# The essential guide

### Power supplies and transformers

#### 2013





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.



## Contents



#### **Power supplies**

	Regulated switch mode power supplies and accessories	
	Phaseo ABL8, ABL7, ABL4, ABL1	2 to 5
	Filtered rectified power supplies	
	Phaseo ABL8	5
<b>Transformers</b>		
	Phaseo ABL6, ABT7	6

### Power supplies Regulated switch mode - Rail mounting













Type of power supply	7 to 60 W Sir	7 to 60 W Single-phase					
Rated input voltage	100240 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 c	or 35x15 or on pan	el mount by screw	,			
References	ABL8MEM24003	ABL8MEM24006	ABL8MEM24012	ABL7RM24025	ABL8MEM05040	ABL8MEM12020	







Type of power supply	72 to 240 W Single-	72 to 240 W Single-phase - Wide input range					
Rated input voltage	100120 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, CB						
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				

### Regulated, switch mode Compact - Rail mounting







Type of power supply	85 to 480W Singl	e-phase			
Rated Input Voltage AC	120230V 50/60Hz		120/230V		
Rated Input Voltage DC	100370V		300350 V		
Rated adjustable output Voltage	2327,5 V	2327,5 V			
Rated power / Rated output current	84W / 3,5A	120W / 5A	240W /10A	480W / 20A	
Temporary permissible inrush current output	6A for 30s	8A for 30s	15A for 30s	30A for 5s	
Reset after overload	Auto				
Diagnostic relay (output voltage > 21.6V)	Yes				
Fixing (mm)	DIN rail 35 x 7,5				
Dimensions W x D x H (mm)	39 x 115 x 134		64 x 140 x 139	80 x 127 x 146	
References	ABL4RSM24035	ABL4RSM24050	ABL4RSM24100	ABL4RSM24200	









60 to 144 W single-phase			
100240 VAC			
24 V		12 V	48 V
72 W / 3 A	120 W / 5 A	60 W / 5 A	144 W / 2.5 A
Auto		Auto or manual	
No		Yes	
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	ABL7RP1205	ABL7RP4803
	24 V 72 W / 3 A Auto No cULus, cCSAus, TUV, CE, C-Tick 27 x 120 x 120 DIN rail 75x7.5, 35x7.5 or 35x15	100240 VAC 24 V 72 W / 3 A Auto No cULus, cCSAus, TUV, CE, C-Tick 27 x 120 x 120 DIN rail 75x7.5, 35x7.5 or 35x15	100240 VAC 24 V











480 to 960 W single ar	nd 3-phases	
100120 VAC and 200240 VAC	3 x 380500 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	Converters DC/DC					
Compatibility	Output connection of powe ABL8WPS24, ABL4RSM	· · · · · · · · · · · · · · · · · · ·				
Rated output voltage	5 V	12 V				
Rated output current	6 A	2 A				
Certifications	cCSAus, CB scheme, CE					
Dimensions W x D x H (mm)	44 x 140 x 146					
Fixing (mm)	DIN rail 35x7.5 or 35x15					
References	ABL8DCC05060	ABL8DCC12020				



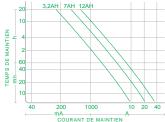




Type of power supply	480 to 960W 3-phase				
Rated Input Voltage AC	400 500V 50/60 Hz				
Working on 2 phases	Possible with output current = 75% of the nominal output current.				
Output Voltage	24V				
Rated power / Rated output current	480W / 20A	720W / 30A	960W / 40A		
Temporary permissible inrush current output	30A for 5s	45A for 5s	60A for 5s		
Reset after overload	Auto				
Diagnostic relay	Yes				
Fixation (mm)	DIN rail 35 x 7,5				
Dimensions W x D x H (mm)	80 x 127 x 146				
References	ABL4WSR24200	ABL4WSR24300	ABL4WSR24400		



#### Power supplies Function modules for regulated switch mode power supplies.







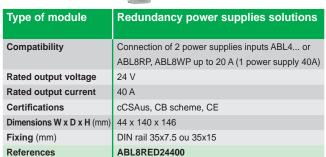




COURANT DE MAINTIE	N							
Type of module		Microcuts and cuts	Microcuts and cuts network solutions. (1)					
Compatibility		Output connection of Univ	versal power supplies ABL8RPS24, AB	BL8WPS24, ABL4RSM24,				
Technology		Buffer module						
Rated output voltage		40 A	20 A 40 A					
Holding time 1A		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	adjustable from 10 to 10 mn				
			(battery depending)	(battery depending)				
Certifications		cCSAus, CB scheme, CE	cCSAus, CB scheme, CE					
Dimensions W x D x H (mi	m)	85 x 140 x 146	86 x 175 x 143	86 x 175 x 143				
Fixing (mm)		DIN rail 35x7.5 or 35x15 (	DIN rail 35x7.5 or 35x15 (1)					
References Control modu	le	ABL8BUF24400	ABL8BBU24200	ABL8BBU24400				
References battery	3,2AH (2)	-	ABL8BPK24A03	ABL8BPK24A03				
	7AH (2)	-	ABL8BPK24A07	ABL8BPK24A07				
	12AH (2)	-	ABL8BPK24A12	ABL8BPK24A12				
1) Pottory modulo except 7	AH and 12AH For battory modu	In 2 2ALI with ADI 1A02 kit						

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







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	1/2.5/4/5/7/8/10A				
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				

<sup>(2)</sup> Battery to be chosen according to the graph above.

