Laboratory Equipment Manufacturer
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CE — IQNet — THE STANDARDS INSTITUTION OF ISRAEL

Operating Instructions
Temperature Indicator
Eurotherm 2132 or 2116
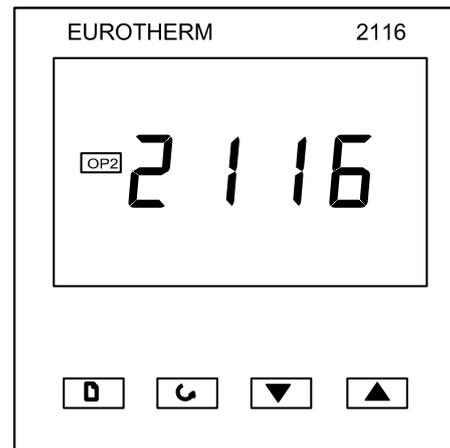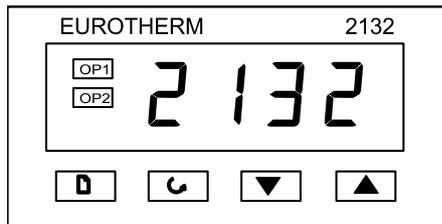
EUROTHERM   2132

OP1
OP2   **2132**

EUROTHERM   2116

OP2   **2116**

CONTENTS

Description

The model 2132 or 2116 controller/indicator is made by Eurotherm, and is fitted by MRC configured for immediate use as an indicator. It is configured for the input (thermocouple) type for which it was ordered.

The indicator does not contain a real-time calendar, and is not subject to century-end date problems.

When the indicator is supplied fitted into a furnace or oven then it is usually on whenever the Instrument Switch is on. When it is supplied in a separate box, then it is on whenever the box is connected to the electrical supply.

The indicator will only show the correct temperature if it is also connected to type of thermocouple for which it is configured.

1   OPERATION

No operator action is normally required.

When switched on, the indicator lights up, goes through a short test routine, and then displays the measured temperature.
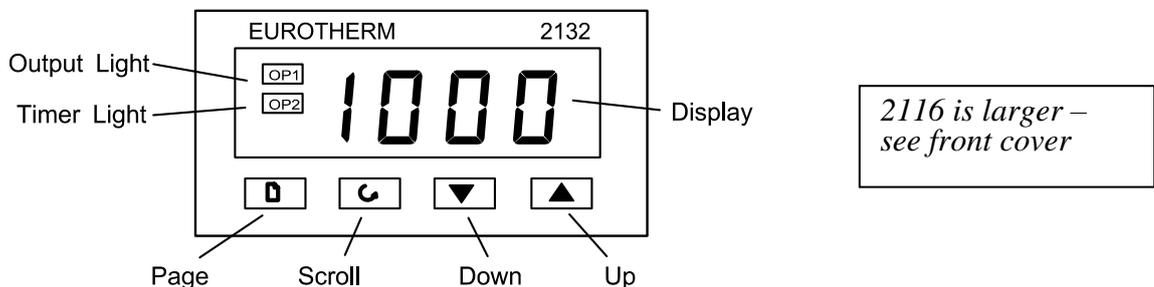
The output light and timer light are not used.

The **Page** key ▯, the **Scroll** key ↻, and the **Down** ▼ and **Up** ▲ keys allow access to parameters within the controller. Most lists and parameters are hidden and cannot be accessed by the operator because they contain factory-set parameters which should not be changed. Only the calibration parameters are normally accessible.

2 USER CALIBRATION

The indicator is calibrated for life at manufacture against known reference sources, but there may be sensor errors or other system errors. User calibration allows compensation for such errors, and the 2132 or 2116 allows for a user 2-point calibration. This setting is password protected to avoid accidental alteration.

Page to iP, scroll to CAL.P, and use Up ▲ to alter the password. The password is 3. If the correct password is entered, the display shows PASS. Scroll to CAL and use ▼ or ▲ to observe the setting FACt (factory values, as manufactured) or USEr (user values). Change to USEr.

NOTE: before checking the calibration of the indicator, or of the complete system, remember to reset the 2132 or 2116 to factory calibration values by setting the CAL.P parameter to FACt.

To enter a user calibration, scroll to each or the following parameters in turn and set the desired values.

Pnt.L   low temperature for which an offset is to be entered

OFS.L   offset value for the low temperature

Pnt.H   high temperature for which an offset is to be entered

OFS.H   offset value for the high temperature

Example: the controller reads 3°C low at 400°C, and 5°C low at 1000°C. The parameter values should be Pnt.L=400, OFS.L=3, Pnt.H=1000, OFS.H=5.

Negative or positive values can be entered: if the controller is reading high, negative offsets would be appropriate.

Fig 4 gives a graphical representation of the 2-point calibration.
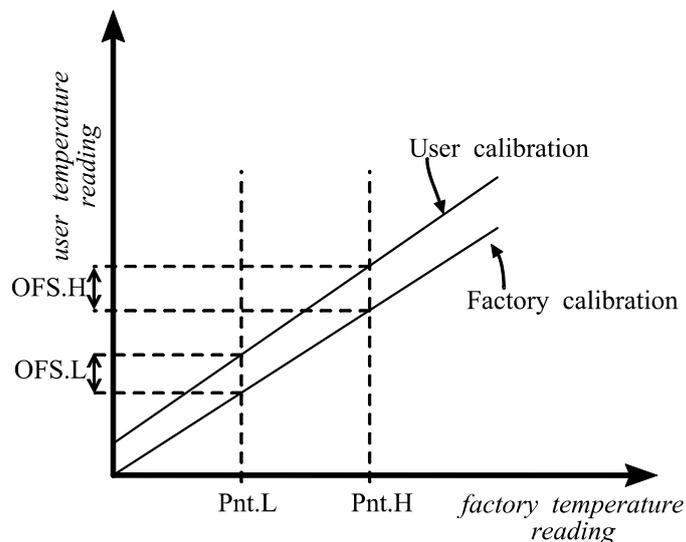

fig 4 – 2-point calibration

3   NAVIGATION DIAGRAM

Home List	Input List	Access List

```
   20.0 ──► *C ──────────► iP ──────────────►  ┌────┐ ─ ─ ─ ─ ► ACCS
    ↑↻                     ↻                    └────┘              ↻
    │                      │                                        │
   *C                    CAL.P                                    codE
                           │                                        ↑
                    enter password
                           │
                          CAL
                           │
                    if user calibration
                           │
                         Pnt.L ─ ─ ─ ─ ─ ─ ► user 2-point calibration
                           │
                         OFS.L
                           │
                         Pnt.H
                           │
                         OFS.H
```

measured temperature

for factory access to lists and parameters not available to the operator

mrc

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