



# SPECIFICATION

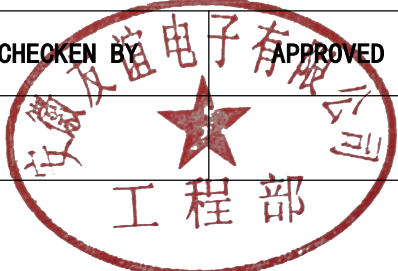
Customer: \_\_\_\_\_

Product Name: Switching Power Supply

Part Number: YY-D-200-5 V-K2

File No.: \_\_\_\_\_

Date: \_\_\_\_\_ Quantity: \_\_\_\_\_

	CHECKEN BY  APPROVED BY	CUSTOMER CONFIRMATION

Please return to us one original of "SPECIFICATION FOR APPROVAL" with your approved signatures

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### Revision History

Revision	Change Item	Approved By	Date

Signature:

Date:



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## 1: Product Overview

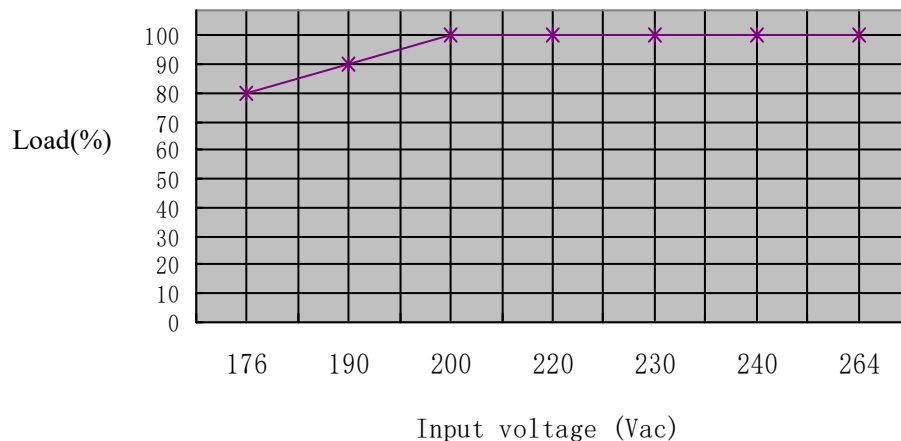
The product is AC-DC constant voltage power supply and it can drive the industrial equipment, like LED display. It have the characteristics of high efficiency, small capacity, a stable output and high reliability. It also have protection function of short circuit protection, over temperature protection and so on.

## 2: Electrical Specification

### 2.1 Input Electrical Characteristics

Item	model	YY-D-200-5 V-K2
Output Power		200W
Input Voltage Range		180 Vac ~ 240Vac
Frequency range		47HZ ~ 63HZ
Leakage Current		$\leq 2\text{ma @}240\text{Vac}$
Maximum Input Current		2A @220Vac
Inrush Current		$\leq 45\text{A @}230\text{Vac}$
Efficiency(full load)		$\geq 89\%$

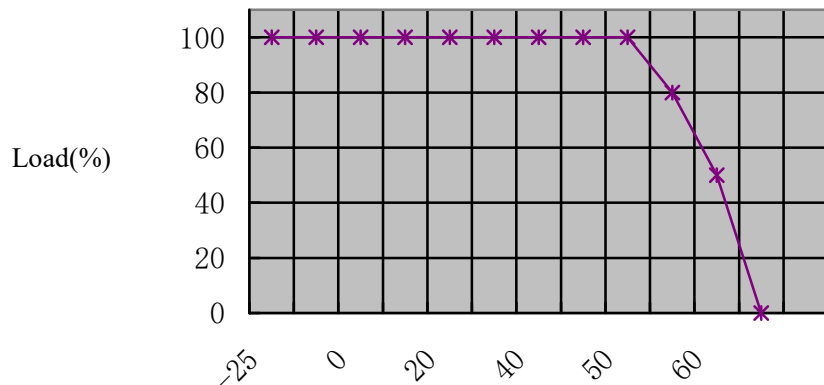
### 2.2 Operate Voltage Rating Cuidline.





