

informations

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Device compliant with the requirements of directives:
2004/108/CEE (Electromagnetic compatibility)
and 2006/95/CEE (Low voltage safety)



Installation and User Guide

MINOR 11

Electronic thermostat for underfloor heating or radiant ceiling heating



020713



Because of changes in standards and equipment, the characteristics given in the text and the illustrations in this document are not binding unless confirmed by Delta Dore.



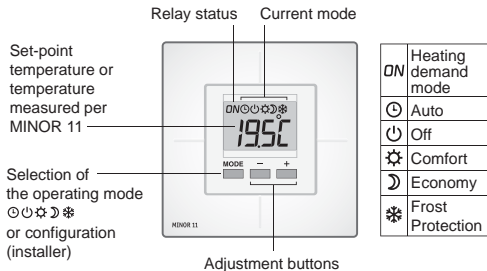
Warnings

- Carefully read these instructions prior to installation.
- The unit must be installed in compliance with currently applicable standards.
- Always switch off the mains before installing or servicing the unit.
- Do not attempt to repair the unit yourself; an after-sales service is available.
- The diagrams provided are simplified for greater clarity. The protective units and other accessories required by the standards are not illustrated.
Standard UTE NF C15-100 and good practice must be complied with. Connected or nearby equipment must not generate excessive interference (directive 2004/108/EEC).

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2- Presentation

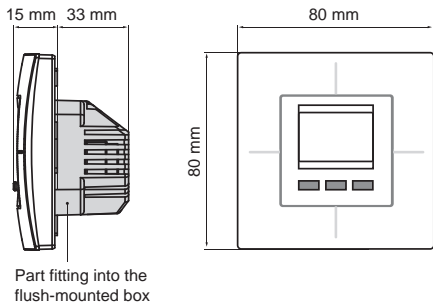


- Suitable for underfloor heating or radiant ceiling heating
- Permanent regulation (proportional integral)
- Simple control system (pilot wire principle)
- Up to 6 operating modes (GIFAM standard)

2.1 The pilot wire principle (CALYBOX standard)

The pilot wire principle enables the required operating mode to be selected from a programmer (CALYBOX range, Driver range, etc.).

The MINOR 11 thermostat thus controls the corresponding temperature.

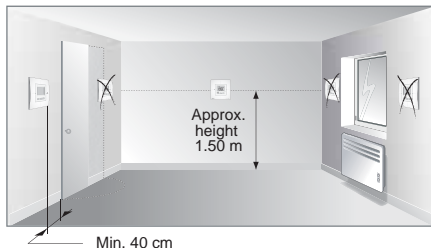


| Order sent by the programmer | Corresponding temperature controlled by the thermostat |
|------------------------------|--|
| Comfort ☀️ | Comfort setting (5°C to +30°C) |
| Comfort- 1°C | Comfort - 1°C setting |
| Comfort- 2°C | Comfort - 2°C setting |
| Economy 🌙 | Economy setting (5°C to +30°C) |
| Frost Protection ❄️ | Frost protection Frost protection can be set from 5°C to 15°C (7°C by default) |
| Off ⏻ | Heating switched off |

3- Location

The MINOR 11 thermostat is mounted flush-mounted in a flush-mounted box. It should be placed in a room whose temperature represents the mean temperature, with a recommended height of 1.5 m and it should be away from any heat sources (fireworks, sunlight) and from air flows (window, door, etc.).

To avoid unwanted air movements that would distort the sensor measurement, the wire entry into the flush-mounted box must be plugged (mastic, glass wool, etc.).



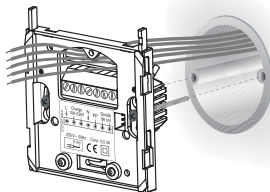
IMPORTANT: Do not install the MINOR 11 on a wall in contact with the outside or in an unheated room (e.g. garage, etc.).

4- Mounting / Connection

To open the casing, slide the moving tabs using a screwdriver and remove the front panel from the base to be flush mounted.

