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## **1 TECHNICAL PARAMETERS**

### 1.1 Working conditions

Voltage: 220 ± 10%

Frequency: 50HZ

Environmental temperature:-10~+40℃

Elevation: ≤1000m

### 1.2 Technical parameters

Name: capacitance power source for magnetizing

Type: DCD 1100/2-24

Input current(A): ≤15A

Voltage to charge (V): 50V-1100V

Maximal work period: 4S

Maximal output current (A): 20000A

Capacitance( μ F):2400 μ F

Volume (mm<sup>3</sup>): 350(W) X 500(L) X 800(H)

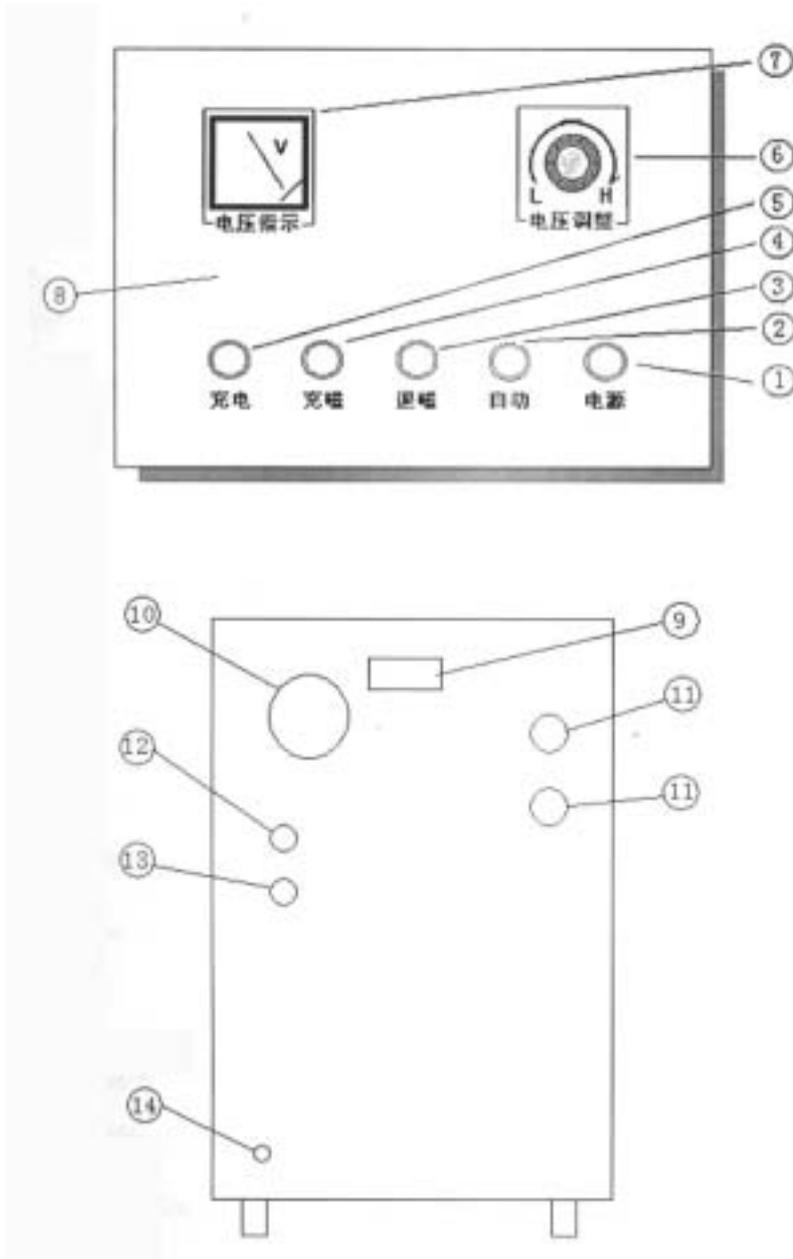
Weight (kg): 60

## **2 Name and function of the parts**

- (1) On-Of button of the power source: While pressing the button, it will be locked by itself and the red light on. It means that the power source is turn-on.
- (2) Button with automatic function: While pressing it, the button will be locked by itself and the green light on. It means that the power source is working under the state of charging. It makes the power source be charged automatically after one work period without pressing the button again. This function can improve work efficiency.
- (3) Button with demagnetizing function: While pressing the button, it will be locked by itself and the yellow light on. It means that the power source is working under the state of demagnetizing function (Only for the model which have demagnetizing function)
- (4) Perform-button to magnetize: While pressing button, the green light will be bright. It means that the magnetizing operation begins. When the light turns off, the operation

finished.

