

# 240Watts Single Output Industrial DIN Rail Power Supply

## IT-DIN-240S Series



### FEATURES

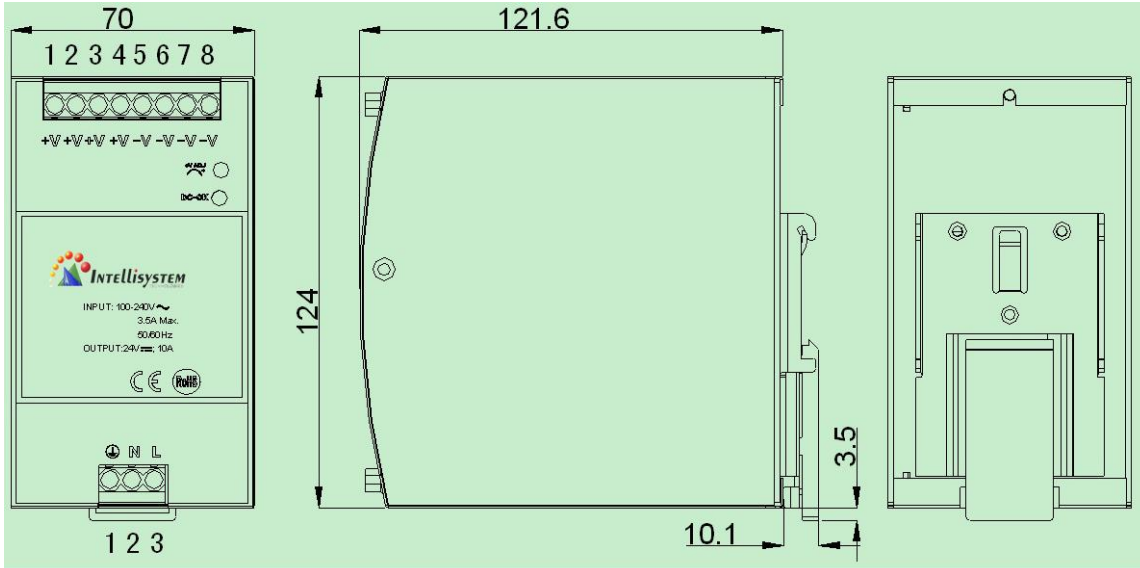
- Universal AC input range(90~264Vac)
- Built-in active PFC,PF>0.94
- High efficiency up to 87%
- Built-in current limiting circuit
- Output protections: OVP/OLP/SCP/OTP
- Wide operating ambient temp (-20°C~70°C)
- Can be installed on TS-35/7.5 or TS-35/15
- 100% full load burn-in test
- PCB soldering side with conformal coating
- Suitable for critical applications
- Altitude up to 6000m
- Ultra-slim,70mm width
- Cooling by free air convection
- 2 years warranty

