Zhitao Group
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Industria Din rail power supply

Product Specifications

SDR-240

- Product Category:240W Single Output Din Rail Power Supply
- Version No.:ZTAO3.0
- Release date: 1st May 2025

product overview

SDR-240-XX series products for a 240W rail industrial power supply, the whole series of products with a wide range of voltage AC and DC input, output voltage, including 24V/36V/48V, etc., can be adapted to different load applicati on requirements to meet the needs of most industrial applications, high convers ion efficiency, compact housing design, good heat dissipation, and a full range of protection to ensure that this series of products of high reliability and high stability. Stability.

Model encoding

SDR - 240 xx

- xx: Output voltage
- 240: Rated power
- SDR: Series name

product characteristics

- International full range AC input
- Mounting rail: TS35/7.5 or 15
- Type of protection: short circuit/overload/overvoltage natural
- air-cooled
- Built-in DC OK relay contact power start LED indicator
- 100% full load burn-in test
- 3-year warranty

CE FC RoHS ISO ISO9001

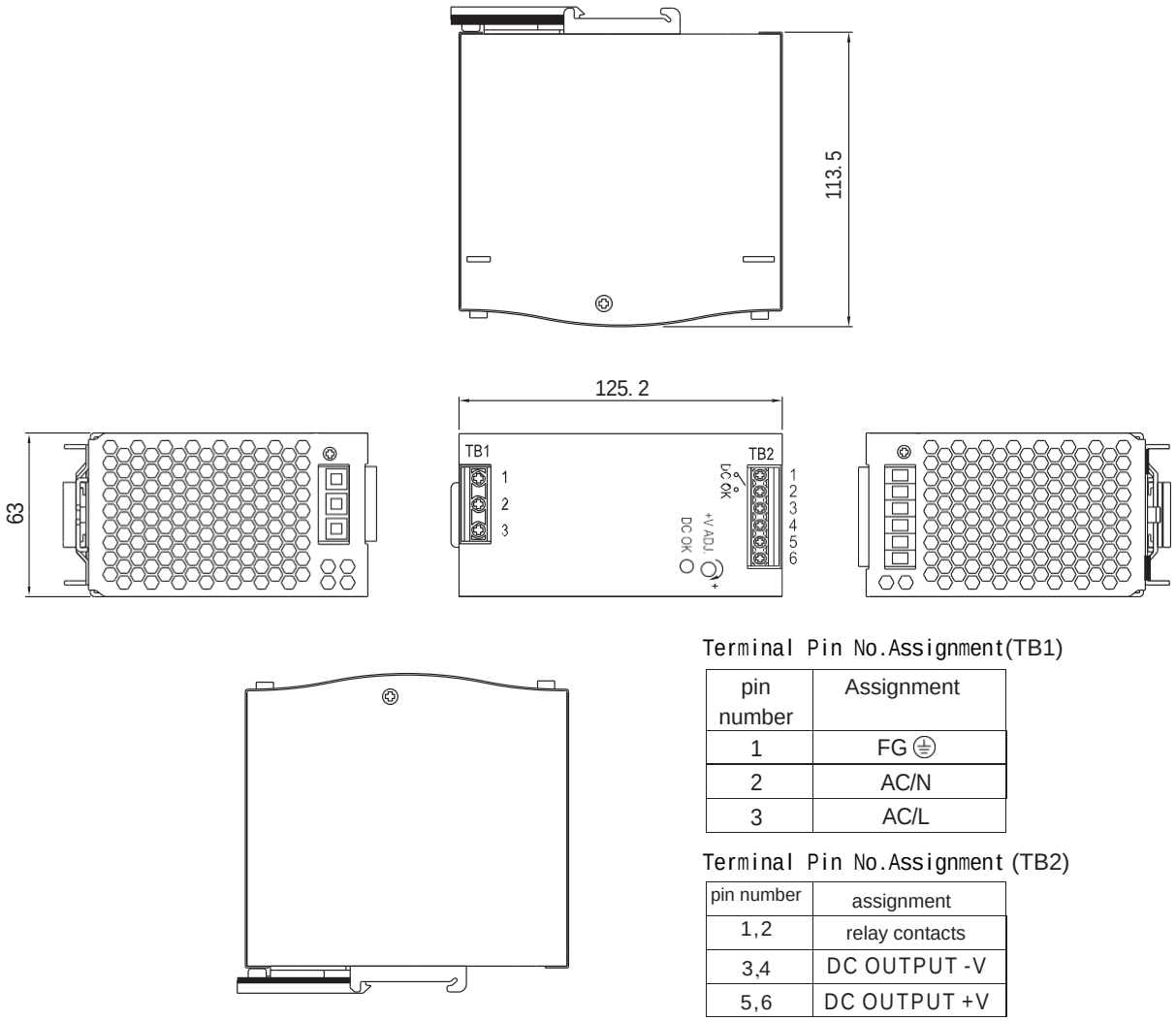
areas of application

Industrial control, mechanical and electrical, electronic instruments, industrial automation, electronic equipment, semiconductor equipment, etc. (except information technology equipment)

electrical specifications

Model		SDR-240-24	SDR-240-36	SDR-240-48
Output	DC output voltage	24V	36V	48V
	Rated current	10A	6.7A	5A
	Current range	0~10A	0~6.7A	0~5A
	Rated power	240W	241.2W	240W
	Ripple & Noise (Max)	320mVp-p	360mVp-p	360mVp-p
	voltage adjustment range	21.6~26.4V	32.4~39.6V	43.2~52.8V
	voltage accuracy	±1%	±1%	±1%
	Linear adjustment rate	±0.5%	±0.5%	±0.5%
	Load Adjustment Ratio	±1.0%	±1.0%	±1.0%
	start-up & rise time	1500 ms,60ms/230VAC	3000ms,100ms/115VAC (at full load)	
	Holding time	30mS/230VAC	22mS/115VAC (at full load)	
Input	Input Voltage	95~264VAC	135~370VDC	
	Input frequency	50~60HZ		
	Efficiency	88.5%	89%	90%
	Input current	2.6A/115VAC	1.7A/230VAC	
	Leakage current	＜ 3mA/240VAC		
Protection	overload protection	115~145% of rated power Protect mode: shut down the output, abnormal conditions are removed and can be restored after power failure and restart		
	Overvoltage protection	28.8~33.6V	41.4~48.6V	55.2~64.8V
		Protect mode: shut down the output voltage, restart to recover		
Function	DC OK signal	Relay contact (max.): 30V1A resistive load		
	Over-temperature protection	The output is switched off and the power supply can be restored from the start		
Environment	Operating temperature	-20℃ ~+65℃		
	Operating humidity	20~90%RH No condensation		
	Storage temperature/humidity	-40~+80°C 10~95%RH, no condensation		
	Vibration-resistant	10~500HZ, 5G 10 min/cycle, X, Y, Z 60 min each		
Security	pressure resistance	Input to Output :1.5KVAC; Input to Ground :1.5KVAC; Output to Ground :500VAC		
	Insulation impedance	Input to Output, Input to Ground, Output to Ground :100 Ohms/500VDC/25℃ /70%RH		
Others	Product dimensions	63*125.2*113.5mm（W*H*D）		
	Packaging	1.0kg/pcs		
	Remarks	1. All parameters are measured at 230VAC input, rated load and 25°C when not otherwise specified. 2. Ripple and noise voltages were measured on a 20MHz bandwidth oscilloscope with 0.1μ and 47μ capacitors at the end of a 12-inch twisted pair cable, measured at 20MHZ bandwidth. 3. Accuracy: Includes setting error, linear adjustment ratio and load adjustment ratio. 4. Linear Adjustment Ratio Measurement Method: Test from low voltage to high voltage at rated load 5. Load Adjustment Ratio Measurement Method: From 0% to 100% of rated load 6. Start-up time is measured at cold start, fast and frequent switching on and off may increase the start-up time. 7. When operating at altitudes higher than 2000 metres (6500ft): the operating environment needs to be reduced by 5°C / 1000 metres		

Outline and Mounting Dimensions (mm)



Terminal Pin No.Assignment(TB1)

pin number	Assignment
1	FG ⏚
2	AC/N
3	AC/L

Terminal Pin No.Assignment (TB2)

pin number	assignment
1,2	relay contacts
3,4	DC OUTPUT -V
5,6	DC OUTPUT +V

Pinout	Function	
L	AC LINE	Screw:M3*9.0 Torque:5Kgf.cn (0.5N.m)
N	AC NETURAL	
⏚	EARTH	
-V	DC output -	Screw:M3*9.0 Torque:5Kgf.cn (0.5N.m)
-V	DC output -	
+V	DC output +	
+V	DC output +	
DC OK	relay contacts	

mounting holes for rail-type customer systems

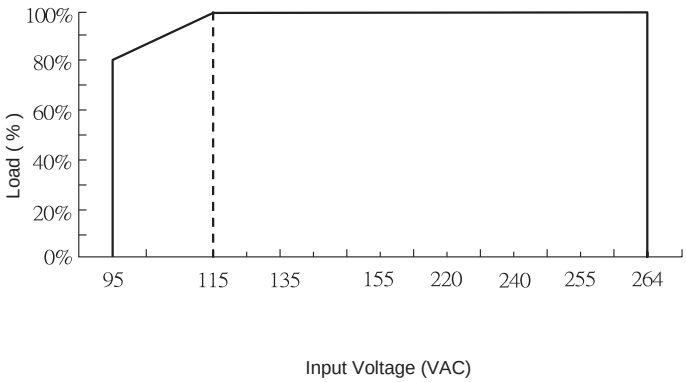
Rail mounting: TS35/7.5 or TS35/15

Notes:

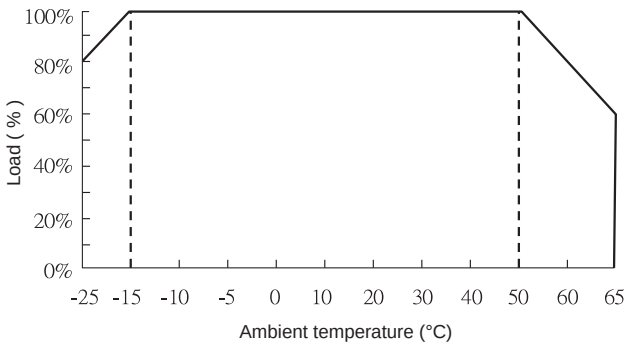
Unit: mm [inch]; unlabelled tolerances are ±0.5 [±0.020].

Characteristic Curve

Input Voltage VS Output Load



Ambient Temperature VS Output Load



Remarks:

1.If you need to know more detailed test data, please contact our technical support to get the application notes of the corresponding products.

2.This product is suitable for use in a natural air convection environment, if used in a closed environment, please contact our technical support staff.