

Hot Set Tester EB 16-II

Oven for determination of Hot Set according to IEC 811-2-1



EB 16-II is made for hot set testing of cable material according to IEC 811-2-1. To avoid too high temperature loss when inserting and cutting the samples, the samples are introduced through a small opening in the top of the oven. To get a suitable working height and not shake the samples during insertion, the oven is fixed and the sample holder moves up and down by a servo motor driven screw system.

The oven has a controlled air exchange rate and low air speed which can be controlled by a flow meter, meeting the requirements for ageing ovens in IEC 811.

Measurements are made through the window with a laser pointer mounted on a measuring scale placed on the door. The window can be taken apart for cleaning.

When measuring the elongation with a push on a button on the scale the measured values are entered in an Excel template. The set is measured outside the oven with a digital caliper also connected to the computer.

A finished report can then be produced in Excel.

Technical Specification, Hot Set Tester

Temperature range, °C:	40 - 250
Temp. control, 40 - 100 °C, °C:	± 0,5
101 - 200 °C, °C:	± 1,0
201 - 250 °C, °C:	± 2,0
Temp. variation in time and space, °C:	± 0,25
Temperature sensors:	Pt 100, 1/3 DIN
Air speed, m/s:	<0,001
Useful volume, l:	60
Sample positions, no.:	4
Dimensions, internal, w x d x h mm:	450 x 450 x 300
Dimensions, external, w x d x h, mm:	820 x 680 x 1460 (max)
Weight, kg:	approx. 120
Voltage, V:	220-240 / 1 / 50
Power, W:	2 200
Illumination, W, V:	10, 24, halogen lamp

Common specifications:

- The oven perform well inside the apparatus requirements in IEC 811.
- The sample holder moves up and down by a servo motor.
- Special design with controlled air exchange rate and low air speed.
- The casing consists of steel, painted with powder paint in bluegreen colour.
- The inner chamber is made of stainless steel.
- Temperature controller with 0,1°C setpoint.
- Solid state relay for safe control.
- Temperature indicator with sensor in the test space.
- Adjustable over and under temperature limits with alarm.
- Fixed over temperature fuse at 340 °C.
- Over temperature safety relay.
- Flowmeter with needle valve, for setting the air exchange rate.
- The air speed is low and is dependent on the air exchange rate only.
- Cooling channels in the casing for low surface temperature.
- Temperature controlled cooling fan for the electronics cabinet.
- Run-time meter.
- Laser pointer for measuring the elongation.
- Calliper for measuring the tension set.
- 2 pcs of timers (one preset to 5 min the other one preset to 15 min PLC.)
- The temperature, timers, alarms and movement are controlled by a micro PLC with colour touch screen.
- Clamps and weights for 8 samples are included as well as the computer.

ELASTOCON reserve the right to modify this specification in part or in whole.