

60Watts Single Output Industrial DIN Rail Power Supply

IT-DIN-60S Series



FEATURES

- Universal AC input range(90~264Vac)
- 300Vac surge for 3 seconds
- High efficiency, long life and high reliability
- Output protections: OVP/OLP/SCP
- Wide operating ambient temp (-25°C~50°C)
- Can be installed on TS-35/7.5 or 35/15
- 100% full load burn-in test
- PCB with conformal coating
- Suitable for critical applications
- Cooling by free air convection
- 3 years warranty

SPECIFICATION

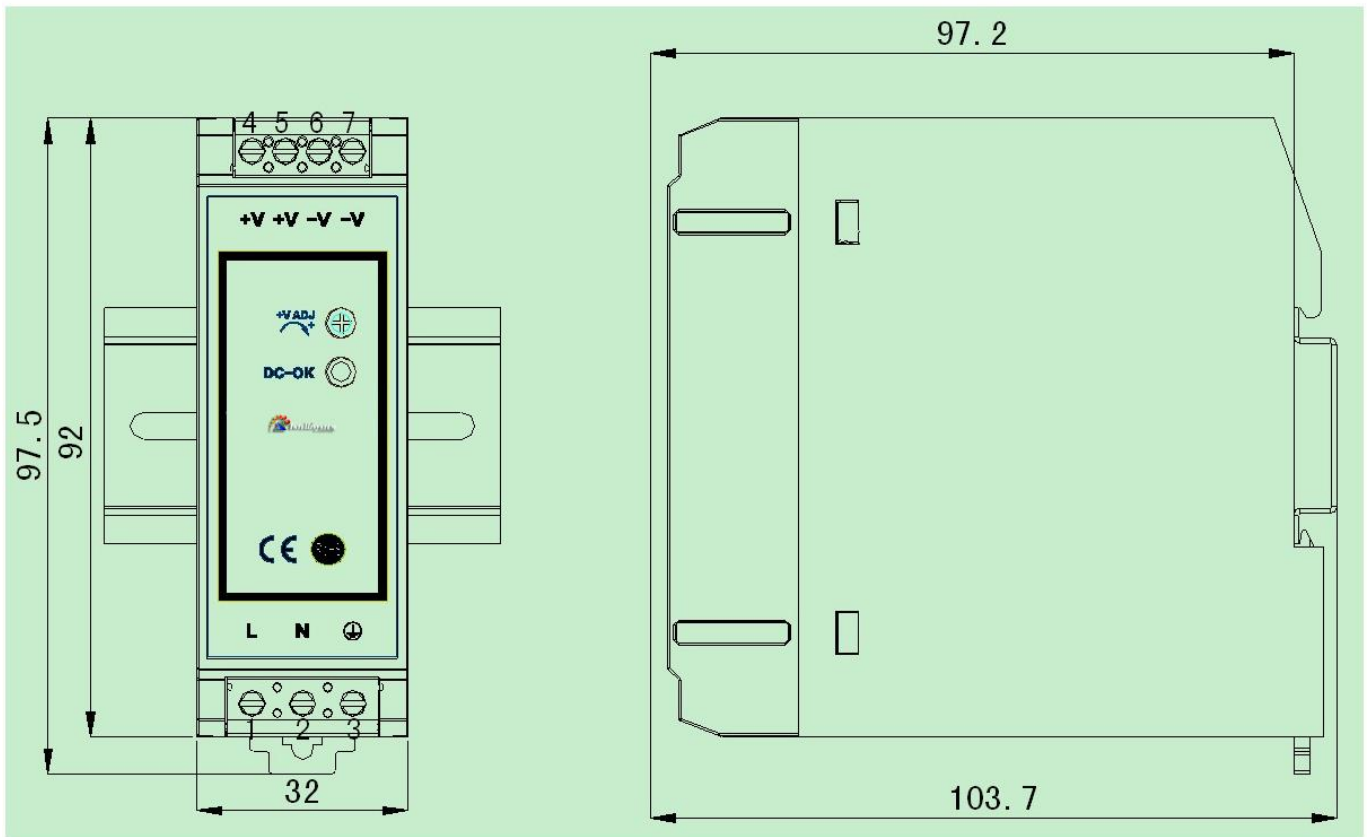
MODEL		IT-DIN-60S-12	IT-DIN-60S-24	IT-DIN-60S-48	
OUTPUT	DC Output	12V	24V	48V	
	Rated Current	5A	2.5A	1.25A	
	Current Range	Note 1 0~5A	0~2.5A	0~1.25A	
	Ripple and Noise Note 2	10~50°C	≤60mV	≤50mV	≤120mV
		-25~10°C	≤120mV	≤100mV	≤240mV
	Voltage ADJ. Range	12~14V	24~28V	48~56V	
	Voltage Accuracy	±1.0%			
	Line Regulation	±0.5%			
	Load Regulation	±1%			
	Set-up Time	<1.5S @230Vac Full load			
	Hold up Time	≥20mS @230Vac Full load			
	Temperature Coefficient	±0.03%/°C			
Overshoot and undershoot	<5.0%				
INPUT	Voltage Range	90Vac~264Vac, 127VDC-370VDC(input V+ connect L, input V- connect N)			
	Frequency Range	47Hz~63Hz			
	Efficiency (Typical) @ 230Vac	86%	88%	89%	
