Product datasheet

Specification





regulated SMPS - 1 or 2-phase - 100..240 V AC - 24 V - 5 A

ABL8REM24050

- ! Discontinued on: 14 Dec 2020
- ! End-of-service on: 25 Jan 2021

! Discontinued

EAN Code: 3389119405591

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	120 W	
Output Voltage	24 V DC	
Power Supply Output Current	5 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	21.2 W	
Current Consumption	1.2 A 240 V AC 1.9 A 100 V AC	
Output Protection Type	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 inpu connection Screw type terminals: 4 x 0.144 x 2.5 mm², (AWG 26AWG 14) for outp connection Screw type terminals: 1 x 0.141 x 2.5 mm², (AWG 26AWG 14) for inpu connection Screw type terminals: 2 x 0.142 x 2.5 mm², (AWG 26AWG 14) for outp connection		
Status Led	1 LED (green) output voltage 1 LED (orange) input voltage	
Depth	120 mm	
	120 mm	

Width	54 mm
Net Weight	1 kg
Output Coupling	Series Parallel
Marking	CE
Mounting Support	35 x 15 mm symmetrical DIN rail 75 x 7.5 mm symmetrical DIN rail 35 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 500 V with between output and ground 500 V with between outputs

Environment

Standards	UL 508 CSA C22.2 No 60950-1 EN/IEC 62368-1	
Product Certifications	RCM EAC KC CCSAus 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	6.7 cm
Package 1 Width	13.3 cm
Package 1 Length	14.5 cm
Package 1 Weight	803 g

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
	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	

Product datasheet

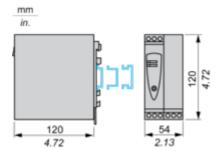
ABL8REM24050

Dimensions Drawings

Regulated Switch Mode Power Supply

Dimensions and Mounting

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



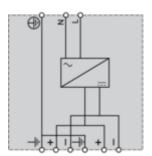
Product datasheet

ABL8REM24050

Connections and Schema

Regulated Switch Mode Power Supply

Internal Wiring Diagram

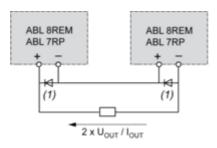


31 May 2024

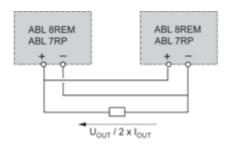
Regulated Switch Mode Power Supplies

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.

ABL8REM24050

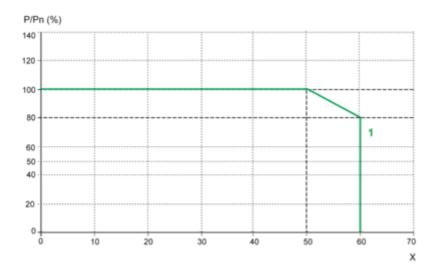
Performance Curves

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

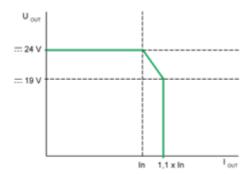
Derating should be considered in extreme operating conditions:

- 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

ABL8REM24050

Regulated Switch Mode Power Supply

Load Limit



ABL8REM24050

Regulated Switch Mode Power Supply

Temporary Overloads

