



# Zhitao Group

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Industrial Power Supplies

## Product Specifications

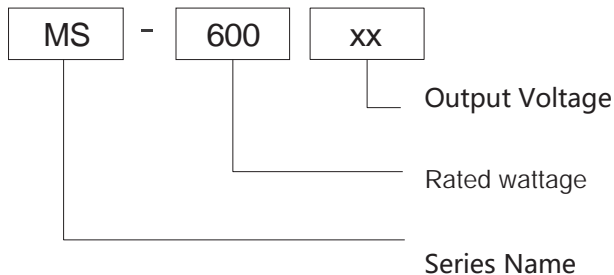
# MS-600

- Product Category: 600w Single Output Power Supply
- Version number: ztao3.0
- Release date: 1st May 2025

### Product Overview

MS-600-XX SERIES PRODUCTS FOR A 600W 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, AS WELL AS A FULL RANGE OF PROTECTION, TO ENSURE THAT THIS SERIES OF PRODUCTS OF HIGH RELIABILITY AND HIGH STABILITY.

### Model encoding



### product characteristics

- The AC range input is switched via the switch
- 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



# 600W SINGLE OUTPUT POWER SUPPLY

MS-600 series

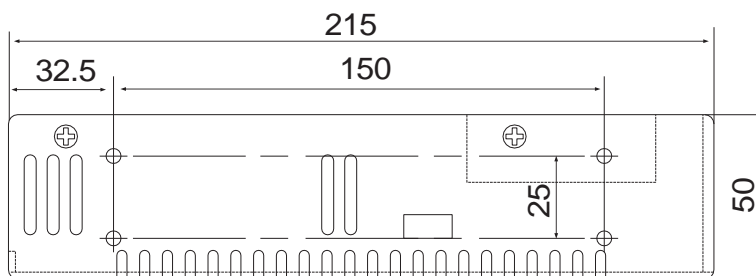
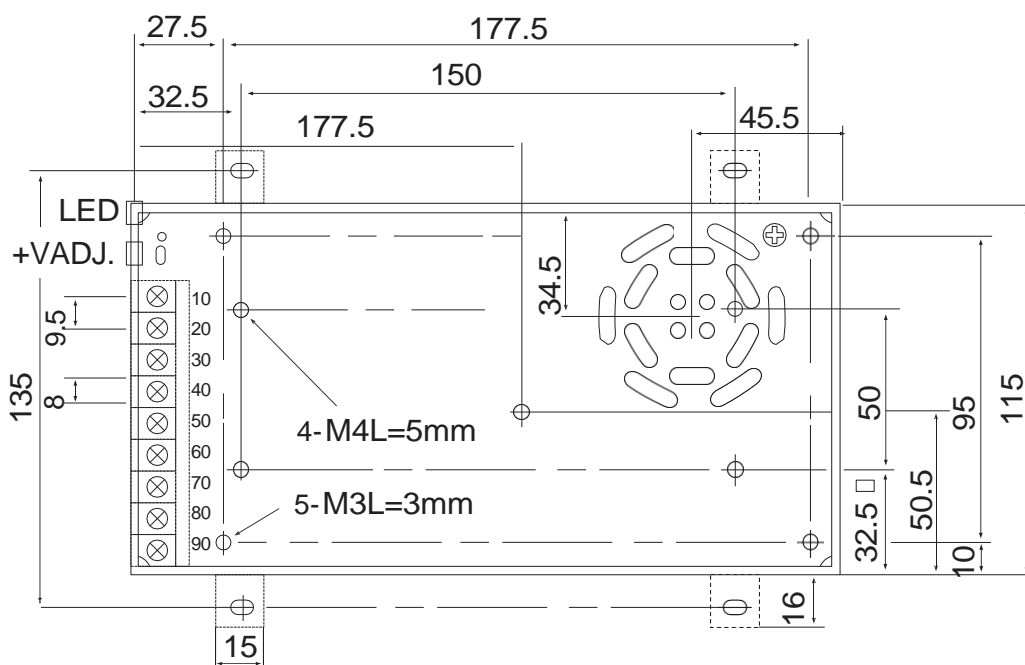


