PSC-75 Series

Input: 85-264VAC 47/63Hz
Output Voltage: 12, 24 & 48 V DC
Rated Power: 75W max.

c UL us LISTED
IND. CONT. EQ.
UL 508
E205412

c UL us
UL 60950-1
E521519

UK CA | CE

CB | RoHS | Parallel PFC | ENERGY SAVER

Ultra Compact

- Ultra Slim size
- Conformal coated PCB
- Parallel option available
- Universal input
- Three-year Warranty

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 91%
- Built-in current sharing function
- Built-in current limiting circuit
- Output protections: OVP/OLP/SCP/OTP
- Wide operating ambient temp (-25°~70°)
- 150% peak load capacity
- Easy Fuse Tripping due to High Overload Current
- Excellent Partial Load Efficiency
- 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,32mm width
- 3 years warranty

CATALOG NUMBER		PSC-7512	PSC-7524	PSC-7548
INPUT				
Voltage Range		85Vac~264Vac, 127Vdc-360Vdc		
Frequency Range		47Hz~63Hz		
Power Factor (typical)		0.99/100Vac 0.95/230Vac		
AC Current (max.)		<0.95 A/100Vac <0.45A/230Vac		
Inrush Current (Typical)		<30A/100Vac <60A/230Vac Cold start		
Leakage Current		Input—output: ≤0.25mA Input—PG: ≤3.5mA		
Efficiency (Typical) @230Vac		88%	91%	91%
OUTPUT				
DC Output		12V	24V	48V
Rated Current		6.3A	3.2A	1.6A
Current Range	*Note 1*	0~6.3A	0~3.2A	0~1.6A
Ripple and Noise	0~70°C	≤100mV	≤120mV	≤120mV
	Note 2 -25°C~0	≤200mV	≤240mV	≤240mV
Voltage ADJ. Range		12~14V	24~28V	48~56V
Voltage Accuracy		±1.0%		
Line Regulation		±0.5%		
Load Regulation		±1.0%		
Set-up Time		<250mS@230Vac ; <500mS@100Vac		
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		15~18V	29~33V	58~65V
		Protection type: Hiccup mode, Auto recovery		
Over Load		110%~150% of rated current, Constant power 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		100±5°C, detect on heat sink of power transistor; 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)		124 x 119 x 32mm		
Packing		28pcs/CTN,17.6Kg, 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"

PSC-75 Series

Altech Corp.®

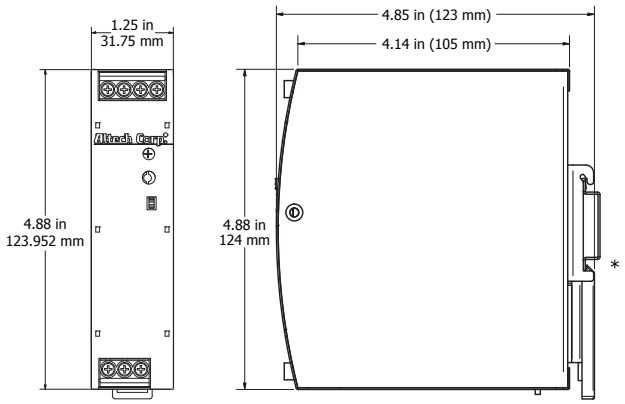
Mechanical Specification

1.AC terminal blocks installation information

Terminal No.	Function	Wire Spec	Recommended Torque
1	L	20~10AWG	1Nm
2	N		
3	PG		

2.DC terminal blocks installation information

Terminal No.	Function	Wire Spec	Recommended Torque
4 & 5	DC OK Relay Contact	20~10AWG	1Nm
6	-V		
7	+V		



* DIN Rail sold separately.

