## **ABL8MEM12020**

regulated SMPS - 1 or 2-phase - 100..240 V AC - 12 V - 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, terminal(s): L1-L2 100240 V AC single phase, terminal(s): N-L1 120250 V DC
Output voltage	1215 V DC
Rated power in W	25 W
Input protection type	Integrated fuse (not interchangeable)
Power supply output current	2.1 A
Output protection type	Against short-circuits
Ambient air temperature for operation	-13131 °F (-2555 °C) without 5570 °C with

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Complementary		
Input voltage limits	85264 V	
Network frequency	4763 Hz	
Inrush current	20 A	
Cos phi	0.5	
Efficiency	80 %	
Output voltage limits	11.415 V adjustable	
Power dissipation in W	6.2 W	
Current consumption	0.35 A at 240 V 0.6 A at 100 V	
Line and load regulation	+/- 3 %	
Residual ripple	250 mV	
Holding time	>= 10 ms at 100 V	
Connections - terminals	Screw type terminals input connection, connection capacity: 2 x 0.142 x 2.5 mm² AWG 26AWG 14  Screw type terminals output connection, connection capacity: 4 x 0.144 x 2.5 mm² AWG 26AWG 14	
Marking	CE	
Mounting support	35 x 15 mm symmetrical DIN rail Panel 2 screws, diameter : 4 mm 35 x 7.5 mm symmetrical DIN rail	
Operating position	Vertical	
Operating altitude	6561.68 ft (2000 m)	
Output coupling	Series Parallel	
Name of test	Harmonic current emission conforming to EN/IEC 61000-3-2 Conducted emissions on the power line conforming to EN 55022 Class B Electrostatic discharges conforming to EN/IEC 61000-4-2 Emission conforming to EN 50081-1 Induced electromagnetic field conforming to EN/IEC 61000-4-6 Primary outage conforming to IEC 61000-4-11 Radiated electromagnetic field conforming to EN/IEC 61000-4-3 Radiated emissions conforming to EN 55022 Class B Rapid transient conforming to IEC 61000-4-4 Surge conforming to EN/IEC 61000-4-5	
Status LED	1 LED green output voltage	
	0.00 ( (50)	

Depth

2.32 in (59 mm)

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

Product certifications	KC CSA 22-2 No 950 CCSAus CULus 508 RCM EAC TUV 60950-1	
Standards	CSA C22.2 No 60950-1 UL 508	
Environmental characteristic	EMC conforming to EN 55022 Class B EMC conforming to EN 61000-6-3 EMC conforming to EN/IEC 61000-6-2 EMC conforming to EN/IEC 61204-3 Safety conforming to EN/IEC 60950-1 Safety conforming to SELV	
IP degree of protection	IP20 conforming to EN/IEC 60529	
Ambient air temperature for storage	-40158 °F (-4070 °C)	
Relative humidity	090 % during operation 095 % in storage	
Overvoltage category	Class II conforming to VDE 0106-1	
Dielectric strength	Between input and output	

#### Ordering and shipping details

Category	22525 - ABL8 AND ABL7 POWER SUPPLIE	
Discount Schedule	CP12	
GTIN	00785901608264	
Nbr. of units in pkg.	1	
Package weight(Lbs)	0.510000000000001	
Returnability	Υ	
Country of origin	CN	

#### Offer Sustainability

California proposition 65	WARNING: This product can expose you to chemicals including:
Substance 1	Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm.
More information	For more information go to www.p65warnings.ca.gov

#### Contractual warranty

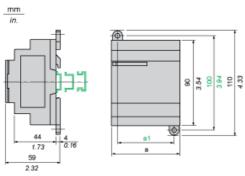
Warranty period	18 months	

# Product data sheet Dimensions Drawings

### **ABL8MEM12020**

#### Regulated Switch Mode Power Supplies

#### Dimensions

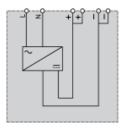


	a in mm	a in in.	a1 in mm	a1 in in.
ABL8MEM05040	54	2.12	42	1.65
ABL8MEM12020	54	2.12	42	1.65
ABL8MEM24003	36	1.41	24	0.94
ABL8MEM24006	36	1.41	24	0.94
ABL8MEM24012	54	2.12	42	1.65
ABL7RM24025	74	2.91	60	2.36

#### **ABL8MEM12020**

#### Regulated Switch Mode Power Supply

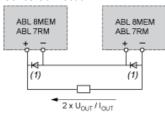
#### Internal Wiring Diagram



#### Regulated Switch Mode Power Supplies

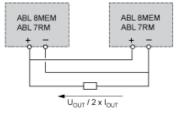
#### Series or Parallel Connection

#### 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.

## Product data sheet Performance Curves

#### **ABL8MEM12020**

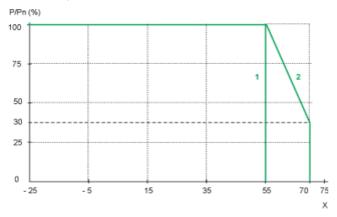
#### Regulated Switch Mode Power Supplies

#### **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•••••

## **Mouser Electronics**

**Authorized Distributor** 

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ABL8MEM12020