

Power supplies

Phaseo ABL1

Single Phase power supplies

100 V to 240 V - 60 W to 240 W

Catalog

March 2017



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Power supplies

Phaseo ABL1

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

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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	<ul style="list-style-type: none"> United States <ul style="list-style-type: none"> - 120 V (in phase-to-neutral) - 240 V (in phase-to-phase) Europe <ul style="list-style-type: none"> - 230 V (in phase-to-neutral) - 400 V (in phase-to-phase) United States <ul style="list-style-type: none"> - 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)	
		-	
		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/1RPM, 60 to 240 W - Mounting on panel



ABL1REM/1RPM Phaseo range regulated switch mode power supplies

Presentation

ABL1REM/1RPM Phaseo range regulated switch mode power supplies are specially designed to provide the d.c. 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 world-wide standards. Switch mode technology guarantees the quality of the output current with regulation below 3%.

As machine components, **ABL1REM/1RPM** Phaseo range power supplies must be easy to install; only setting-up may vary from one application to another. The ABL1 range has been specially designed for machine manufacturers.

ABL1REM/1RPM regulated switch mode power supplies are totally electronic and regulated. They provide the following benefits:

- A wide input voltage range from 85 to 264 V \sim and 120 to 370 V --- (not indicated on the product).
- Products with anti-harmonic distortion input filter.
- A high degree of output voltage stability, adjustable by potentiometer.
- Built-in thermal overload protection.
- Conformity to world-wide standards.
- UL 508, CSA and TÜV certifications.
- Overload and short-circuit protection.
- Considerably reduced weight.
- Identical mounting accessories for each model.

ABL1 power supplies for electrical equipment are split into two ranges :

- **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 distortion filter:
 - 100 W for the 12 V --- version,
 - 100 W, 150 W and 240 W for the 24 V --- versions.

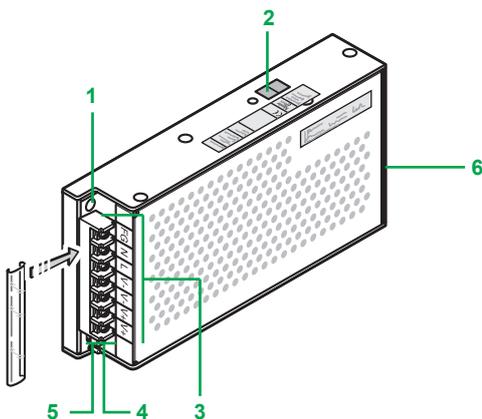
Behaviour in the event of short-circuits

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/1RPM regulated switch mode power supplies comprise:

- 1 Two fixing 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 connection of the AC input voltage and DC output voltage.
- 4 A green LED indicating presence of the d.c. output voltage.
- 5 An output voltage adjustment potentiometer ($\pm 10\%$).
- 6 A removable, transparent, clip-on cover.



Selection of protection for the power supply primary

Type of mains supply Type of protection (2 poles protected)	~ 115 V single-phase			~ 230 V single-phase		
	Thermal-magnetic circuit-breaker		gG fuse	Thermal-magnetic circuit-breaker		gG fuse
	GB2 (IEC/CSA-c/US)	C60N (IEC) C60N (UL)		GB2 (IEC/CSA-c/US)	C60N (IEC) C60N (UL)	
ABL1REM12050	GB2DB07	24517	2 A	GB2DB07	24517	2 A
ABL1REM24025	GB2DB07	24517	2 A	GB2DB07	24517	2 A
ABL1RPM12083	GB2DB07	24517	2 A	GB2DB07	24517	2 A
ABL1REM24042	GB2DB07	24517	2 A	GB2DB07	24517	2 A
ABL1RPM24042	GB2DB07	24517	2 A	GB2DB07	24517	2 A
ABL1REM24062	GB2DB07	24517	2 A	GB2DB08	24518	4 A
ABL1RPM24062	GB2DB07	24517	2 A	GB2DB08	24518	4 A
ABL1REM24100	GB2DB08	24518	4 A	GB2DB10 (1)	17454	6 A
ABL1RPM24100	GB2DB08	24518	4 A	GB2DB10 (1)	17454	6 A

(1) Pending UL certification.

References

Regulated switch mode power supplies: ABL1REM Phaseo range

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



ABL1REM24025



ABL1RPM24042



ABL1RPM24062



ABL1RPM24100

Regulated switch mode power supplies: ABL1RPM Phaseo range

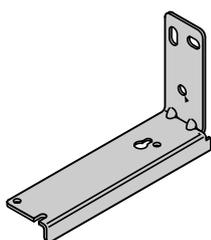
Input voltage 47...63 Hz	Output voltage	Nominal power	Nominal current	Auto-protect reset	Conforming to standard IEC/EN 61000-3-2	Reference	Weight kg/lb
100...240 V ~ (1) single-phase wide range	12 V $\overline{\text{---}}$	100 W	8.3 A	Automatic	Yes	ABL1RPM12083	0.640/ 1.411
	24 V $\overline{\text{---}}$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

Mounting accessories

Description	For power supplies	Sold in lots of	Unit reference	Weight kg/lb
Reversible mounting bracket	For the mounting on the back of cabinet of ABL1RPM power supply	5	ABL1A01	0.085/ 0.187
Clip-on mounting plate for 35 mm mounting rail	- ABL1REM12050/24025: the plate mounting on 35 mm rail requires one mounting plate - ABL1RPM12083 and ABL1RPM24042/24062/24100: the plate mounting on 35 mm rail requires 2 mounting plates - ABL1RPM: the mounting on the back of cabinet on the 35 mm rail requires one mounting plate	5	ABL1A02	0.035/ 0.077

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

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



ABL1A01

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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