DRY BLOCK TEMPERATURE CALIBRATOR

PCE-DBC 650



- **Simple calibration**
- **4 sensor openings 6 ... 12 mm**
- **Easily transportable**
- **Colour touch display**
- **Adjustable alarm**
- **PID settings**
- **Internal memory**

Regular calibration of temperature sensors is crucial, as they are exposed to a variety of mechanical, thermal and chemical stresses that can lead to drift over time. This drift can cause the measured temperature to deviate from the actual temperature. Through regular calibration, the differences between the actual and measured temperature can be determined, making the specific drift behaviour visible. Dry-block calibrators are effective instruments for checking and calibrating a wide range of temperature measuring devices and temperature sensors.

The calibrator / simulator is used to calibrate temperature sensors such as Pt100, Pt1000 and many other temperature sensors. The dry block function offers a practical solution for calibrating temperature sensors in the laboratory and in the field. The use of the correct "transition sleeve" ensures optimum thermal coupling between the dry block and the test item to be calibrated.

The versatility of the calibration insert makes it possible to calibrate a wide range of straight temperature sensors with different lengths and diameters with the calibrator / simulator. This significantly increases the flexibility and applicability of the dry block. Another advantage of the dry block function is that it covers the entire temperature range without having to change the calibration medium.

Specification

Temperature	
Measuring range	300 ... 1200 °C
Resolution	0,001 °C
Accuracy	±0.1% FS

General technical data	
Units	°C, °F
Display Typ	Touch screen
Display size	4,96 Inch
Storage medium	Internal memory
Storage capacity	50 Data records
Temperature stability	≤±0.2 °C/15 min
Vertical temperature field	Deviation within 10 mm of floor calibration insert is 1 °C
Horizontal temperature field	≤±0.25 °C (equipped with thermostat)
Heating speed	25 ... 100 °C: 10 min 100 ... 600 °C: 15 min 600 ... 800 °C: 20 min 800 ... 1200 °C: 30 min
Cooling speed	1200 ... 800 °C: 25 min 800 ... 600 °C: 15 min 600 ... 300 °C: 60 min 300 ... 50 °C: 180 min
Dimensions	Calibration insert: 4 openings for sensors: 6, 8, 10, 12 mm Depth: 135 mm
Fuse(s)	Miniature fuse 20 A, 250 V
Menu language	English (US), Chinese
Protection class (device)	IP20
Power supply	110 ... 220 V AC, 45 ... 65 Hz
Connector type	Earthing contact plug
Operating conditions	0 ... 50 °C , 0 ... 90 %RH
Storage conditions	0 ... 50 °C , 0 ... 90 %RH
Dimensions (L x W x H)	295 x 174 x 350 mm
Weight	7700 g