


**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 94%
- Built-in current sharing function
- Built-in current limiting circuit
- Output protections: OVP/OLP/SCP/OTP
- Wide operating ambient temp (-25℃~70℃)
- 150%(720W) peak load capacity
- Easy Fuse Tripping due to High Overload Current
- 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,70mm width
- Free air convection
- 3 years warranty

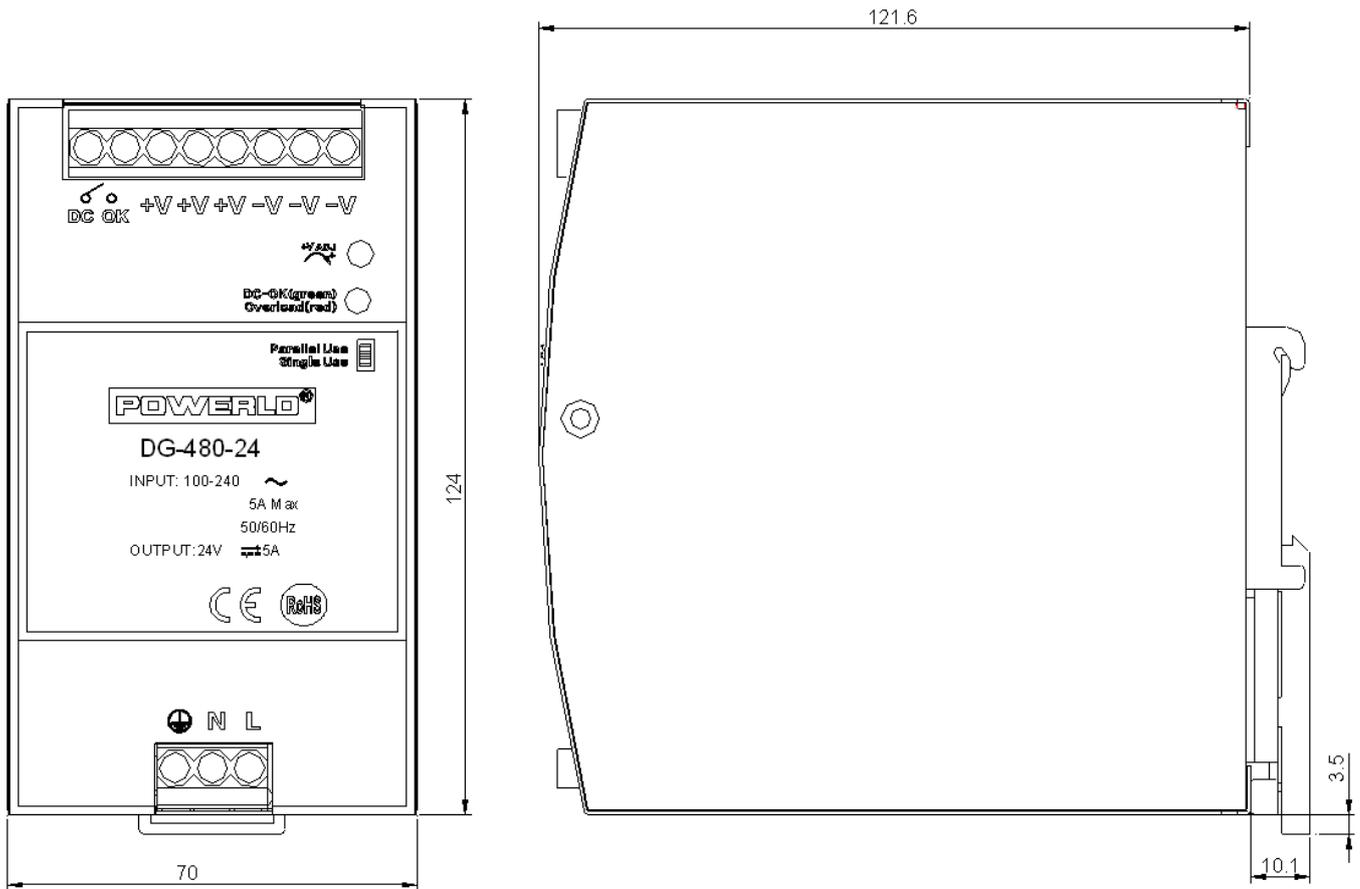

**SPECIFICATION**

MODEL	DG-480-24	DG-480-48		
OUTPUT	DC Output	24V	48V	
	Rated Current	20A	10A	
	Current Range	Note 1 0~20A	0~10A	
	Ripple and Noise	0~70℃	≤240mV	≤480mV
		Note 2 -25℃	≤480mV	≤480mV
	Voltage ADJ. Range	24~28V	48~56V	
	Voltage Accuracy	±3.0%		
	Line Regulation	±0.5%		
	Load Regulation	±1.0%		
	Set-up Time	<3S@230Vac		
	Hold up Time	≥20mS(230Vac input, Full load)		
	Temperature Coefficient	±0.03%/℃		
	Overshoot and Undershoot	<5.0%		
INPUT	Voltage Range	85Vac~264Vac, 130Vdc-350Vdc		
	Frequency Range	47Hz~63Hz		
	Power Factor (typical)	0.99/110Vac	0.95/230Vac	
	Efficiency ( Typical)	93.8%	93.8%	
	AC Current (max.)	<7.0 A/100Vac	<3.5A/230Vac	
	Inrush Current (Typical)	<20A/110Vac	<40A/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	28.8~33V, constant voltage, Auto recovery	58~63V, constant voltage, Auto recovery	
