60Watts Single Output Industrial DIN Rail Power Supply
RPS-60-S 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℃~50℃)
- 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
- 18 months warranty

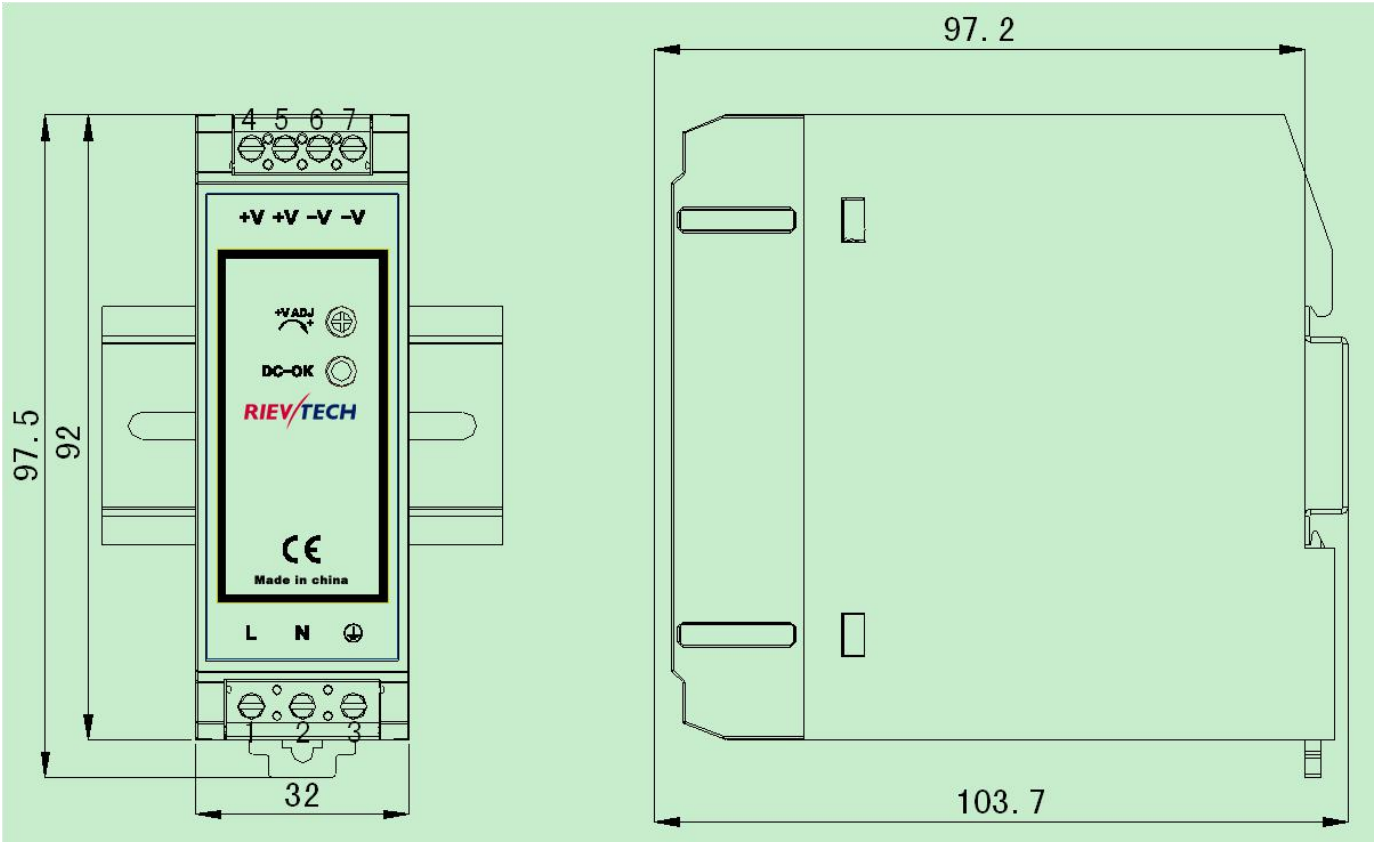
SPECIFICATION

MODEL			RPS-60-S12	RPS-60-S24	RPS-60-S48
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	10~50℃	≤60mV	≤50mV	≤120mV
	Note 2	-25~10℃	≤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%/℃		
	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	Operatingamb.Temp.&Hum.		-25℃~50℃; 20%~90%RH No condensing		
	Storage Temp. & Hum.		-40℃~85℃; 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℃, Full load)		
	Dimension (L*W*H)		103.7*32*97.5mm		
	Cooling method		Cooling by free air convection		