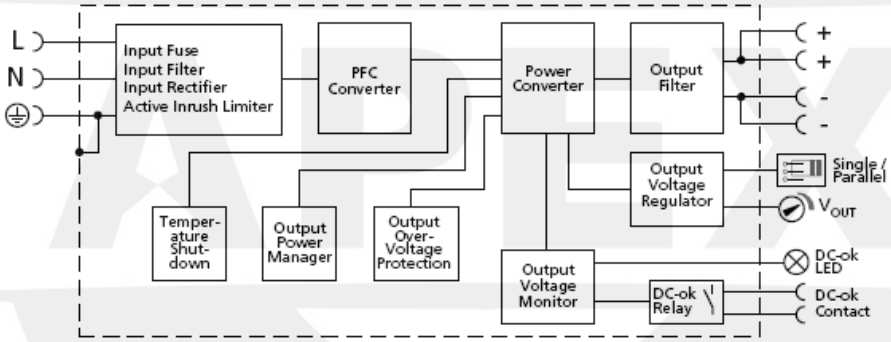
AC/DC Terminal

Type	Screw terminal blocks
Solid Wire	0.5-6mm2
Strand Wire	0.5-4mm2
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

Power boost	150% of rated current
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
Parallel function	support

Block Diagram

Functional Diagram

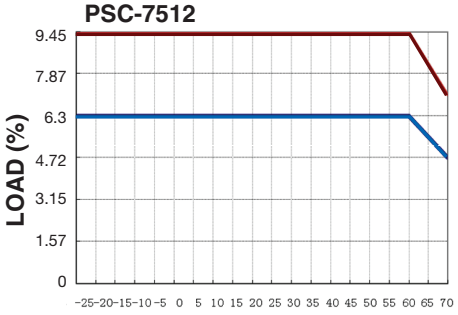


Peak Loading

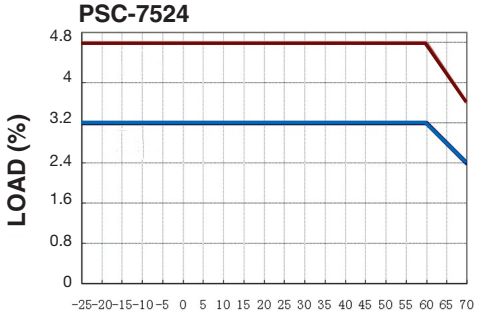
Derating Curve

Peak Load, 3S max
Continual working

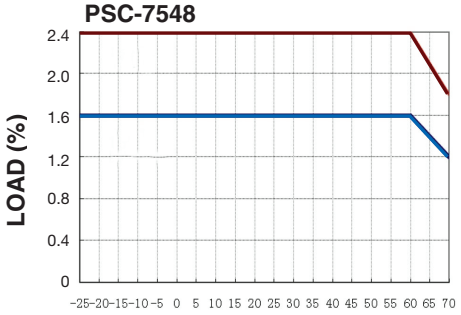
PSC-7512



PSC-7524

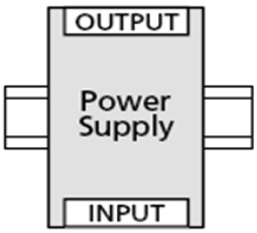


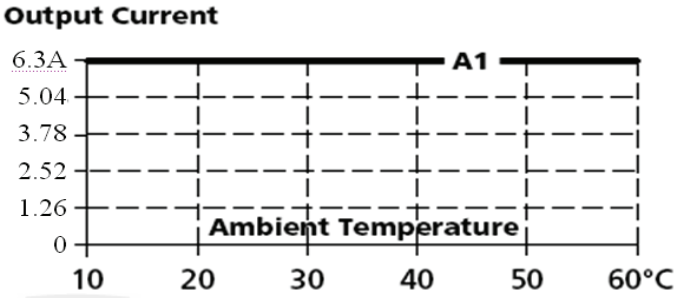
PSC-7548

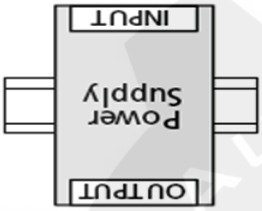


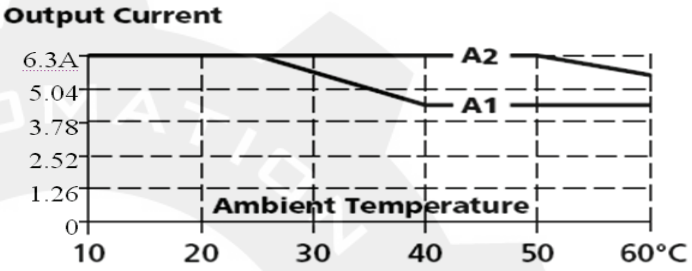
Mounting method instruction PSC-7512

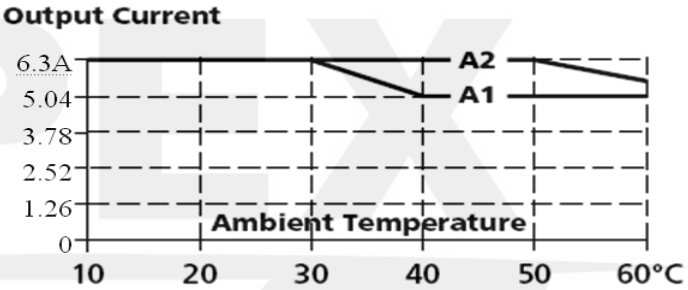
A1 is recommended output current.
A2 is the allowed max output current (PSU lifetime is around half of A1).

