# 01911

Surface electronic chronothermostat - Instruction handbook

**CLIMA**PIÙ

**VIMAR**

Space for noting the three-digit PIN number
used as the lockout password.

.............    .............    .............

## WARNING !

When the display shows the 🔋 symbol blinking, the supply batteries are running down. CHANGE THEM IMMEDIATELY.

If the battery charge drops under the minimum level, the timer-thermostat output relay automatically switches OFF and it is no longer possible to perform any control operations by using the device.

Flat batteries and their renewal do not delete the programs or the settings; after changing, it will in fact be necessary to reset only the date and time.

In addition, if the timer-thermostat is not used for a long period of time, it is always recommended to remove the batteries so as to prevent any acid leaking out that would damage the device.

For the battery life to be assured, it is always necessary for the front of the timer-thermostat to be closed after opening to access the vertical temperature sliders.

## SUMMARY.

## ☑ VIMAR

## 1. THE TIMER-THERMOSTAT 01911

The Vimar 01911 timer-thermostat is able to assure ideal temperature conditions for every hour of the day.

It is equipped with a large display for viewing the temperature and the settings, a push-button and knob for selecting and programming the functions and a set of vertical sliders that are used to adjust the temperature extremely simply.

The timer-thermostat can work in different modes, also timed, and with two types of automatic operation (during which it is also possible to change the programmed temperature temporarily).

The device is powered with two AA LR06 1.5 V penlight batteries that are easily found on the market and assure a power supply for the device for over a year.

## 2. FRONT VIEW, CONTROLS AND DISPLAY

### Indicators and controls

1. Room temperature
2. Unit of measurement of temperature
3. Day of the week
4. Month
5. Current time
6. Daily pattern of the current automatic program
7. OFF
8. Timed OFF
9. Antifreeze
10. 🕐 Heating
11. OFF Air conditioning
12. ❄ Changing the temperature during automatic operation
13. ✋ Manual
14. ⏱ Timed Manual
15. 📞 Remote control via phone dialler
16. 📡 Radio transmitter module present

17. ♨ Flat battery

18. ⏱ Daily programming

19. OVERRIDE Weekly programming

20. ⟺ Push-button for selecting settings and access to menus

21. ◼ Handle for scrolling through menus and setting numerical values

22. ⟷ Vertical sliders for setting the temperature in correspondence with Automatic operation.

**N.B.** If the display shows the symbol ♨ it means that the timer-thermostat is switching on the heating; likewise, the symbol 雪 means that the timer-thermostat is keeping the air-conditioning on.

If the display does not show either of these two symbols, it means that the heating or air-conditioning is off at that time.
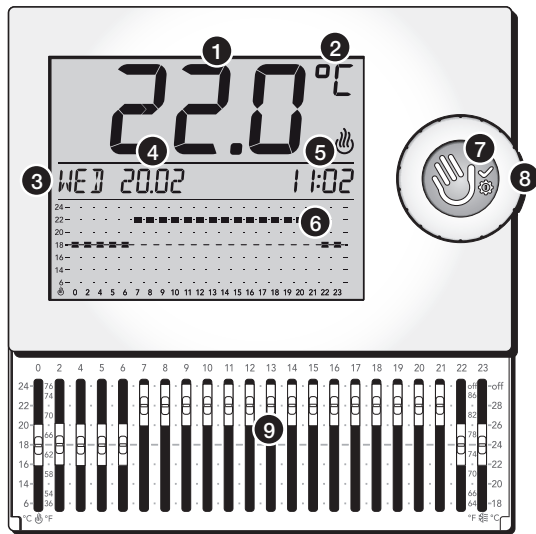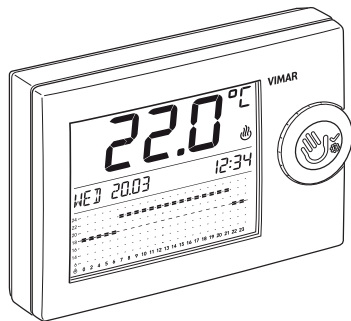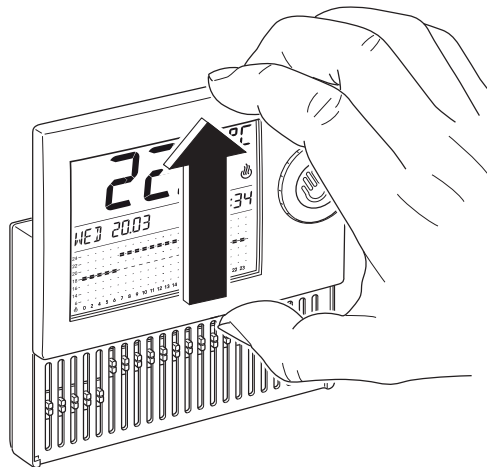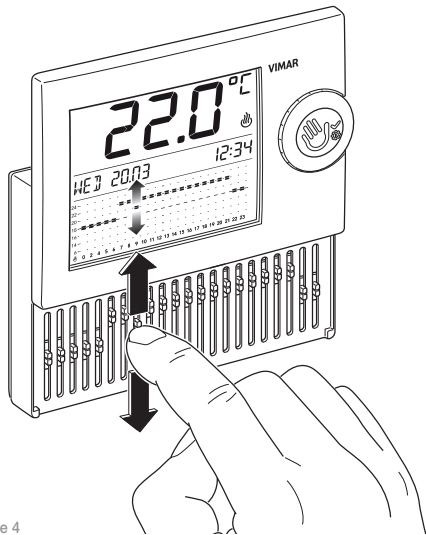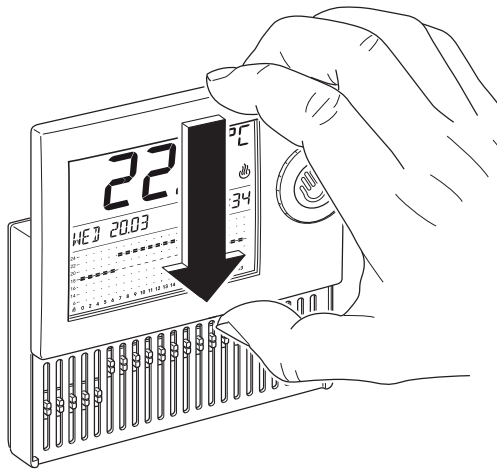


