

# Product data sheet

Specifications



## Regulated Switch Power Supply with auto reset, 1 or 2-phase, 100...240V AC, 24V, 2.5 A

ABL7RM24025

! Discontinued on: 23 January 2021

! End-of-service on: 24 January 2021

! Discontinued

Product availability : Stock - Normally stocked in distribution facility

Price\* : 184.00 USD

### 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
Input voltage limits	85...264 V AC
Kw Rating	60 W
Output voltage	24 V DC
Power supply output current	2.5 A
Anti-harmonic filter	Low frequency harmonic currents

### Complementary

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 IEC 61000-3-2
Residual ripple	200 mV
Output protection type	Against undervoltage 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) input connection Screw type terminals 4 x 0.14...4 x 2.5 mm <sup>2</sup> , AWG 26...AWG 14) output connection
Status LED	Output voltage 1 LED Green)
Depth	2.32 in (59 mm)

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

<b>Height</b>	3.94 in (100 mm)
<b>Width</b>	2.91 in (74 mm)
<b>Net Weight</b>	0.56 lb(US) (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 EN/IEC 60950-1 SELV EN/IEC 60204-1 SELV IEC 60364-4-41

## 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 EN 55022 Class B EMC EN 61000-6-3 EMC EN/IEC 61000-6-2 EMC EN/IEC 61204-3 Safety EN/IEC 60950-1
<b>Operating altitude</b>	6561.68 ft (2000 m)
<b>IP degree of protection</b>	IP20 conforming to EN/IEC 60529
<b>Ambient air temperature for operation</b>	-13...131 °F (-25...55 °C) without 131...158 °F (55...70 °C) with derating factor)
<b>Ambient Air Temperature for Storage</b>	-40...158 °F (-40...70 °C)
<b>Relative Humidity</b>	0...90 % during operation 0...95 % in storage
<b>Electrical energy source class conforming to IEC 62368-1</b>	ES1
<b>Dielectric strength</b>	3000 V between input and output

## Ordering and shipping details

<b>Category</b>	22525 - ABL8 AND ABL7 POWER SUPPLIE
<b>Discount Schedule</b>	CP12
<b>GTIN</b>	00785901446484
<b>Nbr. of units in pkg.</b>	1
<b>Package weight(Lbs)</b>	11.22 oz (318 g)
<b>Returnability</b>	No
<b>Country of origin</b>	TW

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Package 1 Height</b>	2.68 in (6.8 cm)
<b>Package 1 width</b>	3.27 in (8.3 cm)
<b>Package 1 Length</b>	4.25 in (10.8 cm)

<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	20
<b>Package 2 Weight</b>	15.16 lb(US) (6.875 kg)
<b>Package 2 Height</b>	5.91 in (15 cm)
<b>Package 2 width</b>	11.81 in (30 cm)
<b>Package 2 Length</b>	15.75 in (40 cm)
<b>Unit Type of Package 3</b>	P06
<b>Number of Units in Package 3</b>	320
<b>Package 3 Weight</b>	261.25 lb(US) (118.5 kg)
<b>Package 3 Height</b>	30.31 in (77 cm)
<b>Package 3 width</b>	23.62 in (60 cm)
<b>Package 3 Length</b>	31.50 in (80 cm)

## Offer Sustainability

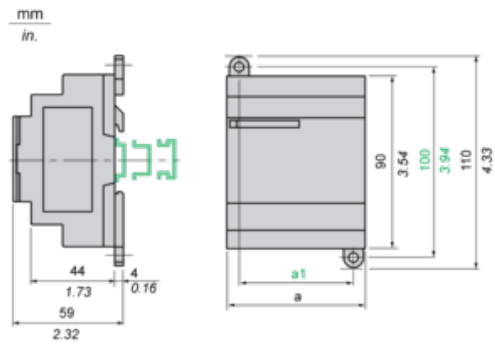
<b>Sustainable offer status</b>	Green Premium product
<b>California proposition 65</b>	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>REACH free of SVHC</b>	Yes
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Toxic heavy metal free</b>	Yes
<b>Mercury free</b>	Yes
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>PVC free</b>	Yes

## Contractual warranty

<b>Warranty</b>	18 months
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**Regulated Switch Mode Power Supplies**

**Dimensions**

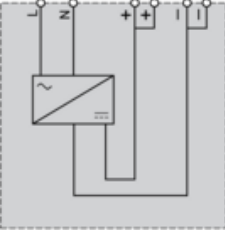


	a in mm	a in in.	a1 in mm	a1 in in.
<b>ABL8MEM05040</b>	54	2.12	42	1.65
<b>ABL8MEM12020</b>	54	2.12	42	1.65
<b>ABL8MEM24003</b>	36	1.41	24	0.94
<b>ABL8MEM24006</b>	36	1.41	24	0.94
<b>ABL8MEM24012</b>	54	2.12	42	1.65
<b>ABL7RM24025</b>	74	2.91	60	2.36

**Regulated Switch Mode Power Supply**

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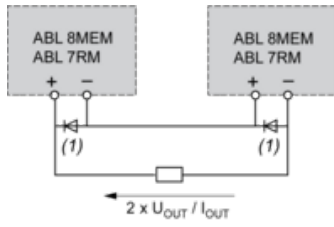
**Internal Wiring Diagram**



**Regulated Switch Mode Power Supplies**

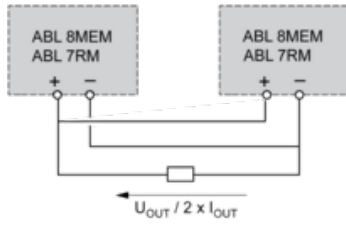
**Series or Parallel Connection**

**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

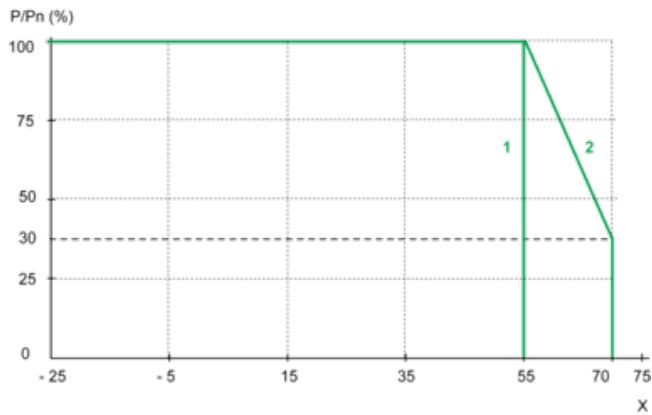
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### Derating

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.....

### Recommended replacement(s)

ABL7RM24025 is replaced by:

1x



Regulated Power Supply, 100-240V AC, 24V 2.5 A, single phase, Modular  
ABLM1A24025