

Product data sheet

Specifications



regulated SMPS, single phase,
100..240 V input, 12 V output, 100
W

ABL1RPM12083

⚠ Discontinued on: 17 February 2021

⚠ Discontinued

Main

Range of Product	Phaseo Dedicated
Product or Component Type	Power supply
Power supply type	Regulated switch mode
Kw Rating	100 W
Main Input Voltage	100...240 V AC single phase 120...370 V DC
Output voltage	12 V DC
Power supply output current	8.3 A
Operating position	Any position
Vibration resistance	2 gn 9...150 Hz)EN/IEC 61131-2 3.5 mm 5...9 Hz)EN/IEC 61131-2
Name of test	Conducted interference EN 61000-4-8 level 4 Electrostatic discharges EN/IEC 61000-4-2 level 3 Induced electromagnetic field EN/IEC 61000-4-6 level 3 Radiated electromagnetic field EN/IEC 61000-4-3 level 3 Rapid transient IEC 61000-4-4 level 3 Conducted/radiated emissions EN 55022 Class B Conducted/radiated emissions EN/IEC 55011 Emission EN/IEC 61000-6-3 Primary outage IEC 61000-4-11 Surge EN/IEC 61000-4-5

Complementary

Input voltage limits	85...264 V
Network Frequency	47...63 Hz
Inrush current	50 A 115 V AC 100 A 230 V AC
Cos phi	0.7...0.95
Efficiency	80 %
Power dissipation in W	25 W
Current consumption	0.7 A 240 V 1.7 A 100 V
Input protection type	Integrated fuse (not interchangeable)
Output voltage limits	10.8...13.2 V
Line and load regulation	+/- 3 %

Holding time	>= 10 ms 100 V >= 40 ms 240 V
Output protection type	Against overload 1.1...1.5 x In Against overvoltage tripping if U > 1.25 x Un Against short-circuits automatic reset Thermal
Connections - terminals	Ground connection screw type terminals 1 x 4 mm² AWG 12 Input connection screw type terminals 2 x 4 mm² AWG 12 Output connection screw type terminals 4 x 4 mm² AWG 12
Marking	CE
Mounting Support	Reversible mounting bracket Panel
Operating altitude	6561.68 ft (2000 m)
Output coupling	Series Parallel
Overvoltage category	II
Meantime between failure [MTBF]	100000 h 104 °F (40 °C)
Status LED	1 LED (Green) output voltage
Net Weight	1.41 lb(US) (0.64 kg)

Environment

Product Certifications	TUV 60950-1 UL 508 cCSAus EAC CSA 22-2 No 60950-1 RCM
Environmental characteristic	EMC EN 50081-1 EMC EN 50082-2 EMC EN 61000-6-3 EMC EN/IEC 61000-6-2 Safety EN/IEC 60950-1 Safety SELV Low frequency harmonic currents EN/IEC 61000-3-2
IP degree of protection	IP20 conforming to EN/IEC 60950
Ambient air temperature for operation	32...113 °F (0...45 °C) without derating) 113...140 °F (45...60 °C) with derating factor)
Ambient Air Temperature for Storage	-13...185 °F (-25...85 °C)
Relative humidity	20...90 % Class I VDE 0106-1
Pollution degree	2
Dielectric strength	1500 V between input and ground 3000 V between input and output 500 V between output and ground

Ordering and shipping details

Category	22524-ABL1 DEDICATED POWER SUPPLIES
Discount Schedule	CP12
GTIN	3389110638196
Returnability	No
Country of origin	CN

Packing Units

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

Package 1 Height	2.17 in (5.5 cm)
Package 1 Width	9.25 in (23.5 cm)
Package 1 Length	4.65 in (11.8 cm)
Package 1 Weight	25.96 oz (736 g)

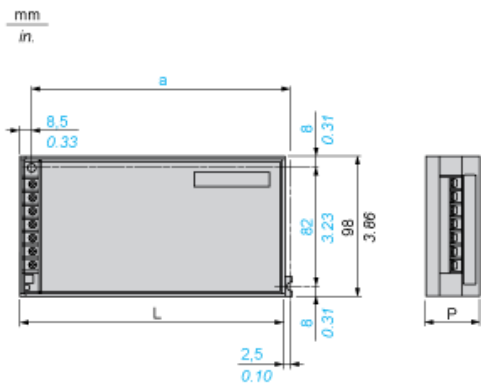
Offer Sustainability

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 cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
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

Contractual warranty

Warranty	18 months
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Dimensions



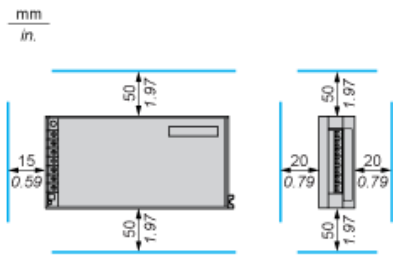
Dimensions in mm

a	L	P
194	200	38

Dimensions in in.

