

# 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 %

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

## Environment

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

## Ordering and shipping details

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

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
PVC free	Yes

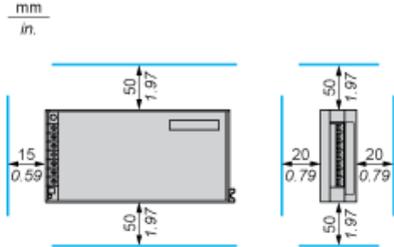
## Contractual warranty

Warranty	18 months
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**Clearance**

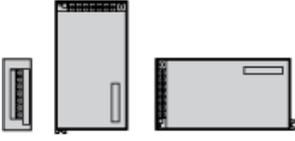
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**Mounting Way**

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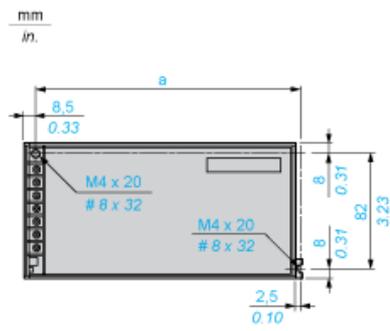
**Mounting on Vertical Plane**



**Mounting on Horizontal Plane**



Direct Mounting by 2 M4 x 20 Screws



Dimensions in mm

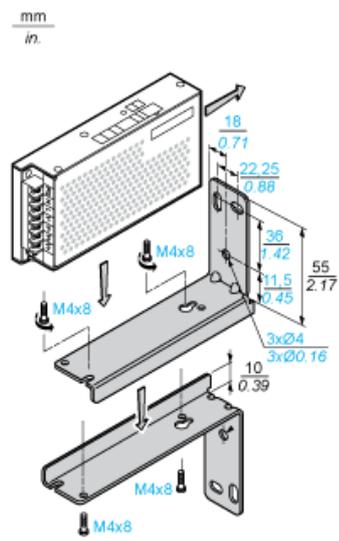
a
194

Dimensions in in

a
7.64

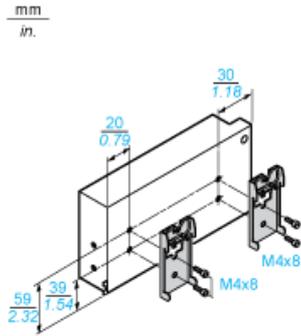
Mounting on the Back on ABL 1A01 Reversible Bracket by Three 4 mm Diameter Screws

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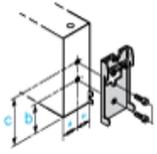
**Mounting on ABL 1A02 Clip-on Mounting on 35 mm Rail**

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**Mounting by the Back**

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Dimensions in mm

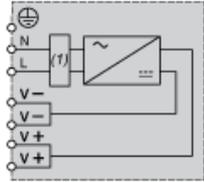
b	c
38	58

Dimensions in in.

b	c
1.50	2.28

**Internal Wiring Diagram**

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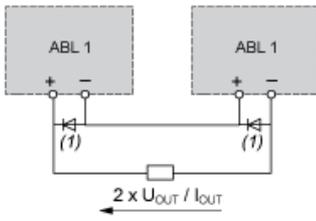


(1) Filter

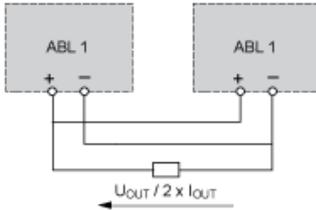
## Series or Parallel Connection

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### Series Connection



### Parallel Connection

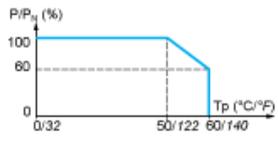


(1) 15 A/100 V Schottky diode

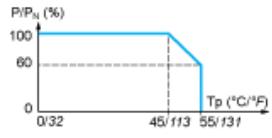
Derating Curves

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Mounting on Vertical Plane

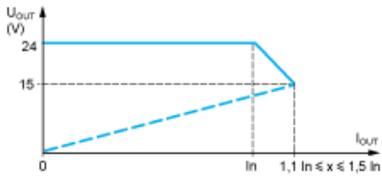


Mounting on Horizontal Plane



**Load Limits Curve**

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**Recommended replacement(s)**

ABL1RPM12083 is replaced by:

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1x



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

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