Zhitao Group

ZHITAO GROUP

Industrial DIN-Rail Power Supplies

product specification

DR-15

- Product Category:15W Single Output DIN Rail switching Power Supply
- Version No.:ZTAO3.0
- Release date: May 1st, 2025

Product Overview

DR-15-XX series products for a 15W self-cooling rail industrial power supply, the product has a wide voltage AC and DC input, output voltage including 5V/12V/15V/24V/48V, etc., can be adapted to different load application requirements to meet the needs of most industrial applications, good heat dissipation, as well as a full range of protections to ensure that this series of products of reliability and stability.

Model Encoding

DR - 15 - xx

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

product Features

- International full range AC input
- rail mounted: TS35/7or 15
  with no-load power
- consumption <0.65 W
- protection: 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

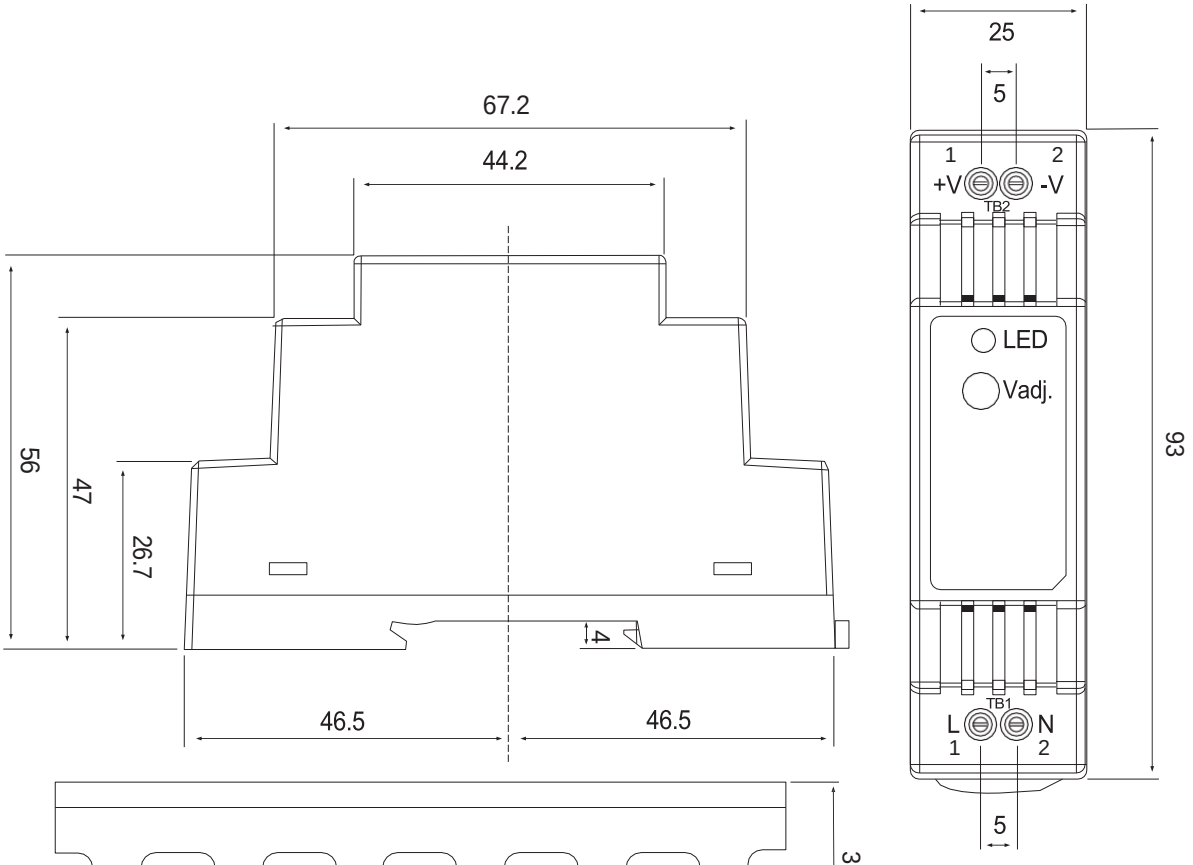
Areas of Application

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

Electrical Specifications

Model		DR-15-5	DR-15-12	DR-15-15	DR-15-24	DR-15-36	DR-15-48
Output	DC output voltage	5V	12V	15V	24V	36V	48V
	Rated current	3A	1.25A	1A	0.63A	0.42A	0.32A
	Current range	0~3A	0~1.25A	0~1A	0~0.63A	0~0.42A	0~0.32A
	Rated power	15W	15W	15W	15.2W	15.12W	15.4W
	Ripple & Noise (Max)	80mVp-p	100mVp-p	100mVp-p	120mVp-p	150mVp-p	150mVp-p
	voltage adjustment range	4.5~5.5V	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%	±1%
	Linear adjustment rate	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load Adjustment Ratio	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	start-up & rise time	1000ms,60ms/230VAC 10000ms,60ms/115VAC(at full load)					
