



Zhitao Group

ZHITAO GROUP

Industrial Power Supplies

Product Specifications

# D-220

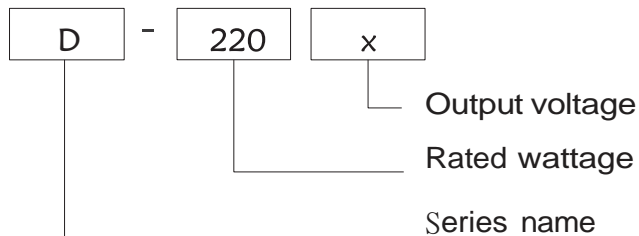
- Product Category: 220W Dual Output Switching Power Supply
- Version No.: ZTAO3.0
- Release date: 1st May 2025



## Product Overview

The D-220-X series is a 220W dual-output industrial power supply. The CH1 and CH2 outputs can be grounded to adapt to different load application requirements, meeting the needs of most industrial applications. With high conversion efficiency, compact design, excellent heat dissipation, and comprehensive protection, this series ensures high reliability and stability

## Model encoding



## product characteristics

- AC input range 170~264VAC
- CH1, CH2 output for ground
- Type of protection: short circuit/overload/overvoltage
- Cooling by free air convection
- 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)



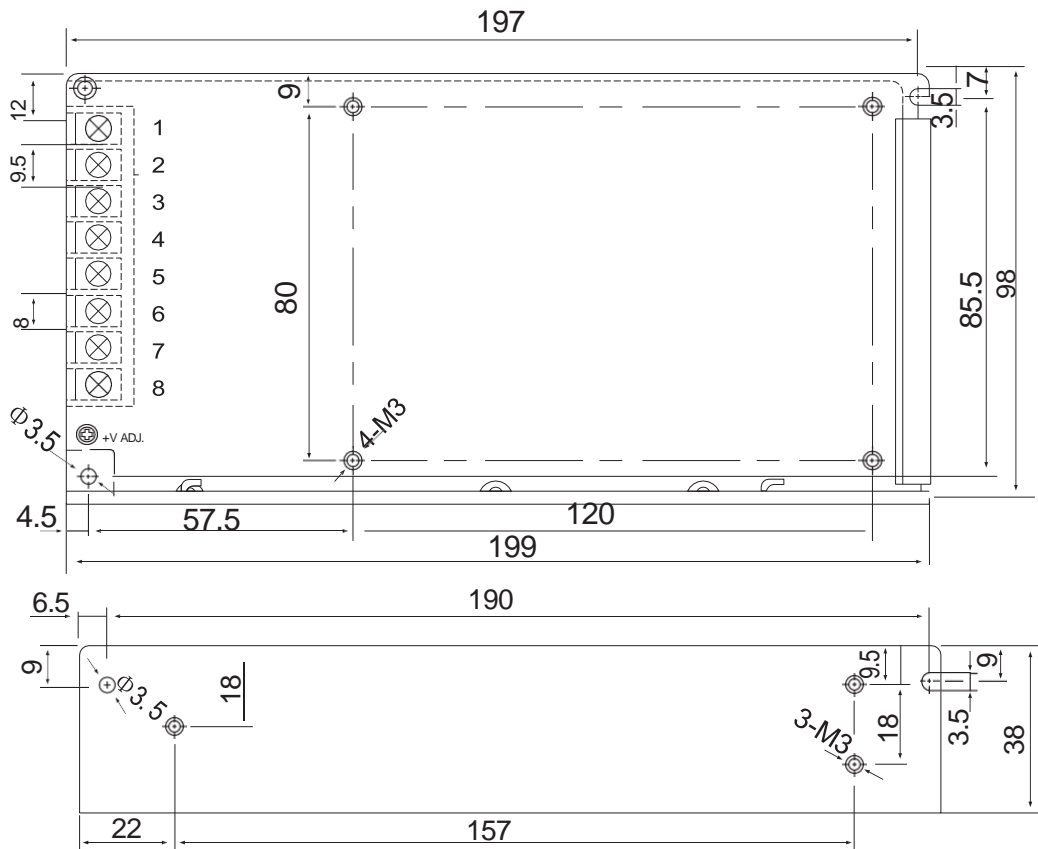
RoHS



electrical specifications

Model		D-220C	
Output	Output channels	CH1	CH2
	DC output voltage	24V	12V
	Rated current	7A	4A
	Current range	0~7A	0~4A
	Rated power	216W	
	Ripple & Noise (Max)	150mVp-p	120mVp-p
	voltage adjustment range	CH1:21.6~27.5V	
	voltage accuracy	±2.0%	±2.0%
	Linear adjustment rate	±0.5%	±0.5%
	Load Adjustment Ratio	±1.0%	±1.5%
	start-up & rise time	200 ms,100 ms/230VAC (at full load)	
	Holding time	30ms/230VAC ( at full load )	
Input	Input Voltage	170~ 264VAC	127~370VDC
	Input frequency	50~60HZ	
	Efficiency	87%	
	Input current	2.4A/230VAC	
	Leakage current	< 1mA/240VAC	
Protection	overload protection	105~135% of rated power	
