

PSC-480 Series



Input: 85-264VAC 47/63Hz
 Output Voltage: 24 & 48 V DC
 Rated Power: 480W max.



FEATURES

- Universal AC input range (85~264Vac)
- Support 1+1 or N+1 redundant system suggest to use redundancy modules.
- Built-in active PFC, PF>0.95
- High efficiency up to 94%
- Built-in current sharing function
- Built-in current limiting circuit
- Output protections: OVP/OLP/SCP/OTP
- Wide operating ambient temp (-25°C~70°C)
- 150% (720W) peak load capacity
- Easy Fuse Tripping due to High Overload Current
- Built-in DC OK relay contact
- Can be installed on 35 mm DIN rail
- 100% full load burn-in test
- PCB with conformal coating
- Suitable for critical applications
- Ultra-slim, 70mm width
- Free air convection
- 3 years warranty

CATALOG NUMBER

PSC-48024

PSC-48048

INPUT

Voltage Range	85Vac~264Vac, 120Vdc-375Vdc	
Frequency Range	47Hz~63Hz	
Power Factor (typical)	0.99/110Vac	0.95/230Vac
AC Current (max.)	<7.0 A/100Vac	<3.5A/230Vac
Inrush Current (Typical)	<20A/110Vac	<40A/230Vac Cold start
Leakage Current	Input—output: ≤0.25mA Input—PG: ≤3.5mA	
Efficiency (Typical)	93.8%	93.5%

OUTPUT

DC Output	24V	8V
Rated Current	20A	10A
Current Range <i>Note 1</i>	0~20A	0~10A
Ripple and Noise	0~70°C ≤240mV	≤480mV
	-25°C~0 ≤480mV	≤480mV
Voltage ADJ. Range	24~28V	48~56V
Voltage Accuracy	±3.0%	
Line Regulation	±0.5%	
Load Regulation	±1.0%	
Set-up Time	<3S@230Vac	
Hold up Time	≥20mS(230Vac input, Full load)	
Temperature Coefficient	±0.03%/°C	
Overshoot	<5.0%	

ENVIRONMENTAL

Operating amb. Temp. & Hum.	-25°C~70°C; 20%~90%RH No condensing
Storage Temp. & Hum.	-40°C~85°C; 5%~95%RH No condensing

PROTECTIONS

Over voltage	28.8~33V, constant voltage, Auto recovery	58~63V, constant voltage, Auto recovery
Over Load	110%~150% of rated current, Constant current limiting for some time(150% of rated current, last 3S) then PS stop working for 7S, after 7S, if the load <=rated current, PS will work normally, auto recovery	
Over temperature	115±5°C, detect on temperature controller; shut down O/P, auto recovery after temperature goes down.	
Short Circuit	Long-term mode, auto recovery	

SAFETY & EMC

Note 3

Safety Standards	UL508, UL60950-1, EN62368-1
Withstand Voltage	Primary-Secondary: 3.0KVac/10mA. Primary-PG: 2.5KVac/10mA. Secondary-PG: 0.5KVac/20mA.
Isolation Resistance	10M ohms
EMC Emission	Compliance to EN55032 Class B
Harmonic Current	Compliance to EN61000-3-2, CLASS A
EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,11;

OTHER

MTBF (MIL-HDBK-217F)	More than 300,000Hrs (25°C, Full load)
Dimension (L*W*H)	70 x 124 x 127mm
Packing	10pcs/CTN, 13Kgs/CTN, 0.04cbm
Cooling method	Cooling by free air convection

NOTES

1. All parameters NOT specially mentioned are measured at rated input, rated load and 25°C of ambient temperature.
2. Measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uF & 10uF parallel capacitor.
3. The power supply is considered as a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies".

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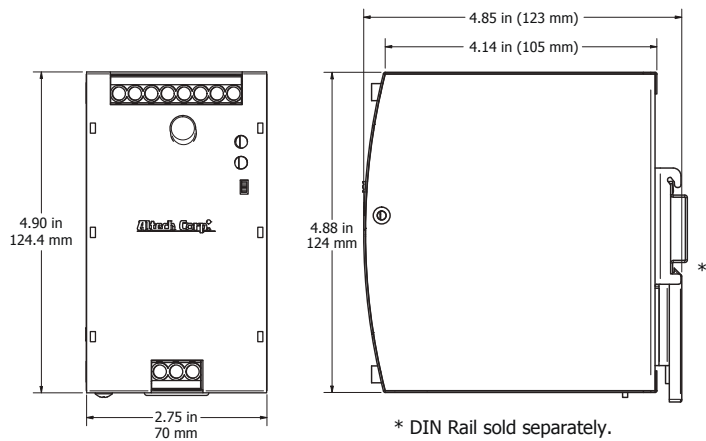
Mechanical Specification

1.AC terminal blocks installation information

Terminal No.	Function	Specifications
1	PG	6.35mm, 3pin screw terminal blocks
2	N	
3	L	

2.DC terminal blocks installation information

Terminal No.	Function	Specifications
1	DC	6.35mm, 3pin screw terminal blocks
2	OK	
3-5	+V	
6-8	-V	



* DIN Rail sold separately.

AC/DC Terminal

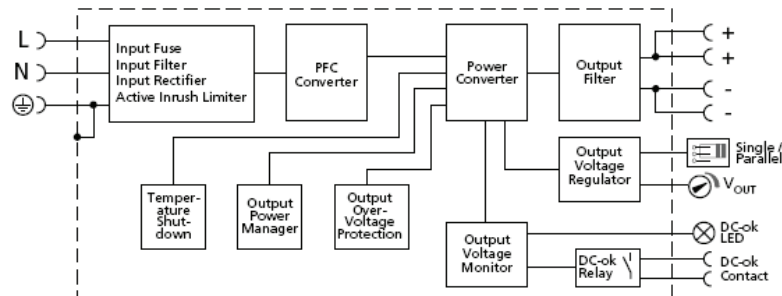
Type	Screw terminal blocks
Solid Wire	0.5-6 mm ²
Strand Wire	0.5-4 mm ²
Wire Spec	AWG20-10 (PG wire >18AWG)
Max Wire Diameter	2.8mm
Recommended stripping length	7mm
Screwdriver	3.5mm Straight or Cross Screwdriver
Recommended Torque	1NM

Additional Functions

Power boost	150% of rated current
Parallel function	support
DC-OK	V On: when output voltage is up to 90% of rated output voltage
	V Off: when output voltage is down to 80% of rated output voltage
DC-OK relay contact rating	Max 30V/1A or 60V/0.3A or 30Vac/0.3A Resistive load

Block Diagram

Functional Diagram



Peak Loading



Derating Curve

