

Power supplies

Phaseo ABL1

Single Phase power supplies

100 V to 240 V - 60 W to 240 W

Catalog

June 2018



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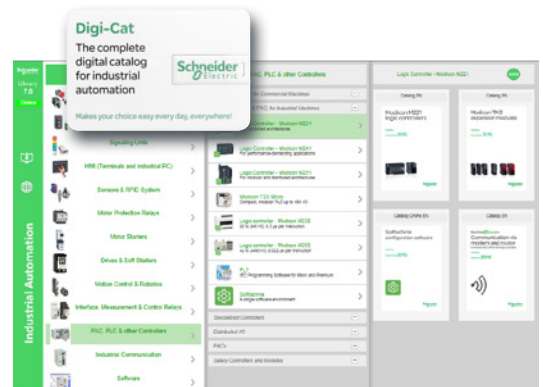
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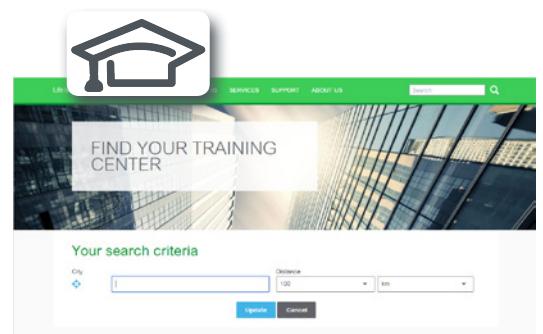
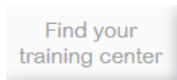


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General contents

Power supplies

Phaseo ABL1

Regulated switch mode power supplies ABL1REM/1RPM: 60 to 240 W - Mounting on panel


■ Selection guide	page 2
■ Presentation	page 4
■ Description	page 4
■ Selection of protection	page 5
■ References	page 5
■ Product reference index	page 6

Power supplies

Phaseo ABL1

Regulated switch mode power supplies

ABL1REM/1RPM, 60 to 240 W - Mounting on panel

Power supplies	Regulated switch mode	
	ABL1REM/1RPM: 60 to 240 W - Mounting on panel	
		
Input voltage	100...240 V ~ 120...370 V ~	
Connection to world-wide line supplies	United States - 120 V (in phase-to-neutral) - 240 V (in phase-to-phase) Europe - 230 V (in phase-to-neutral) - 400 V (in phase-to-phase) United States - 277 V (in phase-to-neutral) - 480 V (in phase-to-phase)	
	Single-phase (N-L1) or 2-phase (L1-L2) connection	
	Single-phase (N-L1)	
	-	
	-	
	-	
Certifications	CE marking, UL (508), CSA (60950-1), EAC, RCM, TÜV, KC (1)	
Conformity to standards	EN 60950-1, EN 55022, EN 55024, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4 (2)	
IEC/EN 61000-3-2 conformity	Yes for ABL1RP, not applicable for ABL1REM24025/12050	
Protection against undervoltage	-	
Protection against overloads and short-circuits	Yes, voltage detection. Automatic restart on on elimination of overload or short circuit	
Diagnostic relay	-	
Compatibility with function modules	-	
Power reserve (Boost)	No	
Output voltage	12 V ~	24 V ~
Output current		
0.5 A		
1 A		
2 A		
2.5 A		ABL1REM24025
3 A		
4 A		
4.2 A		ABL1R•M24042
4.8 A		
5 A	ABL1REM12050	
6 A		
6.2 A		ABL1R•M24062
8.3 A	ABL1RPM12083	
10 A		ABL1R•M24100
15 A		
20 A		
30 A		
40 A		
60 A		
Pages	4	4

(1) Please consult detail on certifications for each reference in the individual data sheet, see on our web site www.schneider-electric.com
 (2) Please consult detail on conformity to standards for each reference in the individual data sheet, see on our web site www.schneider-electric.com

Power supplies

Phaseo ABL1

Regulated switch mode power supplies

ABL1REM/ABL1RPM, 60 to 240 W - Panel mounting



Phaseo ABL1REM/ABL1RPM regulated switch mode power supplies

Presentation

Phaseo **ABL1REM/ABL1RPM** regulated switch mode power supplies are specially designed to provide the DC voltage necessary for electrical equipment operating on a safety extra low voltage (SELV). Split into two ranges, they are able to meet the needs encountered in standard commercial machines.