## SPECIFICATION

MODEL		IT-DIN-240S-24	IT-DIN-240S-48	
OUTPUT	DC Output	24V	48V	
	Rated Current	10A	5A	
	Current Range      Note 1	0~10A	0~5A	
	Ripple and Noise Note 2	0~70°C	≤120mV	≤240mV
		-20°C	≤240mV	≤480mV
	Voltage ADJ.    Range	24~28V	48~56V	
	Voltage Accuracy	±1.0%		
	Line Regulation	±0.5%		
	Load Regulation	±1.0%		
	Set-up Time	<2S@230Vac		
	Hold up Time	≥20mS@230Vac	Full load	
	Temperature Coefficient	±0.03%/°C		
Overshoot and Undershoot	<5.0%			
INPUT	Voltage Range	90Vac~264Vac, 127Vdc-370Vdc		
	Frequency Range	47Hz~63Hz		
	Efficiency ( Typical) @ 230Vac	87%	88%	
	AC Current (max.)	<3A/115Vac ; <2.5 A/230Vac	<3.5A /115Vac; <2.5A /230Vac	
	Inrush Current (Typical)	<30A/115Vac; <60A/230Vac    Cold start		
	Power Factor	0.98/110VAC,    0.94/230VAC		
	Leakage Current	Input—output:<0.25mA	Input—PG:<3.5mA (264Vac input, 63Hz)	
PROTECTION	Over Load	10.3~11.5A	5.5~6.5A	
		Protection type: Constant current		
	Over voltage	28~35V	58~63V	
		Protection type: Shut down, auto recovery		
	Over temperature	100±5°C, detect on heat sink of power transistor; shut down O/P, auto recovery after fault condition removed.		
Short Circuit	Long-term mode, auto recovery			
Operating amb. Temp. & Hum.	-20°C~70°C; 20%~90%RH    No condensing (pls refer to derating curve)			
ENVIRONMENT	Storage Temp. & Hum.	-40°C~85°C; 5%~95%RH    No condensing		
	Safety Standards	UL508, UL60950, EN60950		
SAFETY & EMC Note 3	Withstand Voltage	Primary-Secondary: 3.0KVac/10mA .Primary-PG: 1.5KVac/10mA. Secondary-		
	Isolation Resistance	100M 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		
	MTBF (MIL-HDBK-217F)	More than 300,000Hrs (25°C, Full load)		
OTHERS	Dimension (L*W*H)	70*124*127mm		
	Packing	10pcs/CTN, 11.5Kgs,0.04cbm		
	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

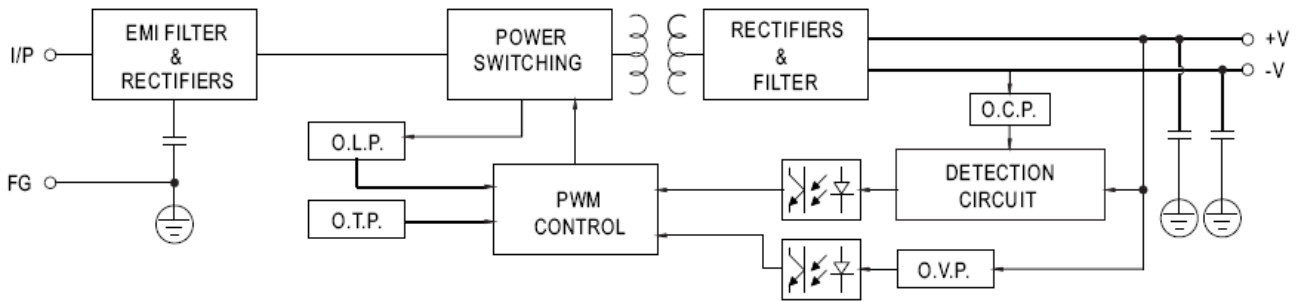
No.	Function	Terminal block specs
1	PE	6.35mm, 3PIN screw connector
2	N	
3	L	

### 2.DC Screw terminal information

No.	Function	Terminal block specs
1~4	V+	6.35mm, 6PIN screw connector
5~8	V-	

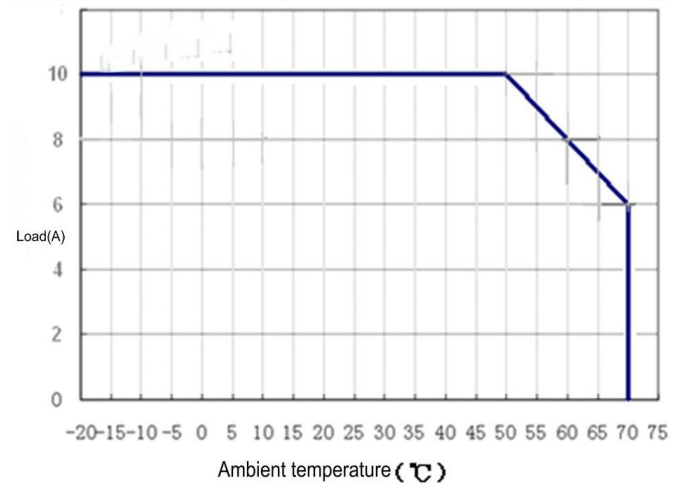
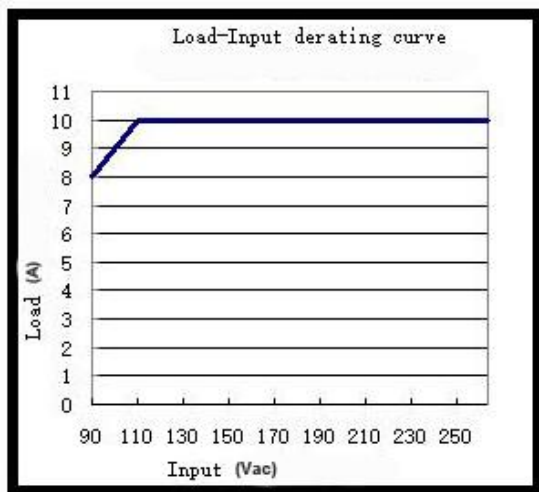
	AC/DC Terminal blocks
Type	Screw terminal blocks
Solid Wire	0.5-6mm <sup>2</sup>
Strand Wire	0.5-4mm <sup>2</sup>
Wire Spec	AWG20-10
Max Wire Diameter	2.8mm
Recommended stripping length	7mm
Screwdriver	3.5mm Straight or Cross Screwdriver
Recommended Torque	1NM

