

## WALL MOUNTING CHRONOTHERMOSTAT "UP AND DOWN" - WEEKLY - Model with possibility to connect a telephone programmer

The programmable thermostat can control heating systems (instantaneous water heaters, burners, electrically controlled valves) and/or air conditioning systems, due to its COOLING/HEATING (SUMMER-WINTER) functions.

Ease of programming is the basic feature of this programmable thermostat. It has been designed keeping in mind the users' needs. The user will not need to execute combinations of keys to modify the settings, but will have specific keys available to easily pass from one function to another. There is a key corresponding to each day of the week, just as there is a key for each hour of the day to increase or decrease the temperature. Particular attention has been paid to energy savings. The WEEKEND function and suspending operation for household cleaning avoid a waste of fuel with consequent economic savings (see the description of these and other functions in the pages that follow).

ENGLISH

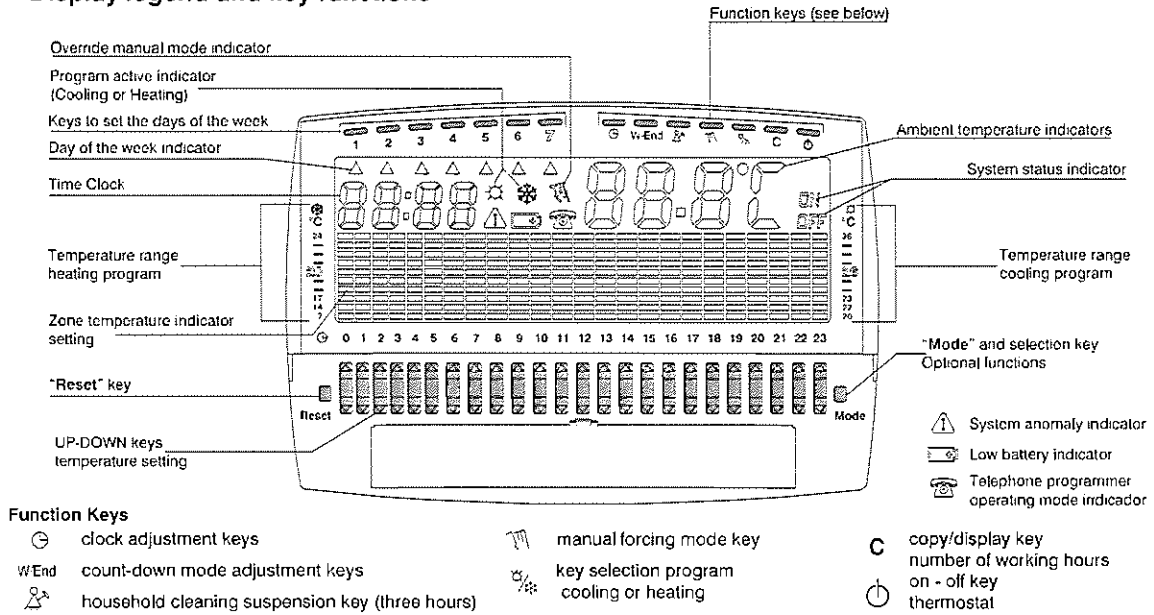


PC - DECANN006 12/01

### TECHNICAL SPECIFICATIONS

Supply voltage:	N° 2 alkaline batteries 1,5 V each type AAA (LR03)
Working:	1 year min.
Type of action, disconnect and device:	1 B U / Electronic
Type of output:	Relay with changeover contact NO COM / NC
wire section at terminals:	voltage free - max 8(2)A/250 Vac
Input:	1,5 mm <sup>2</sup> ÷ 2,5 mm <sup>2</sup>
Insulation:	For NO contact, zero potential
Protection degree:	(telephone programmer)
Pollution:	Class II ☐
Clock precision:	IP30
Precision read of temperature:	Normal
Ambient temperature indicator resolution:	± 1 sec/day
Frost protection temperature:	± 0,5 °C
Heating temperature range:	0,1 °C
Cooling temperature range:	6 °C
Differential operation:	7- 24 °C - 10 step
Thermal gradient:	20-36 °C - 10 step
Operating temperature limits:	Settable from 0,1 to 0,9 °C (default 0,3 °C)
Storing temperature limits:	1°K/15 min
Reference standard for CE mark:	0 ÷ +55 °C
(directives 73/23/CEE - 89/336/CEE)	-10 ÷ + 65 °C
	LVD EN60730-1 EN60730-2-7 EN60730-2-9
	EMC EN55014-1 EN55014-2
	EN61000-3-3

## Display legend and key functions



**Note:** Whenever any key is pressed, the device will BEEP if the action is correct or BOOP if you are performing an operation that is not correct.

