



Zhitao Group
ZHITAO GROUP

Industrial Din rail power supply

product specifications

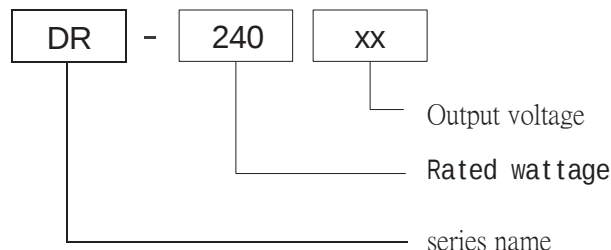
DR-240

- 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, good conversion efficiency, good heat dissipation, as well as a full range of protection, to ensure that this series of products of reliability and stability.

Model Encoding



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

Areas of Application

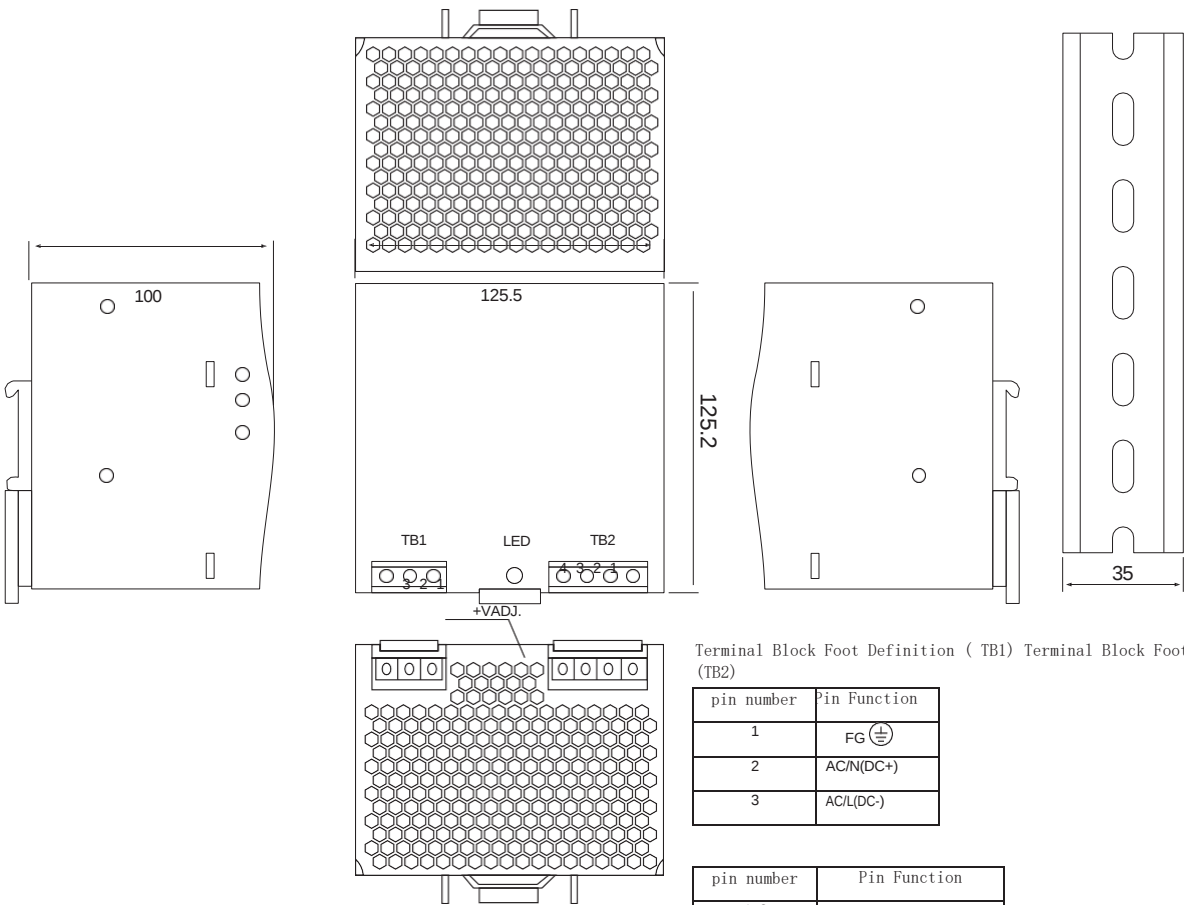
Industrial control, mechanical and electrical, electronic instruments, industrial automation, electronic equipment, semiconductor equipment, etc. (except information technology equipment)



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	Working temperature	-20℃ ~+65℃		
	Working 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 +	

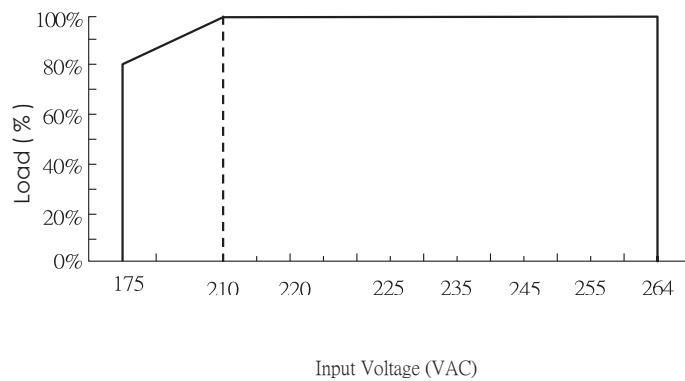
mounting holes for rail-type customer systems

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

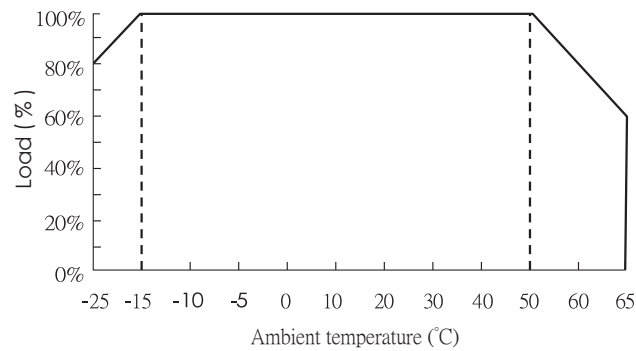
Unit: mm [inch]; unlabelled tolerances are ±0.5 [±0.020].

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.