## ■ Block Diagram

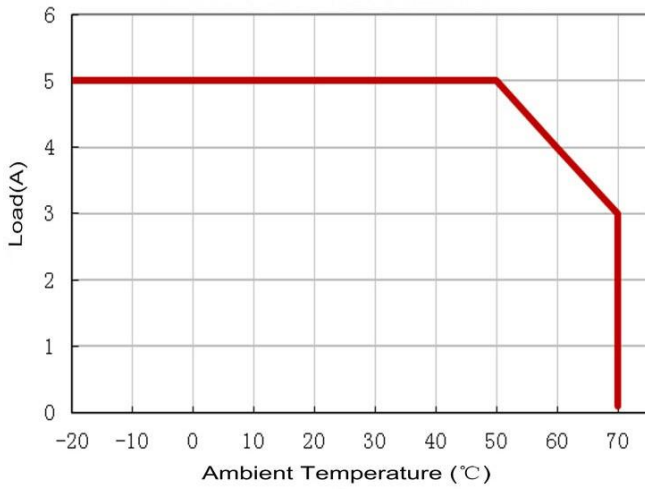


## ■ Derating Curve

### IT-DIN-240S-24:



### IT-DIN-240S-48:



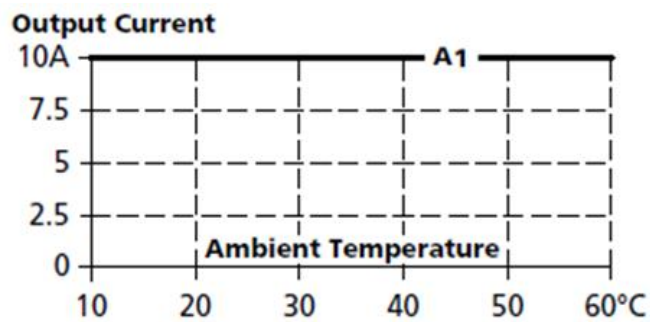
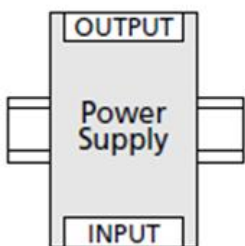
#### ■ Mounting method instruction

A1 is recommended output current

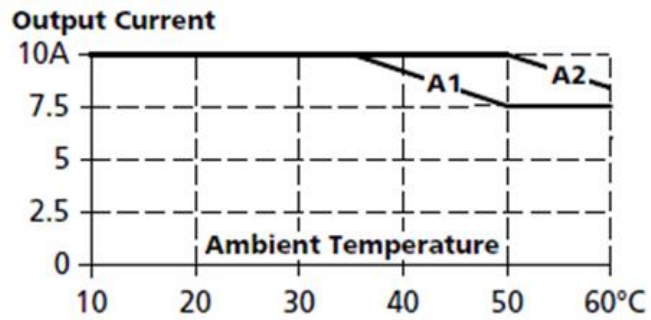
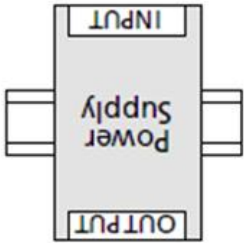
A2 is the allowed max output current (PSU lifetime is around half of A1)