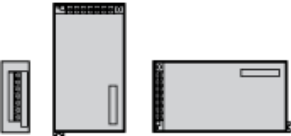
a	L	P
7.64	7.87	1.50

Clearance



Mounting Way

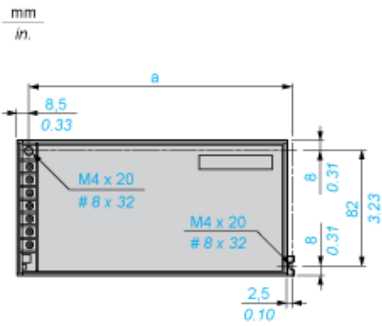
Mounting on Vertical Plane



Mounting on Horizontal Plane



Direct Mounting by 2 M4 x 20 Screws



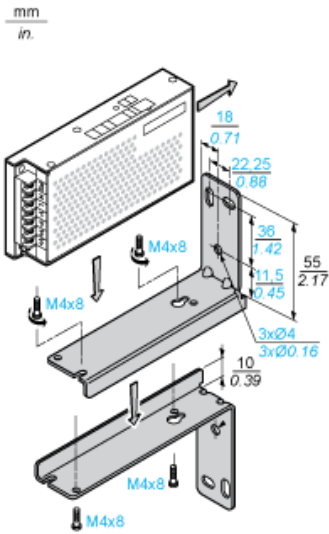
Dimensions in mm

a
194

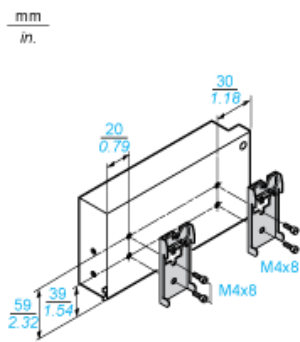
Dimensions in in

a
7.64

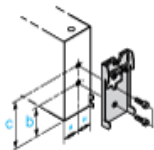
Mounting on the Back on ABL 1A01 Reversible Bracket by Three 4 mm Diameter Screws



Mounting on ABL 1A02 Clip-on Mounting on 35 mm Rail



Mounting by the Back



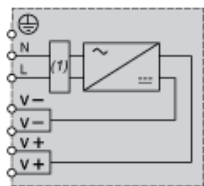
Dimensions in mm

b	c
38	58

Dimensions in in.

b	c
1.50	2.28

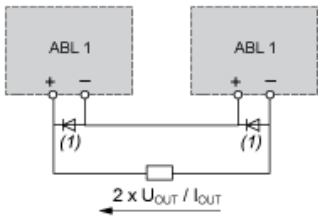
Internal Wiring Diagram



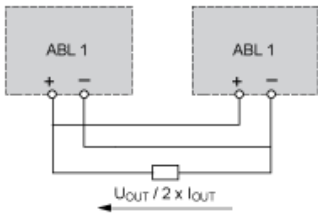
(1) Filter

Series or Parallel Connection

Series Connection



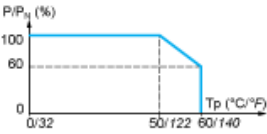
Parallel Connection



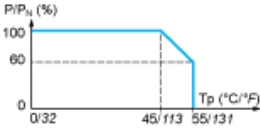
(1) 15 A/100 V Shottky diode

Derating Curves

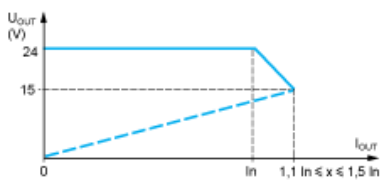
Mounting on Vertical Plane



Mounting on Horizontal Plane



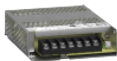
Load Limits Curve



Recommended replacement(s)

ABL1RPM12083 is replaced by:

1x



Regulated Power Supply, modicon power supply, 100...240V AC, 12V, 8.5A, single phase, Panel Mount
ABLP1A12085