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Schneider Electric offers complete and compact ranges of power supplies (switch mode or filtered rectified) and transformers.

With the Phaseo range, your installations will be equipped with a high quality AC or DC power supply compliant with international standards.

Phaseo

Phaseo offers universal power supplies and protection modules with a very wide operating range to provide continuity of service for your installations.

An innovative offer, Phaseo integrates numerous features which set the standard across this market.



5 | Power Supplies



Power supplies

Regulated switch mode, filtered rectified power supplies

Accessories

Phaseo ABL8, ABL1 5/2 to 5/5

Transformers

9070 Industrial control transformers 5/6 & 5/7

Connection

Terminal blocks

AB1 5/8 & 5/9

Cable ends

DZ5/AZ5 5/10



Type of power supply	7 to 60 W Single-phase					
Rated input voltage	100...240 VAC					
Rated output voltage	24 V				5 V	12 V
Rated power / Rated output current	7.5 W / 0.3 A	15 W / 0.6 A	30 W / 1.2 A	60 W / 2.5 A	20 W / 4 A	25 W / 2 A
Reset	Auto					
Conformity to IEC 61000-3-2	Without					
Certifications	cULus, cCSAus, TUV, CE, C-Tick					
Dimensions W x D x H (mm)	36 x 59 x 90		54 x 59 x 90	72 x 59 x 90	54 x 59 x 90	
Fixing (mm)	DIN rail 35x7.5 or 35x15 or on panel mount by screw					
References	ABL8MEM24003	ABL8MEM24006	ABL8MEM24012	ABL7RM24025	ABL8MEM05040	ABL8MEM12020



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Type of power supply	72 to 240 W Single-phase - Wide input range		
Rated input voltage	100...120 VAC and 200...500 VAC		
Rated output voltage	24 V		
Rated power / Rated output current	72 W / 3 A	120 W / 5 A	240 W / 10 A
Permissible temporary inrush current (boost)	1.5 In during 4 s		
Reset	Auto or manual		
Conformity to IEC 61000-3-2	Yes		
Diagnostic relay (output voltage > 21.6V)	No	Yes	
Certifications	cCSAus, CB scheme, CE		
Dimensions W x D x H (mm)	44 x 120 x 143	56 x 120 x 143	85 x 140 x 143
Fixing (mm)	DIN rail 35x7.5 or 35x15		
References	ABL8RPS24030	ABL8RPS24050	ABL8RPS24100

**60 to 144 W single-phase**

100...240 VAC

24 V

72 W / 3 A

120 W / 5 A

Auto

No

cULus, cCSAus, TUV, CE, C-Tick

27 x 120 x 120

54 x 120 x 120

DIN rail 75x7.5, 35x7.5 or 35x15

ABL8REM24030**ABL8REM24050**

12 V

60 W / 5 A

Auto or manual

Yes

48 V

144 W / 2.5 A

ABL7RP1205**ABL7RP4803****480 to 960 W single and 3-phases**

100...120 VAC and 200...240 VAC

3 x 380...500 VAC

24 V

480 W / 20 A

960 W / 40 A

1.5 In during 4 s

Auto or manual

Yes

Yes

cCSAus, CB scheme, CE

145 x 140 x 143

95 x 155 x 143

165 x 155 x 143

DIN rail 35x7.5 or 35x15

ABL8RPM24200**ABL8WPS24200****ABL8WPS24400****Type of module****Compatibility****Rated output voltage****Rated output current****Certifications****Dimensions W x D x H (mm)****Fixing (mm)****References****Converters DC/DC**

Output connection of power supplies ABL8RPS24..., ABL8WPS24..., ABL4RSM24... and ABL4WSR24...

