



Zhitao Group

ZHITAO GROUP

Industrial power supplies

Product Specifications

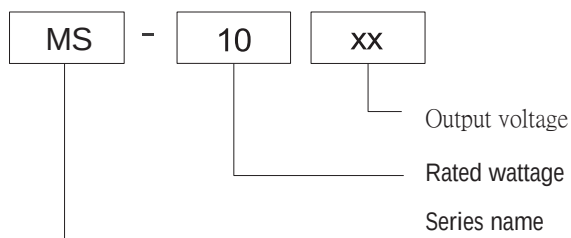
MS-10

- Product Category: 10W single output power supply
- Version number: ztao3.0
- Release date: May 1st, 2025

Product Overview

MS-10-XX SERIES PRODUCTS FOR A 10W CHASSIS-TYPE INDUSTRIAL POWER SUPPLY, THE OUTPUT VOLTAGE INCLUDING 5V/12V/24V, ETC., CAN BE ADAPTED TO DIFFERENT LOAD APPLICATION REQUIREMENTS TO MEET THE NEEDS OF MOST INDUSTRIAL APPLICATIONS, SELF-COOLING HEAT DISSIPATION, AS WELL AS A FULL RANGE OF PROTECTION, TO ENSURE THAT THIS SERIES OF PRODUCTS OF RELIABILITY AND STABILITY.

Model encoding



Product Features:

- International full-range exchange input
- Protection type: short circuit/overload/overvoltage
- cooling by free air convection
- Power on led indicator
- 100% full load burn-in test
- 3-year warranty



Fields of Application

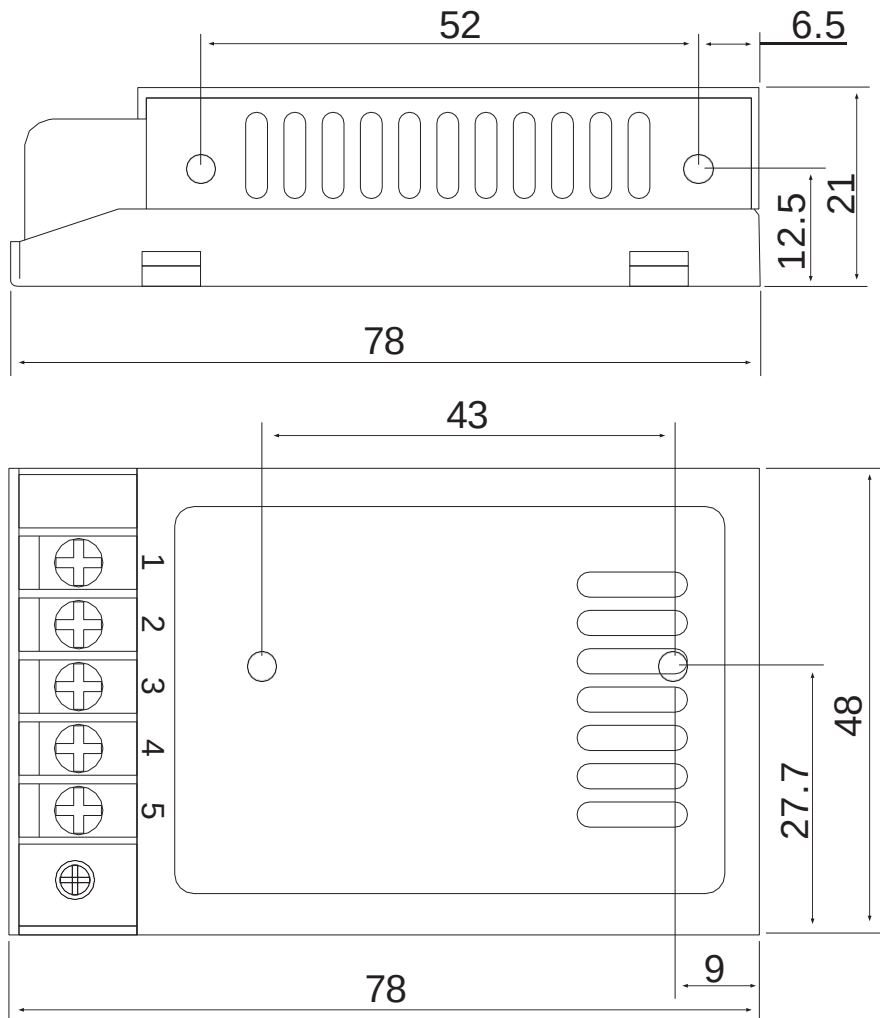
Industrial control, mechanical and electrical, electronic instruments, industrial automation, electronic equipment, semiconductor equipment, etc. (except information technology equipment)

