

TECHNICAL DATA SHEET

ALab™ DMS5-280 LED Digital Display Heating Magnetic Stirrer

Heating magnetic stirrer · plate range room temp.–280 °C · 200–1500 rpm · Ø135 mm ceramic-coated plate



ACS Material ALab™ DMS5-280 LED Digital Display Heating Magnetic Stirrer

CONTENTS

- 01 Product Overview
- 02 Core Advantages
- 03 Specifications
- 04 Key Operating Specifications

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SECTION I

Product Overview

The ALab™ DMS5-280 LED Digital Display Heating Magnetic Stirrer pairs a Ø135 mm ceramic-coated aluminium work plate with a brushless DC drive running 200 to 1500 rpm in 10 rpm steps. The plate temperature range is room temperature to 280 °C from a 600 W heating output, and the maximum stirring quantity is 5 L (H₂O). Speed and temperature have separate LED displays, with a temperature display accuracy of ± 1 °C. An input for an external PT1000 temperature sensor gives a temperature control accuracy of ± 0.2 °C. Overheating protection is set at 320 °C, and a “HOT” residual-heat warning appears from a plate temperature of 50 °C and stays visible after the instrument is switched off. The instrument weighs 1.8 kg, measures 260 × 150 × 100 mm and is rated IP21.

SECTION II

Core Advantages

- **280 °C plate temperature range** — 600 W heating output across a Ø135 mm ceramic-coated aluminium plate
- **Adjustable PT1000 bracket** — the sensor bracket adjusts to different angles to avoid interference
- **External-sensor temperature-control accuracy ± 0.2 °C** — with a PT1000 sensor connected; temperature-display accuracy is ± 1 °C
- **Residual heat stays signposted** — “HOT” from 50 °C, visible after power-off; 320 °C overheating protection

SECTION III

Specifications

Technical data

Specifications	
Power Supply	100–120 V / 200–240 V, 50/60 Hz
Power	610 W
Motor	Brushless DC motor · rating 5 W input / 3 W output
Speed Range	200–1500 rpm, resolution 10 rpm
Stirring Positions · Max. Quantity (H ₂ O)	1 · 5 L
Max. Magnetic Bar Length	40 mm
Work Plate	Ø135 mm · aluminium with ceramic coating
Heating Output	600 W
Heating Temperature Range	Room Temp. – 280 °C
Overheating Protection	320 °C

Specifications	
Display (speed / temperature)	LED / LED
Temperature Display Accuracy	± 1 °C
External Temperature Sensor	PT1000
External Temperature Sensor Temperature Control Accuracy	± 0.2 °C
“Hot” Warning	50 °C
Dimensions · Weight · Ambient · Protection	260 × 150 × 100 mm · 1.8 kg · 5–40 °C, 80% RH · IP21

The two accuracy figures above are separate specifications. The plate stays hot after power-off — observe the “HOT” indicator.

Configuration

- Rated input: 100–120 V / 200–240 V, 50/60 Hz
- Sensor input: PT1000
- Protection class: IP21
- Power: 610 W · heating 600 W
- Work plate: Ø135 mm, ceramic-coated aluminium
- Scope of supply: confirmed at quotation

SECTION IV

Key Operating Specifications

Key operating specifications include:

- **Plate temperature range** — room temperature to 280 °C, from a 600 W heating output
- **Speed range** — 200–1500 rpm, resolution 10 rpm, brushless DC motor
- **Stirring capacity** — up to 5 L with H₂O, magnetic bars up to 40 mm, one stirring position
- **External-sensor temperature-control accuracy** — ± 0.2 °C with a PT1000 sensor connected

Product value: a 280 °C plate temperature range on a Ø135 mm ceramic-coated work plate, 200–1500 rpm brushless DC drive, 1.8 kg. DMS5-280 and DMS5-120 share the listed specifications except for total power (610 / 410 W), heating output (600 / 400 W) and plate-temperature range (280 / 120 °C).

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