Specification





regulated SMPS - 1 or 2-phase - 100..240 V AC - 24 V - 3 A

ABL8REM24030

Discontinued on: Nov 1, 2020

① Discontinued

Main

Range of product	Modicon Power Supply	
product or component type	Power supply	
Power supply type	Regulated switch mode	
Nominal input voltage	100240 V AC phase to phase, terminal(s): L1-L2 100240 V AC single phase, terminal(s): N-L1 110220 V DC	
Rated power in W	72 W	
Output voltage	24 V DC	
Power supply output current	3 A	

Complementary

Input voltage limits	85264 V AC	
	100250 V AC	
Input protection type	Integrated fuse (not interchangeable)	
Inrush current	30 A	
Power factor	0.65 at 24 V DC	
Efficiency	85 %	
Output voltage adjustment	100120 % adjustable	
Power dissipation in W	12.7 W	
Current consumption	0.83 A 240 V AC 1.46 A 100 V AC	
Against overload, protection technology: 1.1 x In Against overvoltage, protection technology: tripping if U > 1.5 x Un Against short-circuits, protection technology: automatic reset Against undervoltage, protection technology: tripping if U < 0.8 x Un		
Screw type terminals: 2 x 0.142 x 2.5 mm², (AWG 26AWG 14) for in connection Screw type terminals: 1 x 0.141 x 2.5 mm², (AWG 26AWG 14) for in connection Screw type terminals: 2 x 0.142 x 2.5 mm², (AWG 26AWG 14) for o connection Screw type terminals: 1 x 0.141 x 2.5 mm², (AWG 26AWG 14) for o connection		
Status LED	1 LED (green) output voltage 1 LED (orange) input voltage	
Depth	120 mm	
Height	120 mm	
Width	27 mm	

net weight	0.52 kg	
Output coupling	Parallel	
	Series	
marking	CE	
Mounting support	35 x 15 mm symmetrical DIN rail	
	35 x 7.5 mm symmetrical DIN rail	
	75 x 7.5 mm symmetrical DIN rail	
Operating position	Vertical	
Supply	SELV conforming to EN/IEC 60950-1	
	SELV conforming to EN/IEC 60204-1	
	SELV conforming to IEC 60364-4-41	
Dielectric strength	3000 V with between input and ground	
	3000 V with between input and output	
	3000 V With between input and output	
	500 V with between input and output	

Environment

Standards	UL 508 CSA C22.2 No 60950-1 EN/IEC 62368-1	
Product certifications	CSA 22-2 No 950 EAC RCM KC UL	
Environmental characteristic	EMC conforming to EN 50081-1 EMC conforming to EN 50082-2 EMC conforming to EN 55024 Safety conforming to EN/IEC 60950	
Operating altitude	2000 m	
IP degree of protection	IP20 conforming to EN/IEC 60529	
Ambient air temperature for operation	050 °C without derating mounting position A < 2000 m 5060 °C with derating factor mounting position A < 2000 m	

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.1 cm
Package 1 Width	13.8 cm
Package 1 Length	14.7 cm
Package 1 Weight	280 g

Contractual warranty

Warranty 12 months



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Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

Well-being performance

	Mercury Free	
⊘	Rohs Exemption Information	Yes
	Pvc Free	

Certifications & Standards

Reach Regulation	REACh Declaration	
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)	
China Rohs Regulation	China RoHS declaration	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End of Life Information	

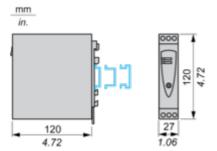
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Dimensions Drawings

Regulated Switch Mode Power Supply

Dimensions and Mounting

Mounting on a 35 mm/1.37 in. or 75 mm/2.95 in. Rail

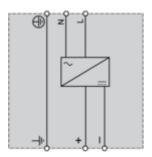


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Connections and Schema

Regulated Switch Mode Power Supply

Internal Wiring Diagram

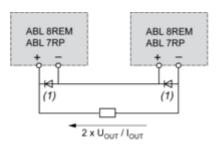


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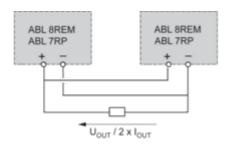
Regulated Switch Mode Power Supplies

Series or Parallel Connection

Series Connection



(1) Two Shottky diodes Imin = power supply In and Vmin = 50 V Parallel Connection



Family	Series	Parallel
ABL 8REM/7RP	2 products max.	2 products max.

NOTE: Series or parallel connection is only recommended for products with identical references.

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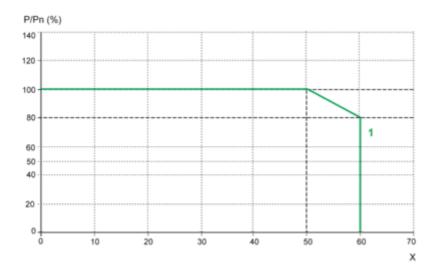
Performance Curves

Regulated Switch Mode Power Supplies

Derating

The ambient temperature is a determining factor that limits the power an electronic power supply can deliver continuously. If the temperature around the electronic components is too high, their life will be significantly reduced. The nominal ambient temperature for the Optimum range of Phaseo power supplies is 50 °C. Above this temperature, derating is necessary up to a maximum temperature of 60 °C.

The graph below shows the power as a percentage of the nominal power that the power supply can deliver continuously, depending on the ambient temperature.



X Maximum operating temperature (°C)

(1) ABL 8REM, ABL 7RP mounted vertically

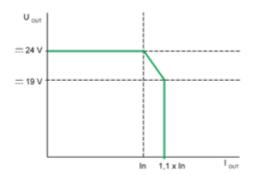
Derating should be considered in extreme operating conditions:

- Intensive operation (output current permanently close to the nominal current, combined with a high ambient temperature)
- Output voltage set above 24 Vdc (to compensate for line voltage drops, for example)
- Parallel connection to increase the total power

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Regulated Switch Mode Power Supply

Load Limit



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Regulated Switch Mode Power Supply

Temporary Overloads

