



Zhitaogroup
ZHITAO GROUP

Industria Din rail power supply

Product Specifications

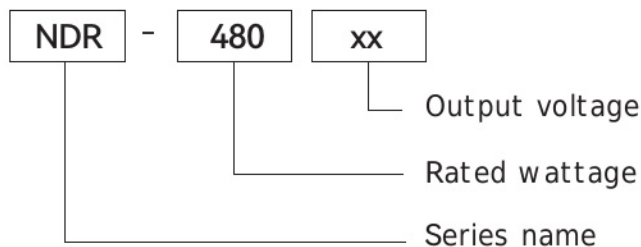
NDR-480

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

Product Overview

The NDR-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 good conversion efficiency, a compact housing design, good heat dissipation, and comprehensive protection, this series ensures reliability and stability.

Model encoding



Product features

- Input voltage range for AC: 185~264VAC
- Install guide rails: TS35/7.5 or 15
- Protection types: Short circuit / Overload / Overvoltage
- Cooling by free air convection
- LED indicator for power on
- 100% full-load burn-in test
- 3-year warranty

Application fields

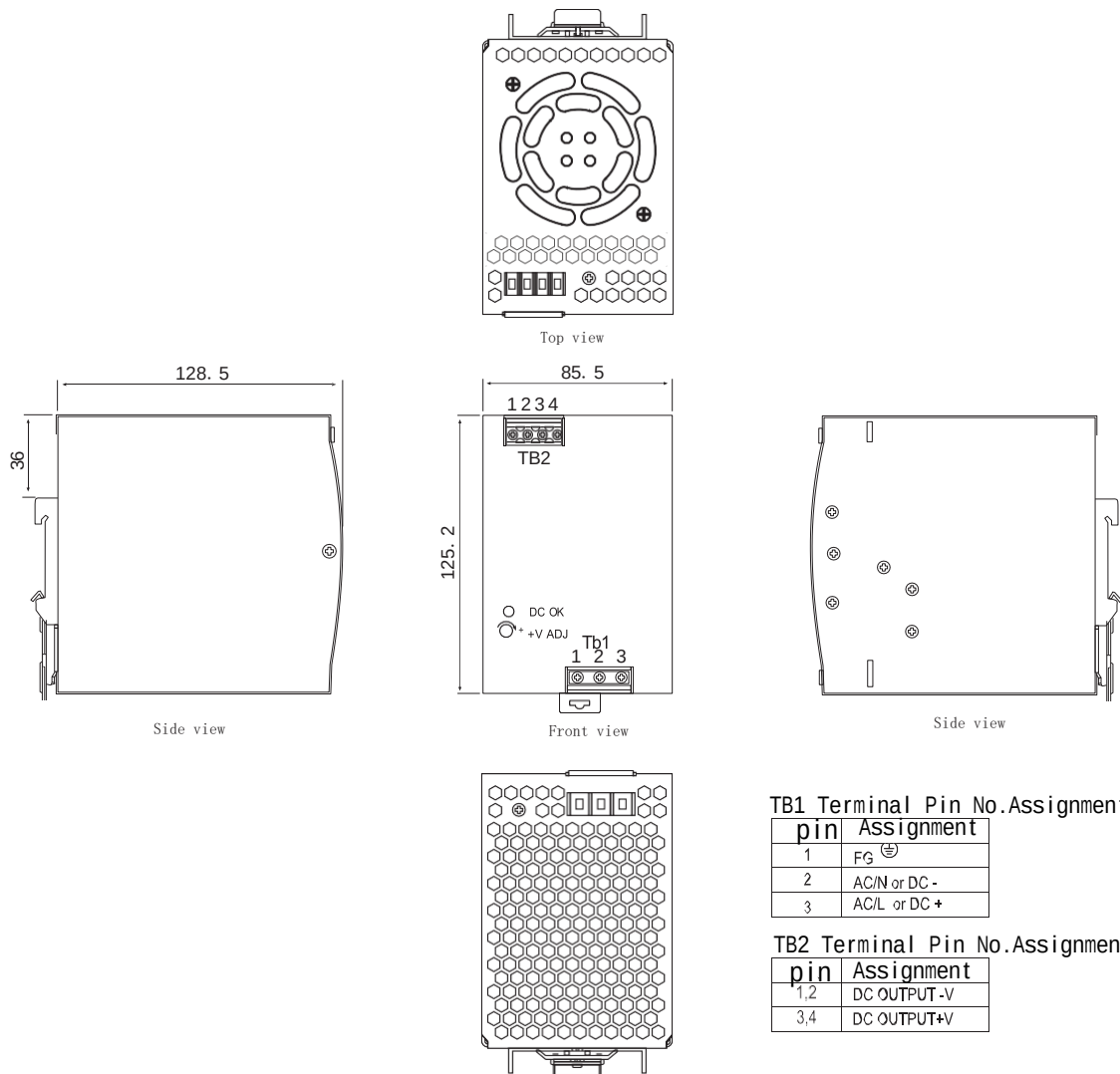
Industrial control, mechanical and electrical, electronic instruments, industrial automation, electronic equipment, semiconductor equipment, etc. (excluding information technology equipment)



electrical specifications

Model		NDR-480-24	NDR-480-36	NDR-480-48
Output	DC output voltage	24V	36V	48V
	Rated current	20A	13.4A	10A
	Current range	0~20A	0~13.4A	0~10A
	Rated power	480W	482.4W	480W
	Ripple & Noise (Max)	240mVp-p	360mVp-p	360mVp-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	1500 ms,100 ms/230VAC (at full load)		
	Holding time	20mS/230VAC (at full load)		
Input	Input Voltage	185~ 264VAC 260~370VDC		
	Input frequency	50~60HZ		
	Efficiency	88%	88%	89%
	Input current	2.4A/230VAC		
	Leakage current	< 1mA/240VAC		
Protection	overload protection	105~135% 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		
	Over-temperature protection	The output is switched off and the power supply can be restored from the start		
Function	Fan On/Off Control (Typ.)	RTH3 ≥ 50°C fan on, ≤ 40°C fan off		
Environment	Operating temperature	-10°C ~+65°C		
	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°C /70%RH		
Others	Product dimensions	85.5*125.2*128.5mm (W*H*D)		
	Packaging	0.8kg/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 0.1 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°C / 1000 metres		

Outline and Mounting Dimensions (mm)



Pinout	Function	
L	AC LINE	Screw:M2.5*8.5 Torque:4Kgf.cm (0.4N.m)
N	AC NETURAL	
⊕	EARTH	
-V	DC output -	Screw:M2.5*8.5 Torque:4Kgf.cm (0.4N.m)
-V	DC output -	
+V	DC output +	
+V	DC output +	

mounting holes for rail-type customer systems

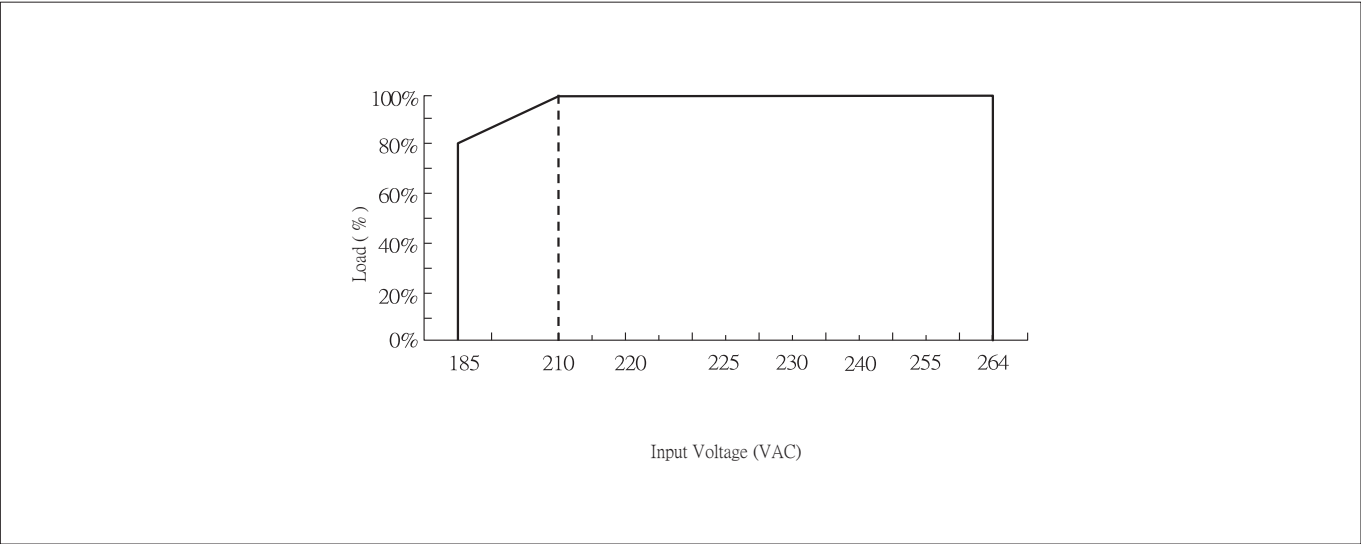
Rail mounting: TS35/7.5 or TS35/15

Remarks:

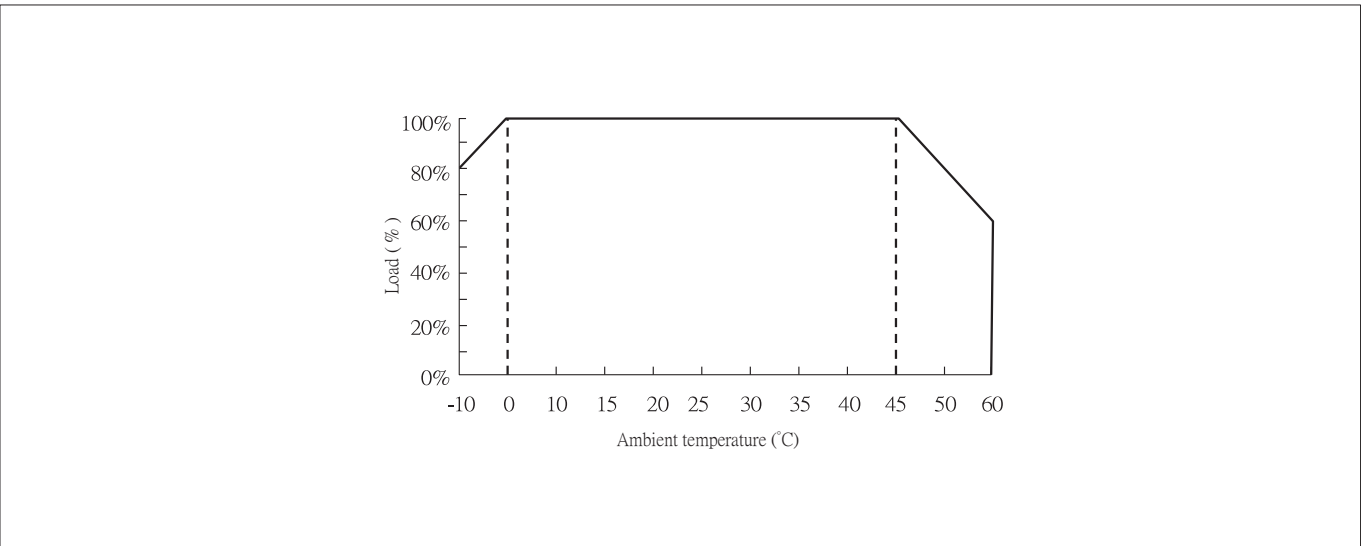
Unit: mm [inch]; unlabelled tolerances are ±0.5 [±0.020].

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.