	Over temperature	115±5℃, detect on temperature controller; 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/20mA. Output-DC OK: 0.5KVac/1mA		
	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)	70*124*127mm
	Packing	10pcs/CTN, 13Kgs/CTN, 0.04cbm
	Cooling method	Cooling by free air convection
Additional function	Power boost	150% of rated current
	Parallel function	support
	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	
NOTE	<p>1. All parameters NOT specially mentioned are measured at rated input, rated load and 25℃ of ambient temperature.</p> <p>2. Measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uF &amp; 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 <a href="http://www.powerld.com.cn">http://www.powerld.com.cn</a>.</p>	

**Mechanical Specification**

Unit: mm



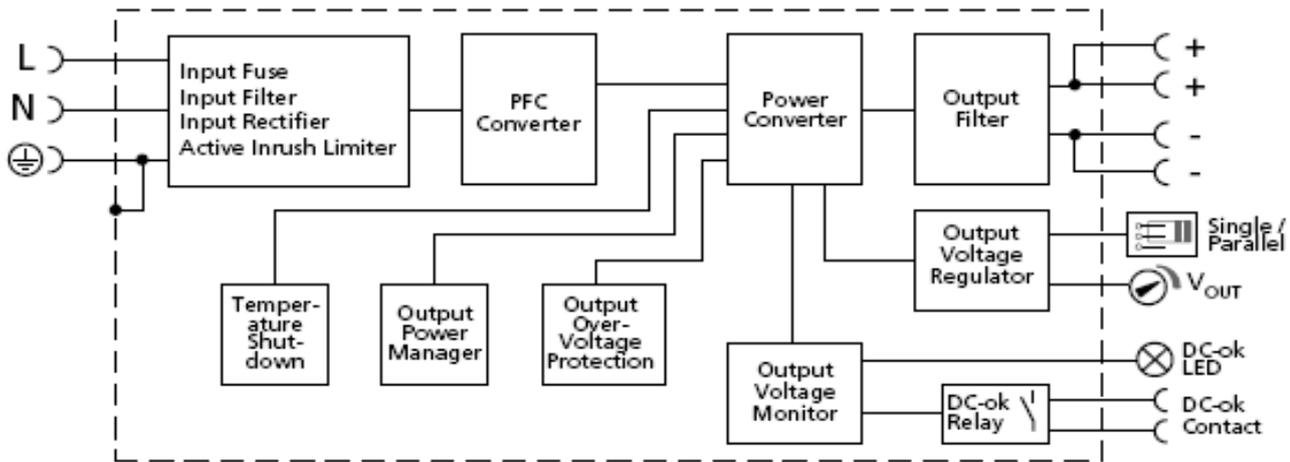
1.AC terminal blocks installation information		
Terminal No.	Function	Specs
1	PG	6.35mm, 3pin screw terminal blocks
2	N	
3	L	

2.DC terminal blocks installation information		
Terminal No.	Function	Specs
1	DC	6.35mm, 3pin screw terminal blocks
2	OK	
3~5	V+	
6~8	V-	

	AC/DC Terminal
Type	Screw terminal blocks
Solid Wire	0.5-6mm <sup>2</sup>
Strand Wire	0.5-4mm <sup>2</sup>
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**