Figure 1

3

Figure 2

Figure 3

Figure 4

Figure 5

# VIMAR

## 3. DESCRIPTION OF THE DEVICE

Electronic timer-thermostat with sliders for ambient temperature control (heating and air conditioning), changeover relay output 5(2) A 250 V~, power supply with penlight batteries AA LR6 1.5 V (not supplied), surface mounting, white.

## 4. FIELD OF APPLICATION

The appliance is designed to control room temperature by acting on the control circuit of the burner or circulation pump (heating) or on the control circuit of the air conditioner (air conditioning), ensuring an ideal temperature, every day, throughout the week.

The large display shows the room temperature, day, time, system operating status and the daily profile set for the current program.

## 5. INSTALLATION

The appliance must be installed on a wall at a height of 1.5 m off the floor in a suitable position for correctly detecting the ambient temperature. It must not be installed in niches, behind doors and curtains or in areas affected by sources of heat or atmospheric factors. In particular, it must not be installed on outer walls.

The base of the appliance has 4 slots for installation straight onto a wall with screws and plugs ø 6 mm (not supplied) or for installation in recess-mounting enclosures with anchoring by screws with centre distance 60 mm or 83.5 mm (3-gang joined rectangular enclosures).

It should be used in dry, dust-free places at a temperature between 0 °C and +40 °C.
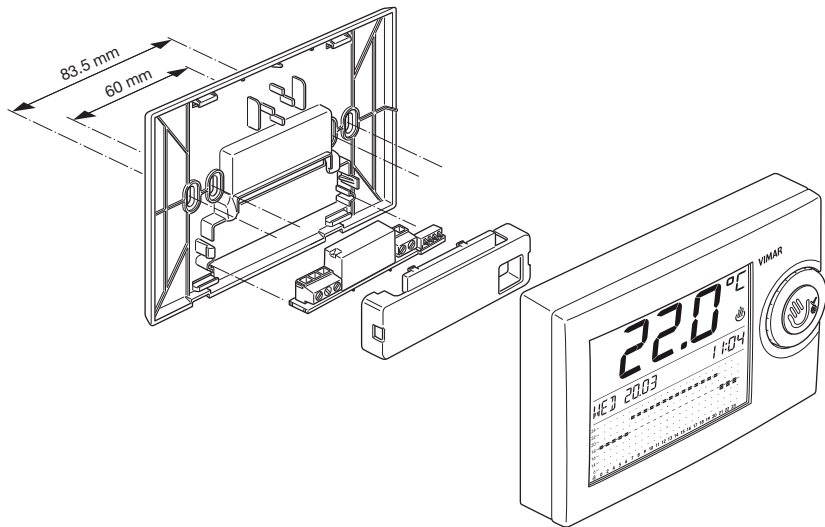
Figure 6

## 6. CONNECTIONS



Circulation pumps, burners, solenoid valves.

L
N

U1

NO NC C
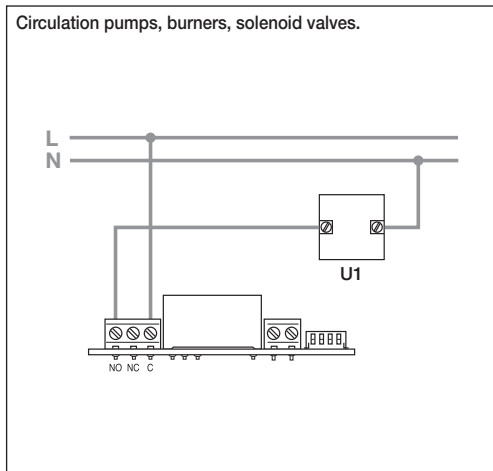
Figure 7



Motor-operated valves.