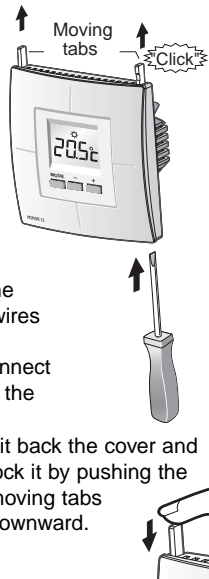
Switch off the power supply to the system before carrying out any operation

Before securing the base to the flush-mounted box, pass the wires through the hole in the base. When the base is secured, connect the wires to the terminal (strip the wires: approx. 6 mm).

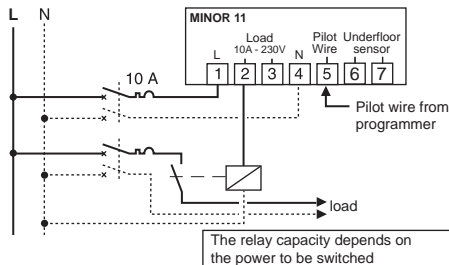
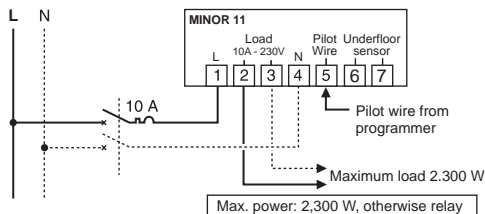


Fit back the cover and lock it by pushing the moving tabs downward.

Switch on the installation.




5- Connections



The reference number of the underfloor sensor to use is 6300037.

6- Switching on the unit for the first time

When the MINOR 11 is first switched on, it starts up the "gradual heating" mode designed for new underfloor heating systems for which a gradual heating is recommended (over a period of 20 days). In this mode, the heating percentage is limited to 8% on the 1st day, 12% the 2nd day... up to 100% on the 20th day.

The display shown the number of remaining days and .

The  symbol flashes.

- The program can be stopped at any moment by pressing **MODE**.

- pressing the button  displays the current program P1.

After the 20-day period, MINOR 11 exits the gradual heating mode and returns to the Off mode.

The heating can always be started again in gradual heating mode. (see Installer commissioning).

- The percentage shown above is calculated in relation to the regulation time base,
- The gradual heating mode depends on the set-point temperature.



7- Installer commissioning

To enter this mode, press the button **MODE** for 10 seconds until **CF01** is displayed.



7.1 Choosing the temperature displayed (CF01)

00 : Temperature of the room measured by MINOR 11

01 : Current set-point temperature (default mode)

Select by pressing the **+** or buttons **-**, confirm by pressing and releasing **MODE**. Go on to the next menu.

7.2 Choosing the control sensor (CF02)

00 : Sensor within the casing (by default)

01 : Underfloor sensor (optional)



Select by pressing the **+** or buttons **-**, confirm by pressing and releasing **MODE**.

Passage au menu suivant.

7.3 Correcting the temperature measurement (CF05)

If you notice a difference between the temperature recorded (thermometer) and the temperature measured by the unit, this menu allows you to correct the difference (+/-5°C in increments of 0.1°C).

E.g. The temperature displayed is 19°C and the temperature recorded is 20°C, so set +1°C.

Make the selection by **+** or **-**, Confirm by pressing and releasing **MODE**.

Go on to the next menu.



You must wait at least 24 hours until the effect of the correction can be observed in the room.

7.4 Locking user access (CF06)

Important: Before activating the user locking feature, select the required operating mode (🕒 ⚙️ 🌙 ❄️ 🔌).

00 : Les touches sont verrouillées.
Only the set-point configured before the locking operation can be changed to +/- 3°C (except for the 🕒 and 🔌 modes).

CF06

01 : Active buttons (default display).

Make the selection by the buttons or ,

Confirm by pressing and releasing .

Go on to the next menu.

7.5 Choosing the installation type (CF07)

This menu is used to determine the type of installation so that the most suitable regulation settings are used.

00 : Underfloor heating application - P.I. type regulation (default display)

02 : Ceiling heating application - P.I. type regulation
Paramètre disponible si choix sonde interne §7.2

Select by pressing the buttons or , and confirm by pressing and releasing .
Go on to the next menu.