- (5) Perform-button to charge: While pressing the button, the red light will be bright. It means the charging operation begins. When the lights turns off, the charging operation performed.
- (6) Button to adjust the voltage: It is used to regulate the charging voltage continuously. The regulation of the voltage is only in effect during and after charging. It is not working at any other time. But by next charging, it will be charged at the last regulation voltage.
- (7) Voltage meter: It shows the voltage value of the capacitors.



- (8) Operation panel.

- (9) Nameplate
- (10) Fan
- (11) Line hole: For connecting line of the powder source and the fixture.
- (12) Remote-control electrical outlet: used together with remote-control connector plugs, which are computer accessories. Remote-control connector plugs 1 and 2 meet on-off contact, 3 and 4 meet fat-control; LED, 3 meets (+) of the LDD, 4 meets (-) of the LLED.
- (13) Additional power outlet of the power supply: used together with the additional power connector plugs, which are equipment accessories, to offer peripheral equipment the power supply.
- (14) Connecting line of the power supply.

### **3 Using manual**

#### **3.1 Installation**

##### **1 Installation of the power supply**

Put well the main machine tank and the assistant machine tank of the power source for magnetizing. When you open the front and back door of the equipment, you will find copper rows for connection. Please connect them according to the color. Notice: The connection must be firm.

##### **2 Installation of the Magnetizer:**

The installation of the Magnetizer will influences its work situation directly. Before using this power source for magnetizing please ensure right installation and pay attention to the following points:

- 1) On the power net which is used by the power source for magnetizing, frequency conversion, middle or high frequency, or mix-phase equipments that need high-power supply singly or add filter equipment. Layout must be performed according to the technical parameters.
- 2) The coming-into power wire must be single-phase and three line.
- 3) By installation of the power source, please differentiate live wire, zero wire and terra wire clearly. Their connections must be firm.
- 4) If peripheral equipments need, please use additional power outlet of the power supply or other power source.
- 5) If peripheral equipments need, please use additional power outlet of the power supply other power source.

#### **3.2 How to use the Magnetizer**

Before using the Magnetizer it must confirm that all the door of the Magnetizer must be closed, otherwise the Magnetizer cannot work.

##### **1. Manual Control**

- 1) Press button of the power source (1), and the indicator light will be bright.
- 2) Make automatic on-off button (2) off (the indicator light of this button is not bright).
- 3) If one cannot know the magnetizing voltage at the first time please modulate the button to minimal.
- 4) Press the charging button (5), the button will go out after flashing. It shows that charging its finished. Regulate button (6) until the voltage watch (7) shows the magnetizing voltage according to technique require. Loosen the button (6), the value on the voltage watch

doesn't go up any more. The Magnetizer is ready to magnetizing.

- 5) Press magnetizing button (4), the indicator light of the button will go out after flashing. The value on the voltage is 0, and it shows that magnetizing is finished.
- 6) When the result is not satisfied, regulate charging voltage until it is suitable for magnetizing.
- 7) After regulating the magnetizing voltage, press the charging button (5) and repeat magnetizing with hand.

## 2. Magnetize automatically

- 1) Act as 1. Control with hand, from 1) to 5) step-by-step.
- 2) Press automatic on-off button (2). The green light will be bright and it means the automatic function is in effect. If one has charged before pressing this button, the magnetizing power source will charge at once. If one has not charged before pressing this button, he must charge with hand at first, and next the magnetizing power source will charge automatically. Only the operator presses the magnetizing button (4) the magnetizer will magnetize automatically.
- 3) Now the remote-control function can be at work, which is performed by far-control electric outlet (12). If this magnetizer is equipped with magnetizing fixture made by our company, you can find a remote-control magnetizing button and a indicator light that shows waiting for magnetizing. After charging this light will be bright, it means the operator at the far place can magnetize. The operator presses the remote-control magnetizing button on the magnetizing fixture, and then magnetizing can be performed.

## 3. Manual and automatic demagnetizing (only for the power source has demagnetizing function)

Press demagnetizing button (3), The green light will be bright and it means the demagnetizing function is in effect. The demagnetizing procedure is the same as show in 1. Manual Control and 2. Magnetize automatically.