L
N

CLOSE

OPEN

M

U1

NO NC C
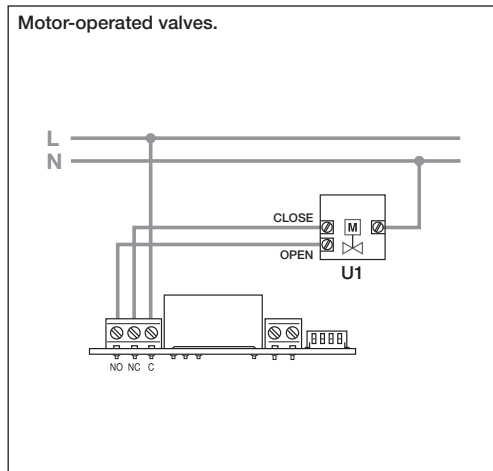
Figure 8

## 6.1 Phone dialler control

It is possible to control the timer-thermostat remotely with a phone dialler connected to the dedicated terminals (see the figure below).
• By closing the contact, the timer-thermostat is forced onto Manual operation and the keys are locked.
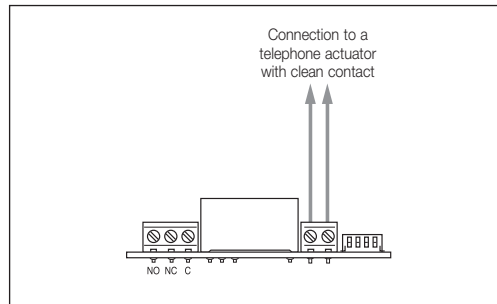
• On opening the contact the timer-thermostat is forced onto:
  - Antifreeze mode if heating is on;
  - OFF if air-conditioning is on.

**Note:** If the user has remotely forced timer-thermostat operation onto Manual mode (closing the contact), to then be able to operate on the device it will be necessary to make another phone call to have the input contact open.



Connection to a telephone actuator with clean contact

NO NC C

Figure 9

## 7. INSERTING/CHANGING THE BATTERIES

| 1. | 2. |
|---|---|
|  |  |
| | AA LR6 1,5 V |
| | **ATTENTION!** After replacing the battery, dispose of the old battery in the appropriate sorted refuse bins. |
| Figure 10 | Figure 11 |

## 8. BUTTON FUNCTIONS

The surface-mounting timer-thermostat 01911 is used and pro-grammed with:
• the selection button;
• the rotary knob;
• the vertical sliders.

## 8.1 (🖐) selection button

The push-button, pressing it briefly, is used to confirm selections when scrolling through the menus or to confirm actions of program-ming; pressing and holding it down, instead, accesses or exits the menu. In addition, in some cases, it can also be used to pass from one operating mode to another (for example from Automatic to Manual).
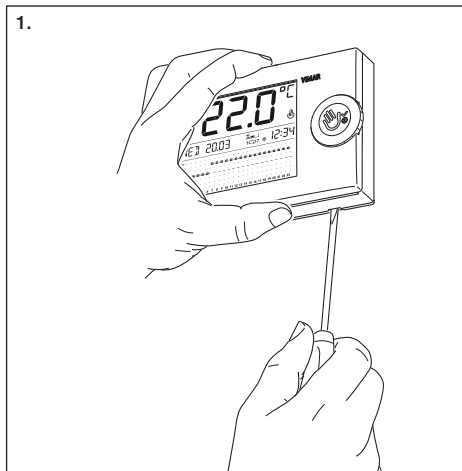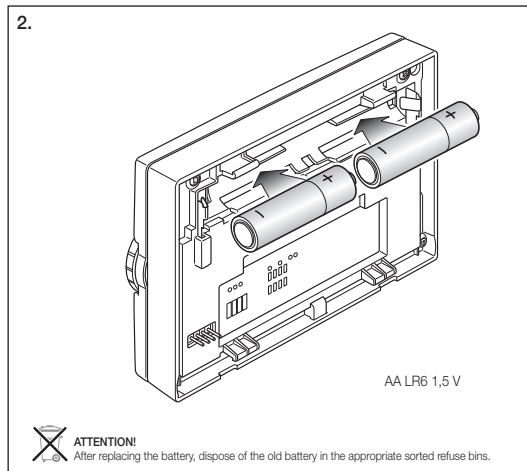
### 8.1.1 Pressing the selection button

• When the timer-thermostat displays the information related to a general operating mode (Manual, Automatic, OFF, etc.), on quickly pressing the push-button, the device:

- switches onto Manual if it was operating in a different mode;
- switches onto the previously active mode if the timer-thermostat was operating in Manual mode;
- if it is on, it deletes the automatic temperature change.

**Pressing the selection button for approximately 4 s when the timer-thermostat display shows the information related to any operating mode accesses the device's programming menus.**

• When the display shows the timer-thermostat programming menus, quickly pressing the button confirms access to the menu displayed, then accessing the related submenus.

