

ELECTRICAL
INTERCONNECTIONS

AUTOMATION

Product Short Form

PSF 4.1

WAGO®

WAGO Registered Trademarks



CAGE CLAMP®

CAGE CLAMP® **S**

POWER CAGE CLAMP

FIT CLAMP®

PUSH WIRE®

TOPJOB®

TOPJOB® **S**

WINSTA®

WAGO®

X-COM®

X-COM® **S**

JUMPFLEX®

TO-PASS®

ProServe®

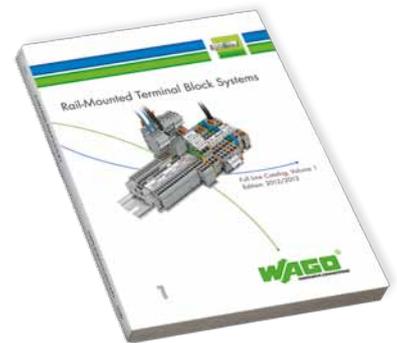
EPSITRON®

picoMAX®

WAGO Full Line Catalogs

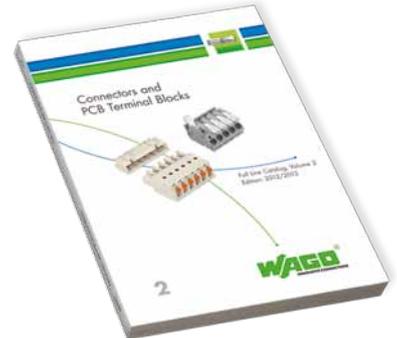
Volume 1, Rail-Mounted Terminal Block Systems

- Rail-Mounted Terminal Blocks
- Modular Connectors (X-COM®-SYSTEM and X-COM®-SYSTEM)
- Patchboard Systems
- Terminal Strips
- PUSH WIRE® Connectors for Junction Boxes
- Lighting Connectors
- Shield Connecting System



Volume 2, Connectors and PCB Terminal Blocks

- PCB Terminal Blocks
- Feedthrough Terminal Blocks
- MULTI CONNECTION SYSTEM
- Pluggable PCB Connectors
- Specialty Connectors



Volume 3, AUTOMATION

- IP20 Modular I/O-SYSTEM
- Wireless Technology, TO-PASS® Telecontrol Technology
- Industrial Switches, PERSPECTO®
- IP67 Modular I/O-SYSTEM, IP67 Block I/O-SYSTEM
- IP67 Sensor/Actuator Boxes, IP67 Cables and Connectors
- Power Supplies



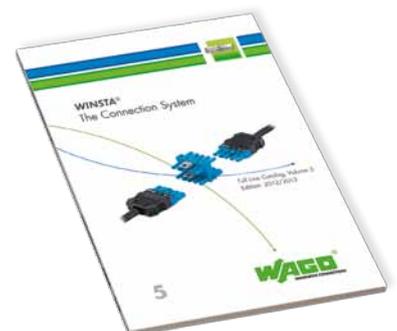
Volume 4, INTERFACE ELECTRONIC

- Relays - Optocouplers - Special Functions
- Interface Modules
- Transducers
- Power Supplies
- Overvoltage Protection
- Wireless Technology
- Empty Housings and Mounting Carriers



Volume 5, WINSTA® - The Connection System

- WINSTA® MINI - Connectors
- WINSTA® MINI special - Connectors
- WINSTA® MIDI - Connectors
- WINSTA® MIDI special - Connectors
- WINSTA® MAXI - Connectors
- WINSTA® RD - Cable Assemblies
- WINSTA® KNX - Connectors
- WINSTA® IDC - Flat Cables



Operation of WAGO Connection Technologies*

CAGE CLAMP® S



The universal connection with "SPECIAL"

Handling:

- Open clamping unit
- Insert the conductor
- Release clamp - done!
- Terminate both solid and ferruled conductors by simply pushing them in - no operating tool needed.

CAGE CLAMP®



The universal connection for solid, stranded and fine-stranded conductors

Handling:

- Open clamping unit
- Insert the conductor
- Release clamp - done!

POWER CAGE CLAMP®



The universal connection for conductors larger than 6 AWG (16 mm²)

Handling:

- Open clamp by turning appropriate hex wrench, or operating tool, counter-clockwise.
- Press integrated latch to open clamping unit for hands-free wiring.
- Insert conductor until it hits backstop.
- A small, counter-clockwise rotation closes the clamp, securing conductor.

FIT CLAMP®



Insulation Displacement Connection (IDC)

Handling:

- Push unstripped conductor into the IDC contact using an operating tool.

PUSH WIRE®



PUSH WIRE® connection for solid and stranded conductors (depending on model used)

Handling:

- Tool-free, twist-free terminations for solid and rigid stranded conductors - simply push into unit.

* Please follow applicable product instructions for product-specific handling.

CONTENTS PSF 4.1



Rail-Mounted Terminal Block Systems

Through Terminal Blocks, Double- and Triple-Deck Terminal Blocks, Ground Terminal Blocks, Ex Terminal Blocks, High-Current Terminal Blocks, Diode Terminal Blocks, Fuse Terminal Blocks, Disconnect Terminal Blocks, X-COM® SYSTEM, X-COM®S SYSTEM, PUSH WIRE® Connectors for Junction Boxes, Lighting Connectors

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Excerpt from Full Line Catalog, Volume 1, Rail-Mounted Terminal Block Systems



Connectors and PCB Terminal Blocks

MULTI CONNECTION SYSTEM:

MICRO, MINI, MINI HD, MIDI, MIDI Classic, MAXI

Rail-Mounted Terminal Blocks, Modular Terminal Blocks, Double-, Triple- and Quadruple-Deck Terminal Strips, SMD Terminal Blocks, Terminal Blocks

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Excerpt from Full Line Catalog, Volume 2, Connectors and PCB Terminal Blocks

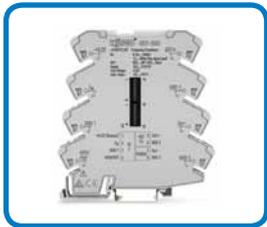


AUTOMATION

Fieldbus Couplers, Programmable Fieldbus Controllers, Input and Output Modules, PERSPECTO®, TO-PASS® Telecontrol Modules, Industrial Switches, Power Supply Units, Shield Connecting System

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WINSTA® – The Connection System

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Over 50 Years of Innovations

Since its establishment in 1951, WAGO has been pioneering innovative connection systems in electrical engineering and electronics. The idea for a screwless termination system was born in 1951; the first terminal blocks with spring clamp termination technology were presented at the Hanover Fair the same year.

Precisely designed and manufactured, spring-loaded connections not only guarantee a faster and easier connection, but also offer a higher safety level since the contact quality is largely independent of operator skill.

Now, WAGO is the leading specialist of Spring Pressure Termination Technology and is providing components for automation technology. In 1977, the success story of the CAGE CLAMP® began – “vibration-proof, fast and maintenance-free connections.” Safe operation for countless devices, systems and installation depends on the unconditional reliability of our products.

1951

The first WAGO spring clamp



1974

WAGO PUSH WIRE® Connector for Junction Boxes



1977

Rail-mounted terminal blocks with CAGE CLAMP®



1998

POWER CAGE CLAMP®



2001

WINSTA® – The Connection System



ELECTRICAL INTERCONNECTIONS

AUTOMATION

1985

Pluggable electronic functions on rail-mounted terminal blocks



1995

WAGO-I/O-SYSTEM, IP20



2005

WAGO SPEEDWAY 767, modular I/O-SYSTEM, IP67



Recognized and Approved Worldwide



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5



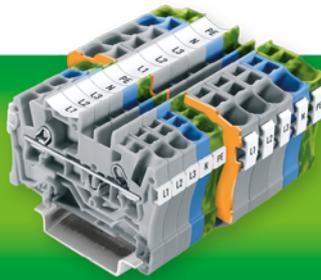
2004

Compact splicing connectors for all conductor types



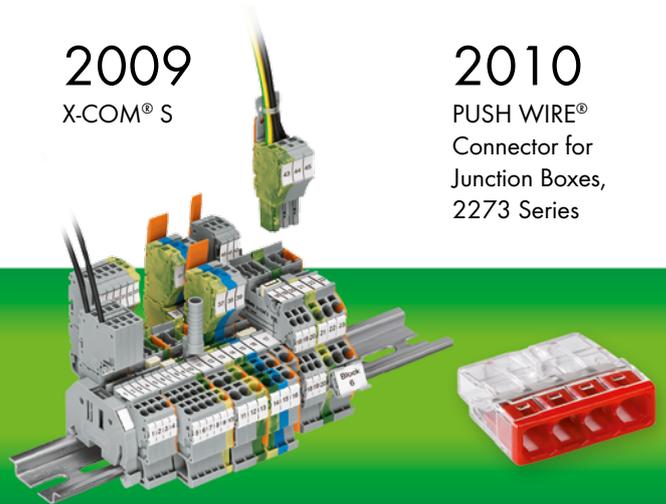
2006

TOPJOB®S Rail-Mounted Terminal Blocks



2009

X-COM® S



2010

PUSH WIRE® Connector for Junction Boxes, 2273 Series



2006

WAGO JUMPFLEX® Transducers and Pluggable Relay Modules



2008

TO-PASS® - Scalable Tele-control Technology



2010

PERSPECTO® Touch and Control Panels



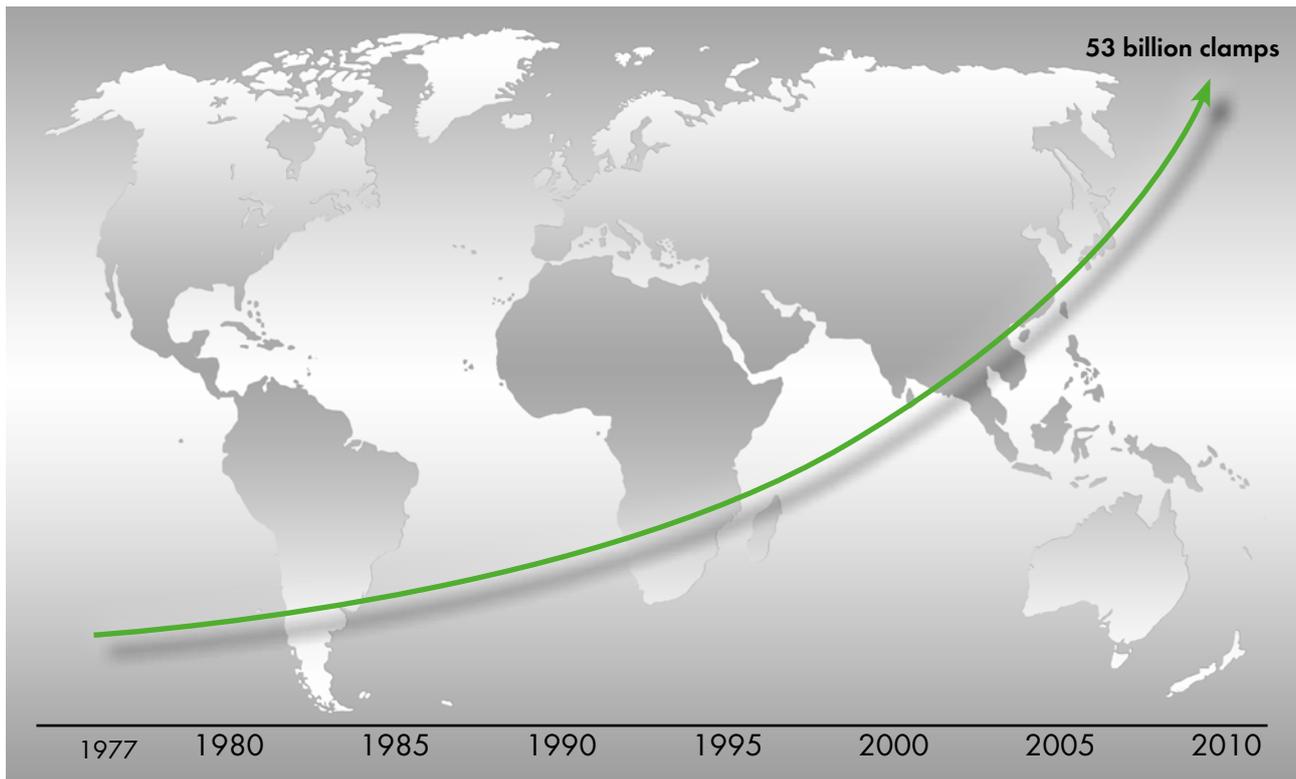
From Pioneer to Leader

When the first terminal blocks with spring clamp termination technology debuted at the Hanover Fair in 1951, it represented a significant advancement in manufacturing. At the time, manufacturing terminal blocks was not possible because the carbon steel of the time did not meet the high quality requirements

However, WAGO was quite active in the years leading up to the 1977 debut of the first series of CAGE CLAMP®-equipped rail-mount terminal

blocks from 28 to 6 AWG (0.08–6mm²). With numerous developments – from the Suprafix banana plug product family up to the first range of rail-mounted terminal blocks for conductors up to 6 AWG (16mm²) – WAGO has firmly established itself as an innovator.

With this reputation and WAGO's slogan "vibration-proof, fast and maintenance-free," CAGE CLAMP®, which was superior to all previous connection technologies, has become a worldwide industrial standard.



Number of spring clamps for terminal blocks and connectors produced to date

Today, CAGE CLAMP® technology has several imitators, yet it remains unmatched. Again WAGO is setting new standards with further developments, such as CAGE CLAMP® Compact (1996) for ultra-compact applications or WAGO POWER

CAGE CLAMP (1998) for a rated cross section up to 4/0 AWG (95mm²). Furthermore, figures speak for themselves: More than 53 billion spring clamps have been sold worldwide and, every day, millions of clamps are added to that number.

WAGO Worldwide



WAGO was founded 1951 in Minden, Germany. Now, the WAGO Group consists of 32 companies with more than 5,000 employees, worldwide operations and global sales greater than 500 million euros (2010).

The first factory was located in Minden, Germany, which is also our headquarters. As part of WAGO's global expansion, additional factories have been built: 1977 in Domdidier/Switzerland, 1979 in Milwaukee/USA, 1995 in Sondershausen/Germany and Dehli/India, 1997 in Tianjin/China and Wroclaw/Poland.

Products manufactured locally for domestic and foreign markets create the starting point for a local distribution network with strong coverage of the complete product range. Such organization enables WAGO subsidiaries and sales offices to develop and deliver custom-designed products that comply with local regulations and meet local demand. Approximately half of WAGO's global staff of 5,000 is employed outside of Germany.



WAGO Minden, Headquarters



WAGO Sondershausen



WAGO Switzerland



WAGO USA



WAGO China

International success requires international presence.

WAGO is a group of companies that operates on the world stage with subsidiaries or agencies on all continents and production facilities in Germany (Minden/Westfalia and Sondershausen/Thuringia), Switzerland (Domdidier/Fribourg), Poland (Wro-zlaw), China (Tianjin), India (Noida/Delhi), USA (Germantown) and Japan (Koto-Ku/Tokio).

Our presence in local markets enables us to provide service tailored to our individual customers, with a finger on the pulse of our customers and suppliers. This allows us to develop and deliver products and solutions that are compliant with local codes and regulations. That is what we consider being close to our customers.

- Production sites
- Sales companies
- Representatives

America >>



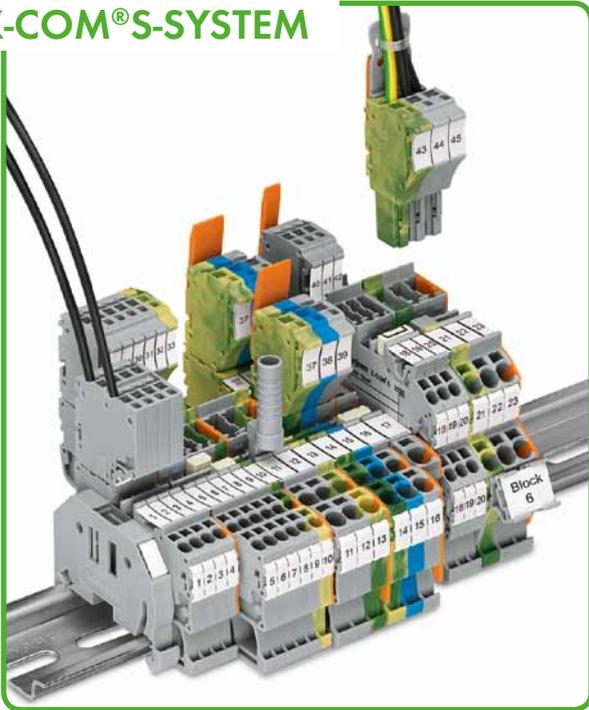
Europe >>

Asia >>

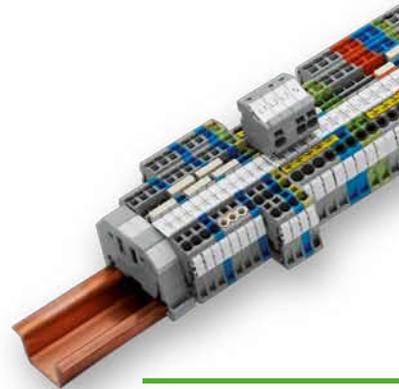


WAGO Product Range: Electrical Interconnections

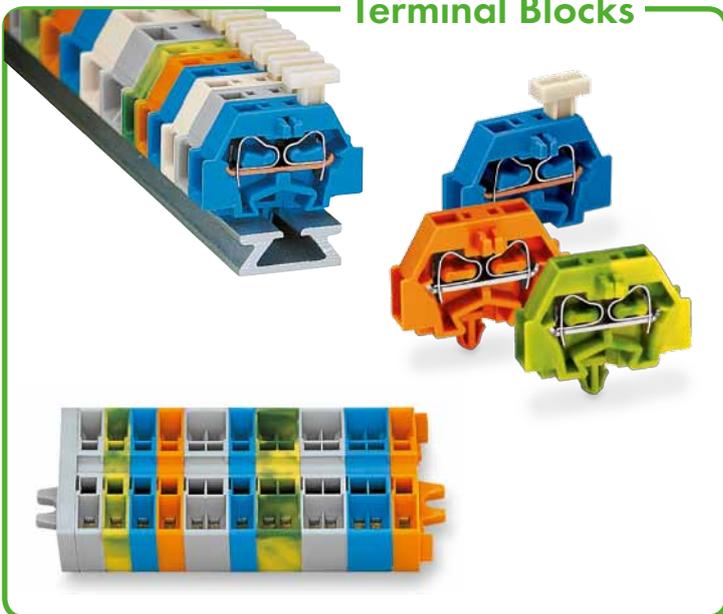
X-COM®-SYSTEM X-COM®-S-SYSTEM



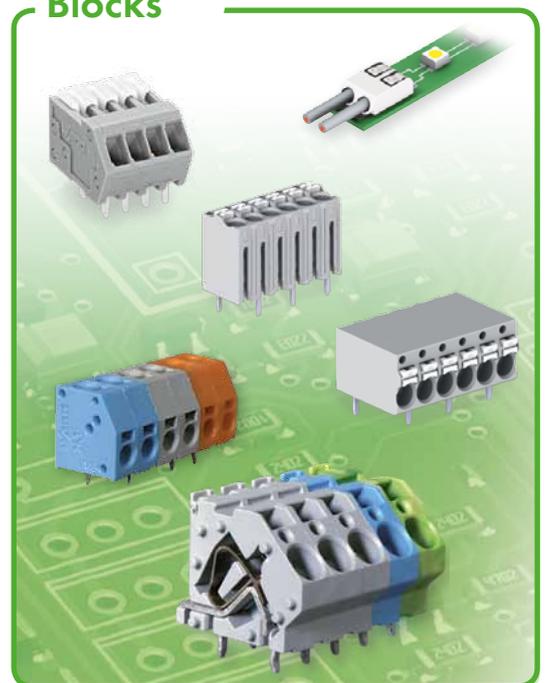
Installation Connectors



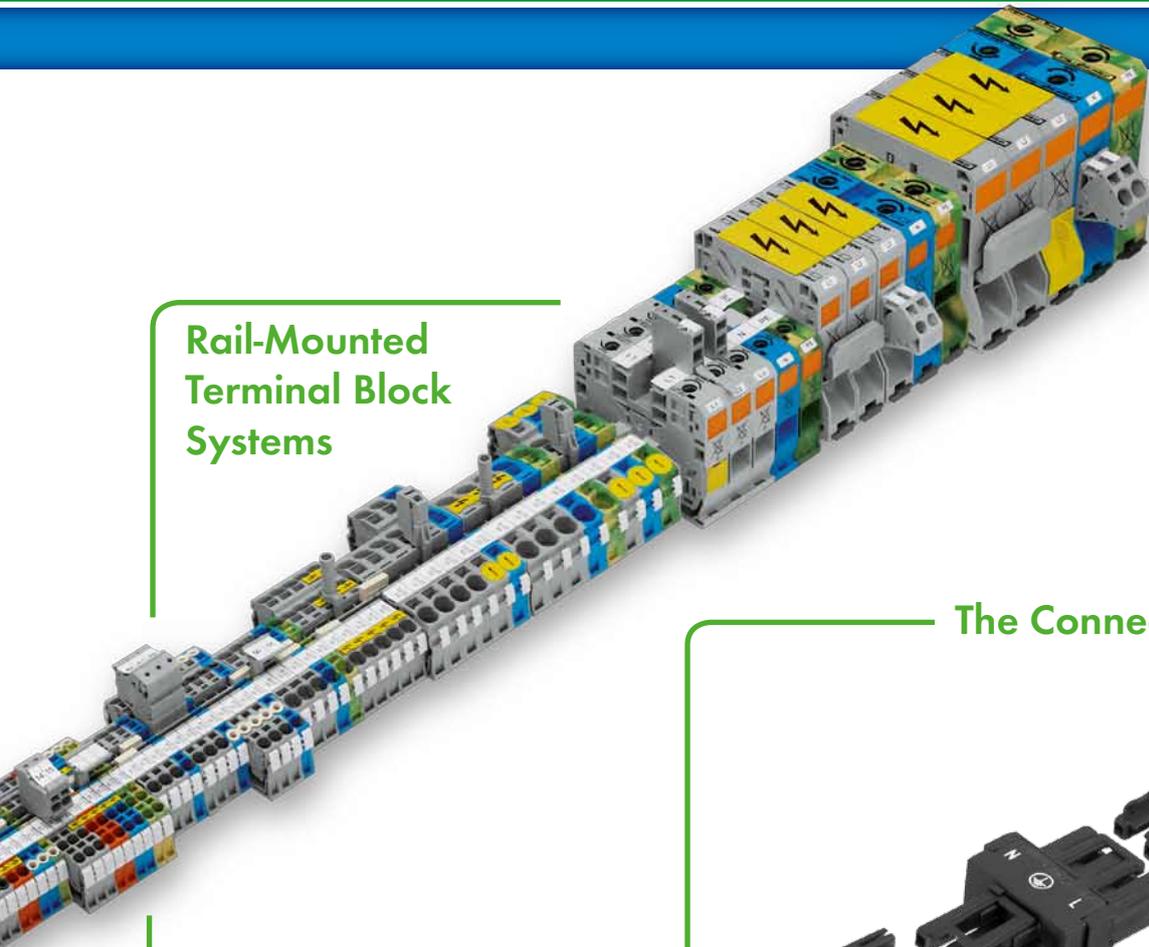
Modular Terminal Blocks



PCB Terminal Blocks



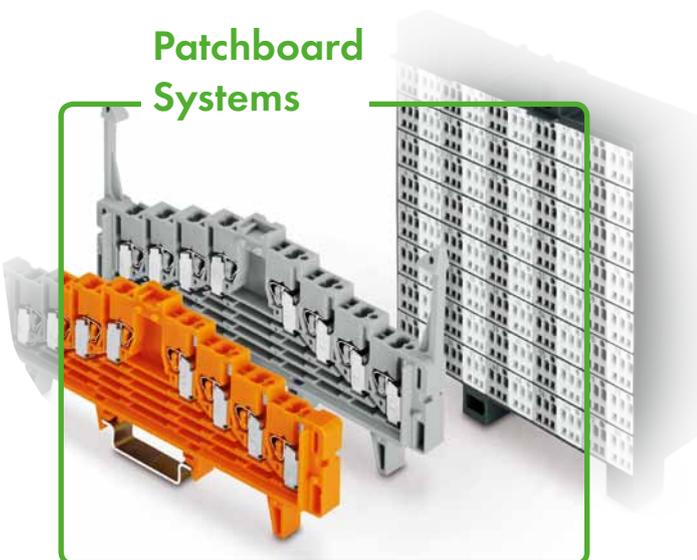
Rail-Mounted Terminal Block Systems



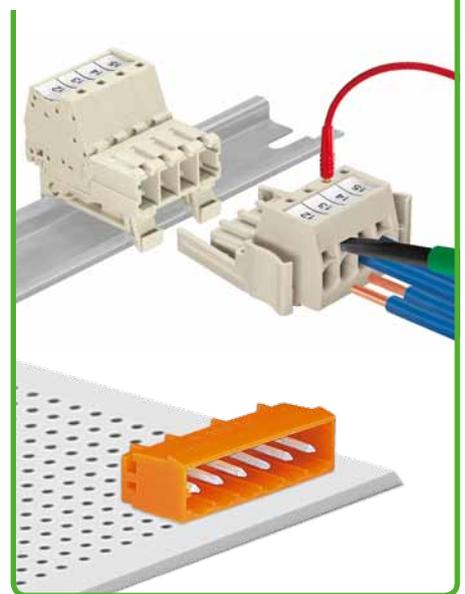
WINSTA® – The Connection System



Patchboard Systems



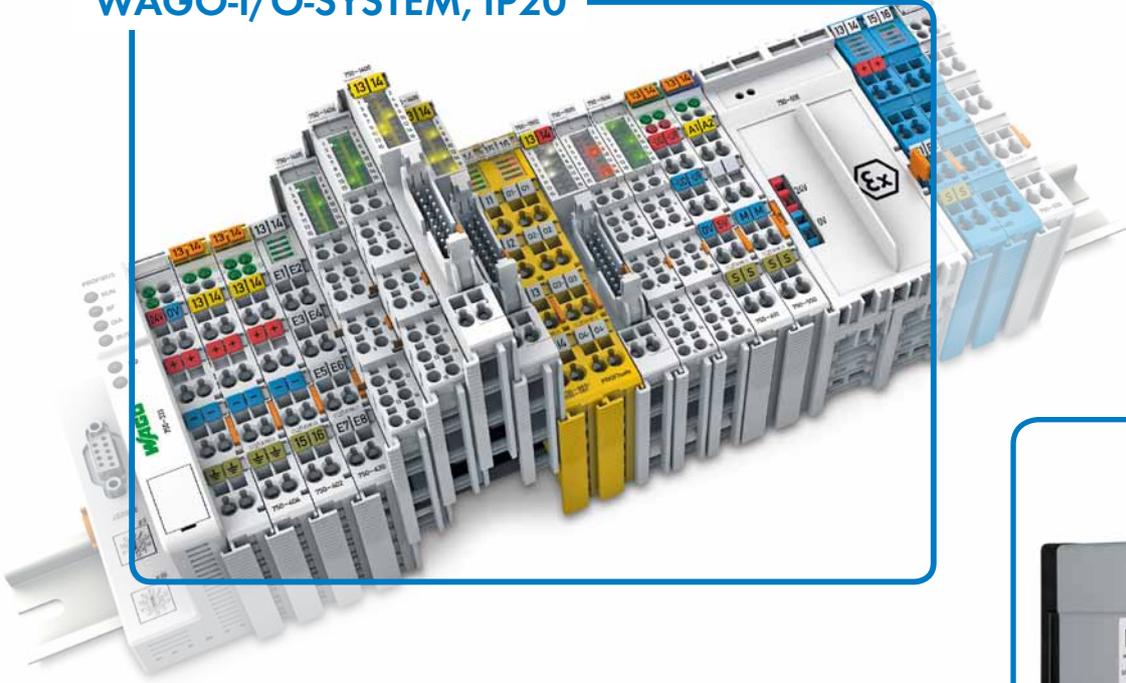
Connectors



WAGO Product Range: Automation



WAGO I/O-SYSTEM, IP20



Power Supplies



WAGO SPEEDWAY 767,
Modular I/O-SYSTEM, IP67



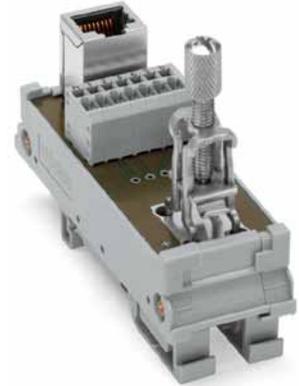
PERSPECTO®



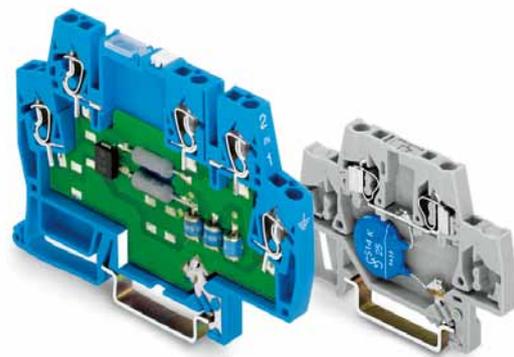
JUMPFLEX® – Transducers and Relay Modules



Interface Modules



Overvoltage Protection



Relay Modules and Relay Sockets



The Wide Variety of Applications



BUILDING AUTOMATION



Building installation and automation

POWER AND PROCESS TECHNOLOGY



Energy, food, water, chemical, petrochemical and metal industries

INDUSTRY



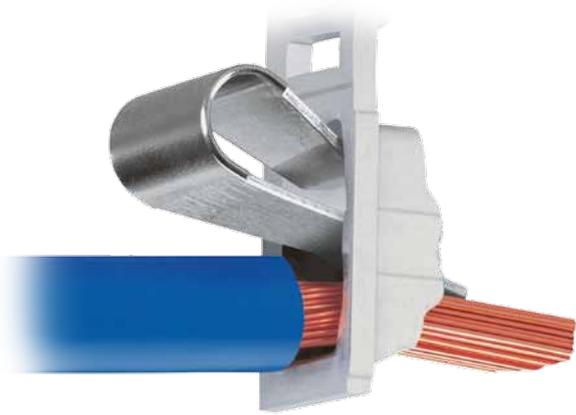
Plant automation and traffic engineering

WAGO products can be used in a wide range of applications. Our components and systems are used worldwide in industrial, automotive, process engineering, building and many other sophisticated applications.

- implement innovative solutions
- create a compact design
- save energy
- make equipment safer
- react to requirements in a flexible way
- minimize installation, maintenance costs and downtime
- guarantee reliable operation under extreme conditions
- guarantee high availability and technical safety
- accommodate individual customer requirements



CAGE CLAMP®S



The CAGE CLAMP®S technology offers the same quality and handling features as the CAGE CLAMP® connection, however with a significant additional benefit: Solid and stranded conductors that are rigid enough, as well as fine-stranded conductors with ferrules can be directly connected without any tools. This is achieved by simply pushing in the conductor until fully inserted, without having to previously open the clamping unit

PUSH WIRE®

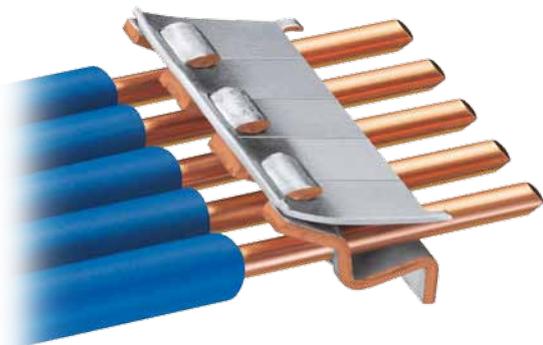


PUSH WIRE® technology is perfectly suited for fast connection of solid conductors. It utilizes the conductor's stiffness to provide safe, direct insertion into the clamping unit.

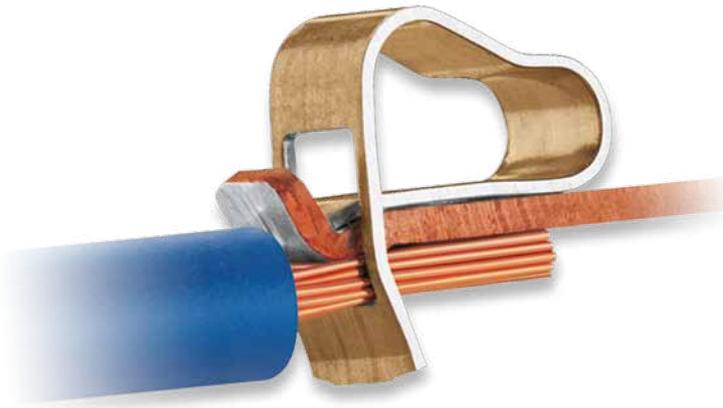
This is the fastest way to connect stripped solid conductors. PUSH WIRE® technology is widely used in connectors for junction boxes that are also available for stranded conductors. Conductor removal is performed by simultaneously twisting and pulling the conductor.

Other types of PUSH WIRE® connectors allow the connection of conductors with less rigidity by opening the clamp using a screwdriver or a push-button.

Similarly, the connected conductor can be easily removed by releasing the clamp.



CAGE CLAMP®



Rail-mounted terminal blocks with the patented WAGO CAGE CLAMP® connection were introduced in 1977. The CAGE CLAMP® technology is available for conductors with a rated cross section from 20 to 2 AWG (0.5–35mm²) in thousands of product variations.

The CAGE CLAMP® technology is suitable for solid, stranded, fine-stranded and extra fine-stranded conductors from a cross section of 28 AWG (0.08mm²). Before inserting the conductor, the CAGE CLAMP® spring must be opened using a screwdriver or, for many products, using an operating lever, push-button or slide.

After releasing the spring, the conductor, which has been inserted into the clamping point, is pressed against the current bar within a defined contact zone. The predefined contact force then ensures consistent clamping forces by automatically adjusting to the conductor cross section.

POWER CAGE CLAMP®



The POWER CAGE CLAMP connection technology is suitable for all conductor types from 10 to 4/0 AWG (6–95mm²). The connected conductor is clamped in a double cage consisting of a spring-loaded bracket and the U-shaped current bar.

To terminate the conductor, a standard Allen wrench is inserted and rotated counterclockwise. Then, the locking tab is pushed in for hands free wiring. The prepared conductor can now be inserted until it hits the backstop. A short counterclockwise turn of the Allen wrench unlocks the locking tab. After rotating Allen wrench clockwise (automatic), the conductor is terminated securely.

Benefits of WAGO Connection Technology

• Simple, easy-to-use design

Front-entry wiring:

CAGE CLAMP®S

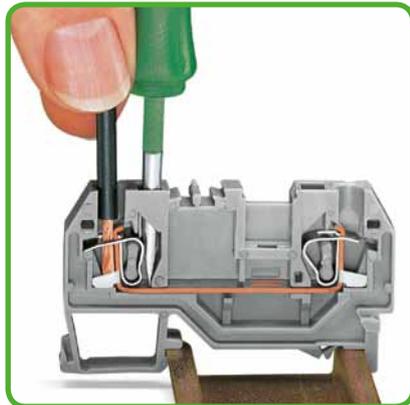
CAGE CLAMP®S
connection



CAGE CLAMP®S connection,
push-in termination of solid
and ferruled conductors

CAGE CLAMP®

CAGE CLAMP®
connection



CAGE CLAMP®
connection

Side-entry wiring:



One Conductor per Clamping Unit – Damage-Free Connections for all Copper Conductors

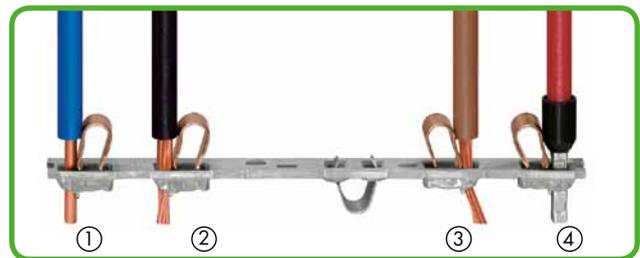
A number of VDE directives mandate or recommend that only one conductor should or must be connected per clamping unit (e.g., DIN VDE 0611, Part 4, 02.91, Section 3.1.9). WAGO complies with this safety requirement, as expressed in the corresponding directives.

Technical and economical benefits for the users:

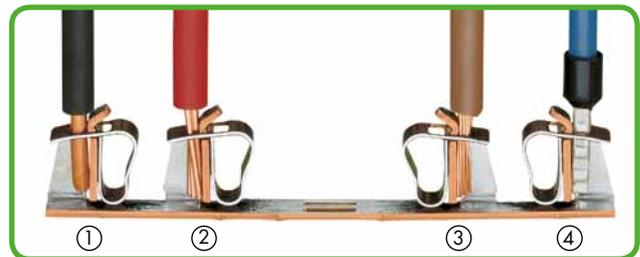
- Each conductor is clamped independently.
- Any conductor size combination per potential can be safely connected.
- Where re-wiring is required, only the conductor to be changed is removed from the clamping point, all other conductors remain safely clamped.
- The arrangement of more than two clamping units on one current bar permits potential multiplication, without jumpers or additional terminal blocks.

CAGE CLAMP® and CAGE CLAMP®S clamp all copper conductors from 28 to 2 AWG (0.08–35mm²) (4/0 AWG/95mm²), or from 22 to 4 AWG (0.25–25mm²). Splice protection is not required, but possible.

The conductor is pressed against the current bar in the **pre-defined contact area**, without damage. The clamping force adjusts automatically to the conductor size. Dynamic contact compensates for changes/movement of the conductor to eliminate the risk of a loose connection.

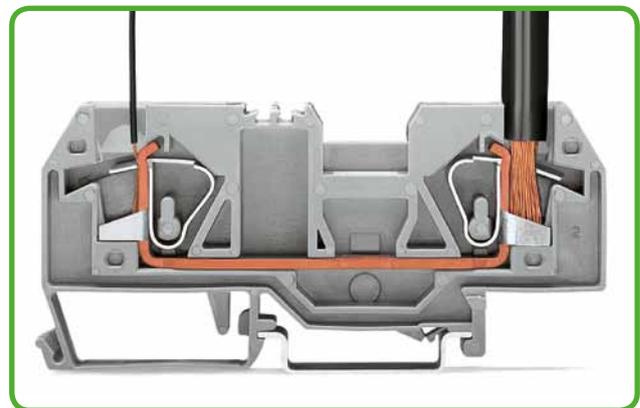


CAGE CLAMP® clamps one conductor per clamping unit.



CAGE CLAMP® clamps one conductor per clamping unit.

- ① solid
- ② stranded
- ③ fine-stranded
- ④ fine-stranded with ferrule (gastight crimped)



An unlikely connection demonstrates this capability: 24 AWG (0.2mm²) conductor (left) and 6 AWG (16mm²) conductor (right) in a 6 AWG (16mm²) terminal block.

Benefits of WAGO Connection Technology

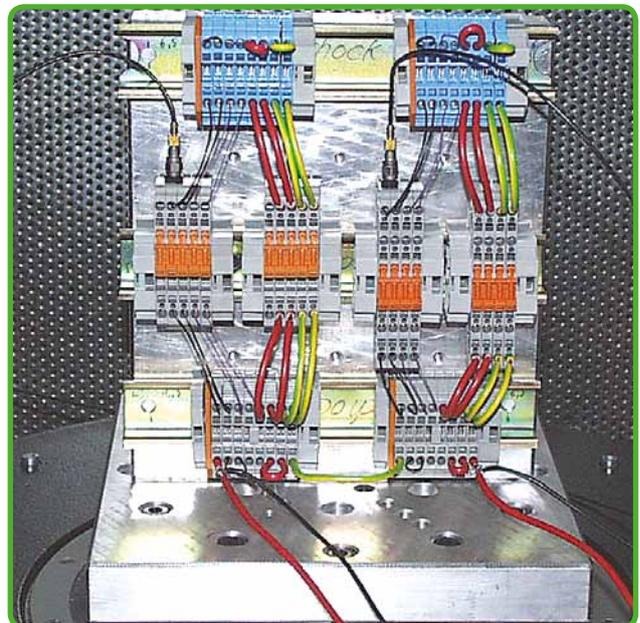
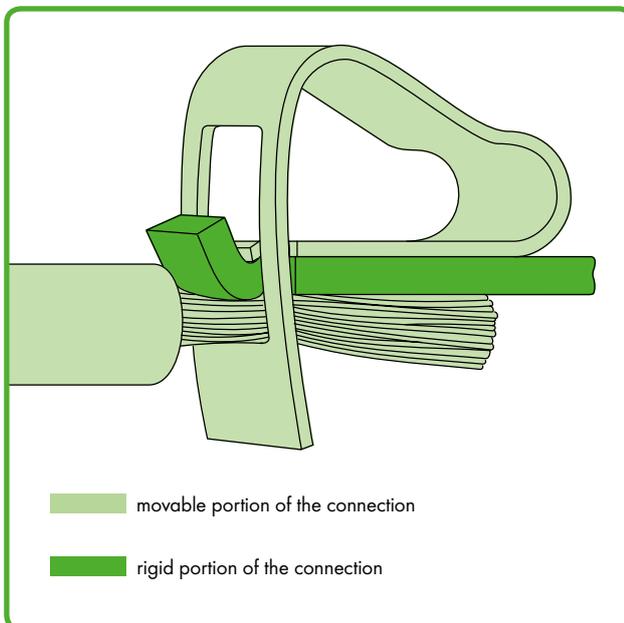
Vibration- and Shock-Proof – Maintenance-Free

The **vibration-proof properties** of CAGE CLAMP® connections have been tested and verified in a vibration test to IEC/EN 60068-2-6. In this test, a frequency band up to 2000Hz, at different accelerations up to 20g and different amplitudes up to 20m, is passed continuously in three axes. Additionally, international authorities have placed extremely demanding requirements on electrical installations. Railway authorities have applied testing for electrical installations in rolling stock (IEC/EN 61373); multiple marine agencies (e.g., GL, LR and DNV) have also held CAGE CLAMP® to their lofty approval standards. Each rigorous test was successfully passed.

In the **Impact Test** (IEC/EN 60068-2-27) or for railway applications (IEC/EN 61373), test specimens are exposed to instant shock stresses, instead of permanent vibrations. Stresses up to 100g on the x-, y-, and z-axis were easily passed.

Maintenance-free operation results from excellent long-term consistency of the electrical and mechanical properties of the clamping connection – or more precisely, the clamping unit. The Voltage Drop Test evaluates clamping unit quality under stresses such as vibrations, temperature changes and corrosive influences, in order to verify that the contact point is gas-tight. The long-term consistency of CAGE CLAMP® technology has been demonstrated both through laboratory testing by international approval agencies and from world-wide applications.

The resulting maintenance-free operation reduces service costs, leading to greater equipment availability and reliability.

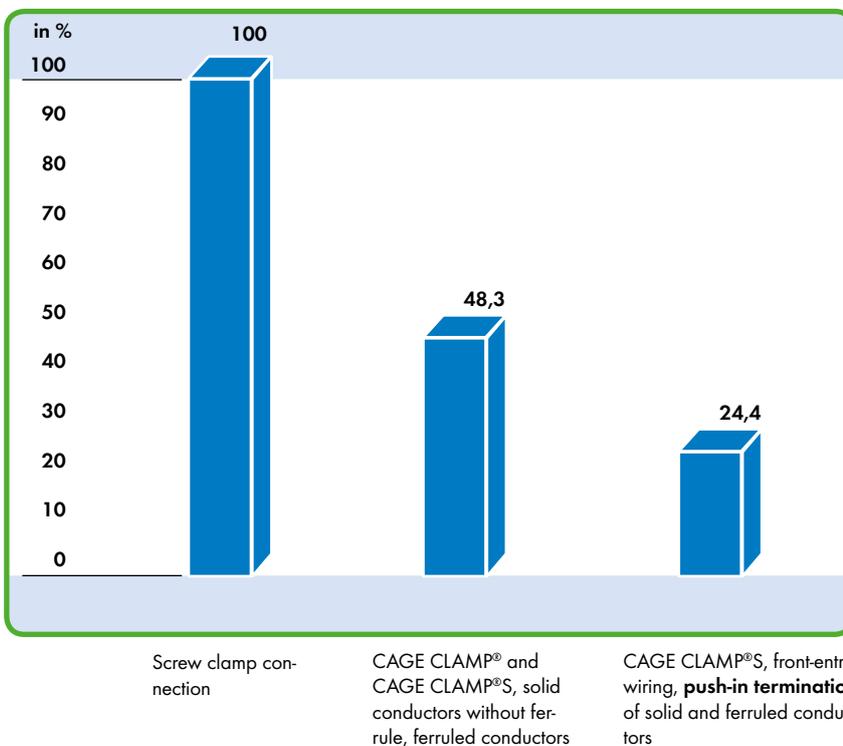


Time-Saving

CAGE CLAMP® technology **significantly reduces wiring times**, which helps minimize labor costs.

Additional savings provided via **faster project commissioning** and **elimination of service costs** due to maintenance-free terminations.

Savings go further by **reducing both material and labor costs** through eliminating the need to prepare ferrules or pin terminals prior to termination. Front-entry terminal blocks are specified for top-tier designs because they minimize both install time and effort.



Average manual wiring times in a percentage comparison (per MTM)

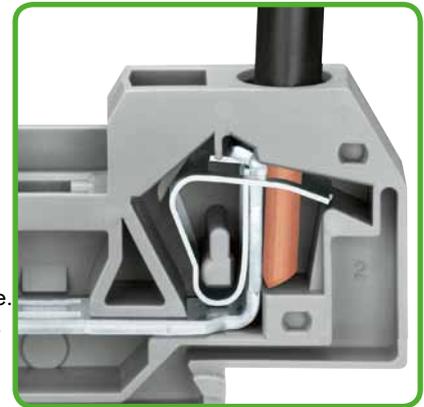
Benefits of WAGO Connection Technology

Gas-tight Clamping Units – Measurable Contact Quality

Climatic chambers simulate standard atmospheres that could impact long-term constancy of clamping units. All WAGO products meet requirements for the following climatic tests:

- Temperature Cycling Test to IEC/EN 60947-7-1, IEC/EN 60998-2-2
- Industrial Atmospheres to EN ISO 6988, IEC/EN 60068-2-42, IEC/EN 60068-2-60
- Salt Spray Test to IEC/EN 60068-2-11, Marine Applications GL, LR, DNV
- Quick Change of Temperature to IEC/EN 60068-2-14
- Damp Heat, Cyclic (12 + 12 Hours) to IEC/EN 60068-2-30, Marine Applications GL, LR, DNV

Long-term consistency for the low contact resistance of both CAGE CLAMP® and CAGE CLAMP®S results from **gas-tight** clamping units. The spring clamp (acid- and saltwater-proof CrNi spring steel) presses the connected conductor against the current bar (electrolyte copper with lead-free, pure tin



coating) within a defined contact zone. The conductor is embedded into the soft tin layer with high contact pressure, securing it against corrosive infiltration.

The contact pressure

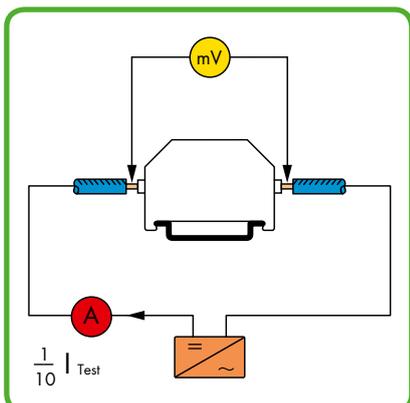
$$P \left[\frac{\text{N}}{\text{mm}^2} \right] = \frac{\text{Force } F \text{ [N]}}{\text{Area } A \text{ [mm}^2\text{]}}$$

exerted by CAGE CLAMP® terminations is similar to screw-style terminals.



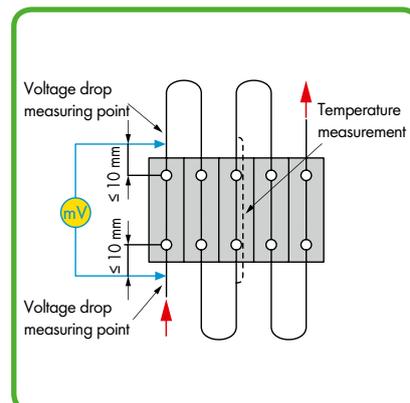
To best evaluate the quality of a clamping point, WAGO uses the following test procedures:

The **Voltage Drop Test** evaluates clamping unit quality under stresses such as vibrations, temperature changes and corrosive influences.



Test arrangement: "Voltage Drop Test"

The **Temperature-Rise Test** examines the clamping unit, including the surrounding insulation, at rated current, over-current and short-circuit current levels.



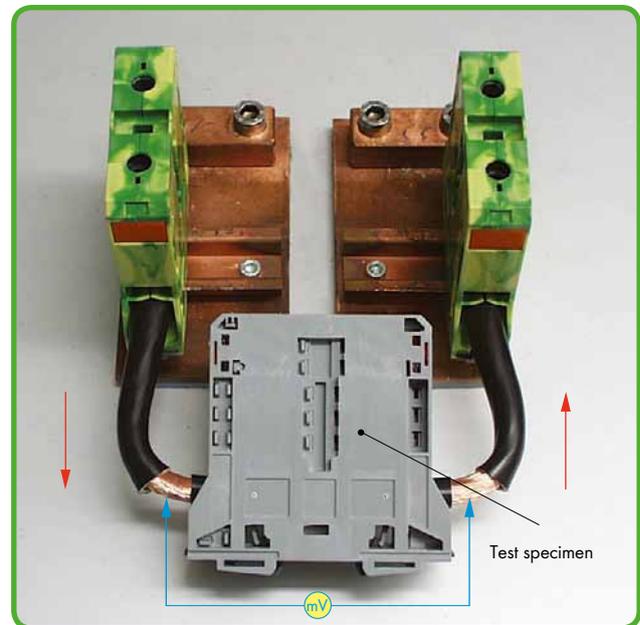
Test arrangement: "Temperature-Rise Test"

High-Current Carrying Capacity

The **short-time withstand capacity** is defined in standards such as IEC/EN 60947-7-1 for through rail-mounted terminal blocks. It is a **current-carrying capacity of 120A per mm² nominal diameter** for the duration of 1 second. **In the case of a 4/0 AWG (95 mm²) WAGO 285 Series High-Current Terminal Block, this translates to 11,400A!**

Ground conductor terminal blocks are submitted to the "120A per mm²" test for 3x one second.

The pass criterion for the test is the voltage drop (limit value and constancy). CAGE CLAMP® and CAGE CLAMP®S connections passed this test without damage or reduced functionality.



Test arrangement: "Short-Time Current Withstand Test"



Unrealistic test of a CAGE CLAMP®-equipped, 12 AWG (4mm²) rail-mounted terminal block: **Increase of current without time limit.** In such an extreme test – normally, fuse devices would have interrupted the current – **the electrical connection is undamaged.**

TOPJOB® Rail-Mounted Terminal Blocks 2000, 2001, 2002, 2004, 2006, 2010 and 2016 Series

Conductor termination/removal



Push-in termination: Solid conductors with cross sections from either one size above, or up to two sizes below, the rated cross section can be pushed in directly - without tools.



With screwdriver: The operation of the clamp remains the same for unprepared fine-stranded conductors or small cross sections that don't allow push-in termination.

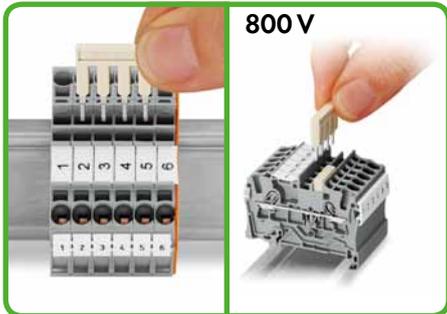
Testing



Testing of TOPJOB®S rail-mounted terminal blocks using test plug adapter or testing tap

Like the original CAGE CLAMP®, a screwdriver is used for conductor removal with CAGE CLAMP®S.

Commoning



800 V

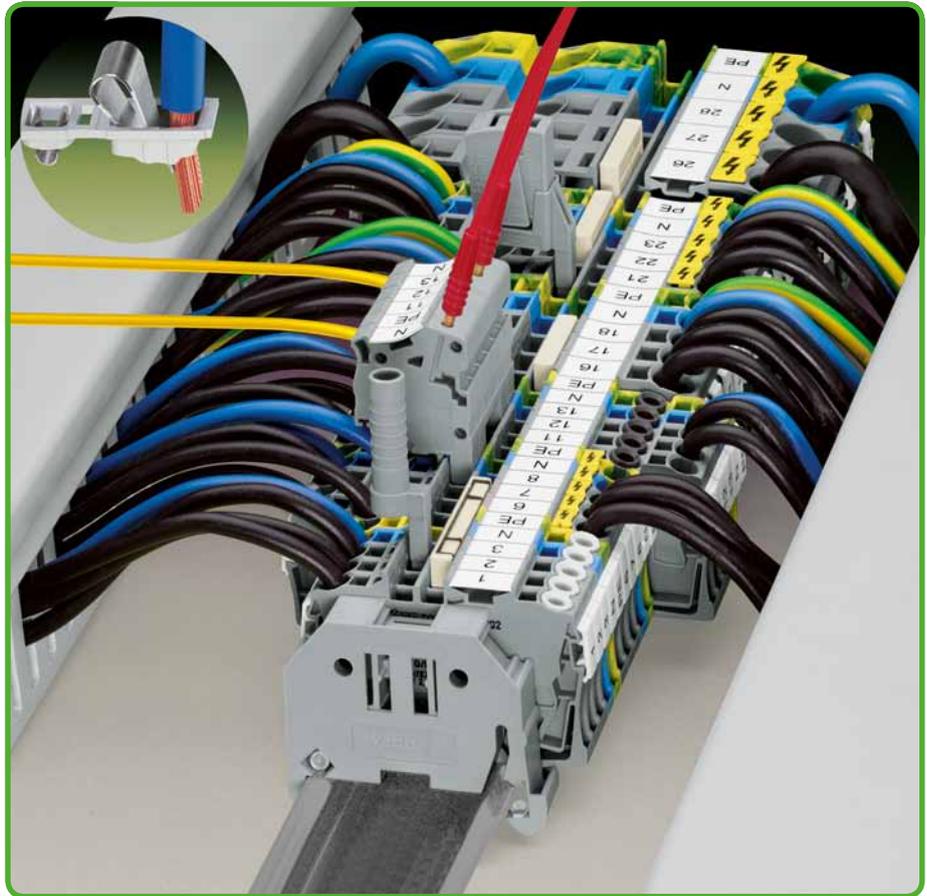
Twin integrated, spring-loaded jumper system allows use of comb-style jumper bars, test plugs and connectors. Jumper bars rated at 800 V (ex works).

Commoning



800 V

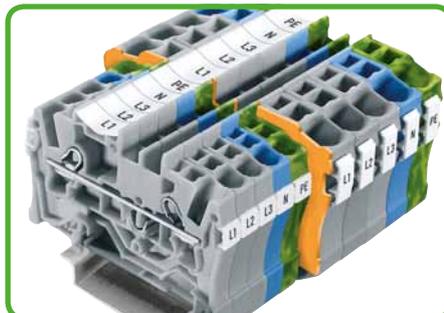
Jumper contacts that are not required can be broken off and removed, the upper-side of the jumper can then be marked accordingly. Applies to 2001, 2002 and 2004 Series.



Marking

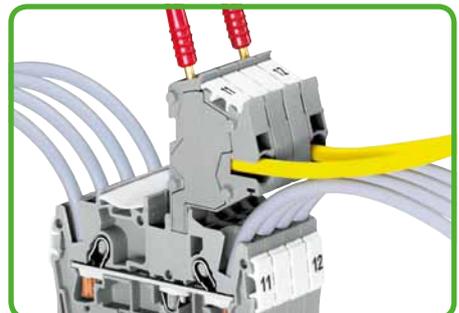


A thermal transfer printer and WAGO "smartDESIGNER" software generate the marking.



TOPJOB®S offers three marking positions for WMB markers, miniature WSB markers or a full-length marking strip.

Pre-assembled connectors



Pre-assembled connectors with CAGE CLAMP®S connection provide an additional connection option.

CAGE CLAMP®S clamps the following copper conductors:



solid



stranded



fine-stranded



tip bonded



with ferrule



with pin terminal

Strip length, see packaging or instructions.

TOPJOB® Rail-Mounted Terminal Blocks 1.0 (1.5) mm² 2000 Series

CAGE CLAMP® S

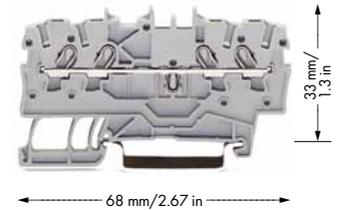
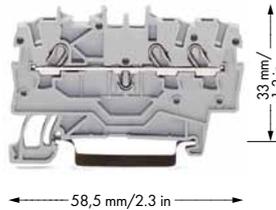
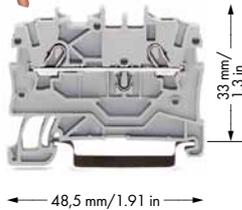
1

25

1

| | | |
|--|--|--|
| <p>0.14 - 1.0 (1.5) mm² ① AWG 24 - 16 800 V/6 kV/3 600 V, 10 A  I_N 13.5 A (18 A) 600 V, 10 A </p> <p>Terminal block width 3.5 mm / 0.138 in  9 - 11 mm / 0.39 in</p> <p>② Approvals</p> | <p>0.14 - 1.0 (1.5) mm² ① AWG 24 - 16 800 V/6 kV/3 600 V, 10 A  I_N 13.5 A (18 A) 600 V, 10 A </p> <p>Terminal block width 3.5 mm / 0.138 in  9 - 11 mm / 0.39 in</p> <p>② Approvals</p> | <p>0.14 - 1.0 (1.5) mm² ① AWG 24 - 16 800 V/6 kV/3 600 V, 10 A  I_N 13.5 A (18 A) 600 V, 10 A </p> <p>Terminal block width 3.5 mm / 0.138 in  9 - 11 mm / 0.39 in</p> <p>② Approvals</p> |
|--|--|--|

① Conductor sizes: 0.14 - 1.5 mm² "s + f-st";
Push-in conductor sizes: 0.5 - 1.5 mm² "s" and 0.5 - 1 mm² "insulated ferrule, 12 mm"



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|---|-----------|------------|---|-----------|------------|---|-----------|------------|
| 2-conductor through terminal block | | | 3-conductor through terminal block | | | 4-conductor through terminal block | | |
|  | 2000-1201 | 100 |  | 2000-1301 | 100 |  | 2000-1401 | 100 |
|  | 2000-1204 | 100 |  | 2000-1304 | 100 |  | 2000-1404 | 100 |
|  | 2000-1202 | 100 |  | 2000-1302 | 100 |  | 2000-1402 | 100 |
|  | 2000-1203 | 100 |  | 2000-1303 | 100 |  | 2000-1403 | 100 |
|  | 2000-1205 | 100 |  | 2000-1305 | 100 |  | 2000-1405 | 100 |
|  | 2000-1206 | 100 |  | 2000-1306 | 100 |  | 2000-1406 | 100 |
| 2-conductor ground terminal block | | | 3-conductor ground terminal block | | | 4-conductor ground terminal block | | |
|  | 2000-1207 | 100 |  | 2000-1307 | 100 |  | 2000-1407 | 100 |

Item-Specific Accessories

| | | |
|---|---|---|
| <p>End and intermediate plate, 0.7 mm thick</p> <p> orange 2000-1292 100 (4x25)  gray 2000-1291 100 (4x25)</p> | <p>End and intermediate plate, 0.7 mm thick</p> <p> orange 2000-1392 100 (4x25)  gray 2000-1391 100 (4x25)</p> | <p>End and intermediate plate, 0.7 mm thick</p> <p> orange 2000-1492 100 (4x25)  gray 2000-1491 100 (4x25)</p> |
|---|---|---|

2000 Series Accessories

Appropriate marking systems: **WMB/Marking Strips**

| | | |
|--|--|---|
| <p>Push-in type jumper bar, insulated, I_N 14 A, light gray</p> <p> 2-way 2000-402 200 (8x25)  3-way 2000-403 200 (8x25)  4-way 2000-404 200 (8x25)  5-way 2000-405 100 (4x25) : : 10-way 2000-410 100 (4x25)</p> | <p>Push-in type jumper bar, insulated, I_N 14 A, light gray</p> <p> 1 - 3 2000-433 200 (8x25)  1 - 4 2000-434 200 (8x25)  1 - 5 2000-435 100 (4x25) : : 1 - 10 2000-440 100 (4x25)</p> | <p>Star point jumper, insulated, I_N = I_N terminal block, light gray</p> <p> 1-3-5 2000-405/011-000 100 (4x25)</p> |
| <p>Protective warning marker, with high-voltage symbol, for 5 terminal blocks</p> <p> yellow 2000-115 100 (4x25)</p> | <p>WMB Multi marking system,</p> <p>10 strips with 10 markers per card for 3.5 mm terminal block width, plain 793-3501 50 (10x5)</p> | <p>Marking strips, plain</p> <p>11 mm wide, 50m roll white 2009-110 1</p> |
| <p>Operating tool with partially insulated shaft,</p> <p>type 1, (2.5 x 0.4) mm blade 210-719 1</p> | <p> Suitable for Ex i applications</p> | <p>Test plug adapter, for test plug 4 mm Ø</p> <p>gray 2009-174 100 (4x25)</p> |
| <p>Insulated ferrules, extra long, for TOPJOB®S terminal blocks see page 195</p> <p></p> | | <p>Testing tap, for max. 2.5 mm²/AWG 14</p> <p>gray 2009-182 100 (4x25)</p> |

② Approvals are available online at: www.wago.com.

For technical explanations and abbreviations, see technical section.



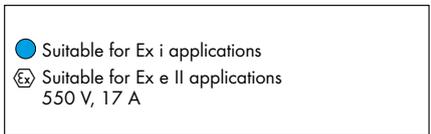
TOPJOB® Through/Ground Conductor and Ex Terminal Blocks 1.5 (2.5) mm² 2001 Series

| | | | |
|---|--|--|--|
| 0.25 - 1.5 (2.5) mm² ① 800 V/8 kV/3 I _N 18 A (24 A) Terminal block width 4.2 mm / 0.165 in  9 - 11 mm / 0.39 in ② Approvals | AWG 22 - 14 600 V, 10 A Ⓢ 600 V, 10 A Ⓢ I _N 18 A (24 A) Terminal block width 4.2 mm / 0.165 in  9 - 11 mm / 0.39 in ② Approvals | 0.25 - 1.5 (2.5) mm² ① 800 V/8 kV/3 I _N 18 A (24 A) Terminal block width 4.2 mm / 0.165 in  9 - 11 mm / 0.39 in ② Approvals | AWG 22 - 14 600 V, 10 A Ⓢ 600 V, 10 A Ⓢ I _N 18 A (24 A) Terminal block width 4.2 mm / 0.165 in  9 - 11 mm / 0.39 in ② Approvals |
|---|--|--|--|



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|---|--------------------|------------|---|--------------------|------------|---|--------------------|------------|
| 2-conductor through terminal block | | | 3-conductor through terminal block | | | 4-conductor through terminal block | | |
| gray Ⓢ | 2001-1201 | 100 | gray Ⓢ | 2001-1301 | 100 | gray Ⓢ | 2001-1401 | 100 |
| blue Ⓢ | 2001-1204 | 100 | blue Ⓢ | 2001-1304 | 100 | blue Ⓢ | 2001-1404 | 100 |
| orange Ⓢ | 2001-1202 | 100 | orange Ⓢ | 2001-1302 | 100 | orange Ⓢ | 2001-1402 | 100 |
| red Ⓢ | 2001-1203 | 100 | red Ⓢ | 2001-1303 | 100 | red Ⓢ | 2001-1403 | 100 |
| black Ⓢ | 2001-1205 | 100 | black Ⓢ | 2001-1305 | 100 | black Ⓢ | 2001-1405 | 100 |
| yellow Ⓢ | 2001-1206 | 100 | yellow Ⓢ | 2001-1306 | 100 | yellow Ⓢ | 2001-1406 | 100 |
| 2-conductor ground terminal block | | | 3-conductor ground terminal block | | | 4-conductor ground terminal block | | |
| green-yellow Ⓢ | 2001-1207 | 100 | green-yellow Ⓢ | 2001-1307 | 100 | green-yellow Ⓢ | 2001-1407 | 100 |
| Other terminal blocks with the same profile: | | | Other terminal blocks with the same profile: | | | Other terminal blocks with the same profile: | | |
| Diode | 2001-1211/1000-411 | Volume 1 | Diode | 2001-1311/1000-411 | Volume 1 | Diode | 2001-1411/1000-411 | Volume 1 |
| | | | LED | 2001-1321/1000-434 | Volume 1 | Diode | 2001-1411/1000-434 | Volume 1 |
| | | | | | | Double-potential | 2001-1441 | Volume 1 |

| Item-Specific Accessories | | Separator for Ex e/Ex i applications, see page 30 | |
|---|---|---|--|
| End and intermediate plate, 0.8 mm thick  orange 2002-1292 100 (4x25) gray 2002-1291 100 (4x25) | End and intermediate plate, 0.8 mm thick  orange 2002-1392 100 (4x25) gray 2002-1391 100 (4x25) | End and intermediate plate, 0.8 mm thick  orange 2002-1492 100 (4x25) gray 2002-1491 100 (4x25) | |
| Separator, oversized, 0.8 mm thick  orange 2002-1294 100 (4x25) gray 2002-1293 100 (4x25) | Separator, oversized, 0.8 mm thick  orange 2002-1394 100 (4x25) gray 2002-1393 100 (4x25) | Separator, oversized, 0.8 mm thick  orange 2002-1494 100 (4x25) gray 2002-1493 100 (4x25) | |

| 2001 Series Accessories | | Appropriate marking systems: WMB/Marking Strips | |
|--|--|---|--|
| Push-in type jumper bar, insulated, I_N 18 A, light gray  2-way 2001-402 200 (8x25) 3-way 2001-403 200 (8x25) 4-way 2001-404 200 (8x25) : : 10-way 2001-410 100 (4x25) | Push-in type jumper bar, insulated, I_N 18 A, light gray  1 - 3 2001-433 200 (8x25) 1 - 4 2001-434 200 (8x25) 1 - 5 2001-435 100 (4x25) : : 1 - 10 2001-440 100 (4x25) | Push-in type wire jumper, insulated, I_N 16 A, wire size 1.5 mm²/AWG 16  60 mm 2009-412 100 (10x10) 110 mm 2009-414 100 (10x10) 250 mm 2009-416 100 (10x10) | |
| Insulation stop, 5 pcs/strip, 0.25 - 0.5 mm ² light gray 2001-171 200 (8x25) | Protective warning marker, with high-voltage symbol, for 5 terminal blocks  yellow 2001-115 100 (4x25) | TOPJOB'S connector, modular, for jumper contact slot  gray 2001-511 100 (4x25) | |
| WMB Multi marking system, 10 strips with 10 markers per card, stretchable 4 - 4.2 mm plain 793-4501 5 |  ● Suitable for Ex i applications Ⓢ Suitable for Ex e II applications 550 V, 17 A | Spacer module gray 2001-549 100 (4x25) | |
| Marking strip, plain, 11 mm wide, 50m roll white 2009-110 1 | | Operating tool with partially insulated shaft, type 1, (2.5 x 0.4) mm blade 210-719 1 | |
| | | Insulated ferrules, extra long, for TOPJOB'S terminal blocks see page 195 | |

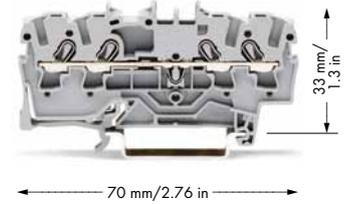
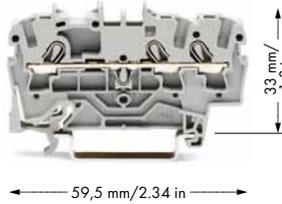
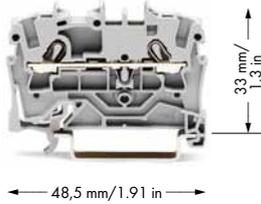
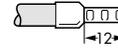
② Approvals are available online at: www.wago.com.

For technical explanations and abbreviations, see technical section.

Through/Ground Conductor and Ex Terminal Blocks 2.5 (4) mm² 2002 Series

| | | |
|---|---|---|
| <p>0.25 - 2.5 (4) mm² ① AWG 22 - 12 800 V/8 kV/3 600 V, 20 A 600 V, 20 A </p> <p>Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in.</p> <p>② Approvals</p> | <p>0.25 - 2.5 (4) mm² ① AWG 22 - 12 800 V/8 kV/3 600 V, 20 A 600 V, 20 A </p> <p>Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in.</p> <p>② Approvals</p> | <p>0.25 - 2.5 (4) mm² ① AWG 22 - 12 800 V/8 kV/3 600 V, 20 A 600 V, 20 A </p> <p>Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in.</p> <p>② Approvals</p> |
|---|---|---|

① Conductor sizes: 0.25 - 4 mm² "s + f-st";
Push-in conductor sizes: 0.75 - 4 mm² "s" and
0.75 - 2.5 mm² "insulated ferrule, 12 mm"



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|---|--------------------|------------|---|--------------------|------------|---|--------------------|------------|
| 2-conductor through terminal block | | | 3-conductor through terminal block | | | 4-conductor through terminal block | | |
| gray | 2002-1201 | 100 | gray | 2002-1301 | 100 | gray | 2002-1401 | 100 |
| blue | 2002-1204 | 100 | blue | 2002-1304 | 100 | blue | 2002-1404 | 100 |
| orange | 2002-1202 | 100 | orange | 2002-1302 | 100 | orange | 2002-1402 | 100 |
| red | 2002-1203 | 100 | red | 2002-1303 | 100 | red | 2002-1403 | 100 |
| black | 2002-1205 | 100 | black | 2002-1305 | 100 | black | 2002-1405 | 100 |
| yellow | 2002-1206 | 100 | yellow | 2002-1306 | 100 | yellow | 2002-1406 | 100 |
| 2-conductor ground terminal block | | | 3-conductor ground terminal block | | | 4-conductor ground terminal block | | |
| green-yellow | 2002-1207 | 100 | green-yellow | 2002-1307 | 100 | green-yellow | 2002-1407 | 100 |
| Other terminal blocks with the same profile: | | | Other terminal blocks with the same profile: | | | Other terminal blocks with the same profile: | | |
| Diode | 2002-1211/1000-411 | Page 42 | Diode | 2002-1311/1000-411 | Page 42 | Diode | 2002-1411/1000-411 | Page 42 |
| | | | LED | 2002-1321/1000-434 | Page 42 | Diode | 2002-1411/1000-434 | Page 42 |
| | | | | | | Double-potential | 2002-1441 | Volume 1 |

Item-Specific Accessories

Separator for Ex e/Ex i applications, see page 30

| | | |
|---|---|---|
| <p>End and intermediate plate, 0.8 mm thick</p> <p> orange 2002-1292 100 (4x25) gray 2002-1291 100 (4x25)</p> | <p>End and intermediate plate, 0.8 mm thick</p> <p> orange 2002-1392 100 (4x25) gray 2002-1391 100 (4x25)</p> | <p>End and intermediate plate, 0.8 mm thick</p> <p> orange 2002-1492 100 (4x25) gray 2002-1491 100 (4x25)</p> |
| <p>Separator, oversized, 0.8 mm thick</p> <p> orange 2002-1294 100 (4x25) gray 2002-1293 100 (4x25)</p> | <p>Separator, oversized, 0.8 mm thick</p> <p> orange 2002-1394 100 (4x25) gray 2002-1393 100 (4x25)</p> | <p>Separator, oversized, 0.8 mm thick</p> <p> orange 2002-1494 100 (4x25) gray 2002-1493 100 (4x25)</p> |

2002 Series Accessories

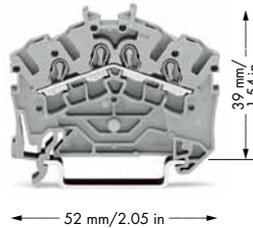
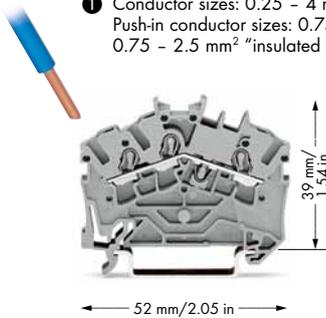
Appropriate marking systems: **WMB/Marking Strips/WMB Inline/Mini-WSB**

| | | |
|---|---|---|
| <p>Push-in type jumper bar, insulated, I_N 25 A, light gray</p> <p> 2-way 2002-402 200 (8x25) 3-way 2002-403 200 (8x25) 4-way 2002-404 200 (8x25) : 10-way 2002-410 100 (4x25)</p> | <p>Push-in type jumper bar, insulated, I_N 25 A, light gray</p> <p> 1 - 3 2002-433 200 (8x25) 1 - 4 2002-434 200 (8x25) 1 - 5 2002-435 100 (4x25) : 1 - 10 2002-440 100 (4x25)</p> | <p>Staggered jumper, insulated, I_N 25 A, light gray</p> <p> 2-way 2002-472 100 (4x25) 3-way 2002-473 100 (4x25) 4-way 2002-474 100 (4x25) : 12-way 2002-482 50 (2x25)</p> |
| <p>Insulation stop, 5 pcs/strip 200 strips</p> <p> light gray 2002-171 0.25-0.5 mm² dark gray 2002-172 0.75-1 mm²</p> | <p>Protective warning marker, with high-voltage symbol, for 5 terminal blocks</p> <p> yellow 2002-115 100 (4x25)</p> | <p>TOPJOB®S connector, modular, for jumper contact slot</p> <p> gray 2002-511 100 (4x25)</p> |
| <p>WMB Multi marking system,</p> <p>10 strips with 10 markers per card, stretchable 5 - 5.2 mm plain 793-5501 5</p> | <p></p> <p>● Suitable for Ex i applications ⊗ Suitable for Ex e II applications 550 V, 22 A</p> | <p>Spacer module</p> <p> gray 2002-549 100 (4x25)</p> |
| <p>Marking strip, plain,</p> <p>11 mm wide, 50m roll white 2009-110 1</p> | | <p>Operating tool with partially insulated shaft,</p> <p>type 2, (3.5 x 0.5) mm blade 210-720 1</p> |
| | | <p>Insulated ferrules, extra long, for TOPJOB®S terminal blocks</p> <p> see page 195</p> |

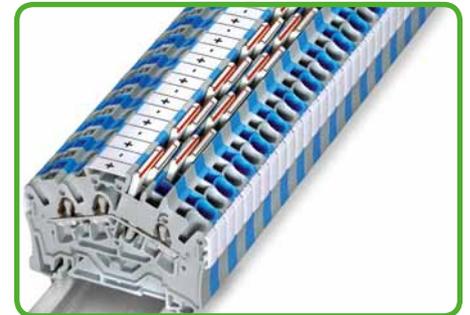
TOPJOB® S Through/Ground and Ex Terminal Blocks 2.5 (4) mm², Angled Type 2002 Series

| | | | |
|--|--|---|--|
| <p>0.25 - 2.5 (4) mm² ① 800 V/8 kV/3 I_N 24 A (32 A)</p> <p>Terminal block width 5.2 mm / 0.205 in  10 - 12 mm / 0.43 in.</p> <p>② Approvals</p> | <p>AWG 22 - 12 600 V, 20 A  600 V, 20 A </p> | <p>0.25 - 2.5 (4) mm² ① 800 V/8 kV/3 I_N 24 A (32 A)</p> <p>Terminal block width 5.2 mm / 0.205 in  10 - 12 mm / 0.43 in.</p> <p>② Approvals</p> | <p>AWG 22 - 12 600 V, 20 A  600 V, 20 A </p> |
|--|--|---|--|

① Conductor sizes: 0.25 - 4 mm² "s + f-st";
Push-in conductor sizes: 0.75 - 4 mm² "s" and
0.75 - 2.5 mm² "insulated ferrule, 12 mm"



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|---|-----------|------------|--|-----------|------------|
| 3-conductor through terminal block | | | 4-conductor through terminal block | | |
| gray  Ex | 2002-6301 | 100 | gray  Ex | 2002-6401 | 100 |
| blue  Ex | 2002-6304 | 100 | blue  Ex | 2002-6404 | 100 |
| orange  Ex | 2002-6302 | 100 | orange  Ex | 2002-6402 | 100 |
| Additional colors pending | | | Additional colors pending | | |
| 3-conductor ground terminal block | | | 4-conductor ground terminal block | | |
| green-yellow  Ex | 2002-6307 | 100 | green-yellow  Ex | 2002-6407 | 100 |
| Notice: These terminal blocks cannot be commoned with push-in type jumper bars! | | | | | |



| Item-Specific Accessories | | | Item-Specific Accessories | | |
|---|--------|----------------------|---|--------|----------------------|
| End and intermediate plate, 0.8 mm thick | | | End and intermediate plate, 0.8 mm thick | | |
|  | orange | 2002-6392 100 (4x25) |  | orange | 2002-6392 100 (4x25) |
| | gray | 2002-6391 100 (4x25) | | gray | 2002-6391 100 (4x25) |

| 2002 Series Accessories | | Appropriate marking systems: WMB/Marker Strips/WMB Inline/Mini-WSB | |
|---|--|---|---|
|  | Push-in type jumper bar , insulated, I _N 25 A, light gray | | |
| | 2-way 2002-402 200 (8x25) | | |
| | 3-way 2002-403 200 (8x25) | | |
| | 4-way 2002-404 200 (8x25) | | |
| | 5-way 2002-405 100 (4x25) | | |
| | : : : : : : | | |
| | 10-way 2002-410 100 (4x25) | | |
|  | Push-in type jumper bars , light gray, insulated, I _N 25 A |  | Insulated ferrules , extra long, for TOPJOB®S terminal blocks, see page 195 |
| | 1 - 3 2002-433 200 (8x25) | | |
| | 1 - 4 2002-434 200 (8x25) | | |
| | 1 - 5 2002-435 100 (4x25) | | |
| | : : : : : : | | |
| | 1 - 10 2002-440 100 (4x25) |  | Insulation stop , 5 pcs/strip 200 strips |
|  | Staggered jumper , insulated, I _N 25 A, light gray | | |
| | 2-way 2002-472 100 (4x25) | | |
| | 3-way 2002-473 100 (4x25) | | |
| | 4-way 2002-474 100 (4x25) | | |
| | 5-way 2002-475 50 (2x25) | | |
| | : : : : : : | | |
| | 12-way 2002-482 50 (2x25) |  | Protective warning marker , with high-voltage symbol, for 5 terminal blocks |
|  | TOPJOB®S connector , modular, for jumper contact slot |  | Test plug adapter , for test plug 4 mm Ø |
| | gray 2002-511 100 (4x25) | | gray 2009-174 100 (4x25) |
|  | Spacer module | | Testing tap , for max. 2.5 mm ² /AWG 14 |
| | gray 2002-549 100 (4x25) | | gray 2009-182 100 (4x25) |
|  | Operating tool with partially insulated shaft , type 2, (3.5 x 0.5) mm blade |  | Banana plugs , only for safety extra-low voltage (42 V) |
| | 210-720 1 | | black 215-311 50 |
| | | | red 215-212 50 |
| | | | blue 215-711 50 |
| | | | <ul style="list-style-type: none">  Suitable for Ex i applications  Suitable for Ex e II applications |

3- and 4-conductor terminal blocks

The TOPJOB®S rail-mounted terminal blocks have a 35-degree conductor entry angle permitting a very small bend radius and an extremely short wiring distance to the cable duct. For applications in switchgear and control cabinets using the LSC wiring system from Lütze, e.g., these terminal blocks are a space- and cost-saving solution. This allows the cable duct to be placed very close to the terminal blocks, keeping its height relatively low.

Product features:

- CAGE CLAMP®S connection for all conductor types, with the additional benefit of solid and ferruled conductors being simply pushed in
- Vibration-proof, fast, maintenance-free terminations
- 3-conductor through and ground conductor terminal blocks equipped with a dual jumper slot
- 4-conductor terminal blocks permit potential multiplication - no additional jumpers or terminal blocks needed
- 3- and 4-conductor terminal blocks have **the same dimensions**

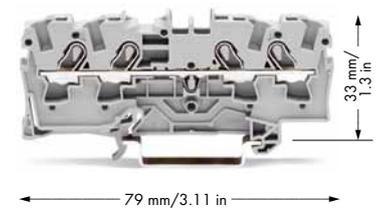
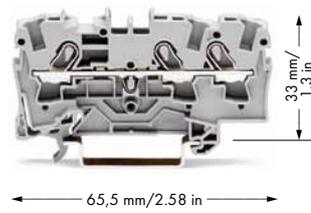
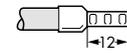
An end plate must be applied when changing from a 3-conductor terminal block to a 4-conductor terminal block and vice versa.

② Approvals are available online at: www.wago.com.

For technical explanations and abbreviations, see technical section.

| | | |
|---|---|---|
| <p>0.5 - 4 (6) mm² ① 800 V/8 kV/3 I_N 32 A (41 A)</p> <p>AWG 20 - 10 600 V, 30 A  600 V, 30 A </p> <p>Terminal block width 6.2 mm / 0.244 in  11 - 13 mm / 0.47 in</p> <p>② Approvals</p> | <p>0.5 - 4 (6) mm² ① 800 V/8 kV/3 I_N 32 A (41 A)</p> <p>AWG 20 - 10 600 V, 30 A  600 V, 30 A </p> <p>Terminal block width 6.2 mm / 0.244 in  11 - 13 mm / 0.47 in</p> <p>② Approvals</p> | <p>0.5 - 4 (6) mm² ① 800 V/8 kV/3 I_N 32 A (41 A)</p> <p>AWG 20 - 10 600 V, 30 A  600 V, 30 A </p> <p>Terminal block width 6.2 mm / 0.244 in  11 - 13 mm / 0.47 in</p> <p>② Approvals</p> |
|---|---|---|

① Conductor sizes: 0.5 - 6 mm² "s + f.st.";
Push-in conductor sizes: 1 - 6 mm² "s" and
0.75 - 4 mm² "insulated ferrule, 12 mm"



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|--|-----------|------------|--|-----------|------------|--|-----------|------------|
| 2-conductor through terminal block | | | 3-conductor through terminal block | | | 4-conductor through terminal block | | |
|  gray  | 2004-1201 | 100 |  gray  | 2004-1301 | 100 |  gray  | 2004-1401 | 100 |
|  blue  | 2004-1204 | 100 |  blue  | 2004-1304 | 100 |  blue  | 2004-1404 | 100 |
|  orange  | 2004-1202 | 100 |  orange  | 2004-1302 | 100 |  orange  | 2004-1402 | 100 |
|  red  | 2004-1203 | 100 |  red  | 2004-1303 | 100 |  red  | 2004-1403 | 100 |
|  black  | 2004-1205 | 100 |  black  | 2004-1305 | 100 |  black  | 2004-1405 | 100 |
|  yellow  | 2004-1206 | 100 |  yellow  | 2004-1306 | 100 |  yellow  | 2004-1406 | 100 |
| 2-conductor ground terminal block | | | 3-conductor ground terminal block | | | 4-conductor ground terminal block | | |
|  green-yellow  | 2004-1207 | 100 |  green-yellow  | 2004-1307 | 100 |  green-yellow  | 2004-1407 | 100 |

Item-Specific Accessories

Separator for Ex e/Ex i applications, see page 30

| | | |
|---|---|---|
| <p>End and intermediate plate, 1 mm thick</p>  <p>orange 2004-1292 100 (4x25) gray 2004-1291 100 (4x25)</p> | <p>End and intermediate plate, 1 mm thick</p>  <p>orange 2004-1392 100 (4x25) gray 2004-1391 100 (4x25)</p> | <p>End and intermediate plate, 1 mm thick</p>  <p>orange 2004-1492 100 (4x25) gray 2004-1491 100 (4x25)</p> |
| <p>Separator, oversized, 0.8 mm thick</p>  <p>orange 2004-1294 100 (4x25) gray 2004-1293 100 (4x25)</p> | <p>Separator, oversized, 0.8 mm thick</p>  <p>orange 2004-1394 100 (4x25) gray 2004-1393 100 (4x25)</p> | <p>Separator, oversized, 0.8 mm thick</p>  <p>orange 2004-1494 100 (4x25) gray 2004-1493 100 (4x25)</p> |

2004 Series Accessories

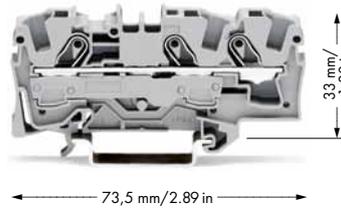
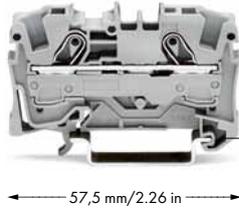
Appropriate marking systems: WMB/Marking strips/Mini-WSB

| | | |
|--|--|--|
| <p>Push-in type jumper bar, insulated, I_N 32 A, light gray</p>  <p>2-way 2004-402 200 (8x25) 3-way 2004-403 200 (8x25) 4-way 2004-404 100 (4x25) : : 10-way 2004-410 100 (4x25)</p> | <p>Push-in type jumper bar, insulated, I_N 32 A, light gray</p>  <p>1 - 3 2004-433 200 (8x25) 1 - 4 2004-434 200 (8x25) 1 - 5 2004-435 100 (4x25) : : 1 - 10 2004-440 100 (4x25)</p> | <p>Star point jumper, insulated, I_N = I_N terminal block, light gray 1-3-5 2004-405/011-000 100 (4x25)</p> <p>Step-down jumper, insulated, I_N 32 A light gray 2006-499 50 (2x25)</p> |
| <p>Insulation stop, 5 pcs/strip 200 strips</p>  <p>light gray 2004-171 0.25-0.5 mm² dark gray 2004-172 0.75-1 mm²</p> | <p>Protective warning marker, with high-voltage symbol, for 5 terminal blocks yellow 2004-115 100 (4x25)</p>  | <p>TOPJOB®S connector, modular, for jumper contact slot gray 2004-511 100 (4x25)</p> <p>Spacer module gray 2004-549 100 (4x25)</p> |
| <p>WMB Multi marking system, 10 strips with 10 markers per card, stretchable 5 - 5.2 mm plain 793-5501 5</p>  | <p> Suitable for Ex i applications  Suitable for Ex e II applications 550 V, 30 A</p> | <p>Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade 210-720 1</p>  |
| <p>Marking strip, plain, 11 mm wide, 50m roll white 2009-110 1</p>  | <p>Insulated ferrules, extra long, for TOPJOB®S terminal blocks see page 195</p>  | |

TOPJOB® Through/Ground Conductor and Ex Terminal Blocks 6 (10) mm² 2006 Series

| | | | | |
|---|--|--|--|--------------------------------------|
| 0.5 - 6 (10) mm² ① 800 V/8 kV/3 I _N 41 A (57 A) Terminal block width 7.5 mm / 0.295 in  13 - 15 mm / 0.55 in ② Approvals | AWG 20 - 8 600 V, 50 A  600 V, 50 A  | 0.5 - 6 (10) mm² ① 800 V/8 kV/3 I _N 41 A (57 A) Terminal block width 7.5 mm / 0.295 in  13 - 15 mm / 0.55 in ② Approvals | AWG 20 - 8 600 V, 50 A  600 V, 50 A  | Separator for Ex e/Ex i applications |
|---|--|--|--|--------------------------------------|

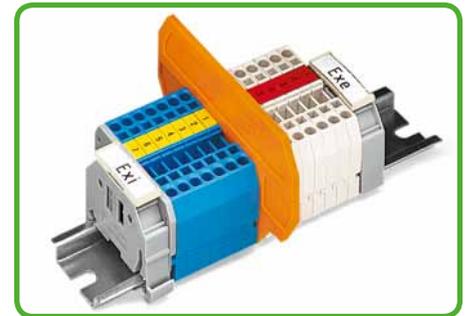
① Conductor sizes: 0.5 - 10 mm² "s + f-st";
 Push-in conductor sizes: 1.5 - 10 mm² "s" and
 1.5 - 6 mm² "insulated ferrule, 12 mm"



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Item No. | Pack. Unit |
|---|-------------------------|------------|--|-------------------------|------------|--|--------------------------|
| 2-conductor through terminal block | | | 3-conductor through terminal block | | | Separator for Ex e/Ex i applications, 3 mm thick, | |
|  gray  | 2006-1201 | 50 |  gray  | 2006-1301 | 25 | orange | |
|  blue  | 2006-1204 | 50 |  blue  | 2006-1304 | 25 | | |
|  orange  | 2006-1202 | 50 |  orange  | 2006-1302 | 25 | 90 mm wide | 209-190 50 (2x25) |
| | | | | | | 120 mm wide | 209-191 50 (2x25) |
| 2-conductor ground terminal block | | | 3-conductor ground terminal block | | | | |
|  green-yellow  | 2006-1207 | 50 |  green-yellow  | 2006-1307 | 25 | | |
| Item-Specific Accessories | | | Item-Specific Accessories | | | | |
| End and intermediate plate, 1 mm thick | | | End and intermediate plate, 1 mm thick | | | | |
|  | orange 2006-1292 | 100 (4x25) |  | orange 2006-1392 | 100 (4x25) | | |
| | gray 2006-1291 | 100 (4x25) | | gray 2006-1391 | 100 (4x25) | | |

2006 Series Accessories Appropriate marking systems: WMB/Marking strips/Mini-WSB

| | |
|--|---|
| Push-in type jumper bar, insulated, I_N 41 A, light gray  2-way 2006-402 50 (2x25) 3-way 2006-403 50 (2x25) 4-way 2006-404 50 (2x25) 5-way 2006-405 50 (2x25) | Push-in type jumper bar, insulated, I_N 41 A, light gray  1 - 3 2006-433 50 (2x25) 1 - 4 2006-434 50 (2x25) 1 - 5 2006-435 50 (2x25) |
| Star point jumper, insulated, I _N = I _N terminal block, light gray 1-3-5 2004-405/011-000 100 (4x25) | Step-down jumper, insulated, I _N 32 A light gray 2006-499 50 (2x25) |
| Protective warning marker, with high-voltage symbol, for 5 terminal blocks  yellow 2006-115 100 (4x25) | Operating tool with partially insulated shaft, type 3, (5.5 x 0.8) mm blade  210-721 1 |
| Test plug adapter, for test plug 4 mm Ø  gray 2009-174 100 (4x25) Testing tap, for max. 2.5 mm²/AWG 14 gray 2009-182 100 (4x25) | Banana plugs, only for safety extra-low voltage (42 V)  black 215-311 50 red 215-212 50 blue 215-711 50 |
| Marking strips, plain, 11 mm wide, 50m roll white 2009-110 1 | WMB Multi marking system,  10 strips with 10 markers per card, stretchable 5 - 5.2 mm plain 793-5501 50 (10x5) |
| Insulated ferrules, extra long, for TOPJOB®S terminal blocks see page 195  | ● Suitable for Ex i applications ☒ Suitable for Ex e II applications 550 V, 38 A (2-conductor terminal blocks) 550 V, 36 A (3-conductor terminal blocks) |



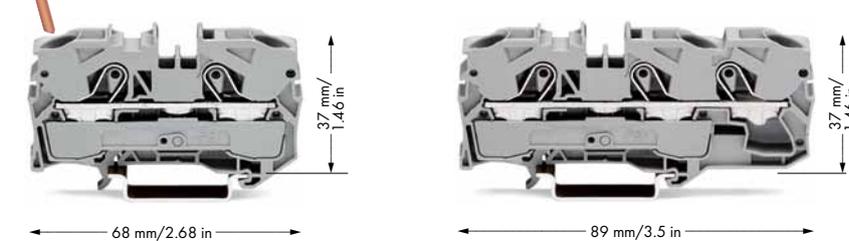
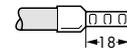
Separator for Ex e/Ex i applications
 According to EN 50020, a minimum distance of 50 mm must be kept between live parts of Ex e and Ex i circuits. The use of Ex e/Ex i separators is a space-saving solution when Ex e and Ex i terminal blocks are mounted on a common carrier rail.

Suitable for Series: 279 to 282,
 2001, 2002 and 2004.

209-190 for 2-conductor terminal blocks.
 209-191 for 2-, 3-, 4-conductor terminal blocks.

| | | |
|---|---|-------------------------|
| <p>0.5 - 10 (16) mm² ① AWG 20 - 6 800 V/8 kV/3 600 V, 65 A 600 V, 65 A </p> <p>Terminal block width 10 mm / 0.394 in 17 - 19 mm / 0.71 in</p> <p>② Approvals</p> | <p>0.5 - 10 (16) mm² ① AWG 20 - 6 800 V/8 kV/3 600 V, 65 A 600 V, 65 A </p> <p>Terminal block width 10 mm / 0.394 in 17 - 19 mm / 0.71 in</p> <p>② Approvals</p> | <p>Step-down jumper</p> |
|---|---|-------------------------|

① Conductor sizes: 0.5 - 16 mm² "s + f-st";
Push-in conductor sizes: 2.5 - 16 mm² "s" and
2.5 - 10 mm² "insulated ferrule, 18 mm"



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Item No. | Pack. Unit |
|---|-----------------------------|------------|---|-----------------------------|------------|---|---------------------------|
| 2-conductor through terminal block | | | 3-conductor through terminal block | | | Step-down jumper, light gray, insulated, | |
| gray | 2010-1201 | 25 | gray | 2010-1301 | 25 | I _N 32 A, | |
| blue | 2010-1204 | 25 | blue | 2010-1304 | 25 | commons 6/4mm ² (AWG 10/12) t. blocks with | |
| orange | 2010-1202 | 25 | orange | 2010-1302 | 25 | 4/2.5/1.5mm ² (AWG 12/14/16) blocks. | 2006-499 50 (2x25) |
| 2-conductor ground terminal block | | | 3-conductor ground terminal block | | | Step-down jumper, light gray, insulated, | |
| green-yellow | 2010-1207 | 25 | green-yellow | 2010-1307 | 25 | I _N 32 A, | |
| Item-Specific Accessories | | | | | | commons 16/10 mm ² (AWG 16/8) t. blocks with | |
| End and intermediate plate, 1 mm thick | | | End and intermediate plate, 1 mm thick | | | 10/6/4/2.5 mm ² (AWG 8/10/12/14) blocks. | |
| | orange 2010-1292 100 (4x25) | | | orange 2010-1392 100 (4x25) | | 2016-499 | 50 (2x25) |
| | gray 2010-1291 100 (4x25) | | | gray 2010-1391 100 (4x25) | | | |
| 2010 Series Accessories | | | Appropriate marking systems: WMB/Marking strips/Mini-WSB | | | | |

| | |
|--|--|
| <p>Push-in type jumper bar, insulated, I_N 57 A, light gray</p> <p>2-way 2010-402 50 (2x25)</p> <p>3-way 2010-403 50 (2x25)</p> <p>4-way 2010-404 50 (2x25)</p> <p>5-way 2010-405 50 (2x25)</p> | <p>Push-in type jumper bar, insulated, I_N 57 A, light gray</p> <p>1 - 3 2010-433 50 (2x25)</p> <p>1 - 4 2010-434 50 (2x25)</p> <p>1 - 5 2010-435 50 (2x25)</p> |
|--|--|

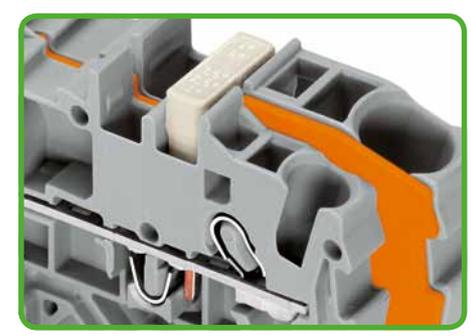
| | |
|---|---|
| <p>Step-down jumper, insulated,</p> <p>I_N 32 A</p> <p>light gray 2006-499 50 (2x25)</p> | <p>Finger guard,</p> <p>touchproof cover protects unused conductor entries</p> <p>yellow 2010-100 100 (4x25)</p> |
|---|---|

| | |
|--|---|
| <p>Protective warning marker, with high-voltage symbol,</p> <p>for 5 terminal blocks</p> <p>yellow 2010-115 50 (2x25)</p> | <p>Operating tool with partially insulated shaft,</p> <p>type 3, (5.5 x 0.8) mm blade</p> <p>210-721 1</p> |
|--|---|

| | |
|---|---|
| <p>Test plug adapter, for test plug 4 mm Ø</p> <p>gray 2009-174 100 (4x25)</p> <p>Testing tap, for max. 2.5 mm²/AWG 14</p> <p>gray 2009-182 100 (4x25)</p> | <p>Banana plugs, only for safety extra-low voltage (42 V)</p> <p>black 215-311 50</p> <p>red 215-212 50</p> <p>blue 215-711 50</p> |
|---|---|

| | |
|---|--|
| <p>Marking strips, plain,</p> <p>11 mm wide,</p> <p>50m roll</p> <p>white 2009-110 1</p> | <p>WMB Multi marking system,</p> <p>10 strips with 10 markers per card,</p> <p>stretchable 5 - 5.2 mm</p> <p>plain 793-5501 50 (10x5)</p> |
|---|--|

| | |
|---|--|
| <p>Insulated ferrules, extra long,</p> <p>for TOPJOB®S terminal blocks</p> <p>see page 195</p> | <p> Suitable for Ex i applications</p> <p> Suitable for Ex e II applications</p> <p>550 V, 51 A (2-conductor terminal blocks)</p> <p>550 V, 50 A (3-conductor terminal blocks)</p> |
|---|--|



An end plate must be applied to the open side of the larger terminal block.

Further terminal blocks of the smaller cross section may be commoned using push-in type jumper bars.

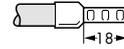
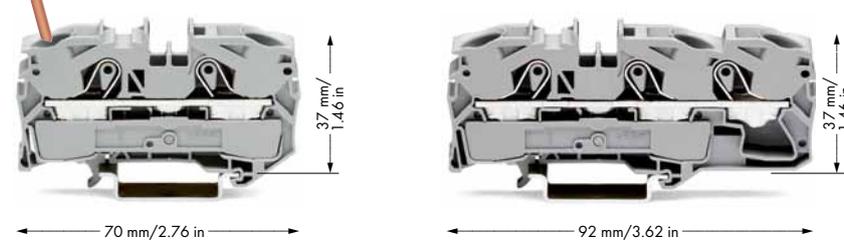
Note:
The total current flowing shall not exceed the rating of the step-down jumper.

| Reduction of cross section | Push-in type jumper bar | Step-down jumper |
|----------------------------|-------------------------|------------------|
| 16 to 10 mm ² | X | |
| 16 to 6 mm ² | X | |
| 16 to 4 mm ² | | X |
| 16 to 2.5 mm ² | | X |
| 10 to 6 mm ² | X | |
| 10 to 4 mm ² | X | |
| 10 to 2.5 mm ² | | X |
| 6 to 4 mm ² | X | |
| 6 to 2.5 mm ² | X | |

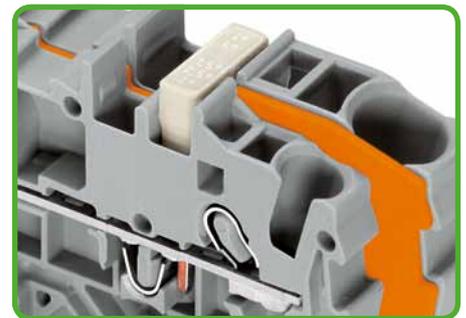
TOPJOB® Through/Ground Conductor and Ex Terminal Blocks 16 (25 "f-st") mm² 2016 Series

| | | |
|---|---|-------------------------|
| <p>0.5 - 16 (25 "f-st") mm² ① AWG 20 - 4 800 V/8 kV/3 600 V, 85 A ② I_N 76 A (90 A) 600 V, 85 A ③</p> <p>Terminal block width 12 mm / 0.472 in 18 - 20 mm / 0.75 in</p> <p>② Approvals</p> | <p>0.5 - 16 (25 "f-st") mm² ① AWG 20 - 4 800 V/8 kV/3 600 V, 85 A ② I_N 76 A (90 A) 600 V, 85 A ③</p> <p>Terminal block width 12 mm / 0.472 in 18 - 20 mm / 0.75 in</p> <p>② Approvals</p> | <p>Step-down jumper</p> |
|---|---|-------------------------|

① Conductor sizes: 0.5 - 16 mm² "s + f-st";
Push-in conductor sizes: 2.5 - 16 mm² "s" and
2.5 - 16 mm² "insulated ferrule, 18 mm"



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Item No. | Pack. Unit |
|---|-----------|---|---|--|---|---|------------|
| 2-conductor through terminal block | | | 3-conductor through terminal block | | | Step-down jumper, insulated, I_N 32 A, | |
| gray ③ | 2016-1201 | 20 | gray ③ | 2016-1301 | 20 | light gray, | |
| blue ③ | 2016-1204 | 20 | blue ③ | 2016-1304 | 20 | commons 6/4mm ² (AWG 10/12) t. blocks with | |
| orange ③ | 2016-1202 | 20 | orange ③ | 2016-1302 | 20 | 4/2.5/1.5mm ² (AWG 12/14/16) blocks. | |
| | | | | | | 2006-499 | 50 (2x25) |
| 2-conductor ground terminal block | | | 3-conductor ground terminal block | | | Step-down jumper, insulated, I_N 57 A, | |
| green-yellow ③ | 2016-1207 | 20 | green-yellow ③ | 2016-1307 | 20 | commons 16/10 mm ² (AWG 16/8) t. blocks with | |
| | | | | | | 10/6/4/2.5 mm ² (AWG 8/10/12/14) blocks. | |
| | | | | | | 2016-499 | 50 (2x25) |
| Item-Specific Accessories | | | | | | | |
| End and intermediate plate, 1 mm thick | | | | End and intermediate plate, 1 mm thick | | | |
| | | orange 2016-1292 100 (4x25) | | | orange 2016-1392 100 (4x25) | | |
| | | gray 2016-1291 100 (4x25) | | | gray 2016-1391 100 (4x25) | | |
| 2016 Series Accessories | | | | | | | |
| Appropriate marking systems: WMB/Marking strips/Mini-WSB | | | | | | | |
| Push-in type jumper bar, insulated, I_N 76 A, light gray | | | | Push-in type jumper bar, insulated, I_N 76 A, light gray | | | |
| | | 2-way 2016-402 50 (2x25) | | | 1 - 3 2016-433 50 (2x25) | | |
| | | 3-way 2016-403 50 (2x25) | | | 1 - 4 2016-434 50 (2x25) | | |
| | | 4-way 2016-404 50 (2x25) | | | 1 - 5 2016-435 50 (2x25) | | |
| | | 5-way 2016-405 50 (2x25) | | | | | |
| Star point jumper, insulated, | | | | Finger guard, | | | |
| | | I _N = I _N terminal block, light gray 1-3-5 2016-405/011-000 50 (2x25) | | | touchproof cover protects unused conductor entries yellow 2016-100 100 (4x25) | | |
| Protective warning marker, with high-voltage symbol, | | | | Operating tool with partially insulated shaft, | | | |
| | | for 5 terminal blocks yellow 2016-115 50 (2x25) | | | type 3, (5.5 x 0.8) mm blade 210-721 1 | | |
| Test plug adapter, for test plug 4 mm Ø | | | | Banana plugs, only for safety extra-low voltage (42 V) | | | |
| | | gray 2009-174 100 (4x25) Testing tap, for max. 2.5 mm ² /AWG 14 gray 2009-182 100 (4x25) | | | black 215-311 50 red 215-212 50 blue 215-711 50 | | |
| Marking strips, plain, | | | | WMB Multi marking system, | | | |
| | | 11 mm wide, 50m roll white 2009-110 1 | | | 10 strips with 10 markers per card, stretchable 5 - 5.2 mm plain 793-5501 50 (10x5) | | |
| Insulated ferrules, extra long, | | | | <ul style="list-style-type: none"> ● Suitable for Ex i applications ③ Suitable for Ex e II applications 550 V, 70 A (2-conductor terminal blocks) 550 V, 67 A (3-conductor terminal blocks) | | | |
| | | for TOPJOB®S terminal blocks see page 195 | | | | | |



An end plate must be applied to the open side of the larger terminal block.

Further terminal blocks of the smaller cross section may be commoned using push-in type jumper bars.

Note:
The total current flowing shall not exceed the rating of the step-down jumper.

| Reduction of cross section | Push-in type jumper bar | Step-down jumper |
|----------------------------|-------------------------|------------------|
| 16 to 10 mm ² | X | |
| 16 to 6 mm ² | X | |
| 16 to 4 mm ² | | X |
| 16 to 2.5 mm ² | | X |
| 10 to 6 mm ² | X | |
| 10 to 4 mm ² | X | |
| 10 to 2.5 mm ² | | X |
| 6 to 4 mm ² | X | |
| 6 to 2.5 mm ² | X | |

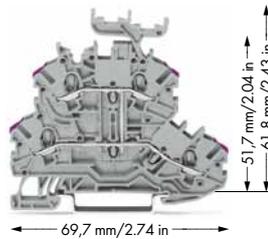
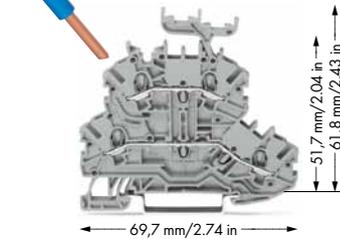
② Approvals are available online at: www.wago.com.
Please find terminal blocks for larger wire sizes on page 59.

For technical explanations and abbreviations, see technical section.

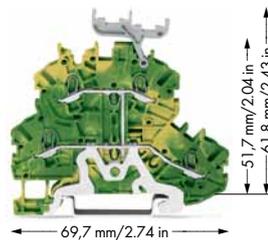
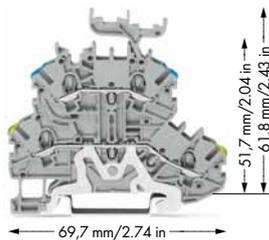
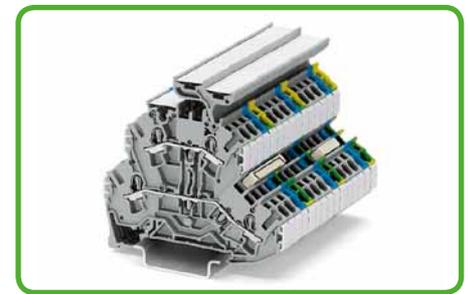
TOPJOB® Double-Deck Terminal Blocks 1 (1.5) mm² 2000 Series

| | |
|---|---|
| 0.14 - 1 (1.5) mm² ① AWG 24 - 16 500 V/6 kV/3 I _N 13.5 A Terminal block width 3.5 mm / 0.138 in  9 - 11 mm / 0.39 in ② Approvals | 0.14 - 1 (1.5) mm² ① AWG 24 - 16 500 V/6 kV/3 I _N 13.5 A Terminal block width 3.5 mm / 0.138 in  9 - 11 mm / 0.39 in ② Approvals |
|---|---|

① Conductor sizes: 0.14 - 1.5 mm² "s + f-st";
 Push-in conductor sizes: 0.5 - 1.5 mm² "s" and
 0.5 - 0.75 mm² "insulated ferrule, 10 mm"



| Item No. | Item No. | Pack. Unit | Item No. | Item No. | Pack. Unit |
|---|------------------|---------------------|---|------------------|---------------------|
| Through/through terminal block, gray housing | | | 4-conductor through terminal block, internal commoning, gray housing, conductor entry position colored in violet | | |
| Marker carrier with | | | Marker carrier with | | |
| | without | | | without | |
| ● L/L | 2000-2231 | 2000-2201 50 | ● L | 2000-2238 | 2000-2208 50 |
| ● N/L | 2000-2232 | 2000-2202 50 | | | |
| ● L/N | 2000-2233 | 2000-2203 50 | | | |
| Blue housing | | | 4-conductor through terminal block, internal commoning, blue housing, conductor entry position colored in violet | | |
| ● N/N | 2000-2234 | 2000-2204 50 | ● N | 2000-2239 | 2000-2209 50 |



| Item No. | Item No. | Pack. Unit | Item No. | Item No. | Pack. Unit |
|--|------------------|---------------------|--|------------------|---------------------|
| Ground conductor/through terminal block, gray housing | | | 4-conductor ground terminal block, internal commoning, green-yellow housing | | |
| Marker carrier with | | | Marker carrier with | | |
| | without | | | without | |
| ● PE/N | 2000-2247 | 2000-2217 50 | ● PE | 2000-2237 | 2000-2207 50 |
| ● PE/L | 2000-2257 | 2000-2227 50 | | | |

Item-Specific Accessories

| | | |
|---|--------|-----------------------------|
| End and intermediate plate, 0.7 mm thick | | |
|  | orange | 2000-2292 100 (4x25) |
| | gray | 2000-2291 100 (4x25) |

| | | |
|---|--------|-----------------------------|
| End and intermediate plate, 0.7 mm thick | | |
|  | orange | 2000-2292 100 (4x25) |
| | gray | 2000-2291 100 (4x25) |

2000 Series Accessories

Appropriate marking systems: **WMB/Marking Strips**

| | | |
|---|--------|----------------------------|
| Push-in type jumper bar, insulated, I_N 14 A, light gray | | |
|  | 2-way | 2000-402 200 (8x25) |
| | 3-way | 2000-403 200 (8x25) |
| | 4-way | 2000-404 200 (8x25) |
| | 5-way | 2000-405 100 (4x25) |
| | : | : |
| | 10-way | 2000-410 100 (4x25) |

| | | |
|---|--------|----------------------------|
| Push-in type jumper bar, insulated, I_N 25 A, light gray | | |
|  | 1 - 3 | 2000-433 200 (8x25) |
| | 1 - 4 | 2000-434 200 (8x25) |
| | 1 - 5 | 2000-435 100 (4x25) |
| | : | : |
| | 1 - 10 | 2000-440 100 (4x25) |

| | | |
|---|-------|------------------------------------|
| Star point jumper, insulated, I_N = I_N terminal block, light gray | | |
|  | 1-3-5 | 2000-405/011-000 100 (4x25) |

| | | |
|---|--------|----------------------------|
| Protective warning marker, with high-voltage symbol, for 5 terminal blocks | | |
|  | yellow | 2000-115 100 (4x25) |

| |
|-------------------------------|
| ● Ex e II approvals (pending) |
|-------------------------------|

| | | |
|---|--|------------------|
| Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade | | |
|  | | 210-720 1 |

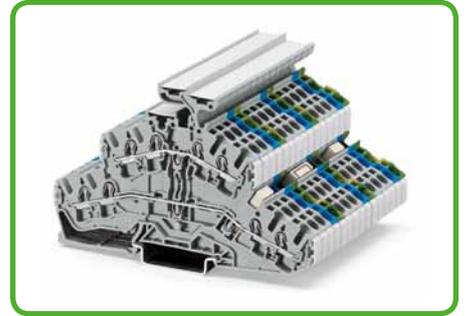
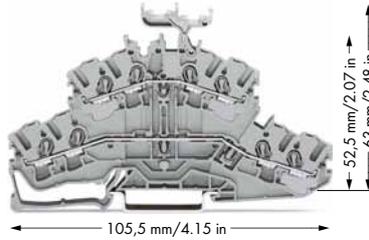
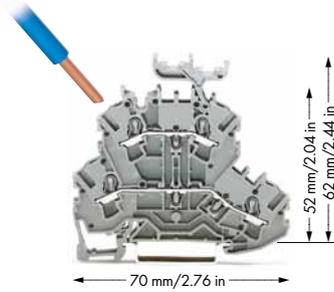
TOPJOB® S

Double-Deck Terminal Blocks 2.5 (4) mm²

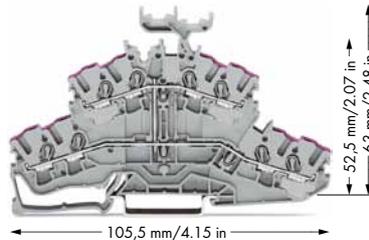
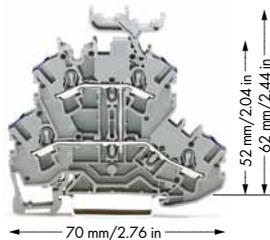
2002 Series

| | | | |
|--|--|---|--------------------|
| 0.25 - 2.5 (4) mm² ① 500 V/6 kV/3 I _N 24 A (28 A) Terminal block width 5.2 mm / 0.205 in  10 - 12 mm / 0.43 in ② Approvals | AWG 22 - 12 300 V, 20 A  600 V, 20 A  | 0.25 - 2.5 (4) mm² ① 800 V/8 kV/3 I _N 24 A (28 A) Terminal block width 5.2 mm / 0.205 in  10 - 12 mm / 0.43 in ② Approvals | AWG 22 - 12 |
|--|--|---|--------------------|

① Conductor sizes: 0.25 - 4 mm² "s + fst";
 Push-in conductor sizes: 0.75 - 4 mm² "s" and 0.75 - 2.5 mm² "insulated ferrule, 12 mm"



| Item No. | Item No. | Pack. Unit | Item No. | Item No. | Pack. Unit | 2002 Series Accessories |
|--|------------------|---------------------|--|------------------|---------------------|--|
| 2-cond. double-deck terminal block, for DIN 35 rail | | | 4-cond. double-deck terminal block, for DIN 35 rail | | | Push-in type jumper bar, insulated, I_N 25 A, light gray 2-way 2002-402 200 (8x25) 3-way 2002-403 200 (8x25) 4-way 2002-404 200 (8x25) 5-way 2002-405 100 (4x25) : : 10-way 2002-410 100 (4x25) Push-in type jumper bar, insulated, I_N 25 A, light gray 1 - 3 2002-433 200 (8x25) 1 - 4 2002-434 200 (8x25) 1 - 5 2002-435 100 (4x25) : : 1 - 10 2002-440 100 (4x25) |
| Through/through terminal block, gray housing | | | Through/through terminal block, gray housing | | | |
| Marker carrier with | | | Marker carrier with | | | |
| without | | | without | | | |
| ⊖ L/L | 2002-2231 | 2002-2201 50 | ⊖ L/L | 2002-2431 | 2002-2401 50 | |
| ⊖ N/L | 2002-2232 | 2002-2202 50 | ⊖ N/L | 2002-2432 | 2002-2402 50 | |
| ⊖ L/N | 2002-2233 | 2002-2203 50 | ⊖ L/N | 2002-2433 | 2002-2403 50 | |
| Blue housing | | | Blue housing | | | |
| ⊖ N/N | 2002-2234 | 2002-2204 50 | ⊖ N/N | 2002-2434 | 2002-2404 50 | |
| Ground conductor/through terminal block, gray housing | | | Ground conductor/through terminal block, gray housing | | | |
| ⊖ PE/N | 2002-2247 | 2002-2217 50 | ⊖ PE/N | 2002-2447 | 2002-2417 50 | |
| ⊖ PE/L | 2002-2257 | 2002-2227 50 | ⊖ PE/L | 2002-2457 | 2002-2427 50 | |



| Item No. | Item No. | Pack. Unit | Item No. | Item No. | Pack. Unit | 2002 Series Accessories |
|--|------------------|---------------------|--|------------------|---------------------|--|
| 4-cond. double-deck terminal block, for DIN 35 rail | | | 8-cond. double-deck terminal block, for DIN 35 rail | | | Staggered jumper, insulated, I_N 25 A, light gray 2-way 2002-472 100 (4x25) 3-way 2002-473 100 (4x25) 4-way 2002-474 100 (4x25) 5-way 2002-475 50 (2x25) : : 12-way 2002-482 50 (2x25) TOPJOB®S connector, modular, for jumper contact slot gray 2002-511 100 (4x25) Spacer module gray 2002-549 100 (4x25) Protective warning marker, with high-voltage symbol, for 5 terminal blocks yellow 2002-115 100 (4x25) Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade 210-720 1 Marking strips, plain 11 mm wide, 50m roll white 2009-110 1 Insulated ferrules, extra long, for TOPJOB®S terminal blocks, see page 195 |
| Through terminal block, internal commoning, gray housing, conductor entry position colored in violet | | | Through terminal block, internal commoning, gray housing, conductor entry position colored in violet | | | |
| Marker carrier with | | | Marker carrier with | | | |
| without | | | without | | | |
| ⊖ L | 2002-2238 | 2002-2208 50 | ⊖ L | 2002-2438 | 2002-2408 50 | |
| 4-conductor through terminal block, internal commoning, blue housing, conductor entry position colored in violet | | | Through terminal block, internal commoning, blue housing, conductor entry position colored in violet | | | |
| ⊖ N | 2002-2239 | 2002-2209 50 | ⊖ N | 2002-2439 | 2002-2409 50 | |
| 4-cond. double-deck terminal block, for DIN 35 rail | | | 4-cond. double-deck terminal block, for DIN 35 rail | | | |
| Ground conductor terminal block, internal commoning, green-yellow housing | | | Ground conductor terminal block, internal commoning, green-yellow housing | | | |
| ⊖ PE | 2002-2237 | 2002-2207 50 | ⊖ PE | 2002-2437 | 2002-2407 50 | |
| Item-Specific Accessories Appropriate marking systems: WMB/Marking Strips | | | | | | |
| End and intermediate plate, 0.8 mm thick | | | End and intermediate plate, 0.8 mm thick | | | |
|  orange 2002-2292 100 (4x25) gray 2002-2291 100 (4x25) | | |  orange 2002-2492 100 (4x25) gray 2002-2491 100 (4x25) | | | |

⊖ Suitable for Ex i applications
 ⊖ Ex e II approvals (pending)

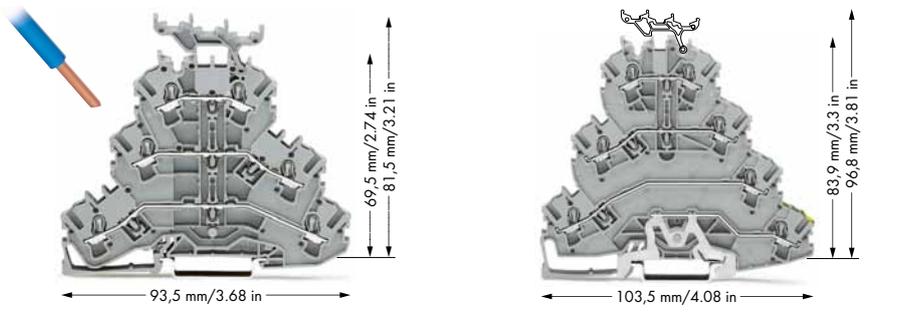
TOPJOB® Triple- and Quadruple-Deck Terminal Blocks 2.5 (4) mm² 2002 Series

CAGE CLAMP® S

| | | | |
|---|--|--|--------------------|
| <p>0.25 - 2.5 (4) mm² ① 800 V/8 kV/3 I_N 24 A (28 A)</p> <p>Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in</p> <p>② Approvals</p> | <p>AWG 22 - 12 300 V, 20 A 300 V, 20 A</p> | <p>0.25 - 2.5 (4) mm² ① 800 V/8 kV/3 I_N 24 A</p> <p>Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in</p> <p>② Approvals</p> | <p>AWG 22 - 12</p> |
|---|--|--|--------------------|

Handling Quadruple-Deck Terminal Blocks

① Conductor sizes: 0.25 - 4 mm² "s + fst";
Push-in conductor sizes: 0.75 - 4 mm² "s" and 0.75 - 2.5 mm² "insulated ferrule, 12 mm"

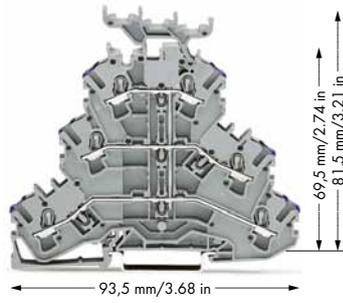


Creating spacer housings for rail-mounted terminal blocks for electric motor wiring via termination port and operating slot covers.

| Item No. | Item No. | Pack. Unit | Item No. | Item No. | Pack. Unit | | | |
|--|-----------|------------|--|------------|------------|-----------|-----------|----|
| 2-cond. triple-deck terminal block, for DIN 35 rail | | | Quadruple-deck, rail-mounted terminal block | | | | | |
| Through/through/through terminal block, gray housing | | | or | | | | | |
| Rail-mounted terminal block for electric motor wiring, gray housing | | | | | | | | |
| Marker carrier with without | | | Marker carrier with without | | | | | |
| ○ L/L/L | 2002-3231 | 2002-3201 | 50 | ○ L1-L2 | 2002-4141 | 2002-4111 | 25 | |
| ○ L/L/N | 2002-3233 | 2002-3203 | 50 | ○ L1-L2-L3 | 2002-4131 | 2002-4101 | 25 | |
| Blue housing | | | ○ L1-L2-L3-PE | | | 2002-4157 | 2002-4127 | 25 |
| ● N/N/N | 2002-3234 | 2002-3204 | 50 | | | | | |
| Ground conductor/through/through terminal block, gray housing | | | | | | | | |
| ○ PE/N/L | 2002-3247 | 2002-3217 | 50 | | | | | |
| ○ PE/L/L | 2002-3257 | 2002-3227 | 50 | | | | | |



Compact design: 3 phases and ground conductor in one terminal block.

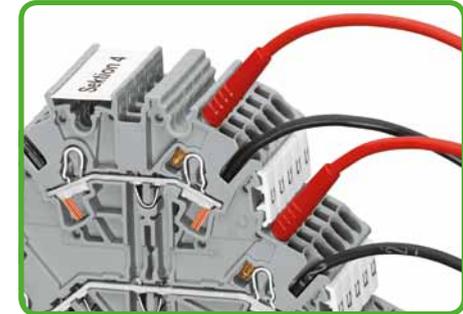


| Item No. | Item No. | Pack. Unit | |
|---|-----------|------------|----|
| 6-cond. triple-deck terminal block, for DIN 35 rail | | | |
| Through terminal block, internal commoning, gray housing, conductor entry position colored in violet | | | |
| Marker carrier with without | | | |
| ○ L | 2002-3238 | 2002-3208 | 50 |
| blue housing, conductor entry position colored in violet | | | |
| ● N | 2002-3239 | 2002-3209 | 50 |
| Shield/through/through terminal block, gray housing | | | |
| ○ Shield/N/L | 2002-3248 | 2002-3218 | 50 |
| ○ Shield/L/L | 2002-3258 | 2002-3228 | 50 |
| Ground conductor terminal block, internal commoning, green-yellow housing | | | |
| ● PE | 2002-3237 | 2002-3207 | 50 |



Marking clamping units with WMB Multi marking system (see Full Line Catalog, Volume 1, Section 13)
Group marking using marking strips.

| Item-Specific Accessories | | Appropriate marking systems: WMB/Marking Strips | |
|---|-----------------------------|---|-----------------------------|
| End and intermediate plate, 0.8 mm thick | | End and intermediate plate, 1 mm thick | |
| | orange 2002-3292 100 (4x25) | | orange 2002-4192 100 (4x25) |
| | gray 2002-3291 100 (4x25) | | gray 2002-4191 100 (4x25) |



Testing with test plug 2 mm Ø.

Please find the entire product range in our Full Line Catalog, Volume 1. Additional information at www.wago.com.



1 TOPJOB® Function Terminal Blocks 2002, 2004 and 2006 Series

36

Fuse disconnect terminal blocks



Pluggable fuse module with blown fuse indication on a 3-conductor carrier terminal block.

Disconnect/test terminal blocks



Movable knife disconnects clearly indicate the circuit state.

Diode and LED terminal blocks



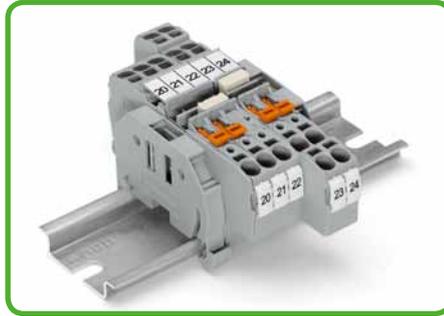
Designing custom circuits:
- via diode terminal blocks (e.g., collective fault signals)
- via LED terminal blocks (e.g., monitoring units).

Fuse replacement 1



Before replacing the fuse, pivot the fuse holder into the locked open position.

Commoning and marking



Dual jumper slots, in the same position as the 2002 Series terminal blocks. Commoning options in front of or behind the knife disconnect, depending on the power supply direction. One center and two side marker slots for WMB markers or marking strips.

Commoning



Custom circuit design via push-in type jumper bars. Example shows "lamp test circuit."

Fuse replacement 2



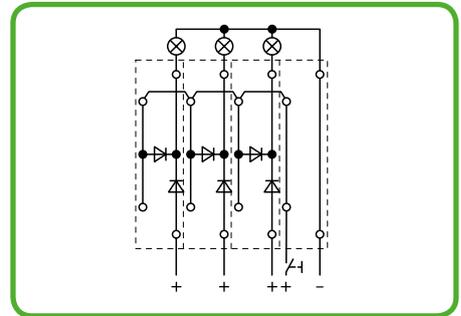
One end of the fuse is automatically ejected from the holder when opening the cover.

