



Zhitao Group
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Industrial Din rail power supply

Product Specifications

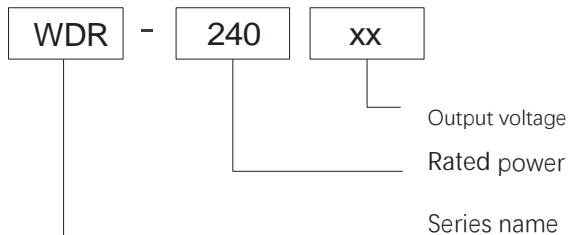
WDR-240

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

product overview

WDR-240-XX series is a 240W rail industrial power supply, the whole series can accept 200~500 VAC wide voltage input range, output voltage including 24V/36V/48V, etc., can be adapted to different load application requirements to meet the needs of most industrial applications, high conversion efficiency, compact housing design, good heat dissipation, as well as a full range of protection, to ensure the high reliability and stability of this series of products. High conversion efficiency, compact housing design, good heat dissipation, and all-round protection guarantee the high reliability and stability of this series of products.

Model encoding



product characteristics

- Wide voltage input of 200~500VAC in one or two phases
- 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

areas of application

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



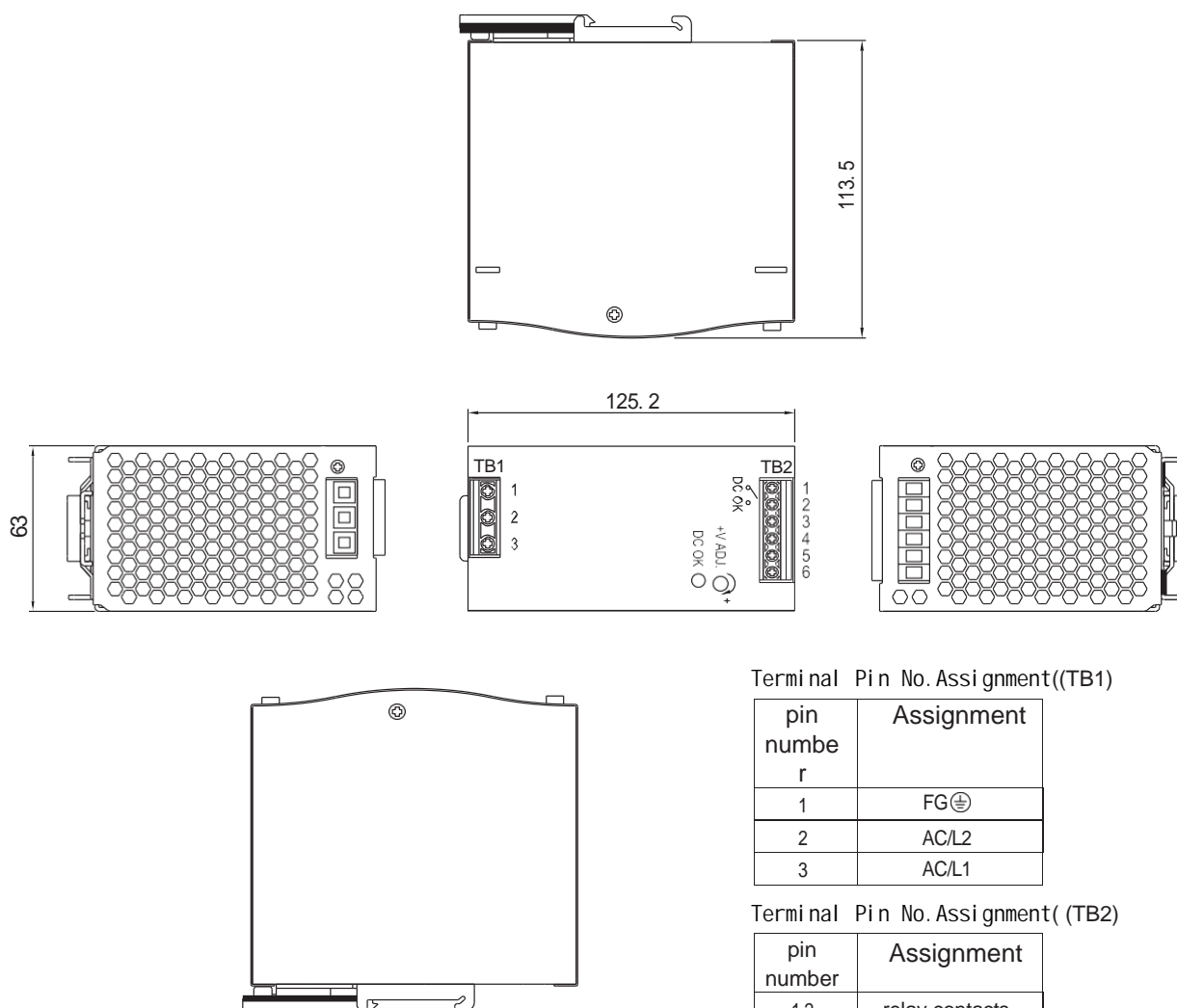
RoHS



electrical specifications

Model		WDR-240-24	WDR-240-36	WDR-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)	240mVp-p	320mVp-p	320mVp-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	1000 ms,200ms/400VAC 1800ms,200ms/230VAC (at full load)		
	Holding time	15mS/400VAC 15mS/230VAC (at full load)		
Input	Input Voltage	200~ 500VAC 280~700VDC		
	Input frequency	50~60HZ		
	Efficiency	87%	88.5%	89%
	Input current	1.0A/400VAC 2.0A/230VAC		
	Leakage current	< 3mA/240VAC		
Protection	overload protection	105~135% of rated power		
		Protection mode: hiccup type protection, abnormal conditions removed after power failure and restart can be restored		
	Overvoltage protection	28.8~33.6V	41.4~48.6V	55.2~64.8V
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		
	Operating temperature	-20℃ ~+65℃		
Environment	Operating humidity	20~90%RH No condensation		
	Storage temperature/humidity	-40~+80℃ 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℃ 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℃ / 1000 metres		

Outline and Mounting Dimensions (mm)



Terminal Pin No. Assignment((TB1)

pin number	Assignment
1	FG⊕
2	AC/L2
3	AC/L1

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.cm (0.5N.m)
N	AC NETURAL	
⊕	EARTH	
-V	DC output -	Screw:M3*9.0 Torque:5Kgf.cm (0.5N.m)
-V	DC output -	
+V	DC output +	
+V	DC output +	
DC OK	relay contacts	

mounting holes for rail-type customer systems

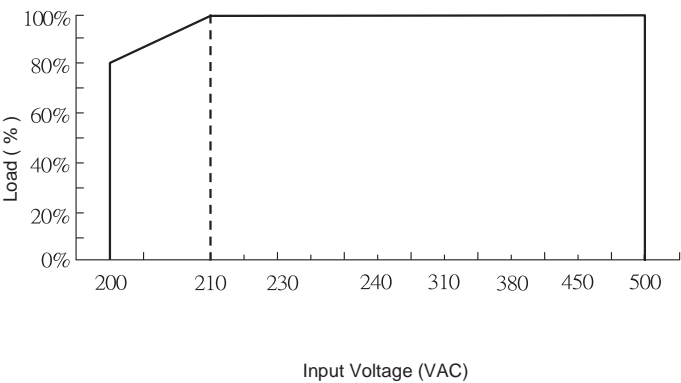
Rail mounting: TS35/7.5 or TS35/15

Notes:

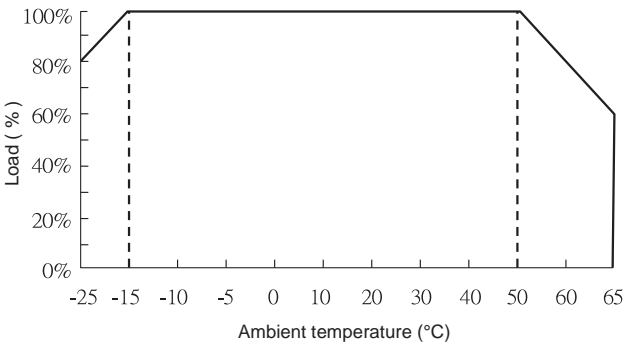
Unit: mm [inch]; unlabelled tolerances are ± 0.5 [± 0.020].

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.