### 3: Output Electrical Characteristics

#### 3.1 Operate Temperature Rating Cuidline.



Operating environment temperature.

If customer want the product to work at the environment of - 40°C, please indicate special requirement when customer order it.

#### 3.2 Output Voltage And Current Specification

Output Voltage	5.0V
Rated Current	40A
Current Range	0 - 40A
Voltage Adj. Range	-
Voltage Tolerance	±3.0%
Line Regulation	±0.5%
Load Regulation	±2.0%

#### 3.3 Timing Characteristics

Item	Input	
	115Vac Input @ Full Load	230Vac Input @ Full Load
Setup Time	-	≤1500ms
Rise Time	-	≤50ms
Hold Up Time	-	≤16ms



### 3.4 Output Dynamic Response

Output Voltage	Change Rate	Voltage Range	Load Change
5.0 Vdc	1~1.5A/uS	≤±5%	@Min.to 50% load and 50% to max load
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### 3.5 Output Ripple & Noise

Output Voltage	Ripple & Noise
5.0 Vdc	100mVp-p

#### Measure Methods

A. Ripple & Noise test: Ripple & Noise bandwidth is set to 20mHZ.

B. Connect a 0.1uf Ceramic Capacitor with a 10uf Electrolytic Capacitor parallel to output terminals to test Ripple & Noise.

## 4: Protection Function

### 4.1 Output Short Circuit Protection

Output Voltage	Description
5.0 Vdc	When a short circuit occurs, the output is turned off; operation automatically resumes once the fault is cleared.

### 4.2 Output Over Load Protection

Output Voltage	Description
5.0 Vdc	When the output current exceeds 105% to 138% of the rated value, the output is turned off; operation automatically resumes after the fault is cleared.

### 4.3 Output Over Voltage Protection

Output Voltage	Description
6.0 Vdc	Due to external factors causing abnormal output of the product, the maximum voltage will not exceed 6.0V, effectively protecting the product' s power supply equipment.

## 5: Isolation

### 5.1 Dielectric Strength

(Input To Output)	3000Vac 50HZ 1minute ≤5mA
(Input To FG)	2000Vac 50HZ 1minute ≤5mA
(Output To FG)	500Vac 50HZ 1minute ≤5mA



## 5.2 Insulation Resistance

Input To Output	DC 500V 10M $\Omega$ Min
Output To FG	DC 500V 10M $\Omega$ Min
Input To FG	DC 500V 10M $\Omega$

## 6: EMC

### 6.1 EMI

The power supply shall comply with the following standard.

Conduction Emission: EN55032, CLASS B

Radiation Emission: EN55032, CLASS B

Note: If the customer requires, we can cooperate to make modifications on the customer's complete machine to meet the standards.

### 6.2 EMS

A. ESD EN55035, Level 3

B. SURGE EN55035, Level 3

## 7: Environment Requirement

### 7.1 Environment Temperature

A. Working Temperature:-10°C~+60°C

Note: The product can start up and operate at low temperatures as low as -40°C. If long-term operation at -40°C is required, please specify this requirement.

Storage Temperature:-40°C to +70°C

### 7.2 Humidity

A. Working Humidity: Relative humidity is from 15RH to 90RH.

B. Storage Humidity: Relative humidity is from 15RH to 90RH.

### 7.3 Altitude

Working Altitude:0 to 3000m

## 8: Shock & Vibration

Shock: 49m/s<sup>2</sup>(5G),11ms,once each X,Y and Z axis.

Vibration: 10-55Hz,19.6m/s<sup>2</sup>(2G),20minutes each along X,Y and Z axis.

## 9: Cooling Method:

Cooling by air

Specific Cautions:

When installing the product, the mounting surface may be left suspended or attached to a metal

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surface. The mounting surface should not be in contact with or obstructed by non-heat-conductive materials such as plastic or wood.

When installing the product, the distance between modules should be kept greater than 5 cm to avoid affecting heat dissipation between them.

