TECHNICAL DATA SHEET

ALab™ DMS4-550 Magnetic Hotplate Stirrer

LCD digital 4-inch timed heating magnetic stirrer · RT to 550°C · 50 to 1500 rpm · 10 L [H_2O]



ALab™ DMS4-550 Magnetic Hotplate Stirrer

The ALab™ DMS4-550 magnetic hotplate stirrer; image shown for reference.

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SECTION I

Product Overview

The ALab™ DMS4-550 is an LCD digital 4-inch timed heating magnetic stirrer. Its 100 × 100 mm glass-ceramic plate heats from RT to 550°C in 1°C increments, and a brushless DC motor stirs at 50 to 1500 rpm with a maximum stirring volume of 10 L of water. The corrosion-resistant all-metal housing provides heat dissipation and fire protection.

The LCD shows speed, time and temperature. A PT1000 external temperature sensor (accuracy ±0.2°C) measures the liquid; three heating modes, a settable safety temperature, 580°C overheating protection, two independent safety circuits and a "HOT" residual-heat warning cover heating safety, and RS232 allows PC remote control.

SECTION II

Core Advantages

- **Plate** — 100 × 100 mm · 4 in, glass ceramic
- **Stirring** — 50 to 1500 rpm, 10 L
- **Timer** — heating stops, stirring continues
- **Heating** — RT to 550°C, modes A / B / C
- **Sensor** — PT1000, ±0.2°C
- **Safety** — two independent safety circuits

SECTION III

Specifications

Technical data — DMS4-550

Specifications	
Brand	ALab™ by ACS Material
Model	DMS4-550
ACS Cat. No.	ALMS4550 (parent ALMS4)
Product type	LCD digital 4-inch timed heating magnetic stirrer
Working plate size	100 × 100 mm (4 inch)
Plate material	Glass ceramic
Motor type	Brushless DC motor
Stirring positions	1
Maximum stirring volume [H_2O]	10 L
Maximum stirrer size [length]	40 mm
Speed range and step	50 to 1500 rpm, increment 1 rpm
Speed display	LCD
Temperature display	LCD
Heating temperature range	RT to 550°C, increment 1°C
Temperature control accuracy of heating liquid	±1°C (<100°C), ±1% (>100°C)
Overheating protection	580°C
Temperature display accuracy	0.1°C
External temperature sensor	PT1000 (accuracy ±0.2°C)
Residual heat warning	50°C
Data connection	RS232
Protection class	IP21
Timer function	1 min to 99 h 59 min
Motor output power	10 W
Power	460 W
Heating output power	410 W
Voltage, frequency	100 to 120 V / 200 to 240 V, 50/60 Hz

Dimensions and operating environment	
Dimensions [L × W × H]	270 × 175 × 108 mm
Weight	2.2 kg
Permissible ambient temperature and humidity	5 to 40°C, 80% RH

SECTION IV

Applications

The DMS4-550 combines heating and magnetic stirring. The specified maximum stirring volume is 10 L of water. A PT1000 external sensor supports liquid-temperature control, mode C provides stable heating, and RS232 supports PC remote control.

Specifications are per the table above.

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