



Zhitao Group

ZHITAO GROUP

Industrial Din rail power supply

product specification

MDR-40

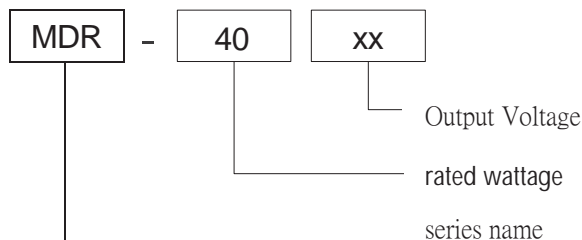
- Product Category: 40W Single Output Din rail switching Power Supply
- Version No.: ZTAO3.0
- Release date: May 1st, 2025



Product Overview

International full range AC input, mounting rail: TS35/7.5 or 15,
no-load power consumption < 0.8W, 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: TS35/7.5 or 15
- no-load power consumption < 0.8W
- DC OK relay contact
- Type of 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



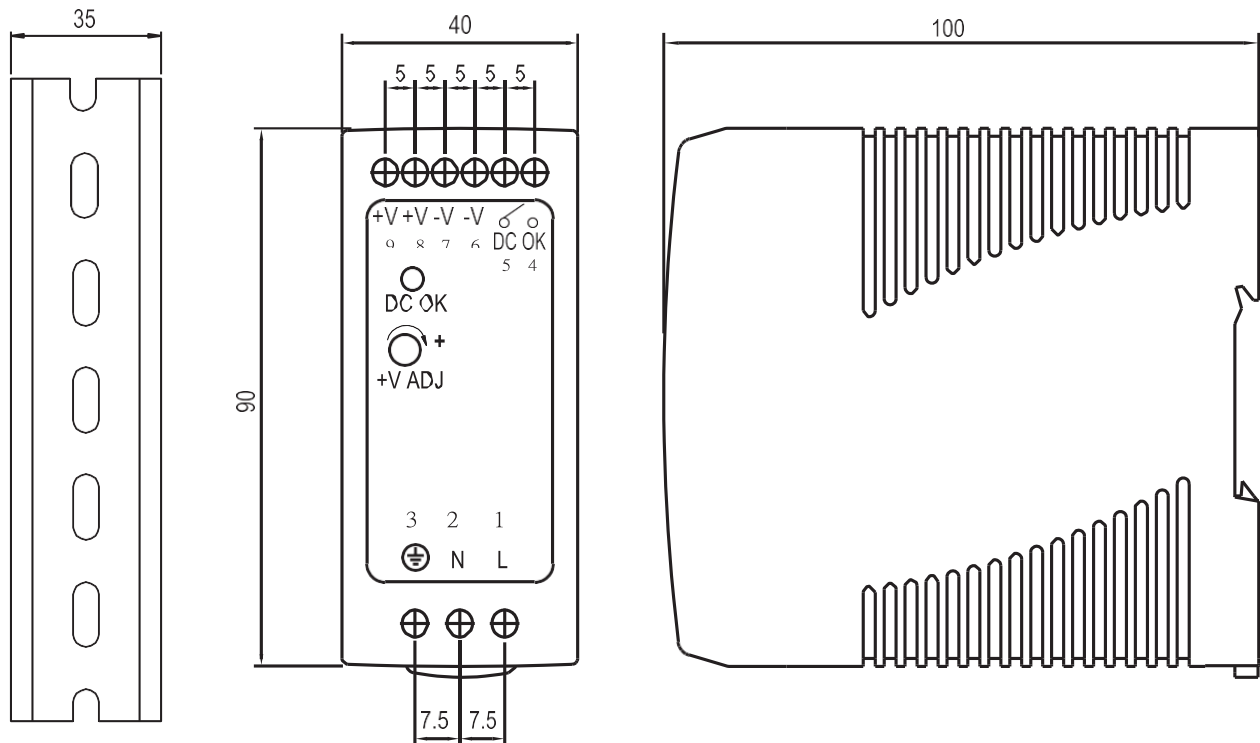
Zhitao Power Supply - is not Just a Full Power Supply

400-888-6287

Electrical Specifications

	Model	MDR-40-5	MDR-40-12	MDR-40-15	MDR-40-24	MDR-40-36	MDR-40-48
Output	DC output voltage	5V	12V	15V	24V	36V	48V
	Rated current	6A	3.33A	2.67A	1.7A	1.2A	0.83A
	Current range	0~6A	0~3.33A	0~2.67A	0~1.7A	0~1.2A	0~0.83A
	Rated power	30W	39.96W	40.05W	40.8W	43.2W	39.84W
	Ripple & Noise (Max)	80mVp-p	80mVp-p	100mVp-p	100mVp-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 500ms,30ms/115VAC(at full load)					
	Holding time	55 mS/230VAC 20mS/115VAC (at full load)					
Input	Input Voltage	85~264VAC 120~370VDC					
	Input frequency	50~60HZ					
	Efficiency	78%	85%	86%	88%	88%	88%
	Input current	1.1A/115VAC 0.7A/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
Function	DC OK signal	Protect mode: shut down the output voltage, restart to recover					
		Protection mode: 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	40*90*100mm (W*H*D)					
	Packaging	0.3kg/pcs					
Remarks		<ol style="list-style-type: none"> 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 0.1 μ and 47 μ 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)



