


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 92%
- Built-in current sharing function
- Built-in current limiting circuit
- Output protections: OVP/OLP/SCP/OTP
- Wide operating ambient temp (-25℃~70℃)
- 150%(180W) 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

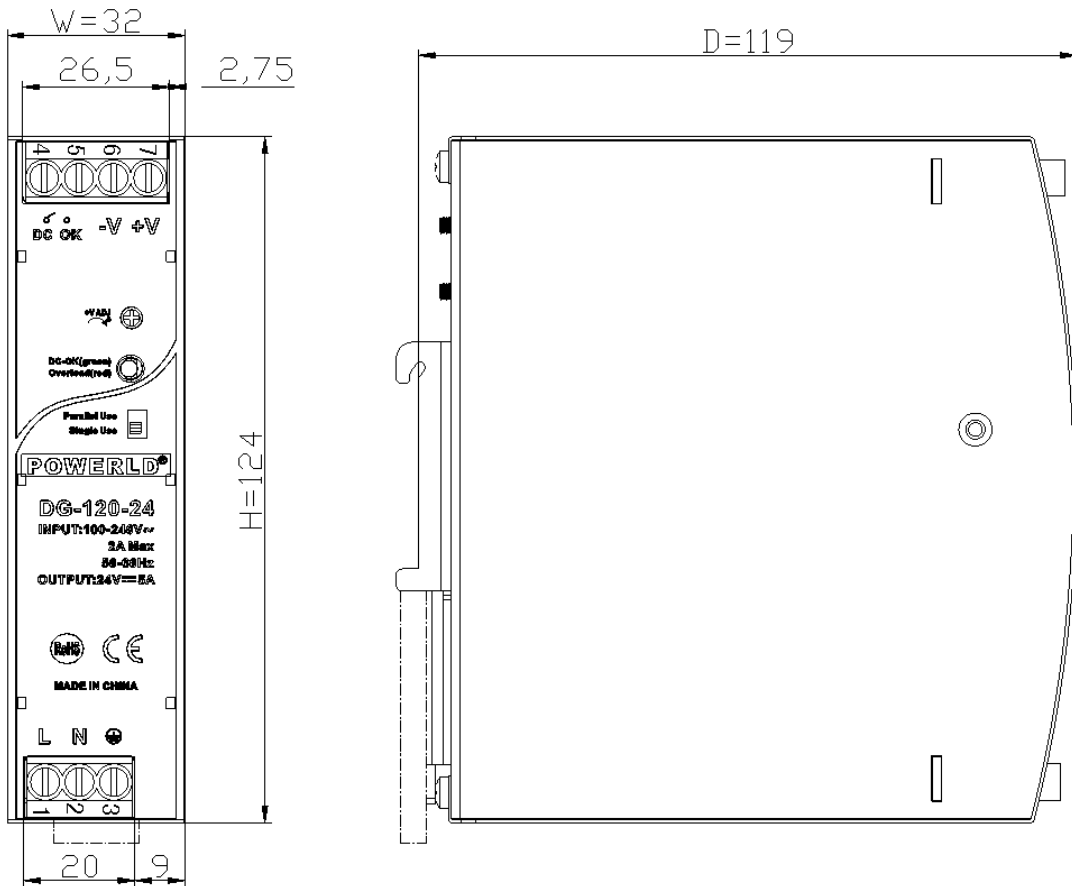

SPECIFICATION

MODEL		DG-120-12	DG-120-24	DG-120-48	
OUTPUT	DC Output	12V	24V	48V	
	Rated Current	10A (pls refer to derating curve)	5A	2.5A	
	Current Range	Note 1 0~10A	0~5A	0~2.5	
	Ripple and Noise	0~70℃	≤100mV	≤120mV	≤240mV
		Note 2 -25℃	≤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%/℃			
	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)	89.5%	91%	92%	
	AC Current (max.)	<1.5 A/100Vac	<0.65A/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 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 voltage	15~18V	29~33V	58~65V	
		Protection type: Hiccup mode, Auto recovery			
	Over temperature	100±5℃, 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℃~70℃; 20%~90%RH No condensing			
	Storage Temp. & Hum.	-40℃~85℃; 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	10M 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℃, Full load)			

	Dimension (L*W*H)	124*119*32mm
	Packing	28pcs/CTN, 18.02Kgs, 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	<p>1. All parameters NOT specially mentioned are measured at rated input, rated load and 25°C of ambient temperature.</p> <p>2. Measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uF & 10uF parallel capacitor.</p> <p>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 http://www.powerld.com.cn.</p>	