		Protection mode: VO drops to undervoltage point, power off and restart after abnormal conditions are removed	
	Overvoltage protection	CH1:27.6~32.4V Protection mode: load current exceeds 115~150% of the rated load, the current enters the constant current mode, power off and restart after troubleshooting	
Environment	Operating temperature	-20°C ~+65°C	
	Operating humidity	20~90%RH No condensation	
	Storage temperature/humidity	-40~+80°C 10~95%RH, no condensation	
	Resistant to vibration	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°C /70%RH	
Others	Product dimensions	199*98*50mm (L*W*H)	
	Packaging	0.6kg/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 0.1 $\mu$ and 47 $\mu$ 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 block leg definition

pin number	Pin Function	pin number	Pin Function
1	AC/N(DC+)	5	DC output +24V
2	AC/L(DC-)	6	DC output COM
3	FG $\oplus$	7	DC output COM
4	DC output +24V	8	DC output +12V

Pinout	Function	
L	AC LINE	Screw:M4*9.5 Torque:22Kgf.cn (2.2N.m)
N	AC NETURAL	
$\oplus$	EARTH	
+24V	DC output +24V	Screw:M4*9.5 Torque:22Kgf.cn (2.2N.m)
+24V	DC output +24V	
COM	DC output -	
COM	DC output -	
+12V	DC output +12V	

8-M4 Customer system

mounting holes mounting

screws: M3

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

screws into the housing is not more

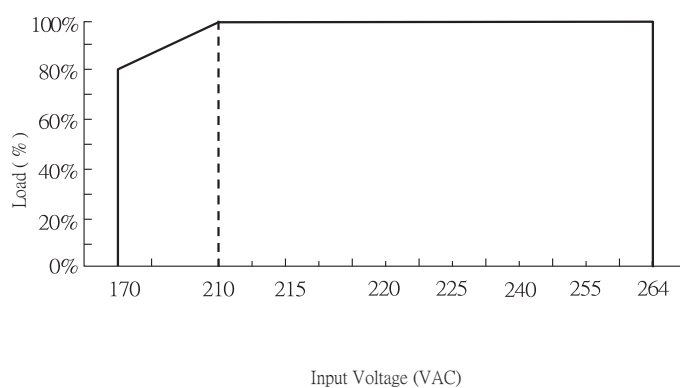
than 3mm

Remarks:

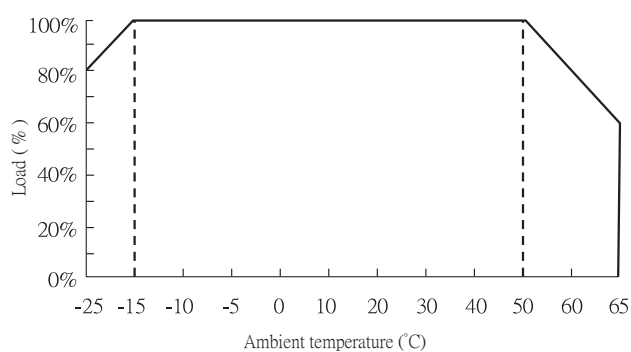
Unit: mm [inch]; unlabelled tolerances are  $\pm 0.5$  [ $\pm 0.020$ ].

## Characteristic Curve

### Input Voltage VS Output Load



### Ambient Temperature VS Output Load



#### Note:

- 1.If you need 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.