### IT-DIN-240S-24:

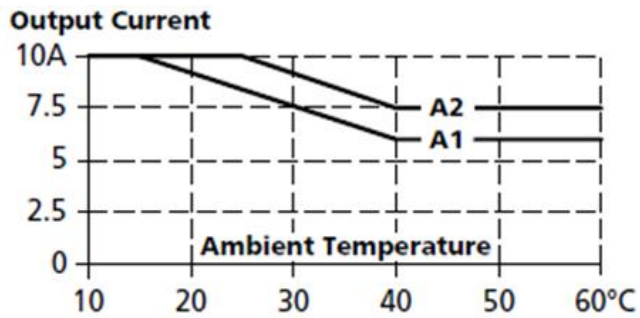
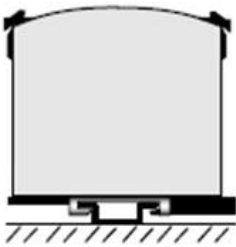
#### Mounting A:



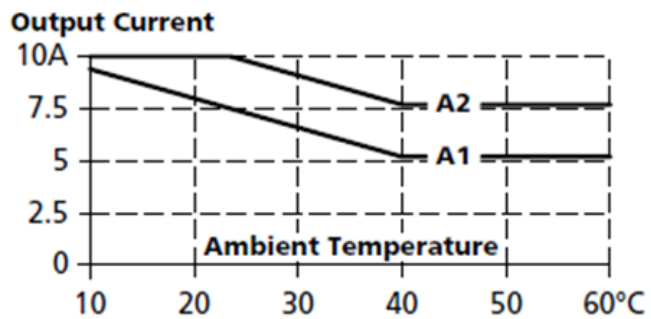
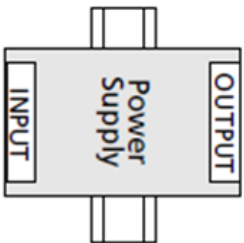
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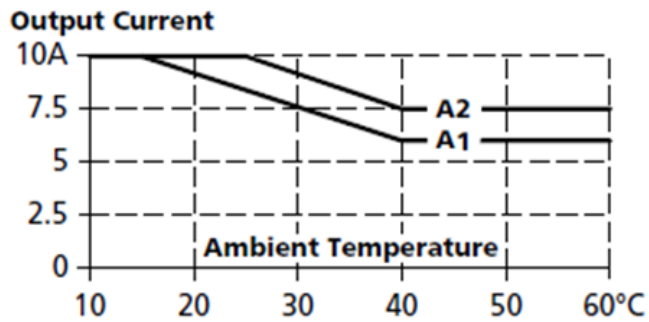
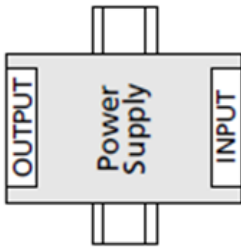
### Mounting C:



### Mounting D:

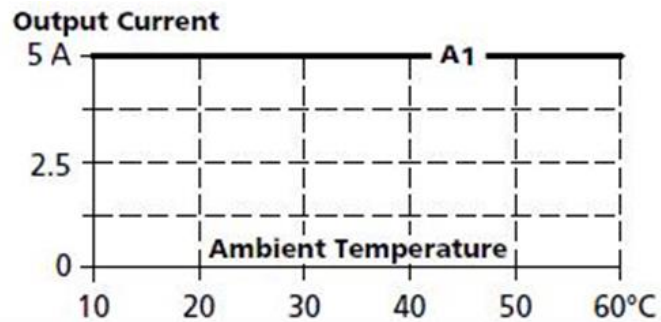
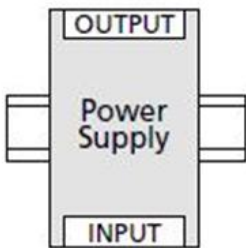