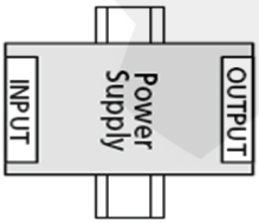


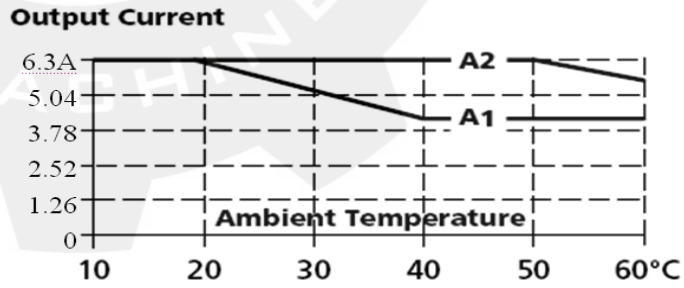


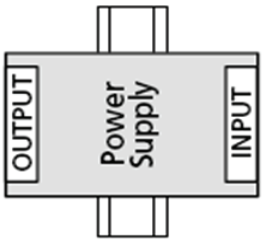


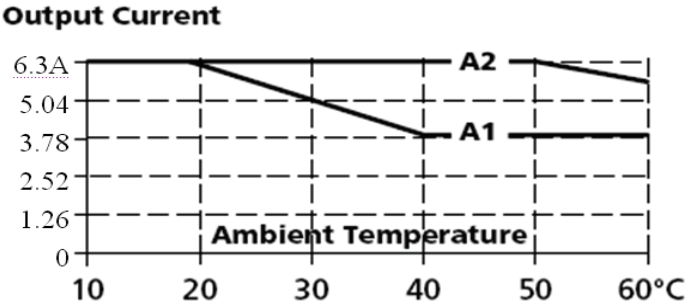








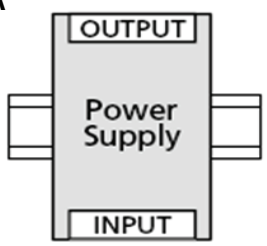


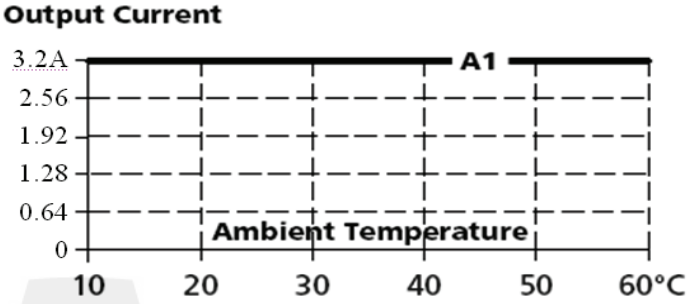


Mounting method instruction PSC-7524

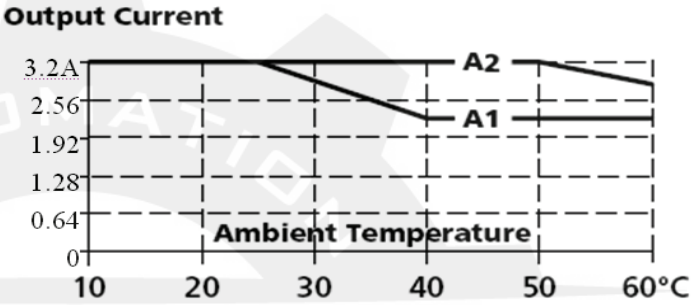
A1 is recommended output current.
A2 is the allowed max output current (PSU lifetime is around half of A1).

