

# Product datasheet

Specifications



## regulated SMPS with auto reset - 1 or 2-phase - 100...240 V AC - 24 V - 2.5 A

ABL7RM24025

! Discontinued

! Discontinued on: 11 Nov 2020

! End-of-service on: 25 Jan 2021

EAN Code: 3389119404600

## 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
Rated power in W	60 W
Output voltage	24 V DC
Power supply output current	2.5 A
Anti-harmonic filter	Low frequency harmonic currents

## Complementary

Input voltage limits	85...264 V AC
Input protection type	Integrated fuse (not interchangeable)
Inrush current	90 A
Power factor	0.5 at 24 V DC
Efficiency	84 %
Output voltage adjustment	22.2...28.8 V adjustable
Power dissipation in W	11.4 W
Current consumption	0.7 A 240 V AC
Provided equipment	Power factor correction filter conforming to IEC 61000-3-2
Residual ripple	200 mV
Output protection type	Against undervoltage, protection technology: tripping if $U < 19$ V Against short-circuits
Connections - terminals	Screw type terminals: 2 x 0.14...2 x 2.5 mm <sup>2</sup> , (AWG 26...AWG 14) for input connection Screw type terminals: 4 x 0.14...4 x 2.5 mm <sup>2</sup> , (AWG 26...AWG 14) for output connection
Status LED	1 LED (green) output voltage
Depth	59 mm
Height	100 mm
Width	74 mm

<b>Net weight</b>	0.255 kg
<b>Output coupling</b>	Series Parallel
<b>Marking</b>	CE
<b>Mounting support</b>	35 x 7.5 mm symmetrical DIN rail panel 2 screws, diameter : 4 mm 35 x 15 mm symmetrical DIN rail
<b>Operating position</b>	Vertical
<b>Supply</b>	SELV conforming to IEC 60950-1 SELV conforming to IEC 60204-1 SELV conforming to IEC 60364-4-41
<b>Dielectric strength</b>	3000 V with between input and output

## Environment

<b>Standards</b>	CSA C22.2 No 60950-1 UL 508 EN/IEC 62368-1
<b>Product certifications</b>	EAC CULus 508 TUV 60950-1 RCM KC
<b>Environmental characteristic</b>	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
<b>Operating altitude</b>	2000 m
<b>IP degree of protection</b>	IP20 conforming to IEC 60529
<b>Ambient air temperature for operation</b>	-25...55 °C without derating mounting position A < 2000 m 55...70 °C with derating factor mounting position A < 2000 m

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	6.8 cm
<b>Package 1 Width</b>	8.3 cm
<b>Package 1 Length</b>	10.8 cm
<b>Package 1 Weight</b>	318 g

## Contractual warranty

<b>Warranty</b>	18 months
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## 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.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### 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)

PVC free

Yes

## Use Again

### Repack and remanufacture

[End of life manual availability](#)

[End of Life Information](#)

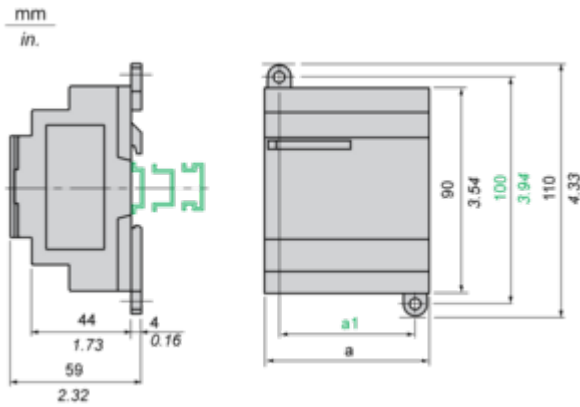
WEEE Label

 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

Regulated Switch Mode Power Supplies

Dimensions



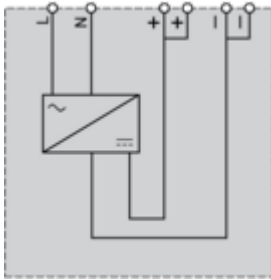
	a in mm	a in in.	a1 in mm	a1 in in.
<b>ABL8MEM05040</b>	54	2.12	42	1.65
<b>ABL8MEM12020</b>	54	2.12	42	1.65
<b>ABL8MEM24003</b>	36	1.41	24	0.94
<b>ABL8MEM24006</b>	36	1.41	24	0.94
<b>ABL8MEM24012</b>	54	2.12	42	1.65
<b>ABL7RM24025</b>	74	2.91	60	2.36

Connections and Schema

Regulated Switch Mode Power Supply

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Internal Wiring Diagram

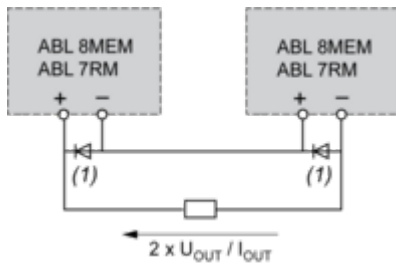


Regulated Switch Mode Power Supplies

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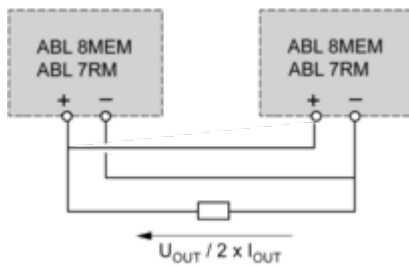
Series or Parallel Connection

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.

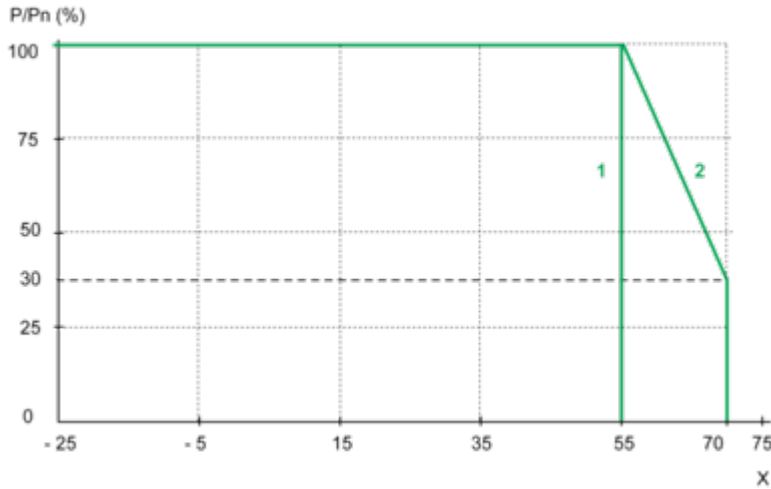
Performance Curves

Regulated Switch Mode Power Supplies

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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.....