



Zhitao Group
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Industrial Din rail power supply
product specification

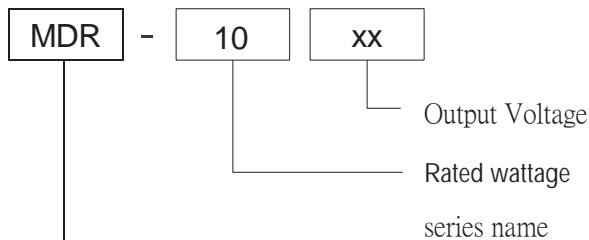
MDR-10

- Product Category: 10W Single Output Din rail switching Power Supply
- Version No.: ZTAO3.0
- Release date: May 1st, 2025

Product Overview

International full range AC input, mounting rail: TS35/7.5 or 15, no-load power consumption <0.5W, DC OK relay contacts, protection types: short circuit/overload/overcurrent protection, Cooling by free air convection, LED indicator for power on, 100% full load burn-in test, 3-year warranty.

Model Encoding



Features

- International full range AC input
- rail mounted: TS35/7 or 15
- no-load power consumption <0.7W
- DC OK relay contact
- protection: 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)



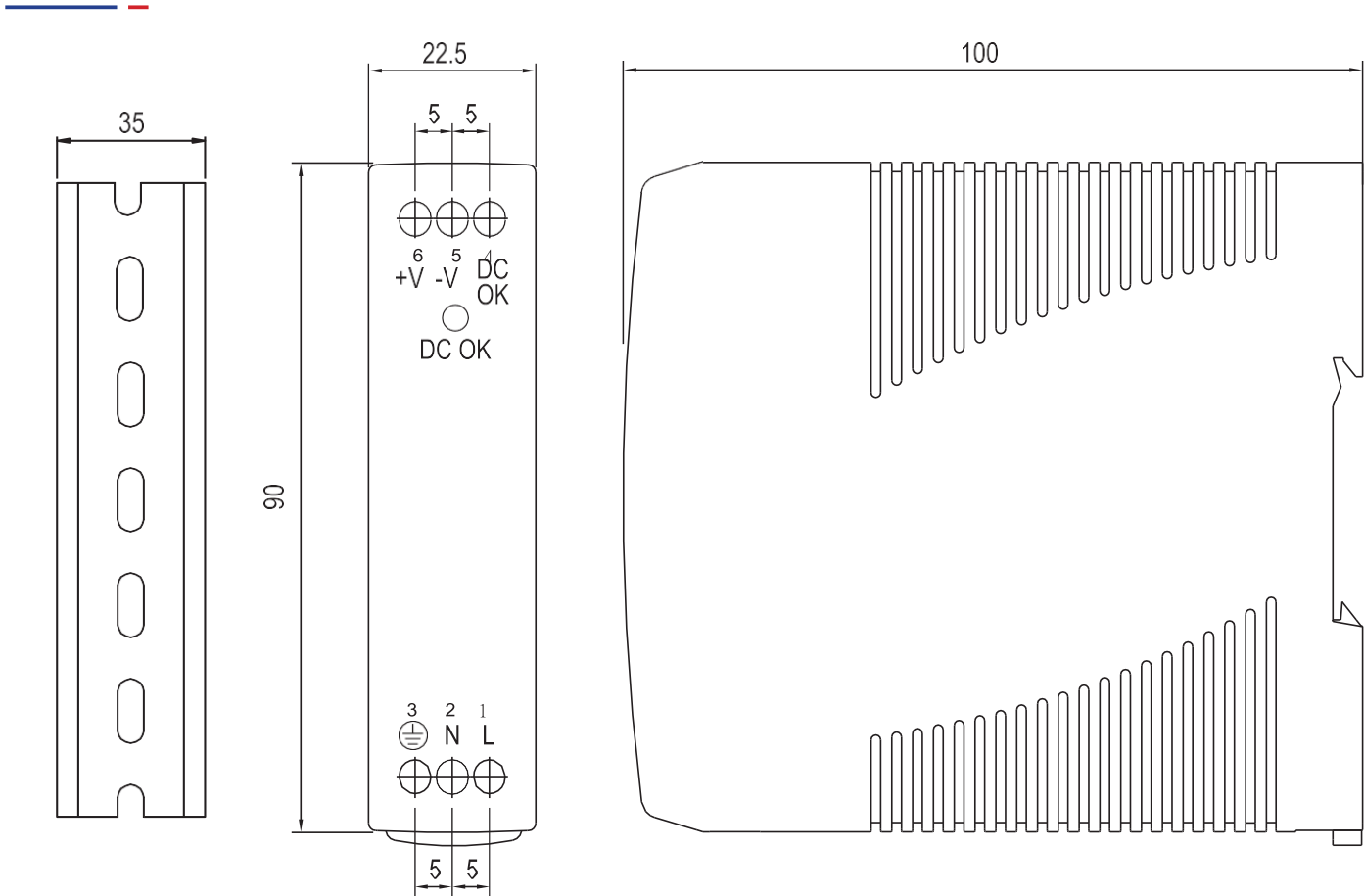
RoHS



Electrical Specifications

Model		MDR-10-5	MDR-10-12	MDR-10-15	MDR-10-24	MDR-10-36	MDR-10-48
Output	DC output voltage	5V	12V	15V	24V	36V	48V
	Rated current	2A	0.84A	0.67A	0.42A	0.28A	0.21A
	Current range	0~2A	0~0.84A	0~0.67A	0~0.42A	0~0.28A	0~0.42A
	Rated power	10W	10.08W	10.05W	10.8W	20.16W	10.08W
	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	500ms,30ms/230VAC 1000ms,30ms/115VAC(at full load)					
	Holding time	60mS/230VAC;25mS/115VAC (at full load)					
Input	Input Voltage	85~264VAC 120~370VDC					
	Input frequency	50~60HZ					
	Efficiency	73%	75%	76%	80%	81%	82%
	Input current	0.33A/115VAC 0.21A/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					
Function	DC OK signal	Relay contact (max): 30V/1A resistive load					
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					
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	22.5*90*100mm (W*H*D)					
	Packaging	0.13kg/pcs					
Remarks		<ol style="list-style-type: none"> 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)



Mounting Rail: TS35/7.5 or TS35/15

Terminal Pin No. Assignment

pin No	Assignment	pin No	Assignment
1	AC/L	4	DC OK relay contact
2	AC/N	5	DCOUTPUT -V
3	FG	6	DCOUTPUT +V