Additional marking



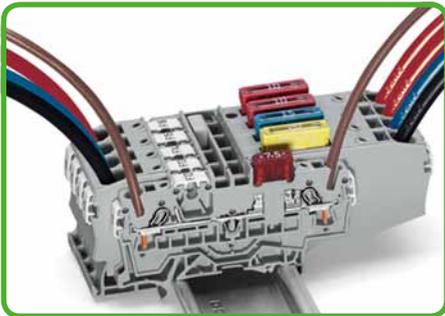
Additional marking option via pivoting marker carriers.

Application



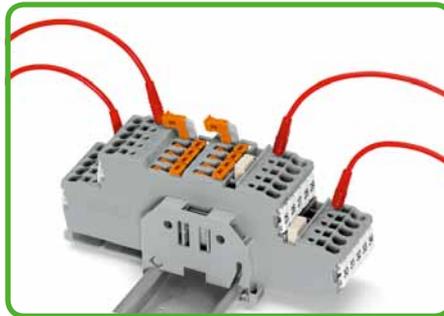
Lamp test circuit

Mini-automotive blade-style fuses



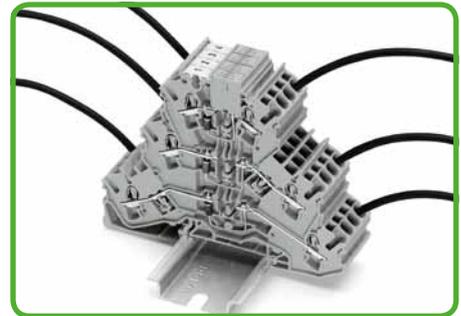
Fuse terminal block for mini-automotive blade-style fuses

Double-deck disconnect terminal blocks



Two disconnect terminal blocks with different potential are housed on two levels in a double-deck disconnect terminal block.

Triple-deck diode terminal blocks



Space saving arrangement.

CAGE CLAMP®S clamps the following copper conductors:



solid



stranded



fine-stranded



tip bonded



with ferrule

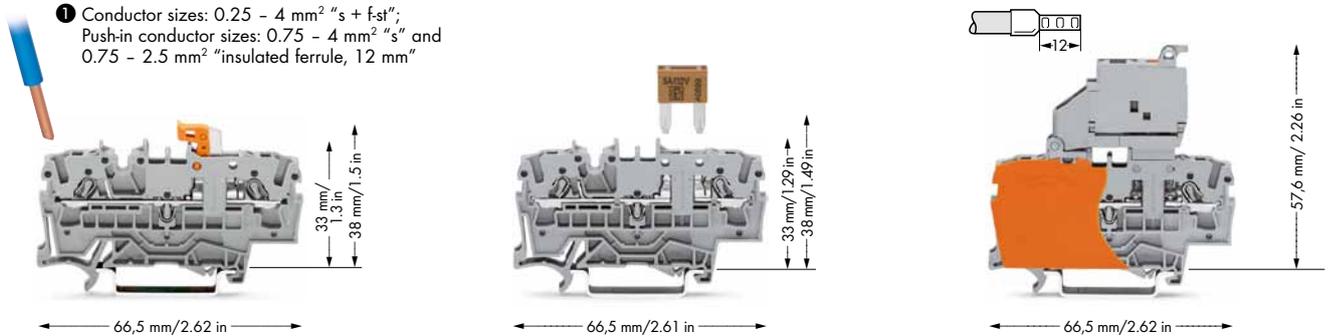


with pin terminal

Strip length, see packaging or instructions.

| | | |
|--|--|---|
| <p>0.25 - 2.5 (4) mm² ① AWG 22 - 12 400 V/6 kV/3 I_N 16 A</p> <p>Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in</p> <p>③ Approvals</p> | <p>0.25 - 2.5 (4) mm² ① AWG 22 - 12 400 V/6 kV/3 I_N 10 A ②</p> <p>Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in</p> <p>③ Approvals</p> | <p>0.25 - 2.5 (4) mm² ① AWG 22 - 12 250 V/6 kV/3 I_N 6.3 A ②</p> <p>Terminal block width 6.2 mm / 0.244 in 10 - 12 mm / 0.43 in</p> <p>③ Approvals</p> |
|--|--|---|

① Conductor sizes: 0.25 - 4 mm² "s + f-st";
Push-in conductor sizes: 0.75 - 4 mm² "s" and
0.75 - 2.5 mm² "insulated ferrule, 12 mm"



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | |
|---|-----------|------------|---|----------|------------|--|--------------------|--------------------|----|
| 2-conductor disconnect/test terminal block | | | 2-conductor fuse terminal block, | | | 2-conductor fuse terminal block with end plate, | | | |
| gray | 2002-1671 | 50 | for blade-style fuses acc. to DIN 72581-3f, ISO 8820-3 | | | with blown fuse indication, for miniature metric fuses, gray | | | |
| blue | 2002-1674 | 50 | | | | 12 - 30 V ≈ | 2002-1611/1000-541 | 50 | |
| orange | 2002-1672 | 50 | | gray | 2002-1681 | 50 | 30 - 65 V ≈ | 2002-1611/1000-542 | 50 |
| | | | | | | 120 V ≈ | 2002-1611/1000-867 | 50 | |
| | | | | | | 230 V ≈ | 2002-1611/1000-836 | 50 | |
| 2-conductor through terminal block, same profile | | | - Individual arrangement: 10 A - Block arrangement: 5 A | | | 2-conductor fuse terminal block with end plate, | | | |
| gray | 2002-1601 | 50 | Protection against direct contact must be observed for 42 V and higher voltages! | | | without blown fuse indication, gray | | | |
| blue | 2002-1604 | 50 | | | | gray | | | |
| orange | 2002-1602 | 50 | | | | 2002-1611 | | | |
| | | | | | | 50 | | | |

Item-Specific Accessories

| | |
|---|---|
| <p>End and intermediate plate, 1 mm thick</p> <p>orange 2002-1692 100 (4x25) gray 2002-1691 100 (4x25)</p> | <p>End and intermediate plate, 1 mm thick</p> <p>orange 2002-1692 100 (4x25) gray 2002-1691 100 (4x25)</p> |
|---|---|

2002 Series Accessories

Appropriate marking systems: WMB/Marking Strips/WMB Inline/Mini-WSB

| <p>Push-in type jumper bar, insulated, I_N 25 A, light gray</p> <p>2-way 2002-402 200 (8x25) 3-way 2002-403 200 (8x25) 4-way 2002-404 200 (8x25) 5-way 2002-405 100 (4x25) : : 10-way 2002-410 100 (4x25)</p> | <p>Push-in type jumper bar, insulated, I_N 25 A, light gray</p> <p>1 - 3 2002-433 200 (8x25) 1 - 4 2002-434 200 (8x25) 1 - 5 2002-435 100 (4x25) : : 1 - 10 2002-440 100 (4x25)</p> | <p>End plate for fuse terminal blocks, 2 mm thick</p> <p>orange 2002-992 100 (4x25) gray 2002-991 100 (4x25)</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|---------------------------|--|--|----------------------------------|--|---------------------------|----------------------|---------------------------|----------------------|---------------------------------|--|--|--|--|-----------|-------|-------|-------|-------|-----------|--|--|--|--|-----------------|-------|-------|-------|-------|-----------------|--|--|--|--|
| <p>For step-down jumpers, see page 31.</p> <p>Staggered jumper, insulated, I_N 25 A, light gray</p> <p>2-way 2002-472 100 (4x25) 3-way 2002-473 100 (4x25) 4-way 2002-474 100 (4x25) 5-way 2002-475 50 (2x25) : : 12-way 2002-482 50 (2x25)</p> | <p>Disconnect plug for fuse terminal blocks, suitable when using the fuse terminal block as a disconnect terminal block orange 2002-401 100 (4x25)</p> <p>TOPJOB®S connector, modular, for jumper contact slot gray 2002-511 100 (4x25)</p> | <p>Fuse terminal blocks with a width of 6.2 mm can be assembled adjacently. If there is no adjacent fuse terminal block at the end of the assembly, an end plate must be used.</p> <p>When selecting miniature metric fuses, the maximum power loss listed below shall not be exceeded. The power loss is determined according to IEC or EN 60947-7-3/VDE 0611-6 at 23 °C. The temperature rise of the terminal blocks must be checked according to their application and mounting. Higher ambient temperatures place additional strain on fuse cartridges. Therefore, in such applications, the rated current must be reduced if necessary. More details available from the manufacturer.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Insulation stop, 5 pcs/strip 200 strips</p> <p>light gray 2002-1710.25-0.5 mm² dark gray 2002-172 0.75-1 mm²</p> | <p>Spacer module gray 2002-549 100 (4x25)</p> | <p>Miniature metric fuses 5 x 20</p> <table border="1"> <thead> <tr> <th rowspan="2">Series Item No.</th> <th colspan="2">Overload and short circuit protection</th> <th colspan="2">Short circuit protection only</th> </tr> <tr> <th>Individual arrangement</th> <th>Group arrangement</th> <th>Individual arrangement</th> <th>Group arrangement</th> </tr> </thead> <tbody> <tr> <td colspan="5">Fuse disconnect terminal blocks</td> </tr> <tr> <td>2002-1611</td> <td>1.6 W</td> <td>1.6 W</td> <td>2.5 W</td> <td>2.5 W</td> </tr> <tr> <td>2002-1811</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2002-1811/.....</td> <td>1.6 W</td> <td>1.6 W</td> <td>2.5 W</td> <td>2.5 W</td> </tr> <tr> <td>2002-1611/.....</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> | Series Item No. | Overload and short circuit protection | | Short circuit protection only | | Individual arrangement | Group arrangement | Individual arrangement | Group arrangement | Fuse disconnect terminal blocks | | | | | 2002-1611 | 1.6 W | 1.6 W | 2.5 W | 2.5 W | 2002-1811 | | | | | 2002-1811/..... | 1.6 W | 1.6 W | 2.5 W | 2.5 W | 2002-1611/..... | | | | |
| Series Item No. | Overload and short circuit protection | | | Short circuit protection only | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Individual arrangement | Group arrangement | Individual arrangement | Group arrangement | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fuse disconnect terminal blocks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2002-1611 | 1.6 W | 1.6 W | 2.5 W | 2.5 W | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2002-1811 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2002-1811/..... | 1.6 W | 1.6 W | 2.5 W | 2.5 W | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2002-1611/..... | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Test plug adapter, for test plug 4 mm Ø 2009-174 100 (4x25)</p> <p>Testing tap, for max. 2.5 mm²/AWG 14 2009-182 100 (4x25)</p> | <p>Protective warning marker, with high-voltage symbol, for 5 terminal blocks yellow 2002-115 100 (4x25)</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Test plug, with 500 mm cable, 2 mm Ø red 210-136 50 (5x10)</p> | <p>Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade 210-720 1</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Insulated ferrules, extra long, for TOPJOB®S terminal blocks, see page 195</p> | <p>Approval for Ex i applications (pending) Ex Approval for Ex e II applications (pending)</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

② Nominal voltage and current are given by the fuse or blown fuse indicator!

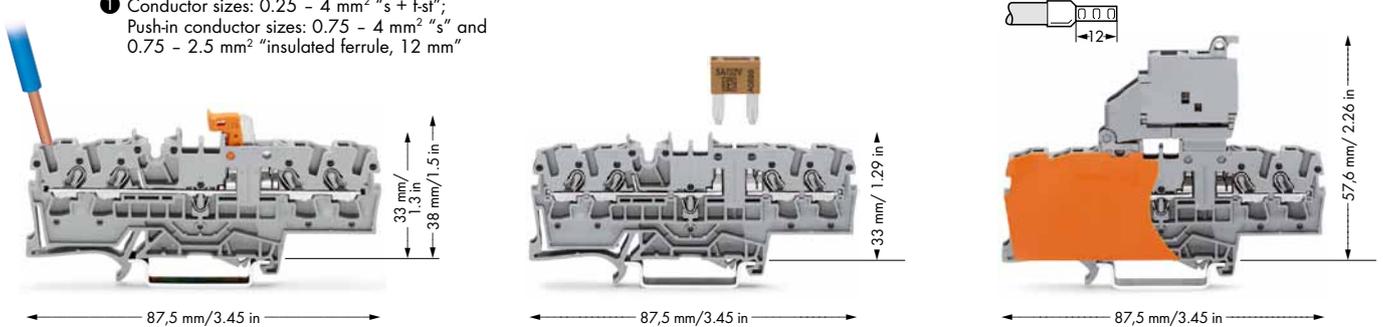
③ Approvals are available online at: www.wago.com.

For technical explanations and abbreviations, see technical section.

TOPJOB® Disconnect/Test and Fuse Terminal Blocks, 4-Conductor 2002 Series

| | | |
|---|--|---|
| 0.25 - 2.5 (4) mm² ① AWG 22 - 12 400 V/6 kV/3 I _N 16 A Terminal block width 5.2 mm / 0.205 in  10 - 12 mm / 0.43 in ③ Approvals | 0.25 - 2.5 (4) mm² ① AWG 22 - 12 400 V/6 kV/3 I _N 10 A ② Terminal block width 5.2 mm / 0.205 in  10 - 12 mm / 0.43 in ③ Approvals | 0.25 - 2.5 (4) mm² ① AWG 22 - 12 400 V/6 kV/3 I _N 6.3 A ② Terminal block width 6.2 mm / 0.244 in  10 - 12 mm / 0.43 in ③ Approvals |
|---|--|---|

① Conductor sizes: 0.25 - 4 mm² "s + f-st";
 Push-in conductor sizes: 0.75 - 4 mm² "s" and
 0.75 - 2.5 mm² "insulated ferrule, 12 mm"



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Item No. | Pack. Unit | |
|---|-----------|------------|---|-----------|------------|--|-----------------------|-----------------------|
| 4-conductor disconnect/test terminal block | | | 4-conductor fuse terminal block, | | | 4-conductor fuse terminal block with end plate, | | |
| gray | 2002-1871 | 50 | for blade-style fuses acc. to DIN 72581-3f, | | | with blown fuse indication by LED, gray | | |
| blue | 2002-1874 | 50 | ISO 8820-3 | | | 12 - 30 V ≈ | 2002-1811/1000-541 50 | |
| orange | 2002-1872 | 50 | gray | 2002-1881 | 50 | 30 - 65 V ≈ | 2002-1811/1000-542 50 | |
| 4-conductor through terminal block, same profile | | | - Individual arrangement: 10 A | | | 120 V ≈ | | 2002-1811/1000-867 50 |
| gray | 2002-1801 | 50 | - Block arrangement: 5 A | | | 230 V ≈ | | 2002-1811/1000-836 50 |
| blue | 2002-1804 | 50 | Protection against direct contact must be observed for 42 | | | 4-conductor fuse terminal block with end plate, | | |
| orange | 2002-1802 | 50 | V and higher voltages! | | | without blown fuse indication | | |
| | | | | | | gray | 2002-1811 50 | |

Item-Specific Accessories

| | |
|--|---|
| End and intermediate plate, 1 mm thick  orange 2002-1892 100 (4x25) gray 2002-1891 100 (4x25) | End and intermediate plate, 1 mm thick  orange 2002-1892 100 (4x25) gray 2002-1891 100 (4x25) |
|--|---|

2002 Series Accessories Appropriate marking systems: WMB/Marking Strips/WMB Inline/Mini-WSB

| | | |
|---|--|---|
| Push-in type jumper bar, insulated, I_N 25 A, light gray  2-way 2002-402 200 (8x25) 3-way 2002-403 200 (8x25) 4-way 2002-404 200 (8x25) 5-way 2002-405 100 (4x25) : : 10-way 2002-410 100 (4x25) | Push-in type jumper bar, insulated, I_N 25 A, light gray  1 - 3 2002-433 200 (8x25) 1 - 4 2002-434 200 (8x25) 1 - 5 2002-435 100 (4x25) : : 1 - 10 2002-440 100 (4x25) | Push-in type jumper bar, insulated, I_N 25 A, light gray  2-way 2004-402 200 (8x25) 3-way 2004-403 200 (8x25) 4-way 2004-404 200 (8x25) 5-way 2004-405 100 (4x25) : : 10-way 2004-410 100 (4x25) |
| For step-down jumpers, see page 31. Staggered jumper, light gray, insulated, I_N 25 A  2-way 2002-472 100 (4x25) 3-way 2002-473 100 (4x25) 4-way 2002-474 100 (4x25) 5-way 2002-475 50 (2x25) : : 12-way 2002-482 50 (2x25) | Disconnect plug for fuse terminal blocks, suitable  when using the fuse terminal block as a disconnect terminal block orange 2002-401 100 (4x25) | Push-in type jumper bar, insulated, I_N 25 A, light gray  1 - 3 2004-433 200 (8x25) 1 - 4 2004-434 200 (8x25) 1 - 5 2004-435 100 (4x25) : : 1 - 10 2004-440 100 (4x25) |
| Insulation stop, 5 pcs/strip 200 strips  light gray 2002-171 0.25-0.5 mm ² dark gray 2002-172 0.75-1 mm ² | TOPJOB®S connector, modular,  for jumper contact slot gray 2002-511 100 (4x25) | Insulation stop, 5 pcs/strip 200 strips  light gray 2002-171 0.25-0.5 mm ² dark gray 2002-172 0.75-1 mm ² |
| Test plug adapter, for test plug 4 mm Ø  2009-174 100 (4x25) Testing tap, for max. 2.5 mm²/AWG 14 2009-182 100 (4x25) | Spacer module  gray 2002-549 100 (4x25) | Insulated ferrules, extra long,  for TOPJOB®S terminal blocks, see page 195 |
| Test plug, with 500 mm cable, 2 mm Ø  red 210-136 50 (5x10) | WMB Multi marking system,  10 strips with 10 markers per card, stretchable 5 - 5.2 mm plain 793-5501 50 (10x5) | Operating tool with partially insulated shaft,  type 2, (3.5 x 0.5) mm blade 210-720 1 |
| Double-deck marker carrier,  pivoting gray 2002-121 50 (2x25) | ● Approval for Ex i applications (pending) ⓧ Approval for Ex e II applications (pending) | End plate for fuse terminal blocks, 2 mm thick  orange 2002-992 100 (4x25) gray 2002-991 100 (4x25) |

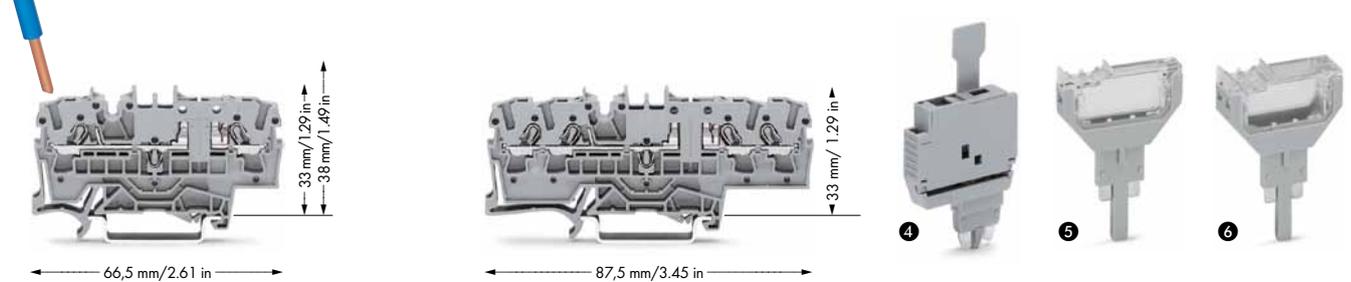
② Nominal voltage and current are given by the fuse or blown fuse indicator!

③ Approvals are available online at: www.wago.com.

For technical explanations and abbreviations, see technical section.

| | | |
|---|---|---|
| <p>0.25 - 2.5 (4) mm² ① AWG 22 - 12 400 V/6 kV/3 I_N 24 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in</p> <p>③ Approvals</p> | <p>0.25 - 2.5 (4) mm² ① AWG 22 - 12 400 V/6 kV/3 I_N 24 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in</p> <p>③ Approvals</p> | <p>250 V max. I_N 6.3 A ② Plug width ④ 6.1 mm / 0.24 in ⑤ 5.2 mm / 0.205 in ⑥ 10.4 mm / 0.409 in</p> <p>③ Approvals</p> |
|---|---|---|

① Conductor sizes: 0.25 - 4 mm² "s + f-st";
Push-in conductor sizes: 0.75 - 4 mm² "s" and 0.75 - 2.5 mm² "insulated ferrule, 12 mm"

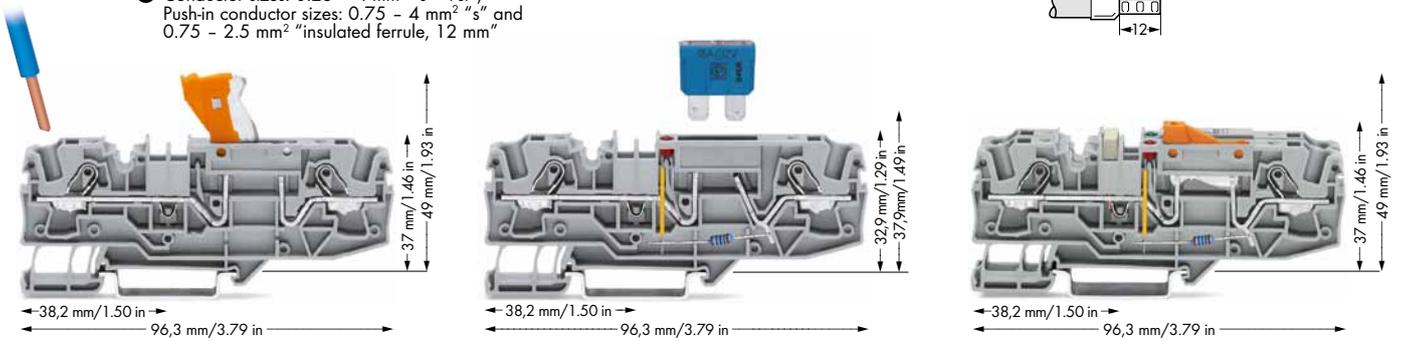


| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Item No. | Pack. Unit |
|--|---|------------|---|---|------------|---|----------------------|
| 2-conductor carrier terminal block | | | 4-conductor carrier terminal block | | | ④ Fuse plug, with pull-tab, | |
| gray | 2002-1661 | 50 | gray | 2002-1861 | 50 | for miniature metric fuses 5 x 20 mm (see page 37) | 2004-911 50 |
| | | | | | | with LED, can be used in both switching directions | |
| | | | | | | LED, 12 - 30 V AC/DC | 2004-911/1000-541 50 |
| | | | | | | LED, 30 - 65 V AC/DC | 2004-911/1000-542 50 |
| | | | | | | LED, 120 - 250 V AC/DC | 2004-911/1000-836 50 |
| | | | | | | | |
| Item-Specific Accessories | | | | | | | |
| End and intermediate plate, 1 mm thick | | | | End and intermediate plate, 1 mm thick | | | |
| | orange | 2002-1692 | 100 (4x25) | orange | 2002-1892 | 100 (4x25) | |
| | gray | 2002-1691 | 100 (4x25) | gray | 2002-1891 | 100 (4x25) | |
| 2002 Series Accessories Appropriate marking systems: WMB/Marking Strips/WMB Inline | | | | | | | |
| Push-in type jumper bar, insulated, I_N 25 A, light gray | | | | Push-in type jumper bar, insulated, I_N 25 A, light gray | | | |
| | 2-way | 2002-402 | 200 (8x25) | 1 - 3 | 2002-433 | 200 (8x25) | |
| | 3-way | 2002-403 | 200 (8x25) | 1 - 4 | 2002-434 | 200 (8x25) | |
| | 4-way | 2002-404 | 200 (8x25) | 1 - 5 | 2002-435 | 100 (4x25) | |
| | 5-way | 2002-405 | 100 (4x25) | : | : | | |
| | 10-way | 2002-410 | 100 (4x25) | 1 - 10 | 2002-440 | 100 (4x25) | |
| For step-down jumpers, see page 31. | | | | | | | |
| Staggered jumper, insulated, I_N 25 A, light gray | | | | TOPJOB®S connector, modular, | | | |
| | 2-way | 2002-472 | 100 (4x25) | for jumper contact slot | | | |
| | 3-way | 2002-473 | 100 (4x25) | gray | 2002-511 | 100 (4x25) | |
| | 4-way | 2002-474 | 100 (4x25) | | | | |
| | 5-way | 2002-475 | 50 (2x25) | | | | |
| | : | : | | | | | |
| | 12-way | 2002-482 | 50 (2x25) | Spacer module | | | |
| | | | | gray 2002-549 100 (4x25) | | | |
| Insulation stop, 5 pcs/strip 200 strips | | | | Protective warning marker, with high-voltage symbol, | | | |
| | light gray | 2002-171 | 0.25-0.5 mm ² | for 5 terminal blocks | | | |
| | dark gray | 2002-172 | 0.75-1 mm ² | yellow | 2002-115 | 100 (4x25) | |
| Test plug adapter, for test plug 4 mm Ø | | | | Banana plugs, only for safety extra-low voltage (42 V) | | | |
| | | 2009-174 | 100 (4x25) | black | 215-311 | 50 | |
| | Testing tap, for max. 2.5 mm ² /AWG 14 | 2009-182 | 100 (4x25) | red | 215-212 | 50 | |
| | | | | blue | 215-711 | 50 | |
| Marking strips, plain | | | | WMB Multi marking system, | | | |
| | 11 mm wide, | | | 10 strips with 10 markers per card, | | | |
| | 50m roll | | | stretchable 5 - 5.2 mm | | | |
| | white | 2009-110 | 1 | plain | 793-5501 | 50 (10x5) | |
| End plate for fuse terminal blocks, 2 mm thick | | | | Shorting link, 5 x 20 mm, 6.3 A, | | | |
| | orange | 2002-992 | 100 (4x25) | if the fuse plug is used as a discon- | | | |
| | gray | 2002-991 | 100 (4x25) | nect plug | | 281-503 250 (10x25) | |

TOPJOB® Disconnect and Fuse Terminal Blocks 6 (10) mm² 2006 Series

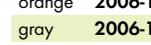
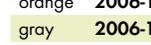
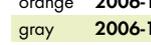
| | | |
|--|--|---|
| 0.5 - 6 (10) mm² ① AWG 20 - 8 800 V/6 kV/3 I _N 30 A Terminal block width 7.5 mm / 0.295 in  13 - 15 mm / 0.55 in ③ Approvals | 0.2 - 6 (10) mm² ① AWG 20 - 8 800 V/8 kV/3 ② I _N 25/30 A ② Terminal block width 7.5 mm / 0.295 in  13 - 15 mm / 0.55 in ③ Approvals | 0.5 - 6 (10) mm² ① AWG 20 - 8 500 V/6 kV/3 I _N 30 A Terminal block width 15 mm / 0.59 in  13 - 15 mm / 0.55 in ③ Approvals |
|--|--|---|

① Conductor sizes: 0.25 - 4 mm² "s + f-st";
 Push-in conductor sizes: 0.75 - 4 mm² "s" and
 0.75 - 2.5 mm² "insulated ferrule, 12 mm"



| Color | Item No. | Pack. Unit | Item No. | Pack. Unit | Item No. | Pack. Unit | |
|--|----------|------------|---|------------|----------|---|--|
| 2-conductor disconnect terminal block, with test point, orange disconnect link ● gray 2006-1671 25 ● blue 2006-1674 25 | | | 2-cond. fuse term. block for mini-automotive fuses, 12 V, with blown fuse indication by LED, with test option, gray ● Circuit I 2006-1681/1000-429 25 ● Circuit II 2006-1681/1000-449 25 | | | Ground conductor disconnect terminal block, gray ● 24 V AC/DC 2006-1671/1000-848 12 ● 48 V AC/DC 2006-1671/1000-849 12 ● 120 V AC/DC 2006-1671/1000-850 12 ● 230 V AC/DC 2006-1671/1000-851 12 | |
| 2-conductor through terminal block, same profile ● gray 2006-1601 25 ● blue 2006-1604 25 | | | without blown-fuse indication, with test option ● gray 2006-1681 25 | | | For application notes, see page 83. | |

Item-Specific Accessories

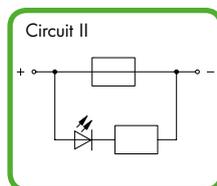
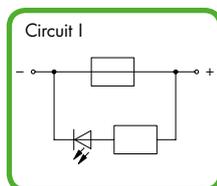
| | | |
|--|---|---|
| End and intermediate plate, 1 mm thick  orange 2006-1692 100 (4x25)  gray 2006-1691 100 (4x25) | End and intermediate plate, 1 mm thick  orange 2006-1692 100 (4x25)  gray 2006-1691 100 (4x25) | End and intermediate plate, 1 mm thick  orange 2006-1692 100 (4x25)  gray 2006-1691 100 (4x25) |
|--|---|---|

2006 Series Accessories

Appropriate marking systems: **WMB/Marking Strips/WMB Inline**

| | | |
|---|---|---|
| Push-in type jumper bar, insulated, I_N 41 A, light gray  2-way 2006-402 50 (2x25)  3-way 2006-403 50 (2x25)  4-way 2006-404 50 (2x25)  5-way 2006-405 50 (2x25) | Push-in type jumper bar, insulated, I_N 41 A, light gray  2-way 2006-402 50 (2x25)  3-way 2006-403 50 (2x25)  4-way 2006-404 50 (2x25)  5-way 2006-405 50 (2x25) | Push-in type jumper bar, insulated, I_N 41 A, light gray  2-way 2006-402 50 (2x25) |
| Push-in type jumper bar, insulated, I_N 41 A, light gray  1 - 3 2006-433 50 (2x25)  1 - 4 2006-434 50 (2x25)  1 - 5 2006-435 50 (2x25) | Push-in type jumper bar, insulated, I_N 41 A, light gray  1 - 3 2006-433 50 (2x25)  1 - 4 2006-434 50 (2x25)  1 - 5 2006-435 50 (2x25) | Protective warning marker, with high-voltage symbol, for 5 terminal blocks  yellow 2006-115 100 (4x25) |
| Protective warning marker, with high-voltage symbol, for 5 terminal blocks  yellow 2006-115 100 (4x25) | Disconnect plug for fuse terminal blocks, suitable when using the fuse terminal block as a disconnect terminal block  orange 2006-401 100 (4x25) | WMB Multi marking system, 10 strips with 10 markers per card, stretchable 5 - 5.2 mm plain 793-5501 50 (10x5) |
| Test plug adapter, for test plug 4 mm Ø  2009-174 100 (4x25) Testing tap, for max. 2.5 mm²/AWG 14  2009-182 100 (4x25) | Blade-style fuses,  acc. to DIN 72581-3c/ISO 8820 (not offered by WAGO) | Insulated ferrules, extra long, for TOPJOB®S terminal blocks, see page 195  |
| Banana plugs, only for safety extra-low voltage (42 V)  black 215-311 50 red 215-212 50 blue 215-711 50 | Overcurrent circuit breaker*, thermal  not offered by WAGO | Operating tool with partially insulated shaft, type 3, (5.5 x 0.8) mm blade  210-721 1 |

*Recommended overcurrent circuit breaker from ETA, Elektrotechnische Apparate GmbH, Postfach 1061, D-90514 Altdorf/Nürnberg
 Types 1170-02, 1621-21 or 1610-22, individual or block arrangement up to 25 A for conductor size 4 mm²/AWG 12



② Nominal voltage and current are given by the fuse or blown fuse indicator!
 ③ Approvals are available online at: www.wago.com.

TOPJOB® S

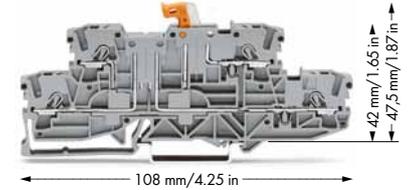
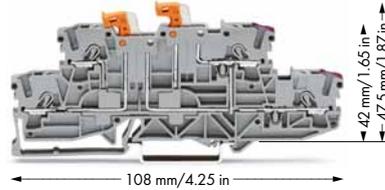
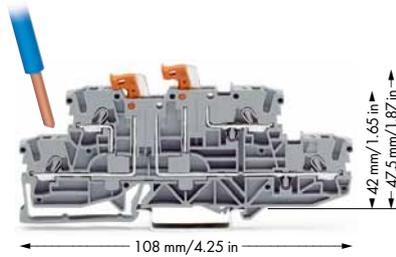
Double-Deck Disconnect Terminal Blocks 2.5 (4) mm²

2002 Series

CAGE CLAMP® S

| | | |
|--|--|--|
| <p>0.25 - 2.5 (4) mm² ① AWG 22 - 12 400 V/6 kV/3 I_N 16 A</p> <p>Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in</p> <p>③ Approvals</p> | <p>0.25 - 2.5 (4) mm² ① AWG 22 - 12 400 V/6 kV/3 I_N 16 A</p> <p>Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in</p> <p>③ Approvals</p> | <p>0.25 - 2.5 (4) mm² ① AWG 22 - 12 400 V/6 kV/3 I_N 16 A</p> <p>Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in</p> <p>③ Approvals</p> |
|--|--|--|

① Conductor sizes: 0.25 - 4 mm² "s + Fst";
Push-in conductor sizes: 0.75 - 4 mm² "s" and 0.75 - 2.5 mm² "insulated ferrule, 12 mm"



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|---|-----------|------------|--|-----------|------------|---|-----------|------------|
| 4-conductor, double-deck, double-disconnect terminal block | | | 4-conductor, double-deck, double-disconnect terminal block, lower and upper decks internally commoned on right side and with violet marking | | | 4-conductor, double-deck disconnect terminal block, same profile as double-deck, double-disconnect terminal blocks | | |
| gray | 2002-2951 | 50 | gray | 2002-2958 | 50 | gray | 2002-2971 | 50 |
| blue | 2002-2954 | 50 | blue | 2002-2959 | 50 | blue | 2002-2974 | 50 |
| gray N/L | 2002-2952 | 50 | | | | gray N/L | 2002-2972 | 50 |

Item-Specific Accessories

| | | |
|--|--|--|
| <p>End and intermediate plate, 1 mm thick</p> <p>orange 2002-2992 100 (4x25)</p> <p>gray 2002-2991 100 (4x25)</p> | <p>End and intermediate plate, 1 mm thick</p> <p>orange 2002-2992 100 (4x25)</p> <p>gray 2002-2991 100 (4x25)</p> | <p>End and intermediate plate, 1 mm thick</p> <p>orange 2002-2992 100 (4x25)</p> <p>gray 2002-2991 100 (4x25)</p> |
|--|--|--|

2002 Series Accessories

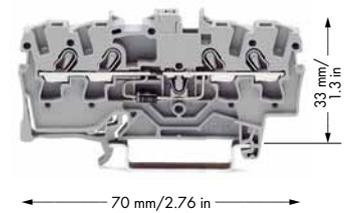
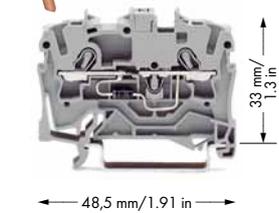
Appropriate marking systems: WMB/Marking Strips/WMB Inline

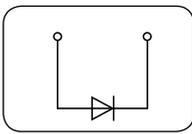
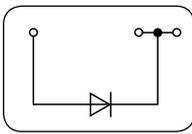
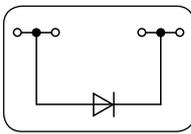
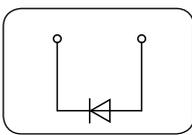
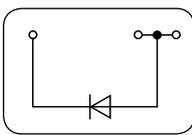
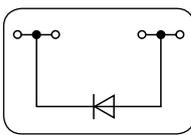
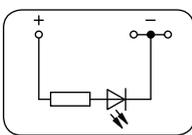
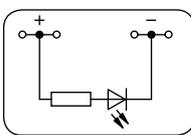
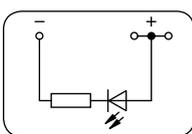
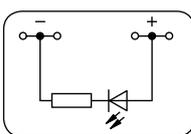
| | | |
|--|--|--|
| <p>Push-in type jumper bar, insulated, I_N 25 A, light gray</p> <p>2-way 2002-402 200 (8x25)</p> <p>3-way 2002-403 200 (8x25)</p> <p>4-way 2002-404 200 (8x25)</p> <p>5-way 2002-405 100 (4x25)</p> <p>: : 10-way 2002-410 100 (4x25)</p> | <p>Push-in type jumper bar, insulated, I_N 25 A, light gray</p> <p>2-way 2002-402 200 (8x25)</p> <p>3-way 2002-403 200 (8x25)</p> <p>4-way 2002-404 200 (8x25)</p> <p>5-way 2002-405 100 (4x25)</p> <p>: : 10-way 2002-410 100 (4x25)</p> | <p>Push-in type jumper bar, insulated, I_N 25 A, light gray</p> <p>2-way 2002-402 200 (8x25)</p> <p>3-way 2002-403 200 (8x25)</p> <p>4-way 2002-404 200 (8x25)</p> <p>5-way 2002-405 100 (4x25)</p> <p>: : 10-way 2002-410 100 (4x25)</p> |
| <p>Push-in type jumper bar, insulated, I_N 25 A, light gray</p> <p>1 - 3 2002-433 200 (8x25)</p> <p>1 - 4 2002-434 200 (8x25)</p> <p>1 - 5 2002-435 100 (4x25)</p> <p>: : 1 - 10 2002-440 100 (4x25)</p> | <p>Staggered jumper, insulated, I_N 25 A, light gray</p> <p>2-way 2002-472 100 (4x25)</p> <p>3-way 2002-473 100 (4x25)</p> <p>4-way 2002-474 100 (4x25)</p> <p>5-way 2002-475 50 (2x25)</p> <p>: : 12-way 2002-482 50 (2x25)</p> | <p>Push-in type jumper bar, insulated, I_N 25 A, light gray</p> <p>1 - 3 2002-433 200 (8x25)</p> <p>1 - 4 2002-434 200 (8x25)</p> <p>1 - 5 2002-435 100 (4x25)</p> <p>: : 1 - 10 2002-440 100 (4x25)</p> |
| <p>Insulation stop, 5 pcs/strip 200 strips</p> <p>light gray 2002-171 0.25-0.5 mm²</p> <p>dark gray 2002-172 0.75-1 mm²</p> | <p>Insulation stop, 5 pcs/strip 200 strips</p> <p>light gray 2002-171 0.25-0.5 mm²</p> <p>dark gray 2002-172 0.75-1 mm²</p> | <p>Insulation stop, 5 pcs/strip 200 strips</p> <p>light gray 2002-171 0.25-0.5 mm²</p> <p>dark gray 2002-172 0.75-1 mm²</p> |
| <p>TOPJOB®S connector, modular, for jumper contact slot</p> <p>gray 2002-511 100 (4x25)</p> | <p>TOPJOB®S connector, modular, for jumper contact slot</p> <p>gray 2002-511 100 (4x25)</p> | <p>TOPJOB®S connector, modular, for jumper contact slot</p> <p>gray 2002-511 100 (4x25)</p> |
| <p>Spacer module</p> <p>gray 2002-549 100 (4x25)</p> | <p>Spacer module</p> <p>gray 2002-549 100 (4x25)</p> | <p>Spacer module</p> <p>gray 2002-549 100 (4x25)</p> |
| <p>Test plug adapter, for test plug 4 mm Ø</p> <p>2009-174 100 (4x25)</p> <p>Testing tap, for max. 2.5 mm²/AWG 14</p> <p>2009-182 100 (4x25)</p> | <p>Banana plugs, only for safety extra-low voltage (42 V)</p> <p>black 215-311 50</p> <p>red 215-212 50</p> <p>blue 215-711 50</p> | <p>Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade</p> <p>210-720 1</p> |
| <p>Protective warning marker, with high-voltage symbol, for 5 terminal blocks</p> <p>yellow 2002-115 100 (4x25)</p> | <p>Ex e II approvals (pending)</p> | <p>Marking strips, plain</p> <p>11 mm wide, 50m roll</p> <p>white 2009-110 1</p> |

TOPJOB® Diode Terminal Blocks and LED Terminal Blocks 2.5 (4) mm² 2002 Series

| | | |
|---|---|---|
| <p>0.25 - 2.5 (4) mm² ① AWG 22 - 12 U_N 250 V; U_{RM} 1000 V 1N4007 - 0.5 A continuous current</p> <p>Terminal block width 5.2 mm / 0.205 in  10 - 12 mm / 0.43 in ④ Approvals</p> | <p>0.25 - 2.5 (4) mm² ① AWG 22 - 12 ② U_N 250 V; U_{RM} 1000 V 1N4007 - 0.5 A continuous current ③ 24 VDC / I_F 0.025 A max.</p> <p>Terminal block width 5.2 mm / 0.205 in  10 - 12 mm / 0.43 in ④ Approvals</p> | <p>0.25 - 2.5 (4) mm² ① AWG 22 - 12 ② U_N 250 V; U_{RM} 1000 V 1N4007 - 0.5 A continuous current ③ 24 VDC / I_F 0.025 A max.</p> <p>Terminal block width 5.2 mm / 0.205 in  10 - 12 mm / 0.43 in ④ Approvals</p> |
|---|---|---|

① Conductor sizes: 0.25 - 4 mm² "s + Fst";
 Push-in conductor sizes: 0.75 - 4 mm² "s" and
 0.75 - 2.5 mm² "insulated ferrule, 12 mm"



| Item No. | Pack. Unit | Item No. | Pack. Unit | Item No. | Pack. Unit |
|---|--|---|--|---|--|
|  | 2-conductor diode terminal block with 1N 4007 diode 2002-1211/1000-410 100 |  | ② 3-conductor diode terminal block with 1N4007 diode 2002-1311/1000-410 100 |  | ② 4-conductor diode terminal block with 1N4007 diode 2002-1411/1000-410 100 |
|  | 2-conductor diode terminal block with 1N 4007 diode 2002-1211/1000-411 100 |  | ② 3-conductor diode terminal block with 1N4007 diode 2002-1311/1000-411 100 |  | ② 4-conductor diode terminal block with 1N4007 diode 2002-1411/1000-411 100 |
| | |  | ③ 3-conductor LED terminal block with red LED, 24 VDC 2002-1321/1000-434 100 |  | ③ 4-conductor LED terminal block with red LED, 24 VDC 2002-1421/1000-434 100 |
| | |  | ③ 3-conductor LED terminal block with red LED, 24 VDC 2002-1321/1000-413 100 |  | ③ 4-conductor LED terminal block with red LED, 24 VDC 2002-1421/1000-413 100 |
|  | Through terminal block of same profile 2002-1201 100 |  | Through terminal block of same profile 2002-1301 100 |  | Through terminal block of same profile 2002-1401 100 |

Item-Specific Accessories

| | | |
|--|--|--|
| <p>End and intermediate plate, 0.8 mm thick</p> <p>orange 2002-1292 100 (4x25) gray 2002-1291 100 (4x25)</p>  | <p>End and intermediate plate, 0.8 mm thick</p> <p>orange 2002-1392 100 (4x25) gray 2002-1391 100 (4x25)</p>  | <p>End and intermediate plate, 0.8 mm thick</p> <p>orange 2002-1492 100 (4x25) gray 2002-1491 100 (4x25)</p>  |
|--|--|--|

2002 Series Accessories Appropriate marking systems: WMB/Marking Strips/WMB Inline

| | | |
|---|--|---|
| <p>Push-in type jumper bars, light gray, insulated, I_N 25 A</p> <p>2-way 2002-402 200 (8x25) 3-way 2002-403 200 (8x25) 4-way 2002-404 200 (8x25) 5-way 2002-405 100 (4x25) : : 10-way 2002-410 100 (4x25)</p>  | <p>Push-in type jumper bars, light gray, insulated, I_N 25 A</p> <p>1 - 3 2002-433 200 (8x25) 1 - 4 2002-434 200 (8x25) 1 - 5 2002-435 100 (4x25) : : 1 - 10 2002-440 100 (4x25)</p>  | <p>Staggered jumper, light gray, insulated, I_N 25 A</p> <p>2-way 2002-472 100 (4x25) 3-way 2002-473 100 (4x25) 4-way 2002-474 100 (4x25) 5-way 2002-475 50 (2x25) : : 12-way 2002-482 50 (2x25)</p>  |
|---|--|---|

② Approvals are available online at: www.wago.com.

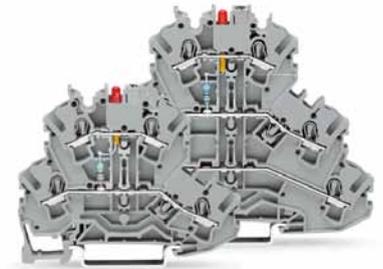
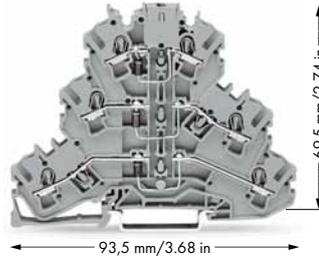
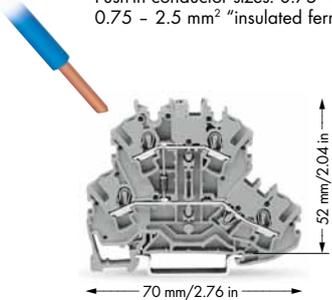
For technical explanations and abbreviations, see technical section.

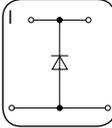
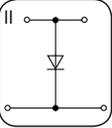
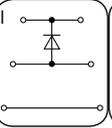
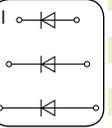
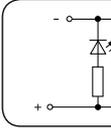
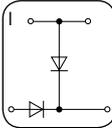
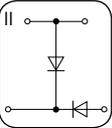
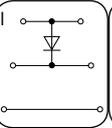
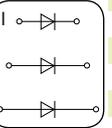
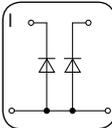
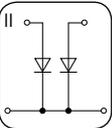
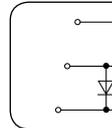
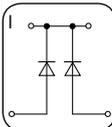
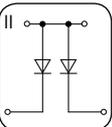
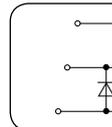
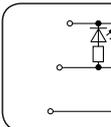
Double- and Triple-Deck Diode Terminal Blocks

Double- and Triple-Deck LED Terminal Blocks, 2.5 (4) mm², 2002 Series

| | | |
|--|--|---|
| <p>0.25 - 2.5 (4) mm² AWG 22 - 12 V_N 250 V; V_{RM} 1000 V 1N4007 - 0.5 A continuous current</p> <p>Terminal block width 5.2 mm / 0.205 in  10 - 12 mm / 0.43 in</p> <p>④ Approvals</p> | <p>0.25 - 2.5 (4) mm² AWG 22 - 12 V_N 250 V; V_{RM} 1000 V 1N4007 - 0.5 A continuous current</p> <p>Terminal block width 5.2 mm / 0.205 in  10 - 12 mm / 0.43 in</p> <p>④ Approvals</p> | <p>0.25 - 2.5 (4) mm² AWG 22 - 12 24 VDC I_F 25 mA max.</p> <p>Terminal block width 5.2 mm / 0.205 in  10 - 12 mm / 0.43 in</p> <p>④ Approvals</p> |
|--|--|---|

① Conductor sizes: 0.25 - 4 mm² "s + fst";
 Push-in conductor sizes: 0.75 - 4 mm² "s" and
 0.75 - 2.5 mm² "insulated ferrule, 12 mm"



| Item No. | Pack. Unit | Item No. | Pack. Unit | Item No. | Pack. Unit |
|---|---|---|--|---|---|
|   | Double-deck diode terminal block with 1N4007 diode (I) 2002-2211/1000-410 50 |   | Triple-deck diode terminal block with 1N4007 diode (I) 2002-3211/1000-410 50 |  | Double-deck diode terminal block with red LED, 24 VDC 2002-2221/1000-434 50 |
| | with 1N4007 diode (II) 2002-2211/1000-411 50 | | with 3 1N4007 diodes (II) 2002-3212/1000-673 50 | | Double-deck diode terminal block with red LED, 24 VDC 2002-2221/1000-413 50 |
|   | Double-deck diode terminal block with 2 1N4007 diodes (I) 2002-2214/1000-492 50 |   | Triple-deck diode terminal block with 1N4007 diode (I) 2002-3211/1000-411 50 | | |
| | with 2 1N4007 diodes (II) 2002-2214/1000-491 50 | | with 3 1N4007 diodes (II) 2002-3212/1000-674 50 | | |
|   | Double-deck diode terminal block with 2 1N4007 diodes (I) 2002-2213/1000-487 50 |  | Triple-deck diode terminal block with 1N4007 diode 2002-3211/1000-675 50 | | |
| | with 2 1N4007 diodes (II) 2002-2213/1000-488 50 | | | | |
|   | Double-deck diode terminal block with 2 1N4007 diodes (I) 2002-2214/1000-489 50 |  | Triple-deck diode terminal block with 1N4007 diode 2002-3211/1000-676 50 |  | Triple-deck diode terminal block with red LED, 24 VDC 2002-3221/1000-434 50 |
| | with 2 1N4007 diodes (II) 2002-2214/1000-490 50 | | | | Triple-deck diode terminal block with red LED, 24 VDC 2002-3221/1000-413 50 |
|  | Through terminal block of same profile 2002-2201 100 |  | Through terminal block of same profile 2002-3201 100 | | Through terminal block with same profile Double-deck terminal block 2002-2201 Triple-deck terminal block 2002-3201 |

Item-Specific Accessories

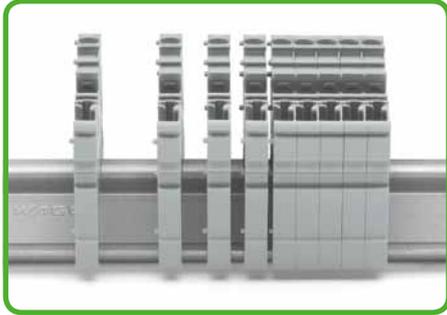
| | | |
|--|--|---|
| <p>End and intermediate plate, 0.8 mm thick</p> <p>orange 2002-2292 100 (4x25) gray 2002-2291 100 (4x25)</p>  | <p>End and intermediate plate, 0.8 mm thick</p> <p>orange 2002-3292 100 (4x25) gray 2002-3291 100 (4x25)</p>  | <p>End and intermediate plate, 0.8 mm thick</p> <p>orange gray</p> <p>Double-deck terminal block 2002-2292 2002-2291 Triple-deck terminal block 2002-3292 2002-3291</p> |
|--|--|---|

2002 Series Accessories Appropriate marking system: WMB/WMB Inline

| | | |
|--|---|--|
| <p>Insulation stop, 5 pcs/strip 200 strips</p> <p>light gray 2002-171 0.25-0.5 mm² dark gray 2002-172 0.75-1 mm²</p>  | <p>Test plug adapter, for test plug 4 mm Ø</p> <p>2009-174 100 (4x25)</p> <p>Testing tap, for max. 2.5 mm²/AWG 14</p> <p>2009-182 100 (4x25)</p>  | <p>Operating tool with partially insulated shaft,</p> <p>type 2, (3.5 x 0.5) mm blade</p> <p>210-720 1</p>  |
| <p>Insulated ferrules, extra long,</p> <p>for TOPJOB®S terminal blocks, see page 195</p>  | <p>Banana plugs, only for safety extra-low voltage (42 V)</p> <p>black 215-311 50 red 215-212 50 blue 215-711 50</p>  | <p>WMB Multi marking system,</p> <p>10 strips with 10 markers per card, stretchable 5 - 5.2 mm plain 793-5501 50 (10x5)</p>  |

X-COM® SYSTEM Description and Handling, 2020 and 2022 Series

Assembly



Snap individual carrier terminal blocks onto carrier rail and engage.

Removal



Unlock assembly with screwdriver (3.5 x 0.5 mm) and remove terminal block via release lever.

CAGE CLAMP® connection



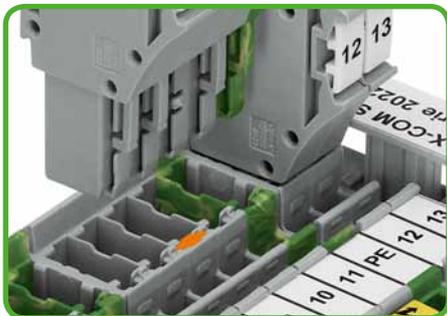
Carrier terminal block: inserting/removing conductor via screwdriver (3.5 x 0.5 mm).

Coding

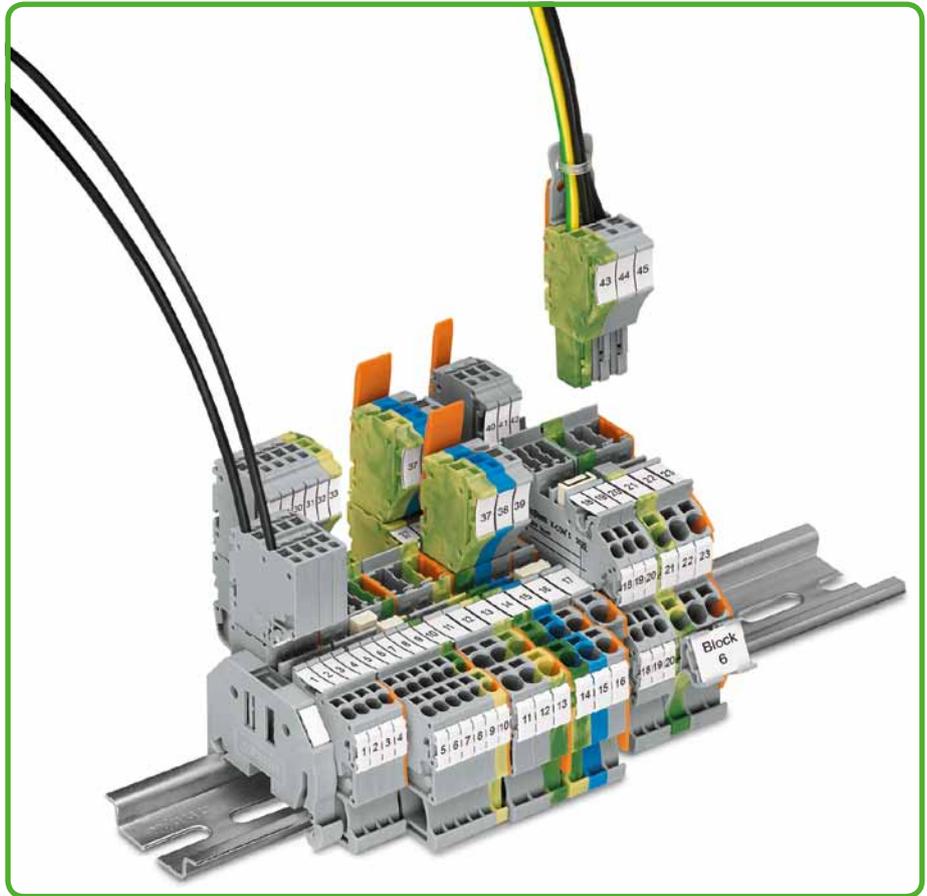


Coding a female plug: remove coding finger using a suitable tool.

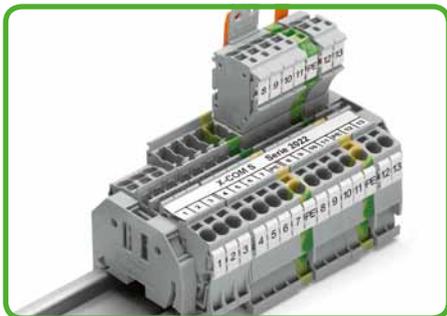
Coding



Insert 2022-100 coding pin into the corresponding location of the carrier terminal block.

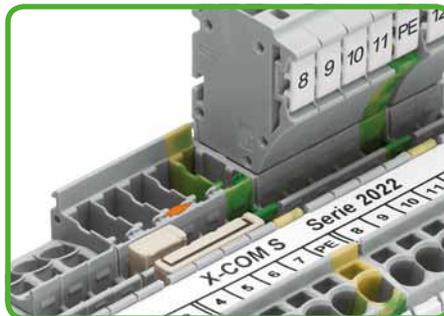


Marking

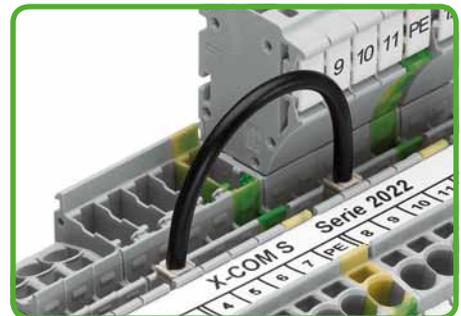


Marking terminal blocks via marking strips or WMB Multi markers.

Commoning



Commoning carrier terminal blocks via staggered jumper. Push jumper down until fully inserted!



Commoning carrier terminal blocks via push-in type wire jumper.

CAGE CLAMP®S clamps the following copper conductors:



solid



stranded



fine-stranded



tip bonded



with ferrule



with pin terminal

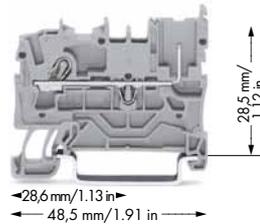
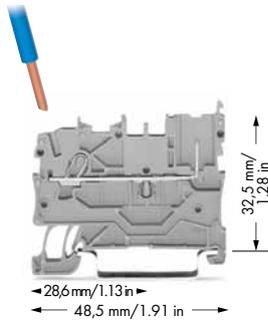
Strip length, see packaging or instructions.

X-COM® SYSTEM

Carrier Terminal Blocks and Female Plugs

2020 and 2022 Series

| | |
|---|---|
| <p>0.14 - 1 (1.5) mm² ① AWG 24 - 16 500 V/6 kV/3 I_N 13.5 A ③</p> <p>Terminal block width 3.5 mm / 0.138 in 9 - 11 mm / 0.39 in</p> <p>④ Approvals</p> | <p>0.25 - 2.5 (4) mm² ② AWG 22 - 12 690 V/6 kV/3 I_N 24 A (32 A) ③</p> <p>Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in</p> <p>④ Approvals</p> |
|---|---|



- ① Conductor sizes: 0.14 - 1.5 mm² "s + f-st"; Push-in conductor sizes: 0.5 - 1.5 mm² "s" and 0.5 - 0.75 mm² "insulated ferrule, 10 mm"
- ② Conductor sizes: 0.25 - 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 - 4 mm² "s" and 0.75 - 2.5 mm² "insulated ferrule, 12 mm"
- ③ Derating curves available upon request
- ④ Approvals are available online at: www.wago.com.

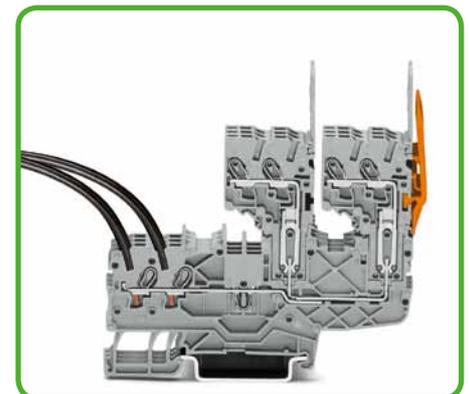
| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|---|-----------|------------|---|-----------|------------|
| 1-conductor/1-pin carrier terminal block, suitable for DIN 35 rail acc. to EN 60715 | | | 1-conductor/1-pin carrier terminal block, suitable for DIN 35 rail acc. to EN 60715 | | |
| gray | 2020-1201 | 50 | gray | 2022-1201 | 100 |
| blue | 2020-1204 | 50 | blue | 2022-1204 | 100 |
| 1-conductor/1-pin ground carrier terminal block | | | 1-conductor/1-pin ground carrier terminal block | | |
| green-yellow | 2020-1207 | 50 | green-yellow | 2022-1207 | 100 |
| 2-conductor/2-pin carrier terminal block, | | | 2-conductor/1-pin carrier terminal block, | | |
| gray | 2020-1401 | 50 | gray | 2022-1301 | 100 |
| blue | 2020-1404 | 50 | blue | 2022-1304 | 100 |
| 2-conductor/2-pin ground carrier terminal block | | | 2-conductor/1-pin ground carrier terminal block | | |
| green-yellow | 2020-1407 | 50 | green-yellow | 2022-1307 | 100 |
| | | | 2-conductor/2-pin carrier terminal block, | | |
| | | | gray | 2022-1401 | 50 |
| | | | blue | 2022-1404 | 50 |
| | | | 2-conductor/2-pin ground carrier terminal block | | |
| | | | green-yellow | 2022-1407 | 50 |
| Item-Specific Accessories | | | Item-Specific Accessories | | |
| End and intermediate plate, 1 mm thick, for 1-conductor / 1-pin carrier terminal block | | | End and intermediate plate, 1 mm thick, for 1-conductor / 1-pin carrier terminal block | | |
| gray 2020-1291 100 (4x25) | | | gray 2022-1291 100 (4x25) | | |
| orange 2020-1292 100 (4x25) | | | orange 2022-1292 100 (4x25) | | |
| End and intermediate plate, 1 mm thick, for 2-conductor / 2-pin carrier terminal block | | | End and intermediate plate, 1 mm thick, for 2-conductor / 1-pin carrier terminal block | | |
| gray 2020-1491 100 (4x25) | | | gray 2022-1391 100 (4x25) | | |
| orange 2020-1492 100 (4x25) | | | orange 2022-1392 100 (4x25) | | |
| | | | End and intermediate plate, 1 mm thick, for 2-conductor / 2-pin carrier terminal block | | |
| | | | gray 2022-1491 100 (4x25) | | |
| | | | orange 2022-1492 100 (4x25) | | |
| 2020 Series Accessories (see 2000 Series) | | | 2022 Series Accessories (see 2002 Series) | | |
| 1-conductor female plug with CAGE CLAMP®S, with coding fingers, gray | | | 1-conductor female plug with CAGE CLAMP®S, with coding fingers, gray | | |
| 2-pole 2020-102 100 | | | 1-pole 2022-101 200 | | |
| 3-pole 2020-103 50 | | | 2-pole 2022-102 100 | | |
| 4-pole 2020-104 50 | | | 3-pole 2022-103 50 | | |
| : | | | : | | |
| 14-pole 2020-114 10 | | | 14-pole 2022-114 10 | | |
| 15-pole 2020-115 10 | | | 15-pole 2022-115 10 | | |
| Carrier with 6 coding pins, | | | Carrier with 6 coding pins, | | |
| for coding of female plugs | | | for coding of female plugs | | |
| orange 2020-100 100 (4x25) | | | orange 2022-100 100 (4x25) | | |



Double-deck terminal blocks, 2020 and 2022 Series



1-conductor female plug on 1-conductor/1-pin carrier terminal block



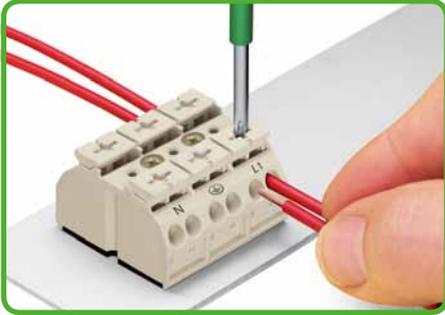
2-conductor female plugs on 2-conductor/2-pin carrier terminal block

Additional poles and/or mixed (gray/blue/green-yellow) female plugs upon request

4-Conductor, Chassis-Mount Terminal Strips

Description and Handling, 862 Series

Conductor termination



Four conductors per pole for solid and fine-stranded conductors.

Marking



Marking
Direct, one-side printing
Marking strips

Testing



Testing
with test plug 2 mm Ø.

Ground contact (PE contact)

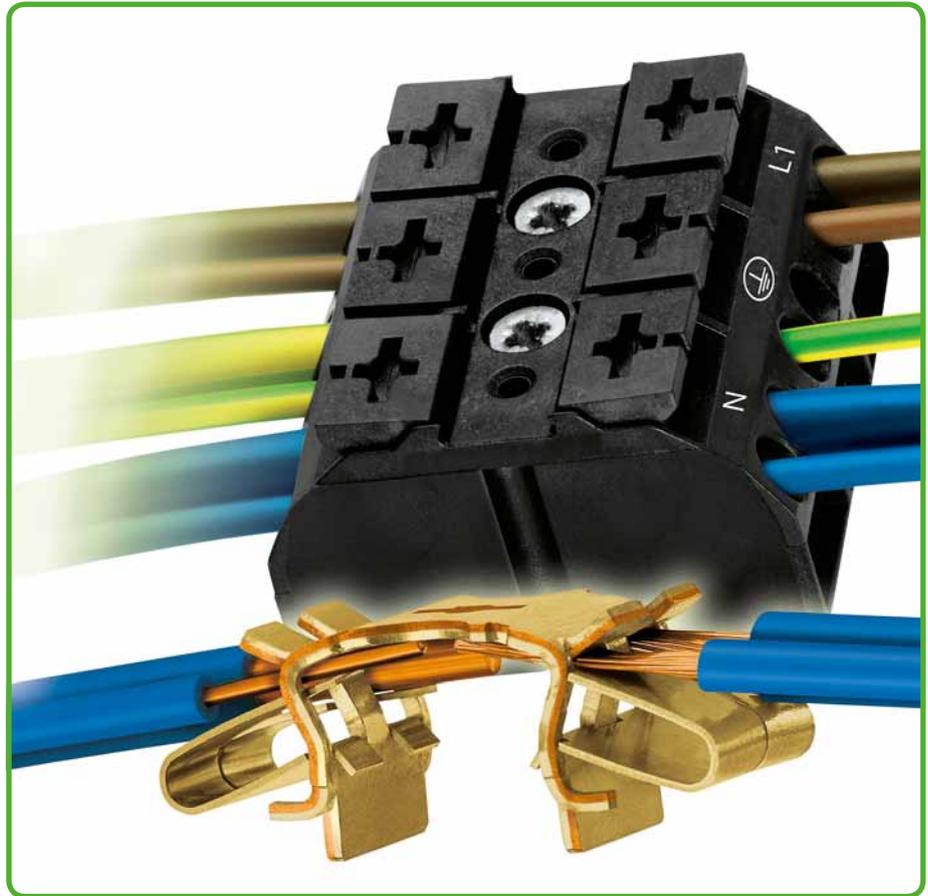


Makes an automatic contact to the mounting plate. The varnish coating is penetrated automatically.

Commoning



Commoning with comb-style jumper bar.



Cost-effective features:

The 862 Series chassis-mount terminal strips were developed specifically to **minimize wiring costs**, while accommodating requirements for easy mounting, multiple connection points, marking and handling:

- The 862 Series equipped with CAGE CLAMP®S connects up to four conductors sized 0.5 mm² to 4 mm² (AWG 20–12). Due to multiple connection points per pole, different conductor sizes can be used within the same terminal block position.
- CAGE CLAMP®S termination technology allows solid conductors, fine-stranded conductors with ferrules or ultrasonically bonded conductors from 0.5 mm² to 4 mm² (AWG 20–12) to be connected by simply pushing the conductor into contact. (Length of bonded wire end min. 10 mm/0.39 in).
- Convenient automatic grounding contact available as an option.
- Snap-in mounting feet for fast assembly.
- Push-buttons for easy handling with an operating tool or by hand.
- Built-in test points simplify testing with test plug 2 mm Ø.
- Flexible marking options with standard marking (pre-marked), marker strip or custom marked for large quantity orders.

CAGE CLAMP®S clamps the following copper conductors:



solid



stranded



fine-stranded

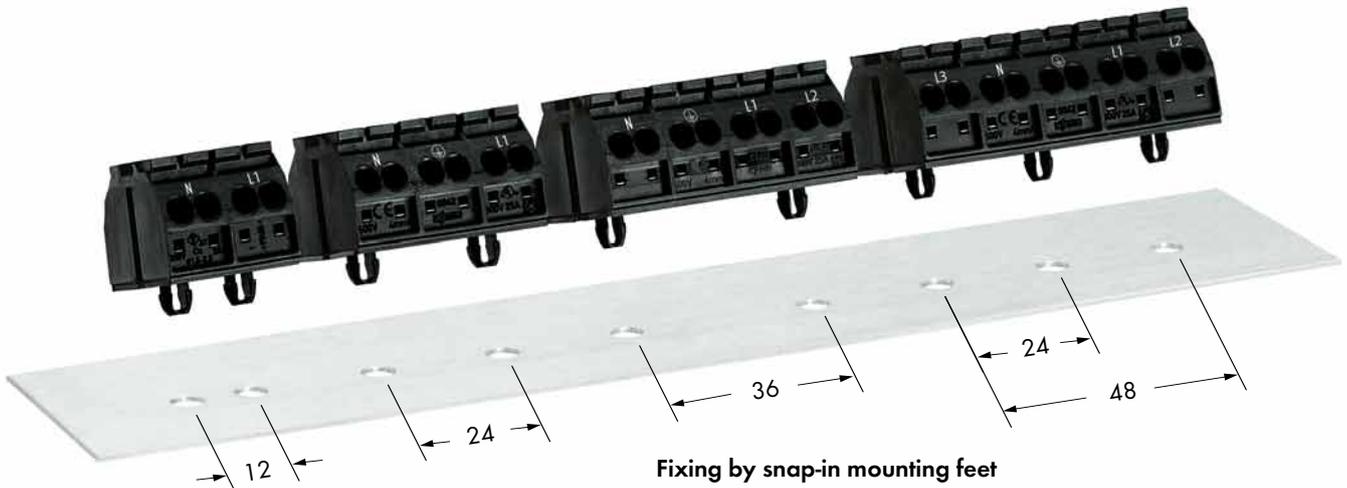


tip bonded



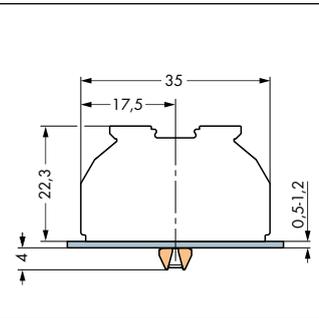
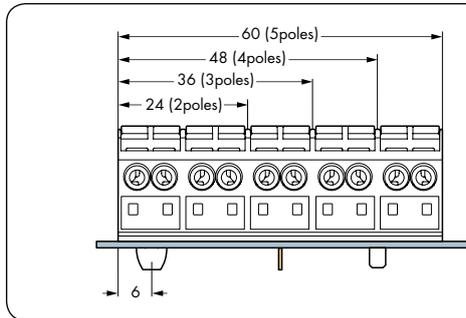
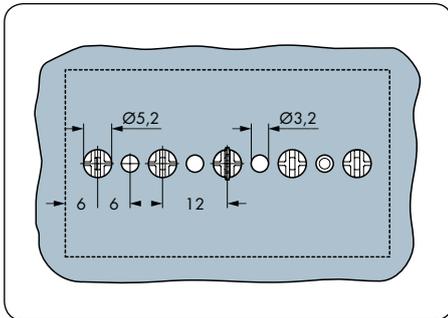
with ferrule

Strip length, see packaging or instructions.



Fixing by snap-in mounting feet

Dimensions



| Ferrules | Sleeve for mm ² | AWG | Color | Strip Length L mm | L1 | D mm | D1 | D2 | Item No. | Pack. Unit | |
|----------|----------------------------|-----|-------|-------------------|------|------|-----|-----|----------|------------|------|
| | 0,5 | 22 | white | 12,0 | 16,0 | 10,0 | 3,1 | 2,6 | 1,0 | 216-241 | 1000 |
| | 0,75 | 20 | gray | 12,0 | 16,0 | 10,0 | 3,3 | 2,8 | 1,2 | 216-242 | 1000 |
| | 1,0 | 18 | red | 12,0 | 16,0 | 10,0 | 3,5 | 3,0 | 1,4 | 216-243 | 1000 |
| | 1,5 | 16 | black | 12,0 | 16,0 | 10,0 | 4,0 | 3,5 | 1,7 | 216-244 | 1000 |
| | 2,5 | 14 | blue | 12,0 | 17,0 | 10,0 | 4,7 | 4,2 | 2,2 | 216-246 | 1000 |
| | 4 | 12 | gray | 14,0 | 20,0 | 12,0 | 5,4 | 4,8 | 2,8 | 216-267 | 500 |
| | 0,5 | 22 | | 10 | 10 | | 2,1 | | 1,0 | 216-141 | 1000 |
| | 0,75 | 20 | | 10 | 10 | | 2,3 | | 1,2 | 216-142 | 1000 |
| | 1,0 | 18 | | 10 | 10 | | 2,5 | | 1,4 | 216-143 | 1000 |
| | 1,5 | 16 | | 10 | 10 | | 2,8 | | 1,7 | 216-144 | 1000 |
| | 2,5 | 14 | | 10 | 10 | | 3,4 | | 2,2 | 216-106 | 1000 |
| | 4 | 12 | | 12 | 12 | | 4,0 | | 2,8 | 216-167 | 1000 |

Please find the entire product range in our Full Line Catalog, Volume 1. Additional information at www.wago.com.

4-Conductor, Chassis-Mount Terminal Strips

2- and 3-Pole, 4 mm²

862 Series

| | | |
|--|--|--|
| | 0.5 - 4 mm² ① 500 V/6 kV/3 I _N 32 A  10 - 11 mm / 0.41 in ② Approvals | 0.5 - 4 mm² ① 500 V/6 kV/3 I _N 32 A  10 - 11 mm / 0.41 in ② Approvals |
|--|--|--|

① Conductor sizes: 0.25 - 4 mm² "s + fst";
 Push-in conductor sizes: 0.75 - 4 mm² "s" and
 0.75 - 2.5 mm² "insulated ferrule, 12 mm"



Available in black and white.

2-pole

3-pole

| | without Ground contact (PE contact) | with Ground contact (PE contact) | Item No. black | Item No. white | Pack. Unit | Item No. black | Item No. white | Pack. Unit |
|---|-------------------------------------|----------------------------------|----------------|----------------|------------|----------------|----------------|------------|
| For screw and nut 3 mm Ø or for self-tapping screw 2.9 mm Ø from top | | | | | | | | |
| | plain | | ● 862-0552 | ○ 862-0652 | 500 | | | |
| | L1-N | | ● 862-1552 | ○ 862-1652 | 500 | | | |
| | N-L1 | | ● 862-2552 | ○ 862-2652 | 500 | | | |
| For self-tapping screw 2.9 mm Ø from below | | | | | | | | |
| | plain | | ● 862-0562 | ○ 862-0662 | 500 | | | |
| | L1-N | | ● 862-1562 | ○ 862-1662 | 500 | | | |
| | N-L1 | | ● 862-2562 | ○ 862-2662 | 500 | | | |
| 1 snap-in foot per pole | | | | | | | | |
| | plain | | ● 862-0532 | ○ 862-0632 | 500 | | | |
| | L1-N | | ● 862-1532 | ○ 862-1632 | 500 | | | |
| | N-L1 | | ● 862-2532 | ○ 862-2632 | 500 | | | |
| For screw and nut 3 mm Ø or for self-tapping screw 2.9 mm Ø from top | | | | | | | | |
| | plain | | | | | ● 862-0503 | ○ 862-0603 | 250 |
| | ⊕-N-L1 | | | | | ● 862-1503 | ○ 862-1603 | 250 |
| | N-⊕-L1 | | | | | ● 862-2503 | ○ 862-2603 | 250 |
| | | N-⊕-L1 | | | | ● 862-8503 | ○ 862-8603 | 250 |
| | | ⊕-N-L1 | | | | ● 862-9503 | ○ 862-9603 | 250 |
| 1 snap-in foot per pole | | | | | | | | |
| | plain | | | | | ● 862-0533 | ○ 862-0633 | 250 |
| | ⊕-N-L1 | | | | | ● 862-1533 | ○ 862-1633 | 250 |
| | N-⊕-L1 | | | | | ● 862-2533 | ○ 862-2633 | 250 |
| | | N-⊕-L1 | | | | ● 862-8533 | ○ 862-8633 | 250 |
| | | ⊕-N-L1 | | | | ● 862-9533 | ○ 862-9633 | 250 |
| Snap-in foot at pos. 1+3 | | | | | | | | |
| | plain | | | | | ● 862-0593 | ○ 862-0693 | 250 |
| | ⊕-N-L1 | | | | | ● 862-1593 | ○ 862-1693 | 250 |
| | N-⊕-L1 | | | | | ● 862-2593 | ○ 862-2693 | 250 |
| | | N-⊕-L1 | | | | ● 862-8593 | ○ 862-8693 | 250 |
| | | ⊕-N-L1 | | | | ● 862-9593 | ○ 862-9693 | 250 |

862 Series Accessories

| | | |
|--|---|---|
| Comb-style jumper bar , simply push into conductor entry hole I _N 32 A 862-482 5 | Test plug , with 500 mm cable, 2 mm Ø red 210-136 50 | Test plug , with 500 mm cable, 2.3 mm Ø yellow 210-137 50 |
| Operating tool with partially insulated shaft , type 2, (3.5 x 0.5) mm blade 210-720 1 | Suitable for Ex e II applications 440 V, 28 A | Marking strip , plain, 7.5 mm wide, 50m roll white 709-178 1 |

② Approvals are available online at: www.wago.com.

4-Conductor, Chassis-Mount Terminal Strips

4- and 5-Pole, 4 mm²

862 Series

| | | |
|--|---|---|
| | 0.5 - 4 mm² ① 500 V/6 kV/3 I _N 32 A | 4 x AWG 20 - 12 300 V, 20 A  300 V, 20 A  |
| | 0.5 - 4 mm² ① 500 V/6 kV/3 I _N 32 A | 4 x AWG 20 - 12 300 V, 20 A  300 V, 20 A  |
| |  10 - 11 mm / 0.41 in ② Approvals |  10 - 11 mm / 0.41 in ② Approvals |

① Conductor sizes: 0.25 - 4 mm² "s + fst";
 Push-in conductor sizes: 0.75 - 4 mm² "s" and 0.75 - 2.5 mm² "insulated ferrule, 12 mm"



Available in black and white.

4-pole

5-pole

| | without Ground contact (PE contact) | with Ground contact (PE contact) | Item No. black | Item No. white | Pack. Unit | Item No. black | Item No. white | Pack. Unit |
|---|-------------------------------------|----------------------------------|----------------|----------------|------------|----------------|----------------|------------|
| For screw and nut 3 mm Ø or for self-tapping screw 2.9 mm Ø from top | | | | | | | | |
| | plain | | ● 862-0504 | ○ 862-0604 | 200 | | | |
| | ⊕-N-L1-L2 | | ● 862-1504 | ○ 862-1604 | 200 | | | |
| | N-⊕-L1-L2 | | ● 862-2504 | ○ 862-2604 | 200 | | | |
| | | N-⊕-L1-L2 | ● 862-8504 | ○ 862-8604 | 200 | | | |
| | | ⊕-N-L1-L2 | ● 862-9504 | ○ 862-9604 | 200 | | | |
| 1 snap-in foot per pole | | | | | | | | |
| | plain | | ● 862-0534 | ○ 862-0634 | 200 | | | |
| | ⊕-N-L1-L2 | | ● 862-1534 | ○ 862-1634 | 200 | | | |
| | N-⊕-L1-L2 | | ● 862-2534 | ○ 862-2634 | 200 | | | |
| | | N-⊕-L1-L2 | ● 862-8534 | ○ 862-8634 | 200 | | | |
| | | ⊕-N-L1-L2 | ● 862-9534 | ○ 862-9634 | 200 | | | |
| Snap-in foot at pos. 1+4 | | | | | | | | |
| | plain | | ● 862-0594 | ○ 862-0694 | 200 | | | |
| | ⊕-N-L1-L2 | | ● 862-1594 | ○ 862-1694 | 200 | | | |
| | N-⊕-L1-L2 | | ● 862-2594 | ○ 862-2694 | 200 | | | |
| | | N-⊕-L1-L2 | ● 862-8594 | ○ 862-8694 | 200 | | | |
| | | ⊕-N-L1-L2 | ● 862-9594 | ○ 862-9694 | 200 | | | |
| For screw and nut 3 mm Ø or for self-tapping screw 2.9 mm Ø from top | | | | | | | | |
| | plain | | | | | ● 862-0505 | ○ 862-0605 | 200 |
| | ⊕-N-L1-L2-L3 | | | | | ● 862-1505 | ○ 862-1605 | 200 |
| | L3-N-⊕-L1-L2 | | | | | ● 862-2505 | ○ 862-2605 | 200 |
| | | L3-N-⊕-L1-L2 | | | | ● 862-8505 | ○ 862-8605 | 200 |
| | | ⊕-N-L1-L2-L3 | | | | ● 862-9505 | ○ 862-9605 | 200 |
| 1 snap-in foot per pole | | | | | | | | |
| | plain | | | | | ● 862-0525 | ○ 862-0625 | 200 |
| | ⊕-N-L1-L2-L3 | | | | | ● 862-1525 | ○ 862-1625 | 200 |
| | L3-N-⊕-L1-L2 | | | | | ● 862-2525 | ○ 862-2625 | 200 |
| | | L3-N-⊕-L1-L2 | | | | ● 862-8525 | ○ 862-8625 | 200 |
| | | ⊕-N-L1-L2-L3 | | | | ● 862-9525 | ○ 862-9625 | 200 |
| Snap-in foot at pos. 1+3+5 | | | | | | | | |
| | plain | | | | | ● 862-0515 | ○ 862-0615 | 200 |
| | ⊕-N-L1-L2-L3 | | | | | ● 862-1515 | ○ 862-1615 | 200 |
| | L3-N-⊕-L1-L2 | | | | | ● 862-2515 | ○ 862-2615 | 200 |
| | | L3-N-⊕-L1-L2 | | | | ● 862-8515 | ○ 862-8615 | 200 |
| | | ⊕-N-L1-L2-L3 | | | | ● 862-9515 | ○ 862-9615 | 200 |

862 Series Accessories

| | | |
|---|--|--|
| Comb-style jumper bar , simply push into conductor entry hole  I _N 32 A 862-482 5 | Test plug , with 500 mm cable, 2 mm Ø  red 210-136 50 | Test plug , with 500 mm cable, 2.3 mm Ø  yellow 210-137 50 |
| Operating tool with partially insulated shaft , type 2, (3.5 x 0.5) mm blade  210-720 1 | Suitable for Ex e II applications 440 V, 28 A | Marking strip , plain, 7.5 mm wide, 50m roll  white 709-178 1 |

For technical explanations and abbreviations, see technical section.

Rail-Mounted Terminal Blocks 279 to 285 Series

Conductor termination/removal

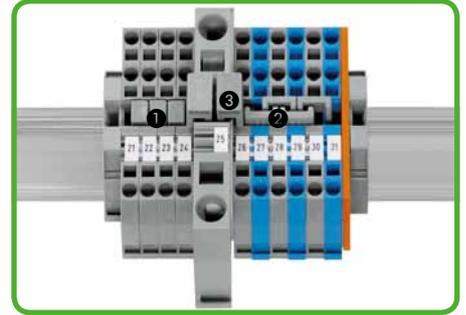


Inserting conductor via screwdriver.



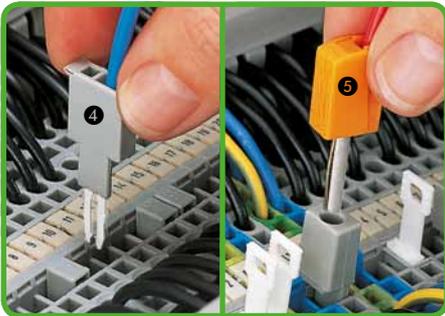
Removing conductor via screwdriver.

Adjacent/Staggered/Step-down jumpers



Commoning with adjacent jumpers **1** or with staggered jumpers **2**.
Commoning terminal blocks of different sizes - with step down jumpers **3**.

Testing

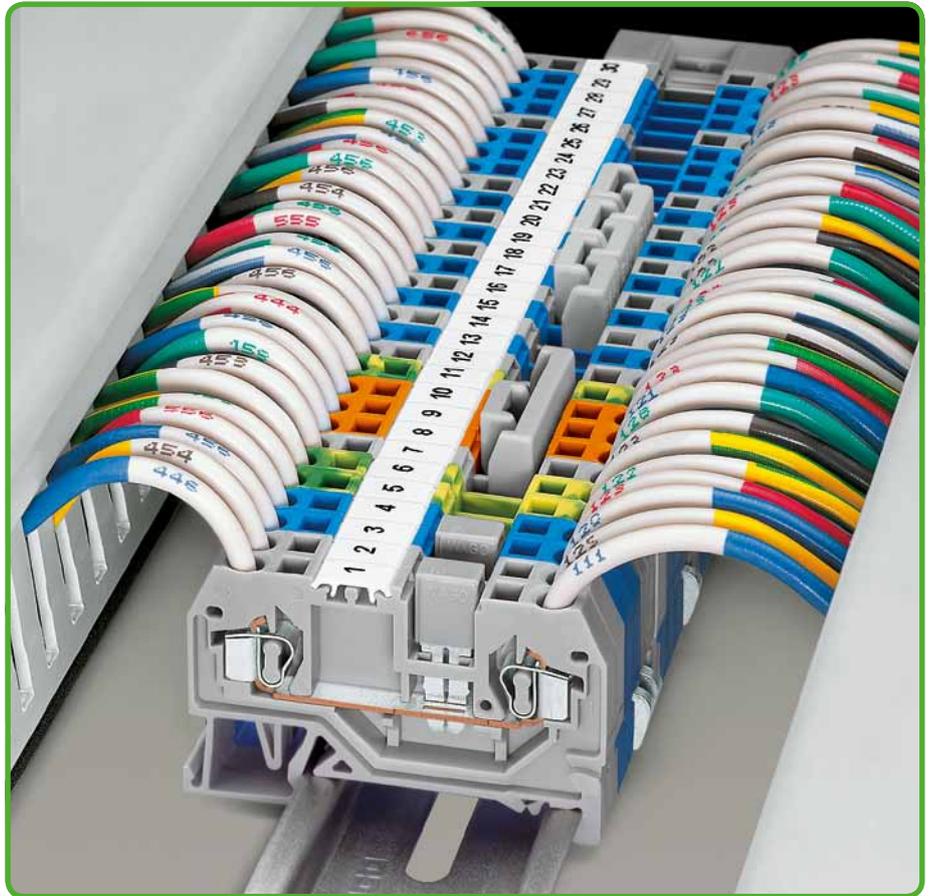


4 Test plug adapter fitted with CAGE CLAMP®
5 Banana plug (4 mm Ø) via 209-170 test plug adapter

Warning cover/Insulation stop

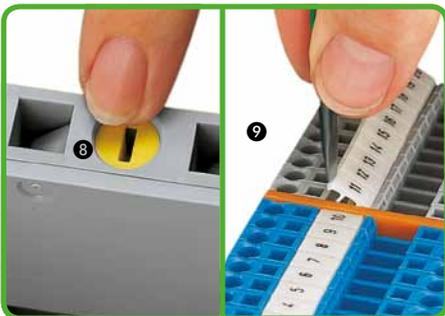


6 Protective warning markers inserted into operating slots.
7 Inserting insulation stop.



Finger guard

Marking

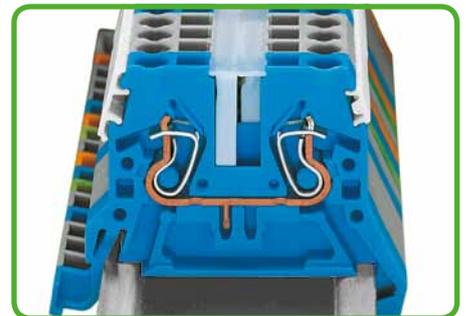


8 Touchproof cover protects unused conductor entries.
9 Marking via WMB Multi markers.



Marking via IP350 Plotter.

870 Series (see Full Line Catalog, Volume 1)



Rail-mounted terminal blocks equipped with CAGE CLAMP®.

CAGE CLAMP®S clamps the following copper conductors:



solid



stranded



fine-stranded



tip bonded



with ferrule



with pin terminal

Strip length, see packaging or instructions.

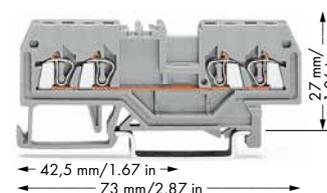
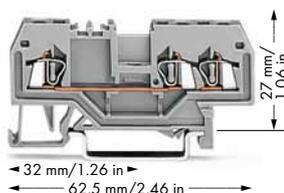
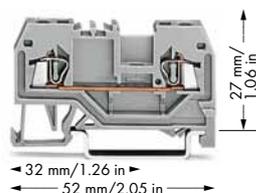
Through/Ground Conductor/Shield and Ex Terminal Blocks

1.5 mm²

279 Series

CAGE CLAMP®

| | | | | | |
|--|--|--|--|--|--|
| 0.08 - 1.5 mm² 800 V/8 kV/3 I _N 18 A Terminal block width 4 mm / 0.157 in  8 - 9 mm / 0.33 in ① Approvals | AWG 28 - 16 600 V, 10 A  600 V, 10 A  | 0.08 - 1.5 mm² 800 V/8 kV/3 I _N 18 A Terminal block width 4 mm / 0.157 in  8 - 9 mm / 0.33 in ① Approvals | AWG 28 - 16 600 V, 10 A  600 V, 10 A  | 0.08 - 1.5 mm² 800 V/8 kV/3 I _N 18 A Terminal block width 4 mm / 0.157 in  8 - 9 mm / 0.33 in ① Approvals | AWG 28 - 16 600 V, 10 A  600 V, 10 A  |
|--|--|--|--|--|--|



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|--|-----------------|------------|--|-----------------|------------|--|-----------------|------------|
| 2-conductor through terminal block | | | 3-conductor through terminal block | | | 4-conductor through terminal block | | |
| gray | 279-901 | 100 | gray | 279-681 | 100 | gray | 279-831 | 100 |
| blue | 279-904 | 100 | blue | 279-684 | 100 | blue | 279-834 | 100 |
| orange | 279-902 | 100 | orange | 279-682 | 100 | orange | 279-832 | 100 |
| red | 279-903 | 100 | red | 279-683 | 100 | red | 279-833 | 100 |
| black | 279-905 | 100 | black | 279-685 | 100 | black | 279-835 | 100 |
| yellow | 279-906 | 100 | yellow | 279-686 | 100 | yellow | 279-836 | 100 |
| light gray  | 279-992 | 100 | light gray  | 279-993 | 100 | light gray  | 279-994 | 100 |
| 2-conductor ground terminal block | | | 3-conductor ground terminal block | | | 4-conductor ground terminal block | | |
| green-yellow | 279-907 | 100 | green-yellow | 279-687 | 100 | green-yellow | 279-837 | 100 |
| green-yellow  | 279-907/999-950 | 100 | green-yellow  | 279-687/999-950 | 100 | green-yellow  | 279-837/999-950 | 100 |
| Other terminal blocks with the same profile: | | | Other terminal blocks with the same profile: | | | Other terminal blocks with the same profile: | | |
| Diode | 279-915/..... | Volume 1 | Diode | 279-673/..... | Volume 1 | Double-potential | 279-826 | Volume 1 |
| | | | LED | 279-674/..... | Volume 1 | Diode | 279-815/..... | Volume 1 |
| | | | | | | LED | 279-809/..... | Volume 1 |

Item-Specific Accessories (Separator for Ex e / Ex i applications, see page 30)

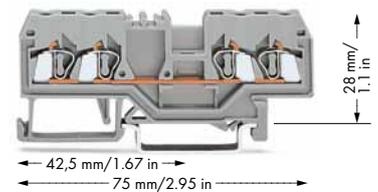
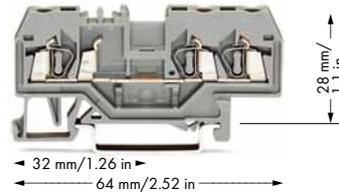
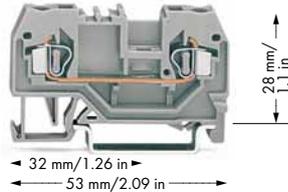
| End and intermediate plate, 2 mm thick | Separator, oversized, 2 mm thick |
|--|----------------------------------|
| orange 279-328 100 (4x25) | orange 279-329 100 (4x25) |
| gray 279-325 100 (4x25) | gray 279-326 100 (4x25) |
| light gray 279-330 100 (4x25) | light gray 279-331 100 (4x25) |
| orange 279-339 100 (4x25) | orange 279-340 100 (4x25) |
| gray 279-308 100 (4x25) | gray 279-309 100 (4x25) |
| light gray 279-341 100 (4x25) | light gray 279-342 100 (4x25) |
| orange 279-346 100 (4x25) | orange 279-347 100 (4x25) |
| gray 279-344 100 (4x25) | gray 279-345 100 (4x25) |
| light gray 279-348 100 (4x25) | light gray 279-349 100 (4x25) |

279 Series Accessories

| Adjacent jumper, insulated, I _N 15 A | Alternate comb-style jumper bar, insulated, I _N = I _N terminal block | Protective warning marker, with high-voltage symbol, for 5 terminal blocks |
|--|--|--|
| gray 279-402 200 (8x25) | 2-way 279-492 200 (8x25) | yellow 279-415 100 (4x25) |
| yellow-green 279-422 200 (8x25) | | |
| Alternate jumper, insulated, I _N 15 A | Operating tool, insulated | Screwless end stop, |
| gray 279-409 100 (4x25) | 2-way 279-432 1 | 6 mm wide 249-116 100 (4x25) |
| | 3-way 279-433 1 | 10 mm wide 249-117 50 (2x25) |
| | 10-way 279-440 1 | |
| Push-in type wire jumper, insulated, I _N 9 A | Insulation stop, 5 pcs/strip 200 strips | Test plug adapter, for terminal blocks 1.5-4 mm ² |
| 60 mm 249-125 10 | | (AWG 16-12), 5 mm wide |
| 110 mm 249-126 10 | | 280-404 100 (4x25) |
| 250 mm 249-127 10 | | for 210-137 test plug |
| Comb-style jumper bar, insulated, I _N = I _N terminal block | white 279-470 0.08-0.2 mm ² (AWG 28-24) | Test plug adapter, for terminal blocks 1.5-10 mm ² |
| 2-way 279-482 200 (8x25) | dark gray 279-471 0.25 mm ² (AWG 22) | (AWG 16-8), 8 mm wide |
| 3-way 279-483 200 (8x25) | | 209-170 50 (2x25) |
| 10-way 279-490 50 (2x25) | | for test plug 4 mm Ø |
| Operating tool with partially insulated shaft, | ● Suitable for Ex i applications | Banana plugs, only for safety extra-low voltage (42 V) |
| type 1, (2.5 x 0.4) mm blade | ⊗ Suitable for Ex e II applications | black 215-311 50 |
| 210-719 1 | 0.2 - 1.5 mm ² AWG 24 - 16 | red 215-212 50 |
| | 550 V, 15 A | blue 215-711 50 |

Through/Ground Conductor/Shield and Ex Terminal Blocks 2.5 mm² 280 Series

| | | | | | |
|---|--|---|--|---|--|
| <p>0.08 - 2.5 mm² 800 V/8 kV/3 I_N 24 A</p> <p>Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in</p> <p>● Approvals</p> | <p>AWG 28 - 12* 600 V, 20 A 600 V, 20 A</p> | <p>0.08 - 2.5 mm² 800 V/8 kV/3 I_N 24 A</p> <p>Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in</p> <p>● Approvals</p> | <p>AWG 28 - 12* 600 V, 20 A 600 V, 10 A</p> | <p>0.08 - 2.5 mm² 800 V/8 kV/3 I_N 20 A</p> <p>Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in</p> <p>● Approvals</p> | <p>AWG 28 - 12* 600 V, 20 A 600 V, 10 A</p> |
|---|--|---|--|---|--|



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|---|-----------------|------------|---|-----------------|------------|---|-----------------|------------|
| 2-conductor through terminal block | | | 3-conductor through terminal block | | | 4-conductor through terminal block | | |
| gray | 280-901 | 100 | gray | 280-681 | 100 | gray | 280-833 | 100 |
| blue | 280-904 | 100 | blue | 280-684 | 100 | blue | 280-834 | 100 |
| orange | 280-902 | 100 | orange | 280-650 | 100 | orange | 280-835 | 100 |
| red | 280-903 | 100 | red | 280-653 | 100 | red | 280-830 | 100 |
| black | 280-905 | 100 | black | 280-671 | 100 | black | 280-831 | 100 |
| yellow | 280-906 | 100 | yellow | 280-672 | 100 | yellow | 280-832 | 100 |
| light gray | 280-992 | 100 | light gray | 280-993 | 100 | light gray | 280-994 | 100 |
| 2-conductor ground terminal block | | | 3-conductor ground terminal block | | | 4-conductor ground terminal block | | |
| green-yellow | 280-907 | 100 | green-yellow | 280-687 | 100 | green-yellow | 280-837 | 100 |
| green-yellow | 280-907/999-950 | 100 | green-yellow | 280-687/999-950 | 100 | green-yellow | 280-837/999-950 | 100 |
| Other terminal blocks with the same profile: | | | Other terminal blocks with the same profile: | | | Other terminal blocks with the same profile: | | |
| Diode | 280-915/... | Volume 1 | Diode | 280-673/... | Volume 1 | Double-potential | 280-826 | Volume 1 |
| Disconnect | 280-912 | Page 67 | Disconnect | 280-683 | Page 67 | LED | 280-809/... | Volume 1 |
| Carrier | 280-916 | Volume 1 | Carrier | 280-610 | Volume 1 | Carrier | 280-816 | Volume 1 |
| 4-conductor shield terminal block | | | | | | | | |
| | | | | | | white | 280-838 | 100 |

Item-Specific Accessories

(Separator for Ex e/Ex i applications, see page 30)

| End and intermediate plate, 2.5 mm thick | End and intermediate plate, 2.5 mm thick | End and intermediate plate, 2.5 mm thick |
|--|--|--|
| orange 280-309 100 (4x25) | orange 280-326 100 (4x25) | orange 280-315 100 (4x25) |
| gray 280-308 100 (4x25) | gray 280-324 100 (4x25) | gray 280-314 100 (4x25) |
| light gray 280-356 100 (4x25) | light gray 280-358 100 (4x25) | light gray 280-352 100 (4x25) |
| Separator, oversized, 2 mm thick | Separator, oversized, 2 mm thick | Separator, oversized, 2 mm thick |
| orange 280-311 100 (4x25) | orange 280-346 100 (4x25) | orange 280-335 100 (4x25) |
| gray 280-310 100 (4x25) | gray 280-344 100 (4x25) | gray 280-334 100 (4x25) |
| light gray 280-357 100 (4x25) | light gray 280-359 100 (4x25) | light gray 280-353 100 (4x25) |

280 Series Accessories

Appropriate marking system: **WMB**

| | | |
|--|---|--|
| <p>Adjacent jumper, insulated, I_N 24 A</p> <p>gray 280-402 200 (8x25)</p> <p>yellow-green 280-422 200 (8x25)</p> | <p>Comb-style jumper bar, insulated, I_N = I_N terminal block</p> <p>2-way 280-482 200 (8x25)</p> <p>3-way 280-483 200 (8x25)</p> <p>10-way 280-490 50 (2x25)</p> | <p>Protective warning marker, with high-voltage symbol, for 5 terminal blocks</p> <p>yellow 280-415 100 (4x25)</p> |
| <p>Alternate jumper, insulated, I_N 24 A</p> <p>gray 280-409 100 (4x25)</p> | <p>Operating tool, insulated</p> <p>2-way 280-432 1</p> <p>3-way 280-433 1</p> <p>10-way 280-440 1</p> | <p>Screwless end stop</p> <p>6 mm wide 249-116 100 (4x25)</p> <p>10 mm wide 249-117 50 (2x25)</p> |
| <p>Staggered jumper, insulated, I_N 24 A, spacing 5 mm</p> <p>from 1 to 2 780-452 100 (4x25)</p> <p>from 1 to 3 780-453 100 (4x25)</p> <p>from 1 to 4 780-454 100 (4x25)</p> <p>from 1 to 5 780-455 50 (2x25)</p> <p>: :</p> <p>from 1 to 8 780-458 50 (2x25)</p> | <p>Insulation stop, 5 pcs/strip 200 strips</p> <p>white 280-470 0.08-0.2 mm² (AWG 28-24)</p> <p>light gray 280-471 0.25-0.5 mm² (AWG 12-20)</p> <p>dark gray 280-472 0.75-1 mm² (AWG 20-18)</p> | <p>Test plug adapter, for terminal blocks 1.5-4 mm² (AWG 16-12), 5 mm wide</p> <p>280-404 100 (4x25)</p> <p>for 210-137 test plug</p> <p>Test plug adapter, for terminal blocks 1.5-10 mm² (AWG 16-12), 8 mm wide</p> <p>209-170 50 (2x25)</p> <p>for test plug 4 mm Ø</p> |
| <p>Push-in type wire jumper, insulated, I_N 9 A</p> <p>60 mm 249-125 10</p> <p>110 mm 249-126 10</p> <p>250 mm 249-127 10</p> | <p>● Suitable for Ex i applications</p> <p>⊗ Suitable for Ex e II applications</p> <p>0.2 - 2.5 mm² AWG 24 - 12</p> <p>550 V, 20 A</p> | <p>Test plug, 6 mm wide, with CAGE CLAMP®</p> <p>for 0.08-2.5 mm² (AWG 28-14)</p> <p>I_N 24 A 281-407 100 (4x25)</p> |

● Approvals are available online at: www.wago.com.

Through/Ground and Ex Terminal Blocks, Angled Type 280 Series (2.5 mm²) and 281 Series (4 mm²)

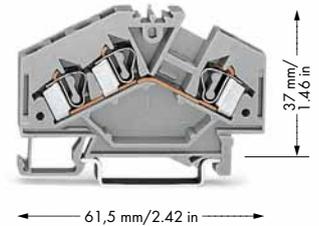
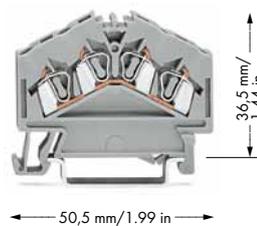
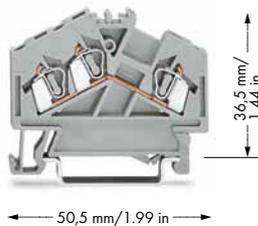
CAGE CLAMP®

1

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1

| | | |
|---|---|--|
| <p>0.08 - 2.5 mm² 800 V/8 kV/3 I_N 24 A</p> <p>Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in</p> <p>AWG 28 - 12* 600 V, 20 A 600 V, 20 A</p> <p>Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in</p> <p>Approvals</p> | <p>0.08 - 2.5 mm² 800 V/8 kV/3 I_N 24 A</p> <p>Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in</p> <p>AWG 28 - 12* 600 V, 20 A 600 V, 20 A</p> <p>Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in</p> <p>Approvals</p> | <p>0.08 - 4 mm² 800 V/8 kV/3 I_N 32 A</p> <p>Terminal block width 6 mm / 0.236 in 9 - 10 mm / 0.37 in</p> <p>AWG 28 - 12 600 V, 20 A 600 V, 20 A</p> <p>Terminal block width 6 mm / 0.236 in 9 - 10 mm / 0.37 in</p> <p>Approvals</p> |
|---|---|--|



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|--|-----------------|------------|--|----------|--------------------------------------|--|-----------------|------------|
| 3-conductor through terminal block | | | 4-conductor through terminal block | | | 3-conductor through terminal block | | |
| gray | 280-641 | 100 | gray | 280-646 | 100 | gray | 281-631 | 100 |
| blue | 280-651 | 100 | blue | 280-656 | 100 | blue | 281-651 | 100 |
| orange | 280-654 | 100 | orange | 280-946 | 100 | light gray (Ex) | 281-998 | 100 |
| light gray (Ex) | 280-998 | 100 | light gray (Ex) | 280-996 | 100 | 3-conductor ground terminal block | | |
| 3-conductor ground terminal block | | | Notice: | | | green-yellow 281-637 100 | | |
| green-yellow | 280-637 | 100 | These terminal blocks can only be commoned with | | | green-yellow (Ex) | 281-637/999-950 | 100 |
| green-yellow (Ex) | 280-637/999-950 | 100 | 280 Series comb-style jumper bars! | | | | | |
| 3-conductor shield terminal block | | | | | | | | |
| white | 280-640 | 100 | | | | | | |
| Other terminal blocks with the same profile: | | | | | | | | |
| Spacer | 280-654/056-000 | Volume 1 | | | | | | |
| Item-Specific Accessories | | | Item-Specific Accessories | | | Item-Specific Accessories | | |
| End and intermediate plate, 2.5 mm thick | | | End and intermediate plate, 2.5 mm thick | | | End and intermediate plate, 2.5 mm thick | | |
| orange | 280-313 | 100 (4x25) | orange | 280-313 | 100 (4x25) | orange | 281-313 | 100 (4x25) |
| gray | 280-312 | 100 (4x25) | gray | 280-312 | 100 (4x25) | gray | 281-312 | 100 (4x25) |
| light gray | 280-354 | 100 (4x25) | light gray | 280-354 | 100 (4x25) | light gray | 281-357 | 100 (4x25) |
| Separator, oversized, 2.5 mm thick | | | Separator, oversized, 2.5 mm thick | | | Separator, oversized, 2 mm thick | | |
| orange | 280-318 | 100 (4x25) | orange | 280-318 | 100 (4x25) | orange | 281-318 | 100 (4x25) |
| gray | 280-348 | 100 (4x25) | gray | 280-348 | 100 (4x25) | gray | 281-348 | 100 (4x25) |
| light gray | 280-355 | 100 (4x25) | light gray | 280-355 | 100 (4x25) | light gray | 281-358 | 100 (4x25) |
| 280 Series Accessories Appropriate marking system: WMB | | | 281 Series Appropriate marking system: WMB | | | 281 Series Appropriate marking system: WMB | | |
| Adjacent jumper, insulated, I_N 24 A | | | Protective warning marker, with high-voltage symbol, | | | Adjacent jumper, insulated, I_N 24 A | | |
| gray | 280-402 | 200 (8x25) | for 5 terminal blocks | | | gray | 281-402 | 200 (8x25) |
| yellow-green | 280-422 | 200 (8x25) | yellow | 280-415 | 100 (4x25) | yellow-green | 281-422 | 200 (8x25) |
| Alternate jumper, insulated, I_N 24 A | | | Screwless end stop, | | | Alternate jumper, insulated, I_N 24 A | | |
| gray | 280-409 | 100 (4x25) | 6 mm wide 249-116 100 (4x25) | | | gray | 281-409 | 100 (4x25) |
| Staggered jumper, insulated, I_N 24 A, | | | 10 mm wide 249-117 50 (2x25) | | | Staggered jumper, insulated, I_N 24 A, | | |
| spacing 5 mm | | | Test plug adapter, for terminal blocks 1.5-4 mm² | | | spacing 5 mm | | |
| from 1 to 2 780-452 100 (4x25) | | | (AWG 16-12), 5 mm wide | | | from 1 to 2 781-452 100 (4x25) | | |
| from 1 to 3 780-453 100 (4x25) | | | 280-404 100 (4x25) | | | from 1 to 3 781-453 100 (4x25) | | |
| from 1 to 4 780-454 100 (4x25) | | | for 210-137 test plug | | | from 1 to 4 781-454 100 (4x25) | | |
| from 1 to 5 780-455 50 (2x25) | | | Insulation stop, 5 pcs/strip 200 strips | | | from 1 to 5 781-455 50 (2x25) | | |
| from 1 to 8 780-458 50 (2x25) | | | | | | from 1 to 6 781-456 50 (2x25) | | |
| Push-in type wire jumper, insulated, I_N 9 A | | | white 280-470 0.08-0.2 mm ² (AWG 28-24) | | | | | |
| 60 mm | 249-125 | 10 | light gray | 280-471 | 0.25-0.5 mm ² (AWG 12-20) | | | |
| 110 mm | 249-126 | 10 | dark gray | 280-472 | 0.75-1 mm ² (AWG 20-18) | | | |
| 250 mm | 249-127 | 10 | For additional accessories, see page 52. | | | For additional accessories see page 54. | | |
| Operating tool with partially insulated shaft, | | | Suitable for Ex i applications | | | Suitable for Ex i applications | | |
| type 2, (3.5 x 0.5) mm blade | | | (Ex) Suitable for Ex e II applications | | | (Ex) Suitable for Ex e II applications | | |
| 210-720 1 | | | 0.2 - 2.5 mm ² AWG 24 - 12 | | | 0.2 - 4 mm ² AWG 24 - 12 | | |
| | | | 550 V, 20 A | | | 550 V, 30 A | | |

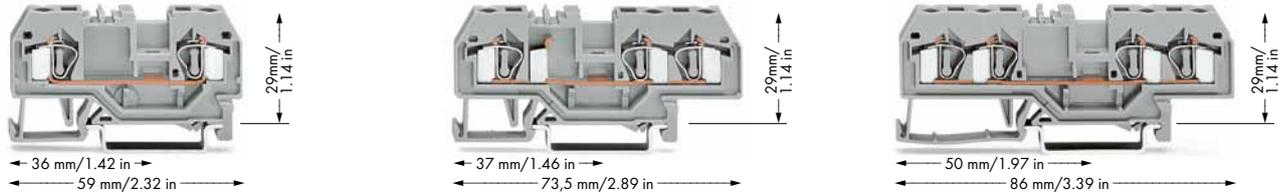
Please find the entire product range in our Full Line Catalog, Volume 1. Additional information at www.wago.com.

* AWG 12: THHN, THWN

WAGO®

Through/Ground Conductor/Shield and Ex Terminal Blocks 4 mm² 281 Series

| | | | | | |
|---|--|--|--|--|--|
| 0.08 - 4 mm² 800 V/8 kV/3 I_N 32 A Terminal block width 6 mm / 0.236 in  9 - 10 mm / 0.37 in Approvals | AWG 28 - 12 600 V, 20 A  600 V, 20 A  | 0.08 - 4 mm² 800 V/8 kV/3 I_N 32 A Terminal block width 6 mm / 0.236 in  9 - 10 mm / 0.37 in Approvals | AWG 28 - 12 600 V, 20 A  600 V, 20 A  | 0.08 - 4 mm² 800 V/8 kV/3 I_N 26 A Terminal block width 6 mm / 0.236 in  9 - 10 mm / 0.37 in Approvals | AWG 28 - 12 600 V, 20 A  600 V, 20 A  |
|---|--|--|--|--|--|



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|--|------------------------|------------|---|------------------------|------------|---|------------------------|------------|
| 2-conductor through terminal block | | | 3-conductor through terminal block | | | 4-conductor through terminal block | | |
|  | 281-901 | 50 |  | 281-681 | 50 |  | 281-652 | 50 |
|  | 281-904 | 50 |  | 281-684 | 50 |  | 281-654 | 50 |
|  | 281-902 | 50 |  | 281-678 | 50 |  | 281-653 | 50 |
|  | 281-903 | 50 |  | 281-679 | 50 |  | 281-663 | 50 |
|  | 281-905 | 50 |  | 281-685 | 50 |  | 281-664 | 50 |
|  | 281-906 | 50 |  | 281-686 | 50 |  | 281-668 | 50 |
|   | 281-992 | 50 |   | 281-993 | 50 |   | 281-994 | 50 |
| 2-conductor ground terminal block | | | 3-conductor ground terminal block | | | 4-conductor ground terminal block | | |
|  | 281-907 | 50 |  | 281-687 | 50 |  | 281-657 | 50 |
|   | 281-907/999-950 | 50 |   | 281-687/999-950 | 50 |   | 281-657/999-950 | 50 |
| Other terminal blocks with the same profile: | | | Other terminal blocks with the same profile: | | | Other terminal blocks with the same profile: | | |
| Diode | 281-915/... | Volume 1 | Diode | 281-673/... | Volume 1 | Diode | 281-665/... | Volume 1 |
| Disconnect | 281-912 | Page 67 | Disconnect | 281-683 | Page 67 | Disconnect | 281-659 | Page 67 |
| Carrier | 281-916 | Page 66 | Carrier | 281-610 | Page 66 | Carrier | 281-656 | Page 66 |

| Item-Specific Accessories | | | Separator for Ex e /Ex i applications, see page 30 | | | | | |
|--|---------------------------|------------|---|---------------------------|------------|---|---------------------------|------------|
| End and intermediate plate, 2.5 mm thick | | | End and intermediate plate, 2.5 mm thick | | | End and intermediate plate, 2.5 mm thick | | |
|  | orange 281-329 | 100 (4x25) |  | orange 281-326 | 100 (4x25) |  | orange 281-335 | 100 (4x25) |
| | gray 281-328 | 100 (4x25) | | gray 281-324 | 100 (4x25) | | gray 281-334 | 100 (4x25) |
| | light gray 281-349 | 100 (4x25) | | light gray 281-355 | 100 (4x25) | | light gray 281-345 | 100 (4x25) |
| Separator, oversized, 2 mm thick | | | Separator, oversized, 2 mm thick | | | Separator, oversized, 2 mm thick | | |
|  | orange 281-331 | 100 (4x25) |  | orange 281-346 | 100 (4x25) |  | orange 281-339 | 100 (4x25) |
| | gray 281-330 | 100 (4x25) | | gray 281-344 | 100 (4x25) | | gray 281-338 | 100 (4x25) |
| | light gray 281-350 | 100 (4x25) | | light gray 281-356 | 100 (4x25) | | light gray 281-347 | 100 (4x25) |

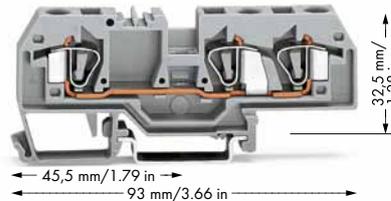
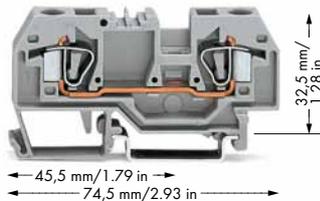
| 281 Series Accessories | | | Appropriate marking system: WMB | | | | | | |
|--|-----------------------------|------------|--|---------------------------|--------------------------------------|---|---|----------------|------------|
| Adjacent jumper, insulated, I_N 32 A | | | Comb-style jumper bar, insulated, I_N = I_N terminal block | | | Protective warning marker, with high-voltage symbol, for 5 terminal blocks | | | |
|  | gray 281-402 | 200 (8x25) |  | 2-way 281-482 | 100 (4x25) |  | yellow 281-415 | 100 (4x25) | |
| | yellow-green 281-422 | 200 (8x25) | | 3-way 281-483 | 100 (4x25) | | | | |
| | | | | 5-way 281-485 | 100 (4x25) | | | | |
| Alternate jumper, insulated, I_N 32 A | | | Operating tool, insulated | | | Screwless end stop, | | | |
|  | gray 281-409 | 100 (4x25) |  | 2-way 280-432 | 1 |  | 6 mm wide 249-116 | 100 (4x25) | |
| | | | | 3-way 280-433 | 1 | | 10 mm wide 249-117 | 50 (2x25) | |
| | | | | 5-way 280-440 | 1 | | | | |
| Staggered jumper, insulated, I_N 32 A | | | Insulation stop, 5 pcs/strip 200 strips | | | Test plug adapter, for terminal blocks 1.5-4 mm² | | | |
|  | Spacing: 6 mm | |  | white 281-470 | 0.08-0.2 mm ² (AWG 28-24) |  | (AWG 16-12), 5 mm wide | 280-404 | 100 (4x25) |
| | from 1 to 2 781-452 | 100 (4x25) | | light gray 281-471 | 0.25-0.5 mm ² (AWG 12-20) | | for 210-137 test plug | | |
| | from 1 to 3 781-453 | 100 (4x25) | | dark gray 281-472 | 0.75-1.5 mm ² (AWG 18-16) | | | | |
| | from 1 to 4 781-454 | 100 (4x25) | | | | | | | |
| | from 1 to 5 781-455 | 50 (2x25) | | | | | | | |
| | from 1 to 6 781-456 | 50 (2x25) | | | | | | | |
| Push-in type wire jumper, insulated, I_N 9 A | | |  Suitable for Ex i applications  Suitable for Ex e II applications 0.2 - 4 mm ² AWG 24 - 12 550 V, 30 A | | | Test plug adapter, for terminal blocks 1.5-10 mm² | | | |
| | 60 mm 249-125 | 10 | | | |  | (AWG 16-12), 8 mm wide | 209-170 | 50 (2x25) |
| | 110 mm 249-126 | 10 | | | | | for test plug 4 mm Ø | | |
| | 250 mm 249-127 | 10 | | | |  | Test plug, 6 mm wide, with CAGE CLAMP® | | |
| | | | | | | | for 0.08-2.5 mm ² (AWG 28-14) | | |
| | | | | | | | I _N 24 A 281-407 | 100 (4x25) | |

Approvals are available online at: www.wago.com.

For technical explanations and abbreviations, see technical section.

Through/Ground Conductor and Ex Terminal Blocks 6 mm², 282 Series Test Plug Modules with CAGE CLAMP®, 249 and 709 Series

| | | | | |
|---|--|---|--|--|
| <p>0.2 - 6 mm² 800 V/8 kV/3 I_N 41 A</p> <p>Terminal block width 8 mm / 0.315 in 12 - 13 mm / 0.49 in</p> <p>Approvals</p> | <p>AWG 24 - 10 600 V, 30 A 600 V, 40 A</p> | <p>0.2 - 6 mm² 800 V/8 kV/3 I_N 41 A</p> <p>Terminal block width 8 mm / 0.315 in 12 - 13 mm / 0.49 in</p> <p>Approvals</p> | <p>AWG 24 - 10 600 V, 30 A 600 V, 40 A</p> | <p>Test plug modules for 280, 281, 282 and 284 Series rail-mounted terminal blocks</p> |
|---|--|---|--|--|



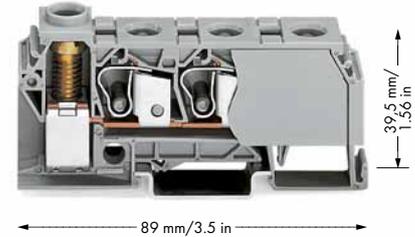
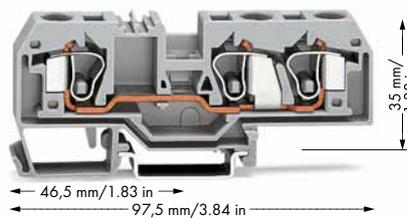
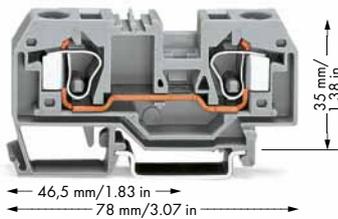
| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Item No. | Pack. Unit |
|--|-----------------|---------------------|---|-----------------|------------|--|------------|
| 2-conductor through terminal block | | | 3-conductor through terminal block | | | Test plug module with CAGE CLAMP®, | |
| gray | 282-901 | 50 | gray | 282-681 | 25 | can be snapped together, gray, module width 5 mm, | |
| blue | 282-904 | 50 | blue | 282-684 | 25 | suitable for all WAGO 280 Series rail-mounted terminal | |
| orange | 282-902 | 50 | orange | 282-682 | 25 | blocks, version using jumper contact position in current bar | |
| light gray (Ex) | 282-992 | 50 | light gray (Ex) | 282-993 | 25 | 249-106 | 100 (4x25) |
| 2-conductor ground terminal block | | | 3-conductor ground terminal block | | | Spacer module, e.g., bridging commoned terminal blocks, | |
| green-yellow | 282-907 | 50 | green-yellow | 282-687 | 25 | can be snapped together, gray, module width 5 mm | |
| green-yellow (Ex) | 282-907/999-950 | 50 | green-yellow (Ex) | 282-687/999-950 | 25 | 249-107 | 100 (4x25) |
| | | | | | | Test plug module with CAGE CLAMP®, | |
| | | | | | | can be snapped together, gray, module width 6 mm, | |
| | | | | | | suitable for all WAGO 281 Series rail-mounted terminal | |
| | | | | | | blocks, version using jumper contact position in current bar | |
| | | | | | | 249-147 | |
| | | | | | | 100 (4x25) | |
| | | | | | | Spacer module, e.g., bridging commoned terminal blocks, | |
| | | | | | | can be snapped together, gray, module width 6 mm | |
| | | | | | | 249-148 | |
| | | | | | | 100 (4x25) | |
| Item-Specific Accessories | | | Separator for Ex e / Ex i applications, see page 30 | | | Test plug module with CAGE CLAMP®, | |
| End and intermediate plate, 2.5 mm thick | | | End and intermediate plate, 2.5 mm thick | | | can be snapped together, gray, module width 8 mm, | |
| orange | 282-328 | 100 (4x25) | orange | 282-339 | 100 (4x25) | suitable for all WAGO 282 Series rail-mounted terminal | |
| gray | 282-325 | 100 (4x25) | gray | 282-308 | 100 (4x25) | blocks, version using jumper contact position in current bar | |
| light gray | 282-330 | 100 (4x25) | light gray | 282-341 | 100 (4x25) | 709-310 | 100 (4x25) |
| Separator, oversized, 2 mm thick | | | Separator, oversized, 2 mm thick | | | Spacer module, e.g., bridging commoned terminal blocks, | |
| orange | 282-329 | 100 (4x25) | orange | 282-340 | 100 (4x25) | can be snapped together, gray, module width 8 mm | |
| gray | 282-326 | 100 (4x25) | gray | 282-309 | 100 (4x25) | 709-311 | 100 (4x25) |
| light gray | 282-331 | 100 (4x25) | light gray | 282-342 | 100 (4x25) | Spacer plate, - only for 284 Series - | |
| | | | | | | modular, gray, width 2 mm, | |
| | | | | | | snaps on 709-310 test plug modules and | |
| | | | | | | 709-311 spacer modules for testing 284 Series rail-mount- | |
| | | | | | | ed terminal blocks | |
| | | | | | | 709-312 | |
| | | | | | | 100 (4x25) | |
| 282 Series Accessories | | | Appropriate marking system: WMB | | | | |
| Adjacent jumper, insulated, I_N 41 A | | | Protective warning marker, with high-voltage symbol, | | | | |
| gray | 282-402 | 100 (4x25) | for 5 terminal blocks | | | | |
| yellow-green | 282-422 | 100 (4x25) | yellow | 282-415 | 100 (4x25) | | |
| Alternate jumper, insulated, I_N 41 A | | | Screwless end stop, | | | | |
| gray | 282-409 | 100 (4x25) | 6 mm wide | 249-116 | 100 (4x25) | | |
| | | | 10 mm wide | 249-117 | 50 (2x25) | | |
| Step-down jumper, insulated | | | Test plug adapter, for terminal blocks 1.5 - 10 mm² | | | | |
| gray | | 50 (2x25) | (AWG 16 - 12), 8 mm wide | 209-170 | 50 (2x25) | | |
| | | | for test plug 4 mm Ø | | | | |
| 284/282 - 281/280/279 | 284-414 | I _N 15 A | Banana plugs, only for safety extra-low voltage (42 V) | | | | |
| 284/282 - 282/281 | 284-413 | I _N 30 A | black | 215-311 | 50 | | |
| Cover plate, for step-down jumper application only, 1 mm thick, | | | red | 215-212 | 50 | | |
| for 2-conductor terminal blocks | | | blue | 215-711 | 50 | | |
| gray | 282-357 | 25 | Suitable for Ex i applications | | | | |
| for 3-conductor terminal blocks | | | (Ex) Suitable for Ex e II applications | | | | |
| gray | 282-358 | 25 | 0.5 - 6 mm ² AWG 20 - 10 | | | | |
| | | | 550 V, 39 A Jumper 35 A | | | | |



Test plug adapter strips are directly inserted into the jumper contact slots of the current bar (picture shows 282 Series)

Through/Ground Conductor and Ex Terminal Blocks 10 mm², Distribution Terminal Blocks 284 Series

| | | | | | |
|---|--|---|--|---|--|
| <p>0.2 - 10 mm² 800 V/8 kV/3 I_N 57 A</p> <p>Terminal block width 10 mm / 0.394 in 12 - 13 mm / 0.49 in</p> <p>Ⓢ Approvals</p> | <p>AWG 24 - 8 600 V, 50 A </p> <p>600 V, 54 A </p> | <p>0.2 - 10 mm² 800 V/8 kV/3 I_N 57 A</p> <p>Terminal block width 10 mm / 0.394 in 12 - 13 mm / 0.49 in</p> <p>Ⓢ Approvals</p> | <p>AWG 24 - 8 600 V, 50 A </p> <p>600 V, 54 A </p> | <p>0.2 - 10 mm² ① 6 - 35 mm² ② 800 V/8 kV/3, I_N 125 A</p> <p>Terminal block width 17.5 mm / 0.689 in 12 - 14 mm / 0.51 in</p> <p>Ⓢ Approvals</p> | <p>AWG 24 - 8 ① AWG 10 - 2 ② 600 V, 115 A </p> |
|---|--|---|--|---|--|



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|---|-----------------|------------|---|-----------------|------------|---|----------|------------|
| 2-conductor through terminal block | | | 3-conductor through terminal block | | | Distribution terminal block, | | |
| gray | 284-901 | 25 | gray | 284-681 | 25 | with 3 x CAGE CLAMP® connection ① 10 mm ² /AWG 8 | | |
| blue | 284-904 | 25 | blue | 284-684 | 25 | and 1 x screw clamp connection ② 35 mm ² /AWG 2 | | |
| orange | 284-902 | 25 | orange | 284-682 | 25 | gray | 284-621 | 15 |
| light gray | 284-992 | 25 | light gray | 284-993 | 25 | blue | 284-624 | 15 |
| 2-conductor ground terminal block | | | 3-conductor ground terminal block | | | | | |
| green-yellow | 284-907 | 25 | green-yellow | 284-687 | 25 | | | |
| green-yellow | 284-907/999-950 | 25 | green-yellow | 284-687/999-950 | 25 | | | |



Terminating a 35 mm²/AWG 2 conductor. Screw clamp connection, side-entry wiring.



