Digital Chronothermostat

User manual

$C \in$

RDZ
invisible heating and cooling

Index

Digital chronothermostat

- Summer and winter operation modes

- Covers of white and grey anthracite colour included in the package (silver available on request)

- 230V power supply

- 7 programs available for heating operation
  7 programs available for cooling operation

- Flush-mounting in three modules box (503 type)

- Weekly programming with 3 settable temperature levels

CONTENT OF THE PACKAGE

covers

mount A

mount B

plastic elements VI

plastic elements BM

chronothermostat
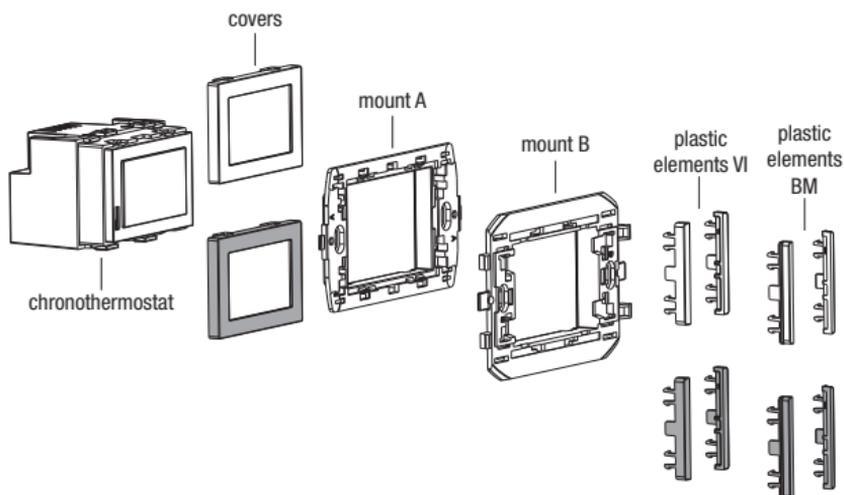
covers and plastic elements are available in white and grey anthracite colours

CONNECTION DIAGRAMS

| 1 | 2 | 3 | 4 | 5 |
| NA | COM | NC | N | L |

230V~

MOUNTING

A
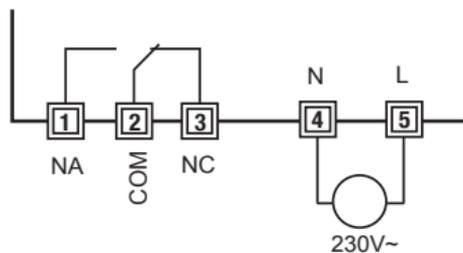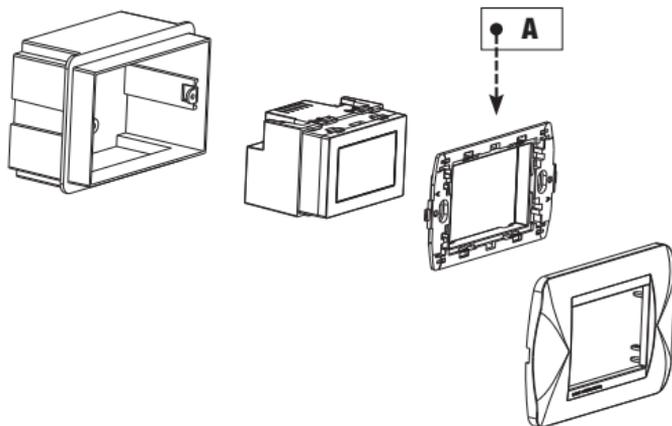
Bticino Living, Light, Light Tech, Livinglight, Axolute
Vimar Eikon, Eikon Evo, Plana
Ave S44 – ABB Mylos

