**Installation**

**Operation**

- Press for 5 seconds, allows changing the set point (SP). (Not available in thermometers).
- Pressing for 10 seconds/Passes to the programming menu.
- In the programming menu, go to the level displayed or accept the new value while setting a parameter.
- Pressing for 5 seconds starts/stops defrosting. (Not available in thermometers).
- The programming menu, allows you to scroll through the various levels or, during the setting of a parameter, to change the value.
- Press 5 seconds to start/stop fast freezing mode (rapid cooling). (Function available depending on the model).
- The programming menu, allows you to scroll through the various levels or, during the setting of a parameter, to change the value.
- Pressing for 5 seconds activates Standby mode, pressing for 2 seconds returns the equipment to normal mode. In Standby mode, the equipment performs no actions and only the indicator is displayed on the screen.
- In the programming menu, to exit without saving parameters, return to previous level or exit programming.

**Wiring**

- The probe and its cable should NEVER be located in the same conduit as power, control or supply cables.

**Start-up**

**Warnings**

- Using the equipment without following the manufacturer’s instructions may affect the device’s safety requirements. To ensure that the device operates correctly, only probes supplied by AKO should be used.

- The unit must be installed in a location protected from vibrations, water and corrosive gases, where the ambient temperature does not exceed that shown in the technical data.

- To ensure a correct reading, the probe must be situated in a location without any external heat influences except for the temperature which it is measuring, as a control.

- The power supply circuit must be provided with a main switch rated at at least 2 A, 230 V, located close to the equipment. The cables will enter through the back and should be type H05VV-F or H05V-K.

- The device operates correctly, only probes supplied by AKO should be used.

- The gauge will depend on local regulations, but should in no case be less than 1 mm.

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**Access to set point and programming**

After 3 seconds without key being pressed, the menu prompt will return to the previous level. If you are on level 3, the changes will not be saved.

**Level 1**

- **Access to**
  - **Set point**
  - **Programming**

**Level 2**

- **Defrost on equipment start-up**
  - **Defrost frequency (Time between two starts)**
    - Value of the option selected in parameter C4

**Level 3**

- **Temperature Adjustment (Set Point)**
  - (value of the option selected in parameter C10)
  - (SP+C10)
  - (SP+C10 = 0, =Sum of times the compressor is on)
  - 0

**Table of parameters and messages**

Def: column shows factory set default parameters. Those marked with * are variable parameters depending on the application chosen in the wizard (see Start-up). Unless otherwise stated, temperatures are expressed in °C.

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<th>Parameters</th>
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**Technical specifications**

- **Power supply**
  - AKO-D1462 / AKO-D14610: 230V ± 10% 50/60Hz 3.5VA
  - AKO-D14612 / AKO-D146122 / AKO-D146121 / AKO-D146141: 230V ± 10% 50/60Hz 3.5VA

- **Maximum Voltage EEC circuits**
  - 20V

- **Inputs**
  - AKO-D14610 / AKO-D146ix: 1 input NTC/PTC
  - AKO-D1462x: 2 inputs NTC + 2 digital inputs
  - AKO-D1463x / AKO-D146ix: 3 inputs NTC + 1 digital input

- **Relays**
  - COOL 16A (EN60701-1: 80A, 250V-1)
  - Relays DEF 16A (EN60701-1: 60A, 250V-1)
  - Relays AUX 16A (EN60701-1: 60A, 250V-1)

- **Number of relay-operations**
  - 300000 operations

- **Type of probe**
  - AKO-D14619x: NTC: AKO-D14619x
  - AKO-D14619x: PTC: AKO-D1509x

- **Moisture level range**
  - 30% to 100% relative humidity

- **Ambient storage humidity**
  - 30% to 100% relative humidity

- **Class of protection**
  - IP40

- **Ambient storage temperature**
  - -30 to 70 °C, humidity <90%

- **Installation**
  - Wall assembly, adaptable to built-in housing

- **Connections**
  - Connections via screw terminals for cables up to 2.5mm²

- **Rating of control device automatic operation feature**
  - Type 1.B, for use in clean environments, Class II and continuous operation. Pollution classification 2 (EN60701.1)

- **Double insulation between supply, secondary circuit and relay output**
  - 250V

- **Temperature during full pressure test**
  - 75°C

- **Parts which position active elements**
  - 125°C

- **Voltage and charging of EMC test**
  - AKO-D14602 / D14610 / D146122 / C14612 / D14614 / D146142 / C146142: 20% ± 10% ± 10%

- **Current of radio frequency emission peaks**
  - 270mA

**Accessories**

The AKO-D14918 programming key allows you to quickly and easily copy configured settings from one controller to another with the same functionality.

**Fixation**

- Wall assembly, adaptable to built-in housing

**Other properties**

- NTC: AKO-D146ix
- PTC: AKO-1558xx

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