ABL1RPM12083

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



Main	
Range of product	Phaseo Dedicated
Product or component type	Power supply
Power supply type	Regulated switch mode
Rated power in W	100 W
Input voltage	120370 V DC 100240 V AC single phase
Output voltage	12 V DC
Power supply output current	8.3 A
Operating position	Any position
Vibration resistance	3.5 mm (f = 59 Hz) conforming to EN/IEC 61131-2 2 gn (f = 9150 Hz) conforming to EN/IEC 61131-2
Name of test	Surge conforming to EN/IEC 61000-4-5 Primary outage conforming to IEC 61000-4-11 Emission conforming to EN/IEC 61000-6-3 Conducted/Radiated emissions conforming to EN/ IEC 55011 Conducted/Radiated emissions conforming to EN 55022 Class B Rapid transient conforming to IEC 61000-4-4 level 3

IEC 61000-4-3 level 3

61000-4-6 level 3

61000-4-2 level 3

level 4

Radiated electromagnetic field conforming to EN/

Electrostatic discharges conforming to EN/IEC

Induced electromagnetic field conforming to EN/IEC

Conducted interference conforming to EN 61000-4-8

Complementary

Input voltage limits	85264 V
Network frequency limits	4763 Hz
Inrush current	<= 100 A at 230 V AC <= 50 A at 115 V AC
Cos phi	0.70.95
Efficiency	> 80 %
Power dissipation in W	25 W
Current consumption	1.7 A at 100 V 0.7 A at 240 V
Input protection type	Integrated fuse (not interchangeable)
Output voltage limits	10.813.2 V
Line and load regulation	+/- 3 %
Holding time	>= 40 ms at 240 V >= 10 ms at 100 V
Output protection type	Thermal Against short-circuits, protection technology: automatic reset Against overvoltage, protection technology: tripping if U > 1.25 x Un Against overload, protection technology: 1.11.5 x In
Connections - terminals	Screw type terminals for output connection, connection capacity: 4 x 4 mm²AWG gauge12 Screw type terminals for input connection, connection capacity: 2 x 4 mm²AWG gauge12 Screw type terminals for ground connection, connection capacity: 1 x 4 mm²AWG gauge12
Marking	CE

Mounting support	Panel	
	Reversible mounting bracket	
Output coupling	Parallel	
	Series	
Overvoltage category	II	
Meantime between failure (MTBF)	> 100000 h at 40 °C	
Status LED	1 LED green for output voltage	
Product weight	0.64 kg	

Environment

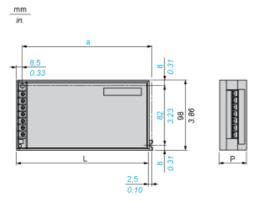
Product certifications	CCSAus
	CSA 22-2 No 60950-1
	C-Tick
	TUV 60950-1
	UL 508
Environmental characteristic	Low frequency harmonic currents conforming to EN/IEC 61000-3-2
	Safety conforming to SELV
	Safety conforming to EN/IEC 60950-1
	EMC conforming to EN/IEC 61000-6-2
	EMC conforming to EN 61000-6-3
	EMC conforming to EN 50082-2
	EMC conforming to EN 50081-1
IP degree of protection	IP20 conforming to EN/IEC 60950
Ambient air temperature for operation	4560 °C with derating factor
	045 °C without derating factor
Ambient air temperature for storage	-2585 °C
Relative humidity	2090 %
Class of protection against electric shock	Class I conforming to VDE 0106-1
Pollution degree	2
Dielectric strength	500 V between output and ground
	3000 V between input and output
	1500 V between input and ground



Product data sheet Dimensions Drawings

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Dimensions



Dimensions in mm

а	L	Р
194	200	38

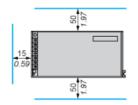
Dimensions in in.

а	L	Р
7.64	7.87	1.50

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Clearance

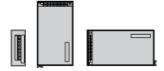






Mounting Way

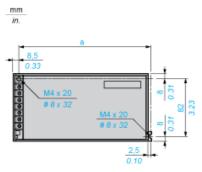
Mounting on Vertical Plane



Mounting on Horizontal Plane



Direct Mounting by 2 M4 x 20 Screws



Dimensions in mm

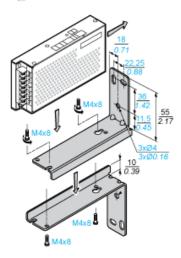
a 194

Dimensions in in

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

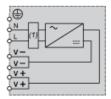
b	С
38	58

Dimensions in in.

b	С
1.50	2.28

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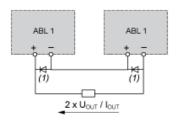
Internal Wiring Diagram



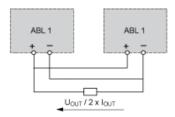
(1) Filter

Series or Parallel Connection

Series Connection



Parallel Connection



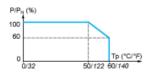
(1) 15 A/100 V Shottky diode

Product data sheet Performance Curves

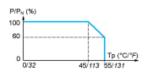
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Derating Curves

Mounting on Vertical Plane



Mounting on Horizontal Plane



Load Limits Curve