**Pressing the selection button for approximately 2 s when the timer-thermostat display shows the programming menus exits these menus and the device returns to the currently active operating mode.**

## 8.2 Rotary knob



Turning the knob clockwise or anticlockwise scrolls through the various menu items and allows setting the parameters during the phase of programming (temperature, date, time, etc.).

• If the timer-thermostat is working in Manual mode, turning the knob changes the temperature setting.

• If the timer-thermostat is working in Automatic mode, turning the knob accesses the procedure for setting the Automatic Temperature Change (see par. 9.4.2).

In the other operating modes, turning the knob produces no effect.

## 8.3 Vertical sliders

Using the 22 sliders that are accessed by opening the front of the device it is possible to:

- set the desired temperature when the timer-thermostat is on daily Automatic mode;

- set the desired temperatures, for each hour and for each day of the week, while configuring the weekly automatic program.

Slider adjustment has immediate effect when the timer-thermostat is working on daily Automatic mode; if this is not the case, there will be no change.

Take care that, if the operating mode is then switched over onto daily Automatic mode, the temperature values will adjust to the current position of the sliders.

Whereas, if operating in weekly Automatic mode, the timer-thermostat will set the temperature values defined in the programming phase and changing the sliders will not make any change (unless, after opening the front, you confirm the intention to edit the program).

## 9. ACCESS TO MENUS AND OPERATING MODES

This chapter illustrates the procedures to follow in order to set and program the timer-thermostat and the related operating modes.

When the display shows a general operating mode, press the selection button for approximately 4 s; this takes you to the main menu whose items can be displayed by turning the knob:

- *OFF*
- *OFF TIMED*
- *ANTIFREEZ.*
- *AUTO*
- *MANUAL*
- *MAN TIMED*
- *SETTINGS*
- *BACK*

After entering a menu, if no operations are performed within a time of approximately 40 seconds, the timer-thermostat will exit this menu without saving any settings made in the meantime.

In all the menus, selecting the *BACK*, option will take you back to the previous display.

**Note:** The *SETTINGS.* menu is the menu that enables setting the language, date, time, operating mode of the automatic program (daily or weekly), password, etc.

## 9.1 OFF

When the timer-thermostat is *OFF*, the device is off.

The display will in any case keep on showing the date, time and room temperature.

Access the main menu and press the  selection button in correspondence with *OFF*; the timer-thermostat is switched off and as a result you exit the menu. The device will no longer make any adjustment and the display will show:
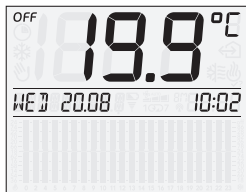


OFF

WED 20.08    10:02

Figure 12

## 9.2 OFF TIMED

This option permits switching off the timer-thermostat for any length of time at the end of which the device will switch on, going back into the previously active operating mode (that is before switching off).

**The *OFF TIMED* mode cannot be accessed if the timer-thermostat is working in *OFF* or *MAN TIMED* mode.**

Access the main menu and press the  selection button in correspondence with *OFF TIMED*; the display will show:
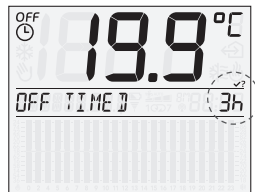


OFF

OFF TIMED    3h

Figure 13

14

Using the rotary knob, set the desired time interval.

The value can be set in the range from 1 hour to 1 year in steps of one hour; the first 6 hours are displayed as shown in figure 22 whereas after the 6 hours the display will show the date and time within which the **OFF TIMED** operation will end.
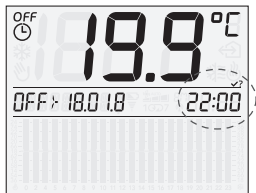
The following figure, by way of example, shows the screen corresponding to the **OFF TIMED** mode that will remain active until 18th January at 11:30 a.m. after which the timer-thermostat will switch over onto Manual mode.

The messages current date/time and date/time will appear alternately on the display as long as the **OFF TIMED** mode stays active.
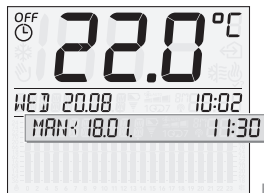


Figure 14



Figure 15

Then press the selection button to confirm.

**Note:** To exit the **OFF TIMED** mode quickly, just briefly press the selection button; you will thus go into **MANUAL** mode (pressing the button a second time will set the **OFF** mode).

### 9.3 ANTIFREEZ.

This option, which can only be set on heating, permits setting a minimum temperature level so as to avoid damage to the pipes or to prevent the temperature from falling under a safety level; when the room temperature drops under the set antifreeze value, the timer-thermostat will switch on.