Mounting A

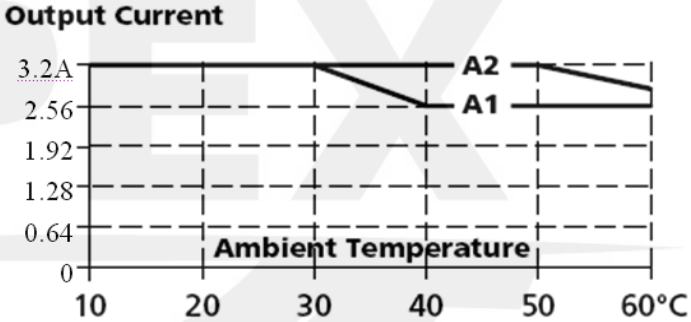




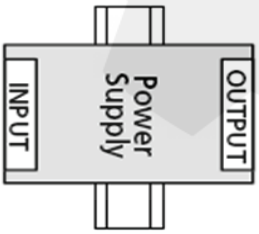
Mounting B

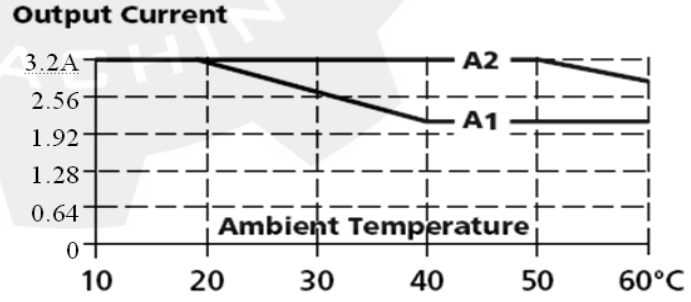


Mounting C

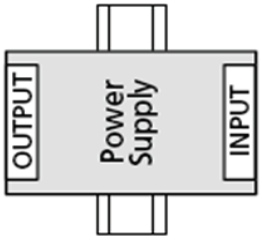


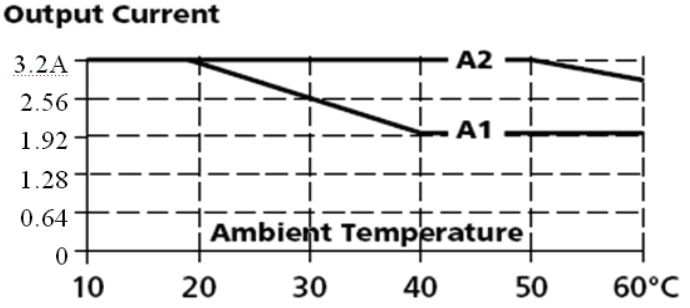
Mounting D





Mounting E

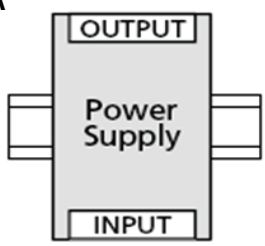


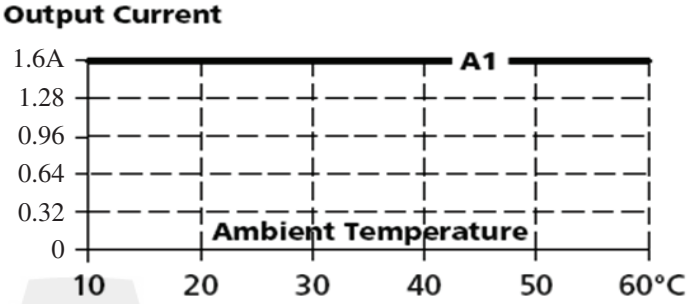


Mounting method instruction PSC-7548