These single-phase power supplies, with or without anti-harmonic distortion filter, conform to worldwide standards. Switch mode technology ensures the quality of the output current with regulation below 3%.

As machine components, Phaseo **ABL1REM/ABL1RPM** power supplies must be easy to install; only their setup may vary from one application to another. The **ABL1REM/ABL1RPM** range has been specially designed for machine manufacturers.

ABL1REM/ABL1RPM switch mode power supplies are totally electronic and regulated. They offer the following benefits:

- A wide input voltage range from 85 to 264 V ~ and 120 to 370 V ~ (not indicated on the product)
- Products with anti-harmonic PFC input filter
- A high degree of output voltage stability, adjustable by potentiometer
- Built-in thermal overload protection
- Conformity to worldwide standards
- UL 508, CSA, and TÜV certification
- Overload and short-circuit protection
- Lightweight
- Identical mounting accessories for each model

ABL1 power supplies for electrical equipment are available in two versions:

- **ABL1REM**, single-phase:
 - 60 W for the 12 V ~ version
 - 60 W, 100 W, 150 W, and 240 W for the 24 V ~ versions
- **ABL1RPM**, single-phase with anti-harmonic PFC filter:
 - 100 W for the 12 V ~ version
 - 100 W, 150 W, and 240 W for the 24 V ~ versions

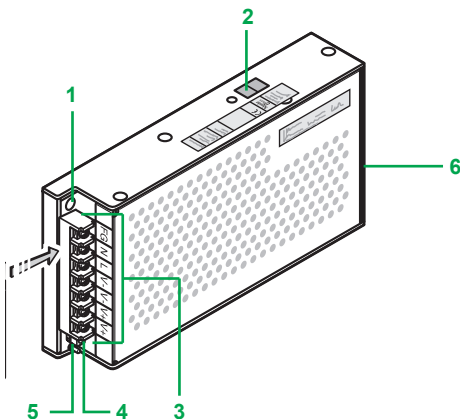
Behavior in the event of short circuits

ABL1 power supplies are equipped with electronic and thermal overload protection. This protection resets itself automatically on elimination of the fault, which avoids having to take any action or change a fuse.

Description

ABL1REM/ABL1RPM regulated switch mode power supplies comprise:

- 1 Two holes for M4 x 20 screws
- 2 A 115/230 V input voltage selector (on 150 W and 240 W versions only)
- 3 A 4 mm² screw clamp terminal block for connecting the input and output voltages
- 4 A green LED indicating presence of the DC output voltage
- 5 An output voltage adjustment potentiometer ($\pm 10\%$)
- 6 A removable, transparent, clip-on cover



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Regulated switch mode power supplies

ABL1REM/ABL1RPM, 60 to 240 W - Panel mounting

Selection of protection on the power supply primary

Line supply type	115 V ~ single-phase			230 V ~ single-phase		
Type of protection (2-pole breaking)	Thermal-magnetic circuit breaker	Miniature circuit breaker	gG fuse	Thermal-magnetic circuit breaker	Miniature circuit breaker	gG fuse
	GB2 (IEC/CSA-c/US)	Multi9 C60 (IEC, UL/CSA)		GB2 (IEC/CSA-c/US)	Multi9 C60 (IEC, UL/CSA)	
ABL1REM12050	GB2DB07	M9F23202	2 A	GB2DB07	M9F23202	2 A
ABL1REM24025	GB2DB07	M9F23202	2 A	GB2DB07	M9F23202	2 A
ABL1RPM12083	GB2DB07	M9F23202	2 A	GB2DB07	M9F23202	2 A
ABL1REM24042	GB2DB07	M9F23202	2 A	GB2DB07	M9F23202	2 A
ABL1RPM24042	GB2DB07	M9F23202	2 A	GB2DB07	M9F23202	2 A
ABL1REM24062	GB2DB07	M9F23202	2 A	GB2DB08	M9F23203	4 A
ABL1RPM24062	GB2DB07	M9F23202	2 A	GB2DB08	M9F23203	4 A
ABL1REM24100	GB2DB08	M9F23203	4 A	GB2DB10 (1)	M9F23205	6 A
ABL1RPM24100	GB2DB08	M9F23203	4 A	GB2DB10 (1)	M9F23205	6 A

