Zhitao Group
ZHITAO GROUP

Industrial Din rail power supply

product specifications

DR-240

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

Product Overview

DR-240-XX series products for a 240W Din rail industrial power supply, the 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, good heat dissipation, as well as a full range of protection, to ensure that this series of products of high reliability and high stability.

Model Encoding

DR - 240 xx

- xx: Output voltage
- 240: Rated wattage
- DR: series name

Product Features

- AC input range 180~240VAC
- Mounting rail:TS35/7.5 or 15
- Protection type: short circuit/ overload/overvoltage
- Cooling by free air convection
- LED indicator for power on
- 100% full load burn-in test
- 3-year warranty

CE FC RoHS ISO ISO9001

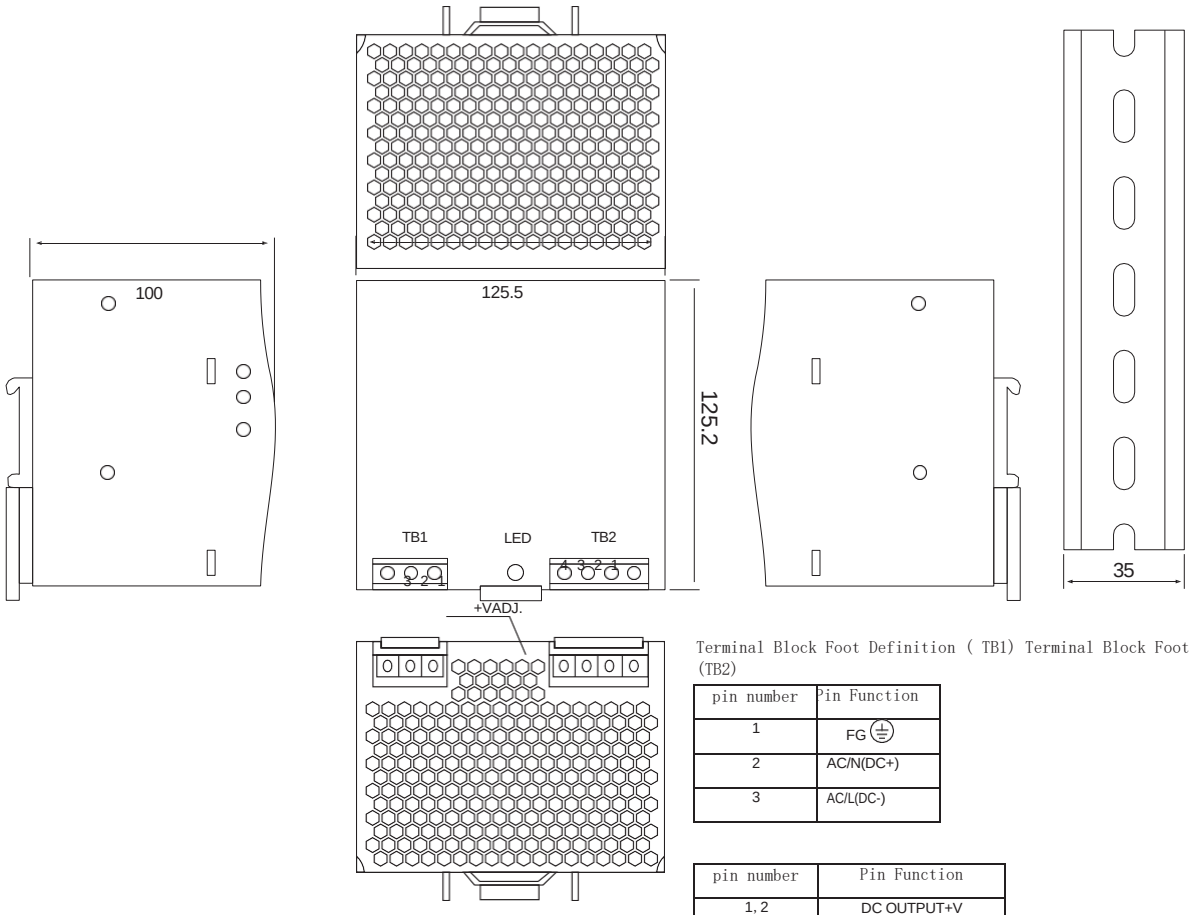
Areas of Application

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

Electrical Specifications

	Model	DR-240-24	DR-240-36	DR-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)	200mVp-p	200mVp-p	240mVp-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	800 ms,40ms/230VAC (at full load)		
	Holding time	24mS/230VAC (at full load)		
Input	Input Voltage	175~ 264VAC 248~370VDC		
	Input frequency	50~60HZ		
	Efficiency	89.5%	90%	90%
	Input current	2.8A/230VAC		
	Leakage current	＜ 1mA/240VAC		
Protection	overload protection	105~145% of rated power Protection mode: hiccup protection, automatic recovery after removal of abnormal conditions		
	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	Over-temperature protection	The output is switched off and the power supply can be restored from the start		
Environment	Woking temperature	-20℃ ~+65℃		
	Woking humidity	20~90%RH No condensation		
	Storage temperature/humidity	-40~+80℃ 10~95%RH, no condensation		
	Resistant to vibration	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	125.5*125.2*100mm（W*H*D）		
	Packaging	1kg/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 0.1 μ and 47 μ 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		

Appearance and Installation Dimensions (mm)



Terminal Block Foot Definition (TB1) Terminal Block Foot Definition (TB2)

pin number	Pin Function
1	FG ⏚
2	AC/N(DC+)
3	AC/L(DC-)

pin number	Pin Function
1, 2	DC OUTPUT+V
3, 4	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 +	

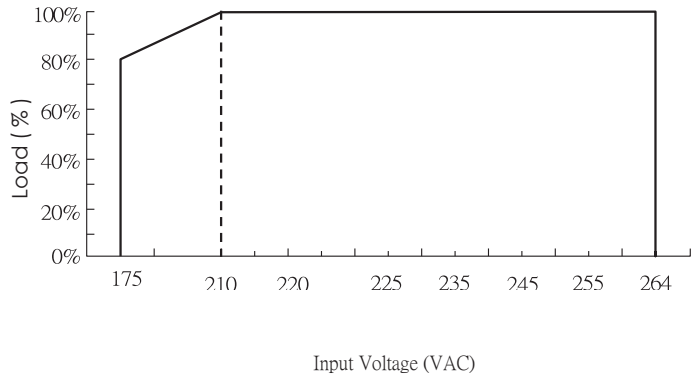
mounting holes for rail-type customer systems

Rail mounting: TS35/7.5 or TS35/15 Notes:

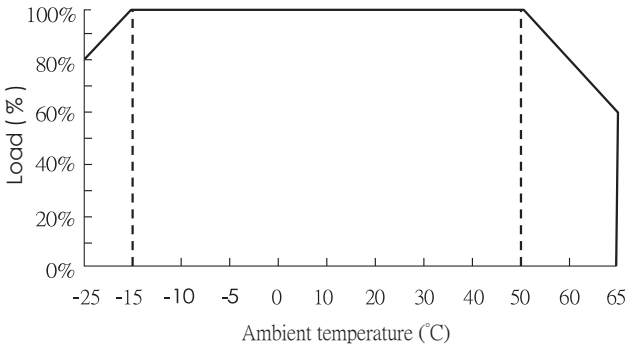
Unit: mm [inch]; unlabelled tolerances are ±0.5 [±0.020].

Characteristic Curve

Input Voltage VS Output Load



Ambient Temperature VS Output Load



Remarks:

1. If you need 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.