Product data sheet
Characteristics

ABL8MEM24012
regulated power supply, Phaseo, 100 to 240 V, 24 V, 1.2 A



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 120...250 V DC
Input voltage limits	85...264 V AC
Kw Rating	30 W
Output voltage	24 V DC
Power supply output current	1.2 A

Complementary

Input protection type	Integrated fuse (not interchangeable)
Inrush current	20 A
[Ue] rated operational voltage	24 V DC 0.5
Efficiency	82 %
Output voltage adjustment	22.2...28.8 V adjustable
Power dissipation in W	6.6 W
Current consumption	0.4 A 240 V 0.65 A 100 V
Residual ripple	250 mV
Output protection type	Against short-circuits
Connections - terminals	Input connection screw type terminals 2 x 0.14...2 x 2.5 mm² AWG 26...AWG 14 Output connection screw type terminals 4 x 0.14...4 x 2.5 mm² AWG 26...AWG 14
Status LED	Output voltage 1 LED Green)
Maximum Depth	2.32 in (59 mm)
Maximum Height	3.94 in (100 mm)
Maximum Width	2.13 in (54 mm)
Net Weight	0.43 lb(US) (0.195 kg)
Output coupling	Parallel Series
Marking	CE
Mounting support	35 x 7.5 mm symmetrical DIN rail Panel 2 screws, diameter : 4 mm 35 x 15 mm symmetrical DIN rail
Operating position	Vertical

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance 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.
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Environment

Standards	UL 508 CSA C22.2 No 60950-1
Product certifications	TUV 60950-1 EAC RCM KC CCSAus CSA 22-2 No 950 CULus 508
Environmental characteristic	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 Safety SELV
Operating altitude	6561.68 ft (2000 m)
IP degree of protection	IP20 EN/IEC 60529
Ambient air temperature for operation	-13…131 °F (-25…55 °C) without) 131…158 °F (55…70 °C) with derating factor)
Ambient air temperature for storage	-40…158 °F (-40…70 °C)
Relative humidity	0…90 % during operation 0…95 % in storage
Dielectric strength	3000 V between input and output

Ordering and shipping details

Category	22525 - ABL8 AND ABL7 POWER SUPPLIE
Discount Schedule	CP12
GTIN	00785901551508
Nbr. of units in pkg.	1
Package weight(Lbs)	0.51 lb(US) (0.23 kg)
Returnability	Yes
Country of origin	CN

Packing Units

Package 1 Height	0.680 dm
Package 1 width	0.730 dm
Package 1 Length	1.000 dm

Offer Sustainability

Sustainable offer status	Green Premium product
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
Circularity Profile	End Of Life Information
PVC free	Yes

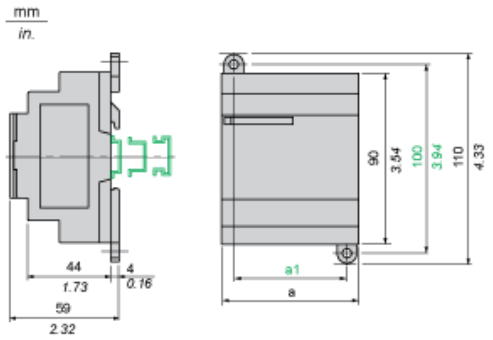
Contractual warranty

Warranty	18 months

ABL8MEM24012

Regulated Switch Mode Power Supplies

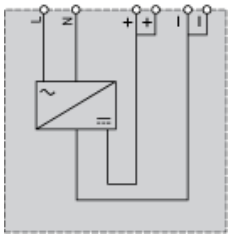
Dimensions



	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

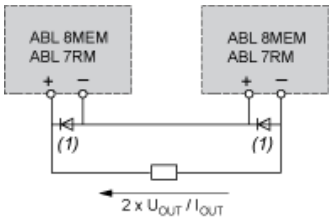
Internal Wiring Diagram



Regulated Switch Mode Power Supplies

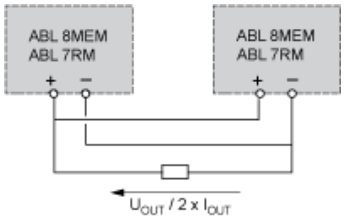
Series or Parallel Connection

Series Connection



(1) Two Shottky diodes Imin = power supply In and Vmin = 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.

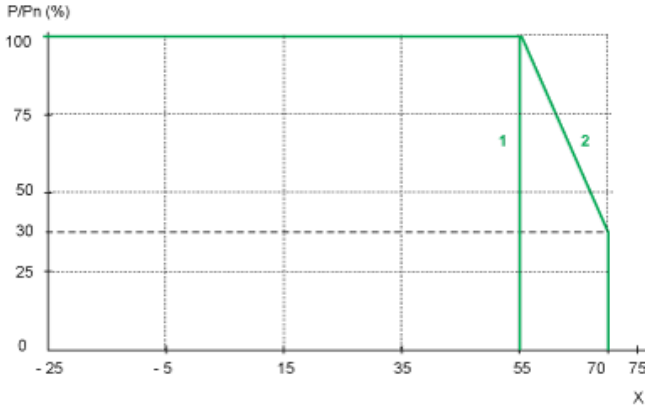
Regulated Switch Mode Power Supplies

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•••••