

Product datasheet

Specifications



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

ABL1RPM12083

⚠ Discontinued on: Nov 1, 2020

⚠ Discontinued

Main

Range Of Product	Phaseo Dedicated
Product Or Component Type	Power supply
Power Supply Type	Regulated switch mode
Rated Power In W	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 (f= 9...150 Hz) conforming to EN/IEC 61131-2 3.5 mm (f= 5...9 Hz) conforming to EN/IEC 61131-2
Name Of Test	Conducted interference conforming to EN 61000-4-8 level 4 Electrostatic discharges conforming to EN/IEC 61000-4-2 level 3 Induced electromagnetic field conforming to EN/IEC 61000-4-6 level 3 Radiated electromagnetic field conforming to EN/IEC 61000-4-3 level 3 Rapid transient conforming to IEC 61000-4-4 level 3 Conducted/radiated emissions conforming to EN 55022 class B Conducted/radiated emissions conforming to EN/IEC 55011 Emission conforming to EN/IEC 61000-6-3 Primary outage conforming to IEC 61000-4-11 Surge conforming to EN/IEC 61000-4-5

Complementary

Input Voltage Limits	85...264 V
Network Frequency	47...63 Hz
Inrush Current	50 A at 115 V AC 100 A at 230 V AC
Cos Phi	0.7...0.95
Efficiency	80 %
Power Dissipation In W	25 W
Current Consumption	0.7 A at 240 V 1.7 A at 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 at 100 V >= 40 ms at 240 V

Output Protection Type	Against overload, protection technology: 1.1...1.5 x In Against overvoltage, protection technology: tripping if $U > 1.25 \times U_n$ Against short-circuits, protection technology: automatic reset Thermal
Connections - Terminals	For ground connection: screw type terminals, connection capacity: 1 x 4 mm ² AWG 12 For input connection: screw type terminals, connection capacity: 2 x 4 mm ² AWG 12 For output connection: screw type terminals, connection capacity: 4 x 4 mm ² AWG 12
Marking	CE
Mounting Support	Reversible mounting bracket Panel
Operating Altitude	2000 m
Output Coupling	Series Parallel
Overvoltage Category	II
Meantime Between Failure [Mtbf]	100000 h at 40 °C
Status Led	1 LED (green) output voltage
Net Weight	0.64 kg

Environment

Product Certifications	TUV 60950-1 UL 508 cCSAus EAC CSA 22-2 No 60950-1 RCM
Environmental Characteristic	EMC conforming to EN 50081-1 EMC conforming to EN 50082-2 EMC conforming to EN 61000-6-3 EMC conforming to EN/IEC 61000-6-2 Safety conforming to EN/IEC 60950-1 Safety conforming to SELV Low frequency harmonic currents conforming to EN/IEC 61000-3-2
Ip Degree Of Protection	IP20 conforming to EN/IEC 60950
Ambient Air Temperature For Operation	0...45 °C (without derating) 45...60 °C (with derating factor)
Ambient Air Temperature For Storage	-25...85 °C
Relative Humidity	20...90 %
Overvoltage Category	Class I conforming to 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

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	5.5 cm
Package 1 Width	23.5 cm
Package 1 Length	11.8 cm
Package 1 Weight	736 g

Contractual warranty

Warranty

12 months

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

Well-being performance

Mercury Free

Rohs Exemption Information Yes

Pvc Free

Certifications & Standards

Reach Regulation [REACH Declaration](#)

Eu Rohs Directive Pro-active compliance (Product out of EU RoHS legal scope)

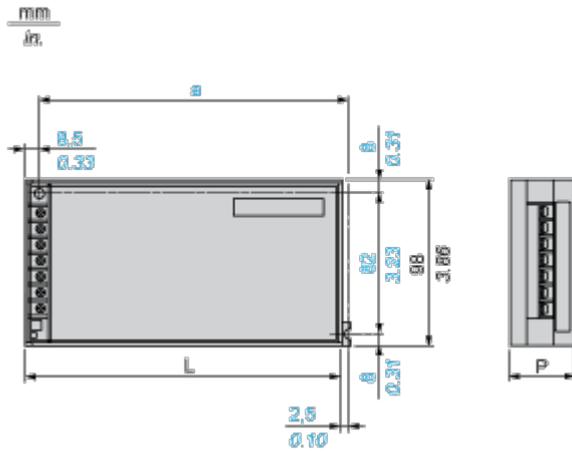
China Rohs Regulation [China RoHS declaration](#)