B
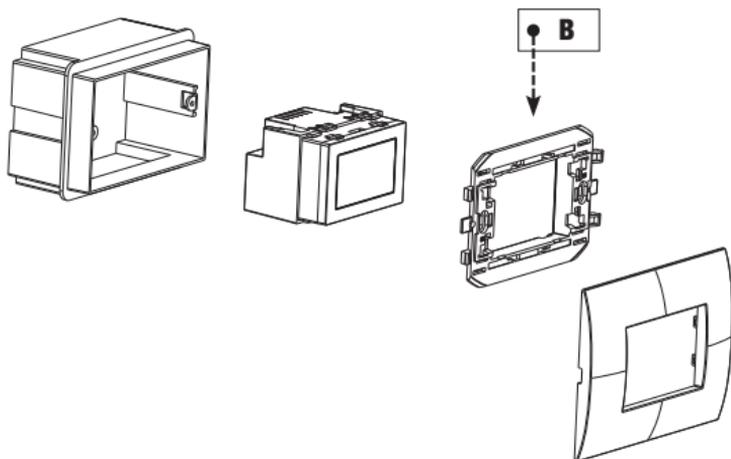
ABB Chiara
Vimar Arké

B

Remove the cogs

Gewiss Chorus

B

BM

Remove the cogs
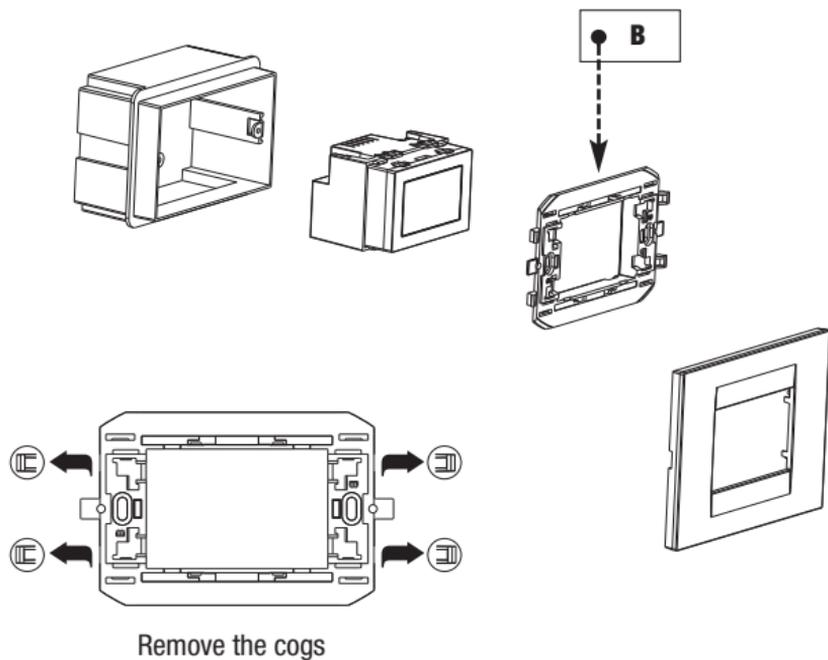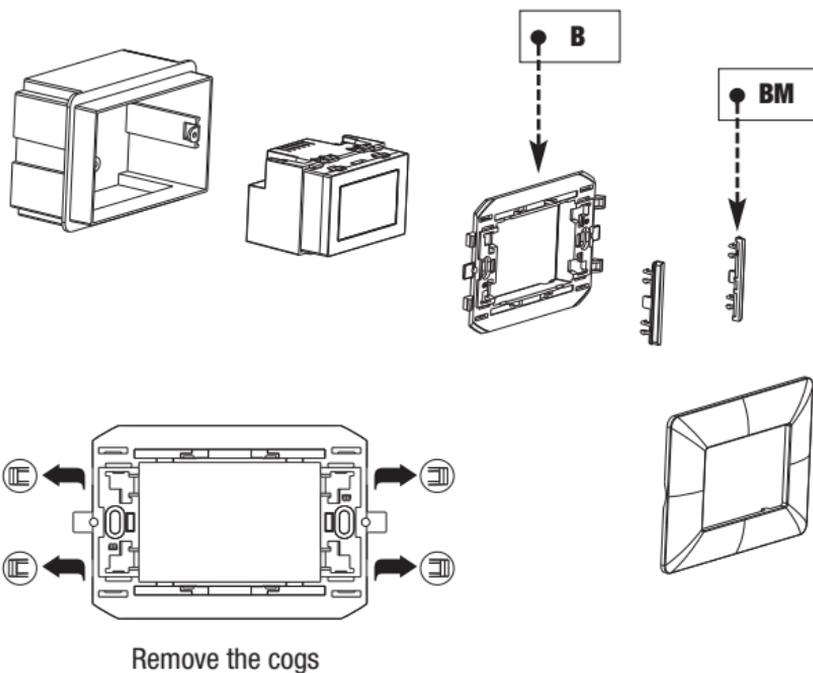
Bticino serie Matix

