

Power Basic 300

Basic Electrophoresis Power Supply

Reference Guide



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Electrophoresis power supply is an instrument for electrophoretic analysis. Electrophoretic experiment generally consists of power supply, electrophoretic tank, detection unit, etc.

Using microcomputer and switching Power supply technology, Power basic 300 has incomparable advantages over the traditional electrophoresis power supply, can choose timing and non-timing output, with output voltage stability, output short-circuit protection, unconnected load stop output voltage functions, suitable for submersible gel electrophoresis and small micro vertical gel electrophoresis.

1、Instrument function

The Power basic 300 has the following features:

- . Constant voltage output, constant current output, constant power output
- . When the set value is exceeded, the constant voltage and constant current automatically switch.
- Timing control
 - . Automatic no-load detection; Automatic load short-circuit protection; Automatic memory of working status
 - . 192*64 LCD large display
 - . Non-slip motor box foot

1.1 Keyboard

The Power basic 300 has five buttons. They are added with two program switch keys (◀▶), two data adjustment keys (▲▼), and command execution keys (OK).

Item Switch key: Used to switch the desired adjustment items in the power supply

Data adjustment key: Used to adjust the data selected by the cursor

Command execution key: Used to execute adjusted commands

Display mode: Voltage, current, power display at the same time

Timing: 0-99:59; Voltage: 10 to 300V; Current: 5 to 400 mA; Power: 5 to 75 W

Reduce: Reduces the setting parameter of the current selection state.

1.2 Display

The Power basic 300 basic electrophoresis supply can display voltage, current and power at the same time, which is convenient for real-time data viewing. When the fault occurs in the window after startup, the following information is displayed according to the fault content:

If "NO LOAD" is displayed, there is no connection load.

When there is "SHORT", it means that the positive and negative electrodes of the electrophoresis device power supply are short circuit.

2、Use method

Note/Warning:

1. When the electrophoresis power supply is working, do not touch the output part of the electrophoresis power supply with your hand;
2. When changing the electrophoresis device power supply and electrophoresis cell, the electrophoresis device power output must be stopped;
3. Do not plug and unplug the output wire arbitrarily when powered on, which will lead to protection of the electrophoresis device power output or damage to the device. Power basic 300 voltage (u) and current (c) setting state, for each specified state, the experimental parameters can be modified by the ▲ ▼ key.

1) Constant voltage output

- A. When the electrophoresis device power supply is on the main page, press the ► key, the cursor moves to the constant value V, then press ▲ ▼ to switch the constant value of the power supply;
- B. When the constant value is V, continue to press the ► key, the cursor moves to the specific value of the voltage in the middle of the window, then press the ▲ ▼ key to adjust the specific value of the constant voltage;
- C. Continue to press ► to move the cursor to 00:00, then press ▲ ▼ to adjust the timing time;
- D. After the constant voltage value and timing time are set, press the middle OK button to start working according to the set value.

4.3 Output Setting

Output timing range: 0 to 99:59 minutes, 1 minute adjustment

Output constant voltage range: 10 to 300V, 1V adjustment

Output constant current range: 5-400mA, 1 mA adjustment

Output constant power range: 5-75W, 1W adjustment

When four sets are output at the same time, the current may be greater than 400mA

a) Security protection measures

No-load detection

Overload/break protection

b) Working environment

Temperature: 0 to 40 degrees

Humidity: 0 to 90%

c) Size

280 (L) x 195 (W) x 85 (H)

d) Weight 3 Kg

2) Constant current, constant power output

Constant current, constant power regulation is the same as constant voltage output.

3) The job is over

After the end of the power to stop output, buzzer start, at this time press the ▲ key to mute, press the

Ok key to work according to the previously set value.

4) Historical record retrieval

On the home page, press ▼ to enter the history page, press ▲ ▼ key to record and turn the page, and press OK key to work according to the current page setting value.

3、Safety protection and accident handling :

1. The Power supply of the Power basic 300 electrophoresis device adopts safety design, please do not disassemble and refit yourself, so as to avoid safety problems.
2. Please use an electrophoresis tank with a safe design such as open cover power off.

Note/Warning:

Due to the high voltage in the machine, if the electrophoresis device power failure, the customer can not open the chassis for maintenance, otherwise any situation, the responsibility is not the company.

4、Instrument parameters

4.1 Power Supply :

Power supply: 220VAC/50Hz

Fuse: 3A / 250VAC

Maximum power: 100VA

4.2 Output

Four sets of 3.5mm diameter output sockets

The output voltage ripple is less than 1 %

Output voltage drift less than 1 % (10 minutes after boot)

The output voltage adjustment rate is less than 1 %