Terminating a 10 mm²/AWG 8 conductor. CAGE CLAMP® connection, front-entry wiring.

Rail-mounted distribution terminal block with 35 mm²/AWG 2 and 3 x 10 mm² (3 x AWG 8) front-entry CAGE CLAMP® connection. Snaps onto DIN 35 carrier rails per EN 60715. The terminal block enclosed on both sides, an end or intermediate plate is not necessary.

In case of maximum wiring with 3 x 10 mm²/AWG 8 on the distribution side, the nominal current of 125A shall not be exceeded.

| Item-Specific Accessories | | Appropriate marking system: WMB | |
|---|---------------------------------|---|-----------------------------|
| End and intermediate plate, 2.5 mm thick | | End and intermediate plate, 2.5 mm thick | |
| orange | 284-328 100 (4x25) | orange | 284-339 100 (4x25) |
| gray | 284-325 100 (4x25) | gray | 284-308 100 (4x25) |
| light gray | 284-330 100 (4x25) | light gray | 284-341 100 (4x25) |
| Separator, oversized, 2 mm thick | | Separator, oversized, 2 mm thick | |
| orange | 284-329 100 (4x25) | orange | 284-340 100 (4x25) |
| gray | 284-326 100 (4x25) | gray | 284-309 100 (4x25) |
| light gray | 284-331 100 (4x25) | light gray | 284-342 100 (4x25) |
| 284 Series Accessories | | 284 Series Accessories | |
| Adjacent jumper, insulated, I_N 57 A | | Protective warning marker, with high-voltage symbol, for 5 terminal blocks | |
| gray | 284-402 100 (4x25) | yellow | 284-415 50 (2x25) |
| yellow-green | 284-422 100 (4x25) | | |
| Alternate jumper, insulated, I_N 57 A | | Finger guard, | |
| gray | 284-409 50 (2x25) | touch-proof cover protects unused conductor entries | |
| | | yellow | 284-400 100 (4x25) |
| Test plug adapter, for terminal blocks 1.5 - 10 mm² (AWG 16-8), 8 mm wide | | Step-down jumper, insulated, | |
| | 209-170 50 (2x25) | gray | 50 (2x25) |
| for test plug 4 mm Ø | | | |
| Test plug module and spacer module, both with spacer plate, see page 55 | | 284/282 - 281/280/279 | 284-414 I _N 15 A |
| | | 284/282 - 282/281 | 284-413 I _N 30 A |
| Cover plate, for step-down jumper application only, 1 mm thick, | | | |
| | for 2-conductor terminal blocks | | |
| gray | 284-357 25 | | |
| | for 3-conductor terminal blocks | | |
| gray | 284-358 25 | | |
| | | Ⓢ Suitable for Ex e II applications | |
| | | 0.5 - 10 mm ² AWG 20 - 8 | |
| | | 550 V, 53 A | |

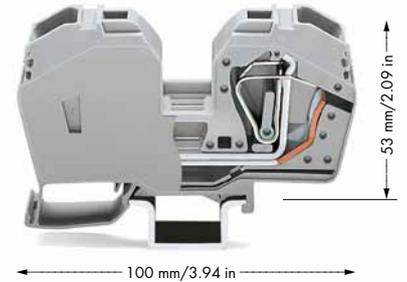
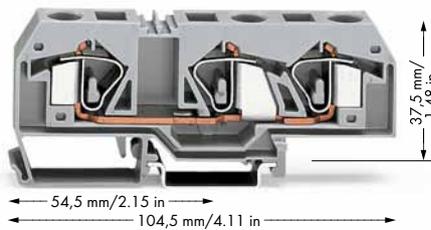
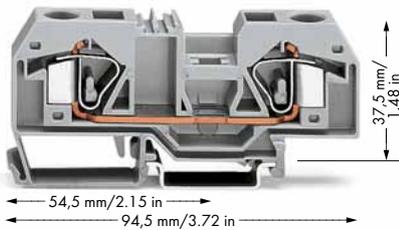
| | |
|---|---|
| Comb-style jumper bar, insulated, individual arrangement | I _N 125 A - 2 jumpers combined in one clamping unit 100 A, 2-way |
| | gray 284-412 100 (4x25) |

Ⓢ Approvals are available online at: www.wago.com.

For technical explanations and abbreviations, see technical section.

Through/Ground Conductor and Ex Terminal Blocks 16 mm² / 35 mm² 283 and 285 Series

| | | | | | |
|---|---|---|---|---|--|
| <p>0.2 - 16 mm² 800 V/8 kV/3 I_N 76 A</p> <p>Terminal block width 12 mm / 0.472 in 16 - 17 mm / 0.65 in</p> <p>Approvals</p> | <p>AWG 24 - 6 600 V, 65 A  600 V, 70 A </p> | <p>0.2 - 16 mm² 800 V/8 kV/3 I_N 76 A</p> <p>Terminal block width 12 mm / 0.472 in 16 - 17 mm / 0.65 in</p> <p>Approvals</p> | <p>AWG 24 - 6 600 V, 65 A  600 V, 70 A </p> | <p>6 - 35 mm² 1000 V/8 kV/3 I_N 125 A</p> <p>Terminal block width 16 mm / 0.63 in 23 mm / 0.91 in </p> <p>Approvals</p> | <p>AWG 8 - 2 600 V, 115 A  600 V, 140 A </p> |
|---|---|---|---|---|--|



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|--|-----------------|------------|--|-----------------|------------|--|-----------------|------------|
| 2-conductor through terminal block | | | 3-conductor through terminal block | | | 2-conductor through terminal block, with integrated end plate | | |
| gray | 283-901 | 20 | gray | 283-671 | 20 | gray | 285-635 | 15 |
| blue | 283-904 | 20 | blue | 283-674 | 20 | blue | 285-634 | 15 |
| orange | 283-902 | 20 | orange | 283-672 | 20 | blue | 285-634 | 15 |
| light gray  | 283-992 | 20 | light gray  | 283-998 | 20 | light gray  | 285-992 | 15 |
| 2-conductor ground terminal block | | | 3-conductor ground terminal block | | | 2-conductor ground terminal block | | |
| green-yellow | 283-907 | 20 | green-yellow | 283-677 | 20 | green-yellow | 285-637 | 15 |
| green-yellow  | 283-907/999-950 | 20 | green-yellow  | 283-677/999-950 | 20 | green-yellow  | 285-637/999-950 | 15 |
| Notice: These terminal blocks cannot be commoned using adjacent jumpers! | | | | | | | | |



Termination of 35 mm²/AWG 2 conductor

Item-Specific Accessories

| | |
|--|--|
| <p>End and intermediate plate, 2.5 mm thick</p> <p>orange 283-328 50 (2x25)</p> <p>gray 283-325 50 (2x25)</p> <p>light gray 283-330 50 (2x25)</p> | <p>End and intermediate plate, 2.5 mm thick</p> <p>orange 283-352 50 (2x25)</p> <p>gray 283-350 50 (2x25)</p> <p>light gray 283-354 50 (2x25)</p> |
| <p>Separator, oversized, 2 mm thick</p> <p>orange 283-329 50 (2x25)</p> <p>gray 283-326 50 (2x25)</p> <p>light gray 283-331 50 (2x25)</p> | <p>Separator, oversized, 2 mm thick</p> <p>orange 283-353 50 (2x25)</p> <p>gray 283-351 50 (2x25)</p> <p>light gray 283-355 50 (2x25)</p> |

283 Series Accessories

Appropriate marking system: **WMB**

| | |
|---|---|
| <p>Adjacent jumper, insulated, I_N 70 A</p> <p>gray 283-402 50 (2x25)</p> <p>yellow-green 283-422 50 (2x25)</p> | <p>Alternate jumper, insulated, I_N 76 A</p> <p>gray 283-409 50 (2x25)</p> |
| <p>Test plug adapter, for terminal blocks 1.5 - 16 mm² (AWG 16-6), 11.6 mm wide</p> <p>283-404 25</p> <p>for test plug 4 mm Ø</p> | <p>Step-down jumper, insulated, I_N 32 A, 16 mm²/AWG 6 to 4 mm²/AWG 12</p> <p>gray 283-414 50 (2x25)</p> |
| <p>Cover plate, for step-down jumper application only, 1 mm thick, for 2-conductor terminal blocks</p> <p>gray 283-357 25</p> | |

| | |
|---|---|
| <p>Protective warning marker, with high-voltage symbol, for 5 terminal blocks</p> <p>yellow 283-415 50 (2x25)</p> | <p>Finger guard,</p> <p>touch-proof cover protects unused conductor entries</p> <p>yellow 283-400 100 (4x25)</p> |
| <p>Banana plugs, only for safety extra-low voltage (42 V)</p> <p>black 215-311 50</p> <p>red 215-212 50</p> <p>blue 215-711 50</p> | <p>Operating tool with partially insulated shaft,</p> <p>type 3, (5.5 x 0.8) mm blade</p> <p>210-721 1</p> |
| <p> Suitable for Ex e II applications 0.5 - 16 mm² AWG 20 - 6 550 V, 68 A Jumper 63 A</p> | |

285 Series

Appropriate marking systems: **Miniature WSB WMB**

| | |
|--|--|
| <p>Adjacent jumper, insulated, I_N 85 A</p> <p>gray 285-435 50 (2x25)</p> | <p>Step-down jumper, insulated, I_N 32 A, from 35 mm²/AWG 2 to 4 mm²/AWG 12</p> <p>gray 283-414 50 (2x25)</p> |
| <p>Protective warning marker, with high-voltage symbol, for 5 terminal blocks</p> <p>yellow 285-416 50 (2x25)</p> | <p>Finger guard,</p> <p>touch-proof cover protects unused conductor entries</p> <p>yellow 285-401 100 (4x25)</p> |
| <p> Suitable for Ex e II applications 6 - 35 mm² AWG 8 - 2 750 V, 120 A 6 - 25 mm² AWG 8 - 4 for ground terminal blocks</p> | |

Rail-Mounted, High-Current Terminal Blocks, 285 Series

Description and Handling

Conductor entry 1



Insert Allen wrench and rotate counterclockwise. Then push in orange locking tab for hands-free wiring.

Safety notice



Risk of injury!
Do not insert fingers in the conductor entry!

Shock Protector



To protect unused conductor entries (separate jumper entry protector from shock protector unit).

Conductor entry 2



Insert stripped conductor (observe 35 mm of strip length) into clamping unit until it hits backstop. Hold this position.



Conductor entry 3



Unlock the locking tab with a short counterclockwise turn of the Allen wrench ①. When unlocked (click), allow Allen wrench to rotate clockwise (automatic) ② to securely terminate the conductor.

Jumpers 35 mm²/AWG 2



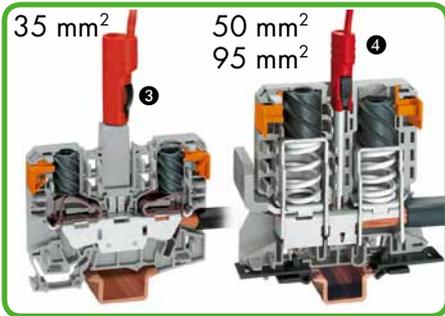
Commoning adjacent terminals with a simple push-in jumper.

Jumpers 50 mm² (AWG 2/0)/95 mm² (AWG 4/0)



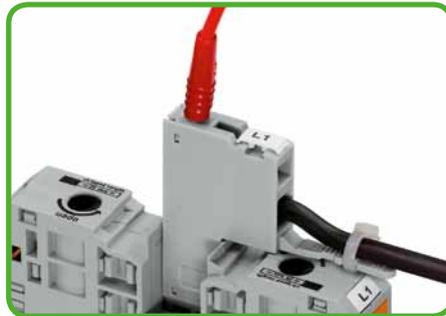
Commoning with adjacent jumper: tool-free insertion of jumper above the conductor entry hole. Rated cross section is still 50 mm²/AWG 2/0 and 95 mm²/AWG 4/0.

Testing



③ via test adapter for 4 mm Ø plugs
④ via touchproof 4 mm Ø plugs

Voltage tap 35 mm²/AWG 2



The voltage tap is inserted into the jumper contact slot. It can be fitted with a strain relief plate and provides test option for 2 mm Ø test plugs.

Voltage tap 50 mm² (AWG 2/0)/95 mm² (AWG 4/0)



Reliable and simple tap directly into the power supply. Insert the unwired tap before opening the clamping unit.

POWER CAGE CLAMP clamps the following copper conductors:



solid



stranded



fine-stranded



with ferrule

Strip length, see packaging or instructions.

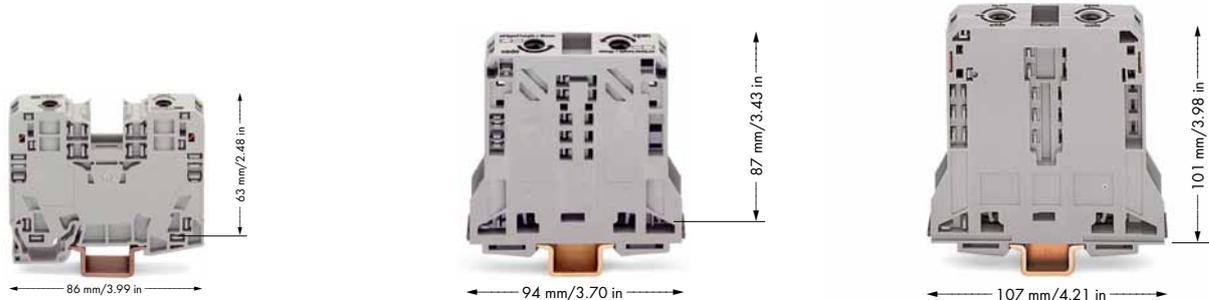
High-Current, Through/Ground Conductor and Ex Terminal Blocks

35 mm², 50 mm² and 95 mm²

285 Series

POWER CAGE CLAMP®

| | | |
|--|--|---|
| <p>6 - 35 mm² 1000 V/8 kV/3 I_N 125 A</p> <p>Terminal block width 16 mm / 0.63 in 25 mm / 0.98 in</p> <p>AWG 8 - 2 600 V, 115 A 600 V, 115 A</p> <p>Approvals</p> | <p>10 - 50 (70 "f-st") mm² 1000 V/8 kV/3 I_N 150 A</p> <p>Terminal block width 20 mm / 0.787 in 30 mm / 1.18 in</p> <p>AWG 8 - 1 600 V, 150 A 600 V, 150 A</p> <p>Approvals</p> | <p>25 - 95 mm² 1000 V/8 kV/3 I_N 232 A</p> <p>Terminal block width 25 mm / 0.98 in 35 mm / 1.38 in</p> <p>AWG 4 - 4/0 600 V, 200 A 600 V, 210 A</p> <p>Approvals</p> |
|--|--|---|



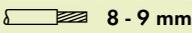
| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|--|-----------|--|--|-----------|--|--|----------------------------|--|
| 2-conductor through terminal block | | | 2-conductor through terminal block | | | 2-conductor through terminal block | | |
| gray | 285-135 | 15 | gray | 285-150 | 5 | gray | 285-195 | 5 |
| blue | 285-134 | 15 | blue | 285-154 | 5 | blue | 285-194 | 5 |
| | | | | | | light gray (Ex) | 285-995 | 5 |
| 2-conductor ground terminal block, only for DIN 35 x 15 rails; 2.3 mm thick, copper | | | 2-conductor ground terminal block, only for DIN 35 x 15 rails; 2.3 mm thick, copper | | | 2-conductor ground terminal block, only for DIN 35 x 15 rails; 2.3 mm thick, copper | | |
| green-yellow | 285-137 | 15 | green-yellow | 285-157 | 5 | green-yellow | 285-197 | 5 |
| | | | | | | green-yellow (Ex) | 285-197/999-950 | 5 |
| 285 Series Accessories | | | Appropriate marking system: WMB | | | | | |
| Adjacent jumper, insulated, ⑥ | | | Adjacent jumper, insulated, ⑥ | | | Adjacent jumper, insulated, ⑥ | | |
| | gray | 285-435 50 (2x25) | | gray | 285-450 25 | | gray | 285-495 25 |
| | | I _N 85 A | | | I _N 150 A for 1 jumper I _N 130 A for 2 to 4 jumpers | | | I _N 232 A for 1 jumper I _N 130 A for 2 to 4 jumpers |
| Voltage Tap, I_N 32 A, 0.2-6 mm² (24-10), ⑥ | | | Voltage Tap, I_N 41 A, 0.2-6 mm² (24-10), ⑥ | | | Voltage Tap, I_N 57 A, 0.2-10 mm² (24-80)/16 mm² (AWG 6), ⑥ | | |
| | | module width 8 mm / 0.315 in gray 285-427 5 | | | module width 16 mm / 0.63 in gray 285-447 5 | | | module width 20 mm / 0.787 in gray 285-407 5 |
| Operating tool with partially insulated shaft, type 3, (5.5 x 0.8) mm blade | | | Allen wrench with partially insulated shaft | | | Allen wrench with partially insulated shaft | | |
| | | 210-721 1 | | 8 mm | 285-172 1 | | 8 mm | 285-172 1 |
| Protective warning marker, with high-voltage symbol, black | | | Protective warning marker, with high-voltage symbol, black | | | Protective warning marker, with high-voltage symbol, black | | |
| | yellow | 285-420 50 (2x25) | | yellow | 285-440 50 (2x25) | | yellow | 285-170 50 (2x25) |
| Finger guard, touch-proof cover protects unused conductor entries | | | Finger guard, touchproof cover protects unused conductor entries and jumper slots | | | Finger guard, touchproof cover protects unused conductor entries and jumper slots | | |
| | yellow | 285-421 100 (4x25) | | yellow | 285-441 100 (4x25) | | yellow | 285-169 25 |
| Test plug adapter, 11.6 mm wide, for test plug 4 mm Ø | | | | | | | | |
| | | 283-404 25 | | | | | | |
| Test plug, 4 mm Ø, protected against accidental contact; e.g., available through Multi-Contact Deutschland GmbH | | | Test plug, 4 mm Ø, protected against accidental contact; e.g., available through Multi-Contact Deutschland GmbH | | | Test plug, 4 mm Ø, protected against accidental contact; e.g., available through Multi-Contact Deutschland GmbH | | |
| | | Postfach 1606, 79551 Weil am Rhein, Hegenheimerstraße 19 79576 Weil am Rhein | | | Postfach 1606, 79551 Weil am Rhein, Hegenheimerstraße 19 79576 Weil am Rhein | | | Postfach 1606, 79551 Weil am Rhein, Hegenheimerstraße 19 79576 Weil am Rhein |
| Copper carrier rail, as per EN 60715, 35 x 15 mm, 2.3 mm thick, 2 m long | | | Copper carrier rail, as per EN 60715, 35 x 15 mm, 2.3 mm thick, 2 m long | | | Copper carrier rail, as per EN 60715, 35 x 15 mm, 2.3 mm thick, 2 m long | | |
| | unslotted | 210-198 10 | | unslotted | 210-198 10 | | unslotted | 210-198 10 |
| Marking strip, plain, 11 mm wide, 50m roll | | | WMB Multi marking system, 10 strips with 10 markers per card, stretchable 5 - 5.2 mm | | | (Ex) Suitable for Ex e II applications | | |
| | white | 2009-110 1 | | plain | 793-5501 5 | | 25 - 95 mm ² | AWG 4 - 4/0 |
| | | | | | | | 750 V, 195 A | |
| | | | | | | | 35 - 70 mm ² | AWG 2 - 2/0 |
| | | | | | | | for ground terminal blocks | |

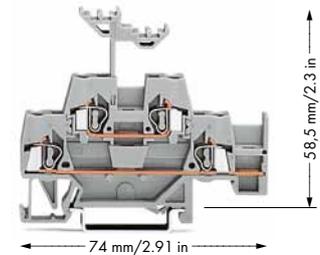
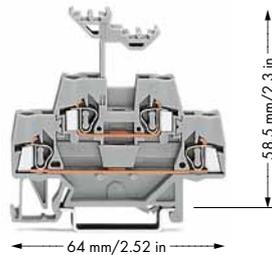
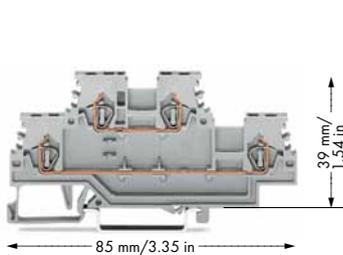
⑤ Approvals are available online at: www.wago.com.

For technical explanations and abbreviations, see technical section.

⑥ Adjacent jumpers and voltage taps can only be removed or inserted when the clamp is in closed position.

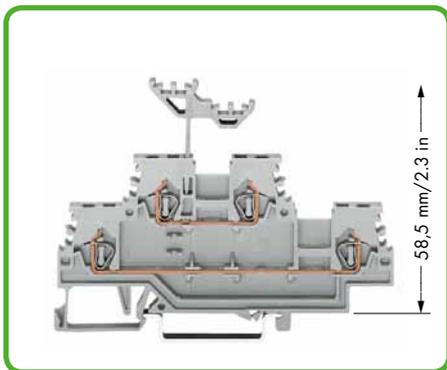
Double-Deck Terminal Blocks 1.5 mm² and 2.5 mm² 279 and 280 Series

| | | | | | |
|---|--------------------|--|--|--|---|
| 0.08 - 1.5 mm² 500 V/6 kV/3 I _N 18 A Terminal block width 4 mm / 0.157 in  8 - 9 mm / 0.33 in ① Approvals | AWG 28 - 16 | 0.08 - 2.5 mm² 500 V/6 kV/3 I _N 20 A Terminal block width 5 mm / 0.197 in  8 - 9 mm / 0.33 in ① Approvals | AWG 28 - 12* 300 V, 15 A  300/600 V, 20/5 A  | 0.08 - 2.5 mm² 500 V/6 kV/3 I _N 20 A Terminal block width 5 mm / 0.197 in  8 - 9 mm / 0.33 in ① Approvals | AWG 28 - 12* 300 V, 15 A  300/600 V, 20/5 A  |
|---|--------------------|--|--|--|---|

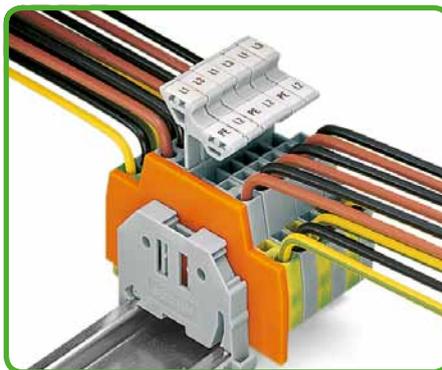


| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|---|---|-------------------|---|-----------------|------------|---|----------------|------------|
| Through/through terminal block, colored conductor entry position | | | Through/through terminal block | | | Through/through terminal block with horizontal jumpering on lower level | | |
| ● gray | 279-501 | 50 | ● gray | 280-519 | 50 | ● gray | 280-520 | 50 |
| ● gray (N/L) | 279-512 | 50 | ● blue | 280-529 | 50 | ● blue | 280-530 | 50 |
| ● gray (L/N) | 279-513 | 50 | ● blue/gray | 280-523 | 50 | ● blue/gray | 280-524 | 50 |
| ● blue (N/N) | 279-504 | 50 | ● gray/blue | 280-533 | 50 | ● gray/blue | 280-534 | 50 |
| 4-conductor through terminal block, internal commoning, conductor entry position colored in violet | | | Ground conductor/through terminal block | | | | | |
| ● blue | 279-509 | 50 | ● green-yellow/gray | 280-527 | 50 | | | |
| ● gray | 279-508 | 50 | ● green-yellow/blue | 280-537 | 50 | | | |
| Ground conductor/through terminal block, colored conductor entry position | | | 4-conductor ground terminal block, internal commoning | | | | | |
| ● gray (PE/N) | 279-517 | 50 | ● green-yellow | 280-517 | 50 | | | |
| ● gray (PE/L) | 279-527 | 50 | Other terminal blocks with the same profile: | | | Other terminal blocks with the same profile: | | |
| 4-conductor ground terminal block, internal commoning | | | Diode | 280-940/281-410 | Volume 1 | Through/Disconnect | 280-522 | Volume 1 |
| ● green-yellow | 279-507 | 50 | LED | 280-943/281-434 | Volume 1 | Fuse | 280-5xx | Volume 1 |
| End and intermediate plate, 2 mm thick | | | End and intermediate plate, 2.5 mm thick | | | End and intermediate plate, 2.5 mm thick | | |
|  | orange 279-519 | 100 (4x25) |  | orange 280-341 | 100 (4x25) |  | orange 280-343 | 100 (4x25) |
| | gray 279-518 | 100 (4x25) | | gray 280-340 | 100 (4x25) | | gray 280-342 | 100 (4x25) |
| Accessories, 279 Series | Appropriate marking system: | WMB | 280 Series Accessories | | | Appropriate marking system: WMB | | |
| WSB double-deck marker carrier |  | 279-529 50 (2x25) | ● Suitable for Ex i applications | | | Vertical jumper, insulated, I_N 24 A | | |
| For additional accessories, see page 51. | | | | | |  gray 281-421 200 (8x25) | | |
| For additional accessories, see page 51. | | | | | | For additional accessories, see page 52. | | |

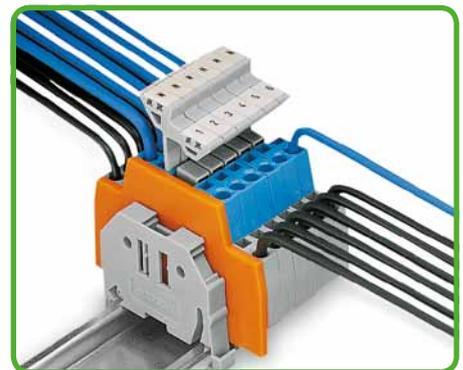
Application Notes:



279 Series double-deck terminal block with plugged double-deck marker carrier.



Double-deck terminal blocks used for connecting a three-phase motor.



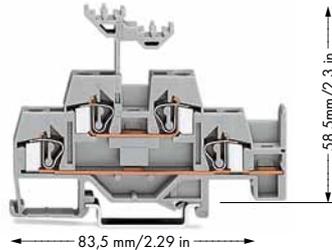
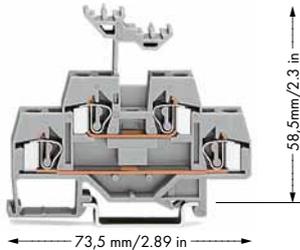
Double-deck terminal blocks used as control wire terminals; e.g., for magnetic valves. Upper deck commoned.

① Approvals are available online at: www.wago.com.
* AWG 12: THHN, THWN

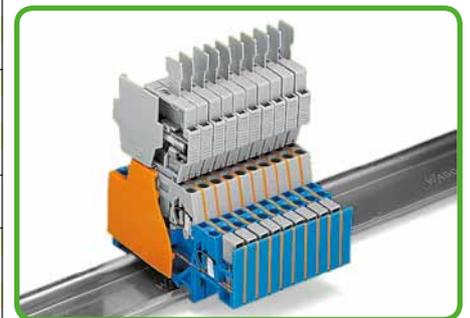
For technical explanations and abbreviations, see technical section.

Double-Deck Terminal Blocks 4 mm² 281 Series

| | | | | |
|---|--|---|--|---------------------------|
| <p>0.08 - 4 mm² 500 V/6 kV/3 I_N 26 A</p> <p>Terminal block width 6 mm / 0.236 in 9 - 10 mm / 0.37 in</p> <p>Approvals</p> | <p>AWG 28 - 12 600 V, 20 A 600 V, 10 A</p> | <p>0.08 - 4 mm² 500 V/6 kV/3 I_N 26 A</p> <p>Terminal block width 6 mm / 0.236 in 9 - 10 mm / 0.37 in</p> <p>Approvals</p> | <p>AWG 28 - 12 600 V, 20 A 600 V, 10 A</p> | <p>Application Notes:</p> |
|---|--|---|--|---------------------------|



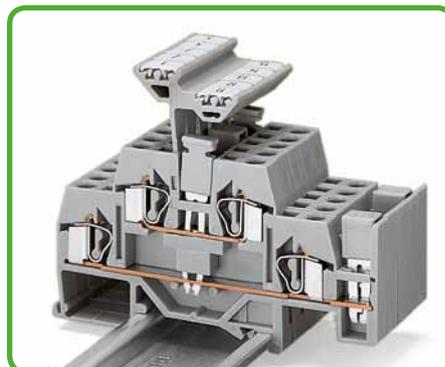
| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|---|-----------------|---|--|----------|------------|
| Through/through terminal block | | | Through/through terminal block with horizontal jumpering on lower level | | |
| gray | 281-619 | 50 | gray | 281-620 | 50 |
| blue | 281-629 | 50 | blue | 281-630 | 50 |
| Other terminal blocks with the same profile: | | | | | |
| Diode | 281-634/281-434 | Volume 1 | | | |
| LED | 281-634/281-434 | Volume 1 | | | |
| End and intermediate plate, 2.5 mm thick | | | End and intermediate plate, 2.5 mm thick | | |
| orange | 281-341 | 100 (4x25) | orange | 281-343 | 100 (4x25) |
| gray | 281-340 | 100 (4x25) | gray | 281-342 | 100 (4x25) |
| 281 Series Accessories | | Appropriate marking system: WMB | | | |
| Vertical jumper, insulated, I_N 24 A | | Operating tool with partially insulated shaft, | | | |
| gray | 281-421 | 200 (8x25) | type 2, (3.5 x 0.5) mm blade 210-720 1 | | |
| For additional accessories, see page 54. | | | | | |
| Application Notes: | | | | | |



Double-deck terminal block assembly with fuse plugs.



Conductor termination



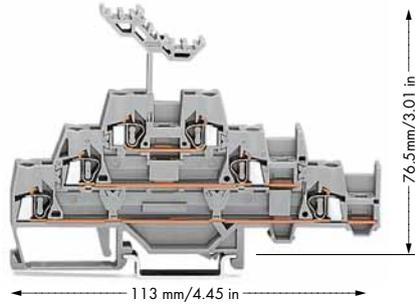
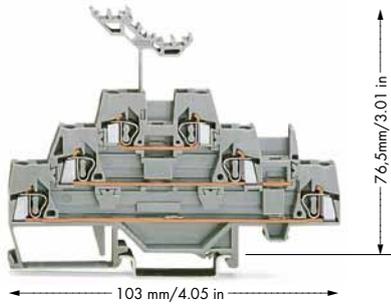
Commoning with vertical and adjacent jumpers.



Example of a mixed assembly with double-deck terminal blocks.

Triple-Deck Terminal Blocks 2.5 mm² 280 Series

| | | | |
|--|---|--|---|
| <p>0.08 - 2.5 mm² 500 V/6 kV/3 I_N 20 A</p> <p>Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in</p> <p>Approvals</p> | <p>AWG 28 - 12* 300 V, 15 A 300 V, 20 A</p> | <p>0.08 - 2.5 mm² 500 V/6 kV/3 I_N 20 A</p> <p>Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in</p> <p>Approvals</p> | <p>AWG 28 - 12* 300 V, 15 A 300 V, 20 A</p> |
|--|---|--|---|



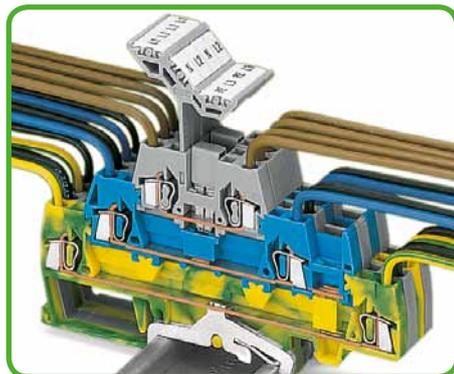
| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|--|----------|------------|--|----------|------------|
| Through/through/through terminal block | | | Through/through/through terminal block with horizontal jumpering on lower level | | |
| gray | 280-549 | 40 | gray | 280-550 | 40 |
| blue | 280-551 | 40 | | | |
| gray/gray/blue | 280-552 | 40 | | | |
| Ground conductor/through/through terminal block | | | | | |
| green-yellow/blue/gray | 280-547 | 40 | | | |
| green-yellow/gray/gray | 280-557 | 40 | | | |
| 6-conductor ground terminal block, internal commoning | | | | | |
| green-yellow | 280-597 | 40 | | | |
| Other terminal blocks with the same profile: | | | | | |
| Fuse | 280-5xx | Volume 1 | | | |
| End and intermediate plate, 2.5 mm thick | | | End and intermediate plate, 2.5 mm thick | | |
| orange | 280-304 | 50 (2x25) | orange | 280-306 | 100 (4x25) |
| gray | 280-303 | 50 (2x25) | gray | 280-305 | 100 (4x25) |
| Intermediate plate, 1.1 mm thick | | | Intermediate plate, 1.1 mm thick | | |
| orange | 280-336 | 100 (4x25) | orange | 280-339 | 100 (4x25) |

280 Series Accessories

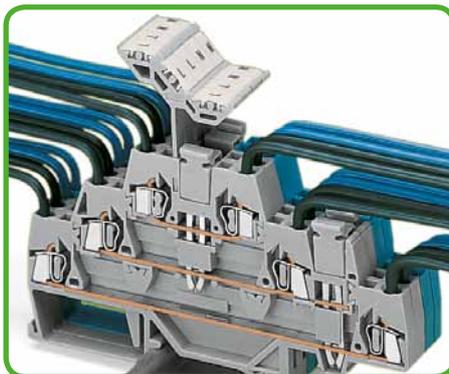
Appropriate marking system: **WMB**

| | | |
|---|---------------------------------------|--|
| <p>Vertical jumper, insulated, I_N 24 A</p> <p>gray 281-421 200 (8x25)</p> <p>For additional accessories, see page 52.</p> | <p>Suitable for Ex i applications</p> | <p>Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade</p> <p>210-720 1</p> |
|---|---------------------------------------|--|

Application Notes:



3-conductor power circuit with additional branch circuit tapping.



Commoning with vertical and adjacent jumpers.



Commoning with vertical and adjacent jumpers.

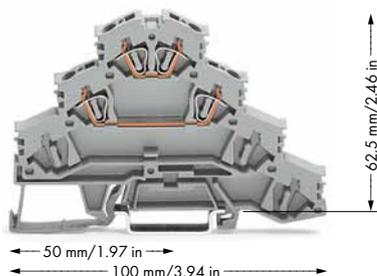
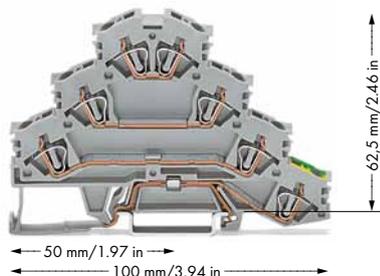
Approvals are available online at: www.wago.com.
* AWG 12: THHN, THWN

For technical explanations and abbreviations, see technical section.

Quadruple-Deck, Rail-Mounted Terminal Blocks or Rail-Mounted Terminal Blocks for Electric Motor Wiring, 4 mm² 281 Series

CAGE CLAMP®

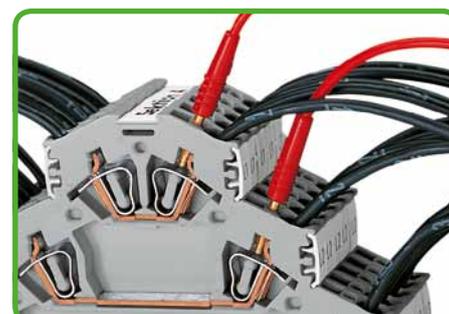
| | | | | |
|---|--|---|--|---------------------------|
| <p>0.08 - 4 mm² 400 V/6 kV/3 I_N 20 A (2.5 mm²) I_N 25 A (4 mm²) Terminal block width 6 mm / 0.236 in 8 - 9 mm / 0.33 in Approvals</p> | <p>AWG 28 - 12 600 V, 20 A 300 V, 25 A </p> | <p>0.08 - 4 mm² 400 V/6 kV/3 I_N 20 A (2.5 mm²) I_N 25 A (4 mm²) Terminal block width 6 mm / 0.236 in 8 - 9 mm / 0.33 in Approvals</p> | <p>AWG 28 - 12 600 V, 20 A 300 V, 25 A </p> | <p>Application Notes:</p> |
|---|--|---|--|---------------------------|



Commoning



Compact design: Three phases and one ground conductor in a single terminal block.

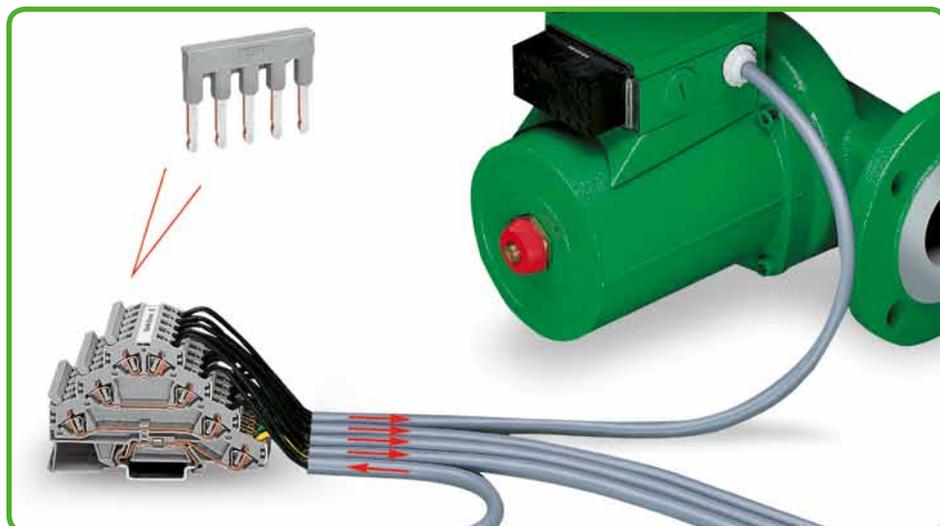


Testing with test plug 2 mm Ø.



Marking clamping units with WMB Multi markers (see Section 6)
Group marking using marker strips Item No. 709-177.

| Item No. | Pack. Unit | Item No. | Pack. Unit |
|---|--|--|--------------------------------------|
| Rail-mounted terminal block for electric motor wiring, gray | | Rail-mounted terminal block for electric motor wiring, gray | |
| L1 - L2 - L3 - PE 281-530 | 50 | L1 - L2 281-531 | 50 |
| | | L1 - L2 - L3 281-532 | 50 |
| End and intermediate plate, 1 mm thick | | End and intermediate plate, 1 mm thick | |
| orange 281-366 | 100 (4x25) | orange 281-366 | 100 (4x25) |
| | | gray 281-365 | 100 (4x25) |
| 281 Series Accessories | Appropriate marking system: WMB | | |
| Comb-style jumper bar, insulated, I_N = I_N terminal block | | Insulation stop, 5 pcs/strip | 200 strips |
| 2-way 281-482 | 100 (4x25) | white 281-470 | 0.08-0.2 mm ² (AWG 28-24) |
| | | light gray 281-471 | 0.25-0.5 mm ² (AWG 12-20) |
| | | dark gray 281-472 | 0.75-1.5 mm ² (AWG 18-16) |
| Operating tool, insulated | | Test plug, with 500 mm cable | |
| 2-way 280-432 | 1 | 2 mm Ø 210-136 | 50 (5x10) |
| | | 2.3 mm Ø 210-137 | 50 (5x10) |
| | | | |
| Operating tool with partially insulated shaft, | | Marking strip, plain, | |
| type 2, (3.5 x 0.5) mm blade | | 7.5 mm wide, | |
| 210-720 | 1 | 50m roll | |
| | | translucent 709-177 | 1 |
| Screwless end stop, for DIN 35 rail | | | |
| 6 mm wide 249-116 | 100 (4x25) | | |
| | | | |
| | | | |



Please find the entire product range in our Full Line Catalog, Volume 1. Additional information at www.wago.com.

Fuse Disconnect Terminal Blocks, Fuse Plugs, Disconnect/Test Terminal Blocks . . . 280 to 282 Series

Fuse disconnect terminal blocks



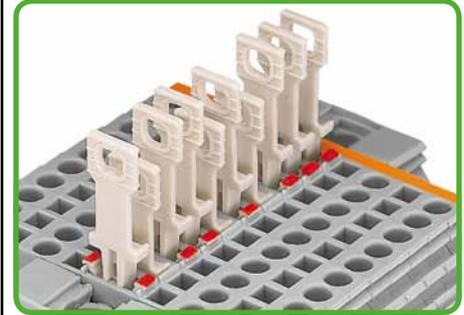
Blown fuse indication by LED or neon lamp.

Commoning



Distribution of current to several fuse-protected circuits via insulated touchproof jumpers.

Disconnect terminal blocks with disconnect tab



Disconnecting by pulling the disconnecting tab (red = disconnected).

Fuse replacement 1



Before replacing the fuse, pivot the fuse holder in the locked open position.

Testing



Voltage test, either at input or output with fuse holder in closed position (live).

Commoning



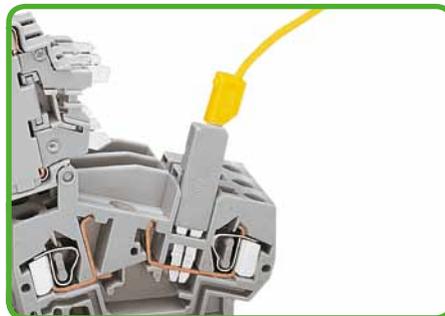
Commoning using comb-style jumper bars.

Fuse replacement 2



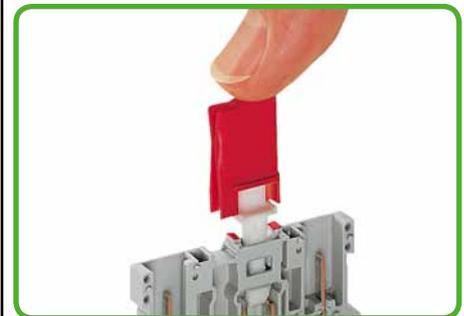
One end of the fuse is automatically ejected from the holder when opening the cover.

Testing



Voltage testing at input via 280-404 test plug adapter (shown) or 281-407 test plug.

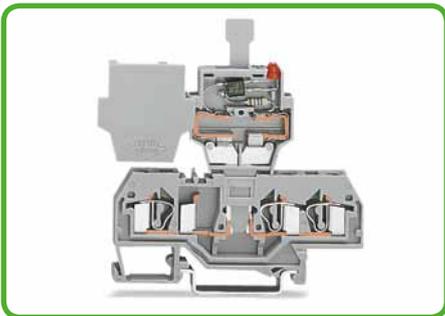
Disconnect lock



As soon as the disconnecting tab is in the disconnect position, it can be protected against unintentional reconnection by using the disconnect lock.

More fuse terminal blocks

Fuse plug



Fuse plug with blown fuse indication on a 3-conductor carrier terminal block.

CAGE CLAMP®
clamps the following
copper conductors:*



solid

Fuse terminal blocks for mini-automotive fuses



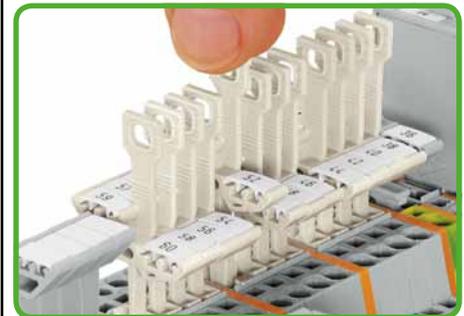
Fuse terminal block for mini-automotive blade-style fuses



stranded

More disconnect terminal blocks

Double-deck terminal blocks



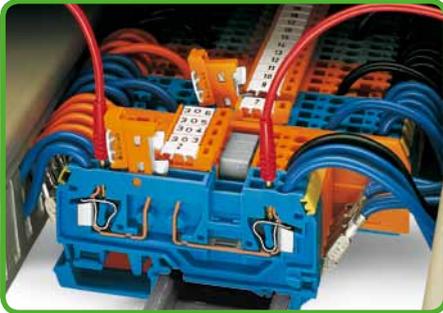
Pulling the disconnect tab on a through/disconnect terminal block.



fine-stranded,
also with tinned
single strands

Strip length, see packaging or instructions.

Disconnect terminal blocks with knife disconnect



Disconnecting by knife disconnect. Test slot for 2 mm or 2.3 mm Ø test plugs - direct contact to the current bar.

Longitudinal switching disconnect terminal blocks



Disconnecting by disconnect link. 4 mm Ø test slots are integrated.

Disconnect/test terminal blocks



Example: current or voltage transformer circuits

Staggered jumpers



Staggered jumpers for sophisticated circuit requirements. Push jumper down until fully inserted!

Commoning



Longitudinal switching disconnect terminal blocks with jumpers
 ① commoned and ② isolated



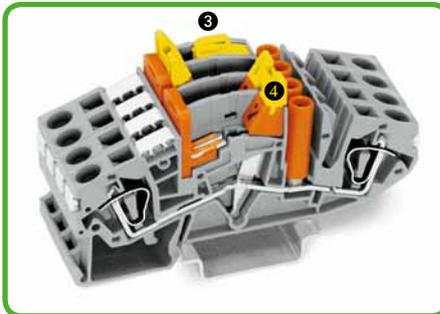
Terminal strip permanently prepared for current transformer circuits with short circuit jumpers ⑤

Power supply



Power distribution using disconnect link in supply line. Disconnection of all outputs.

Transverse switching terminal blocks



For current transformer circuits with
 ③ lockout and ④ coupling device.

Locking cover and lock-out seal



⑥ Transparent locking cover (for 1- 4 disconnect links) can be snapped on for mechanical interlocking for multipole switching.
 ⑦ A lock-out seal can be used on the disconnect link in notched position "I".

Disconnect terminal blocks 6 mm²/AWG 10

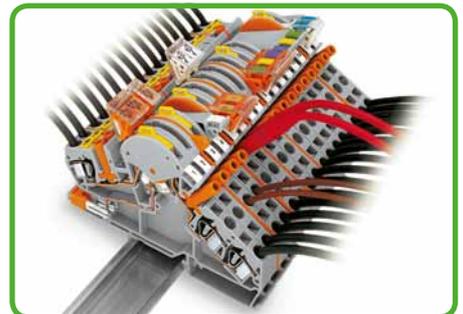


Testing a 6mm²/AWG 10 disconnect terminal block.

Switch positions



closed open



Transformer terminal strip (e.g., for meter boards or substations of the power supply industry).



fine-stranded, tip-bonded



fine-stranded with ferrule ⑧ (gastight crimped)



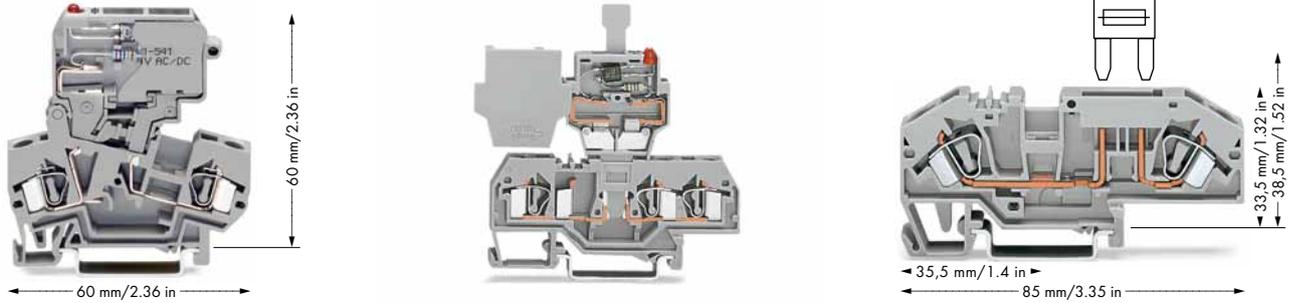
fine-stranded, with pin terminal (gastight crimped)

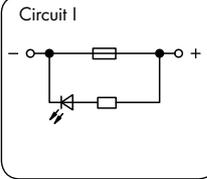
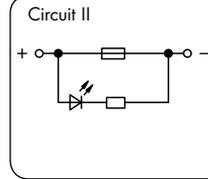
⑧ With ferruled conductors, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

Fuse Disconnect Terminal Blocks and Fuse Plugs 281 and 282 Series

| | | |
|---|---|--|
| <p>0.08 - 4 mm² ① 800 V/8 kV/3 ① I_N 10 A max. Terminal block 8 mm / 0.315 in Terminal block width 10 mm / 0.394 in  9 - 10 mm / 0.37 in ③ Approvals</p> | <p>AWG 28 - 12 600 V, 10 A  600 V, 15 A </p> <p>① 250 V max. ① I_N 6.3 A max. Plug width 6 mm / 0.236 in ③ Approvals</p> | <p>0.2 - 6 mm² ① 400 V/6 kV/3 ① I_N 30 A Terminal block width 8 mm / 0.315 in  12 - 13 mm / 0.49 in ③ Approvals</p> |
|---|---|--|

① Nominal voltage and current are given by the fuse or blown fuse indicator!



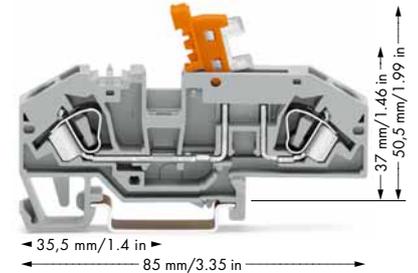
| Item No. | Pack. Unit | Item No. | Pack. Unit | Item No. | Pack. Unit |
|--|------------|---|------------|---|------------|
| Fuse disconnect terminal block, gray for miniature metric fuses | | Fuse plug, 6 mm wide, with pull-tab, for miniature metric fuses 5 x 20 mm and 5 x 25 mm, without blown fuse indication | | 2-conductor fuse terminal block for mini-automotive blade-style fuses, with test point, gray, without blown fuse indication | |
| ⑤ 5 x 20 mm 281-611 | 50 | ⑤ 281-511 | 50 | ⑤ 282-696 | 25 |
| ⑤ 5 x 20 mm 281-611/281-541 ① | 50 | | | | |
| ⑤ 5 x 20 mm 281-611/281-417 ② | 50 | | | | |
| ⑤ 5 x 25 mm 281-612 | 50 | with LED | | with blown fuse indication by LED, 12 V | |
| ⑤ 5 x 25 mm 281-612/281-541 ① | 50 | ⑤ 24 V AC/DC 281-512/281-501 | 50 | ⑤ Circuit I 282-698/281-429 | 25 |
| ⑤ 5 x 25 mm 281-612/281-417 ② | 50 | | | ⑤ Circuit II 282-698/281-449 | 25 |
| ⑤ 5 x 30 mm 281-622 | 50 | with neon lamp | | with blown fuse indication by LED, 24 V | |
| ⑤ 281-622/281-541 ① | 50 | ⑤ 120 V AC/DC 281-512/281-418 | 50 | ⑤ Circuit I 282-698/281-413 | 25 |
| ⑤ 281-622/281-417 ② | 50 | ⑤ 230 V AC/DC 281-512/281-417 | 50 | ⑤ Circuit II 282-698/281-434 | 25 |
| Terminal block width 10 mm/0.394 in | | Carrier blocks, 0.08-4 mm²,  9-10 mm/0.33 in | | 3-conductor through terminal block with same profile, with test point | |
| ⑤ 0.25" x 1" 281-613 | 50 | 2-conductor 281-916 | 100 (4x25) | ⑤ gray 282-699 | 25 |
| ⑤ 0.25" x 1" 281-613/281-541 ① | 50 | 3-conductor 281-610 | 100 (4x25) | ⑤ blue 282-694 | 25 |
| ⑤ 0.25" x 1" 281-613/281-417 ② | 50 | 4-conductor 281-656 | 100 (4x25) | | |
| ⑤ 0.25" x 1.25" 281-623 | 50 | End plate, 2.5 mm thick, | |   | |
| ⑤ 0.25" x 1.25" 281-623/281-541 ① | 50 | for 2-cond. carrier terminal block | | | |
| ⑤ 0.25" x 1.25" 281-623/281-417 ② | 50 | orange 281-329 100 (4x25) | | | |
| | | gray 281-328 100 (4x25) | | | |
| | | for 3-cond. carrier terminal block | | | |
| | | orange 281-326 100 (4x25) | | | |
| | | gray 281-324 100 (4x25) | | | |
| with blown fuse indication by: | | for 4-cond. carrier terminal block | | End and intermediate plate, 2 mm thick | |
| ① LED 15-30 V ≈ | | orange 281-335 100 (4x25) | | orange 282-333 100 (4 x 25) | |
| ② Neon lamp 230 V ≈ | | gray 281-334 100 (4x25) | | gray 282-334 100 (4 x 25) | |
| Other voltages upon request. | | | | | |
| End and intermediate plate, 2.5 mm thick | | | | | |
| orange 281-309 | 100 (4x25) | | | | |
| gray 281-311 | 100 (4x25) | | | | |
| Accessories, 281 Series Appropriate marking system: WMB | | Accessories, 281 Series Appropriate marking system: WSB 4 mm wide | | Accessories, 282 Series Appropriate marking system: WMB | |
| Adjacent jumper, insulated, I_N 32 A | | Comb-style jumper bar, insulated, I_N 32 A | | Adjacent jumper, insulated, I_N 41 A | |
| gray 281-402 | 200 (8x25) | 2-way 281-482 | 100 (4x25) | gray 282-402 | 100 (4x25) |
| | | 3-way 281-483 | 100 (4x25) | | |
| | | 10-way 281-490 | 50 (2x25) | | |
| Interlocking link, 1 m long, mechanically locks several fuse holders transparent 210-254 1 | | Alternate comb-style jumper bar, insulated, I_N 32 A | | Alternate jumper, insulated, I_N 41 A | |
| | | 2-way 281-492 | 100 (4x25) | gray 282-409 | 100 (4x25) |
| Test plug adapter, for terminal blocks 1.5-4 mm² (AWG 16-12), 5 mm wide 280-404 100 (4x25) for test plug 2.3 mm Ø | | Operating tool, insulated | | Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade 210-720 1 | |
| | | 2-way 280-432 | 1 | | |
| | | 3-way 280-433 | 1 | | |
| | | 5-way 281-440 | 1 | | |
| Test plug, 6 mm wide, with CAGE CLAMP® for 0.08-2.5 mm ² (AWG 28-14) I _N 24 A 281-407 100 (4x25) for 4 mm Ø test plug | | Shorting link, 5 x 20 mm, 6.3 A, if the fuse plug is used as disconnect plug 281-503 250 (10x25) | | Operating tool with partially insulated shaft, Type 3, (5.5 x 0.8) mm blade 210-721 1 | |

③ Approvals are available online at: www.wago.com.

For technical explanations and abbreviations, see technical section.

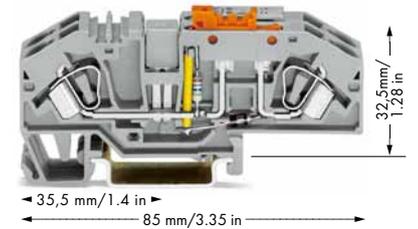
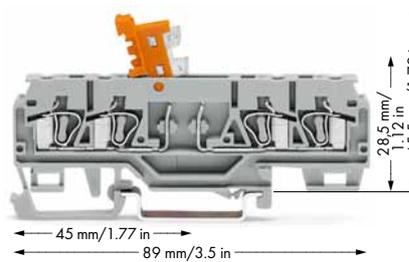
Disconnect Terminal Blocks 280 / 281 / 282 Series

| | | |
|---|---|---|
| <p>0.08 - 2.5 mm² AWG 28 - 12* 400 V/8 kV/3 300 V, 15 A  I_N 10 A 300 V, 15 A </p> <p>Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in</p> <p> Approvals</p> | <p>0.08 - 2.5 mm² AWG 28 - 12* 400 V/6 kV/3 600 V, 15 A  I_N 16 A 300 V, 15 A </p> <p>Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in</p> <p> Approvals</p> | <p>0.2 - 6 mm² AWG 24 - 10 400 V/6 kV/3 600 V, 30 A  I_N 30 A 300 V, 36 A </p> <p>Terminal block width 8 mm / 0.315 in 12 - 13 mm / 0.49 in</p> <p> Approvals</p> |
|---|---|---|



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | |
|---|----------|------------|--|------------------|------------|---|--|------------|----|
| Disconnect terminal blocks, 280 Series | | | 2-conductor disconnect/test terminal block, | | | 2-conductor disconnect terminal block, | | | |
| 2-conductor disconnect terminal block | | | with movable knife disconnect, | | | with test point, | | | |
| with test slots for 2 mm and | | | with test slots for 2 mm and | | | same profile as fuse terminal blocks | | | |
| 2.3 mm Ø test plugs | | | 2.3 mm Ø test plugs | | | 2.3 mm Ø test plugs | | | |
| gray | 280-912 | 50 | Housing | Knife disconnect | | gray | 282-697 | 25 | |
| blue | 280-914 | 50 | gray | orange | 280-870 | 100 | blue | 282-695 | 25 |
| orange | 280-913 | 50 | gray | gray | 280-868 | 100 | 3-conductor through terminal block with same profile, with test point | | |
| 3-conductor disconnect terminal block | | | blue | orange | 280-876 | 100 | gray | 282-699 | 25 |
| gray | 280-683 | 50 | orange | orange | 280-879 | 100 | blue | 282-694 | 25 |
| 4-conductor disconnect terminal block | | | | | | | | | |
| gray | 280-836 | 50 | | | | | | | |
| blue | 280-839 | 50 | | | | | | | |
| orange | 280-805 | 50 | | | | | | | |

| |
|---|
| <p>0.08 - 4 mm² AWG 28 - 12 400 V/8 kV/3 300 V, 15 A  I_N 10 A 300 V, 15 A </p> <p>Terminal block width 6 mm / 0.236 in 9 - 10 mm / 0.37 in</p> <p> Approvals</p> |
|---|



| Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Voltage | Item No. | Pack. Unit |
|---|------------|-------|---|------------|-------------|---|------------|
| Disconnect terminal blocks, 281 Series | | | 4-conductor disconnect/test terminal block | | | Ground conductor disconnect terminal block, gray  | |
| gray | | | Housing | | | Terminal block width 16 mm / 0.63 in | |
| 2-conductor | 281-912 | 50 | Knife disconnect | | 24 V AC/DC | 282-640 | 12 |
| 3-conductor | 281-683 | 50 | gray | orange | 48 V AC/DC | 282-641 | 12 |
| 4-conductor | 281-659 | 50 | gray | gray | 120 V AC/DC | 282-638 | 12 |
| | | | blue | orange | 230 V AC/DC | 282-639 | 12 |
| | | | orange | orange | | | |
| Accessories, 280/281 Series Appropriate marking system: WMB | | | Accessories, 280 Series Appropriate marking system: WMB | | | Accessories, 282 Series Appropriate marking system: WMB | |
| End plate | | | End plate, 2.5 mm thick | | | End plate, 2 mm thick | |
| 280 Series 281 Series | | | for 2-conductor terminal blocks | | | orange 282-333 100 (4x25) | |
| for 2-cond. blocks 100 (4x25) | | | orange 280-371 100 (4x25) | | | gray 282-334 100 (4x25) | |
| orange 280-309 281-329 | | | gray 280-374 100 (4x25) | | | | |
| gray 280-308 281-328 | | | for 4-conductor terminal blocks | | | Adjacent jumper, insulated, I_N 41 A | |
| for 3-cond. blocks 100 (4x25) | | | orange 280-373 100 (4x25) | | | gray 282-402 100 (4x25) | |
| orange 280-326 281-326 | | | gray 280-376 100 (4x25) | | | | |
| gray 280-324 281-324 | | | | | | Alternate jumper, insulated, I_N 41 A | |
| for 4-cond. blocks 100 (4x25) | | | | | | gray 282-409 100 (4x25) | |
| orange 280-315 281-335 | | | | | | | |
| gray 280-314 281-334 | | | | | | | |
| Test sockets, insulated, | | | Operating tool with partially insulated shaft, | | | | |
| 2 mm Ø | | | type 2, (3.5 x 0.5) mm blade | | | | |
| red 209-107 100 (2 x 50) | | | 210-720 1 | | | | |
| 2.3 mm Ø | | | Type 3, (5.5 x 0.8) mm blade | | | | |
| yellow 209-108 100 (2 x 50) | | | 210-721 1 | | | | |

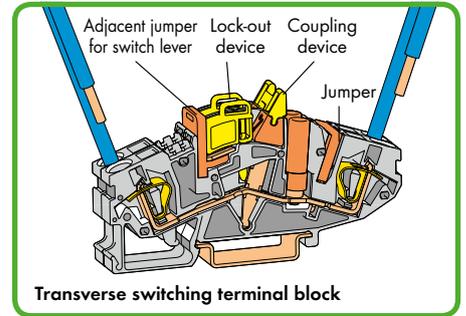
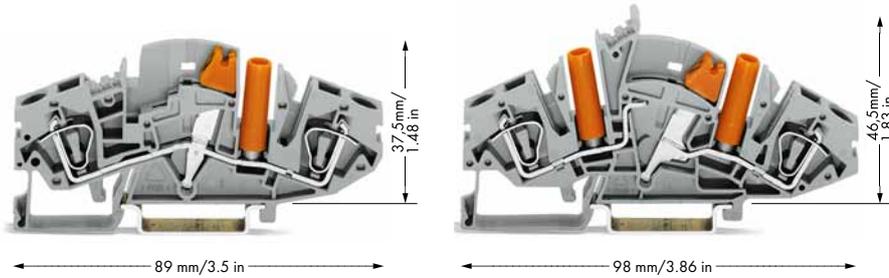
Please find the entire product range in our Full Line Catalog, Volume 1. Additional information at www.wago.com.

* AWG 12: THHN, THWN

 For application notes, see page 83.

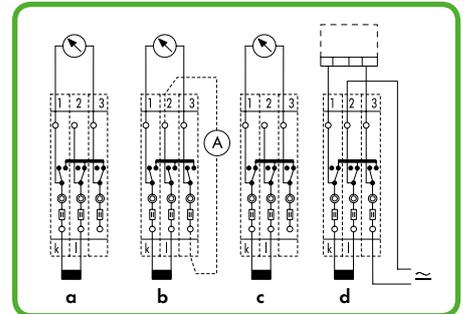
Transverse Switching Terminal Blocks and Longitudinal Switching Disconnect Terminal Blocks 282 Series

| | | | | |
|---|------------------------------------|---|------------------------------------|---------------------------|
| <p>0.2 - 6 mm² 500 V/6 kV/3 I_N 30 A</p> <p>Terminal block width 8 mm / 0.315 in 12 - 13 mm / 0.49 in</p> <p>Approvals</p> | <p>AWG 24 - 10 600 V, 30 A</p> | <p>0.2 - 6 mm² 500 V/6 kV/3 I_N 30 A</p> <p>Terminal block width 8 mm / 0.315 in 12 - 13 mm / 0.49 in</p> <p>Approvals</p> | <p>AWG 24 - 10 600 V, 30 A</p> | <p>Application Notes:</p> |
|---|------------------------------------|---|------------------------------------|---------------------------|

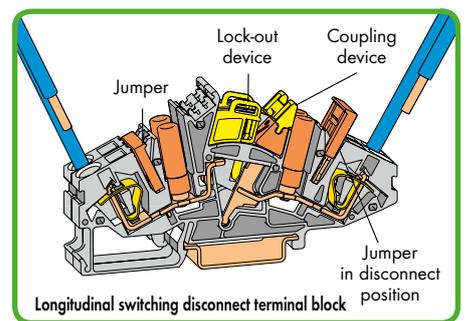


| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|---|----------|------------|---|----------|------------|
| <p>Transverse switching terminal block, 2-conductor, with touch-proof test socket (orange), 4 mm Ø</p> <p>gray 282-811 20</p> | | | <p>Longitudinal switching disconnect terminal block, 2-conductor, with touch-proof test sockets (orange), 4 mm Ø</p> <p>gray 282-821 20</p> | | |
| <p>End and separator plate, 1.5 mm thick</p> <p>orange 282-366 50 (2x25)</p> <p>gray 282-361 50 (2x25)</p> | | | <p>End and separator plate, 1.5 mm thick</p> <p>orange 282-365 50 (2x25)</p> <p>gray 282-360 50 (2x25)</p> | | |
| <p>Accessories, 282 Series Appropriate marking systems: WMB/Mini-WSB</p> | | | | | |
| <p>Lock-out device, for switch lever</p> <p>yellow 282-370 100 (4x25)</p> | | | <p>Lock-out device, for switch lever</p> <p>yellow 282-370 100 (4x25)</p> | | |
| <p>Coupling device, yellow, for simultaneous operation of several switch levers</p> <p>2-way 282-372 50 (5x10)</p> <p>3-way 282-373 50 (5x10)</p> <p>4-way 282-374 50 (5x10)</p> | | | <p>Coupling device, yellow, for simultaneous operation of several switch levers</p> <p>2-way 282-372 50 (5x10)</p> <p>3-way 282-373 50 (5x10)</p> <p>4-way 282-374 50 (5x10)</p> | | |
| <p>Jumper, insulated, I_N 30 A, orange</p> <p>2-way 282-432 50 (5x10)</p> <p>3-way 282-433 50 (5x10)</p> <p>10-way 282-440 50 (5x10)</p> <p>Special version upon request (e.g., 1-3-5)</p> | | | <p>Jumper, insulated, I_N 30 A, orange</p> <p>2-way 282-432 50 (5x10)</p> <p>3-way 282-433 50 (5x10)</p> <p>10-way 282-440 50 (5x10)</p> <p>Special version upon request (e.g., 1-3-5)</p> | | |
| <p>Adjacent jumper for switch lever, insulated, I_N 30 A,</p> <p>2-way 282-442 50 (5x10)</p> <p>3-way 282-443 50 (5x10)</p> <p>4-way 282-444 50 (5x10)</p> | | | <p>Collective carrier for jumpers,</p> <p>282-369 25</p> | | |
| <p>Protective warning marker, with high-voltage symbol, for 5 terminal blocks</p> <p>yellow 282-415 100 (4x25)</p> | | | <p>Protective warning marker, with high-voltage symbol, for 5 terminal blocks</p> <p>yellow 282-415 100 (4x25)</p> | | |
| <p>Banana plugs, only for safety extra-low voltage (42 V)</p> <p>black 215-311 50</p> <p>red 215-212 50</p> <p>blue 215-711 50</p> | | | <p>Operating tool with partially insulated shaft, type 3, (5.5 x 0.8) mm blade</p> <p>210-721 1</p> | | |
| <p>For more colors and technical data, see page 193.</p> | | | | | |
| <p>Stickers for operating instructions</p> <p>210-424 100</p> | | | <p>Stickers for operating instructions</p> <p>210-423 100</p> | | |
| <p>WMB Multi marking system, 10 strips with 10 markers,</p> <p>with printing blue U/V (50 each) 794-5554/000-006 1 card</p> <p>yellow k/l (50 each) 794-5553/000-002 1 card</p> <p>white 1...10 (10 each) 793-5502 5 cards</p> <p>white 11...20 (10 each) 793-5503 5 cards</p> | | | | | |

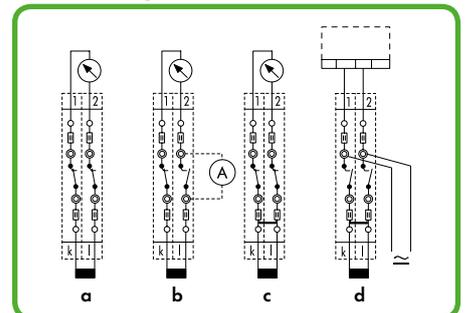
Current transformer circuit with transverse switching terminal blocks



a = Normal operation b = Measurement testing
c = Transformer short-circuit d = Relay testing



Current transformer circuit with longitudinal switching disconnect terminal blocks



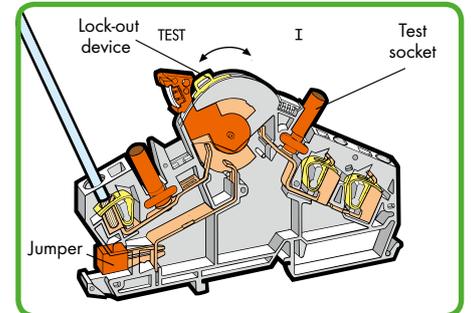
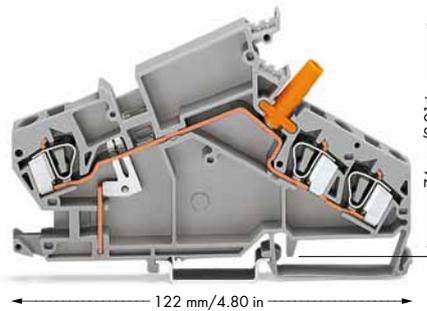
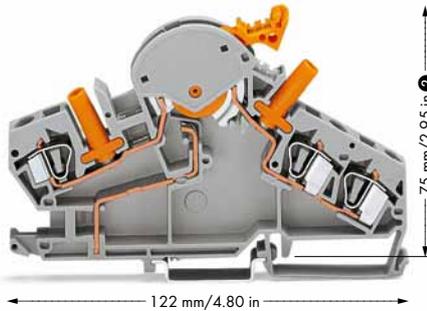
a = Normal operation b = Measurement testing
c = Transformer short-circuit d = Relay testing

Approvals are available online at: www.wago.com.

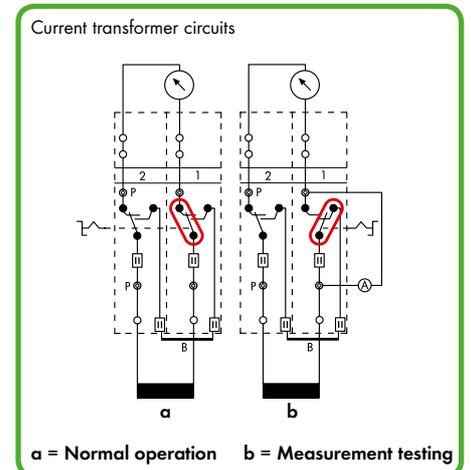
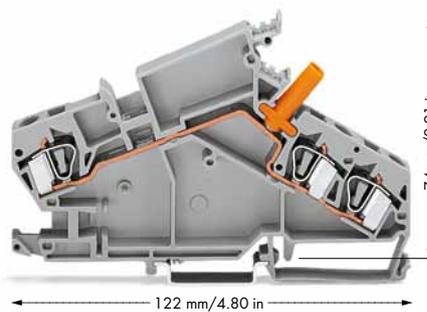
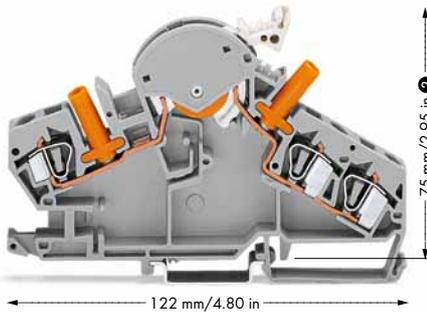
For technical explanations and abbreviations, see technical section.

Disconnect/test terminal blocks 282 Series

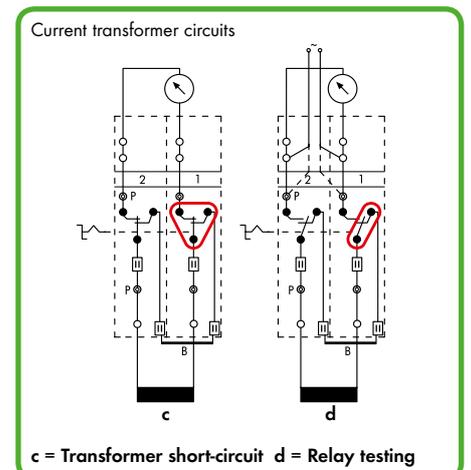
| | | | | |
|---|---|---|---|---------------------------|
| <p>0.2 - 6 mm² 500 V/6 kV/3 I_N 30 A</p> <p>Terminal block width 8 mm / 0.315 in 12 - 13 mm / 0.49 in</p> <p>1 Approvals</p> | <p>AWG 24 - 10 600 V, 30 A </p> <p>600 V, 30 A </p> | <p>0.2 - 6 mm² 500 V/6 kV/3 I_N 30 A</p> <p>Terminal block width 8 mm / 0.315 in 12 - 13 mm / 0.49 in</p> <p>1 Approvals</p> | <p>AWG 24 - 10 600 V, 30 A </p> <p>600 V, 30 A </p> | <p>Application Notes:</p> |
|---|---|---|---|---------------------------|



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|--|----------|------------|---|----------|------------|
| Disconnect/test terminal block, e.g., for current transformer circuits, with touch-proof test sockets (orange), 4 mm Ø, orange disconnect link | | | Through terminal block, e.g., current transformer circuits, with touch-proof test socket (orange), 4 mm Ø | | |
| gray | 282-870 | 20 | gray | 282-865 | 20 |



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|---|--------------------|------------|---|----------|------------|
| Disconnect/test terminal block, e.g., voltage transformer circuits, with touch-proof test sockets (orange), 4 mm Ø, disconnect link, light gray | | | Through terminal block, e.g., voltage transformer circuits, with touch-proof test socket (orange), 4 mm Ø | | |
| gray | 282-860 | 20 | gray | 282-866 | 20 |
| green-yellow | 282-868 | 20 | | | |
| | (with ground foot) | | | | |



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|--|----------|------------|--|----------|------------|
| End plate, for disconnect/test terminal blocks, 1.5 mm thick | | | End plate, for through terminal blocks, 1.5 mm thick | | |
| orange | 282-387 | 50 (5x10) | orange | 282-385 | 50 (5x10) |
| gray | 282-392 | 50 (5x10) | gray | 282-390 | 50 (5x10) |

Accessories, 282 Series Appropriate marking system: WMB

| | |
|--|--|
| <p>Adjacent jumper</p> <p>gray 282-402 100 (4x25)</p> <p>orange 282-424 100 (4x25)</p> | <p>Wire comming chain, insulated, black,</p> <p>4 connections, 24 A, 2.5 mm²/ AWG 14</p> <p>3 x 80 mm 709-110 1</p> |
| <p>Lock-out device,</p> <p>for disconnect link</p> <p>yellow 282-384 100 (5x20)</p> | <p>Wire comming chain, insulated, black, 3 connections,</p> <p>24 A, 2.5 mm²/AWG 14</p> <p>2 x 90 mm 709-111 1</p> <p>2 x 150 mm 709-112 1</p> |
| <p>Interlocking link,</p> <p>mechanically locks multiple links,</p> <p>1 m long, transparent</p> <p>210-254 1</p> | <p>Protective warning marker, with high-voltage symbol,</p> <p>for 5 terminal blocks</p> <p>yellow 282-415 100 (4x25)</p> |
| <p>Locking cover, mechanically locks multiple links</p> <p>transparent</p> <p>1-pole 282-881 50 (5x10)</p> <p>: : :</p> <p>4-pole 282-884 50 (5x10)</p> | <p>Banana plugs, only for safety extra-low voltage (42 V)</p> <p>black 215-311 50</p> <p>red 215-212 50</p> <p>blue 215-711 50</p> <p>For more colors and technical data, see page 193.</p> |

Terminal blocks and accessories required:

| | |
|------------------------------------|---------|
| 2 x disconnect/test terminal block | 282-870 |
| 1 x jumper, orange | 282-424 |
| 1 x end plate, orange | 282-386 |
| 1 x locking cover, transparent | 282-882 |

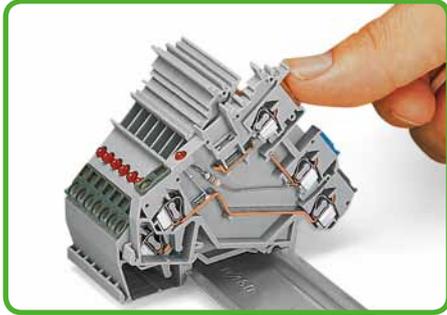
In addition, interlocking links, lock-out devices

2 Max. height when rotating the disconnect link (incl. locking cover): 92 mm/3.62 in.
Please find the entire product range in our Full Line Catalog, Volume 1. Additional information at www.wago.com.

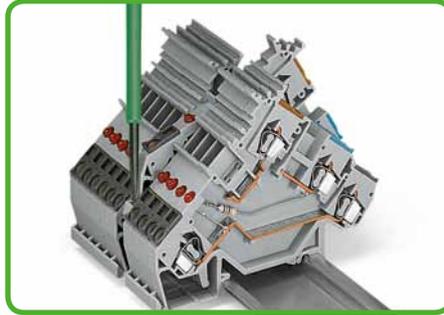
Sensor and Actuator Terminal Blocks . . . 280 Series

Assembly

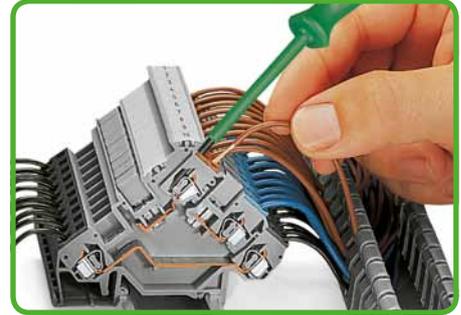
CAGE CLAMP® connection



Snapping terminal block onto DIN rail. Terminal blocks with grounding foot automatically establish a direct contact to the rail.

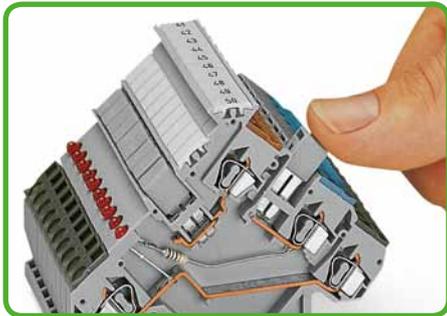


Removing terminal block from DIN rail. Notice: Remove jumper contacts first!

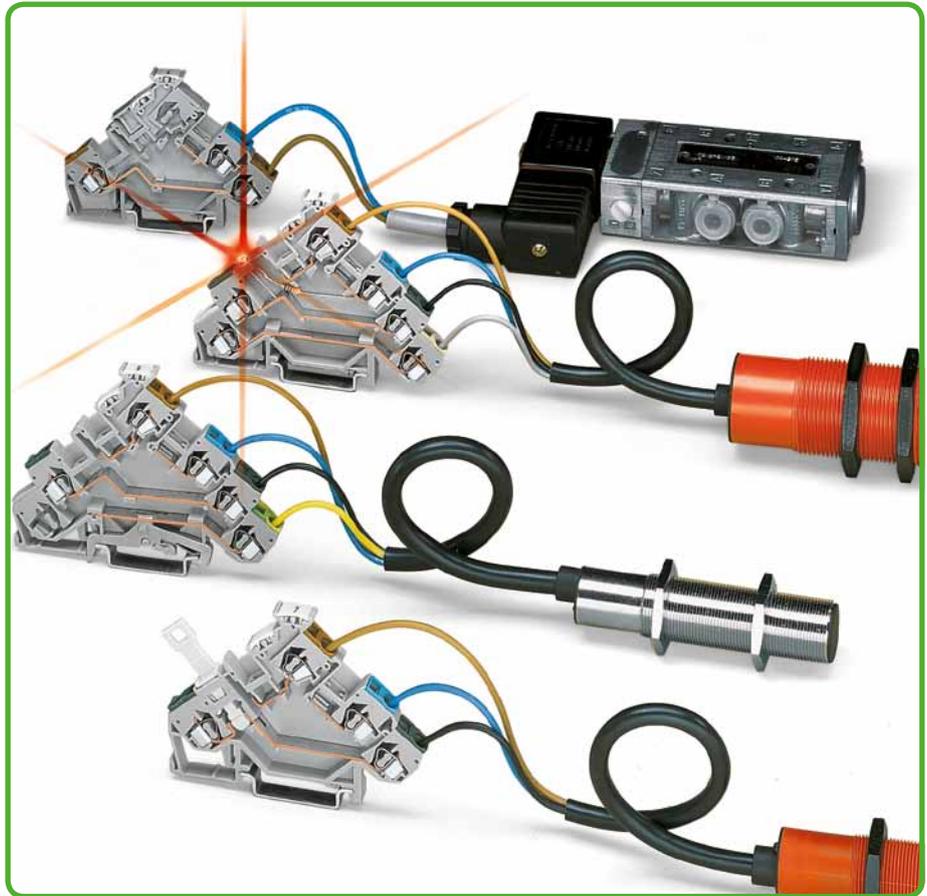


Inserting conductor via straight (3.5 x 0.5) mm screwdriver.

Commoning



Commoning with adjacent jumpers. Push jumper down until fully inserted!



Power supply

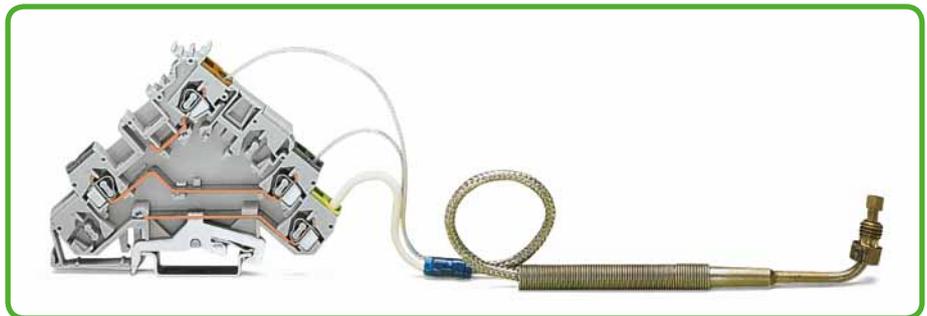


Sensor terminal blocks. Power supply from control panel side.

Power supply



Sensor terminal blocks. Power supply from sensor side.



Actuator terminal block and thermocouple with shield contact.



CAGE CLAMP®
clamps the following
copper conductors:

solid

Strip length, see packaging or instructions.



stranded



fine-stranded,
also with tinned
single strands

Marking

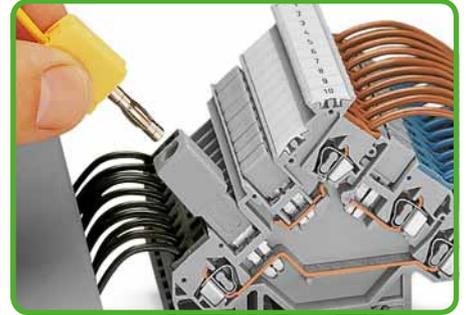


Inserting conductor via angled (3.5 x 0.5) mm screwdriver.



Marking using WMB Multi markers.

Testing



Testing via banana plug and 209-170 test plug adapter.

Actuator terminal blocks (see Full Line Catalog, Volume 1)



Actuator terminal blocks with 281-511 fuse holders. Intermediate plates also required!



Actuator terminal blocks with 280-801 component plugs.



Actuator terminal block with ground connection, for line interruption

289 Series (see Full Line Catalog, Volume 4)



Connection module for 8 x 3-conductor sensors.



Connection module for 8 x 3-conductor sensors, LED indicator.



Connection module for 8 actuators with ground connection

270 Series (see Full Line Catalog, Volume 1)



Sensor LED terminal block.



Commoning the voltage supply using uninsulated push-in type jumper bars.



fine-stranded, tip-bonded



fine-stranded with ferrule (gastight crimped) ①

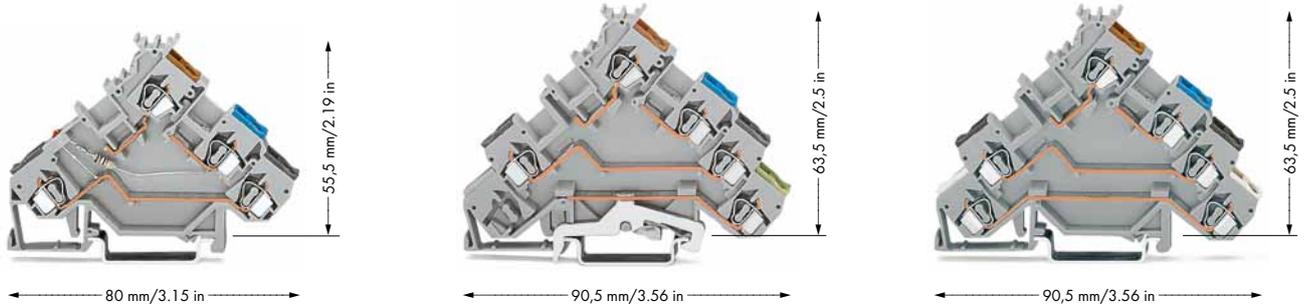


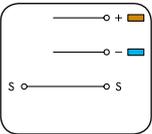
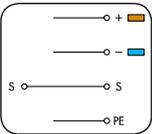
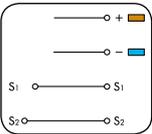
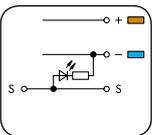
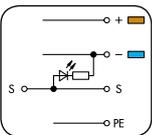
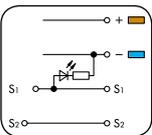
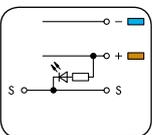
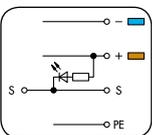
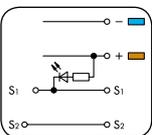
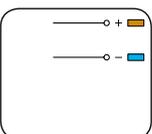
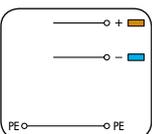
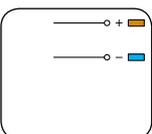
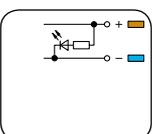
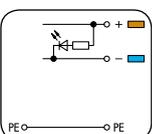
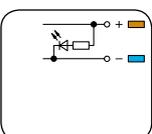
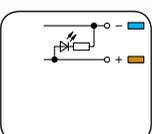
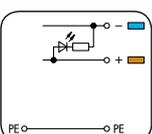
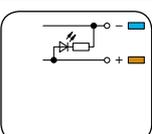
fine-stranded, with pin terminal (gastight crimped)

① With ferruled conductors, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

Sensor Terminal Blocks 280 Series

| | | |
|---|---|--|
| <p>Sensor terminal blocks for 3-cond. sensors</p> <p>0.08 - 2.5 mm² AWG 28 - 12*</p> <p>Terminal block width 5 mm / 0.197 in</p>  <p>8 - 9 mm / 0.33 in</p> <p>① Approvals</p> | <p>Sensor terminal blocks with ground connection</p> <p>0.08 - 2.5 mm² AWG 28 - 12*</p> <p>Terminal block width 5 mm / 0.197 in</p>  <p>8 - 9 mm / 0.33 in</p> <p>① Approvals</p> | <p>Sensor terminal blocks for 4-conductor sensors</p> <p>0.08 - 2.5 mm² AWG 28 - 12*</p> <p>Terminal block width 5 mm / 0.197 in</p>  <p>8 - 9 mm / 0.33 in</p> <p>① Approvals</p> |
|---|---|--|



| Item No. | Pack. Unit | Item No. | Pack. Unit | Item No. | Pack. Unit |
|---|------------|---|------------|--|------------|
|  Sensor terminal block 400 V/6 kV/3, 20 A 280-560 50 | |  Sensor terminal block with ground connection 400 V/6 kV/3, 20 A 280-570 50 | |  Sensor terminal block 400 V/6 kV/3, 20 A 280-580 50 | |
|  Sensor LED terminal block 24 VDC, 20 A, red LED, for PNP (positive) switching sensors 280-560/281-434 50 LED power consumption: 4.8 mA | |  Sensor LED terminal block with ground connection , 24 VDC, 20 A, red LED, for PNP (positive) switching sensors 280-570/281-434 50 LED power consumption: 4.8 mA | |  Sensor LED terminal block 24 VDC, 20 A, red LED, for PNP (positive) switching sensors 280-580/281-434 50 LED power consumption: 4.8 mA | |
|  Sensor LED terminal block 24 VDC, 20 A, red LED, for NPN (negative) switching sensors 280-561/281-413 50 LED power consumption: 4.8 mA | |  Sensor LED terminal block with ground connection , 24 VDC, 20 A, red LED, for NPN (negative) switching sensors 280-571/281-413 50 LED power consumption: 4.8 mA | |  Sensor LED terminal block 24 VDC, 20 A, red LED, for NPN (negative) switching sensors 280-581/281-413 50 LED power consumption: 4.8 mA | |
|  Sensor supply terminal block power supply from sensor side 400 V/6 kV/3, 20 A 280-564 10 | |  Sensor supply terminal block with ground connection , power supply from sensor side 400 V/6 kV/3, 20 A 280-574 10 | |  Sensor supply terminal block power supply from sensor side 400 V/6 kV/3, 20 A 280-584 10 | |
|  Sensor LED supply terminal block 24 VDC, 20 A, green LED, for PNP (positive) switching sensors 280-564/281-483 10 LED power consumption: 4.8 mA | |  Sensor LED supply terminal block, with ground connection , 24 VDC, 20 A, green LED, for PNP (positive) switching sensors 280-574/281-483 10 LED power consumption: 4.8 mA | |  Sensor LED supply terminal block 24 VDC, 20 A, green LED, for PNP (positive) switching sensors 280-584/281-483 10 LED power consumption: 4.8 mA | |
|  Sensor LED supply terminal block 24 VDC, 20 A, green LED, for NPN (negative) switching sensors 280-566/281-496 10 LED power consumption: 4.8 mA | |  Sensor LED supply terminal block, with ground connection , 24 VDC, 20 A, green LED, for NPN (negative) switching sensors 280-576/281-496 10 LED power consumption: 4.8 mA | |  Sensor LED supply terminal block 24 VDC, 20 A, green LED, for NPN (negative) switching sensors 280-586/281-496 10 LED power consumption: 4.8 mA | |
| End and intermediate plate , 1 mm thick orange 280-321 100 (4x25) gray 280-319 100 (4x25) | | End and intermediate plate , 1 mm thick orange 280-323 100 (4x25) gray 280-320 100 (4x25) | | End and intermediate plate , 1 mm thick orange 280-323 100 (4x25) gray 280-320 100 (4x25) | |

| Accessories, 280 Series | | Appropriate marking system: WMB | |
|---|---|---|--|
|  Adjacent jumper , insulated, I _N 24 A gray 280-402 200 (8x25) |  Test plug adapter , for terminal blocks 1.5–10 mm ² (AWG 16–8) 8 mm wide 209-170 50 (2x25) for 4 mm Ø test plug |  Insulation stop , 5 pcs/strip 200 strips | |
| | | white 280-470 0.08–0.2 mm ² (AWG 28–24) | |
| | | light gray 280-471 0.25–0.5 mm ² (AWG 12–20) | |
| | | dark gray 280-472 0.75–1 mm ² (AWG 20–18) | |
| | For 215 Series test plugs, see page 193. | | |

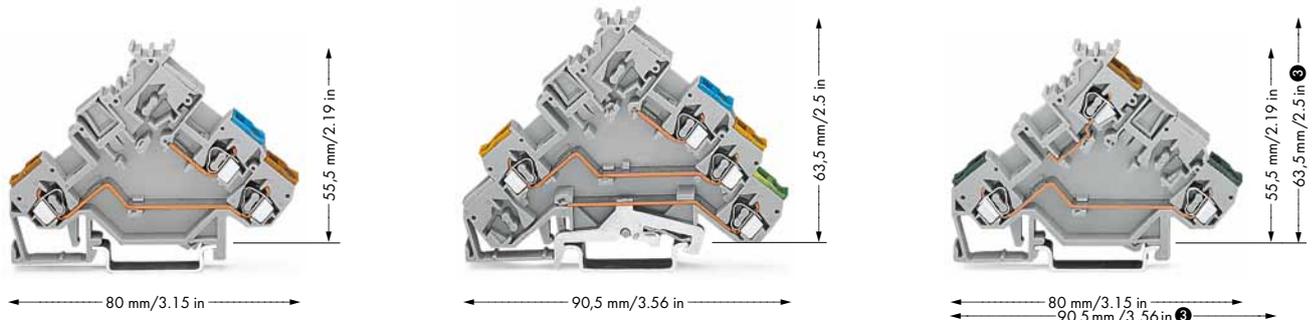
③ Approvals are available online at: www.wago.com.

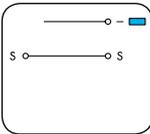
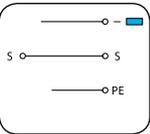
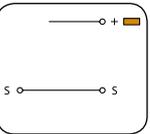
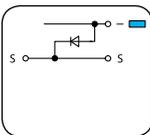
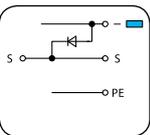
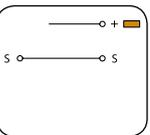
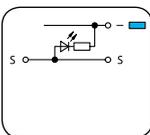
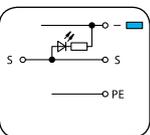
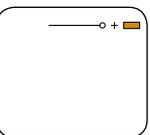
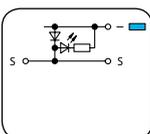
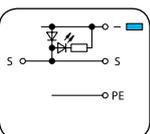
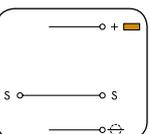
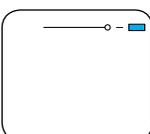
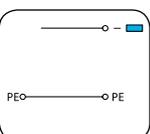
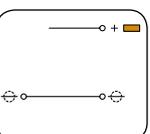
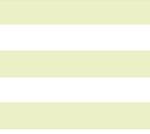
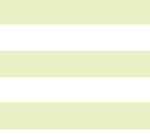
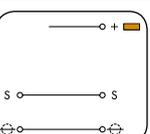
*AWG 12: THHN, THWN

For technical explanations and abbreviations, see technical section.

Actuator Terminal Blocks 280 Series

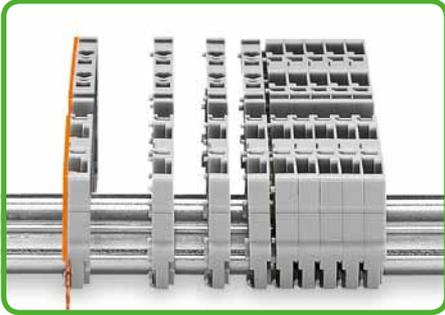
| | | |
|--|--|---|
| <p>Actuator terminal blocks for 2-conductor actuators 0.08 - 2.5 mm² AWG 28 - 12* Terminal block width 5 mm / 0.197 in  8 - 9 mm / 0.33 in ① Approvals</p> | <p>Actuator terminal block with ground connection 0.08 - 2.5 mm² AWG 28 - 12* Terminal block width 5 mm / 0.197 in  8 - 9 mm / 0.33 in ① Approvals</p> | <p>Actuator terminal blocks with shield connection 0.08 - 2.5 mm² AWG 28 - 12* Terminal block width 5 mm / 0.197 in  8 - 9 mm / 0.33 in ① Approvals</p> |
|--|--|---|



| Item No. | Pack. Unit | Item No. | Pack. Unit | Item No. | Pack. Unit |
|---|--|---|--|---|---|
|  | Actuator terminal block (e.g., for magnetic valves) 400 V/6 kV/3, 20 A 280-562 50 |  | Actuator terminal block with ground connection 400 V/6 kV/3, 20 A 280-572 50 |  | Actuator terminal block (e.g., for thermocouples) 400 V/6 kV/3, 20 A 280-555 ② 50 |
|  | Actuator terminal block with 1N4007 recovery diode 250 V/4 kV/3, 20 A 280-562/281-411 50 |  | Actuator terminal block with ground connection, with 1N4007 recovery diode 250 V/4 kV/3, 20 A 280-572/281-411 50 |  | Actuator terminal block (e.g., for pressure switches) 400 V/6 kV/3, 20 A 280-554 ② 50 |
|  | Actuator LED terminal block 24 VDC, 20 A, red LED 280-562/281-434 50 LED power consumption: 4.8 mA |  | Actuator LED terminal block with ground connection, 24 VDC, 20 A, red LED 280-572/281-434 50 LED power consumption: 4.8 mA |  | Actuator supply terminal block with end plate, 6 mm terminal block width, for 280-554 and 280-555 400 V/6 kV/3, 20 A 280-556 ② 20 |
|  | Actuator LED terminal block 24 VDC, red LED, with 1N4007 recovery diode 280-562/281-420 50 LED power consumption: 4.8 mA |  | Actuator LED terminal block with ground connection, 24 VDC, 20 A, red LED 280-572/281-420 50 LED power consumption: 4.8 mA |  | Actuator terminal block with shield connection 400 V/6 kV/3, 20 A 280-585 ③ 50 |
|  | Actuator supply terminal block power supply from actuator side 400 V/6 kV/3, 20 A 280-592 10 |  | Actuator supply terminal block with ground connection, power supply from actuator side 400 V/6 kV/3, 20 A 280-593 10 |  | Actuator supply terminal block with shield connection, with end plate, 6 mm terminal block width 280-586 ③ 20 |
|  | End and intermediate plate , 1 mm thick orange 280-321 100 (4x25) gray 280-319 100 (4x25) |  | End and intermediate plate , 1 mm thick orange 280-323 100 (4x25) gray 280-320 100 (4x25) |  | Actuator terminal block with shield conductor through contact 400 V/6 kV/3, 20 A 280-583 ③ 50 |
| Accessories, 280 Series | | | Appropriate marking system: WMB | | |
|  | Adjacent jumper , insulated, I _N 24 A gray 280-402 200 (8x25) |  | Test plug adapter , for terminal blocks 1.5 - 10 mm ² (AWG 16 - 8) 8 mm wide 209-170 50 (2x25) for 4 mm Ø test plug |  | Insulation stop , 5 pcs/strip 200 strips white 280-470 0.08-0.2 mm ² (AWG 28-24) light gray 280-471 0.25-0.5 mm ² (AWG 12-20) dark gray 280-472 0.75-1 mm ² (AWG 20-18) |
| | | | For 215 Series test plugs, see page 193. | | |

X-COM®-SYSTEM . . . 769 Series

Assembly



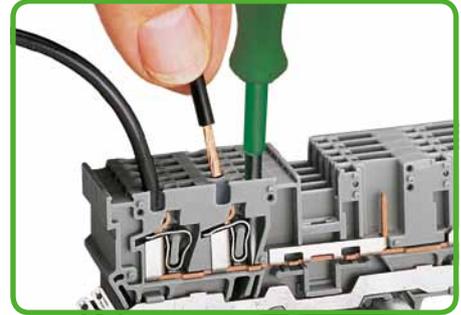
Snap individual carrier terminal blocks onto DIN rail and slide together.

Removal



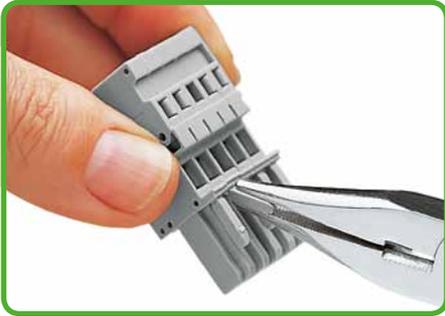
Unlock assembly with (3.5 x 0.5) mm screwdriver and remove terminal block via release lever.

CAGE CLAMP® connection



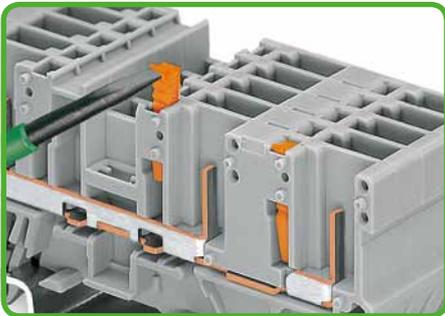
Carrier terminal block: Inserting/removing conductor via (3.5 x 0.5) mm screwdriver.

Coding



Coding a female plug - removing coding finger(s). Do not break off the first and last latch position coding fingers!

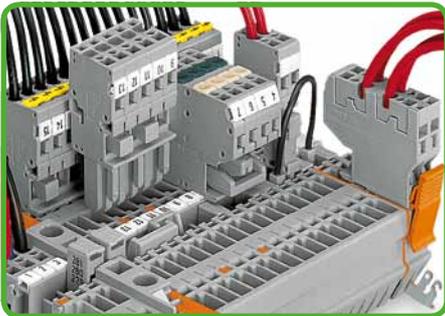
Coding



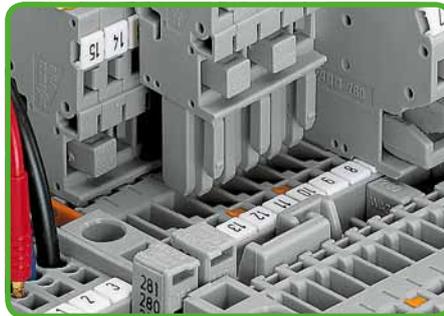
Snap coding pin in proper direction on carrier terminal block. Shown: Removing coding pin from carrier terminal block.



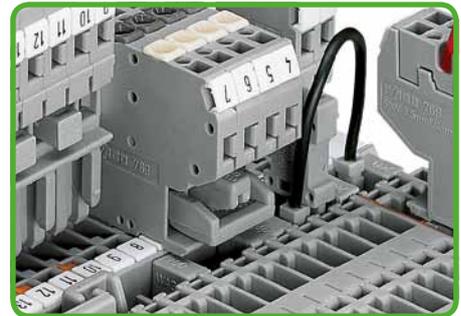
Commoning



Commoning with adjacent or staggered jumpers. Push jumpers down until fully inserted!



Commoning carrier terminal blocks via staggered jumpers.



Commoning 2-conductor female plug with staggered jumper and commoning carrier terminal block with adjacent jumper.



CAGE CLAMP®
clamps the following
copper conductors:

solid

Strip length, see packaging or instructions.

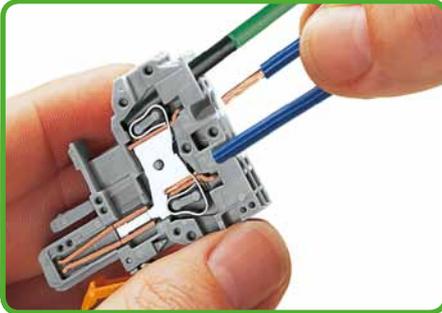


stranded

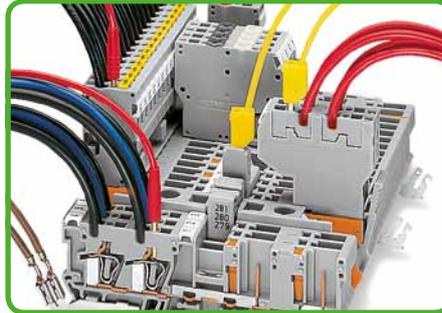


fine-stranded,
also with tinned
single strands

Testing



Female plug: Inserting/removing conductor. Operation 90° to wire also possible.

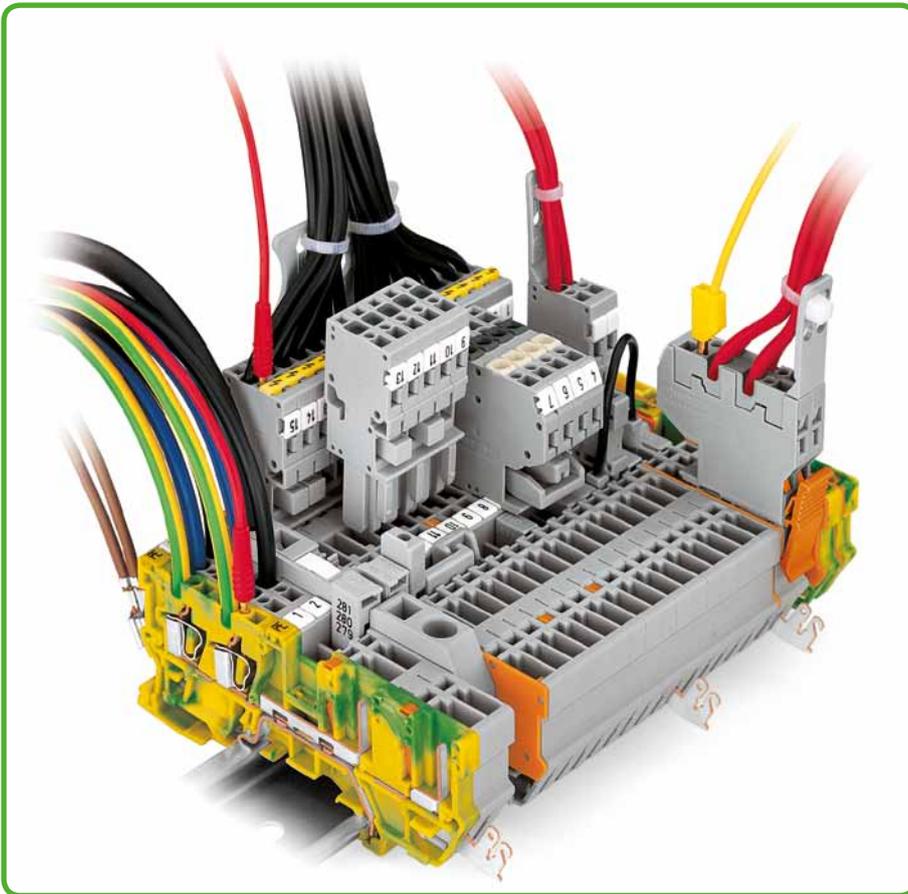


Testing with 2 mm Ø (red) or 2.3 mm Ø (yellow) test plug.

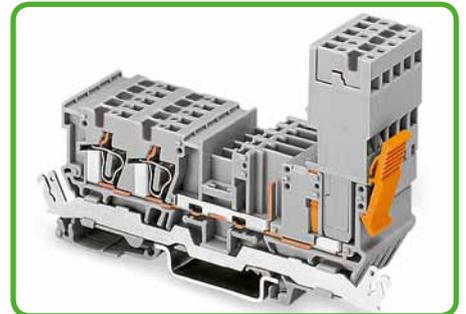
Locking lever



Snapping in/removing locking lever.



Locking lever

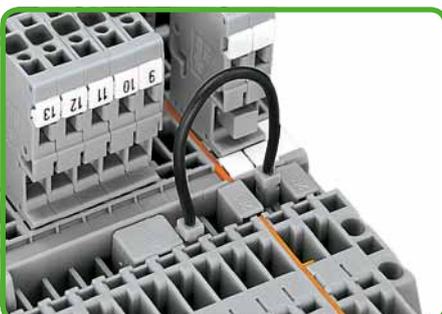


Female plug secured with locking lever in external area of carrier terminal block.

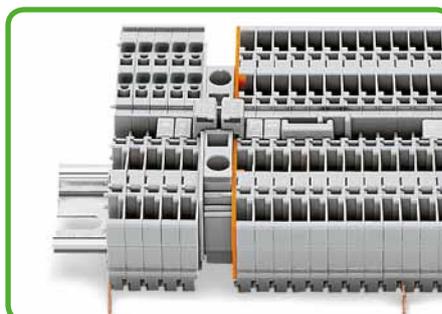
Strain relief



Removing female plug, conductors provided with strain relief plate.



Commoning carrier terminal blocks with push-in type wire, or adjacent jumpers over the intermediate plate.



Step-down jumper used for commoning terminal blocks of different sizes (max. 10 mm²/AWG 8).



Commoning 1-conductor female plugs with miniature adjacent jumpers.



fine-stranded, tip-bonded



fine-stranded with ferrule ① (gastight crimped)

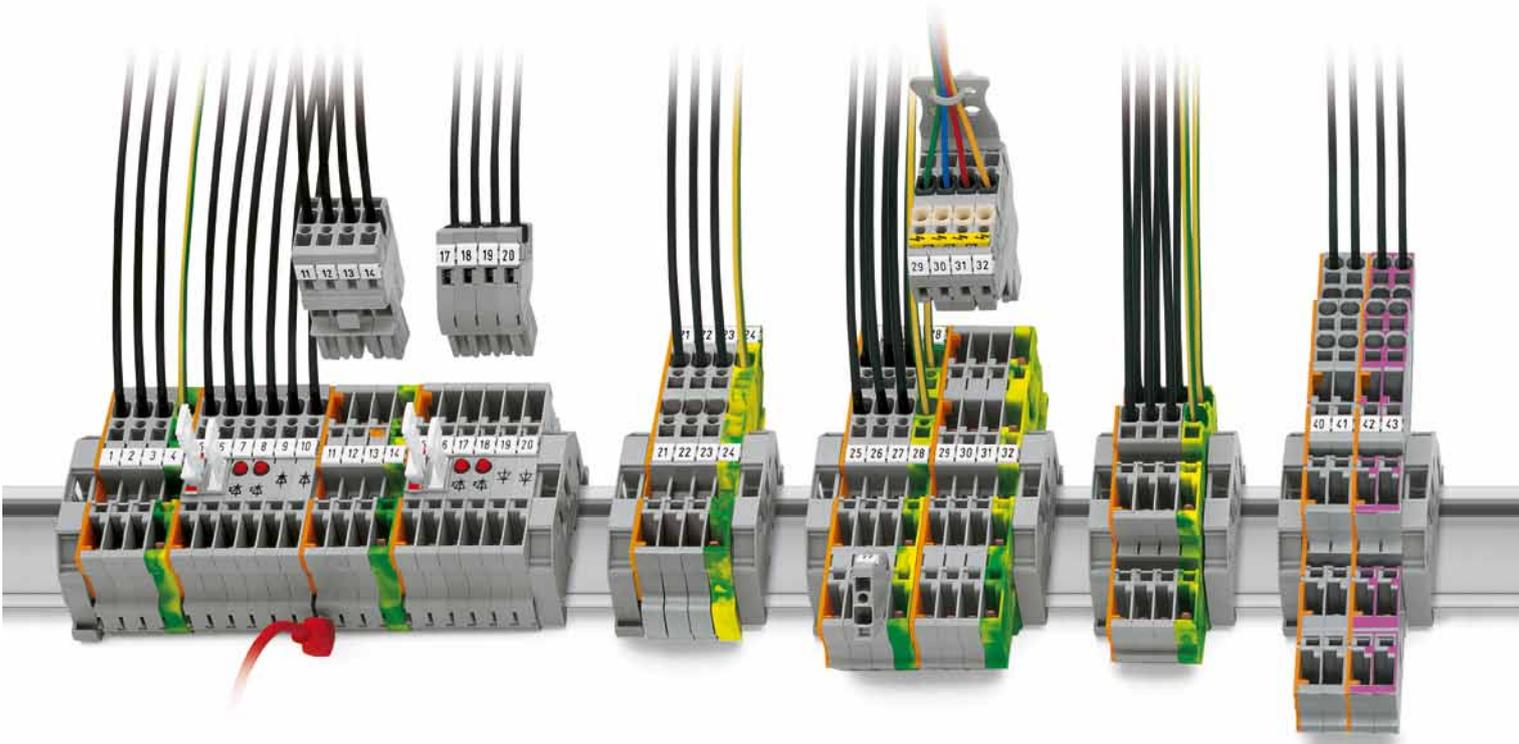


fine-stranded, with pin terminal (gastight crimped)

① With ferruled conductors, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

X-COM®-SYSTEM 769 and 870 Series

| | | |
|---|--|---|
| Technical data – carrier terminal blocks: | 0.08 - 4 mm ² | AWG 28 - 12 |
| | 500 V/6 kV/3 | 300 V, 10 A  |
| | 250 V/4 kV/3 | 300 V, 20 A  |
| | I _N 16 A / 32 A* | |
| | Terminal block width 5 mm / 0.197 in | |
| |  8 - 9 mm / 0.33 in | |
| |  Approvals | |

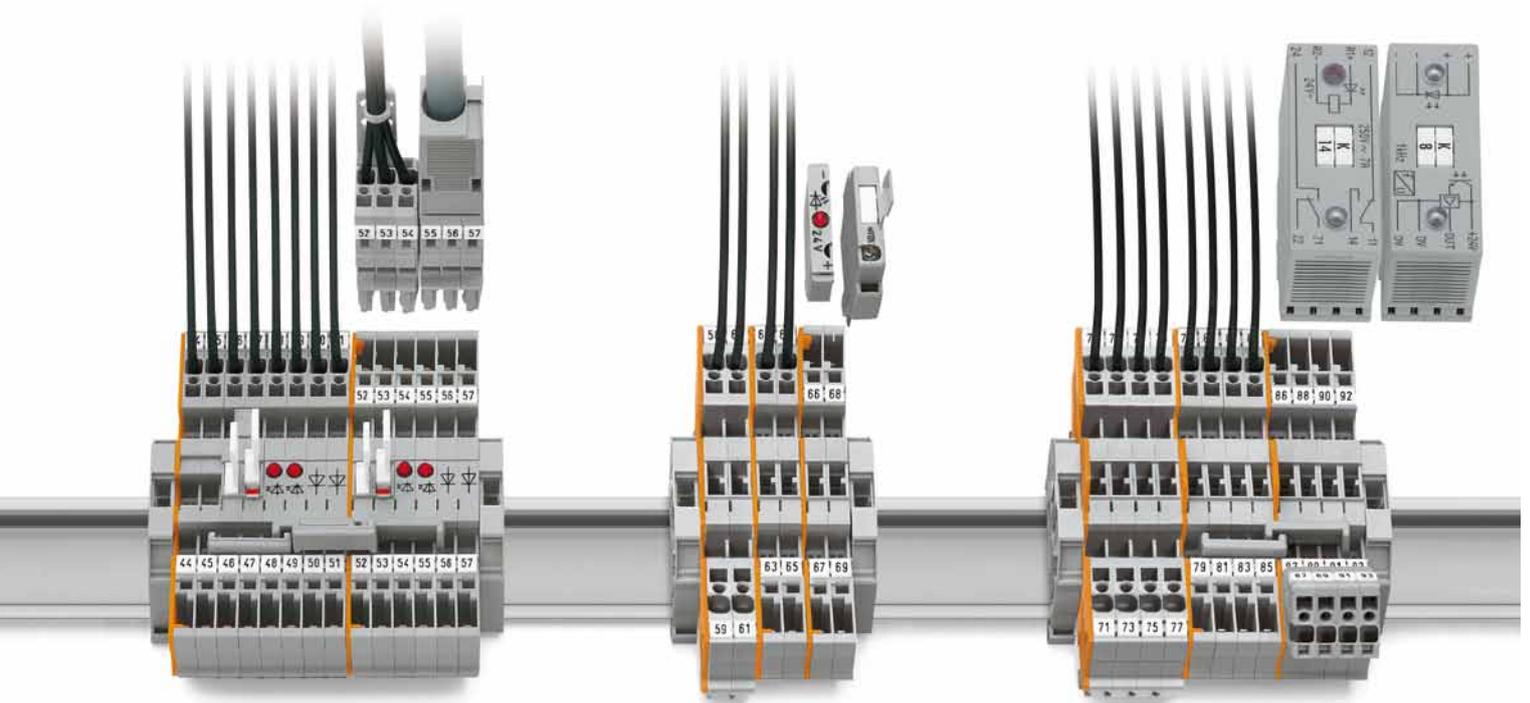


| | Single-deck through and function terminal blocks: | | | | | Double-deck terminal blocks: | | | |
|--|---|-----------------|---------------|---------------|----------|------------------------------|------------------|---------------|---------------|
| | 1-cond./1-pin | 2-pin | 2-cond./1-pin | 2-cond./2-pin | 4-pin | 1-cond./1-pin | 2-pin/2-pin | 2-cond./2-pin | 4-cond./4-pin |
| <input type="radio"/> Carrier terminal block | 769-176* | 769-156* | 769-251* | 769-171* | 769-151* | 870-101 | 870-151 | 870-131 | |
| <input type="radio"/> Carrier terminal block internal commoning | | | | | | | 4-pin 870-158 | 870-108 | 870-138 |
| <input type="radio"/> Carrier terminal block with shield contact | 769-231* | 769-221* | | 769-211* | 769-201* | | 4-pin | | |
| <input checked="" type="radio"/> Ground carrier term. block | 769-237 | 769-227 | 769-257 | 769-217 | 769-207 | 870-157 | 870-107 | | |
| <input type="radio"/> Disconnect carrier term. block | 769-232 | 769-222 | | | | | | | |
| <input type="radio"/> Disconnect carrier terminal block with shield contact | 769-233 | 769-223 | | | | | | | |
| <input type="radio"/> Diode carrier terminal block | | | | | | | | | |
| Anode, left side | 769-238/281-410 | 769-228/281-410 | | | | | | | |
| Anode, right side | 769-238/281-411 | 769-228/281-411 | | | | | | | |
| <input type="radio"/> LED carrier terminal block | | | | | | | | | |
| Anode, right side | 769-239/281-413 | 769-229/281-413 | | | | | | | |
| Anode, left side | 769-239/281-434 | 769-229/281-434 | | | | | | | |
| <input type="radio"/> End plate | 769-307 | 769-305 | 769-320 | 769-301 | | 870-118 | 870-168 | 870-148 | |
| <input checked="" type="radio"/> Separator, oversized | 769-308 | 769-306 | 769-321 | 769-302 | | 870-119 | 870-169 | 870-149 | |
| <input type="radio"/> Jumper | 280-4xx | 280-4xx | 280-4xx | 280-4xx | 280-4xx | 870-4xx | 870-4xx | 870-4xx | |

 Approvals are available online at: www.wago.com.

