

ABL1RPM24100

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



Main

| | |
|-----------------------------|--|
| Range of product | Phaseo Dedicated |
| Product or component type | Power supply |
| Power supply type | Regulated switch mode |
| Rated power in W | 240 W |
| Input voltage | AC single phase AC single phase DC |
| Output voltage | 24 V DC |
| Power supply output current | 10 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 Conducted/radiated emissions conforming to EN 55022 Class B Conducted/radiated emissions conforming to EN/IEC 55011 Electrostatic discharges conforming to EN/IEC 61000-4-2 level 3 Emission conforming to EN/IEC 61000-6-3 Induced electromagnetic field conforming to EN/IEC 61000-4-6 level 3 Primary outage conforming to IEC 61000-4-11 Radiated electromagnetic field conforming to EN/IEC 61000-4-3 level 3 Rapid transient conforming to IEC 61000-4-4 level 3 Surge conforming to EN/IEC 61000-4-5 |

Complementary

| | |
|--------------------------|--|
| Input voltage limits | 170...264 V 85...132 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 | 60 W |
| Current consumption | 3 A at 240 V 6 A at 100 V |
| Input protection type | Integrated fuse (not interchangeable) |
| Output voltage limits | 21.6...26.4 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 x Un Against short-circuits, protection technology: automatic reset Thermal |
| Connections - terminals | Screw type terminals for ground connection, connection capacity: 1 x 4 mm ² AWG 12 Screw type terminals for input connection, connection capacity: 2 x 4 mm ² AWG 12 Screw type terminals for output connection, connection capacity: 4 x 4 mm ² AWG 12 |
| Marking | CE |
| Mounting support | Panel |

The information provided in this documentation contains general descriptions and/or technical characteristics of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

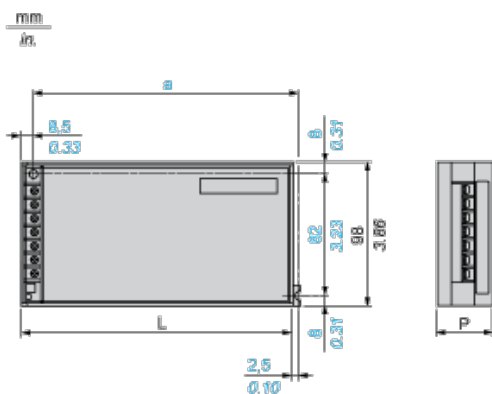
Reversible mounting bracket

| | |
|---------------------------------|--------------------------------|
| Operating altitude | 2000 m |
| 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 | 1.23 kg |

Environment

| | |
|---------------------------------------|--|
| product certifications | CCSAus CSA 22-2 No 60950-1 TUV 60950-1 UL 508 RCM EAC KC |
| 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 factor 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 |

Dimensions



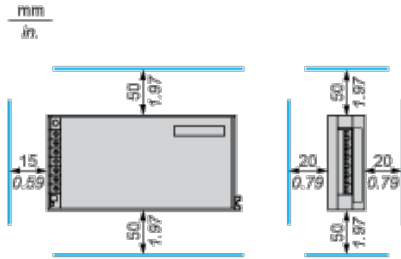
Dimensions in mm

| a | L | P |
|-----|-----|----|
| 194 | 200 | 65 |

Dimensions in in.

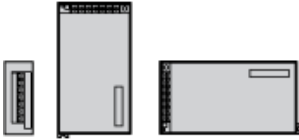
| a | L | P |
|------|------|------|
| 7.64 | 7.87 | 2.56 |

Clearance



Mounting Way

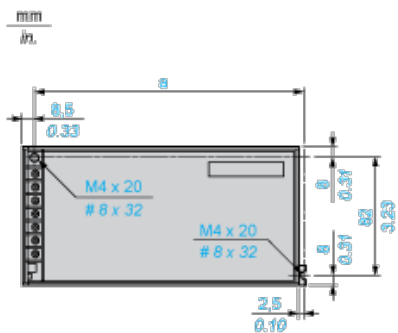
Mounting on Vertical Plane



Mounting on Horizontal Plane



Direct Mounting by 2 M4 x 20 Screws



Dimensions in mm

a

194

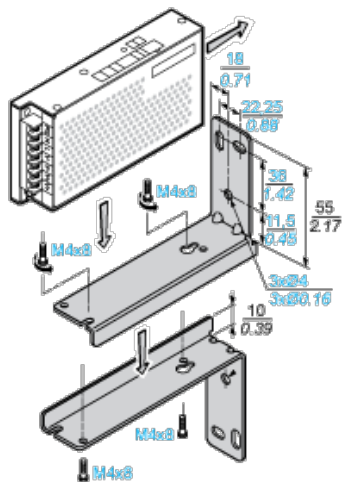
Dimensions in in

a

7.64

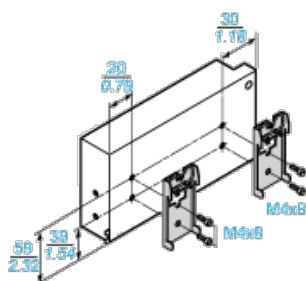
Mounting on the Back on ABL 1A01 Reversible Bracket by Three 4 mm Diameter Screws

mm
in.

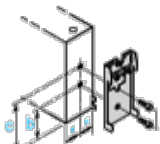


Mounting on ABL 1A02 Clip-on Mounting on 35 mm Rail

mm
in.



Mounting by the Back



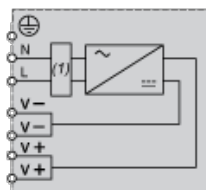
Dimensions in mm

| b | c |
|----|----|
| 28 | 48 |

Dimensions in in.

| b | c |
|------|------|
| 1.10 | 1.89 |

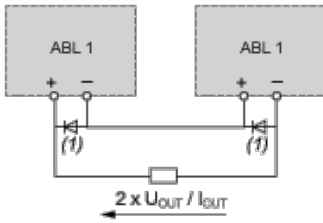
Internal Wiring Diagram



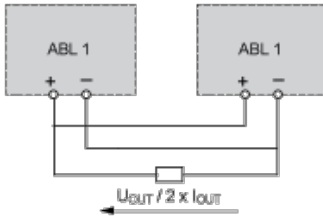
(1) Filter

Series or Parallel Connection

Series Connection



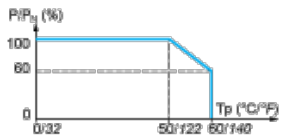
Parallel Connection



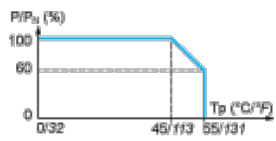
(1) 15 A/100 V Shottky diode

Derating Curves

Mounting on Vertical Plane



Mounting on Horizontal Plane



Load Limits Curve