# USER INSTRUCTIONS

## 1 - EASY PROGRAM

### A) Turning the device on

After you have inserted the batteries, the programmable thermostat performs a test, lighting all segments of the display. When the test is finished, it beeps, and the clock displays 00:00 with the day of the week selector set on day 1 (Monday). The thermal program displayed is the one set at the factory. To place the device in operation, it is only necessary to set the current day and time and the working mode (heating or cooling).

### B) Setting the current time

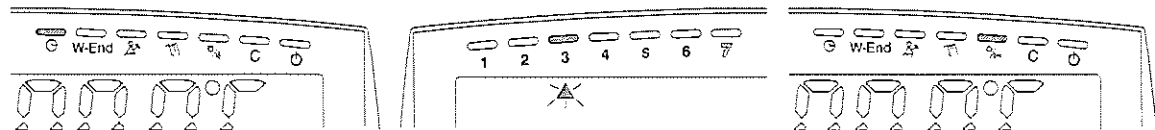
Holding the key pressed, sets the hour, repeatedly pressing sets the minutes

### C) Setting the day of the week

To set the day of the week, press, and hold pressed for 4 seconds, the key corresponding to the current day (1 = Monday 2 = Tuesday, etc.). The device signals that it has been set by beep-beep

### D) Cooling - heating mode

With the key select the working mode. The corresponding symbol will appear on the display: for heating, for cooling.



After performing these operations, the programmable timer-thermostat is ready for temperature settings. The display will show the heating program set at the factory: 19° C for the winter program and 23° C for the summer, both constant for all 24 hours. Using the 24 UP-DOWN keys for the hours of the day, change the program to suit your needs (Chap. 2).

## 2 - SETTING THE TEMPERATURE

The programmable thermostat allows setting the temperature for each hour of the day, and different programs for each day of the week, ensuring the optimum room temperature for the user's every need.

### A) Adjusting the temperature

There is an UP-DOWN key corresponding to every hour. Pressing the upper part of the  $\Delta$  key (red) increases the temperature setting; pressing the lower part  $\nabla$  (blue) decreases it. The device immediately displays the temperature change in the temperature indicator area and shows the level set on the ambient temperature display.

As the temperature is decreased, when you reach the last display (7° C), the next time the key is pressed, the anti-freezing temperature (6° C) will flash or if the anti-freezing temperature is excluded, there will be three flashing hyphens (chap. 4).



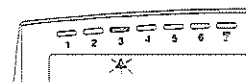
### B) Setting the desired weekly temperature

It is possible to set the desired temperature for every hour of the day and every day of the week.

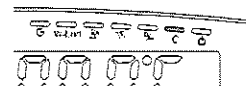
- Select the day of the week to program, pressing the corresponding key. The relative setting will appear on the display.
- Set the temperature as described in the preceding paragraph.
- Several seconds after the last key is pressed, the programmable thermostat will display the current day and will signal that the new program has been stored with a beep.
- Additional days can be programmed in succession, without waiting for the programmable thermostat to display the current day, simply by pressing the key corresponding to the day that you want to program.

### C) Copying the temperature setting

In the example shown at the side, the setting for day 3 is copied to days 1, 2, 4, 5.



Select the day of the week that you wish to copy. The corresponding indicator will flash.

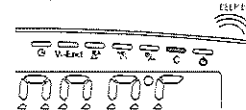


Press the function key C

The remaining day indicators will begin to flash, while those selected will stop flashing. If your intention is to copy the programming to all the remaining days, press C again.




If you do not wish to copy day 3 onto all the other days, turn off the day indicators that you do not intend to change, pressing the corresponding select-on keys, then again press C.




