Zhitao Group

ZHITAO GROUP

Industrial Power Supplies

Product Specifications

MS-60

- Product Category:60w single output power supply
- Version number:ztao3.0
- Release date: 1st May 2025

Product Overview

MS-60-XX SERIES PRODUCTS FOR A 60W CHASSIS-TYPE INDUSTRIAL POWER SUPPLY, THE OUTPUT VOLTAGE INCLUDING 12V/24V/36V/48V, 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 HIGH RELIABILITY AND HIGH STABILITY.

Model encoding

MS - 60 xx

- xx: Output voltag
- 60: Rated wattage
- MS: Series name

product characteristics

- International full-scope exchange inputs
- Protection type: short circuit/overload/overvoltage
- Cooling by free air convection
- led indicator for Power on
- 100% full load burn-in test 3-year wa
- rranty

CE FC RoHS ISO ISO9001

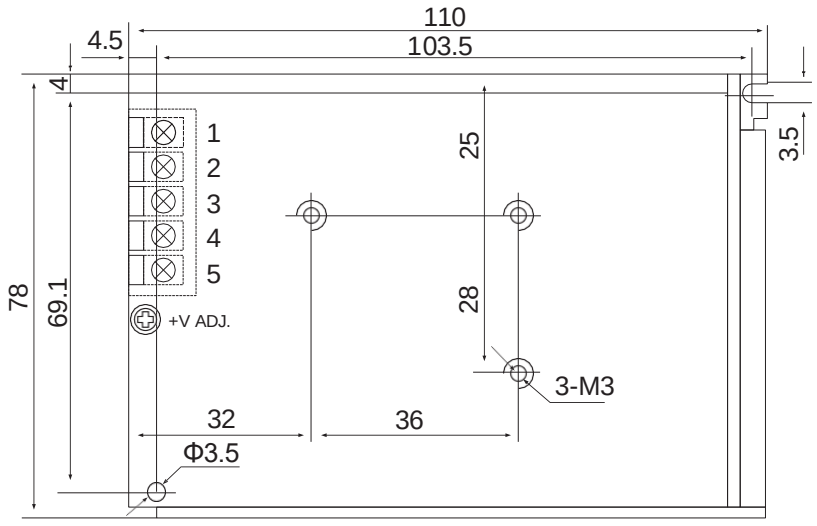
Areas of Application

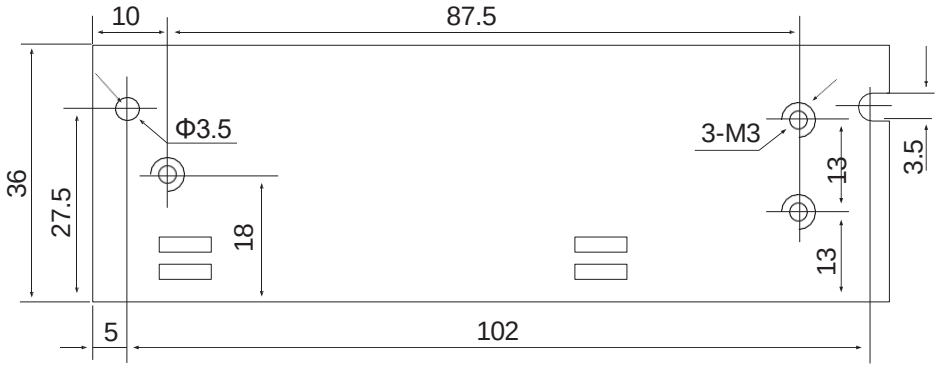
Industrial control, mechanical and electrical, electronic instruments, industrial automation, electronic equipment, semiconductor equipment, etc. (except information technology equipment)

Electrical Specifications

Model		MS-60-12	MS-60-15	MS-60-24	MS-60-36	MS-60-48
Output	DC output voltage	12V	15V	24V	36V	48V
	Rated current	5A	4A	2.5A	1.7A	1.25A
	Current range	0~5A	0~4A	0~2.5A	0~1.7A	0~1.25A
	Rated power	60W	60W	60W	61.2W	60W
	Ripple & Noise (Max)	80mVp-p	100mVp-p	100mVp-p	120mVp-p	120mVp-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	600ms,30ms/230VAC 800ms,30ms/115VAC (at full load)				
	Holding time	25mS/230VAC 12mS/115VAC (at full load)				
Input	Input Voltage	100~264 VAC 144~370VDC				
	Input frequency	50~60HZ				
	Efficiency	86%	86%	87.5%	88%	89%
	Input current	1.2A/115VAC 0.6A/230VAC				
	Leakage current	＜ 1mA/240VAC				
Protection	overload protection	120~140% 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
		Protect mode: shut down the output voltage, restart to recover				
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	110*78*32mm（L*W*H）				
	Packaging	0.4kg/pcs				
Remarks		1. All parameters are measured at 230vac input, rated load and 25℃ 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℃ / 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 holes mounting

screws:m3

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

screws into the housing is not more

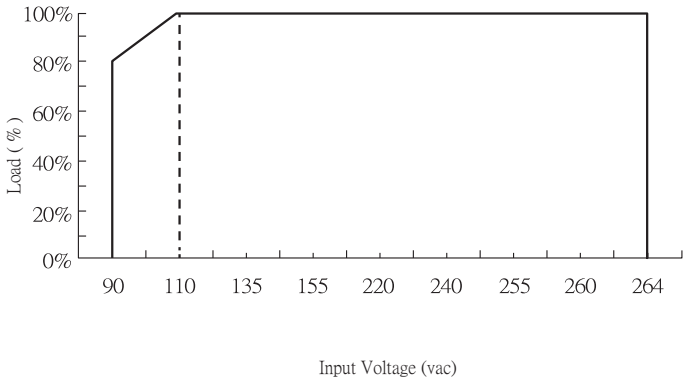
than 3mm

Remarks:

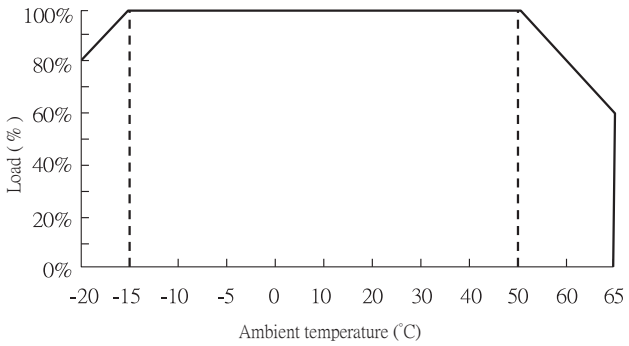
Unit: mm [inch]; unlabelled tolerances are ±0.5 [±0.020].

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.