

Product data sheet

Characteristics

ABL8REM24030

regulated power supply, Phaseo, 100 to 240 V, 24 V, 3 A



Product availability: Stock - Normally stocked in distribution facility

Price*: 195.00 USD



Commercial status

This Product is Obsolete : DEC 01, 2020

This Product is Obsolete

Main

Range of Product	Modicon Power Supply
Product or Component Type	Power supply
Power supply type	Regulated switch mode
Input voltage	100...240 V AC phase to phase L1-L2 100...240 V AC single phase N-L1 110...220 V DC
Input voltage limits	85...264 V AC 100...250 V AC
Rated power in W	72 W
Output voltage	24 V DC
Power supply output current	3 A

Complementary

Input protection type	Integrated fuse (not interchangeable)
Inrush current	30 A
Power factor	0.65 at 24 V DC
Efficiency	85 %
Output voltage limits	100...120 % adjustable
Power dissipation in W	12.7 W
Current consumption	0.83 A 240 V AC 1.46 A 100 V AC
Output protection type	Against overload 1.1 x In Against overvoltage, protection technology: tripping if $U > 1.5 \times U_n$ Against short-circuits automatic reset Against undervoltage tripping if $U < 0.8 \times U_n$
Connections - terminals	Screw type terminals 2 x 0.14...2 x 2.5 mm ² , AWG 26...AWG 14) input connection Screw type terminals 1 x 0.14...1 x 2.5 mm ² , AWG 26...AWG 14) input ground connection Screw type terminals 2 x 0.14...2 x 2.5 mm ² , AWG 26...AWG 14) output connection Screw type terminals 1 x 0.14...1 x 2.5 mm ² , AWG 26...AWG 14) output ground connection

Status LED	Output voltage 1 LED Green) Input voltage 1 LED Orange)
Maximum Depth	4.72 In (120 mm)
Maximum Height	4.72 In (120 mm)
Maximum Width	1.06 In (27 mm)
Net Weight	1.15 Lb(US) (0.52 kg)
Output coupling	Parallel Series
Marking	CE
Mounting support	35 x 15 mm symmetrical DIN rail 35 x 7.5 mm symmetrical DIN rail 75 x 7.5 mm symmetrical DIN rail
Operating position	Vertical
Supply	SELV EN/IEC 60950-1 SELV EN/IEC 60204-1 SELV IEC 60364-4-41

Environment

Standards	UL 508 CSA C22.2 No 60950-1 EN/IEC 62368-1
Product certifications	CSA 22-2 No 950 EAC RCM KC UL
Environmental characteristic	EMC EN 50081-1 EMC EN 50082-2 EMC EN 55024 Safety EN/IEC 60950
Operating altitude	2000 m
IP degree of protection	IP20 conforming to EN/IEC 60529
Ambient air temperature for operation	32...122 °F (0...50 °C) without) 122...140 °F (50...60 °C) with derating factor)
Ambient Air Temperature for Storage	-13...158 °F (-25...70 °C)
Relative Humidity	0...95 % without condensation or dripping water
Electrical energy source class conforming- to IEC 62368-1	ES1
Dielectric strength	3000 V between input and ground 3000 V between input and output 500 V between output and ground 500 V between outputs

Ordering and shipping details

Category	22525 - ABL8 AND ABL7 POWER SUPPLIE
Discount Schedule	CP12
GTIN	00785901616849
Nbr. of units in pkg.	1
Package weight(Lbs)	1 Lb(US) (0.45 kg)
Returnability	No
Country of origin	CN

Packing Units

Package 1 Height	0.410 Dm
Package 1 width	1.380 Dm
Package 1 Length	1.470 Dm

Offer Sustainability

Sustainable offer status	Green Premium product
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 more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
PVC free	Yes

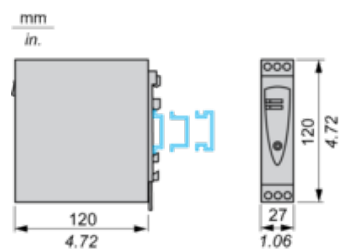
Contractual warranty

Warranty	18 months
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Regulated Switch Mode Power Supply

