

Zhitao Group

ZHITAO GROUP

Industrial power supplies

Product Specifications

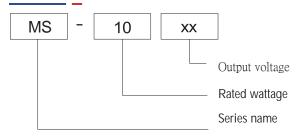
MS-10

- 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 HIGH RELIABILITY AND HIGH 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



CE FC ROHS ISO

Fields of Application

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

01-01

Zhitao Power Supply - is not just a full power supply

400-888-6287



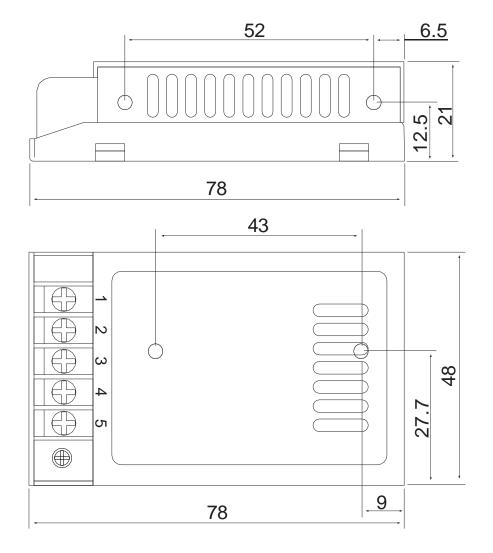
Electrical Specifications

DC output voltage Current rating Current range Rated power Ripple & Noise (Max) Voltage regulation range Voltage accuracy Linear adjustment rate Load Adjustment Ratio start-up & rise time Holding time Input Voltage Input frequency	24mS/230VAC;20m 85~264VA C 50~60HZ			24V 0.5A 0~0.5A 12W 150mVp-p 21.6~26.4V ±1% ±0.5% ±0.5%	36V 0.34A 0~0.34A 12.24W 200mVp-p 32.4~39.6V ±1% ±0.5%	48V 0.25A 0~0.25A 12W 200mVp-p 43.2~52.8V ±1% ±0.5%				
Current range Rated power Ripple & Noise (Max) Voltage regulation range Voltage accuracy Linear adjustment rate Load Adjustment Ratio start-up & rise time Holding time Input Voltage Input frequency	0~2A 10W 120mVp-p 4.5~5.5V ±1% ±0.5% ±0.5% 500ms,24ms/230VA 24mS/230VAC;20m 85~264VAC 50~60HZ	0~1A 12W 120mVp-p 10.2~13.8V ±1% ±0.5% ±0.5% AC 800ms,30 S/115VAC (at full load)	0~0.8A 12W 120mVp-p 13.5~16.5V ±1% ±0.5% ±0.5%	0~0.5A 12W 150mVp-p 21.6~26.4V ±1% ±0.5% ±0.5%	0~0.34A 12.24W 200mVp-p 32.4~39.6V ±1% ±0.5%	0~0.25A 12W 200mVp-p 43.2~52.8V ±1% ±0.5%				
Rated power Ripple & Noise (Max) Voltage regulation range Voltage accuracy Linear adjustment rate Load Adjustment Ratio start-up & rise time Holding time Input Voltage Input frequency	10W 120mVp-p 4.5~5.5V ±1% ±0.5% ±0.5% 500ms,24ms/230VA 24mS/230VAC;20m 85~264VA C 50~60HZ	12W 120mVp-p 10.2~13.8V ±1% ±0.5% ±0.5% AC 800ms.30 S/115VAC (at full load)	12W 120mVp-p 13.5~16.5V ±1% ±0.5% ±0.5%	12W 150mVp-p 21.6~26.4V ±1% ±0.5% ±0.5%	12.24W 200mVp-p 32.4~39.6V ±1% ±0.5%	12W 200mVp-p 43.2~52.8V ±1% ±0.5%				
Ripple & Noise (Max) Voltage regulation range Voltage accuracy Linear adjustment rate Load Adjustment Ratio start-up & rise time Holding time Input Voltage Input frequency	120mVp-p 4.5~5.5V ±1% ±0.5% ±0.5% 500ms,24ms/230VA 24mS/230VAC;20m 85~264VA C 50~60HZ	120mVp-p 10.2~13.8V ±1% ±0.5% ±0.5% AC 800ms.30 S/115VAC (at full load)	120mVp-p 13.5~16.5V ±1% ±0.5% ±0.5%	150mVp-p 21.6~26.4V ±1% ±0.5% ±0.5%	200mVp-p 32.4~39.6V ±1% ±0.5%	200mVp-p 43.2~52.8V ±1% ±0.5%				
(Max) Voltage regulation range Voltage accuracy Linear adjustment rate Load Adjustment Ratio start-up & rise time Holding time Input Voltage Input frequency	4.5~5.5V ±1% ±0.5% ±0.5% 500ms,24ms/230VA 24mS/230VAC;20m 85~264VAC 50~60HZ	10.2~13.8V ±1% ±0.5% ±0.5% AC 800ms,30 S/115VAC (at full load)	13.5~16.5V ±1% ±0.5% ±0.5% Oms/115VAC(at full loa	21.6~26.4V ±1% ±0.5% ±0.5%	32.4~39.6V ±1% ±0.5%	43.2~52.8V ±1% ±0.5%				
range Voltage accuracy Linear adjustment rate Load Adjustment Ratio start-up & rise time Holding time Input Voltage Input frequency	±1% ±0.5% ±0.5% 500ms,24ms/230VA 24mS/230VAC;20m 85~264VA C 50~60HZ	±1% ±0.5% ±0.5% S/115VAC (at full load)	±1% ±0.5% ±0.5% Oms/115VAC(at full loa	±1% ±0.5% ±0.5%	±1% ±0.5%	±1% ±0.5%				
Linear adjustment rate Load Adjustment Ratio start-up & rise time Holding time Input Voltage Input frequency	±0.5% ±0.5% 500ms,24ms/230VA 24mS/230VAC;20m 85~264VA C 50~60HZ	±0.5% ±0.5% AC 800ms,30 S/115VAC (at full load)	±0.5% ±0.5% 0ms/115VAC(at full loa	±0.5%	±0.5%	±0.5%				
rate Load Adjustment Ratio start-up & rise time Holding time Input Voltage Input frequency	±0.5% 500ms,24ms/230VA 24mS/230VAC;20m 85~264VA C 50~60HZ	±0.5% AC 800ms,30 S/115VAC (at full load)	±0.5% 0ms/115VAC(at full loa	±0.5%						
Ratio start-up & rise time Holding time Input Voltage Input frequency	500ms,24ms/230VA 24mS/230VAC;20m 85~264VA C 50~60HZ	AC 800ms,30 S/115VAC (at full load)	0ms/115VAC(at full loa		±0.5%	±0.5%				
Holding time Input Voltage Input frequency	24mS/230VAC;20m 85~264VA C 50~60HZ	S/115VAC (at full load)		ud)						
Input Voltage Input frequency	85~264VA C 50~60HZ)	500ms,24ms/230VAC 800ms,30ms/115VAC(at full load)						