## Electrical Specifications

Model		MS-600-24		MS-600-36		MS-600-48	
Output	DC output voltage	24V		36V		48V	
	Rated current	25A		16.7A		12.5A	
	Current range	0~25A		0~16.7A		0~12.5A	
	Rated power	600W		601.2W		600W	
	Ripple & Noise (Max)	240mVp-p		300mVp-p		300mVp-p	
	voltage adjustment range	21.6~26.4V		32.4~39.6V		43.2~52.8V	
	voltage accuracy	±1%		±1%		±1%	
	Linear adjustment rate	±0.5%		±0.5%		±0.5%	
	Load Adjustment Ratio	±0.5%		±0.5%		±0.5%	
	start-up & rise time	1200ms,50ms/230VAC                      1500ms,50ms/115VAC (at full load)					
	Holding time	18mS/230VAC 14mS/115VAC (at full load)					
Input	Input Voltage	100~132 VAC/195~264VAC SELECTABLE BY SWITCH                      273~370VDC(switc on 230VAC)					
	Input frequency	50~60HZ					
	Efficiency	85%	85%	87%	88%	89%	
	Input current	7.0A/115VAC   4.0A/230VAC					
	Leakage current	< 2mA/240VAC					
Protec tion	overload protection	105~135% of rated power					
		Protection mode: +vo down to undervoltage point, automatic recovery after removal of abnormal conditions					
	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					
Environ ment	Operating temperature	-20°C ~+65°C					
	Operating humidity	20~90%rh No condensation					
	Storage temperature/humidity	-40~+80°C 10~95%rh, no condensation					
Security	Vibration-resistant	10~500HZ, 5G 10 MIN/CYCLE, X, Y, Z 60 MIN EACH					
	pressure resistance	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	215*115*50mm ( L*W*H )					
	Packaging	1.3kg/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/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*9.5 Torque:22Kgf.cn( 2..... 2N.m)
N	AC NETURAL	
⊕	EARTH	
-Vo	DC output -	Screw:m4*9.5 Torque:22Kgf.cn( 2..... 2N.m)
-Vo	DC output -	
-Vo	DC output -	
+Vo	DC output +	
+Vo	DC output +	
+Vo	DC output +	

8-m4 Customer system  
mounting holes  
mounting screws:m4  
Installation torque: 8Kgf.cn  
(0.8N.m) screws into the  
housing is not more than  
3mm

Remarks:

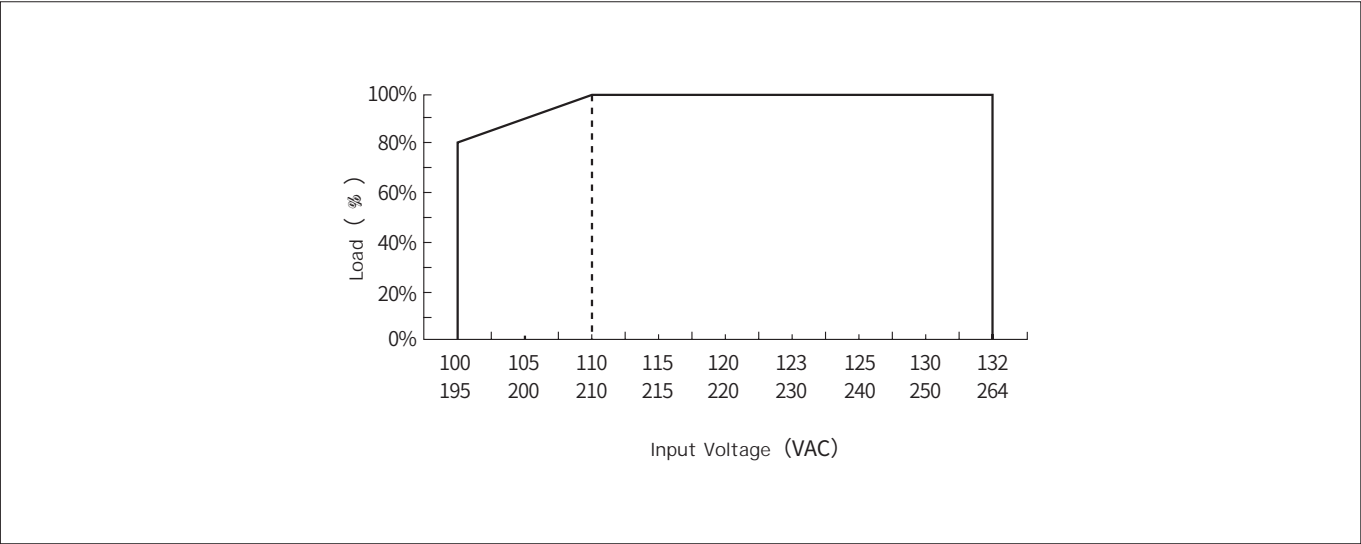
Unit: mm [inch]; unlabelled tolerances  $\pm 0.5$  [ $\pm 0.020$ ].



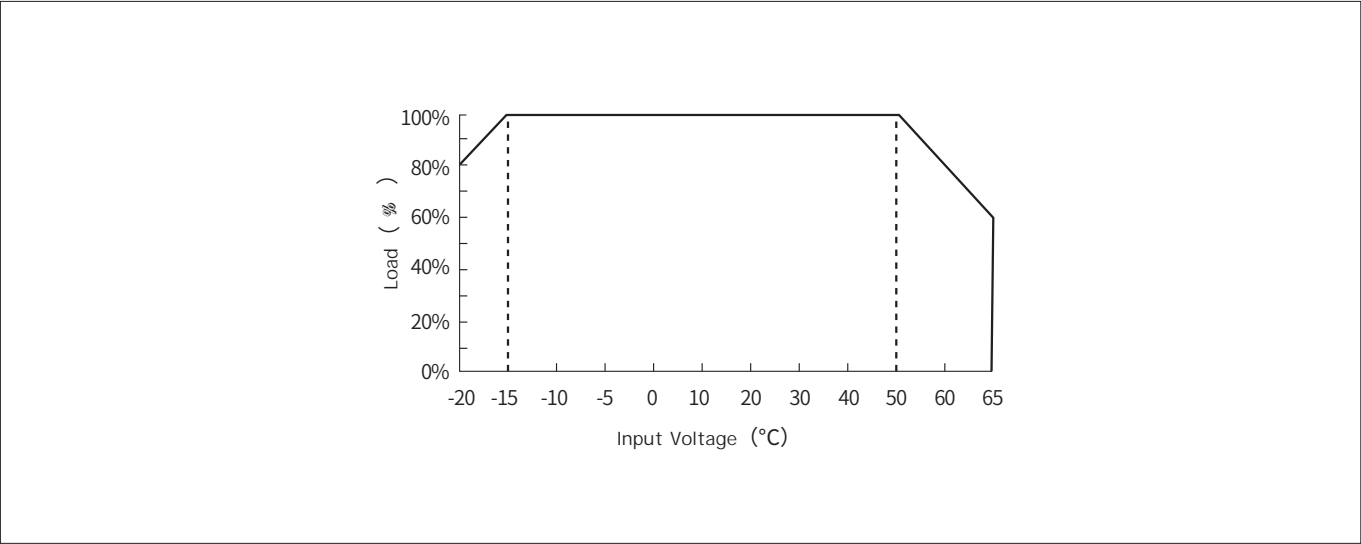


Characteristic Curve

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.