Mounting Rail: TS35/7.5 or TS35/15

Terminal Pin No. Assignment

pin No	Assignment	pin No	Assignment
1	AC/L	4~5	DC OK relay contact
2	AC/N	6~7	DCOUTPUT -V
3	FG	8~9	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 -	
+Vo	DC output +	
+Vo	DC output +	
DC OK	relay contacts	

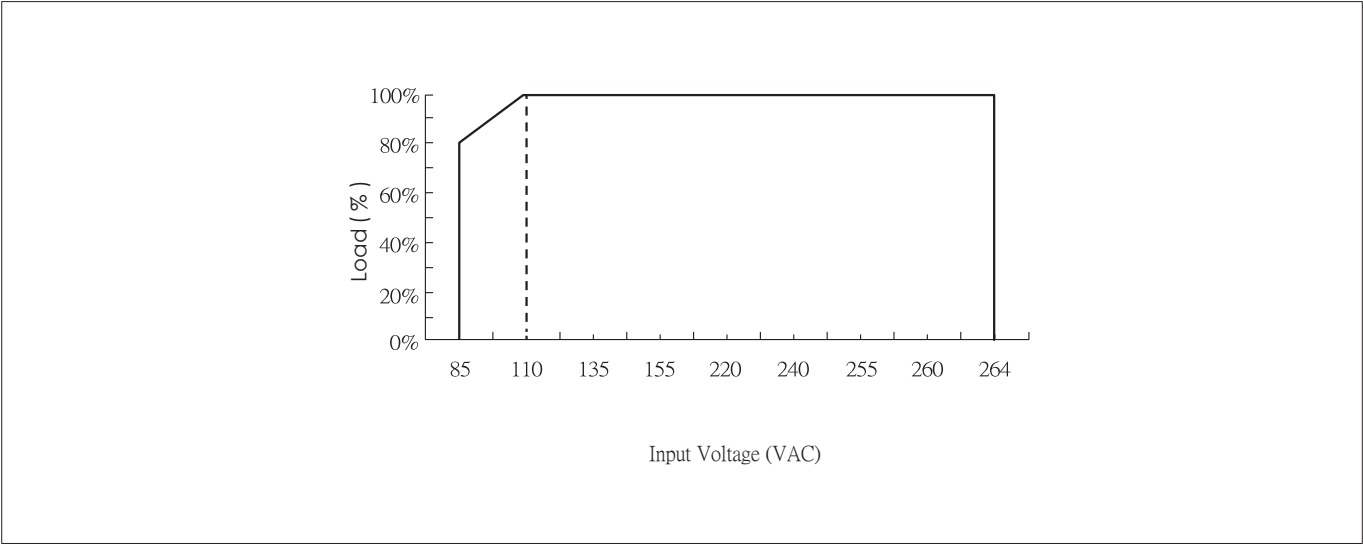
rail-guided customer system installation

Rail mounting: TS35/7.5 or TS35/15 Notes:

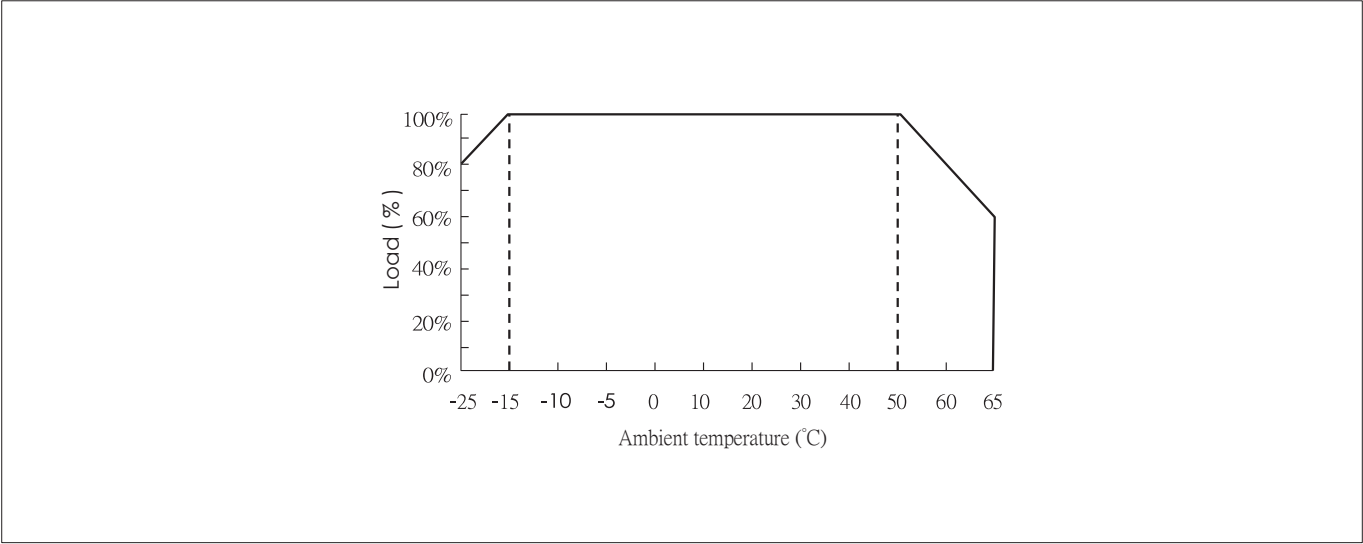
Unit: mm [inch]; unlabelled tolerances are ±0.5 [±0.020].

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.