NOTE	1. All parameters NOT specially mentioned are measured at rated input, rated load and 25℃ 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" on www.rievtech.com.

■ Mechanical Specification

Unit: mm

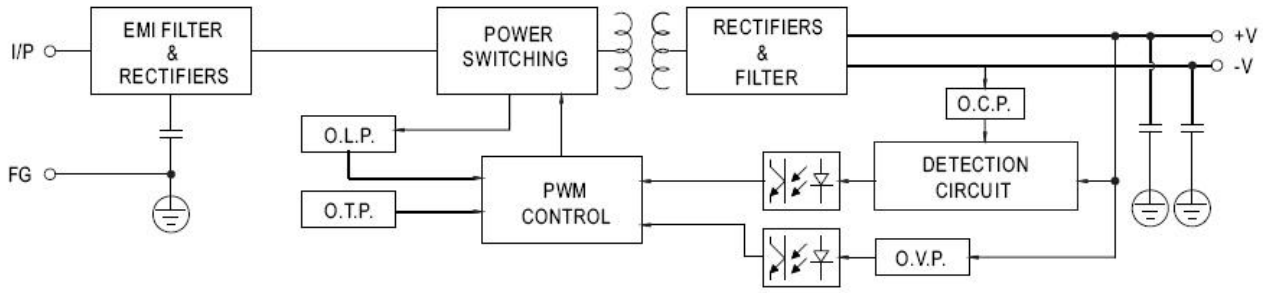


1.AC Screw terminal information			
No.	Function	Wire Specs	Recommended torque
1	L	26-12AWG	0.5Nm
2	N		
3	PE		

2.DC Screw terminal information			
No.	Function	Wire Specs	Recommended torque
4	V+	26-12AWG	0.5Nm
5			
6	V-		
7			

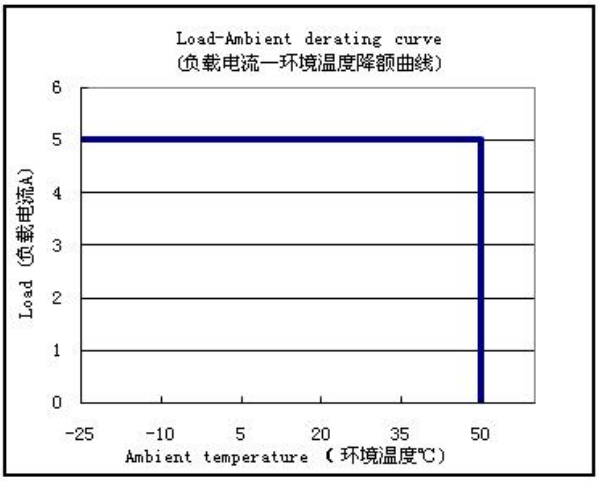
	AC Terminal	DC Terminal
Type	Screw terminal blocks	
Solid Wire	0.32-2.5mm^2	0.65-2.5mm^2
Strand Wire	0.32-2.5mm^2	0.65-2.5mm^2
Wire Spec	AWG26-12	
Max Wire Diameter	2.05mm	
Recommended stripping length	6-7mm	
Screwdriver	3.5mm Straight Screwdriver	
Recommended Torque	0.5NM	