B

VI
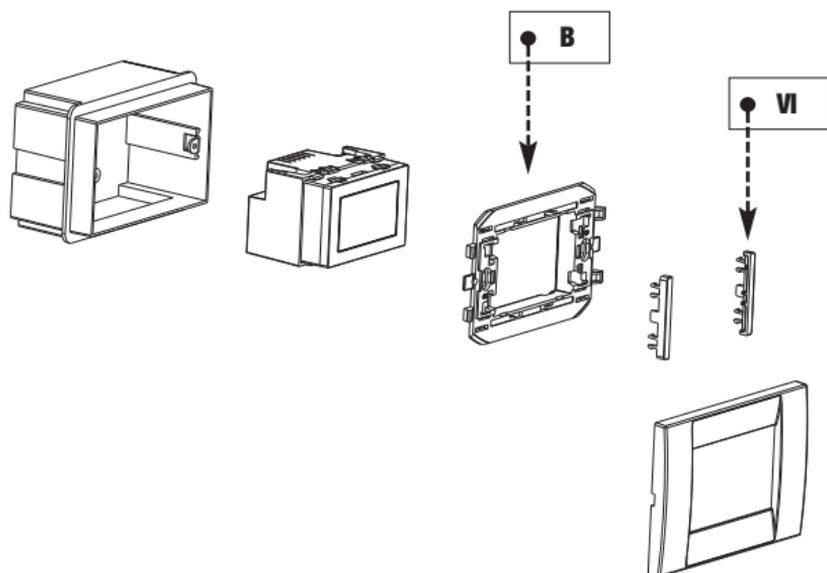
Vimar serie Idea
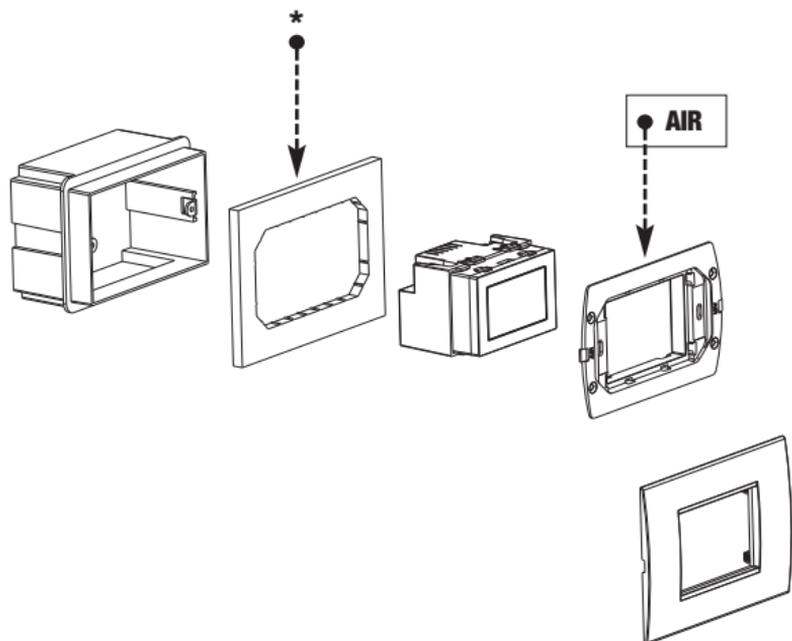
AXO AIR mount not included in the package.
* Note: if the box extension is not present (adapter which increases the depth of the flush-mounting box) we recommend you using the frame for Livinglight AIR installation

Bticino Livinglight AIR

Electronic chronothermostats series with flush-mounting in
3 modules box (503 type) suitable for the temperature control in household.

