Specifications



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

ABL1RPM12083

① Discontinued

() Discontinued on: Dec 20, 2020

(!) End-of-service on: Jan 6, 2021

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	100240 V AC single phase 120370 V DC	
Output Voltage	12 V DC	
Power Supply Output Current	8.3 A	
Operating Position	Any position	
Vibration Resistance	2 gn (f= 9150 Hz) conforming to EN/IEC 61131-2 3.5 mm (f= 59 Hz) conforming to EN/IEC 61131-2	
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/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	85264 V	
Network Frequency	4763 Hz	
Inrush Current	50 A at 115 V AC 100 A at 230 V AC	
Cos Phi	0.70.95	
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	10.813.2 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: 1.11.5 x In Against overvoltage, protection technology: tripping if U > 1.25 x Un Against short-circuits, protection technology: automatic reset Thermal Connections - Terminals For ground connection: screw type terminals, connection capacity: 1 x 4 12 For input connection: screw type terminals, connection capacity: 2 x 4 m For output connection: screw type terminals, connection capacity: 4 x 4 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		
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For input connection: screw type terminals, connection capacity: 2 x 4 m For output connection: screw type terminals, connection capacity: 4 x 4 Marking CE Mounting Support Reversible mounting bracket Panel 2000 m Output Coupling Series Parallel Overvoltage Category	4 mm² AWG	
For output connection: screw type terminals, connection capacity: 4 x 4 Marking CE Mounting Support Reversible mounting bracket Panel Operating Altitude 2000 m Output Coupling Series Parallel Overvoltage Category II		
Marking CE Mounting Support Reversible mounting bracket Panel Operating Altitude 2000 m Output Coupling Series Parallel Overvoltage Category II	nm² AWG 12	
Mounting Support Reversible mounting bracket Panel Operating Altitude 2000 m Output Coupling Series Parallel Overvoltage Category II	mm ² AWG 12	
Panel Operating Altitude 2000 m Output Coupling Series Parallel Overvoltage Category II		
Operating Altitude 2000 m Output Coupling Series Parallel Overvoltage Category II		
Output Coupling Series Parallel Overvoltage Category II		
Overvoltage Category II		
Overvoltage Category		
Meantime Between Failure [Mtbf] 100000 h at 40 °C		
	100000 h at 40 °C	
Status Led 1 LED (green) output voltage	1 LED (green) output voltage	
Net Weight 0.64 kg	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	-2585 °C	
Relative Humidity	2090 %	
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

Contractual warranty

Warranty

18 months

Sustainability

Green PremiumTM label is Schneider Electric's commitment to delivering products with best-inclass 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 >



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Transparency RoHS/REACh

Well-being performance

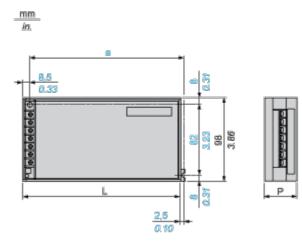


Certifications & Standards

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	
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	

Dimensions Drawings

Dimensions



Dimensions in mm

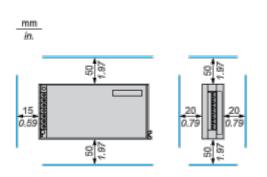
а	L	Ρ
194	200	38

Dimensions in in.

а	L	Р
7.64	7.87	1.50

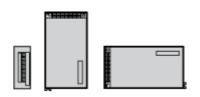
Mounting and Clearance

Clearance



Mounting Way

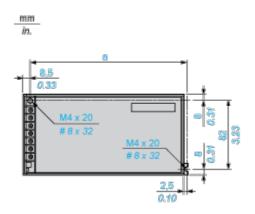
Mounting on Vertical Plane



Mounting on Horizontal Plane



Direct Mounting by 2 M4 x 20 Screws

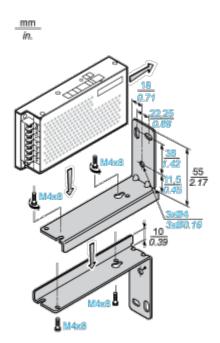


Dimensions in mm

a 194

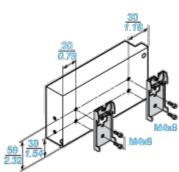
Dimensions in in

а 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

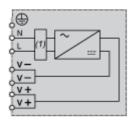
b	с
38	58

Dimensions in in.

b	с
1.50	2.28

Connections and Schema

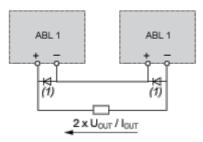
Internal Wiring Diagram



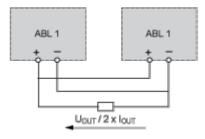
(1) Filter

Series or Parallel Connection

Series Connection



Parallel Connection

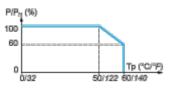


(1) 15 A/100 V Shottky diode

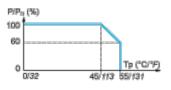
Performance Curves

Derating Curves

Mounting on Vertical Plane



Mounting on Horizontal Plane



Load Limits Curve

