



**Zhitaogroup**  
ZHITAO GROUP

Industria Din rail power supply

## Product Specifications

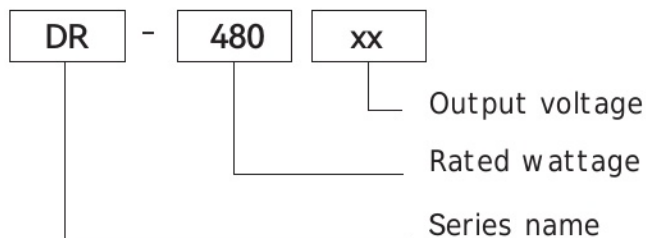
# DR-480

- Product category: 480W single-output Din rail switching power supply
- Version Number: ZTAO3.0
- Release date: May 1, 2025

### Product Overview

The DR-480-XX series is a 480W rail-mounted industrial power supply with output voltages of 24V, 36V, 48V, etc. It can be adapted to different load application requirements to meet the needs of most industrial applications. With high conversion efficiency, excellent heat dissipation, and comprehensive protection, this series ensures high reliability and stability.

### Product naming



### Product features

- Input voltage range for AC: 175 - 264VAC
- Install guide rails: TS35/7.5 or TS35/15
- Protection types: Short circuit / Overload / Overvoltage
- Fan cooling
- LED indicator for power on
- 100% full-load burn-in test
- Three-year warranty

### Application fields

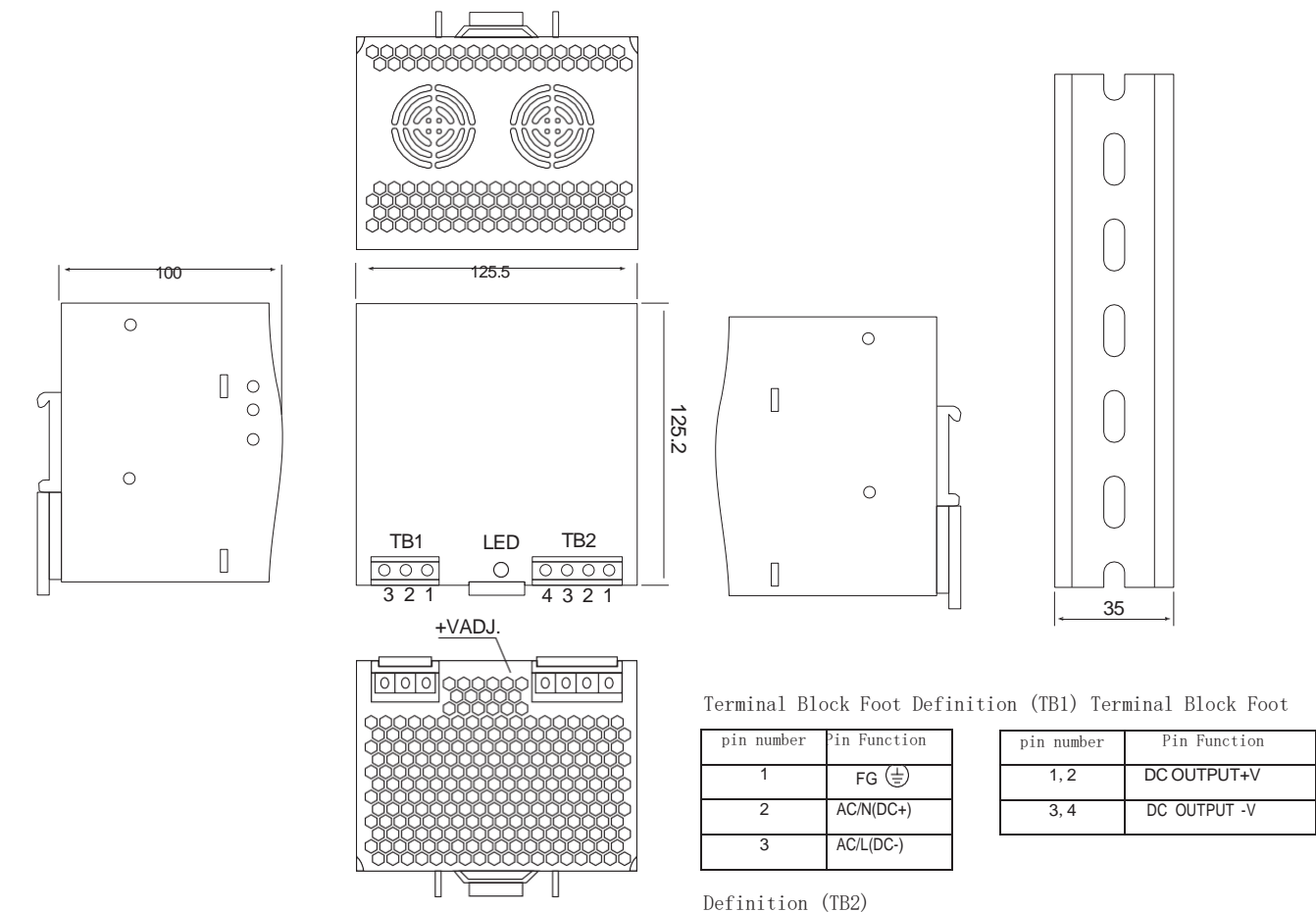
Industrial control, mechanical and electrical, electronic instruments, industrial automation, electronic equipment, semiconductor equipment, etc. (excluding information technology equipment)



## Electrical Specifications

Model numbe		DR-480 -24	DR-480-36	DR-480-48
Output	DC output voltage	24V	36V	48V
	Rated current	20A	13.4A	10A
	Current range	0~20A	0 to 13.4 A	0~10A
	Rated power	480W	482.4W	480W
	Ripple & Noise (Max)	240mVp-p	360mVp-p	360mVp-p
	Voltage adj.range	21.6 to 26.4 volts	32.4 to 39.6 volts	43.2 to 52.8 volts
	Voltage accuracy	±1%	±1%	±1%
	Linear regulation rate	±0.5%	±0.5%	±0.5%
	Load regulation	±1.0%	±1.0%	±1.0%
	Startup & Rise Time	800 ms, 40 ms / 230 VAC (at full load)		
	Retention time	20mS/230VAC (at full load)		
Input	Input voltage	175~264VAC                      135~370VDC		
	Input frequency	50~60HZ		
	efficiency	90%	91%	92%
	Input current	5.5A / 230VAC		
	Leakage current	1 mA / 240 VAC		
protection	Overload protection	105% to 120% of the rated power Protection mode: hiccup protection, which can automatically resume after the abnormal condition is removed.		
	Overvoltage protection	28.8 to 33.6 volts	41.4 to 48.6 volts	55.2 to 64.8 volts Protection mode: Turn off output voltage, restart to restore.
	Over-temp protect	turn off the output. The device can resume operation after the power is restored.		
	Function	Fan on/off control (Typ.)	The fan starts when RTH3 is ≥ 50°C and stops when it is ≤ 40°C.	
Environmental	Working temperature	-20°C to +65°C		
	Environmental working humidity	20% to 90% RH No condensation		
	Storage temp/ humidity	-40 to +80°C, 10 to 95% RH, no condensation		
	Anti-vibration	10 - 500 Hz, 5G, 10 minutes per cycle, 60 minutes each for X, Y, and Z.		
Safety	Pressure resistance	Input to output: 1.5 kVAC; Input to ground: 1.5 kVAC; Output to ground: 500 VAC		
	Insulation impedance	Input to output, input to ground, output to ground: 100 Ohms / 500VDC / 25°C / 70%RH		
Others	Product dimensions	125.5 * 125.2 * 100 mm (W * H * D)		
	Packaging	1.3 kilograms per piece		
	Note	All parameters, unless otherwise specified, are measured values obtained under the conditions of 230VAC input voltage, rated load and 25°C.  The ripple and noise voltages were measured at the end of a 12-inch twisted pair with 0.1μF and 47μF capacitors attached, using a 20 MHz bandwidth oscilloscope. At a 20 MHz bandwidth, Take measurements.  3. Accuracy: It includes setting error, linearity adjustment rate and load adjustment rate.  4. Linear regulation measurement method: Test from low voltage to high voltage under rated load.  5. Load regulation measurement method: from 0% to 100% of rated load  The startup time is measured under cold start conditions. Frequent and rapid on/off cycles may increase the startup time.  7. When operating at an altitude above 2000 meters (6500 ft): The operating environment temperature needs to be reduced by 5°C for every 1000 meters increase in altitude.		

Appearance and Installation Dimensions (mm)



Pinout	Function	
L	AC LINE	Screw:M2.5*8.5 Torque:4Kg <sub>f</sub> .cn (0.4N.m)
N	AC NETURAL	
⊕	EARTH	
-V	DC output -	Screw:M2.5*8.5 Torque:4Kg <sub>f</sub> .cn (0.4N.m)
-V	DC output -	
+V	DC output +	
+V	DC output +	

mounting holes for rail-type customer systems

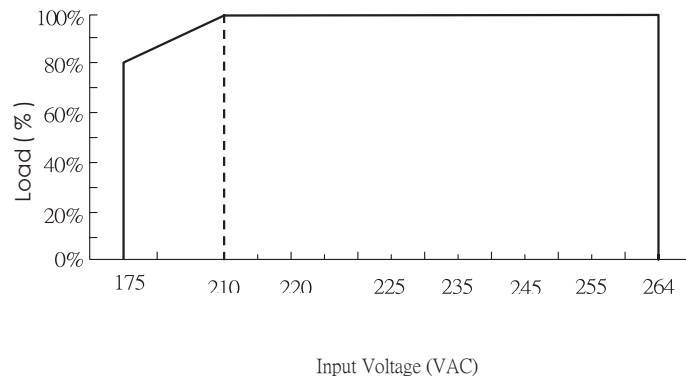
Rail mounting: TS35/7.5 or TS35/15

Remarks:

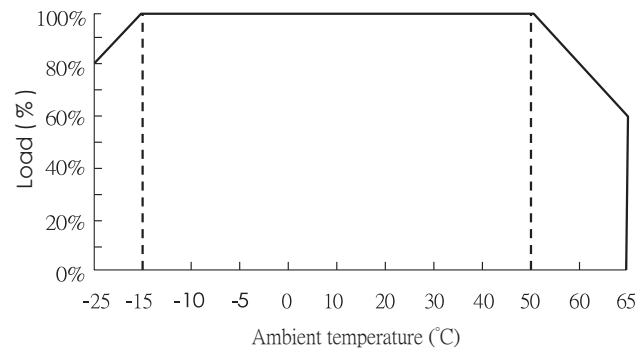
Unit: mm [inch]; unlabelled tolerances ±0.5 [±0.020].

## 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.