Environmental Disclosure [Product Environmental Profile](#)

Circularity Profile [End of Life Information](#)

Dimensions Drawings

Dimensions



Dimensions in mm

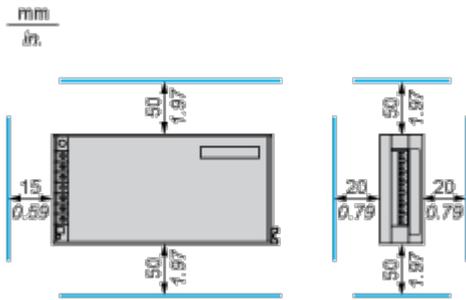
a	L	P
194	200	38

Dimensions in in.

a	L	P
7.64	7.87	1.50

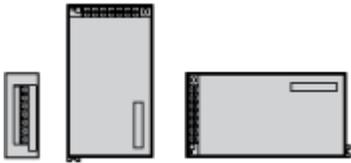
Mounting and Clearance

Clearance



Mounting Way

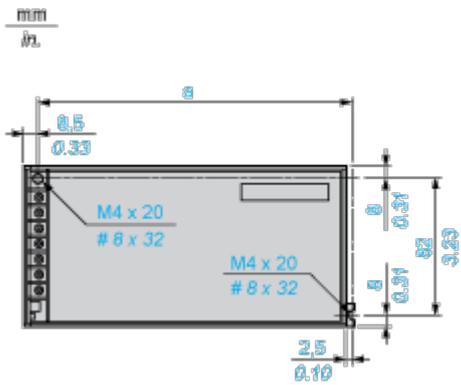
Mounting on Vertical Plane



Mounting on Horizontal Plane



Direct Mounting by 2 M4 x 20 Screws



Dimensions in mm

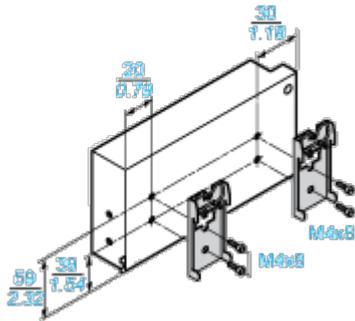
a
194

Dimensions in in

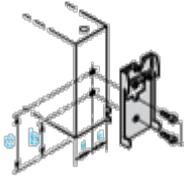
a
7.64

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

mm
in.



Mounting by the Back



Dimensions in mm

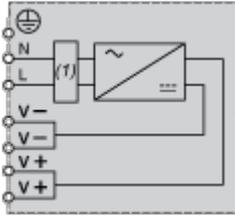
b	c
38	58

Dimensions in in.

b	c
1.50	2.28

Connections and Schema

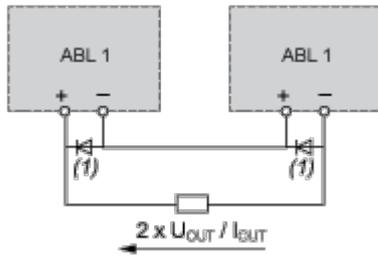
Internal Wiring Diagram



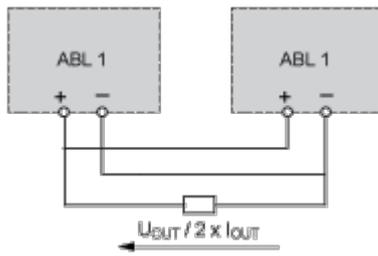
(1) Filter

Series or Parallel Connection

Series Connection



Parallel Connection



(1) 15 A/100 V Shottky diode

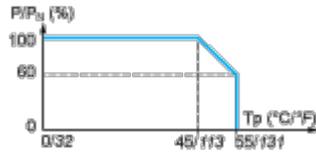
Performance Curves

Derating Curves

Mounting on Vertical Plane



Mounting on Horizontal Plane



Load Limits Curve

