

480Watts Single Output Industrial DIN Rail Power Supply

IT-DIN-480 Series



FEATURES

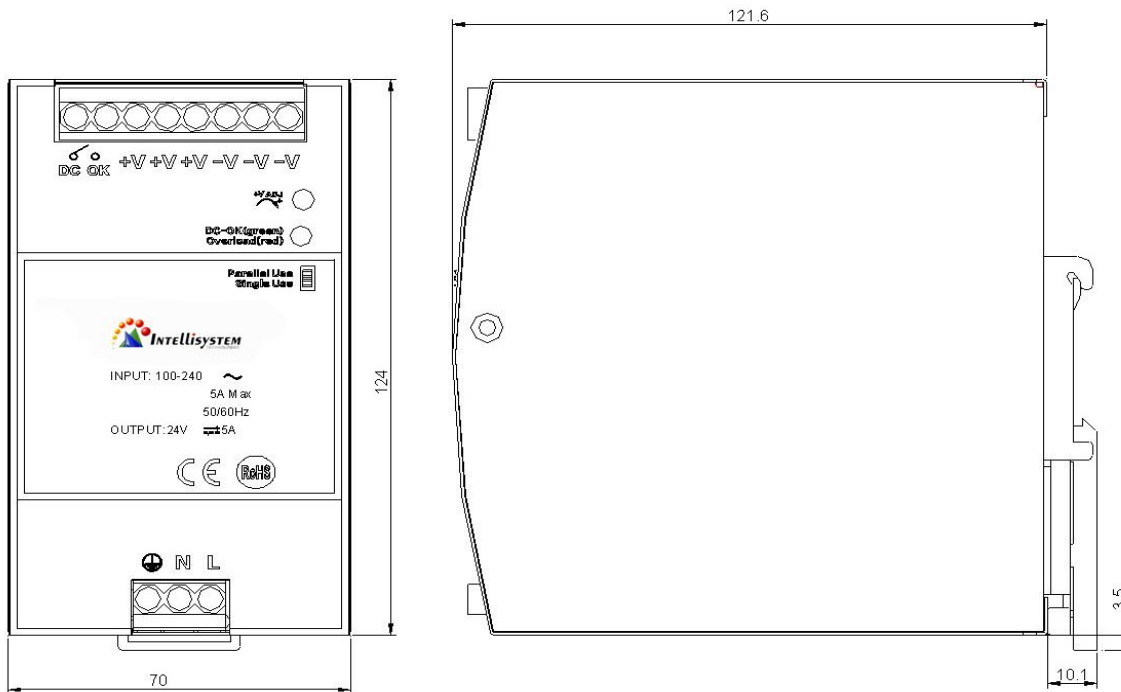
- Universal AC input range(85~264Vac)
- Support 1+1 or N+1 redundant system (suggest to use redundancy modules.)
- Built-in active PFC,PF>0.95
- High efficiency up to 94%
- Built-in current sharing function
- Built-in current limiting circuit
- Output protections: OVP/OLP/SCP/OTP
- Wide operating ambient temp (-25°C~70°C)
- 150%(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		IT-DIN-480-24	IT-DIN-480-48	
OUTPUT	DC Output	24V	48V	
	Rated Current	6A	10A	
	Current Range Note 1	0~20A 0~6A	0~10A	
	Ripple and Noise Note 2	0~70°C	≤240mV	≤480mV
		-25°C	≤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%/°C		
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.)	<6.0 A/100Vac	<3.0A/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°C, 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°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/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°C, 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		

