



Zhitao Group
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Industria Din rail power supply

Product Specifications

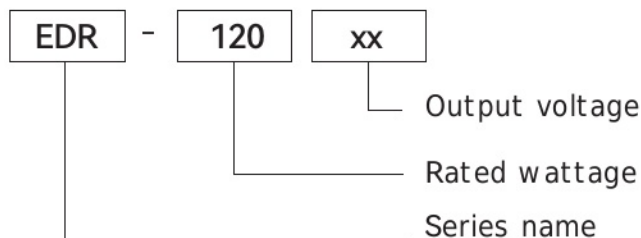
EDR-120

- Product category: 120W single-output Din rail d switching power supply
- Version Number: ZTAO3.0
- Release Date: May 1st, 2025

Product Overview

The EDR-120-XX series is a 120W industrial power supply for rail mounting. The entire series features wide-range AC/DC input, with output voltages including 12V, 24V, 36V, and 48V, catering to various load application requirements and meeting the needs of most industrial applications. It boasts good conversion efficiency, a compact housing design, good heat dissipation, and comprehensive protection, ensuring the reliability and stability of this series of products.

Product naming



Product features

- International full-range A C input
- 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

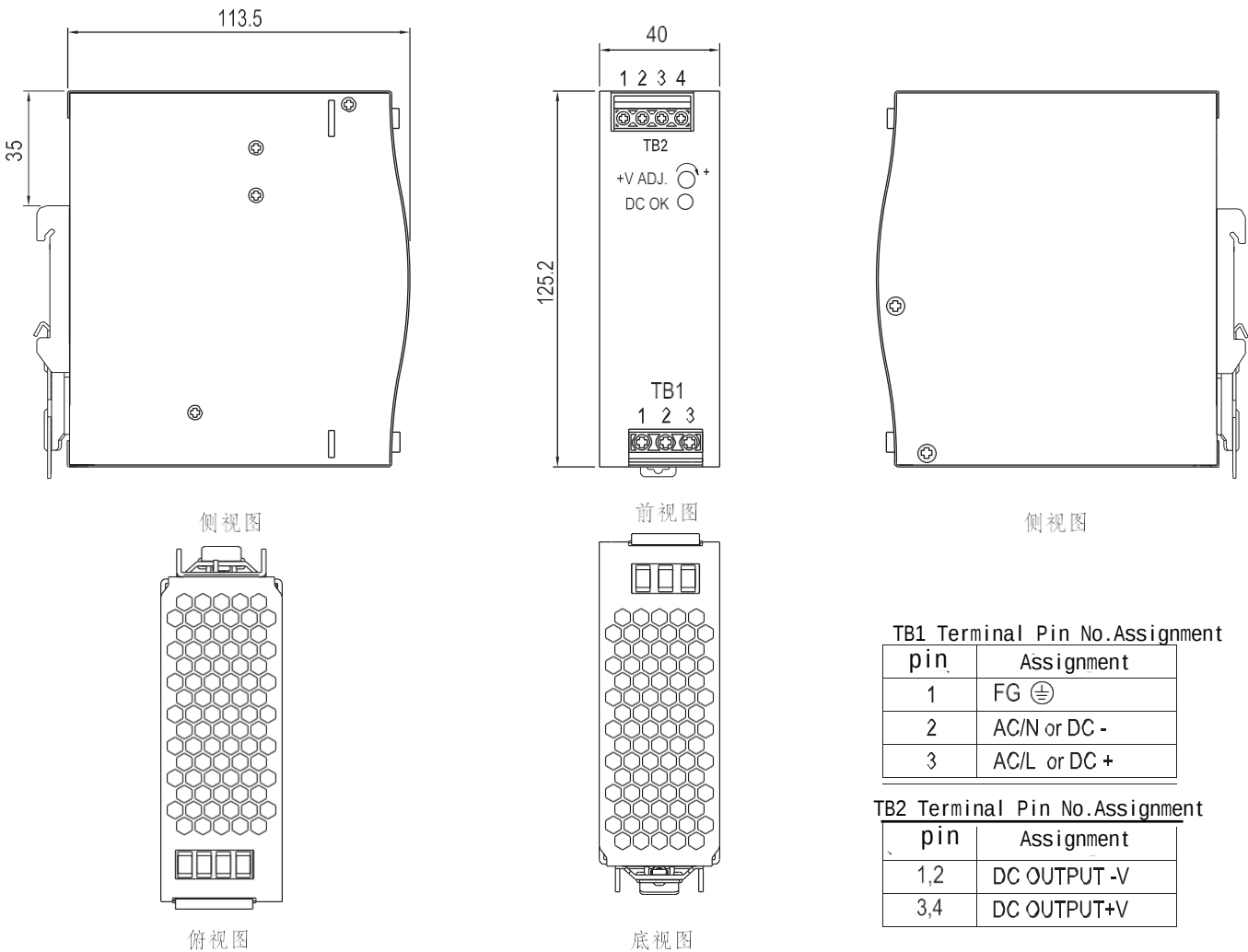
Industrial control, mechanical and electrical, electronic instruments, industrial automation, electronic equipment, semiconductor equipment, etc. (excluding information technology equipment)