	AC Current (max.)	<1.6A			
	Inrush Current (Typical)	65A/230Vac Cold start	50A/230Vac Cold start	65A/230Vac Cold start	
	Leakage Current	Input—output: ≤0.25mA Input—PE: ≤3.5mA			
PROTECTION	Over Load	6~7.5A Hiccup mode, auto recovery	3~4A Hiccup mode, auto recovery	1.5~2.5A Hiccup mode, auto recovery	
	Over voltage	15.4~18V Hiccup mode, auto recovery	28.8~31.2V Hiccup mode, auto recovery	58~63V Hiccup mode, auto recovery	
	Short Circuit	Long-term mode, auto recovery			
ENVIRONMENT	Operating amb. Temp. & Hum.	-25°C~50°C; 20%~90%RH No condensing			
	Storage Temp. & Hum.	-40°C~85°C; 5%~95%RH No condensing			
SAFETY & EMC Note 3	Safety Standards	UL60950, EN60950			
	Withstand Voltage	Primary-Secondary: 3KVac/10mA; Primary-PE: 1.5KVac/10mA; Secondary-PE: 0.5KVac/10mA			
	Isolation Resistance	>10M ohms			
	EMC Emission	Compliance to EN55022, EN55024 Class B			
	Harmonic Current	Compliance to EN61000-3-2, CLASS A			
	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,11; heavy industry level			
OTHERS	MTBF (MIL-HDBK-217F)	590,000Hrs (25°C, Full load)			
	Dimension (L*W*H)	103.7*32*97.5mm			
	Packing	36pcs/CTN			
	Cooling method	Cooling by free air convection			