These instruments perform actions of 1B type and are intended for operating in
environments Pollution degree 2 and Overvoltage Category III (EN 60730-1).

SAFETY WARNINGS

■ **During installation and operation product it is necessary to observe the following instructions:**

1) The device must be installed by a qualified person, in strict compliance with the connection diagrams.
2) Do not power or connect the device if any part of it is damaged
3) After installation, inaccessibility to the connection terminals without appropriate tools must be guaranteed.
4) The device must be installed and activated in compliance with current electric system standards
5) Before accessing the connection terminals, verify that the leads are not live.
6) In the electrical system of the building where the device must be installed, a protection device from the overcurrents must be present.

Code	Description
7015065	Weekly chronothermostat 230V

TECHNICAL CHARACTERISTICS

- Power supply:
  - 230Vac (-15% ÷ +10%) 50/60Hz
  - maximum consumption: 6 VA / 230Vac
  - charge reserve (for blackout): 2 days about
- Flush-mounting in 3 modules box
- Terminal block:
  - 3 terminals for 1.5 mm² cables for bistable output relay 5A / 250 Vac
  - 2 terminals for 1.5 mm² cables for digital input (on/off with telephone dialler)
- Temperature regulation:
  - On/Off with settable differential between 0.1°C and 1°C
  - Proportional with settable band and period
- Summer/winter operating mode
- Weekly programming (7 programs available for each operating mode)
- Daily resolution: 1 hour (possibility to set delays activation of 15, 30, 45 minutes independent for each hour)
- 5 settable temperatures:
  - T1, T2, T3 in automatic operation
  - Tm in manual operation
  - Toff in off mode (antifreeze)
- Measured temperature display: 0 ÷ 50 °C
- Measurement precision: ±0,5 °C
- Measured temperature resolution: 0,1°C
- Setpoint range: 2 ÷ 35 °C
- Clock precision: ±1 second/day
- Key lock by password
- Automatic summer/winter time change (you can deactivate it)
- Operating temperature: 0 ÷ +50 °C
- Storage temperature: -10 ÷ +65 °C
- Operating humidity: 20÷90% non condensing
- Protection degree: IP40
- Insulation: reinforced among accessible parts (frontal) and all other terminals
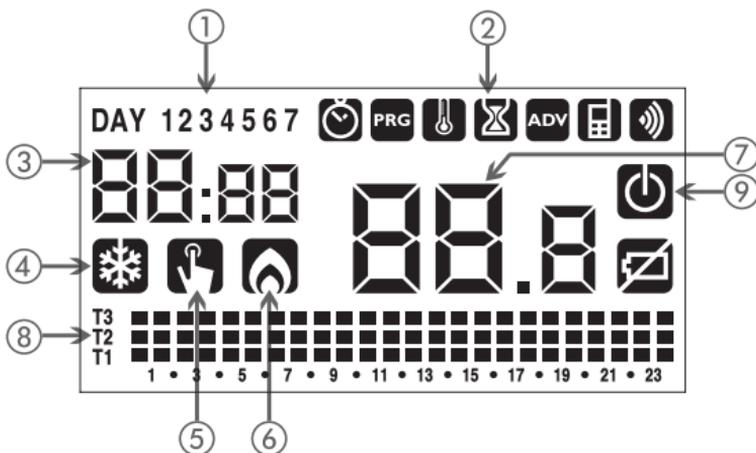
① Day of the week (DAY 1 = monday)
② Programming menu:

   : date/time and summer time setting

   PRG: programs modification (for automatic operation)

   : temperatures setting T1, T2, T3

   : timings menu

   ADV: advanced programming menu

   : *not used*

   : *not used*

③ Time and minutes
④ Load activation in summer/cooling mode
⑤ Manual operation activation
⑥ Load activation in winter /heating mode
⑦ Measured environment temperature
⑧ Program on graphic for the current day (in automatic operation)
⑨ Off operation

■ *Keyboard*

The keys carry out different functions on the basis of the instrument status and they will be described step by step in this user manual.

