

Product data sheet

Specifications



Regulated switch power supply, modicon power supply, 1 or 2 phase, 100...240V AC, 48V, 2...5A

ABL7RP4803

⚠ Discontinued on: Feb 17, 2021

⚠ Discontinued

Product availability: Non-Stock - Not normally stocked in distribution facility

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 L1-L2 100...240 V AC single phase N-L1 110...220 V DC |
| Kw Rating | 120 W |
| Output Voltage | 48 V DC |
| Power Supply Output Current | 2.5 A |

Complementary

| | |
|---------------------------|--|
| Efficiency At Full Load | 85...264 V AC 100...250 V AC |
| Input Protection Type | Integrated fuse (not interchangeable) |
| Inrush Current | 30 A |
| Power Factor | 0.98 at 48 V DC |
| Efficiency | 85 % |
| Output Voltage Adjustment | 100...120 % adjustable |
| Power Dissipation In W | 25.4 W |
| Current Consumption | 1 A 100 V AC 0.6 A 240 V AC |
| Output Protection Type | Against overload $1.1 \times I_n$ Against overvoltage tripping if $U > 1.5 \times U_n$ Against short-circuits manual or automatic reset Against undervoltage tripping if $U < 0.8 \times U_n$ |
| Connections - Terminals | Screw type terminals $2 \times 0.14...2 \times 2.5 \text{ mm}^2$, AWG 26...AWG 14) input connection Screw type terminals $4 \times 0.14...4 \times 2.5 \text{ mm}^2$, AWG 26...AWG 14) output connection Screw type terminals $1 \times 0.14...1 \times 2.5 \text{ mm}^2$, AWG 26...AWG 14) input ground connection Screw type terminals $2 \times 0.14...2 \times 2.5 \text{ mm}^2$, AWG 26...AWG 14) output ground connection |
| Status Led | 1 LED (Green) output voltage 1 LED (Orange) input voltage |
| Depth | 4.72 in (120 mm) |
| Height | 4.72 in (120 mm) |
| Width | 2.13 in (54 mm) |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

| | |
|----------------------------|--|
| Net Weight | 2.20 lb(US) (1 kg) |
| Output Coupling | Series Parallel |
| Marking | CE |
| Mounting Support | 75 x 7.5 mm symmetrical DIN rail 35 x 7.5 mm symmetrical DIN rail 35 x 15 mm symmetrical DIN rail |
| Operating Position | Vertical |
| Supply | SELV EN/IEC 60950-1 SELV EN/IEC 60204-1 SELV 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 | CSA 22-2 No 950 EAC RCM KC UL 508 TÜV |
| Environmental Characteristic | EMC EN 50081-1 EMC EN 50082-2 EMC EN/IEC 61000-6-2 Safety EN/IEC 60950 Safety IEC 61496-1-2 |
| Operating Altitude | 6561.68 ft (2000 m) |
| Ip Degree Of Protection | IP20 conforming to EN/IEC 60529 |
| Ambient Air Temperature For Operation | 32...122 °F (0...50 °C) without derating mounting position A < 6561.68 ft (2000 m) 122...140 °F (50...60 °C) with derating factor mounting position A < 6561.68 ft (2000 m) |

Ordering and shipping details

| | |
|--------------------------|---------------|
| Category | US1CP1222525 |
| Discount Schedule | CP12 |
| Gtin | 3389110178029 |
| Returnability | No |
| Country Of Origin | US |

Packing Units

| | |
|-------------------------------------|------------------------|
| Unit Type Of Package 1 | PCE |
| Number Of Units In Package 1 | 1 |
| Package 1 Height | 2.56 in (6.5 cm) |
| Package 1 Width | 5.24 in (13.3 cm) |
| Package 1 Length | 5.71 in (14.5 cm) |
| Package 1 Weight | 2.37 lb(US) (1.076 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-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 >](#)

Well-being performance

✓ Mercury Free

✓ Rohs Exemption Information [Yes](#)

✓ Pvc Free

Reach Regulation [REACH Declaration](#)

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

China Rohs Regulation [China RoHS declaration](#)

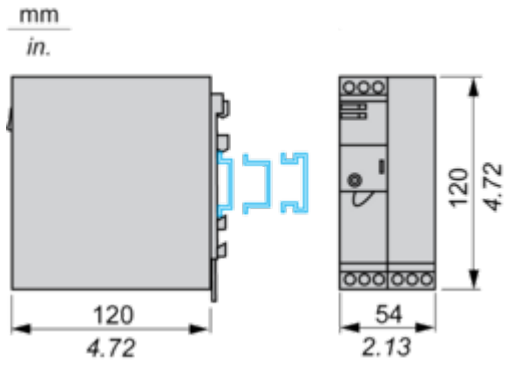
California Proposition 65 WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Dimensions Drawings

