6. Power up the device.

5. Make the electrical connection as shown in the section 4. Disconnect the device from the mains. Then check that the remaining settings are appropriate; see the section 3. All protective parts must be fixed in such a way as to prevent the use of a tool to remove them.

PRECAUTIONS FOR ELECTRICAL CONNECTION

- The thickness of the panel must be between 8.8 and 2.0 mm (1/2 and 1/16 in).
- Ensure that the working conditions are within the limits stated in the TECHNICAL SPECIFICATIONS section.
- Do not install the device close to heat sources, equipment with a strong magnetic field, or in places subject to direct sunlight, rain, damp, excessive dust, mechanical vibrations or shocks.
- In compliance with safety regulations, the device must be installed to ensure adequate protection from contact with electrical parts. All protective parts must be fixed in such a way as to prevent the use of a tool to remove them.

2 ELECTRICAL CONNECTION

- Use cables of an adequate section for the current running through them.
- Use cables of an adequate section for the current running through them.
- Check that the keypad is not locked.
- Ensure that the range limit r1... r2 (default -40... 50°C) is set.
- Touch the SET key for 4 s: the display will show the label "PAR.
- Touch the UP or DOWN key within 15 s to set the value within the limits r1 and r2 (default -40... 50°C).
- The test normally takes a few seconds. When it is finished, the display will switch off.
- If 30 s have elapsed without the keys being pressed, the display will show the "Lac" label and the keypad will lock automatically.

2. Unlock keypad

1. Touch the SET key for 1 s: the display will show the label "UNL".
2. Touch the UP or DOWN key within 15 s to select a label.
3. Touch the UP or DOWN key within 15 s to select a label.
4. Touch the SET key (or do not operate for 60 s) to exit the procedure.

5. View the temperature detected by the probe

1. Touch the UP or DOWN key within 15 s to select a label.
2. Touch the SET key.
3. Touch the UP or DOWN key within 15 s to select a label.
4. Touch the UP or DOWN key within 15 s to select a label.
5. Touch the SET key.
6. Touch the UP or DOWN key within 15 s to select the value.
7. Touch the SET key.
8. Touch the SET key for 4 s or do not operate for 60 s to exit the procedure.

6. Restore the factory settings (default) and store customized settings as default

1. Touch the SET key for 4 s: the display will show the label "IW.
2. Touch the SET key.
3. Touch the UP or DOWN key within 15 s to select the value.
4. Touch the SET key.
5. Touch the SET key for 4 s or do not operate for 60 s to exit the procedure.

6. Check that the factory settings are appropriate; see the section 6. Configuration parameters — the storing of customized settings overwrites the default.
1. Touch the SET key for 4 s: the display will show the label "IW.
2. Touch the SET key.
3. Touch the UP or DOWN key within 15 s to select the value.
4. Touch the SET key.
5. Touch the UP or DOWN key within 15 s to select a parameter.
6. Touch the SET key.
7. Touch the UP or DOWN key within 15 s to select the value.
8. Touch the SET key.
9. Touch the SET key for 4 s or do not operate for 60 s to exit the procedure.
10. Touch the SET key before action 6, to exit the procedure beforehand.
### Alarms

<table>
<thead>
<tr>
<th>COD</th>
<th>DESCRIPTION</th>
<th>RESET</th>
<th>REMEDIES</th>
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<tbody>
<tr>
<td>Pr1</td>
<td>cabinet probe alarm automatic</td>
<td>- check P0</td>
<td></td>
</tr>
<tr>
<td>Pr2</td>
<td>auxiliary probe alarm automatic</td>
<td>- check probe integrity</td>
<td>- check electrical connection</td>
</tr>
<tr>
<td>Al</td>
<td>low temperature alarm automatic</td>
<td>- check A4</td>
<td></td>
</tr>
<tr>
<td>Ah</td>
<td>high temperature alarm automatic</td>
<td>- check A4</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>open door alarm</td>
<td>- check B</td>
<td>- check D</td>
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<tr>
<td>C0D</td>
<td>high condensation warning automatic</td>
<td>- check C16</td>
<td></td>
</tr>
<tr>
<td>Cs4</td>
<td>high condensation alarm manual</td>
<td>- switch the device off and on</td>
<td>- check C7</td>
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<tr>
<td>LA</td>
<td>multi-purpose input alarm automatic</td>
<td>- check B and D</td>
<td>- check D, D3 and D11</td>
</tr>
<tr>
<td>Plf</td>
<td>self-test timeout alarm manual</td>
<td>- touch a key</td>
<td>- check D, D3 and D11</td>
</tr>
</tbody>
</table>

