

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



Main

| | |
|---------------------------------------|--|
| Range of product | Phaseo |
| Product or component type | Power supply |
| Power supply type | Regulated switch mode |
| Input voltage | 100...240 V AC phase to phase L1-L2 100...240 V AC single phase N-L1 110...220 V DC |
| Output voltage | 48 V DC |
| Rated power in W | 120 W |
| Input protection type | Integrated fuse (not interchangeable) |
| Power supply output current | 2.5 A |
| Output protection type | Against overload 1.1 x In Against overvoltage tripping if $U > 1.5 \times U_n$ Against short-circuits manual or automatic reset Against undervoltage tripping if $U < 0.8 \times U_n$ |
| Ambient air temperature for operation | 32...122 °F (0...50 °C) without) 122...140 °F (50...60 °C) with derating factor) |

Complementary

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|--------------------------|--|
| Input voltage limits | 85...264 V 100...250 V |
| Network frequency | 47...63 Hz |
| Inrush current | 30 A |
| Cos phi | 0.98 |
| Efficiency | 85 % |
| Output voltage limits | 100...120 % adjustable |
| Power dissipation in W | 25.4 W |
| Current consumption | 1 A 100 V 0.6 A 240 V |
| Line and load regulation | +/- 3 % |
| Holding time | >= 20 ms 100 V >= 20 ms 240 V |
| Connections - terminals | Input connection screw type terminals 2 x 0.14...2 x 2.5 mm ² AWG 26...AWG 14 Output connection screw type terminals 4 x 0.14...4 x 2.5 mm ² AWG 26...AWG 14 Input ground connection screw type terminals 1 x 0.14...1 x 2.5 mm ² AWG 26...AWG 14 Output ground connection screw type terminals 2 x 0.14...2 x 2.5 mm ² AWG 26...AWG 14 |
| 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 |
| Operating altitude | 6561.68 ft (2000 m) |
| Output coupling | Series Parallel |

The information provided in this documentation contains general descriptions and/or technical characteristics of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

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|--------------|---|
| Name of test | Electrostatic discharges EN/IEC 61000-4-2 Induced electromagnetic field EN/IEC 61000-4-6 Primary outage IEC 61000-4-11 Radiated electromagnetic field EN/IEC 61000-4-3 Rapid transient IEC 61000-4-4 Surge EN/IEC 61000-4-5 Emission EN 50081-1 Conducted/Radiated emissions EN 55011 Conducted/radiated emissions EN 55022 class B |
| Status LED | Output voltage 1 LED green) Input voltage 1 LED orange) |
| Depth | 4.72 in (120 mm) |
| Height | 4.72 in (120 mm) |
| Width | 2.13 in (54 mm) |
| Net weight | 2.20 lb(US) (1 kg) |

Environment

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|-------------------------------------|--|
| Product certifications | CSA 22-2 No 950 EAC RCM KC UL 508 TÜV |
| Standards | UL 508 CSA C22.2 No 60950-1 |
| 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 Safety SELV |
| IP degree of protection | IP20 EN/IEC 60529 |
| Ambient air temperature for storage | -13...158 °F (-25...70 °C) |
| Relative humidity | 0...95 % without condensation or dripping water |
| Overvoltage category | Class I VDE 0106-1 |
| Dielectric strength | 3000 V between input and ground 3000 V between input and output 500 V between output and ground 500 V between outputs |

Ordering and shipping details

| | |
|---------------------|-------------------------------------|
| Category | 22525 - ABL8 AND ABL7 POWER SUPPLIE |
| Discount Schedule | CP12 |
| GTIN | 00785901425304 |
| Package weight(Lbs) | 1.08 kg (2.37 lb(US)) |
| Returnability | No |
| Country of origin | CN |

Offer Sustainability

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|----------------------------|--|
| Sustainable offer status | Green Premium product |
| REACH Regulation |  REACH Declaration |
| REACH free of SVHC | Yes |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope)  EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information |  Yes |
| China RoHS Regulation |  China RoHS Declaration |
| Environmental Disclosure |  Product Environmental Profile |
| Circularity Profile |  End Of Life Information |

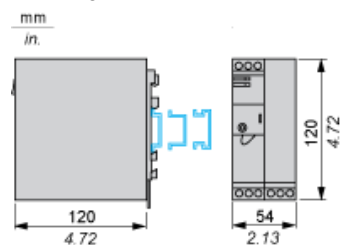
Contractual warranty

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

Regulated Switch Mode Power Supply

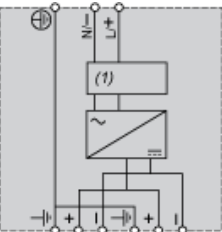
Dimensions and Mounting

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



Regulated Switch Mode Power Supply

Internal Wiring Diagram

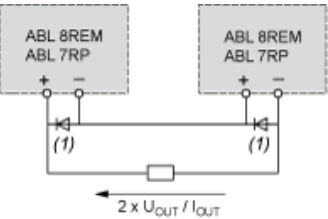


(1) Filter

Regulated Switch Mode Power Supplies

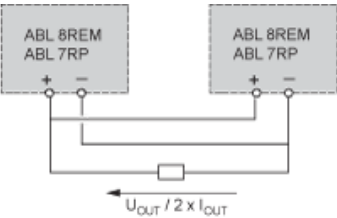
Series or Parallel Connection

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.

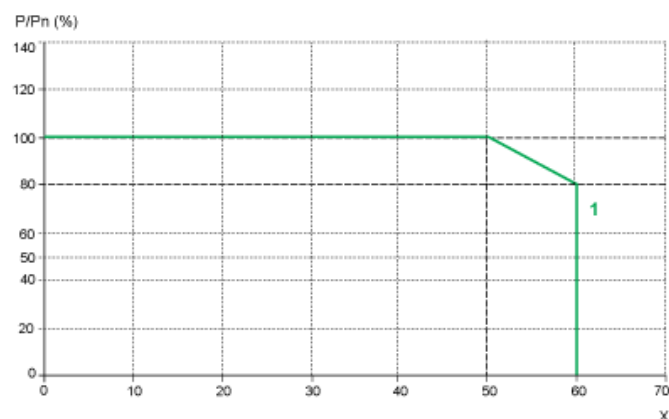
Regulated Switch Mode Power Supplies

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

