

### Selection of protection on the power supply primaries

Type of line supply	100 to 240 V ~ single-phase		
Type of protection	Thermal-magnetic circuit breaker		gG fuse
	GB2 (IEC/CSA-c/US)	C60N (IEC) C60N (UL/CSA)	
ABL8MEM05040	GB2●●07 (1)	24581 24517	2 A
ABL8MEM12020			
ABL8MEM24003			
ABL8MEM24006			
ABL8MEM24012			
ABL7RM24025	GB2●●08 (1)	24582 24518	3 A

(1) Complete the reference by replacing ●● with:

**CB:** for single-pole circuit-breaker with magnetic trip threshold 12 to 16 In

**CD:** for single-pole + neutral circuit-breaker with magnetic trip threshold 12 to 16 In

**DB:** for 2-pole circuit-breaker with magnetic trip threshold 12 to 16 In

**CS:** for single-pole circuit-breaker with magnetic trip threshold 5 to 7 In

### References



ABL8MEM05040/12020/24012



ABL8MEM24003/24006



ABL7RM24025

Input voltage	Secondary		Reset	Conformity to standard IEC/EN 61000-3-2 (1)	Reference	Weight kg/lb
	Output voltage	Nominal power				
<b>Single-phase (N-L1) or 2-phase (L1-L2) connection</b>						
100...240 V -15%, +10% 50/60 Hz	5 V ---	20 W	4 A	Automatic	Not applicable	<b>ABL8MEM05040</b> 0.195/ 0.430
	12 V ---	25 W	2 A	Automatic	Not applicable	<b>ABL8MEM12020</b> 0.195/ 0.430
	24 V ---	7 W	0.3 A	Automatic	Not applicable	<b>ABL8MEM24003</b> 0.100/ 0.220
		15 W	0.6 A	Automatic	Not applicable	<b>ABL8MEM24006</b> 0.100/ 0.220
		30 W	1.2 A	Automatic	Not applicable	<b>ABL8MEM24012</b> 0.195/ 0.430
	60 W	2.5 A	Automatic	Not applicable	<b>ABL7RM24025</b> 0.255/ 0.562	

Description	Use	Order in multiples of	Unit reference	Weight kg/lb
Clip-on marker tags	Replacement parts for ABL8MEM power supplies	100	LAD90	0.030/ 0.066

(1) Due to their power < 75 W, **ABL8MEM/ABL7RM (Modular)** power supplies are not subject to the requirements of standard IEC/EN 61000-3-2.

# Power supplies and transformers

## Phaseo

Regulated switch mode power supplies  
ABL8REM/ABL7RP (Optimum)  
60 to 144 W - Rail mounting

### Switch mode power supplies: range ABL8REM/ABL7RP (Optimum)

The ABL8REM/ABL7RP (Optimum) power supply offer is designed to provide the DC voltage necessary for the control circuits of automation system equipment consuming 60 to 144 W in 12, 24 and 48 V  $\text{DC}$ . Comprising four products, this range meets the needs encountered in industrial, commercial, and residential applications. With phase-to-neutral (N-L1) or phase-to-phase (1) (L1-L2) connection, these slim electronic switch mode power supplies provide a quality of output current that is suitable for the loads supplied and compatible with both Modicon logic controllers and small Modicon M340, Premium and Quantum configurations, making them ideal partners.

Their simplified characteristics in comparison with the ABL8RP/8WP offer also make them the low-cost solution for applications less affected by constraints with the line supply, such as harmonic pollution and outages. Clear guidelines are given on selecting the upstream protection devices which are often used with them, and thus a comprehensive solution is provided that can be used in total safety.

The ABL8REM/ABL7RP (Optimum) power supplies delivers a voltage that is precise to 3%, whatever the load and whatever the type of line supply, within a range of 85 to 264 V  $\sim$ . Conforming to IEC standards and UL, CSA and TUV certified, they are suitable for universal use. The inclusion of overload and short-circuit protection makes downstream protection unnecessary if discrimination is not required.

- ABL8REM power supplies do not have an anti-harmonic filter and do not satisfy the requirements of standard IEC/EN 61000-3-2 concerning harmonic pollution.
- ABL7RP power supplies, however, are equipped with a PFC (*Power Factor Correction*) filter, thus ensuring compliance with standard IEC/EN 61000-3-2.

ABL8REM/ABL7RP (Optimum) power supplies have protection devices to give optimum performance of the automation system with an automatic reset mode. In the event of an overload or short-circuit, the integrated protection interrupts the current supply before the output voltage drops below 19 V  $\text{DC}$ . The protection device resets itself automatically (no action or change a fuse).

Each product is equipped with an output voltage adjustment potentiometer to compensate for any line voltage drops in installations with long cable runs. The power supplies are designed for direct mounting on 35 and 75  $\text{mm}$  rails.

There are four references available in the ABL8REM/ABL7RP (Optimum) Phaseo range:

■ ABL8REM24030	72 W	3 A	24 V $\text{DC}$
■ ABL8REM24050	120 W	5 A	24 V $\text{DC}$
■ ABL7RP1205	60 W	5 A	12 V $\text{DC}$
■ ABL7RP4803	144 W	3 A	48 V $\text{DC}$

### Description

- 1 2.5 mm<sup>2</sup> enclosed screw terminals for connection of the input voltage (single-phase N-L1, phase-to-phase L1-L2 (1))
  - 2 Protective glass flap
  - 3 Input voltage status LED (orange)
  - 4 Output DC voltage status LED (green)
  - 5 Locking catch for the glass flap (sealable)
  - 6 Clip-on marker tag
  - 7 Output voltage adjustment potentiometer
  - 8 2.5 mm<sup>2</sup> enclosed screw terminal block for connection of the DC output voltage
- (1) 240 V  $\sim$  nominal