Mechanical Specification

Unit: mm


1.AC terminal blocks installation information

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

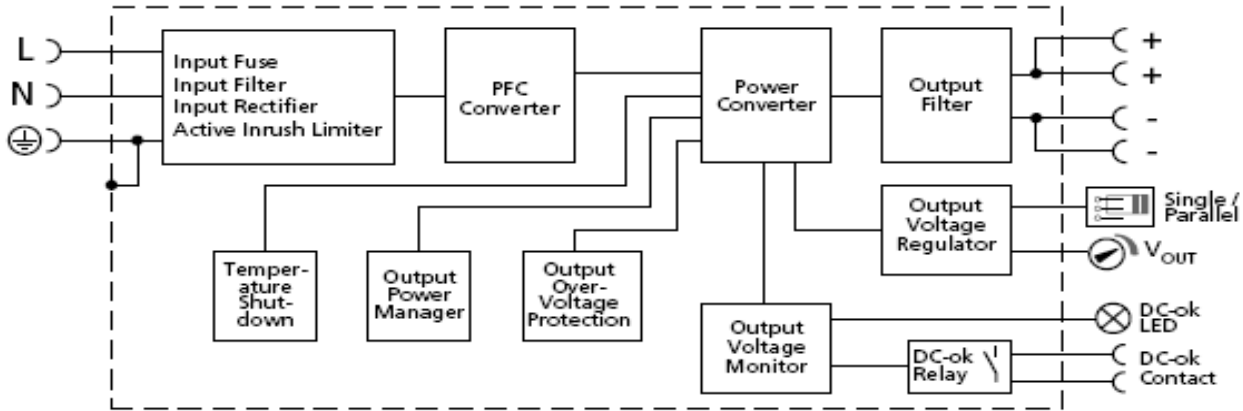
2.DC terminal blocks installation information

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

	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

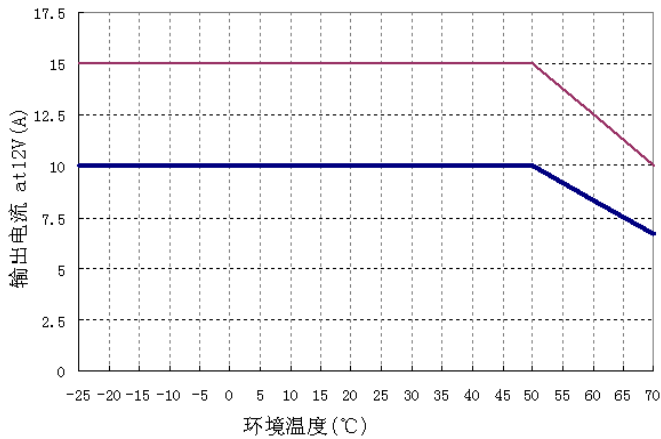
Block Diagram

Fig. 11-1 Functional diagram

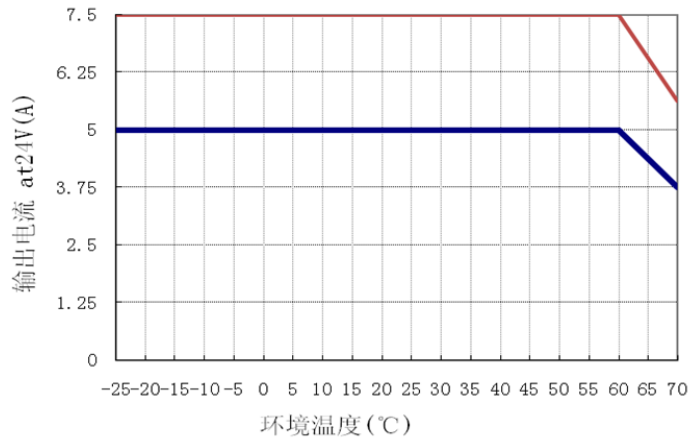


Derating Curve

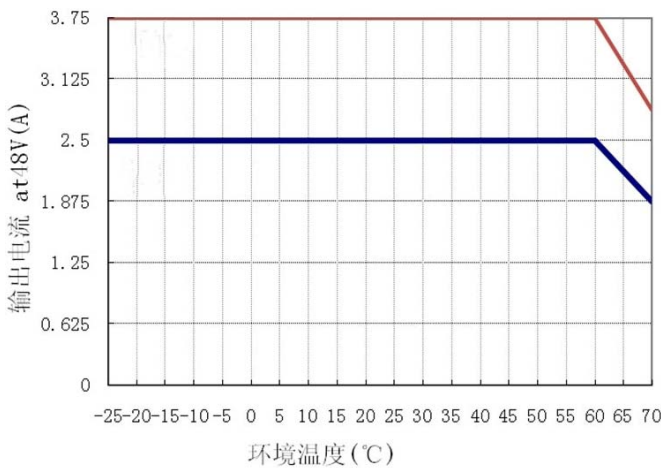
DG-120-12



DG-120-24



DG-120-48:



— (Red line): short time working;
— (Blue line): continual working.