There are no multipurpose keys, that is to say contemporary pressures of 2 or more keys.

There are two types of pressure:

- brief pressure

- long pressure, with duration higher than 3 seconds

During the pressure of a key, the display is blue.

■ *Cleaning the display*

To clean the display use a soft, lint-free cloth, without using excess force.

INSTALLATION

- The chronothermostats of Dafne series are designed for flush-mounting in 3 modules box (503 type).
- The programmable thermostat must be installed at a height at about 1.5 m above the floor, away from direct sunlight, away from doors, windows, heat sources, locations with excess or total lack of ventilation.
- Install the white or anthracite grey cover according to your preferences by hooking it to the cogs of the device.
- Make the connections by respecting the diagrams described in this manual.
- Fix the device inside the 3 modules box in compliance with the assembly diagrams described at the beginning of this manual. The accessories for the installation included in the package allow the mounting of the plates described in the diagram "adjustable plates" and they are:

  - mount A
  - mount B (according to the needs it could be necessary to remove the side cogs)
  - mount AIR
  - couple of BM side plastic elements (both of white colour and grey colour)
  - couple of VI side plastic elements (both of white colour and grey colour)
  - covers of white colour and anthracite grey colour.

- **Clock setting**

Once the device is powered, set the clock (time and date insertion).
The parameters to enter are the following:
seconds (only synchronisation at value 00), minutes, hours, year, month, day.

Use the keys ▲ and ▼ to increase and decrease the values and the key 👆 to confirm and to move to the next parameter.
Once all values are set, press for a long time (3 seconds) the key SET to exit the menu of the clock synchronisation.

Seconds synchronisation

Minutes setting

Time setting

Year setting

Month setting

Day setting
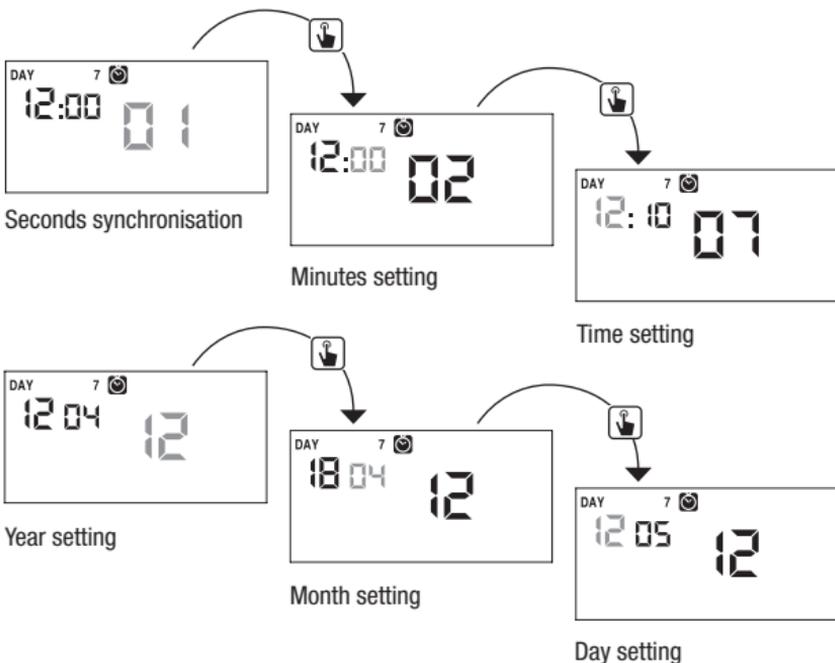
At this point the chronothermostat will begin to operate with the set default parameters (see page 44), displaying the day of the week, the time, the environment temperature and the graphic of the program switched on.