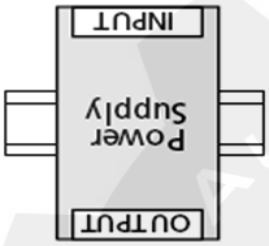
A1 is recommended output current.
A2 is the allowed max output current (PSU lifetime is around half of A1).

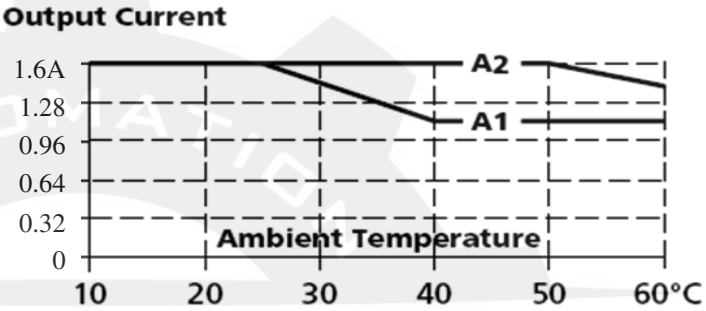
Mounting A



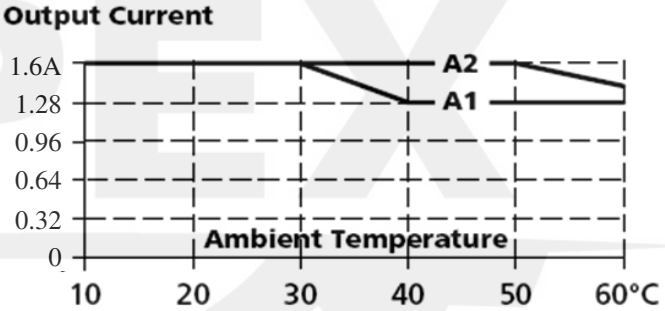


Mounting B

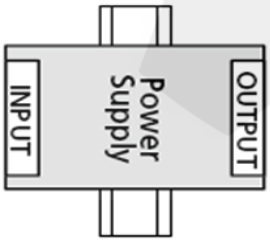


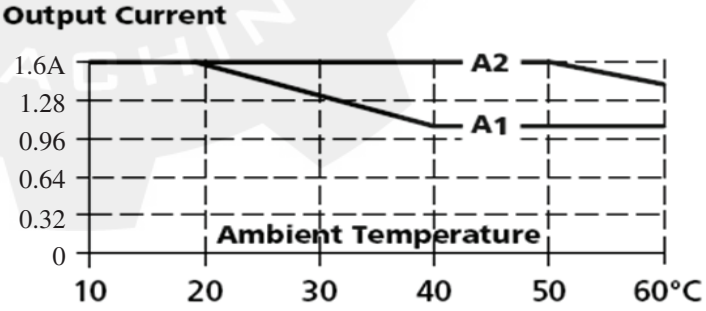


Mounting C



Mounting D





Mounting E