### Technical Specifications

**Purpose of the control device**
- Function controller

**Construction of the control device**
- Built-in electronic device

**Container**
- Black, self-extinguishing

**Category of heat and fire resistance**
- D

**Measurements**
- 75.0 x 33.0 x 59.0 mm (2 15/16 x 1 5/16 x 2 5/16 in)
- 75.0 x 33.0 x 81.5 mm (2 15/16 x 1 5/16 x 3 3/16 in)

**Mounting methods for the control device**
- To be fitted to a panel, snap-in brackets provided

**Degree of protection provided by the covering**
- IP65 (front)

**Connection method**
- Fixed screw terminal blocks for wires up to 2.5 mm²
- Removable screw terminal blocks for wires up to 2.5 mm²; by request

**Minimum permitted length for connection cables**
- Power supply: 10 m (32.8 ft)
- Analogue inputs: 10 m (32.8 ft)
- Digital inputs: 10 m (32.8 ft)
- Digital outputs: 10 m (32.8 ft)
- Power supply: 10 m (32.8 ft)
- Analogue inputs: 10 m (32.8 ft)
- Digital inputs: 10 m (32.8 ft)
- Digital outputs: 10 m (32.8 ft)

**Operating temperature**
- From 0 to 55 °C (from 32 to 131 °F); from 0 to 50 °C (from 32 to 122 °F) in EV3...N3

**Storage temperature**
- From -25 to 70 °C (from -13 to 158 °F)

**Operating humidity**
- Relative humidity without condensate from 10 to 90%

**Pollution status of the control device**
- 2

**Conformity**
- RoHS 2011/65/CE
- WEEE 2012/19/EU
- REACH (EC) Regulation 1907/2006
- EMC 2014/30/UE
- LVD 2014/35/UE

**Power supply**
- 230 VAC (+10% -15%), 50/60 Hz (±3 Hz), max. 2 VA insulated in EV3...N7
- 12-24 VAC/DC (+10% -15%), 50/60 Hz (±3 Hz), max. 4 VA/2W in EV3...N3, provided by a SELV class 2 source

**Earthing methods for the control device**
- None

**Rated impulse withstand voltage**
- 4 KV

**Over-voltage category**
- III; II in EV3...N3

**Software class and structure**
- A

**Analogue inputs**
- 1 for PTC or NTC probes (cabinet probe)
- KTY 81-121 (990 Ω @ 25 °C, 77 °F)
- Measurement field: From -50 to 150 °C (from -58 to 302 °F)
- Resolution: 0.1 °C (1 °F)

**NTC probes**
- Sensor type β3435 (10 K Ω @ 25 °C, 77 °F)
- Measurement field: From -40 to 105 °C (from -40 to 221 °F)
- Resolution: 0.1 °C (1 °F)

**Digital inputs**
- Input configurable for analogue input (auxiliary probe) or digital input (door switch/multi-purpose, dry contact)
- Dry contact: Contact type 5 VDC, 1.5 mA
- Power supply: None
- Protection: None

**Digital outputs**
- 1 electro-mechanical relay (compressor relay)
- Compressor relay (K1) SPST, 16 A res. @ 250 VAC
- Type 1 or Type 2 Actions
- Type 1
- Additional features of Type 1 or Type 2 actions
- 4
- Display
- 3 digits custom display, with function zone

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**N.B.**
The device must be disposed of according to local regulations governing the collection of electrical and electronic waste.

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