Regulated Switch Mode Power Supply

Dimensions and Mounting

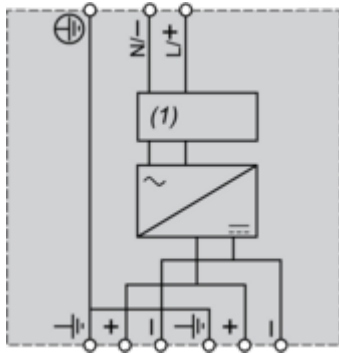
Mounting on 35 mm/1.37 in. or 75 mm/2.95 in. Rail



Connections and Schema

Regulated Switch Mode Power Supply

Internal Wiring Diagram

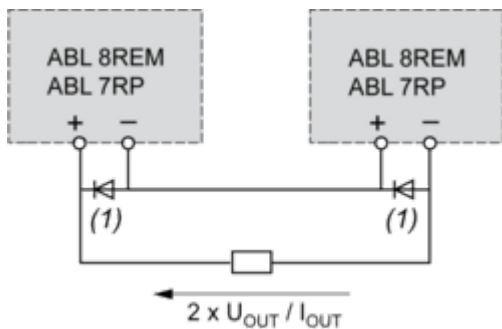


(1) Filter

Regulated Switch Mode Power Supplies

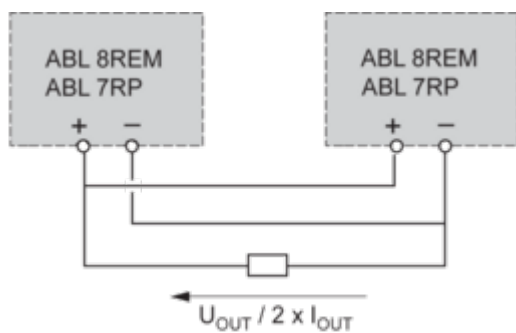
Series or Parallel Connection

Series Connection



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

Parallel Connection



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

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

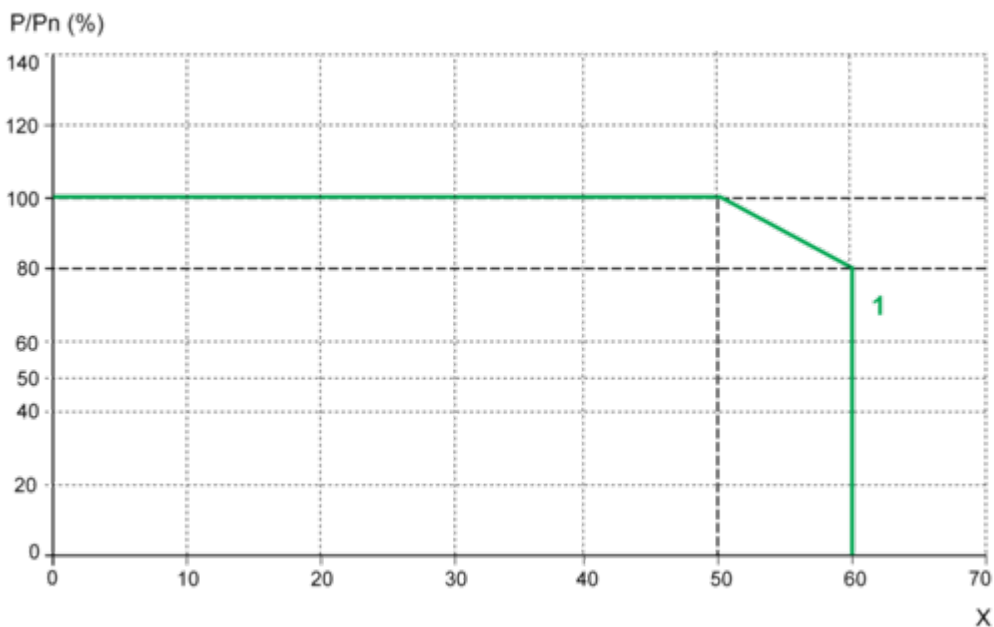
Performance Curves

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 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

Regulated Switch Mode Power Supply

Temporary Overloads