## 3 - ENERGY SAVING FUNCTIONS

### A) Suspending the system for cleaning



By pressing the  key the programmable thermostat will turn off the system for three hours, placing itself in the anti-freezing position. This function has been designed to avoid wasting energy in all of those cases (such as household cleaning) when it is necessary to keep the windows open.

The activation of the suspension program is displayed by the disappearance of the display segments corresponding to the three hours starting from the current hour.

To return to the normal set program, press the  key again and the missing segments will reappear on the display.



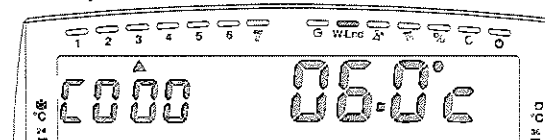
### B) Excluding the system


Press the  key 4 seconds until you hear the beep-beep. The word OFF will appear on the display to indicate that the programmable thermostat is deactivated, temperature and current time will remain displayed. Pressing the  key again, the programmable thermostat will return to the previously set heating cycle (beep).

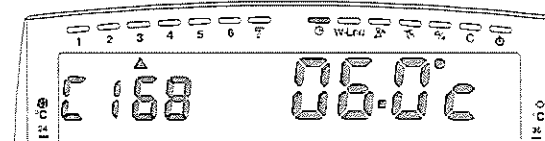


### C) Selecting the WEEKEND program

This program allows optimizing fuel consumption whenever you have to be away from home for several days, without having to change the program that is set. To activate the WEEKEND function, press the corresponding **W-End** key.



To set the period of your absence in hours (168 hours = 7 days), press the key . If no setting is made, after several seconds, the programmable thermostat continues the interrupted program.

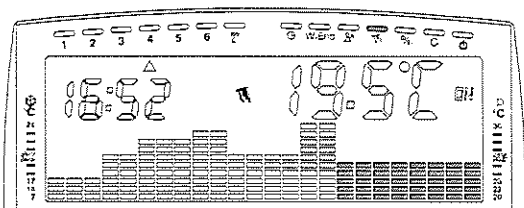


If no maximum and minimum temperature limits have been set (chap. 4-func. 1), the programmable thermostat defaults automatically to the anti-freeze temperature 6° C (or three blinking dashes if the anti-freeze temperature is deselected) which can be changed at any time by using one of the UP-DOWN keys. If on the other hand maximum and minimum temperatures have been set, it will be possible to change the setting only within these limits. Press the button **W-End** to exit the WEEK-END program.

#### D) Temporary manual override

Pressing the key achieves the temporary overriding of the heating cycle imposed. The programmable thermostat will signal the overriding with a beep and the icon will flash. This condition will be active from the current time until hour 24, after which the programmable thermostat will execute the set program. During this period you can select the temperature by pressing any one of the UP-DOWN keys.

The temporary manual forcing period can be interrupted by pressing the key again (beep).



#### E) System working hours

The programmable thermostat allows the display of the working hours of the present day, of the 6 preceding days and the total hours for the season.

Pressing function key **C**, the letters **Ch** (count hours) will appear on the display preceded by the number of working hours and minutes during the day in progress.

The day's indicator blinks to indicate that the acquisition of the data related to the day's consumption is still under way and will be finished at 11:59 p.m.; if during the current day the hour has been modified, besides the day's indicator also the hour and minutes indicators will blink.

To know the number of working hours of a different day push the correspondent key and the display will show the total number of hours with the program profile of that day.

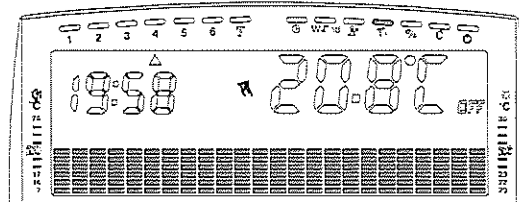
To get the visualisation of the total number of hours, keep the **C** key pushed till hearing a beep-beep, the display will show **ChT** (total hours counter) with the total number of working hours since the beginning of the season.

To reset the total number of hours counter, push again the **C** key till hearing a long beep.

