

# Dry well temperature calibrator Model CTD9100-375

WIKA data sheet CT41.32

## Applications

- Testing and calibration of temperature measuring instruments
- Reference instrument for works' laboratories for the calibration of thermometers
- On-site calibration

## Special features

- High accuracy and stability
- Possibility for testing temperature switches
- Low weight and compact design
- Simple operation



Dry well temperature calibrator model CTD9100-375

## Description

### Versatile in application

Nowadays, fast and simple testing of thermometers is a "must", especially when it involves the reliability of operation of plant and machinery.

The portable calibrators of the CTx9100 family are particularly suited to local calibration tasks. They are extremely user-friendly. Due to their compact design and their low weight, the devices can be carried and used almost anywhere.

The CTD9100-375 is most notable for its rugged case and very small dimensions.

This new instrument concept combines a stable heat source with precision Pt100 temperature measurement. Thus industrial temperature sensors can be calibrated even more efficiently. Regular monitoring of temperature sensors helps to recognise failures promptly and shorten downtimes.

### Easy to use

The CTD9100 series of dry well temperature calibrators work with temperature-controlled metal blocks and interchangeable inserts.

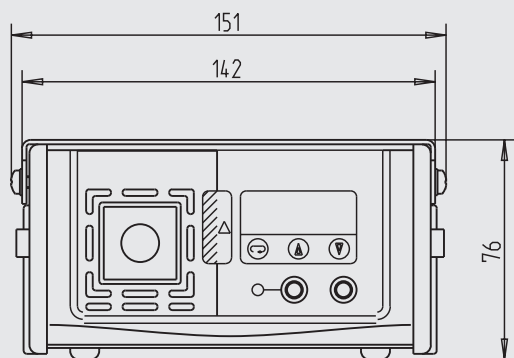
The calibration temperature, adjusted simply via two keys on the controller, can be very quickly controlled. The actual temperature of the heated block is displayed simultaneously on a large, 4-digit, high-contrast LED display. Thus reading errors are virtually eliminated.

Thermometers with different diameters can be fitted into the calibrator using inserts, drilled to suit.

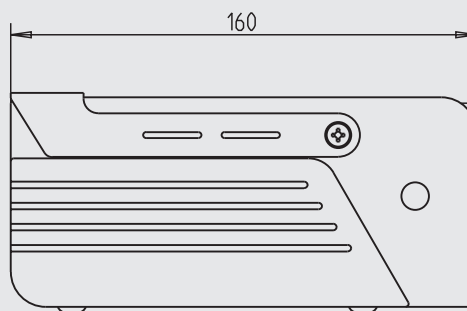
A new block design, with improved temperature homogeneity at the calibrator's lower range, leads to smaller measurement uncertainties.