7.6 Gradual heating (CF09)

CF09 is displayed.

CF09

P1 : Start-up program 1 (dry floor).

P3 : Start-up program disabled

Select by pressing the buttons or , and confirm by pressing and releasing .

7.7 Power to be switched (CF10)

This parameter is only displayed if the Underfloor heating mode (CF07 - § 7.5) and the internal sensor (CF02 - § 7.2) are selected.



00: Up to 1,000 W (direct control)

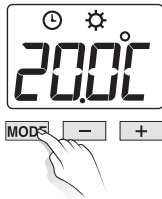
01: From 1,000 W to 2,300 W (direct control, by default)

02: Greater than 2,300 W (contact switch control)

Press the button several times for rapid access to a specific menu **MODE**

7.8 Exiting the installer mode

You can exit the installer mode by pressing the button **MODE** after the last menu (CF09 - § 7.6 or CF10 - § 7.7) or automatically after 2 minutes without pressing any button.



8- Operation

8.1 Choosing the operating mode

Select the operating mode by pressing and releasing the button repeatedly **MODE** :

| | |
|-------------------------|--|
| AUTO | MINOR 11 follows the mode requested by the programmer. |
| Comfort | MINOR 11 regulates according to the Comfort set-point configured. |
| Economy | MINOR 11 regulates according to the Economy set-point configured. |
| Frost Protection | MINOR 11 regulates according to the Frost protection set-point configured. |
| OFF | The heating is shut down |



8.2 Set-point temperature setting

8.2.1 Set-point setting for the sensor within the casing (selection of sensor type made §7.2)

Select the mode to set (, or) by using the button **MODE**.




Use or , to make your choice (5°C to +30°C or 5°C to 15°C for the).



In Comfort mode, MINOR 11 will regulate according to the set-point configured.

When a choice is made to display the current temperature (default mode, § 7.1), the first time the button  or  is pressed will display room temperature, pressing it a second time allows you to adjust the set-point.

8.2.2 Underfloor sensor set-point setting

(selection of sensor type made in § 7.2)

Select the mode to set ( or  , **Frost protection**) by the button .

Use  or  , to make your choice (setting of 5 to 40°C for Comfort or Economy, and 5 to 30°C for Frost protection).

Note: Note: Setting the floor temperature to 26°C corresponds to a room temperature of about 20°C.

A floor temperature of 23°C corresponds to a room temperature of about 18°C.

The values specified are theoretical values.

The settings must be readjusted after a few days use.

10- Technical characteristics

Electrical

- 230 V, 50 Hz power supply, $\pm 10\%$
- Class II insulation
- Power consumption: 0.5 VA
- Power supplied operating contact output, 10 A, 230 V
- Automatic action: type 1.C
- 1 pilot wire input from programmer

Specific operation

- 6 Operating modes:
 - Comfort and economy (adjustable from 5°C to 30°C)
 - Comfort -1°C and Comfort -2°C
 - Frost protection adjustable from 5°C to 15°C (except for underfloor sensor applications)
 - Off
- P.I. type regulation (proportional integral), 20 minute time base either in relation to the thermostat sensor, or in relation to an underfloor sensor.
- eu.bac certificate no. 020713
Application: Electric Underfloor Heating
CA: 0.7


Mechanical

- Dimensions: LxHxD = 80 x 80 x 48 mm
- IP 30
- Wall-mounted on flush-mounted box
- Installation in an environment with normal pollution levels

Technical

- Storage temperature: -10°C to +70°C
- Operating temperature: 0°C to +40°C.

11- Maintenance

| Problem | Diagnosis / Solutions |
|--|---|
| Nothing appears on the screen | No power supply <i>Check the power supply</i> |
| The indication  flashes | •The “gradual heating” mode is enabled <i>See chapter 7</i> |
| You cannot set a set-point temperature | The buttons are locked <i>See the “installer mode” chapter or</i> AUTO mode is enabled <i>(set-points cannot be changed)</i> |