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

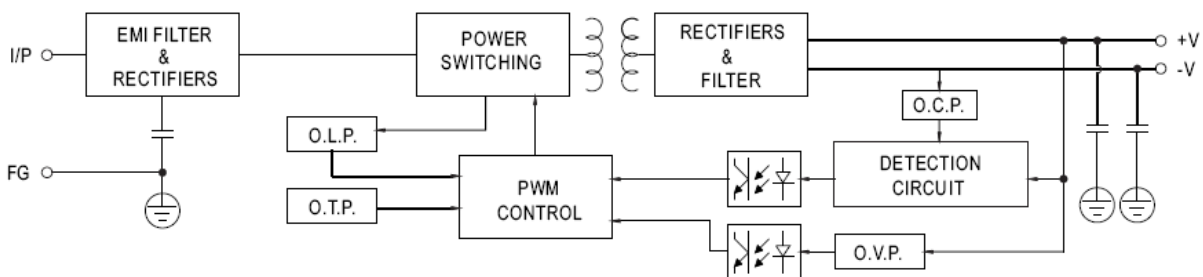
No.	Function	Wire Specs	Recommended torque
1	L	26-12AWG	0.5Nm
2	N		
3	PE		

2.DC Screw terminal information

No	Function	Wire Specs	Recommended torque
4	V+	26-12AWG	0.5Nm
5			
6	V-		
7			

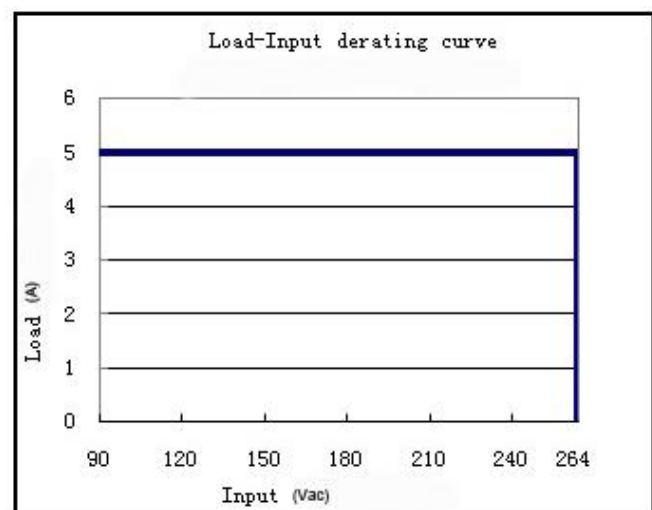
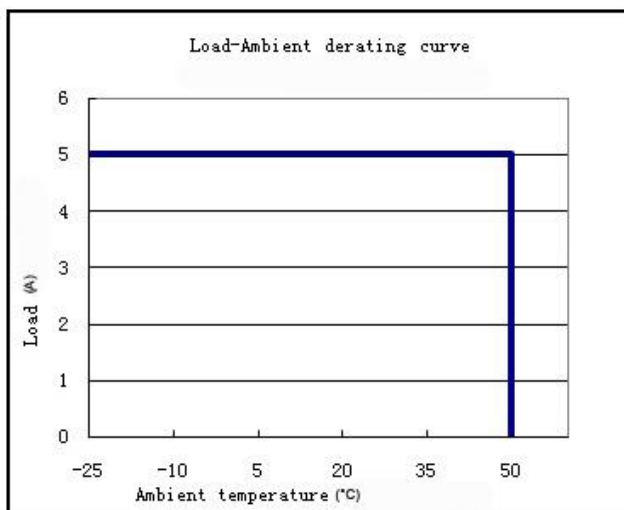
	AC Terminal	DC Terminal
Type	Screw terminal blocks	
Solid Wire	0.32-2.5mm ²	0.65-2.5mm ²
Strand Wire	0.32-2.5mm ²	0.65-2.5mm ²
Wire Spec	AWG26-12	
Max Wire Diameter	2.05mm	
Recommended stripping length	6-7mm	
Screwdriver	3.5mm Straight Screwdriver	
Recommended Torque	0.5NM	