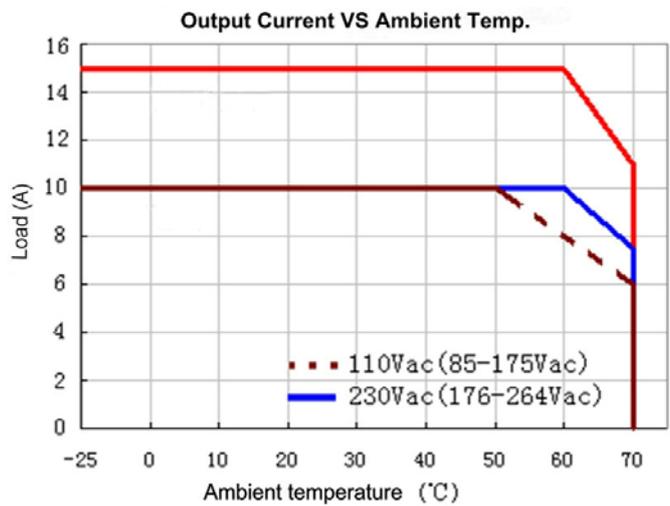
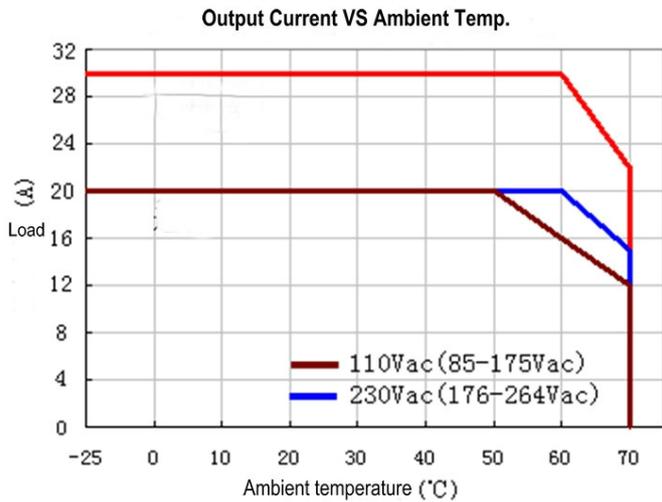
Fig. 11-1 **Functional diagram**



■ **Derating Curve**

DG-480-24

DG-480-48



- short time working, 3S
- continuous working

■ **Mounting method instruction**

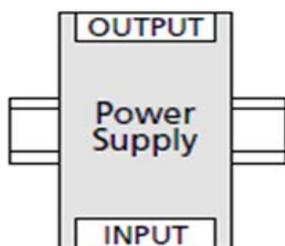
A1 is recommended output current

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

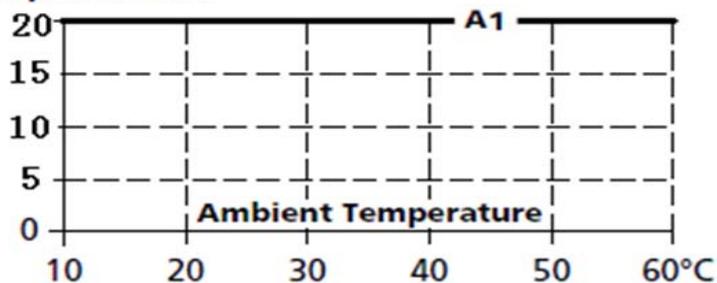
Below curves are tested under 230Vac(179~264Vac), when 110Vac input(85~175Vac), all derating points drops 10°C

DG-480-24

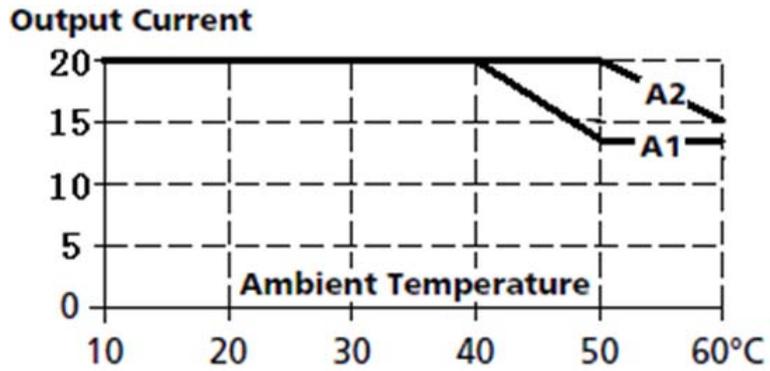
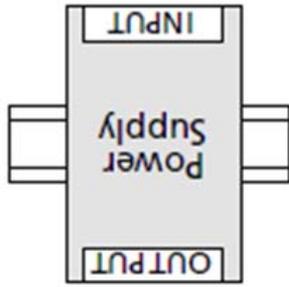
Mounting A



