

Product data sheet

Specifications



Regulated Switch Power Supply, 1 or 2-phase, 100..240V AC, 5V, 4 A

ABL8MEM05040

⚠ Discontinued on: Dec 20, 2020

⚠ End-of-service on: Jan 6, 2021

⚠ Discontinued

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 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 mm ² , (AWG 26...AWG 14) for input connection Screw type terminals: 4 x 0.14...4 x 2.5 mm ² , (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 |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

| | |
|---------------------|---|
| 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 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 | 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 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 | IP20 conforming to EN/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

| | |
|------------------|----------|
| Package 1 Height | 0.670 dm |
| Package 1 Width | 0.730 dm |
| Package 1 Length | 1.000 dm |
| Package 1 Weight | 0.231 kg |

Contractual warranty

| | |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Sustainability

Green Premium™ label is Schneider Electric’s commitment to delivering products with best-in-class environmental performance. **Green Premium** promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low- 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 >](#)



Transparency RoHS/REACH

Well-being performance



Mercury Free



Pvc Free



Rohs Exemption Information

Yes

Certifications & Standards

Eu Rohs Directive

Pro-active compliance (Product out of EU RoHS legal scope)

[EU RoHS Declaration](#)

China Rohs Regulation

[China RoHS declaration](#)

Environmental Disclosure

[Product Environmental Profile](#)

California Proposition 65

WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

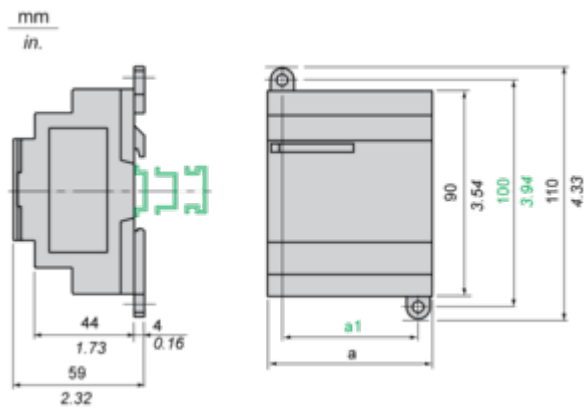
Circularity Profile

[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

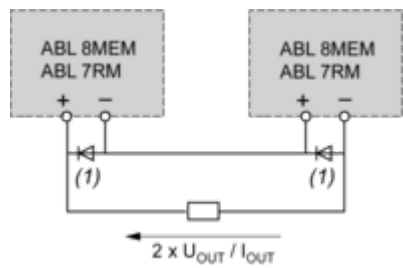
Regulated Switch Mode Power Supply

Internal Wiring Diagram

Regulated Switch Mode Power Supplies

Series or Parallel Connection

Series Connection



(1) Two Schottky diodes I_{min} = power supply I_n and V_{min} = 50 V

Parallel Connection

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

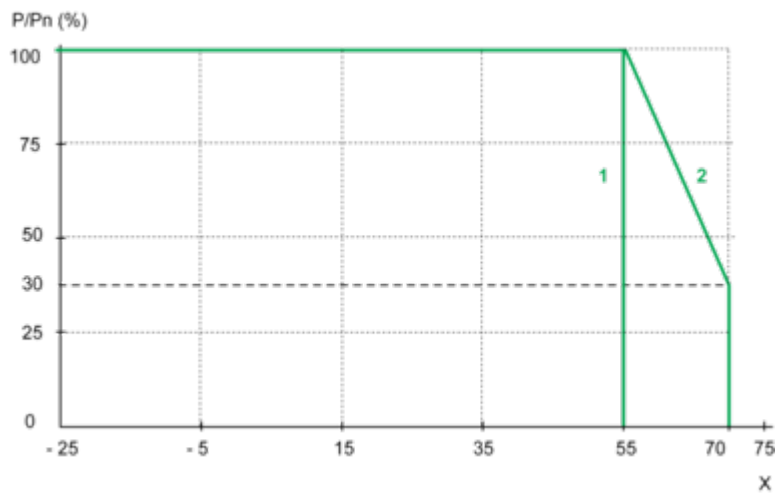
NOTE: Series or parallel connection is only recommended for products with identical references.

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.....