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ETS-D5 Electronic contact thermometer

/// Data Sheet

ETS-D5 Electronic Contact Thermometer

The new dimension in temperature control in the laboratory

The new ETS-D5 electronic contact thermometer redefines precision, safety, and ease of use. Developed for demanding laboratory processes, it offers everything you need for reliable temperature control — and now with even more functions for maximum process reliability and flexibility.

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Proven strengths
- Temperature range from –20☐°C to +400☐°C with 0.1☐K resolution
- High accuracy: ±0.2☐K + PT1000 sensor tolerance (class A)
- Optimized PID control for stable temperature control without overshoot
- Automatic shutdown of the magnetic stirrer in case of sensor error or exceeding the defined safety temperature – maximum process reliability
- Replaceable temperature sensor (optionally with coating H66.53 or made of glass H66.51)
- Can be extended with an intermediate cable

New and improved

Integrated safety features:
- Sensor timeout – detects when the sensor is not in the medium (adjustable)
- Temperature drop detection – reacts to unexpected temperature drops (adjustable)
- Setpoint monitoring (Delta T) – switches off temperature control when the setpoint is exceeded by Delta T
- Setpoint limitation – limits the maximum adjustable temperature
- Safe temp – switches off the temperature control when the value is exceeded
- In the event of a fault, the stirrer remains off – for maximum safety

Three temperature control modes for every application:
- Fast – fast heating
- Precise – maximum accuracy
- Synthesis block optimized – perfect for chemical syntheses

- Adjustable heating speed in percent for sensitive samples
- Convenient touch display for intuitive operation
- USB-C interface for fast and easy data transfer to a PC

What is an electronic contact thermometer?
An electronic contact thermometer is a temperature controller with an integrated sensor that directly controls the heating power of a magnetic stirrer. When connected, the device takes over the active temperature control of the medium by switching the heating plate on and off accordingly. The magnetic stirrer itself continues to monitor the preset safety limits for the heating plate.

Advantages in combination with magnetic stirrers
- Upgrade option for devices without integrated external temperature control
- Additional safety circuit for the medium temperature – crucial for risk analyses
- Better display resolution and data transfer to software
- Clear assignment of the measuring point – minimizes mix-ups

Greater safety, greater precision

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The new ETS-D5 is more than just a temperature sensor – it is an intelligent safety and control center for your laboratory. With state-of-the-art interface technology, advanced safety features, and optimized control, it offers maximum control and protection for your processes. Greater precision. Greater safety. Greater comfort.

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Technical Data

Temperature measuring range min. (with H62 sensor) [°C]	-20
Temperature measuring range max. (with H62 sensor) [°C]	400
Temperature measurement resolution [K]	0.1
Accuracy of temperature measurement [K]	±0.2 + tolerance PT1000 (DIN IEC 751 Class A)
Set temperature resolution [K]	0.1
Display	TFT
Immersion depth min. [mm]	20
Touch function	yes
Warning function acoustic	yes
Heat control accuracy (500ml H2O in 600ml beaker, 40mm stirring bar, 600rpm, 50°C) [K]	±0.5
Changeable temperature sensor	H62.51
Thermometer connector type (to main device)	DIN 45322 (MAS6)
Status LED	yes
Temperature operating mode	A,B,C,D
Temperature control mode	Price,Fast,Block
Sensor type	PT1000 (DIN IEC 751 Class A)
Dimensions (W x H x D) [mm]	52 x 36 x 385
Weight [kg]	0.156
Permissible ambient temperature [°C]	5 - 40
Permissible relative humidity [%]	80
Protection class according to DIN EN 60529	IP 54
USB interface	USB-C
DC Voltage [V=]	8 - 16
Current consumption [mA]	100