HOUR   DAY   TEMPERATURE

PROGRAM
GRAPHIC
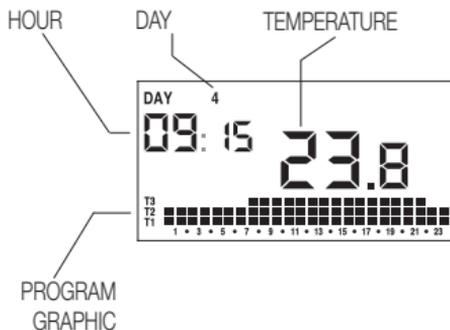
Attention:
to operate correctly the chronothermostat requires the time and date insertion.

SIf once powered, no value is set within about 30 seconds, the chronothermostat begins to operate in off mode, displayed with the symbol ⏻.
The time lack is displayed with flashing dashes (_ _:_ _).
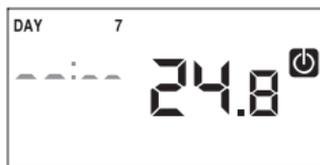
The chronothermostat remains in off operation condition until when the hour is not inserted, ensuring in this way the maintainance of the antifreeze temperature (6°C).

In this condition, pressing any key reactivates the menu of date/time insertion for another 30 seconds about.

PROGRAMMING MENU

With this menu it's possible to modify
the following operating parameters:
- Date and time
- Automatic operation programs
- Automatic operation temperatures
- Timings
- Advanced functions.

Time and date modification 🕑

To modify the set time and date:

1. From normal operating display, press for a long time the key [SET] until the symbol
   🕑 starts flashing on field **(2)**

2. Press the key 👆 to access parameters modification. The seconds field starts
   flashing. Parameters sequence to set is:

   seconds* -> minutes -> hours -> year -> month -> day

3. Use the keys ▲ and ▼ to modify the values and the key 👆 to confirm and move
   to the next parameter.
   (*) for seconds it's possible only the synchronisation at value 00

4. Once all parameters are set, to exit and go back to the programming menu, press
   for a short time the key [SET].
   To exit and go back to the normal operation (automatic, manual) press for a long
   time the key [SET] or wait for the time-out expiration (30 seconds about).

   Inside this menu it's also possible to modify the parameters for winter/
   summer time change. The procedure is described in a detailed way in the
   chapter "Summer time change" on page 27.

Programs modification PRG

With this menu it's possible to modify the programs of the automatic operation.
The device is configured to perform the program P1 from Monday to Friday and P2 on Saturday and on Sunday (the programs profiles are described at the end of this manual on page 45-46).
If this programming doesn't satisfy the user needs it's possible to change it.

To modify the programming:

1. From the normal operation display, press for a long time the key SET until the symbol ⏰ starts flashing on field **(2)**

2. Press briefly the key ▲ until the symbol PRG flashes and press the key 👆 to access the parameters modification.

3. The programs page is displayed:
the first day of the week (DAY 1) flashing,
the current program (for example P1) of the
current operation mode (🔥 or ❄️) and the
profile that corresponds to the program.

   3.1. If the set program is good, move to the
      next day with the keys ▲ and ▼.

   3.2. If the set program is not good, press
      the key 👆.
      The set program flashes: choose one
      program different among the 7 available
      by pressing the keys ▲ and ▼.

     3.2.1. If no program exactly satisfies the
        user's needs, choose the program
        which best meets them and
        press the key 👆 to access the
        modification of the program profile.
        On field **(3)** 00:00 appears while
        on field **(7)** flashes the temperature
        level (T1, T2 or T3) set for that
        specific time (00:00).
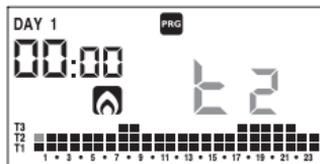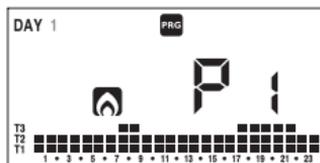
Use the keys ▲ and ▼ to change
the temperature level and the
key 👆 to move to the next hour.
Set in this way the desired level
temperature for each hour of the day.