(1) Pending UL certification

References

Phaseo ABL1REM single-phase regulated switch mode power supplies

Line input voltage 47 to 63 Hz	Output voltage	Nominal power	Nominal current	Auto-protect reset	Conforming to standard IEC/EN 61000-3-2	Reference	Weight
V	V $\overline{\text{---}}$	W	A				kg/lb
100...240 ~ (1) single-phase wide range	12	60	5	Automatic	Not applicable	ABL1REM12050	0.440/ 0.970
	24	60	2.5	Automatic	Not applicable	ABL1REM24025	0.440/ 0.970
		100	4.2	Automatic	Not applicable	ABL1REM24042	0.640/ 1.411
100...120/200...240 ~ (2) single-phase	24	150	6.2	Automatic	No	ABL1REM24062	0.730/ 1.609
		240	10	Automatic	No	ABL1REM24100	0.880/ 1.940



ABL1REM24025



ABL1RPM24042



ABL1RPM24062



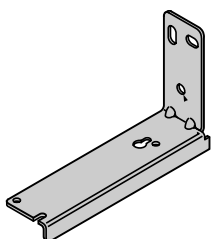
ABL1RPM24100

Phaseo ABL1RPM single-phase regulated switch mode power supplies

Line input voltage 47 to 63 Hz	Output voltage	Nominal power	Nominal current	Auto-protect reset	Conforming to standard IEC/EN 61000-3-2	Reference	Weight
V	V $\overline{\text{---}}$	W	A				kg/lb
100...240 ~ (1) single-phase wide range	12	100	8.3	Automatic	Yes	ABL1RPM12083	0.640/ 1.411
	24	100	4.2	Automatic	Yes	ABL1RPM24042	0.640/ 1.411
100...120/200...240 ~ (2) single-phase	24	150	6.2	Automatic	Yes	ABL1RPM24062	0.970/ 2.138
		240	10	Automatic	Yes	ABL1RPM24100	1.230/ 2.712

Mounting accessories

Description	For power supplies	Order in multiples of	Unit reference	Weight kg/lb
Reversible mounting bracket	For mounting on the back of cabinet of ABL1RPM power supplies	5	ABL1A01	0.085/ 0.187
Clip-on mounting plate for 35 mm \perp mounting rail	ABL1REM12050/24025: flat mounting on \perp rail requires a mounting plate ABL1RPM12083 and ABL1RPM24042/24062/24100: flat mounting on \perp rail requires two mounting plates ABL1REM: mounting on the back of cabinet on \perp rail requires one mounting plate	5	ABL1A02	0.035/ 0.077



ABL1A01

(1) Compatible input voltage 120...370 V $\overline{\text{---}}$ not indicated on the product.

(2) Compatible input voltage 180...370 V $\overline{\text{---}}$ not indicated on the product.

A	
ABL1A01	5
ABL1A02	5
ABL1REM12050	5
ABL1REM24025	5
ABL1REM24042	5
ABL1REM24062	5
ABL1REM24100	5
ABL1RPM12083	5
ABL1RPM24042	5
ABL1RPM24062	5
ABL1RPM24100	5



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Schneider Electric Industries SAS

Head Office
35, rue Joseph Monier
F-92500 Rueil-Malmaison
France

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