After a few seconds since the last keying in, the programmable thermostat restarts the current program.

#### F) Permanent manual override

Press the key until you hear beep-beep, the symbol will light upon the display. Adjust the temperature using the UP-DOWN keys (Chap. 2-A). The device will remain in manual forcing mode until the next time the key is pressed, or it can be activated via the telephone programmer (chap. 6).



#### G) System anomalies

If after 2 hours from the system's activation on the programmable thermostat doesn't detect any significant temperature variation, the symbol will appear on the display indicating a possible anomaly.

During this period the device will go on working following the set program, regularly sending the on-off commands to the installation.

The anomaly indication will be automatically switched off once the programmable thermostat identifies a significant temperature modification.

#### H) Reset functions

In the case that the device shows anomalous displays or improper functioning, press **RESET** for several seconds.

### 4 - FUNCTIONS PROTECTED BY ACCESS CODE

The programmable thermostat offers 5 protected functions. Access to these functions is through a 5-digit code. To gain access, press the **Mode** key. A closed padlock will appear on the display. Now type the code **27371** using the day keys. The padlock will open and the letter **F** will appear beside it. The entry of an incorrect code will be indicated by an acoustic signal. After 4 incorrect attempts, the device will return to executing the set program. It will be necessary to wait 15 minutes before accessing the optional functions again. To resume the interrupted program, press the **Mode** key again.



#### Function 1: lock in the maximum and minimum temperatures

Press the **1** key. With the key, select the temperature scale on which to make the setting. Still using the **1** key, select the MIN or MAX value to set. The corresponding letters will flash. Using the UP-DOWN keys, select the value to set at the extreme upper and lower limits of the temperature scale; the lock option is deactivated. The display will show the word **OFF**. Press the **Mode** key to return to option selection (padlock open).

#### Function 2: lock temperature settings (set programs)

Press the **2** key. The words **bl c ON** or **OFF** in the display will indicate whether the option is active or not.

This condition can be changed by pressing the **2** key again. With the option **ON** (blinking profile) it will not be possible to change the temperature settings once normal operation has restarted.

To confirm the selection press the **Mode** key. The programmable thermostat will return to option selection, padlock open.

#### Function 3: total exclusion of the anti-freezing temperature

Press the **3** key. The word **ON** will appear on the display if the anti-freeze function is active, otherwise the word **OFF** will appear.

This condition can be changed by pressing the **3** key again

- with the option **ON** the display will show **05.0°C** (flashing)

- with the option **OFF** the display will show **--°C** (flashing)

To confirm the selection, press the **Mode** key. The programmable thermostat will return to option selection, padlock open. This function cannot be activated in cooling mode (summer).

#### Function 4: activating use for 2 minutes everyday from 12:00 to 12:02

Press the **4** key. The word **2PM ON** will appear on the display if the option is active (otherwise the word **--PM OFF** will appear).

This condition can be changed by pressing the **4** key again.

With the option **ON** the programmable thermostat will activate for 2 minutes every day starting at 12:00, independently of the set program.

To confirm the selection, press the **Mode** key. The programmable thermostat will return to option selection, padlock open.

#### Function 5: setting the differential

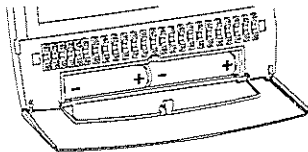
Press the **5** key. The differential setting (0.3°C from the factory) The display will show **0.3°C**

Using the UP-DOWN keys, select the desired value and confirm with the **Mode** key.

## 5 - BATTERIES REPLACEMENT

- open the cover of the battery compartment
- replace the dead batteries with two 1.5 V type LR03 batteries, paying attention to their polarity
- Close the cover

**Note:** When changing batteries, the time available to perform the operation is about 1 MIN.




## 6 - TELEPHONE PROGRAMMER

The chronothermostat can be activated via the telephone programmer only under one of the following operating conditions.