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

rail-guided customer system installation

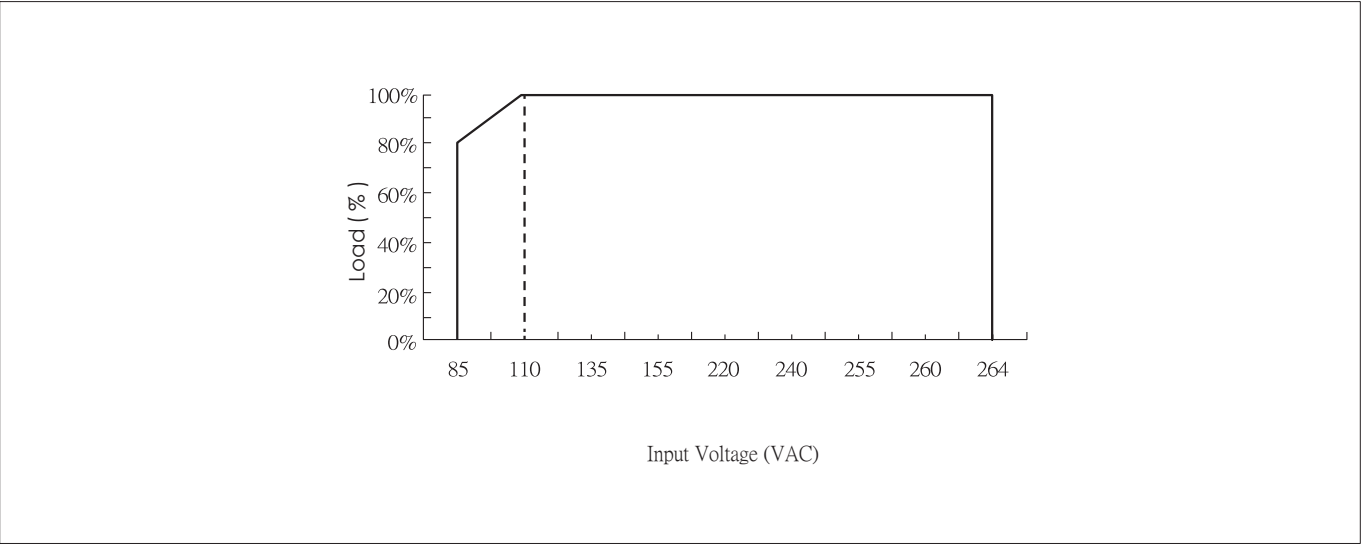
Rail mounting: TS35/7.5 or TS35/15

Remarks:

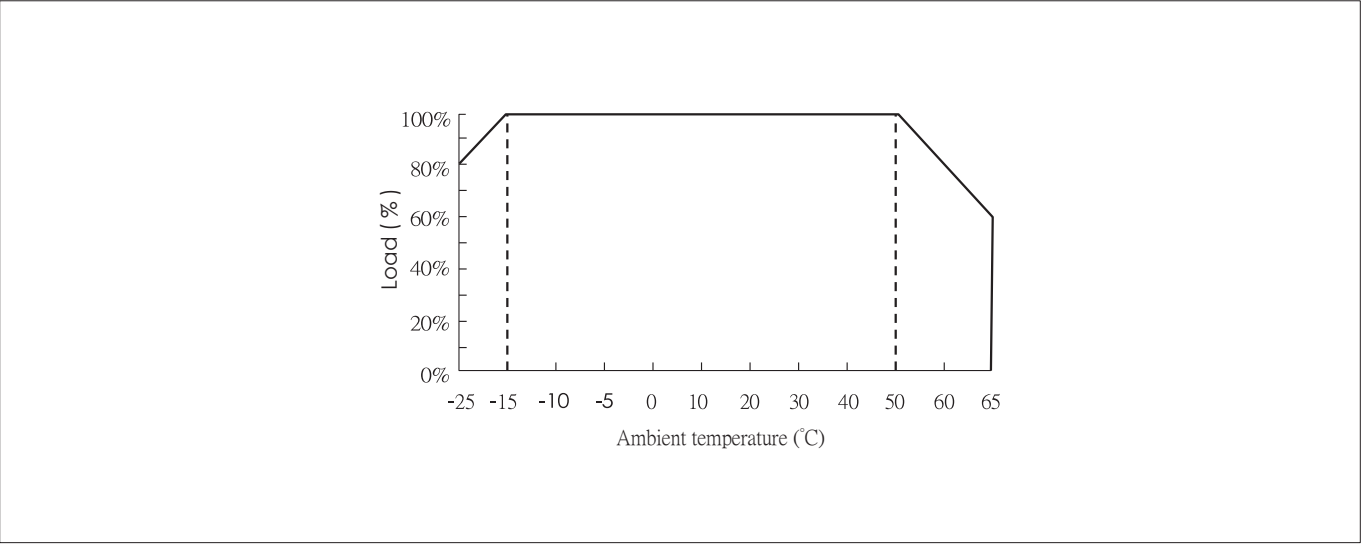
Unit: mm [inch]; unlabelled tolerances are ±0.5 [±0.020].

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.