Input frequency	50~60HZ	120~370VDC		24mS/230VAC;20mS/115VAC (at full load)						
			85~264VAC 120~370VDC							
Efficiency		50~60HZ								
	78%	80%	80%	85%	85%	86%				
Input current	0.4A/115VA C 0.18A/230VAC									
Leakage current	< 1mA/240VAC									
Prote overload protection Ction Overvoltage protection	125~150% of rated power									
	Protection mode: hiccup protection, automatic recovery after removal of abnormal conditions									
	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									
Operating temperature	-20°C ~+65°C									
Operating humidity	20~90%rh No condensation -40~+80°C 10~95%rh, no condensation									
Storage temperature/humidity										
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									
Insulation impedance	Input to Output, Input to Ground, Output to Ground :100 Ohms/500VDC/25°C /70%RH									
Product dimensions	78*48*21mm (L*W*H)									
Packaging	0.1kg/pcs									
	 Ripple and noise volt air cable, measured at 20 Accuracy: Includes s Linear Adjustment R 	tages were measured on a DMHZ bandwidth. etting error, linear adjustr atio Measurement Method tio Measurement Method:	20MHz bandwidth oscill nent ratio and load adjust d: Test from low voltage From 0% to 100% of rat d frequent switching on a	oscope with 0.1 μ and 42 ment ratio. to high voltage at rated lo red load nd off may increase the st	pad tart-up time.	of a 12-inch twisted p				
(t T I I I	Dperating humidity Storage emperature/humidity Vibration-resistant pressure resistance insulation impedance Product dimensions	Deparating humidity 20~90%rh No conde Storage -40~+80°C 10~95%r emperature/humidity 10~500HZ, 5G 10 M vibration-resistant 10~500HZ, 5G 10 M pressure resistance Input to output :1.5k nsulation impedance Input to Output, Input Product dimensions 78*48*21mm (Packaging 0.1kg/pcs I. All parameters are m 2. Ripple and noise voltair cable, measured at 20 at	Operating humidity 20~90%rh No condensation Storage -40~+80°C 10~95%rh, no condensation emperature/humidity -40~+80°C 10~95%rh, no condensation Vibration-resistant 10~500HZ, 5G 10 MIN/CYCLE, X, Y, Z 60 pressure resistance Input to output :1.5kvac; Input to ground :1. nsulation impedance Input to Output, Input to Ground, Output to 0 Product dimensions 78*48*21mm (L*W*H) Packaging 0.1kg/pcs I. All parameters are measured at 230vac input, 12. Remarks 3. Accuracy: Includes setting error, linear adjustr 4. Linear Adjustment Ratio Measurement Method: 6. Start-up time is measured at cold start, fast and	Deparating humidity 20~90%rh No condensation Storage -40~+80°C 10~95%rh, no condensation emperature/humidity -40~+80°C 10~95%rh, no condensation 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 :100 Ohms/500 Product dimensions 78*48*21mm (L*W*H) Packaging 0.1kg/pcs I. All parameters are measured at 230vac input, rated load and 25°C when 2. Ripple and noise voltages were measured on a 20MHz bandwidth oscill air cable, measured at 20MHZ bandwidth. S. Accuracy: Includes setting error, linear adjustment ratio and load adjust 4. Linear Adjustment Ratio Measurement Method: From 0% to 100% of rate	Operating humidity 20~90%rh No condensation Storage -40~+80°C 10~95%rh, no condensation emperature/humidity -40~+80°C 10~95%rh, no condensation 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 nsulation impedance Input to Output, Input to Ground, Output to Ground :100 Ohms/500VDC/25°C /70%RH Product dimensions 78*48*21mm (L*W*H) Packaging 0.1kg/pcs I. 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 0.1 µ and 4' air 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 log 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 s	Operating humidity 20-90%rh No condensation Storage -40~+80°C 10~95%rh, no condensation emperature/humidity -40~+80°C 10~95%rh, no condensation 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 nsulation impedance Input to Output, Input to Ground, Output to Ground :100 Ohms/500VDC/25°C /70%RH Product dimensions 78*48*21mm (L*W*H) Packaging 0.1kg/pcs 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 0.1 µ and 47 µ capacitors at the end air 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				