    3.2.1.1. For each hour it's also possible
            to delay the start of the
            regulation of 15', 30' or 45'.
            After setting the temperature
            as described above, press for
            a long time the key 👆 to set
            a delay.
            The minutes field flashes (field
            3): set with the keys ▲ and ▼
            the delay and press the key 👆
            to move to the next hour.
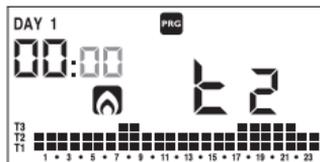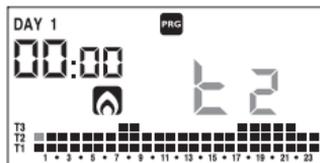
4. When the program satisfies the user's
needs, go back to the days page pressing
twice the key `SET` and repeat for the other
days of the week the operations just described. When all modifications have been
performed, exit the programming menu by pressing for a long time the key `SET`.

Temperatures T1, T2, T3 modification 🌡

To modify the 3 temperatures of automatic operation:

1. From the normal operation display, press for
a long time the key `SET` until the symbol ⏱
starts flashing on field **(2)**

2. Press briefly the key ▲ until the symbol
🌡 flashes. Press the key 👆 to access
theparameters modification.

3. The value of the flashing T1 temperature is displayed. Modify the value with the keys ▲ and ▼ and press the key 👆 to move to the modification of T2.

4. The value of the flashing T2 temperature is displayed. Modify the value with the keys ▲ and ▼ and press the ke 👆 to move to the modification of T3.

5. The value of the flashing T3 temperature is displayed. Modify the value with the keys ▲ and ▼ and press the key 👆 to go back to the page of T1 temperature.

6. Once all parameters are set, to exit and to go back to the programming menu, press for a short time the key SET.
To exit and to go back to the normal operation press for a long time the key SET or wait for the time-out expiration (30 seconds about).

Attention: the set values of temperature must respect the condition: T1≤T2≤T3. In cooling mode T1 is not settable and equals off system.

Timing setting ⧗

This menu allows the setting of a timing on the current operating mode, expressed in hours or days.

> For further information about timings, see the chapter "Timings: what they are" on page 40.

To set a timing:

1. From the normal operation display, press for a long time the key `SET` until the symbol ⏱ starts flashing on field **(2)**

2. Press briefly the key ▲ until the symbol ⧗ flashes and press the key 👆 to access the parameters modification.

```
              ⧗
hΠ ür  ΠΠ
```

👆↘

3. The value of the timing currently set flashes (00= no timing). Enter the timing value (from 1 to 99) with the keys ▲ and ▼ and press the key 👆 to move to the measurement unit change (hours or days).

```
              ⧗
hΠ ür  Π5
```

👆↘

4. The measurement unit starts flashing (hΠür or dАУ). Press the keys ▲ and ▼ to choose if it is a timing in hours (hΠür) or days (dАУ).

```
              ⧗
hΠ ür  Π5
```

5. Once all parameters are set, to exit and go back to the programming menu, press for a short time the key [SET].
To exit and go back to the normal operation (automatic, manual) press for a long time the key [SET] or wait for the time-out expiration (30 seconds about).

If a timing is active, the display shows the symbol ⊠.
To interrupt a timing, access again the menu and set the value 00.

Menù funzioni avanzate ADV

With the ADV menu it's possible to modify the following operation parameters:

- operating mode (heating or cooling)
- regulation type (on-off or proportional)
- parameters relative to regulation type
- antifreeze temperature
- password for keylock
- system operation hours.

To access the menu ADV:

1. From the normal operation display, press for a long time the key [SET] until the symbol 🕐 starts flashing on field **(2)**

2. Premere brevemente il tasto [▲] fino a quando lampeggia il simbolo ADV e premere il tasto [👆] per accedere alla modifica dei parametri

3. At this point the first parameter of the menu starts flashing:
press the keys [▲] and [▼] to modify the parameter and the key [👆] to confirm and to move to the next parameter. To exit the parameters modification press the key [SET].