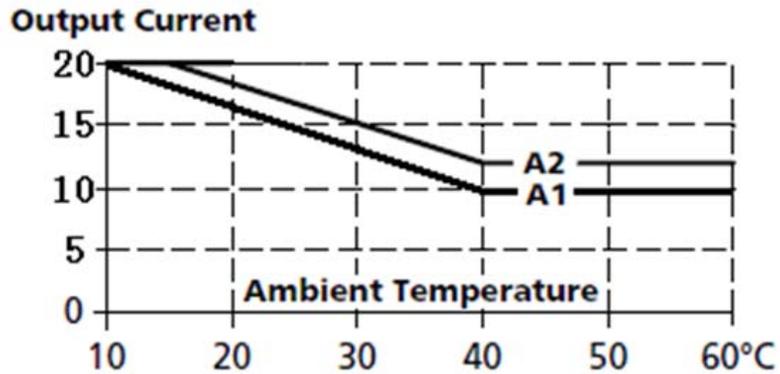
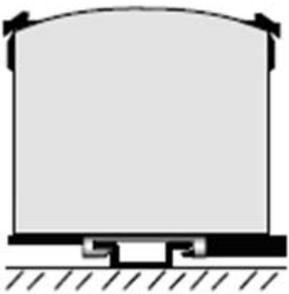
**Output Current**



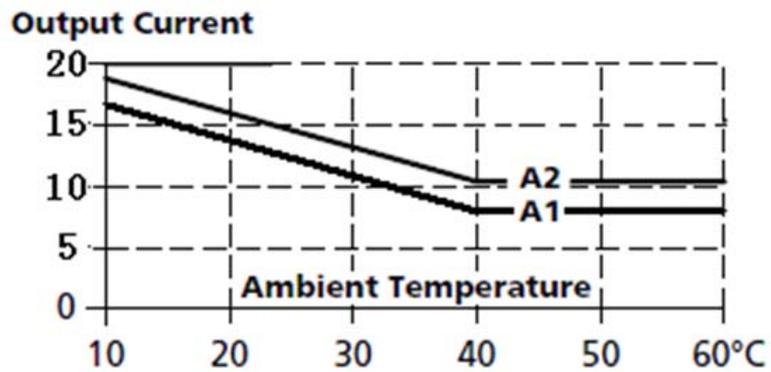
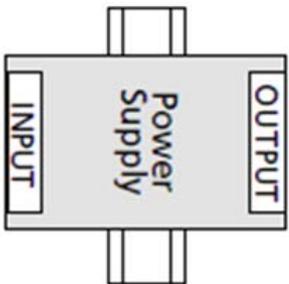
Mounting B



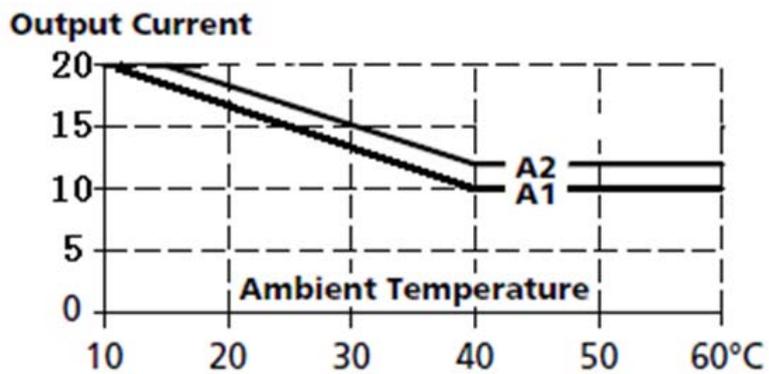
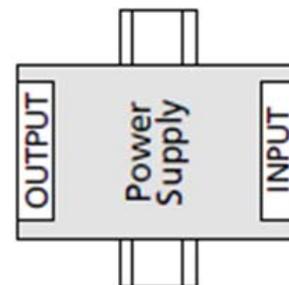
Mounting C