### Mounting E:

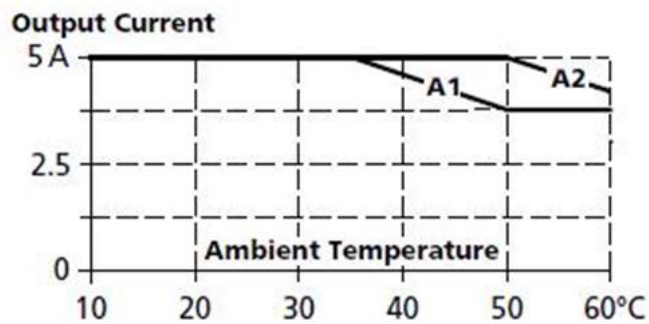
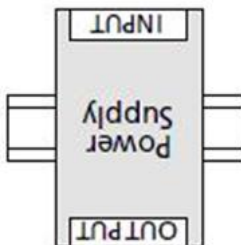


### IT-DIN-240S-48:

### Mounting A:

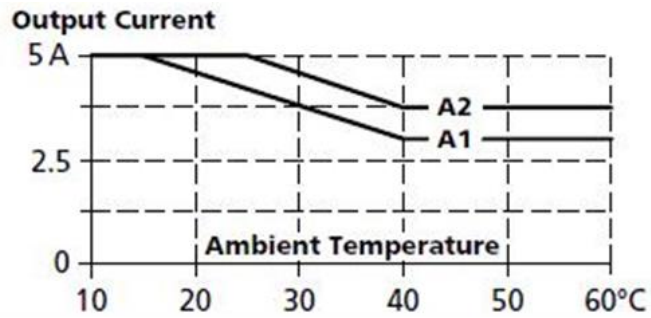
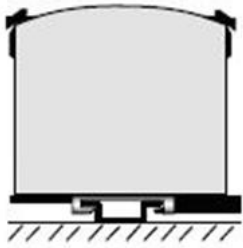


### Mounting B

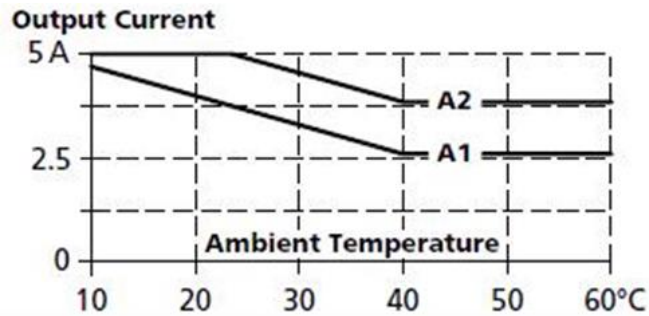
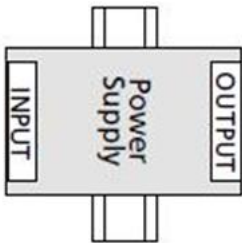




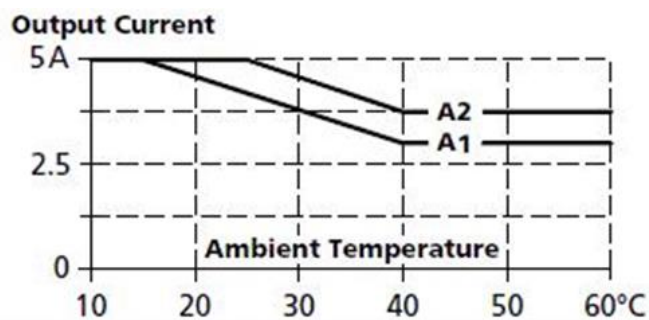
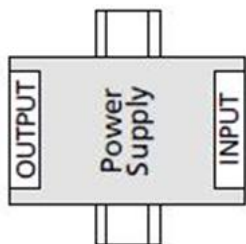
### Mounting C



### Mounting D



### Mounting E



## Disclaimer

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