### Power supplies Regulated switch mode. Panel mounting









Type of power supp	oly	60W to 240W	60W to 240W				
Input voltage	ge 85264 VAC 85132 VAC			85132 VAC / 1	70264 VAC		
Output voltage		12 VDC	12 VDC 24 VDC 24 VDC		24 VDC		
Rated power / Rated output currrent		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, C	E, 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	Panel mount by screw, 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

<sup>(1)</sup> To be ordered separately.

#### **Filtered rectified**

















Type of power supply	12W to 480	W single-ph	ase					
Input voltage	215/230/245 \	15/230/245 V or 385/400/415 VAC						
Rated output voltage	24 V	24 V						
Certifications	cULus, ENEC	cULus, ENEC						
Rated power / Rated output current	12 W / 0.5 A	24 W / 1 A	48 W / 2 A	96 W / 4 A	144 W / 6 A	240 W / 10 A	360 W / 15 A	480 W / 20 A
Dimensions W x D x H (mm)	87 x 124 x 108	87 x 124 x 108	87 x 142 x 108	87 x 165 x 108	123 x 153 x 153	123 x 185 x 153	135 x 185 x 138	175 x 215 x 128
Fixing (mm)	DIN rail 35x7.	DIN rail 35x7.5 or 35x15 or on panel mount by screw  On panel mount by screw						
References	ABL8FEQ24005	ABL8FEQ24010	ABL8FEQ24020	ABL8FEQ24040	ABL8FEQ24060	ABL8FEQ24100	ABL8FEQ24150	ABL8FEQ24200











Type of power supply	240W to 1440W 3-phases									
Input voltage	3x 380 / 400 / 420 V									
Rated output voltage	24 V									
Certifications	cULus, ENEC									
Rated power / Rated output current	240 W / 10 A 480 W / 20 A 720 W / 30 A 960 W / 40 A 1440 W / 60 A									
Dimensions W x D x H (mm)	185 x 190 x 78									
Fixing (mm)	On panel mount by screw									
References	ABL8TEQ24100 ABL8TEQ24200 ABL8TEQ24300 ABL8TEQ24400 ABL8TEQ24600									

<sup>(2)</sup> Anti harmonic IEC/EN 61000-3-2





**			Double winding operating temperature +60°C							+50°C	
Rated input voltage			230/400 VAC (±15 V) 1-phase								
Certifications			c <b>%</b> us, ENEC								
Rated power / Rated output currrent			40 VA	63 VA	100 VA	160 VA	250 VA	320 VA	400 VA	630 VA	1000 VA
Visualization			LED display of voltage presence at primary							Without	
Fixing (mm)			DIN rail 35x15 or on panel mount by screw  On panel mount by screw								
References			ABT7PDU•••(1)							<b>ABT7TDU•••</b> (1)	
Rated output voltage	24/48 V	002B	004B	006B	010B	016B	025B	032B	040B	063B	100B
	115/230 V	002G	004G	006G	010G	016G	025G	032G	040G	063G	100G

<sup>(1)</sup> Complete the reference according to the power and voltage using the table below (example: ABT7PDU002G)



Type of transformer			Single winding operating temperature +50°C								
Rated input voltage			230/400 V	AC (±15 V)	1-phase						
Certifications											
Rated output power			25 VA	40 VA	63 VA	100 VA	160 VA	250 VA	400 VA	630 VA	1000 VA
Fixing (mm)			On panel mount by screw								
References				ABL6TS•••(2)							
	Rated output voltage	24 V	02B	04B	06B	10B	16B	25B	40B	63B	100B
		115 V	02G	04G	06G	10G	16G	25G	40G	63G	100G
		230 V	02U	04U	06U	10U	16U	25U	40U	63U	100U

<sup>(2)</sup> Complete the reference according to the power and voltage using the table below (example: ABL6TS02G)



Type of transformer			Single win	Single winding operating temperature +40°C							
Rated input voltage			230 VAC (±15 V) 1-phase								
Certifications	Without										
Rated power / Rated output currrent			40 VA	63 VA	100 VA	160 VA	250 VA	320 VA	400 VA		
Fixing (mm)	On panel mount by screw										
References			ABT7ESM•••(3)								
	Rated output voltage	24 V	004B	006B	010B	016B	025B	032B	040B		

<sup>(3)</sup> Complete the reference according to the power and voltage using the table below (example: ABT7ESM004B)





#### **Schneider Electric Industries SAS**

Head Office 35, rue Joseph Monier - CS 30323 F92500 Rueil-Malmaison Cedex France

www.schneider-electric.com

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Design : IGS-CP

Photos : Schneider Electric

Print :

ART. 960176 01/2013 - V10.0