Important notice;

Because this equipment works under high voltage and great current, there will be strong electromagnetic power and it will make the piece to be magnetized shake. This will influence the effect of magnetizing and demagnetizing. Seriously, the piece to be magnetized will fly out of magnetizing fixture and arise unnecessary damage. So please press out the piece before magnetizing it.

## 4. Maintenance

This Magnetizer makes use of high voltage and great current. So users must pay attention to maintenance besides performing according to the manual. Maintenance personnel must have professional work experience by operating electricians.

- 1) Because this equipment works under high voltage, please pay especial attention to moisture-proof treatment of the work environment.
- 2) Because this equipment works under high voltage and great current, please pay especial attention to the density of the environmental powder. The equipment should be got rid of dust once half a year.

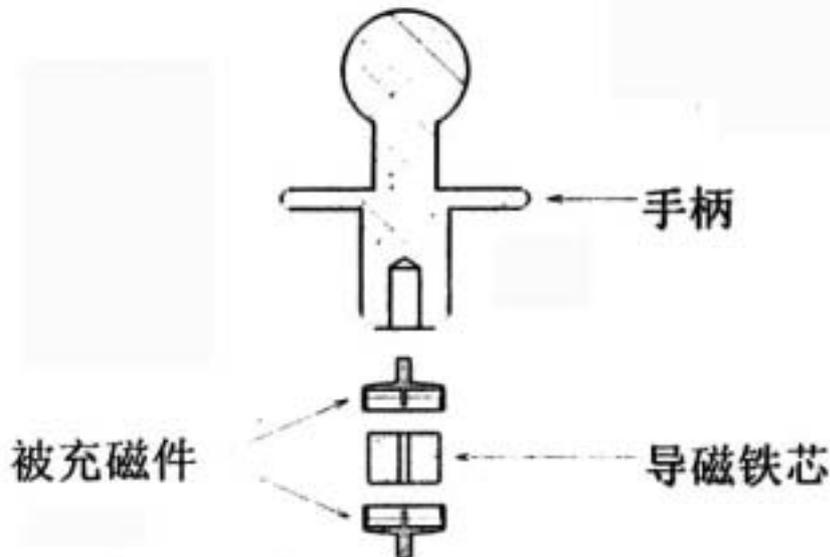
- 3) Because the equipment works under high voltage and great current, long time work will make fasteners flexible, and it will influence magnetizing results, So examination should be carried through once three months to prevent fasteners from flexible.

## HAND BOOK

Specification of radial out going magnetizing fixture for 16-pole clamp with water-cooling system.

Please read this specification carefully before you use this magnetizing fixture.

1. When using this magnetizing fixture with magnetizing power of Model DCD-1100/2-24 at 1200uF state. Connect the connecting end of the fixture and the output of the magnetizing power with a lead and screw down it so that it could not loose and strike fire after long time using.
2. This fixture is been cooling by water, and before using it, the water should be put into the fixture and the magnetism charge must be done when making sure if the water flow is smooth. Magnetism charge frequency should be  $\geq 15s$ /per time and the fixture can't be too hot, or in this case, electrical insulation will be broken, and the fixture will be destroyed completely.
3. Please select proper voltage according to your requirement. According to our practice, your sample parts to be magnetized could be saturated under the voltage of 600v, and then your max using voltage should not over than 800v(If the magnetism of your sample part is satisfied enough, choosing lower voltage of magnetizing charge could last long the fixture using life).
4. When magnetizing, first (shown as the inset) put the parts to be charged into the nylon orientation seat of the orientation hole, press the parts into the hole by the handle, then you can make the charge.



手柄: Handle

被充磁件: Sample parts to be magnetized

导磁铁芯: Iron core of transmitting magnetism

Note: This fixture can't be used to do any magnetizing when for nothing, that is magnetizing is not allowed when nothing in the fixture.

### Specification of Capacitance Capacity Transforming

In order to rather match with magnetizing fixture, this magnetizing power adds the function of capacitance capacity transforming; notes and measures are as follows:

1. Strictly prohibit operating with electrification when transforming.
2. Switch off the power for more one minute before transforming; then again affirm without voltage on voltage meter.
3. Open left overlay board of this magnetizing power, then set eyes on capacitances, at the same time secondly affirm without voltage with a multimeter, and then you can make the charge.
4. The equipment is set at 1200 uF for the first time.