Product datasheet

Specifications

Discontinued

Regulated switch power supply, modicon power supply, 1 or 2 phase, 100...240V AC, 5V, 4A

ABL8MEM05040

Discontinued on: Oct 31, 2020 AD

End-of-service on: Dec 20, 2020 AD

Main

Range of product	Modicon Power Supply
Product or component type	Power supply
Power supply type	Regulated switch mode
Nominal input voltage	100...240 V AC phase to phase, terminal(s): L1-L2 100...240 V AC single phase, terminal(s): N-L1 120...250 V DC
Rated power in W	20 W
Output voltage	5 V DC
Power supply output current	4 A

Complementary

Input voltage limits	85...264 V AC
Input protection type	Integrated fuse (not interchangeable)
Inrush current	20 A
Power factor	0.5 at 5 V DC
Efficiency	75 %
Output voltage adjustment	4.75...6.25 V adjustable
Power dissipation in W	6.7 W
Current consumption	0.35 A 240 V AC 0.55 A 100 V AC
Residual ripple	250 mV
Output protection type	Against short-circuits
Connections - terminals	Screw type terminals: 2 x 0.14...2 x 2.5 mm², (AWG 26...AWG 14) for input connection Screw type terminals: 4 x 0.14...4 x 2.5 mm², (AWG 26...AWG 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	35 x 15 mm symmetrical DIN rail 35 x 7.5 mm symmetrical DIN rail panel 2 screws, diameter : 4 mm
Operating position	Vertical
Supply	SELV conforming to IEC 60950-1 SELV conforming to IEC 60204-1 SELV conforming to IEC 60364-4-41
Dielectric strength	3000 V with between input and output

Environment

Standards	CSA C22.2 No 60950-1 UL 508 EN/IEC 62368-1
Product certifications	EAC TUV 60950-1 RCM KC CCSAus CSA 22-2 No 950 CULus 508
Environmental characteristic	EMC conforming to EN 55022 class B EMC conforming to IEC 61000-6-3 EMC conforming to IEC 61000-6-2 EMC conforming to EN/IEC 61204-3 Safety conforming to IEC 60950-1
Operating altitude	2000 m
IP degree of protection	IP20 conforming to IEC 60529
Ambient air temperature for operation	-25…55 °C without derating mounting position A < 2000 m 55…70 °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

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

How this information helps you

Environmental footprint

Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	Fe64e454-324e-4d95-961c-5ccceb461cf0
China RoHS Regulation	China RoHS declaration
PVC free	Yes

Use Again

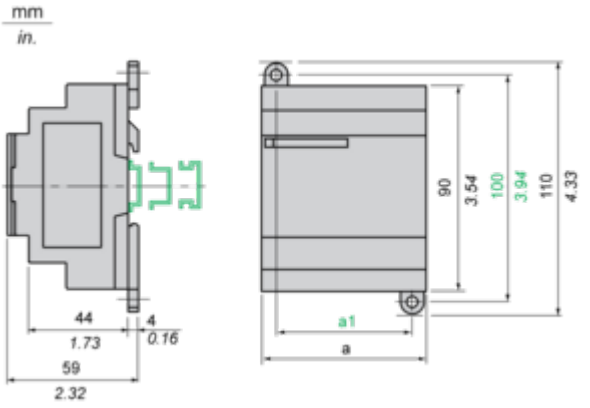
Repack and remanufacture

Circularity Profile	End of Life Information

Dimensions Drawings

Regulated Switch Mode Power Supplies

Dimensions

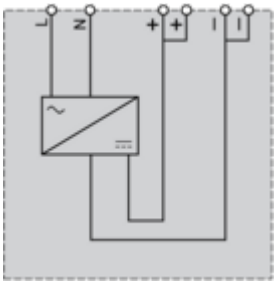


	a in mm	a in in.	a1 in mm	a1 in in.
ABL8MEM05040	54	2.12	42	1.65
ABL8MEM12020	54	2.12	42	1.65
ABL8MEM24003	36	1.41	24	0.94
ABL8MEM24006	36	1.41	24	0.94
ABL8MEM24012	54	2.12	42	1.65
ABL7RM24025	74	2.91	60	2.36

Connections and Schema

Regulated Switch Mode Power Supply

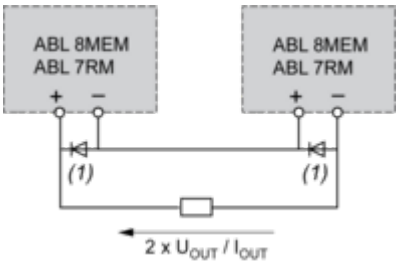
Internal Wiring Diagram



Regulated Switch Mode Power Supplies

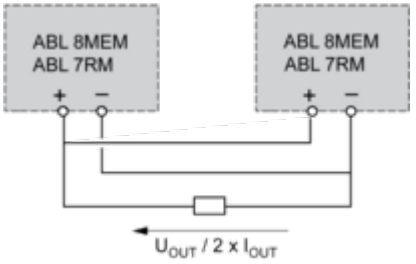
Series or Parallel Connection

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.

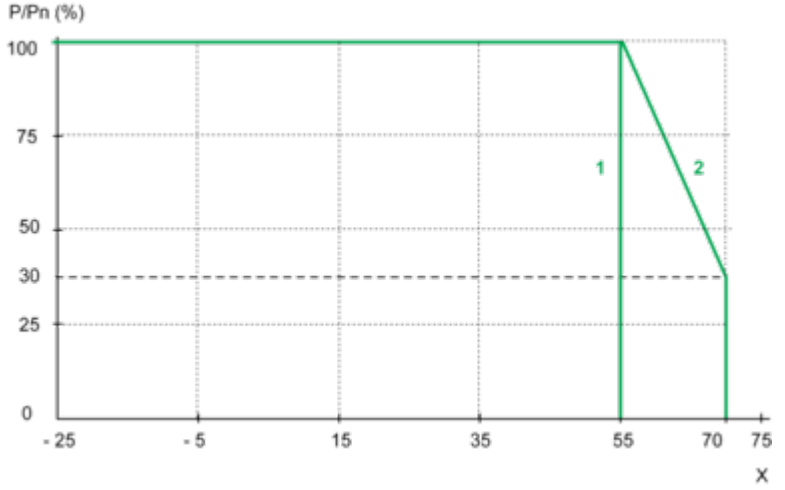
NOTE: Series or parallel connection is only recommended for products with identical references.

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•••••