Access the main menu and press the selection button in correspondence with **ANTIFREEZ.**; the display will show:
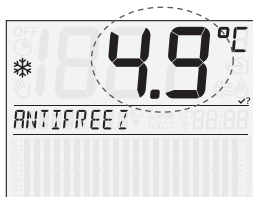


Figure 16

Using the rotary knob, set the desired antifreeze temperature; this value can be set in the range from 4 °C to 15 °C in steps of 0.1 °C. Then press the selection button to confirm.

### 9.4 AUTO

In the **AUTO** operating mode, that is automatic, the timer-thermostat performs temperature control (both for heating and air-conditioning) by comparing the room temperature with the setting for each hour of the current day.

Access the main menu and press the selection button in correspondence with **AUTO**; the display will show:
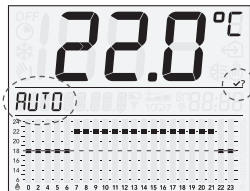


Figure 17

Press the selection button again to confirm.

The desired temperature values are set using the 22 vertical sliders. To adjust the temperature in the time period between midnight and 04:00 only two sliders will be used (one slider to set the temperature between 00:00 and 02:00 and one to set the temperature between 02:00 and 04:00) whereas, for the following hours, each slider will correspond to a specific hour of the day.

The heating temperature values are the ones on the left of the first slider on the timer-thermostat (marked with the 🔥 symbol at the bottom), whereas the air-conditioning ones are shown to the right of the last slider (marked with the ❄ symbol at the bottom).

During *AUTO* operation the display shows the temperature settings with a diagram in which:
- at the bottom there are the hours of the day (from 0 to 23);
- vertically there are the corresponding temperature values that can be set with the sliders (the heating values on the left-hand side and the air-conditioning values on the right-hand side).

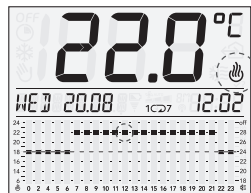The following figure shows the display of the timer-thermostat during *AUTO* operation in heating mode:



Figure 18

The automatic operating mode can be associated with daily or weekly programming:
- For daily programming, the temperature settings are reproposed day by day and therefore the programming will be identical for every day of the week (see par. 9.7.3); these values can be changed in real time by using the vertical sliders.
- In case of weekly programming, the timer-thermostat saves separate temperature settings associated with the corresponding day of the week and, at the start of each day, activates the corresponding automatic program.

For all the procedures for configuring the weekly program or for changing these temperature settings, see par. 9.4.1.
When operating with daily programming, the display will show the 1꒰ symbol, and with weekly programming it will show the 1꒰7 symbol; the display will moreover show the 🖐 or 🗲 symbols depending on whether the *AUTO* program is on heating or air-conditioning.

#### 9.4.1 WEEKLY PROGRAMMING

Weekly programming offers the user the opportunity to create a time program that, for each day of the week, automatically adjusts the room temperature according to the settings.
The weekly program can be created in a differentiated manner depending on whether the timer-thermostat is working in heating or air-conditioning mode.

• **9.4.1.1** To access weekly programming, the timer-thermostat must be operating in weekly *AUTO* mode 1꒰7; to activate this type of operation, see par. 9.7.3.
After activating this mode, **open the front of the timer-thermostat**; using the rotary knob, select *MODIFY PROGRAM ?* and press the 🔘 selection button to confirm. The display will show the current day (for example) *MONDAY*.
The *CONCLUDE CHANGES* option, instead, exits the weekly program.

**Warning: Closing the front, regardless of the current programming phase, exits the weekly program and the timer-thermostat goes back to display the previous weekly *AUTO* mode 1꒰7 without saving the changes made up to that time.**

• **9.4.1.2** Using the rotary knob, select the day of the week for which you want to set the temperature values; scrolling through the list of days, the display will show the word *MODIFY* alternating it with that of the selected day.

Press the ⊚ selection button to confirm; the display shows the screen related to that day on which the temperature indicators will blink.
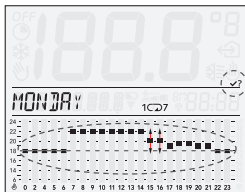


Figure 19

**N.B.** Refer to the temperature profile shown on the display and not to that of the vertical sliders.

To set the temperature it is enough to position the vertical sliders on the desired values; during this operation the display will show the movement of the slider via the associated indicator and the value corresponding to it.

At the end of the settings, press the ⊚ selection button to confirm.

• **9.4.1.3** At this stage, the timer-thermostat suggests the four different options *COPY*, *MODIFY*, *OTHER* and *CONCLUDE* that can be selected with the rotary knob:

> **COPY is used, for the following day, to copy the same settings made for the current day (that is the one that has just been set).**
Press the ⊚ selection button on *COPY MON -> TUE* and the automatic program for Tuesday will be the same as that for Monday.
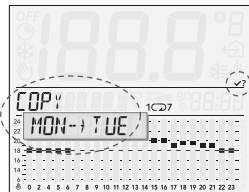


Figure 20

This procedure, if the settings are the same, must be repeated in the same way for every day of the week.

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> *MODIFY* is used to change the temperature settings for the following day with the vertical sliders as described in par. 10.2.

