



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

ABL1REM24100

Discontinued on: 20 December 2020

End-of-service on: 06 January 2021



#### Main

Range of product	Phaseo Dedicated	
Product or component type	Power supply	
Power supply type	Regulated switch mode	
Rated power in W	240 W	
Main Input Voltage	100120 V AC single phase 200240 V AC single phase 180370 V DC	
Output voltage	24 V DC	
Power supply output current	t 10 A	
Operating position	Any position	
Vibration resistance	2 gn (f= 9150 Hz) conforming to EN/IEC 61131-2 3.5 mm (f= 59 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	170264 V 85132 V
Network frequency	4763 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	21.626.4 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: 1.11.5 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: $1 \times 4 \text{ mm}^2$ AWG 12 For input connection: screw type terminals, connection capacity: $2 \times 4 \text{ mm}^2$ AWG 12 For output connection: screw type terminals, connection capacity: $4 \times 4 \text{ mm}^2$ AWG 12	
Marking	CE	
Mounting support	Reversible mounting bracket Panel	
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	0.88 kg	
Environment		
Product certifications	CSA 22-2 No 60950-1 UL 508 KC EAC cCSAus RCM TUV 60950-1	
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	045 °C (without derating) 4560 °C (with derating factor)	
Ambient air temperature for storage	-2585 °C	
Relative humidity	2090 %	
	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	
Package 1 Height	8.5 cm	
Package 1 Width	12 cm	
Package 1 Length	23.5 cm	
Package 1 Weight	1.057 kg	

### Offer Sustainability

Sustainable offer status	Green Premium product	
REACh Regulation	REACh Declaration	
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration	
Mercury free	Yes	
China RoHS Regulation	China RoHS declaration	
RoHS exemption information	Yes	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End of Life Information	
PVC free	Yes	
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For moinformation go to www.P65Warnings.ca.gov	

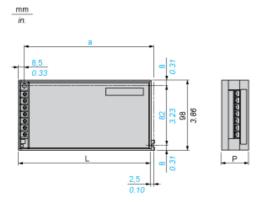
### **Contractual warranty**

Warranty 18 months

# **ABL1REM24100**

**Dimensions Drawings** 

#### **Dimensions**



#### Dimensions in mm

а	L	Р
194	200	65

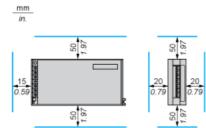
#### Dimensions in in.

а	L	Р
7.64	7.87	2.56

# **ABL1REM24100**

Mounting and Clearance

### Clearance

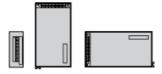


# **ABL1REM24100**

Mounting and Clearance

**Mounting Way** 

**Mounting on Vertical Plane** 



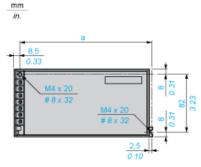
**Mounting on Horizontal Plane** 



# **ABL1REM24100**

Mounting and Clearance

### Direct Mounting by 2 M4 x 20 Screws



#### Dimensions in mm

а	
194	

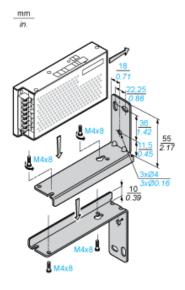
#### Dimensions in in

а			
7.64			

# **ABL1REM24100**

Mounting and Clearance

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

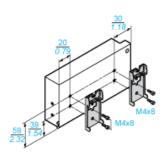


# **ABL1REM24100**

Mounting and Clearance

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

\_mm in



# **ABL1REM24100**

Mounting and Clearance

### **Mounting by the Back**



#### Dimensions in mm

b	С
28	48

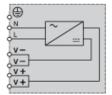
#### Dimensions in in.

b	С
1.10	1.89

# **ABL1REM24100**

Connections and Schema

### **Internal Wiring Diagram**

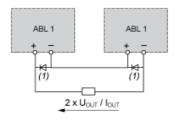


# **ABL1REM24100**

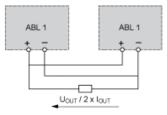
Connections and Schema

#### **Series or Parallel Connection**

#### **Series Connection**



#### **Parallel Connection**



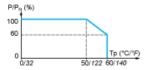
(1) 15 A/100 V Shottky diode

# **ABL1REM24100**

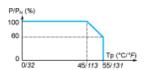
Performance Curves

### **Derating Curves**

### **Mounting on Vertical Plane**



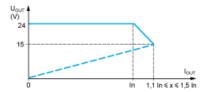
### **Mounting on Horizontal Plane**



## **ABL1REM24100**

Performance Curves

#### **Load Limits Curve**



#### Recommended replacement(s)

ABL1REM24100 is replaced by:





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