5 V

12 V

6 A

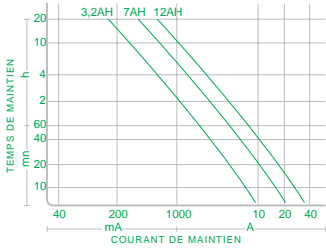
2 A

cCSAus, CB scheme, CE

44 x 140 x 146

DIN rail 35x7.5 or 35x15

ABL8DCC05060**ABL8DCC12020****5**



Type of module	Microcuts and cuts network solutions. (1)		
Compatibility	Output connection of Universal power supplies ABL8RPS24..., ABL8WPS24..., ABL4RSM24..., ABL4WSR24...		
Technology	Buffer module	battery backup module + battery	
Rated output voltage	40 A	20 A	40 A
Holding time 1A	2 s typique	adjustable from 10 s to 24 H (battery depending)	
Holding time for maximum current output	100 ms typique	adjustable from 10 s to 30 mn (battery depending)	adjustable from 10 to 10 mn (battery depending)
Certifications	cCSAus, CB scheme, CE		
Dimensions W x D x H (mm)	85 x 140 x 146	86 x 175 x 143	86 x 175 x 143
Fixing (mm)	DIN rail 35x7.5 or 35x15 (1)		
References Control module	ABL8BUF24400	ABL8BBU24200	ABL8BBU24400
References battery	3,2AH (2)	ABL8BPK24A03	ABL8BPK24A03
	7AH (2)	ABL8BPK24A07	ABL8BPK24A07
	12AH (2)	ABL8BPK24A12	ABL8BPK24A12

(1) Battery module except 7AH and 12AH. For battery module 3.2AH with ABL1A02 kit.

(2) Battery to be chosen according to the graph page 6/2

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Type of module	Redundancy power supplies solutions
Compatibility	Connection of 2 power supplies inputs ABL4... or ABL8RP, ABL8WP up to 20 A (1 power supply 40A)
Rated output voltage	24 V
Rated output current	40 A
Certifications	cCSAus, CB scheme, CE
Dimensions W x D x H (mm)	44 x 140 x 146
Fixing (mm)	DIN rail 35x7.5 ou 35x15
References	ABL8RED24400

Type of module	Starter protection solution
Compatibility	Output connection of Universal power supplies ABL8RPS24100..., ABL8RPM24200..., ABL8WPS24..., ABL4RSM24... and ABL4WSR24...
Rated output current	10A par voie
Calibres	1 / 2.5 / 4 / 5 / 7 / 8 / 10 A
Number of channels	4
Diagnostic relay	Yes
Manual switch off (1 per channel)	Two-pole
Certifications	cCSAus, CB scheme, CE
Dimensions (mm)	71 x 109 x 110
Fixing (mm)	DIN rail 35x7.5 or 35x15 or on panel mount by screw
References	ABL8PRP24100



Type of power supply		60W to 240W					
Input voltage		85...264 VAC			85...132 VAC / 170...264 VAC		
Output voltage		12 VDC		24 VDC		24 VDC	
Rated power / Rated output current		60 W / 5 A	100 W / 8.3 A	60 W / 2.5 A	100 W / 4.2 A	150 W / 6.2 A	240 W / 10 A
Certifications		UL, c CSA us, CE, Ctick					
Dimensions W x D x H (mm)		150 x 38 x 98	200 x 38 x 98	150 x 38 x 98	200 x 38 x 98	200 x 50 x 98	200 x 65 x 98
Fixing (mm)		Panel mount by scrow, by bracket ABL1A01 (1) , on DIN rail 35mm by panel ABL1A02 (1).					
References	Without filter	ABL1REM12050	–	ABL1REM24025	ABL1REM24042	ABL1REM24062	ABL1REM24100
	With filter (2)	–	ABL1RPM12083	–	ABL1RPM24042	ABL1RPM24062	ABL1RPM24100

(1) has to order separately.

(2) Anti harmonic IEC/EN 61000-3-2



Type of power supply	Control Circuit Transformers						
Rated UL/CSA	50VA	75VA	100VA	150VA	200VA	250VA	
Rated CE	50VA	75VA	100VA	150VA	200VA	160VA	
Inrush UL VA at 20% Power factor / at 40% Power factor	95% of secondary voltage	193/151	271/210	339/266	666/529	588/459	1416/1057
	90% of secondary voltage	266/215	396/318	499/404	893/731	815/659	1910/1494
	85% of secondary voltage	339/282	520/430	659/549	1120/942	1041/866	2388/1936
Certification	"UL-E612939, CSA LR 37055, EN61558/01.89 (TUV)"						
Catalogue Number	Non fused	9070T50*	9070T75*	9070T100*	9070T150*	9070T200*	9070T250*
	Fused (primary and secondary)	9070TF50*	9070TF75*	9070TF100*	9070TF150*	9070TF200*	9070TF250*

* Complete the catalogue number by adding the voltage code from Table 1.