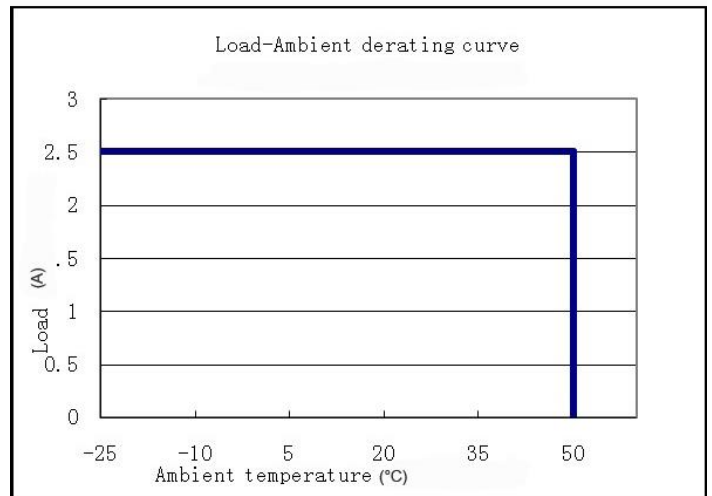
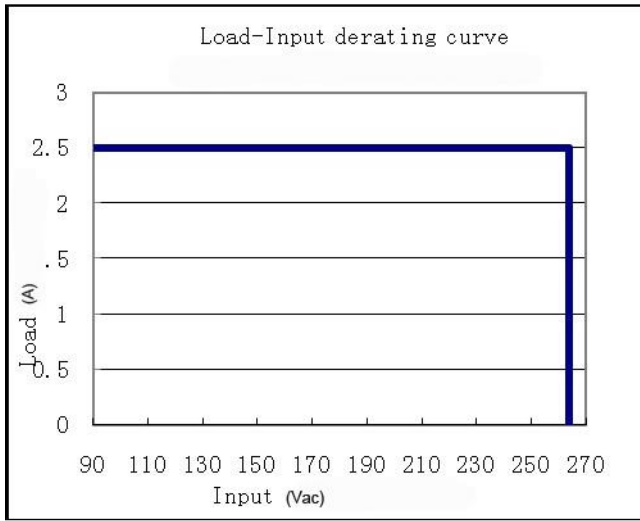
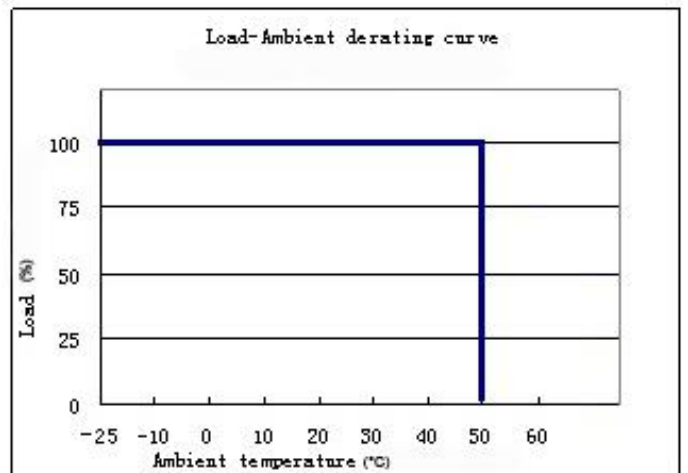
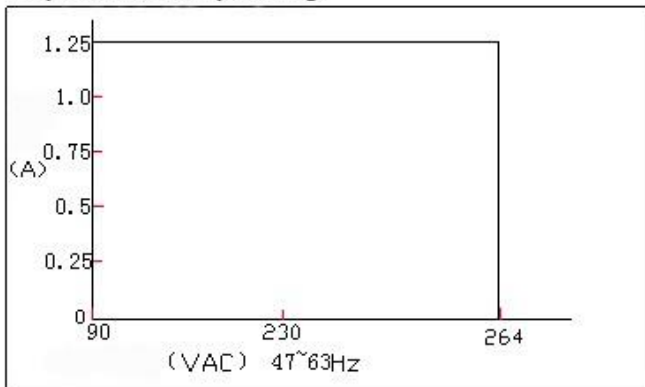
■ Block Diagram



■ Derating Curve

IT-DIN-60S-12:



IT-DIN-60S-24:

IT-DIN-60S-48:
Output current VS Input voltage


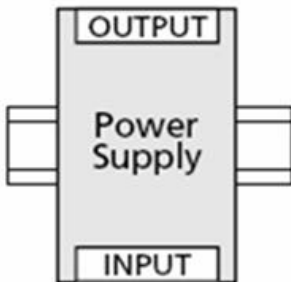
■ Mounting method instruction

A1 is recommended output current

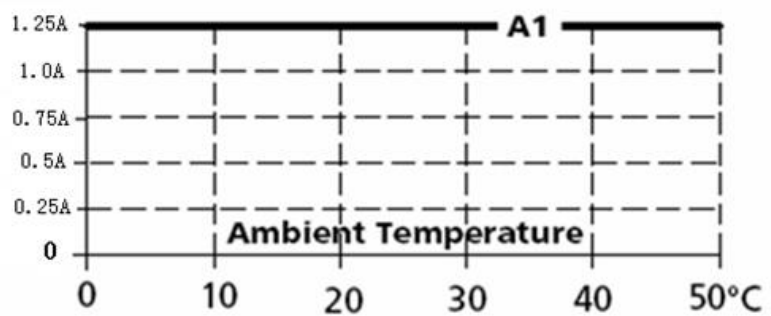
A2 is the allowed max output current (PSU lifetime is around half of A1)

IT-DIN-60S-48:

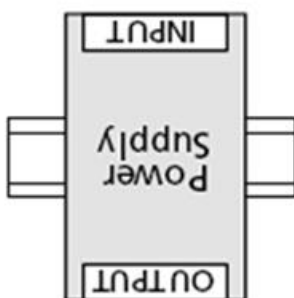
Mounting A:



