

# Product datasheet

Specifications



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

ABL1REM24042

! Discontinued on: 28 February 2021

! 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	24 V DC
Power supply output current	4.2 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	0.65
Efficiency	80 %
Power dissipation in W	25 W
Current consumption	0.7 A at 240 V 1.4 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	For ground connection: screw type terminals, connection capacity: 1 x 4 mm² AWG 12 For input connection: screw type terminals, connection capacity: 2 x 4 mm² AWG 12 For output connection: screw type terminals, connection capacity: 4 x 4 mm² AWG 12
Marking	CE
Mounting support	Panel Reversible mounting bracket
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	UL 508 cCSAus TUV 60950-1 CSA 22-2 No 60950-1 RCM KC EAC
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
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 %  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

## Offer Sustainability

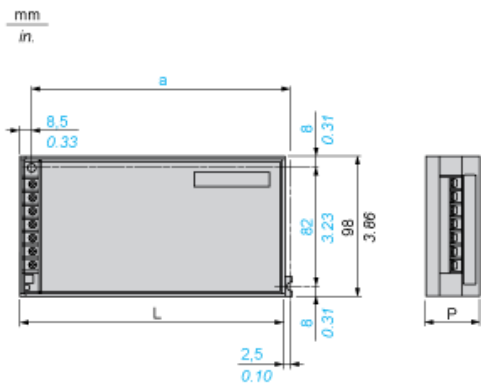
Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes

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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Dimensions



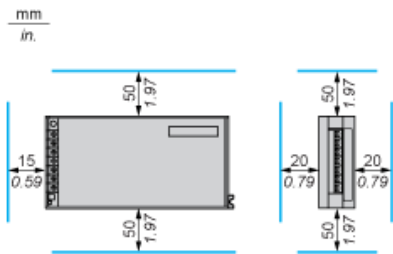
Dimensions in mm

a	L	P
194	200	38

Dimensions in in.

a	L	P
7.64	7.87	1.50

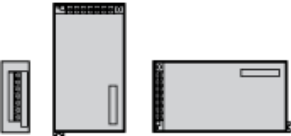
Clearance



Mounting Way

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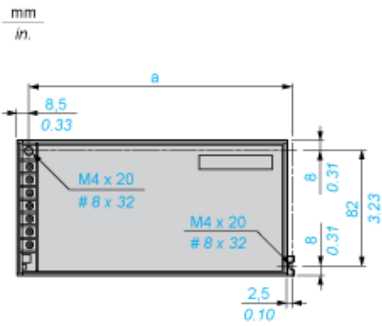
Mounting on Vertical Plane



Mounting on Horizontal Plane



Direct Mounting by 2 M4 x 20 Screws



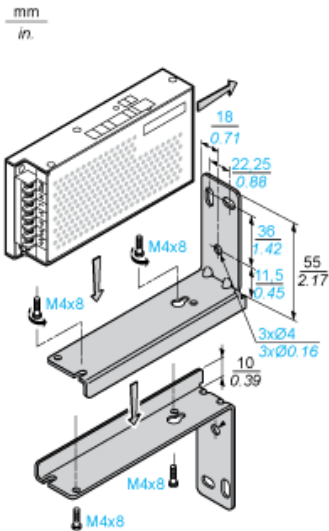
Dimensions in mm

a
194

Dimensions in in

a
7.64

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

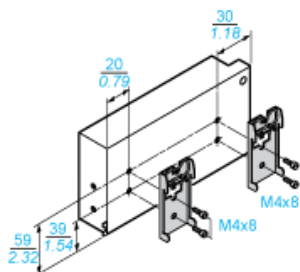




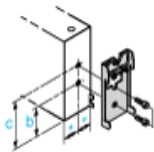
## Mounting and Clearance

**ABL1REM24042**

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



Mounting by the Back



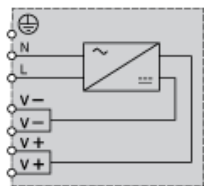
Dimensions in mm

b	c
38	58

Dimensions in in.

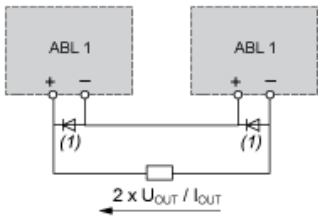
b	c
1.50	2.28

Internal Wiring Diagram

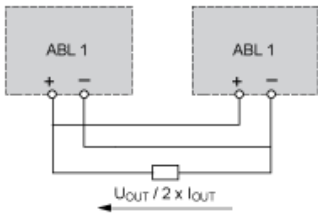


Series or Parallel Connection

Series Connection



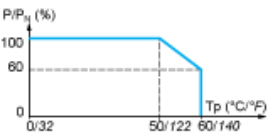
Parallel Connection



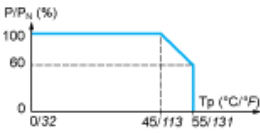
(1) 8 A/100 V Shottky diode

Derating Curves

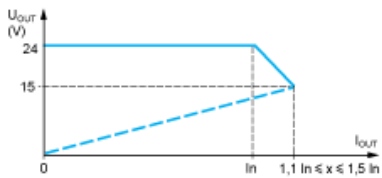
Mounting on Vertical Plane



Mounting on Horizontal Plane



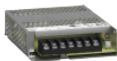
Load Limits Curve



Recommended replacement(s)

ABL1REM24042 is replaced by:

1x



Regulated Power Supply, 100...240V AC, 24V 4.5A, single phase, Panel Mount  
ABLP1A24045