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	

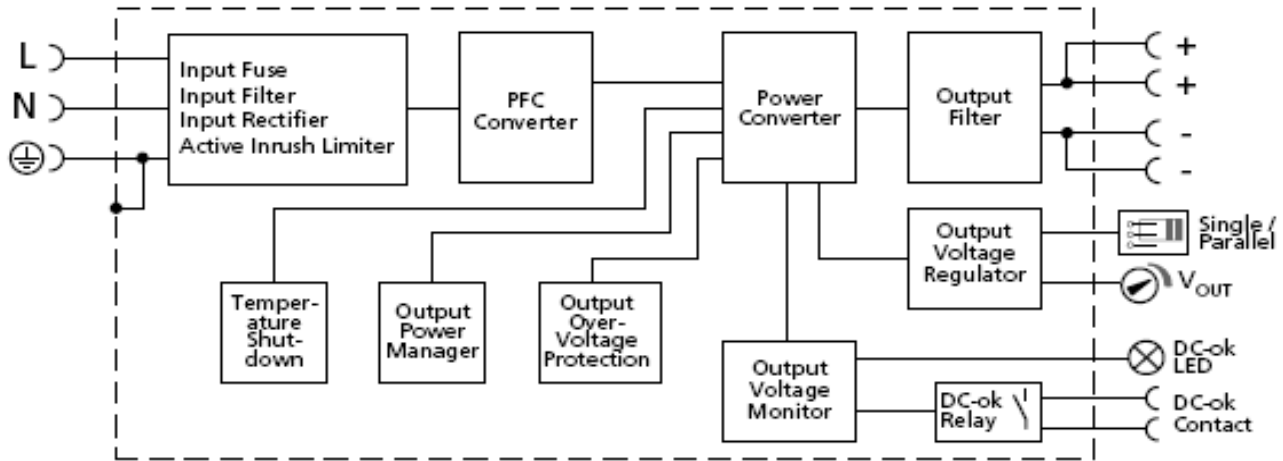
2.DC terminal blocks installation information

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

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

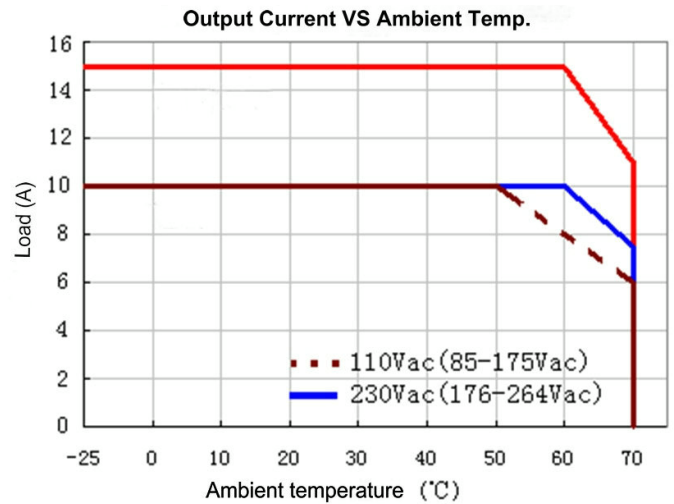
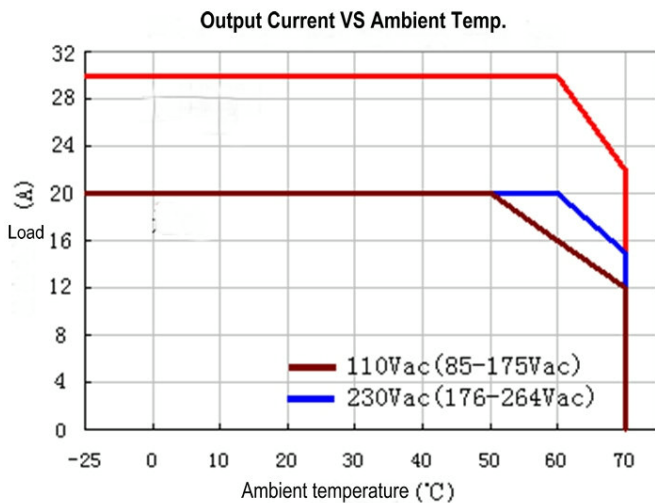
■ Block Diagram

Fig. 11-1 **Functional diagram**



■ Derating Curve

IT-DIN-480-24:



- short time working, 3S
- continuous working

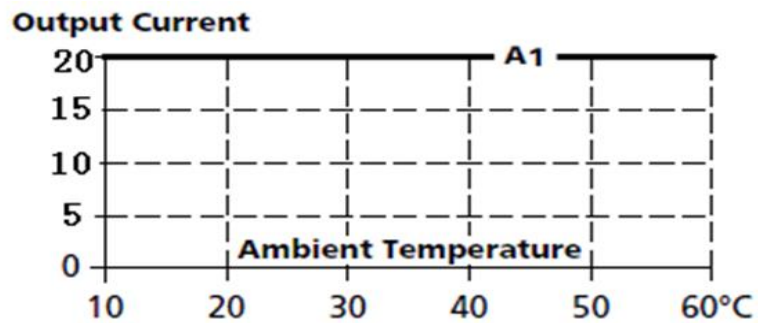
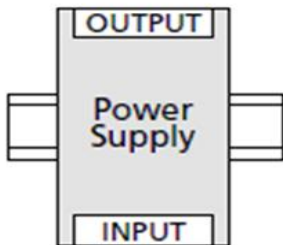
■ Mounting method instruction

A1 is recommended output current

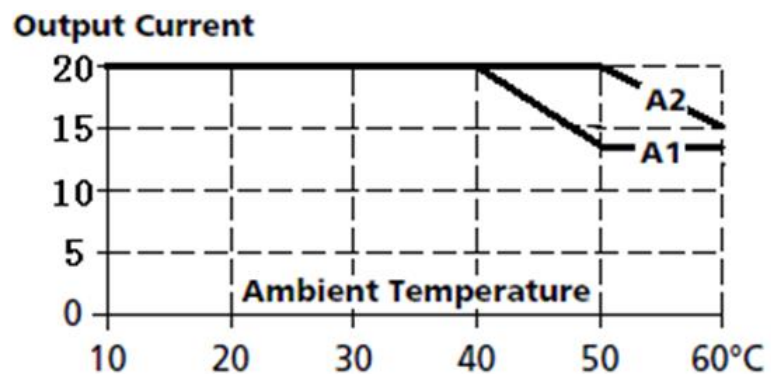
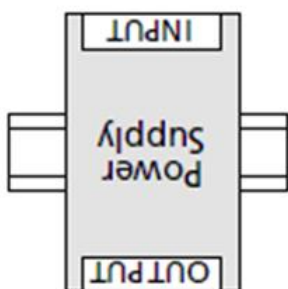
A2 is the allowed max output current (PSU lifetime is around half of A1)

IT-DIN-480-24:

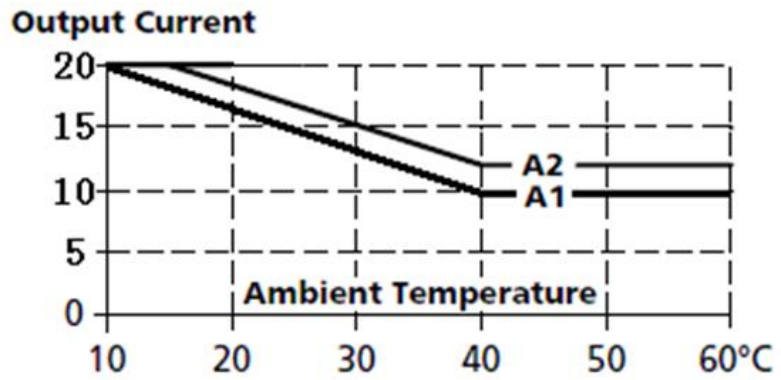
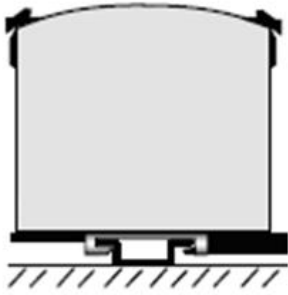
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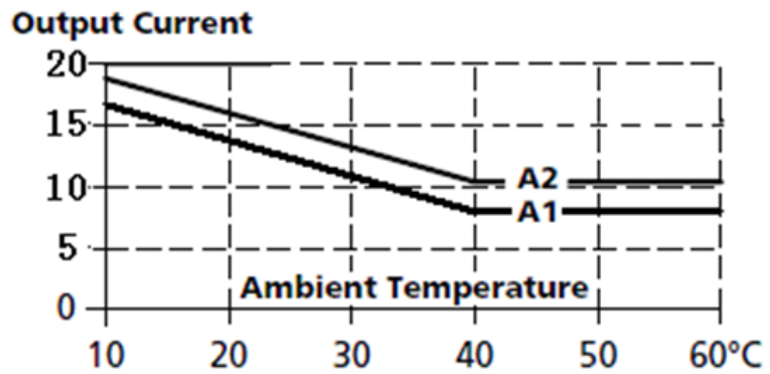
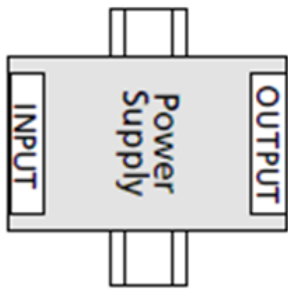
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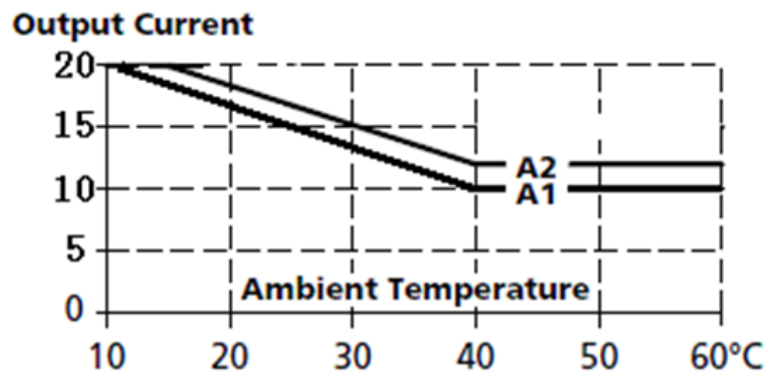
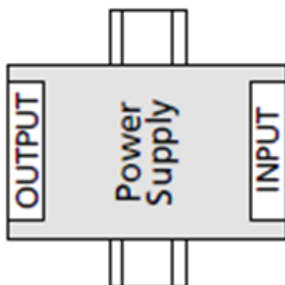
Mounting C:

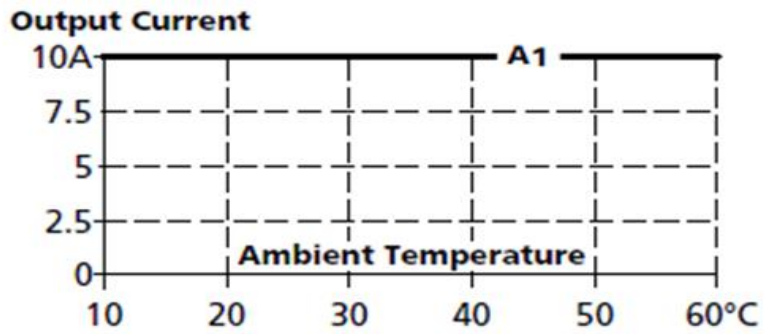
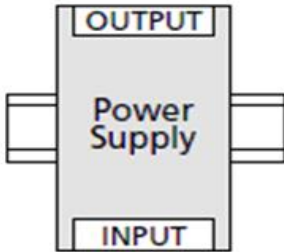
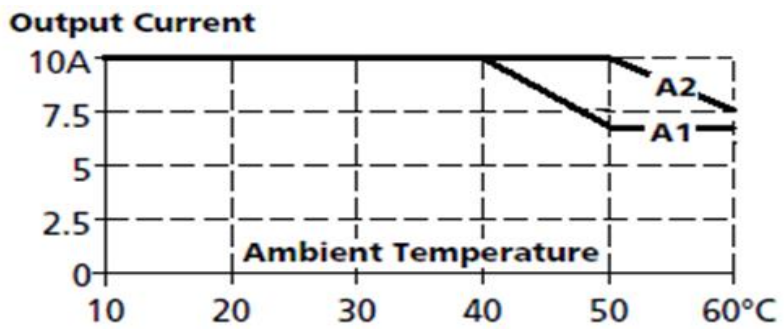
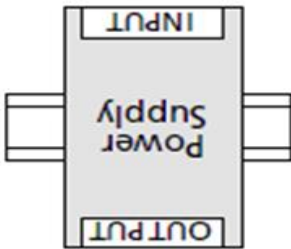
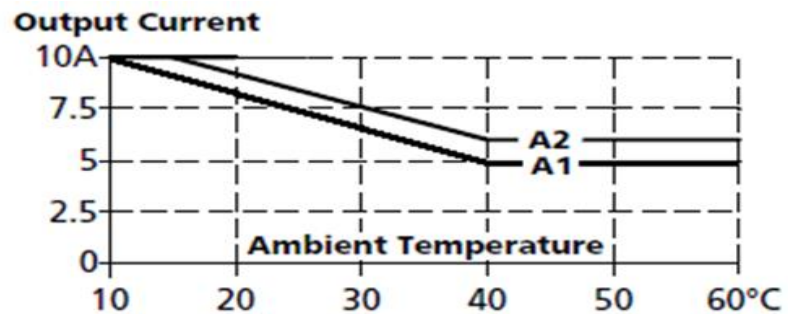


