

# Magnetic Stirrer

Operation instruction

## I. Brief introduction

Magnetic Stirrer is widely used in various large and medium-sized institutions, environmental protection, scientific research, sanitation, epidemic prevention, petroleum, metallurgy, chemical industry, medical and other units, the equipment performance is good, no noise, no vibration, mixing effect is remarkable, it is the ideal tool for experimental and laboratory personnel.

## II. Parameters(1)

| Model     | Voltage   | Heating power | Rotational speed r/min | The highest temperature of working plate | The highest temperature of beaker | The maximum capacity | Heating plate size mm |
|-----------|-----------|---------------|------------------------|------------------------------------------|-----------------------------------|----------------------|-----------------------|
| SH-2A     | 110V/220V | 180W          | -                      | 300℃                                     | 80℃                               | 2000ml               | 120×120               |
| SH-2B     |           | -             | 100-2000               | -                                        | -                                 |                      |                       |
| SH-2AB    |           | 180W          | 100-2000               | 300℃                                     | 80℃                               |                      |                       |
| SH-3A     |           | 500W          | -                      | 300℃                                     | 100℃                              | 5000ml               | 175×175               |
| SH-3B     |           | -             | 100-2000               | -                                        | -                                 |                      |                       |
| SH-3AB    |           | 500W          | 100-2000               | 300℃                                     | 100℃                              |                      |                       |
| SH-3ABE   |           | 500W          | 200-2000               | 300℃                                     | 100℃                              |                      |                       |
| SH-3ABEII |           | 500W          | 200-2000               | 300℃                                     | 100℃                              |                      |                       |
| SH-4A     |           | 600W          | -                      | 300℃                                     | 100℃                              | 5000ml               | 190×190               |
| SH-4B     |           | -             | 100-2000               | -                                        | -                                 |                      |                       |
| SH-4AB    |           | 600W          | 100-2000               | 300℃                                     | 100℃                              |                      |                       |
| SH-4ABE   |           | 600W          | 200-2000               | 300℃                                     | 100℃                              |                      |                       |
| SH-4ABEII |           | 600W          | 200-2000               | 300℃                                     | 100℃                              |                      |                       |

**Remarks: A means heating function; B means stirring function; E means liquid crystal display.**

**The voltage is based on the product label.**

### III. Parameters(2)

| Model | Voltage   | Heating power | Rotational speed r/min | The highest temperature | The maximum capacity | Heating plate size mm |
|-------|-----------|---------------|------------------------|-------------------------|----------------------|-----------------------|
| SH-6B | 110V/220V | -             | 100-2000               | -                       | 1000ml×4             | 300×250               |
| SH-7B |           | -             | 100-2000               | -                       | 3000ml×4             | 400×300               |

**Remarks: The voltage is based on the product label.**

### IV. Operating instruction (liquid crystal display)



PV means the temperature, when there is no external sensor, it means the furnace plate temperature, when the external sensor is connected, it means the external sensor temperature.

SV represents the rotational speed, the set state represents the setting rotational speed, and the non-set state represents the running rotational speed.

If external temperature sensor is not placed in the beaker on the heating plate, temperature change can't be sensed within ten minutes after the machine powered on, instrument controller close the heating and show “pot”

1. Place the machine on a horizontal table, and then connect one end of the power cord to the power jack on the back of the machine base
2. Plug the other end of the power cord into a standard socket.
3. Pay attention to the power switch on the right side of the machine base. The line (-) means open, and the circle (o) means close.

4. Put the machine in a stable position, put the beaker containing liquid medicine in the center of the working plate, put the appropriate rotor in the beaker, and make it in the center of the beaker, turn on the power, the upper part of meter will show the working plate temperature (If an external sensor is connected, will show the external sensor temperature), the lower part of meter will show "OFF". press the "HEAT" knob, the machine starts to heat ,by rotating "HEAT" knob to adjust to the required temperature,(When the knob is rotated, the setting temperature will be displayed on the upper part of the meter, 2 seconds after finishing rotation, the temperature of the working plate will be displayed on the upper part of the meter).  
samely,press the "STIR "knob,the machine starts to stir, by rotating "STIR" knob to adjust to the required rotational speed, (When the knob is rotated, the setting rotational speed will be displayed on the lower part of the meter. 2 seconds after finishing rotation, current rotational speed will be displayed on the lower part of the meter).

5. If need to measure the temperature of the liquid in the beaker, connect the bracket, insert the sensor lead plug into the back of the machine, and then insert the sensor into the liquid. the temperature displayed on the meter at this time is the temperature of the liquid.

## **V. Operating instruction (no displayer)**

Put the machine in a stable position, put the beaker containing liquid medicine in the center of the working plate, put the appropriate rotor in the beaker, and make it in the center of the beaker, turn on the power, adjust the temperature by rotating the "HEAT" knob at different angels , the "HEAT" indicator light is on when heating, and the heating power is adjusted by the "HEAT" knob.adjust the stir speed by rotating the "STIR" knob at different angels , the "STIR" indicator light is on when stirring, and the STIR speed is adjusted by

the “STIR” knob.the temperature of the liquid in the beaker can be measured by a thermometer fixed with a bracket.

## VI. Matters needing attention

1. It should be avoided using in a humid environment.
2. When in use, the liquid in the beaker should not be put too full to prevent overflow during stirring
3. Do not touch the working plate during using to avoid scald.

## VII.



## VIII Packing List

| Serial Number | Category   | Name                  | Unit  | Quantity | Remarks  |
|---------------|------------|-----------------------|-------|----------|----------|
| 1             | Instrument | Magnetic Stirrer      | Piece | 1        | ✓        |
| 2             | Document   | Operating instruction | Piece | 1        | ✓        |
| 3             | Attachment | Stir bar              | Piece | 1        | ✓        |
| 4             | Attachment | Bracket               | Piece | 1        | Optional |
| 5             | Attachment | Sensor                | Piece | 1        | Optional |