**10: MTBF**

Under full load at an ambient temperature of 25°C, the mean time between failures (MTBF) is at least 50,000 hours.

**11: Weight: 325g**

**12: Pin Connection**

The figure below is vertical view of product, Output 4 pin terminal block is on the right side and Input 3 pin terminal block is on the left side.



Unit:mm

Table 1 : Input 3 pin terminal block (Pitch 9.5mm)

Name	Function
L	The AC Input Line L
N	The AC Input Line N
	Earth Line

Table 2 : Output 4 pin terminal block (Pitch 8.25mm)

**Note: Each pair of output terminals has a maximum current rating of 20A. Do not exceed this rating during testing or use; otherwise, overheating caused by overcurrent may damage the terminals.**

Name	Function
V+ V+	Output DC Positive Pole

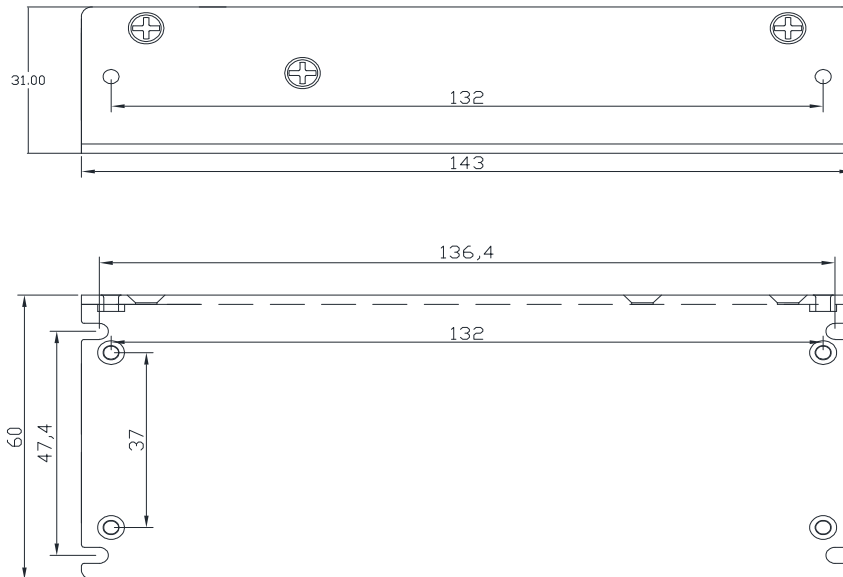


V- V-	Output DC Negative Pole
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### 13: Power Supply Mounting Dimension

Outside dimension : L\*W\*H = 143×60×31mm

The figure below is mounting hole position



Unit:mm

#### Notice:

Method 1. M3 Machine Screws are suitable for 4 tapped holes under the cabinet.

Method 2. M3 screws lock in the mounting rack of 4 U grooves under the cabinet.

One way should be chosen from the two methods, make sure that the part of screw that is in the body of power supply should be less than 3mm and exert not much strength to avoid damaging the screw.

### 14: Precautions for Use

When using the power supply, ensure safety insulation is in place; the ends of all connecting wires must be properly insulated. The product must be well grounded, and avoid touching the enclosure with hands to prevent burns.

### 15: Packing, Transport, Storage

Packaging: The packaging box bears the product name, model, manufacturer's identification, inspection certificate from the manufacturer's quality department, date of manufacture, etc. The packaging box contains an accessory list.



Transportation: Suitable for transportation by truck, ship, or aircraft. During transit, it must be protected from sun and rain with a canopy, kept waterproof, and handled with care.

Storage: It will be better that the product store in the environment temperature between  $-10^{\circ}\text{C}$  and  $+80^{\circ}\text{C}$  as well as the humidity less than 80%RH. Make sure that there is no corrosive gases in the storage environment. Besides, the surrounding must not have the strong mechanical vibration and high-intensity magnetic field. And the case have to be block up at least 25cm away from the earth. The time of storage regulation should be 2 years, power supply need to be tested after storing more than 2 years.