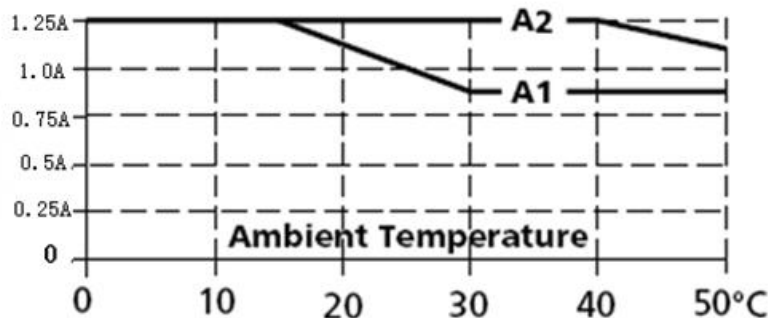
Output Current



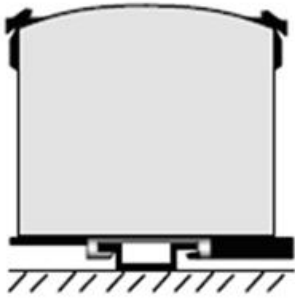
Mounting B:



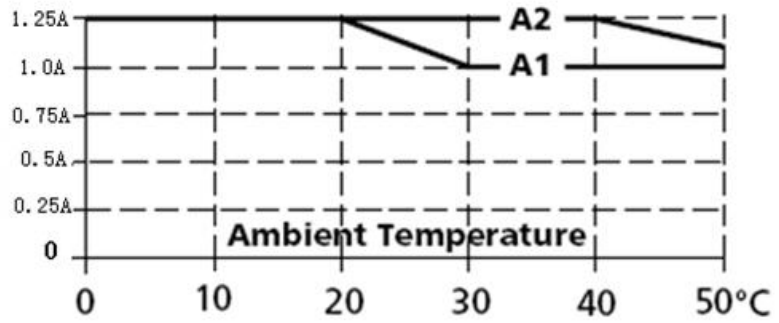
Output Current



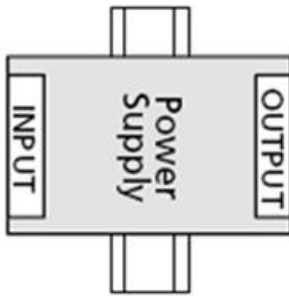
Mounting C:



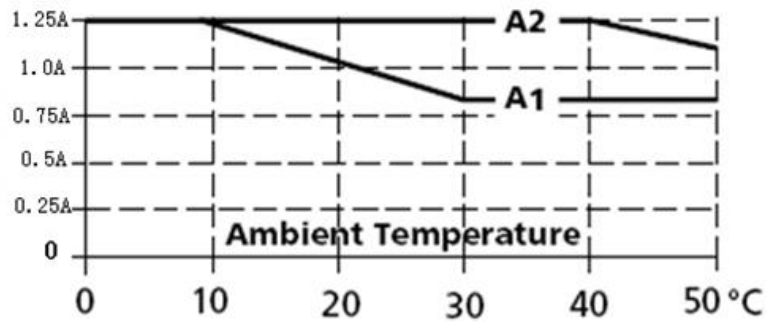
Output Current



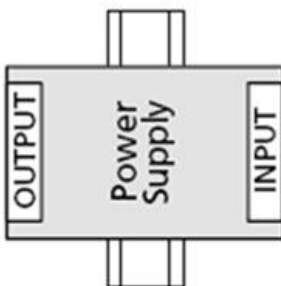
Mounting D:



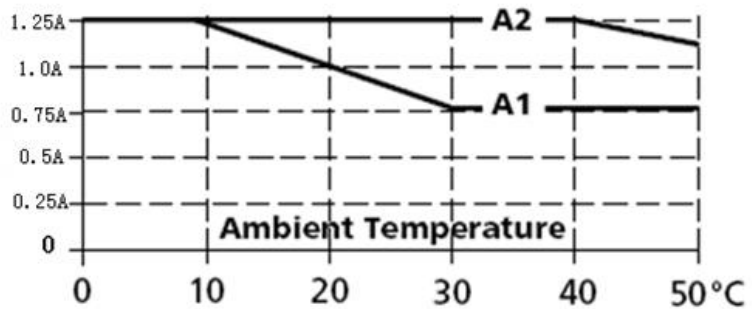
Output Current



Mounting E:

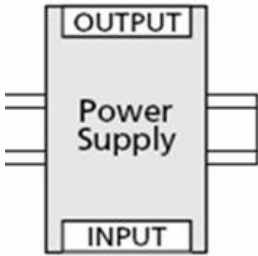


Output Current

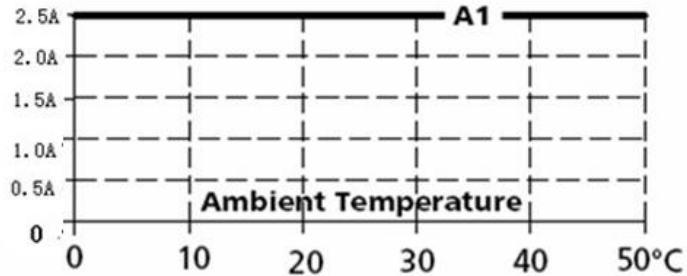


IT-DIN-60S-24:

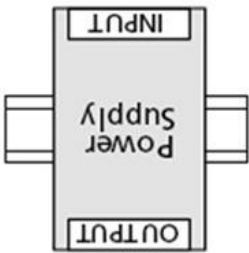
Mounting A:



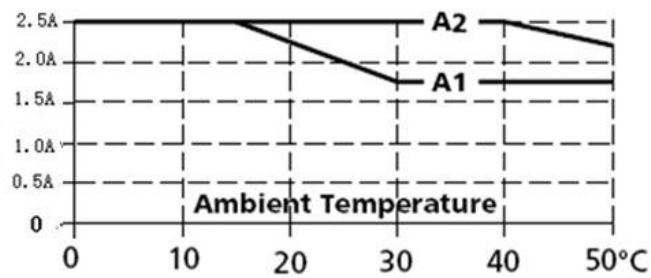
Output Current



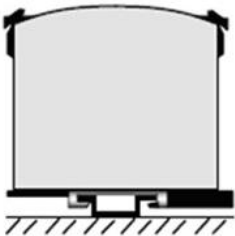
Mounting B:



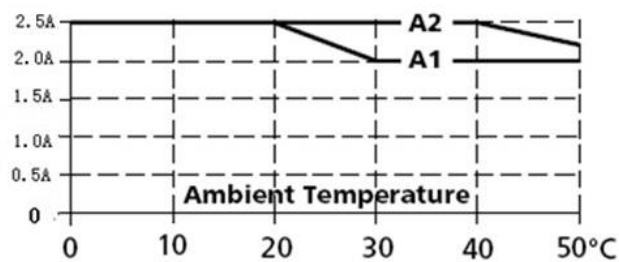
Output Current



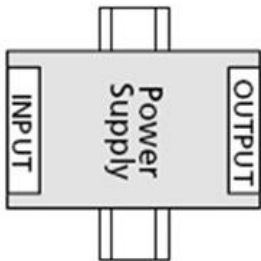
Mounting C:



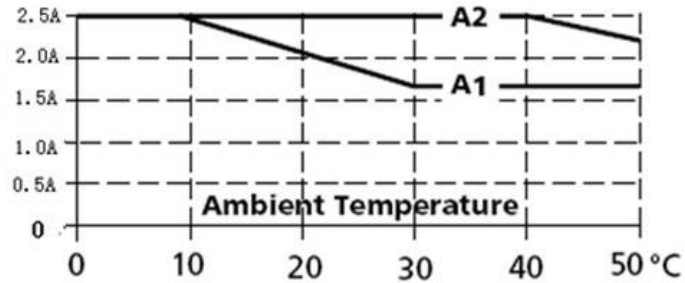
Output Current



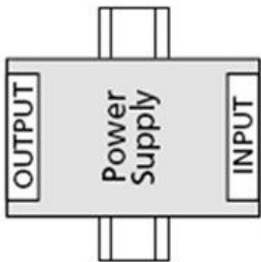
Mounting D:



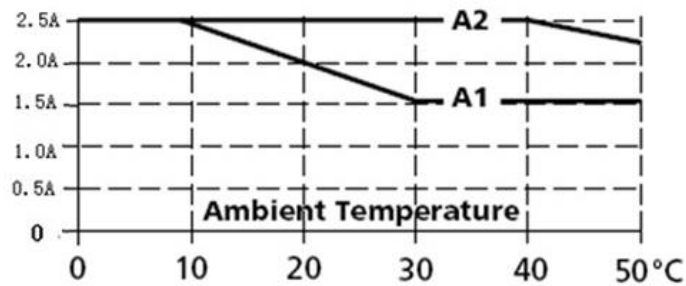
Output Current



Mounting E:

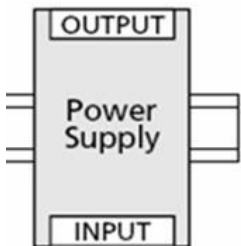


Output Current

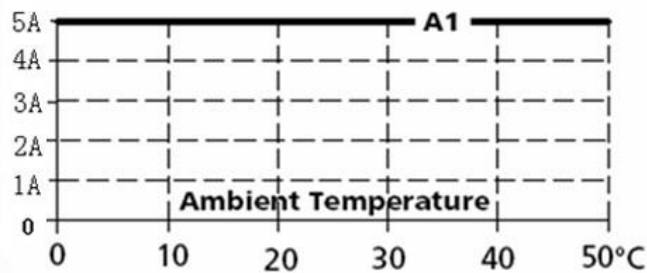


IT-DIN-60S-12:

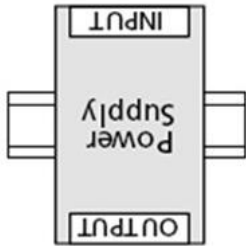
Mounting A:



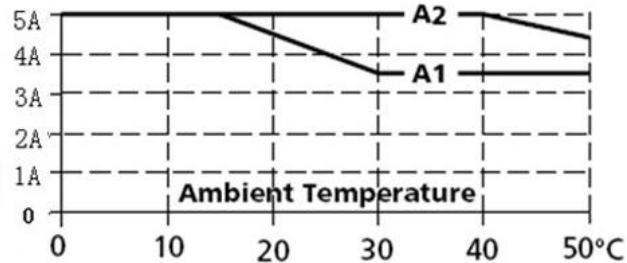
Output Current



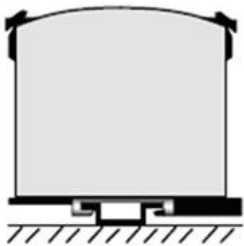
Mounting B:



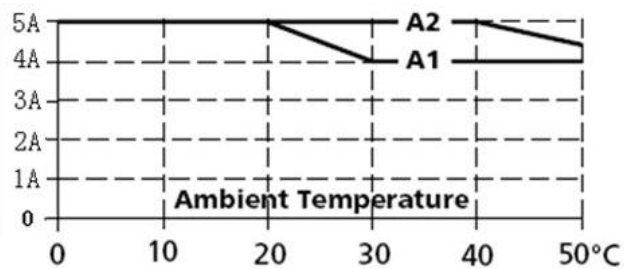
Output Current



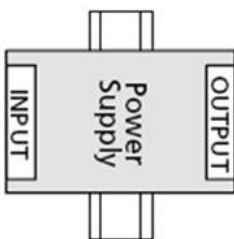
Mounting C:



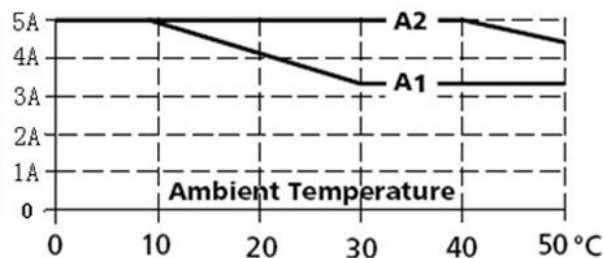
Output Current



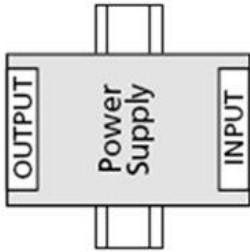
Mounting D:



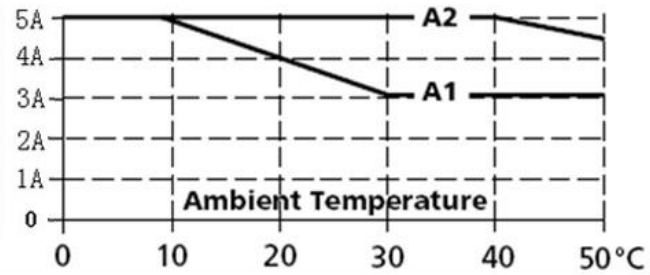
Output Current



Mounting E:



Output Current



Disclaimer

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