Table 1 - Voltage Codes

Primary Voltage	Secondary Voltage	Voltage Code	Accessory key
120	120	D24	I
120	12/24	D13	I
208	24	D14	I
208	120	D3	I
277	24	D25	I
277	120	D4	I
380	110	D6	I
415	110	D17	I
480	240	D12	I
480	277	D22	I
600	120	D5	I
600	12/24	D36	I
600	120/240	D37	I
120/240	24	D23	I
208/230/460	115	D20	II
208/240/277/380/480	24	D19	III
208/277	120	D51	I
208/277/380	95/115	D18	II
230/460/575	95/115	D32	II
240/480	24	D2	I
240/480	120	D1	I
240/480	120/240	D31	I
240/480	24/120	D15	I
380/400/415	12/24	D52	I
380/400/415	115/230	D33	I



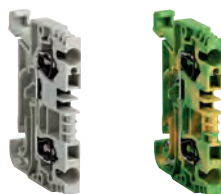
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300VA	350VA	500VA	750VA	1000VA	1500VA	2000VA	3000VA	5000VA
200VA	300VA	350VA	500VA	750VA	1000VA	1500VA	2000VA	3000VA
1634/1194	1894/1392	3197/2374	3770/2887	6587/4706	19324/15066	31384/24794	26539/19355	53111/39368
2184/1681	2592/2005	4104/3195	5515/4391	9079/6886	23983/19361	38777/31630	39934/30721	85265/66309
2709/2169	3261/2621	4981/4019	7231/5945	11430/9051	28607/23756	46161/38667	52713/42216	116277/93882
"UL-E61293, cULE61239, EN61558/01.89 (TUV)"								
9070T50*	9070T350*	9070T500*	9070T750*	9070T1000*	9070T1500*	9070T2000*	9070T3000*	9070T5000*
9070TF50*	9070TF350*	9070TF500*	9070TF750*	9070TF1000*	9070TF1500*	9070TF2000*	-	-

Accessories	Accessory Key			Description
	I	II	III	
Finger safe covers				
9070FSC-1	25-200VA	25-100VA	n/a	2 covers per kit
9070FSC-2	250-5000VA	150-5000VA	n/a	
9070FSC-23	n/a	n/a	25-5000	
Field Installable Fuse Options				
Primary Only				
9070FB-2A	25-200VA	25-150VA	n/a	2 pole fuse block, 1-1/2in x 13/32in midget fuse
9070FB-2B	250-2000	200-1500	25-1500	
Primary and Secondary				
9070FB-3A	25-200VA	25-150VA	n/a	3 pole fuse blk , 1-1/2in x 13/32in midget fuse
9070FB-3B	250-2000	200-1500	25-1500	
Secondary Only				
9070FB-1A	25-200VA	25-150VA	n/a	1 pole fuse blk , 1-1/2in x 13/32in midget fuse
9070FB-1B	250-2000	200-1500	25-1500	
9070SF25A	25-200VA	25-150VA	n/a	1 pole fuse blk , 1-1/4in x 1/4in fuse
9070SF25B	250-2000	200-1500	25-1500	
9070SF41A (1)	25-200VA	25-150VA	n/a	secondary fuse clip , 1-1/2in x 13/32in midget fuse
9070SF41B (1)	n/a	200-2000	25-2000	
Fuse Pullers				
9070FP1		All		used with fuse blk , 1-1/2in x 13/32in fuses

(1) Cannot be installed on voltage codes D13, D15, D18, D31, D32, D33, D35, D36, D37, D39, D52.



Clip-on mounting on 35 mm $\frac{25}{4}$ rails		Terminal blocks (sold in lots of 100)	End covers (sold in lots of 100)	Commoning link (sold in lots of 100)
2.5 mm ² c.s.a.	Conducting	AB1RRN235U2GR	AB1RRNAC242GR	AB1RRAL22 (1)
	Protective earth conductor	AB1RRNTP235U2	AB1RRNTPAC242	–
4 mm ² c.s.a.	Conducting	AB1RRN435U2GR	AB1RRNAC442GR	AB1RRAL42 (1)
	Protective earth conductor	AB1RRNTP435U2	AB1RRNTPAC442	–
6 mm ² c.s.a.	Conducting	AB1RRN635U2GR	AB1RRNAC642GR	AB1RRNAL62 (2)
	Protective earth conductor	AB1RRNTP635U2	AB1RRNTPAC642	–
10 mm ² c.s.a.	Conducting	AB1RRN1035U2GR (3)	AB1RRNAC1042GR	AB1RRNAL102
	Protective earth conductor	AB1RRNTP1035U2 (3)	AB1RRNTPAC1042	–
16 mm ² c.s.a.	Conducting	AB1RRN1635U2GR (3)	AB1RRNAC1642GR	AB1RRNAL162
	Protective earth conductor	AB1RRNTP1635U2 (3)	AB1RRNTPAC1642	–
35 mm ² c.s.a.	Conducting	AB1RRN3535U2GR (4)	–	AB1RRAL352
	Protective earth conductor	AB1RRNTP3535U2 (4)	–	–