	Holding time	70mS/230VAC; 16mS/115VAC (at full load)					
Input	Input Voltage	88~264VAC 124~370VDC					
	Input frequency	50~60HZ					
	Efficiency	80%	85%	85%	85.5%	86%	87%
	Input current	0.88A/115VAC 0.48A/230VAC					
	Leakage current	＜ 1mA/240VAC					
Protection	overload protection	125~150% of rated power					
		Protection mode: hiccup protection, automatic recovery after removal of abnormal conditions					
	Overvoltage protection	5.9~7.3V	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					
Environment	Operating temperature	-20℃ ~+65℃					
	Operating 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					
	Insulation impedance	Input to Output :100 Ohms/500VDC/25℃ /70%RH					
Others	Product dimensions	25*93*56mm（W*H*D）					
	Packaging	0.1kg/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 0.1μ 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					

Appearance and Installation Dimensions (mm)



Terminal Block Foot Definition (TB1)

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

Terminal Block Foot Definition (TB2)

pin number	Pin Function
1	DC OUTPUT+V
2	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 +	

rail-guided customer system installation

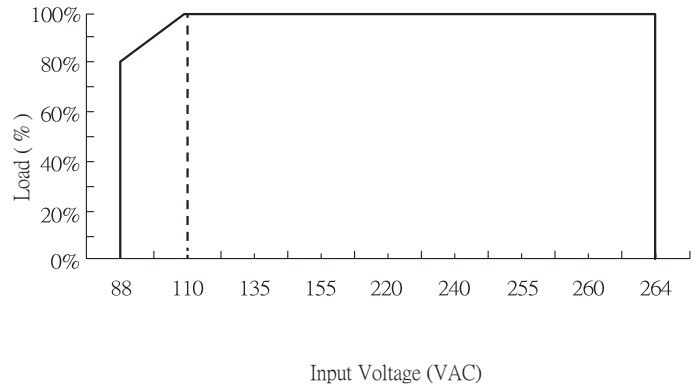
Rail mounting: TS35/7.5 or TS35/15

Remarks:

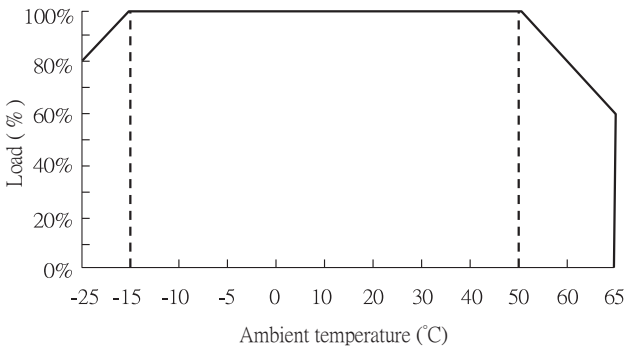
Unit: mm [inch]; unlabelled tolerances are ±0.5 [±0.020].

Characteristic Curve

Input Voltage VS Output Load



Ambient Temperature VS Output Load



Note:

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

.