Mounting D

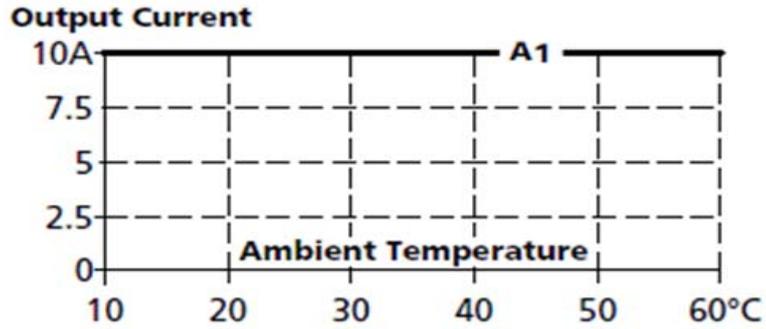
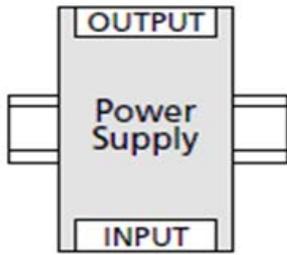


Mounting E

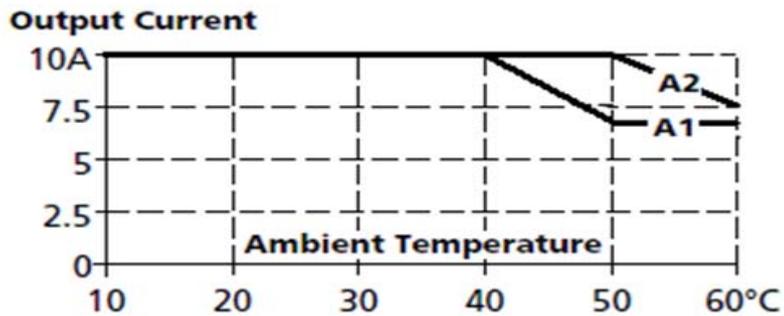
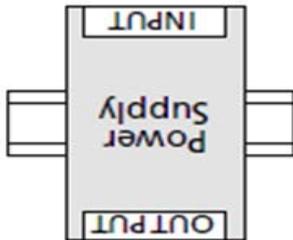


DG-480-48

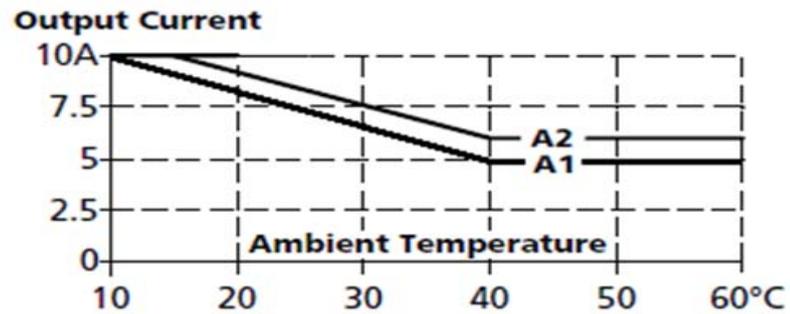
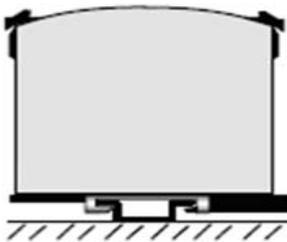
Mounting A



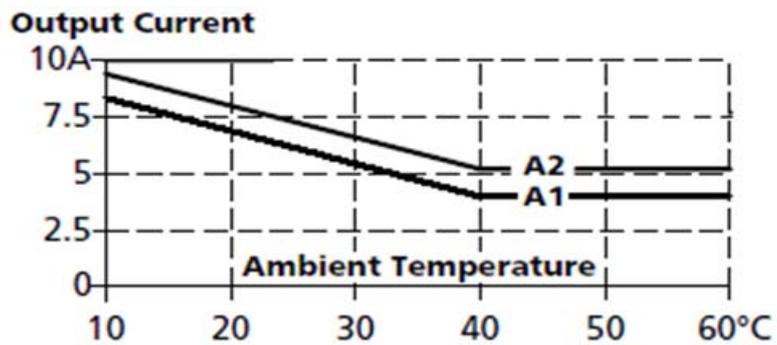
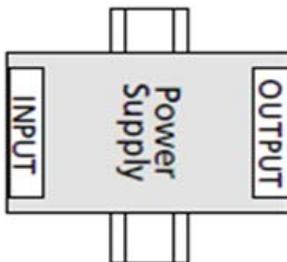
Mounting B



Mounting C



Mounting D



Mounting E