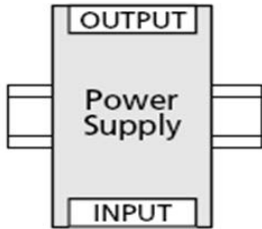
Mounting method instruction

A1 is recommended output current

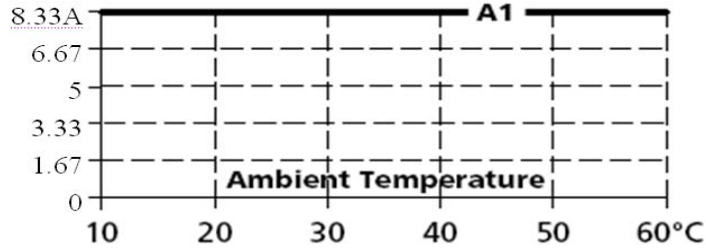
A2 is the allowed max output current (PSU lifetime is around half of A1)

DG-120-12

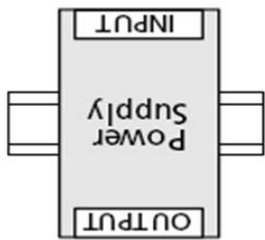
Mounting A



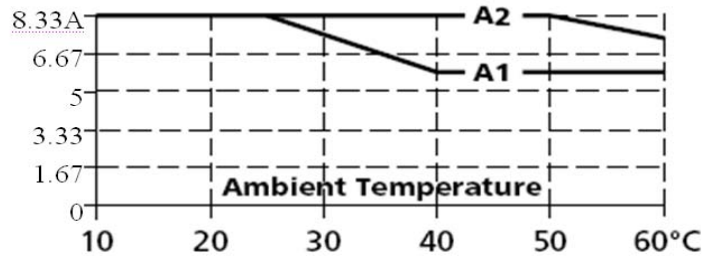
Output Current



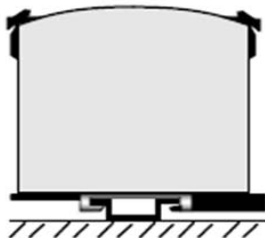
Mounting B



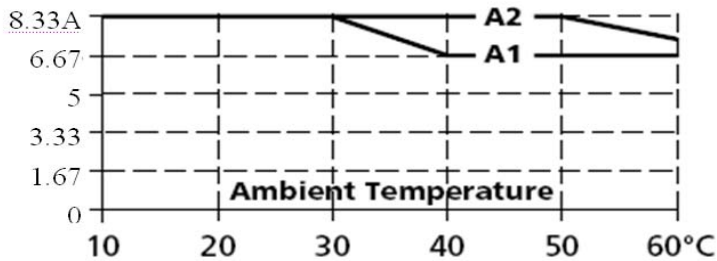
Output Current



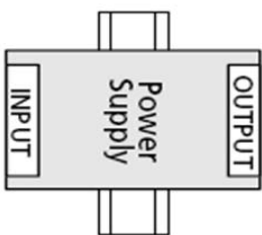
Mounting C



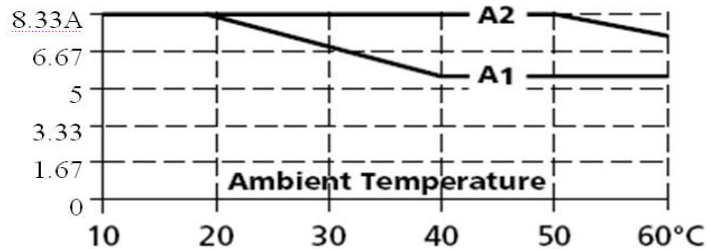
Output Current



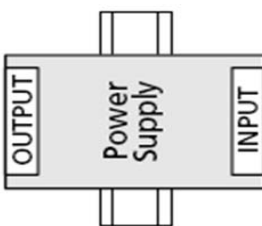