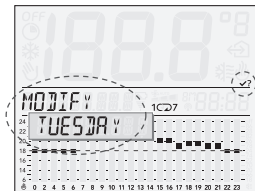Press the 🔘 selection button on *MODIFY TUESDAY*, you can set the automatic program for Tuesday.



Figure 21

> *OTHER* is used, for a selected day, to copy the same settings made for the current day (that is the one that has just been set).

After setting *MONDAY*, press the 🔘 selection button on *OTHER* and, for example, by selecting *THURSDAY* with the rotary knob, the automatic program for Thursday will be the same as that for Monday.
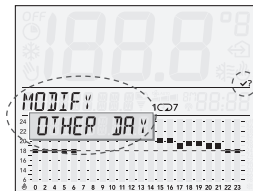


Figure 22

> *CONCLUDE* is used to exit programming.

#### 9.4.2 CHANGING THE TEMPERATURE DURING AUTOMATIC OPERATION (OVERRIDE)

This option, which can be used when the timer-thermostat is operating on *AUTO* in daily or weekly programming, is used for temporarily changing a previously set temperature value within the program.

This function is useful when, at a certain time, the desired temperature is different to the programmed temperature; in particular, it is possible to define a different temperature to the one set in the program and for a time interval selected automatically by the timer-thermostat (but not modifiable).

When the user wishes to change the programmed temperature for a specific day in fact, the timer-thermostat will check for how many hours the program has a temperature near the current one (differing by at most ± 1 °C) and will include the temperature values associated with these time bands in the change.

As soon as the device makes a change that does not come within the range of ± 1 °C it will delimit the time band involved; in this way the change can involve a minimum time band corresponding to the current time to reach a maximum time band that, from the current time, will reach up to 00:00 hours on the same day.

When the timer-thermostat is working in *AUTO*, mode, to change the current temperature value it is sufficient to turn the knob briefly; the display will show:
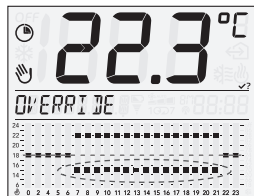


Figure 23

Now, again turning the knob, select the desired value; the timer-thermostat will automatically blink to highlight the time bands affected by the change and the indicators will go onto the set temperature.

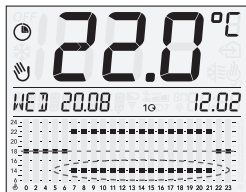Lastly press the selection button (🖐️); the display will then show:

Figure 24

In the above figure, for example, the temperature that has just been set will involve the time band from 11:00 to 13:00 hours.

**Warning:** At the end of the current day, the timer-thermostat will delete the changes made and the temperature values will return to be the ones set by the automatic daily or weekly program.

**Note:** If it is wished to set a different temperature for a different time to the one automatically prompted by the timer-thermostat, it is recommended to use *MAN TIMED* mode.

### 9.5 MANUAL

In this operating mode the timer-thermostat works by comparing the room temperature with the one set by the user.

Access the main menu and press the selection button in correspondence with *MANUAL*; the display will show:
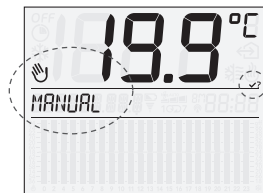


Figure 25

Using the rotary knob, set the desired temperature; this value can be set in the range from 5 °C to 35 °C in steps of 0.1 °C.

Then press the selection button to confirm.

The display will on *MANUAL* timer-thermostat operation show the date and time alternating with the indication of *MANUAL* and the temperature set by the user.

## 9.6 MAN TIMED

This option permits switching on the timer-thermostat in *MANUAL* operation for any length of time at the end of which the device will return to the previously active operating mode.

The *MAN TIMED* mode cannot be accessed if the timer-thermostat is working in *MANUAL* or *OFF TIMED* mode.

Access the main menu and press the selection button in correspondence with *MAN TIMED*; the display will show:

Using the rotary knob, set the desired temperature that will be active for the time during which the timer-thermostat works on manual.
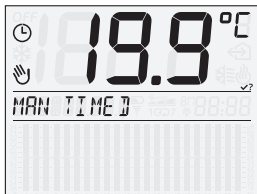


Figure 26

Press the selection button to confirm.

Using the rotary knob, set the desired time interval.

The value can be set in the range from 1 hour to 1 year in steps of one hour; the first 6 hours are displayed as shown in figure 27 whereas after the 6 hours the display will show the date and time within which the *MAN TIMED* operation will end.
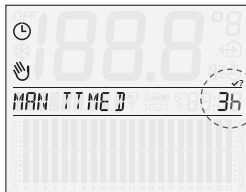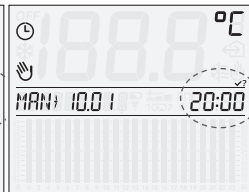


Figure 27                    Figure 28

Then press the selection button to confirm.