electrical specifications

Model		EDR-120-12	EDR-120-15	EDR-120-24	EDR-120-36	EDR-120-48
Output	DC output voltage	12V	15V	24V	36V	48V
	Rated current	10A	8A	5A	3.4A	2.5A
	Current range	0~10A	0~8A	0~5A	0~3.4A	0~2.5A
	Rated power	120W	120W	120W	122.4W	120W
	Ripple & Noise (MAX)	100mVp-p	100mVp-p	120mVp-p	150mVp-p	150mVp-p
	voltage adjustment range	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%
	Linear adjustment rate	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load Adjustment Ratio	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	start-up & rise time	1200 ms,60ms/230VAC 2500ms,60ms/115VAC (at full load)				
	Holding time	16mS/230VAC 12mS/115VAC (at full load)				
Input	Input Voltage	90~264VAC 127~370VDC				
	Input frequency	50~60HZ				
	Efficiency	86%	86%	88%	88.5%	89%
	Input current	2.25A/115VAC 1.3A/230VAC				
	Leakage current	< 1mA/240VAC				
Protection	overload protection	120~150% of rated power				
		Protection Mode: Vo drops to undervoltage point and automatically recovers when abnormal conditions are removed				
	Overvoltage protection	13.8~16.2V	18.7~21.7V	28.8~33.6V	41.4~48.6V	55.2~64.8V
Environment	Operating temperature	-20℃ ~+65℃				
	Operating humidity	20~90%RH No condensation				
	Storage temperature/humidity	-40~+80℃ 10~95%RH, no condensation				
	Vibration-resistant	10~500HZ, 5G 10 min/cycle, X, Y, Z 60 min each				
	pressure resistance	Input to Output :1.5KVAC; Input to Ground :1.5KVAC; Output to Ground :500VAC				
Security	Insulation impedance	Input to Output, Input to Ground, Output to Ground :100 Ohms/500VDC/25℃ /70%RH				
	Product dimensions	40*125.2*113.5mm (W*H*D)				
Others	Packaging	0.5kg/pcs				
	Remarks	- All parameters are measured at 230VAC input, rated load and 25℃ when not otherwise specified. - 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. - Accuracy: Includes setting error, linear adjustment ratio and load adjustment ratio. - Linear Adjustment Ratio Measurement Method: Test from low voltage to high voltage at rated load - Load Adjustment Ratio Measurement Method: From 0% to 100% of rated load - Start-up time is measured at cold start, fast and frequent switching on and off may increase the start-up time. - 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)



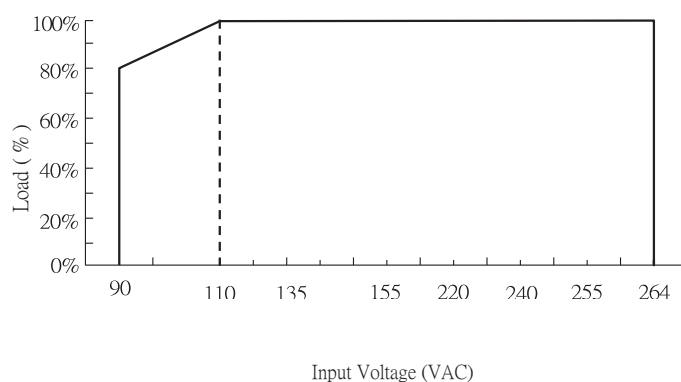
Pinout	Function	
L	AC LINE	Screw:M3*9.0 Torque:5Kgf.cm (0.5N.m)
N	AC NETURAL	
⊕	EARTH	
-V	DC output -	Screw:M3*9.0 Torque:5Kgf.cm (0.5N.m)
-V	DC output -	
+V	DC output +	
+V	DC output +	

mounting holes for rail-type customer systems
Rail mounting: TS35/7.5 or TS35/15
Notes:

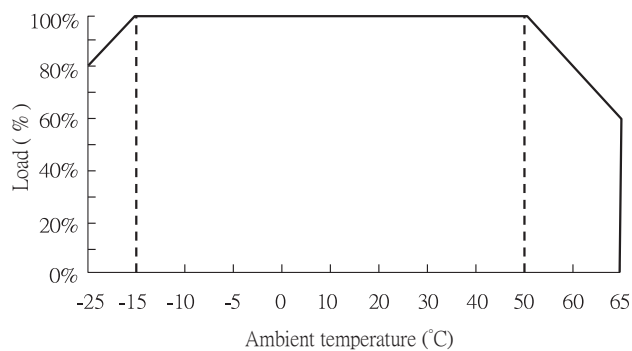
Unit: mm [inch]; unlabelled tolerances are ±0.5 [±0.020].

characteristic curve

Input Voltage VS Output Load



Ambient Temperature VS Output Load



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.