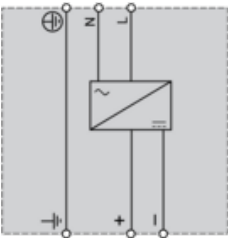
Dimensions and Mounting

Mounting on a 35 mm/1.37 in. or 75 mm/2.95 in. Rail



Regulated Switch Mode Power Supply

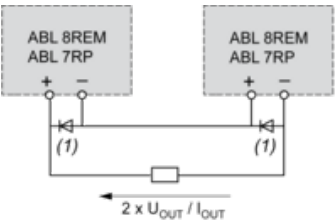
Internal Wiring Diagram



Regulated Switch Mode Power Supplies

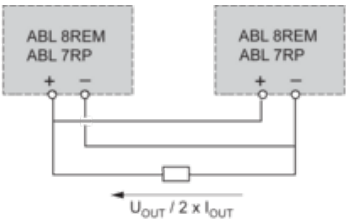
Series or Parallel Connection

Series Connection



(1) Two Schottky diodes I_{min} = power supply I_n and V_{min} = 50 V

Parallel Connection



Family	Series	Parallel
ABL 8REM/7RP	2 products max.	2 products max.

NOTE: Series or parallel connection is only recommended for products with identical references.

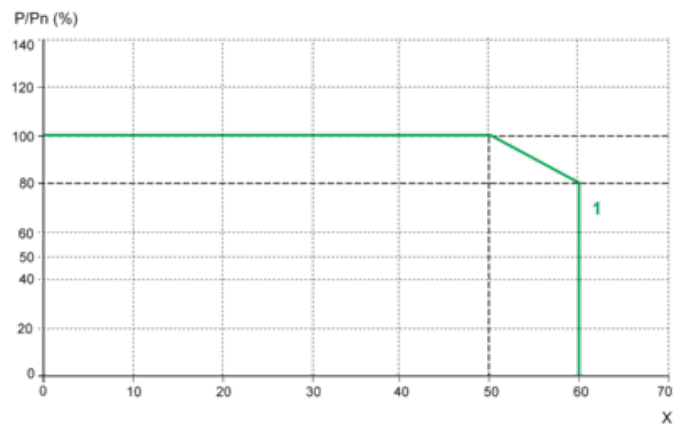
Regulated Switch Mode Power Supplies

Derating

The ambient temperature is a determining factor that limits the power an electronic power supply can deliver continuously. If the temperature around the electronic components is too high, their life will be significantly reduced.

The nominal ambient temperature for the Optimum range of Phaseo power supplies is 50 °C. Above this temperature, derating is necessary up to a maximum temperature of 60 °C.

The graph below shows the power as a percentage of the nominal power that the power supply can deliver continuously, depending on the ambient temperature.



X Maximum operating temperature (°C)

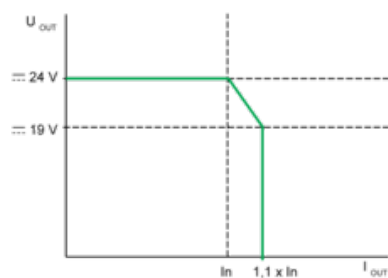
(1) ABL 8REM, ABL 7RP mounted vertically

Derating should be considered in extreme operating conditions:

- Intensive operation (output current permanently close to the nominal current, combined with a high ambient temperature)
- Output voltage set above 24 Vdc (to compensate for line voltage drops, for example)
- Parallel connection to increase the total power

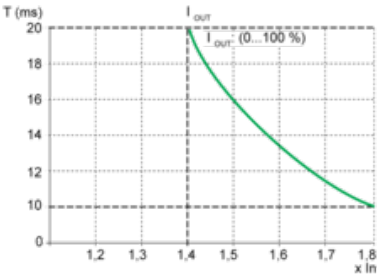
Regulated Switch Mode Power Supply

Load Limit



Regulated Switch Mode Power Supply

Temporary Overloads



Product Life Status : **End of commercialisation**

ABL8REM24030 may be replaced by any of the following products:



ABLS1A24031
Regulated Power Supply, 100-240V AC, 24V 3.1 A, single phase, Optimized
Qty 1
Substitution date: |