10W SINGLE OUTPUT POWER SUPPLY MS-10 SERIES



Outline and Mounting Dimensions (mm)



pin No	Assignment
1	AC/L(DC-)
2	AC/N(DC+)

Terminal Pin No. Assignment

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2	/(O/I((DOI))
3	FG 🖶
4	DC OUTPUT -V
5	DC OUTPUT +V

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

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].

01-03

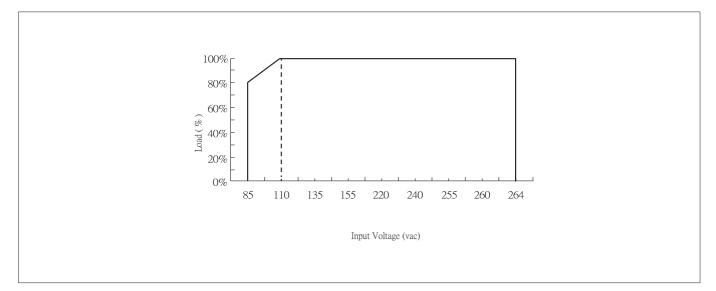
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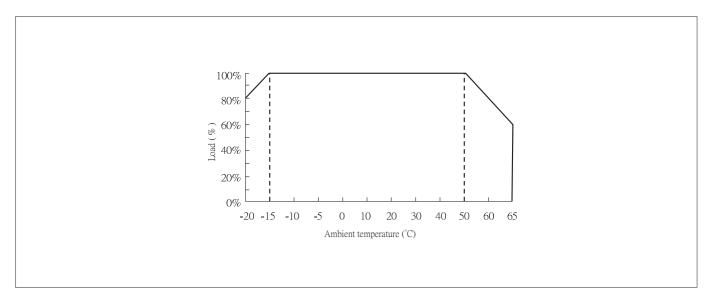


Characteristic Curve

Input Voltage vs Output Load



Ambient temperature vs output load



Remarks:

If you need to know more detailed test data, please contact our technical support to get the application notes of the corresponding products.
 This product is suitable for use in a natural air convection environment, if used in a closed environment, please contact our technical support staff.

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