**Note:** To exit the *MAN TIMED* mode quickly, just briefly press the ⊛ selection button; you will thus go into the previous operating mode (pressing the button a second time will set the *MANUAL* mode).

The following figure, by way of example, shows the screen corresponding to the *MAN TIMED* mode; this will remain active with the set-point of 20.5 °C until 13th September at 20:50 after which the timer-thermostat will switch over onto *AUTO* mode.
The messages current date/time, *MAN TIMED* and set-point and date/time will appear alternately on the display as long as the *MAN TIMED* mode stays active.
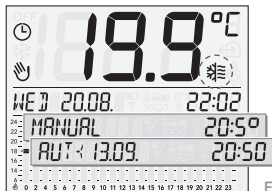


Figure 29

## 9.7 SETTINGS

When the timer-thermostat display shows the *SETTINGS*, press the ⊛; selection button; this takes you to the following main menu whose items can be displayed by turning the knob:

• *LANGUAGE*
• *HEAT/AIR.*
• *PROGR 1/7*
• *THERM DIF*
• *DATE/TIME*
• *12h/24h*
• *°C/°F*
• *CONFIG. RF*
• *PIN*
• *INFO*
• *BACK*

### 9.7.1 LANGUAGE

This option is used to select the language in which all the menus and information will be shown on the display.

Press the ⊙ selection button on *LANGUAGE* and, using the rotary knob, set the desired language (Italian, English, French, German and Spanish); lastly press the ⊙ selection button to confirm.

### 9.7.2 HEAT/AIR.

This option is used to select the timer-thermostat operating mode, choosing from heating or air conditioning.

Press the ⊙ selection button on *HEAT/AIR.* nd, using the rotary knob, set the desired mode (*h HEAT* or *h AIRC.*); lastly press the ⊙ selection button to confirm.

### 9.7.3 PROGR 1/7

This option is used to select the type of operation, daily or weekly, of the timer-thermostat on *AUTO* (automatic) mode.

**In the case of daily *AUTO* operation, the timer-thermostat adjusts the temperature using the settings made with the vertical sliders, whereas in the case of weekly *AUTO* operation, the device sets the temperature according to the values selected in the phase of programming that correspond to the current day of the week.**

Press the ⊙ selection button on *PROG 1/7* and, using the rotary knob, set the desired mode (*DAYLY* or *WEEKLY*); lastly press the ⊙ selection button to confirm.

### 9.7.4 THERM DIF

This option is used to set the value of the temperature differential; the temperature differential is the difference between the set temperature and the actual temperature of switching the system on and off.

By adjusting the temperature differential, the system can be prevented from continually switching on or off; systems with high thermal inertia (for example, with cast iron radiators) require a low temperature differential value, and systems with low thermal inertia (for example, fan coil units) require a higher value.

**Example:** If the ambient temperature is set to 20 °C and the temperature differential is set to 0.3 °C, the system will come on when the ambient temperature falls to 19.9 °C and will go off when it reaches 20.3 °C.

Press the selection button on *THERM DIF* and, using the rotary knob, set the desired value (can be selected between 0.1 °C and 1°C); lastly press the selection button to confirm.

#### 9.7.5 DATE/TIME

This option is used to set the current day and time on the timer-thermostat.

Press the selection button on *DATE/TIME*; using the rotary knob, set the day, month, year, hours and minutes, pressing the

selection button to confirm each of the choices made (see figure 30).
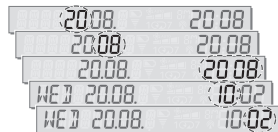
Figure 30

**N.B.** Changes for summer time must be made by the user.

#### 9.7.6 12h/24h

This option is used to set the mode, twenty-four hour or *AM* and *PM*, with which to show the time on the display of the timer-thermostat.

Press the selection button on *12h/24h* and, using the rotary knob, set the desired mode (*12 h* or *24 h*); lastly press the selection button to confirm.

### 9.7.7 °C/°F

This option is used to set the unit of measurement of the temperature on the timer-thermostat.

Press the selection button on *°C/°F* and, using the rotary knob, set the desired unit of measurement (*°C* or *°F*); lastly press the selection button to confirm.

### 9.7.8 CONFIG. RF

See chap. 11.

### 9.7.9 PIN

This option is used to set, edit or deactivate a three-digit code that, if active, must be entered to be able to access the menus of the timer-thermostat and make any change to its operation (for example, passing from *MANUAL* to *OFF*, setting the temperature values, etc.).

Press the selection button on *PIN*; using the rotary knob, set the first, second and third digit, pressing the selection button to confirm each of the digits selected.

The *PIN* value *000* is equivalent to not setting the code for accessing timer-thermostat use.

If the *PIN* code is lost and it is no longer possible to access the menus of the timer-thermostat, the device must be reset by following the instructions given in par. 13.1.

### 9.7.10 INFO

This option is used to display the data related to the firmware and to the hours of operation of the timer-thermostat.

Press the selection button on *INFO*; using the rotary knob, select:

• *FIRMWARE*

Press the selection button; the display will show the release of the current firmware.

