



Zhitao Group

ZHITAO GROUP

Industrial Power Supply

Product Specifications

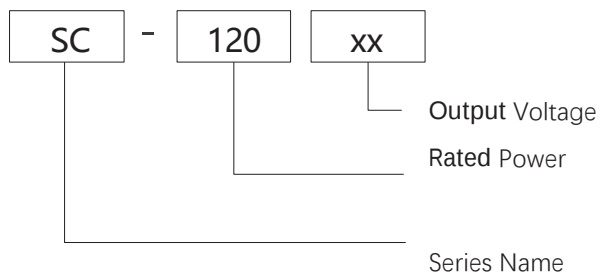
SC-120

- Product Category: 120W Single Output Power Supply with
- Charging Function; Version Number: ZTAO3.0
- Release Date: May 1st, 2025

Product Overview

The SC-120-XX series products are 120W (UPS) chassis-type industrial power supplies with charging function. The output voltage includes 12V/24V, etc., and there is also a charging output. It has a small rated current to provide backup power for safe access to system needs. It can be adapted to different load application requirements to meet the needs of most industrial applications. Self-cooling heat dissipation and all-round protection ensure the reliability and stability of this series of products.

product encoding



Product Features

- AC Input Voltage Selectable by Switch
- Protection Types: Short Circuit / Overload
- Natural Air Cooling
- Features Power-On / Charging / AC Power Indicator (LED)
- 100% Full Load Burn-in Test
- Battery Low Voltage Protection
- 3-Year Warranty
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Application Areas

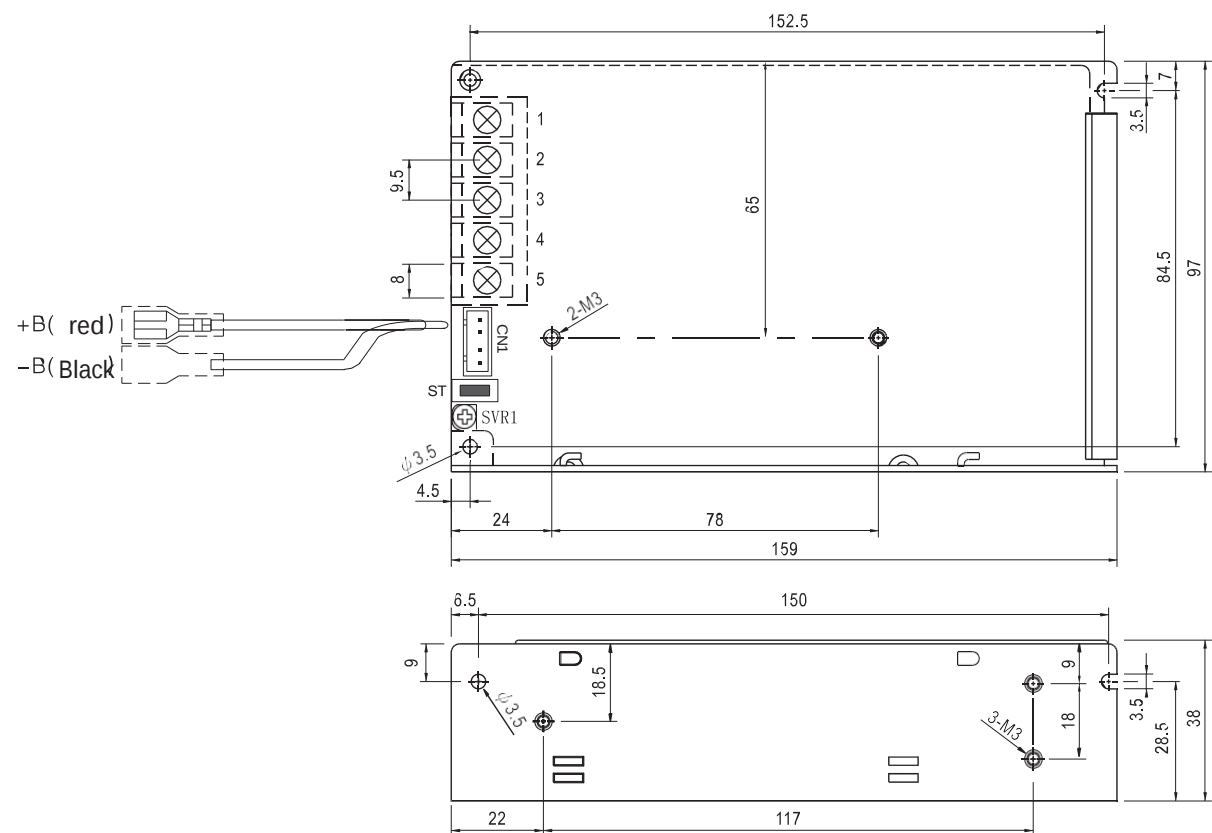
Industrial Control, Mechanical Electrical Equipment, Electronic Instruments, Industrial Automation, Electronic Equipment, Semiconductor Equipment, etc. (excluding information technology equipment)