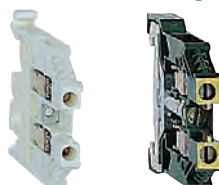
(1) For a 3, 4, 5 or 10-pole commoning link replace the last number of the reference (2) by 3, 4, 5 or 10 respectively. (Example: AB1RRAL22 becomes A1BRRAL23)

(2) For a 3, 4, 5 or 10-pole commoning link replace the last number of the reference (2) by 3, 4, 5 or 10 respectively. (Example: AB1RRNAL62 becomes A1BRRNAL64)

(3) Sold in lots of 50

(4) Sold in lots of 10

Screw clamp technology



Clip-on mounting on 35 mm $\frac{25}{4}$ rails		Terminal blocks (sold in lots of 100)	End covers (sold in lots of 100)	Commoning link (sold in lots of 100)
2.5 mm ² c.s.a.	Conducting	AB1VV235U	AB1AC24	AB1ALN22 (1)
	Protective earth conductor	AB1TP235U	AB1AC25	–
4 mm ² c.s.a.	Conducting	AB1VV435U	AB1AC24	AB1ALN42 (1)
	Protective earth conductor	AB1TP435U	–	–
6 mm ² c.s.a.	Conducting	AB1VV635U	AB1AC6	AB1ALN62 (1)
	Protective earth conductor	AB1TP635U	–	–
10 mm ² c.s.a.	Conducting	AB1VVN1035U (2)	AB1ACN10	AB1ALN102 (1)
	Protective earth conductor	AB1TP1035U (2)	–	–
16 mm ² c.s.a.	Conducting	AB1VVN1635U (2)	AB1ACN16	AB1ALN162 (1)
	Protective earth conductor	AB1TP1635U (2)	–	–
35 mm ² c.s.a.	Conducting	AB1VVN3535U (3)	–	AB1ALN352 (1)
	Protective earth conductor	AB1TP3535U (3)	–	–
70 mm ² c.s.a.	Conducting	AB1VVN7035U (3)	–	AB1ALN702
150 mm ² c.s.a.	Conducting	AB1VVN15035U (4)	–	AB1ALN1502 (1)

(1) For a 3, 4, 5 or 10-pole commoning link replace the last number of the reference (2) by 3, 4, 5 or 10 respectively. (Example: AB1ALN22 becomes AB1ALN23)

(2) Sold in lots of 50

(3) Sold in lots of 20

(4) Sold in lots of 10

Insulation displacement technology



Clip-on mounting on 35 mm $\frac{25}{4}$ rails		2-way terminal blocks (sold in lots of 100)	End covers (sold in lots of 10)	2-pole commoning link (1) (sold in lots of 10)
1 mm ² c.s.a.	Conducting	AB1AA135U2GR	AB1AAAC122GR	AB1RRAL22
	Protective earth conductor	AB1AATP135U2	AB1AAAC122VE	–
2.5 mm ² c.s.a.	Conducting	AB1AA235U2GR	AB1AAAC122GR	AB1RRAL22
	Protective earth conductor	AB1AATP235U2	AB1AAAC122VE	–

(1) For a 3, 4, 5 or 10-pole commoning link replace the last number of the reference (2) by 3, 4, 5 or 10 respectively. (Example: AB1RAL22 becomes AB1RAL23).

Terminal blocks

Screw clamp technology



Mounting on 35mm 7 or Square D track	Terminal block (Sold in lots of 50)	End barrier (Sold in lots of 10)	2-pole jumper (Sold in lots of 10)
#22-10 AWG	9080GM6	9080GM6B	9080GH700 (3)
#22-8 AWG	9080GR6	9080GM6B	9080GH72
#22-10 AWG	9080GK6	9080GK6B (1)	9080GH72
#18-4 AWG	9080GC6	9080GC6B	9080GH74
#12 AWG-1/0	9080GD6 (2)	9080GD6B	9080GH76
#6 AWG-250 kcmil	9080GE6 (2)	-	-

(1) Sold in lots of 50.

