ABL8REM24030



Main

Range of product	Phaseo
Product or component type	Power supply
Power supply type	Regulated switch mode
Input voltage	100240 V AC phase to phase, terminal(s): L1-L2 100240 V AC single phase, terminal(s): N-L1 110220 V DC
Output voltage	24 V DC
Rated power in W	72 W
Input protection type	Integrated fuse (not interchangeable)
Power supply output current	3 A
Output protection type	Against overload, protection technology: 1.1 x In Against overvoltage, protection technology: tripping if U > 1.5 x Un Against short-circuits, protection technology: automatic reset Against undervoltage, protection technology: tripping if U < 0.8 x Un
Ambient air temperature for operation	32122 °F (050 °C) without 122140 °F (5060 °C) with

Complementary		
Input voltage limits	100250 V 85264 V	
Network frequency	4763 Hz	
Inrush current	30 A	
Cos phi	0.65	
Efficiency	85 %	
Output voltage limits	100120 % adjustable	
Power dissipation in W	12.7 W	
Current consumption	0.83 A at 240 V 1.46 A at 100 V	
Line and load regulation	+/- 3 %	
Holding time	>= 10 ms at 100 V >= 10 ms at 240 V	
Connections - terminals	Screw type terminals input connection, connection capacity: 2 x 0.142 x 2.5 mm² AWG 26AWG 14 Screw type terminals input ground connection, connection capacity: 1 x 0.141 x 2.5 mm² AWG 26AWG 14 Screw type terminals output connection, connection capacity: 2 x 0.142 x 2.5 mm² AWG 26AWG 14 Screw type terminals output ground connection, connection capacity: 1 x 0.141 x 2.5 mm² AWG 26AWG 14	
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	
Operating altitude	6561.68 ft (2000 m)	
Output coupling	Parallel Series	
Name of test	Conducted/radiated emissions conforming to EN 55011 Conducted/radiated emissions conforming to EN 55022 Class B Electrostatic discharges conforming to EN/IEC 61000-4-2 Emission conforming to EN 50081-1 Induced electromagnetic field conforming to EN/IEC 61000-4-6 Primary outage conforming to IEC 61000-4-11 Padiated electromagnetic field conforming to EN/IEC 61000-4-3	

Radiated electromagnetic field conforming to EN/IEC 61000-4-3

	Rapid transient conforming to IEC 61000-4-4 Surge conforming to EN/IEC 61000-4-5
Status LED	LED green output voltage LED orange input voltage
Depth	4.72 in (120 mm)
Height	4.72 in (120 mm)
Width	1.06 in (27 mm)
Product weight	1.15 lb(US) (0.52 kg)

Environment

product certifications	CSA 22-2 No 950	
product certifications	CSA 22-2 NO 950 UL	
	RCM	
	KC	
standards	UL 508	
	CSA C22.2 No 60950-1	
environmental characteristic	EMC conforming to EN 50081-1	
	EMC conforming to EN 50082-2	
	Safety conforming to EN/IEC 60950	
	Safety conforming to SELV	
	EMC conforming to EN 55024	
IP degree of protection	IP20 conforming to EN/IEC 60529	
ambient air temperature for storage	-13158 °F (-2570 °C)	
relative humidity	095 % without condensation or dripping water	
overvoltage category	Class I conforming to VDE 0106-1	
dielectric strength	Between input and ground	
	Between output and ground	
	Between input and output	
	Between outputs	
MTBF reliability	115104 H at 110 V AC with MIL-HDBK-217F calculation method	
•	116354 H at 220 V AC with MIL-HDBK-217F calculation method	

Offer Sustainability

WARNING: This product can expose you to chemicals including:	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.	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	For more information go to www.p65warnings.ca.gov

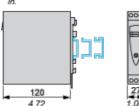
Contractual warranty

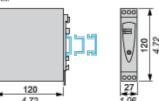
	Warranty period	18 months
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Regulated Switch Mode Power Supply

Dimensions and Mounting

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

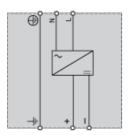




Regulated Switch Mode Power Supply

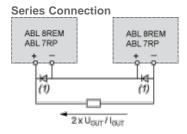
Internal Wiring Diagram



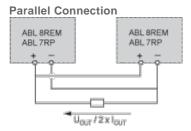


Regulated Switch Mode Power Supplies

Series or Parallel Connection



(1) Two Shottky diodes Imin = power supply In and Vmin = 50 V



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

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

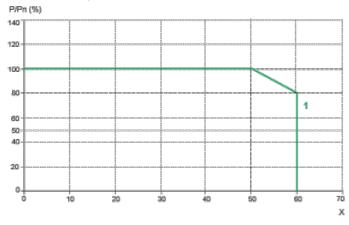
Regulated Switch Mode Power Supplies

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

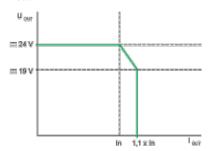
Derating should be considered in extreme operating conditions:

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

