BL-7C

Portable Temperature Calibrator Room temp ...600 °C)

The BL-7C temperature calibrator is a compact instrument used to calibrate transducers, RTD and temperature-measuring sensors in the field and in the laboratory. The possibility to generate temperature ramps makes it suitable for use in calibrating and testing thermostats. To calibrate temperature sensors by the comparison method, a version with two independent inputs are also available on request (one input for the reference probe and the second one for the probe under calibration).

Technical

The **BL-7C** oven consists of copper (Cu) block measuring 50 in diameter heated by a resistance which winds around the outer surface of the block. A set of holes are made in the block into which the calibration probes are inserted and one 17 mm in diameter hole for the appropriate reduction inserts.
BL-7C is equipped with a PID microprocessor controller with a resolution up to 0,01 °C, setting of the standard of measurement in °C, °F and K, programming of ascent/descent ramps and storage of the thermostats' operative temperature.
In the **BL-7C-2I** version, the instrument is equipped with an acquisition card having two adjustable inputs (Pt100 3/4 wires; thermocouples: J, K, N, R, S) with bushes fitted with gold-plated contacts and automatic compensation of the cold junction. The first input is provided for the reference sample probe, thus obtaining a complete calibration system which can be certified by ACCREDIA centres, in compliance with ISO 9000 regulations.
The second input is provided for probes that are being tested; hence, the instrument can display the temperatures of the furnaces, the temperature of the sensor to be checked and of the reference sample probe, at the same time.
Furthermore, **BL-7C** is equipped with the RS232 serial interface; it can operate in automatic mode connected to the PC by means of the software which enables to

T-BL7C-E-1019-4
Model CI-X-13-220219-02

carry out probe calibrations and cyclical life tests; test results can be stored and printed, so they are easily traceable in compliance with ISO 9000 standards.

Technical data

Range: T_{amb} … 600 °C
Diameter Cu block: 50 mm
Insert hole size: Ø 3,5 -5-6,5 – 8,5 – 12,5 x 185 mm
Stability: ±0,05 °C @ 450 °C
Axial uniformity: ±0,35 °C @ 450 °C @ 60 mm from the bottom
Radial uniformity: ±0,15 °C @ 450 °C @ 50 mm
Mean heating rate: 20 °C/min
Mean cooling rate: 25 °C/min
Display resolution: 0,1 °C / 0,01 °C
Engineering Units: °C, °F, K
Serial interface: RS232
Power supply: 115 o 230 V - 50/60 Hz – 800 VA
Dimensions: 160 x 340 x 330 mm
Shipping size: 320 x 550 x 490 mm
Weight: 9 kg (16,7 kg shipping weight with carrying case)
Made in Italy

Scope of delivery

- BL-2FC calibrator.
- Bottle (500 cc) of silicon oil
- Bottle (500 cc) of silicon oil
- Closing top used for transport

Scope of delivery

- BL-7C calibrator.
- Power supply cable.
- Fuses kit.
- Thermostat connection cables.
- Instructions manual.
- Test report.
- Tweezers for inserts removing.
- Insert with 6 holes: (Ø 3,5 – 5 - 6,5 - 8,5 – 12,5 x 185 mm).
- Kit of clamp connections (only 2I version).
- RS232 serial interface.

Dimensions

160 x 340 x 330 mm

Weight

9 kg

Accessories / Options

- Software
- Special inserts available on request.
- USB/RS232 converterRS232 serial cable.
- Accredia certificate (only 2I version) performed by a sample probe connected to BL-7C.

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