

Product availability: Stock - 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<br>100...240 V AC single phase N-L1<br>120...250 V DC |
| Output voltage                        | 24 V DC   |
| Rated power in W                      | 15 W  |
| Input protection type                 | Integrated fuse (not interchangeable)   |
| Power supply output current           | 0.6 A   |
| Output protection type                | Thermal<br>Against short-circuits   |
| Ambient air temperature for operation | -13...131 °F (-25...55 °C) without<br>131...158 °F (55...70 °C) with derating factor)     |

## Complementary

|                          |  |
|--------------------------|--|
| Input voltage limits     | 85...264 V   |
| Network frequency        | 47...63 Hz   |
| Inrush current           | 20 A   |
| Cos phi                  | 0.5  |
| Efficiency               | 80 %   |
| Output voltage limits    | 22.2...28.8 V adjustable   |
| Power dissipation in W   | 3.8 W  |
| Current consumption      | 0.25 A 240 V<br>0.4 A 100 V  |
| Line and load regulation | +/- 3 %  |
| Residual ripple          | 250 mV   |
| Holding time             | >= 10 ms 100 V<br>>= 150 ms 230 V  |
| Connections - terminals  | Input connection screw type terminals 2 x 0.14...2 x 2.5 mm <sup>2</sup> AWG 26...AWG 14<br>Output connection screw type terminals 2 x 0.14...2 x 2.5 mm <sup>2</sup> AWG 26...AWG 14  |
| Marking                  | CE   |
| Mounting support         | 35 x 7.5 mm symmetrical DIN rail<br>Panel 2 screws, diameter : 4 mm<br>35 x 15 mm symmetrical DIN rail   |
| Operating position       | Vertical   |
| Operating altitude       | 6561.68 ft (2000 m)  |
| Output coupling          | Parallel<br>Series   |
| Name of test             | Electrostatic discharges EN/IEC 61000-4-2<br>Induced electromagnetic field EN/IEC 61000-4-6<br>Primary outage IEC 61000-4-11<br>Radiated electromagnetic field EN/IEC 61000-4-3<br>Rapid transient IEC 61000-4-4<br>Surge EN/IEC 61000-4-5<br>Conducted emissions on the power line EN 55022 class B<br>Emission EN 50081-1<br>Radiated emissions EN 55022 class B<br>Harmonic current emission EN/IEC 61000-3-2 |
| Status LED               | Output voltage 1 LED green)  |

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|                |                      |
|----------------|----------------------|
| Depth          | 2.32 in (59 mm)      |
| Height         | 3.94 in (100 mm)     |
| Width          | 1.42 in (36 mm)      |
| Product weight | 0.22 lb(US) (0.1 kg) |

## Environment

|                                     |  |
|-------------------------------------|--|
| MTBF reliability                    | With MIL-HDBK-217F   |
| Product certifications              | TUV 60950-1<br>EAC<br>KC<br>RCM<br>CCSAus<br>CSA 22-2 No 950<br>CULus 508  |
| Standards                           | UL 508<br>CSA C22.2 No 60950-1   |
| Environmental characteristic        | EMC EN 55022 class B<br>EMC EN 61000-6-3<br>EMC EN/IEC 61000-6-2<br>EMC EN/IEC 61204-3<br>Safety EN/IEC 60950-1<br>Safety SELV |
| IP degree of protection             | IP20 EN/IEC 60529  |
| Ambient air temperature for storage | -40...158 °F (-40...70 °C)   |
| Relative humidity                   | 0...90 % during operation<br>0...95 % in storage   |
| Overvoltage category                | Class II VDE 0106-1  |
| Dielectric strength                 | 3000 V between input and output  |

## Ordering and shipping details

|                     |                                     |
|---------------------|-------------------------------------|
| Category            | 22525 - ABL8 AND ABL7 POWER SUPPLIE |
| Discount Schedule   | CP12                                |
| GTIN                | 00785901490036                      |
| Package weight(Lbs) | 0.13 kg (0.29 lb(US))               |
| Returnability       | Yes                                 |
| Country of origin   | CN                                  |

## Offer Sustainability

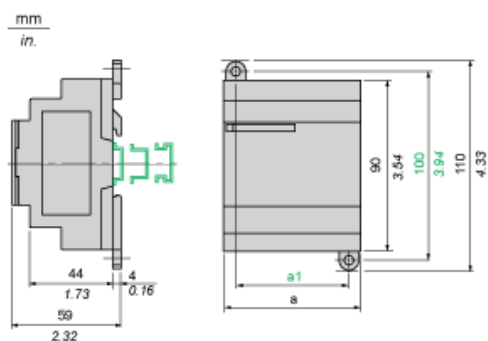
|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| California proposition 65  | WARNING: This product can expose you to chemicals including: Lead and lead compounds which is known to the State of California to cause Carcinogen & Reproductive harm. For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a> |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>  |
| Mercury free               | Yes   |
| RoHS exemption information | <a href="#">Yes</a>   |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>  |
| Circularity Profile        | <a href="#">End Of Life Information</a>   |

## Contractual warranty

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

Regulated Switch Mode Power Supplies

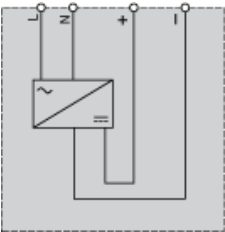
Dimensions



|              | 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      |

Regulated Switch Mode Power Supply

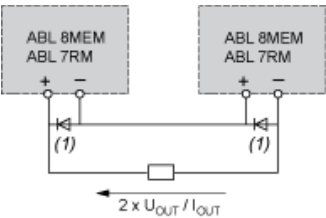
Internal Wiring Diagram



Regulated Switch Mode Power Supplies

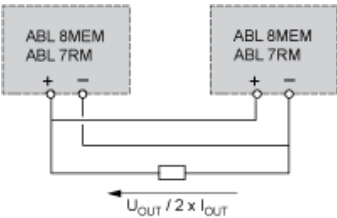
Series or Parallel Connection

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.

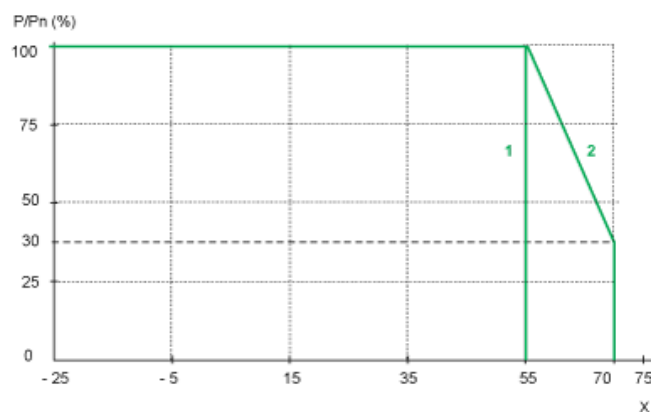
## Regulated Switch Mode Power Supplies

### 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.....