### Product data sheet Characteristics

## ABL8MEM12020

Regulated switch power supply, modicon power supply, 1 or 2 phase, 100...240V AC, 12V, 2A





### Mair

Main			
Range of product	Modicon Power Supply		
Product or component type	Power supply		
Power supply type	Regulated switch mode		
Nominal input voltage	100240 V AC phase to phase, terminal(s): L1-L2 100240 V AC single phase, terminal(s): N-L1 120250 V DC		
Rated power in W	25 W		
Output voltage	1215 V DC		
Power supply output current	2.1 A		

#### Complementary

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Input voltage limits	85264 V AC		
Input protection type	Integrated fuse (not interchangeable)		
Inrush current	20 A		
Power factor	0.5 at 1215 V DC		
Efficiency	80 %		
Output voltage adjustment	11.415 V adjustable		
Power dissipation in W	6.2 W		
Current consumption	0.35 A 240 V AC 0.6 A 100 V AC		
Residual ripple	250 mV		
Output protection type	Against short-circuits		
Connections - terminals	Screw type terminals: 2 x 0.142 x 2.5 mm <sup>2</sup> , (AWG 26AWG 14) for input con- nection Screw type terminals: 4 x 0.144 x 2.5 mm <sup>2</sup> , (AWG 26AWG 14) for output con- nection		
Status LED	1 LED (green) output voltage		
Depth	59 mm		
Height	100 mm		
Width	54 mm		
Net weight	0.195 kg		
Output coupling	Parallel Series		
Marking	CE		
Mounting support	35 x 7.5 mm symmetrical DIN rail 35 x 15 mm symmetrical DIN rail Panel 2 screws, diameter : 4 mm		
Operating position	Vertical		
Supply	SELV conforming to EN/IEC 60950-1 SELV conforming to EN/IEC 60204-1 SELV conforming to IEC 60364-4-41		
Dielectric strength	3000 V with between input and output		

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products for submined herein. This documentation is not intended as a substitute for and is not to be used for determining substitity or reliability of these products for specific use applications. It is the ducty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products for specific user applications. Neither Schneider Electric Inductive SSA nor any of its affiliates or substitiantes shall be responsible or liable for misues of the information contrained herein.

#### Environment

Standards	UL 508 CSA C22.2 No 60950-1 EN/IEC 62368-1	
Product certifications	EAC[RETURN]RCM[RETURN]KC[RETURN]TUV 60950-1[RETURN]CCSAus[RETURN]CSA 22-2 No 950[RETURN]CULus 5	
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	
Operating altitude	2000 m	
IP degree of protection	IP20 conforming to EN/IEC 60529	
Ambient air temperature for operation	-2555 °C without derating mounting position A < 2000 m 5570 °C with derating factor mounting position A < 2000 m	

### Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1

### Offer Sustainability

Sustainable offer status	Green Premium product		
REACh Regulation	REACh Declaration		
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)		
Mercury free	Yes		
China RoHS Regulation	China RoHS Declaration		
RoHS exemption information	₽ Yes		
Environmental Disclosure	Product Environmental Profile		
Circularity Profile	End Of Life Information		
PVC free	Yes		
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 cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov		

#### Contractual warranty

Warranty

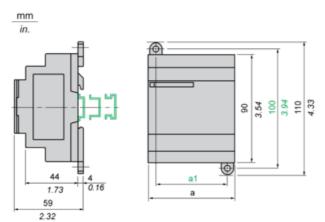
18 months

## Product data sheet Dimensions Drawings

# ABL8MEM12020

#### Regulated Switch Mode Power Supplies

#### Dimensions

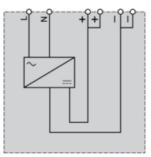


	a in mm	a in in.	a1 in mm	a1 in in.
ABL8MEM05040	54	2.12	42	1.65
ABL8MEM12020	54	2.12	42	1.65
ABL8MEM24003	36	1.41	24	0.94
ABL8MEM24006	36	1.41	24	0.94
ABL8MEM24012	54	2.12	42	1.65
ABL7RM24025	74	2.91	60	2.36

## ABL8MEM12020

#### Regulated Switch Mode Power Supply

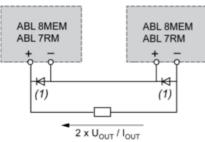
#### Internal Wiring Diagram



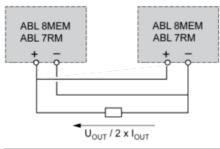
#### Regulated Switch Mode Power Supplies

#### 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.

## ABL8MEM12020

#### **Regulated Switch Mode Power Supplies**

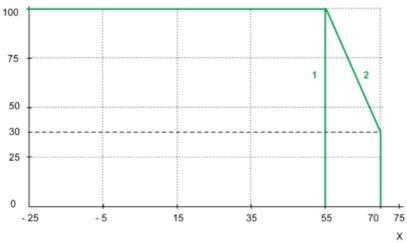
#### Derating

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.

P/Pn (%)



X Maximum operating temperature (°C)

(1) With an ABL7RM24025

(2) With an ABL8MEM .....