(2) Sold in lots of 10.

(3) Sold in lots of 20.

Power Distribution Blocks



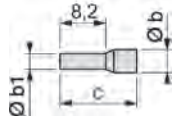
Splitter Blocks	Aluminum Lugs				Copper Lugs	
Main wire (Number of wires in)	(1) #14-2 AWG	(1) #14-2/0 AWG	(1) #6-350 kcmil	(1) #6-600 kcmil	(1) #18-1/0 AWG	(1) #6-250 kcmil
Branch wire (Number of wires out)	(1) #14-2 AWG	(1) #14-2/0 AWG	(1) #6-350 kcmil	(1) #6-600 kcmil	(1) #18-1/0 AWG	(1) #6-250 kcmil
Maximum voltage rating	600	600	600	600	600	600
Maximum current rating—Cu wire	115	175	310	420	150	255
1-pole	9080LBA161101	9080LBA162101	9080LBA163101	9080LBA164101	9080LBC162101	9080LBC163101
2-pole	-	9080LBA262101	-	-	-	-
3-pole	9080LBA361101	9080LBA362101	9080LBA363101	9080LBA364101	9080LBC362101	9080LBC363101

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Splitter Blocks	Aluminum Lugs					
Main wire (Number of wires in)	(1) #14-2 AWG	(1) #14-2/0 AWG	(1) #6-400 kcmil	(1) #6-400 kcmil	(1) #6-400 kcmil	(1) #4-500 kcmil
Branch wire (Number of wires out)	(4) #18-10 AWG	(4) #14-4 AWG	(4) #14-2 AWG	(6) #14-2 AWG	(8) #14-2 AWG	(12) #14-2 AWG
Maximum voltage rating	600	600	600	600	600	600
Maximum current rating—Cu wire	115	175	335	335	335	380
1-pole	9080LBA161104	9080LBA162104	9080LBA163104	9080LBA163106	9080LBA164108	9080LBA165112
2-pole	9080LBA261104	9080LBA262104	9080LBA263104	9080LBA263106	9080LBA264108	9080LBA265112
3-pole	9080LBA361104	9080LBA362104	9080LBA363104	9080LBA363106	9080LBA364108	9080LBA365112

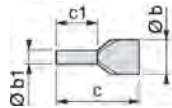
mm ²	Øb	Øb1	c
22	3	1.4	13
20	3.1	1.6	13
18	3.4	1.8	13.5
16	4	2.1	13.5
14	4.6	2.7	14.5



Type		Single cable ends (2) Sold in lots of 10 x 100		
Packaging		Individual or "strings" of bags	Dispenser pack	Markable cable ends
Conductor AWG in mm ²	22	White	DZ5CE005	AZ5CE005
	20	Grey	DZ5CE007	AZ5CE007
	18	Red	DZ5CE010	AZ5CE010
	16	Black	DZ5CE015	AZ5CE015
	14	Blue	DZ5CE025	AZ5CE025
				DZ5CA005
				DZ5CA007
				DZ5CA010
				DZ5CA015
				DZ5CA025

(2) UL certified products. Not CSA certified.

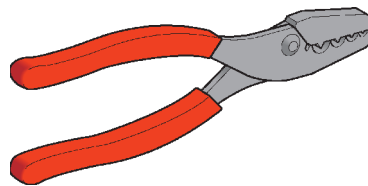
mm ²	Øb	Øb1	c	c1
20	2.8 x 5	1.8	15	8
18	3.4 x 5.4	2.05	15	8
16	3.6 x 6.6	2.3	15	8
14	4.2 x 7.8	2.9	18.5	10



Type		Double cable ends Sold in lots of 5 x 100		
Packaging		Dispenser pack		
Conductor c.s.a. in mm ²	2 x 20	Grey	AZ5DE007D	
	2 x 18	Red	AZ5DE010D	
	2 x 16	Black	AZ5DE015D	
	2 x 14	Blue	AZ5DE025D	

(1) For insulated cable ends conforming to DIN46228, please refer to your Schneider Electric agency.

Cabling accessories



Type	Pliers/cutters				
Functions	Stripping	Cutting/stripping	Crimping	Crimping (ratchet)	Crimping
For cable AWG	28-12	20-12	22-6	0.25 to 6 mm ²	8-2
References	AT1PA7	AT2PE1	AT1PA2	AT2PA5	AT2PA4

