Product datasheet

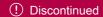




Regulated switch power supply, modicon power supply, 1 or 2 phase, 100...240V AC, 24V, 1.2A

ABL8MEM24012

Discontinued on: 12-Nov-2020



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 120250 V DC	
Rated Power In W	30 W	
Output Voltage	24 V DC	
Power Supply Output Current	1.2 A	

Complementary

J		
Input Voltage Limits	85264 V AC	
Input Protection Type	Integrated fuse (not interchangeable)	
Inrush Current	20 A	
Power Factor	0.5 at 24 V DC	
Efficiency	82 %	
Output Voltage Adjustment	22.228.8 V adjustable	
Power Dissipation In W	6.6 W	
Current Consumption	0.4 A 240 V AC 0.65 A 100 V AC	
Residual Ripple 250 mV		
Output Protection Type Against short-circuits		
Connections - Terminals	Screw type terminals: 2 x 0.142 x 2.5 mm², (AWG 26AWG 14) for input connection Screw type terminals: 4 x 0.144 x 2.5 mm², (AWG 26AWG 14) for output connection	
Status Led	1 LED (green) output voltage	
Depth	59 mm	
Height	100 mm	
Width	54 mm	
Net Weight	0.195 kg	
Output Coupling	Parallel Series	
Marking	CE	

Mounting Support	panel 2 screws, diameter : 4 mm 35 x 15 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 output		

Environment

Standards	UL 508 CSA C22.2 No 60950-1 EN/IEC 62368-1			
Product Certifications	TUV 60950-1 EAC RCM KC CCSAus CSA 22-2 No 950 CULus 508			
Environmental Characteristic	EMC conforming to EN 55022 class B EMC conforming to EN 61000-6-3 EMC conforming to EN/IEC 61000-6-2 EMC conforming to EN/IEC 61204-3 Safety conforming to EN/IEC 60950-1			
Operating Altitude	2000 m			
Ip Degree Of Protection	gree Of Protection IP20 conforming to EN/IEC 60529			
Ambient Air Temperature For Operation	-2555 °C without derating mounting position A < 2000 m 5570 °C with derating factor mounting position A < 2000 m			

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1

Contractual warranty

Warranty 18 months



Green PremiumTM label is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

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
②	Pvc Free	

Certifications & Standards

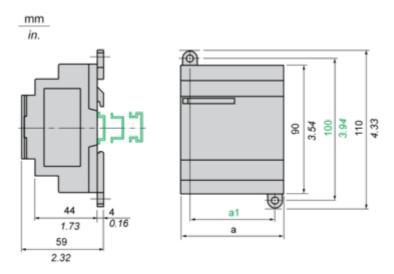
Reach Regulation	REACh Declaration	
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)	
China Rohs Regulation	China RoHS declaration	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End of Life Information	

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Dimensions Drawings

Regulated Switch Mode Power Supplies

Dimensions



	a in mm	a in in.	a1 in mm	a1 in in.
ABL8MEM05040	54	2.12	42	1.65
ABL8MEM12020	54	2.12	42	1.65
ABL8MEM24003	36	1.41	24	0.94
ABL8MEM24006	36	1.41	24	0.94
ABL8MEM24012	54	2.12	42	1.65
ABL7RM24025	74	2.91	60	2.36

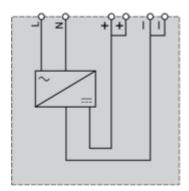
Product datasheet

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Connections and Schema

Regulated Switch Mode Power Supply

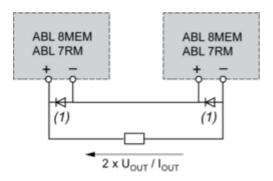
Internal Wiring Diagram



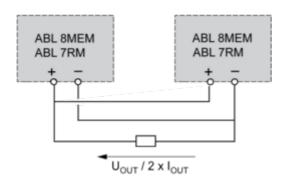
Regulated Switch Mode Power Supplies

Series or Parallel Connection

Series Connection



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



Family	Series	Parallel
ABL 7RM/8MEM	2 products max.	2 products max.

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

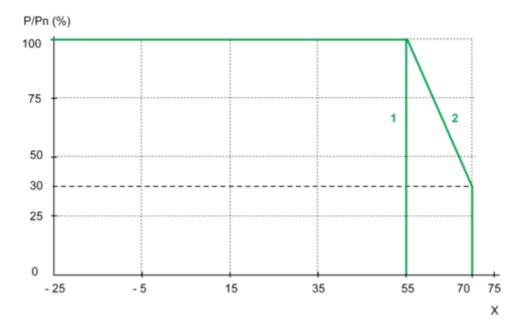
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Performance Curves

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 Modular range of Phaseo power supplies is 55°C. Above this temperature, derating is necessary up to a maximum temperature of 70°C (except for the ABL7RM24025 model). 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) With an ABL7RM24025
- (2) With an ABL8MEM*****