

# ABL1RPM24100

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

Product availability: Stock - Normally stocked in distribution facility



## 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 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 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 ground connection, connection capacity: 1 x 4 mm <sup>2</sup> AWG 12 Screw type terminals input connection, connection capacity: 2 x 4 mm <sup>2</sup> AWG 12 Screw type terminals output connection, connection capacity: 4 x 4 mm <sup>2</sup> AWG 12
Marking	CE

Mounting support	Panel Reversible mounting bracket
Operating altitude	6561.68 ft (2000 m)
Output coupling	Parallel Series
Overvoltage category	II
Meantime between failure [MTBF]	100000 h at 40 °C
Status LED	1 LED green output voltage
Product weight	2.71 lb(US) (1.23 kg)

## Environment

Product certifications	CCSAus CSA 22-2 No 60950-1 TUV 60950-1 UL 508 RCM EAC KC
Environmental characteristic	Low frequency harmonic currents conforming to EN/IEC 61000-3-2 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	32...113 °F (0...45 °C) without derating factor 113...140 °F (45...60 °C) with derating factor
Ambient air temperature for storage	-13...185 °F (-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

## Ordering and shipping details

Category	22524 - ABL1 DEDICATED POWER SUPPLIES
Discount Schedule	CP12
GTIN	00785901665540
Nbr. of units in pkg.	1
Package weight(Lbs)	3.0899999999999999
Returnability	Y
Country of origin	CN

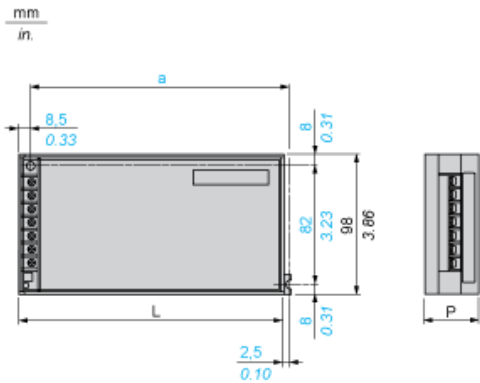
## Offer Sustainability

California proposition 65	WARNING: This product can expose you to chemicals including:
----- Substance 1	Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm.
----- More information	For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>

## Contractual warranty

Warranty period	18 months
-----------------	-----------

Dimensions



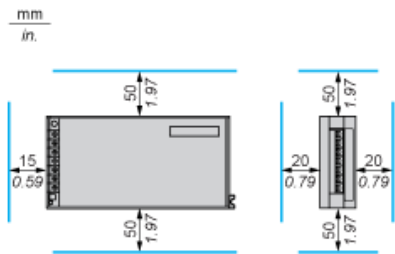
Dimensions in mm

a	L	P
194	200	65

Dimensions in in.

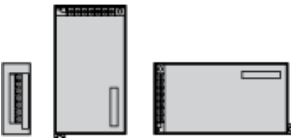
a	L	P
7.64	7.87	2.56

Clearance



Mounting Way

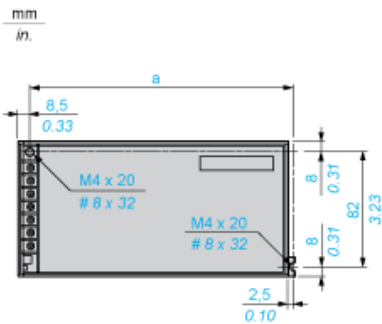
Mounting on Vertical Plane



Mounting on Horizontal Plane



Direct Mounting by 2 M4 x 20 Screws



Dimensions in mm

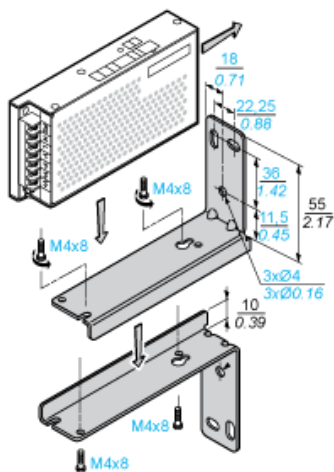
a
194

Dimensions in in

a
7.64

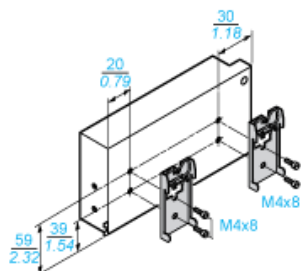
Mounting on the Back on ABL 1A01 Reversible Bracket by Three 4 mm Diameter Screws

mm  
in.

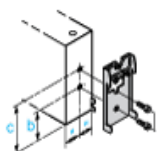


## Mounting on ABL 1A02 Clip-on Mounting on 35 mm Rail

mm  
in.



## Mounting by the Back



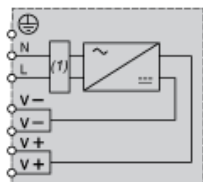
Dimensions in mm

b	c
28	48

Dimensions in in.

b	c
1.10	1.89

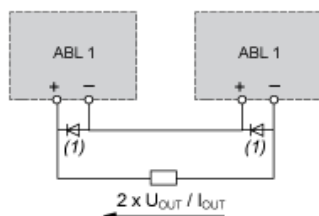
## Internal Wiring Diagram



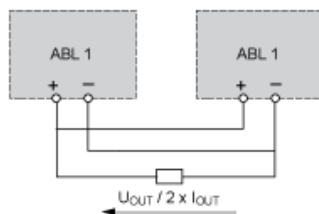
(1) Filter

## Series or Parallel Connection

### Series Connection



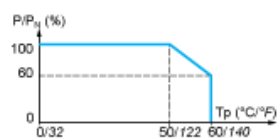
### Parallel Connection



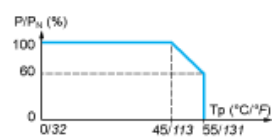
(1) 15 A/100 V Schottky diode

## Derating Curves

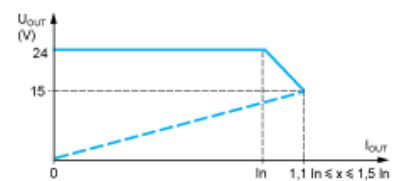
### Mounting on Vertical Plane



### Mounting on Horizontal Plane



## Load Limits Curve



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Schneider Electric:](#)

[ABL1RPM24100](#)