Mounting D:

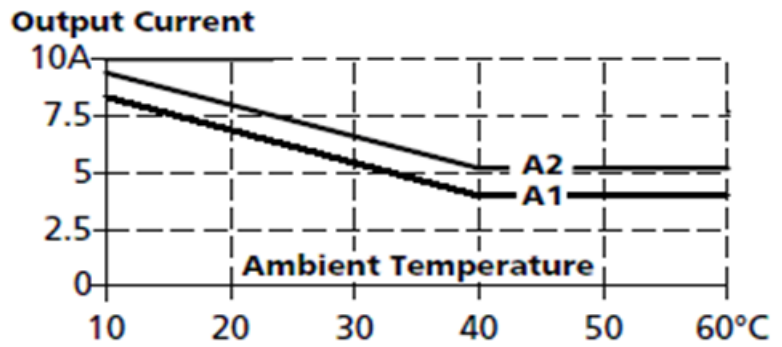
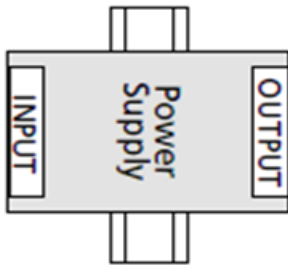


Mounting E:

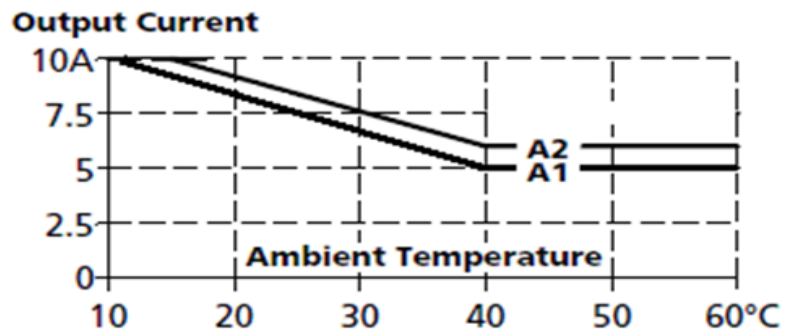
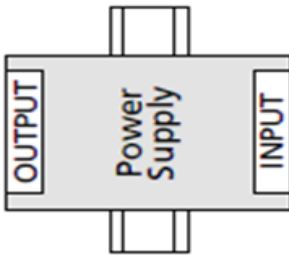


IT-DIN-480-48:
Mounting A:

Mounting B

Mounting C


Mounting D



Mounting E



Disclaimer

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