## Dimensions in mm

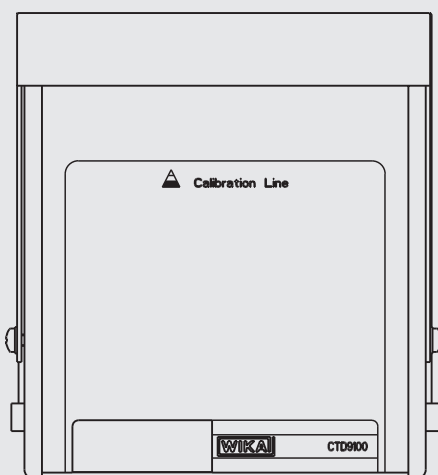
Front view



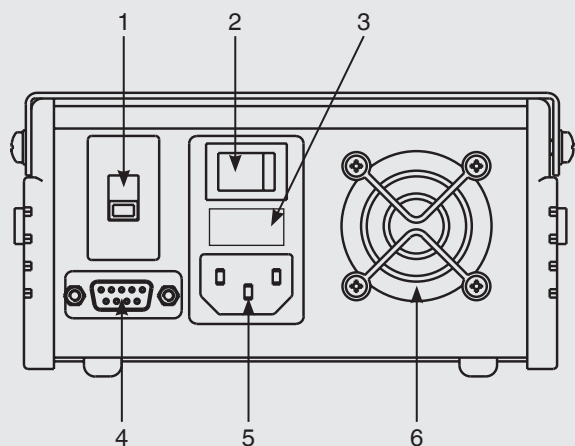
Side view



Top view



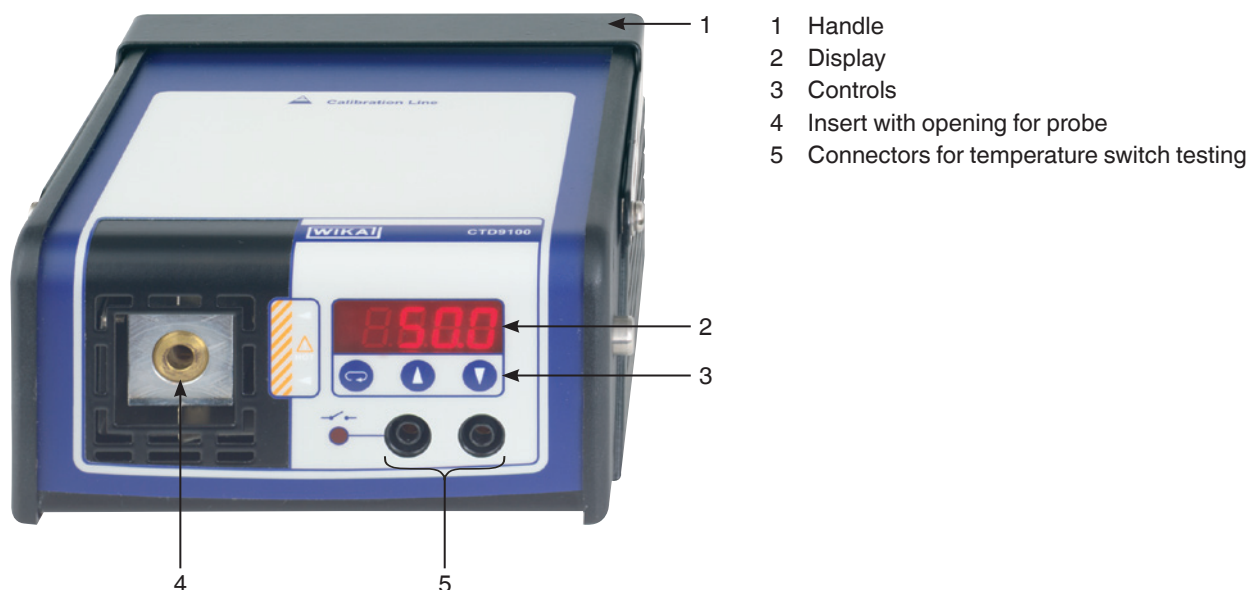
## Rear



- 1 Voltage selector
- 2 ON/OFF Switch
- 3 Fuse
- 4 RS-232 Interface
- 5 Power connection
- 6 Fan

| Specifications         |    | Model CTD9100-375   |
|------------------------|----|---|
| Temperature range      | °C | $t_{\text{amb}} \dots 375$  |
| Accuracy               | K  | $\pm 0.2$   |
| Stability              |    | $\pm 0.05$ K up to 100 °C   |
| Display resolution     | °C | 0.1   |
| Heating time           |    | 6 min; from 20 to 300 °C  |
| Cooling time           |    | 14 min; from 300 to 60 °C   |
| Immersion depth        | mm | 100   |
| Insert dimensions      | mm | Ø 13 x 100  |
| Interface              |    | RS-232  |
| Power supply           | AC | 230 V, 50/60 Hz or 110 V, 50/60 Hz  |
| Power consumption      | VA | 250   |
| EMC                    |    | Tested to 2004/108/EC, EN 61326 Emission (Group 1, Class B) and immunity (industrial locations) |
| Dimensions (W x H x D) | mm | 149 x 74 x 155  |
| Weight                 | kg | 1.7   |

## Layout and controls



## Scope of delivery

- Dry well temperature calibrator
- Power lead, 1.5 m with safety plug
- Insert with 6.2 mm bore
- Insert replacement tools
- Operating Instructions
- 3.1 calibration report per DIN EN 10204

## Accessories

- Inserts, undrilled and drilled to specification
- Carrying case
- Power lead for Switzerland
- Power lead for USA/Canada

## Options

- DKD/DAkkS calibration certificate

## Products and services within our calibration technology program

- DKD/DAkkS calibration services for pressure
- Repair of calibration units of all makes
- Portable pressure measuring devices for test and calibration tasks
- Precision pressure measuring units and pressure controllers
- Primary standards for pressure
- Testing technology system solutions
- DKD/DAkkS calibration services for temperature
- Dry well temperature calibrators
- Calibration baths and furnaces
- Temperature measuring instruments for test and calibration tasks
- Precision thermometers
- Primary standards for temperature
- Consulting and seminars

The specifications given in this document represent the state of engineering at the time of publishing.  
We reserve the right to make modifications to the specifications and materials.



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