

# Product datasheet

Specifications



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

ABL1REM24100

! Discontinued on: 01 November 2020

! End-of-service on: 03 November 2020

! Discontinued

### 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	100...120 V AC single phase 200...240 V AC single phase 180...370 V 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 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	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	0.65
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

<b>Line and load regulation</b>	+/- 3 %
<b>Holding time</b>	>= 10 ms at 100 V >= 40 ms at 240 V
<b>Output protection type</b>	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
<b>Connections - terminals</b>	For ground connection: screw type terminals, connection capacity: 1 x 4 mm <sup>2</sup> AWG 12 For input connection: screw type terminals, connection capacity: 2 x 4 mm <sup>2</sup> AWG 12 For output connection: screw type terminals, connection capacity: 4 x 4 mm <sup>2</sup> AWG 12
<b>Marking</b>	CE
<b>Mounting support</b>	Reversible mounting bracket Panel
<b>Operating altitude</b>	2000 m
<b>Output coupling</b>	Series Parallel
<b>Overvoltage category</b>	II
<b>Meantime between failure [MTBF]</b>	100000 h at 40 °C
<b>Status LED</b>	1 LED (green)output voltage
<b>Net weight</b>	0.88 kg

## Environment

<b>Product certifications</b>	CSA 22-2 No 60950-1 UL 508 KC EAC cCSAus RCM TUV 60950-1
<b>Environmental characteristic</b>	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
<b>IP degree of protection</b>	IP20 conforming to EN/IEC 60950
<b>Ambient air temperature for operation</b>	0...45 °C (without derating) 45...60 °C (with derating factor)
<b>Ambient air temperature for storage</b>	-25...85 °C
<b>Relative humidity</b>	20...90 %
<b>Overvoltage category</b>	Class I conforming to VDE 0106-1
<b>Pollution degree</b>	2
<b>Dielectric strength</b>	1500 V between input and ground 3000 V between input and output 500 V between output and ground

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Weight</b>	1.057 kg
<b>Package 1 Height</b>	8.5 cm
<b>Package 1 width</b>	12 cm
<b>Package 1 Length</b>	23.5 cm
<b>Unit Type of Package 2</b>	P06

<b>Number of Units in Package 2</b>	84
<b>Package 2 Weight</b>	101.788 kg
<b>Package 2 Height</b>	73.5 cm
<b>Package 2 width</b>	80 cm
<b>Package 2 Length</b>	60 cm

## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>PVC free</b>	Yes

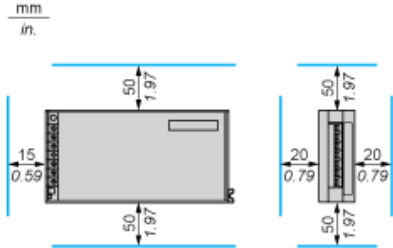
## Contractual warranty

<b>Warranty</b>	12 months
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**Clearance**

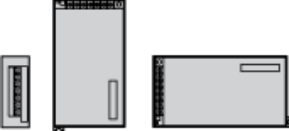
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**Mounting Way**

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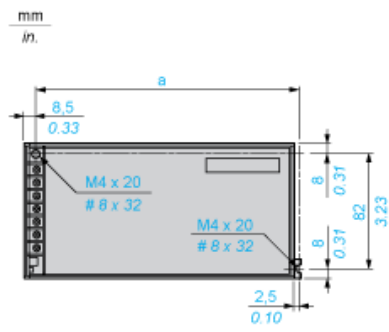
**Mounting on Vertical Plane**



**Mounting on Horizontal Plane**



**Direct Mounting by 2 M4 x 20 Screws**



Dimensions in mm

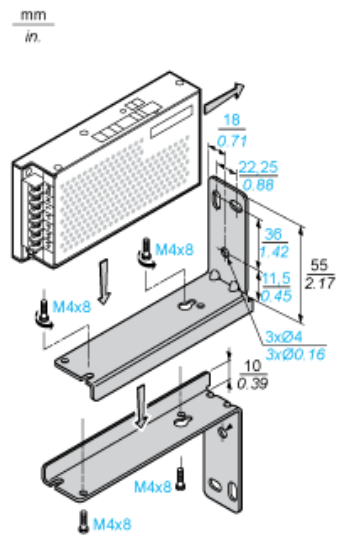
a
194

Dimensions in in

a
7.64

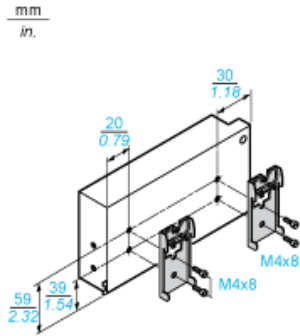
**Mounting on the Back on ABL 1A01 Reversible Bracket by Three 4 mm Diameter Screws**

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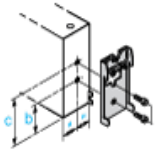
**Mounting on ABL 1A02 Clip-on Mounting on 35 mm Rail**

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**Mounting by the Back**

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Dimensions in mm

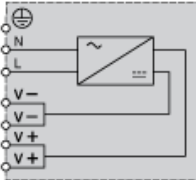
b	c
28	48

Dimensions in in.

b	c
1.10	1.89

**Internal Wiring Diagram**

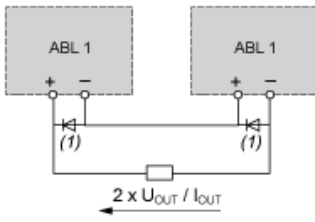
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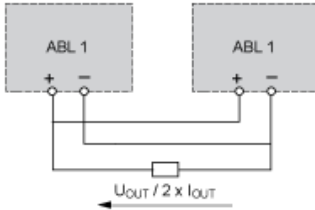
**Series or Parallel Connection**

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**Series Connection**



**Parallel Connection**

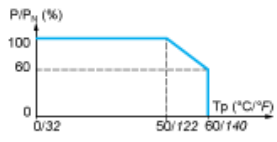


(1) 15 A/100 V Schottky diode

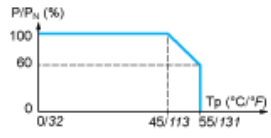
Derating Curves

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Mounting on Vertical Plane

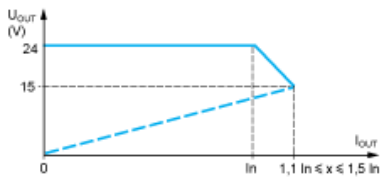


Mounting on Horizontal Plane



## Load Limits Curve

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## Recommended replacement(s)

ABL1REM24100 is replaced by:

1x



Regulated Power Supply, 100...240V AC, 24V 10A, single phase, Panel Mount  
ABLP1A24100

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