

# MS-H220-V3/ MS-H220-V5

## LCD Digital Heating Magnetic Stirring Bath



## Features

- High borosilicate glass liner, resistant to sudden changes from hot to cold without breaking, transparent glass window for monitoring reaction product changes; stainless steel base, rust-resistant, easy to clean; high-temperature resistant protective outer shell to prevent direct contact with hot glass and burns.
- Dual-use stirring bath for water and oil, with secondary stirring in the bath pot. The stirring of the bath liquid simultaneously stirs the liquid sample in the flask, ensuring uniform heating of both bath liquid and sample.
- Safety lock to prevent accidental changes in operational status.
- Buzzer: A “beep beep beep” alert sounds when the countdown timer function ends. Button tone.
- Features a timer function with a range of 1 min to 99h59min. It stops heating when the countdown ends but continues stirring to prevent heat damage to the sample.
- Touch buttons with audible prompts.
- Working status indicator light: Green during operation, flashing green before reaching set temperature; alarm red.
- Reversible function.
- Protection features: dry burning protection, overcurrent protection, ground fault protection, and overtemperature protection.
- Residual heat warning function. When the plate temperature is above 50°C, heating is turned off, and the screen flashes “HOT” as a reminder of the high temperature even after the power is off.
- Two independent safety circuits continuously monitor the device. In case of overheating, sensor failure, or circuit short, the machine will error report and stop heating or automatically cut off power to ensure operator safety.
- DC brushless motor, spark-free, long life; low noise, maintenance-free, stable operation.
- LCD displays speed, time, and temperature parameters clearly and intuitively.

| Specifications                               | MS-H220-V3                                     | MS-H220-V5                                     |
|----------------------------------------------|------------------------------------------------|------------------------------------------------|
| Heating pan material                         | High borosilicate glass + stainless steel base | High borosilicate glass + stainless steel base |
| Motor type                                   | Brushless DC motor                             | Brushless DC motor                             |
| Stirring positions                           | 1                                              | 1                                              |
| Max. stirring quantity [H <sub>2</sub> O]    | 3L                                             | 5L                                             |
| Max. magnetic bar [length]                   | 40mm                                           | 40mm                                           |
| Speed range                                  | 100~1500rpm, ±10rpm                            | 100~1500rpm, ±10rpm                            |
| Speed display                                | LCD                                            | LCD                                            |
| Temperature display                          | LCD                                            | LCD                                            |
| Heating temperature range                    | Room Temp.-220°C                               | Room Temp.-220°C                               |
| Heating liquid temperature control accuracy  | ±1°C                                           | ±1°C                                           |
| Overheating temperature protection           | 350°C                                          | 350°C                                          |
| Temperature display accuracy                 | 0.1°C                                          | 0.1°C                                          |
| External temperature sensor                  | PT1000                                         | PT1000                                         |
| “Hot” warning                                | 50°C                                           | 50°C                                           |
| Buzzer                                       | Yes                                            | Yes                                            |
| Positive and negative rotation               | Yes                                            | Yes                                            |
| Protection class                             | IP21                                           | IP21                                           |
| Motor rating output                          | 20W                                            | 20W                                            |
| Heating output                               | 800W                                           | 1250W                                          |
| Power                                        | 850W                                           | 1300W                                          |
| Voltage,Frequency                            | 100-120V/200-240V, 50/60Hz                     | 100-120V/200-240V, 50/60Hz                     |
| Bath size                                    | Ø220×105mm                                     | Ø240×135mm                                     |
| Maximum flask volume can be placed           | 3L                                             | 5L                                             |
| Dimension [WxDxH]                            | 283×343×215mm                                  | 283×343×228mm                                  |
| Weight                                       | 6.0kg                                          | 6.7kg                                          |
| Timer function                               | 1min-99h59min                                  | 1min-99h59min                                  |
| Permissible ambient temperature and humidity | 5-40°C, 80%RH                                  | 5-40°C, 80%RH                                  |