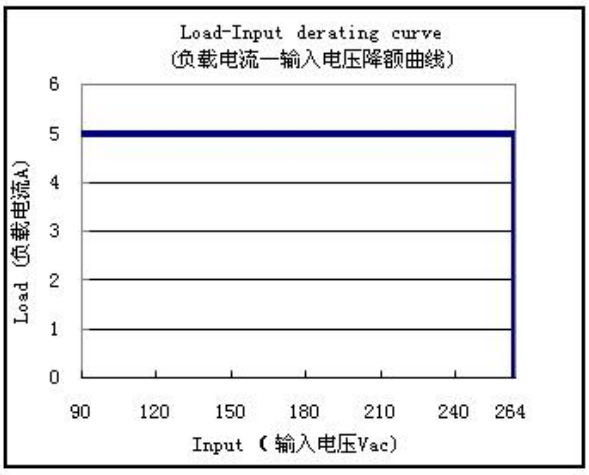
■ Block Diagram



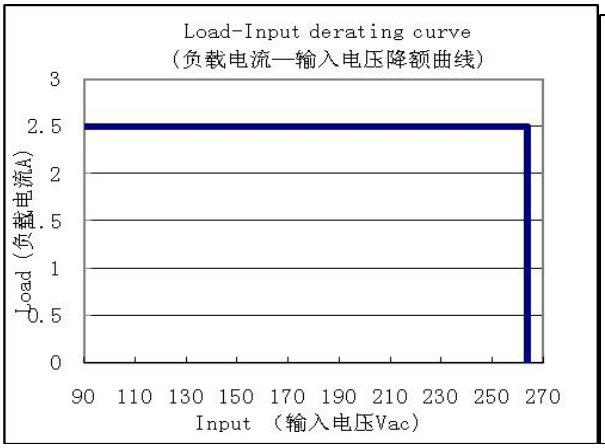
■ Derating Curve

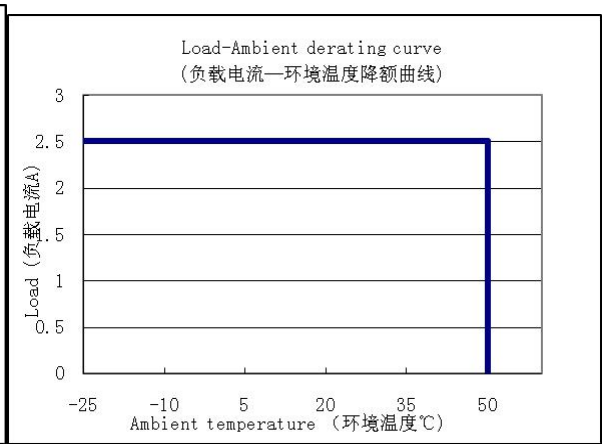
RPS-60-S12:



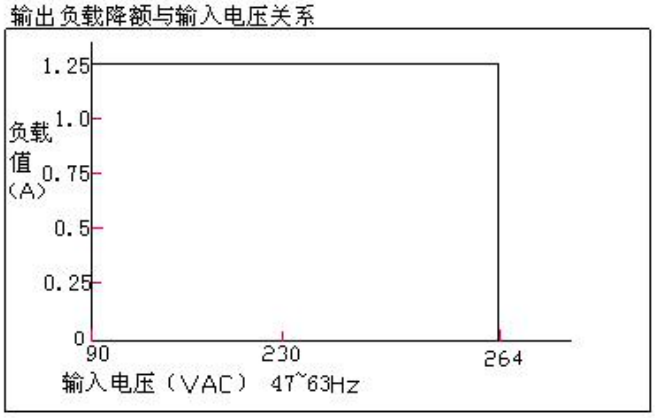


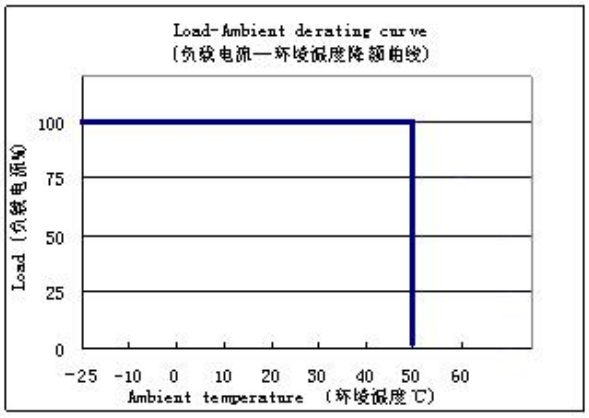
RPS-60-S24:





RPS-60-S48:





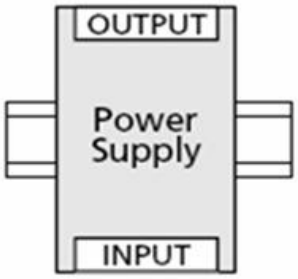
■ Mounting method instruction

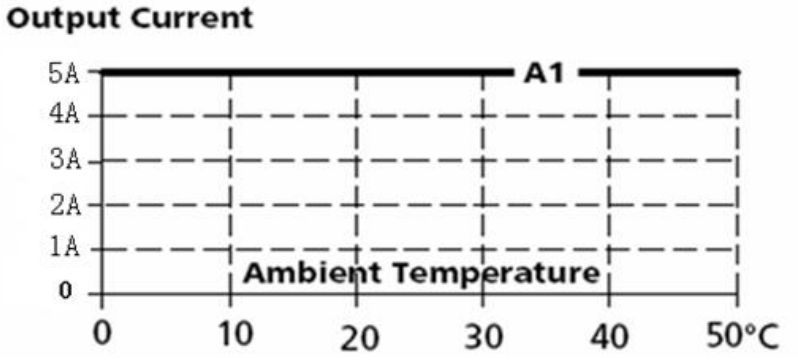
A1 is recommended output current

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

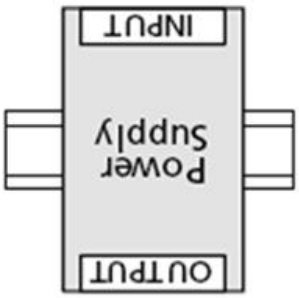
RPS-60-S12:

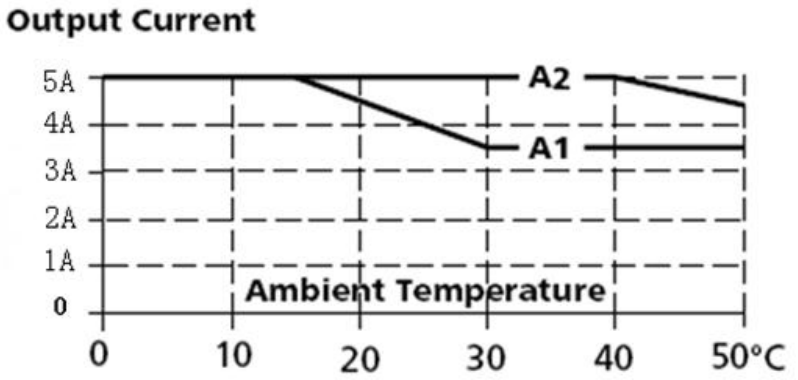
Mounting A:



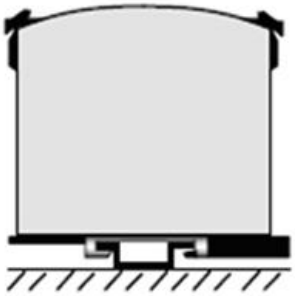


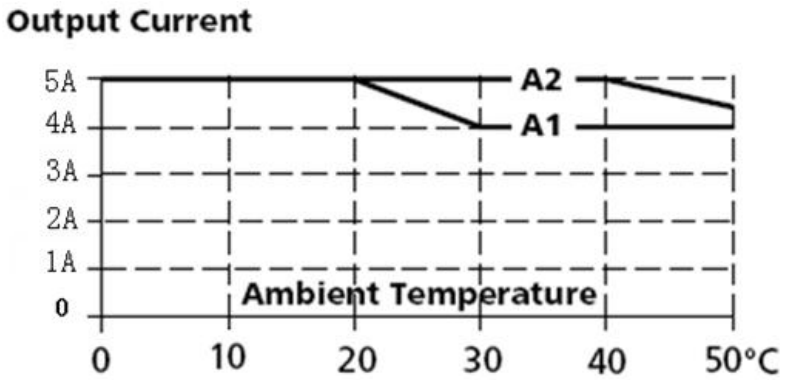
Mounting B:



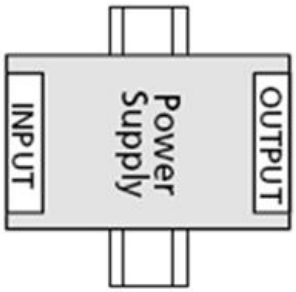


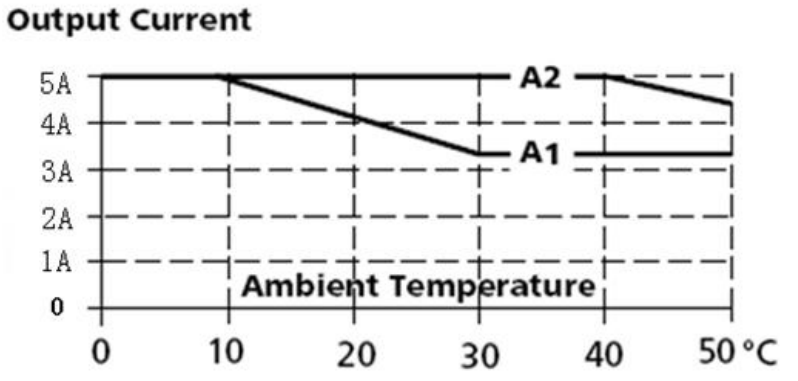
Mounting C:



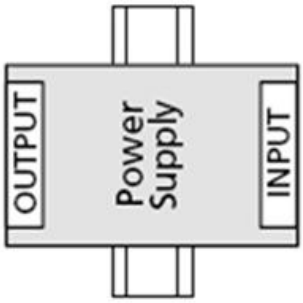


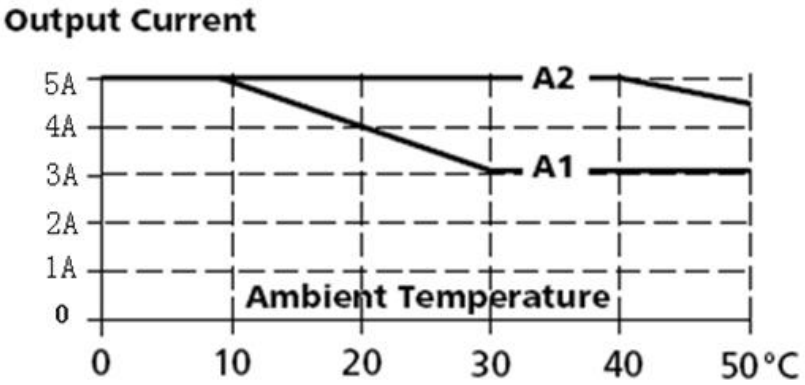
Mounting D:



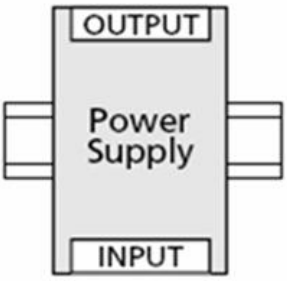


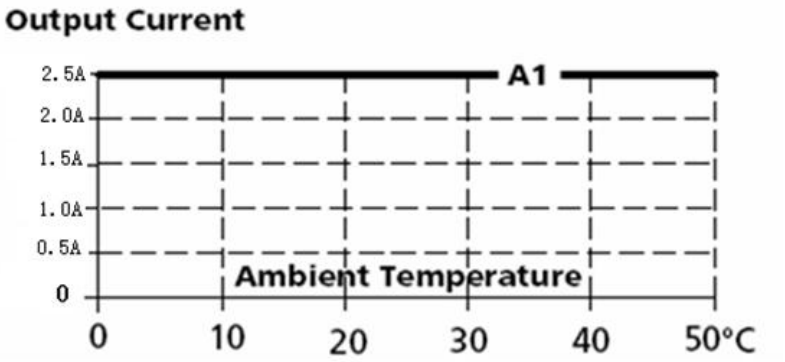
Mounting E:



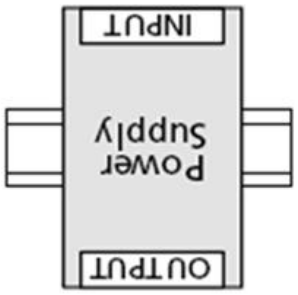


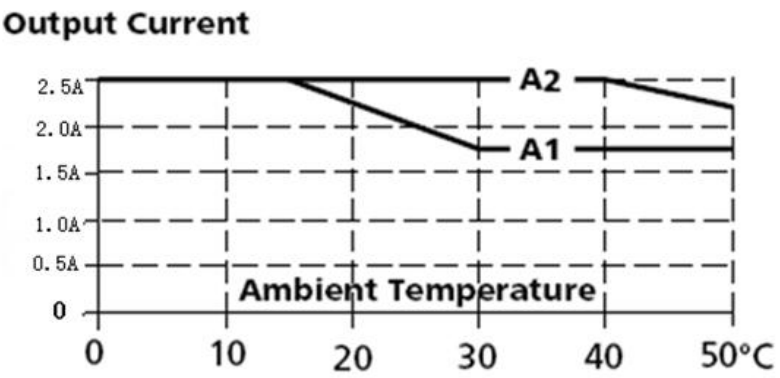
RPS-60-S24:
Mounting A:



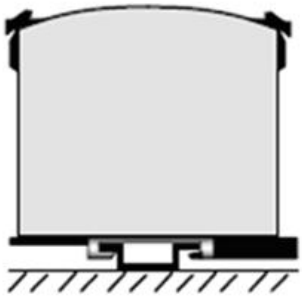


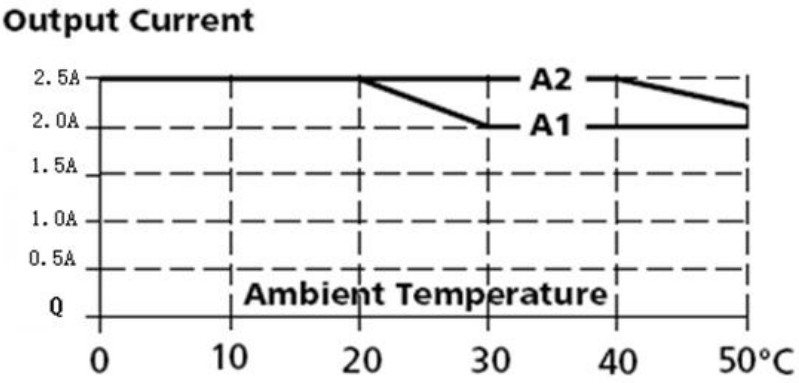
Mounting B:



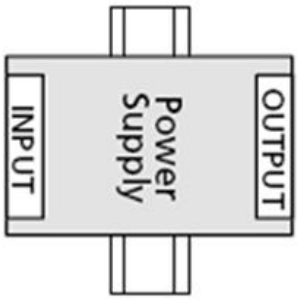


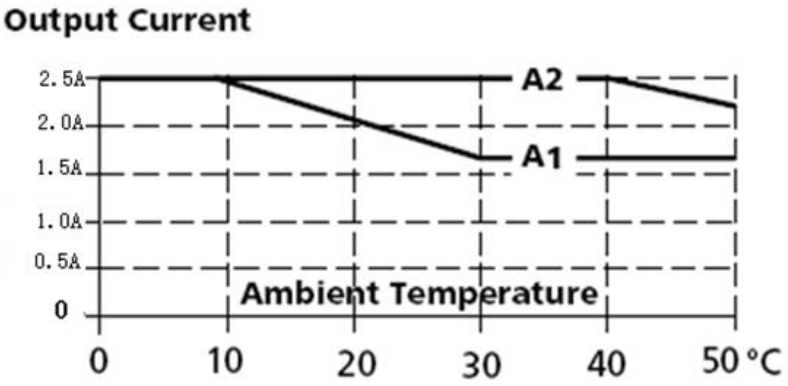
Mounting C:



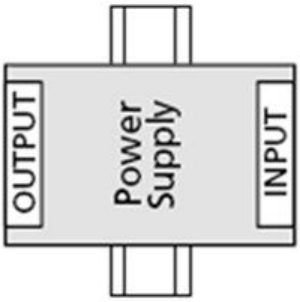


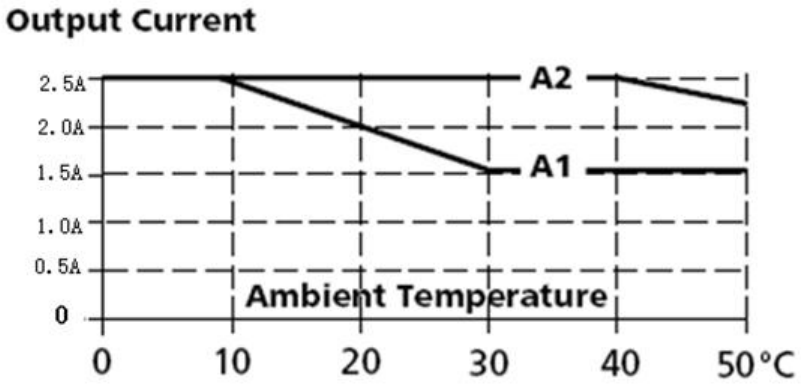
Mounting D:





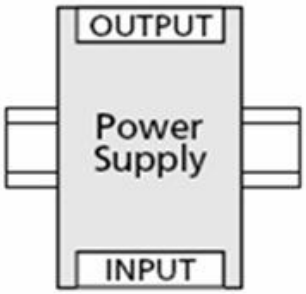
Mounting E:

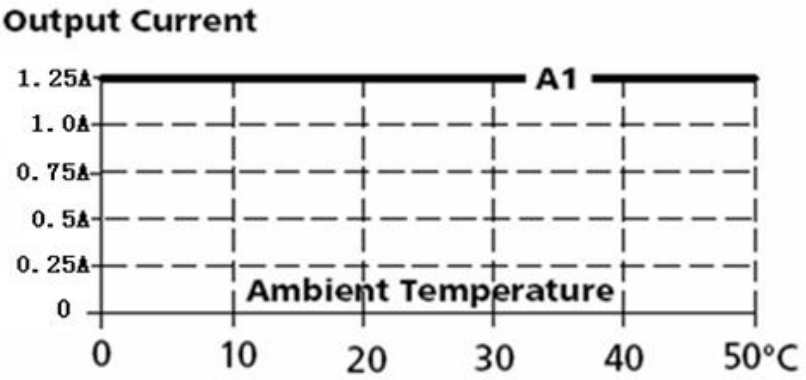




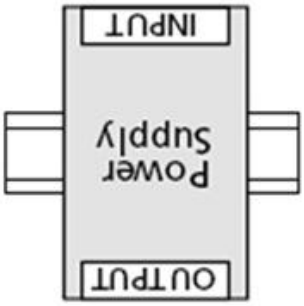
RPS-60-S48:

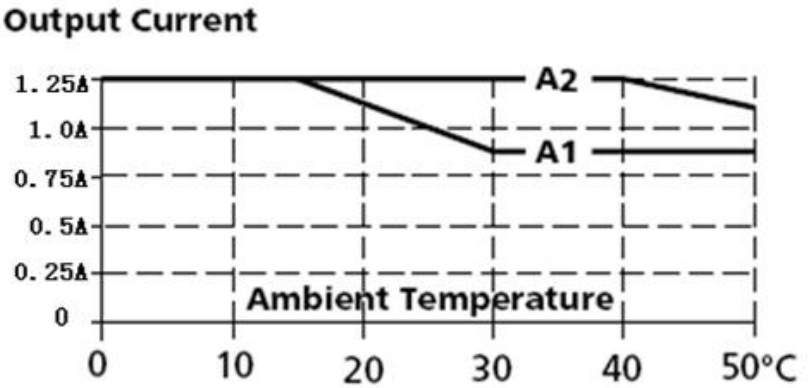
Mounting A:



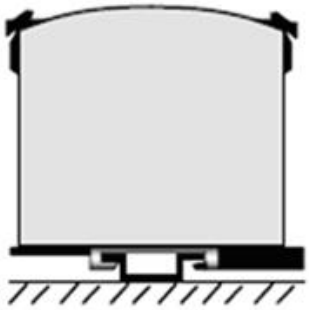


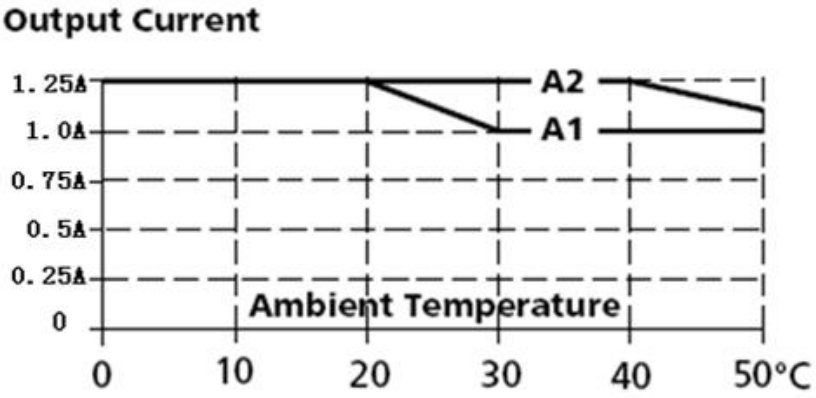
Mounting B:



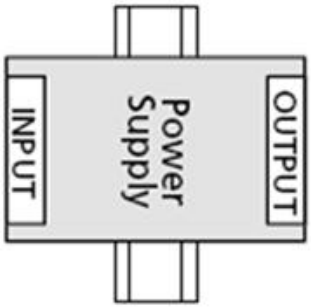


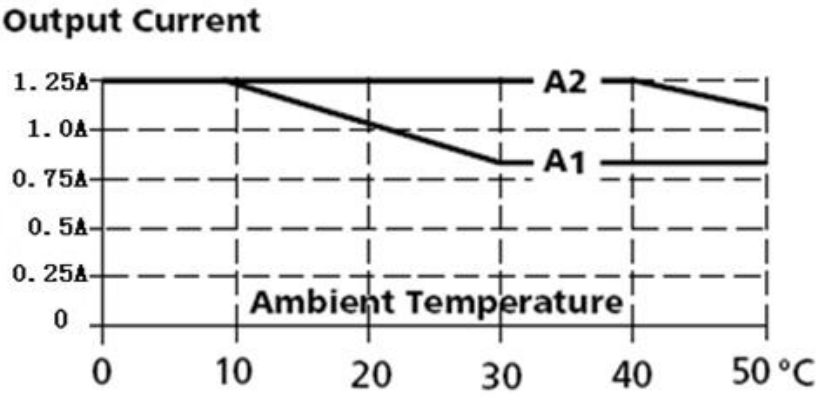
Mounting C:





Mounting D:





Mounting E: