Zhitao Group
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Industria Din rail power supply

Product Specifications

WDR-60

- Product Category:60W Single Output Din rail switching power supply
- Version No.:ZTAO3.0
- Release date: 1st May 2025

product overview

WDR-60-XX series is a 60W rail industrial power supply, the whole series can accept 200~500 VAC wide voltage input range, output voltage including 12V/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 p rotection, to ensure the high reliability and stability of this series. 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

WDR - 60 xx

- xx: Output voltage
- 60: Rated power
- WDR: Series name

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
- DC OK relay contacts
- naturally air-cooled
- Power on LED indicator
- 100% full load burn-in test
- 3-year warranty

CE FC RoHS ISO ISO9001

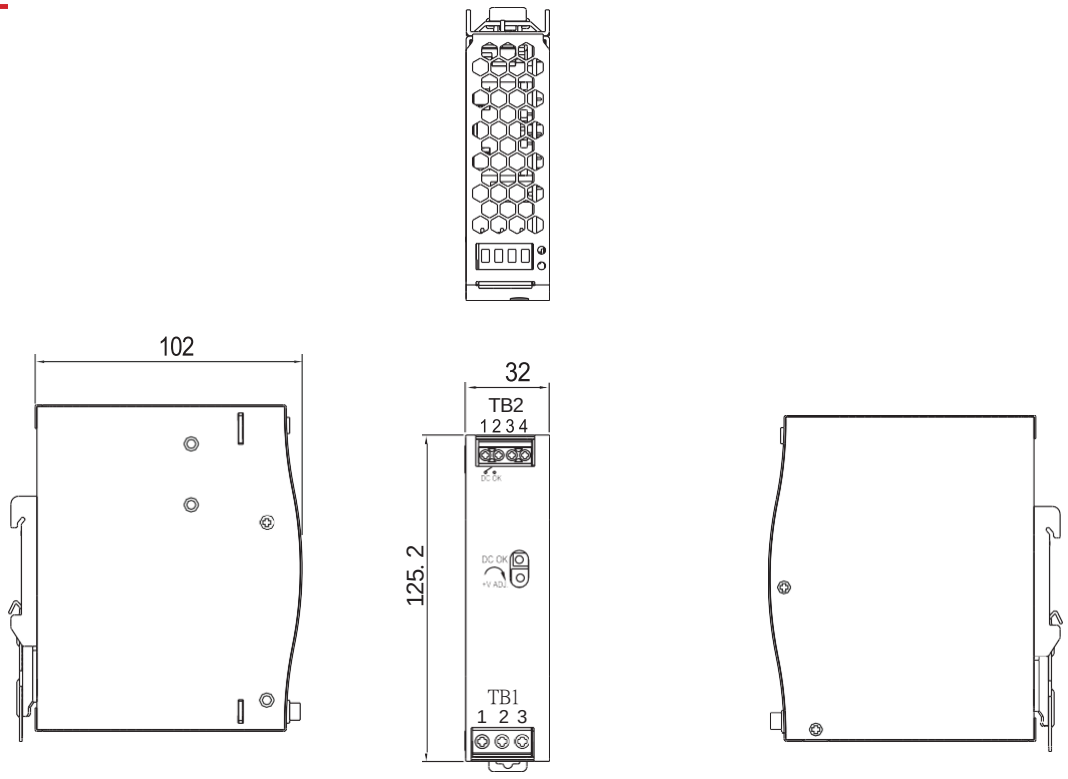
areas of application

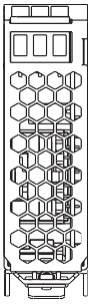
Industrial control, mechanical and electrical, electronic instruments, industrial automation, electronic equipment, semiconductor equipment, etc. (except information technology equipment)

electrical specifications

Model		WDR-60-12	WDR-60-15	WDR-60-24	WDR-60-36	WDR-60-48
Output	DC output voltage	12V	15V	24V	36V	48V
	Rated current	5.0A	4A	2.5A	1.7A	1.25A
	Current range	0~5.0A	0~4A	0~2.5A	0~1.7A	0~1.25A
	Rated power	60W	60W	60W	61.2W	60W
	Ripple & Noise (Max)	80mVp-p	80mVp-p	100mVp-p	120mVp-p	120mVp-p
	voltage adjustment range	10.2~13.8V	13.5~16.5V	21.6~26.4V	32.4~39.6V	43.2~52.8V
	voltage accuracy	±1%	±1%	±1%	±1%	±1%
	Linear adjustment rate	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load Adjustment Ratio	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	start-up & rise time	1000 ms,70ms/400VAC	2000ms,70ms/230VAC (at full load)			
	Holding time	10mS/400VAC	10mS/230VAC (at full load)			
Input	Input Voltage	200~ 500VAC	280~700VDC			
	Input frequency	50~60HZ				
	Efficiency	83%/400Vac	83.5%/400Vac	86.5%/400Vac	89%/400Vac	89%/400Vac
	Input current	0.4A/400VAC	0.7A/230VAC			
	Leakage current	＜ 3mA/240VAC				
Protection	overload protection	105~125% of rated power Protection mode: hiccup protection, automatic recovery after removal of abnormal conditions				
	Overvoltage protection	13.8~16.2V	18.7~21.7V	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.): 30V/1A resistive load				
environmental properties	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	32*125.2*102mm（W*H*D）				
	Packaging	0.4kg/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 No	Assignment
1	FG⏚
2	AC/L2
3	AC/L1

Terminal Pin No.Assignment(TB2)

pin No	Assignment
1,2	relay contacts
3	DC OUTPUT -V
4	DC OUTPUT +V

Pinout	Function	
L	AC LINE	Screw:M2.5*8.5 Torque:4Kgf.cn (0.4N.m)
N	AC NETURAL	
⏚	EARTH	
-V	DC output -	Screw:M2.5*8.5 Torque:4Kgf.cn (0.4N.m)
+V	DC output +	
DC OK	relay contacts	

mounting holes for rail-type customer systems

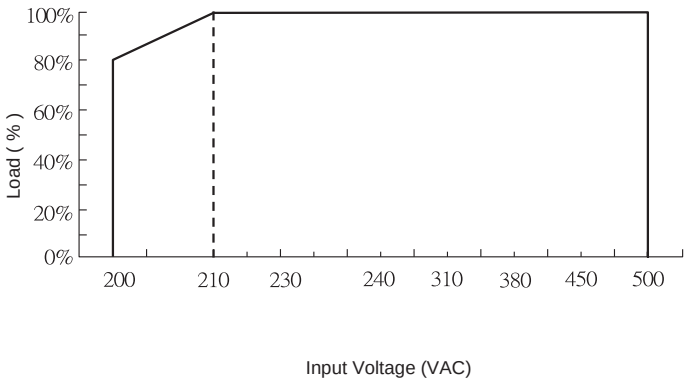
Rail mounting: TS35/7.5 or TS35/15

Notes:

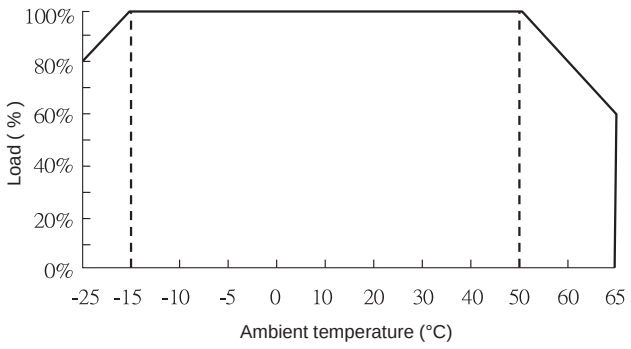
Unit: mm [inch]; unlabelled tolerances are ±0.5 [±0.020].

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.