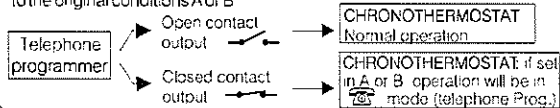
A) Permanent manual override (chap. 3-F)

B) Selection of WEEKEND program (chap. 3-C)

- When the programmer is activated (contact 4-5 closed), the chronothermostat passes from one of the conditions indicated above to operation with the program set by the user. The symbol  appears on the display to indicate that the system has been activated by way of the programmer.

- In this status the device will operate normally with all functions available EXCEPT the two indicated above. Any attempt to return the product to conditions A or B will trigger a beep.

- Deactivating the telephone programmer, the chronothermostat will return to the original conditions A or B



## FOR THE INSTALLER

### 7 - INSTALLATION GUIDELINES

**Important:** installation and electrical connections of devices and appliances must be carried out by skilled people and in compliance with current regulations.

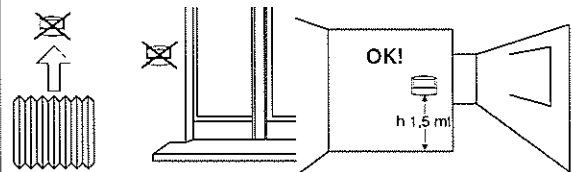
The manufacturer declines any liability in connection with the use of products subject to special environmental and/or installation standards.

**Note for installer:**

for surface installations, prepare in advance adequate raceways for the cables (especially for the supply voltage) in conformity with installation standards.

**Installation of device: independent - fixed**

- wall mounting - on rectangular flush mounting box (3 modules)
- install the chronothermostat at a height of 1.5 m from the floor, far from heat sources, windows and anything that might modify the standard operational mode

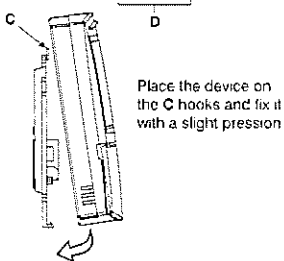
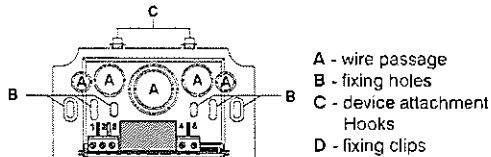


## 8 - FIXING BASE AND DEVICE

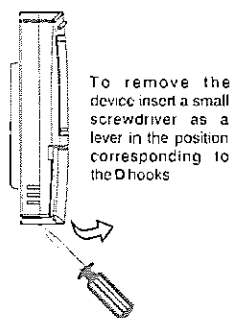
- Using screws, fixing the base to the wall or to the back box using holes B provided

- Make the electrical connections (Chap. 10).

- Fix the device on the base, taking care to insert the contacts correctly, then exert light pressure until you hear the click of the attachment hooks.

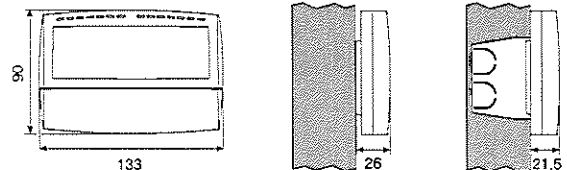


Place the device on the C hooks and fix it with a slight pressure



To remove the device insert a small screwdriver as a lever in the position corresponding to the D hooks

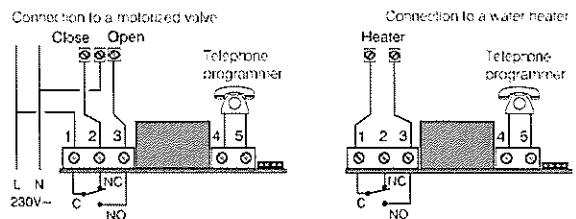
## 9 - DIMENSIONS



## 10 - ELECTRICAL CONNECTIONS

- turn off the electrical power to the wiring.
- connect the controlled device to the terminals:
  - 1 - common
  - 2 - normally closed contact
  - 3 - normally open contact
- The telephone programmer can be connected to terminals 4 and 5

**Examples of electrical connections.**



**WARNING:** in compliance with system safety rules (CEI 64-8), electrical connections must be performed after 230V ~ mains sectioning.

The manufacturer reserves the right to have technical and manufacturing modifications deemed necessary without prior notice.