• *h OPERAT.*

Press the selection button; using the rotary knob, you can view:

- **h HEAT.** (hours of operation in which the timer-thermostat has operated on heating);
- **h AIRC.** (hours of operation in which the timer-thermostat has operated on air-conditioning);
- **RESET h.** Press the 🖐 selection button and the display will show **RESET** blinking; press the 🖐 selection button again if you want to reset the data for **h HEAT** and **h AIRC.** and restart with a new count.

## 10. OPERATION OF THE TIMER-THERMOSTAT WITH THE RADIO MODULE.

The timer-thermostat 01911, after installing the radio module 01921.1, can be configured for radio control of an actuator 01923 or 01924 connected to the boiler or to the fan coil unit.

The option **CONFIG. RF** is only displayed when the radio module 01921.1 has been inserted in the timer-thermostat in place of the relay module; this condition is shown on the display with the symbol

📶; displaying the symbol 📶 therefore indicates installation of the radio module 01921.1 and, more generally, the lack of the relay module.

Correct use of the radio module 01912.1 requires appropriate configuration.

Access the **SETTINGS** menu and press the 🖐 selection button in correspondence with **CONFIG. RF**; the display will show:
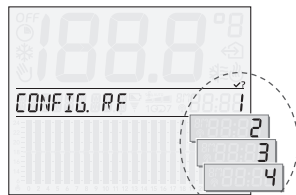
Figure 31

Using the rotary knob, set the identification number of the channel to configure for using the actuator 01923 or 01924.

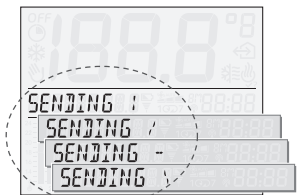Press the 🖐 selection button and the display will show:

Figure 32

The timer-thermostat is awaiting an actuator 01923 or 01924 to configure.

**N.B.** If no operations are performed within 2 minutes, the device exits the *CONFIG. RF* menu.

For all the details related to configuration, see the manual for the actuators 01923-01924.

Lastly press the ⊙ selection button to confirm; the configuration procedure is then ended and the display will again show the option *CONFIG. RF.*

## 11. INITIAL SWITCH-ON

When it is switched on for the first time, the parameters of the timer-thermostat 01911 are set as follows (default settings):

| Parameter | Default valuet |
|---|---|
| Unit of measurement of temperature | °C |
| Time format | 24 h |
| Temperature differential | 0,2 °C |
| Set-point on MANUAL | 20 °C |
| Set-point on ANTIFREEZ. | 6 °C |
| AUTO program mode | Daily |
| Time interval for OFF TIMED | 3 hours |
| Time interval for MAN TIMED | 3 hours |
| Setting mode | Heating |
| PIN | 000 (inactive) |
| Identification number of the radio-frequency relay module | 1 |

## ⊠ VIMAR

### 11.1 RESETTING THE TIMER-THERMOSTAT

If it is necessary to reset the device, which involves resetting the default parameters and as a result losing all the configurations and settings made, the procedure is as follows:

• remove the batteries from the device;

• press the 👆 selection button;

• keeping the 👆, selection button pressed, insert the batteries, waiting for the display to show **BUTTON REALASE**;



Figure 33

• release the 👆 selection button and, using the rotary knob, select **RESET**;

• astly press the 👆 selection button to confirm; the display will show **RESET OK**.

### 12. MAIN CHARACTERISTICS.

• Power supply: 3 V d.c. with 2 penlight batteries AA LR6 1.5 V (not provided)
• Battery life: over a year
• Output: relay with clean changeover contact 5(2) A 250 V~
• Type of setting: ON/OFF
• Possibility of radio-frequency connection to actuators 01923 and 01924 after replacing the relay module with the transmitter module 01921.1 (further information in the general catalogue)
• Updating the temperature displayed: every 5 s
• Room temperature display: 0 °C +40 °C
• Reading resolution: 0.1 °C
• Settings resolution: 0.1 °C

- Temperature differential: adjustable from 0.1 °C to 1 °C
- Adjustment range:
  - +4 °C - +15 °C on antifreeze
  - +5 °C - +35 °C on heating or air conditioning
- Clock error: = ±1 s a day
- Protection class: IP30
- Appliances of class II
- Number of manual cycles: 3000
- Number of automatic cycles: 100.000
- Type of contact opening: microswitch
- Type of action: 1CU
- Tracking index: PTI175
- State of pollution: 2 (normal)
- Nominal pulse voltage: 4000 V
- Ambient temperature during transport: -25 °C +60 °C
- Operating temperature: T40 (0 °C +40 °C)
- ErP classification (Reg. EU 811/2013): class I, contribution 1%
- Software class: A

## 13. INSTALLATION RULES.

Installation should be carried out observing current installation regulations for electrical systems in the country where the products are installed.

## 14. CONFORMITY.

LV directive
EMC directive
Standards EN 60730-1, EN 60730-2-7, EN 60730-2-9.