# **ABL8MEM24012**

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



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	100240 V AC phase to phase L1-L2 100240 V AC single phase N-L1 120250 V DC
Output voltage	24 V DC
Rated power in W	30 W
Input protection type	Integrated fuse (not interchangeable)
Power supply output current	1.2 A
Output protection type	Against short-circuits
Ambient air temperature for operation	-13131 °F (-2555 °C) without) 131158 °F (5570 °C) with derating factor)

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Complementary		
Input voltage limits	85264 V	
Network frequency	4763 Hz	
Inrush current	20 A	
Cos phi	0.5	
Efficiency	82 %	
Output voltage limits	22.228.8 V adjustable	
Power dissipation in W	6.6 W	
Current consumption	0.4 A 240 V 0.65 A 100 V	
Line and load regulation	+/- 3 %	
Residual ripple	250 mV	
Holding time	>= 10 ms 100 V >= 150 ms 230 V	
Connections - terminals	Input connection screw type terminals 2 x 0.142 x 2.5 mm² AWG 26AWG 14 Output connection screw type terminals 4 x 0.144 x 2.5 mm² AWG 26AWG 14	
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	
Operating altitude	6561.68 ft (2000 m)	
Output coupling	Parallel Series	
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 Conducted emissions on the power line EN 55022 class B Emission EN 50081-1 Radiated emissions EN 55022 class B Harmonic current emission EN/IEC 61000-3-2	
Status LED	Output voltage 1 LED green)	
Depth	2.32 in (59 mm)	

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 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.

Height	3.94 in (100 mm)	
Width	2.13 in (54 mm)	
Product weight	0.43 lb(US) (0.195 kg)	

#### Environment

Product certifications	TUV 60950-1 EAC RCM KC CCSAus
	RCM KC CCSAus
	KC CCSAus
	CCSAus
	CSA 22-2 No 950
	CULus 508
Standards	UL 508
	CSA C22.2 No 60950-1
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
IP degree of protection	IP20 EN/IEC 60529
Ambient air temperature for storage	-40158 °F (-4070 °C)
Relative humidity	090 % during operation
	095 % 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	00785901551508
Package weight(Lbs)	0.23 kg (0.51 lb(US))
Returnability	Yes
Country of origin	CN

#### Offer Sustainability

Shor 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 www.p65warnings.ca.gov  REACh Declaration	
REACh Regulation		
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declar tion	
Mercury free	Yes	
RoHS exemption information	Yes	
China RoHS Regulation	China RoHS Declaration	
Circularity Profile	End Of Life Information	

#### Contractual warranty

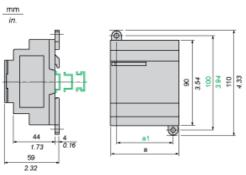
Warranty 18	8 months

# Product data sheet Dimensions Drawings

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#### Regulated Switch Mode Power Supplies

#### Dimensions

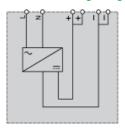


	a in mm	a in in.	a1 in mm	a1 in in.
ABL8MEM05040	54	2.12	42	1.65
ABL8MEM12020	54	2.12	42	1.65
ABL8MEM24003	36	1.41	24	0.94
ABL8MEM24006	36	1.41	24	0.94
ABL8MEM24012	54	2.12	42	1.65
ABL7RM24025	74	2.91	60	2.36

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#### Regulated Switch Mode Power Supply

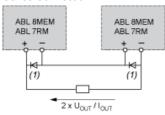
#### Internal Wiring Diagram



#### Regulated Switch Mode Power Supplies

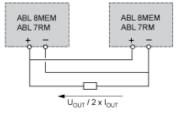
#### Series or Parallel Connection

#### 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.

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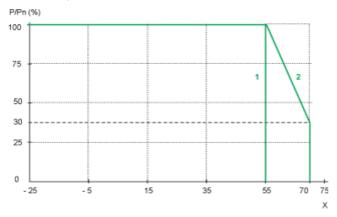
#### Regulated Switch Mode Power Supplies

#### 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•••••