01-01

Electrical Specifications

Model		MS-10-5	MS-10-12	MS-10-15	MS-10-24	MS-10-36	MS-10-48
output	DC output voltage	5V	12V	15V	24V	36V	48V
	Current rating	2A	1A	0.8A	0.5A	0.34A	0.25A
	Current range	0~2A	0~1A	0~0.8A	0~0.5A	0~0.34A	0~0.25A
	Rated power	10W	12W	12W	12W	12.24W	12W
	Ripple & Noise (Max)	120mVp-p	120mVp-p	120mVp-p	150mVp-p	200mVp-p	200mVp-p
	Voltage regulation 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,24ms/230VAC 800ms,30ms/115VAC(at full load)					
	Holding time	24mS/230VAC;20mS/115VAC (at full load)					
Input	Input Voltage	85~264VAC 120~370VDC					
	Input frequency	50~60HZ					
	Efficiency	78%	80%	80%	85%	85%	86%
	Input current	0.4A/115VAC 0.18A/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					
Environment	Operating temperature	-20°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	78*48*21mm (L*W*H)					
	Packaging	0.1kg/pcs					
Remarks		1. All parameters are measured at 230vac input, rated load and 25°C when not specified. 2. 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. 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)



Terminal Pin No. Assignment

pin No	Assignment
1	AC/L(DC-)
2	AC/N(DC+)
3	FG (⊕)
4	DC OUTPUT -V
5	DC OUTPUT +V

Pinout	Function	
L	AC LINE	Screw:m3*8 Torque:8Kgf.cn(0.8N.m)
N	AC NETURAL	
⊕	EARTH	
-V	DC output -	Screw:m3*8 Torque:8Kgf.cn(0.8N.m)
+V	DC output +	

8-m3 Customer System

Mounting Hole Mounting

Screw: M3

Installation torque: 8Kgf.cn (0.8N.m)

screws into the housing is not more

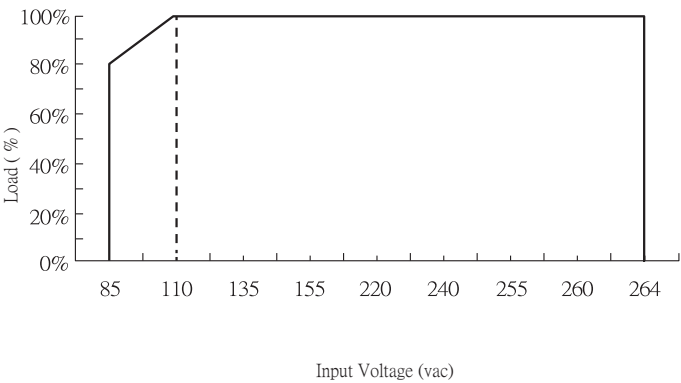
than 3mm

Remarks:

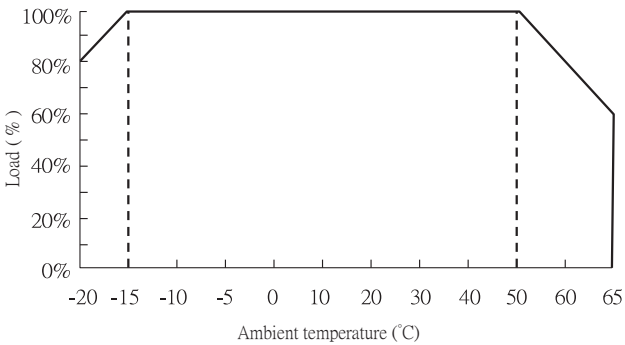
Unit: mm [inch]; unlabelled tolerances are ± 0.5 [± 0.020].

Characteristic Curve

Input Voltage vs Output Load



Ambient temperature vs output load



Remarks:

- 1.If you need to know 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.