01-01

Electrical Specifications

Model		SC-120-12		SC-120-24	
Output	DC Output Voltage	CH1:13.8V	CH1: 13.4V (charging)	CH1:27.6V	CH2:26.5V
	Rated Current	8.0A	0.5A	4.0A	0.3A
	Current Range	0~8.0A	-----	0~4.0A	-----
	Rated Power	117.1W		118.4W	
	Ripple & Noise (Maximum)	120mVp-p	-----	180mVp-p	-----
	Voltage Adjustment Range	11.3~14.9V	-----	21.3~29.8V	-----
	Voltage Accuracy	±2.0%	-----	±1.0%	-----
	Start-up & Rise Time	600ms,50ms/230VAC 1200ms, 50ms / 115VAC (full load)			
	Hold Time	80ms / 230VAC; 16ms / 115VAC (full load)			
Input	Input Voltage	90~132/180~264VAC (selectable via switch)		255~370VDC(switch on 230VAC)	
	Input Frequency	50~60HZ			
	Efficiency	84%		86%	
	Input Current	2.8A/115VAC 1.4A/230VAC			
	Leakage Current	< 1mA/240VAC			
Protection	Overload Protection	110~150% of Rated Power Protection Mode: AC Charging Mode, Hiccup Type, Automatic Recovery After Abnormal Conditions Are Removed			
	Battery Low Voltage Protection	9.5~11V		20~22V	
		Protection Mode: Output Cut-off			
Functions	UPS Functions	Long-term online float charging of the battery, high charging efficiency, battery fullness can reach up to 90%			
		Automatic stop when fully charged, preventing overcharging and effectively extending battery life			
		Automatic switching between AC power and battery, quick switching, no human intervention required			
		Cold Start Function: Under mains power conditions, the UPS can be started directly by battery to meet users' emergency needs.			
Environment	Operating temperature	-20℃ ~+65℃			
	Operating humidity	20~90%RH Non-condensing			
	Storage temperature / humidity	-40~+80℃ 10~95%RH, Non-condensing			
	Vibration resistance	10~500HZ, 5G 10 minutes / Cycle, X, Y, Z each 60 minutes			
Safety	Withstand voltage	Input to Output: 1.5KVAC; Input to Ground: 1.5KVAC; Output to Ground: 500VAC			
	Insulation resistance	Input to Output, Input to Ground, Output to Ground: 100 Ohms/500VDC/25℃/70%RH			
Other	Product dimensions	159*98*38mm (L*W*H)			
	Packaging	0.56kg/45pcs/26Kg/0.041m³			
Remarks		1. Unless otherwise specified, all parameters are measured under 230VAC input, rated load, and 25℃ conditions. 2. Ripple and noise voltage were measured on a 20MHz bandwidth oscilloscope with 0.1μ and 47μ capacitors added to the ends of a 12-inch twisted pair cable, measured at a 20MHz bandwidth. 3. Accuracy: Includes setting error, linearity adjustment rate and load adjustment rate. 4. Linear regulation measurement method: Test from low voltage to high voltage under rated load 5. Load regulation measurement method: From 0% to 100% rated load 6. Startup time is measured under cold start conditions. Rapid and frequent power-on and power-off may increase startup time. 7. When operating at an altitude higher than 2000 meters (6500 ft): the operating environment needs to be lowered by 5℃ / 1000 meters			

Dimensions and Installation (mm)



TB1 Terminal Pin No.Assignment

Pin脚编号	Assignment	Pin脚编号	Assignment
1	AC/L	4	DC-V
2	AC/N	5	DC+V
3	FG		

CN1 External Indicator Light Description

Indicator color	Description
Green	DC OUTPUT 指示灯
Red	AC INPUT 指示灯
white	Battery charging indicator light

Pins	Functions	
L	AC LINE	Screws: M4*9.5 Torque: 22Kgf.cn (2.. 2N.m)
N	AC NETURAL	
⊕	EARTH	
-V	DC output -	Screws: M4*9.5 Torque: 22Kgf.cn (2.. 2N.m)
+V	DC output +	

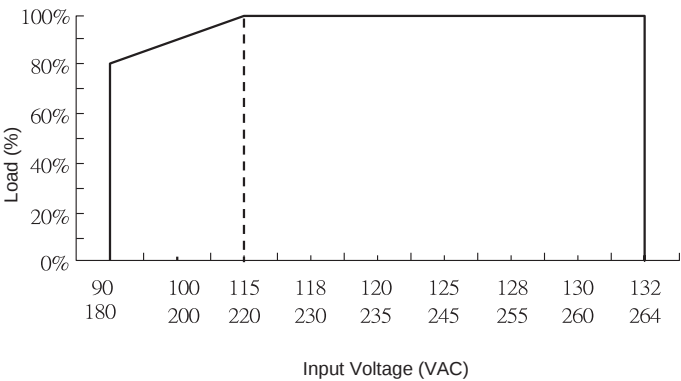
The ST cold start function , switch allows the UPS to be started directly with batteries in the absence of mains power, meeting the user's emergency needs

- 8-M3 Customer System
- Mounting Hole Mounting
- Screws: M3
- Mounting Torque: 8Kgf.cn (0.8Nm)
- Screws should not extend more than 3mm into the housing
- Remarks:

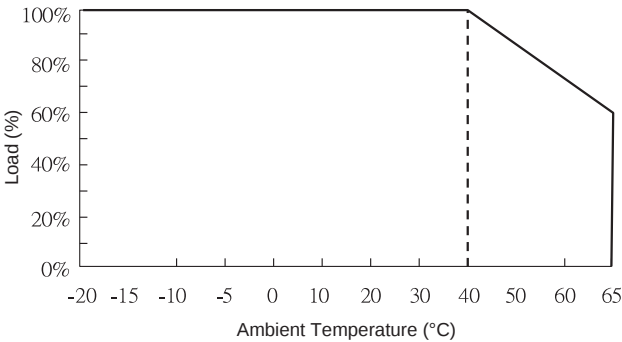
Unit: mm [inch]; Unspecified tolerance is ±0.5 [±0.020]

Characteristic Curve

Input Voltage VS Output Load



Ambient Temperature VS Output Load



- Note:
- 1. For more detailed test data, please contact our technical support to obtain the application notes for the corresponding product.
 - 2. This product is suitable for use in natural air convection environments. For use in enclosed environments, please contact our technical support.