Mounting D



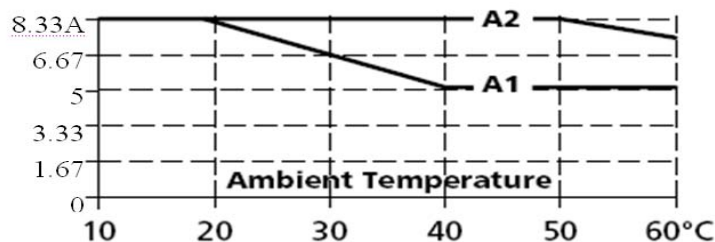
Output Current



Mounting E

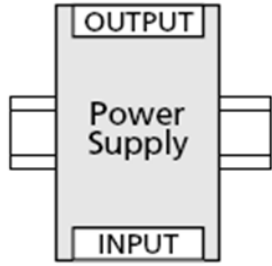


Output Current

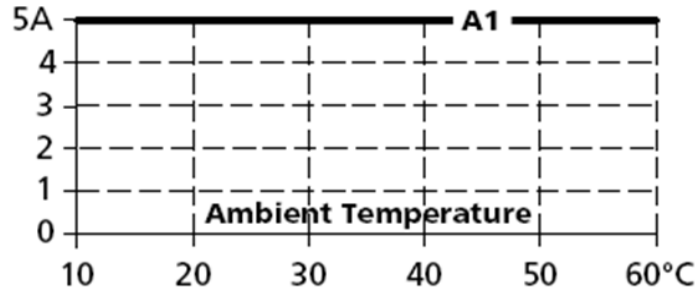


DG-120-24

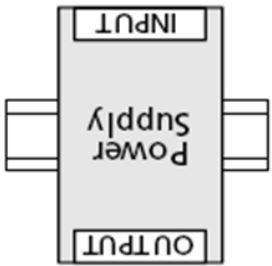
Mounting A



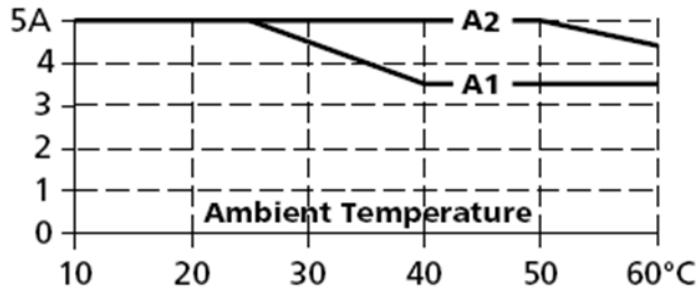
Output Current



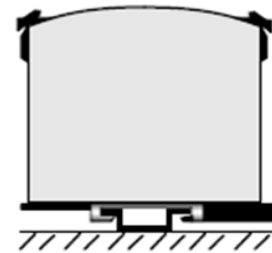
Mounting B



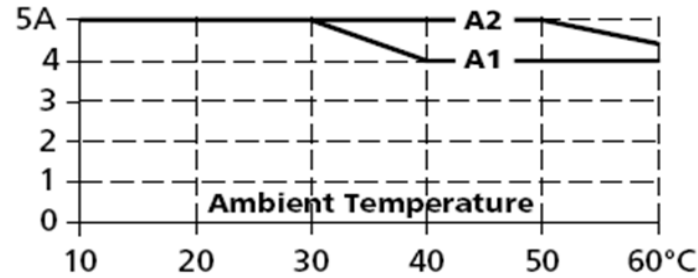
Output Current



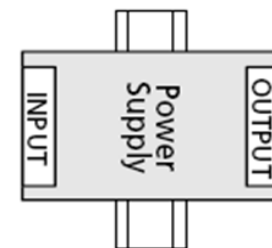
Mounting C



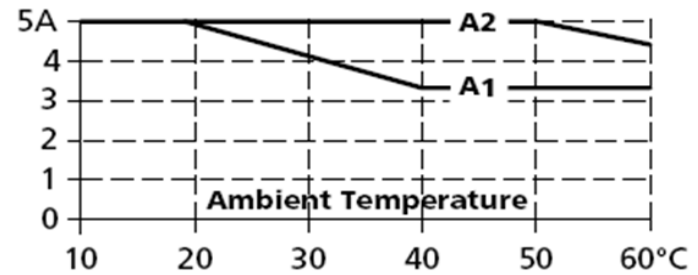
Output Current



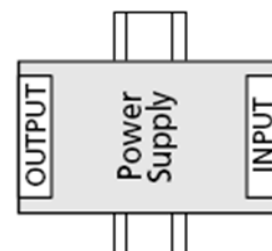
Mounting D



