

75Watts Single Output Industrial DIN Rail Power Supply

IT-DIN-75 Series



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°C~70°C)
- 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 TS-35/7.5 or TS-35/15
- 100% full load burn-in test
- Suitable for critical applications
- Ultra-slim,32mm width
- 3 years warranty



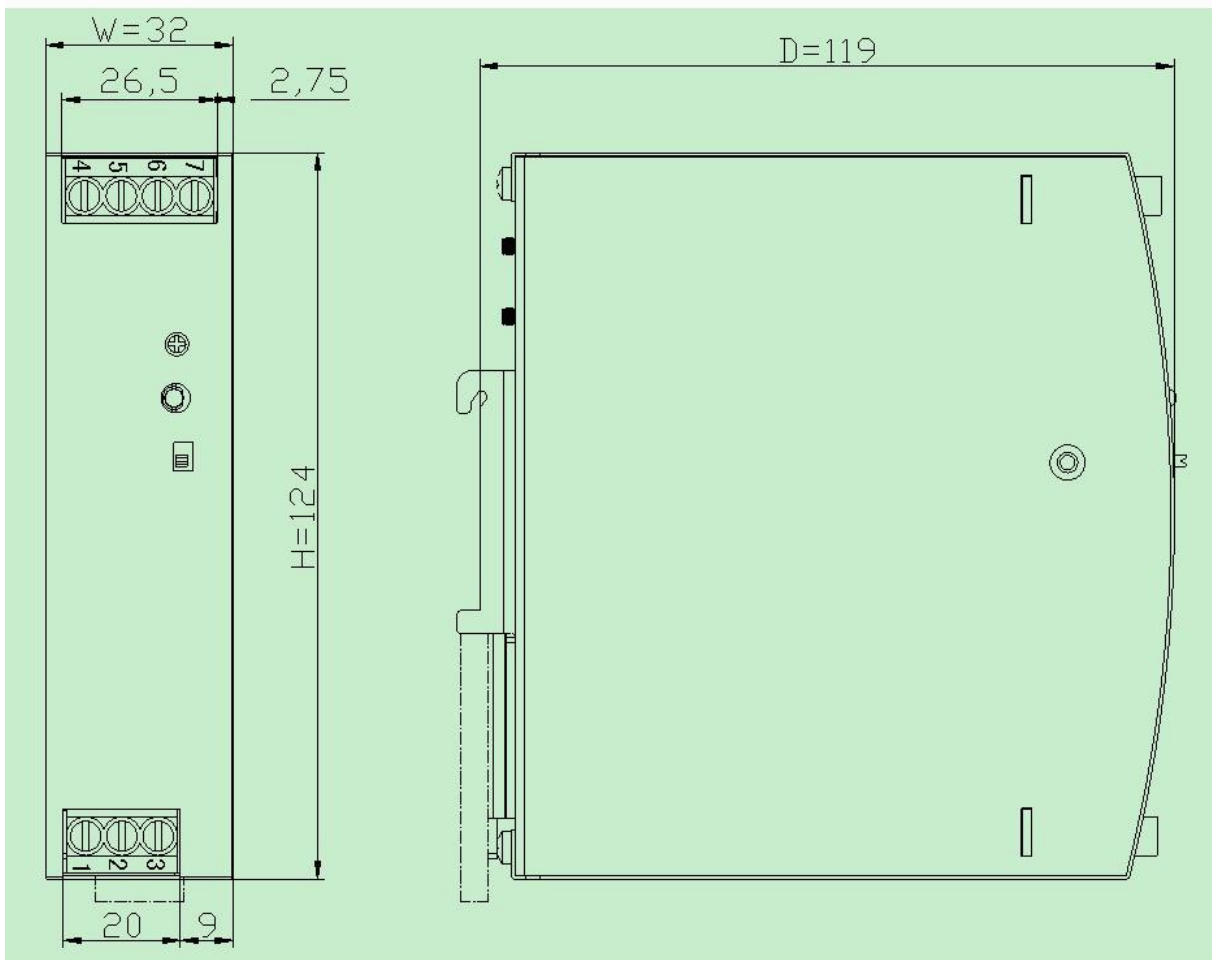
SPECIFICATION

MODEL		IT-DIN-75-12	IT-DIN-75-24	IT-DIN-75-48	
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 Note 2	0~70°C	≤100mV	≤120mV	≤120mV
		-25°C	≤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 and Undershoot	<5.0%				
INPUT	Voltage Range	85Vac~264Vac, 127Vdc-360Vdc			
	Frequency Range	47Hz~63Hz			
	Power Factor (typical)	0.99/100Vac 0.95/230Vac			
	Efficiency (Typical)	88%	91%	91%	
	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			
PROTECTION	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 voltage	15~18V	29~33V	58~65V	
		Protection type: Hiccup mode, 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				
ENVIRONMENT	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			
SAFETY & EMC Note 3	Safety Standards	meet UL508, UL60950, EN60950			
	Withstand Voltage	Primary-Secondary: 3.0KVac; ≤10mA .Primary-PG: 2.5KVac; ≤10mA. Secondary-PG: 0.5KVac≤10mA.			
	Isolation Resistance	≥100M ohms			
	EMC Emission	Compliance to EN55022, EN55024, FCC PART 15 Class B			
	Harmonic Current	Compliance to EN61000-3-2, CLASS A			
	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11; heavy industry level			
OTHERS	MTBF (MIL-HDBK-217F)	More than 300,000Hrs (25°C, Full load)			
	Dimension (L*W*H)	124*119*32mm			
	Packing	28pcs/CTN,21.2Kg, 0.04cbm			
	Cooling method	Cooling by free air convection			
Additional function	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
NOTE	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.	

Mechanical Specification

Unit: mm



1.AC Screw terminal information

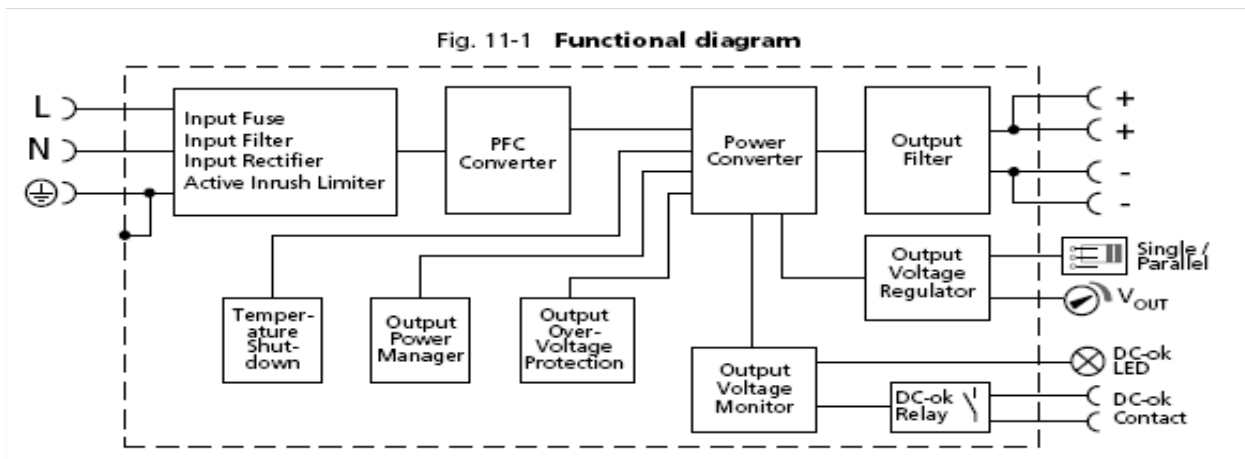
No.	Function	Wire Specs	Recommended torque
1	L	20~10AWG	1Nm
2	N		
3	PG		

2.DC Screw terminal information

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

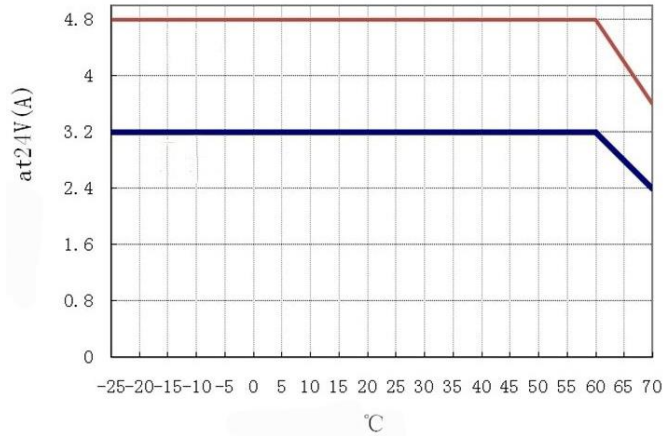
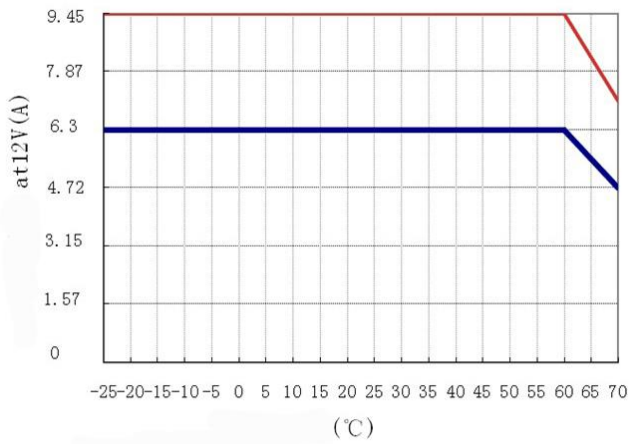
	AC/DC Terminal
Type	Screw terminal blocks
Solid Wire	0.5-6mm ²
Strand Wire	0.5-4mm ²
Wire Spec	AWG20-10 (PG wire >18AWG)
Max Wire Diameter	2.8mm
Recommended stripping length	7mm
Screwdriver	3.5mm Straight or Cross Screwdriver
Recommended Torque	1NM

■ Block Diagram

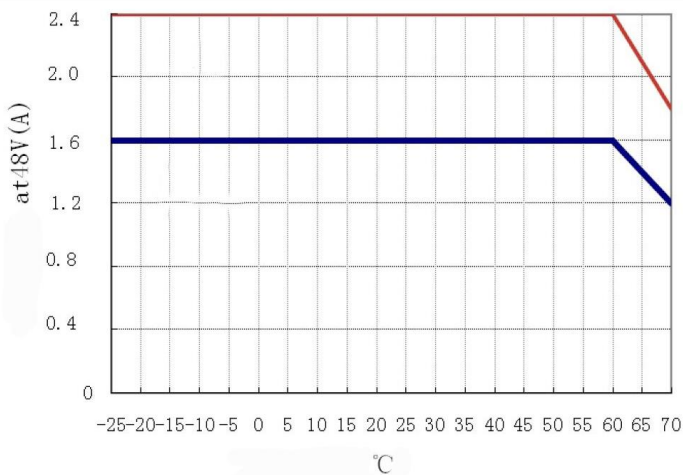


■ Derating Curve

IT-DIN-75-12:



IT-DIN-75-48:



 : short time working;

 : continual working.

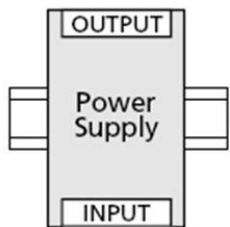
■ Mounting method instruction

A1 is recommended output current

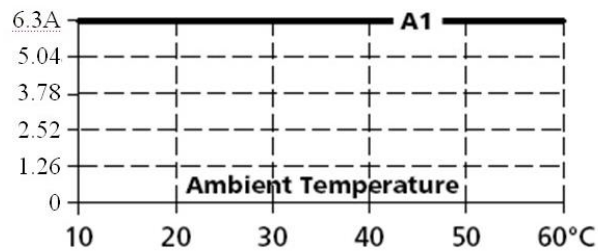
A2 is the allowed max output current (PSU lifetime is around half of A1)

IT-DIN-75-12:

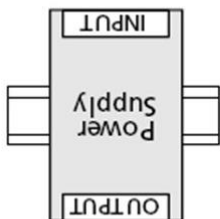
Mounting A:



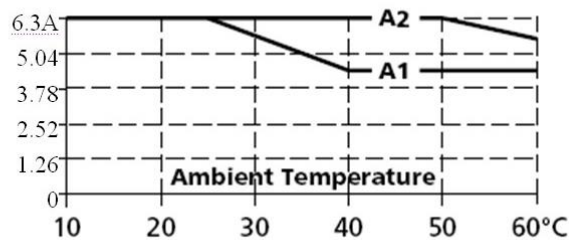
Output Current



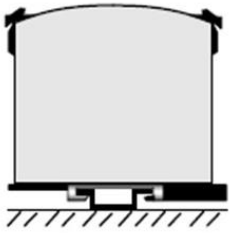
Mounting B:



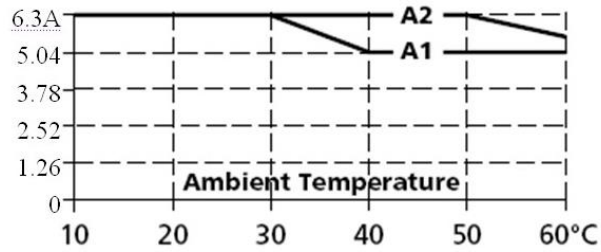
Output Current



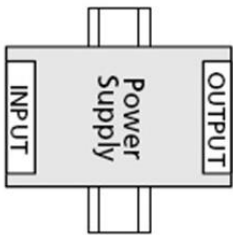
Mounting C:



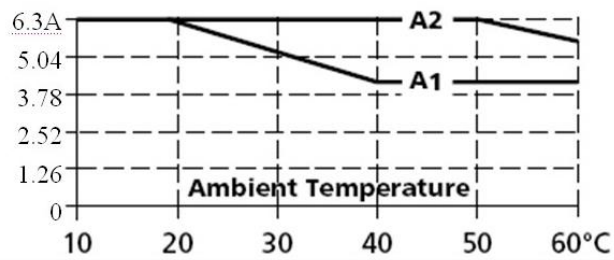
Output Current



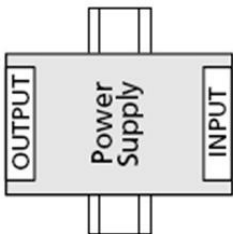
Mounting D:



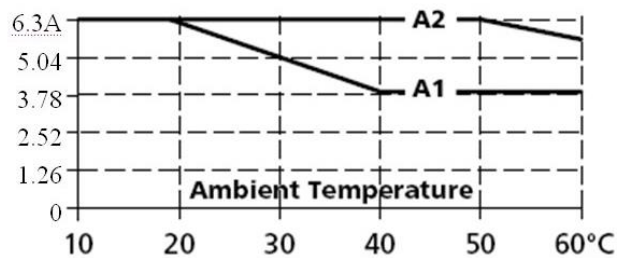
Output Current

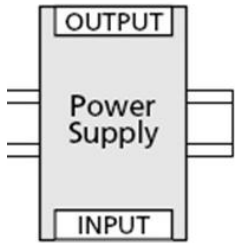
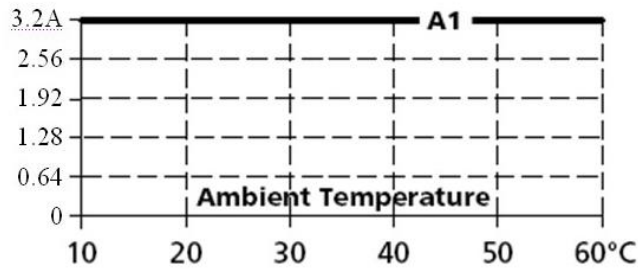
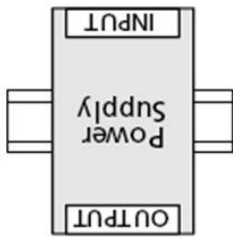
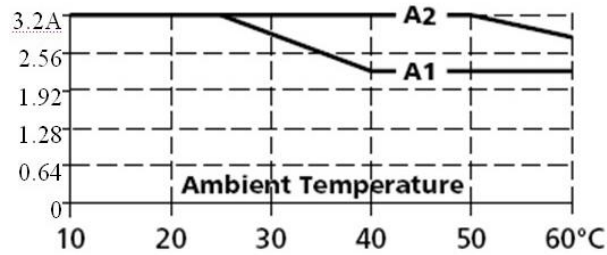
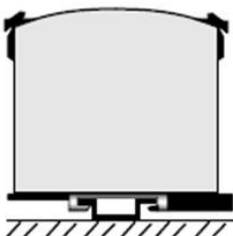
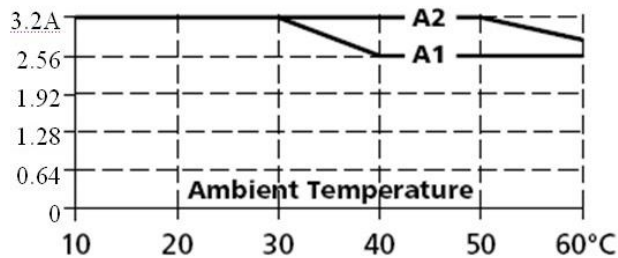


Mounting E:

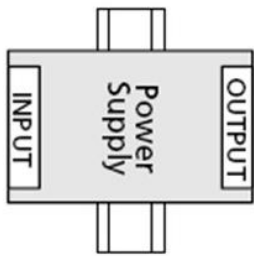


Output Current

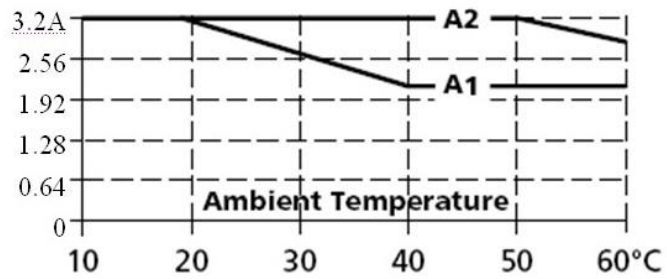


IT-DIN-75-24:
Mounting A:

Output Current

Mounting B:

Output Current

Mounting C:

Output Current


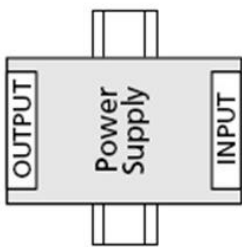
Mounting D:



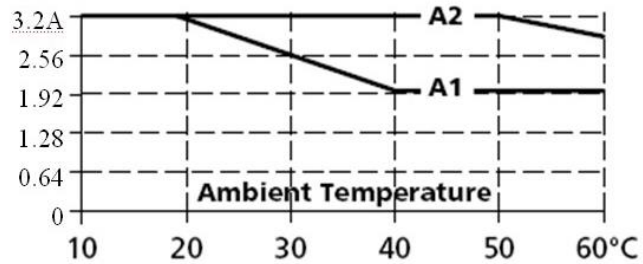
Output Current



Mounting E:



Output Current



Disclaimer

All products, product specifications and data are subject to change without notice.