For technical explanations and abbreviations, see technical section.

| | | |
|---|--|---|
| Technical data – carrier terminal blocks: | 0.08 - 4 mm ² | AWG 28 - 12 |
| | 500 V/6 kV/3 | 300 V, 10 A  |
| | 250 V/4 kV/3 | 300 V, 20 A  |
| | I _N 16 A / 32 A* | |
| | Terminal block width 5 mm / 0.197 in | |
| |  8 - 9 mm / 0.33 in | |
| |  Approvals | |



| Terminal blocks with multiple jumper positions | | | Carrier terminal block for 280/281 Series pluggable modules (fuse, LED, ...) | | | Carrier terminal blocks for 286 Series pluggable modules with integrated end plate (relays, optocouplers, ...) |
|--|---------------|---------|--|---------------|---------|--|
| 3-way | 2-way | 2-way | 1-cond./1-cond. | 1-cond./1-pin | 2-pin | |
| 1-cond./1-pin | 1-cond./1-pin | 2-pin | | | | |
| 769-214* | | | 769-191 | 769-181 | 769-161 | |
| | | | | | | |
| | | | | | | 1-cond./1-pin |
| | | | | | | 4-pole 769-182/769-314 |
| | | | | | | 6-pole 769-183/769-314 |
| | | | | | | 8-pole 769-184/769-314 |
| | | | | | | 10-pole 769-185/769-314 |
| | | | | | | |
| | | | | | | 1-cond./1-cond. |
| | | | | | | 4-pole 769-192/769-319 |
| | | | | | | 6-pole 769-193/769-319 |
| | | | | | | 8-pole 769-194/769-319 |
| | | | | | | 10-pole 769-195/769-319 |
| | | | | | | |
| | | | | | | 2-pin |
| | | | | | | 4-pole 769-162/769-313 |
| | | | | | | 6-pole 769-163/769-313 |
| | | | | | | 8-pole 769-164/769-313 |
| | | | | | | 10-pole 769-165/769-313 |
| | | | | | | |
| | | | 1-cond./1-cond. | 1-cond./1-pin | 2-pin | |
| 769-315 | 769-311 | 769-309 | 769-317 | 769-311 | 769-309 | |
| 769-316 | 769-312 | 769-310 | 769-318 | 769-312 | 769-310 | |
| | | | | | | |
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| | | | | | | |
| | | | | | | |
| | | | | | | |
| 280-4xx | 280-4xx | 280-4xx | 780-45x | 780-45x | 780-45x | 780-45x |

X-COM®-SYSTEM

Male Connectors

769 Series

Technical data – male connectors:

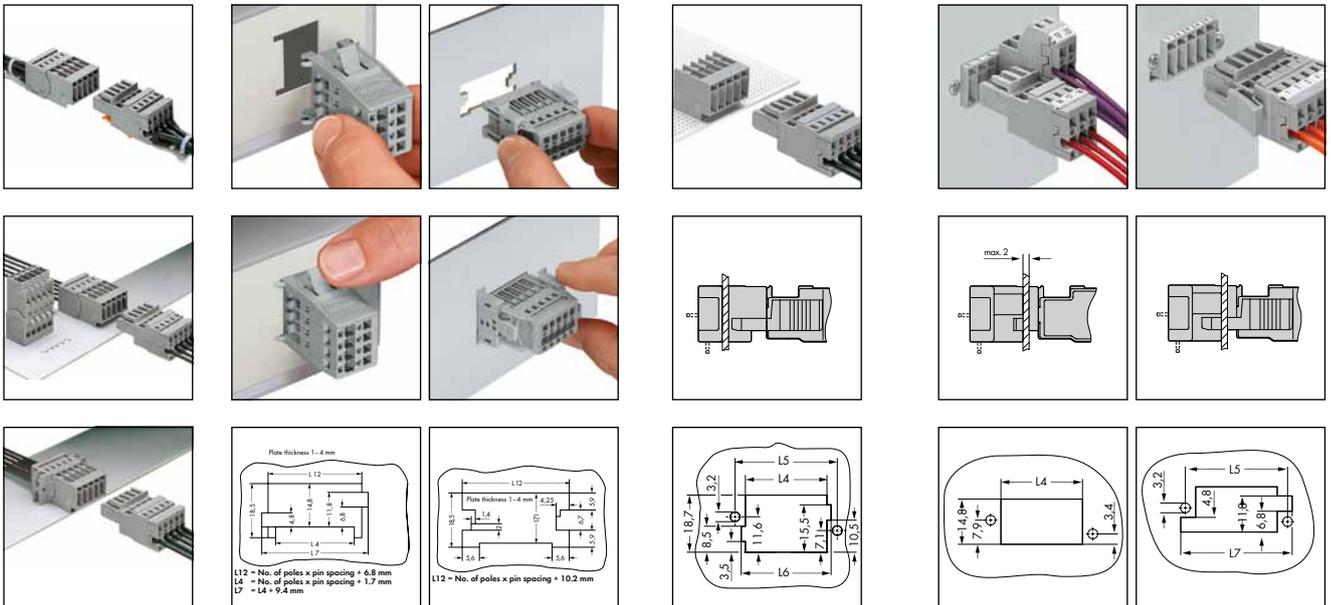
Pin spacing 5 mm / 0.197 in
 0.08 - 4 mm² | AWG 28 - 12
 500 V/6 kV/3 | 600 V, 20 A 
 I_N 32 A | 300 V, 20 A 

 8 - 9 mm / 0.33 in
 Approvals



| Male connectors with CAGE CLAMP® connection | | | Male connectors with CAGE CLAMP® connection and snap-in flanges | | | Headers with solder pins | | Headers with solder pins and fixing flanges | |
|---|---------|-----------------|---|---|---------|--------------------------|-----------------|---|--------|
| | | | | | | straight | angled | straight | angled |
| ○ 2-pole | 769-602 | 769-602/005-000 | 769-602/006-000 | 769-632 | 769-662 | 769-632/004-000 | 769-662/004-000 | | |
| ○ 3-pole | 769-603 | 769-603/005-000 | 769-603/006-000 | 769-633 | 769-663 | 769-633/004-000 | 769-663/004-000 | | |
| ○ 4-pole | 769-604 | 769-604/005-000 | 769-604/006-000 | 769-634 | 769-664 | 769-634/004-000 | 769-664/004-000 | | |
| ○ 5-pole | 769-605 | 769-605/005-000 | 769-605/006-000 | 769-635 | 769-665 | 769-635/004-000 | 769-665/004-000 | | |
| ○ 6-pole | 769-606 | 769-606/005-000 | 769-606/006-000 | 769-636 | 769-666 | 769-636/004-000 | 769-666/004-000 | | |
| ○ 7-pole | 769-607 | 769-607/005-000 | 769-607/006-000 | 769-637 | 769-667 | 769-637/004-000 | 769-667/004-000 | | |
| ○ 8-pole | 769-608 | 769-608/005-000 | 769-608/006-000 | 769-638 | 769-668 | 769-638/004-000 | 769-668/004-000 | | |
| ○ 9-pole | 769-609 | 769-609/005-000 | 769-609/006-000 | 769-639 | 769-669 | 769-639/004-000 | 769-669/004-000 | | |
| ○ 10-pole | 769-610 | 769-610/005-000 | 769-610/006-000 | 769-640 | 769-670 | 769-640/004-000 | 769-670/004-000 | | |
| ○ 11-pole | 769-611 | 769-611/005-000 | 769-611/006-000 | 769-641 | 769-671 | 769-641/004-000 | 769-671/004-000 | | |
| ○ 12-pole | 769-612 | 769-612/005-000 | 769-612/006-000 | 769-642 | 769-672 | 769-642/004-000 | 769-672/004-000 | | |
| ○ 13-pole | 769-613 | 769-613/005-000 | 769-613/006-000 | 769-643 | 769-673 | 769-643/004-000 | 769-673/004-000 | | |
| ○ 14-pole | 769-614 | 769-614/005-000 | 769-614/006-000 | 769-644 | 769-674 | 769-644/004-000 | 769-674/004-000 | | |
| ○ 15-pole | 769-615 | 769-615/005-000 | 769-615/006-000 | 769-645 | 769-675 | 769-645/004-000 | 769-675/004-000 | | |
| Item no. suffix for male connectors with snap-in mounting feet*: ...-.../001-000 or fixing flanges: ...-.../002-000 * 209-137 mounting carrier for DIN 35 rail | | | | Item no. suffix for headers with solder pins and fixing flanges: ...-.../003-000 | | | | | |

Application Notes and Dimensions



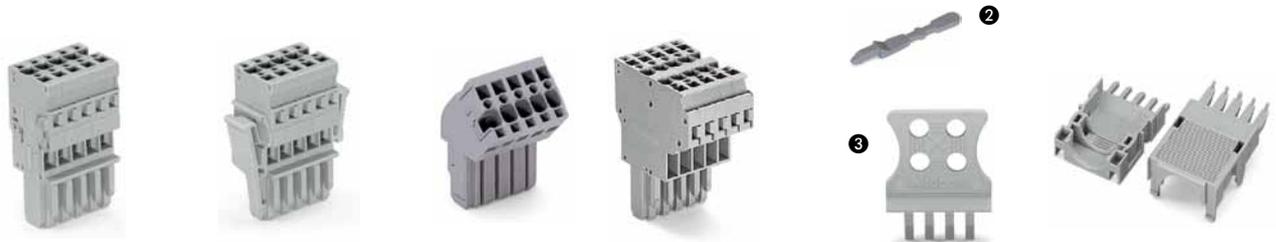
X-COM®-SYSTEM

Female Plugs, Strain Relief Plates and Housings

769 Series

CAGE CLAMP®

| | | |
|--------------------------------|-------------------------------------|----------------------------|
| Technical data – female plugs: | 0.08 - 4 mm ² | AWG 28 - 12 |
| | 500 V/6 kV/3 I _N 32 A | 300 V, 10 A 300 V, 20 A |
| | Module width 5 mm / 0.197 in | |
| | 8 - 9 mm / 0.33 in | |
| | ① Approvals | |



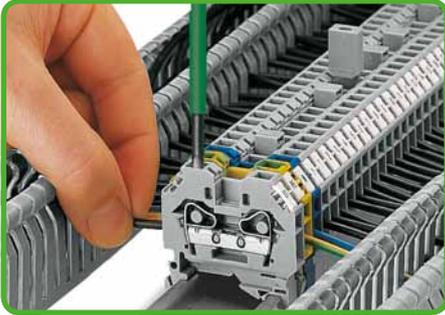
| Female plugs, with coding fingers | 1-conductor, straight | 1-conductor, with locking lever | 1-conductor, angled | 2-conductor, straight | ② Strain relief plate, gray | Strain relief housing, gray |
|-----------------------------------|-----------------------|---------------------------------|---------------------|-----------------------|-----------------------------|-----------------------------|
| ○ 1-pole | 769-101 | - | 769-101/022-000 | 769-121 | 1-pole | 769-410 |
| ○ 2-pole | 769-102 | 769-102/021-000 | 769-102/022-000 | 769-122 | 2- to 3-pole | 769-411 |
| ○ 3-pole | 769-103 | 769-103/021-000 | 769-103/022-000 | 769-123 | 4- to 5-pole | 769-412 |
| ○ 4-pole | 769-104 | 769-104/021-000 | 769-104/022-000 | 769-124 | | |
| ○ 5-pole | 769-105 | 769-105/021-000 | 769-105/022-000 | 769-125 | | |
| ○ 6-pole | 769-106 | 769-106/021-000 | 769-106/022-000 | 769-126 | | |
| ○ 7-pole | 769-107 | 769-107/021-000 | 769-107/022-000 | 769-127 | ③ Strain relief plate, gray | 7-pole |
| ○ 8-pole | 769-108 | 769-108/021-000 | 769-108/022-000 | 769-128 | 6- to 9-pole | 769-413 |
| ○ 9-pole | 769-109 | 769-109/021-000 | 769-109/022-000 | 769-129 | 10- to 15-pole | 769-414 |
| ○ 10-pole | 769-110 | 769-110/021-000 | 769-110/022-000 | 769-130 | | |
| ○ 11-pole | 769-111 | 769-111/021-000 | 769-111/022-000 | 769-131 | | |
| ○ 12-pole | 769-112 | 769-112/021-000 | 769-112/022-000 | 769-132 | | |
| ○ 13-pole | 769-113 | 769-113/021-000 | 769-113/022-000 | 769-133 | | |
| ○ 14-pole | 769-114 | 769-114/021-000 | 769-114/022-000 | 769-134 | | |
| ○ 15-pole | 769-115 | 769-115/021-000 | 769-115/022-000 | 769-135 | | |
| ● 1-pole | 769-101/000-016 | | 769-101/022-016 | 769-121/000-016 | | |

Accessories, X-COM®-SYSTEM

| | | |
|--|--|--|
| Insulation stop, 5 pcs/strip 0.08 - 0.2 mm ² "sol." (0.14 mm ² "f-st") white 769-470 200(8x25) | Insulation stop, 5 pcs/strip 0.25 - 0.5 mm ² light gray 769-471 200(8x25) | Insulation stop, 5 pcs/strip 0.75 - 1 mm ² dark gray 769-472 200(8x25) |
| Miniature adjacent jumper, for straight 1-conductor female plugs, insulated, I _N 24 A gray 769-402 100(4x25) | Adjacent Jumper, for carrier terminal blocks and 2-conductor female plugs, insulated, I _N = I _N terminal block gray 280-402 200(8x25) | Jumper Cover, for 1-conductor female plugs, 5 poles gray 769-436 100(4x25) |
| Protective warning marker, with high-voltage symbol, for 5 terminal blocks yellow 280-415 100(4x25) | Locking Lever, for 1-pole female plugs gray 769-428 100(4x25) orange 769-429 100(4x25) | Locking Lever, for female plugs, 2 poles and more gray 769-430 100(4x25) orange 769-431 100 |
| Coding pin, for coding female plugs orange 769-435 100(4x25) | Disconnect lock, for disconnect tab used on 280/281 and 769 Series disconnect terminal blocks red 709-170 200(8x25) | Operating lever, loose, for female plugs and male connectors with CAGE CLAMP® connection 769-434 2000 (20x100) |
| Operating tool, for female plugs and male connectors with CAGE CLAMP® connection 210-490 1 | Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade 210-720 1 | Test plug, with 500 mm cable, 2.3 mm Ø red 210-136 50 |
| Miniature WSB Quick marking system, see Section 6 | WMB Multi marking system, for double-deck carrier terminal blocks (see Section 6) | |

Side-Entry, Rail-Mounted Terminal Blocks 279 to 284 Series

Conductor termination



Open clamping unit using a screwdriver and insert stripped conductor until it hits backstop.



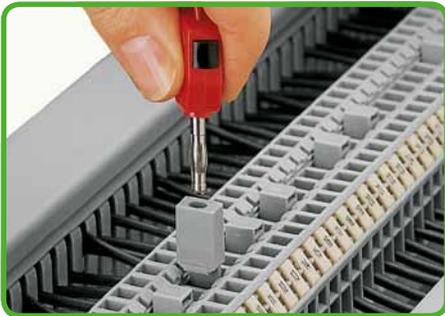
The plunger is placed into the upper operating slot of the side-entry terminal block and the clamp is hooked into the lateral operating slot. The contact is fully opened by pressing the handles together until they engage. Insert stripped conductor until it hits backstop.

Marking



Marking using WMB Multi markers.

Testing

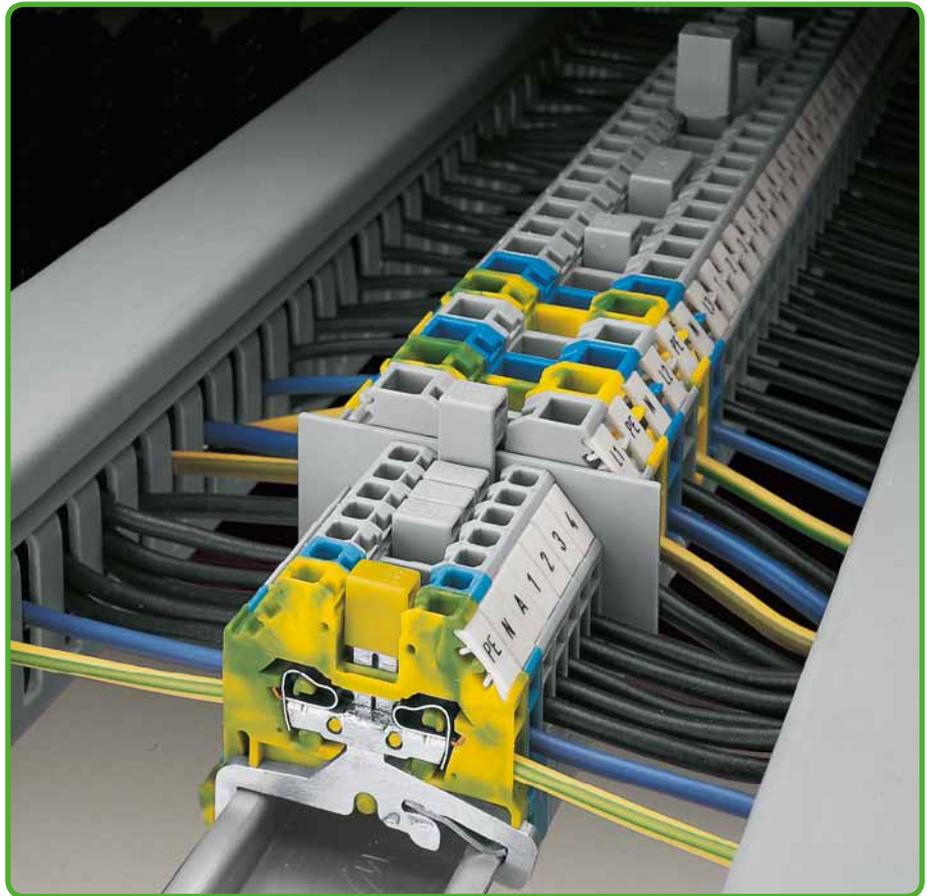


Testing with test plug adapter.

Commoning



Commoning with adjacent jumpers. Push jumper down until fully inserted!

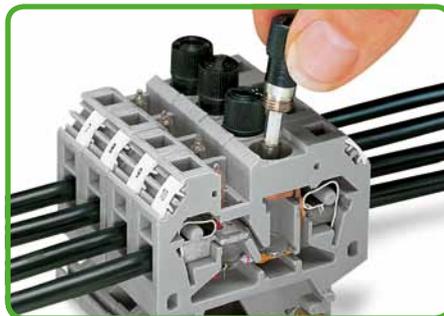


Commoning with step-down jumpers



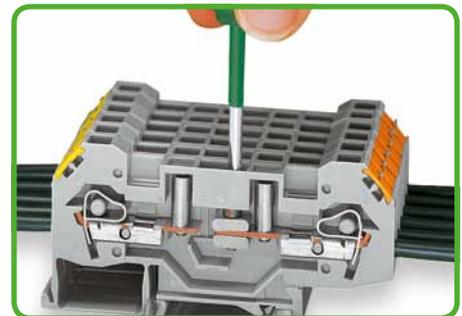
Commoning side-entry rail-mounted terminal blocks with step-down jumpers.

Fuse terminal blocks



Replacing a fuse.

Disconnect terminal blocks



Shifting the disconnect slide link.

CAGE CLAMP® clamps the following copper conductors:



solid



stranded



fine-stranded



tip-bonded



with ferrule



with pin terminal

Strip length, see packaging or instructions.

Through and Ground Conductor Terminal Blocks, Side-Entry 279 to 281 Series

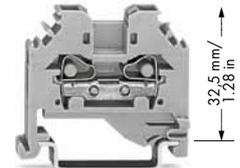
| | | |
|---|--|--|
| <p>0.08 - 1.5 mm² 800 V/8 kV/3 I_N 18 A</p> <p>Terminal block width 4 mm / 0.157 in 8 - 9 mm / 0.33 in</p> <p>AWG 28 - 16 300 V, 10 A 600 V, 15 A </p> <p>Approvals</p> | <p>0.08 - 2.5 mm² 800 V/8 kV/3 I_N 24 A</p> <p>Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in</p> <p>AWG 28 - 12* 600 V, 20 A 600 V, 20 A </p> <p>Approvals</p> | <p>0.08 - 4 mm² 800 V/8 kV/3 I_N 32 A</p> <p>Terminal block width 6 mm / 0.236 in 9 - 10 mm / 0.37 in</p> <p>AWG 28 - 12 600 V, 20 A 600 V, 20 A </p> <p>Approvals</p> |
|---|--|--|



← 42,5 mm/1.67 in →



← 42,5 mm/1.67 in →



← 42,5 mm/1.67 in →

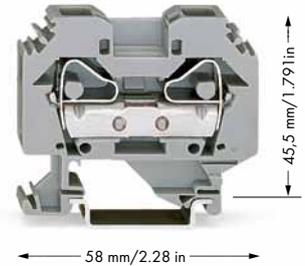
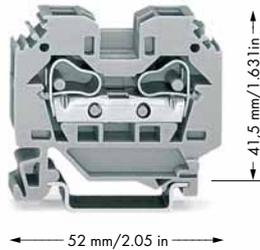
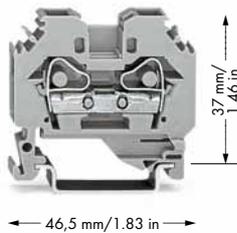
| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|---|----------------------|------------|---|----------------------|------------|---|----------------------|------------|
| 2-conductor through terminal block | | | 2-conductor through terminal block | | | 2-conductor through terminal block | | |
| | 279-101 | 100 | | 280-101 | 100 | | 281-101 | 100 |
| | 279-104 | 100 | | 280-104 | 100 | | 281-104 | 100 |
| 2-conductor ground terminal block | | | 2-conductor ground terminal block | | | 2-conductor ground terminal block | | |
| | 280-107 | 100 | | 281-107 | 100 | | | |
| Item-Specific Accessories | | | Item-Specific Accessories | | | Item-Specific Accessories | | |
| End and intermediate plate, 2.5 mm thick | | | End and intermediate plate, 2.5 mm thick | | | End and intermediate plate, 3 mm thick | | |
| | orange 280-302 | 100 (4x25) | | orange 280-302 | 100 (4x25) | | orange 281-302 | 100 (4x25) |
| | gray 280-301 | 100 (4x25) | | gray 280-301 | 100 (4x25) | | gray 281-301 | 100 (4x25) |
| Separator, oversized, 2 mm thick | | | Separator, oversized, 2 mm thick | | | Separator, oversized, 2 mm thick | | |
| | orange 280-322 | 100 (4x25) | | orange 280-322 | 100 (4x25) | | orange 281-322 | 100 (4x25) |
| | gray 280-332 | 100 (4x25) | | gray 280-332 | 100 (4x25) | | gray 281-332 | 100 (4x25) |
| Accessories, 279 Series | | | Accessories, 280 Series | | | Accessories, 281 Series | | |
| Appropriate marking system: WMB | | | Appropriate marking system: WMB | | | Appropriate marking system: WMB | | |
| Adjacent jumper, insulated, I_N 15 A | | | Adjacent jumper, insulated, I_N 24 A | | | Adjacent jumper, insulated, I_N 32 A | | |
| | gray 279-402 | 200 (8x25) | | gray 280-402 | 200 (8x25) | | gray 281-402 | 200 (8x25) |
| | yellow-green 279-422 | 200 (8x25) | | yellow-green 280-422 | 200 (8x25) | | yellow-green 281-422 | 200 (8x25) |
| Alternate jumper, insulated, I_N 15 A | | | Alternate jumper, insulated, I_N 24 A | | | Alternate jumper, insulated, I_N 32 A | | |
| | gray 279-409 | 100 (4x25) | | gray 280-409 | 100 (4x25) | | gray 281-409 | 100 (4x25) |
| Staggered jumper, insulated, I_N 24 A, 5 mm wide | | | Staggered jumper, insulated, I_N 24 A, 5 mm wide | | | Staggered jumper, insulated, I_N 32 A, 6 mm wide | | |
| | from 1 to 2 780-452 | 100 (4x25) | | from 1 to 2 780-452 | 100 (4x25) | | from 1 to 2 781-452 | 100 (4x25) |
| | from 1 to 3 780-453 | 100 (4x25) | | from 1 to 3 780-453 | 100 (4x25) | | from 1 to 3 781-453 | 100 (4x25) |
| | from 1 to 4 780-454 | 100 (4x25) | | from 1 to 4 780-454 | 100 (4x25) | | from 1 to 4 781-454 | 100 (4x25) |
| | from 1 to 5 780-455 | 50 (2x25) | | from 1 to 5 780-455 | 50 (2x25) | | from 1 to 5 781-455 | 50 (2x25) |
| | : | : | | : | : | | from 1 to 6 781-456 | 50 (2x25) |
| | from 1 to 8 780-458 | 50 (2x25) | | from 1 to 8 780-458 | 50 (2x25) | | | |
| Test plug adapter, for terminal blocks 1.5-10 mm² (AWG 16-8), 8 mm wide | | | Test plug adapter, for terminal blocks 1.5-10 mm² (AWG 16-8), 8 mm wide | | | Test plug adapter, for terminal blocks 1.5-10 mm² (AWG 16-8), 8 mm wide | | |
| | 209-170 | 50 (2x25) | | 209-170 | 50 (2x25) | | 209-170 | 50 (2x25) |
| for 4 mm Ø test plug | | | for 4 mm Ø test plug | | | for 4 mm Ø test plug | | |
| Protective warning marker, with high-voltage symbol, for 5 terminal blocks | | | Protective warning marker, with high-voltage symbol, for 5 terminal blocks | | | Protective warning marker, with high-voltage symbol, for 5 terminal blocks | | |
| | yellow 279-405 | 100 (4x25) | | yellow 280-405 | 100 (4x25) | | yellow 281-405 | 100 (4x25) |
| Operating tool, for side-entry rail-mounted terminal blocks | | | Operating tool, for side-entry rail-mounted terminal blocks | | | Operating tool, for side-entry rail-mounted terminal blocks | | |
| | 210-143 | 1 | | 210-143 | 1 | | 210-141 | 1 |
| Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade | | | Suitable for Ex i applications | | | Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade | | |
| | 210-720 | 1 | | | | | 210-720 | 1 |

Approvals are available online at: www.wago.com.
* AWG 12: THHN, THWN

For technical explanations and abbreviations, see technical section.

Through and Ground Conductor Terminal Blocks, Side-Entry 282 to 284 Series

| | | |
|---|--|--|
| <p>0.2 - 6 mm² 800 V/8 kV/3 I_N 41 A</p> <p>Terminal block width 8 mm / 0.315 in 12 - 13 mm / 0.49 in</p> <p>AWG 24 - 10 600 V, 30 A 600 V, 10 A</p> | <p>0.2 - 10 mm² 800 V/8 kV/3 I_N 57 A</p> <p>Terminal block width 10 mm / 0.394 in 12 - 13 mm / 0.49 in</p> <p>AWG 24 - 8 600 V, 50 A 600 V, 65 A</p> | <p>0.2 - 16 mm² 800 V/8 kV/3 I_N 76 A</p> <p>Terminal block width 12 mm / 0.472 in 16 - 17 mm / 0.65 in</p> <p>AWG 24 - 6 600 V, 65 A 600 V, 90 A</p> |
|---|--|--|



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|---|--------------|---|---|--------------|--|--|--------------|--|
| 2-conductor through terminal block | | | 2-conductor through terminal block | | | 2-conductor through terminal block | | |
| gray | 282-101 | 50 | gray | 284-101 | 50 | gray | 283-101 | 50 |
| blue | 282-104 | 50 | blue | 284-104 | 50 | blue | 283-104 | 50 |
| 2-conductor ground terminal block | | | 2-conductor ground terminal block | | | 2-conductor ground terminal block | | |
| green-yellow | 282-107 | 50 | green-yellow | 284-107 | 50 | green-yellow | 283-107 | 50 |
| Item-Specific Accessories | | | Item-Specific Accessories | | | Item-Specific Accessories | | |
| End and intermediate plate, 4 mm thick | | | End and intermediate plate, 2.5 mm thick | | | End and intermediate plate, 4 mm thick | | |
| | orange | 282-302 100 (4x25) | | orange | 284-302 100 (4x25) | | orange | 283-302 50 (2x25) |
| | gray | 282-301 100 (4x25) | | gray | 284-301 100 (4x25) | | gray | 283-301 50 (2x25) |
| Separator, oversized, 2 mm thick | | | Separator, oversized, 2 mm thick | | | Separator, oversized, 2 mm thick | | |
| | orange | 282-322 100 (4x25) | | orange | 284-322 100 (4x25) | | orange | 283-322 50 (2x25) |
| | gray | 282-332 100 (4x25) | | gray | 284-332 100 (4x25) | | gray | 283-332 50 (2x25) |
| Accessories, 282 Series Appropriate marking system: WMB | | | Accessories, 284 Series Appropriate marking system: WMB | | | Accessories, 283 Series Appropriate marking system: WMB | | |
| Adjacent jumper, insulated, I_N 41 A | | | Adjacent jumper, insulated, I_N 57 A | | | Adjacent jumper, insulated, I_N 70 A | | |
| | gray | 282-402 100 (4x25) | | gray | 284-402 100 (4x25) | | gray | 283-402 50 (2x25) |
| | yellow-green | 282-422 100 (4x25) | | yellow-green | 284-422 100 (4x25) | | yellow-green | 283-422 50 (2x25) |
| Alternate jumper, insulated, I_N 41 A | | | Alternate jumper, insulated, I_N 57 A | | | Alternate jumper, insulated, I_N 76 A | | |
| | gray | 282-409 100 (4x25) | | gray | 284-409 100 (4x25) | | gray | 283-409 50 (2x25) |
| Test plug adapter, for terminal blocks 1.5-10 mm² (AWG 16-8), 8 mm wide | | | Test plug adapter, for terminal blocks 1.5-10 mm² (AWG 16-8), 8 mm wide | | | Test plug adapter, for terminal blocks 1.5-16 mm² (AWG 16-6), 11.6 mm wide | | |
| | | 209-170 50 (2x25) | | | 209-170 50 (2x25) | | | 283-404 25 |
| for 4 mm Ø test plug | | | for 4 mm Ø test plug | | | for 4 mm Ø test plug | | |
| Step-down jumper, insulated, I_N 15 A | | | Step-down jumper, insulated, I_N 30 A | | | Step-down jumper, insulated, I_N 32 A | | |
| | | 10/6 mm ² to 4/2.5/1.5 mm ² / AWG 12/14/16 | | | 10/6 mm ² /AWG 8/10 to 6/ 4 mm ² /AWG 10/12 | | | 16 mm ² /AWG 6 to 4 mm ² / AWG 12 |
| | gray | 284-414 50 (2x25) | | gray | 284-413 50 (2x25) | | gray | 283-414 50 (2x25) |
| Protective warning marker, with high-voltage symbol, for 5 terminal blocks | | | Protective warning marker, with high-voltage symbol, for 5 terminal blocks | | | Protective warning marker, with high-voltage symbol, for 5 terminal blocks | | |
| | yellow | 282-405 100 (4x25) | | yellow | 284-405 50 (2x25) | | yellow | 283-405 50 (2x25) |
| Operating tool, for side-entry rail-mounted terminal blocks | | | Operating tool, for side-entry rail-mounted terminal blocks | | | Operating tool, for side-entry rail-mounted terminal blocks | | |
| | | 210-141 1 | | | 210-141 1 | | | 210-141 1 |
| Operating tool with partially insulated shaft, type 3, [5.5 x 0.8] mm blade | | | Suitable for Ex i applications | | | Banana plugs, only for safety extra-low voltage (42 V) | | |
| | | 210-721 1 | | | | | | |
| | | | | | | | red | 215-212 50 |
| | | | | | | | blue | 215-711 50 |

1 Approvals are available online at: www.wago.com.

For technical explanations and abbreviations, see technical section.

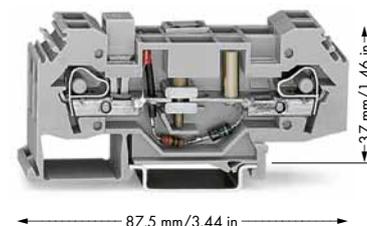
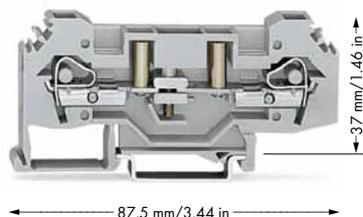
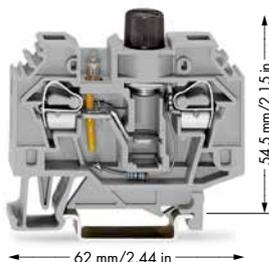
Fuse Terminal Blocks, Disconnect Terminal Blocks and Ground Conductor Disconnect Terminal Blocks 282 Series

CAGE CLAMP®

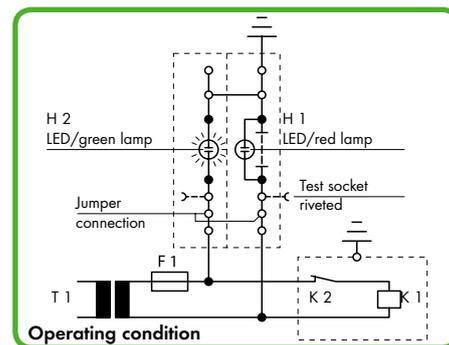
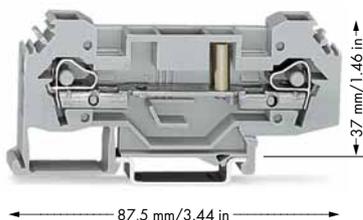
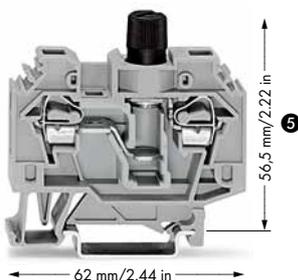
| | | |
|---|--|---|
| <p>0.2 - 6 mm² 220 V ≈ ③ I_N 10 A max. ③</p> <p>AWG 24 - 10 600 V, 10 A ③ ④ 250 V, 10 A ③ ④</p> <p>Terminal block width 13 mm / 0.512 in 12 - 13 mm / 0.49 in</p> <p>① Approvals</p> | <p>0.2 - 6 mm² 400 V/6 kV/3 I_N 41 A</p> <p>AWG 24 - 10 300 V, 30 A ④ 300 V, 40 A ④</p> <p>Terminal block width 8 mm / 0.315 in 12 - 13 mm / 0.49 in</p> <p>① Approvals</p> | <p>0.2 - 6 mm² AWG 24 - 10</p> <p>Terminal block width 16 mm / 0.63 in 12 - 13 mm / 0.49 in</p> <p>① Approvals</p> |
|---|--|---|

③ Electrical ratings are given by the fuse.

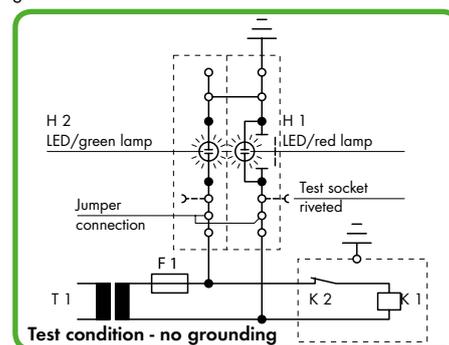
Front-entry, ground conductor disconnect terminal blocks, see page 67.



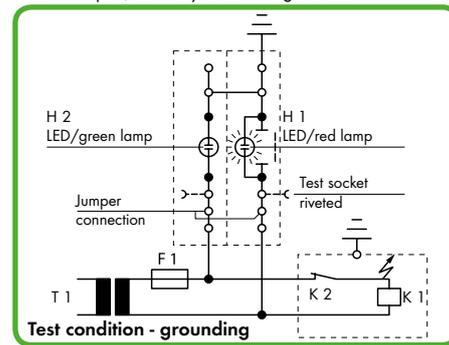
| Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Voltage | Item No. | Pack. Unit | |
|--|-------------------|-------|---|------------|---------|---|------------|----|
| Fuse terminal block, gray, for miniature metric fuses, with blown fuse indication by neon lamp, 250 VAC/220 VDC | | | Disconnect/test terminal block, with 4 mm Ø test sockets | | | Ground conductor disconnect terminal block, gray | | |
| ○ 5 x 20 mm | 282-124 ④ | 40 | ○ gray | 282-131 | 25 | ○ 24 V AC/DC | 282-140 | 12 |
| ○ 1/4" x 1 1/4" | 282-128/281-417 ⑤ | 40 | Disconnect/test terminal block, without test sockets | | | ○ 48 V AC/DC | 282-141 | 12 |
| by neon lamp, 120 V AC/DC | | | ○ gray | 282-135 | 25 | ○ 120 V AC/DC | 282-138 | 12 |
| ○ 1/4" x 1 1/4" | 282-128/281-418 ⑤ | 40 | | | | ○ 230 V AC/DC | 282-139 | 12 |
| by LED, 24 VDC | | | | | | | | |
| ○ 1/4" x 1 1/4" | 282-128/281-413 ⑤ | 40 | | | | | | |



Slide link closed, auxiliary circuit grounded, green LED illuminates.



Slide link open, auxiliary circuit not grounded.



Slide link open, auxiliary circuit not grounded, red LED illuminates.

| Item No. | Pack. Unit | Color | Item No. | Pack. Unit | |
|--|------------|-------------------------------|----------|------------|----|
| Fuse terminal block, gray, for miniature metric fuses, without blown fuse indication, 500 V/6 kV/3 max. | | Through terminal block | | | |
| ○ 5 x 20 mm | 282-122 ④ | 40 | ○ gray | 282-133 | 25 |
| ○ 1/4" x 1" | 282-120 ⑤ | 40 | | | |
| ○ 1/4" x 1 1/4" | 282-128 ⑤ | 40 | | | |

Item-Specific Accessories

| End and intermediate plate, 4 mm thick | | | |
|--|--------|---------|-----------|
| | orange | 282-312 | 50 (2x25) |
| | gray | 282-311 | 50 (2x25) |

| End and intermediate plate, 4 mm thick | | | |
|--|--------|---------|-----------|
| | orange | 282-315 | 50 (2x25) |
| | gray | 282-314 | 50 (2x25) |

Accessories, 282 Series

Appropriate marking system: **WMB**

| Miniature metric fuse | | | |
|-----------------------|---------------|---------|-------|
| | 200 (20x10) | | |
| | 5 x 20 mm | 282-451 | 6.3 A |
| | 1/4" x 1" | 282-458 | 10 A |
| | 1/4" x 1 1/4" | 282-457 | 10 A |

| Adjacent jumper, insulated, I _N 41 A | | | |
|---|------|---------|------------|
| | gray | 282-402 | 100 (4x25) |

| Test plug adapter, for terminal blocks 1.5-10 mm ² | | | |
|---|-----------------------|---------|-----------|
| | (AWG 16-8), 8 mm wide | 209-170 | 50 (2x25) |
| for 4 mm Ø test plug | | | |

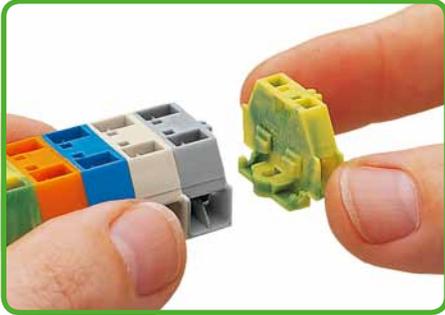
| Alternate jumper, insulated, I _N 41 A | | | |
|--|------|---------|------------|
| | gray | 282-409 | 100 (4x25) |

| Test plug, 6 mm wide, with CAGE CLAMP® | | | |
|--|--|---------|------------|
| | for 0.08-2.5 mm ² (AWG 28-14) | | |
| | I _N 24 A | 281-407 | 100 (4x25) |

| Lock-out, snap-on type, | | | |
|-------------------------|----------------------------------|---------|------------|
| | prevents reclosing of slide link | | |
| | orange | 282-137 | 100 (4x25) |

Modular Terminal Blocks and Terminal Strips, Side-Entry 260 to 262 Series

Assembly

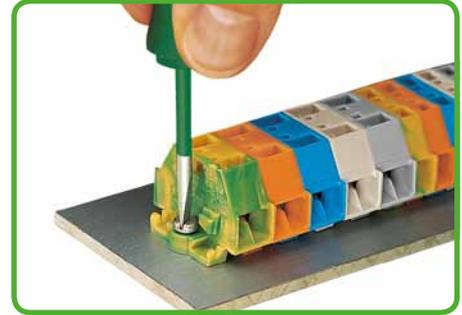


Assembling modular terminal blocks into terminal strips.



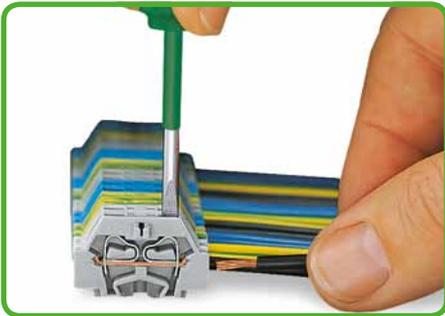
Mounting an end plate.

Mounting

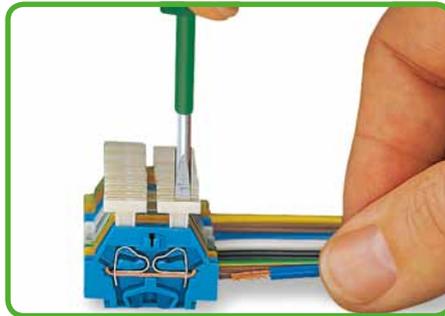


Terminal strip with fixing flanges, screw mount.

CAGE CLAMP® connection



Conductor termination



Conductor termination via push-button.

Mounting



Terminal strip with fixing flanges, screw mounting of 209-123 mounting adapter (distance between mounting adapters should be 35-40 mm).

Marking

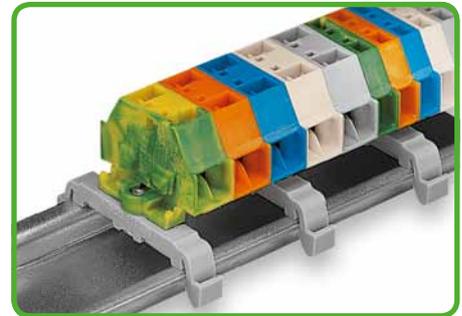


Marking with self-adhesive marker strips.



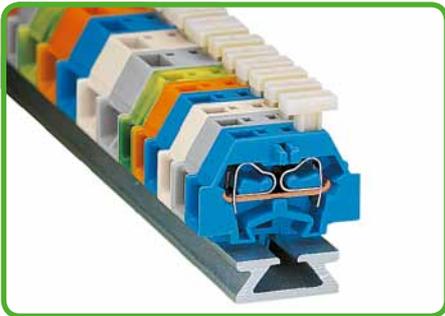
Marking by direct printing (upon request).

Mounting



Terminal strip with fixing flanges, on DIN 35 rail.

Types

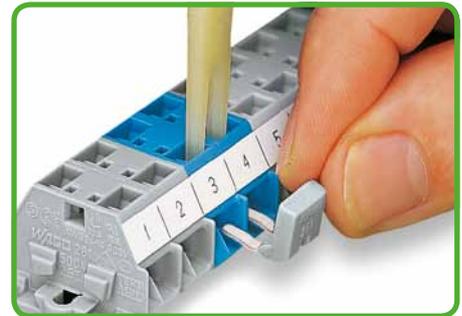


Terminal strip with push-buttons on one side.



Terminal strip with marker slot for miniature WSB Quick marking system (see Full Line Catalog, Volume 1).

Commoning



Commoning with comb-style jumper bar.

CAGE CLAMP® clamps the following copper conductors:



solid



stranded



fine-stranded



tip-bonded



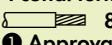
with crimped ferrule*

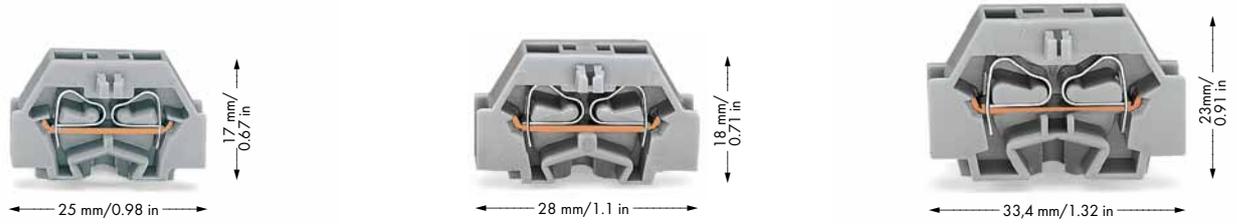


with pin terminal

*With ferruled conductors, it is necessary to use a terminal block one size larger than the conductor's nominal cross section. Strip length, see packaging or instructions.

Modular Terminal Blocks and Terminal Strips 260 to 262 Series

| | | | | | |
|---|--|--|--|--|--|
| <p>0.08 - 1.5 mm² 400 V/6 kV/3 I_N 18 A 2-cond. terminal block width 5 mm/0.197 in. 4-cond. terminal block width 8 mm/0.315 in.</p>  <p>8 - 9 mm / 0.33 in</p> <p>① Approvals</p> | <p>AWG 28 - 16 300 V, 10 A  300 V, 15 A </p> | <p>0.08 - 2.5 mm² 500 V/6 kV/3 I_N 24 A 2-cond. terminal block width 6 mm/0.236 in 4-cond. terminal block width 10 mm/0.394 in</p>  <p>8 - 9 mm / 0.33 in</p> <p>① Approvals</p> | <p>AWG 28 - 14 300/600 V, 15 A  300/600 V, 20 A </p> | <p>0.08 - 4 mm² 630 V/8 kV/3 I_N 24 A  (32 A ) 2-cond. terminal block width 7 mm/0.276 in 4-cond. terminal block width 12 mm/0.472 in</p>  <p>9 - 10 mm / 0.37 in</p> <p>① Approvals</p> | <p>AWG 28 - 12 300/600 V, 20 A  300/600 V, 20 A </p> |
|---|--|--|--|--|--|



| Color | Item No. 2-cond. | Item No. 4-cond. | Pack. Unit | Color | Item No. 2-cond. | Item No. 4-cond. | Pack. Unit | Color | Item No. 2-cond. ② | Item No. 4-cond. ③ | Pack. Unit |
|---|---------------------|---------------------|------------|--|---------------------|---------------------|------------|--|-----------------------|-----------------------|------------|
| gray | 260-301 | 260-331 | 300 (6x50) | gray | 261-301 | 261-331 | 200 (4x50) | gray | 262-301 | 262-331 | 100 (2x50) |
| light gray | 260-303 | 260-333 | 300 (6x50) | light gray | 261-303 | 261-333 | 200 (4x50) | light gray  | 262-130 | 262-230 | 100 (2x50) |
| blue | 260-304 | 260-334 | 300 (6x50) | blue  | 261-304 | 261-334 | 200 (4x50) | blue  | 262-304 | 262-334 | 100 (2x50) |
| orange | 260-306 | 260-336 | 300 (6x50) | orange | 261-306 | 261-336 | 200 (4x50) | orange | 262-306 | 262-336 | 100 (2x50) |
| green-yellow | 260-307 | 260-337 | 300 (6x50) | green-yellow | 261-307 | 261-337 | 200 (4x50) | green-yellow | 262-307 | 262-337 | 100 (2x50) |
| Versions with push-buttons, see bottom right. | | | | | | | | | | | |



| Color | Item No. 2-cond. | Item No. 4-cond. | Pack. Unit | Color | Item No. 2-cond. | Item No. 4-cond. | Pack. Unit | Color | Item No. 2-cond. ② | Item No. 4-cond. ③ | Pack. Unit |
|--|---------------------|---------------------|------------|--|---------------------|---------------------|------------|--|-----------------------|-----------------------|------------|
| Terminal strip with fixing flanges, gray | | | | Terminal strip with fixing flanges, gray | | | | Terminal strip with fixing flanges, gray | | | |
| 2 | 260-102 | 260-202 | 100 | 2 | 261-102 | 261-202 | 100 | 2 | 262-102 | 262-202 | 100 |
| 3 | 260-103 | 260-203 | 100 | 3 | 261-103 | 261-203 | 100 | 3 | 262-103 | 262-203 | 100 |
| : | : | : | | : | : | : | | : | : | : | |
| 12 | 260-112 | 260-212 | 25 | 12 | 261-112 | 261-212 | 25 | 12 | 262-112 | 262-212 | 25 |

Accessories, 260/261/262 Series

Appropriate marking system, see Section 6.

| <p>End plate with fixing flange, gray for 260 Series gray 260-361 100 (2x50) for 261 Series gray 261-361 100 (2x50) for 262 Series gray 262-361 50</p> | <p>Mounting foot with screw, for DIN 35 rail, 6 mm wide, can be screwed on terminal blocks with fixing flange gray 209-123 25</p> | <p>Item no. suffix for terminal blocks and terminal strips with push-buttons, for 261 Series only. With push-buttons on one side:  2-cond. block 261-.../331-000 4-cond. block 261-.../332-000</p> | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|---------------------|------------|------------|----------------|---------------------------|--------|----------------|----------------|-----------------------------|----------------|----------------|-------|-----------------------------|----------------|---|--|----------------|-------|--|----------------|--|
| <p>Comb-style jumper bar, insulated, 2-way </p> <table border="1"> <thead> <tr> <th>Series</th> <th>I_N</th> <th>Reduced Cross Sect.</th> <th>Pack. Unit</th> </tr> </thead> <tbody> <tr> <td>260-402</td> <td>10 A</td> <td>1 mm²/AWG 18</td> <td>25 pcs</td> </tr> <tr> <td>261-402</td> <td>16 A</td> <td>1.5 mm²/AWG 16</td> <td>25 pcs</td> </tr> <tr> <td>262-402</td> <td>16 A</td> <td>2.5 mm²/AWG 14</td> <td>25 pcs</td> </tr> </tbody> </table> | Series | I _N | Reduced Cross Sect. | Pack. Unit | 260-402 | 10 A | 1 mm ² /AWG 18 | 25 pcs | 261-402 | 16 A | 1.5 mm ² /AWG 16 | 25 pcs | 262-402 | 16 A | 2.5 mm ² /AWG 14 | 25 pcs | <p>Test plug module  100 (4x25)</p> | <p>With push-buttons on both sides:  2-cond. block 261-.../341-000 4-cond. block 261-.../342-000</p> | | | | | |
| Series | I _N | Reduced Cross Sect. | Pack. Unit | | | | | | | | | | | | | | | | | | | | |
| 260-402 | 10 A | 1 mm ² /AWG 18 | 25 pcs | | | | | | | | | | | | | | | | | | | | |
| 261-402 | 16 A | 1.5 mm ² /AWG 16 | 25 pcs | | | | | | | | | | | | | | | | | | | | |
| 262-402 | 16 A | 2.5 mm ² /AWG 14 | 25 pcs | | | | | | | | | | | | | | | | | | | | |
| <p>Operating tool, insulated, for inserting comb-style jumper bars 2-way 209-132 1</p> | <p>Locking devices</p> <table border="1"> <thead> <tr> <th>Series</th> <th>with</th> <th>without</th> </tr> </thead> <tbody> <tr> <td>260 / 5 mm</td> <td>260-404</td> <td>249-135</td> </tr> <tr> <td>8 mm</td> <td>260-405</td> <td>249-138</td> </tr> <tr> <td>261 / 6 mm</td> <td>261-404</td> <td>249-136</td> </tr> <tr> <td>10 mm</td> <td>261-405</td> <td>249-139</td> </tr> <tr> <td>262 / 7 mm</td> <td></td> <td>249-137</td> </tr> <tr> <td>12 mm</td> <td></td> <td>249-140</td> </tr> </tbody> </table> | Series | with | without | 260 / 5 mm | 260-404 | 249-135 | 8 mm | 260-405 | 249-138 | 261 / 6 mm | 261-404 | 249-136 | 10 mm | 261-405 | 249-139 | 262 / 7 mm | | 249-137 | 12 mm | | 249-140 | <p>Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade  210-720 1</p> |
| Series | with | without | | | | | | | | | | | | | | | | | | | | | |
| 260 / 5 mm | 260-404 | 249-135 | | | | | | | | | | | | | | | | | | | | | |
| 8 mm | 260-405 | 249-138 | | | | | | | | | | | | | | | | | | | | | |
| 261 / 6 mm | 261-404 | 249-136 | | | | | | | | | | | | | | | | | | | | | |
| 10 mm | 261-405 | 249-139 | | | | | | | | | | | | | | | | | | | | | |
| 262 / 7 mm | | 249-137 | | | | | | | | | | | | | | | | | | | | | |
| 12 mm | | 249-140 | | | | | | | | | | | | | | | | | | | | | |

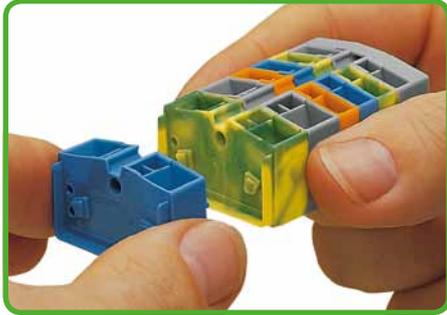
① Approvals are available online at: www.wago.com.

For technical explanations and abbreviations, see technical section.



Modular Terminal Blocks and Terminal Strips, Front-Entry 264 Series

Assembly



Assembling modular terminal blocks into terminal strips.



Mounting an "end terminal block" with fixing flange.

Mounting



Terminal strip with fixing flanges, screw mount.

CAGE CLAMP® connection

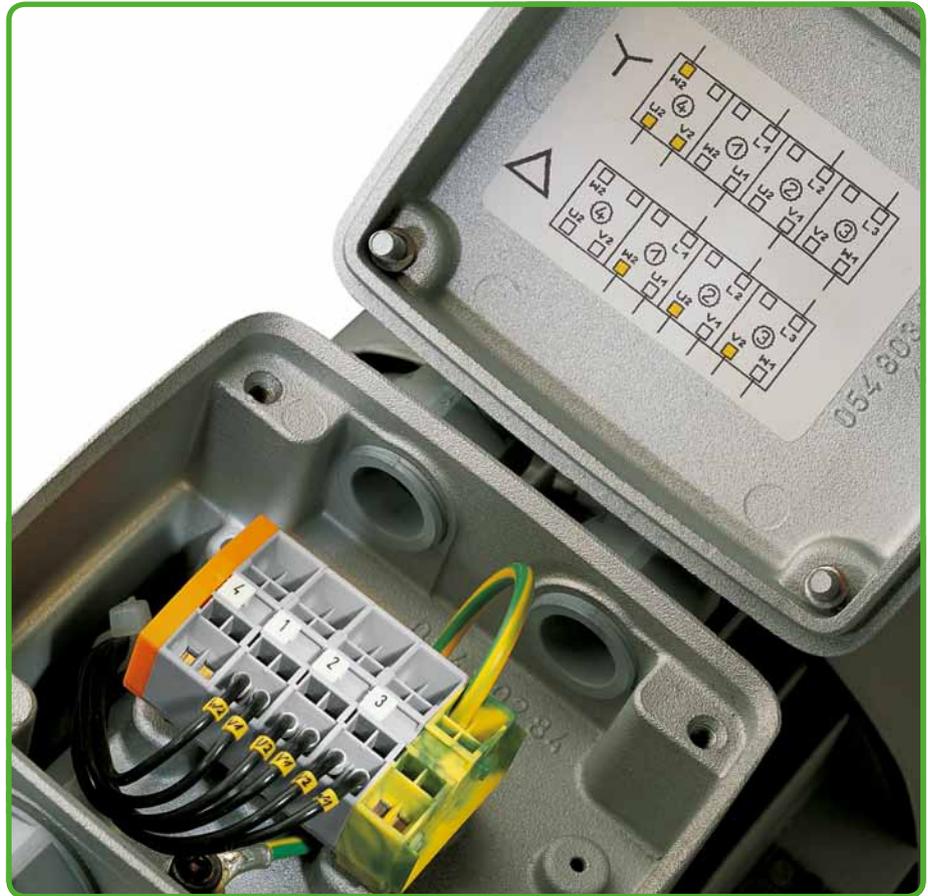


Inserting a conductor via operating tool.

Removal



Removing a terminal block.

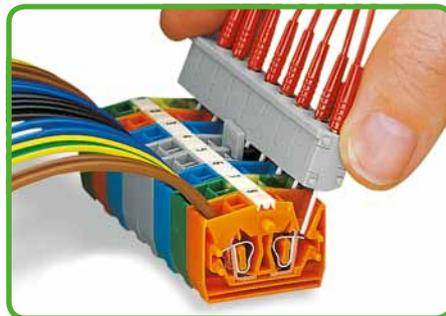


Commoning



Commoning with comb-style jumper bar.

Testing



Testing with test plug module assembly - touch contact.

Marking



Marking using Miniature WSB Quick markers.

CAGE CLAMP® clamps the following copper conductors:



solid



stranded



fine-stranded



tip-bonded



with crimped ferrule*



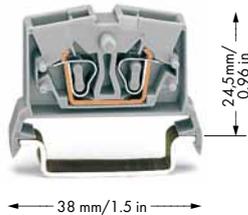
with pin terminal

*With ferruled conductors, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

Strip length, see packaging or instructions.

Modular Terminal Blocks and Terminal Strips 264 Series

| | | |
|--|--|--|
| <p>0.08 - 2.5 mm² 800 V/8 kV/3 I_N 24 A</p> <p>AWG 28 - 12** 600 V, 20 A  600 V, 20 A </p> <p>2-cond. terminal block width 6 mm/0.236 in 4-cond. terminal block width 10 mm/0.394 in</p>  <p>8 - 9 mm / 0.33 in</p> <p> Approvals</p> | <p>0.08 - 2.5 mm² 800 V/8 kV/3 I_N 24 A</p> <p>AWG 28 - 12** 600 V, 20 A  600 V, 20 A </p> <p>2-cond. terminal block width 6 mm/0.236 in 4-cond. terminal block width 10 mm/0.394 in</p>  <p>8 - 9 mm / 0.33 in</p> <p> Approvals</p> | <p>0.08 - 2.5 mm² 800 V/8 kV/3 I_N 24 A</p> <p>AWG 28 - 12** 600 V, 20 A  600 V, 20 A </p> <p>2-cond. terminal block width 6 mm/0.236 in 4-cond. terminal block width 10 mm/0.394 in</p>  <p>8 - 9 mm / 0.33 in</p> <p> Approvals</p> |
|--|--|--|



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | | | | |
|---|----------|------------|-----------------------------|---|------------|-----------------------------|----------|---|---|---------|---------|-----|
| 2-cond. block 4-cond. block | | | 2-cond. block 4-cond. block | | | 2-cond. block 4-cond. block | | | | | | |
| Through terminal block, for DIN 35 rail | | | | | | | | | | | | |
|  | 264-711 | 264-731 | 100 |  | 264-321 | 264-351 | 100 |  | 2 | 264-102 | 264-202 | 100 |
|  | 264-714 | 264-734 | 100 |  | 264-324 | 264-354 | 100 |  | 3 | 264-103 | 264-203 | 100 |
|  | 264-716 | 264-736 | 100 |  | 264-326 | 264-356 | 100 |  | 4 | 264-104 | 264-204 | 100 |
|  | 264-125 | 264-225 | 100 |  | 264-131 | 264-231 | 100 | : | : | : | : | : |
| Center terminal block without fixing flange | | | | | | | | | | | | |
| End terminal block with fixing flange | | | | | | | | | | | | |
| Center terminal block with snap-in mounting foot | | | | | | | | | | | | |
| Terminal strip with fixing flanges, gray | | | | | | | | | | | | |
| Terminal strip with snap-in mounting feet, gray | | | | | | | | | | | | |
| For terminal strips mixed in different colors, please contact factory. | | | | | | | | | | | | |
| End plates for DIN 35 rail, 4 mm thick | | | | | | | | | | | | |
| End plates with fixing flange, 4 mm thick | | | | | | | | | | | | |
| End plate, for blocks with snap-in mounting foot, 4 mm thick | | | | | | | | | | | | |
| Accessories, 264 Series | | | | | | | | | | | | |
| Comb-style jumper bar, insulated, I_N 16 A, 2-way | | | | | | | | | | | | |
| Operating tool, insulated, 2-way, for comb-style jumper bar | | | | | | | | | | | | |
| Test plug modules | | | | | | | | | | | | |
| Alternate comb-style jumper bar, insulated, I_N = I_N terminal block, for 2-conductor blocks | | | | | | | | | | | | |
| Aluminum carrier rail, 1000 x 18 x 7 mm, for version with mounting feet | | | | | | | | | | | | |
| Test plug, with 500 mm cable | | | | | | | | | | | | |
| for 4-conductor blocks | | | | | | | | | | | | |
| Plastic end stop, with WSB marker slot, 6 mm wide, for 210-154 aluminum rail | | | | | | | | | | | | |
| Operating tool with partially insulated shaft, type 2, [3.5 x 0.5] mm blade | | | | | | | | | | | | |
| Separator for Ex e /Ex i applications, 66 mm wide, 4 mm thick | | | | | | | | | | | | |
| <p> Suitable for Ex i applications</p> <p> Suitable for Ex e II applications</p> <p>0.5 - 2.5 mm² AWG 20 - 12**</p> <p>690 V, 23 A</p> | | | | | | | | | | | | |
| DIN 35 rails and end stops, see Section 6 | | | | | | | | | | | | |

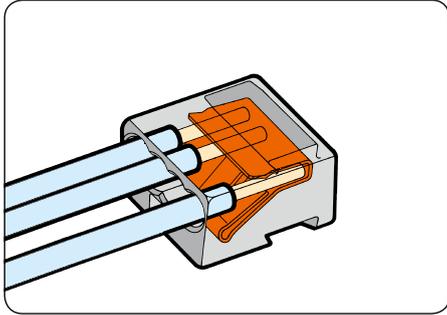


 All approvals and more information at www.wago.com.
**AWG 12: THHN, THWN

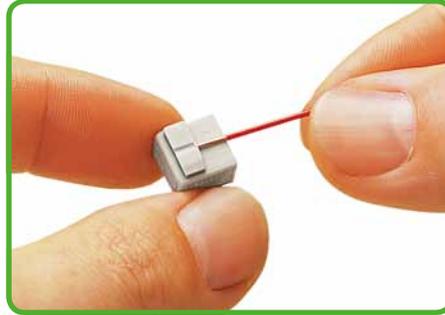
For technical explanations and abbreviations, see technical section.
Please find the entire product range in our Full Line Catalog, Volume 1.



MICRO PUSH WIRE® Connectors for Junction Boxes, 243 Series – Description and Handling –



Strip length



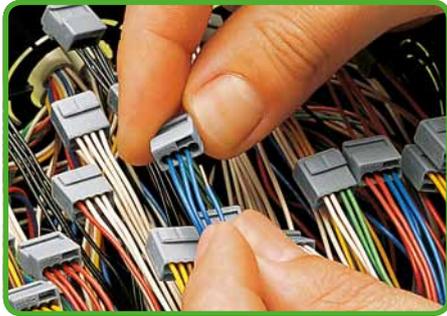
Strip solid conductor to 5 – 6 mm / 0.22 in.

Connector strips



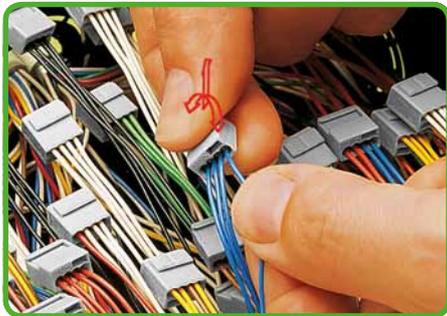
Assembling modular connectors to connector strips

PUSH WIRE® connection



Termination: Insert stripped conductor until it hits backstop.

PUSH WIRE® connection



Removal: Hold conductor to be removed and twist alternately left and right while pulling the connector.



Testing

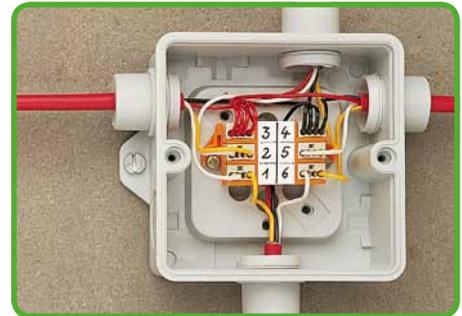


Testing

Applications



Switch (specialty connectors with solder pin termination)



Typical application in a terminal box for burglar alarm – screw mount.

PUSH WIRE® clamps
the following copper conductors:



solid

Strip length, see packaging or instructions.

Connectors for **EIB** applications, see Full Line Catalog, Volume 2.

MICRO PUSH WIRE® Connectors for Junction Boxes, Mounting Carriers 243 Series

| | | | | |
|---|--|---|--|--|
| 0.6 - 0.8 mm Ø "sol."** 100 V/1.5 kV/2 I _N 6 A | AWG 22 - 20 "sol."** 150 V, 7 A 150 V, 7 A | 0.6 - 0.8 mm Ø "sol."** 100 V/1.5 kV/2 I _N 6 A | AWG 22 - 20 "sol."** 150 V, 7 A 150 V, 7 A | Mounting carriers for MICRO PUSH WIRE® connectors |
| 5 - 6 mm / 0.22 in 1 Approvals | | 5 - 6 mm / 0.22 in 1 Approvals | | |



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Description | Item No. | Pack. Unit |
|--|----------|---------------|--|----------|-------------|------------------------------------|----------|------------|
| MICRO PUSH WIRE® connector for junction boxes, 4-conductor connector | | | MICRO PUSH WIRE® connector for junction boxes, 8-conductor connector | | | Mounting carrier, for 4 connectors | | |
| ● dark gray | 243-204 | 1000 (10x100) | ● dark gray | 243-208 | 500 (10x50) | for 6 connectors | 243-112 | 50 (5x10) |
| ● red | 243-804 | 1000 (10x100) | ● red | 243-808 | 500 (10x50) | Marking strips, plain | 243-113 | 50 (5x10) |
| ○ light gray | 243-304 | 1000 (10x100) | ○ light gray | 243-308 | 500 (10x50) | | 243-110 | 1 |
| ● yellow | 243-504 | 1000 (10x100) | ● yellow | 243-508 | 500 (10x50) | | | |

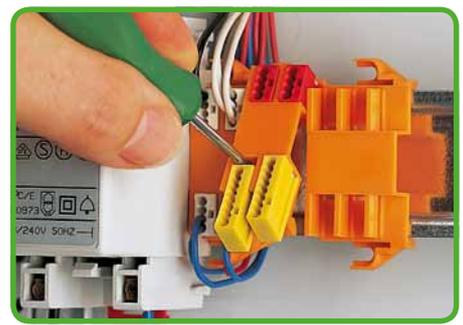
| | |
|---|----------------------|
| 0.4 - 0.5 mm Ø "sol."** 100 V/1.5 kV/2 I _N 6 A | AWG 26 - 24 "sol."** |
| 5 - 6 mm / 0.22 in 1 Approvals | |



Inserting a connector into the mounting carrier.

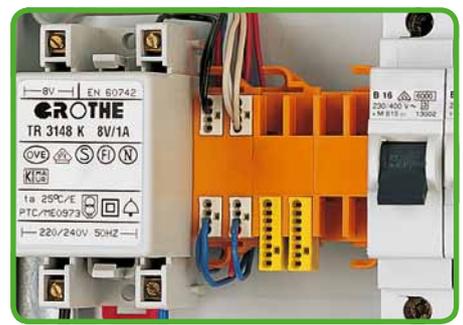
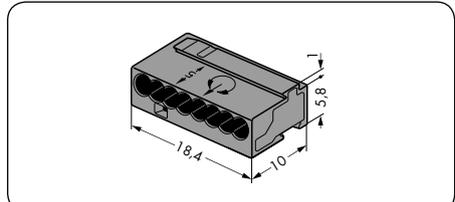
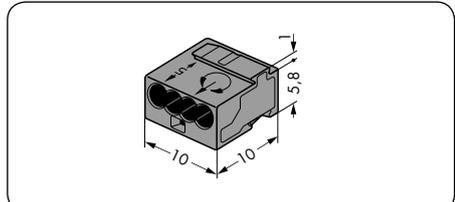


| Color | Item No. | Pack. Unit |
|--|----------|---------------|
| MICRO PUSH WIRE® connector for junction boxes, 4-conductor connector | | |
| ○ transparent | 243-144 | 1000 (10x100) |



Removing a mounting carrier from the DIN rail.

Dimensions



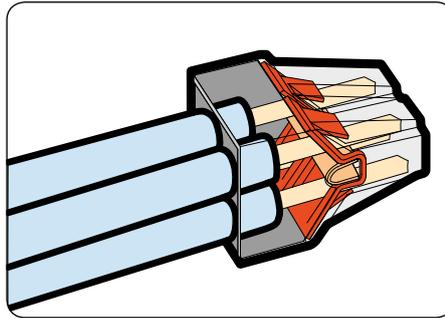
Example of residential door bell application - mounted on DIN 35 rail.

1 Approvals are available online at: www.wago.com. For technical explanations and abbreviations, see technical section.
 **When using conductors of exclusively the same diameter, 0.5 mm/AWG 24 or 1.0 mm/AWG 18 diameters are also possible.

PUSH WIRE® Connectors for Junction Boxes

273 / 773 / 2273 Series

- Description and Handling -



PUSH WIRE® Connectors for Junction Boxes, 273 Series

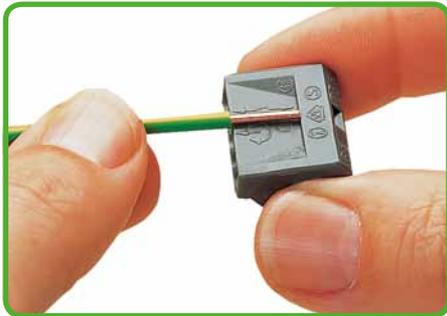
0.75 – 1.5 mm² "sol." ① | AWG 18 – 16 "sol."
 400 V / 4 kV / 2** | 600 V, 20 A ②
 I_N 18 A | 600 V, 10 A ③

10 – 13 mm / 0.45 in

③ Approvals



Strip length



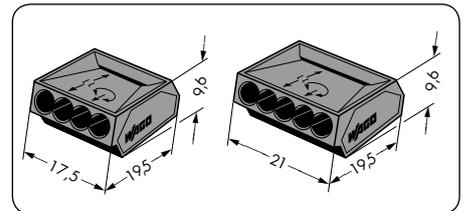
Strip solid conductor to 10 – 13 mm (0.39 – 0.51 in).

Testing



Testing

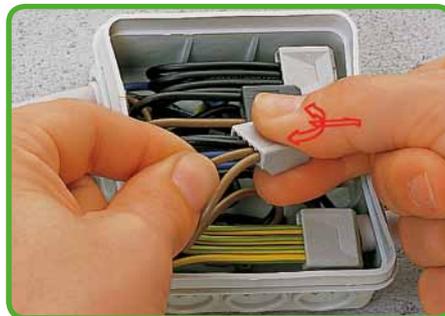
| Color | Item No. | Item No. | Pack. | Unit |
|--|-----------|-----------|-------|------|
| PUSH WIRE® connector for junction boxes | | | | |
| 3 cond. | ● 273-100 | ○ 273-153 | 1000 | |



PUSH WIRE® connection



Termination: Insert stripped solid conductor until it hits backstop.



Removal: Hold conductor to be removed and twist alternately left and right while pulling the connector.

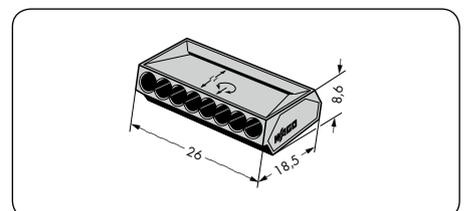
0.75 – 1.5 mm² "sol." ① | AWG 18 – 16 "sol."
 400 V / 4 kV / 2** | 600 V, 20 A ②
 I_N 18 A | 600 V, 10 A ③

10 – 13 mm / 0.45 in

③ Approvals



| Color | Item No. | Item No. | Pack. | Unit |
|--|-----------|-----------|-------|------|
| PUSH WIRE® connector for junction boxes | | | | |
| 5 cond. | ● 273-101 | ○ 273-155 | 1000 | |
| 8 cond. | ● 273-108 | ○ 273-158 | 500 | |



FIXED IN POSITION – on a DIN 35 rail (273 Series mounting carrier)



FIXED IN POSITION – on a DIN 35 rail (773 Series mounting carrier)

PUSH WIRE® clamps the following copper conductors:



solid, 273, 773 and 2273 Series



stranded, 773 Series only

Strip length, see packaging or instructions.

PUSH WIRE® Connectors for Junction Boxes

COMPACT PUSH WIRE® Connectors for Junction Boxes

PUSH WIRE®

1

91

273 Series

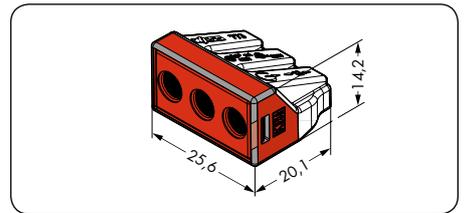
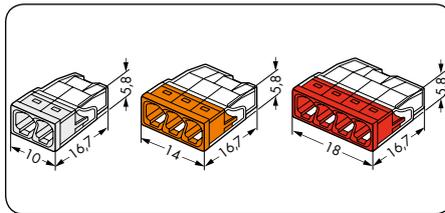
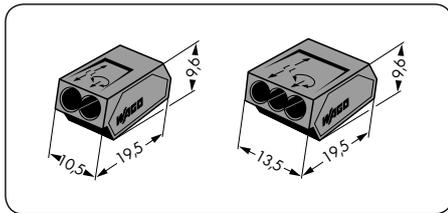
2273 Series

773 Series

| | | |
|--|---|--|
| <p>1 – 2.5 mm² "sol." ① AWG 14 – 12 "sol." 400 V/4 kV/2** 600 V, 20 A ④ I_N 24 A</p> <p>10 – 13 mm / 0.45 in</p> <p>③ Approvals</p> | <p>0.5 – 2.5 mm² "sol." ① AWG 18 – 14 "sol." 450 V/4 kV/2** 600 V, 20 A ④ I_N 24 A</p> <p>11 mm / 0.43 in</p> <p>③ Approvals</p> | <p>2.5 – 6 mm² "s+st" AWG 14 – 10 "s+st" 400 V/4 kV/2** 600 V, 20 A ④ I_N 41 A 600 V, 30 A ④</p> <p>12 – 13 mm / 0.49 in</p> <p>③ Approvals</p> |
|--|---|--|



| Color | Item No. | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | |
|--|----------|----------|------------|--|----------|---------------|---------|---|-------------|--|
| PUSH WIRE® connector for junction boxes | | | | COMPACT PUSH WIRE® connector for junction boxes, Housing color: transparent | | | | PUSH WIRE® connector for junction boxes, transparent housing | | |
| 2 cond. | 273-112 | 273-252 | 1000 | 2 cond. | 2273-202 | 1000 (10x100) | 3 cond. | 773-173 | 500 (10x50) | |
| 3 cond. | 273-104 | 273-253 | 1000 | 3 cond. | 2273-203 | 1000 (10x100) | | | | |
| 4 cond. | 273-102 | 273-254 | 1000 | 4 cond. | 2273-204 | 1000 (10x100) | | | | |

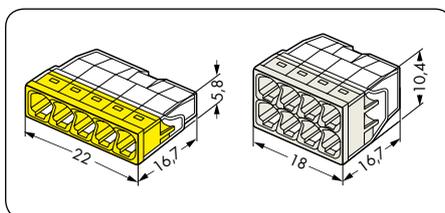
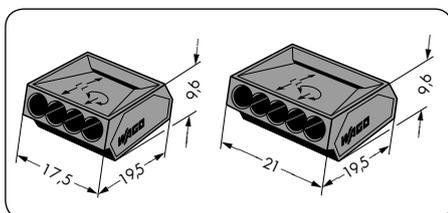


| | | |
|--|---|---|
| <p>1 – 2.5 mm² "sol." ① AWG 14 – 12 "sol." 400 V/4 kV/2** 600 V, 20 A ④ I_N 24 A</p> <p>10 – 13 mm / 0.45 in</p> <p>③ Approvals</p> | <p>0.5 – 2.5 mm² "sol." ① AWG 18 – 14 "sol." 450 V/4 kV/2** 600 V, 20 A ④ I_N 24 A</p> <p>11 mm / 0.43 in</p> <p>③ Approvals</p> | <p>Mounting carrier for 273 and 773 Series PUSH WIRE® connectors for junction boxes</p> <p>for 2273 Series COMPACT PUSH WIRE® connectors for junction boxes</p> |
|--|---|---|



| | |
|--------------------|--|
| 273 Series | |
| 773 Series | |
| 2273 Series | |

| Color | Item No. | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|--|-----------|----------|------------|--|----------|---------------|
| PUSH WIRE® connector for junction boxes | | | | COMPACT PUSH WIRE® connector for junction boxes, Housing color: transparent | | |
| 5 cond. | 273-105 | 273-255 | 1000 | 5 cond. | 2273-205 | 1000 (10x100) |
| 8 cond. | 773-108 ④ | | 500 | 8 cond. | 2273-208 | 500 (10x50) |



| Color | Item No. | Pack. Unit |
|--|----------|------------|
| Mounting carrier | | |
| orange | 273-150 | 50 (5x10) |
| orange | 773-332 | 50 (5x10) |
| orange | 2273-500 | 50 (5x10) |
| Self-adhesive marking strips, plain | | |
| white | 210-334 | 1 |

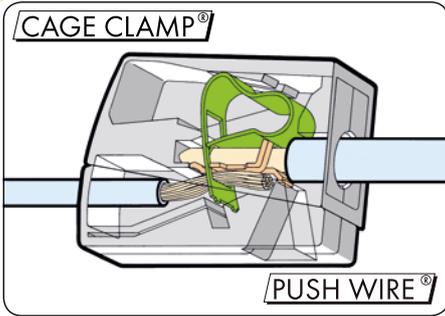
When using conductors of the same diameter only, ① 0.5 mm²/AWG 20 ② or 0.75 mm²/AWG 18 are also possible. ** In grounded power lines ③ Approvals are available online at: www.wago.com. For technical explanations and abbreviations, see technical section.



Lighting Connectors and "Service" Connectors 224 Series

PUSH WIRE®

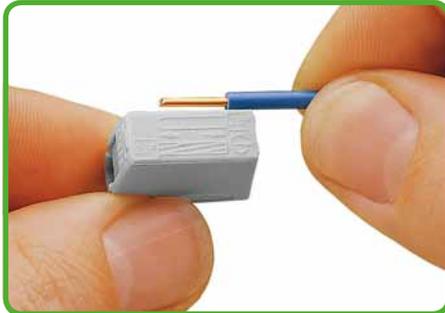
CAGE CLAMP®



| | | | |
|--|--|--|--|
| Installation side 1 - 2.5 mm ² "sol." Lighting side 0.5 - 2.5 mm ² "s+f-st" 400 V/4 kV/2*, I _N 24 A 9 - 11 mm / 0.39 in 1 Approvals | AWG 14 - 12 AWG 20 - 16 300 V, 20 A (UL) | Installation side 2 x 1.0 - 2.5 mm ² "sol." Lighting side 0.5 - 2.5 mm ² "s+f-st" 400 V/4 kV/2*, I _N 24 A 9 - 11 mm / 0.39 in 1 Approvals | AWG 16 - 14 AWG 20 - 16 300 V, 20 A (UL) |
|--|--|--|--|

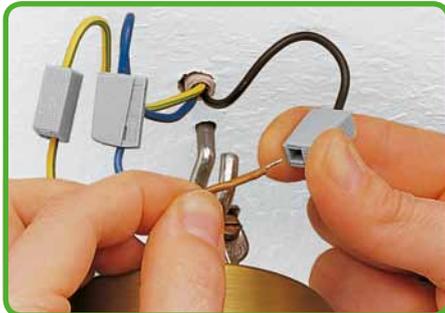


Strip length



Strip conductor to 9 - 11 mm/0.39 in.

Conductor termination



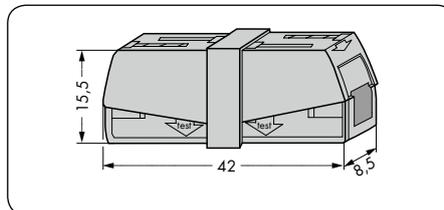
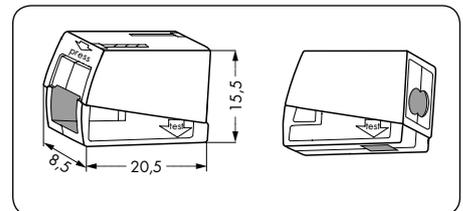
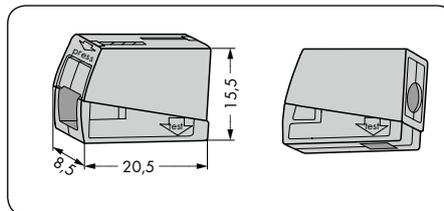
Lighting-side termination:
Press button, insert stripped conductor into square entry and release.



Installation-side termination:
Insert stripped solid conductor into circular entry and push until it hits the backstop.

| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|--|----------------|------------|--|----------------|------------|
| Lighting connector, standard version, continuous service temperature: 105°C | | | 2-conductor lighting connector, standard version, continuous service temperature: 105°C | | |
| ● gray | 224-101 | 1000 | ○ white | 224-112 | 1000 |
| Version for increased continuous service temperature of 120°C | | | Version for increased continuous service temperature of 120°C | | |
| ● black | 224-104 | 100 | ● black | 224-114 | 100 |
| "Service" connector ● gray 224-201 50 | | | | | |

Dimensions and Handling



Testing through separate test slot.

CAGE CLAMP® clamps the following copper conductors:



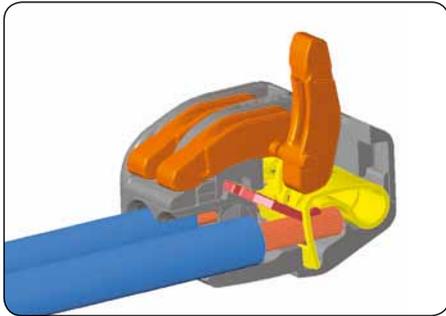
PUSH WIRE® clamps the following copper conductors:



1 Approvals are available online at: www.wago.com.

Strip length, see packaging or instructions.

Compact Splicing Connectors for Fine-Stranded Conductors 222 Series

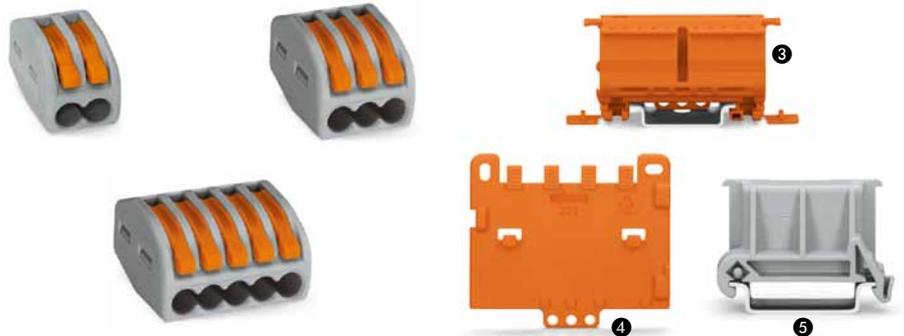


0.08 - 2.5 mm² "s+st"
0.08 - 4 mm² "f-st"
400 V/4 kV/2*
I_N 32 A

AWG 28 - 14 "s+f-st"
AWG 28 - 12 "f-st"
600 V, 20 A Ⓢ

Mounting carrier,
strain relief plate and
angled DIN-rail adapter
for 222 Series compact splicing connectors

9 - 10 mm / 0.37 in
Approvals



Strip length



Strip conductor to 9 - 10 mm / 0.37 in.

CAGE CLAMP® COMPACT connection



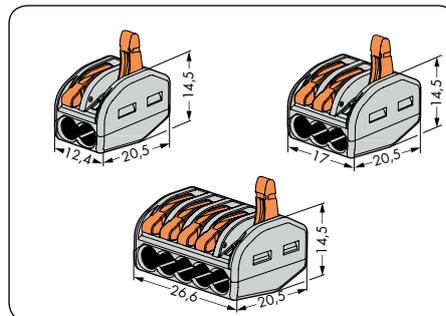
Conductor termination: Open clamping unit using the lever and insert conductor.



Then, lower lever to close the clamp.

| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|--|----------------|------------|---|----------------|------------|
| Compact splicing connector, with levers, max. continuous service temperature: 85 °C | | | Mounting carrier ③, for 2, 3 and 5-conductor compact splicing connectors | | |
| ● orange | 222-500 | 50 | ● orange | 222-500 | 50 (5x10) |
| 2-conductor connector | | | Strain relief plate ④, for mounting carrier | | |
| ● gray | 222-412 | 500 | ● orange | 222-505 | 50 (5x10) |
| 3-conductor connector | | | Angled DIN-rail adapter ⑤, for DIN 35-rail mounting | | |
| ● gray | 222-413 | 500 | ● gray | 222-510 | 50 (5x10) |
| 5-conductor connector | | | Self-adhesive marking strips, plain | | |
| ● gray | 222-415 | 400 | ○ white | 210-334 | 1 card |

Dimensions and Handling



Vertical mounting with strain relief plate on DIN 35 rail. Marking clamping units via marking strips.



Wiring fine-stranded conductors in a junction box.



Testing connectors via test slots on top of the carrier.

CAGE CLAMP® clamps the following copper conductors:

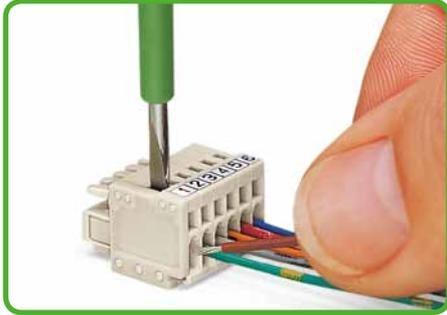


② With ferruled conductors, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.
For technical explanations and abbreviations, see technical section.
* In grounded power lines

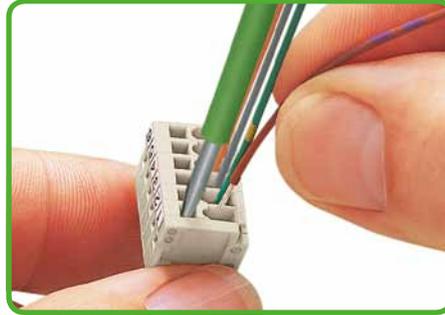
MULTI CONNECTION SYSTEM MICRO, MINI and MIDI

Description and Handling

CAGE CLAMP® connection



Inserting conductor via (2.5 x 0.4) mm screwdriver. Operation perpendicular to conductor entry.



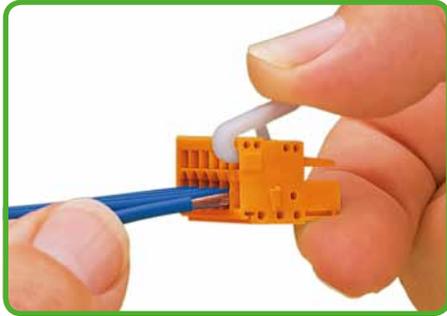
Inserting conductor via (2.5 x 0.4) mm screwdriver. Operation parallel to conductor entry.

Protection against mismatching

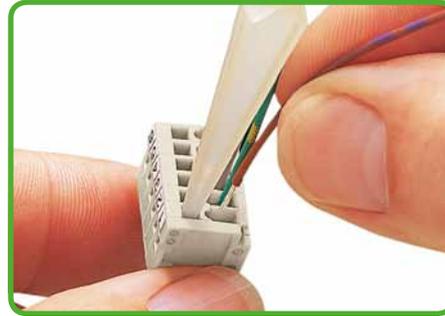


Male header and female connector - 100% protected against mismatching. Only mating halves with the same pole number can be connected together.

CAGE CLAMP® connection



Inserting conductor via 734-230 operating lever.



Inserting conductor via 233-332 operating tool. Operation parallel to conductor entry.

Testing

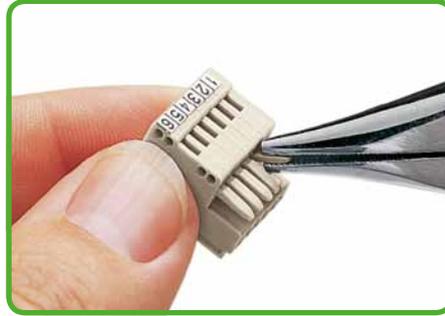


Testing with 1 mm Ø test probe, item no. 735-500, tip contact

Coding

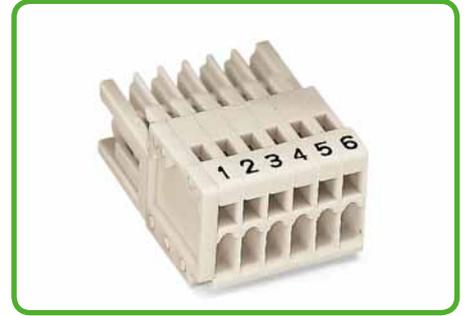


Coding a male header - fitting coding key(s).



Coding a female connector - removing coding finger(s).

Marking



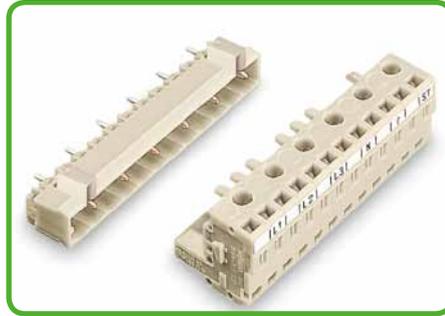
Marking by direct printing or using self-adhesive marker strips.

Insulation stop



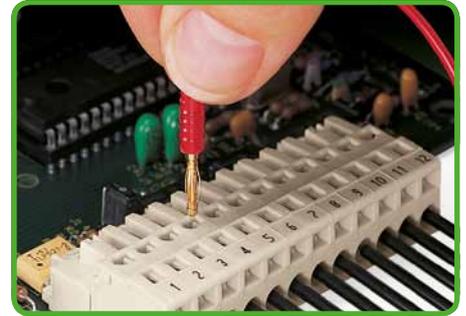
The insulation stop prevents the insulation of smaller conductors from being inserted into the clamping unit.

Pin spacing 10 mm/0.394 in



For 10 mm pin spacing, please contact factory.

Testing



Testing with 2 mm or 2.3 mm Ø test plug.

CAGE CLAMP® clamps the following copper conductors:



solid



stranded



fine-stranded



tip-bonded



with ferrule

Strip length, see packaging or instructions.

MULTI CONNECTION SYSTEM MICRO – 100% Protected Against Mismatching Male Headers with Solder Pins; Male and Female Connectors, Pin Spacing 2.5 mm

| | | |
|--|--|--|
| Pin spacing 2.5 mm/0.098 in, light gray 250 V/2.5 kV/2 I_N 4 A | Pin spacing 2.5 mm/0.098 in, light gray 0.08 - 0.5 mm ² 250 V/2.5 kV/2 I_N 4 A | Pin spacing 2.5 mm/0.098 in, light gray 0.08 - 0.5 mm ² 250 V/2.5 kV/2 I_N 4 A |
| 150 V, 4 A | AWG 28 - 20 150 V, 4 A | AWG 28 - 20 150 V, 4 A |
|  5 - 6 mm / 0.22 in |  5 - 6 mm / 0.22 in |  5 - 6 mm / 0.22 in |
| ① Approvals | ① Approvals | ① Approvals |

CAGE CLAMP®



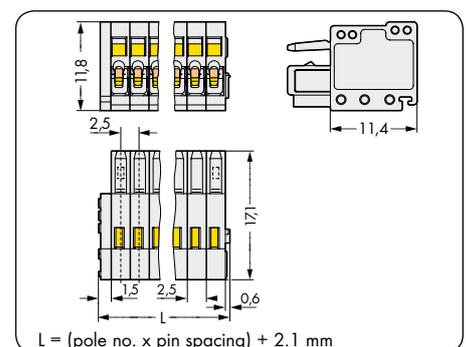
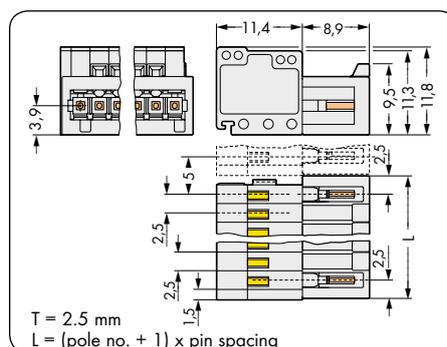
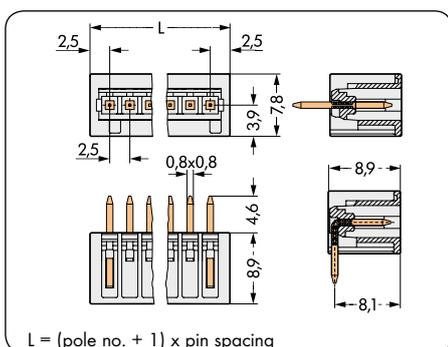
| Pole No. | Item No. | Item No. | Pack. Unit | Pole No. | Item No. | Pack. Unit | Pole No. | Item No. | Pack. Unit | | |
|---|---------------------------|----------|------------|--|----------|------------|----------|---|------------|--|--|
| Male header with solder pins, 100% protected against mismatching, light gray | | | | Male connector with CAGE CLAMP®, 100% protected against mismatching, light gray | | | | Female connector with CAGE CLAMP®, 100% protected against mismatching, with coding fingers, light gray | | | |
| | Solder pin (0.8 x 0.8) mm | | | | | | | | | | |
| | | straight | angled | | | | | | | | |
| ○ 2 | 733-332 | 733-362 | 200 | ○ 2 | 733-202 | 200 | ○ 2 | 733-102 | 200 | | |
| ○ 3 | 733-333 | 733-363 | 200 | ○ 3 | 733-203 | 200 | ○ 3 | 733-103 | 200 | | |
| ○ 4 | 733-334 | 733-364 | 200 | ○ 4 | 733-204 | 200 | ○ 4 | 733-104 | 200 | | |
| ○ 5 | 733-335 | 733-365 | 200 | ○ 5 | 733-205 | 100 | ○ 5 | 733-105 | 100 | | |
| ○ 6 | 733-336 | 733-366 | 200 | ○ 6 | 733-206 | 100 | ○ 6 | 733-106 | 100 | | |
| ○ 7 | 733-337 | 733-367 | 200 | ○ 7 | 733-207 | 100 | ○ 7 | 733-107 | 100 | | |
| ○ 8 | 733-338 | 733-368 | 200 | ○ 8 | 733-208 | 100 | ○ 8 | 733-108 | 100 | | |
| ○ 9 | 733-339 | 733-369 | 200 | ○ 9 | 733-209 | 100 | ○ 10 | 733-110 | 100 | | |
| ○ 10 | 733-340 | 733-370 | 200 | ○ 10 | 733-210 | 100 | ○ 12 | 733-112 | 50 | | |
| ○ 12 | 733-342 | 733-372 | 100 | ○ 12 | 733-212 | 50 | | | | | |

Accessories, 733 Series

| | | |
|---|---|--|
| Coding key, snap-on type  white 733-330 100 | Coding key, snap-on type  white 733-330 100 | Operating tool with partially insulated shaft, type 1, (2.5x0.4)mm blade  210-719 1 |
| Operating tool, partially insulated  233-335 1  233-332 25 | Operating tool, partially insulated  233-335 1  233-332 25 | Marker card, 100 self-adhesive strips per card, 1 - 16 (400x) marking 210-331/250-202 |
| Strain relief plate, pre-assembled Item no. suffix Width: 6 mm 12.5 mm .../032-000 .../033-000 | Strain relief plate, pre-assembled Item no. suffix Width: 6 mm 12.5 mm .../032-000 .../033-000 | Strain relief plate, pre-assembled Item no. suffix Width: 6 mm 12.5 mm .../032-000 .../033-000 |

Dimensions

Drilled hole diameter: 1.1^{+0.1} mm



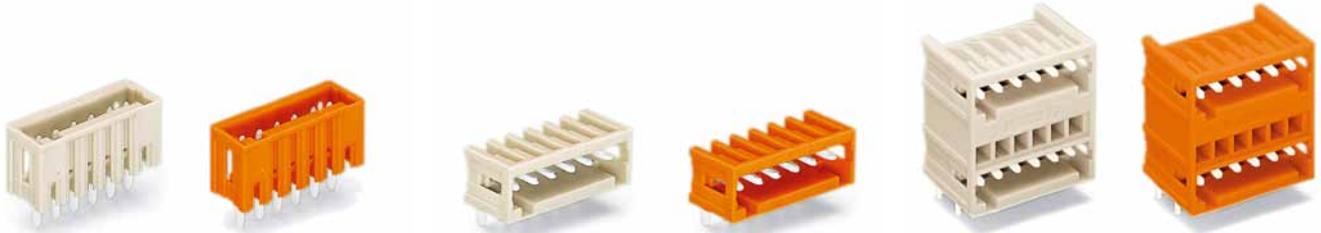
① Approvals are available online at: www.wago.com.

For technical explanations and abbreviations, see technical section.

MULTI CONNECTION SYSTEM MINI – 100% Protected Against Mismatching

Male Headers with Solder Pins; Double-Deck Male Headers with Solder Pins, Pin Spacing 3.5 mm and 3.81 mm

| | | |
|---|---|---|
| Pin spacing 3.5 mm/0.138 in, light gray Pin spacing 3.81 mm/0.15 in, orange 160 V/2.5 kV/2 300 V, 10 A I _N 10 A 300 V, 10 A | Pin spacing 3.5 mm/0.138 in, light gray Pin spacing 3.81 mm/0.15 in, orange 160 V/2.5 kV/2 300 V, 10 A I _N 10 A 300 V, 10 A | Pin spacing 3.5 mm/0.138 in, light gray Pin spacing 3.81 mm/0.15 in, orange 160 V/2.5 kV/2 300 V, 10 A I _N 10 A 300 V, 10 A |
| 1 Approvals | 1 Approvals | 1 Approvals |

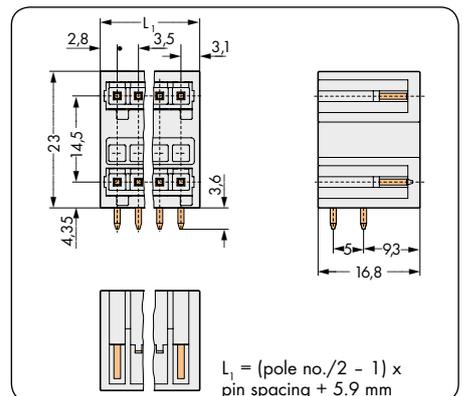
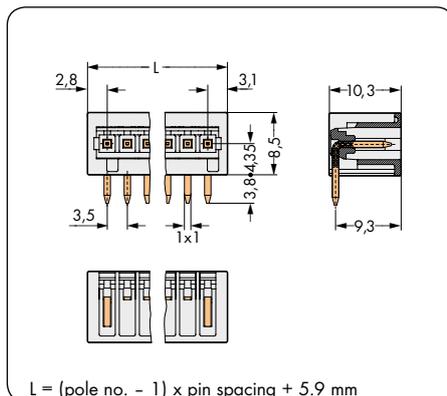
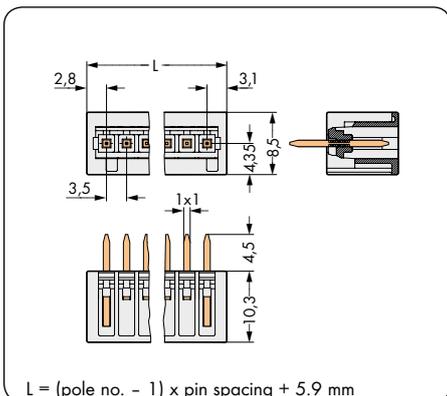


| Pole No. | Item No. | Item No. | Pack. Unit | Pole No. | Item No. | Item No. | Pack. Unit | Pole No. | Item No. | Item No. | Pack. Unit |
|---|--------------------|-----------|------------|---|--------------------|-----------|------------|--|--------------------|-----------|------------|
| Male header, 100% protected against mismatching, (1 x 1) mm straight solder pins | | | | Male header, 100% protected against mismatching, (1 x 1) mm angled solder pins | | | | Double-deck male header without support, 100% protection against mismatching, (1 x 1) mm angled solder pins | | | |
| | Pin spacing 3.5 mm | 3.81 mm | | | Pin spacing 3.5 mm | 3.81 mm | | | Pin spacing 3.5 mm | 3.81 mm | |
| | light gray | orange | | | light gray | orange | | | light gray | orange | |
| 2 | ○ 734-132 | ● 734-232 | 200 | 2 | ○ 734-162 | ● 734-262 | 200 | 2 | ○ 734-402 | ● 734-432 | 100 |
| : | : | : | | : | : | : | | 3 | ○ 734-403 | ● 734-433 | 100 |
| 6 | ○ 734-136 | ● 734-236 | 100 | 6 | ○ 734-166 | ● 734-266 | 100 | 4 | ○ 734-404 | ● 734-434 | 100 |
| 7 | ○ 734-137 | - | 100 | 7 | ○ 734-167 | - | 100 | 5 | ○ 734-405 | ● 734-435 | 100 |
| 8 | ○ 734-138 | ● 734-238 | 100 | 8 | ○ 734-168 | ● 734-268 | 100 | 6 | ○ 734-406 | ● 734-436 | 100 |
| 9 | ○ 734-139 | ● 734-239 | 100 | 9 | ○ 734-169 | ● 734-269 | 100 | 7 | ○ 734-407 | - | 50 |
| 10 | ○ 734-140 | ● 734-240 | 100 | 10 | ○ 734-170 | ● 734-270 | 100 | 8 | ○ 734-408 | ● 734-438 | 50 |
| 12 | ○ 734-142 | ● 734-242 | 100 | 12 | ○ 734-172 | ● 734-272 | 100 | 9 | ○ 734-409 | ● 734-439 | 50 |
| 13 | ○ 734-143 | - | 100 | 13 | ○ 734-173 | - | 100 | 10 | ○ 734-410 | ● 734-440 | 50 |
| 14 | ○ 734-144 | ● 734-244 | 100 | 14 | ○ 734-174 | ● 734-274 | 100 | 12 | ○ 734-412 | ● 734-442 | 50 |
| 16 | ○ 734-146 | ● 734-246 | 50 | 16 | ○ 734-176 | ● 734-276 | 50 | | | | |
| 18 | ○ 734-148 | ● 734-248 | 50 | 18 | ○ 734-178 | ● 734-278 | 50 | | | | |
| 20 | ○ 734-150 | ● 734-250 | 50 | 20 | ○ 734-180 | ● 734-280 | 50 | | | | |
| 24 | ○ 734-154 | - | 50 | 24 | ○ 734-184 | - | 50 | | | | |

Accessories, 734 Series

| | | |
|--|--|--|
| Coding key, snap-on type light gray 734-130 100 | Coding key, snap-on type light gray 734-130 100 | Coding key, to be snapped above top level light gray 734-130 100 |
| <p>Note: These connectors shall only be mated or unmated at voltages below 42V and in the "no load" condition.</p> <p>For mating and unmating at low power values, please request data.</p> | | Coding key, to be snapped in bottom level, light gray 734-400 100 |
| | | |
| | | |

Dimensions Drilled hole diameter: 1.4^{+0.1} mm

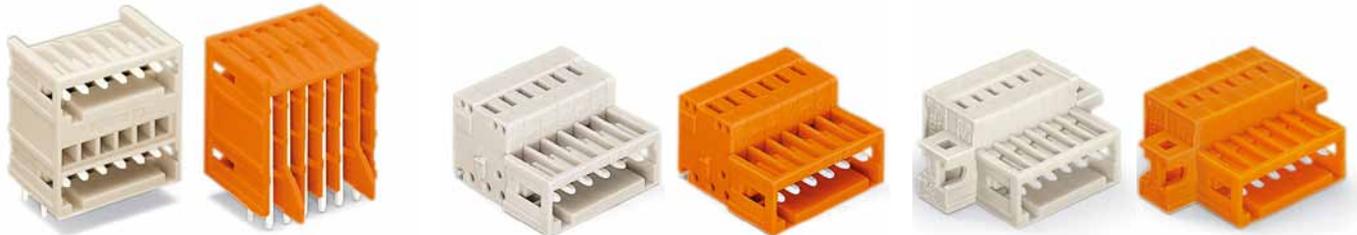


MULTI CONNECTION SYSTEM MINI – 100% Protected Against Mismatching

Double-Deck Male Headers with Solder Pins; Male Connectors with CAGE CLAMP® Connection, Pin spacing 3.5 mm and 3.81 mm

| | | |
|---|---|---|
| Pin spacing 3.5 mm/0.138 in, light gray Pin spacing 3.81 mm/0.15 in, orange 160 V/2.5 kV/2 I _N 10 A | Pin spacing 3.5 mm/0.138 in, light gray Pin spacing 3.81 mm/0.15 in, orange 0.08 - 1.5 mm ² 160 V/2.5 kV/2 I _N 10 A 7 mm / 0.28 in | Pin spacing 3.5 mm/0.138 in, light gray Pin spacing 3.81 mm/0.15 in, orange 0.08 - 1.5 mm ² 160 V/2.5 kV/2 I _N 10 A 7 mm / 0.28 in |
| 300 V, 10 A 300 V, 10 A | AWG 28 - 14* 300 V, 10 A 300 V, 10 A | AWG 28 - 14* 300 V, 10 A 300 V, 10 A |
| Approvals | Approvals | Approvals |

CAGE CLAMP®



| Pole No. | Item No. | Item No. | Pole No. | Item No. | Item No. | Pole No. | Item No. | Item No. |
|---|-----------------|-----------------|--|----------|----------|---|-----------------|-----------------|
| Double-deck male header with support, (1 x 1) mm angled solder pins | | | Male connector with CAGE CLAMP® | | | Male connector with CAGE CLAMP® and fixing flanges | | |
| Pin spacing 3.5 mm | | 3.81 mm | Pin spacing 3.5 mm | | 3.81 mm | Pin spacing 3.5 mm | | 3.81 mm |
| light gray | | orange | light gray | | orange | light gray | | orange |
| 2 | 734-402/001-000 | 734-432/001-000 | 2 | 734-302 | 734-332 | 2 | 734-302/019-000 | 734-332/019-000 |
| 3 | 734-403/001-000 | 734-433/001-000 | 3 | 734-303 | 734-333 | 3 | 734-303/019-000 | 734-333/019-000 |
| 4 | 734-404/001-000 | 734-434/001-000 | : | : | : | : | : | : |
| 5 | 734-405/001-000 | 734-435/001-000 | 10 | 734-310 | 734-340 | 10 | 734-310/019-000 | 734-340/019-000 |
| 6 | 734-406/001-000 | 734-436/001-000 | 11 | 734-311 | - | 11 | 734-311/019-000 | - |
| 7 | 734-407/001-000 | - | 12 | 734-312 | 734-342 | 12 | 734-312/019-000 | 734-342/019-000 |
| 8 | 734-408/001-000 | 734-438/001-000 | 13 | 734-313 | - | 13 | 734-313/019-000 | - |
| 9 | 734-409/001-000 | 734-439/001-000 | 14 | 734-314 | 734-344 | 14 | 734-314/019-000 | 734-344/019-000 |
| 10 | 734-410/001-000 | 734-440/001-000 | 16 | 734-316 | 734-346 | 16 | 734-316/019-000 | 734-346/019-000 |
| 12 | 734-412/001-000 | 734-442/001-000 | 18 | 734-318 | 734-348 | 18 | 734-318/019-000 | 734-348/019-000 |
| | | | 20 | 734-320 | 734-350 | 20 | 734-320/019-000 | 734-350/019-000 |
| | | | 24 | 734-324 | - | 24 | 734-324/019-000 | - |

Accessories, Item-Specific

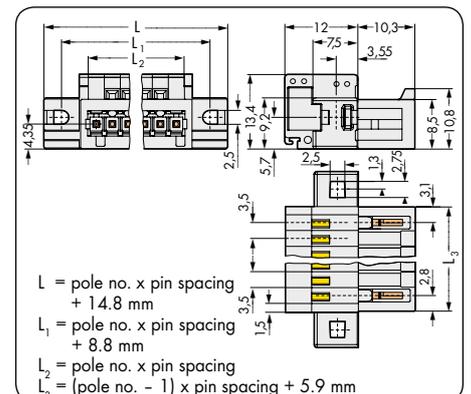
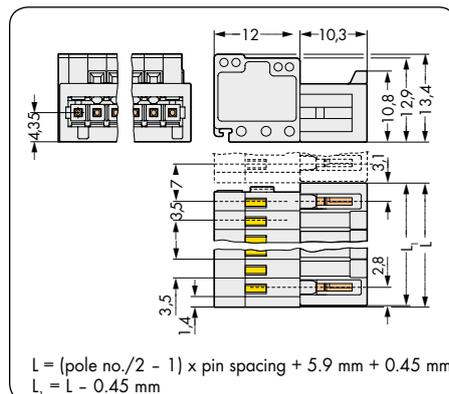
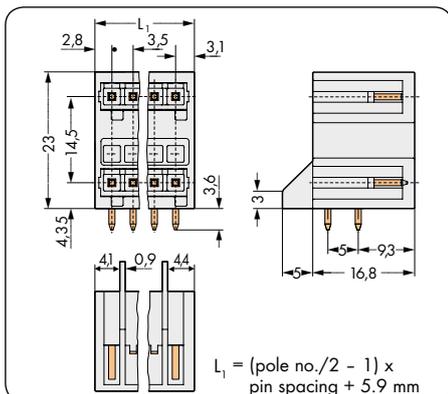
| | | | | | |
|--|--|--|--|--|---|
| | Coding key, light gray, to be snapped in bottom level 734-400 100 | | Operating lever, for male connectors 734-230 100(4x25) | | Screw with nut, M 2 x 12 mm 231-195 200 (2x100) |
|--|--|--|--|--|---|

Accessories, 734 Series

| | | | | | |
|--|--|--|--|--|--|
| | Coding key, light gray, to be snapped above top level 734-130 100 | | Operating tool, with partially insulated shaft, (2.5x0.4)mm blade 210-719 1 | | Marker cards, 80 self-adhesive strips per card direct printing upon request |
| Note: These connectors shall only be mated or unmated at voltages below 42V and in the "no load" condition. For mating and unmating at low power values, please request data. | | | Test pin, 1 mm Ø, with solder connection for test cable 735-500 1 | | Strain relief plates, see page 113 |
| | | | Marking 1 - 16 (240x) Spacing 3.5 mm 210-332/350-202 17 - 32 (240x) Spacing 3.5 mm 210-332/350-204 1 - 16 (160x) Spacing 3.81 mm 210-332/381-202 17 - 32 (160x) Spacing 3.81 mm 210-332/381-204 | | |

Dimensions

Drilled hole diameter: 1.4^{+0.1} mm



* AWG 14: THHN, THWN

For technical explanations and abbreviations, see technical section.

MULTI CONNECTION SYSTEM MINI – 100% Protected Against Mismatching

Female Connectors, Pin spacing 3.5 mm and 3.81 mm

| | | |
|--|--|---|
| <p>Pin spacing 3.5 mm/0.138 in, light gray Pin spacing 3.81 mm/0.15 in, orange 0.08 - 1.5 mm² AWG 28 - 14* 160 V/2.5 kV/2 300 V, 10 A  I_N 10 A 300 V, 10 A   7 mm / 0.28 in  Approvals</p> | <p>Pin spacing 3.5 mm/0.138 in, light gray Pin spacing 3.81 mm/0.15 in, orange 0.08 - 1.5 mm² AWG 28 - 14* 160 V/2.5 kV/2 300 V, 10 A  I_N 10 A 300 V, 10 A   7 mm / 0.28 in  Approvals</p> | <p>Pin spacing 3.5 mm/0.138 in, light gray Pin spacing 3.81 mm/0.15 in, orange 0.2 - 1.5 mm² AWG 24 - 14* 160 V/2.5 kV/2 300 V, 10 A  I_N 10 A 300 V, 10 A   8 - 9 mm / 0.33 in  Approvals</p> |
|--|--|---|

CAGE CLAMP®

CAGE CLAMP®S



| Pole No. | Item No. | Item No. | Pack. Unit | Pole No. | Item No. | Item No. | Pack. Unit | Pole No. | Item No. | Item No. | Pack. Unit |
|---|-----------|-----------|------------|--|-------------------|-------------------|------------|--|------------|------------|------------|
| Female connector with CAGE CLAMP®, with coding fingers | | | | Female connector with CAGE CLAMP® and locking levers, with coding fingers | | | | Female connector with CAGE CLAMP®S and integrated push-buttons, with coding fingers | | | |
| Pin spacing 3.5 mm | | 3.81 mm | | Pin spacing 3.5 mm | | 3.81 mm | | Pin spacing 3.5 mm | | 3.81 mm | |
| light gray | | orange | | light gray | | orange | | light gray | | orange | |
| 2 | ○ 734-102 | ● 734-202 | 200 | 2 | ○ 734-102/037-000 | ● 734-202/037-000 | 100 | 2 | ○ 2734-102 | ● 2734-202 | 200 |
| 3 | ○ 734-103 | ● 734-203 | 200 | 3 | ○ 734-103/037-000 | ● 734-203/037-000 | 100 | 3 | ○ 2734-103 | ● 2734-203 | 200 |
| : | : | : | : | : | : | : | : | : | : | : | : |
| 9 | ○ 734-109 | ● 734-209 | 50 | 9 | ○ 734-109/037-000 | ● 734-209/037-000 | 50 | 9 | ○ 2734-109 | ● 2734-209 | 50 |
| 10 | ○ 734-110 | ● 734-210 | 50 | 10 | ○ 734-110/037-000 | ● 734-210/037-000 | 50 | 10 | ○ 2734-110 | ● 2734-210 | 50 |
| 12 | ○ 734-112 | ● 734-212 | 25 | 12 | ○ 734-112/037-000 | ● 734-212/037-000 | 25 | 12 | ○ 2734-112 | ● 2734-212 | 25 |
| 13 | ○ 734-113 | - | 25 | 13 | ○ 734-113/037-000 | ● - | 25 | 13 | ○ 2734-113 | - | 25 |
| 14 | ○ 734-114 | ● 734-214 | 25 | 14 | ○ 734-114/037-000 | ● 734-214/037-000 | 25 | 14 | ○ 2734-114 | ● 2734-214 | 25 |
| 16 | ○ 734-116 | ● 734-216 | 25 | 16 | ○ 734-116/037-000 | ● 734-216/037-000 | 25 | 16 | ○ 2734-116 | ● 2734-216 | 25 |
| 18 | ○ 734-118 | ● 734-218 | 25 | 18 | ○ 734-118/037-000 | ● 734-218/037-000 | 25 | 18 | ○ 2734-118 | ● 2734-218 | 25 |
| 20 | ○ 734-120 | ● 734-220 | 25 | 20 | ○ 734-120/037-000 | ● 734-220/037-000 | 25 | 20 | ○ 2734-120 | ● 2734-220 | 25 |
| 24 | ○ 734-124 | - | 25 | 24 | ○ 734-124/037-000 | - | 25 | 24 | ○ 2734-124 | - | 25 |

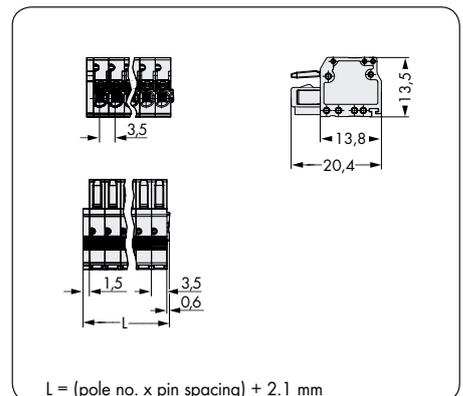
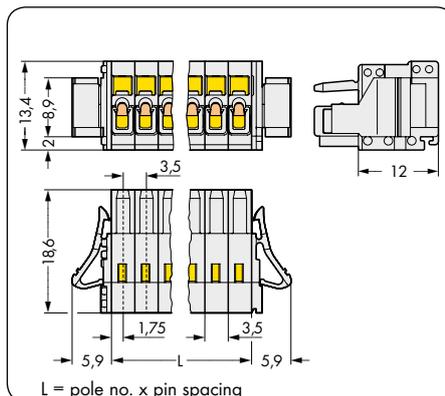
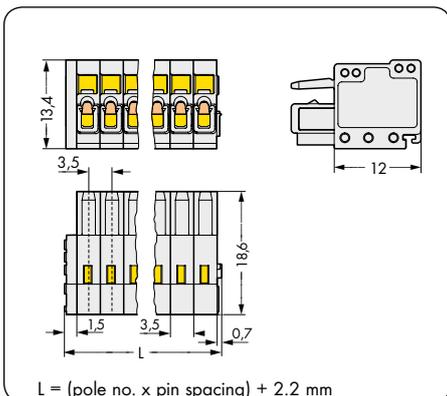
Accessories, Item-Specific

| | |
|---|---|
|  | Operating lever, for male and female connectors 734-230 100 |
|---|---|

Accessories, 734 and 2734 Series

| | | | | | |
|---|---|--|--|---|--|
|  | Operating tool with partially insulated shaft, type 1, (2.5x0.4) mm blade 210-719 1 |  | Marker cards, 80 self-adhesive strips per card direct printing upon request |  | Marker cards, 80 self-adhesive strips per card direct printing upon request |
|  | Test pin, 1 mm Ø, with solder connection for test cable 735-500 1 | Marking 1 - 16 (240x) Spacing 3.5 mm 210-332/350-202 17 - 32 (240x) Spacing 3.5 mm 210-332/350-204 1 - 16 (160x) Spacing 3.81 mm 210-332/381-202 17 - 32 (160x) Spacing 3.81 mm 210-332/381-204 | Marking 1 - 16 (240x) Spacing 3.5 mm 210-332/350-202 17 - 32 (240x) Spacing 3.5 mm 210-332/350-204 1 - 16 (160x) Spacing 3.81 mm 210-332/381-202 17 - 32 (160x) Spacing 3.81 mm 210-332/381-204 | | |
|  | Strain relief plates, see page 113 | | | | |

Dimensions



 Approvals are available online at: www.wago.com.

MULTI CONNECTION SYSTEM MINI HD – 100% Protected Against Mismatching

Male Headers and Female Connectors, Pin Spacing 3.5 mm, 713 Series

| | | |
|---|---|--|
| Pin spacing 3.5 mm / 0.138 in 160 V/2.5 kV/3 I_N 10 A ① Approvals | Pin spacing 3.5 mm / 0.138 in 160 V/2.5 kV/3 I_N 10 A ① Approvals | Pin spacing 3.5 mm / 0.138 in 0.08 - 1.5 mm ² AWG 28 - 16 160 V/2.5 kV/3 I_N 10 A 6 - 7 mm / 0.24 - 0.28 in ① Approvals |
|---|---|--|

CAGE CLAMP®



| Pole No. | Item No. | Pack. Unit | Pole No. | Item No. | Pack. Unit | Pole No. | Item No. | Pack. Unit |
|--|-----------------|------------|--|-----------------|------------|--|-----------------|------------|
| Male header, 2-row, (0.8 x 0.8) mm straight solder pins, black | | | Male header, 2-row, (0.8 x 0.8) mm angled solder pins, black | | | Female connector with CAGE CLAMP®, 2-row, with coding fingers to be cut off, black | | |
| ● 6 (3 x 2) | 713-1403 | 100 | ● 6 (3 x 2) | 713-1423 | 100 | ● 6 (3 x 2) | 713-1103 | 100 |
| ● 8 (4 x 2) | 713-1404 | 50 | ● 8 (4 x 2) | 713-1424 | 50 | ● 8 (4 x 2) | 713-1104 | 50 |
| ● 10 (5 x 2) | 713-1405 | 50 | ● 10 (5 x 2) | 713-1425 | 50 | ● 10 (5 x 2) | 713-1105 | 50 |
| ● 12 (6 x 2) | 713-1406 | 50 | ● 12 (6 x 2) | 713-1426 | 50 | ● 12 (6 x 2) | 713-1106 | 50 |
| ● 14 (7 x 2) | 713-1407 | 50 | ● 14 (7 x 2) | 713-1427 | 50 | ● 14 (7 x 2) | 713-1107 | 50 |
| ● 16 (8 x 2) | 713-1408 | 25 | ● 16 (8 x 2) | 713-1428 | 25 | ● 16 (8 x 2) | 713-1108 | 25 |
| ● 18 (9 x 2) | 713-1409 | 25 | ● 18 (9 x 2) | 713-1429 | 25 | ● 18 (9 x 2) | 713-1109 | 25 |
| ● 20 (10 x 2) | 713-1410 | 25 | ● 20 (10 x 2) | 713-1430 | 25 | ● 20 (10 x 2) | 713-1110 | 25 |
| ● 22 (11 x 2) | 713-1411 | 25 | ● 22 (11 x 2) | 713-1431 | 25 | ● 22 (11 x 2) | 713-1111 | 25 |
| ● 24 (12 x 2) | 713-1412 | 25 | ● 24 (12 x 2) | 713-1432 | 25 | ● 24 (12 x 2) | 713-1112 | 25 |
| ● 26 (13 x 2) | 713-1413 | 25 | ● 26 (13 x 2) | 713-1433 | 25 | ● 26 (13 x 2) | 713-1113 | 25 |
| ● 28 (14 x 2) | 713-1414 | 20 | ● 28 (14 x 2) | 713-1434 | 20 | ● 28 (14 x 2) | 713-1114 | 20 |
| ● 30 (15 x 2) | 713-1415 | 20 | ● 30 (15 x 2) | 713-1435 | 20 | ● 30 (15 x 2) | 713-1115 | 20 |
| ● 32 (16 x 2) | 713-1416 | 20 | ● 32 (16 x 2) | 713-1436 | 20 | ● 32 (16 x 2) | 713-1116 | 20 |
| ● 34 (17 x 2) | 713-1417 | 20 | ● 34 (17 x 2) | 713-1437 | 20 | ● 34 (17 x 2) | 713-1117 | 20 |
| ● 36 (18 x 2) | 713-1418 | 20 | ● 36 (18 x 2) | 713-1438 | 20 | ● 36 (18 x 2) | 713-1118 | 20 |
| Coding pin carrier | 714-101 | 100 (4x25) | Coding pin carrier | 714-101 | 100 (4x25) | | | |

Accessories, 713 Series

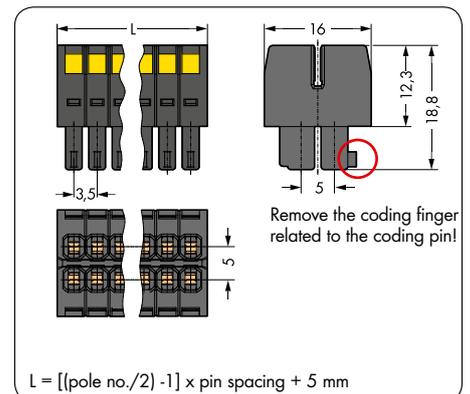
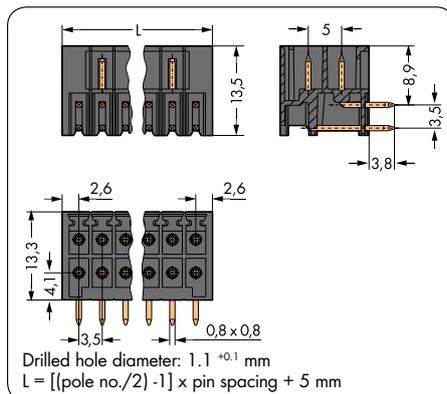
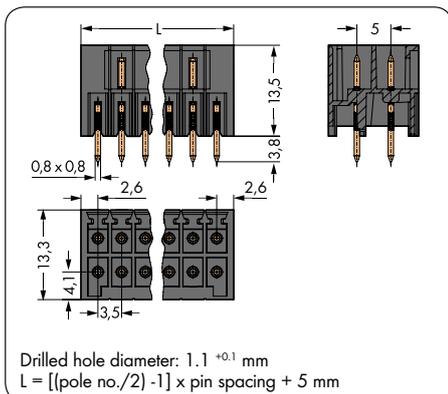
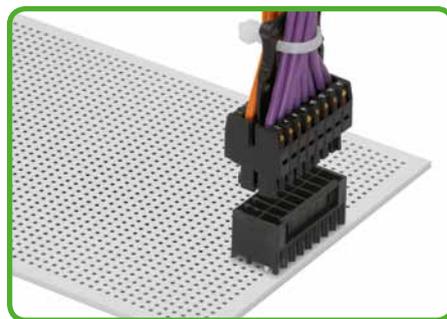
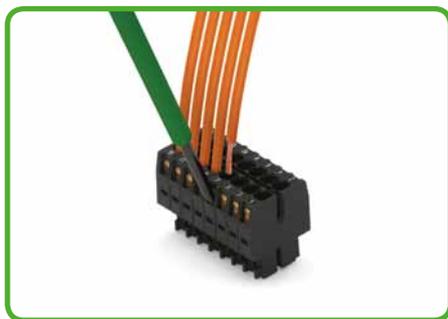


Operating tool with partially insulated shaft, type 1,
[2.5 x 0.4] mm blade **210-719** 1



Strain relief plate
 11 mm wide **713-126** 100
 25 mm wide **713-127** 100
 39 mm wide **713-128** 100
 53 mm wide **713-129** 100

Dimensions



For technical explanations and abbreviations, see technical section.

MULTI CONNECTION SYSTEM MINI HD – 100% Protected Against Mismatching

Male Headers and Female Connectors with Levers

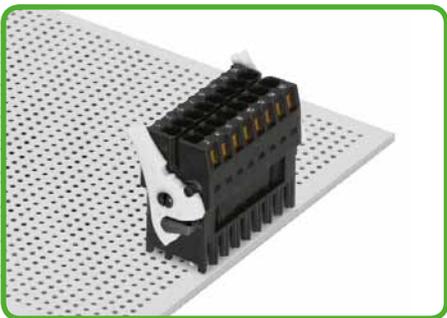
Pin Spacing 3.5 mm; 713 Series

| | | |
|--|--|---|
| Pin spacing 3.5 mm / 0.138 in 160 V/2.5 kV/3 I_N 10 A Approvals | Pin spacing 3.5 mm / 0.138 in 160 V/2.5 kV/3 I_N 10 A Approvals | Pin spacing 3.5 mm / 0.138 in 0.08 - 1.5 mm ² 160 V/2.5 kV/3 I_N 10 A AWG 28 - 16  6 - 7 mm / 0.25 in Approvals |
|--|--|---|

CAGE CLAMP®



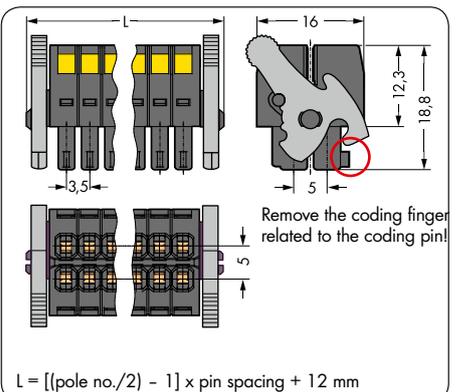
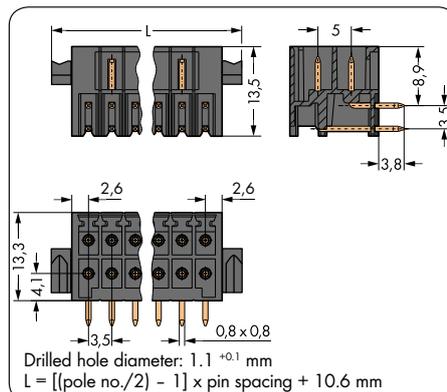
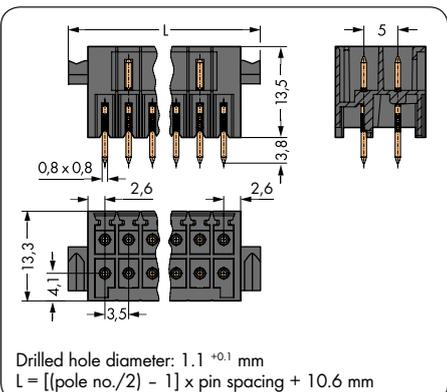
| Pole No. | Item No. | Pack. Unit | Pole No. | Item No. | Pack. Unit | Pole No. | Item No. | Pack. Unit |
|--|------------------|------------|--|------------------|------------|---|------------------|------------|
| Male header, 2-row, with levers, (0.8 x 0.8) mm straight solder pins, black | | | Male header, 2-row, with levers, (0.8 x 0.8) mm angled solder pins, black | | | Female connector, 2-row, with levers, with CAGE CLAMP®, with coding fingers to be cut off, black | | |
| ● 6 (3 x 2) | 713-1403/037-000 | 50 | ● 6 (3 x 2) | 713-1423/037-000 | 50 | ● 6 (3 x 2) | 713-1103/037-000 | 50 |
| ● 8 (4 x 2) | 713-1404/037-000 | 50 | ● 8 (4 x 2) | 713-1424/037-000 | 50 | ● 8 (4 x 2) | 713-1104/037-000 | 50 |
| ● 10 (5 x 2) | 713-1405/037-000 | 50 | ● 10 (5 x 2) | 713-1425/037-000 | 50 | ● 10 (5 x 2) | 713-1105/037-000 | 50 |
| ● 12 (6 x 2) | 713-1406/037-000 | 25 | ● 12 (6 x 2) | 713-1426/037-000 | 50 | ● 12 (6 x 2) | 713-1106/037-000 | 25 |
| ● 14 (7 x 2) | 713-1407/037-000 | 25 | ● 14 (7 x 2) | 713-1427/037-000 | 50 | ● 14 (7 x 2) | 713-1107/037-000 | 25 |
| ● 16 (8 x 2) | 713-1408/037-000 | 25 | ● 16 (8 x 2) | 713-1428/037-000 | 25 | ● 16 (8 x 2) | 713-1108/037-000 | 25 |
| ● 18 (9 x 2) | 713-1409/037-000 | 25 | ● 18 (9 x 2) | 713-1429/037-000 | 25 | ● 18 (9 x 2) | 713-1109/037-000 | 25 |
| ● 20 (10 x 2) | 713-1410/037-000 | 25 | ● 20 (10 x 2) | 713-1430/037-000 | 25 | ● 20 (10 x 2) | 713-1110/037-000 | 20 |
| ● 22 (11 x 2) | 713-1411/037-000 | 20 | ● 22 (11 x 2) | 713-1431/037-000 | 20 | ● 22 (11 x 2) | 713-1111/037-000 | 20 |
| ● 24 (12 x 2) | 713-1412/037-000 | 20 | ● 24 (12 x 2) | 713-1432/037-000 | 20 | ● 24 (12 x 2) | 713-1112/037-000 | 20 |
| ● 26 (13 x 2) | 713-1413/037-000 | 20 | ● 26 (13 x 2) | 713-1433/037-000 | 20 | ● 26 (13 x 2) | 713-1113/037-000 | 20 |
| ● 28 (14 x 2) | 713-1414/037-000 | 20 | ● 28 (14 x 2) | 713-1434/037-000 | 20 | ● 28 (14 x 2) | 713-1114/037-000 | 20 |
| ● 30 (15 x 2) | 713-1415/037-000 | 20 | ● 30 (15 x 2) | 713-1435/037-000 | 20 | ● 30 (15 x 2) | 713-1115/037-000 | 20 |
| ● 32 (16 x 2) | 713-1416/037-000 | 20 | ● 32 (16 x 2) | 713-1436/037-000 | 20 | ● 32 (16 x 2) | 713-1116/037-000 | 20 |
| ● 34 (17 x 2) | 713-1417/037-000 | 10 | ● 34 (17 x 2) | 713-1437/037-000 | 10 | ● 34 (17 x 2) | 713-1117/037-000 | 10 |
| ● 36 (18 x 2) | 713-1418/037-000 | 10 | ● 36 (18 x 2) | 713-1438/037-000 | 10 | ● 36 (18 x 2) | 713-1118/037-000 | 10 |
| Coding pin carrier 714-101 | | | Coding pin carrier 714-101 | | | | | |



Accessories, 713 Series

| | | |
|---|--|-----|
|  | Operating tool with partially insulated shaft, type 1, (2.5 x 0.4) mm blade 210-719 | 1 |
|  | Strain relief plate | |
| | 11 mm wide 713-126 | 100 |
| | 25 mm wide 713-127 | 100 |
| | 39 mm wide 713-128 | 100 |
| | 53 mm wide 713-129 | 100 |

Dimensions



Approvals are available online at: www.wago.com.

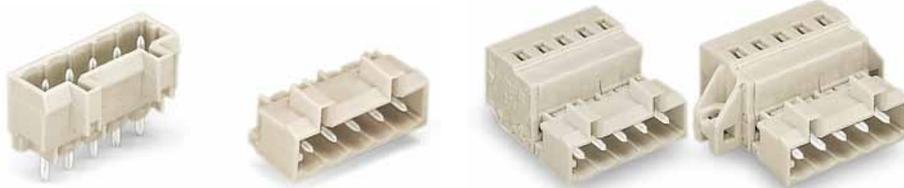
MULTI CONNECTION SYSTEM MIDI – 100% Protected Against Mismatching

Male Headers and Male Connectors

Pin Spacing 5 mm and 7.5 mm

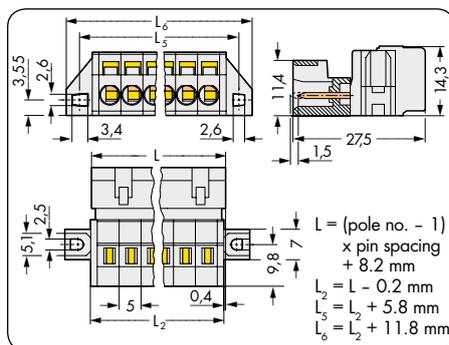
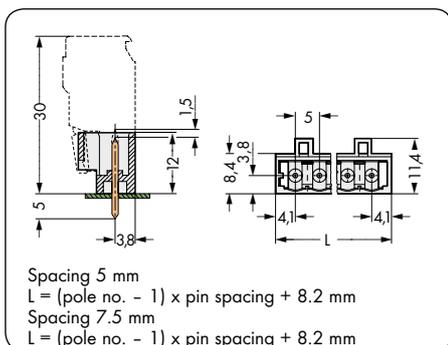
| | | |
|---|--|--------------------|
| Pin spacing 5 mm/0.197 in, light gray 320 V/4 kV/3 300 V, 10 A I_N 12 A 300 V, 10 A Pin spacing 7.5 mm/0.295 in, light gray 400 V/6 kV/3 300 V, 10 A I_N 12 A 300 V, 10 A Approvals | 0.08 - 2.5 mm ² AWG 28 - 12* Pin spacing 5 mm/0.197 in, light gray 250 V/4 kV/3, 12 A 300 V, 15 A Pin spacing 7.5 mm/0.295 in, light gray 400 V/6 kV/3 300 V, 15 A Approvals | Accessories |
|---|--|--------------------|

CAGE CLAMP®



| Pole No. | Item No. | Item No. | Pack. Unit | Pole No. | Item No. | Pack. Unit | Item No. | Pack. Unit | Accessories, 721 and 723 Series | Item No. | Pack. Unit | |
|--|-----------------|-----------------|------------|--|----------|------------|-----------------|---|--|----------|------------|--|
| Male header, 100% protected against mismatching, (1 x 1 mm) solder pins, light gray | | | | Male connector with CAGE CLAMP®, 100% protected against mismatching, light gray | | | | Marking strips, 100 self-adhesive strips | | | | |
| Pin spacing 5 mm | | | | Pin spacing 5 mm | | | | Spacing 5 mm | | | | |
| straight | | | | with fixing flanges | | | | 1 - 12 (300x) 210-331/500-103 | | | | |
| angled | | | | | | | | 13 - 24 (300x) 210-331/500-104 | | | | |
| ○ 2 | 721-132/001-000 | 721-432/001-000 | 200 | ○ 2 | 721-602 | 100 | 721-602/019-000 | 100 | Spacing 7.5 mm | | | |
| ○ 3 | 721-133/001-000 | 721-433/001-000 | 200 | ○ 3 | 721-603 | 100 | 721-603/019-000 | 50 | 1 - 16 (100x) 210-331/750-202 | | | |
| ○ 4 | 721-134/001-000 | 721-434/001-000 | 200 | ○ 4 | 721-604 | 100 | 721-604/019-000 | 50 | Coding key, snap-on type, | | | |
| ○ 5 | 721-135/001-000 | 721-435/001-000 | 200 | ○ 5 | 721-605 | 50 | 721-605/019-000 | 50 | Spacing 5 mm | | | |
| ○ 6 | 721-136/001-000 | 721-436/001-000 | 100 | ○ 6 | 721-606 | 50 | 721-606/019-000 | 50 | light gray 231-129 100 | | | |
| ○ 7 | 721-137/001-000 | 721-437/001-000 | 100 | ○ 7 | 721-607 | 50 | 721-607/019-000 | 50 | Spacing 7.5 mm | | | |
| ○ 8 | 721-138/001-000 | 721-438/001-000 | 100 | ○ 8 | 721-608 | 50 | 721-608/019-000 | 50 | light gray 231-130 100 | | | |
| ○ 9 | 721-139/001-000 | 721-439/001-000 | 100 | ○ 9 | 721-609 | 50 | 721-609/019-000 | 25 | Insulation stop, 5 pcs/strip | | | |
| ○ 10 | 721-140/001-000 | 721-440/001-000 | 100 | ○ 10 | 721-610 | 50 | 721-610/019-000 | 25 | Spacing 5 mm | | | |
| ○ 12 | 721-142/001-000 | 721-442/001-000 | 100 | ○ 12 | 721-612 | 25 | 721-612/019-000 | 25 | 0.08 - 0.2mm ² 231-670 200 | | | |
| ○ 14 | 721-144/001-000 | 721-444/001-000 | 50 | : | : | : | : | : | white 0.25 - 0.5 mm ² 231-671 200 | | | |
| ○ 16 | 721-146/001-000 | 721-446/001-000 | 50 | ○ 16 | 721-616 | 25 | 721-616/019-000 | 10 | light gray 0.75 - 1 mm ² 231-672 200 | | | |
| ○ 20 | 721-150/001-000 | 721-450/001-000 | 50 | ○ 20 | 721-620 | 10 | 721-620/019-000 | 10 | dark gray 231-673 200 | | | |
| Pin spacing 7.5 mm | | | | Pin spacing 7.5 mm | | | | Spacing 7.5 mm | | | | |
| straight | | | | with fixing flanges | | | | 0.08 - 0.2mm ² 231-673 200 | | | | |
| angled | | | | | | | | 0.25 - 0.5 mm ² 231-674 200 | | | | |
| ○ 2 | 721-232/001-000 | 721-832/001-000 | 200 | ○ 2 | 723-602 | 100 | 723-602/019-000 | 50 | light gray 0.75 - 1 mm ² 231-675 200 | | | |
| ○ 3 | 721-233/001-000 | 721-833/001-000 | 200 | ○ 3 | 723-603 | 100 | 723-603/019-000 | 50 | Fixing element, horizontal locking device | | | |
| ○ 4 | 721-234/001-000 | 721-834/001-000 | 100 | ○ 4 | 723-604 | 50 | 723-604/019-000 | 50 | gray 231-193 100 | | | |
| ○ 5 | 721-235/001-000 | 721-835/001-000 | 100 | ○ 5 | 723-605 | 50 | 723-605/019-000 | 50 | Tapping screw | | | |
| ○ 6 | 721-236/001-000 | 721-836/001-000 | 100 | ○ 6 | 723-606 | 50 | 723-606/019-000 | 25 | B 2.2 x 13 mm 231-194 100 | | | |
| ○ 7 | 721-237/001-000 | 721-837/001-000 | 50 | ○ 7 | 723-607 | 50 | 723-607/019-000 | 25 | B 2.2 x 9.5 mm 209-147 100 | | | |
| ○ 8 | 721-238/001-000 | 721-838/001-000 | 50 | ○ 8 | 723-608 | 25 | 723-608/019-000 | 25 | Drilled hole, 1.8 mm Ø | | | |
| ○ 9 | 721-239/001-000 | 721-839/001-000 | 50 | ○ 9 | 723-609 | 25 | 723-609/019-000 | 25 | Screw with nut | | | |
| ○ 10 | 721-240/001-000 | 721-840/001-000 | 50 | ○ 10 | 723-610 | 25 | 723-610/019-000 | 25 | M 2 x 12 mm 231-195 100 | | | |
| ○ 11 | 721-241/001-000 | 721-841/001-000 | 50 | ○ 11 | 723-611 | 25 | 723-611/019-000 | 10 | for fixing flange | | | |
| ○ 12 | 721-242/001-000 | 721-842/001-000 | 50 | ○ 12 | 723-612 | 25 | 723-612/019-000 | 10 | Test plug, with 500 mm cable | | | |
| | | | | | | | | 2 mm Ø, red 210-136 50 | | | | |
| | | | | | | | | 2.3 mm Ø, yellow 210-137 50 | | | | |

Dimensions Drilled hole diameter: 1.4 ^{+0.1} mm (1x1 mm solder pin)



* AWG 12: THHN, THWN

For technical explanations and abbreviations, see technical section.

MULTI CONNECTION SYSTEM MIDI – 100% Protected Against Mismatching

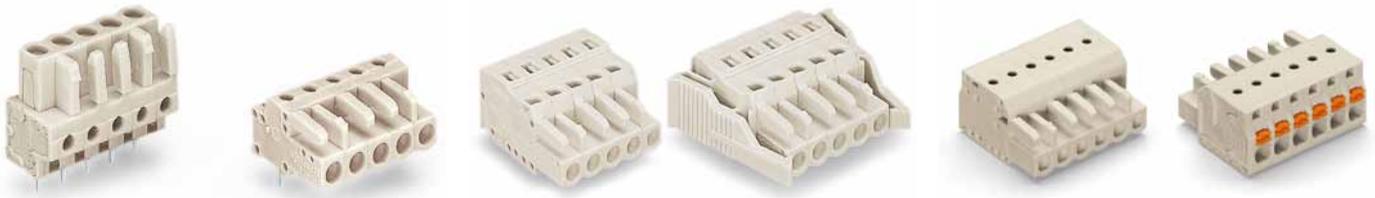
Female Headers and Connectors

Pin Spacing 5 mm and 7.5 mm

| | | |
|--|---|--|
| <p>Pin spacing 5 mm/0.197 in, light gray 250 V/4 kV/3 300 V, 10 A  I_N 12 A 300 V, 15 A </p> <p>Pin spacing 7.5 mm/0.295 in, light gray 400 V/6 kV/3 300 V, 10 A </p> <p> Approvals</p> | <p>Pin spacing 5 mm/0.197 in, light gray 0.08 - 2.5 mm² AWG 28 - 12* 250 V/4 kV/3; 16 A 300 V, 15 A  Pin spacing 7.5 mm/0.295 in, light gray 400 V/6 kV/3 300 V, 10 A   8 - 9 mm / 0.33 in</p> <p> Approvals</p> | <p>Pin spacing 5 mm/0.197 in, light gray 0.2 - 2.5 mm² AWG 24 - 12* 250 V/4 kV/3 I_N 16 A  10 - 11 mm / 0.43 in</p> <p> Approvals</p> |
|--|---|--|

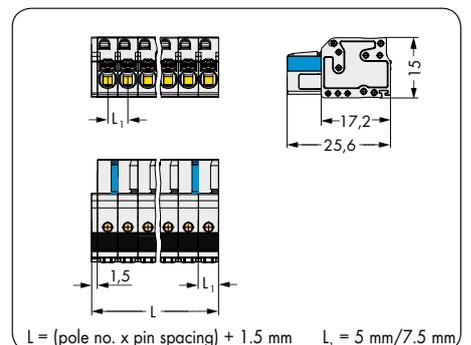
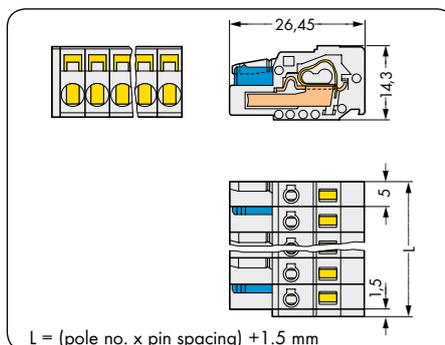
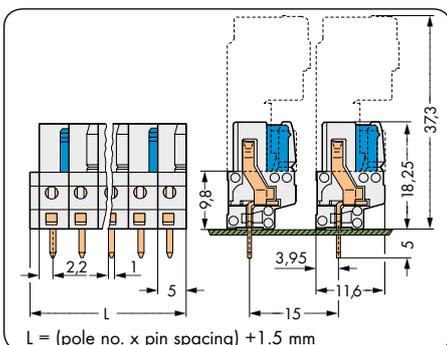
CAGE CLAMP®

CAGE CLAMP®S



| Pole No. | Item No. | Item No. | Pack. Unit | Pole No. | Item No. | Pack. Unit | Item No. | Pack. Unit | Pole No. | Item No. | Pack. Unit |
|--|----------|----------|------------|--|-----------------|------------|-----------------|---|----------|------------------|------------|
| Female header with solder pins, with coding fingers, with two latches, (0.6 x 1) mm solder pin, light gray | | | | Female connector with CAGE CLAMP®, with coding fingers, with two latches, light gray | | | | Female connector with CAGE CLAMP®S and integrated push-buttons, with coding fingers, with two latches, light gray | | | |
| Pin spacing 5 mm | | | | Pin spacing 5 mm | | | | Pin spacing 5 mm | | | |
| straight | | | | with locking levers | | | | | | | |
| ○ 2** | 722-132 | 722-232 | 100 | ○ 2** | 721-102/026-000 | 100 | 721-102/037-000 | 100 | ○ 2** | 2721-102/026-000 | 100 |
| ○ 3 | 722-133 | 722-233 | 100 | ○ 3 | 721-103/026-000 | 100 | 721-103/037-000 | 50 | ○ 3 | 2721-103/026-000 | 100 |
| ○ 4 | 722-134 | 722-234 | 100 | ○ 4 | 721-104/026-000 | 100 | 721-104/037-000 | 50 | ○ 4 | 2721-104/026-000 | 100 |
| ○ 5 | 722-135 | 722-235 | 100 | ○ 5 | 721-105/026-000 | 100 | 721-105/037-000 | 50 | ○ 5 | 2721-105/026-000 | 100 |
| ○ 6 | 722-136 | 722-236 | 50 | ○ 6 | 721-106/026-000 | 50 | 721-106/037-000 | 50 | ○ 6 | 2721-106/026-000 | 50 |
| : | : | : | : | : | : | : | : | : | : | : | : |
| ○ 10 | 722-140 | 722-240 | 50 | ○ 10 | 721-110/026-000 | 50 | 721-110/037-000 | 25 | ○ 10 | 2721-110/026-000 | 50 |
| ○ 12 | 722-142 | 722-242 | 25 | ○ 12 | 721-112/026-000 | 25 | 721-112/037-000 | 25 | ○ 12 | 2721-112/026-000 | 25 |
| ○ 14 | 722-144 | 722-244 | 25 | : | : | : | : | : | ○ 14 | 2721-114/026-000 | 25 |
| ○ 16 | 722-146 | 722-246 | 25 | ○ 16 | 721-116/026-000 | 25 | 721-116/037-000 | 10 | ○ 16 | 2721-116/026-000 | 25 |
| ○ 20 | 722-150 | 722-250 | 10 | ○ 20 | 721-120/026-000 | 10 | 721-120/037-000 | 10 | ○ 20 | 2721-120/026-000 | 10 |
| Pin spacing 7.5 mm (pole no - 1) x pin spacing + 5 mm + 1.5 mm | | | | Pin spacing 7.5 mm (pole no. - 1) + 5 mm | | | | Pin spacing 7.5 mm | | | |
| straight | | | | with locking levers | | | | | | | |
| ○ 2** | 722-732 | 722-832 | 100 | ○ 2** | 721-202/026-000 | 100 | 721-202/037-000 | 50 | ○ 2** | 2721-202/026-000 | 100 |
| ○ 3 | 722-733 | 722-833 | 100 | ○ 3 | 721-203/026-000 | 100 | 721-203/037-000 | 50 | ○ 3 | 2721-203/026-000 | 100 |
| ○ 4 | 722-734 | 722-834 | 50 | ○ 4 | 721-204/026-000 | 50 | 721-204/037-000 | 50 | ○ 4 | 2721-204/026-000 | 50 |
| ○ 5 | 722-735 | 722-835 | 50 | ○ 5 | 721-205/026-000 | 50 | 721-205/037-000 | 50 | ○ 5 | 2721-205/026-000 | 50 |
| ○ 6 | 722-736 | 722-836 | 50 | ○ 6 | 721-206/026-000 | 50 | 721-206/037-000 | 25 | ○ 6 | 2721-206/026-000 | 50 |
| ○ 7 | 722-737 | 722-837 | 50 | ○ 7 | 721-207/026-000 | 50 | 721-207/037-000 | 25 | ○ 7 | 2721-207/026-000 | 50 |
| ○ 8 | 722-738 | 722-838 | 25 | ○ 8 | 721-208/026-000 | 25 | 721-208/037-000 | 25 | ○ 8 | 2721-208/026-000 | 25 |
| ○ 9 | 722-739 | 722-839 | 25 | ○ 9 | 721-209/026-000 | 25 | 721-209/037-000 | 25 | ○ 9 | 2721-209/026-000 | 25 |
| ○ 10 | 722-740 | 722-840 | 25 | ○ 10 | 721-210/026-000 | 25 | 721-210/037-000 | 25 | ○ 10 | 2721-210/026-000 | 25 |
| ○ 11 | 722-741 | 722-841 | 25 | ○ 11 | 721-211/026-000 | 25 | 721-211/037-000 | 10 | ○ 11 | 2721-211/026-000 | 25 |
| ○ 12 | 722-742 | 722-842 | 25 | ○ 12 | 721-212/026-000 | 25 | 721-212/037-000 | 10 | ○ 12 | 2721-212/026-000 | 25 |
| **one latch only | | | | **one latch only | | | | **one latch only | | | |

Dimensions Drilled hole diameter: 1.3 ^{+0.1}mm



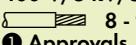
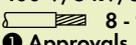
 Approvals are available online at: www.wago.com.
For technical explanations and abbreviations, see technical section.

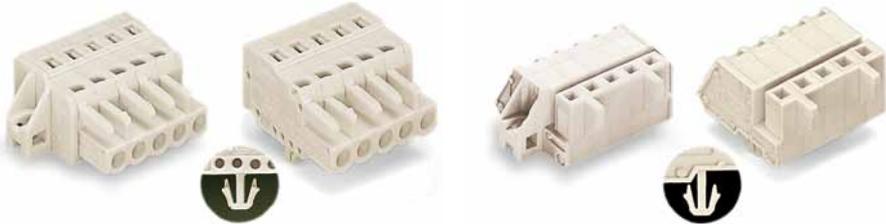
* AWG 12: THHN, THWN

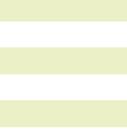
MULTI CONNECTION SYSTEM MIDI – 100% Protected Against Mismatching, Female Headers and Connectors

Pin Spacing 5 mm and 7.5 mm

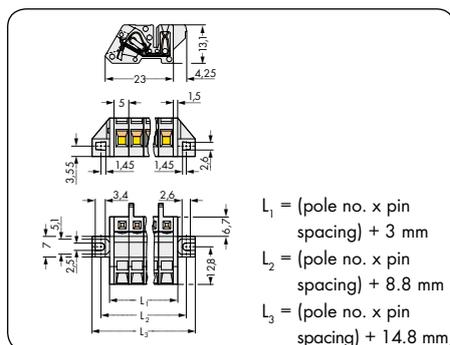
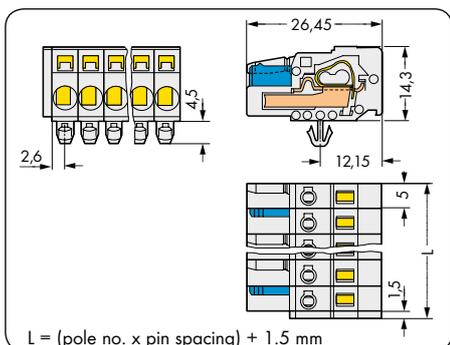
CAGE CLAMP®

| | | |
|---|---|---------------------------|
| <p>Pin spacing 5 mm/0.197 in, light gray 0.08 - 2.5 mm² AWG 28 - 12* 250 V/4 kV/3; 12 A 300 V, 15 A </p> <p>Pin spacing 7.5 mm/0.295 in, light gray 400 V/6 kV/3 300 V, 15 A </p> <p> 8 - 9 mm / 0.33 in</p> <p> Approvals</p> | <p>Pin spacing 5 mm/0.197 in, light gray 0.08 - 2.5 mm² AWG 28 - 12* 250 V/4 kV/3; 12 A 300 V, 15 A </p> <p>Pin spacing 7.5 mm/0.295 in, light gray 400 V/6 kV/3 300 V, 15 A </p> <p> 8 - 9 mm / 0.33 in</p> <p> Approvals</p> | <p>Accessories</p> |
|---|---|---------------------------|



| Pole No. | Item No. | Pack. | Unit | Item No. | Pack. | Unit | Pole No. | Item No. | Pack. | Unit | Item No. | Pack. | Unit | Accessories, 721 and 2721 Series | Item No. |
|--|-----------------|-------|------|---|-------|------|--|---|-------|------|-----------------|---|------|---|----------|
| <p>Female connector with CAGE CLAMP® and fixing flanges for panel mounting, with coding fingers, with two latches, for screw or similar mounting types, light gray</p> <p>and snap-in mounting feet, for 0.6 - 1.2 mm plate thickness, 3.5 mm Ø mounting holes, or with 209-137 mounting adapter for DIN 35 rail</p> | | | | | | | <p>Angled female connector with CAGE CLAMP® and fixing flanges for panel mounting, with two latches, for screw or similar mounting types, light gray</p> <p>and snap-in mounting feet, for 0.6 - 1.2 mm plate thickness, 3.5 mm Ø mounting holes</p> | | | | | | | <p>Marking strips, 100 self-adhesive strips</p> <p>Spacing 5 mm 1 - 12 (300x) 210-331/500-103 13 - 24 (300x) 210-331/500-104</p> <p>Spacing 7.5 mm 1 - 16 (100x) 210-331/750-202</p> <p>Insulation stop, 5 pcs/strip</p> <p>Spacing 5 mm 0.08-0.2mm²  white 231-670 200 0.25-0.5 mm² light gray 231-671 200 0.75-1 mm² dark gray 231-672 200</p> <p>Spacing 7.5 mm 0.08-0.2mm²  white 231-673 200 0.25-0.5 mm² light gray 231-674 200 0.75-1 mm² dark gray 231-675 200</p> <p> 0.2 mm² "sol." (0.14 mm² "fst")</p> <p>Mounting adapter, for DIN 35 rail, 3 or more poles</p> <p> gray 209-137 1</p> <p>Tapping screw  B 2.2 x 9.5 mm 209-147 100 Drilled hole, 1.8 mm Ø</p> <p>Screw with nut  M 2 x 12 mm 231-195 100 for fixing flange</p> <p>Test plug, with 500 mm cable,  2 mm Ø, red 210-136 50 2.3 mm Ø, yellow 210-137 50</p> <p>Operating tool with partially insulated shaft,  type 2, (3.5 x 0.5) mm blade 210-720 1</p> <p>Operating tool, for female and male connectors  210-250 1</p> | |
| <p>Pin spacing 5 mm</p> <p>with fixing flanges with snap-in mounting feet</p> | | | | <p>Pin spacing 5 mm</p> <p>with fixing flanges with snap-in mounting feet</p> | | | | <p>Pin spacing 7.5 mm</p> <p>with fixing flanges with snap-in mounting feet</p> | | | | <p>Pin spacing 7.5 mm (pole no. - 1) + 5 mm</p> <p>with fixing flanges with snap-in mounting feet</p> | | | |
| ○ 2** | 721-102/031-000 | 100 | | 721-102/008-000 | 100 | | ○ 2 | 721-302/031-000 | 100 | | 721-302/008-000 | 100 | | | |
| ○ 3 | 721-103/031-000 | 50 | | 721-103/008-000 | 100 | | ○ 3 | 721-303/031-000 | 50 | | 721-303/008-000 | 50 | | | |
| ○ 4 | 721-104/031-000 | 50 | | 721-104/008-000 | 100 | | ○ 4 | 721-304/031-000 | 50 | | 721-304/008-000 | 50 | | | |
| ○ 5 | 721-105/031-000 | 50 | | 721-105/008-000 | 100 | | ○ 5 | 721-305/031-000 | 50 | | 721-305/008-000 | 50 | | | |
| ○ 6 | 721-106/031-000 | 50 | | 721-106/008-000 | 50 | | ○ 6 | 721-306/031-000 | 50 | | 721-306/008-000 | 50 | | | |
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | | |
| ○ 10 | 721-110/031-000 | 25 | | 721-110/008-000 | 50 | | ○ 10 | 721-310/031-000 | 25 | | 721-310/008-000 | 50 | | | |
| ○ 12 | 721-112/031-000 | 25 | | 721-112/008-000 | 25 | | ○ 12 | 721-312/031-000 | 25 | | 721-312/008-000 | 25 | | | |
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | | |
| ○ 16 | 721-116/031-000 | 10 | | 721-116/008-000 | 25 | | ○ 16 | 721-316/031-000 | 10 | | 721-316/008-000 | 25 | | | |
| ○ 20 | 721-120/031-000 | 10 | | 721-120/008-000 | 10 | | ○ 20 | 721-320/031-000 | 10 | | 721-320/008-000 | 10 | | | |
| <p>Pin spacing 7.5 mm (pole no. - 1) x pin spacing + 5 mm + 1.5 mm</p> <p>with fixing flanges with snap-in mounting feet</p> | | | | <p>Pin spacing 7.5 mm (pole no. - 1) + 5 mm</p> <p>with fixing flanges with snap-in mounting feet</p> | | | | <p>Pin spacing 7.5 mm (pole no. - 1) + 5 mm</p> <p>with fixing flanges with snap-in mounting feet</p> | | | | <p>Pin spacing 7.5 mm (pole no. - 1) + 5 mm</p> <p>with fixing flanges with snap-in mounting feet</p> | | | |
| ○ 2** | 721-202/031-000 | 50 | | 721-202/008-000 | 100 | | ○ 2 | 721-332/031-000 | 50 | | 721-332/008-000 | 100 | | | |
| ○ 3 | 721-203/031-000 | 50 | | 721-203/008-000 | 100 | | ○ 3 | 721-333/031-000 | 50 | | 721-333/008-000 | 100 | | | |
| ○ 4 | 721-204/031-000 | 50 | | 721-204/008-000 | 50 | | ○ 4 | 721-334/031-000 | 50 | | 721-334/008-000 | 50 | | | |
| ○ 5 | 721-205/031-000 | 50 | | 721-205/008-000 | 50 | | ○ 5 | 721-335/031-000 | 50 | | 721-335/008-000 | 50 | | | |
| ○ 6 | 721-206/031-000 | 25 | | 721-206/008-000 | 50 | | ○ 6 | 721-336/031-000 | 50 | | 721-336/008-000 | 50 | | | |
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | | |
| ○ 11 | 721-211/031-000 | 10 | | 721-211/008-000 | 25 | | ○ 11 | 721-341/031-000 | 25 | | 721-341/008-000 | 25 | | | |
| ○ 12 | 721-212/031-000 | 10 | | 721-212/008-000 | 25 | | ○ 12 | 721-342/031-000 | 25 | | 721-342/008-000 | 25 | | | |

Dimensions



MULTI CONNECTION SYSTEM MAXI – 100% Protected Against Mismatching

Male Headers with Solder Pins

Pin spacing 7.62 mm

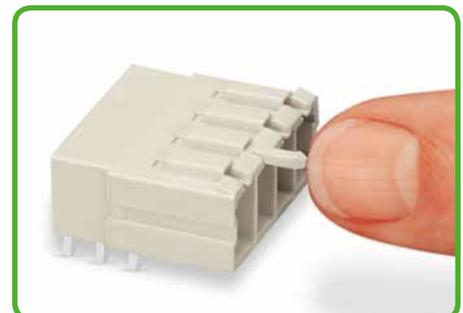
| | | |
|---|---|-----------------|
| Pin spacing 7.62 mm/0.3 in, light gray 630 V/6 kV/3 300 V, 42 A  I_N 41 A 300 V, 50 A  | Pin spacing 7.62 mm/0.3 in, light gray 630 V/6 kV/3 300 V, 42 A  I_N 41 A 300 V, 50 A  | Handling |
|  Approvals |  Approvals | |



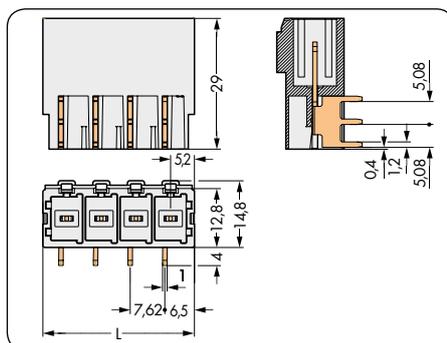
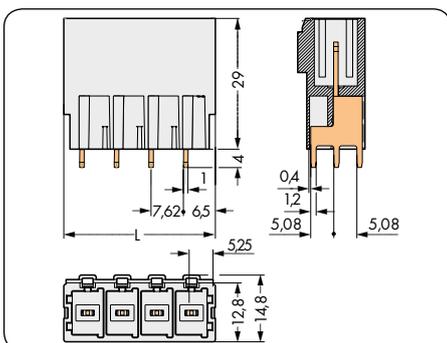
| Pole No. | Item No. | Pack. Unit | Pole No. | Item No. | Pack. Unit |
|--|----------|------------|---|----------|------------|
| Male header with straight solder pins, 3 solder pins/pole, 1 mm x 1.2 mm, light gray | | | Male header with angled solder pins, 3 solder pins/pole, 1 mm x 1.2 mm, light gray | | |
| ○ 2 | 831-3602 | 48 | ○ 2 | 831-3622 | 48 |
| ○ 3 | 831-3603 | 48 | ○ 3 | 831-3623 | 48 |
| ○ 4 | 831-3604 | 24 | ○ 4 | 831-3624 | 24 |
| ○ 5 | 831-3605 | 24 | ○ 5 | 831-3625 | 24 |
| ○ 6 | 831-3606 | 24 | ○ 6 | 831-3626 | 24 |
| ○ 7 | 831-3607 | 12 | ○ 7 | 831-3627 | 12 |
| ○ 8 | 831-3608 | 12 | ○ 8 | 831-3628 | 12 |
| ○ 9 | 831-3609 | 12 | ○ 9 | 831-3629 | 12 |
| Note: Upon request, male headers with straight solder pins are also available with protection against PCB mounting errors. | | | | | |
| Dimensions Drilled hole diameter: $1.7^{+0.1} \text{ mm}$ $L = (\text{pole no.} - 1) \times \text{pin spacing} + 10.5 \text{ mm}$ | | | | | |



Break or cut off coding pin from female connector.



Insert coding pin into male header (break first) until it engages.



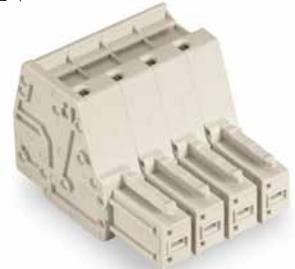
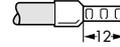
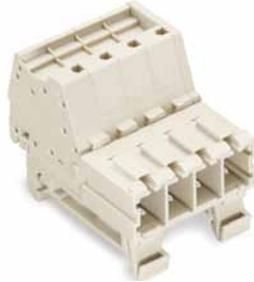
Printed female connector upon request.

MULTI CONNECTION SYSTEM MAXI – 100% Protected Against Mismatching, Male and Female Connectors, Pin Spacing 7.62 mm

CAGE CLAMP®S

| | | |
|--|--|--|
| Pin spacing 7.62 mm/0.3 in, light gray 0.5 - 6 (10) mm ² ② AWG 20 - 8 1000 V/8 kV/3 600 V, 42 A I _N 41 A 600 V, 50 A 13 - 15 mm / 0.52 - 0.58 in ① Approvals | Pin spacing 7.62 mm/0.3 in, light gray 0.5 - 6 (10) mm ² ② AWG 20 - 8 1000 V/8 kV/3 600 V, 42 A I _N 41 A 600 V, 50 A 13 - 15 mm / 0.52 - 0.58 in ① Approvals | Pin spacing 7.62 mm/0.3 in, light gray 0.5 - 6 (10) mm ² ② AWG 20 - 8 1000 V/8 kV/3 600 V, 42 A I _N 41 A 600 V, 50 A 13 - 15 mm / 0.52 - 0.58 in ① Approvals |
|--|--|--|

② Conductor sizes: 0.5 - 10 mm² "s+f-st";
 Push-in conductor sizes: 1.5 - 10 mm² "s" and
 1.5 - 6 mm² "insulated ferrule, 12 mm"

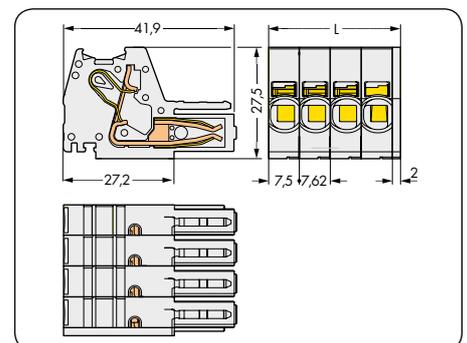
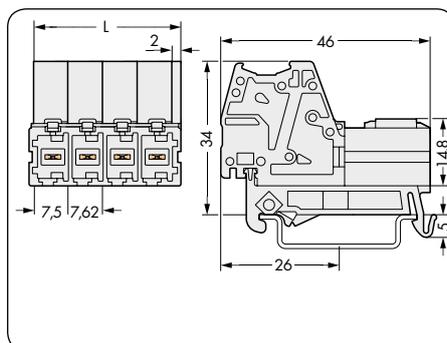
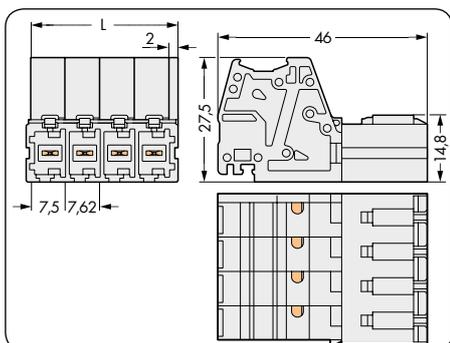


| Pole No. | Item No. | Pack. Unit | Pole No. | Item No. | Pack. Unit | Pole No. | Item No. | Pack. Unit |
|--|----------|------------|--|------------------|------------|---|----------|------------|
| Male connector with CAGE CLAMP®S, coding via pins, light gray | | | Male connector with CAGE CLAMP®S, with integrated adapter for DIN 35-rail mounting, coding via pins, light gray | | | Female connector with CAGE CLAMP®S, with coding pins, light gray | | |
| ○ 2 | 831-3202 | 48 | ○ 2 | 831-3202/007-000 | 48 | ○ 2 | 831-3102 | 48 |
| ○ 3 | 831-3203 | 48 | ○ 3 | 831-3203/007-000 | 48 | ○ 3 | 831-3103 | 48 |
| ○ 4 | 831-3204 | 24 | ○ 4 | 831-3204/007-000 | 24 | ○ 4 | 831-3104 | 24 |
| ○ 5 | 831-3205 | 24 | ○ 5 | 831-3205/007-000 | 24 | ○ 5 | 831-3105 | 24 |
| ○ 6 | 831-3206 | 24 | ○ 6 | 831-3206/007-000 | 24 | ○ 6 | 831-3106 | 24 |
| ○ 7 | 831-3207 | 12 | ○ 7 | 831-3207/007-000 | 12 | ○ 7 | 831-3107 | 12 |
| ○ 8 | 831-3208 | 12 | ○ 8 | 831-3208/007-000 | 12 | ○ 8 | 831-3108 | 12 |
| ○ 9 | 831-3209 | 12 | ○ 9 | 831-3209/007-000 | 12 | ○ 9 | 831-3109 | 12 |

Accessories, 831 Series

| | | |
|--|--|--|
| Test plug, with 500 mm cable, 2 mm Ø red 210-136 50 | Test plug, with 500 mm cable, 2 mm Ø red 210-136 50 | Test plug, with 500 mm cable, 2 mm Ø red 210-136 50 |
| Marker card, 40 self-adhesive strips per card 5 mm wide strip Marking 1 - 16 (100 x) 210-334/762-202 1 For direct printing, please contact factory. | Marker card, 40 self-adhesive strips per card 5 mm wide strip Marking 1 - 16 (100 x) 210-334/762-202 1 For direct printing, please contact factory. | Marker card, 40 self-adhesive strips per card 5 mm wide strip Marking 1 - 16 (100 x) 210-334/762-202 1 For direct printing, please contact factory. |
| Marking strips, plain, 11 mm wide, 50m roll white 2009-110 1 | Marking strips, plain, 11 mm wide, 50m roll white 2009-110 1 | Marking strips, plain, 11 mm wide, 50m roll white 2009-110 1 |
| Mounting adapter for DIN 35-rail, for snap-fit mounting to male connectors with CAGE CLAMP®S 831-137 1 | Operating tool with partially insulated shaft, type 3, (5.5 x 0.8) mm blade 210-721 1 | Operating tool with partially insulated shaft, type 3, (5.5 x 0.8) mm blade 210-721 1 |

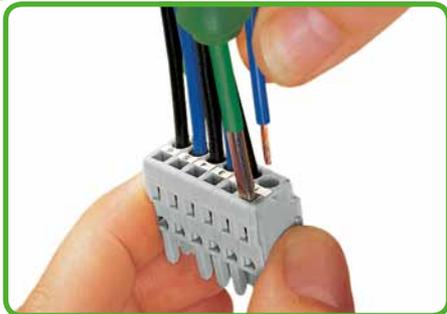
Dimensions L = (pole no. - 1) x pin spacing + 9.5 mm



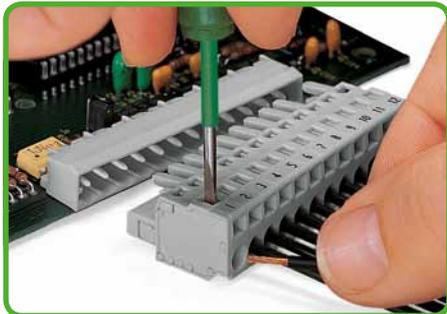
MULTI CONNECTION SYSTEM MIDI Classic

Description and Handling

CAGE CLAMP® connection



Inserting conductor using 3.5 mm screwdriver – CAGE CLAMP® actuation parallel to conductor entry.

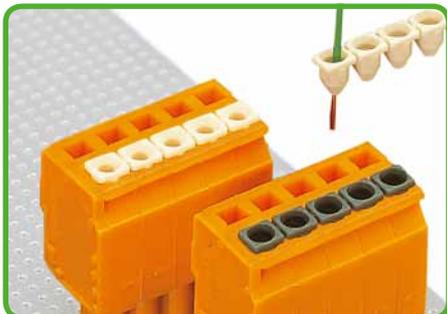


Inserting conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



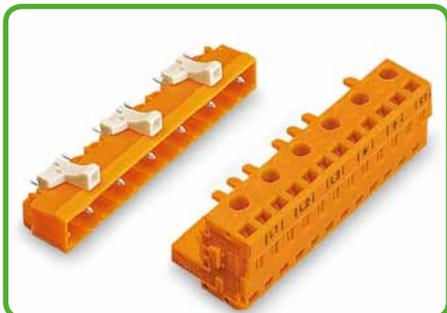
Inserting conductor into CAGE CLAMP® unit via 231-131 operating lever.

Insulation stop

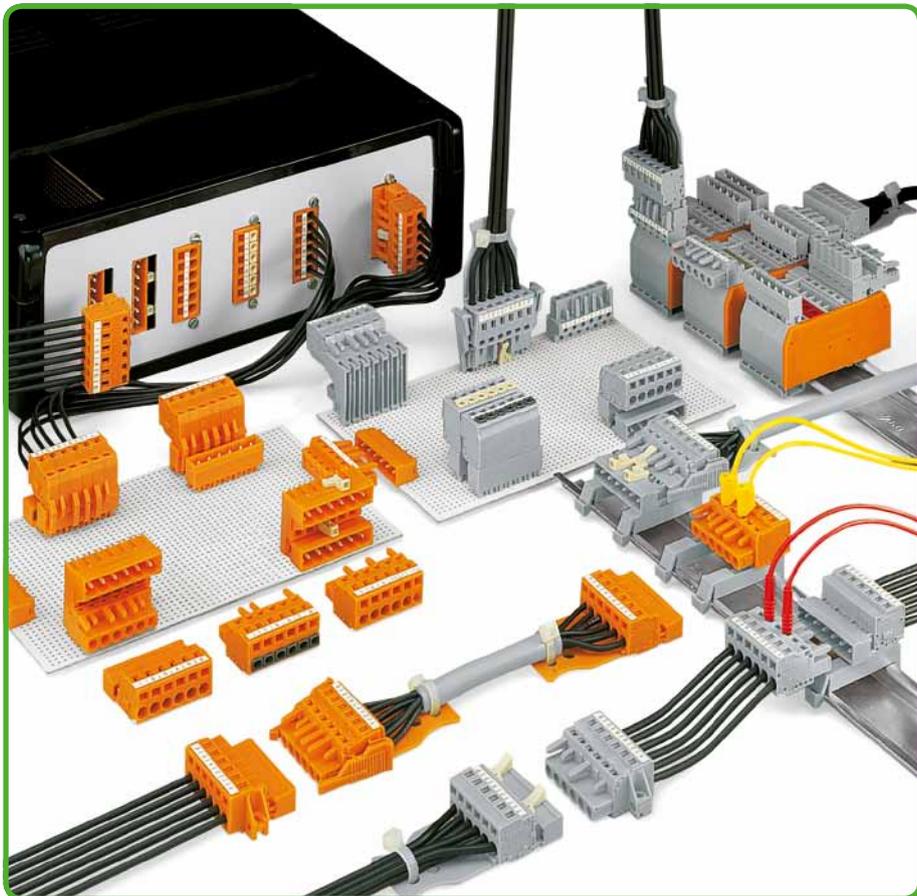


Prevents conductor insulation from being inserted into the clamping unit for CAGE CLAMP® and CAGE CLAMP®S.

Pin spacing 10 mm and 10.16 mm



Shown here with 10.16 mm/0.4 in spacing (upon request).



Coding

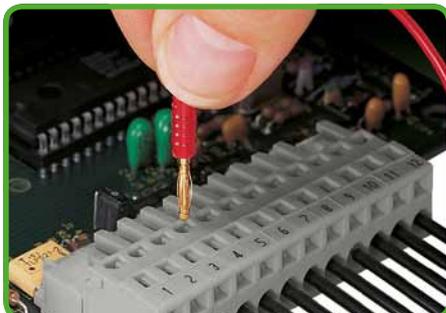


Coding a male header – fitting coding key(s).



Coding a female connector – removing coding finger(s).

Testing



Testing female connector with CAGE CLAMP®. Vertical insertion of 2 mm or 2.3 mm Ø test plug.

CAGE CLAMP® clamps the following copper conductors:



solid



stranded



fine-stranded



tip-bonded



with ferrule



with pin terminal

Strip length, see packaging or instructions.

MULTI CONNECTION SYSTEM MIDI Classic

Male Headers with Solder Pins

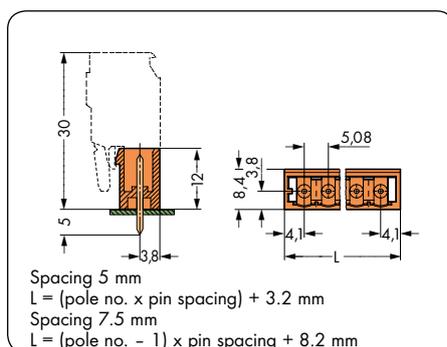
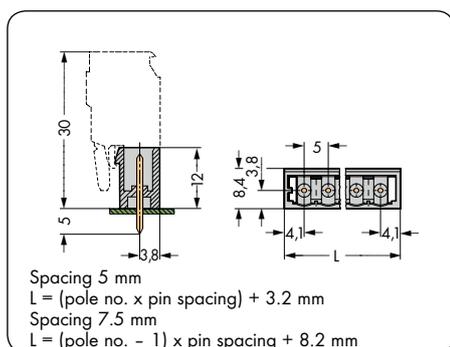
Pin Spacing 5 mm; 5.08 mm; 7.5 mm and 7.62 mm

| | | |
|---|---|--------------------|
| Pin spacing 5 mm/0.197 in, gray 320 V/4 kV/3 300 V, 10 A  I_N 12 A Pin spacing 7.5 mm/0.295 in, gray 630 V/6 kV/3 300 V, 10 A  I_N 12 A  Approvals | Pin spacing 5.08 mm/0.2 in, orange 250 V/4 kV/3 300 V, 10 A  I_N 12 A Pin spacing 7.62 mm/0.3 in, orange 630 V/6 kV/3 300 V, 10 A  I_N 12 A  Approvals | Accessories |
|---|---|--------------------|



For male headers with screw flanges, see Full Line Catalog, Volume 2.

| Pole No. | Item No. | Item No. | Pack. Unit | Pole No. | Item No. | Item No. | Pack. Unit | Accessories, 231 Series | Item No. |
|---|-----------------|-----------------|------------|--|-----------------|-----------------|------------|---|----------|
| Male header with 1 x 1 mm solder pins, gray | | | | Male header with 1 x 1 mm solder pins, orange | | | | Coding key, snap-on type, | |
| Pin spacing 5 mm | | | | Pin spacing 5.08 mm | | | |  5 mm and 5.08 mm pin spacing light gray 231-129 100 | |
| straight | | angled | | straight | | angled | | 7.5 mm and 7.62 mm pin spacing light gray 231-130 100 | |
| 2 | 231-132/001-000 | 231-432/001-000 | 200 | 2 | 231-332/001-000 | 231-532/001-000 | 200 | Fixing element, horizontal, | |
| 3 | 231-133/001-000 | 231-433/001-000 | 200 | 3 | 231-333/001-000 | 231-533/001-000 | 200 |  5 mm and 7.5 mm pin spacing gray 231-193 100 | |
| 4 | 231-134/001-000 | 231-434/001-000 | 200 | 4 | 231-334/001-000 | 231-534/001-000 | 200 | Fixing element, horizontal, | |
| 5 | 231-135/001-000 | 231-435/001-000 | 200 | 5 | 231-335/001-000 | 231-535/001-000 | 200 |  5.08 mm and 7.62 mm pin spacing orange 231-393 100 | |
| : | : | : | : | : | : | : | : | Tapping screw, | |
| 12 | 231-142/001-000 | 231-442/001-000 | 100 | 12 | 231-342/001-000 | 231-542/001-000 | 100 |  for 1.8 mm Ø mounting hole B 2.2 x 13 mm 231-194 100 | |
| 21 | 231-151/001-000 | 231-451/001-000 | 50 | 21 | 231-351/001-000 | 231-551/001-000 | 50 | Screw with nut, | |
| 22 | 231-152/001-000 | 231-452/001-000 | 50 | 22 | 231-352/001-000 | 231-552/001-000 | 50 |  for fixing element M 2 x 12 mm 231-195 100 | |
| 23 | 231-153/001-000 | 231-453/001-000 | 50 | 23 | 231-353/001-000 | 231-553/001-000 | 50 | Separator, for formation of groups | |
| 24 | 231-154/001-000 | 231-454/001-000 | 50 | 24 | 231-354/001-000 | 231-554/001-000 | 50 |  light gray 231-500 100 | |
| Pin spacing 7.5 mm | | | | Pin Spacing 7.62 mm | | | | | |
| straight | | angled | | straight | | angled | | | |
| 2 | 231-232/001-000 | 231-832/001-000 | 200 | 2 | 231-732/001-000 | 231-932/001-000 | 200 | | |
| 3 | 231-233/001-000 | 231-833/001-000 | 200 | 3 | 231-733/001-000 | 231-933/001-000 | 200 | | |
| 4 | 231-234/001-000 | 231-834/001-000 | 100 | 4 | 231-734/001-000 | 231-934/001-000 | 100 | | |
| 5 | 231-235/001-000 | 231-835/001-000 | 100 | 5 | 231-735/001-000 | 231-935/001-000 | 100 | | |
| 6 | 231-236/001-000 | 231-836/001-000 | 100 | 6 | 231-736/001-000 | 231-936/001-000 | 100 | | |
| 7 | 231-237/001-000 | 231-837/001-000 | 50 | 7 | 231-737/001-000 | 231-937/001-000 | 50 | | |
| 8 | 231-238/001-000 | 231-838/001-000 | 50 | 8 | 231-738/001-000 | 231-938/001-000 | 50 | | |
| 9 | 231-239/001-000 | 231-839/001-000 | 50 | 9 | 231-739/001-000 | 231-939/001-000 | 50 | | |
| 10 | 231-240/001-000 | 231-840/001-000 | 50 | 10 | 231-740/001-000 | 231-940/001-000 | 50 | | |
| 11 | 231-241/001-000 | 231-841/001-000 | 50 | 11 | 231-741/001-000 | 231-941/001-000 | 50 | | |
| 12 | 231-242/001-000 | 231-842/001-000 | 50 | 12 | 231-742/001-000 | 231-942/001-000 | 50 | | |
| 13 | 231-243/001-000 | 231-843/001-000 | 50 | | | | | | |
| 16 | 231-246/001-000 | 231-846/001-000 | 50 | | | | | | |
| Dimensions Drilled hole diameter: 1.4 ^{+0.1} mm (1 x 1 mm solder pin) | | | | | | | | | |



 Approvals are available online at: www.wago.com.
 For technical explanations and abbreviations, see technical section.

MULTI CONNECTION SYSTEM MIDI Classic

Male Connectors

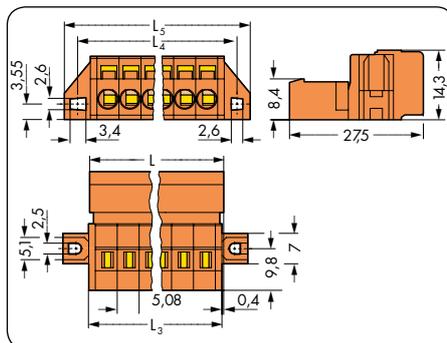
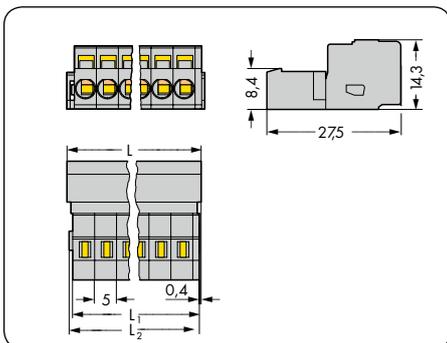
Pin Spacing 5 mm; 5.08 mm; 7.5 mm and 7.62 mm



| | | |
|---|---|---------------------------|
| <p>Pin spacing 5 mm/0.197 in, gray 0.08 - 2.5 mm² AWG 28 - 12* 320 V/4 kV/3, 12 A 300 V, 15 A </p> <p>Pin spacing 7.5 mm/0.295 in, gray 630 V/6 kV/3 300 V, 15 A </p> <p> 8 - 9 mm / 0.33 in</p> <p> Approvals</p> | <p>Pin spacing 5.08 mm/0.2 in, orange 0.08 - 2.5 mm² AWG 28 - 12* 320 V/4 kV/3, 12 A 300 V, 15 A </p> <p>Pin spacing 7.62 mm/0.3 in, orange 630 V/6 kV/3 300 V, 15 A </p> <p> 8 - 9 mm / 0.33 in</p> <p> Approvals</p> | <p>Accessories</p> |
|---|---|---------------------------|



| Pole No. | Item No. | Pack. | Unit | Item No. | Pack. | Unit | Pole No. | Item No. | Pack. | Unit | Item No. | Pack. | Unit | Accessories, Series 231 and 731 | Item No. | | |
|--|----------|-------|-----------------|--|-------|---------|----------|-----------------|-------|--------------------------------|------------------------|---|------|---------------------------------|----------|--|--|
| Male connector with CAGE CLAMP® and fixing flanges, for screw or similar mounting types, for vertical or horizontal mounting, gray | | | | Male connector with CAGE CLAMP® and fixing flanges, for screw or similar mounting types, for vertical or horizontal mounting, orange | | | | | | | | Marking strips, 100 self-adhesive strips | | | | | |
| Pin spacing 5 mm | | | | Pin spacing 5.08 mm | | | | | | | | Pin spacing 5 mm | | | | | |
| with fixing flanges | | | | with fixing flanges | | | | | | | | 1 - 12 (300x) 210-331/500-103 | | | | | |
| 2 | 231-602 | 100 | 231-602/019-000 | 100 | 2 | 231-632 | 100 | 231-632/019-000 | 100 | 13 - 24 (300x) | 210-331/500-104 | Pin spacing 5.08 mm | | | | | |
| 3 | 231-603 | 100 | 231-603/019-000 | 50 | 3 | 231-633 | 100 | 231-633/019-000 | 50 | 1 - 12 (200x) | 210-331/508-103 | Pin spacing 7.5 mm | | | | | |
| 4 | 231-604 | 100 | 231-604/019-000 | 50 | 4 | 231-634 | 100 | 231-634/019-000 | 50 | 13 - 24 (200x) | 210-331/508-104 | Pin spacing 7.62 mm | | | | | |
| 5 | 231-605 | 50 | 231-605/019-000 | 50 | 5 | 231-635 | 50 | 231-635/019-000 | 50 | 1 - 16 (100x) | 210-331/750-202 | Pin spacing 7.62 mm | | | | | |
| : | : | : | : | : | : | : | : | : | : | 1 - 16 (100x) | 210-331/762-202 | Operating tool with partially insulated shaft, type 2, (3.5x0.5) mm blade | | | | | |
| 12 | 231-612 | 25 | 231-612/019-000 | 25 | 12 | 231-642 | 25 | 231-642/019-000 | 25 | 210-720 1 | | | | | | | |
| 21 | 231-621 | 10 | 231-621/019-000 | 10 | 21 | 231-651 | 10 | 231-651/019-000 | 10 | Coding key, snap-on type, | | | | | | | |
| 22 | 231-622 | 10 | 231-622/019-000 | 10 | 22 | 231-652 | 10 | 231-652/019-000 | 10 | 5 mm and 5.08 mm pin spacing | | | | | | | |
| 23 | 231-623 | 10 | 231-623/019-000 | 10 | 23 | 231-653 | 10 | 231-653/019-000 | 10 | light gray 231-129 100 | | | | | | | |
| 24 | 231-624 | 10 | 231-624/019-000 | 10 | 24 | 231-654 | 10 | 231-654/019-000 | 10 | 7.5 mm and 7.62 mm pin spacing | | | | | | | |
| Pin spacing 7.5 mm (pole no. - 1) + 5 mm | | | | Pin spacing 7.62 mm (pole no. - 1) + 5.08 mm | | | | | | | | light gray 231-130 100 | | | | | |
| with fixing flanges | | | | with fixing flanges | | | | | | | | Insulation stop, 5 pcs/strip | | | | | |
| 2 | 731-602 | 100 | 731-602/019-000 | 50 | 2 | 731-632 | 100 | 731-632/019-000 | 50 | 5 mm and 5.08 mm pin spacing | | | | | | | |
| 3 | 731-603 | 100 | 731-603/019-000 | 50 | 3 | 731-633 | 100 | 731-633/019-000 | 50 | 0.08-0.2mm ² ② | | | | | | | |
| 4 | 731-604 | 50 | 731-604/019-000 | 50 | 4 | 731-634 | 50 | 731-634/019-000 | 50 | white 231-670 200 | | | | | | | |
| 5 | 731-605 | 50 | 731-605/019-000 | 50 | 5 | 731-635 | 50 | 731-635/019-000 | 50 | 0.25-0.5 mm ² | | | | | | | |
| 6 | 731-606 | 50 | 731-606/019-000 | 25 | 6 | 731-636 | 50 | 731-636/019-000 | 25 | light gray 231-671 200 | | | | | | | |
| 7 | 731-607 | 50 | 731-607/019-000 | 25 | 7 | 731-637 | 50 | 731-637/019-000 | 25 | 0.75-1 mm ² | | | | | | | |
| 8 | 731-608 | 25 | 731-608/019-000 | 25 | 8 | 731-638 | 25 | 731-638/019-000 | 25 | dark gray 231-672 200 | | | | | | | |
| 9 | 731-609 | 25 | 731-609/019-000 | 25 | 9 | 731-639 | 25 | 731-639/019-000 | 25 | 7.5 mm and 7.62 mm pin spacing | | | | | | | |
| 10 | 731-610 | 25 | 731-610/019-000 | 25 | 10 | 731-640 | 25 | 731-640/019-000 | 25 | 0.08-0.2mm ² ② | | | | | | | |
| 11 | 731-611 | 25 | 731-611/019-000 | 10 | 11 | 731-641 | 25 | 731-641/019-000 | 10 | white 231-673 200 | | | | | | | |
| 12 | 731-612 | 25 | 731-612/019-000 | 10 | 12 | 731-642 | 25 | 731-642/019-000 | 10 | 0.25-0.5 mm ² | | | | | | | |
| 13 | 731-613 | 10 | 731-613/019-000 | 10 | | | | | | | light gray 231-674 200 | | | | | | |
| 16 | 731-616 | 10 | 731-616/019-000 | 10 | | | | | | | 0.75-1 mm ² | | | | | | |
| | | | | | | | | | | | | dark gray 231-675 200 | | | | | |
| Dimensions | | | | L = (pole no. x pin spacing) + 3.2 mm L ₁ = L - 1.7 mm L ₂ = L - 1.2 mm | | | | | | | | ② 0.2 mm ² "sol." (0.14 mm ² "fst") | | | | | |
| | | | | L ₃ = L - 0.2 mm L ₄ = L ₃ + 5.8 mm L ₅ = L ₃ + 11.8 mm | | | | | | | | Tapping screw, | | | | | |
| | | | | | | | | | | | | for 1.8 mm Ø mounting hole | | | | | |
| | | | | | | | | | | | | B 2.2 x 9.5 mm 209-147 100 | | | | | |
| | | | | | | | | | | | | Separator, for formation of groups | | | | | |
| | | | | | | | | | | | | light gray 231-500 100 | | | | | |



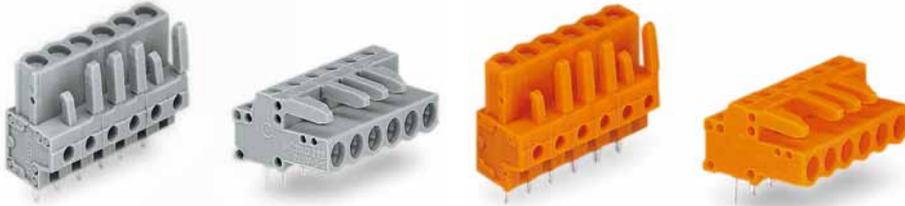
① Approvals are available online at: www.wago.com. * AWG 14: THHN, THWN
For technical explanations and abbreviations, see technical section.

MULTI CONNECTION SYSTEM MIDI Classic

Female Headers with Solder Pins

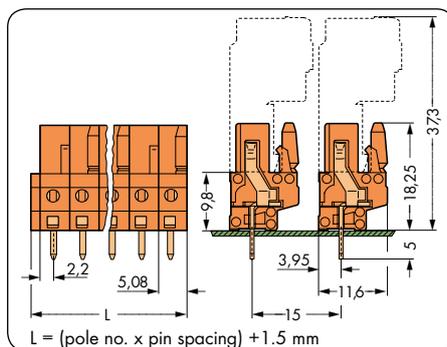
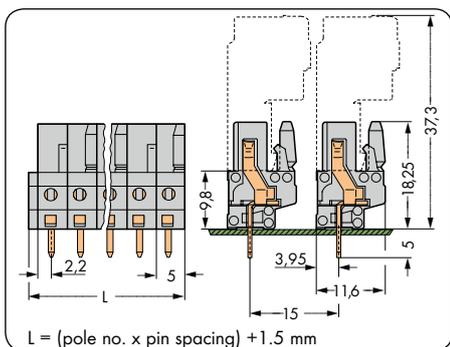
Pin Spacing 5 mm; 5.08 mm; 7.5 mm and 7.62 mm

| | | |
|---|---|--------------------|
| Pin spacing 5 mm/0.197 in, gray 320 V/4 kV/3 300 V, 15 A  I_N 12 A Pin spacing 7.5 mm/0.295 in, gray 630 V/6 kV/3 300 V, 15 A  I_N 12 A  Approvals | Pin spacing 5.08 mm/0.2 in, orange 320 V/4 kV/3 300 V, 15 A  I_N 12 A Pin spacing 7.62 mm/0.3 in, orange 630 V/6 kV/3 300 V, 15 A  I_N 12 A  Approvals | Accessories |
|---|---|--------------------|



| Pole No. Item No. | Item No. Pack. Unit | Pole No. Item No. | Item No. Pack. Unit | Accessories, 232 Series | Item No. |
|---|---------------------|---|---------------------|---|----------|
| Female header with 0.6 x 1 mm solder pins, with coding fingers, with two latches, gray | | Female header with 0.6 x 1 mm solder pins, with coding fingers, with two latches, orange | | Marking strips, 100 self-adhesive strips | |
| Pin spacing 5 mm | | Pin spacing 5.08 mm | | Pin spacing 5 mm | |
| straight angled | | straight angled | | 1-12 (300x) 210-331/500-103 13-24 (300x) 210-331/500-104 | |
| ● 2** 232-132 | 232-232 100 | ● 2** 232-162 | 232-262 100 | Pin spacing 5.08 mm | |
| ● 3** 232-133 | 232-233 100 | ● 3** 232-163 | 232-263 100 | 1-12 (200x) 210-331/508-103 13-24 (200x) 210-331/508-104 | |
| ● 4 232-134 | 232-234 100 | ● 4 232-164 | 232-264 100 | Pin spacing 7.5 mm | |
| ● 5 232-135 | 232-235 100 | ● 5 232-165 | 232-265 100 | 1-16 (100x) 210-331/750-202 | |
| : | : | : | : | Pin Spacing 7.62 mm | |
| ● 12 232-142 | 232-242 50 | ● 12 232-172 | 232-272 50 | 1-16 (100x) 210-331/762-202 | |
| : | : | : | : | Test plug, with 500 mm cable, | |
| ● 21 232-151 | 232-251 10 | ● 21 232-181 | 232-281 10 | 2 mm Ø, red 210-136 50 2.3 mm Ø, yellow 210-137 50 | |
| ● 22 232-152 | 232-252 10 | ● 22 232-182 | 232-282 10 | | |
| ● 23 232-153 | 232-253 10 | ● 23 232-183 | 232-283 10 | | |
| ● 24 232-154 | 232-254 10 | ● 24 232-184 | 232-284 10 | | |
| Pin spacing 7.5 mm (pole no - 1) x pin spacing + 5 mm + 1.5 mm | | Pin spacing 7.62 mm (pole no - 1) x pin spacing + 5.08 mm + 1.5 mm | | | |
| straight angled | | straight angled | | | |
| ● 2** 232-732 | 232-832 100 | ● 2** 232-762 | 232-862 100 | | |
| ● 3** 232-733 | 232-833 100 | ● 3** 232-763 | 232-863 100 | | |
| ● 4 232-734 | 232-834 50 | ● 4 232-764 | 232-864 50 | | |
| ● 5 232-735 | 232-835 50 | ● 5 232-765 | 232-865 50 | | |
| ● 6 232-736 | 232-836 50 | ● 6 232-766 | 232-866 50 | | |
| ● 7 232-737 | 232-837 50 | ● 7 232-767 | 232-867 50 | | |
| ● 8 232-738 | 232-838 25 | ● 8 232-768 | 232-868 25 | | |
| ● 9 232-739 | 232-839 25 | ● 9 232-769 | 232-869 25 | | |
| ● 10 232-740 | 232-840 25 | ● 10 232-770 | 232-870 25 | | |
| ● 11 232-741 | 232-841 25 | ● 11 232-771 | 232-871 25 | | |
| ● 12 232-742 | 232-842 25 | ● 12 232-772 | 232-872 25 | | |
| ● 13 232-743 | 232-843 10 | | | | |
| ● 16 232-746 | 232-846 10 | | | | |
| **one latch only | | **one latch only | | | |

Dimensions



Please find the entire product range in our Full Line Catalog, Volume 2. For more information, please visit www.wago.com.

MULTI CONNECTION SYSTEM MIDI Classic

Female Connectors

Pin Spacing 5 mm; 5.08 mm; 7.5 mm and 7.62 mm

| | | |
|---|--|--|
| <p>Pin spacing 5 mm/0.197 in, gray 0.08 - 2.5 mm² AWG 28 - 12* 320 V/4 kV/3, 16 A 300 V, 15 A  </p> <p>Pin spacing 7.5 mm/0.295 in, gray 630 V/6 kV/3 300 V, 15 A  </p> <p> 8 - 9 mm / 0.33 in</p> <p>1 Approvals</p> | <p>Pin spacing 5.08 mm/0.2 in, orange 0.08 - 2.5 mm² AWG 28 - 12* 320 V/4 kV/3, 16 A 300 V, 15 A  </p> <p>Pin spacing 7.62 mm/0.3 in, orange 630 V/6 kV/3 300 V, 15 A  </p> <p> 8 - 9 mm / 0.33 in</p> <p>1 Approvals</p> | <p>Pin spacing 5 mm/0.197 in, gray 0.2 - 2.5 mm² AWG 24 - 12* 320 V/4 kV/3 I_N 16 A</p> <p> 10 - 11 mm / 0.43 in</p> <p>1 Approvals</p> |
|---|--|--|

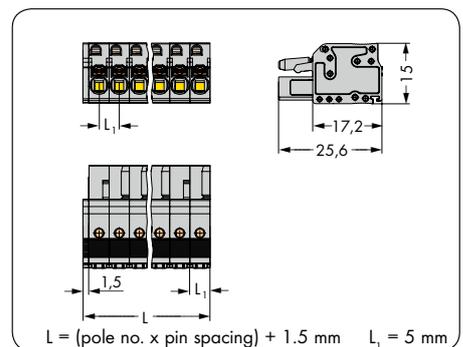
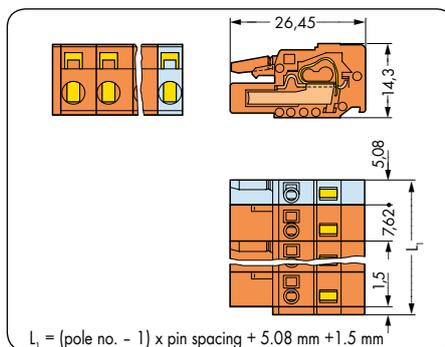
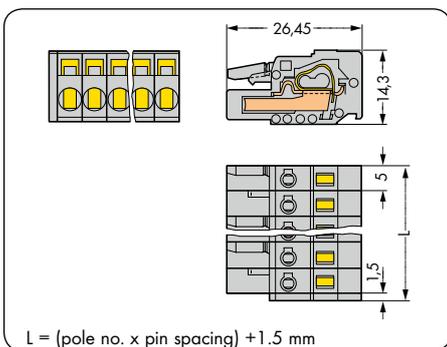
CAGE CLAMP®

CAGE CLAMP®S



| Pole No. | Item No. | Pack. Unit | Item No. | Pack. Unit | Pole No. | Item No. | Pack. Unit | Item No. | Pack. Unit | Pole No. | Item No. | Pack. Unit | Item No. | Pack. Unit |
|--|-----------------|------------|-----------------|------------|--|-----------------|------------|-----------------|------------|---|------------------|----------------------------|------------------|------------|
| Female connector with CAGE CLAMP®, with coding fingers, with two latches, gray | | | | | Female connector with CAGE CLAMP®, with coding fingers, with two latches, orange | | | | | Female connector with CAGE CLAMP®S and integrated push-buttons, with coding fingers, with two latches | | | | |
| Pin spacing 5 mm with locking levers | | | | | Pin spacing 5.08 mm with locking levers | | | | | Pin spacing 5 mm gray | | Pin spacing 5.08 mm orange | | |
| 2** | 231-102/026-000 | 100 | 231-102/037-000 | 100 | 2** | 231-302/026-000 | 100 | 231-302/037-000 | 100 | 2** | 2231-102/026-000 | | 2231-302/026-000 | 100 |
| 3** | 231-103/026-000 | 100 | 231-103/037-000 | 50 | 3** | 231-303/026-000 | 100 | 231-303/037-000 | 50 | 3** | 2231-103/026-000 | | 2231-303/026-000 | 100 |
| 4 | 231-104/026-000 | 100 | 231-104/037-000 | 50 | 4 | 231-304/026-000 | 100 | 231-304/037-000 | 50 | 4 | 2231-104/026-000 | | 2231-304/026-000 | 100 |
| 5 | 231-105/026-000 | 100 | 231-105/037-000 | 50 | 5 | 231-305/026-000 | 100 | 231-305/037-000 | 50 | 5 | 2231-105/026-000 | | 2231-305/026-000 | 100 |
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
| 12 | 231-112/026-000 | 25 | 231-112/037-000 | 25 | 12 | 231-312/026-000 | 25 | 231-312/037-000 | 25 | 12 | 2231-112/026-000 | | 2231-312/026-000 | 50 |
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
| 21 | 231-121/026-000 | 10 | 231-121/037-000 | 10 | 21 | 231-321/026-000 | 10 | 231-321/037-000 | 10 | 21 | 2231-121/026-000 | | 2231-321/026-000 | 10 |
| 22 | 231-122/026-000 | 10 | 231-122/037-000 | 10 | 22 | 231-322/026-000 | 10 | 231-322/037-000 | 10 | 22 | 2231-122/026-000 | | 2231-322/026-000 | 10 |
| 23 | 231-123/026-000 | 10 | 231-123/037-000 | 10 | 23 | 231-323/026-000 | 10 | 231-323/037-000 | 10 | 23 | 2231-123/026-000 | | 2231-323/026-000 | 10 |
| 24 | 231-124/026-000 | 10 | 231-124/037-000 | 10 | 24 | 231-324/026-000 | 10 | 231-324/037-000 | 10 | 24 | 2231-124/026-000 | | 2231-324/026-000 | 10 |
| Pin spacing 7.5 mm (pole no. - 1) + 5 mm with locking levers | | | | | Pin spacing 7.62 mm (pole no. - 1) + 5.08 mm with locking levers | | | | | Pin spacing 7.5 mm gray | | Pin Spacing 7.62 mm orange | | |
| 2** | 231-202/026-000 | 100 | 231-202/037-000 | 50 | 2** | 231-702/026-000 | 100 | 231-702/037-000 | 50 | 2** | 2231-202/026-000 | | 2231-702/026-000 | 100 |
| 3** | 231-203/026-000 | 100 | 231-203/037-000 | 50 | 3** | 231-703/026-000 | 100 | 231-703/037-000 | 50 | 3** | 2231-203/026-000 | | 2231-703/026-000 | 100 |
| 4 | 231-204/026-000 | 50 | 231-204/037-000 | 50 | 4 | 231-704/026-000 | 50 | 231-704/037-000 | 50 | 4 | 2231-204/026-000 | | 2231-704/026-000 | 50 |
| 5 | 231-205/026-000 | 50 | 231-205/037-000 | 50 | 5 | 231-705/026-000 | 50 | 231-705/037-000 | 50 | 5 | 2231-205/026-000 | | 2231-705/026-000 | 50 |
| 6 | 231-206/026-000 | 50 | 231-206/037-000 | 25 | 6 | 231-706/026-000 | 50 | 231-706/037-000 | 25 | 6 | 2231-206/026-000 | | 2231-706/026-000 | 50 |
| 7 | 231-207/026-000 | 50 | 231-207/037-000 | 25 | 7 | 231-707/026-000 | 50 | 231-707/037-000 | 25 | 7 | 2231-207/026-000 | | 2231-707/026-000 | 50 |
| 8 | 231-208/026-000 | 25 | 231-208/037-000 | 25 | 8 | 231-708/026-000 | 25 | 231-708/037-000 | 25 | 8 | 2231-208/026-000 | | 2231-708/026-000 | 25 |
| 9 | 231-209/026-000 | 25 | 231-209/037-000 | 25 | 9 | 231-709/026-000 | 25 | 231-709/037-000 | 25 | : | : | | : | : |
| 10 | 231-210/026-000 | 25 | 231-210/037-000 | 25 | 10 | 231-710/026-000 | 25 | 231-710/037-000 | 25 | 12 | 2231-212/026-000 | | 2231-712/026-000 | 25 |
| 11 | 231-211/026-000 | 25 | 231-211/037-000 | 10 | 11 | 231-711/026-000 | 10 | 231-711/037-000 | 10 | 13 | 2231-213/026-000 | | | 10 |
| 12 | 231-212/026-000 | 25 | 231-212/037-000 | 10 | 12 | 231-712/026-000 | 10 | 231-712/037-000 | 10 | 16 | 2231-216/026-000 | | | 10 |
| 13 | 231-213/026-000 | 10 | 231-213/037-000 | 10 | | | | | | | | | | |
| 16 | 231-216/026-000 | 10 | 231-216/037-000 | 10 | | | | | | | | | | |
| ** one latch only | | | | | ** one latch only | | | | | ** one latch only | | | | |

Dimensions



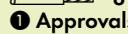
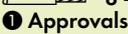
1 Approvals are available online at: www.wago.com. * AWG 12: THHN, THWN
For technical explanations and abbreviations, see technical section.

MULTI CONNECTION SYSTEM MIDI Classic

Female Connectors with Snap-In Mounting Feet

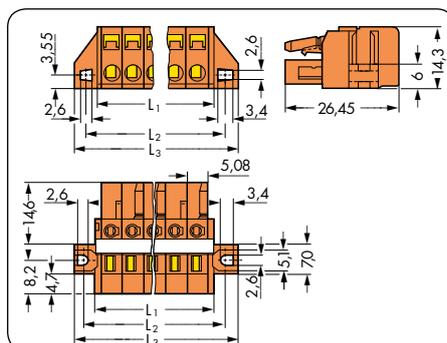
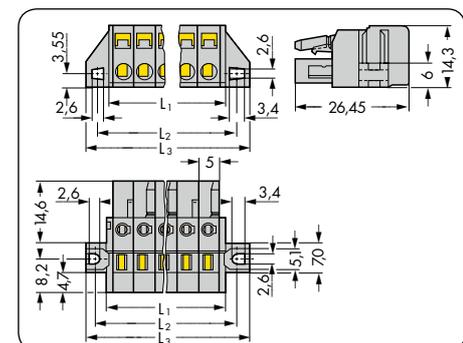
Pin Spacing 5 mm; 5.08 mm; 7.5 mm and 7.62 mm

CAGE CLAMP®

| | | |
|---|---|---------------------------|
| <p>Pin spacing 5 mm/0.197 in, gray 0.08 - 2.5 mm² AWG 28 - 12* 320 V/4 kV/3, 16 A 300 V, 15 A </p> <p>Pin spacing 7.5 mm/0.295 in, gray 630 V/6 kV/3 300 V, 15 A </p> <p> 8 - 9 mm / 0.33 in</p> <p> Approvals</p> | <p>Pin spacing 5.08 mm/0.2 in, orange 0.08 - 2.5 mm² AWG 28 - 12* 320 V/4 kV/3, 16 A 300 V, 15 A </p> <p>Pin spacing 7.62 mm/0.3 in, orange 630 V/6 kV/3 300 V, 15 A </p> <p> 8 - 9 mm / 0.33 in</p> <p> Approvals</p> | <p>Accessories</p> |
|---|---|---------------------------|



| Pole No. | Item No. | Pack. | Unit | Item No. | Pack. | Unit | Pole No. | Item No. | Pack. | Unit | Item No. | Pack. | Unit | Accessories, 231 and 231 Series | Item No. | | | | |
|---|-----------------|-------|------|-----------------|-------|---|----------|-----------------|-------|------|-----------------|--|------|---------------------------------------|-----------------|----------------------------|--|--|--|
| Female connector with CAGE CLAMP® and fixing flanges for panel mounting, with coding fingers, with two latches, for screw or similar mounting types, gray | | | | | | Female connector with CAGE CLAMP® and fixing flanges for panel mounting, with coding fingers, with two latches, for screw or similar mounting types, orange | | | | | | Marking strips, 100 self-adhesive strips | | | | | | | |
| and snap-in mounting feet, for 0.6 - 1.2 mm plate thickness, 3.5 mm Ø mounting holes, or with 209-137 mounting adapter for DIN 35 rail | | | | | | and snap-in mounting feet, for 0.6 - 1.2 mm plate thickness, 3.5 mm Ø mounting holes, or with 209-137 mounting adapter for DIN 35 rail | | | | | | Pin spacing 5 mm | | | | | | | |
| Pin spacing 5 mm | | | | | | Pin spacing 5.08 mm | | | | | | Pin spacing 5.08 mm | | | | | | | |
| with fixing flanges | | | | | | with snap-in mounting feet | | | | | | with fixing flanges | | | | with snap-in mounting feet | | | |
| 2** | 231-102/031-000 | 100 | | 231-102/008-000 | 100 | | 2** | 231-302/031-000 | 100 | | 231-302/008-000 | 100 | | 1-12 (300x) | 210-331/500-103 | | | | |
| 3** | 231-103/031-000 | 50 | | 231-103/008-000 | 100 | | 3** | 231-303/031-000 | 50 | | 231-303/008-000 | 100 | | 13-24 (300x) | 210-331/500-104 | | | | |
| 4 | 231-104/031-000 | 50 | | 231-104/008-000 | 100 | | 4 | 231-304/031-000 | 50 | | 231-304/008-000 | 100 | | Pin spacing 7.5 mm | | | | | |
| 5 | 231-105/031-000 | 50 | | 231-105/008-000 | 100 | | 5 | 231-305/031-000 | 50 | | 231-305/008-000 | 100 | | 1-16 (100x) | 210-331/750-202 | | | | |
| : | : | : | | : | : | | : | : | : | | : | : | | Pin Spacing 7.62 mm | | | | | |
| 12 | 231-112/031-000 | 25 | | 231-112/008-000 | 25 | | 12 | 231-312/031-000 | 25 | | 231-312/008-000 | 25 | | 1-16 (100x) | 210-331/762-202 | | | | |
| : | : | : | | : | : | | : | : | : | | : | : | | Insulation stop, 5 pcs/strip, | | | | | |
| 22 | 231-122/031-000 | 10 | | 231-122/008-000 | 10 | | 22 | 231-322/031-000 | 10 | | 231-322/008-000 | 10 | | 5 mm and 5.08 mm pin spacing | | | | | |
| 23 | 231-123/031-000 | 10 | | 231-123/008-000 | 10 | | 23 | 231-323/031-000 | 10 | | 231-323/008-000 | 10 | | 0.08-0.2mm ² ② | | | | | |
| 24 | 231-124/031-000 | 10 | | 231-124/008-000 | 10 | | 24 | 231-324/031-000 | 10 | | 231-324/008-000 | 10 | | white 231-670 200 | | | | | |
| Pin spacing 7.5 mm (pole no. - 1) + 5 mm | | | | | | Pin spacing 7.62 mm (pole no. - 1) + 5.08 mm | | | | | | 0.25-0.5 mm ² | | | | | | | |
| with fixing flanges | | | | | | with snap-in mounting feet | | | | | | with fixing flanges | | | | with snap-in mounting feet | | | |
| 2** | | | | 231-202/008-000 | 100 | | 2** | 231-702/031-000 | 50 | | 231-702/008-000 | 100 | | light gray 231-671 200 | | | | | |
| 3** | 231-203/031-000 | 50 | | 231-203/008-000 | 100 | | 3** | 231-703/031-000 | 50 | | 231-703/008-000 | 100 | | 0.75-1mm ² | | | | | |
| 4 | 231-204/031-000 | 50 | | 231-204/008-000 | 50 | | 4 | 231-704/031-000 | 50 | | 231-704/008-000 | 50 | | dark gray 231-672 200 | | | | | |
| 5 | 231-205/031-000 | 50 | | 231-205/008-000 | 50 | | 5 | 231-705/031-000 | 50 | | 231-705/008-000 | 50 | | 7.5 mm and 7.62 mm pin spacing | | | | | |
| 6 | 231-206/031-000 | 25 | | 231-206/008-000 | 50 | | 6 | 231-706/031-000 | 25 | | 231-706/008-000 | 50 | | 0.08-0.2mm ² ② | | | | | |
| 7 | 231-207/031-000 | 25 | | 231-207/008-000 | 50 | | 7 | 231-707/031-000 | 25 | | 231-707/008-000 | 50 | | white 231-673 200 | | | | | |
| 8 | 231-208/031-000 | 25 | | 231-208/008-000 | 25 | | 8 | 231-708/031-000 | 25 | | 231-708/008-000 | 25 | | 0.25-0.5 mm ² | | | | | |
| : | : | : | | : | : | | : | : | : | | : | : | | light gray 231-674 200 | | | | | |
| 16 | 231-216/031-000 | 10 | | 231-216/008-000 | 10 | | 12 | 231-712/031-000 | 10 | | 231-712/008-000 | 25 | | 0.75-1mm ² | | | | | |
| ** one latch only | | | | | | ** one latch only | | | | | | dark gray 231-675 200 | | | | | | | |
| Dimensions | | | | | | $L_1 = (\text{pole no.} \times \text{pin spacing}) + 3 \text{ mm}$ | | | | | | $L_2 = (\text{pole no.} \times \text{pin spacing}) + 8.8 \text{ mm}$ | | | | | | | |
| | | | | | | $L_3 = (\text{pole no.} \times \text{pin spacing}) + 14.8 \text{ mm}$ | | | | | | ② 0.2 mm² "sol." (0.14 mm² "f-st") | | | | | | | |



Please find the entire product range in our Full Line Catalog, Volume 2. For more information, please visit www.wago.com.

| | | | |
|---|---|--------------|-----------------|
|  | Pin spacing 5 mm | 1-12 (300x) | 210-331/500-103 |
| | | 13-24 (300x) | 210-331/500-104 |
| | Pin spacing 5.08 mm | 1-12 (200x) | 210-331/508-103 |
| | | 13-24 (200x) | 210-331/508-104 |
| | Pin spacing 7.5 mm | 1-16 (100x) | 210-331/750-202 |
| | Pin Spacing 7.62 mm | 1-16 (100x) | 210-331/762-202 |
|  | 5 mm and 5.08 mm pin spacing | | |
| | 0.08-0.2mm ² ② | | |
| | white | 231-670 | 200 |
| | 0.25-0.5 mm ² | | |
| | light gray | 231-671 | 200 |
| | 0.75-1mm ² | | |
| | dark gray | 231-672 | 200 |
| | 7.5 mm and 7.62 mm pin spacing | | |
| | 0.08-0.2mm ² ② | | |
| | white | 231-673 | 200 |
| | 0.25-0.5 mm ² | | |
| | light gray | 231-674 | 200 |
| | 0.75-1mm ² | | |
| | dark gray | 231-675 | 200 |
| | ② 0.2 mm² "sol." (0.14 mm² "f-st") | | |
| | Test plug, with 500 mm cable, | | |
|  | 2 mm Ø, red | 210-136 | 50 |
| | 2.3 mm Ø, yellow | 210-137 | 50 |
| | Mounting adapter, for DIN 35 rail, | | |
| | 3 or more poles | | |
|  | gray | 209-137 | 1 |
| | Tapping screw, | | |
|  | for 1.8 mm Ø mounting hole | | |
| | B 2.2 x 9.5 | 209-147 | 100 |
| | Operating tool with partially insulated shaft, | | |
|  | type 2, (3.5x0.5) mm blade | 210-720 | 1 |

MULTI CONNECTION SYSTEM MIDI Classic

Angled Female Connectors for Panel Mounting



Pin Spacing 5 mm and 7.5 mm, Multi Mounting Adapter, Test Plug Adapters

Pin spacing 5 mm/0.197 in, gray
 0.08 - 2.5 mm² | AWG 28 - 12*
 320 V/4 kV/3, 12 A | 300 V, 15 A

Pin spacing 7.5 mm/0.295 in, gray
 630 V/6 kV/3 | 300 V, 15 A

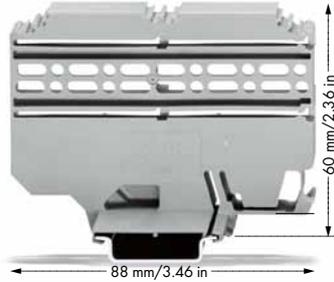
8 - 9 mm / 0.33 in
1 Approvals

Multi mounting adapter
 for male and female connectors
 with snap-in mounting feet

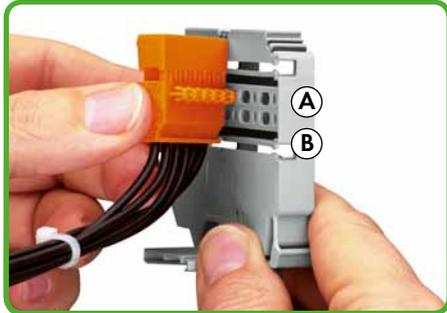
Adapter width 10 mm/0.394 in

Test plug adapter for female connectors
 Pin spacing 5 mm; 5.08 mm; 7.5 mm and 7.62 mm
 0.08 - 2.5 mm² | AWG 28 - 12
 320 V/4 kV/3 | 300 V, 15 A

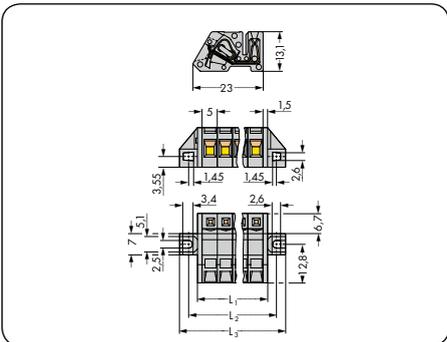
8 - 9 mm / 0.33 in
1 Approvals



| Pole No. | Item No. | Pack. Unit | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Item No. | Pack. Unit | | | | | |
|---|-----------------|------------|-----------------|------------|---|----------|------------|--|------------|--|-----|--|--|--|
| Angled female connector with CAGE CLAMP® and fixing flanges for panel mounting, for screw or similar mounting types, gray and snap-in mounting feet, for 0.6 - 1.2 mm plate thickness, 3.5 mm Ø mounting holes | | | | | Multi mounting adapter | | | | | Test plug adapter for female connector, with CAGE CLAMP® connection | | | | |
| Pin spacing 5 mm | | | | | gray | 209-148 | 25 | 0.08-2.5 mm ² (AWG 28-14), light gray | | | | | | |
| with fixing flanges | | | | | 5 mm and 5.08 mm pin spacing | | | | | 231-661 | 100 | | | |
| with snap-in mounting feet | | | | | 7.5 mm and 7.62 mm pin spacing | | | | | 231-662 | 100 | | | |
| 2 | 731-502/031-000 | 100 | 731-502/008-000 | 100 | Accessories, 731 Series | | | | | | | | | |
| 3 | 731-503/031-000 | 50 | 731-503/008-000 | 50 | Test plug, with 500 mm cable, | | | | | | | | | |
| 4 | 731-504/031-000 | 50 | 731-504/008-000 | 50 | 2 mm Ø, red 210-136 50 | | | | | | | | | |
| 5 | 731-505/031-000 | 50 | 731-505/008-000 | 50 | 2.3 mm Ø, yellow 210-137 50 | | | | | | | | | |
| : | : | : | : | : | Operating lever, for male and female connectors with CAGE CLAMP® | | | | | | | | | |
| 12 | 731-512/031-000 | 25 | 731-512/008-000 | 25 | 231-131 25 | | | | | | | | | |
| : | : | : | : | : | Screw with nut, M 2 x 12, for fixing element | | | | | | | | | |
| 17 | 731-517/031-000 | 10 | 731-517/008-000 | 25 | 231-195 100 | | | | | | | | | |
| 18 | 731-518/031-000 | 10 | 731-518/008-000 | 25 | Operating tool with partially insulated shaft, type 2, (3.5x0.5) mm blade | | | | | | | | | |
| 19 | 731-519/031-000 | 10 | 731-519/008-000 | 10 | 210-720 1 | | | | | | | | | |
| 20 | 731-520/031-000 | 10 | 731-520/008-000 | 10 | Marking strips, 100 self-adhesive strips | | | | | | | | | |
| Pin spacing 7.5 mm (pole no. - 1) + 5 mm | | | | | with fixing flanges | | | | | Spacing 5 mm | | | | |
| with snap-in mounting feet | | | | | with fixing flanges | | | | | 1 - 12 (300x) 210-331/0500-0103 | | | | |
| 2 | 731-532/031-000 | 50 | 731-532/008-000 | 100 | with snap-in mounting feet | | | | | 13 - 24 (300x) 210-331/0500-0104 | | | | |
| 3 | 731-533/031-000 | 50 | 731-533/008-000 | 50 | with snap-in mounting feet | | | | | Spacing 7.5 mm | | | | |
| 4 | 731-534/031-000 | 50 | 731-534/008-000 | 50 | with snap-in mounting feet | | | | | 1 - 16 (100x) 210-331/0750-0202 | | | | |
| 5 | 731-535/031-000 | 50 | 731-535/008-000 | 50 | with snap-in mounting feet | | | | | | | | | |
| 6 | 731-536/031-000 | 25 | 731-536/008-000 | 50 | with snap-in mounting feet | | | | | | | | | |
| 7 | 731-537/031-000 | 25 | 731-537/008-000 | 50 | with snap-in mounting feet | | | | | | | | | |
| : | : | : | : | : | with snap-in mounting feet | | | | | | | | | |
| 10 | 731-540/031-000 | 25 | 731-540/008-000 | 25 | with snap-in mounting feet | | | | | | | | | |
| 11 | 731-541/031-000 | 10 | 731-541/008-000 | 25 | with snap-in mounting feet | | | | | | | | | |
| 12 | 731-542/031-000 | 10 | 731-542/008-000 | 10 | with snap-in mounting feet | | | | | | | | | |
| 13 | 731-543/031-000 | 10 | 731-543/008-000 | 10 | with snap-in mounting feet | | | | | | | | | |
| 16 | 731-546/031-000 | 10 | 731-546/008-000 | 10 | with snap-in mounting feet | | | | | | | | | |
| Dimensions (see also page 103) | | | | | <p>The adapter can be marked either with WMB or miniature WSB markers. For marking accessories, see Section 6.</p> | | | | | Testing MULTI CONNECTION SYSTEM MIDI female connectors via single-pole test plug adapters. | | | | |



If either the male or the female connector is equipped with mounting feet and mounted on the adapter via its oblong holes or open grooves (A/B), but the mating half is not, then the connection remains pluggable.



1 Approvals are available online at: www.wago.com.
 For technical explanations and abbreviations, see technical section.

* AWG 12: THHN, THWN

MULTI CONNECTION SYSTEM MINI and MIDI

Strain Relief Plates and Snap-on Type Strain Relief Housings

Strain relief plates suitable for:
 – female connectors with CAGE CLAMP®
 – male connectors with CAGE CLAMP®

MULTI CONNECTION SYSTEM MINI
 734 Series

MULTI CONNECTION SYSTEM MIDI
 231, 721 and 731 Series

Snap-on type strain relief housings for:
 – female connectors with CAGE CLAMP®
 – male connectors with CAGE CLAMP®



| Width | Item no. suffix |
|--|-----------------|
| Strain relief plate, pre-assembled, for 734 Series | |
| 6 mm | .../032-000 |
| 12.5 mm | .../033-000 |
| 25 mm | .../034-000 |
| 35 mm | .../035-000 |
| 55 mm | .../036-000 |
| Ordering example: Female connector with strain relief plate, 3.81 mm pin spacing, 5-pole, orange 734-205/033-000 | |

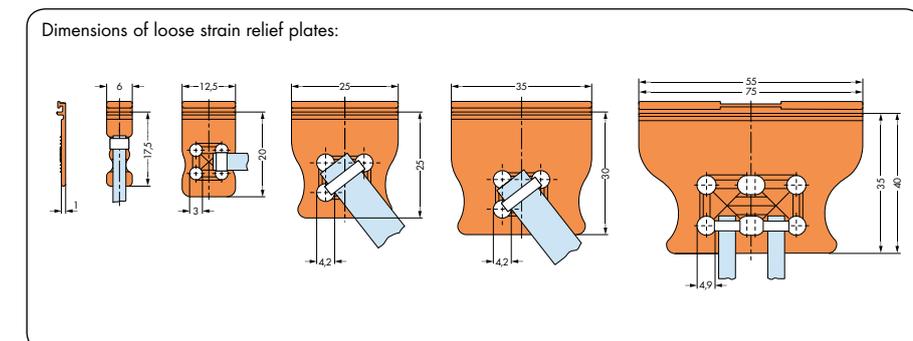
| Width | Item no. suffix |
|--|-----------------|
| Strain relief plate, pre-assembled, for 231, 721 and 731 Series | |
| 11.5 mm | .../032-000 |
| 20 mm | .../033-000 |
| 30 mm | .../034-000 |
| 50 mm | .../035-000 |
| Ordering example: Male connector with strain relief plate, 5 mm pin spacing, 8-pole, light gray, 721-608/034-000 | |

| Strain relief plate, loose, for 734 Series | | | |
|---|------------|----------|---------|
| Item No. | Color | Pole No. | Width |
| 734-127 | light gray | 2 - 4 | 6 mm |
| 734-227 | orange | | |
| 734-128 | light gray | 4 - 8 | 12.5 mm |
| 734-228 | orange | | |
| 734-129 | light gray | 5 - 12 | 25 mm |
| 734-229 | orange | | |
| 734-126 | light gray | 13 - 16 | 35 mm |
| 734-226 | orange | | |
| 734-426 | light gray | max. 17 | 55 mm |
| 734-428 | orange | | |

Both male and female connectors with CAGE CLAMP®S can be retrofitted with a strain relief plate or pre-assembled with one at the factory. Plates are available in 5 different sizes.

An "item no. suffix", referring to the width of the strain relief plate, is added to the "basic item no." and determines the type of male or female connector (see ordering examples).

The arrangement of the attachments for cable ties allows single conductors or multi-core cables to be secured in different ways.

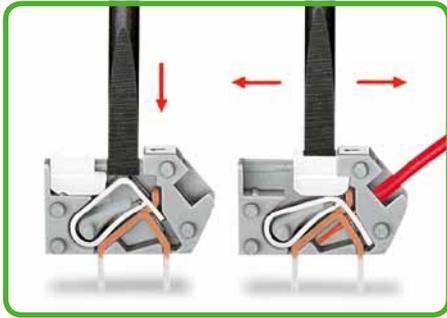


| Pole No. | Item No. | Item No. | Pack. Unit |
|--|--------------------|---------------------|----------------------|
| Snap-on type strain relief housing, consists of strain relief support and housing, for 734 Series | | | |
| | Pin spacing 3.5 mm | Pin spacing 3.81 mm | |
| | light gray | orange | |
| 2 | ○ 734-602 ② | ● 734-632 ② | 50 |
| 3 | ○ 734-603 ② | ● 734-633 ② | 25 |
| : | : | : | |
| 6 | ○ 734-606 | ● 734-636 | 25 |
| 7 | ○ 734-607 | - | 25 |
| 8 | ○ 734-608 | ● 734-638 | 25 |
| 9 | ○ 734-609 | ● 734-639 | 25 |
| 10 | ○ 734-610 | ● 734-640 | 25 |
| 12 | ○ 734-612 | ● 734-642 | 25 |
| for 231 and 721 Series | | | |
| | Pin spacing 5 mm | Pin spacing 5.08 mm | |
| 2 | ○ 232-602 | ● 232-632 | 25 |
| 3 | ○ 232-603 | ● 232-633 | 25 |
| : | : | : | |
| 6 | ○ 232-606 | ● 232-636 | 25 |
| 7 | ○ 232-607 | - | 25 |
| 8 | ○ 232-608 | ● 232-638 | 25 |
| 9 | ○ 232-609 | ● 232-639 | 25 |
| 10 | ○ 232-610 | ● 232-640 | 25 |
| 12 | ○ 232-612 | ● 232-642 | 25 |
| for 231, 721 and 731 Series | | | |
| | Pin spacing 7.5 mm | Pin Spacing 7.62 mm | |
| 2 | ○ 232-662 ③ | ● 232-682 ③ | 25 |
| 3 | ○ 232-663 ③ | ● 232-683 ③ | 25 |
| 4 | ○ 232-664 | ● 232-684 | 25 |
| 5 | ○ 232-665 | ● 232-685 | 25 |
| 7 | ○ 232-667 | ● 232-687 | 25 |
| Cable clamp, for strain relief | | | 209-177 25 |
| for pole no. | | | Spacing in mm |
| 6- to 12-pole | | | 3,5 + 3,81 |
| 4- to 6-pole | | | 5 + 5,08 |
| 3-pole | | | 7,5 + 7,62 |
| Cable clamp, for strain relief | | | 209-174 25 |
| 7 or more poles | | | 5 + 5,08 |
| 5 or more poles | | | 7,5 + 7,62 |
| Fixing screws, for cable clamp | | | 209-176 50 |
| for pole no. | | | Spacing in mm |
| 4- to 6-pole | | | 5 + 5,08 |
| 3-pole | | | 7,5 + 7,62 |
| Fixing screws, for cable clamp | | | 209-172 50 |
| 6- to 12-pole | | | 3,5 + 3,81 |
| Fixing screws, for cable clamp | | | 209-173 50 |
| 7 or more poles | | | 5 + 5,08 |
| 5 or more poles | | | 7,5 + 7,62 |

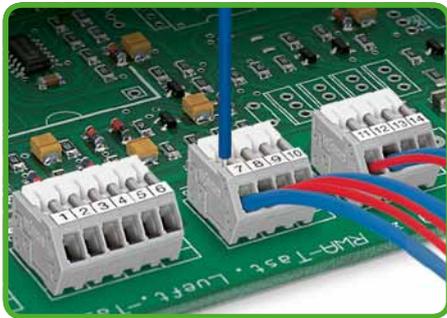
② 2 to 5 poles only suitable for cable ties (734 Series), ③ 2 to 3 poles only suitable for cable ties (231, 721 and 731 Series)

PCB Terminal Strips, Description and Handling 218, 233 and 234 Series

218 Series



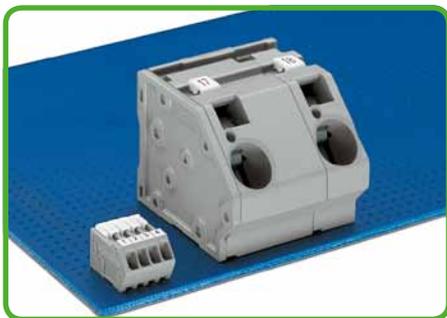
Conductor termination: To momentarily open clamping unit, use screwdriver and then insert stripped conductor. To open clamping unit for extended period, move locking slide toward conductor entry hole. Then fully insert stripped conductor and move locking slide back to original position (also possible to perform with fingernail).



Testing directly on the clamping spring.
Marking with self-adhesive marking strips.



Factory direct printing.



Size comparison between 218 Series and 745 Series high-current terminal blocks.

CAGE CLAMP® clamps the following copper conductors:



solid



stranded



fine-stranded



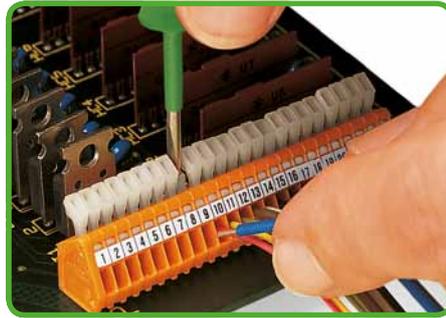
tip-bonded



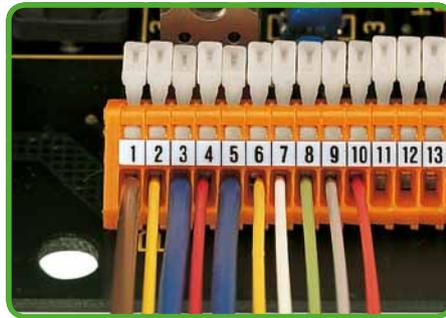
with ferrule

Strip length, see packaging or instructions.

233 Series



Inserting/removing conductor.

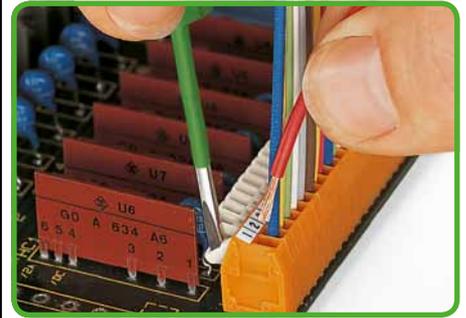


Nominal cross-section 0.5 mm²/AWG 20;
0.75 mm²/AWG 18 only in every other position.



Marking via self-adhesive marking strips (see figure) or
factory direct printing.

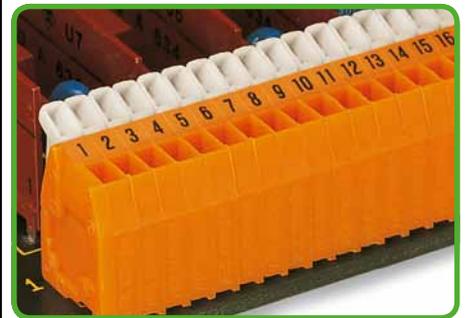
234 Series



Inserting/removing conductor.



Nominal cross-section 0.5 mm²/AWG 20;
0.75 mm²/AWG 18 only in every other position.



Marking via factory direct printing (see figure) or self-
adhesive marking strips.

Terminal Strips with Locking Slides 0.5 mm² Pin Spacing 2.5 mm and 2.54 mm 218 Series

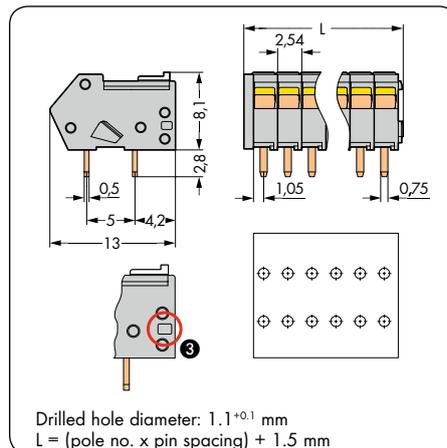
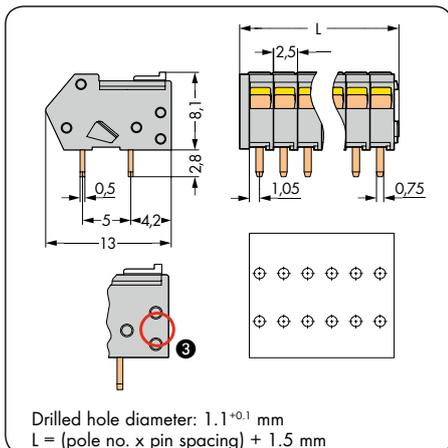
CAGE CLAMP®

| | | |
|--|---|--------------------|
| Pin spacing 2.5 mm / 0.098 in 0.08 - 0.5 mm ² ① AWG 28 - 20 ① 160 V/2.5 kV/2 150 V, 4 A I _N 6 A  5 - 6 mm / 0.22 in ② Approvals | Pin spacing 2.54 mm / 0.1 in 0.08 - 0.5 mm ² ① AWG 28 - 20 ① 160 V/2.5 kV/2 150 V, 4 A I _N 6 A  5 - 6 mm / 0.22 in ② Approvals | Accessories |
|--|---|--------------------|



| Pole No. | Item No. | Pack. Unit | Pole No. | Item No. | Pack. Unit | Accessories, 218 Series | Item No. |
|---|-------------|---------------|---|----------|---------------|---|---------------------------------------|
| 1-conductor terminal strip with locking slides, 2 solder pins/pole in line, gray, locking slides, white | | | 1-conductor terminal strip with locking slides, 2 solder pins/pole in line, gray, locking slides, white | | | Marker cards, | |
| ● 2 | 218-102 | 1000 (10x100) | ● 2 | 218-502 | 1000 (10x100) |  | 100 self-adhesive strips per card |
| ● 3 | 218-103 | 1000 (10x100) | ● 3 | 218-503 | 1000 (10x100) | | |
| ● 4 | 218-104 | 500 (5x100) | ● 4 | 218-504 | 500 (5x100) | | |
| ● 5 | 218-105 | 500 (5x100) | ● 5 | 218-505 | 500 (5x100) | | |
| ● 6 | 218-106 | 280 (4x70) | ● 6 | 218-506 | 280 (4x70) | | |
| ● 7 | 218-107 | 240 (4x60) | ● 7 | 218-507 | 240 (4x60) | | |
| ● 8 | 218-108 | 220 (4x55) | ● 8 | 218-508 | 220 (4x55) | | |
| ● 9 | 218-109 | 200 (4x50) | ● 9 | 218-509 | 200 (4x50) | | |
| ● 10 | 218-110 | 180 (4x45) | ● 10 | 218-510 | 180 (4x45) | | |
| ● 11 | 218-111 | 160 (4x40) | ● 11 | 218-511 | 160 (4x40) | | |
| ● 12 | 218-112 | 140 (4x35) | ● 12 | 218-512 | 140 (4x35) | | |
| ● 13 | 218-113 | 140 (4x35) | ● 13 | 218-513 | 140 (4x35) | | |
| ● 14 | 218-114 | 120 (4x30) | ● 14 | 218-514 | 120 (4x30) | | |
| ● 15 | 218-115 | 120 (4x30) | ● 15 | 218-515 | 120 (4x30) | | |
| ● 16 | 218-116 | 100 (4x25) | ● 16 | 218-516 | 100 (4x25) | | |
| : | : | : | : | : | : | | |
| ● 21 | 218-121 | 80 (4x20) | ● 21 | 218-521 | 80 (4x20) | | |
| ● 22 | 218-122 | 80 (4x20) | ● 22 | 218-522 | 80 (4x20) | | |
| ● 23 | 218-123 | 80 (4x20) | ● 23 | 218-523 | 80 (4x20) | | |
| ● 24 | 218-124 | 60 (4x15) | ● 24 | 218-524 | 60 (4x15) | | |
| Item no. suffix for terminal strips in | | | Ordering example: | | | Test pin, 1 mm Ø, | |
| ● red | .../000-005 | | Terminal strip, 2.5 mm pin spacing, 8-pole, orange | | |  | with solder connection for test cable |
| ● blue | .../000-006 | | 2 solder pins in line | | | | 735-500 1 |
| ● orange | .../000-012 | | 218-108/000-012 | | | | |
| ● green | .../000-023 | | | | | | |
| Locking slides, white | | | | | | Operating tool with partially insulated shaft, | |
| | | | | | |  | type 1, (2.5 x 0.4) mm blade |
| | | | | | | | 210-719 1 |
| | | | | | | Operating tool, partially insulated | |
| | | | | | |  | insulated |
| | | | | | | | 233-335 1 |
| | | | | | | | 233-332 25 |

Dimensions



- ① 0.75 mm²/AWG 18 only in every other position
- ③ A groove at the back of the terminal strip differentiates between the two pin spacings.

② Approvals are available online at: www.wago.com.

For technical explanations and abbreviations, see technical section.

PCB Terminal Strips 0.5 mm² Pin Spacing 2.5 mm and 2.54 mm 233 and 234 Series



| | | |
|---|---|---|
| Pin spacing 2.5 mm / 0.098 in Pin spacing 2.54 mm / 0.1 in 0.08 - 0.5 mm ² ② AWG 28 - 20 ② 250 V/2.5 kV/2 150 V, 4 A ③ I _N 6 A 5 - 6 mm / 0.22 in ① Approvals | Pin spacing 2.5 mm / 0.098 in Pin spacing 2.54 mm / 0.1 in 0.08 - 0.5 mm ² ② AWG 28 - 20 ② 160 V/2.5 kV/2 150 V, 4 A ③ I _N 6 A 5 - 6 mm / 0.22 in ① Approvals | Pin spacing 2.5 mm / 0.098 in Pin spacing 2.54 mm / 0.1 in 0.08 - 0.5 mm ² ② AWG 28 - 20 ② 160 V/2.5 kV/2 150 V, 4 A ③ I _N 6 A 5 - 6 mm / 0.22 in ① Approvals |
|---|---|---|

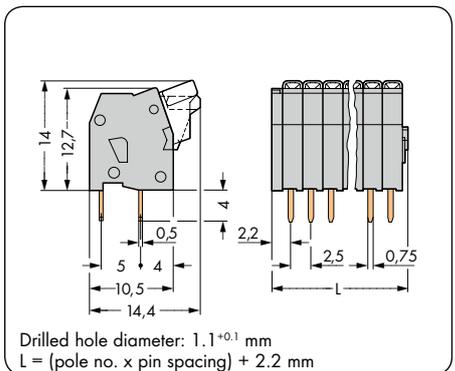
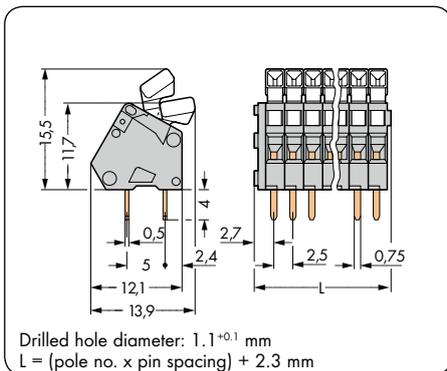
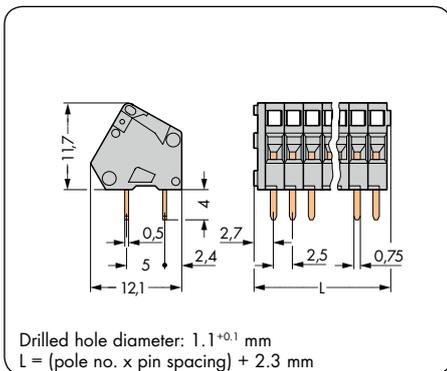


| Pole No. | Item No. | Item No. | Pack. Unit | Pole No. | Item No. | Item No. | Pack. Unit | Pole No. | Item No. | Item No. | Pack. Unit |
|---|----------|----------|-------------|--|----------|----------|-------------|--|----------|----------|-------------|
| Terminal strip without push-buttons, standard lengths, other lengths upon request, 2 solder pins/pole | | | | Terminal strip with push-buttons, standard lengths, other lengths upon request, 2 solder pins/pole | | | | Terminal strip with push-buttons, standard lengths, other lengths upon request, 2 solder pins/pole | | | |
| Pin spacing 2.5 mm | | 2.54 mm | | Pin spacing 2.5 mm | | 2.54 mm | | Pin spacing 2.5 mm | | 2.54 mm | |
| | gray | orange | | | gray | orange | | | gray | orange | |
| 2 | 233-102 | 233-402 | 600 (6x100) | 2 | 233-202 | 233-502 | 600 (6x100) | 2 | 234-202 | 234-502 | 600 (6x100) |
| 3 | 233-103 | 233-403 | 500 (4x125) | 3 | 233-203 | 233-503 | 500 (4x125) | 3 | 234-203 | 234-503 | 520 (4x130) |
| 4 | 233-104 | 233-404 | 400 (4x100) | 4 | 233-204 | 233-504 | 400 (4x100) | 4 | 234-204 | 234-504 | 400 (4x100) |
| 5 | 233-105 | 233-405 | 340 (4x85) | 5 | 233-205 | 233-505 | 340 (4x85) | 5 | 234-205 | 234-505 | 340 (4x85) |
| 6 | 233-106 | 233-406 | 280 (4x70) | 6 | 233-206 | 233-506 | 280 (4x70) | 6 | 234-206 | 234-506 | 280 (4x70) |
| 7 | 233-107 | 233-407 | 240 (4x60) | 7 | 233-207 | 233-507 | 240 (4x60) | 7 | 234-207 | 234-507 | 240 (4x60) |
| 8 | 233-108 | 233-408 | 220 (4x55) | 8 | 233-208 | 233-508 | 220 (4x55) | 8 | 234-208 | 234-508 | 220 (4x55) |
| 9 | 233-109 | 233-409 | 200 (4x50) | 9 | 233-209 | 233-509 | 200 (4x50) | 9 | 234-209 | 234-509 | 200 (4x50) |
| 10 | 233-110 | 233-410 | 180 (4x45) | 10 | 233-210 | 233-510 | 180 (4x45) | 10 | 234-210 | 234-510 | 180 (4x45) |
| 12 | 233-112 | 233-412 | 140 (4x35) | 12 | 233-212 | 233-512 | 140 (4x35) | 12 | 234-212 | 234-512 | 140 (4x35) |
| 16 | 233-116 | 233-416 | 100 (4x25) | 16 | 233-216 | 233-516 | 100 (4x25) | 16 | 234-216 | 234-516 | 100 (4x25) |
| 24 | 233-124 | 233-424 | 80 (4x20) | 24 | 233-224 | 233-524 | 80 (4x20) | 24 | 234-224 | 234-524 | 80 (4x20) |
| Terminal strips without push-buttons cannot be retrofitted with push-buttons! | | | | For other colors, please contact factory. | | | | For other colors, please contact factory. | | | |

Accessories, 233 and 234 Series

| | |
|---|--|
| Marker cards, 100 self-adhesive strips per card | Operating tool, for professional wiring of terminal strips partially insulated 233-335 1 insulated 233-332 25 |
| Marking | Operating tool with partially insulated shaft, type 1, (2.5 x 0.4)mm blade 210-719 1 |
| Pin spacing 2.5 mm | Pin spacing 2.54 mm |
| 1 - 16 (400 x) 210-331/250-202 | 1 - 16 (400 x) 210-331/254-202 |
| 17 - 32 (400 x) 210-331/250-204 | 17 - 32 (400 x) 210-331/254-204 |
| 33 - 48 (400 x) 210-331/250-206 | 33 - 48 (400 x) 210-331/254-206 |
| For direct printing, please contact factory. | |

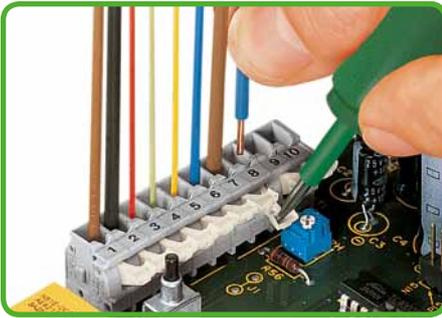
Dimensions



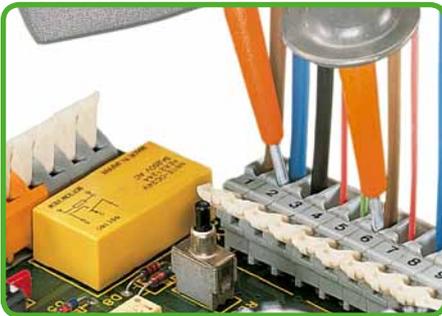
① Approvals are available online at: www.wago.com.
 ② 0.75 mm²/AWG 18 only in every other position.
 For technical explanations and abbreviations, see technical section.

PCB Terminal Strips, Description and Handling 255, 256 and 257 Series

255 Series



Inserting/removing conductor via push-button - 255 Series.

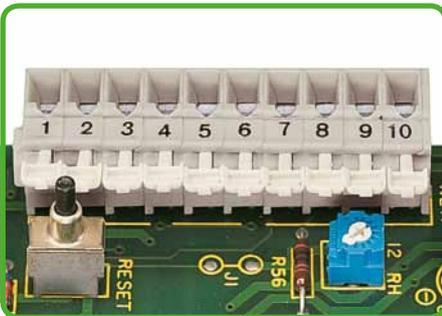


Testing with test probes.



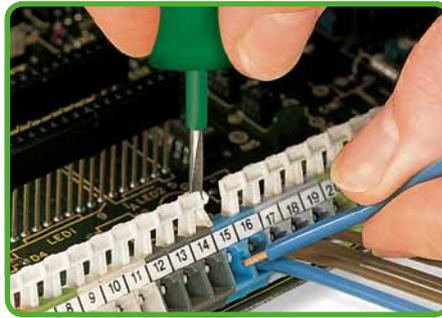
Inserting/removing conductor via finger-operated lever - 255 Series.

For terminal strips with finger-operated levers, see Full Line Catalog, Volume 2.



Factory direct printing.

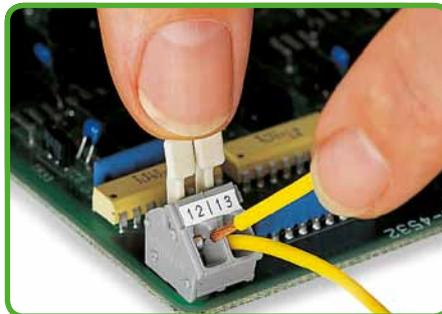
256 Series



Inserting/removing conductor via push-button - 256 Series.

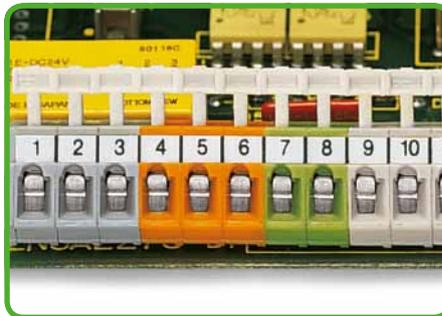


Possible conductor arrangement with terminal strips staggered (for 256 Series only).



Inserting/removing conductor via finger-operated lever - 256 Series.

For terminal strips with finger-operated levers, see Full Line Catalog, Volume 2.



Marking with self-adhesive marking strips.

257 Series

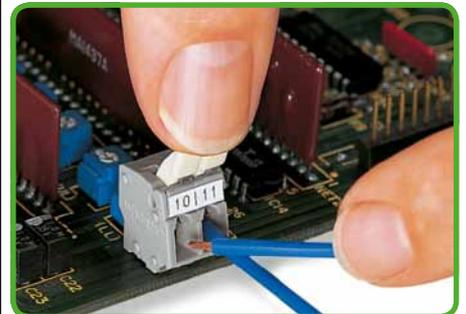


Inserting/removing conductor via push-button - 257 Series.

Angled push-button, side-entry.
Straight push-button, front-entry.

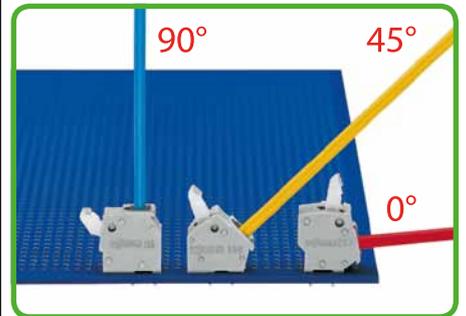


Testing with test plug adapter.



Inserting/removing conductor via finger-operated lever - 257 Series.

For terminal strips with finger-operated levers, see Full Line Catalog, Volume 2.



Series 255 256 257
Conductor entry angles.

CAGE CLAMP® clamps the following copper conductors:



solid



stranded



fine-stranded



tip-bonded



with ferrule

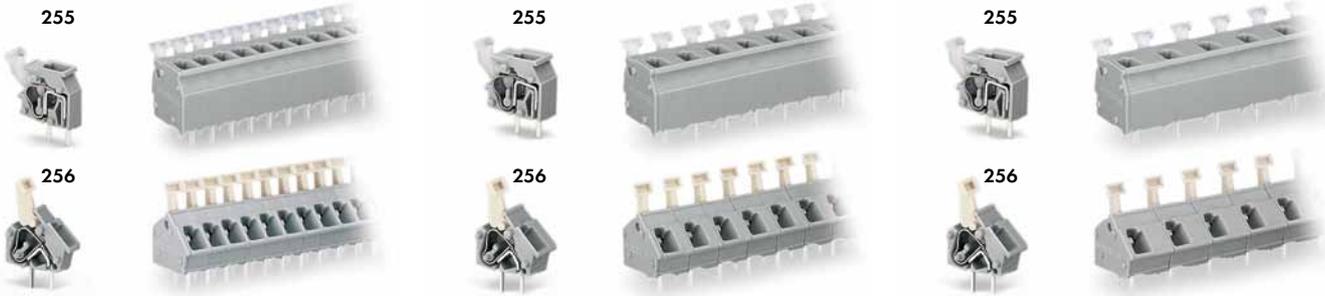


with pin terminal

Strip length, see packaging or instructions.

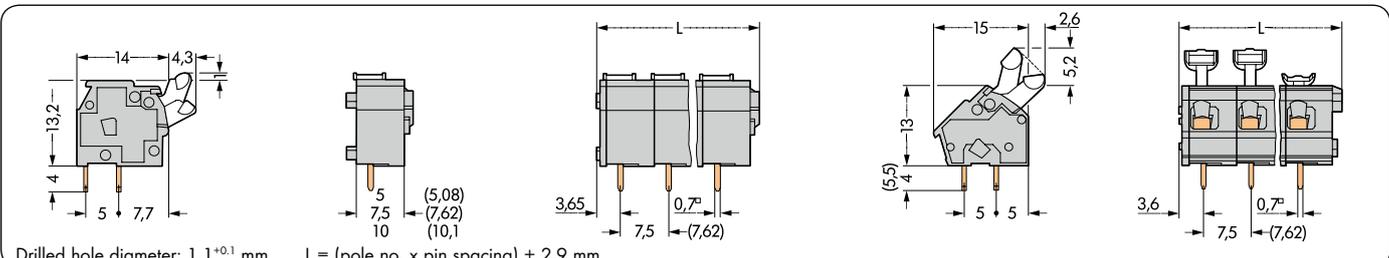
PCB Modular Terminal Blocks and Terminal Strips 2.5 mm² Pin Spacing 5/5.08 mm, 7.5/7.62 mm and 10/10.16 mm 255 and 256 Series

| | | |
|--|--|---|
| Pin spacing 5/5.08 mm / 0.2 in 0.08 - 2.5 mm ² AWG 28 - 12* 250 V/4 kV/3, 16 A 300 V, 15 A 500 V/4 kV/2, 16 A 300/600 V, 15/5 A 5 - 6 mm / 0.22 in Approvals | Pin spacing 7.5/7.62 mm / 0.3 in 0.08 - 2.5 mm ² AWG 28 - 12* 400 V/6 kV/3, 16 A 300 V, 15 A 800 V/6 kV/2, 16 A 300/600 V, 15/5 A 5 - 6 mm / 0.22 in Approvals | Pin spacing 10/10.16 mm / 0.4 in 0.08 - 2.5 mm ² AWG 28 - 12* 500 V/6 kV/3, 16 A 300 V, 15 A 1000 V/6 kV/2, 16 A 300/600 V, 15/5 A 5 - 6 mm / 0.22 in Approvals |
|--|--|---|



| Color Pole No. | Item No. | Pack. | Unit | Item No. | Pack. | Unit | Color Pole No. | Item No. | Pack. | Unit | Item No. | Pack. | Unit | Color Pole No. | Item No. | Pack. | Unit | Item No. | Pack. | Unit |
|---|----------|---------|------|----------|-------|------|---|----------|---------|------|----------|-------|------|---|----------|---------|------|----------|-------|------|
| Modular terminal block, 2 solder pins/pole | | | | | | | Modular terminal block, 2 solder pins/pole | | | | | | | Modular terminal block, 2 solder pins/pole | | | | | | |
| | 255-401 | 500 | | 256-401 | 600 | | | 255-501 | 400 | | 256-501 | 400 | | | 255-601 | 300 | | 256-601 | 300 | |
| | 255-740 | 500 | | 256-740 | 600 | | | 255-750 | 400 | | 256-750 | 400 | | | 255-760 | 300 | | 256-760 | 300 | |
| | 255-742 | 500 | | 256-742 | 600 | | | 255-752 | 400 | | 256-752 | 400 | | | 255-762 | 300 | | 256-762 | 300 | |
| | 255-743 | 500 | | 256-743 | 600 | | | 255-753 | 400 | | 256-753 | 400 | | | 255-763 | 300 | | 256-763 | 300 | |
| | 255-744 | 500 | | 256-744 | 600 | | | 255-754 | 400 | | 256-754 | 400 | | | 255-764 | 300 | | 256-764 | 300 | |
| | 255-746 | 500 | | 256-746 | 600 | | | 255-756 | 400 | | 256-756 | 400 | | | 255-766 | 300 | | 256-766 | 300 | |
| | 255-747 | 500 | | 256-747 | 600 | | | 255-757 | 400 | | 256-757 | 400 | | | 255-767 | 300 | | 256-767 | 300 | |
| Terminal strip, gray, standard lengths,** 2 solder pins/pole | | | | | | | Terminal strip, gray, standard lengths,** 2 solder pins/pole | | | | | | | Terminal strip, gray, standard lengths,** 2 solder pins/pole | | | | | | |
| | 2 | 255-402 | 400 | 256-402 | 400 | | | 2 | 255-502 | 280 | 256-502 | 280 | | | 2 | 255-602 | 200 | 256-602 | 200 | |
| | 3 | 255-403 | 280 | 256-403 | 280 | | | 3 | 255-503 | 180 | 256-503 | 180 | | | 3 | 255-603 | 140 | 256-603 | 140 | |
| | 4 | 255-404 | 200 | 256-404 | 200 | | | 4 | 255-504 | 140 | 256-504 | 140 | | | 4 | 255-604 | 100 | 256-604 | 100 | |
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
| | 9 | 255-409 | 100 | 256-409 | 100 | | | 7 | 255-507 | 80 | 256-507 | 80 | | | 7 | 255-607 | 60 | 256-607 | 60 | |
| | 10 | 255-410 | 80 | 256-410 | 80 | | | 8 | 255-508 | 60 | 256-508 | 60 | | | 8 | 255-608 | 60 | 256-608 | 60 | |
| | 12 | 255-412 | 60 | 256-412 | 60 | | | 9 | 255-509 | 60 | 256-509 | 60 | | | 9 | 255-609 | 40 | 256-609 | 40 | |
| | 16 | 255-416 | 60 | 256-416 | 60 | | | 10 | 255-510 | 60 | 256-510 | 60 | | | 10 | 255-610 | 40 | 256-610 | 40 | |
| | 24 | 255-424 | 40 | 256-424 | 40 | | | 12 | 255-512 | 40 | 256-512 | 40 | | | 12 | 255-612 | 40 | 256-612 | 40 | |
| | 36 | 255-436 | 20 | 256-436 | 20 | | | 16 | 255-516 | 40 | 256-516 | 40 | | | 16 | 255-616 | 20 | 256-616 | 20 | |
| | 48 | 255-448 | 20 | 256-448 | 20 | | | 24 | 255-524 | 20 | 256-524 | 20 | | | 24 | 255-624 | 20 | 256-624 | 20 | |

| Accessories, 255 and 256 Series | | | (Marking strips, see Section 6) | | | **Item no. suffix for colored terminal strips, see page 119 | | |
|---|--|--|---------------------------------|--|--|--|--|--|
| | Spacer, 5/5.08 mm thick, doubles pin spacing | gray 255-801 100 | | Spacer, 7.5/7.62 mm thick, doubles pin spacing | gray 255-811 100 | | Spacer, 10/10.16 mm thick, doubles pin spacing | gray 255-821 100 |
| | End plates, snap-on type, 1 mm thick | 255 Series gray 255-100 100 dark gray 255-200 100 light gray 255-300 100 blue 255-400 100 red 255-500 100 orange 255-600 100 light green 255-700 100 | | End plates, snap-on type, 1 mm thick | 256 Series gray 256-100 100 dark gray 256-200 100 light gray 256-300 100 blue 256-400 100 red 256-500 100 orange 256-600 100 light green 256-700 100 | | End plates, snap-on type, 1 mm thick | 256 Series gray 256-100 100 dark gray 256-200 100 light gray 256-300 100 blue 256-400 100 red 256-500 100 orange 256-600 100 light green 256-700 100 |
| Dimensions (in mm) (Adjust pin spacing by pulling on the end blocks so that they expand to satisfy the hole centers required.) | | | | | | Terminal blocks for Ex e II applications see Full Line Catalog, Volume 2 | | |

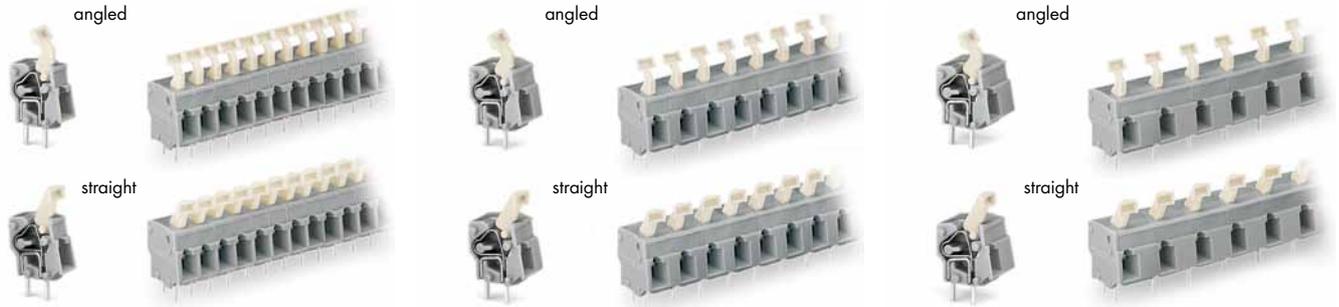


Approvals are available online at: www.wago.com. *AWG 12: THHN, THWN
For technical explanations and abbreviations, see technical section.

PCB Modular Terminal Blocks and Terminal Strips 2.5 mm² Pin Spacing 5/5.08 mm, 7.5/7.62 mm and 10/10.16 mm 257 Series

CAGE CLAMP®

| | | |
|--|--|---|
| Pin spacing 5/5.08 mm / 0.2 in 0.08 - 2.5 mm ² AWG 28 - 12* 250 V/4 kV/3, 16 A 300 V, 15 A 500 V/4 kV/2, 16 A 300/600 V, 15/5 A 5 - 6 mm / 0.22 in Approvals | Pin spacing 7.5/7.62 mm / 0.3 in 0.08 - 2.5 mm ² AWG 28 - 12* 400 V/6 kV/3, 16 A 300 V, 15 A 800 V/6 kV/2, 16 A 300/600 V, 15/5 A 5 - 6 mm / 0.22 in Approvals | Pin spacing 10/10.16 mm / 0.4 in 0.08 - 2.5 mm ² AWG 28 - 12* 500 V/6 kV/3, 16 A 300 V, 15 A 1000 V/6 kV/2, 16 A 300/600 V, 15/5 A 5 - 6 mm / 0.22 in Approvals |
|--|--|---|

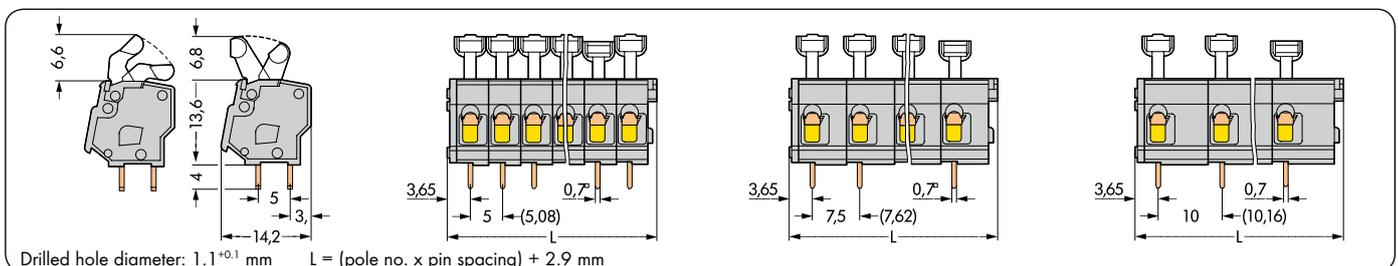


| Color Pole No. | Item No. | Item No. | Pack. Unit | Color Pole No. | Item No. | Item No. | Pack. Unit | Color Pole No. | Item No. | Item No. | Pack. Unit |
|---|-------------|-------------|------------|---|-------------|-------------|------------|---|-------------|-------------|------------|
| Modular terminal block, 2 solder pins/pole | | | | Modular terminal block, 2 solder pins/pole | | | | Modular terminal block, 2 solder pins/pole | | | |
| | Push-button | Push-button | | | Push-button | Push-button | | | Push-button | Push-button | |
| | angled | straight | | | angled | straight | | | angled | straight | |
| | 257-451 | 257-401 | 500 | | 257-551 | 257-501 | 400 | | 257-651 | 257-601 | 300 |
| | 257-840 | 257-740 | 500 | | 257-850 | 257-750 | 400 | | 257-860 | 257-760 | 300 |
| | 257-842 | 257-742 | 500 | | 257-852 | 257-752 | 400 | | 257-862 | 257-762 | 300 |
| | 257-843 | 257-743 | 500 | | 257-853 | 257-753 | 400 | | 257-863 | 257-763 | 300 |
| | 257-844 | 257-744 | 500 | | 257-854 | 257-754 | 400 | | 257-864 | 257-764 | 300 |
| | 257-846 | 257-746 | 500 | | 257-856 | 257-756 | 400 | | 257-866 | 257-766 | 300 |
| | 257-847 | 257-747 | 500 | | 257-857 | 257-757 | 400 | | 257-867 | 257-767 | 300 |
| Terminal strip, gray, standard lengths, 2 solder pins / pole | | | | Terminal strip, gray, standard lengths, 2 solder pins / pole | | | | Terminal strip, gray, standard lengths, 2 solder pins / pole | | | |
| | 257-452 | 257-402 | 400 | | 257-552 | 257-502 | 280 | | 257-652 | 257-602 | 200 |
| | 257-453 | 257-403 | 280 | | 257-553 | 257-503 | 200 | | 257-653 | 257-603 | 140 |
| : | : | : | | : | : | : | | : | : | : | |
| | 257-460 | 257-410 | 80 | | 257-554 | 257-504 | 140 | | 257-654 | 257-604 | 100 |
| | 257-462 | 257-412 | 80 | | 257-559 | 257-509 | 60 | | 257-659 | 257-609 | 40 |
| | 257-466 | 257-416 | 60 | | 257-560 | 257-510 | 60 | | 257-660 | 257-610 | 40 |
| | 257-474 | 257-424 | 40 | | 257-562 | 257-512 | 40 | | 257-662 | 257-612 | 40 |
| | 257-486 | 257-436 | 20 | | 257-566 | 257-516 | 40 | | 257-666 | 257-616 | 20 |
| | 257-498 | 257-448 | 20 | | 257-574 | 257-524 | 20 | | 257-674 | 257-624 | 20 |

Accessories, 257 Series (Marking strips, see Section 6)

| | | |
|---|--|---|
| Spacer, 5/5.08 mm thick, doubles pin spacing gray 257-801 100 | Spacer, 7.5/7.62 mm thick, doubles pin spacing gray 257-811 100 | Spacer, 10/10.16 mm thick, doubles pin spacing gray 257-821 100 |
| End plates, snap-on type, 1 mm thick 257 Series gray 257-100 100 dark gray 257-200 100 light gray 257-300 100 blue 257-400 100 red 257-500 100 orange 257-600 100 light green 257-700 100 | Item no. suffix for terminal strips in: ... /000-005 ... /000-006 ... /000-008 ... /000-009 ... /000-012 ... /000-017 Terminal blocks with blue insulation are suitable for Ex i applications (only for 7.5/7.62 mm and 10/10.16 mm pin spacing). | |

Dimensions (in mm) (Adjust pin spacing by pulling on the end blocks so that they expand to satisfy the hole centers required.)

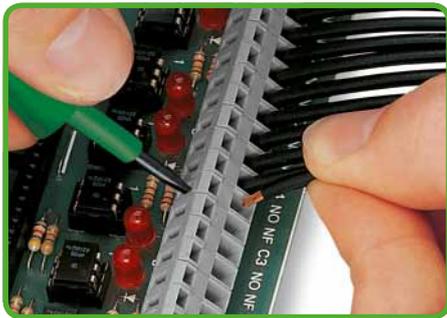


PCB Terminal Strips, Description and Handling 236, 736, 737, 738, 742 and 745 Series

236 Series



Inserting conductor via 3.5 mm screwdriver. Screwdriver actuation parallel to conductor entry.



Inserting conductor via 3.5 mm screwdriver. Screwdriver actuation perpendicular to conductor entry.

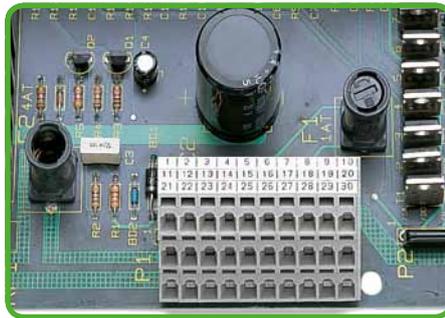


Mixed-color terminal strips with factory direct printing.

736, 737 and 738 Series



Combining double- and triple-deck terminal strips.

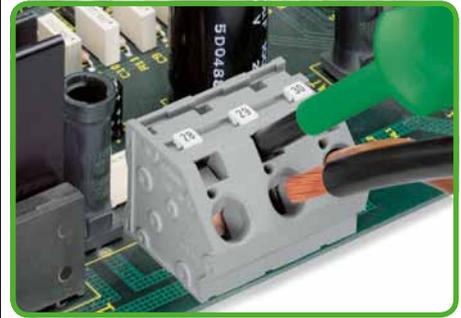


Space-saving triple-deck terminal strip.



Wiring 4-conductor sensors.

745 Series

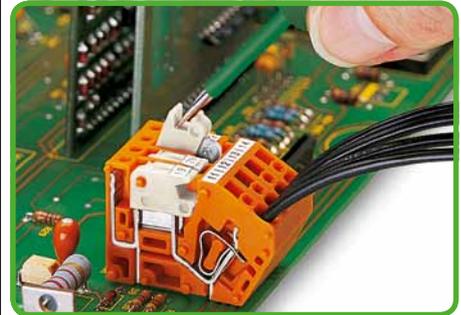


Inserting conductor via 5.5 mm screwdriver.



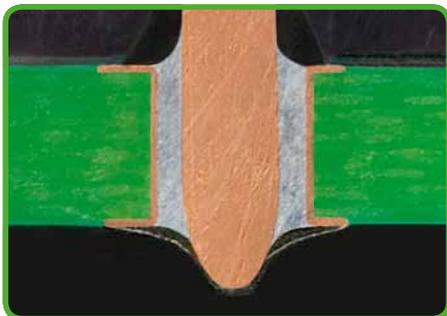
For terminal strips in other colors, please contact factory.

742 Series



Opening knife disconnect.

THR soldering



In electronic product manufacturing, **Surface Mount Technology** has led to a rapid rise in productivity.

The integration of classic electromechanical components such as connectors or PCB terminal blocks into the reflow soldering process offers even more potential for economy.

By using high-temperature resistant plastic and a streamlined pin design, the WAGO **Through Hole Reflow** connectors and PCB terminal blocks meet requirements for SMT process capability while maintaining necessary stability.

Press-in technology



Unique features of WAGO press-in technology:

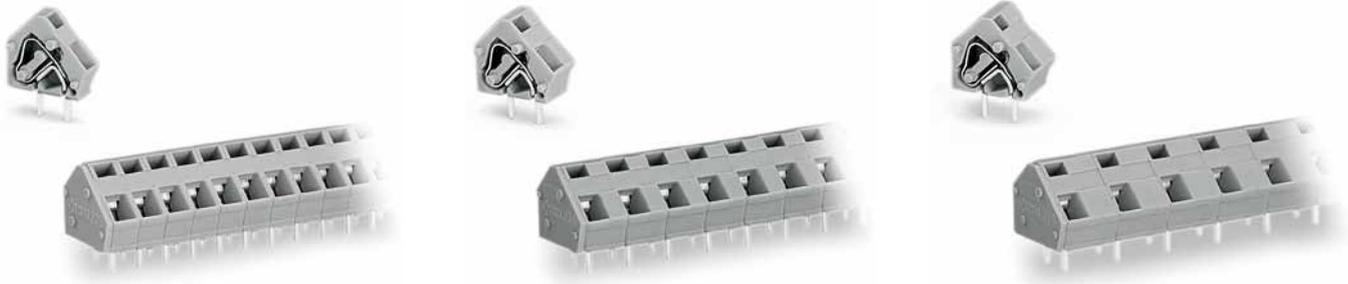
- Press-in pin features spring-loaded style expanding contact zone to provide greater retention and stability
- Suitable for all printed circuit boards with the correct tin plating for press-in connectors
- Mechanically stable pin dimensions
 - 0.6 x 0.6 mm or
 - 0.8 x 0.8 mm
- Metal-plated hole with optimum diameter
 - 1.0 or 1.45^{+0.09}_{-0.06} mm

- Press-in pin for PCB thickness from 1.4 to 3 mm
- Press-in length of approx. 3.2 mm
 - no unnecessary projection on underside of PCB
- Low press-in force required
 - reduces wear and tear on PCB and components
- High retention force within the PCB - doubles the values required by DIN IEC 60352-5
- Robust bonded connection
- Excellent elastic spring behavior
- No deformation of the metal-plated end hole
- Length of contact area ≥ 1.3 mm
- No deformation of multilayer PCBs
- Minimal tin removal in the contact hole
 - reduces wear and tear on PCB and contact points
- Application-specific press-in tool
 - please contact factory

PCB Modular Terminal Blocks and Terminal Strips 2.5 mm² Pin Spacing 5/5.08 mm, 7.5/7.62 mm and 10/10.16 mm 236 Series

CAGE CLAMP®

| | | |
|--|--|---|
| Pin spacing 5/5.08 mm / 0.2 in 0.08 - 2.5 mm ² AWG 28 - 12* 250 V/4 kV/3, 24 A 300 V, 15 A 320 V/4 kV/2, 24 A 300 V, 15 A 5 - 6 mm / 0.22 in 1 Approvals | Pin spacing 7.5/7.62 mm / 0.3 in 0.08 - 2.5 mm ² AWG 28 - 12* 400 V/6 kV/3, 24 A 300 V, 15 A 630 V/6 kV/2, 24 A 300 V, 15 A 5 - 6 mm / 0.22 in 1 Approvals | Pin spacing 10/10.16 mm / 0.4 in 0.08 - 2.5 mm ² AWG 28 - 12* 630 V/8 kV/3, 24 A 300 V, 15 A 1000 V/8 kV/2, 24 A 300 V, 15 A 5 - 6 mm / 0.22 in 1 Approvals |
|--|--|---|

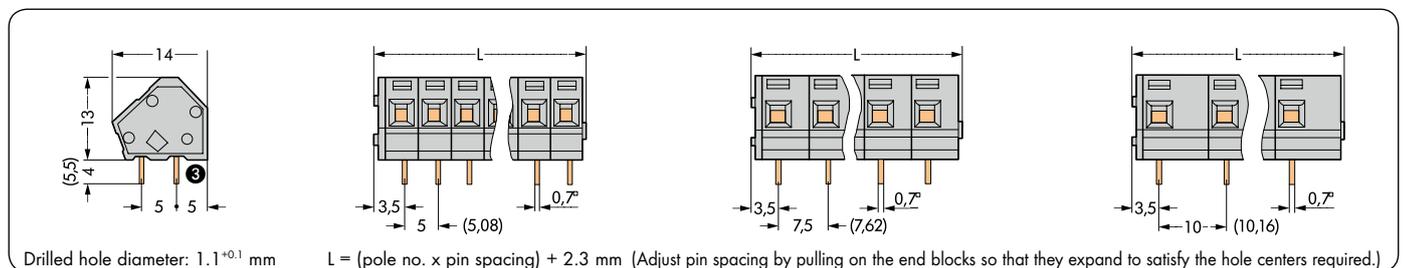


| Color Pole No. | Item No. | Item No. | Pack. Unit | Color Pole No. | Item No. | Item No. | Pack. Unit | Color Pole No. | Item No. | Item No. | Pack. Unit |
|--|----------|---------------------------|------------|--|----------|---------------------------|------------|--|----------|---------------------------|------------|
| Modular terminal block, | | | | Modular terminal block, | | | | Modular terminal block, | | | |
| 1 solder pin / pole, rear ③ | | 2 solder pins/pole | | 1 solder pin / pole, rear ③ | | 2 solder pins/pole | | 1 solder pin / pole, rear ③ | | 2 solder pins/pole | |
| gray | 236-101 | 236-401 | 600 | gray | 236-201 | 236-501 | 400 | gray | 236-301 | 236-601 | 300 |
| dark gray | 236-712 | 236-742 | 600 | dark gray | 236-722 | 236-752 | 400 | dark gray | 236-732 | 236-762 | 300 |
| light gray | 236-713 | 236-743 | 600 | light gray | 236-723 | 236-753 | 400 | light gray | 236-733 | 236-763 | 300 |
| blue | 236-714 | 236-744 | 600 | blue | 236-724 | 236-754 | 400 | blue | 236-734 | 236-764 | 300 |
| green | 236-715 | 236-745 | 600 | green | 236-725 | 236-755 | 400 | green | 236-735 | 236-765 | 300 |
| orange | 236-716 | 236-746 | 600 | orange | 236-726 | 236-756 | 400 | orange | 236-736 | 236-766 | 300 |
| light green | 236-717 | 236-747 | 600 | light green | 236-727 | 236-757 | 400 | light green | 236-737 | 236-767 | 300 |
| black | 236-854 | 236-851 | 600 | black | 236-855 | 236-852 | 400 | black | 236-856 | 236-853 | 300 |
| Terminal strip, gray, standard lengths, | | | | Terminal strip, gray, standard lengths, | | | | Terminal strip, gray, standard lengths, | | | |
| 1 solder pin / pole, rear ③ | | 2 solder pins/pole | | 1 solder pin / pole, rear ③ | | 2 solder pins/pole | | 1 solder pin / pole, rear ③ | | 2 solder pins/pole | |
| 2 | 236-102 | 236-402 | 420 | 2 | 236-202 | 236-502 | 280 | 2 | 236-302 | 236-602 | 200 |
| 3 | 236-103 | 236-403 | 280 | 3 | 236-203 | 236-503 | 200 | 3 | 236-303 | 236-603 | 140 |
| : | : | : | : | 4 | 236-204 | 236-504 | 140 | 4 | 236-304 | 236-604 | 100 |
| 8 | 236-108 | 236-408 | 100 | 6 | 236-206 | 236-506 | 100 | 6 | 236-306 | 236-606 | 80 |
| 12 | 236-112 | 236-412 | 80 | 8 | 236-208 | 236-508 | 80 | 8 | 236-308 | 236-608 | 60 |
| 16 | 236-116 | 236-416 | 60 | 12 | 236-212 | 236-512 | 40 | 12 | 236-312 | 236-612 | 40 |
| 24 | 236-124 | 236-424 | 40 | 16 | 236-216 | 236-516 | 40 | 16 | 236-316 | 236-616 | 20 |
| 36 | 236-136 | 236-436 | 20 | 24 | 236-224 | 236-524 | 20 | 24 | 236-324 | 236-624 | 20 |
| 48 | 236-148 | 236-448 | 20 | | | | | | | | |

Accessories, 236 Series (Marking strips, see Section 6)

| | | | |
|--|---|---|--|
| Operating tool ④, plastic 236-332 1 metal 236-335 1 | End plates, snap-on type, 1 mm thick gray 236-100 100 dark gray 236-200 100 light gray 236-300 100 blue 236-400 100 green 236-500 100 orange 236-600 100 light green 236-700 100 black 236-850 100 | Terminal blocks for Ex e II applications see Full Line Catalog, Volume 2 | Item no. suffix for terminal strips in: ● black ... / ...-004 ● blue ... / ...-006 ● dark gray ... / ...-008 ● light gray ... / ...-009 ● orange ... / ...-012 ● light green ... / ...-017 ● green ... / ...-023 ● Terminal blocks with blue insulation are suitable for Ex i applications (only for pin spacing 7.5/7.62 mm and 10/10.16 mm) |
|--|---|---|--|

Dimensions



① Approvals are available online at: www.wago.com. *AWG 12: THHN, THWN
 ③ solder pin, rear ④ for factory wiring For technical explanations and abbreviations, see technical section.



Double- and Triple-Deck PCB Terminal Strips 2.5 mm² Pin Spacing 5 mm and 5.08 mm 736 and 737 Series

| | | |
|---|--|--|
| Pin spacing 5 mm / 0.197 in Pin spacing 5.08 mm / 0.2 in 0.08 - 2.5 mm ² 250 V/4 kV/3 ①, 21 A AWG 28 - 12* 300 V, 10 A ② 320 V/4 kV/2 ①, 21 A 300 V, 10 A ③  5 - 6 mm / 0.22 in ② Approvals | Pin spacing 5 mm / 0.197 in Pin spacing 5.08 mm / 0.2 in 0.08 - 2.5 mm ² 250 V/4 kV/3 ①, 21 A AWG 28 - 12* 300 V, 10 A ② 320 V/4 kV/2 ①, 21 A 300 V, 10 A ③  5 - 6 mm / 0.22 in ② Approvals | Pin spacing 5 mm / 0.197 in Pin spacing 5.08 mm / 0.2 in 0.08 - 2.5 mm ² 250 V/4 kV/3 ①, 21 A AWG 28 - 12* 300 V, 10 A ② 320 V/4 kV/2 ①, 21 A 300 V, 10 A ③  5 - 6 mm / 0.22 in ② Approvals |
|---|--|--|

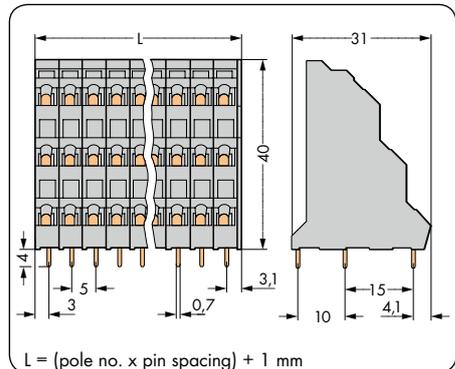
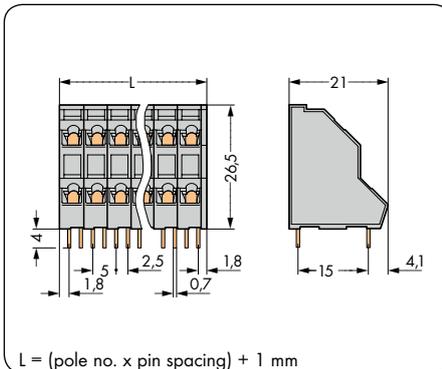
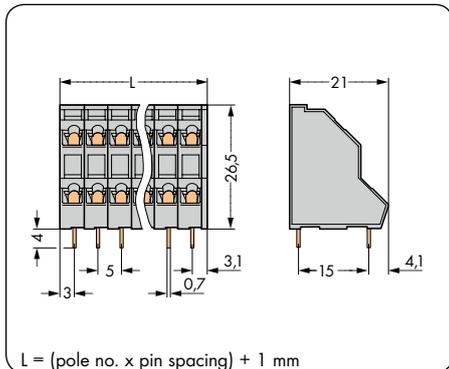
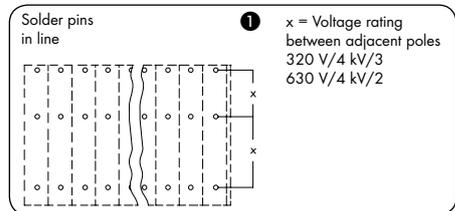
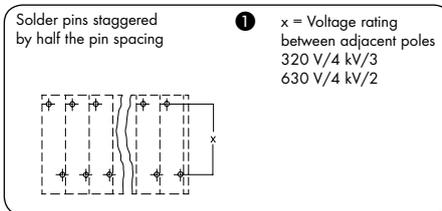
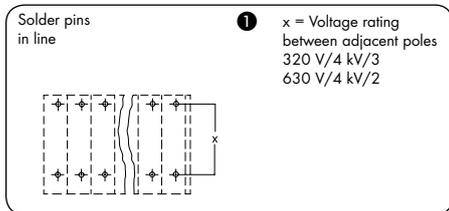


| Pole No. | Item No. | Item No. | Pack. | Unit | Pole No. | Item No. | Item No. | Pack. | Unit | Pole No. | Item No. | Item No. | Pack. | Unit | | | |
|--|----------|----------|---------|---------|--|----------|----------|---------|------|--|----------|----------|---------|---------|---|---------|----|
| Double-deck terminal strip, 2 solder pins in line | | | | | Double-deck terminal strip, 2 solder pins staggered by half the pin spacing | | | | | Triple-deck terminal strip, 3 solder pins in line | | | | | | | |
| Pin spacing | | 5 mm | 5.08 mm | | Pin spacing | | 5 mm | 5.08 mm | | Pin spacing | | 5 mm | 5.08 mm | | | | |
| | | gray | orange | | | | gray | orange | | | | gray | orange | | | | |
| 2 x 2 | ① | 736-102 | ② | 736-302 | 161 | 2 x 2 | ① | 736-202 | ② | 736-402 | 161 | 2 x 3 | ① | 737-102 | ② | 737-302 | 92 |
| 3 x 2 | ① | 736-103 | ② | 736-303 | 112 | 3 x 2 | ① | 736-203 | ② | 736-403 | 112 | 3 x 3 | ① | 737-103 | ② | 737-303 | 64 |
| 4 x 2 | ① | 736-104 | ② | 736-304 | 84 | 4 x 2 | ① | 736-204 | ② | 736-404 | 84 | 4 x 3 | ① | 737-104 | ② | 737-304 | 48 |
| 6 x 2 | ① | 736-106 | ② | 736-306 | 56 | 6 x 2 | ① | 736-206 | ② | 736-406 | 56 | 6 x 3 | ① | 737-106 | ② | 737-306 | 32 |
| 8 x 2 | ① | 736-108 | ② | 736-308 | 42 | 8 x 2 | ① | 736-208 | ② | 736-408 | 42 | 8 x 3 | ① | 737-108 | ② | 737-308 | 24 |
| 12 x 2 | ① | 736-112 | ② | 736-312 | 28 | 12 x 2 | ① | 736-212 | ② | 736-412 | 28 | 12 x 3 | ① | 737-112 | ② | 737-312 | 16 |
| 16 x 2 | ① | 736-116 | ② | 736-316 | 21 | 16 x 2 | ① | 736-216 | ② | 736-416 | 21 | 16 x 3 | ① | 737-116 | ② | 737-316 | 12 |
| 24 x 2 | ① | 736-124 | ② | 736-324 | 14 | 24 x 2 | ① | 736-224 | ② | 736-424 | 14 | 24 x 3 | ① | 737-124 | ② | 737-324 | 8 |
| For other lengths, please contact factory. | | | | | For other lengths, please contact factory. | | | | | For other lengths, please contact factory. | | | | | | | |

Accessories, 736 and 737 Series

| Marker cards, 80 self-adhesive strips per card  Marking <table border="1"> <thead> <tr> <th>Marking</th> <th>Pin spacing 5 mm</th> <th>Pin spacing 5.08 mm</th> </tr> </thead> <tbody> <tr> <td>1 - 16 (160x)</td> <td>210-332/500-202</td> <td>210-332/508-202</td> </tr> <tr> <td>17 - 32 (160x)</td> <td>210-332/500-204</td> <td>210-332/508-204</td> </tr> <tr> <td>33 - 48 (160x)</td> <td>210-332/500-206</td> <td>210-332/508-206</td> </tr> <tr> <td>1 - 32 (80x)</td> <td>210-332/500-205</td> <td>210-332/508-205</td> </tr> </tbody> </table> For direct printing, please contact factory. | Marking | Pin spacing 5 mm | Pin spacing 5.08 mm | 1 - 16 (160x) | 210-332/500-202 | 210-332/508-202 | 17 - 32 (160x) | 210-332/500-204 | 210-332/508-204 | 33 - 48 (160x) | 210-332/500-206 | 210-332/508-206 | 1 - 32 (80x) | 210-332/500-205 | 210-332/508-205 | Operating tool, for professional wiring of terminal strips <table border="1"> <tbody> <tr> <td>partially insulated</td> <td>233-335</td> <td>1</td> </tr> <tr> <td>insulated</td> <td>233-332</td> <td>25</td> </tr> </tbody> </table> Operating tool with partially insulated shaft, type 1, (2.5x0.4)mm blade <table border="1"> <tbody> <tr> <td></td> <td>210-719</td> <td>1</td> </tr> </tbody> </table> | partially insulated | 233-335 | 1 | insulated | 233-332 | 25 | | 210-719 | 1 |
|--|------------------|---------------------|---------------------|---------------|-----------------|-----------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|---------------|-----------------|-----------------|--|---------------------|---------|---|-----------|---------|----|--|---------|---|
| Marking | Pin spacing 5 mm | Pin spacing 5.08 mm | | | | | | | | | | | | | | | | | | | | | | | |
| 1 - 16 (160x) | 210-332/500-202 | 210-332/508-202 | | | | | | | | | | | | | | | | | | | | | | | |
| 17 - 32 (160x) | 210-332/500-204 | 210-332/508-204 | | | | | | | | | | | | | | | | | | | | | | | |
| 33 - 48 (160x) | 210-332/500-206 | 210-332/508-206 | | | | | | | | | | | | | | | | | | | | | | | |
| 1 - 32 (80x) | 210-332/500-205 | 210-332/508-205 | | | | | | | | | | | | | | | | | | | | | | | |
| partially insulated | 233-335 | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| insulated | 233-332 | 25 | | | | | | | | | | | | | | | | | | | | | | | |
| | 210-719 | 1 | | | | | | | | | | | | | | | | | | | | | | | |

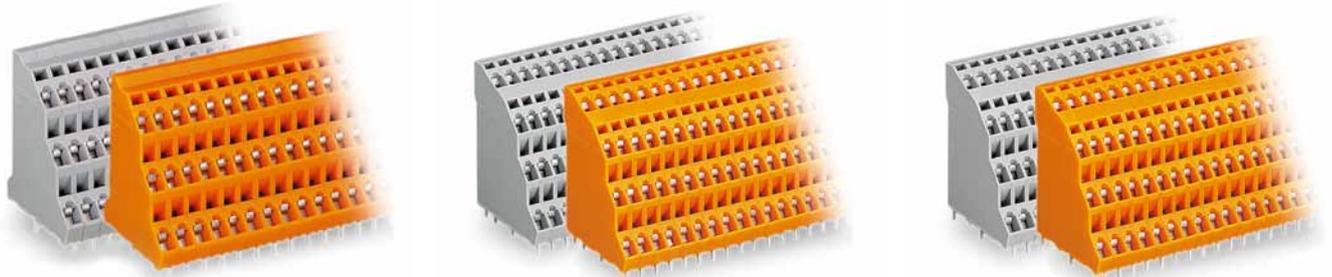
Dimensions Drilled hole diameter: 1.3^{+0.1}mm



② Approvals are available online at: www.wago.com. * AWG 12: THHN, THWN
For technical explanations and abbreviations, see technical section.

Triple- and Quadruple-Deck PCB Terminal Strips 2.5 mm² Pin Spacing 5 mm and 5.08 mm 737 and 738 Series

| | | |
|--|--|--|
| <p>Pin spacing 5 mm / 0.197 in Pin spacing 5.08 mm / 0.2 in 0.08 - 2.5 mm² 250 V/4 kV/3 ①, 21 A 300 V, 10 A ② 320 V/4 kV/2 ①, 21 A 300 V, 10 A ②</p> <p>5 - 6 mm / 0.22 in</p> <p>② Approvals</p> | <p>Pin spacing 5 mm / 0.197 in Pin spacing 5.08 mm / 0.2 in 0.08 - 2.5 mm² 250 V/4 kV/3 ①, 18 A 300 V, 10 A ② 320 V/4 kV/2 ①, 18 A 300 V, 10 A ②</p> <p>5 - 6 mm / 0.22 in</p> <p>② Approvals</p> | <p>Pin spacing 5 mm / 0.197 in Pin spacing 5.08 mm / 0.2 in 0.08 - 2.5 mm² 250 V/4 kV/3 ①, 18 A 300 V, 10 A ② 320 V/4 kV/2 ①, 18 A 300 V, 10 A ②</p> <p>5 - 6 mm / 0.22 in</p> <p>② Approvals</p> |
|--|--|--|



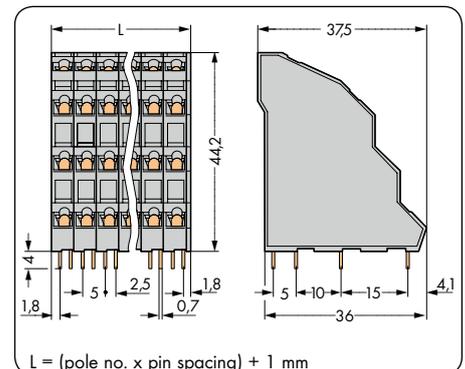
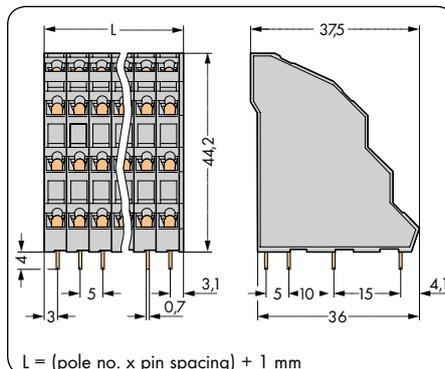
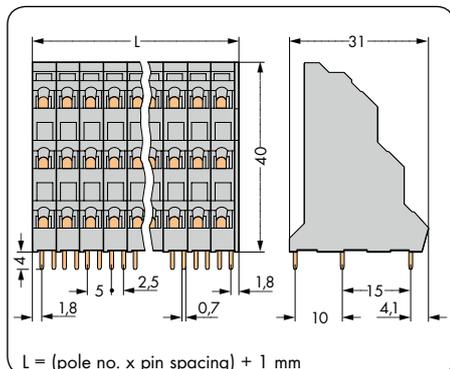
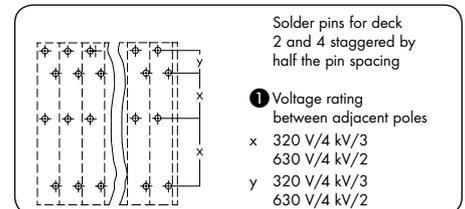
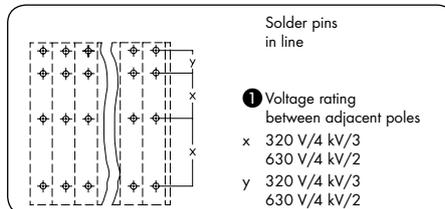
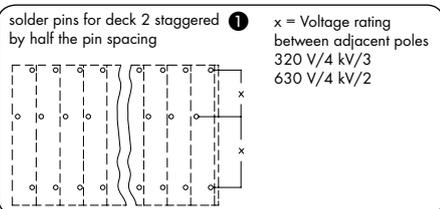
| Pole No. | Item No. | Item No. | Pack. Unit | Pole No. | Item No. | Item No. | Pack. Unit | Pole No. | Item No. | Item No. | Pack. Unit |
|---|----------|----------|------------|---|----------|----------|------------|--|----------|----------|------------|
| Triple-deck terminal strip, solder pins for deck 2 staggered by half the pin spacing | | | | Quadruple-deck terminal strip, 4 solder pins in line | | | | Quadruple-deck terminal strip, solder pins for deck 2 and 4 staggered by half the pin spacing | | | |
| Pin spacing | | 5 mm | 5.08 mm | Pin spacing | | 5 mm | 5.08 mm | Pin spacing | | 5 mm | 5.08 mm |
| | | gray | orange | | | gray | orange | | | gray | orange |
| 2 x 3 | 737-202 | 737-402 | 92 | 2 x 4 | 738-102 | 738-302 | 72 | 2 x 4 | 738-202 | 738-402 | 72 |
| 3 x 3 | 737-203 | 737-403 | 64 | 3 x 4 | 738-103 | 738-303 | 48 | 3 x 4 | 738-203 | 738-403 | 48 |
| 4 x 3 | 737-204 | 737-404 | 48 | 4 x 4 | 738-104 | 738-304 | 36 | 4 x 4 | 738-204 | 738-404 | 36 |
| 6 x 3 | 737-206 | 737-406 | 32 | 6 x 4 | 738-106 | 738-306 | 24 | 6 x 4 | 738-206 | 738-406 | 24 |
| 8 x 3 | 737-208 | 737-408 | 24 | 8 x 4 | 738-108 | 738-308 | 18 | 8 x 4 | 738-208 | 738-408 | 18 |
| 12 x 3 | 737-212 | 737-412 | 16 | 12 x 4 | 738-112 | 738-312 | 12 | 12 x 4 | 738-212 | 738-412 | 12 |
| 16 x 3 | 737-216 | 737-416 | 12 | 16 x 4 | 738-116 | 738-316 | 9 | 16 x 4 | 738-216 | 738-416 | 9 |
| 24 x 3 | 737-224 | 737-424 | 8 | 24 x 4 | 738-124 | 738-324 | 6 | 24 x 4 | 738-224 | 738-424 | 6 |
| For other lengths, please contact factory. | | | | For other lengths, please contact factory. | | | | For other lengths, please contact factory. | | | |

Accessories, 737 and 738 Series

| <p>Marker cards, 80 self-adhesive strips per card</p> <p>Marking</p> <table border="1"> <thead> <tr> <th></th> <th>Pin spacing 5 mm</th> <th>Pin spacing 5.08 mm</th> </tr> </thead> <tbody> <tr> <td>1 - 16 (160x)</td> <td>210-332/500-202</td> <td>210-332/508-202</td> </tr> <tr> <td>17 - 32 (160x)</td> <td>210-332/500-204</td> <td>210-332/508-204</td> </tr> <tr> <td>33 - 48 (160x)</td> <td>210-332/500-206</td> <td>210-332/508-206</td> </tr> <tr> <td>1 - 32 (80x)</td> <td>210-332/500-205</td> <td>210-332/508-205</td> </tr> </tbody> </table> <p>For direct printing, please contact factory.</p> | | Pin spacing 5 mm | Pin spacing 5.08 mm | 1 - 16 (160x) | 210-332/500-202 | 210-332/508-202 | 17 - 32 (160x) | 210-332/500-204 | 210-332/508-204 | 33 - 48 (160x) | 210-332/500-206 | 210-332/508-206 | 1 - 32 (80x) | 210-332/500-205 | 210-332/508-205 | <p>Operating tool, for professional wiring of terminal strips</p> <table border="1"> <tbody> <tr> <td>partially insulated</td> <td>233-335</td> <td>1</td> </tr> <tr> <td>insulated</td> <td>233-332</td> <td>25</td> </tr> </tbody> </table> <p>Operating tool with partially insulated shaft, type 1, (2.5x0.4)mm blade</p> <table border="1"> <tbody> <tr> <td></td> <td>210-719</td> <td>1</td> </tr> </tbody> </table> | partially insulated | 233-335 | 1 | insulated | 233-332 | 25 | | 210-719 | 1 |
|---|------------------|---------------------|---------------------|---------------|-----------------|-----------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|---------------|-----------------|-----------------|---|---------------------|---------|---|-----------|---------|----|--|---------|---|
| | Pin spacing 5 mm | Pin spacing 5.08 mm | | | | | | | | | | | | | | | | | | | | | | | |
| 1 - 16 (160x) | 210-332/500-202 | 210-332/508-202 | | | | | | | | | | | | | | | | | | | | | | | |
| 17 - 32 (160x) | 210-332/500-204 | 210-332/508-204 | | | | | | | | | | | | | | | | | | | | | | | |
| 33 - 48 (160x) | 210-332/500-206 | 210-332/508-206 | | | | | | | | | | | | | | | | | | | | | | | |
| 1 - 32 (80x) | 210-332/500-205 | 210-332/508-205 | | | | | | | | | | | | | | | | | | | | | | | |
| partially insulated | 233-335 | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| insulated | 233-332 | 25 | | | | | | | | | | | | | | | | | | | | | | | |
| | 210-719 | 1 | | | | | | | | | | | | | | | | | | | | | | | |

Dimensions

Drilled hole diameter: 1.3^{+0.1}mm



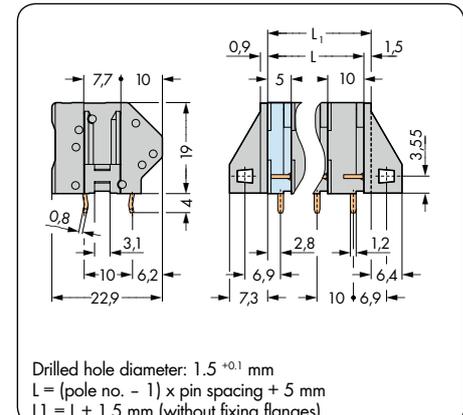
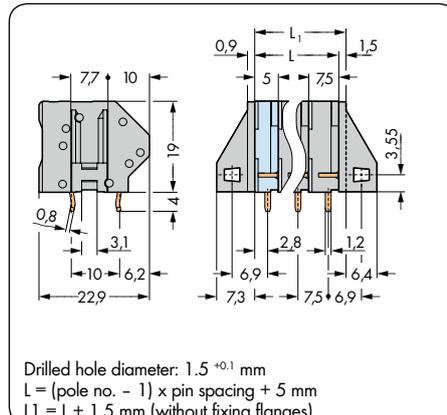
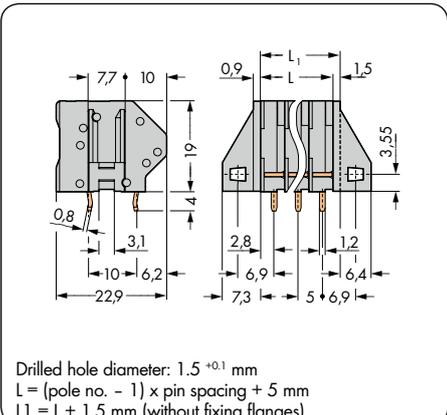
PCB Modular Terminal Blocks and Terminal Strips 4 mm² Pin Spacing 5 mm, 7.5 mm and 10 mm 745 Series

| | | |
|--|--|---|
| <p>Pin spacing 5 mm / 0.197 in 0.08 - 4 mm² 320 V/4 kV/3 I_N 32 A</p> <p>AWG 28 - 12 300 V, 20 A </p> <p> 8 - 9 mm / 0.33 in</p> <p> Approvals</p> | <p>Pin spacing 7.5 mm / 0.295 in 0.08 - 4 mm² 500 V/6 kV/3 I_N 32 A</p> <p>AWG 28 - 12 300 V, 20 A </p> <p> 8 - 9 mm / 0.33 in</p> <p> Approvals</p> | <p>Pin spacing 10 mm / 0.394 in 0.08 - 4 mm² 630 V/8 kV/3 I_N 32 A</p> <p>AWG 28 - 12 300 V, 20 A </p> <p> 8 - 9 mm / 0.33 in</p> <p> Approvals</p> |
|--|--|---|

| Color | Item No. | Pack. | Unit | Color | Item No. | Pack. | Unit | Color | Item No. | Pack. | Unit |
|---|--------------|---------|------|---|--------------|---------|------|---|--------------|---------|------|
| Modular terminal block, | | | | Modular terminal block, | | | | Modular terminal block, | | | |
| 2 solder pins/pole | | | | 2 solder pins/pole | | | | 2 solder pins/pole | | | |
| | gray | 745-801 | 200 | | gray | 745-811 | 200 | | gray | 745-821 | 200 |
| | light gray | 745-803 | 200 | | light gray | 745-813 | 200 | | light gray | 745-823 | 200 |
| | blue | 745-804 | 200 | | blue | 745-814 | 200 | | blue | 745-824 | 200 |
| | green-yellow | 745-807 | 200 | | green-yellow | 745-817 | 200 | | green-yellow | 745-827 | 200 |
| | light green | 745-808 | 200 | | light green | 745-818 | 200 | | light green | 745-828 | 200 |
| Terminal strip without fixing flanges, | | | | Terminal strip without fixing flanges, | | | | Terminal strip without fixing flanges, | | | |
| 2 solder pins/pole, gray | | | | 2 solder pins/pole, gray | | | | 2 solder pins/pole, gray | | | |
| | 2 | 745-102 | 230 | | 2 | 745-152 | 180 | | 2 | 745-202 | 160 |
| | 3 | 745-103 | 160 | | 3 | 745-153 | 120 | | 3 | 745-203 | 100 |
| | 4 | 745-104 | 120 | | 4 | 745-154 | 90 | | 4 | 745-204 | 70 |
| | 5 | 745-105 | 100 | | 5 | 745-155 | 70 | | 5 | 745-205 | 50 |
| | 10 | 745-110 | 50 | | 10 | 745-160 | 30 | | 10 | 745-210 | 20 |
| | 12 | 745-112 | 40 | | 12 | 745-162 | 30 | | 12 | 745-212 | 20 |

| Accessories, 745 Series | | | Appropriate marking systems: WMB/Mini-WSB | | | | | |
|-------------------------|---|-------------|---|---|-------------|--|---|-------------|
| | End plate, snap-on type, 1.5 mm thick gray | 745-100 100 | | End plate, snap-on type, 1.5 mm thick gray | 745-100 100 | | End plate, snap-on type, 1.5 mm thick gray | 745-100 100 |
| | End plate with fixing flange gray | 745-140 100 | | End plate with fixing flange gray | 745-140 100 | | End plate with fixing flange gray | 745-140 100 |
| | End plate with fixing flange gray | 745-145 100 | | End plate with fixing flange gray | 745-145 100 | | End plate with fixing flange gray | 745-145 100 |
| | Test plug, with 500 mm cable 2 mm Ø, red | 210-136 50 | | Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade | 210-720 1 | | Test plug, with 500 mm cable 2.3 mm Ø, yellow | 210-137 50 |
| | Comb-style jumper bar 1 to 3 | 745-181 50 | | Comb-style jumper bar 1 to 3 | 745-191 50 | | Comb-style jumper bar 1 to 3 | 745-281 50 |
| | 2-way | 745-182 50 | | 2-way | 745-192 50 | | 2-way | 745-282 50 |
| | 3-way | 745-183 50 | | 3-way | 745-193 50 | | 3-way | 745-283 50 |
| | 4-way | 745-184 50 | | 4-way | 745-194 50 | | 4-way | 745-284 50 |
| | 5-way | 745-185 50 | | 5-way | 745-195 50 | | 5-way | 745-285 50 |
| | 10-way | 745-180 50 | | 10-way | 745-190 50 | | 10-way | 745-280 50 |

Dimensions



Approvals are available online at: www.wago.com.
For technical explanations and abbreviations, see technical section.

PCB Modular Terminal Blocks and Terminal Strips 6 mm² Pin Spacing 7.5 mm and 10 mm 745 Series

| | |
|---|--|
| Pin spacing 7.5 mm / 0.295 in 0.2 - 6 mm ² 500 V/6 kV/3 I _N 41 A  11 - 12 mm / 0.45 in Approvals | Pin spacing 10 mm / 0.394 in 0.2 - 6 mm ² 630 V/8 kV/3 I _N 41 A  11 - 12 mm / 0.45 in Approvals |
|---|--|

| Color | Item No. | Pack. | Unit | Color | Item No. | Pack. | Unit |
|---|--------------|---------|------|---|--------------|---------|------|
| Modular terminal block, | | | | Modular terminal block, | | | |
| 2 solder pins/pole | | | | 2 solder pins/pole | | | |
|  | gray | 745-831 | 100 |  | gray | 745-841 | 100 |
| | light gray | 745-833 | 100 | | light gray | 745-843 | 100 |
| | blue | 745-834 | 100 | | blue | 745-844 | 100 |
| | green-yellow | 745-837 | 100 | | green-yellow | 745-847 | 100 |
| | light green | 745-838 | 100 | | light green | 745-848 | 100 |



| Pole No. | Item No. | Pack. | Unit | Pole No. | Item No. | Pack. | Unit |
|---|----------|---------|------|---|----------|---------|------|
| Terminal strip without fixing flanges, | | | | Terminal strip without fixing flanges, | | | |
| 2 solder pins/pole, gray | | | | 2 solder pins/pole, gray | | | |
|  | 2 | 745-302 | 128 |  | 2 | 745-352 | 104 |
| | 3 | 745-303 | 88 | | 3 | 745-353 | 72 |
| | 4 | 745-304 | 64 | | 4 | 745-354 | 48 |
| | 5 | 745-305 | 48 | | 5 | 745-355 | 40 |
| | : | : | : | | : | : | : |
| | 10 | 745-310 | 24 | | 10 | 745-360 | 16 |
| | 12 | 745-312 | 16 | | 12 | 745-362 | 16 |

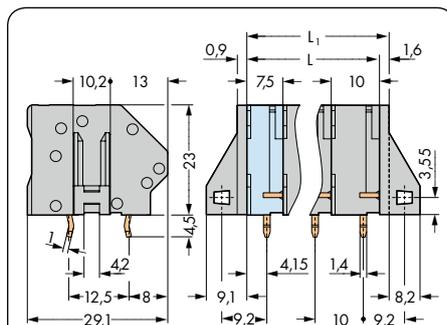
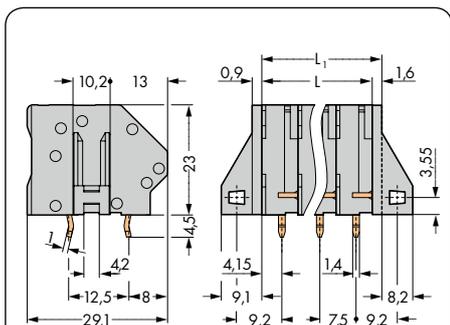
Item no. suffix for terminal strips, end plates in different colors:

| | | |
|---|--------------|-------------|
|  | blue | .../...-006 |
|  | light gray | .../...-009 |
|  | green-yellow | .../...-016 |
|  | light green | .../...-017 |

| Accessories, 745 Series | | Appropriate marking systems: WMB/Mini-WSB | |
|---|--|---|--|
|  | End plate, snap-on type, 1.6 mm thick gray 745-300 100 |  | End plate, snap-on type, 1.6 mm thick gray 745-300 100 |
|  | End plate with fixing flange gray 745-340 50 |  | End plate with fixing flange gray 745-340 50 |
|  | End plate with fixing flange gray 745-345 50 |  | End plate with fixing flange gray 745-345 50 |
|  | Test plug, with 500 mm cable 2 mm Ø, red 210-136 50 2.3 mm Ø, yellow 210-137 50 |  | Operating tool with partially insulated shaft, type 3, (5.5 x 0.8) mm blade 210-721 1 |
|  | Comb-style jumper bar 1 to 3 745-381 50 2-way 745-382 50 3-way 745-383 50 4-way 745-384 50 5-way 745-385 50 10-way 745-380 50 |  | Comb-style jumper bar 1 to 3 745-391 50 2-way 745-392 50 3-way 745-393 50 4-way 745-394 50 5-way 745-395 50 10-way 745-390 50 |

Terminal blocks with blue insulation are suitable for Ex i applications (only for pin spacing 7.5 mm and 10 mm).

Dimensions



PCB Modular Terminal Blocks and Terminal Strips 16 mm² Pin Spacing 10mm, 15 mm and 20 mm 745 Series

| | | |
|---|--|--|
| Pin spacing 10 mm / 0.394 in 0.2 - 16 mm ² AWG 24 - 6 320 V/4 kV/3 300 V, 10 A I _N 76 A ①  12 - 13 mm / 0.49 in ③ Approvals | Pin spacing 15 mm / 0.591 in 0.2 - 16 mm ² AWG 24 - 6 630 V/8 kV/3 300 V, 65 A I _N 76 A ①  12 - 13 mm / 0.49 in ③ Approvals | Pin spacing 20 mm / 0.787 in 0.2 - 16 mm ² AWG 24 - 6 1000 V/12 kV/3 600 V, 65 A I _N 76 A ①  12 - 13 mm / 0.49 in ③ Approvals |
|---|--|--|

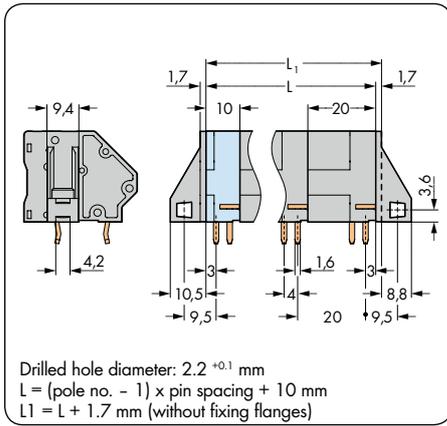
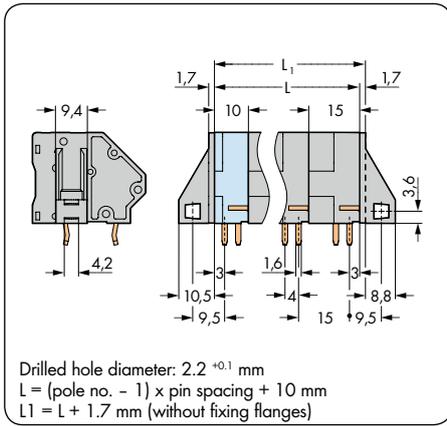
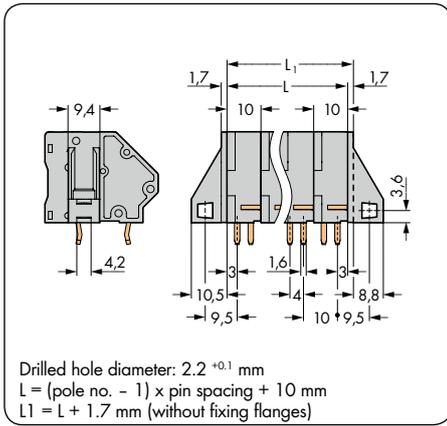
| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|---|--------------|---------------------|---|--------------|---------------------|---|--------------|--------------------|
| Modular terminal block, 2 solder pins/pole | | | Modular terminal block, 2 solder pins/pole | | | Modular terminal block, 2 solder pins/pole | | |
|  | gray | 745-851/006-000 100 |  | gray | 745-871/006-000 100 |  | gray | 745-881/006-000 50 |
| | light gray | 745-853/006-000 100 | | light gray | 745-873/006-000 100 | | light gray | 745-883/006-000 50 |
| | blue | 745-854/006-000 100 | | blue | 745-874/006-000 100 | | blue | 745-884/006-000 50 |
| | green-yellow | 745-857/006-000 100 | | green-yellow | 745-877/006-000 100 | | green-yellow | 745-887/006-000 50 |
| | light green | 745-858/006-000 100 | | light green | 745-878/006-000 100 | | light green | 745-888/006-000 50 |

| Pole No. | Item No. | Pack. Unit | Pole No. | Item No. | Pack. Unit | Pole No. | Item No. | Pack. Unit |
|---|----------|--------------------|---|----------|--------------------|---|----------|--------------------|
| Terminal strip without fixing flanges, 4 solder pins/pole, gray | | | Terminal strip without fixing flanges, 4 solder pins/pole, gray | | | Terminal strip without fixing flanges, 4 solder pins/pole, gray | | |
|  | 2 | 745-502/006-000 48 |  | 2 | 745-602/006-000 36 |  | 2 | 745-652/006-000 32 |
| | 3 | 745-503/006-000 32 | | 3 | 745-603/006-000 24 | | 3 | 745-653/006-000 20 |
| | 4 | 745-504/006-000 24 | | 4 | 745-604/006-000 16 | | 4 | 745-654/006-000 12 |
| | 5 | 745-505/006-000 20 | | 5 | 745-605/006-000 12 | | 5 | 745-655/006-000 8 |

Terminal blocks with blue insulation are suitable for Ex i applications (only for pin spacing 15 mm and 20 mm).

| Accessories, 745 Series | | | Appropriate marking systems: WMB/Mini-WSB | | | Accessories, 745 Series | | |
|---|---|---|---|--|---|---|---|---|
|  | End plate, snap-on type, 1.7 mm/0.067 in thick | gray 745-500 50 |  | End plate, snap-on type, 1.7 mm/0.067 in thick | gray 745-500 50 |  | End plate, snap-on type, 1.7 mm/0.067 in thick | gray 745-500 50 |
|  | End plate with fixing flange | gray 745-540 50 |  | End plate with fixing flange | gray 745-540 50 |  | End plate with fixing flange | gray 745-540 50 |
|  | End plate with fixing flange | gray 745-545 50 |  | End plate with fixing flange | gray 745-545 50 |  | End plate with fixing flange | gray 745-545 50 |
|  | Test plug, with 500 mm cable | 2 mm Ø, red 210-136 50 2.3 mm Ø, yellow 210-137 50 |  | Operating tool with partially insulated shaft, type 3, (5.5 x 0.8) mm blade | 210-721 1 |  | Test plug, with 500 mm cable | 2 mm Ø, red 210-136 50 2.3 mm Ø, yellow 210-137 50 |
|  | Comb-style jumper bar | 1 to 3 745-682 50 2-way 745-582 50 3-way 745-583 50 4-way 745-584 50 5-way 745-585 50 |  | Comb-style jumper bar | 1 to 3 745-631 50 2-way 745-632 50 3-way 745-633 50 4-way 745-634 50 5-way 745-635 50 |  | Comb-style jumper bar | 1 to 3 745-681 50 2-way 745-682 50 3-way 745-683 50 4-way 745-684 50 5-way 745-685 50 |

Dimensions



① Currents require an adapted PCB track design

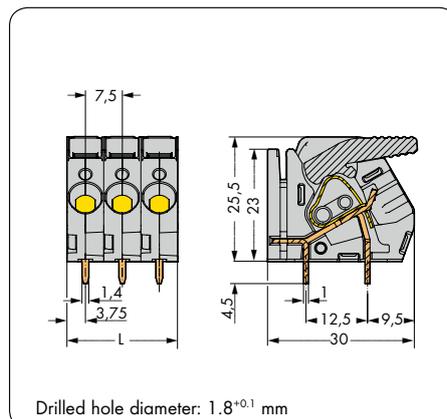
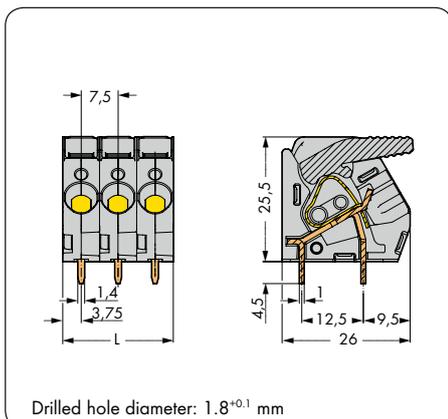
PCB Terminal Strips with Operating Levers 6 mm² Pin Spacing 7.5 mm, 10 mm and 12.5 mm 2706 Series

| | | | |
|---|--------------------|--|--------------------|
| 0.5 - 6 mm² 500 V/6 kV/3, 41 A 800 V/8 kV/3, 41 A 1000 V/8 kV/3, 41 A  11 - 12 mm / 0.45 in Approvals | AWG 20 - 10 | 0.5 - 6 mm² 500 V/6 kV/3, 41 A 630 V/8 kV/3, 41 A  11 - 12 mm / 0.45 in Approvals | AWG 20 - 10 |
|---|--------------------|--|--------------------|



| Pole No. Color | Item No. | Pack. Unit | Pole No. Color | Item No. | Pack. Unit | Accessories, 2706 Series | |
|---|---------------------------------------|------------|---|---------------------------------------|------------|--|---|
| Terminal strip with operating levers, gray | | | Terminal strip with operating levers, with jumper slot, gray | | | Test plug, with 500 mm cable | |
| Pin spacing 7.5 mm | L = (pole no. x pin spacing) | | Pin spacing 7.5 mm | L = (pole no. x pin spacing) | |  2 mm Ø 210-136 red 2.3 mm Ø 210-137 yellow | |
| 2 | 2706-102 | 85 | 2 | 2706-152 | 85 | Comb-style jumper bar, for 7.5 mm pin spacing | |
| 3 | 2706-103 | 55 | 3 | 2706-153 | 55 | | |
| 4 | 2706-104 | 40 | 4 | 2706-154 | 40 | | |
| 5 | 2706-105 | 30 | 5 | 2706-155 | 30 | | |
| : | : | | : | : | | | |
| 10 | 2706-110 | 15 | 10 | 2706-160 | 15 | | |
| 11 | 2706-111 | 15 | 11 | 2706-161 | 15 | | |
| 12 | 2706-112 | 10 | 12 | 2706-162 | 10 | | |
| Pin Spacing 10 mm | | | Pin Spacing 10 mm | | | | Comb-style jumper bar, for 10 mm pin spacing |
| Pin Spacing 10 mm | L = (pole no. x pin spacing) - 2.5 mm | | Pin Spacing 10 mm | L = (pole no. x pin spacing) - 2.5 mm | | | |
| 2 | 2706-202 | 70 | 2 | 2706-252 | 70 | | |
| 3 | 2706-203 | 45 | 3 | 2706-253 | 45 | | |
| 4 | 2706-204 | 30 | 4 | 2706-254 | 30 | | |
| 5 | 2706-205 | 25 | 5 | 2706-255 | 25 | | |
| : | : | | : | : | | | |
| 10 | 2706-210 | 10 | 10 | 2706-260 | 10 | | |
| 11 | 2706-211 | 10 | 11 | 2706-261 | 10 | | |
| 12 | 2706-212 | 10 | 12 | 2706-262 | 10 | | |
| Pin spacing 12.5 mm | | | | | | For other lengths, please contact factory. Item no. suffix for terminal strips in: ● blue ... /000-006 ○ light gray ... /000-009 ● green-yellow ... /000-016 ● light green ... /000-017 | |
| Pin spacing 12.5 mm | L = (pole no. x pin spacing) - 5 mm | | | | | | |
| 2 | 2706-302 | 65 | | | | | |
| 3 | 2706-303 | 40 | | | | | |
| 4 | 2706-304 | 25 | | | | | |
| 5 | 2706-305 | 20 | | | | | |
| : | : | | | | | | |
| 10 | 2706-310 | 10 | | | | | |
| 11 | 2706-311 | 5 | | | | | |
| 12 | 2706-312 | 5 | | | | | |

Dimensions



Commoning via comb-style jumper bar.

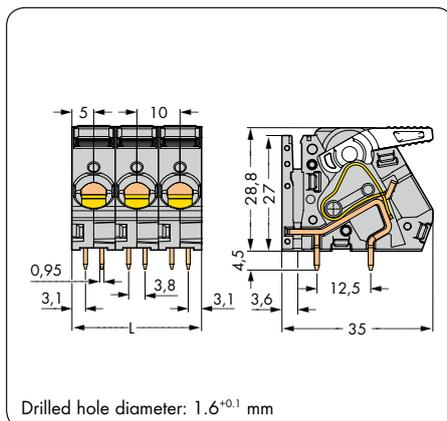
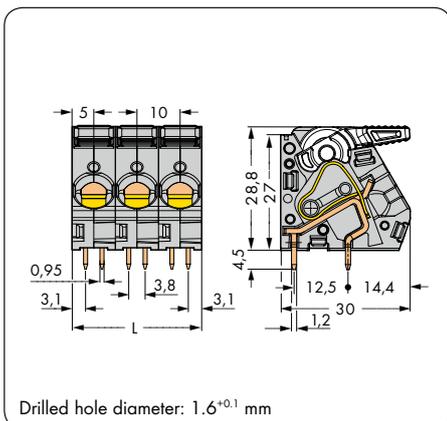
PCB Terminal Strips with Operating Levers 16 mm² Pin Spacing 10 mm and 15 mm 2716 Series

| | |
|--|---|
| <p>1.5 - 16 mm² 320 V/4 kV/3, 76 A 800 V/8 kV/3, 76 A</p> <p>AWG 16 - 6</p> <p> 12 - 13 mm / 0.49 in</p> <p>① Approvals</p> | <p>1.5 - 16 mm² 320 V/4 kV/3, 76 A 800 V/8 kV/3, 76 A</p> <p>AWG 16 - 6</p> <p> 12 - 13 mm / 0.49 in</p> <p>① Approvals</p> |
|--|---|



| Pole No. Color | Item No. | Pack. Unit | Pole No. Color | Item No. | Pack. Unit | Accessories, 2716 Series |
|---|------------------------------|------------|---|------------------------------|------------|---|
| Terminal strip with operating levers, gray | | | Terminal strip with operating levers, with jumper slot, gray | | | Test plug, with 500 mm cable |
| Pin Spacing 10 mm | L = (pole no. x pin spacing) | | Pin Spacing 10 mm | L = (pole no. x pin spacing) | |  2 mm Ø 210-136 red 2.3 mm Ø 210-137 yellow |
| ● 2 | 2716-102 | 65 | ● 2 | 2716-152 | 52 | Comb-style jumper bar, for 7.5 mm pin spacing |
| ● 3 | 2716-103 | 40 | ● 3 | 2716-153 | 32 | |
| ● 4 | 2716-104 | 30 | ● 4 | 2716-154 | 24 | |
| ● 5 | 2716-105 | 25 | ● 5 | 2716-155 | 20 | |
| ● 6 | 2716-106 | 20 | ● 6 | 2716-156 | 16 | |
| ● 7 | 2716-107 | 15 | ● 7 | 2716-157 | 12 | 2-way 745-582 400 (8x50) |
| ● 8 | 2716-108 | 15 | ● 8 | 2716-158 | 12 | 3-way 745-583 300 (6x50) |
| Pin Spacing 15 mm L = (pole no. x pin spacing) - 5 mm | | | Pin Spacing 15 mm L = (pole no. x pin spacing) - 5 mm | | | 4-way 745-584 200 (4x50) |
| ● 2 | 2716-202 | 50 | ● 2 | 2716-252 | 40 | 5-way 745-585 200 (4x50) |
| ● 3 | 2716-203 | 30 | ● 3 | 2716-253 | 24 | Comb-style jumper bar, for 10 mm pin spacing |
| ● 4 | 2716-204 | 20 | ● 4 | 2716-254 | 16 | |
| ● 5 | 2716-205 | 15 | ● 5 | 2716-255 | 12 | |
| ● 6 | 2716-206 | 15 | ● 6 | 2716-256 | 12 | |
| ● 7 | 2716-207 | 10 | ● 7 | 2716-257 | 8 | |
| ● 8 | 2716-208 | 10 | ● 8 | 2716-258 | 8 | 1 to 3 745-631 200 (4x50) |
| | | | | | | 2-way 745-632 200 (4x50) |
| | | | | | | 3-way 745-633 200 (4x50) |
| | | | | | | 4-way 745-634 200 (4x50) |
| | | | | | | 5-way 745-635 200 (4x50) |
| | | | | | | For other lengths, please contact factory. |
| | | | | | | Item no. suffix for terminal strips in: |
| | | | | | | ● blue ... /000-006 |
| | | | | | | ○ light gray ... /000-009 |
| | | | | | | ● green-yellow ... /000-016 |
| | | | | | | ● light green ... /000-017 |

Dimensions



Testing with 2 mm Ø test plug.

1-Conductor PCB Terminal Strips

1.5 mm², Pin Spacing 3.5 mm, 805 Series

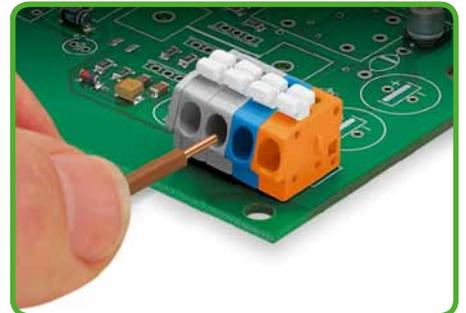
2.5 mm², Pin Spacing 5 mm and 7.5 mm, 804 Series

| | | |
|---|--|--|
| Pin spacing 3.5 mm / 0.138 in 0.2 - 1.5 mm ² 320 V/4 kV/3 I _N 17.5 A  9 - 10 mm / 0.37 in 1 Approvals | Pin spacing 5 mm / 0.197 in Pin spacing 7.5 mm / 0.295 in 0.5 - 2.5 mm ² "s+f-st" 250 V/4 kV/3, 24 A 320 V/4 kV/2, 24 A AWG 20 - 12 "s+f-st" 300 V, 10 A  10 - 11 mm / 0.41 in 1 Approvals | Application notes Accessories |
|---|--|--|

CAGE CLAMP® S



CAGE CLAMP®

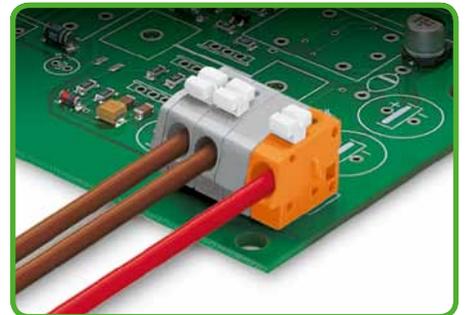


Terminating solid conductors: Simply push in stripped conductor until it hits backstop.

| Pole No. Color | Item No. | Pack. Unit | Pole No. Color | Item No. | Pack. Unit |
|---|--------------|-------------|--|--------------------|-------------|
| 1-conductor terminal strip with CAGE CLAMP® S, with push-buttons, 1 solder pin/pole, with test slots for 2 mm Ø test plug, gray | | | 1-conductor terminal strip with CAGE CLAMP®, with push-buttons, 2 staggered solder pins/pole, with test slots for 1 mm Ø test plug, gray | | |
| | | | | Pin spacing 5 mm | |
| ○ 2-pole | 805-102 | 600 (4x150) | ○ 2 | 804-102 | 420 (4x105) |
| ○ 3-pole | 805-103 | 420 (4x105) | ○ 3 | 804-103 | 280 (4x70) |
| ○ 4-pole | 805-104 | 300 (4x75) | ○ 4 | 804-104 | 220 (4x55) |
| ○ 5-pole | 805-105 | 260 (4x65) | ○ 5 | 804-105 | 180 (4x45) |
| : | : | | : | : | |
| ○ 24-pole | 805-124 | 40 (4x10) | ○ 16 | 804-116 | 40 (4x10) |
| without test slot | | | | Pin spacing 7.5 mm | |
| ○ 2-pole | 805-302 | 600 (4x150) | ○ 2 | 804-302 | 320 (4x85) |
| ○ 3-pole | 805-303 | 420 (4x105) | ○ 3 | 804-303 | 220 (4x55) |
| ○ 4-pole | 805-304 | 300 (4x75) | ○ 4 | 804-304 | 160 (4x40) |
| ○ 5-pole | 805-305 | 260 (4x65) | ○ 5 | 804-305 | 120 (4x30) |
| : | : | | : | : | |
| ○ 24-pole | 805-324 | 40 (4x10) | ○ 12 | 804-312 | 40 (4x10) |
| For direct printing, please contact factory. | | | Item no. suffix for terminal strips in: | | |
| For other lengths, please contact factory. | | | ● red | ... /000-005 | |
| Item no. suffix for terminal strips in: | | | ● blue | ... /000-006 | |
| ● blue | ... /000-006 | | ● orange | ... /000-012 | |
| ● orange | ... /000-012 | | ● light green | ... /000-017 | |
| | | | ● Terminal blocks with blue insulation are suitable for Ex i applications (only for pin spacing 7.5 mm and 10 mm). | | |

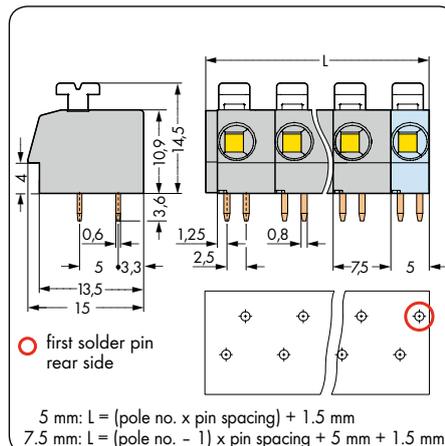
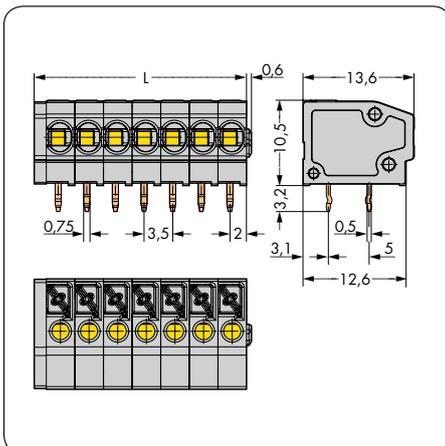


Inserting/removing fine-stranded conductors: Open clamping unit via push-button and insert stripped conductor until it hits backstop.



For terminal strips with and without spacers, please contact factory.

Dimensions Drilled hole diameter: 1.1^{+0.1} mm (805 Series), 1^{+0.1} mm (804 Series)



Accessories, 804/805 Series Item No.

| | | |
|---|-------------------|----|
| Marker cards, 20 self-adhesive strips | | |
| Spacing 5 mm | | |
| 1 - 12 (300x) | 210-331/0500-0103 | |
| 13 - 24 (300x) | 210-331/0500-0104 | |
| Spacing 7.5 mm | | |
| 1 - 16 (100x) | 210-331/0750-0202 | |
| Test pin, 1 mm Ø, | | |
| with solder connection for test cable | 735-500 | 1 |
| Test plug, with 500 mm cable, | | |
| 2 mm Ø, red | 210-136 | 50 |
| Operating tool with partially insulated shaft, | | |
| type 2, (3.5 x 0.5) mm blade | 210-720 | 1 |

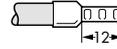
2-Conductor PCB Terminal Strips

1.5 mm², Pin Spacing 5 mm, 816 Series

10 mm², Pin Spacing 7.5 mm, 746 Series

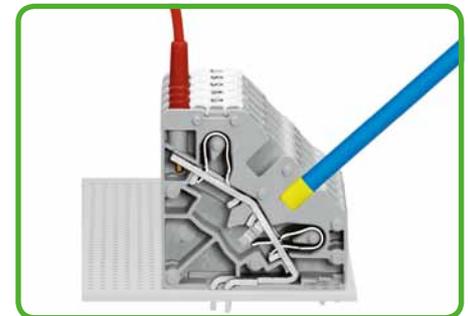
| | | |
|---|--|--------------------------|
| Pin spacing 5 mm / 0.197 in 2 x 0.2 - 1.5 mm ² 2 x AWG 24 - 16 320 V/4 kV/3 300 V, 10 A I _N 14 A 9 - 10 mm / 0.37 in 1 Approvals | Pin spacing 7.5 mm / 0.295 in 2 x 0.5 - 10 mm ² 2 x AWG 20 - 8 800 V/8 kV/3 600 V, 50 A I _N 50 A 600 V, 44 A 13 - 15 mm / 0.55 in 1 Approvals | Application notes |
|---|--|--------------------------|

2 Conductor sizes: 0.5 - 10 mm² "s+f-st";
 Push-in conductor sizes: 1.5 - 10 mm² "s" and
 1.5 - 6 mm² "insulated ferrule, 12 mm"



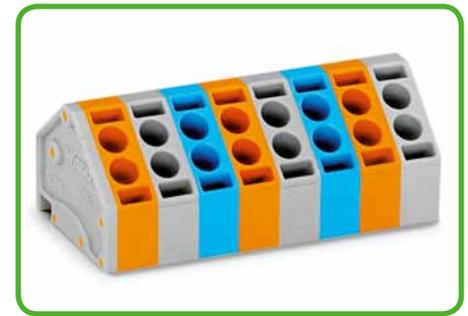
Inserting fine-stranded conductors via 5.5 mm screwdriver.

| Pole No. Color | Item No. | Pack. Unit | Pole No. Color | Item No. | Pack. Unit |
|--|-------------|------------|--|-------------|------------|
| Terminal strip with CAGE CLAMP®S, gray | | | 2-conductor terminal strip with CAGE CLAMP®S, 2 staggered solder pins/pole, gray | | |
| 2 | 816-102 | 400 | 2 | 746-2302 | 60 |
| 3 | 816-103 | 250 | 3 | 746-2303 | 40 |
| 4 | 816-104 | 200 | 4 | 746-2304 | 32 |
| 5 | 816-105 | 175 | 5 | 746-2305 | 24 |
| 6 | 816-106 | 150 | 6 | 746-2306 | 20 |
| 7 | 816-107 | 125 | 7 | 746-2307 | 16 |
| 8 | 816-108 | 100 | 8 | 746-2308 | 16 |
| 9 | 816-109 | 100 | 9 | 746-2309 | 12 |
| 10 | 816-110 | 80 | 10 | 746-2310 | 12 |
| 11 | 816-111 | 80 | 12 | 746-2312 | 8 |
| 12 | 816-112 | 60 | | | |
| For other lengths, please contact factory | | | For other lengths, please contact factory | | |
| Item no. suffix for terminal strips in: | | | Item no. suffix for terminal strips in: | | |
| yellow | .../000-002 | | blue | .../000-006 | |
| blue | .../000-006 | | light gray | .../000-009 | |
| orange | .../000-012 | | green-yellow | .../000-016 | |
| | | | light green | .../000-017 | |
| Accessories, 806 Series | | | Accessories, 746 Series | | |
| Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade 210-720 1 | | | Operating tool with partially insulated shaft, type 3, (5.5 x 0.8) mm blade 210-721 1 | | |
| Marker card, 80 self-adhesive strips per card 1 - 16 (160 x) 210-332/500-202 1 card For direct printing, please contact factory. | | | Test plug, with 500 mm cable, 2 mm Ø, red 210-136 50 | | |



Inserting solid and ferruled conductors by simply pushing them into unit.

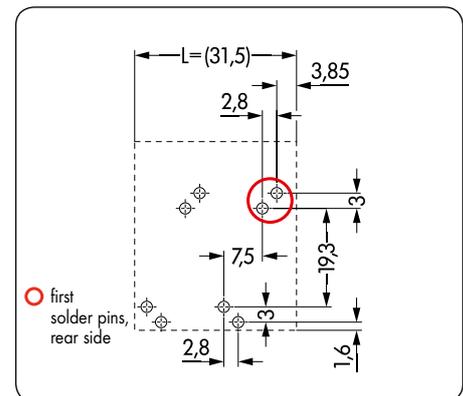
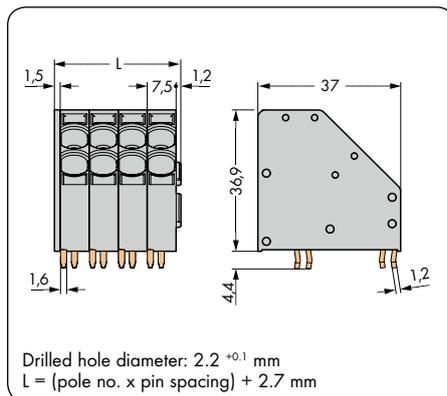
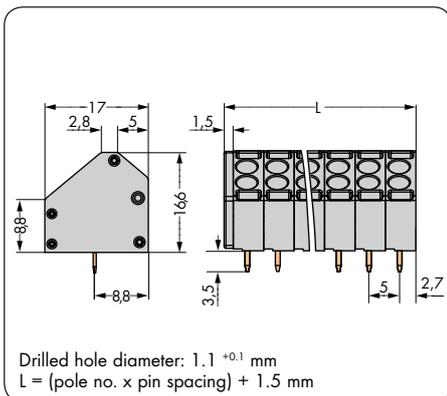
Testing with 2 mm Ø test plug.



For mixed-color terminal strips, please contact factory.

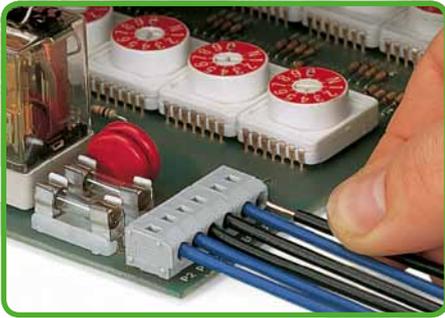
Dimensions

PCB hole pattern, 746 Series

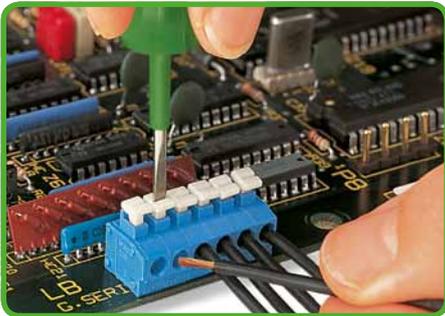


PCB Terminal Strips, Description and Handling 235, 250 and 253 Series

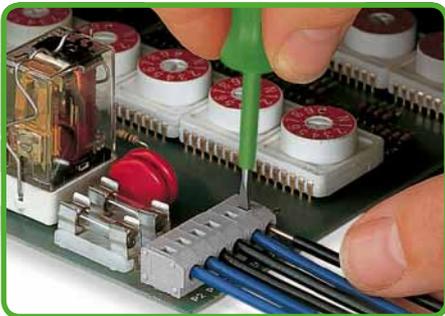
235 Series



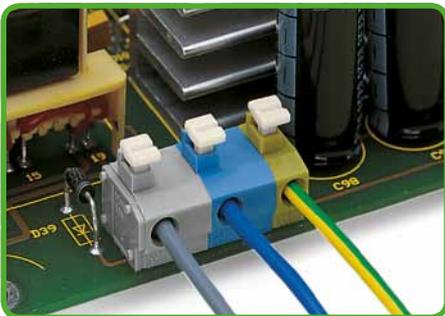
Inserting solid conductor via push-in termination. Terminal strip without push-buttons.



Inserting/removing fine-stranded conductor via push-button.

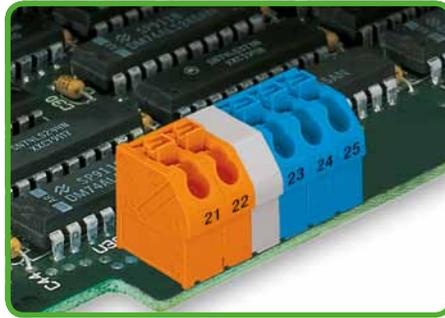


Removing conductor using a screwdriver. Terminal strip without push-buttons.

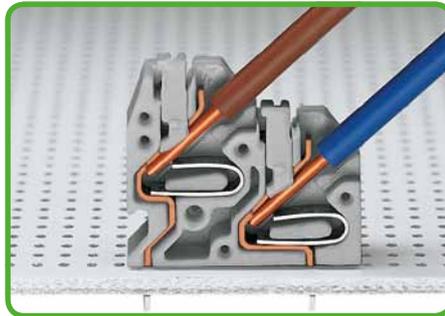


Application example: power supply terminal strip.

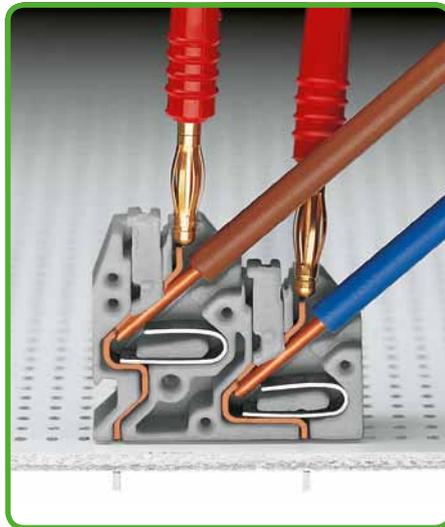
250 Series



Marking using self-adhesive strips or by direct printing. Mixed-color terminal strips (with/without spacer) available upon request.

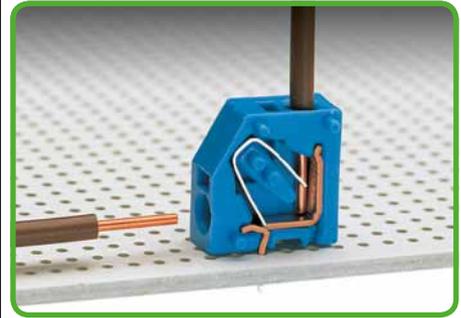


Space-saving wiring. Push-in termination of solid conductors.

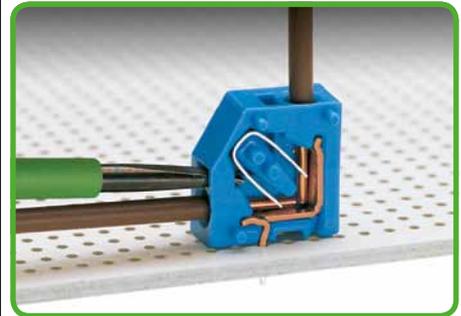


Testing with 2 mm Ø test plug.

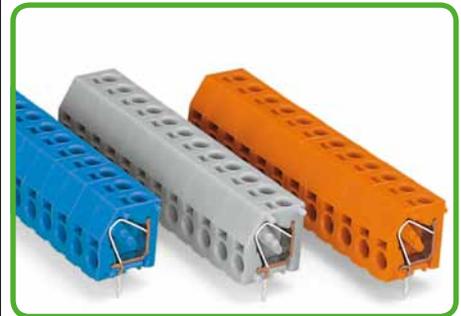
253 Series



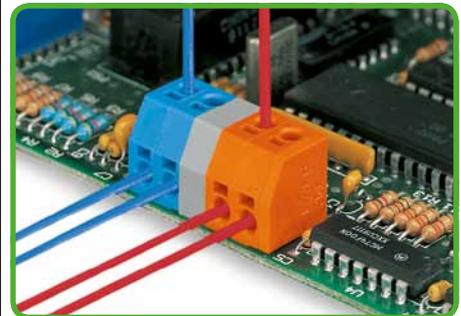
Inserting solid conductor via push-in termination. Front-entry/side-entry wiring.



Removing conductor via 2.5 mm screwdriver.



Terminal strips available in different colors.



Mixed-color terminal strips (with/without spacer) available upon request.

PUSH WIRE® clamps
the following copper conductors:



solid

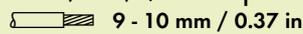
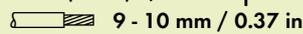
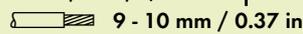


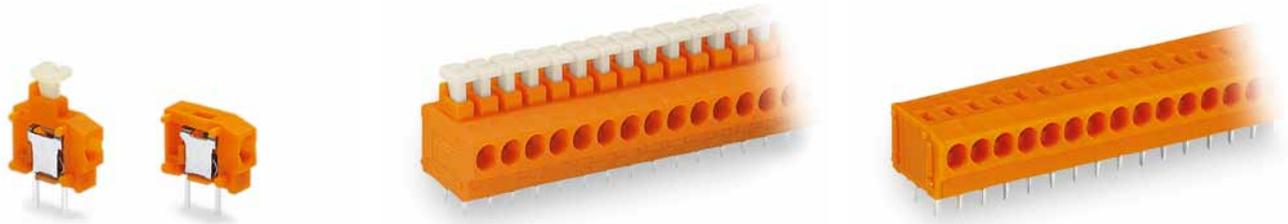
① fine-stranded,
see following pages

Strip length, see packaging or instructions.

PCB Modular Terminal Blocks and Terminal Strips 1.5 mm² Pin Spacing 3.81 mm 235 Series

PUSH WIRE®

| | | |
|--|--|--|
| <p>Pin spacing 3.81 mm / 0.15 in 0.5 - 1.5 mm² "sol." ① AWG 20 - 16 "sol." 200 V/4 kV/3, 17.5 A 300 V, 10 A </p> <p> 9 - 10 mm / 0.37 in</p> <p>② Approvals</p> | <p>Pin spacing 3.81 mm / 0.15 in 0.5 - 1.5 mm² "sol." ① AWG 20 - 16 "sol." 200 V/4 kV/3, 17.5 A 300 V, 10 A </p> <p> 9 - 10 mm / 0.37 in</p> <p>② Approvals</p> | <p>Pin spacing 3.81 mm / 0.15 in 0.5 - 1.5 mm² "sol." AWG 20 - 16 "sol." 200 V/4 kV/3, 10 A 300 V, 10 A </p> <p> 9 - 10 mm / 0.37 in</p> <p>② Approvals</p> |
|--|--|--|

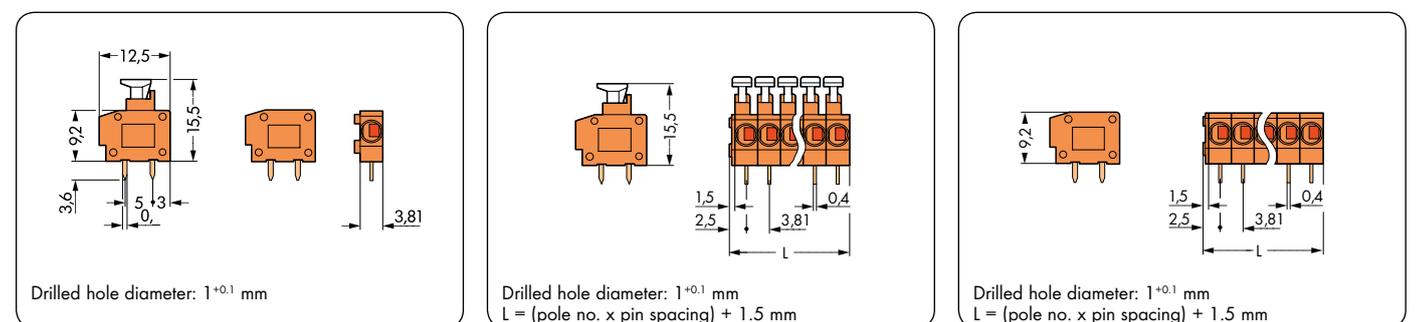


| Color | Item No. | Pack. Unit | Pole No. Color | Item No. | Pack. Unit | Pole No. | Item No. | Pack. Unit |
|---|-----------------|-------------|---|----------|-------------|---|-----------------|-------------|
| 1-conductor modular terminal block with push-button ①, 2 solder pins/pole | | | 1-conductor terminal strip with push-buttons ①, 2 solder pins/pole, orange | | | 1-conductor terminal strip without push-buttons, 2 solder pins/pole, orange | | |
|  | 235-101 | 800 (8x100) |  | 235-102 | 520 (4x130) |  | 235-102/330-000 | 520 (4x130) |
|  | 235-770 | 800 (8x100) |  | 235-103 | 360 (4x90) |  | 235-103/330-000 | 360 (4x90) |
|  | 235-771 | 800 (8x100) |  | 235-104 | 280 (4x70) |  | 235-104/330-000 | 280 (4x70) |
|  | 235-772 | 800 (8x100) |  | 235-105 | 220 (4x55) |  | 235-105/330-000 | 220 (4x55) |
|  | 235-774 | 800 (8x100) |  | 235-106 | 180 (4x45) |  | 235-106/330-000 | 180 (4x45) |
|  | 235-775 | 800 (8x100) |  | 235-107 | 160 (4x40) |  | 235-107/330-000 | 160 (4x40) |
|  | 235-776 | 800 (8x100) |  | 235-108 | 140 (4x35) |  | 235-108/330-000 | 140 (4x35) |
|  | 235-777 | 800 (8x100) |  | 235-109 | 120 (4x30) |  | 235-109/330-000 | 120 (4x30) |
|  | 235-778 | 800 (8x100) |  | 235-110 | 120 (4x30) |  | 235-110/330-000 | 120 (4x30) |
| 1-conductor modular terminal block without push-button, 2 solder pins/pole | | |  | 235-112 | 100 (4x25) |  | 235-112/330-000 | 100 (4x25) |
|  | 235-101/330-000 | 800 (8x100) |  | 235-116 | 60 (4x15) |  | 235-116/330-000 | 60 (4x15) |
| | | |  | 235-124 | 40 (4x10) |  | 235-124/330-000 | 40 (4x10) |
| | | |  | 235-136 | 20 (4x5) |  | 235-136/330-000 | 20 (4x5) |
| | | |  | 235-148 | 20 (4x5) |  | 235-148/330-000 | 20 (4x5) |
| | | | Item no. suffix for terminal strips in: | | | | | |
| | | |  yellow .../000-002 | | | | | |
| | | |  black .../000-004 | | | | | |
| | | |  red .../000-005 | | | | | |
| | | |  blue .../000-006 | | | | | |
| | | |  gray .../000-007 | | | | | |
| | | |  dark gray .../000-008 | | | | | |
| | | |  light green .../000-017 | | | | | |
| | | |  white .../000-050 | | | | | |
| | | | For other lengths, please contact factory. | | | For other lengths, please contact factory. | | |

Accessories, 235 Series (Marking strips, see Section 6)

| | | | | | |
|---|--|--|---|--|---|
|  | End plate , snap-on type, 1 mm thick orange 235-600 100 | For more colored end plates, see page 134. |  | Operating tool with partially insulated shaft , type 1, (2.5x0.4) mm blade 210-719 1 | ① Fine-stranded conductor sizes: 0.75 mm ² - 1.5 mm ² , 4 A |
|  | Spacer , doubles pin spacing orange 235-316 100 | | | | |

Dimensions

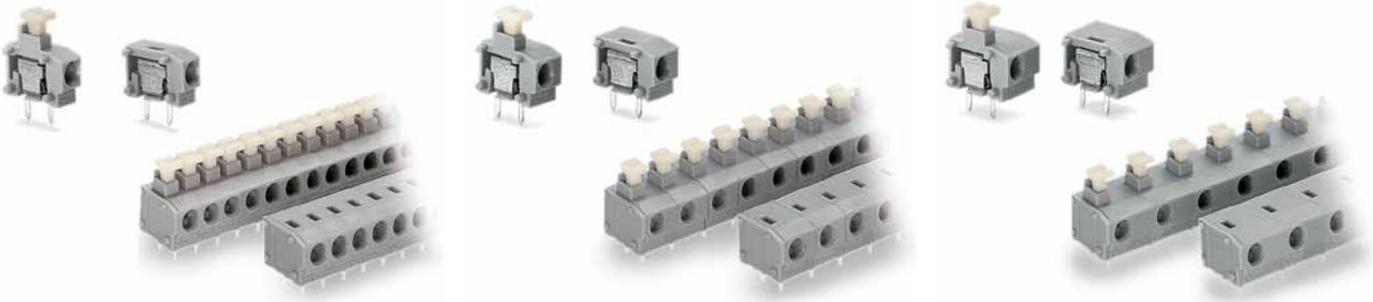


② Approvals are available online at: www.wago.com.

For technical explanations and abbreviations, see technical section.

PCB Modular 1-Conductor Terminal Blocks and Terminal Strips 2.5 mm² Pin Spacing 5/5.08 mm, 7.5/7.62 mm and 10/10.16 mm 235 Series

| | | |
|---|--|--|
| Pin spacing 5/5.08 mm / 0.2 in 0.5 - 2.5 mm ² "sol." AWG 20 - 14 "sol." (1.5 mm ² "sol." with push-button) 250 V/4 kV/3, 24 A 300 V, 10 A 630 V/4 kV/2, 24 A 300 V, 15 A 9 - 10 mm / 0.37 in Approvals | Pin spacing 7.5/7.62 mm / 0.3 in 0.5 - 2.5 mm ² "sol." AWG 20 - 14 "sol." (1.5 mm ² "sol." with push-button) 400 V/6 kV/3, 24 A 300 V, 10 A 1000 V/6 kV/2, 24 A 300 V, 15 A 9 - 10 mm / 0.37 in Approvals | Pin spacing 10/10.16 mm / 0.4 in 0.5 - 2.5 mm ² "sol." AWG 20 - 14 "sol." (1.5 mm ² "sol." with push-button) 630 V/8 kV/3, 24 A 300 V, 10 A 1000 V/8 kV/2, 24 A 300 V, 15 A 9 - 10 mm / 0.37 in Approvals |
|---|--|--|

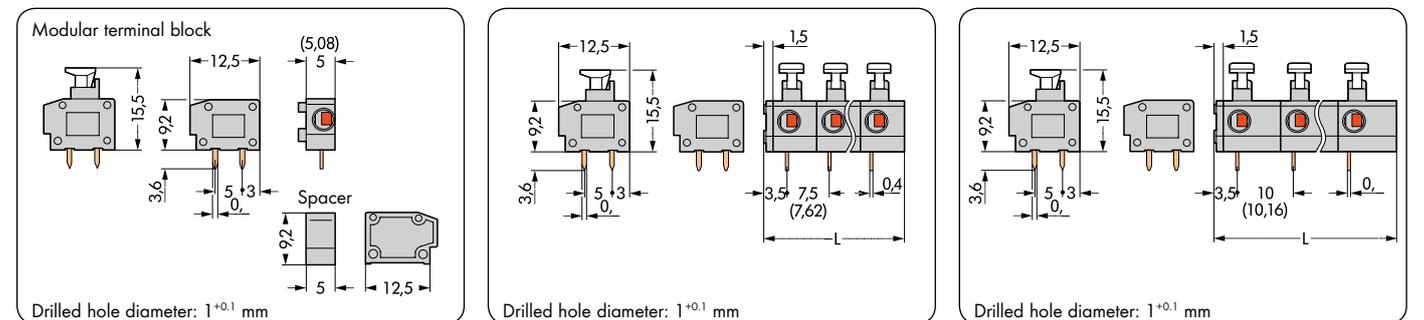


| Color Pole No. | Item No. | Item No. | Pack. | Unit | Color Pole No. | Item No. | Item No. | Pack. | Unit | Color Pole No. | Item No. | Item No. | Pack. | Unit | | |
|--|-----------------|----------|-------|------|--|---|----------|-------|---------|--|---|----------|-------|------|---------|----|
| 1-conductor modular terminal block, 2 solder pins/pole with push-button without | | | | | 1-conductor modular terminal block, 2 solder pins/pole with push-button without | | | | | 1-conductor modular terminal block, 2 solder pins/pole with push-button without | | | | | | |
| gray | 235-401/331-000 | 235-401 | 800 | | gray | 235-501/331-000 | 235-501 | 600 | | gray | 235-801/331-000 | 235-801 | 400 | | | |
| red | 235-740/331-000 | | 800 | | dark gray | 235-752/331-000 | 235-752 | 600 | | dark gray | 235-762/331-000 | 235-762 | 400 | | | |
| yellow | 235-741/331-000 | | 800 | | light gray | 235-753/331-000 | 235-753 | 600 | | light gray | 235-763/331-000 | 235-763 | 400 | | | |
| dark gray | 235-742/331-000 | 235-742 | 800 | | blue | 235-754/331-000 | 235-754 | 600 | | blue | 235-764/331-000 | 235-764 | 400 | | | |
| light gray | 235-743/331-000 | 235-743 | 800 | | white | 235-755/331-000 | | 600 | | white | 235-765/331-000 | | 400 | | | |
| blue | 235-744/331-000 | 235-744 | 800 | | orange | 235-756/331-000 | 235-756 | 600 | | orange | 235-766/331-000 | 235-766 | 400 | | | |
| white | 235-745/331-000 | | 800 | | light green | 235-757/331-000 | 235-757 | 600 | | light green | 235-767/331-000 | 235-767 | 400 | | | |
| orange | 235-746/331-000 | 235-746 | 800 | | black | 235-758/331-000 | | 600 | | black | 235-768/331-000 | | 400 | | | |
| light green | 235-747/331-000 | 235-747 | 800 | | 1-conductor terminal strip without push-buttons, 2 solder pins/pole, standard lengths, gray | | | | | 1-conductor terminal strip without push-buttons, 2 solder pins/pole, standard lengths, gray | | | | | | |
| black | 235-748/331-000 | | 800 | | 2 | 235-502 | 280 | 8 | 235-508 | 60 | 2 | 235-802 | 220 | 8 | 235-808 | 40 |
| violet | 235-749/331-000 | | 800 | | 3 | 235-503 | 200 | 9 | 235-509 | 60 | 3 | 235-803 | 140 | 9 | 235-809 | 40 |
| | | | | | 4 | 235-504 | 140 | 10 | 235-510 | 60 | 4 | 235-804 | 120 | 10 | 235-810 | 40 |
| | | | | | 5 | 235-505 | 120 | 12 | 235-512 | 40 | 5 | 235-805 | 80 | 12 | 235-812 | 40 |
| | | | | | 6 | 235-506 | 100 | 16 | 235-516 | 40 | 6 | 235-806 | 80 | 16 | 235-816 | 20 |
| | | | | | 7 | 235-507 | 80 | 24 | 235-524 | 20 | 7 | 235-807 | 60 | 24 | 235-824 | 20 |
| | | | | | | For custom terminal strips, please contact factory. | | | | | For custom terminal strips, please contact factory. | | | | | |

Accessories, 235 Series Modular Terminal Blocks and Terminal Strips (Marking strips, see Section 6)

| | | |
|---|--|---|
| End plates, snap-on type, 1 mm thick gray 235-100 100 dark gray 235-200 100 light gray 235-300 100 blue 235-400 100 black 235-500 100 yellow 235-550 100 | End plates, snap-on type, 1 mm thick orange 235-600 100 violet 235-650 100 light green 235-700 100 red 235-800 100 white 235-850 100 | Item no. suffix for colored terminal strips with/without push-buttons <ul style="list-style-type: none"> blue .../...-006 dark gray .../...-008 light gray .../...-009 orange .../...-012 light green .../...-017 |
| Spacer, doubles pin spacing gray 235-701 100 | Operating tool with partially insulated shaft, type 2, (3.5x0.5) mm blade 210-720 1 | Fine-stranded conductor sizes: 0.25 mm ² - 0.5 mm ² , 2 A 0.75 mm ² - 1.5 mm ² , 6 A |

Dimensions (Adjust pin spacing by pulling on the end blocks so that they expand to satisfy the hole centers required.) **L = (pole no. x pin spacing) + 1.5 mm**



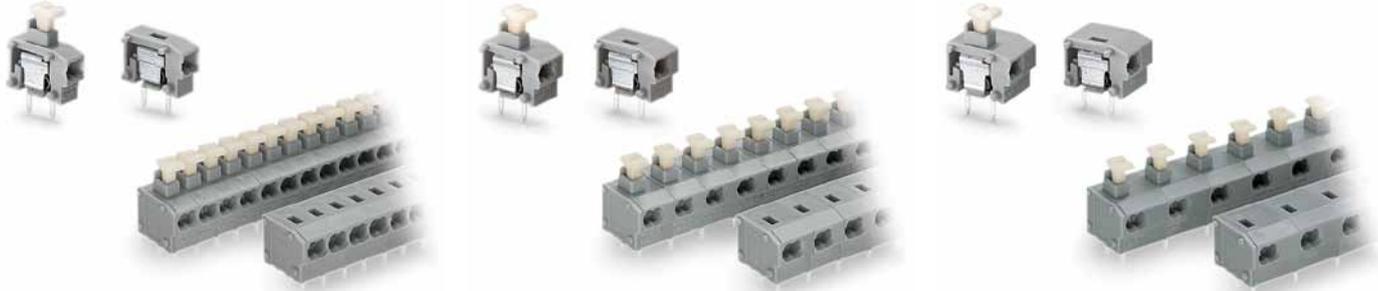
Approvals are available online at: www.wago.com.

For technical explanations and abbreviations, see technical section.

PCB 2-Conductor Modular Terminal Blocks 0.75 mm² Pin Spacing 5/5.08 mm, 7.5/7.62 mm and 10/10.16 mm 235 Series

PUSH WIRE®

| | | |
|--|---|---|
| Pin spacing 5/5.08 mm / 0.2 in 2 x 0.25 - 0.75 mm ² "sol." 2 x AWG 24 - 18 "sol." 250 V/4 kV/3, 10 A 300 V, 10 A 630 V/4 kV/2, 10 A 9 - 10 mm / 0.37 in Approvals | Pin spacing 7.5/7.62 mm / 0.3 in 2 x 0.25 - 0.75 mm ² "sol." 2 x AWG 24 - 18 "sol." 400 V/6 kV/3, 10 A 300 V, 10 A 1000 V/6 kV/2, 10 A 9 - 10 mm / 0.37 in Approvals | Pin spacing 10/10.16 mm / 0.4 in 2 x 0.25 - 0.75 mm ² "sol." 2 x AWG 24 - 18 "sol." 630 V/8 kV/3, 10 A 300 V, 10 A 1000 V/8 kV/2, 10 A 9 - 10 mm / 0.37 in Approvals |
|--|---|---|



| Color Pole No. | Item No. | Item No. | Pack. | Unit | Color Pole No. | Item No. | Item No. | Pack. | Unit | Color Pole No. | Item No. | Item No. | Pack. | Unit | | | | | |
|--|-----------------|----------|-------|---------|--|-----------------|----------|-------|------|--|-----------------|----------|---------|------|---|---------|----|--|--|
| 2-conductor modular terminal block, 2 solder pins/pole with push-button | | | | | 2-conductor modular terminal block, 2 solder pins/pole without push-button | | | | | 2-conductor modular terminal block, 2 solder pins/pole with push-button | | | | | 2-conductor modular terminal block, 2 solder pins/pole without push-button | | | | |
| gray | 235-711/331-000 | 235-711 | 800 | | gray | 235-551/331-000 | 235-551 | 600 | | gray | 235-851/331-000 | 235-851 | 400 | | | | | | |
| dark gray | 235-712/331-000 | 235-712 | 800 | | dark gray | 235-722/331-000 | 235-722 | 600 | | dark gray | 235-732/331-000 | 235-732 | 400 | | | | | | |
| light gray | 235-713/331-000 | 235-713 | 800 | | light gray | 235-723/331-000 | 235-723 | 600 | | light gray | 235-733/331-000 | 235-733 | 400 | | | | | | |
| blue | 235-714/331-000 | 235-714 | 800 | | blue | 235-724/331-000 | 235-724 | 600 | | blue | 235-734/331-000 | 235-734 | 400 | | | | | | |
| orange | 235-716/331-000 | 235-716 | 800 | | orange | 235-726/331-000 | 235-726 | 600 | | orange | 235-736/331-000 | 235-736 | 400 | | | | | | |
| light green | 235-717/331-000 | 235-717 | 800 | | light green | 235-727/331-000 | 235-727 | 600 | | light green | 235-737/331-000 | 235-737 | 400 | | | | | | |
| 2-conductor terminal strip without push-buttons, 2 solder pins/pole, standard lengths, gray | | | | | 2-conductor terminal strip without push-buttons, 2 solder pins/pole, standard lengths, gray | | | | | 2-conductor terminal strip without push-buttons, 2 solder pins/pole, standard lengths, gray | | | | | | | | | |
| 2 | 235-452 | 420 | 9 | 235-459 | 100 | 2 | 235-552 | 280 | 8 | 235-558 | 60 | 2 | 235-852 | 220 | 8 | 235-858 | 40 | | |
| 3 | 235-453 | 280 | 10 | 235-460 | 80 | 3 | 235-553 | 140 | 9 | 235-559 | 60 | 3 | 235-853 | 140 | 9 | 235-859 | 40 | | |
| 4 | 235-454 | 220 | 12 | 235-462 | 60 | 4 | 235-554 | 120 | 10 | 235-560 | 60 | 4 | 235-854 | 120 | 10 | 235-860 | 40 | | |
| 5 | 235-455 | 180 | 16 | 235-466 | 60 | 5 | 235-555 | 80 | 12 | 235-562 | 40 | 5 | 235-855 | 80 | 12 | 235-862 | 40 | | |
| 6 | 235-456 | 140 | 24 | 235-474 | 40 | 6 | 235-556 | 80 | 16 | 235-566 | 40 | 6 | 235-856 | 80 | 16 | 235-866 | 20 | | |
| 7 | 235-457 | 120 | 36 | 235-486 | 20 | 7 | 235-557 | 60 | 24 | 235-574 | 20 | 7 | 235-857 | 60 | 24 | 235-874 | 20 | | |
| 8 | 235-458 | 100 | 48 | 235-498 | 20 | | | | | | | | | | | | | | |

Accessories, 235 Series Modular Terminal Blocks and Terminal Strips (Marking strips, see Section 6)

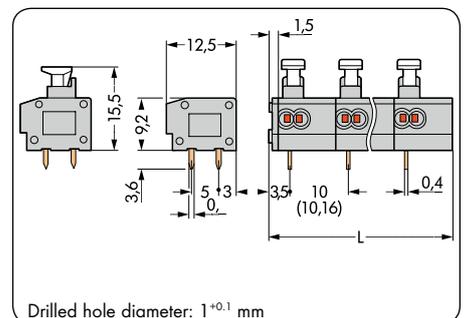
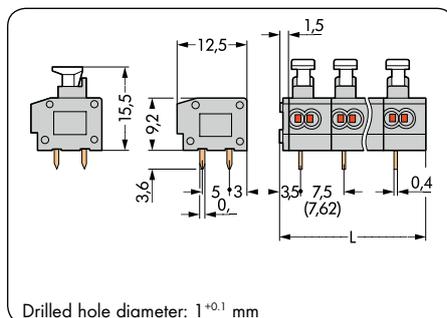
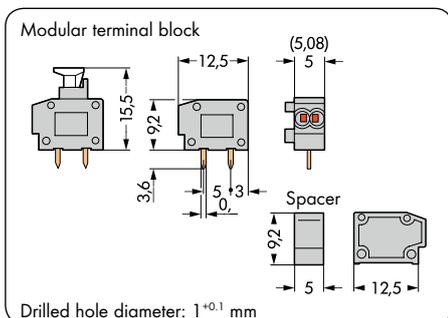
| | | | |
|--|---|--|--|
| | End plates, snap-on type, 1 mm thick gray 235-100 100 dark gray 235-200 100 light gray 235-300 100 blue 235-400 100 orange 235-600 100 light green 235-700 100 | | Item no. suffix for terminal strips in: blue ... / ... -006 dark gray ... / ... -008 light gray ... / ... -009 orange ... / ... -012 light green ... / ... -017 |
| | Spacer, doubles pin spacing gray 235-701 100 | | Item no. suffix for 2-conductor terminal strips with push-buttons ... / 331-000 |

Terminal blocks with blue insulation are suitable for Ex i applications (only for 7.5/7.62 mm and 10/10.16 mm pin spacing).

Dimensions

(Adjust pin spacing by pulling on the end blocks so that they expand to satisfy the hole centers required.)

$$L = (\text{pole no.} \times \text{pin spacing}) + 1.5 \text{ mm}$$



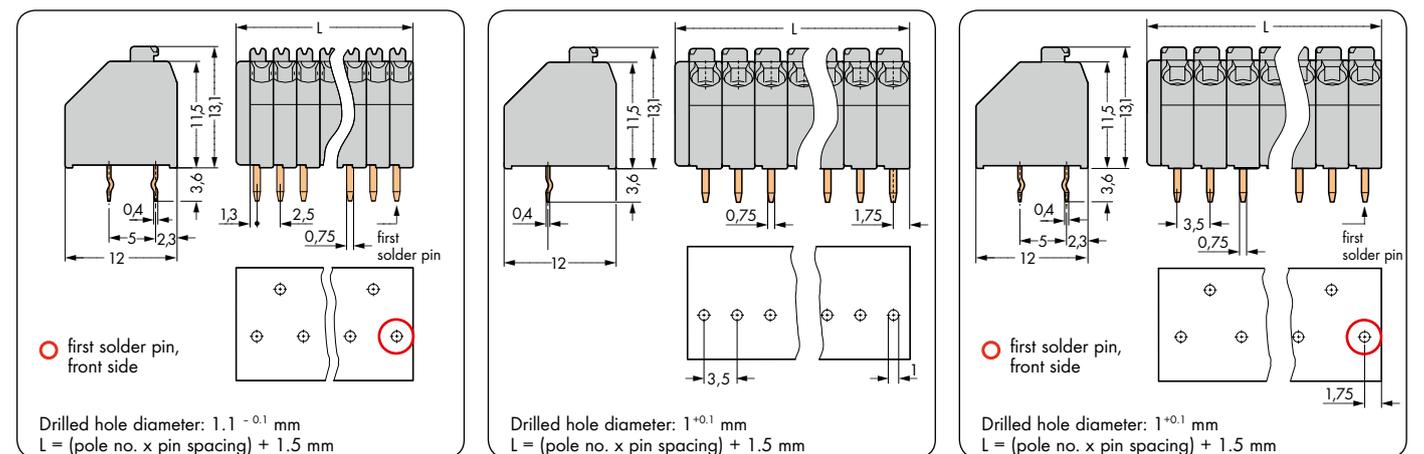
PCB Terminal Strips with Push-Buttons 0.8 mm Ø and 1.5 mm² Pin Spacing 2.5 mm; 2.54 mm and 3.5 mm 250 Series

| | | |
|--|---|---|
| <p>Pin spacing 2.5 mm / 0.098 in Pin spacing 2.54 mm / 0.1 in 0.4 - 0.8 mm Ø "sol." ① AWG 24 - 20 "sol." 160 V/2.5 kV/2 300 V, 5 A ② I_N 4 A 300 V, 2 A ③</p> <p>8.5 - 9.5 mm / 0.34 in</p> <p>③ Approvals</p> | <p>Pin spacing 3.5 mm / 0.138 in</p> <p>0.2 - 1.5 mm² "s+st" AWG 24 - 16 "sol." 160 V/2.5 kV/2 300 V, 5 A ② I_N 8 A ② 300 V, 10 A ③</p> <p>8.5 - 9.5 mm / 0.34 in</p> <p>③ Approvals</p> | <p>Pin spacing 3.5 mm / 0.138 in</p> <p>0.2 - 1.5 mm² "s+st" AWG 24 - 16 "sol." 320 V/4 kV/2 300 V, 5 A ② I_N 8 A ② 300 V, 10 A ③</p> <p>8.5 - 9.5 mm / 0.34 in</p> <p>③ Approvals</p> |
|--|---|---|



| Pole No. Color | Item No. | Pack. Unit | Item No. | Pack. Unit | Pole No. Color | Item No. | Pack. Unit | Pole No. Color | Item No. | Pack. Unit | | | | | |
|---|-----------------|------------|--|------------|----------------|---|-------------|----------------|---|-------------|-----------------|---------|----------------|----------|-----|
| 1-conductor terminal strip with push-buttons, 1 staggered solder pin/pole, with test slot for test pin up to 1.3 mm Ø, gray | | | 1-conductor terminal strip with push-buttons, 1 front solder pin/pole, with test slots for test pin up to 1.3 mm Ø, gray | | | 1-conductor terminal strip with push-buttons, 1 staggered solder pin/pole, with test slot for test pin up to 1.3 mm Ø, gray | | | | | | | | | |
| Pin spacing | 2.5 mm/0.098 in | | 2.54 mm/0.1 in | | Pin spacing | 2.5 mm/0.098 in | | 2.54 mm/0.1 in | | Pin spacing | 2.5 mm/0.098 in | | 2.54 mm/0.1 in | | |
| ○ 2 | 250-402 | 720 | 250-1402 | 720 | ○ 2 | 250-102 | 560 (4x140) | ○ 2 | 250-202 | 560 (4x140) | ○ 3 | 250-403 | 520 | 250-1403 | 520 |
| ○ 3 | 250-403 | 520 | 250-1403 | 520 | ○ 3 | 250-103 | 400 (4x100) | ○ 3 | 250-203 | 400 (4x100) | ○ 4 | 250-404 | 400 | 250-1404 | 400 |
| ○ 4 | 250-404 | 400 | 250-1404 | 400 | ○ 4 | 250-104 | 300 (4x75) | ○ 4 | 250-204 | 300 (4x75) | ○ 5 | 250-405 | 240 | 250-1405 | 240 |
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
| ○ 11 | 250-411 | 160 | 250-1411 | 160 | ○ 11 | 250-111 | 120 (4x30) | ○ 11 | 250-211 | 120 (4x30) | ○ 17 | 250-417 | 80 | 250-1417 | 80 |
| ○ 12 | 250-412 | 140 | 250-1412 | 140 | ○ 12 | 250-112 | 100 (4x25) | ○ 12 | 250-212 | 100 (4x25) | ○ 18 | 250-418 | 80 | 250-1418 | 80 |
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
| ○ 19 | 250-419 | 80 | 250-1419 | 80 | ○ 17 | 250-117 | 80 (4x20) | ○ 17 | 250-217 | 80 (4x20) | ○ 19 | 250-419 | 80 | 250-1419 | 80 |
| ○ 20 | 250-420 | 80 | 250-1420 | 80 | ○ 18 | 250-118 | 60 (4x15) | ○ 18 | 250-218 | 60 (4x15) | ○ 20 | 250-420 | 80 | 250-1420 | 80 |
| ○ 21 | 250-421 | 80 | 250-1421 | 80 | ○ 19 | 250-119 | 60 (4x15) | ○ 19 | 250-219 | 60 (4x15) | ○ 21 | 250-421 | 80 | 250-1421 | 80 |
| ○ 22 | 250-422 | 80 | 250-1422 | 80 | ○ 20 | 250-120 | 60 (4x15) | ○ 20 | 250-220 | 60 (4x15) | ○ 22 | 250-422 | 80 | 250-1422 | 80 |
| ○ 23 | 250-423 | 80 | 250-1423 | 60 | ○ 21 | 250-121 | 60 (4x15) | ○ 21 | 250-221 | 60 (4x15) | ○ 23 | 250-423 | 80 | 250-1423 | 60 |
| ○ 24 | 250-424 | 60 | 250-1424 | 60 | ○ 22 | 250-122 | 60 (4x15) | ○ 22 | 250-222 | 60 (4x15) | ○ 24 | 250-424 | 60 | 250-1424 | 60 |
| For 2.5 mm and 2.54 mm pin spacing | | | For 3.5 mm pin spacing | | | Item no. suffix for terminal strips in: | | | Item no. suffix for terminal strips in: | | | | | | |
| Item no. suffix for terminal strips in: | | | Item no. suffix for terminal strips in: | | | ● black .../000-004 | | | ● brown .../000-014 | | | | | | |
| ● black .../000-004 | | | ● black .../000-004 | | | ● red .../000-005 | | | ● light green .../000-017 | | | | | | |
| ● red .../000-005 | | | ● red .../000-005 | | | ● blue .../000-006 | | | ● violet .../000-024 | | | | | | |
| ● blue .../000-006 | | | ● blue .../000-006 | | | ● light gray .../000-009 | | | ● white .../000-050 | | | | | | |
| ● light gray .../000-009 | | | ● light gray .../000-009 | | | ● orange .../000-012 | | | ● orange .../000-012 | | | | | | |
| ● orange .../000-012 | | | ● orange .../000-012 | | | ● violet .../000-024 | | | | | | | | | |
| ● violet .../000-024 | | | ● violet .../000-024 | | | ● white .../000-050 | | | | | | | | | |
| ● white .../000-050 | | | ● white .../000-050 | | | | | | | | | | | | |
| For other colors, please contact factory. | | | For other colors, please contact factory. | | | For other colors, please contact factory. | | | For other colors, please contact factory. | | | | | | |

| | | |
|---|---|---|
| <p>Accessories, 250 Series</p> <p>① Fine-stranded conductor sizes: 0.2 mm² - 0.5 mm²</p> | <p>Test pin, 1 mm Ø, with solder connection for test cable 735-500 1</p> | <p>Operating tool with partially insulated shaft, type 1, (2.5x0.4) mm blade 210-719 1</p> |
|---|---|---|



② Higher currents upon request ③ Approvals are available online at: www.wago.com.

PCB Terminal Strips with Push-Buttons 1.5 mm²; Pin Spacing 5 mm and 7.5 mm **PUSH WIRE®**

PCB Terminal Strips without Push-Buttons 1.5 mm², Pin Spacing 5 mm

250 and 253 Series

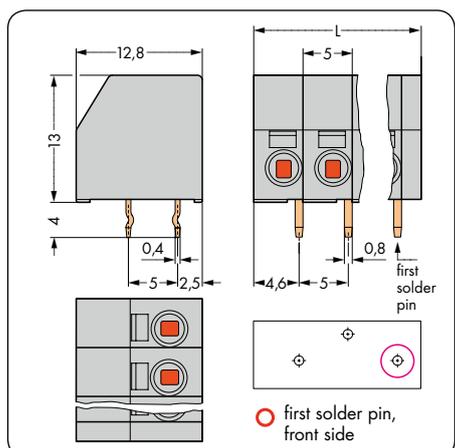
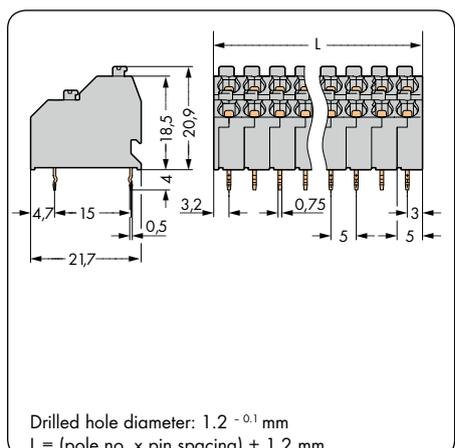
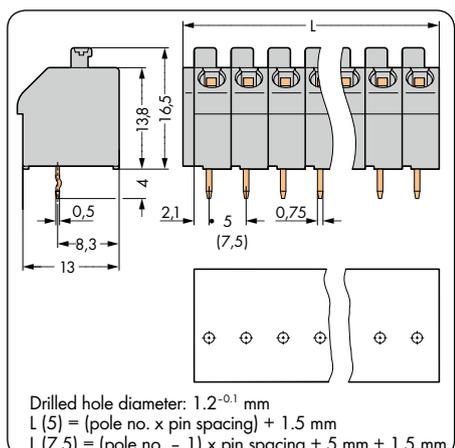
| | | |
|---|--|--|
| <p>Pin spacing 5 mm / 0.197 in 400 V/4 kV/2</p> <p>Pin spacing 7.5 mm / 0.295 in 0.5 - 1.5 mm² "sol." ① AWG 22 - 14 "sol." 800 V/4 kV/2 300 V, 2 A  I_N 10 A 300 V, 10 A </p> <p> 9 - 10 mm / 0.37 in</p> | <p>Pin spacing 5 mm / 0.197 in 0.5 - 1.5 mm² "sol." ① AWG 22 - 14 "sol." 400 V/4 kV/2 300 V, 10 A  I_N 10 A</p> <p> 9 mm / 0.35 in ②</p> <p>③ Approvals</p> | <p>Pin spacing 5 mm / 0.197 in 2 x 0.5 - 1.5 mm² "sol." AWG 20 - 16 "sol." 500 V/4 kV/2 300 V, 2 A  I_N 10 A</p> <p> 8.5 - 9.5 mm / 0.34 in for wiring on both sides  7 - 8 mm / 0.3 in</p> <p>③ Approvals</p> |
|---|--|--|

③ Approvals

③ Approvals



| Pole No. Color | Item No. | Item No. | Pole No. Color | Item No. | Pack. Unit | Pole No. Color | Item No. | Pack. Unit |
|--|--|-----------------|--|--|------------|---|----------------|-------------|
| 1-conductor terminal strip with push-buttons, 1 in-line solder pin/pole, with test slots for test plug up to 2 mm Ø, gray | | | Double-deck terminal strip with push-buttons, 2 in-line solder pins, with test slots for test plug up to 2.3 mm Ø, gray | | | 2-conductor terminal strip without push-buttons, 1 staggered solder pin/pole, gray | | |
| Pin spacing | 5 mm/0.197 in | 7.5 mm/0.295 in | | | | ⊙ 2 | 253-102 | 400 (4x100) |
| ⊙ 2 | 250-502 | 400 | ⊙ 2 x 2 | 250-702 | 264 (4x66) | ⊙ 3 | 253-103 | 280 (4x70) |
| ⊙ 3 | 250-503 | 280 | ⊙ 3 x 2 | 250-703 | 180 (4x45) | ⊙ 4 | 253-104 | 200 (4x50) |
| ⊙ : | : | : | ⊙ 4 x 2 | 250-704 | 132 (4x33) | ⊙ 5 | 253-105 | 160 (4x40) |
| ⊙ 8 | 250-508 | 100 | ⊙ 6 x 2 | 250-706 | 84 (4x21) | ⊙ 6 | 253-106 | 140 (4x35) |
| ⊙ 9 | 250-509 | 100 | ⊙ 8 x 2 | 250-708 | 72 (4x18) | ⊙ 7 | 253-107 | 120 (4x30) |
| ⊙ 10 | 250-510 | 80 | ⊙ 10 x 2 | 250-710 | 48 (4x12) | ⊙ 8 | 253-108 | 100 (4x25) |
| ⊙ 11 | 250-511 | 80 | ⊙ 12 x 2 | 250-712 | 36 (4x9) | ⊙ 9 | 253-109 | 100 (4x25) |
| ⊙ 12 | 250-512 | 60 | ⊙ 16 x 2 | 250-716 | 24 (4x6) | ⊙ 10 | 253-110 | 80 (4x20) |
| ⊙ 13 | 250-513 | 60 | ⊙ 24 x 2 | 250-724 | 12 (4x3) | ⊙ 11 | 253-111 | 80 (4x20) |
| ⊙ 14 | 250-514 | 60 | For other lengths, please contact factory. | | | ⊙ 12 | 253-112 | 60 (4x15) |
| ⊙ 15 | 250-515 | 60 | | | | ⊙ 13 | 253-113 | 60 (4x15) |
| ⊙ 16 | 250-516 | 40 | | | | ⊙ 14 | 253-114 | 60 (4x15) |
| For 5 mm and 7.5 mm pin spacing Item no. suffix for terminal strips in: | | | For 5 mm pin spacing Item no. suffix for terminal strips in: | | | Item no. suffix for terminal strips in: | | |
| ⊙ yellow | .../000-002 | | ⊙ blue | .../000-006 | | ⊙ yellow | .../000-002 | |
| ⊙ red | .../000-005 | | ⊙ orange | .../000-012 | | ⊙ black | .../000-004 | |
| ⊙ blue | .../000-006 | | ① Fine-stranded conductor sizes: 0.5 mm ² , 2 A 0.75 mm ² - 1.5 mm ² , 4 A | | | ⊙ red | .../000-005 | |
| ⊙ light gray | .../000-009 | | | | | ⊙ light gray | .../000-009 | |
| ⊙ orange | .../000-012 | | | | | ⊙ orange | .../000-012 | |
| ⊙ brown | .../000-014 | | | | | ⊙ light green | .../000-017 | |
| ⊙ light green | .../000-017 | | | | | ⊙ violet | .../000-024 | |
| ⊙ white | .../000-050 | | ⊙ white | .../000-050 | | | | |
| For other colors, please contact factory. | | | | | | | | |
| Accessories, 250 Series (Marking strips, see Section 6) | | | | | | | | |
|  | Test plug, with 500 mm cable, 2 mm Ø red 210-136 50 (5x10) | |  | Test plug, with 500 mm cable 2 mm Ø, red 210-136 50 2.3 mm Ø, yellow 210-137 50 | | Dimensions (in mm), 253 Series Drilled hole diameter: 1.1 ^{+0.1} mm L = (pole no. x pin spacing) + 2 mm | | |



For technical explanations and abbreviations, see technical section.

PCB Terminal Strips with Push-Buttons 1.5 mm² Pin Spacing 3.5 mm 2081 Series

| | | |
|---|---|---|
| <p>Pin spacing 3.5 mm / 0.138 in 0.2 - 1.5 mm² AWG 24 - 16 160 V/2.5 kV/2 I_N 17.5 A 8 - 9 mm / 0.33 in</p> <p>Approvals</p> | <p>Pin spacing 3.5 mm / 0.138 in 0.2 - 1.5 mm² AWG 24 - 16 160 V/2.5 kV/2 I_N 17.5 A 8 - 9 mm / 0.33 in</p> <p>Approvals</p> | <p>Pin spacing 3.5 mm / 0.138 in 0.2 - 1.5 mm² AWG 24 - 16 160 V/2.5 kV/2 I_N 17.5 A 8 - 9 mm / 0.33 in</p> <p>Approvals</p> |
|---|---|---|

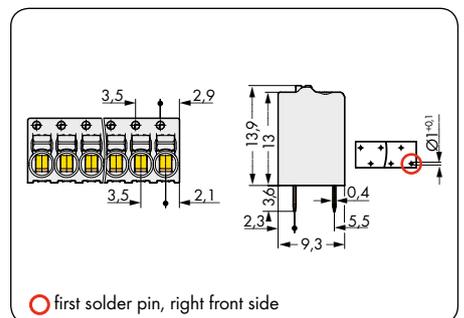
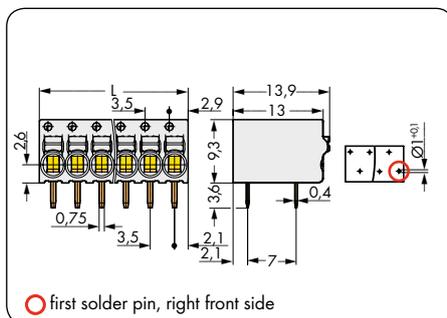
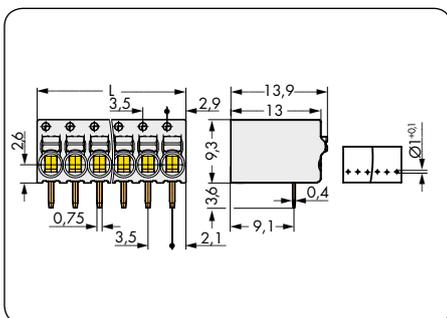


| Pole No. | Item No. | Pack. Unit | Pole No. | Item No. | Pack. Unit | Pole No. | Item No. | Pack. Unit |
|--|-----------|------------|---|-----------|------------|--|-----------|------------|
| Terminal strip with push-buttons, with in-line angled solder pins, with test slots for 1 mm Ø test pin, gray | | | Terminal strip with push-buttons, with staggered, angled solder pins, with test slots for 1 mm Ø test pin, gray | | | Terminal strip with push-buttons, with staggered straight solder pins, with test slots for 1 mm Ø test pin, gray | | |
| 2 | 2081-1202 | 500 | 2 | 2081-1222 | 500 | 2 | 2081-1122 | 500 |
| 3 | 2081-1203 | 320 | 3 | 2081-1223 | 320 | 3 | 2081-1123 | 320 |
| 4 | 2081-1204 | 240 | 4 | 2081-1224 | 240 | 4 | 2081-1124 | 240 |
| 5 | 2081-1205 | 240 | 5 | 2081-1225 | 240 | 5 | 2081-1125 | 240 |
| 6 | 2081-1206 | 160 | 6 | 2081-1226 | 160 | 6 | 2081-1126 | 160 |
| 8 | 2081-1208 | 140 | 8 | 2081-1228 | 140 | 8 | 2081-1128 | 140 |
| 12 | 2081-1212 | 140 | 12 | 2081-1232 | 140 | 12 | 2081-1132 | 140 |
| Direct printing upon request | | | Direct printing upon request | | | | | |

Accessories, 2081 Series (Marking strips, see Section 6)

| | |
|--|--|
| <p>Test pin, 1 mm Ø, with solder connection for test cable 735-500 1</p>  | <p>Operating tool with partially insulated shaft, type 1, (2.5 x 0.4) mm blade 210-719 1</p>  |
|--|--|

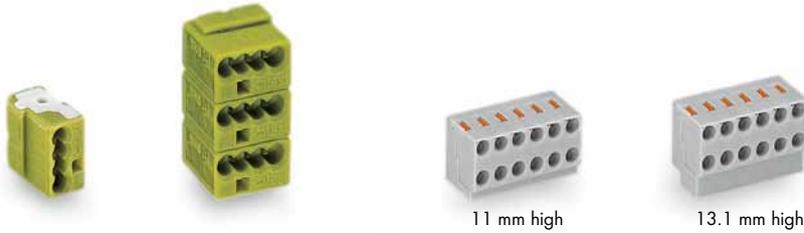
Dimensions Drilled hole diameter: 1^{+0.1} mm



4-Conductor Modular PCB Connectors, Pin Spacing 5.75 mm, 243 Series

2-Conductor Compact PCB Connectors, Pin Spacing 3.5 mm, 252 Series

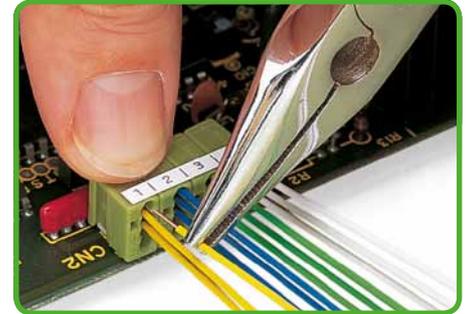
| | | |
|---|---|--|
| <p>Pin spacing 5.75 mm / 0.226 in 4 x 0.5 Ø / 4 x 0.6 Ø / 4 x 0.8 Ø / 4 x 1 mm Ø "sol." 4 x AWG 24/4 x AWG 22/4 x AWG 20/ 4 x AWG 18 "sol." 125 V 100 V/1.5 kV/2, 6 A 150 V </p> <p> 5 - 6 mm / 0.22 in</p> <p> Approvals</p> | <p>Pin spacing 3.5 mm / 0.138 in 2 x 0.4 - 0.8 mm Ø "sol." 2 x AWG 26 - 20 "sol."</p> <p>320 V/4 kV/2, 2 A 300 V, 2 A </p> <p> 6 - 7 mm / 0.26 in</p> <p> Approvals</p> | <p>Description and handling</p> |
|---|---|--|



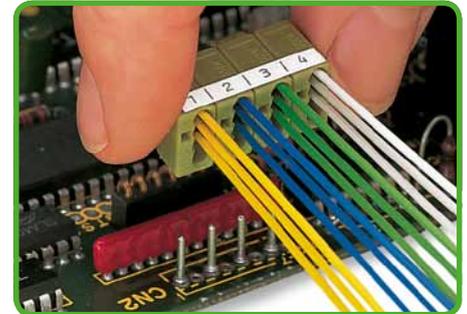
11 mm high

13.1 mm high

243 Series

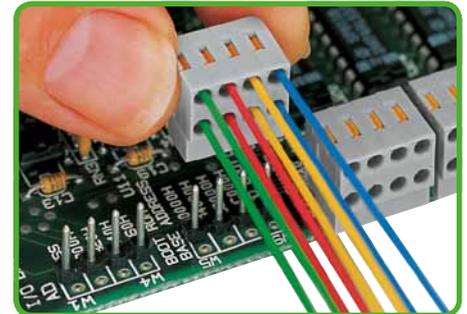


Inserting conductor using pliers until it hits backstop - directly on the PCB ...
 ... or wiring prior to mounting on PCB.



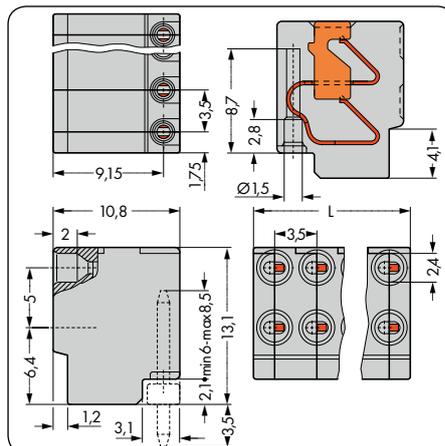
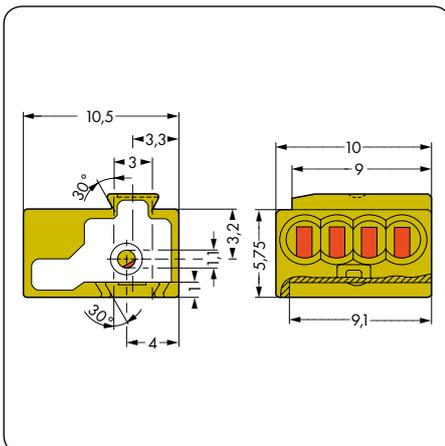
Removing modular PCB connector strip to replace the board.

252 Series



Removing modular PCB connector strip to replace the board.

| Color Pole No. | Item No. | Pack. Unit | Pole No. | Item No. | Pack. Unit | Item No. | Pack. Unit |
|---|----------|------------|---|----------|------------|----------|------------|
| 4-conductor modular PCB connector, can be assembled to connector strips using dovetail joints, with test slot, for solid conductors | | | 2-conductor compact PCB connector, gray for individual solder pins for solder pin strip | | | | |
| | 243-721 | 400 | | 252-102 | 600 | 252-152 | 600 |
| | 243-722 | 400 | | 252-103 | 400 | 252-153 | 400 |
| | 243-723 | 400 | | 252-104 | 300 | 252-154 | 300 |
| | 243-724 | 400 | | 252-105 | 300 | 252-155 | 300 |
| 4-conductor PCB connector strip, with test slots, for solid conductors, light green | | | | 252-106 | 200 | 252-156 | 200 |
| | 243-742 | 50 | | 252-107 | 200 | 252-157 | 200 |
| | 243-743 | 50 | | 252-108 | 200 | 252-158 | 200 |
| | 243-744 | 50 | | 252-109 | 200 | 252-159 | 200 |
| | 243-745 | 50 | | 252-110 | 150 | 252-160 | 150 |
| | 243-746 | 50 | Accessories, 252 Series | | | | |
| | 243-747 | 50 | Solder pin, 1 x 8.5 mm Ø for PCBs up to 2 mm thick for 11 mm high version 243-131 1000 | | | | |
| | 243-748 | 50 | Solder pin strip, 2- to 10-pole, for 13.1 mm high version 252-902 to 252-910 500 | | | | |
| For other colors, see Full Line Catalog, Volume 2. | | | Solder pin strip with strain relief, 4-pole, for 13.1 mm high version 252-954 1000 | | | | |
| Accessories, 243 Series | | | Marker cards, 80 self-adhesive strips per card 1 - 12 (160 x) 210-332/0575-0103 1 card | | | | |
| Solder pin, for PCBs up to 2 mm thick 243-131 1000 | | | Marker cards, 80 self-adhesive strips per card 1 - 16 (240 x) 210-332/0350-0202 17 - 32 (240 x) 210-332/0350-0204 | | | | |
| Marker card, 80 self-adhesive strips per card 1 - 12 (160 x) 210-332/0575-0103 1 card | | | Dimensions Drilled hole diameter: 1.2 ±0.05 mm L = pole no. x pin spacing | | | | |



Removing conductor.

3 The WAGO-I/O-SYSTEM 750, 753, 758

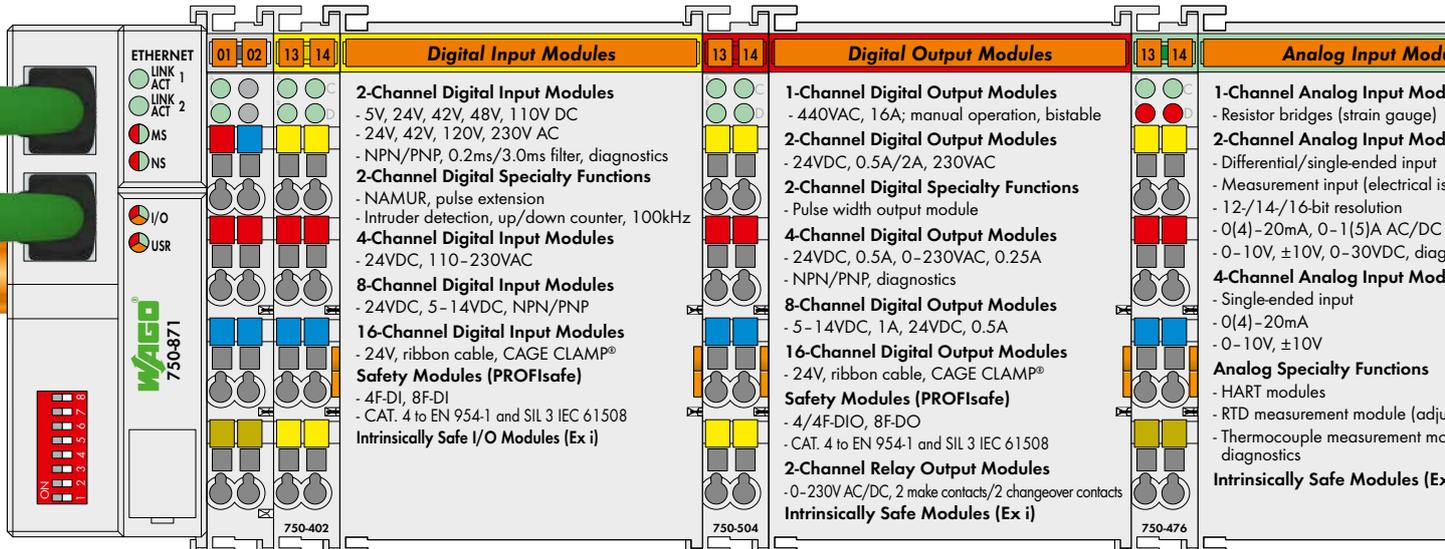
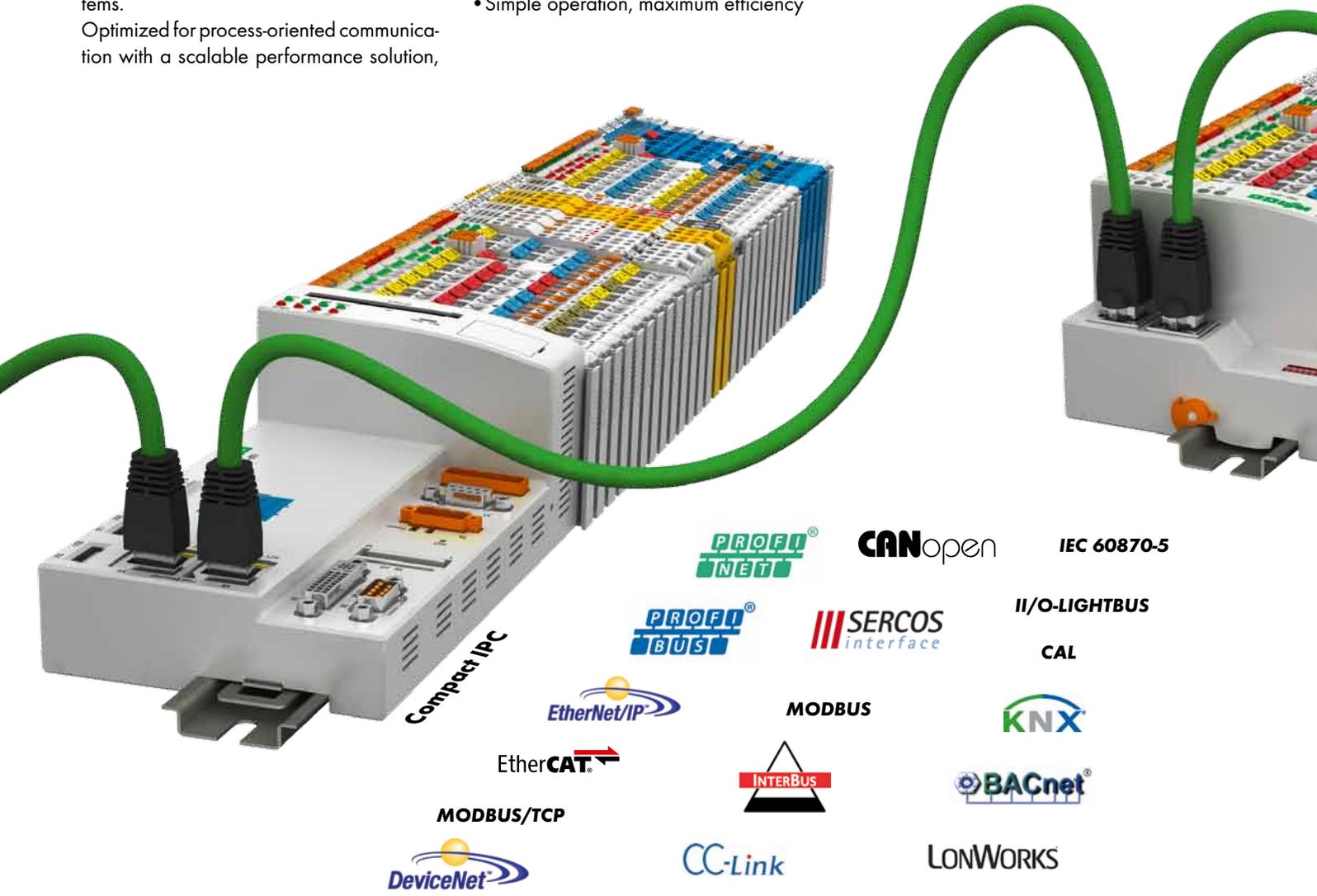
WAGO-I/O-SYSTEM 750, 753, 758 for Scalable Industrial ETHERNET Solutions

Fine modularity and fieldbus-independence are hallmarks of the WAGO-I/O-SYSTEM, which boasts worldwide approvals for a diverse range of applications. During development, great care was taken to ensure the system could account for all the requirements placed on decentralized fieldbus systems. Optimized for process-oriented communication with a scalable performance solution,

the WAGO-I/O-SYSTEM offers high integration density with an unbeatable price/performance ratio.

- Virtually unlimited application possibilities
- Minimal hardware and system costs
- Simple operation, maximum efficiency

The basic premise of the modular system is reflected in the support of numerous fieldbus systems. Depending on the application, it is possible to choose between fieldbus couplers and controllers for different protocols.



Designed to Meet Practical Requirements

Fine granularity:

- I/O module accommodates 1, 2, 4 or 8 channels

Fieldbus-independent:

- Fieldbus couplers & fieldbus controllers for the most common fieldbus protocols & industrial ETHER-NET standards

A sound investment:

- Fieldbus-independent node design easily accommodates new bus standards while retaining the I/O modules

Clear identification:

- Color-coded group marker carriers and WAGO WSB markers for clamping units

Scalable performance:

- With economy and standard couplers as well as programmable controllers on through to comprehensive IPCs

High-performance:

- Fieldbus couplers with additional PLC functionality (controllers) for distributed control networks acc. to IEC 61131-3

Great flexibility:

- Configuration possibilities for digital and analog inputs and outputs and specialty modules with different potentials, capacity, and signals on one fieldbus node

Dependable:

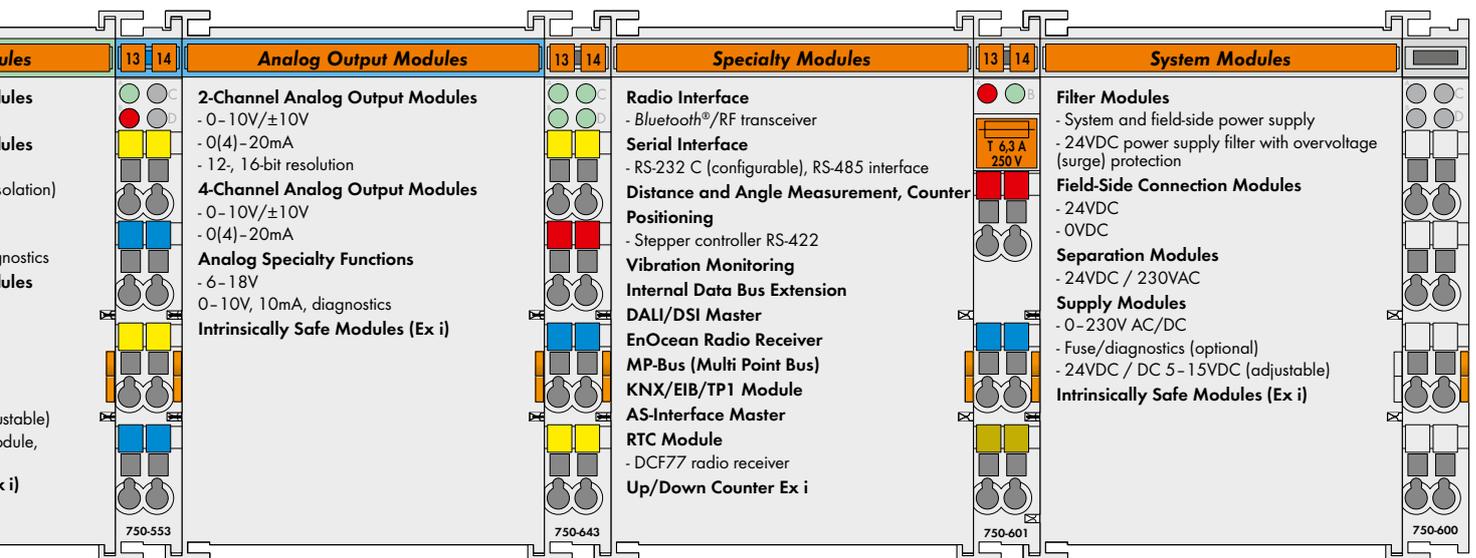
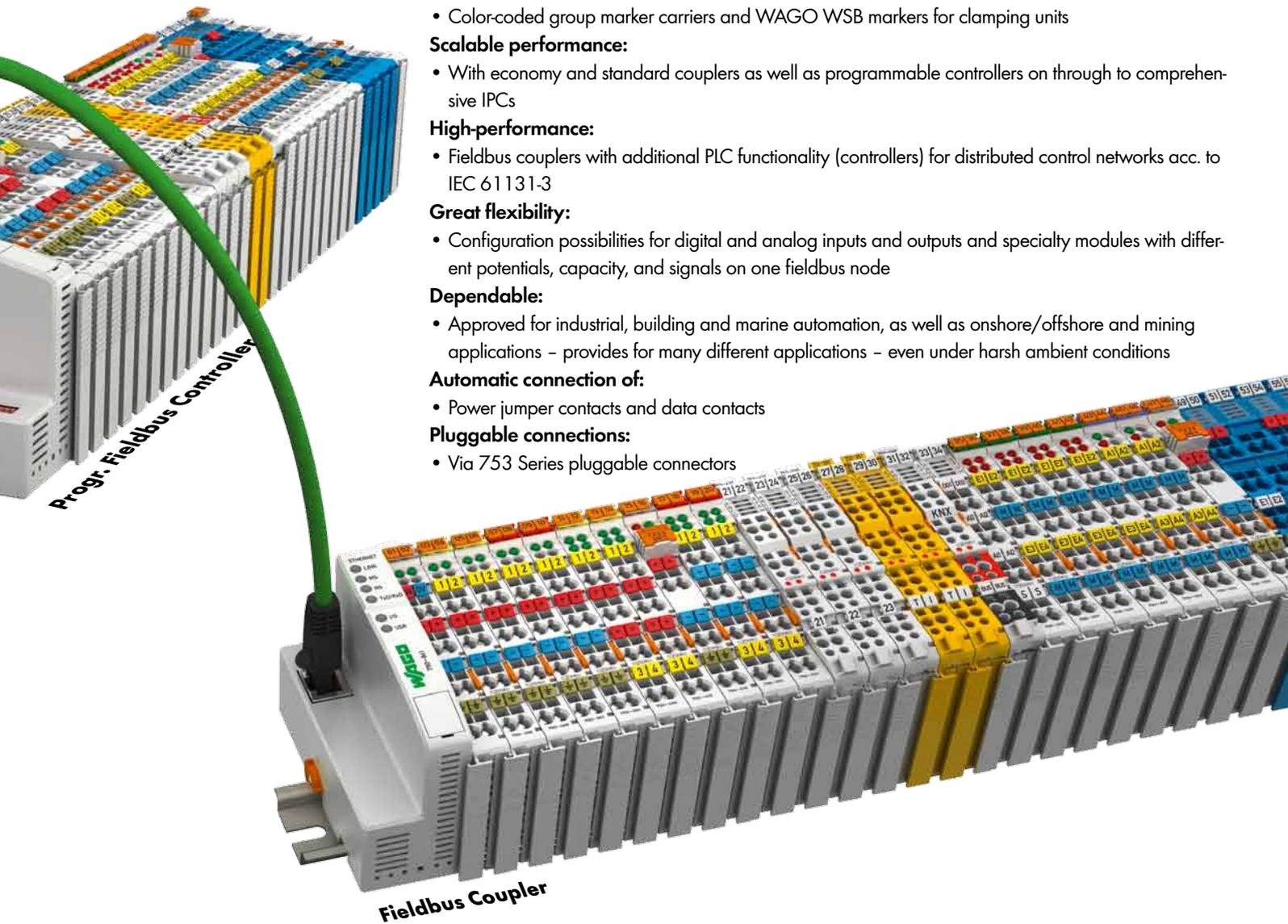
- Approved for industrial, building and marine automation, as well as onshore/offshore and mining applications – provides for many different applications – even under harsh ambient conditions

Automatic connection of:

- Power jumper contacts and data contacts

Pluggable connections:

- Via 753 Series pluggable connectors



3 WAGO-I/O-SYSTEM 750

142

I/O Module

Universal Basic Module

Assembly



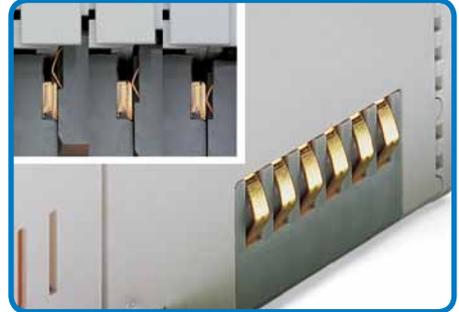
Fine modularity for on-rail assembly

Power jumper contacts on the field side



Safe, automatic connection by tinned, self-cleaning slide contacts with high contact safety through make-first, break-last ground contact

Data contacts

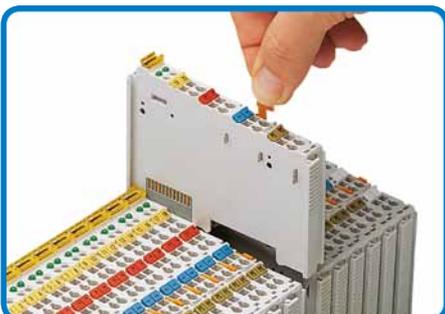


Safe, automatic connection by gold-plated, self-cleaning slide contacts with high contact safety

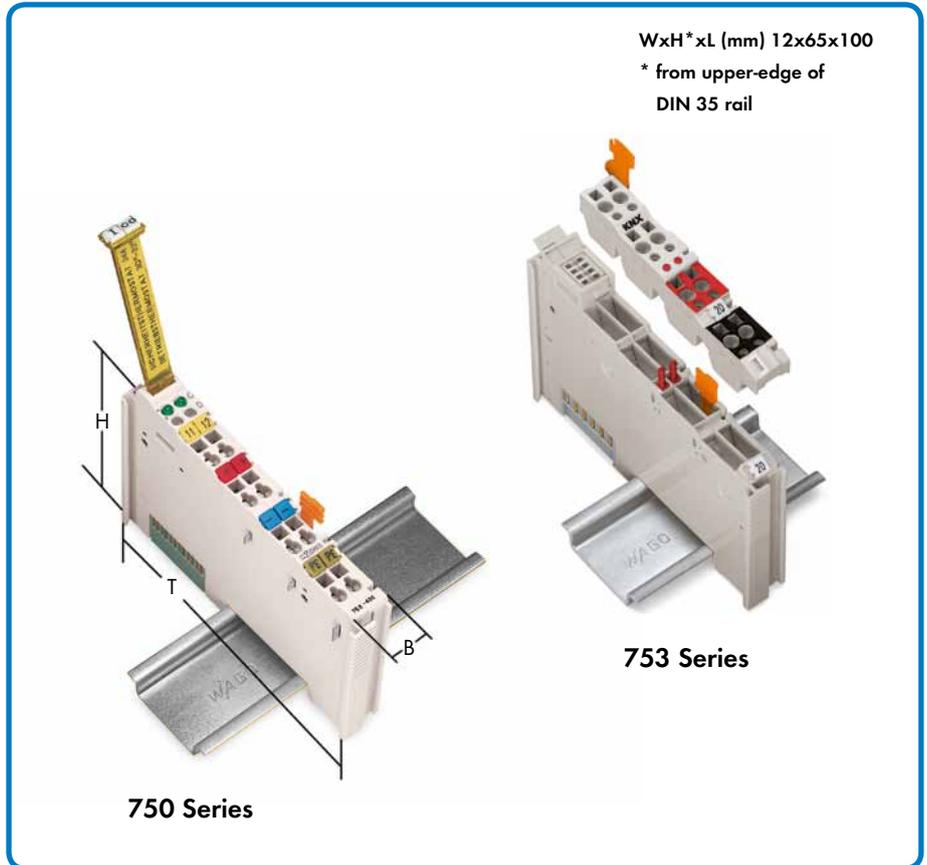


Secure connection with dovetails

Exchange within the assembly



Quick, tool-free exchange of I/O module with assembled node



Locking the fieldbus coupler



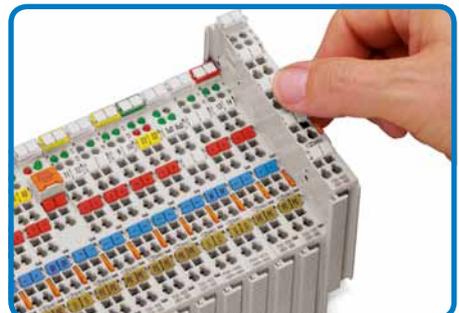
1 locking 2 releasing

Accessing programming interface



Accessing the programming interface. Programming a fieldbus controller via WAGO-I/O-CHECK or WAGO-I/O-PRO CAA.

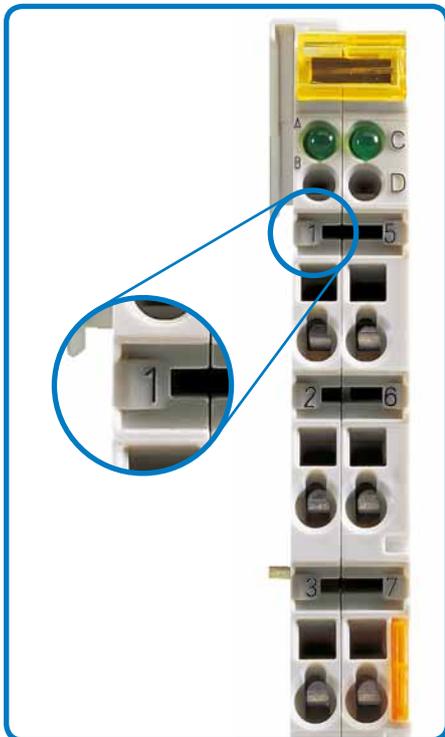
End module required



The end module physically terminates the fieldbus node and guarantees safe data transmission.

Strip length, see packaging or instructions.

Color-coded for simplicity



Printed clamping unit marking



Marking clamping units via colored miniature WSB markers.



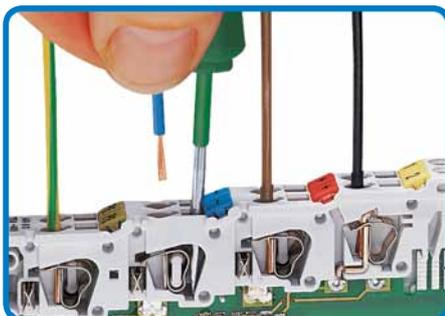
Pullout group marker carrier with large area for self-marking



- yellow – Digital Inputs (DI)
- red – Digital Outputs (DO)
- Green – Analog Inputs (AI)
- blue – Analog Outputs (AO)
- Clear – Supply and
Specialty Modules

Transparent group marker carriers for color indication of module type

CAGE CLAMP® connection



Vibration-proof, fast and maintenance-free connection for conductors rated 0.08 mm² to 2.5 mm² (AWG 28-14)

Status indication



LED diagnostic and status indications for safe startup and system control.

Testing



Signal tracing with wired conductors

Fuse holder



Function at locked position 1:
Power output to I/O group is off.



Function at locked position 2:
Easy fuse replacement via hinged cover.
Use UL-recognized fuses only!

Pluggable connections



753 Series
See Full Line Catalog, Volume 3, AUTOMATION or go to:
www.wago.com.

ECO Couplers, Fieldbus Couplers, PLC – Programmable Fieldbus Controllers 750 Series

| | | |
|---|--|--|
| <p>ECO Fieldbus Couplers* for digital and analog signals 0.08 - 1.5 mm² / AWG 28 - 16 Voltage supply: 24 V (-15 % ... +20 %) Width: 50 mm  5 - 6 mm / 0.24 in</p> | <p>Fieldbus Couplers* for digital and analog signals 0.08 - 2.5 mm² / AWG 28 - 14 Voltage supply: 24 V (-15 % ... +20 %) Width: 51 mm  8 - 9 mm / 0.33 in</p> | <p>PLC – Programmable Fieldbus Controllers* for digital and analog signals 0.08 - 2.5 mm² / AWG 28 - 14 Voltage supply: 24 V (-15 % ... +20 %) Width: 51 mm 62 mm ①  8 - 9 mm / 0.33 in</p> |
|---|--|--|



| Designation | Baud Rate | Item No. | Designation | Baud Rate | Item No. | Designation | Baud Rate | Item No. |
|---------------------|----------------|---|--|------------------|---|----------------------------|----------------|---|
| PROFIBUS DP ECO | 12 Mbaud | 750-343  | PROFINET IO | 100 Mbit/s | 750-340  | PROFIBUS DP/V1 | 12 Mbaud | 750-833  |
| INTERBUS ECO | 500 kbaud | 750-344  | PROFINET IO | 100 Mbit/s | 750-370 | ETHERNET TCP/IP | 10/100 Mbit/s | 750-871  |
| INTERBUS ECO | 2 Mbaud | 750-345  | 2 ports | | | ETHERNET TCP/IP | 10/100 Mbit/s | 750-873  |
| DeviceNet ECO | 500 kbaud | 750-346  | PROFIBUS DP/FMS | 12 Mbaud | 750-303  | RS-232 | | |
| CANopen ECO MCS | 10 kBd - 1 MBd | 750-347  | PROFIBUS DP/V1 | 12 Mbaud | 750-333  | ETHERNET TCP/IP | 10/100 Mbit/s | 750-841  |
| CANopen ECO | 10 kBd - 1 MBd | 750-348  | PROFIBUS | 1.5 Mbaud | 750-331 | ETHERNET TCP/IP | 10 Mbit/s | 750-842  |
| ETHERNET TCP/IP ECO | 100 MBit/s | 750-352/020-000 | with fiber-optic connection | | | ETHERNET TCP/IP | 10 Mbit/s | 750-843  |
| | | | ETHERNET TCP/IP | 100 Mbit/s | 750-341  | ETHERNET | 10/100 Mbit/s | 750-880 ① |
| | | | ETHERNET TCP/IP | 10 Mbit/s | 750-342  | 2 ports | | |
| | | | ETHERNET TCP/IP | 10/100 Mbit/s | 750-352 | ETHERNET | 10/100 Mbit/s | 750-881 ① |
| | | | EtherCAT® | 100 Mbit/s | 750-354 | 2 ports | | |
| | | | SERCOS III | 100 Mbit/s | 750-351 | ETHERNET MR | 10/100 Mbit/s | 750-882 |
| | | | 2 ports | | | DeviceNet | 500 kbaud | 750-806  |
| | | | DeviceNet | 500 kbaud | 750-306  | CANopen | 10 kBd - 1 MBd | 750-837  |
| | | | CANopen | 10 kBd - 1 MBd | 750-307  | MCS | | |
| | | | CANopen | 10 kBd - 1 MBd | 750-337  | CANopen | 10 kBd - 1 MBd | 750-838  |
| | | | CANopen | 10 kBd - 1 MBd | 750-338  | D-Sub | | |
| | | | CAN CAL | 10 kBd - 1 MBd | 750-305  | MODBUS RS-485 | 150-19200 Bd | 750-812  |
| | | | MODBUS RS-485 | 150-19200 Bd | 750-312  | MODBUS RS-232 | 150-19200 Bd | 750-814  |
| | | | MODBUS RS-232 | 150-19200 Bd | 750-314  | MODBUS RS-485 | 1.2-115.2 kBd | 750-815  |
| | | | MODBUS RS-485 | 1.2-115.2 kBd | 750-315  | MODBUS RS-232 | 1.2-115.2 kBd | 750-816  |
| | | | MODBUS RS-232 | 1.2-115.2 kBd | 750-316  | INTERBUS | 500 kbaud | 750-804  |
| | | | INTERBUS | 500 kbaud | 750-304  | IEC 60870-5 | 10/100 Mbit/s | 750-872 |
| | | | INTERBUS | 500 kbaud | 750-334  | for telecontrol technology | | |
| | | | with fiber-optic connection | | | KNX | 10/100 Mbit/s | 750-849 |
| | | | CC-Link | 156 kBd - 10 MBd | 750-310  | BACnet | 10/100 Mbit/s | 750-830  |
| | | | II/O-LIGHTBUS | 2.5 Mbaud | 750-300  | LonWorks® | 78 kbps | 750-819  |
| | | | Digital and analog signals | | | Linux® | 10/100 Mbit/s | 750-860  |
| | | | II/O-LIGHTBUS | 2.5 Mbaud | 750-320  | Linux® | 10/100 Mbit/s | 750-863 |
| | | | Digital signals | | | RS-232 | | |
| | | | LonWorks® | 78 kbps | 750-319  | | | |
| | | | LON Data Exchange Coupler | 78 kbps | 750-319/004-000  | | | |
| | | | (Peer-to-Peer) | | | | | |
| | | |  ATEX/IEC Ex approval | | | | | |

*You can find approvals and technical data in our Full Line Catalog, Volume 3, AUTOMATION, or at www.wago.com.

Analogue Inputs and Analogue Outputs 750 and 753 Series

| | | |
|--|--|--------------------|
| Analogue Input Modules (AI)* 0.08 - 2.5 mm ² / AWG 28 - 14 Voltage supply: 24 V (-15% ... +20%) Width: 12 mm 24 mm  8 - 9 mm / 0.33 in | Analogue Output Modules (AO)* 0.08 - 2.5 mm ² / AWG 28 - 14 Voltage supply: 24 V (-15% ... +20%) Width: 12 mm  8 - 9 mm / 0.33 in | Accessories |
|--|--|--------------------|



| Designation | Item No. | Designation | Item No. | Designation | Item No. |
|--|---|----------------------------|---|---|-----------------------------|
| 1-Channel AI DMS** | 750-491 | 2-Channel AO 0-20mA | 750-552  ① | 753 Series pluggable connector ② | |
| | | 4-20mA | 750-554  ① |  light gray | 753-110 |
| 2-channel AI Differential inputs | | 0-10V | 750-550  ① | | |
| 0-20mA | 750-452  ① | 0-10V | 750-560 | 753 Series pluggable connector ② | |
| 4-20mA | 750-454  ① | 10 bits, 100mW, 24V | |  yellow | 753-120 |
| 0-1A AC/DC | 750-475  ① | ± 10V | 750-556  ① | | |
| 0-10V AC/DC | 750-477  ① | 10 bits, 100mW, 24V | | 753 Series coding elements ③ | |
| ±10VDC | 750-456  ① | 0/4-20mA, | |  red | 753-150 |
| | | 6-18VDC, | | | |
| 2-channel AI Single-ended | | 16 bits | 750-563 | 750/753 Series marker carrier ④ | |
| 0-20mA | 750-465  ① | 0-10V, | |  transparent | 750-103 |
| 0-20mA, | | -10 ... +10VDC, | | Markers, for group marker carrier | |
| short-circuit protected | 750-470  ① | 16 bits | 750-562 |  white | 750-100 |
| 0-20mA, 16 bits | 750-472  ① | | | Miniature WSB Quick marking system, plain | |
| 4-20mA | 750-466  ① | 4-Channel AO 0-20mA | 750-553  ① |  | white 248-501 |
| 4-20mA, | | 4-20mA | 750-555  ① | | yellow 248-501/000-002 |
| short-circuit protected | 750-473  ① | 0-10V | 750-559  ① | | red 248-501/000-005 |
| 4-20mA, 16 bits | 750-474  ① | ± 10V | 750-557  ① | | blue 248-501/000-006 |
| 4-20mA, 16 bits, | | | | | gray 248-501/000-007 |
| HART | 750-482 ① | | | | orange 248-501/000-012 |
| 0-10VDC | 750-467  ① | | | | light green 248-501/000-017 |
| 0-10VDC, 16 bits | 750-478  ① | | | | Green 248-501/000-023 |
| ±10VDC, 16 bits | 750-476  ① | | | | violet 248-501/000-024 |
| | | | | Interface module for system wiring, | |
| 2-channel AI Differential measurement input | | | | relay output module with miniature | |
| 0-20mA | 750-480  ① | | | switching relay, | |
| 4-20mA | 750-492  ① | | | flat cable connector to DIN 41651 | |
| ±10VDC | 750-479  ① | | | | |
| 0-30VDC | 750-483  ① | | | | |
| | | | | | |
| 2-channel AI Pt100/RTD | 750-461  ① | | | | |
| | | | | | |
| 2-channel AI Thermocouple | 750-469  ① | | | | |
| K/Diagnostics | | | | | |
| 2/4-Channel AI RTD | 750-464 | | | | |
| | | | | | |
| 4-Channel AI Single-ended | | | | | |
| 0-20mA, | 750-453  ① | | | | |
| 4-20mA | 750-455  ① | | | | |
| 0-10VDC | 750-468  ① | | | | |
| 0-10VDC | 750-459  ① | | | | |
| ±10VDC | 750-457  ① | | | | |
| | | | | | |
| 4-Channel AI Pt100/RTD | 750-460 | | | | |
| | | | | | |
| 3-Phase Power Measurement Module | 750-493 | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | WAGO ribbon cable, connects I/O modules to interface | |
| | | | | modules | |
| | | | | 20/20 | 706-3057/300-100 |
| | | | | 20/2x10 | 706-7753/302-000 |

① also available with 753 Series pluggable connector.
 **DMS = strain gauges

HS switch. = high-side switching

LS switch. = low-side switching



Specialty Modules and System Modules 750 and 753 Series

| Specialty Modules* | Specialty Modules* | System Modules* |
|---|--|--|
| 0.08 - 2.5 mm ² / AWG 28 - 14 Voltage supply: 24 V (-15 % ... +20 %) Width: 12 mm 24 mm 48 mm  8 - 9 mm / 0.33 in | 0.08 - 2.5 mm ² / AWG 28 - 14 Voltage supply: 24 V (-15 % ... +20 %) Width: 12 mm 24 mm 48 mm  8 - 9 mm / 0.33 in | 0.08 - 2.5 mm ² / AWG 28 - 14 Voltage supply: 24 V (-15 % ... +20 %) Width: 12 mm 24 mm  8 - 9 mm / 0.33 in |



| Designation | Item No. | Designation | Item No. | Designation | Item No. |
|--|---|--|---|---|------------|
| Up/Down Counter 24VDC, 100kHz | 750-404  ① | Stepper Controller RS-422, 24V, 20mA | 750-670  | End Module for internal data bus extension | 750-627 |
| 2-Channel Up/Down Counter 24VDC, 500Hz | 750-638  ① | Stepper Controller 24VDC/1.5A | 750-671  | Coupler Module for internal data bus extension | 750-628 |
| 2-Channel Pulse Width Output Module 24VDC, 0.1A | 750-511  | Stepper Controller 70V/7.5A, 6 IN, 2 OUT | 750-672 | Supply Modules 24VDC, without fuse | 750-602 |
| SSI Transmitter Interface 24 bits, 125kHz, gray | 750-630  | Servo Stepper Controller 70V/7.5A, 6 IN, 2 OUT | 750-673 | Supply Modules 24VDC, with fuse carrier | 750-601 |
| Incremental Encoder Interface 16-bit counter | 750-631/000-004  | DC Drive Controller 24VDC/5A | 750-636 | Supply Modules 24VDC, with fuse carrier, diagnostics | 750-610 |
| Incremental Encoder Interface 32-bit counter, RS-422 interface | 750-637  | | | Supply Modules 24V, 5-15V DC | 750-623 |
| | | | | Supply Modules 24VDC, passive | 750-613 |
| Digital Impulse Interface for magnetostrictive distance measurement sensors | 750-635  ① | | | Supply Modules 120VAC, with fuse carrier | 750-615 |
| | | | | Supply Modules 0-230V AC/DC, without fuse | 750-612 |
| RS-232 C Serial Interface 1200-19200 baud | 750-650  ① | | | Supply Modules 230VAC, with fuse carrier | 750-609 |
| RS-485 Serial Interface 1200-19200 baud | 750-653  ① | | | Supply Modules 230VAC, with fuse carrier, diagnostics | 750-611 |
| RS-232/RS-485 Serial Interface 300-115200 baud, configurable | 750-652 | | | Filter Module for field-side power supply | 750-624 |
| TTY Interface 20mA Current loop | 750-651  | | | Filter Module for system and field-side power supply | 750-626 |
| | | | | Field Side Connection Module | 750-604 ① |
| Data Exchange Module 62500 baud | 750-654 | | | Field Side Connection Module | 750-603 ① |
| DALI/DSI Master Module | 750-641  | | | Field Side Connection Module | 750-1605 ① |
| Radio Receiver Module EnOcean | 750-642  | | | Field Side Connection Module | 750-1606 ① |
| Bluetooth®/RF Transceiver | 750-644 | | | Field Side Connection Module | 750-1607 ① |
| MP-Bus Master Module | 750-643  | | | Field Side Connection Module | 750-614 ① |
| KNX/EIB/TP1 Module | 750-646 | | | Separation Module | 750-616 |
| RTC Module Real-time clock | 750-640  | | | Separation Module with power jumper contacts | 750-621 |
| AS-Interface Master Module | 750-655  ① | | | Binary Spacer Module with supply module | 750-622 |
| 4-Channel IO-Link Master | 750-657 | | | End module | 750-600 |
| Vibration Monitoring 2-channel vibration velocity/bearing condition monitoring Tandem-Piezo acceleration sensor | 750-645 750-925 |  ATEX/IEC Ex approval | | | |

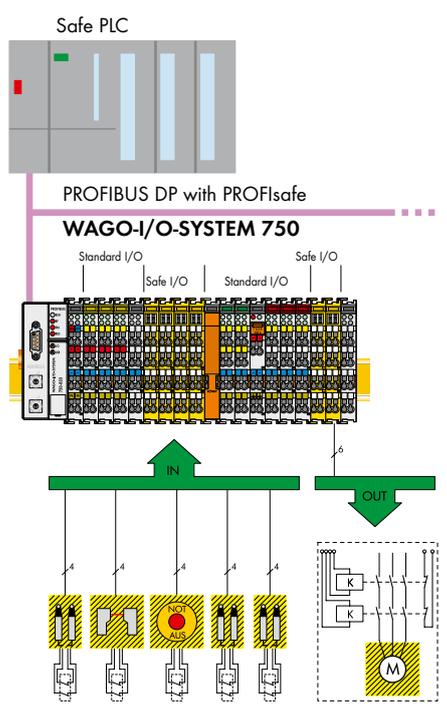
① also available with 753 Series pluggable connector. For accessories, see page 147. For technical explanations and abbreviations, see technical section.

PROFIsafe Modules and Ex i Intrinsically Safe Modules 750 and 753 Series

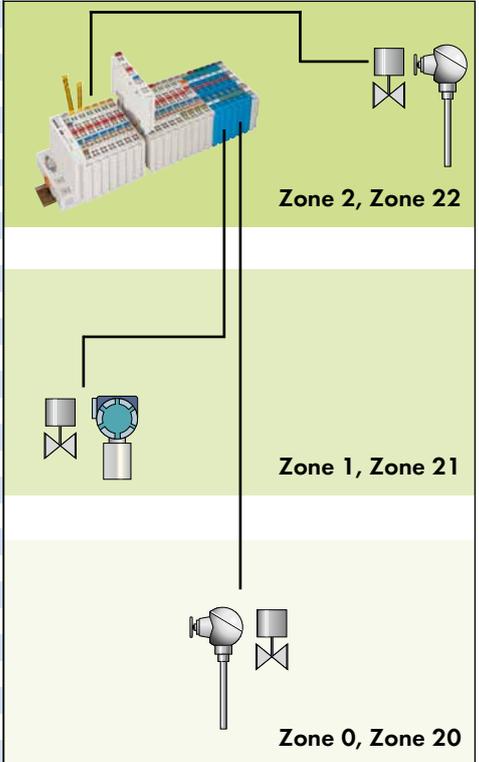
| | |
|---|---|
| PROFIsafe Modules* 0.08 - 2.5 mm ² / AWG 28 - 14 Voltage supply: 24 V (-15 % ... +20 %) Width: 12 mm 24 mm  8 - 9 mm / 0.33 in | Ex i Intrinsically Safe Modules* 0.08 - 2.5 mm ² / AWG 28 - 14 Voltage supply: 24 V (-15 % ... +20 %) Width: 12 mm 24 mm  8 - 9 mm / 0.33 in |
|---|---|



| Designation | Item No. | Designation | Item No. |
|---|--------------------------|--------------------------------------|------------------------|
| 4-Channel Input Module | 750-661/000-003 ① | 1-Channel Digital Input | 750-435 |
| 4 inputs, PROFIsafe V2 iPar | | NAMUR Ex i | |
| 8-Channel Input Module | 750-662/000-003 ① | 2-Channel Digital Input | 750-438 |
| 8 inputs, PROFIsafe V2 iPar | | NAMUR Ex i | |
| 4/4-Channel Input/Output Module | 750-667/000-002 | 2-Channel Digital Output | 750-535 |
| ① | | 24VDC, Ex i | |
| 4 inputs and 4 outputs, cat. 4/SIL 3, PROFIsafe 2.0 | | 2-Channel Analog Input | 750-485 |
| 8-Channel Input Module | 750-660/000-001 | Single-ended, 4-20mA, Ex i | |
| 8 inputs, cat. 4/SIL 3, PROFIsafe 1.3 | | 2-Channel Analog Input | 750-484 |
| 4-Channel Input/Output Module | 750-665/000-001 | Single-ended, 4-20mA, HART, Ex i | |
| 4 inputs and 4 outputs, cat. 4/SIL 3, PROFIsafe 1.3 | | 2-Channel Analog Input | 750-481/003-000 |
| 4/2-Channel Input/Output Module | 750-666/000-003 | RTD Ex i | |
| ① | | 2-Channel Analog Input | 750-487/003-000 |
| 4 inputs and 2 outputs (10A), PROFIsafe V2 iPar | | for thermocouples, Ex i | |
| | | 2-Channel Analog Output | 750-585 |
| | | 0-20mA, Ex i | |
| | | Supply Modules | 750-625/000-001 |
| | | 24VDC, 1A, without diagnostics, Ex i | |
| | | Supply Modules | 750-606 |
| | | 24VDC, 1A, Ex i | |
| | | Up/Down Counter | 750-633 |



WAGO PROFIsafe modules can be used in safety applications up to CAT. 4 in accordance with EN 954-1 or SIL 3 according to base standard IEC 61508 and AK 6 (DIN V 19250). Status, configuration and diagnostics are available in every module.



The WAGO-I/O-SYSTEM 750 is approved for use in Zone 2 hazardous areas. The system also provides direct connection to the sensors/actuators of Zones 0 and 1.

* All technical data and approvals are available in our Full Line Catalog, Volume 3, AUTOMATION, or online at www.wago.com.



WAGO SPEEDWAY 767

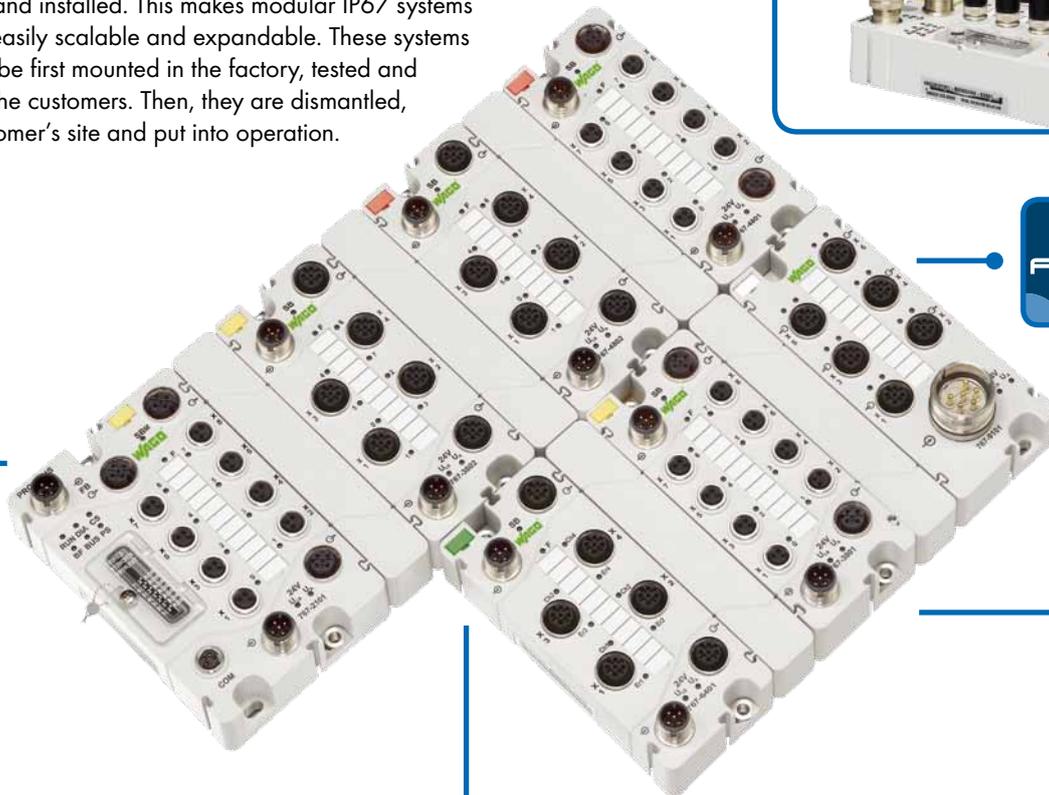
The New Performance Standard for Cabinet-Free Automation

The move from parallel wiring toward fieldbus technology has revolutionized control and installation technology over the past decade. In the following years, even greater efficiency has been achieved for project engineering, assembly, commissioning and system operation through decentralized, IP67-protected and robust fieldbus components. Now, cabinet-free automation has established itself as an industrial standard.

In addition to requiring a high degree of protection, a robust design and standardized connection technology, there is an increasing demand for highly functional IP67 features that were once only reserved for IP20 systems:

- Speed, synchrony
- Configurable via FDT/DTM
- Programmable to IEC 61131-3
- Diagnostic capable

Typically, machines and systems must be tailored to suit individual requirements while meeting tight customer deadlines. Customer requirements must be incorporated easily and rapidly and then the system must be designed and installed. This makes modular IP67 systems ideal, as they are easily scalable and expandable. These systems allow machines to be first mounted in the factory, tested and then accepted by the customers. Then, they are dismantled, re-installed on customer's site and put into operation.



- Modular design
- High-performance data transfer
- Programmable via CoDeSys 3 (IEC 61131-3)
- FDT/DTM configuration
- Asynchronous and synchronous diagnostics
- Fieldbus-independent
- USB interface
- Comprehensive safety features
- Excellent EMC protection
- Efficient power supply solution
- Temp. from -25°C to +60°C
- IP67 degree of protection, fully encapsulated
- Screw and DIN-rail mount options
- Ergonomic design

CoDeSys Automation Alliance

Couplers, Programmable Couplers

- I/O Modules**
- Digital Input Modules**
8 inputs 24 VDC
 - Digital Output Modules**
8 outputs 24 VDC, 0.5 A
8 outputs 24 VDC, 2.0 A
 - Analog Input Modules**
4 inputs U/I, RTD, TC
 - Analog Output Modules**
4 inputs U/I
 - Specialty Modules**
Power divider

Fieldbus Couplers, Programmable Fieldbus Couplers Input and Output Modules, 767 Series Sensor/Actuator Boxes, 757 Series

| | | |
|---|---|---|
| 767 Series Fieldbus Couplers* IP67 protection class Operating voltage: 24 VDC (-25% to +30%) Dimensions (W x H x L) 75 x 35.7 x 117 mm | 767 Series I/O Modules* IP67 protection class Operating voltage: 24 VDC (-25% to +30%) Dimensions (W x H x L) 50 x 35.7 x 117 mm | 767 Series Modules* IP67 protection class Operating voltage: 10 - 30 VDC Dimensions (W x H x L) M12: 60 x 117/123/152 x 26 mm M 8: 30 x 117/123/152/175 x 20 mm |
|---|---|---|



| Designation | Item No. | Designation | Item No. | Designation | Item No. |
|---|--------------------------|---|------------------|---|--|
| Fieldbus Coupler | | Digital Input Module, 24 VDC | | M12 Sensor/Actuator Box with M23 Connector | |
| PROFINET IO | 767-1201 | 8 inputs (8 x M8) | 767-3801 | 4-pole, 4-port | 757-144 |
| PROFIBUS DP/ V1 | 767-1101 | 8 inputs (4 x M12, two inputs per connector) | 767-3802 | 4-pole, 6-port | 757-164 |
| ETHERNET | 767-1301 | 8 Inputs (8 x M8, LS*) | 767-3803 | 4-pole, 8-port | 757-184 |
| DeviceNet | 767-1401 | 8 Inputs (4 x M12, two inputs per connector, LS*) | 767-3804 | 5-pole, 4-port | 757-145 |
| CANopen | 767-1501 | 8 inputs (8 x M12) | 767-3805 | 5-pole, 6-port | 757-165 |
| | | Digital Output Module, 24 VDC, 0.5 A | | 5-pole, 8-port | 757-185 |
| | | 8 outputs (8 x M8) | 767-4801 | 5-pole, 8-port, without LED | 757-185/100-000 |
| Programmable Fieldbus Coupler | | 8 outputs (4 x M12, two outputs per connector) | 767-4802 | | |
| PROFIBUS DP/ V1 | 767-2101 | 8 outputs (8 x M8, LS*) | 767-4805 | M12 Sensor/Actuator Box with 5m Connecting Cable | |
| ETHERNET | 767-2301 | 8 outputs (4 x M12, two outputs per connector, LS*) | 767-4806 | 4-pole, 4-port | 757-244/000-005 |
| CANopen | 767-2501 | 8 outputs (8 x M12) | 767-4807 | 4-pole, 6-port | 757-264/000-005 |
| | | Digital Output Module, 24 VDC, 2 A | | 4-pole, 8-port | 757-284/000-005 |
| | | 8 outputs (8 x M8) | 767-4803 | 5-pole, 4-port | 757-245/000-005 |
| | | 8 outputs (4 x M12, two outputs per connector) | 767-4804 | 5-pole, 6-port | 757-265/000-005 |
| | | Digital Input/Output Module, 24 VDC, 0.5 A | | 5-pole, 8-port | 757-285/000-005 |
| | | 8 inputs/outputs (8 x M8) | 767-5801 | | |
| | | 8 inputs/outputs (4 x M12, two outputs per conn.) | 767-5802 | M8 Sensor/Actuator Box with M16 Connector | |
| | | 8 inputs/outputs (8 x M12) | 767-5803 | 3-pole, 4-port | 757-343 |
| | | Analog Input Module | | 3-pole, 6-port | 757-363 |
| | | Voltage/current (4 x M12) | 767-6401 | 3-pole, 8-port | 757-383 |
| | | Resistance temperature device (4 x M12) | 767-6402 | 3-pole, 10-port | 757-303 |
| | | Thermocouple (TC) (4 x M12) | 767-6403 | | |
| | | Analog Output Module | | M8 Sensor/Actuator Box with 5m Connecting Cable | |
| | | Voltage/current (4 x M12) | 767-7401 | 3-pole, 4-port | 757-443/000-005 |
| | | Power Divider, 24 VDC | | 3-pole, 6-port | 757-463/000-005 |
| | | 6 outputs (6 x M12) | 767-9101 | 3-pole, 8-port | 757-483/000-005 |
| | | Serial interface (RS-232, RS-422/-485) | 767-5203 | 3-pole, 10-port | 757-403/000-005 |
| Accessories, 767 Series | | LS* = low-side switching | | Accessories, 757 Series | |
| Spacer module, with fixing lugs for cable ties | | System bus cable, fitted on both ends, straight, | | Spacer module for sensor/actuator box | |
|  | 767-111 | suitable for drag chains | | 4-port | 757-040 |
| | | 0.3 m | 756-1505/060-003 | 6-port | 757-060 |
| | | 0.5 m | 756-1505/060-005 | 8-port | 757-080 |
| | | 1 m | 756-1505/060-010 | 10-port | 757-000 |
| | | 2 m | 756-1505/060-020 | | |
| Protective caps, for unused sockets | | Supply cable, fitted on both ends, straight | | Marker strips for M8 sensor/actuator box | |
|  | M8 756-8101 | 0.2 m | 756-3105/040-002 | 4-port | 757-041 |
| | M12 756-8102 | 0.3 m | 756-3105/040-003 | 6-port | 757-061 |
| | 1 piece per packing unit | 0.5 m | 756-3105/040-005 | 8-port | 757-081 |
| | | 1 m | 756-3105/040-010 | 10-port | 757-001 |
| | | 2 m | 756-3105/040-020 | | |
| Protective caps, for unused plugs | | USB communication cable | | | |
|  | M12 755-809 | 3 m | 756-4101/042-030 | | |
| | M23 755-837 | | | | |
| | 1 piece per packing unit | | | | |
| Carrier rail adapter | | Profile adapter | | | |
|  | for couplers 767-121 | for couplers | 767-123 | | |
| | for I/O modules 767-122 | for I/O modules | 767-124 | | |
| | | | | | |
| | | | | | For more accessories, see Full Line Catalog, Volume 3, AUTOMATION. |

* All technical data and approvals are available in our Full Line Catalog, Volume 3, AUTOMATION, or online at www.wago.com.

3 **PERSPECTO® – Monitors and Panels**

152

Perfect Integration into the WAGO-I/O-SYSTEM

PERSPECTO® is WAGO's comprehensive monitor and panel system for operating and monitoring process data for machines, systems and control technology.

PERSPECTO® is optimized

The WAGO-I/O-SYSTEM and **PERSPECTO®** are ideally suited to one another. Both system components guarantee smooth, trouble-free communication with a controller or the system's IPC.

PERSPECTO® is fast

Enhanced runtime systems and programs provide consistently high performance.

PERSPECTO® is flexible

Available for a variety of sizes as a Web, visualization or automation panel model, **PERSPECTO®**

provides solutions to suit any customer need.

PERSPECTO® is adaptable

Customer-driven designs, complete with reconfigurable displays, enable **PERSPECTO®** units to be seamlessly integrated into virtually any application.

PERSPECTO® TM, Touch Monitor

The Touch Monitors directly connect to DVI-D and USB interfaces. They are an ideal addition to the WAGO I/O-IPC. The content shown is processed and saved on the connected IPC.

PERSPECTO® WP, Web Panel

Specifically configured as a Web browser, the Web Panel directly connects to controllers with their own Web servers. The CoDeSys 2.3 Web visualization has been specially optimized for the Web Panel.

PLC – PERSPECTO® CP TV, Control Panel

The control panel features CoDeSys runtime with target visualization, making it a full-fledged automation device. It provides configurable functions for operation and monitoring, and can independently process control tasks.

Clearly in View & Clearly in Control

Clear Benefits:

- Compatible with the WAGO-I/O-SYSTEM
- Expert support
- Short boot time
- High computing power
- Outstanding energy efficiency
- Monitor sizes from 3.5" to 15"
- Flat design
- Multiple interfaces
- Optional IEC-61131-compatible control functionality

The WAGO software package for creating visualization and control applications



PERSPECTO® Monitors and Panels 762 Series

| | | |
|---|---|---|
| PERSPECTO® TM Touch Monitor Touch screen: analog, resistive Power supply: 24 VDC (18 – 30 V) Protection class: IP65 (front side), IP20 (rear side) | PERSPECTO® WP Web Panel Touch screen: analog, resistive Operating system: Windows CE Power supply: 24 VDC (18 – 30 V) Protection class: IP65 (front side), IP20 (rear side) | PLC – PERSPECTO® CP with Target Visu (TV) Control Panel Touch screen: analog, resistive Operating system: Windows CE Power supply: 24 VDC (18 – 30 V) Protection class: IP65 (front side), IP20 (rear side) |
|---|---|---|



| Description | Item No. | Pack. Unit | Description | Item No. | Pack. Unit | Description | Item No. | Pack. Unit |
|------------------------|--------------------------------|------------|------------------------|-----------------------|------------|--------------------------|--|------------|
| | | | WP 35 QVGA | 762-1035 | 1 | CP 35 QVGA TV | 762-3035/000-001 | 1 |
| | | | Screen size (diagonal) | 8.9 cm (3.5") | | Screen size (diagonal) | 8.9 cm (3.5") | |
| | | | Resolution/Color | 320 x 240 / 32k | | RAM / Flash / SRAM | 64 MB / 64 MB / 1 MB | |
| | | | RAM / Flash / SRAM | 64 MB / 64 MB / 1 MB | | Memory expansion | MicroSD (max. 2 GB) | |
| | | | Memory expansion | MicroSD card | | Interfaces | USB 2.0, ETHERNET, CAN, RS-485 | |
| | | | Interfaces | USB 2.0, ETHERNET | | Panel cutout (W x H) | 91 x 91 mm | |
| | | | Panel cutout (W x H) | 91 x 91 mm | | | | |
| | | | WP 57 QVGA | 762-1057 | 1 | CP 57 QVGA TV | 762-3057/000-001 | 1 |
| | | | Screen size (diagonal) | 14.5 cm (5.7") | | Screen size (diagonal) | 14.5 cm (5.7") | |
| | | | Resolution/Color | 320 x 240 / 4k | | RAM / Flash / SRAM | 64 MB / 64 MB / 1 MB | |
| | | | RAM / Flash / SRAM | 64 MB / 64 MB / 1 MB | | Memory expansion | SD card (max. 2 GB) | |
| | | | Memory expansion | SD card | | Interfaces | 2 x USB 2.0, ETHERNET, CAN, RS-232, RS-485 | |
| | | | Interfaces | 2 x USB 2.0, ETHERNET | | Panel cutout (W x H) | 198 x 140 mm | |
| | | | Panel cutout (W x H) | 198 x 140 mm | | | | |
| TM 104 VGA | 762-104 | 1 | WP 104 VGA | 762-1104 | 1 | CP 104 VGA TV | 762-3104/000-001 | 1 |
| Screen size (diagonal) | 26.4 cm (10.4") | | Screen size (diagonal) | 26.4 cm (10.4") | | Screen size (diagonal) | 26.4 cm (10.4") | |
| Display colors | 65536 colors | | Resolution/Color | 640 x 480 / 65k | | RAM / Flash / SRAM | 64 MB / 32 MB / 1 MB | |
| Graphics resolution | 640 x 480 pixels | | RAM / Flash / SRAM | 64 MB / 32 MB / 1 MB | | Memory expansion | CF card (max. 2 GB) | |
| Interfaces | 2 x USB 2.0, USB Device, DVI-D | | Memory expansion | CF Card | | Interfaces | 2 x USB 2.0, ETHERNET, 2 x CAN, RS-232, RS-485 | |
| Panel cutout (W x H) | 268 x 206 mm | | Interfaces | 2 x USB 2.0, ETHERNET | | Panel cutout (W x H) | 268 x 206 mm | |
| | | | Panel cutout (W x H) | 268 x 206 mm | | | | |
| TM 121 SVGA | 762-121 | 1 | WP 121 SVGA | 762-1121 | 1 | CP 121 SVGA TV | 762-3121/000-001 | 1 |
| Screen size (diagonal) | 30.7 cm (12.1") | | Screen size (diagonal) | 30.7 cm (12.1") | | Screen size (diagonal) | 30.7 cm (12.1") | |
| Display colors | 65536 colors | | Resolution/Color | 800 x 600 / 65k | | RAM / Flash / SRAM | 64 MB / 32 MB / 1 MB | |
| Graphics resolution | 800 x 600 pixels | | RAM / Flash / SRAM | 64 MB / 32 MB / 1 MB | | Memory expansion | CF card (max. 2 GB) | |
| Interfaces | 2 x USB 2.0, USB Device, DVI-D | | Memory expansion | CF Card | | Interfaces | 2 x USB 2.0, ETHERNET, 2 x CAN, RS-232, RS-485 | |
| Panel cutout (W x H) | 312 x 250 mm | | Interfaces | 2 x USB 2.0, ETHERNET | | Panel cutout (W x H) | 312 x 250 mm | |
| | | | Panel cutout (W x H) | 312 x 250 mm | | | | |
| TM 150 XGA | 762-150 | 1 | | | | CP 150 XGA TV | 762-3150/000-001 | 1 |
| Screen size (diagonal) | 38.1 cm (15") | | | | | Screen size (diagonal) | 38.1 cm (15") | |
| Display colors | 16 million colors | | | | | RAM / Flash / SRAM | 256 MB / 128 MB / - | |
| Graphics resolution | 1024 x 768 pixels | | | | | Memory expansion | CF card (max. 2 GB) | |
| Interfaces | 2 x USB 2.0, USB Device, DVI-D | | | | | Interfaces | 4 x USB 2.0, ETHERNET, RS-232, RS-485 | |
| Panel cutout (W x H) | 383 x 291 mm | | | | | Panel cutout (W x H) | 383 x 291 mm | |
| | | | | | | | | |
| | | | | | | CP 150 XGA CAN TV | 762-3150/000-003 | 1 |
| | | | | | | Screen size (diagonal) | 38.1 cm (15") | |
| | | | | | | RAM / Flash / SRAM | 256 MB / 128 MB / - | |
| | | | | | | Memory expansion | CF card (max. 2 GB) | |
| | | | | | | Interfaces | 4 x USB 2.0, ETHERNET, CAN, RS-232, RS-485 | |
| | | | | | | Panel cutout (W x H) | 383 x 291 mm | |

TO-PASS® Scalable Telecontrol Solutions from Fault Detector to Intelligent Telecontrol PLC 761 Series

| | | |
|--|--|--|
| TO-PASS® Mobile Compact GSM mobile radio network SMS, CSD, GPRS (Web) 4 x DI, 4 x DO, 2 x AI Operating voltage: 10 – 30 VDC Closed current: 35 mA Dimensions (W x H x L): 109 x 105 x 78 mm | TO-PASS® Compact GSM mobile radio network SMS, CSD, GPRS (Web) 8 x DI, 4 x DO, 8 x AI, 2 x AO Operating voltage: 8 – 36 VDC Closed current: 35 mA Dimensions (W x H x L): 109 x 105 x 78 mm | TO-PASS® GPRS Modem, RS-232 TO-PASS® GPRS Modem, VPN Router Supply voltage: 12 – 30 VDC (24 VDC nominal) Dimensions (W x H x L): 22.5 x 99 x 114.5 mm (761-510) 45 x 99 x 114.5 mm (761-520) |
|--|--|--|



| Designation | Item No. | Designation | Item No. | Designation | Item No. |
|------------------------------------|----------|-------------------------------------|----------|------------------------|----------|
| TO-PASS® Compact | 761-110 | TO-PASS® Compact | 761-210 | GPRS Modem, RS-232 | 761-510 |
| TO-PASS® Compact, 2 AI | 761-111 | TO-PASS® Compact, 8 AI, ESP, DSP | 761-214 | GPRS Modem, VPN Router | 761-520 |
| TO-PASS® Compact, Web | 761-112 | TO-PASS® Compact, 8 AI, Web, MODBUS | 761-216 | | |
| TO-PASS® Compact, 2 AI, Web | 761-113 | | | | |
| TO-PASS® Mobile, 4 AI | 761-314 | | | | |
| TO-PASS® Mobile, 4 AI, Web, MODBUS | 761-316 | | | | |

Accessories, 761 Series

| | |
|---|---|
| Self-adhesive antenna, with 2.5m cable, SMA straight plug  758-961 | USB adapter, with 1m connection cable  761-9005 |
| Magnetic foot antenna, with 2.5m cable, SMA straight plug  758-965 | Power supply/charge regulator, 115 – 230 VAC to 24 VDC, 1 A, also for battery mode  761-9007 |
| Rod antenna, with 1m connection cable, SMA straight plug  758-963 | Battery, 12 VDC, 1.2 Ah lead-gel  761-9008 |
| Theft-proof antenna, with 1m connection cable, SMA straight plug  758-962 | Outdoor housing  761-9009 |
| Theft-proof combination antenna, with 2.5m cable, SMA straight plug  758-966 | TO-PASS® configuration software, for 761-1xx and 761-2xx telecontrol modules  761-930 |



ETHERNET

Industrial Switches

852 Series

| | | |
|---|---|---|
| Industrial Switch, 5 Ports* Supply voltage: 9 - 48 VDC Ports: 5 x 10/100Base-TX (RJ-45) Dimensions (W x H x L): 50 x 120 x 105 mm | Industrial Switch, 8 Ports* Supply voltage: 9 - 48 VDC Ports: 8 x 10/100Base-TX (RJ-45) 2 x SFP 100Base-FX Fiber Dimensions (W x H x L): 50 x 162 x 120 mm | Industrial Switch, 7 Ports* Supply voltage: 9 - 48 VDC Ports: 7 x 10/100Base-TX (RJ-45) 2 x SFP 100Base-FX Fiber 1 x RS-232 (RJ-45) Dimensions (W x H x L): 50 x 162 x 120 mm |
|---|---|---|



| Designation | Item No. | Designation | Item No. | Designation | Item No. |
|-------------------------------------|----------|---------------------------------------|----------|---------------------------|----------|
| 5-Port 100Base-TX Industrial Switch | 852-101 | 8-Port 100Base-TX Industrial Switch | 852-102 | 7-Port 100Base-TX | |
| | | 8-Port 100Base-TX | | + 2-Slot 100Base-FX | |
| | | + 2-Slot 100Base-FX Industrial Switch | 852-103 | Industrial Managed Switch | 852-104 |

Accessories, 852 Series

| Accessories, 852 Series | SFP Module 2, | SFP Module 30, |
|-------------------------|---|---|
| |  1310 nm, 100Base-FX Multi-Mode LC, 2 km 852-201/107-002 |  1310 nm, 100Base-FX Single-mode LC, 30 km 852-201/107-030 |

| | | |
|--|--|--|
| Industrial ECO Switch, 5 Ports* Supply voltage: 18 - 30 VDC Ports: 5 x 10/100Base-TX (RJ-45) Dimensions (W x H x L): 23.4 x 73.8 x 109.2 mm | Industrial ECO Switch, 8 Ports* Supply voltage: 18 - 30 VDC Ports: 8 x 10/100Base-TX (RJ-45) Dimensions (W x H x L): 109.2 x 23.4 x 73.8 mm | |
|--|--|--|



| Designation | Item No. | Designation | Item No. |
|---|----------|---|----------|
| 5-Port 100Base-TX Industrial ECO Switch | 852-111 | 8-Port 100Base-TX Industrial ECO Switch | 852-112 |
| | | | |
| | | | |
| | | | |

* All technical data and approvals are available in our Full Line Catalog, Volume 3, AUTOMATION, or online at www.wago.com.

EPSITRON® Primary Switch Mode Power Supplies 787 Series

| | | |
|---|---|---|
| EPSITRON® COMPACT Power Open/short circuit protected, adjustable output voltage, LED status indication, for DIN 35 rail 0.08 - 2.5 mm ² / AWG 28 - 14 | EPSITRON® ECO Power Open/short circuit protected, adjustable output voltage, LED status indication, for DIN 35 rail 0.08 - 4 mm ² / AWG 28 - 12 | EPSITRON® CLASSIC Power Open/short circuit protected, adjustable output voltage, LED status indication, for DIN 35 rail 0.08 - 2.5 mm ² / AWG 28 - 14 |
|---|---|---|



| Output current | Item No. | Pack. Unit | Output current | Item No. | Pack. Unit | Output current | Item No. | Pack. Unit |
|--|----------|------------|--|----------|------------|--|----------|------------|
| Primary Switch Mode Power Supply, 1-Phase | | | Primary Switch Mode Power Supply, 1-Phase | | | Primary Switch Mode Power Supply, 1-Phase | | |
| Input voltage: 85 - 264 VAC 120 - 373 VDC | | | Input voltage: 85 - 264 VAC Nominal voltage: 230 VAC | | | Input voltage: 110 - 230 VAC Nominal voltage: 90 - 264 VAC, 130 - 300 VDC | | |
| Nominal voltage: 100 - 240 VAC | | | 24VDC / 2.5A 787-712 1 | | | 12 VDC / 2 A 787-601 1 | | |
| 12 VDC / 2 A 787-1001 1 | | | Dimensions (mm) W x H x L: 50 x 92 x 136 | | | Dimensions (mm) W x H x L: 40 x 95 x 90 | | |
| Dimensions (mm) W x H x L: 54 x 59 x 89 | | | Input voltage: 85 - 264 VAC Nominal voltage: 230 VAC | | | parallel operation, thermal overload protection | | |
| Input voltage: 85 - 264 VAC 120 - 373 VDC | | | 24 VDC / 0.5 A 787-722 1 | | | 12 VDC / 4 A 787-611 1 | | |
| Nominal voltage: 100 - 240 VAC | | | Dimensions (mm) W x H x L: 75 x 92 x 136 | | | Dimensions (mm) W x H x L: 51 x 133 x 120 | | |
| 12 VDC / 4 A 787-1011 1 | | | Input voltage: 85 - 264 VAC Nominal voltage: 230 VAC | | | 12 VDC / 8 A 787-621 1 | | |
| Dimensions (mm) W x H x L: 72 x 59 x 89 | | | Input voltage: 85 - 264 VAC Nominal voltage: 230 VAC | | | Dimensions (mm) W x H x L: 67 x 133 x 120 | | |
| Input voltage: 85 - 264 VAC 120 - 373 VDC | | | 24 VDC / 10 A 787-732 1 | | | 24 VDC / 1.3 A 787-602 1 | | |
| Nominal voltage: 100 - 240 VAC | | | Dimensions (mm) W x H x L: 110 x 92 x 136 | | | Dimensions (mm) W x H x L: 40 x 95 x 90 | | |
| 12 VDC / 4 A 787-1011 1 | | | Input voltage: 85 - 264 VAC / 90 - 350 VAC Nominal voltage: 110 - 230 VAC | | | parallel operation, thermal overload protection | | |
| Dimensions (mm) W x H x L: 54 x 59 x 89 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | 24VDC / 2.5A 787-612 1 | | |
| Input voltage: 85 - 264 VAC 120 - 373 VDC | | | Dimensions (mm) W x H x L: 54 x 59 x 89 | | | Dimensions (mm) W x H x L: 51 x 133 x 120 | | |
| Nominal voltage: 100 - 240 VAC | | | 24 VDC / 1.3 A 787-1002 1 | | | 24 VDC / 0.5 A 787-622 1 | | |
| 24 VDC / 1.3 A 787-1012 1 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | Dimensions (mm) W x H x L: 67 x 133 x 120 | | |
| Dimensions (mm) W x H x L: 72 x 59 x 89 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | Input voltage: 85 - 264 VAC / 90 - 350 VAC Nominal voltage: 110 - 230 VAC | | |
| Input voltage: 85 - 264 VAC 120 - 373 VDC | | | 24 VDC / 10 A 787-732 1 | | | Nominal voltage: 110 - 230 VAC, parallel operation | | |
| Nominal voltage: 100 - 240 VAC | | | Dimensions (mm) W x H x L: 110 x 92 x 136 | | | 24 VDC / 10 A 787-632 1 | | |
| 24 VDC / 10 A 787-1022 1 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | Dimensions (mm) W x H x L: 115 x 87 x 140 | | |
| Dimensions (mm) W x H x L: 90 x 59 x 89 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | Input voltage: 90 - 264 VAC, 130 - 300 VDC Nominal voltage: 110 - 230 VAC, parallel operation | | |
| Input voltage: 85 - 264 VAC 120 - 373 VDC | | | 24 VDC / 4 A 787-1022 1 | | | 48 VDC / 1 A 787-613 1 | | |
| Nominal voltage: 100 - 240 VAC | | | Dimensions (mm) W x H x L: 90 x 59 x 89 | | | Dimensions (mm) W x H x L: 51 x 133 x 120 | | |
| 24 VDC / 4 A 787-1022 1 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | 48 VDC / 2 A 787-623 1 | | |
| Dimensions (mm) W x H x L: 90 x 59 x 89 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | Dimensions (mm) W x H x L: 67 x 133 x 120 | | |
| Input voltage: 85 - 264 VAC 120 - 373 VDC | | | 24 VDC / 4 A 787-1022 1 | | | Input voltage: 176 - 264 VAC / 90 - 132 VAC Nominal voltage: 110 - 230 VAC | | |
| Nominal voltage: 100 - 240 VAC | | | Dimensions (mm) W x H x L: 90 x 59 x 89 | | | 48 VDC / 5 A 787-633 1 | | |
| 24 VDC / 4 A 787-1022 1 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | Dimensions (mm) W x H x L: 115 x 87 x 140 | | |
| Dimensions (mm) W x H x L: 90 x 59 x 89 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Input voltage: 85 - 264 VAC 120 - 373 VDC | | | 24 VDC / 4 A 787-1022 1 | | | | | |
| Nominal voltage: 100 - 240 VAC | | | Dimensions (mm) W x H x L: 90 x 59 x 89 | | | | | |
| 24 VDC / 4 A 787-1022 1 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Dimensions (mm) W x H x L: 90 x 59 x 89 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Input voltage: 85 - 264 VAC 120 - 373 VDC | | | 24 VDC / 4 A 787-1022 1 | | | | | |
| Nominal voltage: 100 - 240 VAC | | | Dimensions (mm) W x H x L: 90 x 59 x 89 | | | | | |
| 24 VDC / 4 A 787-1022 1 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Dimensions (mm) W x H x L: 90 x 59 x 89 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Input voltage: 85 - 264 VAC 120 - 373 VDC | | | 24 VDC / 4 A 787-1022 1 | | | | | |
| Nominal voltage: 100 - 240 VAC | | | Dimensions (mm) W x H x L: 90 x 59 x 89 | | | | | |
| 24 VDC / 4 A 787-1022 1 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Dimensions (mm) W x H x L: 90 x 59 x 89 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Input voltage: 85 - 264 VAC 120 - 373 VDC | | | 24 VDC / 4 A 787-1022 1 | | | | | |
| Nominal voltage: 100 - 240 VAC | | | Dimensions (mm) W x H x L: 90 x 59 x 89 | | | | | |
| 24 VDC / 4 A 787-1022 1 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Dimensions (mm) W x H x L: 90 x 59 x 89 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Input voltage: 85 - 264 VAC 120 - 373 VDC | | | 24 VDC / 4 A 787-1022 1 | | | | | |
| Nominal voltage: 100 - 240 VAC | | | Dimensions (mm) W x H x L: 90 x 59 x 89 | | | | | |
| 24 VDC / 4 A 787-1022 1 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Dimensions (mm) W x H x L: 90 x 59 x 89 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Input voltage: 85 - 264 VAC 120 - 373 VDC | | | 24 VDC / 4 A 787-1022 1 | | | | | |
| Nominal voltage: 100 - 240 VAC | | | Dimensions (mm) W x H x L: 90 x 59 x 89 | | | | | |
| 24 VDC / 4 A 787-1022 1 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Dimensions (mm) W x H x L: 90 x 59 x 89 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Input voltage: 85 - 264 VAC 120 - 373 VDC | | | 24 VDC / 4 A 787-1022 1 | | | | | |
| Nominal voltage: 100 - 240 VAC | | | Dimensions (mm) W x H x L: 90 x 59 x 89 | | | | | |
| 24 VDC / 4 A 787-1022 1 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Dimensions (mm) W x H x L: 90 x 59 x 89 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Input voltage: 85 - 264 VAC 120 - 373 VDC | | | 24 VDC / 4 A 787-1022 1 | | | | | |
| Nominal voltage: 100 - 240 VAC | | | Dimensions (mm) W x H x L: 90 x 59 x 89 | | | | | |
| 24 VDC / 4 A 787-1022 1 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Dimensions (mm) W x H x L: 90 x 59 x 89 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Input voltage: 85 - 264 VAC 120 - 373 VDC | | | 24 VDC / 4 A 787-1022 1 | | | | | |
| Nominal voltage: 100 - 240 VAC | | | Dimensions (mm) W x H x L: 90 x 59 x 89 | | | | | |
| 24 VDC / 4 A 787-1022 1 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Dimensions (mm) W x H x L: 90 x 59 x 89 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Input voltage: 85 - 264 VAC 120 - 373 VDC | | | 24 VDC / 4 A 787-1022 1 | | | | | |
| Nominal voltage: 100 - 240 VAC | | | Dimensions (mm) W x H x L: 90 x 59 x 89 | | | | | |
| 24 VDC / 4 A 787-1022 1 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Dimensions (mm) W x H x L: 90 x 59 x 89 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Input voltage: 85 - 264 VAC 120 - 373 VDC | | | 24 VDC / 4 A 787-1022 1 | | | | | |
| Nominal voltage: 100 - 240 VAC | | | Dimensions (mm) W x H x L: 90 x 59 x 89 | | | | | |
| 24 VDC / 4 A 787-1022 1 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Dimensions (mm) W x H x L: 90 x 59 x 89 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Input voltage: 85 - 264 VAC 120 - 373 VDC | | | 24 VDC / 4 A 787-1022 1 | | | | | |
| Nominal voltage: 100 - 240 VAC | | | Dimensions (mm) W x H x L: 90 x 59 x 89 | | | | | |
| 24 VDC / 4 A 787-1022 1 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |
| Dimensions (mm) W x H x L: 90 x 59 x 89 | | | Input voltage: 85 - 264 VAC Nominal voltage: 100 - 240 VAC | | | | | |

Please find the entire product range in our Full Line Catalog, Volume 3, AUTOMATION. Additional information at www.wago.com. For technical explanations and abbreviations, see technical section.

EPSITRON® Primary Switch Mode Power Supplies 787 Series

| | | |
|---|---|--|
| EPSITRON® PRO Power Open/short circuit protected, adjustable output voltage, LED status indication, for DIN 35 rail 0.08 - 2.5 mm ² / AWG 28 - 14 | EPSITRON® PRO Power Open/short circuit protected, adjustable output voltage, LED status indication, for DIN 35 rail 0.08 - 2.5 mm ² / AWG 28 - 14 | EPSITRON® 0.08 - 2.5 mm ² / AWG 28 - 14 |
|---|---|--|



| Output current | Item No. | Pack. Unit | Output current | Item No. | Pack. Unit | Output current | Item No. | Pack. Unit |
|--|----------|------------|--|----------|------------|---|----------|------------|
| Primary Switch Mode Power Supply, 1-Phase | | | Primary Switch Mode Power Supply, 3-Phase | | | Electronic Circuit Breaker | | |
| Input voltage: 85 - 264 VAC | | | Input voltage: 340 - 550 VAC | | | Input voltage: 24 VDC | | |
| 120 - 350 VDC | | | 480 - 780 VDC | | | Output voltage: 4 x 24 VDC | | |
| Nominal voltage: 1/2 x 100 - 240 VAC | | | Nominal voltage: 3x (2x) 400 - 500 VAC | | | 4 x 1 - 6 ADC 787-860 1 | | |
| 12 VDC / 6 A 787-819 1 | | | 24 VDC / 10 A 787-840 1 | | | Dimensions (mm) W x H x L: 40 x 171 x 163 | | |
| Dimensions (mm) W x H x L: 40 x 163 x 127 | | | Dimensions (mm) W x H x L: 57 x 163 x 179 | | | Electronic Circuit Breaker | | |
| Input voltage: 85 - 264 VAC | | | Input voltage: 340 - 550 VAC | | | Input voltage: 24 VDC | | |
| 120 - 350 VDC | | | 480 - 780 VDC | | | Output voltage: 4 x 24 VDC | | |
| Nominal voltage: 1/2 x 100 - 240 VAC | | | Nominal voltage: 3x (2x) 400 - 500 VAC | | | 4 x 1 - 8 ADC 787-861 1 | | |
| 12 VDC / 10 A 787-821 1 | | | 24 VDC / 20 A 787-842 1 | | | Dimensions (mm) W x H x L: 40 x 171 x 163 | | |
| Dimensions (mm) W x H x L: 57 x 163 x 127 | | | Dimensions (mm) W x H x L: 77 x 171 x 179 | | | Electronic Circuit Breaker | | |
| Input voltage: 85 - 264 VAC | | | Input voltage: 340 - 550 VAC | | | Input voltage: 24 VDC | | |
| 120 - 350 VDC | | | 480 - 780 VDC | | | Output voltage: 4 x 24 VDC | | |
| Nominal voltage 1/2 x 110 - 240 VAC | | | Nominal voltage: 3x (2x) 400 - 500 VAC | | | 4 x 1 - 10 ADC 787-862 1 | | |
| 12 VDC / 15 A 787-831 1 | | | 24 VDC / 40 A 787-844 1 | | | Dimensions (mm) W x H x L: 40 x 171 x 163 | | |
| Dimensions (mm) W x H x L: 57 x 179 x 127 | | | Dimensions (mm) W x H x L: 128 x 171 x 205 | | | UPS Charger and Controller | | |
| Input voltage: 85 - 264 VAC | | | Input voltage: 340 - 550 VAC | | | Input voltage: 24 VDC | | |
| 120 - 350 VDC | | | 480 - 780 VDC | | | Output voltage: 24 VDC | | |
| Nominal voltage: 1/2 x 100 - 240 VAC | | | Nominal voltage: 3x (2x) 400 - 500 VAC | | | 10 A 787-870 1 | | |
| 24 VDC / 3 A 787-818 1 | | | 48 VDC / 10 A 787-845 1 | | | Dimensions (mm) W x H x L: 40 x 163 x 163 | | |
| Dimensions (mm) W x H x L: 40 x 163 x 127 | | | Dimensions (mm) W x H x L: 77 x 179 x 127 | | | UPS Charger and Controller | | |
| Input voltage: 85 - 264 VAC | | | Input voltage: 340 - 550 VAC | | | Input voltage: 24 VDC | | |
| 120 - 373 VDC | | | 480 - 780 VDC | | | Output voltage: 24 VDC | | |
| Nominal voltage: 100 - 240 VAC | | | Nominal voltage: 3x (2x) 400 - 500 VAC | | | 20 A 787-875 1 | | |
| 24 VDC / 0.5 A 787-822 1 | | | 48 VDC / 20 A 787-847 1 | | | Dimensions (mm) W x H x L: 57 x 163 x 171 | | |
| Dimensions (mm) W x H x L: 57 x 163 x 163 | | | Dimensions (mm) W x H x L: 128 x 205 x 127 | | | Redundancy Module | | |
| Input voltage: 85 - 264 VAC | | | Primary Switch Mode Power Supply, 3-Phase, with Display | | | Input voltage: 2 x 24 VDC | | |
| 120 - 373 VDC | | | Input voltage: 340 - 550 VAC | | | Output voltage: 24 VDC | | |
| Nominal voltage: 100 - 240 VAC | | | 480 - 780 VDC | | | 2 x 20 A/1 x 40 A 787-885 1 | | |
| 24 VDC / 10 A 787-832 1 | | | Nominal voltage: 3x (2x) 400 - 500 VAC | | | Dimensions (mm) W x H x L: 40 x 163 x 181 | | |
| Dimensions (mm) W x H x L: 57 x 163 x 179 | | | Dimensions (mm) W x H x L: 57 x 163 x 179 | | | Redundancy Module | | |
| Input voltage: 85 - 264 VAC | | | Input voltage: 340 - 550 VAC | | | Input voltage: 2 x 48 VDC | | |
| 120 - 350 VDC | | | 480 - 780 VDC | | | Output voltage: 48 VDC | | |
| Nominal voltage 1/2 x 110 - 240 VAC | | | Nominal voltage: 3x (2x) 400 - 500 VAC | | | 2 x 20 A/1 x 40 A 787-886 1 | | |
| 24 VDC / 20 A 787-834 1 | | | 24 VDC / 20 A 787-852 1 | | | Dimensions (mm) W x H x L: 40 x 163 x 181 | | |
| Dimensions (mm) W x H x L: 97 x 187 x 163 | | | Dimensions (mm) W x H x L: 77 x 171 x 179 | | | Capacitive Buffer Module | | |
| Input voltage: 85 - 264 VAC | | | Input voltage: 340 - 550 VAC | | | Input voltage: 24 VDC | | |
| 120 - 350 VDC | | | 480 - 780 VDC | | | Output voltage: 24 VDC | | |
| Nominal voltage: 110 - 240 VAC | | | Nominal voltage: 3x (2x) 400 - 500 VAC | | | 10 A 787-880 1 | | |
| 48 VDC / 5 A 787-833 1 | | | 24 VDC / 40 A 787-854 1 | | | Dimensions (mm) W x H x L: 57 x 179 x 163 | | |
| Dimensions (mm) W x H x L: 57 x 179 x 127 | | | Dimensions (mm) W x H x L: 128 x 171 x 205 | | | 20 A 787-881 1 | | |
| 48 VDC / 10 A 787-835 1 | | | | | | Dimensions (mm) W x H x L: 57 x 179 x 181 | | |
| Dimensions (mm) W x H x L: 97 x 187 x 127 | | | | | | | | |

Shield Connecting System 790 and 791 Series



Snap into any metal plate up to max. thickness 3 mm.



790 Series



791 Series



791 Series



Installation on a specialty slotted carrier rail



Installation on busbar with insulated mounting feet



Installation on U-shaped copper busbar

Shield Clamping Saddle

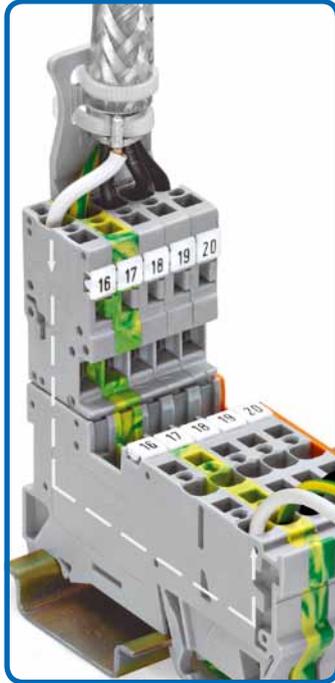
| Saddle Width | Cable Diameter | Item No. | Saddle Width | Cable Diameter | Item No. |
|--------------|----------------|----------|--------------|----------------|----------|
| 11 mm | 8 | 790-108 | 10 mm | 1,5 - 6,5 | 791-107 |
| 19 mm | 7 - 16 | 790-116 | 17 mm | 5 - 11 | 791-111 |
| 27 mm | 6 - 24 | 790-124 | 23 mm | 10 - 17 | 791-117 |
| 43 mm | 22 - 40 | 790-140 | 30 mm | 16 - 24 | 791-124 |

Accessories, 790 Series

| | | | |
|--|--|----------------------|-------------|
| | Carrier with grounding foot , 45 mm bar 90° to the rail, copper, (10 x 3) mm | 790-113 | 25 |
| | Carrier with grounding foot , bar parallel to the rail, copper, (10 x 3) mm, 25 mm long | 790-112 | 25 |
| | Carrier with grounding foot , bar parallel to the rail, copper, (10 x 3) mm, 45 mm long | 790-114 | 25 |
| | Carrier with 2 grounding feet , 125 mm bar parallel to the rail, copper, (10 x 3) mm | 790-115 | 25 |
| | Carrier rail , specialty slotted, 1000 mm long, tin-plated (special lengths upon request) | 790-145 | 1 |
| | Spacer sleeve , for specialty slotted carrier rail, for M5-size screw | 790-144 | 200 (2x100) |
| | Straight busbar , tin-plated, 1000 mm copper, (10 x 3) mm | 210-133 | 20 (20x1) |
| | | 30 mm 790-133 | 20 (20x1) |
| | | 50 mm 790-134 | 20 (20x1) |
| | Insulated mounting foot , for busbar with M4 x 8 mm screw gray | 790-100 | 50 (2x25) |
| | with (3.5 x 9) mm sheet metal screw gray | 790-101 | 50 (2x25) |
| | U-shaped busbar , for I/O modules, 750 Series copper, (10 x 3) mm for 5 I/O | 790-190 | 25 (5x5) |
| | for 8 I/O | 790-191 | 25 (1x25) |
| | Busbar carrier , for (10 x 3) mm copper busbars, straight | 790-300 | 10 |
| | angled | 790-301 | 10 |
| | Shield termination , incl. cable tie for 5 - 10 mm Ø, 55 mm long | 709-350 | 100 (4x25) |
| | 150 mm long | 709-352 | 100 (4x25) |

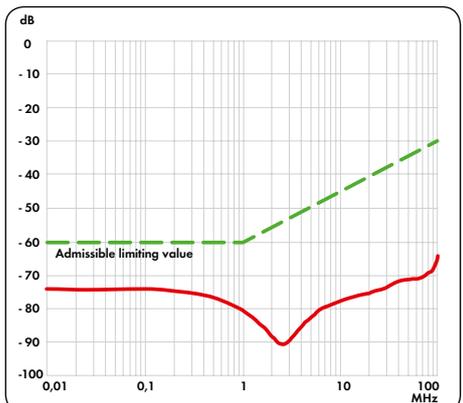


Removing the busbar carrier.



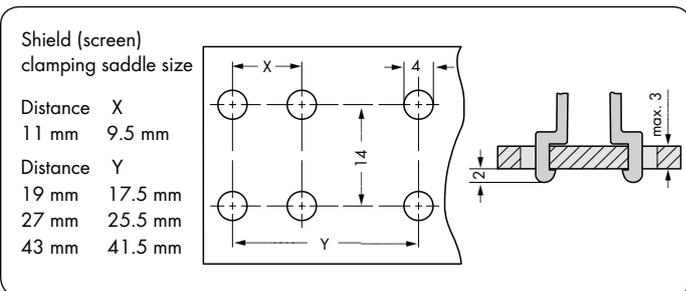
Shield termination

Negative Shield Attenuation



The WAGO shield connecting system is highly effective because the clamping unit can be brought very close to the unshielded part of the cable. Additionally, the spring material is part of the clamping saddle, providing a good electrical connection (the system also acts as a partial strain relief). The spring element integrated in the shield clamping saddle compensates deformation and settling that results from a connected shield.

Hole Dimensions for Panel Mounting (790 Series)



JUMPFLEX®

A Complete Product Line is Available, Bringing Each Signal into Shape 857 Series

Perfectly pairing a housing with electronics is key to a highly successful device. This goal has been achieved by WAGO with the new family of 857 Series Transducers and Relay Modules.

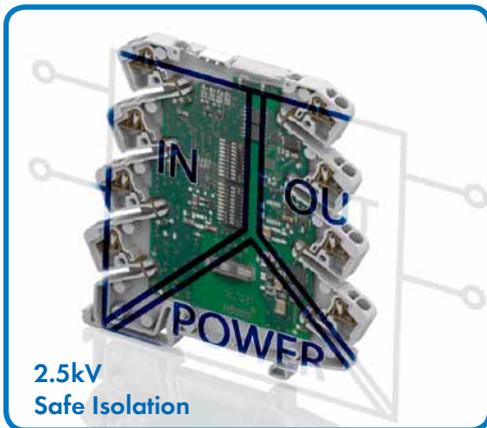
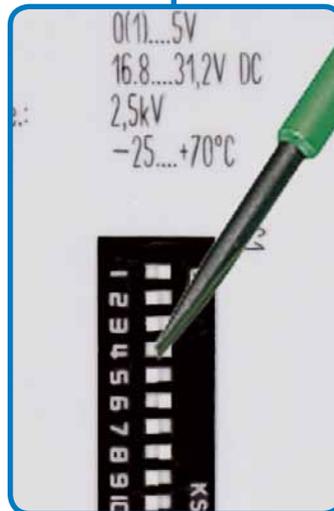
Clear Identification

Clear marking via WMB Multi markers.



Flexibility At Its Finest

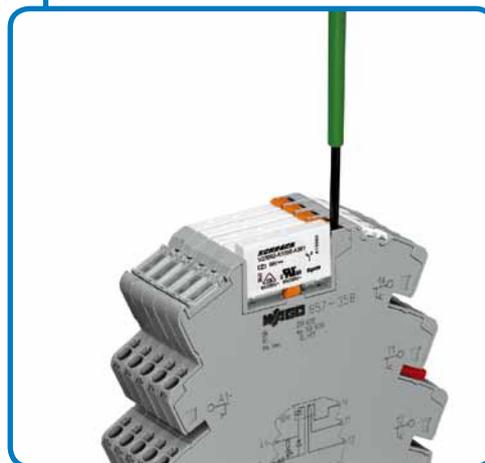
Configuration via DIP switch.
Temperature transducers can also be configured via software.



2.5kV
Safe Isolation

Simple Handling

Removing relay via 3.5mm screwdriver.



CAGE CLAMP®

Maximum Safety

All devices provide "safe isolation" with 2.5kV test voltage to EN 61140.

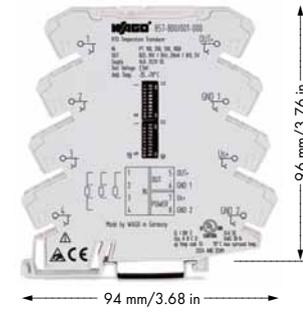
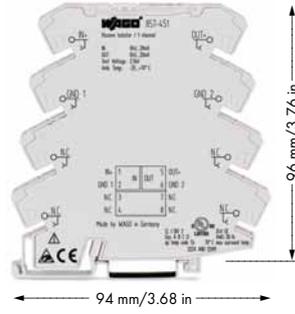
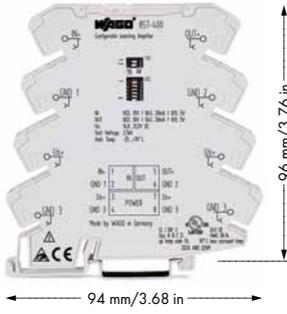


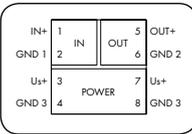
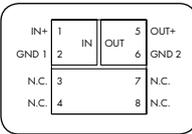
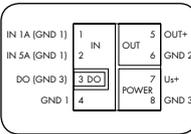
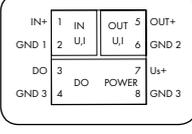
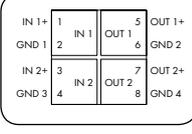
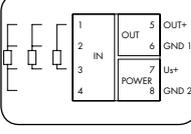
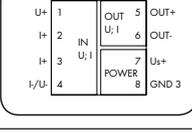
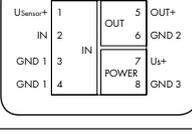
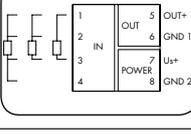
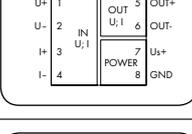
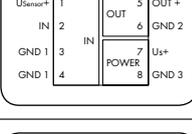
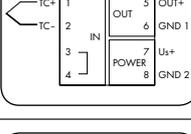
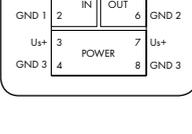
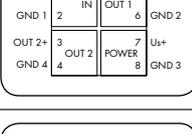
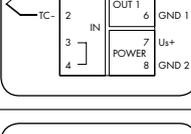
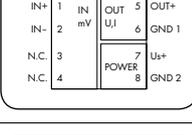
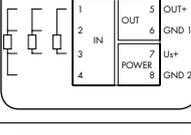
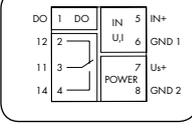
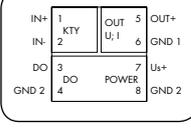
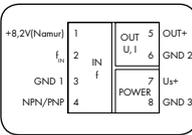
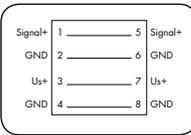
Commoning, Not Discrete Wiring

Same outline allows use of a single in-line, push-in jumper.

JUMPFLEX® Transducers 857 Series

| | | |
|--|---|---|
| Transducers 0.08 - 0.2 mm ² "sol." / 0.34 - 2.5 mm ² "f-st" Voltage supply: 16.8 - 31.2 V Temperature range: -25 °C to +70 °C Width: 6 mm  9 - 10 mm / 0.37 in | Transducers 0.08 - 0.2 mm ² "sol." / 0.34 - 2.5 mm ² "f-st" Voltage supply: 16.8 - 31.2 V Temperature range: -25 °C to +70 °C Width: 6 mm  9 - 10 mm / 0.37 in | Transducers 0.08 - 0.2 mm ² "sol." / 0.34 - 2.5 mm ² "f-st" Voltage supply: 16.8 - 31.2 V Temperature range: -25 °C to +60 °C Width: 6 mm  9 - 10 mm / 0.37 in |
|--|---|---|



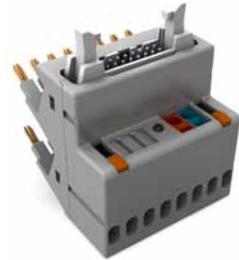
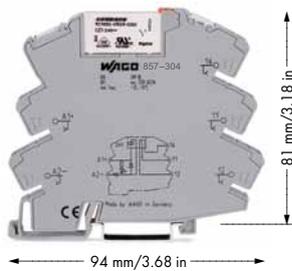
| Item No. | Pack. Unit | Item No. | Pack. Unit | Item No. | Pack. Unit |
|---|--|---|------------|----------|------------|
|  Isolation amplifier, configurable, with zero/span adjustment 857-400 1 |  Passive isolator, 1-channel 857-451 1 |  Current transducer 0 - 1 A, 0 - 5 A AC/DC 857-550 1 | | | |
|  Isolation amplifier, configurable, with digital output 857-401 1 |  Passive isolator, 2-channel 857-452 1 |  Temperature transducer for RTD 857-800 1 | | | |
|  Universal isolation amplifier, configurable 857-402 1 |  Repeater power supply 857-420 1 |  Temperature transducer for RTD 857-801 1 | | | |
|  Bipolar isolation amplifier 857-409 1 |  Repeater power supply, HART 857-421 1 |  Temperature transducer for thermocouples 857-810 1 | | | |
|  Isolation amplifier, fixed setting Input: 0(4) - 20 mA Output: 0(4) - 20 mA 857-411 1 |  Signal splitter 857-423 1 |  Temperature transducer for thermocouples 857-811 1 | | | |
| Input: 0(2) - 10 V Output: 0(2) - 10 V 857-412 1 |  Millivolt transducer 857-819 1 |  Temperature transducer for Ni sensors 857-818 1 | | | |
| Input: 0 - 10 V Output: 0 - 20 mA 857-413 1 |  Threshold value switch 857-531 1 |  Temperature transducer for KTY sensors 857-820 1 | | | |
| Input: 0 - 10 V Output: 4 - 20 mA 857-414 1 |  Frequency transducer 0.1 - 120 KHz 857-500 1 |  Supply and through module 857-979 1 | | | |
| Input: 0 - 20 mA Output: 0 - 10 V 857-415 1 | | | | | |
| Input: 4 - 20 mA Output: 0 - 10 V 857-416 1 | | | | | |

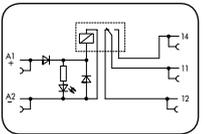
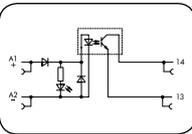
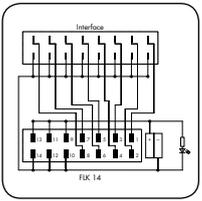
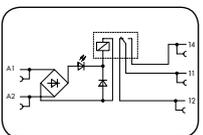
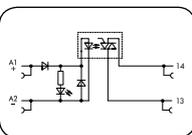
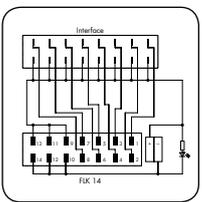
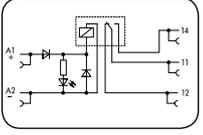
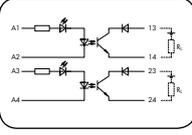
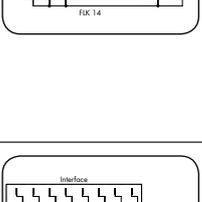
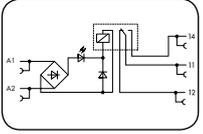
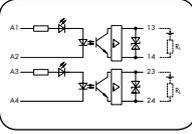
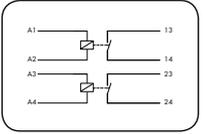
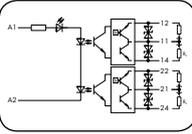
JUMPFLEX®

Relays, Optocouplers and Adapters

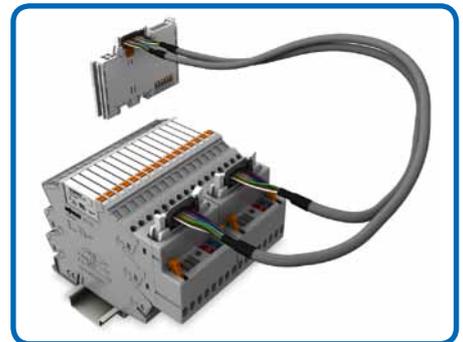
857 Series

| | | |
|--|--|--|
| Relays 0.08 - 0.2 mm ² "sol." / 0.34 - 2.5 mm ² "f-st" Voltage supply: 16.8 - 31.2 V Temperature range: -25°C to +60°C Width: 6 mm  9 - 10 mm / 0.37 in | Optocouplers 0.08 - 0.2 mm ² "sol." / 0.34 - 2.5 mm ² "f-st" Voltage supply: 16.8 - 31.2 V Temperature range: -25°C to +60°C Width: 6 mm  9 - 10 mm / 0.37 in | 8-Channel Adapter 0.08 - 2.5 mm ² / AWG 28 - 14  5 - 6 mm / 0.22 in |
|--|--|--|



| Item No. | Pack. Unit | Item No. | Pack. Unit | Item No. | Pack. Unit |
|---|------------|---|------------|---|------------|
|  <p>Socket with miniature switching relay</p> <p>857-303 12 VDC 1</p> <p>857-304 24 VDC 1</p> <p>857-305 48 VDC 1</p> <p>857-306 60 VDC 1</p> <p>857-307 110 VDC 1</p> <p>857-308 220 VDC 1</p> | |  <p>Optocoupler, with plugged solid-state relay</p> <p>Switching voltage ①</p> <p>857-724 24 VDC 1</p> <p>857-727 115 V AC/DC 1</p> <p>857-728 230 V AC/DC 1</p> | |  <p>8-channel adapter for system wiring, with 14-pole ribbon cable connector to DIN 41651, high-side switching input</p> <p>Supply voltage: 24 VDC</p> <p>Current carrying capacity: 1 A</p> <p>857-981 1</p> | |
|  <p>Socket with miniature switching relay</p> <p>857-354 24 V AC/DC 1</p> <p>857-357 115 V AC/DC 1</p> <p>857-358 230 V AC/DC 1</p> | |  <p>Optocoupler, with plugged solid-state relay</p> <p>Switching voltage ③</p> <p>857-714 24 VDC 1</p> <p>857-717 115 V AC/DC 1</p> <p>857-718 230 V AC/DC 1</p> | |  <p>8-channel adapter for system wiring, with 14-pole ribbon cable connector to DIN 41651, high-side switching output</p> <p>Supply voltage: 24 VDC</p> <p>Current carrying capacity: 1 A</p> <p>857-982 1</p> | |
|  <p>Socket with miniature switching relay, with gold contacts</p> <p>857-314 24 VDC 1</p> <p>857-317 110 VDC 1</p> <p>857-318 220 VDC 1</p> | |  <p>Optocouplers</p> <p>Input: 2 x 24 VDC</p> <p>Output: 2 x 9 - 60 VDC</p> <p>Max. switching current: 2 x 0.1 A</p> <p>857-1494 1</p> | |  <p>8-channel adapter for system wiring, with D-sub male connector</p> <p>Supply voltage: 24 VDC</p> <p>Current carrying capacity: 1 A</p> <p>857-986 1</p> | |
|  <p>Socket with miniature switching relay, with gold contacts</p> <p>857-364 24 V AC/DC 1</p> <p>857-367 115 V AC/DC 1</p> <p>857-368 230 V AC/DC 1</p> | |  <p>Optocouplers</p> <p>Input: 2 x 24 VDC</p> <p>Output: 2 x 3 - 30 VDC</p> <p>Max. switching current: 2 x 3 A</p> <p>857-1430 1</p> | | | |
|  <p>Socket with miniature switching relay</p> <p>857-1330 24 V AC/DC 1</p> | |  <p>Optocouplers</p> <p>Input: 24 VDC</p> <p>Output: 2 changeover contacts, 2 x 9 - 60 VDC</p> <p>Max. switching current: 2 x 0.5 A</p> <p>857-1432 1</p> | | | |

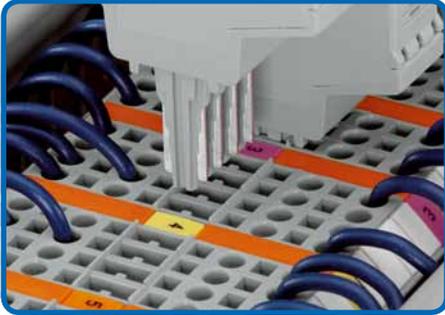
| | | | |
|---|---|--|--|
| Accessories, 857 Series | | Appropriate marking system: WMB | |
|  <p>Push-in type jumper bars, light gray, insulated, I_N 18 A</p> <p>2-way 859-402 200 (8x25)</p> <p>3-way 859-403 200 (8x25)</p> <p>4-port 859-404 200 (8x25)</p> <p>⋮</p> <p>10-port 859-410 100 (4x25)</p> |  <p>WAGO USB communication cable, connects a PC (notebook) to the 857 Series transducer interface</p> <p>750-923 1</p> | | |



① 0 - 24 VDC / 2 A ② 0 - 48 VDC / 0.1 A ③ 24 - 230 VAC / 1 A

4 INTERFACE ELECTRONIC . . .

Plugging



Coding ensures correct polarity.

Testing



Function testing via touch-proof test slots

Function modules on carrier terminal blocks



Pluggable electronic modules on 2- or 4-conductor carrier terminal blocks

Clamping units



4-conductor carrier terminal blocks – Two clamping units per side enable parallel feeding of voltage supply to multiple units.

Pluggable function modules on carrier terminal blocks



Marking



Marking plate, for group or block marking

System circuits

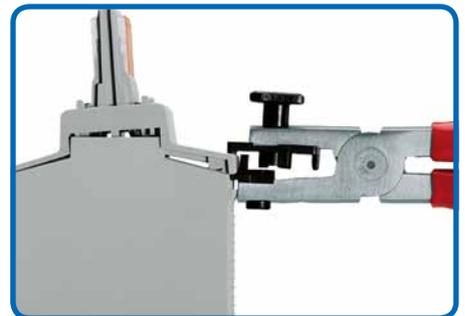


Printed system circuits for quick function recognition

Service



Pliers for removing function module housing covers (see page 171)



CAGE CLAMP®
clamps the following
copper conductors:

solid

Strip length, see packaging or instructions.



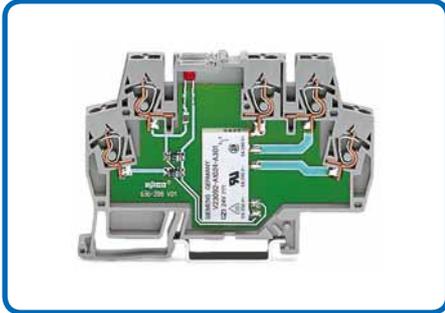
stranded



fine-stranded,
also with tinned
single strands

... Description and Handling

859 Series



Relay and optocoupler modules

Overvoltage protection

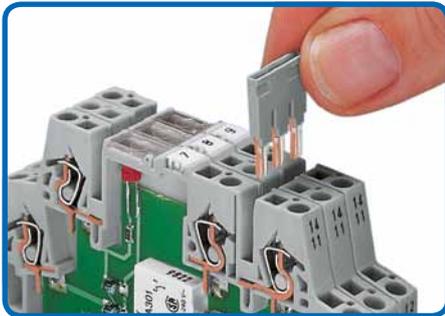


Rail-mounted terminal blocks with overvoltage protection

Interface Modules



Commoning

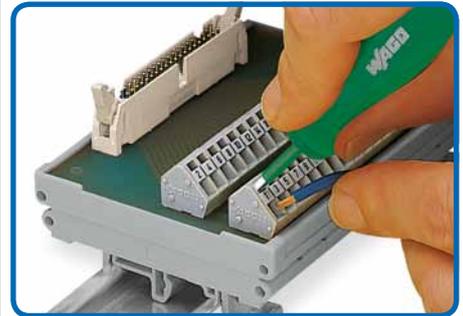


Commoning using a 3-way push-in type jumper bar. 2-way to 10-way jumper bars are also available.



Rail-Mounted Terminal Blocks with Overvoltage Protection

CAGE CLAMP® connection



"Front-entry" conductor termination

Marking

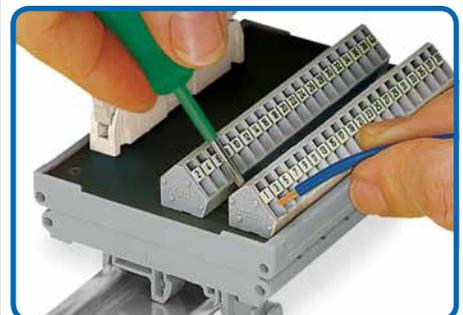


Each clamping unit is marked individually.



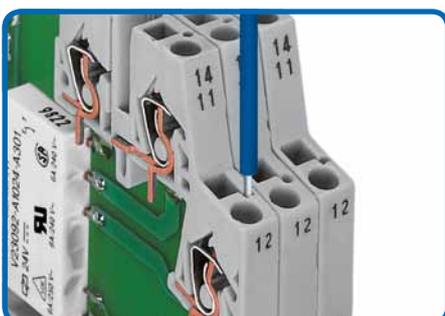
Pluggable surge suppression modules

CAGE CLAMP® connection



"Side-entry" conductor termination

Testing

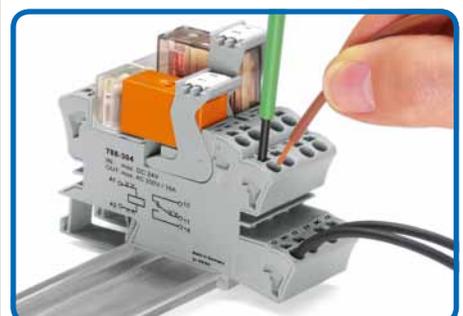


Testing with test pin.

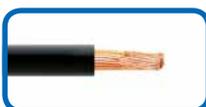


For mounting carriers and empty component plug housings, see page 170.

CAGE CLAMP®S connection



Push-in termination of solid conductors or fine-stranded conductors with ultrasonically bonded conductor ends or ferrules.



fine-stranded, tip-bonded



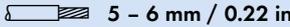
fine-stranded with ferrule ❶ (gastight crimped)

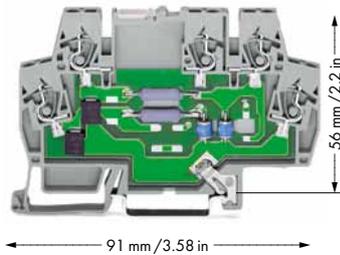


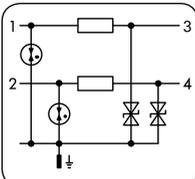
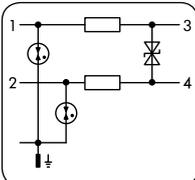
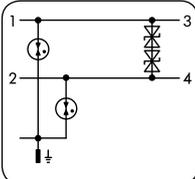
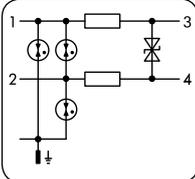
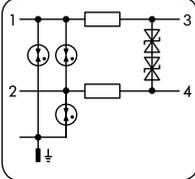
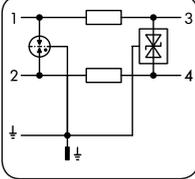
fine-stranded, with pin terminal (gastight crimped)

❶ When using ferrules, the max. conductor cross section which can be accommodated is one size smaller than max. rating of terminal block.

Rail-mounted terminal blocks with overvoltage protection 792 Series

| | | |
|--|---|---|
| <p>Overvoltage protection for information technology systems</p> <p>0.08 – 2.5 mm² AWG 28 – 14</p> <p>Terminal block width: 6 mm</p>  <p>5 – 6 mm / 0.22 in</p> | <p>Accessories for:</p> <ul style="list-style-type: none"> – Relay and optocoupler modules – Rail-mounted terminal blocks with overvoltage protection | <p>Accessories for:</p> <ul style="list-style-type: none"> – Relay and optocoupler modules – Rail-mounted terminal blocks with overvoltage protection |
|--|---|---|



| Item No. | Pack. Unit | Item No. | Pack. Unit | Item No. | Pack. Unit | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|----------------|---|------------|---|------------|----------------|---|----------------|----------------|---|-----------------|----------------|---|-----------------|----------------|---|-----------------|----------------|---|-----------------|----------------|---|---------------|----------------|---|--------------------|----------------|---|---------------------|----------------|---|-------------|----------------|---|--------------------|----------------|---|---------------------|----------------|---|-------------|----------------|---|
|  <p>792-800 1 24 VDC, ME24, for 2 single lines (line/protected ground), unbalanced interfaces as well as RS-485 and RS-422 interfaces</p> | |  <p>End and intermediate plate, 1 mm thick gray 859-525 100 (4x25)</p> | |  <p>Screwless end stop, 6 mm wide 249-116 100 (4x25) 10 mm wide 249-117 50 (2x25)</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  <p>792-801 1 24 VDC, MD24, for balanced interfaces (line/line) with electrical isolation (telecommunications)</p> | |  <p>Push-in type jumper bars, light gray, insulated, I_N 18 A 2-way 859-402 200 (8x25) 3-way 859-403 200 (8x25) 4-way 859-404 200 (8x25) 5-way 859-405 200 (8x25) : : 10-way 859-410 100 (4x25)</p> | |  <p>Adjustable height group marker carriers, for 249-116 and 249-117 end stops for 1 marker card 1 249-119 50 (2x25) for 2 WSB Quick markers or 1 x continuous marking strip 2 249-118 100 (4x25)</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  <p>792-802 1 24 VDC, SD24, for supply lines (power supply units)</p> | | <p>Item no. suffix for colored push-in type jumper bars: yellow .../000-029 blue .../000-006</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  <p>792-803 1 24 VDC, MDEX24, for intrinsically safe circuits, blue terminal block</p> | |  <p>Test pin, 1 mm Ø, with solder connection for test cable 859-500 1</p> | |  <p>Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade 210-720 1</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  <p>792-804 1 48 VDC, MD48LON, for network applications</p> | |  <p>Marking pen, for permanent marking 210-110 1</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  <p>792-805 1 5 VDC, MDHF5, for network applications</p> | |  <p>Miniature WSB Quick marking cards, 10 strips with 10 markers each, white with black printing</p> | | <p>Marking:</p> <table border="0"> <tr><td>plain</td><td>248-501</td><td>5</td></tr> <tr><td>1 ... 10 (10x)</td><td>248-502</td><td>5</td></tr> <tr><td>11 ... 20 (10x)</td><td>248-503</td><td>5</td></tr> <tr><td>21 ... 30 (10x)</td><td>248-504</td><td>5</td></tr> <tr><td>31 ... 40 (10x)</td><td>248-505</td><td>5</td></tr> <tr><td>41 ... 50 (10x)</td><td>248-506</td><td>5</td></tr> <tr><td>1 ... 50 (2x)</td><td>248-566</td><td>5</td></tr> <tr><td>K 1 ... K 10 (10x)</td><td>248-450</td><td>5</td></tr> <tr><td>K 11 ... K 20 (10x)</td><td>248-451</td><td>5</td></tr> <tr><td>K 100 (10x)</td><td>248-452</td><td>5</td></tr> <tr><td>U 1 ... U 10 (10x)</td><td>248-453</td><td>5</td></tr> <tr><td>U 11 ... U 20 (10x)</td><td>248-454</td><td>5</td></tr> <tr><td>U 100 (10x)</td><td>248-455</td><td>5</td></tr> </table> | plain | 248-501 | 5 | 1 ... 10 (10x) | 248-502 | 5 | 11 ... 20 (10x) | 248-503 | 5 | 21 ... 30 (10x) | 248-504 | 5 | 31 ... 40 (10x) | 248-505 | 5 | 41 ... 50 (10x) | 248-506 | 5 | 1 ... 50 (2x) | 248-566 | 5 | K 1 ... K 10 (10x) | 248-450 | 5 | K 11 ... K 20 (10x) | 248-451 | 5 | K 100 (10x) | 248-452 | 5 | U 1 ... U 10 (10x) | 248-453 | 5 | U 11 ... U 20 (10x) | 248-454 | 5 | U 100 (10x) | 248-455 | 5 |
| plain | 248-501 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 ... 10 (10x) | 248-502 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 ... 20 (10x) | 248-503 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 ... 30 (10x) | 248-504 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 31 ... 40 (10x) | 248-505 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 41 ... 50 (10x) | 248-506 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 ... 50 (2x) | 248-566 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| K 1 ... K 10 (10x) | 248-450 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| K 11 ... K 20 (10x) | 248-451 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| K 100 (10x) | 248-452 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U 1 ... U 10 (10x) | 248-453 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U 11 ... U 20 (10x) | 248-454 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| U 100 (10x) | 248-455 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Sockets with Miniature Switching Relay, 788 Series

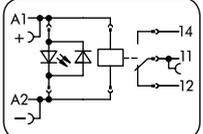
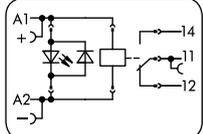
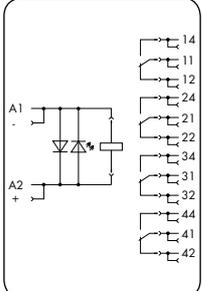
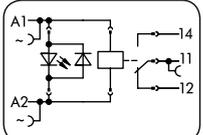
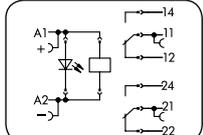
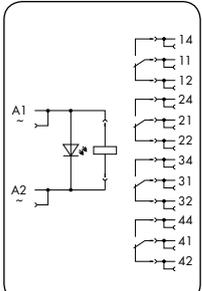
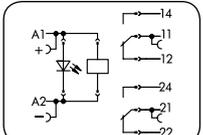
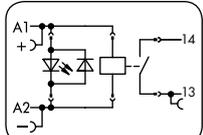
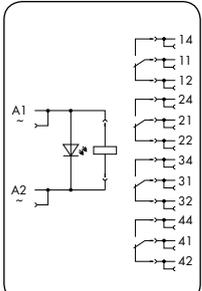
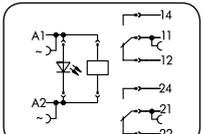
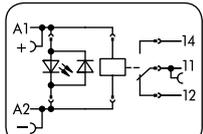
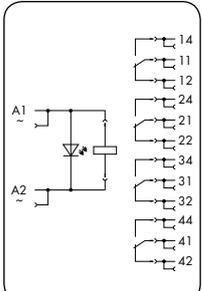
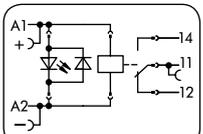
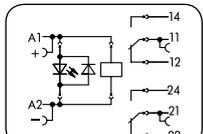
Relay Sockets with Industrial Relay, 858 Series

Sockets with relay and status indication
 1 changeover contact / 16 A, gold-plated 50 mA
 2 changeover contacts / 2 x 8 A, gold-plated 50 mA
 0.34 - 2.5 mm² AWG 22 - 14
 Socket width: 15 mm / Relay height: 15 mm
 9 - 10 mm / 0.37 in

Sockets with relay and status indication
 1 changeover contact / 16 A, gold-plated 50 mA
 2 changeover contacts / 2 x 8 A, gold-plated 50 mA
 0.34 - 2.5 mm² AWG 22 - 14
 Socket width: 15 mm / Relay height: 25 mm
 9 - 10 mm / 0.37 in

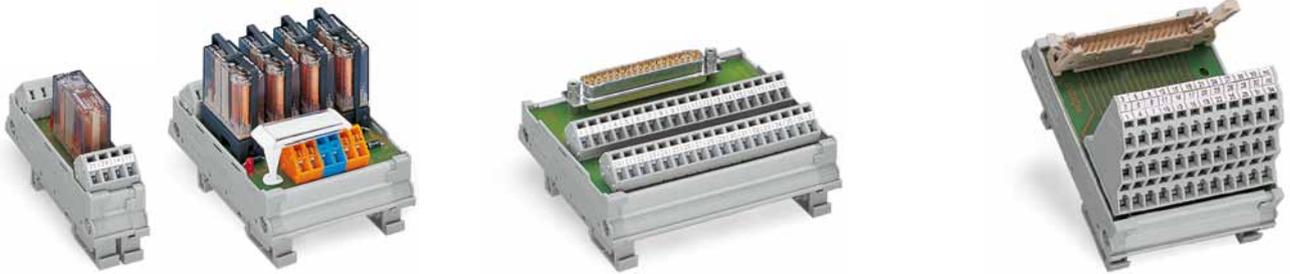
Sockets with relay and integrated status indication, free-wheeling diode and manual operation
 4 changeover contacts / 5 A, gold-plated 50 mA
 2 x 0.34 - 2 x 2.5 mm² AWG 22 - 14
 Socket width: 31 mm / Relay height: 35 mm
 9 - 10 mm / 0.37 in

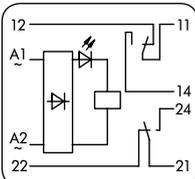
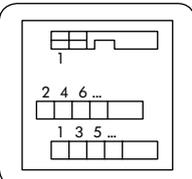
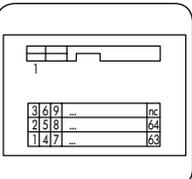
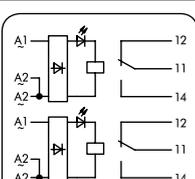
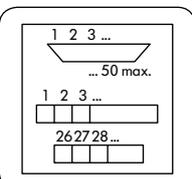
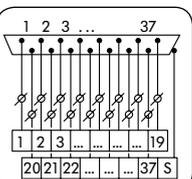
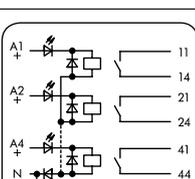
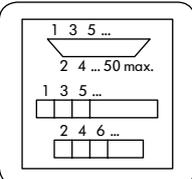
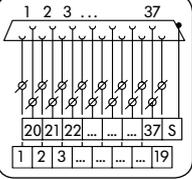
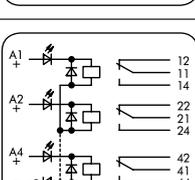
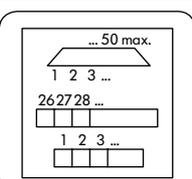
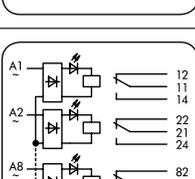
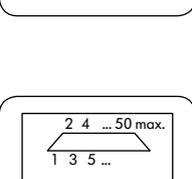
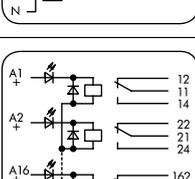


| Item No. | Pack. Unit | Item No. | Pack. Unit | Item No. | Pack. Unit |
|---|---|---|--|---|--|
|  | 1 changeover contact 788-303 12 VDC 20 788-304 24 VDC 20 788-305 48 VDC 20 788-306 60 VDC 20 788-307 110 VDC 20 |  | 1 changeover contact 788-324 24 VDC 20 788-528 230 VAC 20 (no illustration) |  | 4 changeover contacts 858-304 1 24 VDC |
|  | 1 changeover contact 788-506 24 VAC 20 788-507 115 VAC 20 788-508 230 VAC 20 |  | 2 changeover contacts 788-334 24 VDC 20 788-538 230 VAC 20 (no illustration) |  | 4 changeover contacts, gold-plated 858-314 1 24 VDC |
|  | 2 changeover contacts 788-311 12 VDC 20 788-312 24 VDC 20 788-313 48 VDC 20 788-314 60 VDC 20 788-315 110 VDC 20 |  | 1 make contact 788-355 24 VDC 20 |  | 4 changeover contacts 858-508 1 230 VAC |
|  | 2 changeover contacts 788-512 24 VAC 20 788-515 115 VAC 20 788-516 230 VAC 20 |  | 1 changeover contact, manual operation 788-374 24 VDC 20 |  | 4 changeover contacts, gold-plated 858-518 1 230 VAC |
|  | 1 changeover contact, with gold contacts 788-404 24 VDC 20 2 changeover contacts, with gold contacts 788-412 24 VDC 20 |  | 2 changeover contacts, manual operation 788-375 24 VDC 20 | | |
| Accessories, 788 Series Appropriate marking system: WMB | | Accessories, 858 Series Appropriate marking systems: WMB/Marking Strips | | | |
|  | Comb-style jumper bar, 2-way 788-113 ① 200 859-402 ② 200 |  | Status indicator, with recovery diode 788-120 24 VDC 1 788-121 48 VDC 1 788-122 110 VDC 1 |  | Holding bracket, for industrial relays 858-110 8 |
|  | WMB Multi marking system plain 793-501 5 cards 1 ... 10 (10x) 793-502 5 cards |  | Status indicator, with recovery diode 788-123 24 VAC 1 788-124 115 VAC 1 788-125 230 VAC 1 |  | Push-in type jumper bar, for the coil side 858-402 200 |
|  | Socket, for relay (15 mm high) 788-100 1 RT 15, 1 changeover contact 788-102 1 RT 15, 2 changeover contacts |  | Socket, for relay (25 mm high) 788-101 1 RT 25, 1 changeover contact 788-103 1 RT 25, 2 changeover contacts |  | Socket, for relay (35 mm high) 858-100 1 RT 25, 4 changeover contacts |

Rail-Mounted Relay Modules, 287 and 288 Series Interface Modules, 289 Series

| | | |
|---|--|--|
| <p>Relay soldered/plugged</p> <p>0.08 - 2.5 mm² AWG 28 - 14</p> <p> 5 - 6 mm / 0.22 in</p> | <p>Interface module Terminal strips with CAGE CLAMP® (236 Series) Mounting carrier for DIN rail 35</p> <p>0.08 - 2.5 mm² AWG 28 - 12</p> <p> 5 - 6 mm / 0.22 in</p> | <p>Interface module Terminal strips with CAGE CLAMP® (736 and 737 Series) Mounting carrier for DIN rail 35</p> <p>0.08 - 2.5 mm² AWG 28 - 12</p> <p> 5 - 6 mm / 0.22 in</p> |
|---|--|--|



| Item No. | Pack. Unit | Item No. | Pack. Unit | Item No. | Pack. Unit |
|--|------------|--|---|--|------------|
|  <p>2 changeover contacts Relay, soldered</p> <p>288-512 1 24 VUC / 6 A</p> <p>288-312 1 24 VDC / 6 A (no illustration)</p> | |  <p>Interface module with male header to DIN 41 651</p> <p>289-501 10-pole 1 289-502 14-pole 1 289-503 16-pole 1 289-504 20-pole 1 289-505 26-pole 1 289-506 34-pole 1 289-507 40-pole 1 289-508 50-pole 1 289-509 64-pole 1</p> | |  <p>Interface module for ribbon cable connector</p> <p>289-611 10-pole 1 289-612 14-pole 1 289-613 16-pole 1 289-614 20-pole 1 289-615 26-pole 1 289-616 34-pole 1 289-617 40-pole 1 289-618 50-pole 1 289-619 64-pole 1</p> | |
|  <p>2 relays, 1 changeover contact each, Relay, soldered</p> <p>288-758 1 24 VUC / 6 A</p> <p>288-761 1 115 VUC / 6 A</p> <p>288-762 1 230 VAC / 6 A</p> | |  <p>Interface module with D-subminiature male connector for mating connectors with solder connection</p> <p>289-545 9-pole 1 289-546 15-pole 1 289-547 25-pole 1 289-548 37-pole 1 289-549 50-pole 1</p> |  <p>Interface module with D-subminiature male connector</p> <p>289-720 9-pole 1 289-721 15-pole 1 289-722 25-pole 1 289-723 37-pole 1</p> | | |
|  <p>4 relays, 1 make contact each, Relay, soldered</p> <p>287-474 1 24 VDC / 16 A</p> | |  <p>Interface module with D-subminiature female connector for mating connectors with IDC</p> <p>289-540 9-pole 1 289-541 15-pole 1 289-542 25-pole 1 289-543 37-pole 1 289-544 50-pole 1</p> |  <p>Interface module with D-subminiature female connector</p> <p>289-725 9-pole 1 289-726 15-pole 1 289-727 25-pole 1 289-728 37-pole 1</p> | | |
|  <p>4 relays, 1 changeover contact each Relay, plugged</p> <p>287-774 1 24 VDC / 6 A</p> | |  <p>Interface module with D-subminiature female connector for mating connectors with solder connection</p> <p>289-555 9-pole 1 289-556 15-pole 1 289-557 25-pole 1 289-558 37-pole 1 289-559 50-pole 1</p> | | | |
|  <p>8 relays, 1 changeover contact each Relay, plugged</p> <p>287-834 1 24 VUC / 6 A</p> <p>287-824 1 24 VDC / 6 A (no illustration)</p> | |  <p>Interface module with D-subminiature female connector for mating connectors with IDC</p> <p>289-550 9-pole 1 289-551 15-pole 1 289-552 25-pole 1 289-553 37-pole 1 289-554 50-pole 1</p> | | | |
|  <p>16 relays, 1 changeover contact each Relay, plugged</p> <p>287-853 1 12 VDC / 6 A</p> <p>287-854 1 24 VDC / 6 A</p> <p>(no illustration)</p> | | | | <p>Also available for connectors complying with:</p> <p>DIN 41612 Type E, F DIN 41651</p> | |

Pluggable Modules for Carrier Terminal Blocks 286 Series

| | | |
|---|--|--|
| <p>Relays</p> <p>① Module width: 10 mm / 0.394 in ② Module width: 15 mm / 0.591 in</p> | <p>Relays</p> <p>② Module width: 15 mm / 0.591 in ③ Module width: 20 mm / 0.787 in ④ Module width: 35 mm / 1.378 in</p> | <p>Optocouplers</p> <p>② Module width: 15 mm / 0.591 in</p> |
|---|--|--|



| Item No. | Pack. Unit | Item No. | Pack. Unit | Item No. | Pack. Unit |
|----------|--|----------|--|----------|--|
| | <p>① Relay with 1 make contact</p> <p>286-364 1 24 VDC / 5 A</p> <p>286-365 1 48 VDC / 5 A</p> <p>286-366 1 60 VDC / 5 A</p> | | <p>② Relay with 1 change-over contact</p> <p>286-502 1 5 V AC/DC / 7 A</p> <p>286-504 1 24 V AC/DC / 7 A</p> <p>286-508 1 230 V AC/DC / 7 A</p> | | <p>② 24 VDC input negative switching</p> <p>286-700 1 5 VDC / 500 mA</p> <p>286-701 1 15 VDC / 500 mA</p> <p>286-702 1 24 VDC / 500 mA</p> |
| | <p>① Relay with 1 make contact</p> <p>286-564 1 24 VAC / 5 A</p> <p>286-566 1 115 VAC / 5 A</p> <p>286-567 1 230 VAC / 5 A</p> | | <p>③ Relay with 2 change-over contacts</p> <p>286-310 1 5 VDC / 7 A</p> <p>286-312 1 24 VDC / 7 A</p> <p>286-316 1 24 VDC / 7 A</p> | | <p>② 24 VDC input positive switching</p> <p>286-750 1 5 VDC / 500 mA</p> <p>286-751 1 15 VDC / 500 mA</p> <p>286-752 1 24 VDC / 500 mA</p> |
| | <p>① Relay with 1 break contact</p> <p>286-368 1 24 VDC / 5 A</p> <p>286-369 1 48 VDC / 5 A</p> <p>286-370 1 60 VDC / 5 A</p> | | <p>③ Relay with 2 change-over contacts</p> <p>286-510 1 5 VAC / 7 A</p> <p>286-512 1 24 VAC / 7 A</p> <p>286-516 1 230 VAC / 7 A</p> | | <p>② 230 VAC input negative switching</p> <p>286-704 1 5 VDC / 500 mA</p> <p>286-706 1 15 VDC / 500 mA</p> <p>286-708 1 24 VDC / 500 mA</p> |
| | <p>① Relay with 1 break contact</p> <p>286-568 1 24 VAC / 5 A</p> | | <p>④ Relay with 4 change-over contacts</p> <p>286-375 1 24 VDC / 4 A</p> | | <p>② 230 VAC input positive switching</p> <p>286-754 1 5 VDC / 500 mA</p> <p>286-756 1 15 VDC / 500 mA</p> <p>286-758 1 24 VDC / 500 mA</p> |
| | <p>② Relay with 1 changeover contact</p> <p>286-302 1 5 VDC / 7 A</p> <p>286-304 1 24 VDC / 7 A</p> <p>286-308 1 24 VDC / 7 A</p> | | <p>④ Relay with 4 change-over contacts</p> <p>286-578 1 110/120 VAC / 4 A</p> <p>286-579 1 230 VAC / 4 A</p> | | <p>② 24 VDC input</p> <p>286-720 1 24 VDC / 2 A</p> <p>286-721 1 24 VDC / 5 A</p> |

Accessories, 286 Series

Appropriate marking system: **WMB**



| | | |
|--|--|--|
| Terminal block for pluggable modules | with 2-conductor terminal blocks, orange separator | with 4-conductor terminal blocks, orange separator |
| 0.08 - 2.5 mm ² / AWG 28 - 14 | 12 mm wide ① 280-618 1 | 12 mm wide ① 280-608 1 |
| | 17 mm wide ② 280-619 1 | 17 mm wide ② 280-609 1 |
| | 22 mm wide ③ 280-638 1 | 22 mm wide ③ 280-628 1 |
| Strip length: 8 - 9 mm / 0.33 in | | 37 mm wide ④ 280-636 1 |

| | | |
|---|---|---|
| <p>Optocouplers</p> <p>② Module width: 15 mm / 0.591 in ③ Module width: 20 mm / 0.787 in</p> | <p>Temperature transducers Bridge rectifiers</p> <p>② Module width: 15 mm / 0.591 in ③ Module width: 20 mm / 0.787 in</p> | <p>Overvoltage protection Latching relays Switching modules</p> <p>② Module width: 15 mm / 0.591 in ③ Module width: 20 mm / 0.787 in</p> |
|---|---|---|



| Item No. | Pack. Unit | Diagram | Item No. | Pack. Unit | Diagram | Item No. | Pack. Unit |
|---|-------------|---------|---|-------------|---------|--|-------------|
| ② 24 VDC input positive switching 286-723 | 1 | | ③ Temperature transducer 2 conductors 286-860 0 - 10 V 286-861 0 - 20 mA 286-862 4 - 20 mA | 1 | | ③ AC current flow monitoring module 80 mA - 6 A AC 286-661 | 1 |
| ② 110 VDC output negative switching 286-726 286-728 286-730 | 1 1 1 | | ③ Temperature transducer 3 conductors 286-870 0 - 10 V 286-871 0 - 20 mA 286-872 4 - 20 mA | 1 1 1 | | ② Surge suppression device Single-stage suppression 286-836 24 V AC/DC 286-835 230 VAC 286-835/115-000 115 VAC | 1 1 1 |
| ② 230 VAC output 286-732 286-733 286-734 | 1 1 1 | | ③ Temperature transducer Thermocouple J: 0-750°C 286-863 0 - 10 V 286-865 0 - 20 mA 286-867 4 - 20 mA | 1 1 1 | | ③ Surge suppression device Two-stage suppression 286-843 110/120 VAC 286-841 230 VDC 286-842 230 VAC | 1 1 1 |
| ③ 2 inputs 2 x 24 VDC 286-792 | 1 | | Thermocouple K: 0-1000°C 286-864 0 - 10 V 286-866 0 - 20 mA 286-868 4 - 20 mA | 1 1 1 | | ③ Latching relay 1 break and 1 make contact 286-571 24 VDC 286-570 230 VAC (no illustration) | 1 1 |
| ③ 24 VDC input 2 inverted outputs 286-790 | 1 | | ② Bridge rectifier with varistor 286-830 24 VAC / 1 A 286-840 250 VAC / 1 A | 1 1 | | ② Switching module with changeover rocker switch 286-895 with momentary switch 286-896 | 1 1 |

Accessories, 286 Series

Appropriate marking system: **WMB**

Dimensions

| | | | | | | |
|--|---|---|----------------|--|---|--------------------------------|
| | Terminal block for pluggable modules | with 4-conductor terminal blocks, marking plate | | | Entire height from upper-edge of carrier rail | |
| | 0.08 - 2.5 mm ² / AWG 28 - 14 | 15 mm wide ① | 280-762 | | 1 | |
| | | 20 mm wide ② | 280-763 | | 1 | X = 2-conductor, 50 mm/1.97 in |
| | | 25 mm wide ③ | 280-764 | | 1 | 4-conductor, 73 mm/2.87 in |
| | Strip length: 8 - 9 mm / 0.33 in | | | | | |

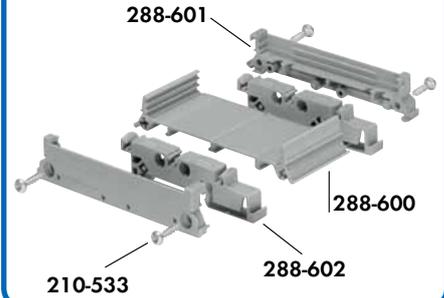
Mounting Carriers for DIN-Rail Mounting PCBs 288 Series

Mounting carrier, type 1, 85 mm wide, for DIN-rail mounting of 71.2 mm wide PCBs

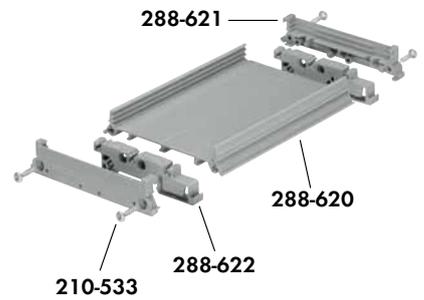
Mounting carrier, type 2, 106 mm wide, for DIN-rail mounting of 100 mm wide PCBs



Mounting carrier, type 1



Mounting carrier, type 2



| Item No. | Pack. Unit | Item No. | Pack. Unit |
|--|------------|--|------------|
| Lateral cover, type 1, | | Lateral cover, type 2, | |
| small, 6.35 mm thick | 288-601 1 | small, 8.75 mm thick | 288-621 1 |
| Fixing foot for DIN 35 rail | 288-602 1 | Fixing foot for DIN 35 rail | 288-622 1 |
| Rail-mount profile, type 2, 1 m long | 288-600 1 | Rail-mount profile, type 2, 1 m long | 288-620 1 |
| | | Lateral cover, type 2, | |
| | | large, 8.75 mm thick | 288-626 1 |
| | | Cover, type 2, 1 mm long | 288-627 1 |
| Phillips screw, 2.9 x 13 | | Phillips screw, 2.9 x 13 | |
| | 210-533 25 | | 210-533 25 |
| 2 pcs per lateral cover. Can be used with a module length of 39 mm or higher. Side covers must be riveted for smaller modules. | | 2 pcs per lateral cover. Can be used with a module length of 39 mm or higher. Side covers must be riveted for smaller modules. | |
| Rivet length depends on module length. Rivets are not part of our product line. | | Rivet length depends on module length. Rivets are not part of our product line. | |
| Accessories, 288 Series | | | |

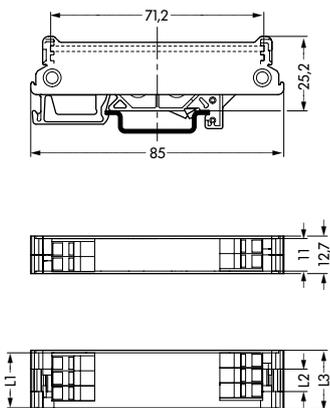
Mounting carrier, type 2, high, with cover



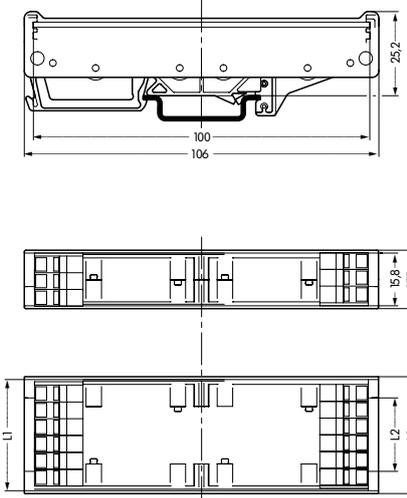
PCB length: L1
 Rail-mount profile length: L2 = L1 - 11 mm
 Mounting carrier length: L3 = L1 + 2 mm
 Lateral cover, type 1: 6.35 mm thick
 Free space between profile and PCB: 5 mm (when using upper groove)

PCB length: L1
 Rail-mount profile length: L2 = L1 - 15.8 mm
 Mounting carrier length: L3 = L1 + 2 mm
 Cover length: L4 = L1
 Lateral cover, type 2: 8.75 mm thick
 Free space between profile and PCB: 5 mm

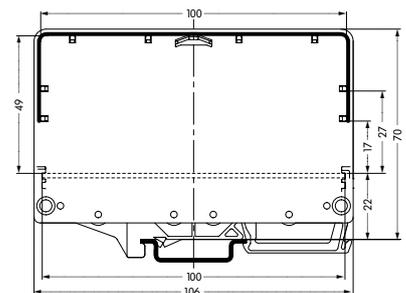
Mounting carrier, type 1



Mounting carrier, type 2, low



Mounting carrier, type 2, high



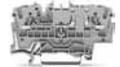
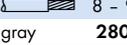
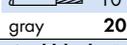
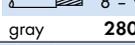
Empty Component Plug Housings for Building Custom Circuits 280, 286 and 2002 Series

| | | |
|--|--|---|
| Plug width: 5.2 mm / 0.205 in 10.4 mm / 0.409 in | Plug width: 5 mm / 0.197 in 10 mm / 0.394 in 250 V/4 kV/3 6 A max. | Plug width: 10 mm / 0.394 in 15 mm / 0.591 in 20 mm / 0.787 in 25 mm / 0.984 in 250 V/4 kV/3 6 A max. |
|--|--|---|



| Type | Item No. | Pack. Unit | Type | Item No. | Pack. Unit | Type | Item No. | Pack. Unit |
|---|-----------------|------------|---|----------------|------------|---|----------------|------------|
| Empty component plug for carrier terminal blocks, 2002 Series | | | Empty component plug for carrier terminal blocks | | | Empty component plug for carrier terminal blocks | | |
| Type 1 | 2002-800 | 100 | Type 1 | 280-801 | 100 | Type 9 | 286-110 | 1 |
| 2-pole, 5.2 mm/0.205 in wide | | | 2-pole, 5 mm / 0.197 in wide Plug inside dimensions: W/H/L (3.2/15/15) mm | | | 4-pole, 10 mm / 0.394 in wide | | |
| Type 2 | 2002-810 | 50 | Type 2 | 280-802 | 50 | Type 10 | 286-111 | 1 |
| 2-pole, 10.4 mm/0.409 in wide | | | 2-pole, 10 mm / 0.394 in wide Plug inside dimensions: W/H/L (8.2/15/15) mm | | | 6-pole, 15 mm / 0.591 in wide | | |
| Type 3 | 2002-820 | 50 | Type 3 | 280-804 | 50 | Type 11 | 286-112 | 1 |
| 4-pole, 10.4 mm/0.409 in wide | | | 4-pole, 10 mm / 0.394 in wide Plug inside dimensions: W/H/L (8.2/15/15) mm | | | 8-pole, 20 mm / 0.787 in wide | | |
| Empty component plug for through terminal blocks, 2002, 2004 and 2006 Series | | | Empty component plug for through terminal blocks | | | Type 12 | | |
| Type 4 | 2002-880 | 50 | Type 4 | 280-803 | 50 | 286-113 | | |
| 2-pole, 10.4 mm/0.409 in wide | | | 2-pole, 10 mm / 0.394 in wide Plug inside dimensions: W/H/L (8.2/15/15) mm | | | 10-pole, 25 mm / 0.984 in wide | | |
| For PCB dimensions and component height, see drawing and table. | | | | | | | | |

Accessories, 280, 286 and 2002 Series

| | | |
|---|--|---|
| 2-cond. carrier terminal block, 5.2 mm wide  0.25 - 2.5 (4)mm ² /AWG 22 - 12  10 - 12 mm / 0.43 in gray 2002-1661 50 | 2-cond. carrier terminal block, 5 mm wide  0.08 - 2.5 mm ² /AWG 28 - 14  8 - 9 mm / 0.33 in gray 280-916 100 | Terminal block for pluggable modules, 2-cond., polarized, with orange separator  0.08 - 2.5 mm ² /AWG 28 - 14  8 - 9 mm / 0.33 in |
| 4-cond. carrier terminal block, 5.2 mm wide  0.25 - 2.5 (4)mm ² /AWG 22 - 12  10 - 12 mm / 0.43 in gray 2002-1861 50 | 3-cond. carrier terminal block, 5 mm wide  0.08 - 2.5 mm ² /AWG 28 - 14  8 - 9 mm / 0.33 in gray 280-610 100 | Terminal block for pluggable modules, 4-cond., polarized, with orange separator  0.08 - 2.5 mm ² /AWG 28 - 14  8 - 9 mm / 0.33 in |
| 2-cond. through terminal block, 5.2 mm wide  0.25 - 2.5 (4)mm ² /AWG 22 - 12  10 - 12 mm / 0.43 in gray 2002-1201 100 | 4-cond. carrier terminal block, 5 mm wide  0.08 - 2.5 mm ² /AWG 28 - 14  8 - 9 mm / 0.33 in gray 280-686 100 | Terminal block for pluggable modules, 4-cond., polarized, with orange separator  0.08 - 2.5 mm ² /AWG 28 - 14  8 - 9 mm / 0.33 in |
| 3-cond. through terminal block, 5.2 mm wide  0.25 - 2.5 (4)mm ² /AWG 22 - 12  10 - 12 mm / 0.43 in gray 2002-1301 100 | 2-cond. through terminal block, 5 mm wide  0.08 - 2.5 mm ² /AWG 28 - 14  8 - 9 mm / 0.33 in gray 280-901 100 | Terminal block for pluggable modules, 4-cond., polarized, with orange separator  0.08 - 2.5 mm ² /AWG 28 - 14  8 - 9 mm / 0.33 in |
| 4-cond. through terminal block, 5.2 mm wide  0.25 - 2.5 (4)mm ² /AWG 22 - 12  10 - 12 mm / 0.43 in gray 2002-1401 100 | 3-cond. through terminal block, 5 mm wide  0.08 - 2.5 mm ² /AWG 28 - 14  8 - 9 mm / 0.33 in gray 280-681 100 | Terminal block for pluggable modules, 4-cond., polarized, with orange separator  0.08 - 2.5 mm ² /AWG 28 - 14  8 - 9 mm / 0.33 in |
| | 4-cond. through terminal block, 5 mm wide  0.08 - 2.5 mm ² /AWG 28 - 14  8 - 9 mm / 0.33 in gray 280-833 100 | 1-cond./1-cond. block for pluggable modules, with orange separator  0.08 - 4 mm ² /AWG 28 - 12  8 - 9 mm / 0.33 in |
| | 2-cond. terminal block, side-entry, 5 mm wide  0.08 - 2.5 mm ² /AWG 28 - 14  8 - 9 mm / 0.33 in gray 280-101 100 | Terminal block for pluggable modules, 4-cond., polarized, with orange separator 4-pole, 11.1 mm wide 769-192/769-319 10 6-pole, 16.1 mm wide 769-193/769-319 5 8-pole, 21.1 mm wide 769-194/769-319 5 10-pole, 26.1 mm wide 769-195/769-319 5 |
| | | Pliers, for removing electronic housing cover  210-492 1 |

WINSTA® – The Connection System

WINSTA® MINI

For space-limited applications

- Sensors (switches, push-buttons, window contacts, pressure switches, temperature sensors, etc.)
- Actuators (control valves, magnetic valves, servo motors, blinds/sun protection, etc.)
- Protection class II for halogen lamps and luminaires
- Control signals
- 1.5 mm²/AWG 16, 250 V, 16 A



WINSTA® MIDI

For the majority of applications

- General building installation, ideal for modern buildings
- Standard lighting fixtures and safety lights
- Tradeshow and shop installation
- Motor homes
- Lab work stations
- Rolling stock
- Shipbuilding
- 4 mm²/AWG 12, 250/400 V, 25 A



WINSTA® MAXI

For high power

- Power supply via 6 mm²/AWG 10 cable for extended cable runs
- 32 A power supply in distribution boxes for high energy requirements
- 6 mm²/AWG 10, 250/400 V, 35 A



WINSTA® KNX

For the standardized bus

- KNX/EIB
- Control signals
- 0.8 mm Ø, 50 V, 3 A



WINSTA® IDC

For a high degree of flexibility

- Supply and tap off is possible at any time and at any location along the flat cable. No cutting, no stripping, no dismantling → very user-friendly
- A 120° rotation is all that is required to connect the flat cable
- Space-efficient across the flat cable through longitudinal tap off
- 2.5/4 mm² (AWG 14/12), 400 V, 25 A
- 10 mm²/AWG 8, 690 V, 57 A
- 16 mm²/AWG 6, 690 V, 76 A



WINSTA® RD

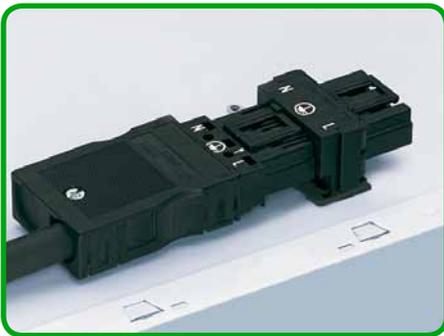
For round conduits and ducts

- Outside diameter of 17.5 mm for applications in electrical conduits with an internal diameter > 18 mm
- Prefabricated houses
- Recessed luminaires
- Wall and ceiling cutouts



WINSTA® – The Connection System Benefits for All Applications

Building automation



Lighting fixtures



Cable ducts



Under-floor distribution boxes



Conduits



Distribution boxes



Sub-distribution

Shipbuilding



Lighting connection



Cabin distribution

Rolling stock



Heating



Passenger information systems



Loudspeakers

**WINSTA® – The Connection System
System Partners – A Strong Alliance**



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www.zumtobel.com
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Veko Lichtsystems International BV
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info@veko.nl

Office buildings



Lab work stations



Rolling stock



Prefabricated houses



Shipbuilding



Trade show design



Airports



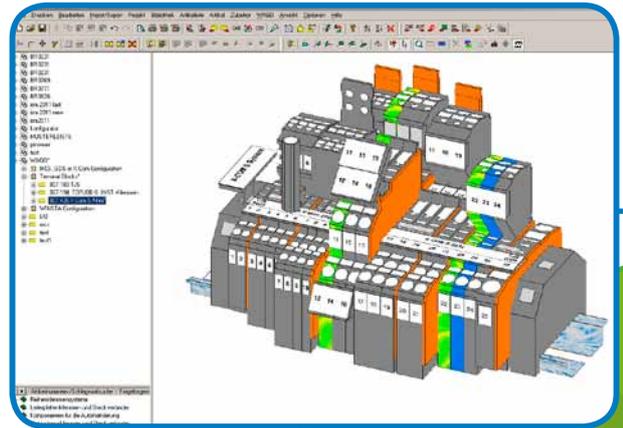
Motor homes



Benefits:

- Quick design
- Quick ordering
- User-friendly
- Extensive and user-specific documentation
- Network compatibility
- Different software products on a single CD (smartDESIGNER, productLOCATOR, smartSCRIPT)
- A price list is included

...all for free!



ProServe® – Planning at a New Level



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electronic GmbH

see *electrical*
CADdy⁺⁺

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promis engine
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AutoCAD
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E³ series

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smartDESIGNER and productLOCATOR

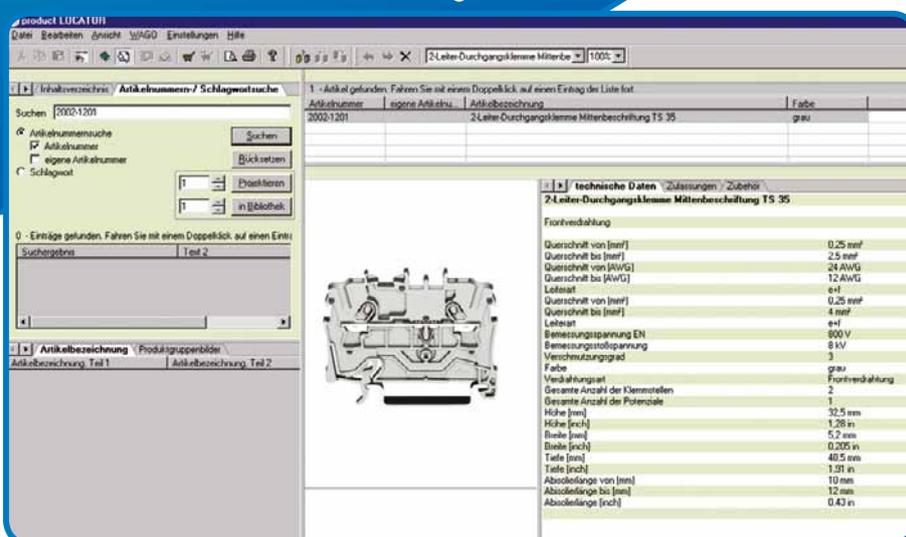
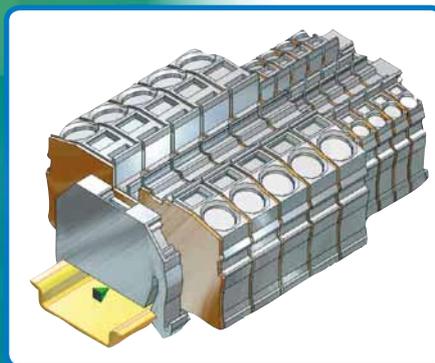
- Interfaces to CAE and M-CAD programs
- Output in PDF and HTML format
- Different search functions provide quick item selection
- Creation of part lists including product pictures and custom part numbers
- Complex rail assemblies can be easily designed in 3D
- Easy creation of custom part numbers
- Creating custom items to design third-party products
- Default parts (favorites) can be defined individually, streamlining design time
- Intelligent, user-optimized accuracy check features
- 18 languages available
- 25,000 sales items

Marking:

- Direct creation and output of marking data to plotter or thermal transfer printer

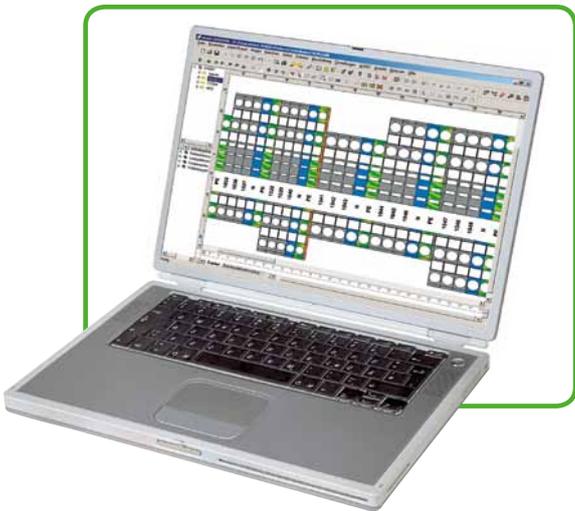


STEP – IGES – DXF – DWG



ProServe® Marking – Now Easier Than Ever

Configuration and marking of rail assemblies, stand-alone or in combination with CAE systems.



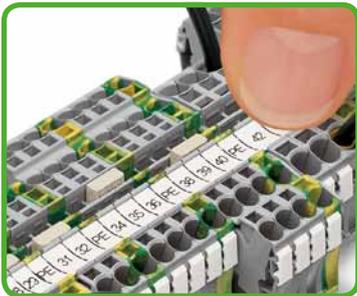
Designing:

Custom rail assemblies and markings can be designed easily via WAGO ProServe® Software.



Snapping:

Marker strip is snapped into center marker slot.



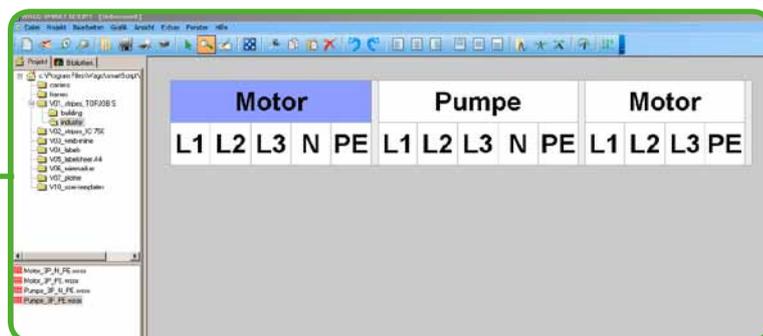
Combining marker strips with single WMB markers.



Alternative: Miniature WSB markers can be printed on a plotter.

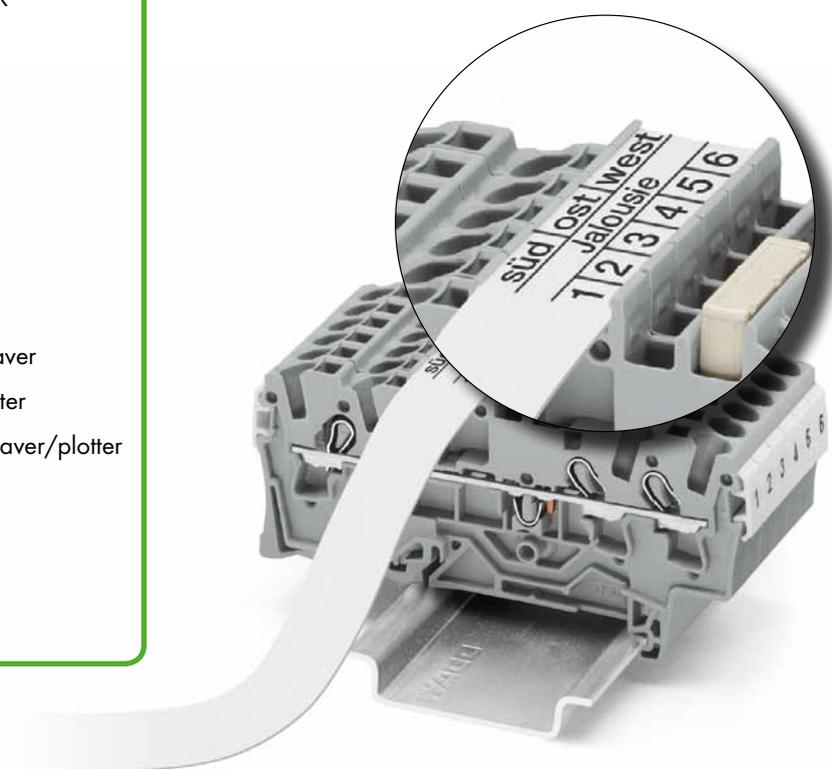


WMB Inline markers on continuous reel can be used in three positions: in the center and on each side.



smartSCRIPT

- Extensive import functions from CAE systems, MS Office and WAGO smartDESIGNER
- WYSIWYG marking
- Automatic plotter calibration
- Extensive library including markers
- Symbol library
- Text length checking
- Several languages available
- Output of East European characters
- Fully compatible with EG 450 Engraver
- Direct output to thermal transfer printer
- Creation of custom markers for engraver/plotter



Printing:

Marking strips (2009 Series) or WMB Inline markers on continuous reel are printed on a thermal transfer printer.

Three-Line Printing:

...for clear marking.
This makes it immediately clear which function corresponds with each terminal block.

Thermal Transfer Printers Plotters

TP 343+ Thermal Transfer Printer
Resolution: 300 dpi
incl. ProServe® Software

Dimensions (W x H x L):
230 x 200 x 290 mm

TP 298+ Thermal Transfer Printer
Resolution: 300 dpi
incl. ProServe® Software

Dimensions (W x H x L):
242 x 274 x 446 mm

IP 350 A3 / IP 350 A4 Plotters
EG 450 Engraver
incl. ProServe® Software

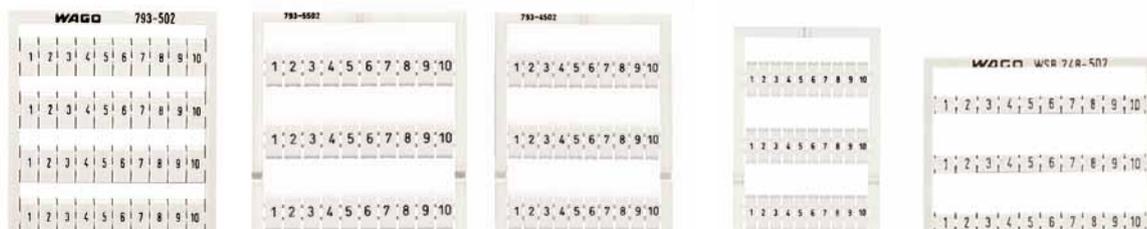
Dimensions (W x H x L):
125 x 660 x 440 mm



| Description | Item No. | Description | Item No. | Description | Item No. |
|--|---|---|--|--|---|
| TP 343+ Thermal Transfer Printer | 258-343 | TP 298+ Thermal Transfer Printer | 258-298 | IP 350 A3 Plotter | 258-350 |
| | | incl. print roller (258-178) for WMB Inline markers | | IP 350 A4 Plotter | 258-451 |
| Printing method | Thermal/thermal transfer | Printing method | Thermal/thermal transfer | Maximum plot area | 440 x 305 mm (A3) 220 x 305 mm (A4) |
| Print head | Thin-film transfer head | Print head | Thick-film transfer head | Interfaces | Parallel Centronics (LPT), USB 1.1 |
| Print resolution | 300 dpi | Print resolution | 300 dpi | Control language | based on HP-GL 7475A |
| Print speed | up to 76 mm/sec. | Print speed | 100 mm/sec. | Data buffer | 16 MB |
| Print width | 6 - 104 mm (0.25" - 4.09") | Print width | 108.4 mm | Speed | max. 400 mm/sec. |
| Print length | up to 990 mm (39") | See-through/ reflective sensor | Standard | Drive system | Two-phase stepper motor |
| Memory | 2 MB DRAM, 1 MB Flash | Processor (32-bit, ColdFire) / Clock rate | 64 MHz | Pen storage unit | max. 4 pens (optimum seal) |
| Interfaces | ETHERNET 10/100, RS-232 (COM), USB | RAM | 8 MB | Plotter pen | Special plotter pens with HP receptacle |
| Sensors | Label sensor (material end, foil end, bottom reflective sensor) | ROM | 4 MB Flash | Addressable resolution | 0.01 mm |
| Power supply | via external power supply unit | Slot for memory card | CompactFlash, Type 1 | Repeat accuracy | 0.05 mm |
| Operating voltage | 100 - 240 VAC | Interfaces | ETHERNET 10/100 Base T, RS-232 (COM), USB | Power supply | via separate desktop power supply unit, equipped with exchange- able supply line |
| Dimension with unwinder | approx. 450 mm depth | Accessories (optional) | Cutter | Operating voltage | 120 - 240 VAC 50 - 60 Hz |
| Housing | Double-walled plastic | Power supply | via external power supply unit | Voltage range | 90 - 264 VAC |
| Weight | approx. 1800 g | Operating voltage | 100 - 240 VAC 50 - 60 Hz, PFC | Current consumption (internal) | 0.3 A max. at 220 VAC |
| Software | ProServe® Software; smartMARKING | Weight | approx. 1800 g | Weight | approx. 8,000 g/17.63 lbs |
| Ink ribbon for marking strips | | Ink ribbon for marking strips | | WAGO disposable plotter pen | |
| Resin, 38 mm x 300 m | 258-145 | Resin, 38 mm x 300 m | 258-145 | 0.18 mm line width | 258-326 |
| Resin, 50 mm x 300 m | 258-149 | Resin, 50 mm x 300 m | 258-149 | 0.25 mm line width | 258-327 |
| Ink ribbon for labels | | Ink ribbon for labels | | 0.35 mm line width | 258-328 |
| Resin/wax, Width: 60 mm x 300 m | 258-143 | Resin/wax, Width: 60 mm x 300 m | 258-143 | Carrier plate for: | |
| Width: 100 mm x 300 m | 258-144 | Width: 100 mm x 300 m | 258-144 | WSB 5 mm | 258-361 |
| Ink ribbon for wire markers | | Ink ribbon for wire markers | | WSB 4 mm | 258-362 |
| 76 mm wide x 300 m | 258-150 | 76 mm wide x 300 m | 258-150 | Miniature WSB | 258-363 |
| 100 mm wide x 300 m | 258-157 | 100 mm wide x 300 m | 258-157 | Group marker carrier (209-112) | 258-364 |
| Carrying case for TP 343 | 258-342 | Cutter for TP 298+ | 258-161 | WMB (3.5 mm/4 mm /5 mm) | 258-368 |
| Retractable handle for carrying case | 258-173 | Spare roller for TP 298+ labels | 258-177 | Marker tags (210-199/200) | 258-369 |
| Software for Printers | | Spare roller for TP 298+ WMB Inline | 258-178 | WAGO marker cards (210-110/120) | 258-370 |
| ProServe® Software, | | Carrying case for TP 298+ | 258-171 | For other receptacles, please contact factory. | |
| WAGO smartDESIGNER | | Retractable handle for carrying case | 258-173 | | |
| WAGO smartSCRIPT | | | | | |
| WAGO productLOCATOR | | | | | |
|  | | | | | |
| CD-ROM 888-414/101-3601 | | | | | |

Marking Accessories

| | | |
|--|--|---|
| WAGO Multi marking system WMB fits in miniature WSB and WSB marker slots for terminal blocks! 10 strips with 10 markers for each card 5 cards per packing unit | WAGO Multi marking system WMB fits in miniature WSB and WSB marker slots for terminal blocks! 10 strips with 10 markers for each card 5 cards per packing unit | WAGO Multi marking system WMB and WAGO miniature WSB Quick marking system 10 strips with 10 markers for each card 5 cards per packing unit |
|--|--|---|



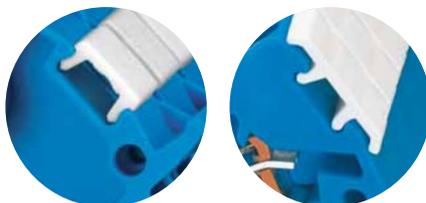
| Marking | Item No. | Item No. | Item No. | Item No. | Item No. |
|--|----------------|---------------------------------|-----------------|--|--------------------------|
| | | WMB Multi marking system | | | Miniature WSB |
| | | for terminal block width: | | | for 264, 750, 769 Series |
| | 5 mm | 5-5.2 mm | 4-4.2 mm | 3.5 mm | |
| | | stretchable | stretchable | | |
| plain | 793-501 | 793-5501 | 793-4501 | 793-3501 | 248-501 |
| 1 ... 10 (10x) | 793-502 | 793-5502 | 793-4502 | 793-3502 | 248-502 |
| 11 ... 20 (10x) | 793-503 | 793-5503 | 793-4503 | 793-3503 | 248-503 |
| 21 ... 30 (10x) | 793-504 | 793-5504 | 793-4504 | 793-3504 | 248-504 |
| 31 ... 40 (10x) | 793-505 | 793-5505 | 793-4505 | 793-3505 | 248-505 |
| 41 ... 50 (10x) | 793-506 | 793-5506 | 793-4506 | 793-3506 | 248-506 |
| 1 ... 9 (10x) | 793-565 | 793-5565 | 793-4565 | 793-3565 | 248-565 |
| 1 ... 50 (2x) | 793-566 | 793-5566 | 793-4566 | 793-3566 | 248-566 |
| 51 ... 100 (2x) | 793-507 | 793-5507 | 793-4507 | 793-3507 | 248-507 |
| 101 ... 150 (2x) | 793-508 | 793-5508 | 793-4508 | 793-3508 | 248-508 |
| 151 ... 200 (2x) | 793-509 | 793-5509 | 793-4509 | 793-3509 | 248-509 |
| R, S, T, U, V, W, X, Y, Z, MP | 793-544 | 793-5544 | 793-4544 | 793-3544 | 248-544 |
| A, B, P, N, PE, PEN, L1, L2, L3, ⊕ | 793-545 | 793-5545 | 793-4545 | 793-3545 | 248-545 |
| (in strips with 10 identical letters) | | | | | |
| for double-deck terminal blocks | | | | All listed markings are also available on colored marker cards (black printing). | |
| 1, 3, 5, ..., 99 and 2, 4, 6, ..., 100 (1x) | 793-599 | 793-5599 | 793-4599 | Item no. suffix for colored marker cards: | |
| | | | | yellow | ... /000-002 |
| | | | | red | ... /000-005 |
| | | | | blue | ... /000-006 |
| | | | | gray | ... /000-007 |
| | | | | orange | ... /000-012 |
| | | | | light green | ... /000-017 |
| | | | | green | ... /000-023 |
| | | | | violet | ... /000-024 |
| for triple-deck terminal blocks | | | | | |
| 1, 4, 7, ..., 88 and 2, 5, 8, ..., 89 and 3, 6, 9, ..., 90 and 91, 94, 97, ..., 99 (1x) | 794-557 | 794-5557 | - | | |

WMB marker slot



WMB

Miniature WSB marker slot



Miniature WSB

WMB



Marking Strips Marker Cards Computer Marking

| | | |
|---|---|--|
| Thermal Transfer Printers Plotters Accessories | WAGO Marker Cards for 260/261/262 Series, computer marked, 40 self-adhesive strips per card Strip height: 6 mm | WAGO Marker Cards, computer marked, for pin spacing 2.5 mm; 2.54 mm; 3.5 mm; 3.81 mm; 5 mm; 5.08 mm; 7.5 mm; 7.62 mm; 10 mm and 10.16 mm 100/80 self-adhesive strips per card |
|---|---|--|

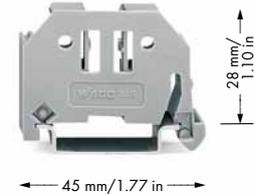
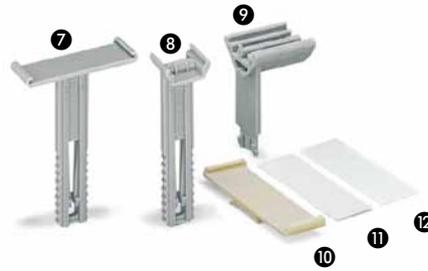


| Description | Item No. | Marking | Item No. | Pack. Unit | Marking | Item No. | Pack. Unit |
|--|-----------------|---|--------------------------|------------|--|--------------------------|------------|
| Marking strip, for TOPJOB®S, white, plain, 11 mm wide, 50 m coil | 2009-110 | for 2-conductor terminal strips (260 Series) 1 - 10 (120x) | 210-333/0500-0002 | 1 card | suitable for terminal strips with 2.5 mm pin spacing, 2.3 mm strip height/100 strips 1 - 16 (400x) | 210-331/0250-0202 | 1 card |
| | | 11 - 20 (120x) | 210-333/0500-0003 | 1 card | 17 - 32 (400x) | 210-331/0250-0204 | 1 card |
| | | 21 - 30 (120x) | 210-333/0500-0004 | 1 card | 33 - 48 (400x) | 210-331/0250-0206 | 1 card |
| | | 31 - 40 (120x) | 210-333/0500-0005 | 1 card | | | |
| | | 41 - 50 (120x) | 210-333/0500-0006 | 1 card | 2.54 mm pin spacing, 2.3 mm strip height/100 strips 1 - 16 (400x) | 210-331/0254-0202 | 1 card |
| Marking strip, for 870, 869, 862, 270 Series white, plain, 7.5 mm wide, 50 m coil | 709-178 | for 4-conductor terminal strips (260 Series) 1 - 10 (80x) | 210-333/0800-0002 | 1 card | 17 - 32 (400x) | 210-331/0254-0204 | 1 card |
| | | 11 - 20 (80x) | 210-333/0800-0003 | 1 card | 33 - 48 (400x) | 210-331/0254-0206 | 1 card |
| | | 21 - 30 (80x) | 210-333/0800-0004 | 1 card | 3.5 mm pin spacing, 3 mm strip height/80 strips 1 - 16 (240x) | 210-332/0350-0202 | 1 card |
| | | 31 - 40 (80x) | 210-333/0800-0005 | 1 card | 17 - 32 (240x) | 210-332/0350-0204 | 1 card |
| | | 41 - 50 (80x) | 210-333/0800-0006 | 1 card | 33 - 48 (240x) | 210-332/0350-0206 | 1 card |
| | | for 2-conductor terminal strips (261 Series) 1 - 12 (80x) | 210-333/0600-0103 | 1 card | 3.81 mm pin spacing, 3 mm strip height/80 strips 1 - 16 (160x) | 210-332/0381-0202 | 1 card |
| | | 13 - 24 (80x) | 210-333/0600-0104 | 1 card | 17 - 32 (160x) | 210-332/0381-0204 | 1 card |
| WMB Inline, 5 mm pitch, stretchable 5 - 5.2 mm, on roll | | 25 - 36 (80x) | 210-333/0600-0105 | 1 card | 33 - 48 (160x) | 210-332/0381-0206 | 1 card |
| | | 37 - 48 (80x) | 210-333/0600-0106 | 1 card | 5 mm pin spacing, 3 mm strip height/80 strips 1 - 16 (160x) | 210-332/0500-0202 | 1 card |
| | | for 4-conductor terminal strips (261 Series) 1 - 16 (40x) | 210-333/1000-0202 | 1 card | 17 - 32 (160x) | 210-332/0500-0204 | 1 card |
| white, 1,500 pcs | 2009-115 | 17 - 32 (40x) | 210-333/1000-0204 | 1 card | 33 - 48 (160x) | 210-332/0500-0206 | 1 card |
| white, 8,000 pcs | 2009-135 | 33 - 48 (40x) | 210-333/1000-0206 | 1 card | 5.08 mm pin spacing, 3 mm strip height/80 strips 1 - 16 (160x) | 210-332/0508-0202 | 1 card |
| | | for 2-conductor terminal strips (262 Series) 1 - 20 (40x) | 210-333/0700-0108 | 1 card | 17 - 32 (160x) | 210-332/0508-0204 | 1 card |
| | | 21 - 40 (40x) | 210-333/0700-0109 | 1 card | 33 - 48 (160x) | 210-332/0508-0206 | 1 card |
| | | 41 - 60 (40x) | 210-333/0700-0109 | 1 card | 7.5 mm pin spacing, 3 mm strip height/80 strips 1 - 20 (80x) | 210-332/0750-0020 | 1 card |
| | | for 4-conductor terminal strips (262 Series) 1 - 12 (40x) | 210-333/1200-0103 | 1 card | 7.62 mm pin spacing, 3 mm strip height/80 strips 1 - 20 (80x) | 210-332/0762-0020 | 1 card |
| | | 13 - 24 (40x) | 210-333/1200-0104 | 1 card | 10 mm pin spacing, 3 mm strip height/80 strips 1 - 16 (80x) | 210-332/1000-0202 | 1 card |
| | | 25 - 36 (40x) | 210-333/1200-0105 | 1 card | 17 - 32 (80x) | 210-332/1000-0204 | 1 card |
| | | 37 - 48 (40x) | 210-333/1200-0106 | 1 card | 33 - 48 (80x) | 210-332/1000-0206 | 1 card |
| | | Self-adhesive marking strips on DIN A4 cards, plain, 182 mm long, selectable pin spacing | | | 10.16 mm pin spacing, 3 mm strip height/80 strips 1 - 16 (80x) | 210-332/1016-0202 | 1 card |
| | | 2.3 mm strip height/100 strips | 210-331 | | 17 - 32 (80x) | 210-332/1016-0204 | 1 card |
| | | 3 mm strip height/80 strips | 210-332 | | 33 - 48 (80x) | 210-332/1016-0206 | 1 card |
| | | 5 mm strip height/48 strips | 210-334 | | | | |
| | | 6 mm strip height/40 strips | 210-333 | | | | |
| | | 9 mm strip height/40 strips | 210-335 | | | | |

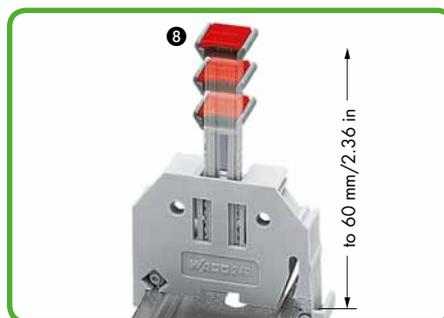


Group Marker Carriers End Stops

| | | |
|--------------------------------|-----------------------|-------------------------------------|
| TOPJOB®S Group Marker Carriers | Group Marker Carriers | Screwless End Stops for DIN 35 Rail |
|--------------------------------|-----------------------|-------------------------------------|



| Item No. | Pack. Unit | Item No. | Pack. Unit | Item No. | Pack. Unit |
|---|-----------------------|---|---------------------|---|------------|
| TOPJOB®S group marker carrier, snap-on type for jumper slot, for WMB Multi marking system, WMB Inline and marking strips | | Height-adjustable group marker carrier, for 249-116 and 249-117 end stops, for 1 marker or self-adhesive label and transparent protection covers | | Screwless end stop, for DIN 35 rail 6 mm wide | |
| 5 mm wide | 2009-191 ① 50 (2x25) | 10 mm wide | 249-119 ⑦ 50 (2x25) | 249-116 | 100 (4x25) |
| 10 mm wide | 2009-192 ② 50 (2x25) | 6 mm wide | 249-120 ⑦ 50 (2x25) | Screwless end stop, for DIN 35 rail 10 mm wide | |
| 15 mm wide | 2009-193 ③ 50 (2x25) | for 2 WSB Quick markers each or 1 x marking strip (2009-110) | | 249-117 | 50 (2x25) |
| TOPJOB®S group marker carrier snap-on type for jumper slot, for marking strips | | 249-118 ⑧ 100 (4x25) | | | |
| 10 mm wide | 2009-196 ④ 50 (2x25) | Group marker carrier, fits into jumper slot of rail-mounted terminal blocks, for up to 3 WMB markers | | | |
| | | 15 mm wide | | 209-140 ⑨ | 50 |
| Marking adapter, for lateral marker slots | | Group marker carrier, snaps into plastic end stop | | | |
| 5 mm wide | 2009-198 ⑤ 200 (8x25) | 10 mm wide | | 209-112 ⑩ | 50 |
| | | Marker card, from white cardboard, for self-marking, 100 markers per sheet | | | |
| Marking adapter, for jumper slots of 2002 Series | | 209-113 ⑪ | | 1 sheet | |
| 5 mm wide | 2002-161 ⑥ 100 (4x25) | Sticker, for self-marking, 100 markers per sheet | | | |
| | | 210-345 | | 1 sheet | |
| | | Protection cover, transparent | | | |
| | | 209-114 ⑫ | | 50 | |



Conductor Marking for Conductors from 0.25 mm² to 16 mm² (AWG 22–6) 211 Series

| | | |
|--|--|---|
| Marking sleeve, halogen-free for one marker, to be fitted prior to conductor termination | Marking sleeve, halogen-free for one marker, to be fitted prior to conductor termination | Marking sleeve, halogen-free, for cable tie, for one marker, can also be fitted after install |
|--|--|---|



| Item No. | Pack. Unit | Item No. | Pack. Unit | Item No. | Pack. Unit |
|--|------------|--|------------|--|------------|
| Marking sleeve, 12 mm long | | Marking sleeve, 23 mm long | | Marking sleeve, 23 mm long | |
| for conductor diameter 1.6 – 3.2 mm or 0.25 mm ² – 1.5 mm ² | | for conductor diameter 1.6 – 3.2 mm or 0.25 mm ² – 1.5 mm ² | | for conductors 10 mm ² (AWG 8) and larger for 6 mm Ø cables and larger | |
| 211-112 | 2000 | 211-122 | 2000 | 211-129 | 1000 |
| for conductor diameter 2.2 – 4.5 mm or 0.5 mm ² – 4 mm ² | | for conductor diameter 2.2 – 4.5 mm or 0.5 mm ² – 4 mm ² | | | |
| 211-113 | 2000 | 211-123 | 2000 | | |
| for conductor diameter 3.7 – 5.9 mm or 2.5 mm ² – 6 mm ² | | for conductor diameter 3.7 – 5.9 mm or 2.5 mm ² – 6 mm ² | | | |
| 211-114 | 1000 | 211-124 | 1000 | | |
| for conductor diameter 5.5 – 10 mm or 10 mm ² – 25 mm ² | | for conductor diameter 5.5 – 10 mm or 10 mm ² – 25 mm ² | | | |
| 211-115 | 1000 | 211-125 | 1000 | | |

| Accessories, 211 Series | | Accessories, 211 Series | |
|---|---|---|---|
| Markers on roll, for thermal transfer printer, 3000 cards per roll; 12 mm long white 211-111 | 1 | Markers on roll, for thermal transfer printer, 3000 cards per roll; 23 mm long white 211-121 | 1 |
| Marker card, for plotter, 57 markers per card, 12 mm long white 211-110 | 1 | Marker card, for plotter, 34 markers per card, 23 mm long white 211-120 | 1 |
| Carrier plate for marker cards for IP 350 plotter 258-370 | 1 | Carrier plate for marker cards for IP 350 plotter 258-370 | 1 |

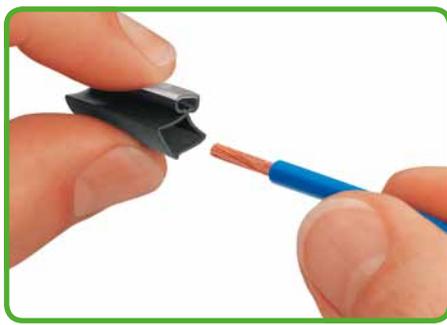


Slide the plotted or printed marker into the marking sleeve receptacle. Exchanging the marker is also possible after the conductor has been terminated.

Applications



Conductor marking using marking sleeves.



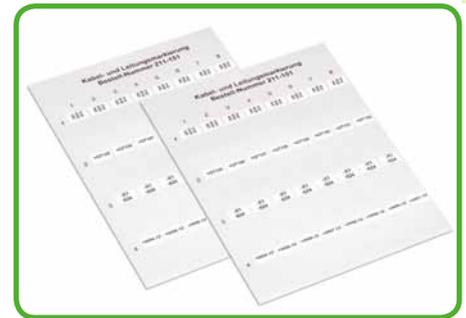
Compress the sleeve and slide it onto the conductor to be marked.



Attach the 211-129 marking sleeve to individual cables or conductors via cable ties.

Conductor Marking for Thread-On Mounting Self-Laminating Labels for Cable Marking 211 Series

| | |
|--|--|
| Conductor Marking for Thread-On Mounting | Self-laminating labels for cable marking on DIN A4 sheets or roll Cable diameter: approx. 3 – 14 mm |
|--|--|



Self-laminating labels are available on A4 sheets for laser printers (plotters) or are supplied on roll for thermal transfer printers.

| Item No. | Pack. Unit | Item No. | Pack. Unit |
|--|------------|---|------------|
| Conductor markers for thread-on mounting, 2,000 markers/roll | | Labels on DIN A4 sheets, for laser printer | |
| for conductors 0.75–1.5 mm ² (AWG 20–16) | | Marking surface: "S" = 9 mm x "B" = 17 mm "L" = 35 mm | |
| 211-161 | 1000 | for max. 8 mm cable diameter 70 labels per sheet | |
| for conductors 2.5–6 mm ² (AWG 14–10) | | 211-150 | 20 |
| 211-162 | 1000 | Marking surface: "S" = 13 mm x "B" = 21 mm "L" = 56 mm | |
| | | for max. 14 mm cable diameter 32 labels per sheet | |
| | | 211-151 | 25 |
| | | Labels on roll for thermal transfer printer | |
| | | Marking surface: "S" = 8 mm x "B" = 18 mm "L" = 35 mm | |
| | | for max. 9 mm cable diameter 9,000 labels per roll | |
| | | 211-155 | 1 |
| | | Marking surface: "S" = 13 mm x "B" = 23 mm "L" = 51 mm | |
| | | for max. 12 mm cable diameter 5,000 labels per roll | |
| | | 211-156 | 1 |



Remove the printed label from the sheet or roll.

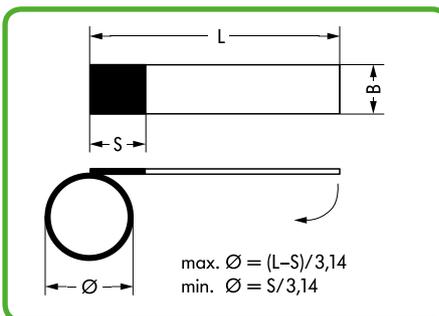


Wrap the label around the conductor or cable.

Application and Dimensions



Conductor Marking for Thread-On Mounting



Dimensions of self-laminating label (in mm)



The transparent laminate protects the marking.

Transparent Covers for Rail-Mounted Terminal Blocks, Usable with Lead Seals Collective Carriers for Jumpers

| | | |
|--|---|--|
| <p>Cover and cover carrier, type 1, suitable for: 279 to 282 Series rail-mounted terminal blocks 264 Series miniature rail-mounted terminal blocks</p> | <p>Cover and cover carrier, type 2, suitable for: 283 to 285 Series rail-mounted terminal blocks 280/281 Series double- and triple-deck term. blocks 280 Series sensor/actuator terminal blocks 282 Series disc./test term. blocks for transformer circuits</p> | <p>Switchgear cabinet outlet Switchgear cabinet drawer Collective carrier for adjacent jumpers</p> |
|--|---|--|



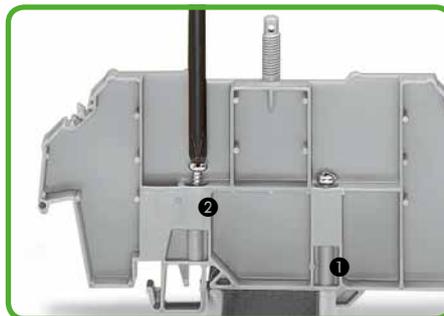
| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|--|----------|------------|---|----------|------------|---|----------|------------|
| <p>Cover, type 1, 1 m long, for cover carrier (type 1), transparent 709-153 10</p> | | | <p>Cover, type 2, 1 m long, for cover carrier (type 2), transparent 709-154 1</p> | | | <p>Switchgear cabinet outlet, DIN 35-rail mount SCHUKO outlet, with green operating LED 709-581 1</p> | | |
| <p>Switchgear cabinet drawer, DIN 35-rail mount drawer 709-591 1</p> | | | | | | | | |



| Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit | Color | Item No. | Pack. Unit |
|---|----------|------------|--|----------|------------|---|----------|------------|
| <p>Cover carrier, type 1, incl. mounting/securing screws and knurled nuts gray 709-167 10</p> | | | <p>Cover carrier, type 2, incl. mounting/securing screws and knurled nuts gray 709-168 10</p> | | | <p>Collective carrier for adjacent jumpers gray 209-100 50 (2x25) Suitable for 279, 280, 281, 282 and 284 Series adjacent jumpers and 215 Series banana plugs</p> | | |
| <p>Accessories, 709 Series</p> | | | | | | | | |
| <p>Spare mounting/securing screw  209-196 200 (8x25)</p> | | | <p>Marking card with 6 marking strips, plain  709-183 1</p> | | | | | |
| <p>Spare knurled nut  210-549 100 (4x25)</p> | | | | | | | | |



Application example:
Cover (type 1) with safety warning and lead seals.



① Mounting screw – prevents the cover carrier from being moved on the rail.
② Securing screw – prevents lifting off from rail.



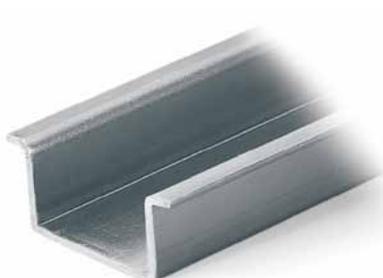
The switchgear cabinet drawer is the ideal place to store small parts that are not commonly used (e.g., instructions, test plug adapters, jumpers, spare fuses).

Carrier Rails Angled Support Brackets

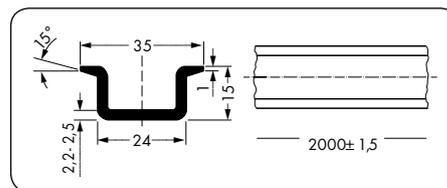
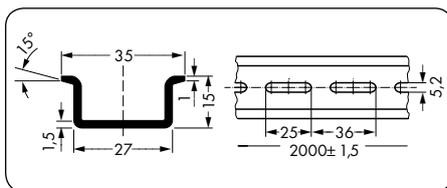
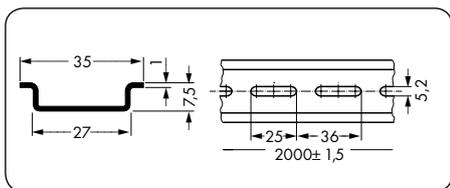
Carrier rail 35 x 7.5 mm,
1 mm thick,
acc. to IEC 60715,
steel, zinc-plated and yellow chromated
I_N 76 A (reference length of 1 m)

Carrier rail 35 x 15 mm,
1.5 mm thick,
acc. to EN 60715,
steel, zinc-plated and yellow chromated
I_N 125 A (reference length of 1 m)

Carrier rail 35 x 15 mm,
2.3 mm thick,
acc. to EN 60715,
steel, zinc-plated and yellow chromated
I_N 125 A (reference length of 1 m)



| Length | Item No. | Pack. Unit | Length | Item No. | Pack. Unit | Length | Item No. | Pack. Unit |
|---|----------|------------|---|----------|------------|--|----------|------------|
| Steel carrier rail 35 x 7.5 mm, 1 mm thick, unslotted 2 m long | 210-113 | 10 | Steel carrier rail 35 x 15 mm, 1.5 mm thick, unslotted 2 m | 210-114 | 10 | Steel carrier rail 35 x 15 mm, 2.3 mm thick, unslotted 2 m | 210-118 | 10 |
| Steel carrier rail 35 x 7.5 mm, 1 mm thick, slotted 2 m long | 210-112 | 10 | Steel rail 35 x 15 mm, 1.5 mm thick, slotted 2 m | 210-197 | 10 | | | |



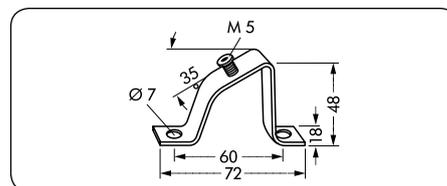
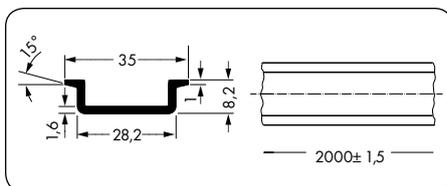
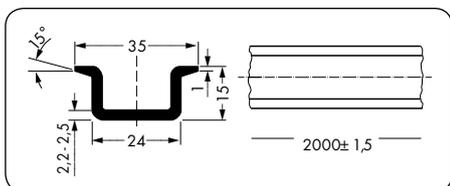
Carrier rail 35 x 15 mm,
2.3 mm thick,
acc. to IEC 60715,
copper, unplated
IN 309 A (reference length of 1 m)

Carrier rail 35 x 7.5 mm,
1.5 mm thick,
acc. to IEC 60715,
aluminum, unplated
I_N 76 A (reference length of 1 m)

Angled support bracket,
steel, zinc-plated



| Length | Item No. | Pack. Unit | Length | Item No. | Pack. Unit | Item No. | Pack. Unit | |
|--|----------|------------|---|----------|------------|---------------------------------------|------------|------------|
| Copper carrier rail 35 x 15 mm, 2.3 mm thick, unslotted 2 m long | 210-198 | 10 | Aluminum carrier rail 35 x 7.5 mm, 1.5 mm thick, unslotted 2 m long | 210-196 | 10 | Angled support bracket, without screw | 210-148 | 10 |
| | | | | | | M 5 x 8 screw | 210-149 | 100 (5x20) |



Operating Tools

| | | |
|--|---|---|
| Operating tool with partially insulated shaft, ideal for operating terminal blocks | Insulated multipole operating tools for front-entry terminal blocks | Operating tool (DIN 5264), ideal for terminal blocks with CAGE CLAMP® |
|--|---|---|



| Item No. | Pack. Unit | Item No. | Pack. Unit | Item No. | Pack. Unit |
|--|---------------------|--|---|---|------------------|
| Operating tool with partially insulated shaft, type 1, (2.5 x 0.4) mm blade, suitable for 218, 233, 234, 235, 250, 253, 279, 726, 727, 733, 734, 735, 750, 752, 753, 770, 2000, 2001 Series | 210-719 1 | Operating tool, insulated, suitable for 279 Series | 1-pole 209-129 1 2-pole 279-432 1 3-pole 279-433 1 10-pole 279-440 1 | Operating tool, (2.5 x 0.4) mm blade, suitable for 218, 233, 234, 235, 250, 253, 279, 726, 727, 733, 734, 735, 750, 752, 753, 770, 2000, 2001, 2734 Series | 210-647 1 |
| Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade, suitable for 231, 232, 236, 255, 256, 257, 260, 261, 262, 264, 270, 280, 281, 290, 721, 722, 736, 737, 738, 742, 745, 775, 776, 777, 769, 780, 781, 804, 869, 870, 880, 2002, 2003, 2004, 2005, 2022 Series | 210-720 1 | suitable for 264*, 280, 281** Series | 1-pole 209-130 1 2-pole 280-432 1 3-pole 280-433 1 4-pole 280-434 1 5-pole 280-435 1 6-pole 280-436 1 7-pole 280-437 1 8-pole 280-438 1 9-pole 280-439 1 10-pole 280-440 1 | Operating tool, angled, (2.5 x 0.4) mm blade, suitable for 279, 2000, 2001, 2020 Series | 210-648 1 |
| Operating tool with partially insulated shaft, type 3, (5.5 x 0.8) mm blade, suitable for 282, 283, 284, 285, 745, 782, 783, 784, 785, 2006, 2010, 2016 Series | 210-721 1 | suitable for 281 Series | 5-pole 281-440 1 | Operating tool, (3.5 x 0.5) mm blade, suitable for 231, 232, 236, 255, 256, 257, 264, 280, 281, 721, 722, 736, 737, 738, 742, 745, 804, 869, 2002, 2004 Series | 210-657 1 |
| Set of operating tools with partially insulated shafts, type 1, (2.5 x 0.4) mm blade, type 2, (3.5 x 0.5) mm blade, type 3, (5.5 x 0.8) mm blade | 210-722 1 | | *only 1- and 2-pole **only up to 3-pole | Operating tool, angled, (3.5 x 0.5) mm blade, suitable for 231, 232, 236, 255, 256, 257, 260, 261, 262, 264, 280, 281, 721, 722, 736, 737, 738, 742, 745, 804, 869, 870, 880, 2002, 2004 Series | 210-658 1 |

Application Notes



Set of operating tools in a box.



Commoning front-entry disconnect terminal blocks via comb-style jumper bar using a 10-pole operating tool.



The above-listed operating tools with blade dimensions to DIN 5264 are ideal for operating 280 Series front-entry sensor and actuator terminal blocks.

Operating Tools Test and Measurement Tools

| | | |
|---|---|---|
| Operating tool for TOPJOB®S installation terminal blocks | Voltage testers Profi LCD+ Profi LED+ | "Multi-Tester" digital multimeter "Amp-Tester" clamp meter |
|---|---|---|



| Item No. | Pack. Unit | Item No. | Pack. Unit | Item No. | Pack. Unit |
|--|------------|---|------------|---|------------|
| Operating tool, (2.5 x 0.4) mm and (3.5 x 0.5) mm blades, for TOPJOB®S installation terminal blocks | | Profi LCD+, 2-pole voltage tester with LCD display, 4 mm Ø removable test probes, measuring range of 6 - 1000 V AC/DC, IP65 protection class, resistance measurement up to 2000 Ω | | Multi-Tester, digital multimeter with non-contact voltage tester, with bag, measures up to 600 V AC/DC and 10 A AC/DC, resistance measurement up to 20 MΩ, acoustical continuity test, diode test, data hold function | |
| 2009-309 | 1 | 206-807 | 1 | 206-810 | 1 |
| Operating tool, (3.5 x 0.5) mm and (5.5 x 0.8) mm blades, for TOPJOB®S installation terminal blocks | | Profi LED+, 2-pole voltage tester with LED display, 4 mm Ø removable test probes, measuring range of 6 - 1000 V AC/DC, IP65 protection class, resistance measurement up to 2000 Ω | | Amp-Tester, digital clamp meter, true RMS measurement, with bag, measuring range of 0.01 - 200 A AC/DC, IP44 protection class, data hold function, max. conductor size, 21 mm Ø, resolution of 0.01 A at 40 A, resolution of 0.1 A at 200 A | |
| 2009-310 | 1 | 206-806 | 1 | 206-815 | 1 |
| Accessories | | | | | |
| | | Spare test probes, 4 mm Ø (2 pcs) | | Replacement test leads, for Multi-Tester, red/black | |
| | |  206-808 | 1 |  206-811 | 1 |
| Application Notes | | | | | |



Voltage testing in switchgear cabinet.



Current measurement in switchgear cabinet.

Cable and Wire Strippers 206 Series

| | | |
|----------------|----------------|--|
| Cable stripper | Cable stripper | <p>"Quickstrip 10" wire stripper 0.02 – 10 mm² "f-st" (6 mm² "sol.")</p> <p>"Quickstrip 16" wire stripper 4 – 16 mm² Wire cutter up to 10 mm² "f-st" (1.5 mm² "sol.")</p> |
|----------------|----------------|--|



| Item No. | Pack. Unit | Item No. | Pack. Unit | Item No. | Pack. Unit |
|--|------------|--|------------|--|------------|
| Cable stripper, for round cables with an outer diameter from 2.5 mm to 11 mm | | Cable stripper, for round cables with an outer diameter from 4.5 mm to 45 mm | | "Quickstrip 10" wire stripper | |
| 206-171 | 1 | 206-174 | 1 | 206-124 | 1 |
| Accessories, Item-Specific | | Accessories, Item-Specific | | Accessories, Item-Specific | |
| Replacement blade, for 2.5 mm to 11 mm Ø | | Replacement blade, for 4.5 mm to 45 mm Ø | | "Standard" blade cassette | |
|  206-170 | 1 |  206-173 | 1 |  0.02 mm ² to 10 mm ² | 1 |
| <ul style="list-style-type: none"> - 10-position adjustment wheel ensures repeatable stripping results - Fine adjustability via 10-position blade cutting depth adjustment - Strips the sheath from multi-core and fiber optic cables up to 11 mm diameter - Safe and easy to use through closed stripping cavity. | | <ul style="list-style-type: none"> - Safe and easy to use: Three locking positions for circular, longitudinal and spiral cuts - High cable stripping capacity of up to 45 mm diameter - Well balanced, ergonomic design features rests for thumb, index and pinky fingers to ease raising of the cable retention hook - Replacement blades can be stored within the tool body. | | <ul style="list-style-type: none"> "V" blade cassette 0.02 mm² to 4 mm² for PTFE  206-127 1 | |
| | | | | <ul style="list-style-type: none"> "Standard" blade cassette 4 mm² to 16 mm²  206-128 1 | |



Stripping a wire via Quickstrip 16.



Cutting a wire via Quickstrip 16.

Cable Cutter and TESTBOY, 206 Series Banana Plugs, 215 Series

| | | |
|--------------|---------|---|
| Cable cutter | TESTBOY | Banana plugs for 4 mm Ø sockets 0.08 - 2.5 mm² AWG 28 - 14 42 V I_N 20 A  9 - 11 mm / 0.39 in |
|--------------|---------|---|



| Item No. | Pack. Unit | Item No. | Pack. Unit | Item No. | Pack. Unit |
|--|------------|---|------------|--|-------------------|
| Cable cutter, for copper and aluminum cables up to 35 mm ² /AWG 2 | | TESTBOY, non-contact voltage tester, with integrated flashlight, voltage range of 12 - 1000 VAC | | Banana plugs, for 4 mm Ø sockets, color mixed, orange, blue, yellow, white, black | |
| 206-118 | 10(10x1) | 206-804 | 1 | 215-111 | 50 |
| | | | | Banana plugs, for 4 mm Ø sockets, orange | 215-211 50 |
| | | | | red | 215-212 50 |
| | | | | black | 215-311 50 |
| | | | | green | 215-411 50 |
| | | | | yellow | 215-511 50 |
| | | | | blue | 215-711 50 |
| | | | | gray | 215-811 50 |
| | | | | green-yellow | 215-911 50 |

Application Notes



Cutting a cable.



A device that will reliably detect AC voltage in cables, sockets, fuses, switches, outlets, etc.



Conductor termination:
Press button fully and insert stripped conductor into square entry and release.

The WAGO TESTBOY detects:

- Live conductors
- Line breaks
- Blown fuses (in cartridges or holders)
- Defective switches
- Defective lamps in strings of lights

Crimping Tools 206 Series

| | | |
|--|--|--|
| "Variocrimp 4" crimping tool 0.25 - 4 mm ² / AWG 22 - 12 | "Variocrimp 16" crimping tool 6 - 16 mm ² / AWG 10 - 6 | Crimping tool 25 10 mm ² , 16 mm ² and 25 mm ² AWG 8, AWG 6 and AWG 4 |
|--|--|--|



| Item No. | Pack. Unit | Item No. | Pack. Unit | Item No. | Pack. Unit |
|--|------------|---|------------|--|------------|
| "Variocrimp 4" crimping tool, for insulated and uninsulated ferrules, crimping range of 0.25 - 4 mm ² | | "Variocrimp 16" crimping tool, for insulated and uninsulated ferrules, crimping range of 6 - 16 mm ² | | Crimping tool 25, for insulated and uninsulated ferrules, crimping range of 10 mm ² , 16 mm ² and 25 mm ² | |
| 206-204 | 1 | 206-216 | 1 | 206-225 | 1 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Application Notes



Introduce ferruled conductor into crimping station.
Squeeze handles until ratchet mechanism is released.



Only for Variocrimp 16:
Adjust conductor cross section with opened tool.



Insert ferruled conductor into crimping station.

- With "Variocrimp 4," the built-in crimping pressure control automatically adjusts force to the conductor cross section used. With "Variocrimp 16," it is necessary to select the wire gauge on the tool before crimping.
- Only one crimping station is needed to handle the specified conductor size range.
- Uniform, compact crimping on all four sides for high conductor retention.
- No need to center the conductor into the ferrule.
- Conductor and ferrule insertion possible from both sides (for left- and right-handers).
- Built-in ratchet mechanism ensures gas-tight crimp connection.
- Crimping tools open automatically after crimping operation is complete.
- Ergonomical handles.

What is a "gas-tight" connection

In a gas-tight connection, the conductor and the ferrule are compressed together, eliminating all spaces. Under normal atmospheric conditions, neither a liquid nor a gaseous medium can penetrate into the crimped connection. Oxidation between crimped single conductors is prevented, ruling out nearly any increase in the crimped connection resistance. In some exceptional cases, minute, isolated spaces may be present. These can be considered to be closed off on account of the twisted wires, however.

Inadequate crimping can allow the conductor to be pulled out of the connection. Hollow spaces also remain in which oxidation can form. Oxidation leads to an increase in contact resistance.

Crimping Tool, 206 Series Ferrules, 216 Series

Crimping tool 50
35 mm² and 50 mm²
AWG 2 and AWG 1

Insulated ferrules



| Item No. | Pack. Unit | Sleeve for mm ² | AWG | Color | Strip Length L mm | L1 | D mm | D1 | D2 | Item No. | Pack. Unit | | |
|---|------------|---|------|--------|----------------------|------|---------|-----|---------|----------|------------|------|--|
| Crimping tool 50, for insulated and uninsulated ferrules, crimping range of 35 mm ² and 50 mm ² | 1 | 0,25 | 24 | yellow | 7,5 | 10,5 | 6,0 | 2,5 | 2,0 | 0,8 | 216-321 | 1000 | |
| | | 0,25 | 24 | yellow | 9,5 | 12,5 | 8,0 | 2,5 | 2,0 | 0,8 | 216-301 | 1000 | |
| Application Notes | 1 | 0,35 | 24 | green | 7,5 | 10,5 | 6,0 | 2,5 | 2,0 | 0,8 | 216-322 | 1000 | |
| | | 0,34 | 24 | green | 9,5 | 12,5 | 8,0 | 2,5 | 2,0 | 0,8 | 216-302 | 1000 | |
| | | 0,5 | 22 | white | 7,5 | 11,5 | 6,0 | 3,0 | 2,5 | 1,1 | 216-221 | 1000 | |
| | | 0,5 | 22 | white | 9,5 | 13,5 | 8,0 | 3,0 | 2,5 | 1,1 | 216-201 | 1000 | |
| | | 0,75 | 20 | gray | 8,0 | 12,0 | 6,0 | 3,3 | 2,8 | 1,3 | 216-222 | 1000 | |
| | | 0,75 | 20 | gray | 10,0 | 14,0 | 8,0 | 3,3 | 2,8 | 1,3 | 216-202 | 1000 | |
| | | 1,0 | 18 | red | 8,0 | 12,0 | 6,0 | 3,6 | 3,0 | 1,5 | 216-223 | 1000 | |
| | | 1,0 | 18 | red | 10,0 | 14,0 | 8,0 | 3,6 | 3,0 | 1,5 | 216-203 | 1000 | |
| | | 1,5 | 16 | black | 8,0 | 12,0 | 6,0 | 4,0 | 3,4 | 1,8 | 216-224 | 1000 | |
| | | 1,5 | 16 | black | 10,0 | 14,0 | 8,0 | 4,0 | 3,4 | 1,8 | 216-204 | 1000 | |
| | | 2,08 | 14 | yellow | 10,0 | 14,5 | 8,0 | 4,2 | 3,6 | 2,05 | 216-205 | 1000 | |
| | | 2,5 | 14 | blue | 10,0 | 15,0 | 8,0 | 4,8 | 4,2 | 2,3 | 216-206 | 1000 | |
| | | 4,0 | 12 | gray | 12,0 | 16,8 | 9,5 | 5,4 | 4,8 | 2,9 | 216-207 | 1000 | |
| | | 6,0 | 10 | yellow | 14,0 | 20,0 | 12,0 | 6,8 | 6,2 | 3,5 | 216-208 | 100 | |
| | | 10,0 | 8 | red | 16,0 | 21,0 | 12,0 | 8,1 | 7,5 | 4,6 | 216-209 | 100 | |
| | | 16,0 | 6 | blue | 23,0 | 28,0 | 18,0 | 9,6 | 8,8 | 5,8 | 216-210 | 100 | |
| | | Insulated ferrules, extra long, for TOBJOB®S terminal blocks | | | | | | | | | | | |
| | | 0,5 | 22 | white | 12,0 | 16,0 | 10,0 | 3,1 | 2,6 | 1,0 | 216-241 | 1000 | |
| | | 0,75 | 20 | gray | 12,0 | 16,0 | 10,0 | 3,3 | 2,8 | 1,2 | 216-242 | 1000 | |
| | | 0,75 | 20 | gray | 14,0 | 18,0 | 12,0 | 3,3 | 2,8 | 1,2 | 216-262 | 1000 | |
| 1,0 | 18 | red | 12,0 | 16,0 | 10,0 | 3,5 | 3,0 | 1,4 | 216-243 | 1000 | | | |
| 1,0 | 18 | red | 14,0 | 18,0 | 12,0 | 3,5 | 3,0 | 1,4 | 216-263 | 1000 | | | |
| 1,5 | 16 | black | 12,0 | 16,0 | 10,0 | 4,0 | 3,5 | 1,7 | 216-244 | 1000 | | | |
| 1,5 | 16 | black | 14,0 | 18,0 | 12,0 | 4,0 | 3,5 | 1,7 | 216-264 | 1000 | | | |
| 1,5 | 16 | black | 20,0 | 24,0 | 18,0 | 4,0 | 3,5 | 1,7 | 216-284 | 1000 | | | |
| 2,5 | 14 | blue | 12,0 | 17,0 | 10,0 | 4,7 | 4,2 | 2,2 | 216-246 | 1000 | | | |
| 2,5 | 14 | blue | 14,0 | 19,0 | 12,0 | 4,7 | 4,2 | 2,2 | 216-266 | 1000 | | | |
| 2,5 | 14 | blue | 20,0 | 25,0 | 18,0 | 4,7 | 4,2 | 2,2 | 216-286 | 1000 | | | |
| 4,0 | 12 | gray | 14,0 | 20,0 | 12,0 | 5,4 | 4,8 | 2,8 | 216-267 | 500 | | | |
| 4,0 | 12 | gray | 20,0 | 26,0 | 18,0 | 5,4 | 4,8 | 2,8 | 216-287 | 500 | | | |
| 6,0 | 10 | yellow | 14,0 | 20,0 | 12,0 | 6,9 | 6,3 | 3,5 | 216-208 | 500 | | | |
| 6,0 | 10 | yellow | 20,0 | 26,0 | 18,0 | 6,9 | 6,3 | 3,5 | 216-288 | 500 | | | |
| 10,0 | 8 | red | 20,0 | 28,0 | 18,0 | 8,4 | 7,6 | 4,5 | 216-289 | 500 | | | |
| 16,0 | 6 | blue | 23,0 | 28,0 | 18,0 | 9,6 | 8,8 | 5,8 | 216-210 | 500 | | | |

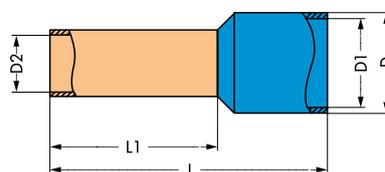


Squeeze handles until ratchet mechanism is released.

Elevated resistance is detrimental for signal transmission, as the signal flow is damped (weakened), and for power transmission, as power loss and, hence a temperature increase due to contact (risk of fire) can result.

Crimping tools with built-in ratchets are recommended, such as the **WAGO crimping tools**. These tools only open after the crimping process has been fully completed. Space-saving crimping from all four sides is ideal for spring clamp termination. Cross section data for ferruled conductors indicated for WAGO products is based on this crimping method.

Insulated ferrules



For letters with the corresponding dimensions, see table above.

Uninsulated ferrules

(see Full Line Catalog, Volume 1)



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International Certification Organizations – Overview

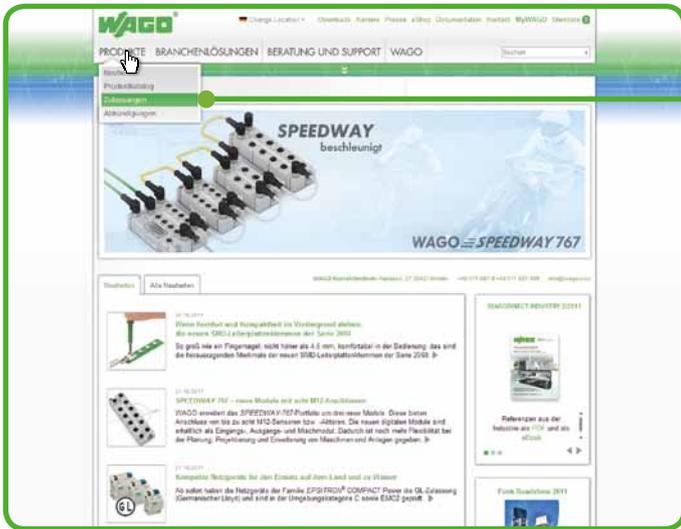
| | Abbreviation for online search | | Abbreviation for online search |
|--|-----------------------------------|--|-------------------------------------|
|  Underwriters Laboratories USA http://www.ul.com | UL |  Danmarks Elektriske Materielkontrol Denmark http://www.demko.dk | DEMKO |
|  Underwriters Laboratories USA http://www.ul.com | UL | CENELEC CERTIFICATION AGREEMENT  Danmarks Elektriske Materielkontrol Denmark http://www.cenelec.org | CCA App. No. with DK |
|  Underwriters Laboratories USA http://www.ul.com | cURus | | |
|  Underwriters Laboratories USA http://www.ul.com | cULus |  SETI – FEMKO Sähkötarastuskeskus Elinspektionscentralen Finland http://www.seti.fi | |
|  Canadian Standards Association Canada http://www.csa.ca | CSA |  Sähkötarastuskeskus Elinspektionscentralen Finland http://www.fimko.com | FIMKO |
|  VDE Expert Report with Production Monitoring Federal Republic of Germany http://www.vde.de/vde/html/e/home.htm | VDE | SABS South African Bureau of Standards South Africa http://www.sabs.co.za | SABS |
|  VDE – Deutscher Verband für Elektrotechnik Germany http://www.vde.de | |  RosTest Russia http://www.rostest.ru | ROSTEST |
| VDE VDE – Test Report Germany | |  Departamentul Moldovastandard Moldavia http://www.moldova.md/ro/government/oll/D_STAND/en/strcent2.htm | CSM |
|  Österreichischer Verband für Elektrotechnik Austria http://www.ove.at | ÖVE |  Certificate of Registration Great Britain http://www.astacertification.com | ASTA |
|  Schweizerischer Elektrotechnischer Verein Switzerland http://www.sev.ch/ | SEV |  Rheinisch-Westfälischer Technischer Überwachungsverein e.V. Germany http://www.rwtuv.de | RWTÜV |
|  N.V. tot Keuring van Elektrotechnische Materialen Netherlands http://www.kema.nl | KEMA |  Elektrotechnik ý v ýskumn ý a projektov ý ústav Czech Republic http://www.ezu.cz | EZU |
| CENELEC CERTIFICATION AGREEMENT  N.V. tot Keuring van Elektrotechnische Materialen Netherlands http://www.cenelec.org | CCA App. No. with NL |  Stowarzyszenie Elektrykow Polskich Poland http://www.bbj.pl | BBJ |
|  Norges Elektriske Materialkontroll Norway http://express.nemko.com | NEMKO |  Stowarzyszenie Elektrykow Polskich Poland http://www.sep.com.pl | SEP |
|  Svenska Elektriska Materielkontrollanstalten AB Sweden http://www.semko.com | SEMKO | | |

| | Abbreviation for online search | | Abbreviation for online search |
|---|--------------------------------|--|--------------------------------|
| CNET Centre National d'Etudes des Télécommunications France http://www.lannion.cnet.fr | CNET |  Robbanásbiztos Villamos Berendezések Hungary http://www.bki.hu | BKI |
| LCIE Laboratoire Central des Industries Electriques France http://www.lcieie.fr | LCIE | CB CB – TEST CERTIFICATE India http://www.ul-europe.com | CB |
|  Fyzikálne Technick ý Zkusebn ý Ústav, Ostrava-Radvanice Czech Republic http://www.ftzu.cz | FTZU | CB CB – TEST CERTIFICATE China http://www.ul-europe.com | CB |
| | |  UL-International Demko A/S Denmark http://www.ul-europe.com | ENEC |
| Shipbuilding Approvals | | Ex approvals | |
|  Germanischer Lloyd Federal Republic of Germany http://www.gl-group.com | GL |  Physikalisch Technische Bundesanstalt Germany Ex e IIEx e II http://www.ptb.de | PTB |
| BV Bureau Veritas France http://www.bureauveritas.fr | BV |  Underwriters Laboratories USA http://www.ul.com | cURus-EX |
|  Lloyd's Register of Shipping Great Britain http://www.lloydsregister.com | LR |  N.V. tot Keuring van Elektrotechnische Materialien Netherlands http://www.kemaquality.com | KEMA-EX |
|  NV – Det Norske Veritas Norway http://www.dnv.com | DNV | GOSENERGO-Ex GOSENERGONADZOR Russia | GOSENERGO-EX |
|  Russian Maritime Register of Shipping CIS http://www.rs-head.spb.ru | RMR |  Fyzikálne Technick ý Zkusebn ý Ústav, Ostrava-Radvanice Czech Republic http://www.ftzu.cz | FTZU |
|  Polski Rejestr Statków Poland http://www.prs.pl | PRS |  Robbanásbiztos Villamos Berendezések Hungary http://www.bki.hu | BKI-EX |
|  Korean Register of Shipping Korea http://www.krs.co.kr | KR | | |
| ABS American Bureau of Shipping USA http://www.eagle.org | ABS | | |



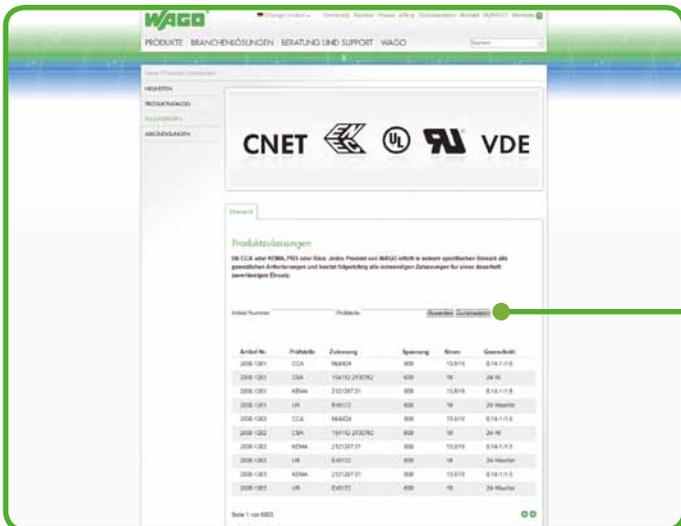
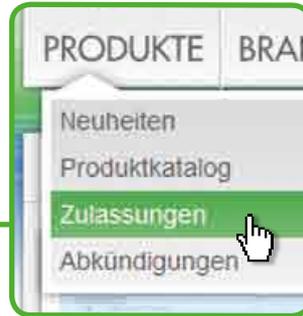
• 1. Select "Country" ①

e.g., Germany



• 2. Select "Products"

Select "Approvals"



• 3. "Search for Approvals"

Here, you can search for approvals or items according to defined criteria.



① Step 1 only required when country is not automatically recognized.



4. Input options

- a) Item no.,
e.g., 264-301
- b) Certification agency,
e.g., "UL"
- c) Certification agency and
item no. range,
e.g., "280 - 6" and "UR"

Artikel Nummer: 264-301 Prüfstelle: Absenden Zurücksetzen

Ihre Abfrage lieferte folgende Ergebnisse:

| Artikel Nr. | Prüfstelle | Zulassung | Spannung | Strom | Querschnitt |
|-------------|------------|------------------|----------|-------|-------------|
| 264-301 | ABS | 04-HG4761741-PDA | 800 | 24 | 2,5 |
| 264-301 | BY | 07436/C0 | | | 0,08-2,5 |
| 264-301 | CCA | NL6611 | 800 | 24 | 2,5 |
| 264-301 | CSA | 18677-23 | 600 | 20 | 26-12 |
| 264-301 | DINV | E-9215 | 800 | 24 | 2,5 |
| 264-301 | GL | 17296-00HH | 800 | 24 | 2,5 |
| 264-301 | KR | HMB05880-EL002 | 800 | 24 | |
| 264-301 | LR | 92/20242(E5) | 800 | 24 | 2,5 |
| 264-301 | RMR | 11130002 | 800 | 24 | 2,5 |
| 264-301 | UR | E45172 | 300 | 20 | 28-12 |

Search results a)
Item no.:

All approvals related to that product are displayed.

Artikel Nummer: Prüfstelle: UL Absenden Zurücksetzen

Ihre Abfrage lieferte folgende Ergebnisse:

| Artikel Nr. | Prüfstelle | Zulassung | Spannung | Strom | Querschnitt |
|-------------|------------|-----------|----------|-------|----------------------|
| 224-101 | UL listed | E69654 | 300 | 20 | 14-12"s/20-16"s/str" |
| 224-104 | UL listed | E69654 | 300 | 20 | 14-12"s/20-16"s/str" |
| 224-112 | UL listed | E69654 | 300 | 20 | 18-16"s/20-16"s/str" |
| 224-114 | UL listed | E69654 | 300 | 20 | 18-16"s/20-16"s/str" |
| 224-201 | UL listed | E69654 | 300 | 20 | 20-16 |
| 273-100 | UL listed | E69654 | 600 | 20 | 20-16"s |
| 273-101 | UL listed | E69654 | 600 | 20 | 20-16"s |
| 273-102 | UL listed | E69654 | 600 | 20 | 18-12"s |
| 273-103 | UL listed | E69654 | 600 | 20 | 16-14"s |
| 273-104 | UL listed | E69654 | 600 | 20 | 18-12"s |

Search results b)
Certification agency:

All products approved by that agency are displayed.

Artikel Nummer: 280 Prüfstelle: UR Absenden Zurücksetzen

Ihre Abfrage lieferte folgende Ergebnisse:

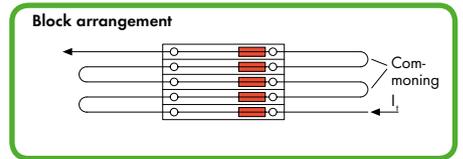
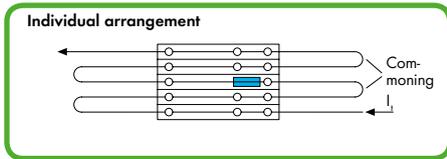
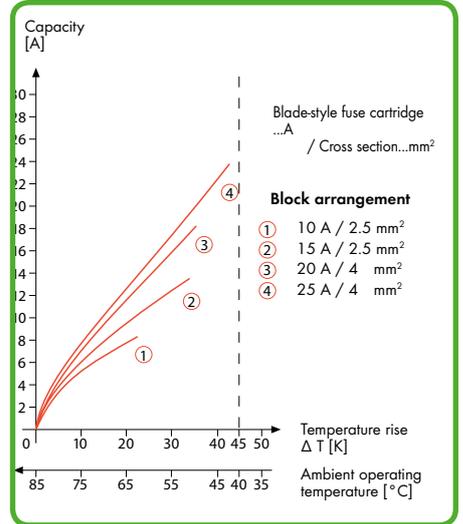
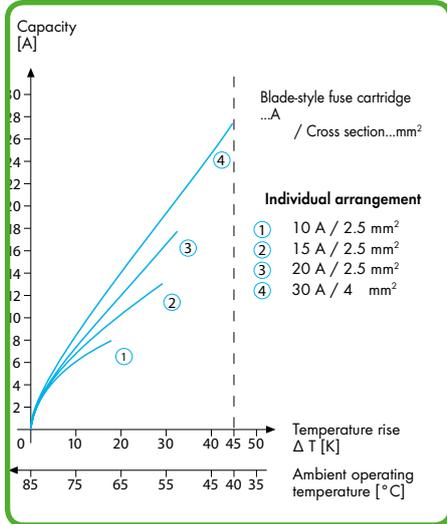
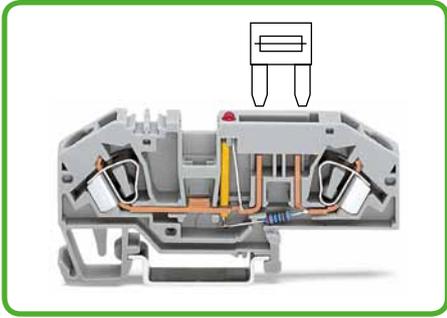
| Artikel Nr. | Prüfstelle | Zulassung | Spannung | Strom | Querschnitt |
|-------------|------------|-----------|----------|-------|-------------|
| 280-101 | UR | E45172 | 600 | 20 | 28-12 |
| 280-104 | UR | E45172 | 600 | 20 | 28-12 |
| 280-107 | UR | E45172 | | | 28-12 |
| 280-510 | UR | E45172 | 300 | 15 | 28-12 |
| 280-513 | UR | E45172 | 300 | 15 | 28-12 |
| 280-515 | UR | E45172 | 300 | 15 | 28-12 |
| 280-519 | UR | E45172 | 300 | 15 | 28-12 |
| 280-520 | UR | E45172 | 300 | 15 | 28-12 |
| 280-521 | UR | E45172 | 300 | 15 | 28-12 |
| 280-522 | UR | E45172 | 300 | 15 | 28-12 |

Search results c)
Certification agency and item no.:

The whole range of products approved by that agency are displayed.

Current-Carrying Capacity Curves Fuse Terminal Blocks for Mini-Automotive Blade-Style Fuses

Higher ambient temperatures (T_{amb}) place additional strain on fuse cartridges. Therefore, the reduction of the rated current according to the following diagrams and tables (see factor F_T) should be taken into account in such applications:

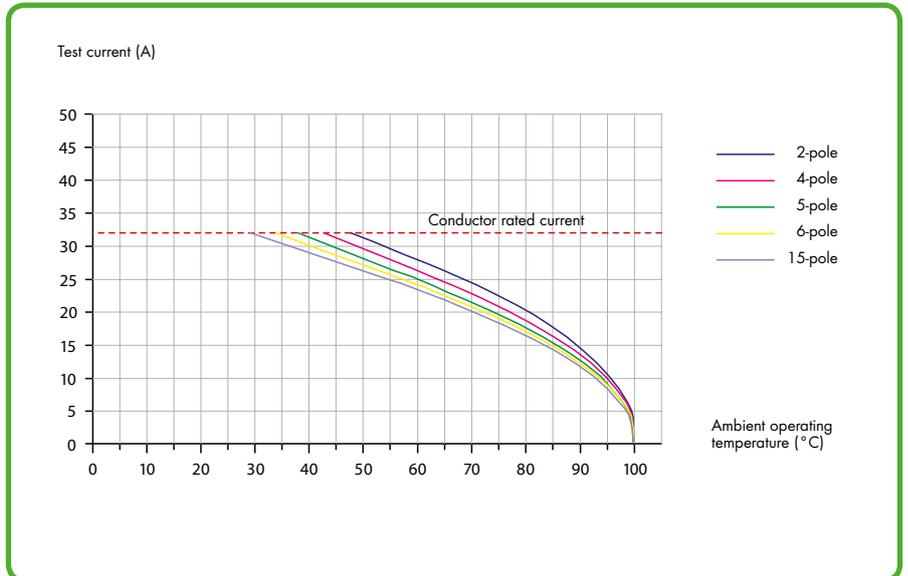


Current-Carrying Capacity Curves for 1-Conductor/1-Pin and 2-Pin Carrier Terminal Blocks and 1-Conductor Female Plugs X-COM®-SYSTEM

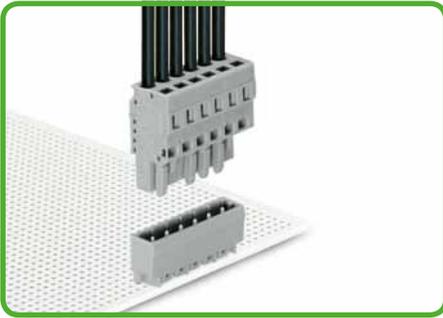


2-cond./1-pin carrier terminal block 769-176
Conductor size: 4 mm²/AWG 12

1-conductor female plugs 769-102 to 769-115
Conductor size: 4 mm²/AWG 12
Conductor loop length: 1 m



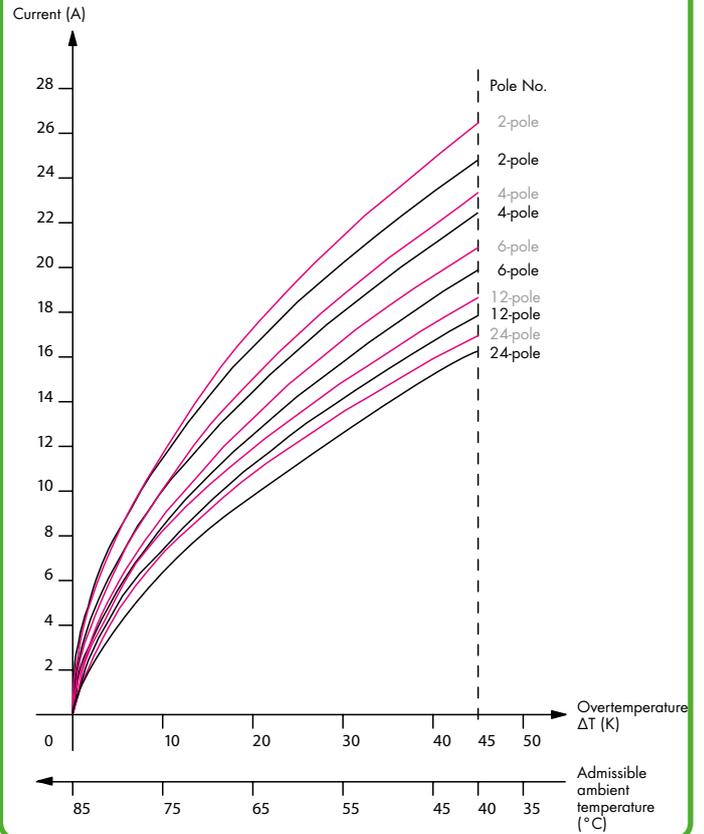
Current-Carrying Capacity Curves for Connectors with CAGE CLAMP® MULTI CONNECTION SYSTEM – MIDI



| | |
|--|--|
| Headers with solder pins 1 mm x 1 mm | 231-132/001-000 to -154/001-000 |
| 1.2 mm x 1.2 mm | 231-162/001-000 to -184/001-000 |
| Female connectors/plugs | 231-102/026-000 to -124/026-000 |
| Conductor size 2.5 mm ² /AWG 14 "fst" | on PCB side commoned with 2.5 mm ² /AWG 14 |
| Conductor loop length: | 1 m |

Additional current-carrying capacity curves upon request.

Male headers with straight solder pins 1 mm x 1 mm/1.2 mm x 1.2 mm MIDI
5 mm; 5.08 mm; 7.5 mm and 7.62 mm pin spacing



Determining Maximum Load

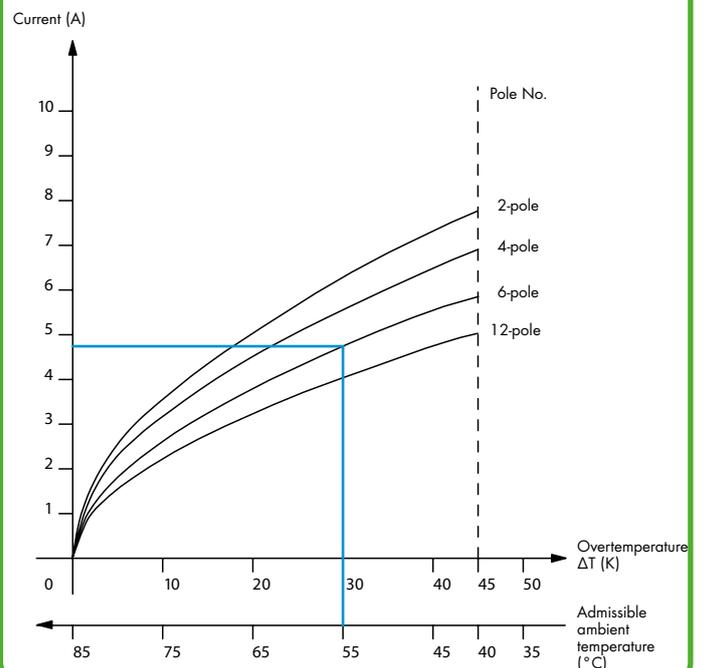
Explanation using the following example:

What load (amps) can a 6-pole connector assembly handle when subjected to an ambient operating temperature of 55 $^{\circ}\text{C}$?

- 1.) On the bottom axis (x-coordinate = temperature), select the ambient operating temperature for the connector assembly (here 55 $^{\circ}\text{C}$).
- 2.) For this temperature, draw a vertical line up to the curve corresponding to the number of poles (here: 6-pole).
- 3.) From the point of intersection, draw a line horizontally to the intersection with the y-axis and read the value of the current.

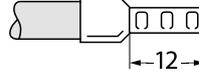
In this example, all poles of the 6-pole connector assembly can be simultaneously loaded with 4.8 amps at a 55 $^{\circ}\text{C}$ ambient operating temperature.

Example



| | | | |
|---|---|---|--------------------------------|
| 0.25 - 2.5 (4) mm² ① 800 V/8 kV/3 I _N 24 A Terminal block width 5.2 mm / 0.205 in  10 - 12 mm / 0.43 in ② Approvals | AWG 22 - 12 600 V, 20 A  600 V, 20 A  | Pin spacing 5 mm / 0.197 in 0.5 - 2.5 mm ² "s+f-st" 250 V/4 kV/3, 16 A 500 V/4 kV/2, 16 A AWG 20 - 12 "sol.+f-st" 300 V, 10 A  10 - 11 mm / 0.41 in ② Approvals | Connection technologies |
|---|---|---|--------------------------------|

- ② Conductor sizes: 0.25 - 4 mm² "s+f-st";
 Push-in conductor sizes: 0.75 - 4 mm² "s" and
 0.75 - 2.5 mm² "insulated ferrule, 12 mm"
 (Length on ferrule is ONLY related to metallic part)



CAGE CLAMP[®] S



CAGE CLAMP[®]



POWER CAGE CLAMP[®]



FIT CLAMP[®]



PUSH WIRE[®]

Pin spacing 5 mm/0.197 in: Terminal block pin spacing

(e.g., for PCB terminal blocks and *MULTI CONNECTION SYSTEM*)

0.25 - 2.5 (4) mm² / AWG 22 - 12: Min. - max. conductor size,

ferrules reduce cross section to 2.5 mm²/AWG 14 (see ①)

800 V/250 V/500 V: Rated voltage (see Full Line Catalog 1, Section 15)

8 kV/4 kV: Rated surge voltage (see Full Line Catalog 1, Section 15)

3/2: Degree of pollution (see Full Line Catalog 1, Section 15)

I_N 24 A/16 A: Maximum current

600 V, 20 A : Voltage and current values according to UL approval

600 V, 20 A : Voltage and current values according to CSA approval

300 V, 10 A: Voltage and current values according to applied UL and CSA approvals

Terminal block width 5.2 mm/0.205 in: Width of modular terminal blocks (e.g., rail-mounted terminal blocks)

 10 - 12 mm / 0.43 in: Strip length (here, fine-stranded conductor)

 10 - 11 mm / 0.41 in: Strip length (here, solid conductor)

② Approvals (Current approvals are available online at: www.wago.com)

Abbreviations

"sol.": solid conductor

"f-st": fine-stranded conductor

"sol.+f-st": solid and fine-stranded conductors

AWG: American Wire Gauge

I_N 32 A: Nominal current 32 A (e.g., for jumpers)

WCB: WAGO Combi marking system

WMB: WAGO Multi marking system

WSB: WAGO Quick marking system

Material Specifications

Insulating materials:

WAGO primarily uses polyamide (PA 6.6 and PA 4.6) as carriers of current-conducting parts and polycarbonate (PC) as insulating material.

These materials have proven their value in WAGO products for more than 40 years and are approved by the responsible test authorities.

Contact materials:

Hard and extra-hard electrolytic copper (ECu) as well as extra-hard copper alloys are standard materials used for the current-carrying parts of all WAGO products. This material combines excellent conductivity and good chemical resistance without the risk of stress-induced cracking.

Contact plating:

The special tin layer, which is the standard layer for all current-carrying parts in WAGO products, ensures perfect long-term protection against corrosive substances. Furthermore, these layers provide a gas-tight contact that ensures a durable transition resistance.

Clamping spring material:

All WAGO clamping springs are made of high-quality, accurately tested austenitic chrome nickel steel (CrNi) with high tensile strength, which boasts proven corrosion resistance through long-term usage.

It is resistant to salt sea air, city pollutants and industrial emissions (e.g., sulfur dioxide, hydrogen sulfide).

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