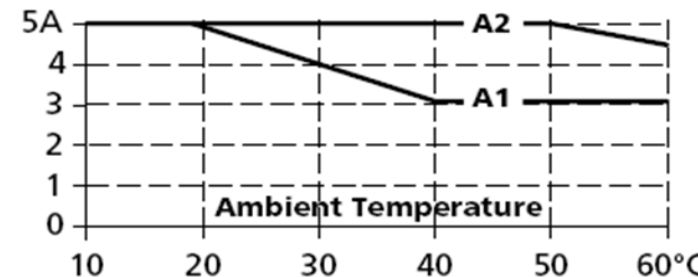
Output Current



Mounting E

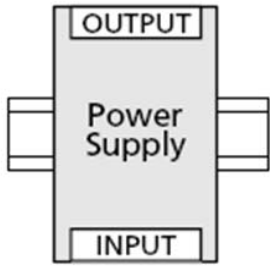


Output Current

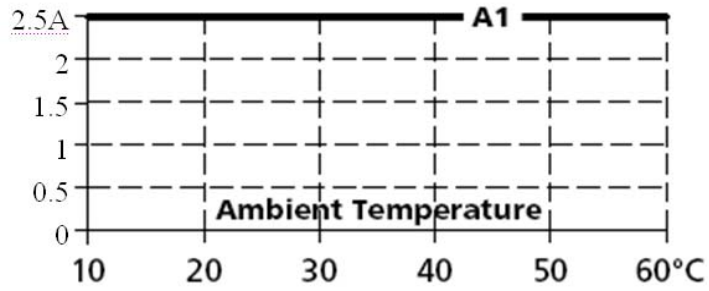


DG-120-48

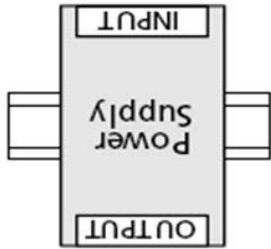
Mounting A



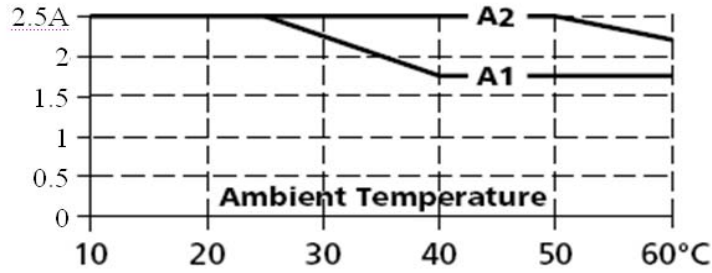
Output Current



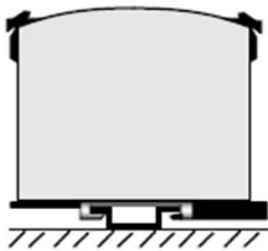
Mounting B



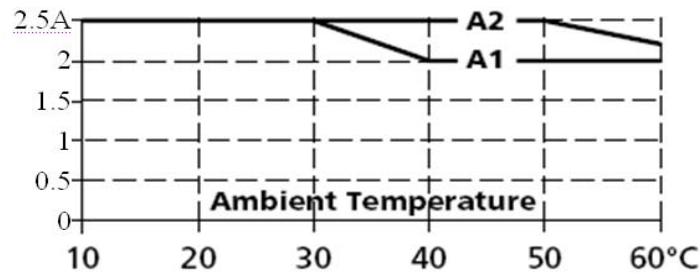
Output Current



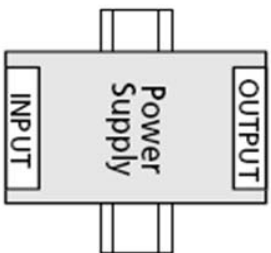
Mounting C



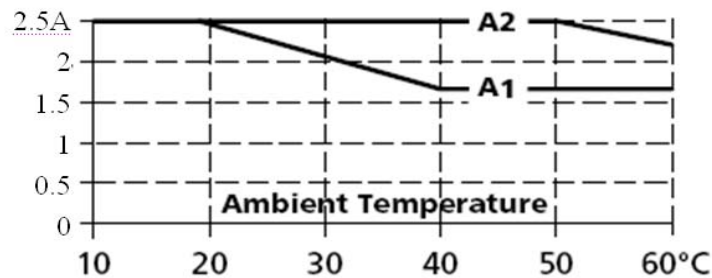
Output Current



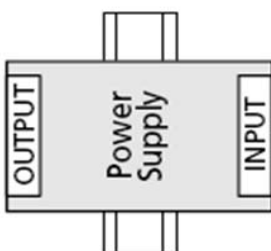
Mounting D



Output Current



Mounting E



Output Current

