



Zhitao Group

ZHITAO GROUP

Industrial Power Supplies

Product Specifications

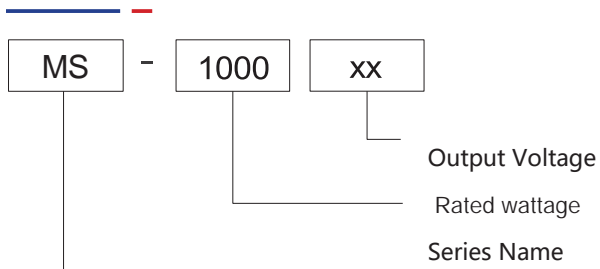
MS-1000

- Product Category: 1000W Single Output Power Supply
- Version No.: ZTAO3.0
- Release date: 1st May 2025

product overview

MS-1000-XX series products for a 1000W 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, fan cooling and a full range of protection, to ensure that this series of products of high reliability and high stability.

Model encoding



product characteristics

- AC input range 185~264VAC
- Type of protection: short circuit/overload/overvoltage fan cooling
- LED indicator for Power on
- 100% full load burn-in test
- 3-year warranty



areas of application

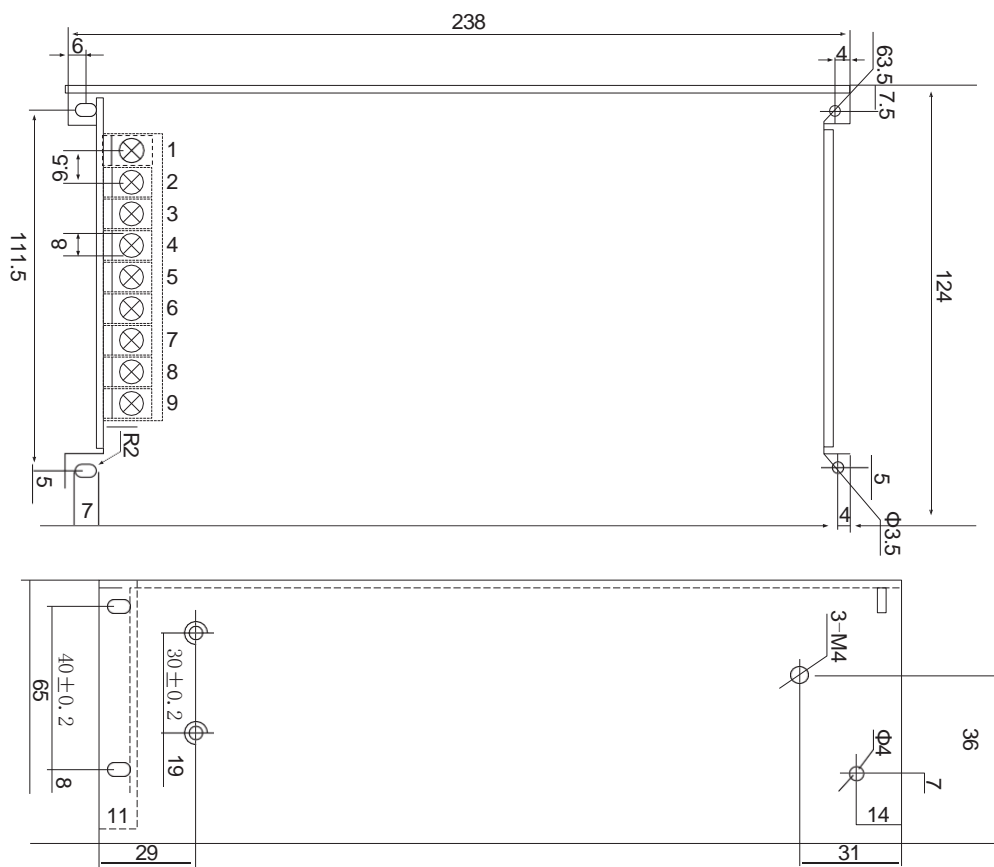
Industrial control, mechanical and electrical, electronic instruments, industrial automation, electronic equipment, semiconductor equipment, etc. (except information technology equipment)

01-01

Electrical Specifications

Model		MS-1000-12	MS-1000-15	MS-1000-24	MS-1000-36	MS-1000-48
Output	DC output voltage	12V	15V	24V	36V	48V
	Rated current	80A	64A	40A	27.8A	21A
	Current range	0~80A	0~64A	0~40A	0~27.8A	0~21A
	Rated power	960W	960W	960W	1000.8W	1008W
	Ripple & Noise (Max)	200mVp-p	200mVp-p	240mVp-p	320mVp-p	320mVp-p
	voltage adjustment range	0~13.8V	0~16.5V	0~26.4V	0~39.6V	0~52.8V
	voltage accuracy	±1%	±1%	±1%	±1%	±1%
	Linear adjustment rate	±1%	±1%	±1%	±1%	±1%
	Load Adjustment Ratio	±1%	±1%	±1%	±1%	±1%
	start-up & rise time	1200ms,60ms/230VAC (at full load)				
	Holding time	10mS/230VAC (at full load)				
Input	Input Voltage	185~264VAC 260~370VDC				
	Input frequency	50~60HZ				
	Efficiency	84%	85%	88.5%	89%	90%
	Input current	8.5A/230VAC				
	Leakage current	< 2mA/240VAC				
Protection	overload protection	105~135% of rated power Protection mode: constant current limiting mode, restart to recover after 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				
	Over temperature	Turn off the output voltage, reboot to restore				
Function	Fan On/Off Control (Typ.)	TH3 ≥ 50 °C fan on, ≤ 40 °C fan off				
Environment	Operating temperature	-20°C ~+60°C				
	Operating humidity	20~90%RH No condensation				
	Storage temperature/humidity	-40~+80°C 10~95%RH, no condensation				
Security	Vibration-resistant pressure resistance	10~500HZ, 5G 10 min/cycle, X, Y, Z 60 min each				
		Input to Output :1.5KVAC; Input to Ground :1.5KVAC; Output to Ground :500VAC				
Others	Insulation impedance	Input to Output, Input to Ground, Output to Ground :100 Ohms/500VDC/25°C /70%RH				
	Product dimensions	241*124*65mm (L*W*H)				
	Packaging	2.0kg/pcs				
Remarks		1. All parameters are measured at 230VAC input, rated load and 25°C when not otherwise 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/N(DC+)
2	AC/L(DC-)
3	FG (⊕)
4,5,6	DC OUTPUT -V
7,8,9	DC OUTPUT +V

Pinout	Function	
L	AC LINE	Screw:M4*10 Torque:22Kgf.cn(2..... 2N.m)
N	AC NETURAL	
⊕	EARTH	
-V	DC output -	Screw:M6*12 Torque:22Kgf.cn(2..... 2N.m)
-V	DC output -	
-V	DC output -	
+V	DC output +	
+V	DC output +	
+V	DC output +	

8-M4 Customer system

mounting holes

mounting screws: M4

Installation torque: 8Kgf.cn

(0.8N.m) The screw extends into

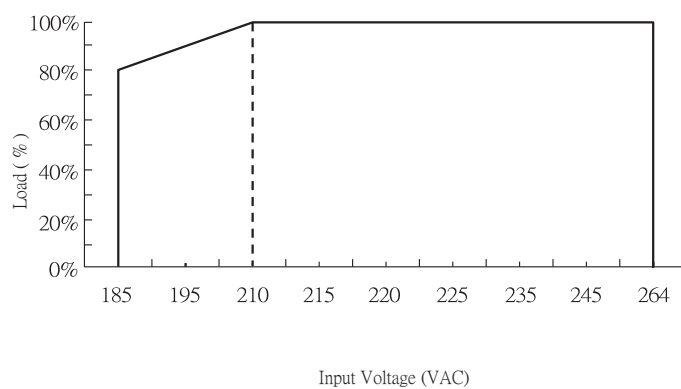
the casing no more than 3mm

Remarks:

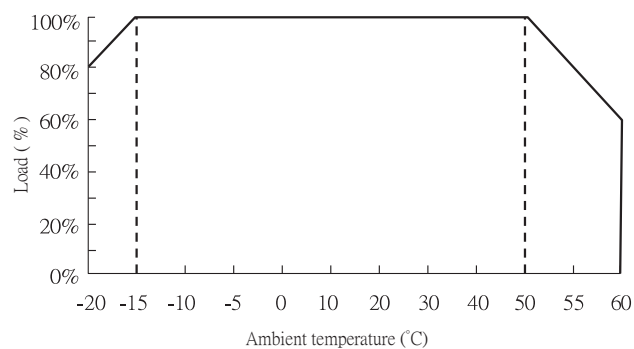
Unit: mm[inch]; Unlabeled tolerance of $\pm 0.5[\pm 0.020]$

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.