Operating mode

This parameter allows to specify the operating mode of the chronothermostat, between winter/ heating (🔥) and summer-cooling (❄️).
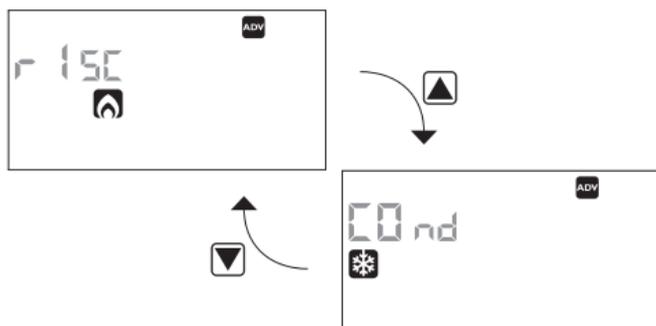
> For further information about the operating mode see the chapter "Regulation type" on page 29.

Regulation type (for heating mode only))

For heating mode it's possible to choose between on/off regulation ($rEG\ 0$) or proportional ($rEG\ P$).
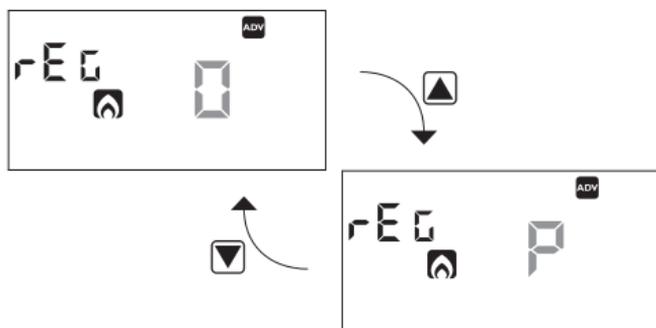
> For further information about regulation type see the chapter "Regulation type" on page 29.

Regulation parameters

In case of **on/off** regulation the only parameter to set is the differential (d IF), which can have values between 0.1°C and 1°C.

In case of **proportional** regulation the parameters to set are the regulation band (bnd) and the regulation period (PEr).

> For further information about how to choose these values see the chapter "Regulation type" on page 29.
> But remember that the preset settings are suitable for the most part of the situations: change these settings only if it's really necessary.

Antifreeze temperature (for heating mode only)

PFor the heating mode it's possible to set a safety temperature (antifreeze temperature – OFF) to maintain also if the chronothermostat is switched off.
It's possible to choose a value between 1°C and 10°C. It's also possible to deactivate the antifreeze function by pressing the key ▼ until the display shows "_ _._".
In this case, if the chronothermostat is switched off, no safety temperature is maintained.

Password for keylock

It's possible to set a keylock if the chronothermostat is installed in public places or if you want to prevent anyone from modifying the operation parameters.
To set a password, enter on field PAS a value between 001 and 999. To deactivate the password press the key ▼ until "_ _ _" appears.
When the keyboard is locked, the chronothermostat performs all its functions using the set regulation parameters.
If the keylock is active and one key is pressed, the display shows for a few seconds the writing bLOc with flashing dashes: enter the password to unlock the keyboard, which will be unlocked for 30 seconds from the last pressure.

System operation hours

This page shows the total number of hours of the system operation (relay ON) for the current mode (indicated by the icons ❄ or 🔥).
The hour meter has 4 digits and is resettable by pressing for a long time the key 👆 until *0000* appears.

MANUAL OPERATION

During manual operation the device performs as a normal thermostat, adjusting on the basis of the Tm temperature (manual setpoint), independently from the day and the time where it is.
The manual operation is signalled with the switch on of the symbol 👆 in the field **(5)**.

To move from automatic operation to manual operation:

1. press briefly the key 👆. In the field **(7)** the setpoint (Tm) currently set flashes
2. set the desired setpoint with the keys ▲ and ▼ and confirm with the key 👆
3. at this point on field **(7)** the value of the environment temperature reappears and the instrument operates in manual.

If you want to change the setpoint (Tm) press the key 👆 and repeat the points 2 and 3.

To go back to the automatic operation press for a long time the key 👆 (3 seconds about).

Automatic operation

Manual setpoint (Tm) setting

Manual operation
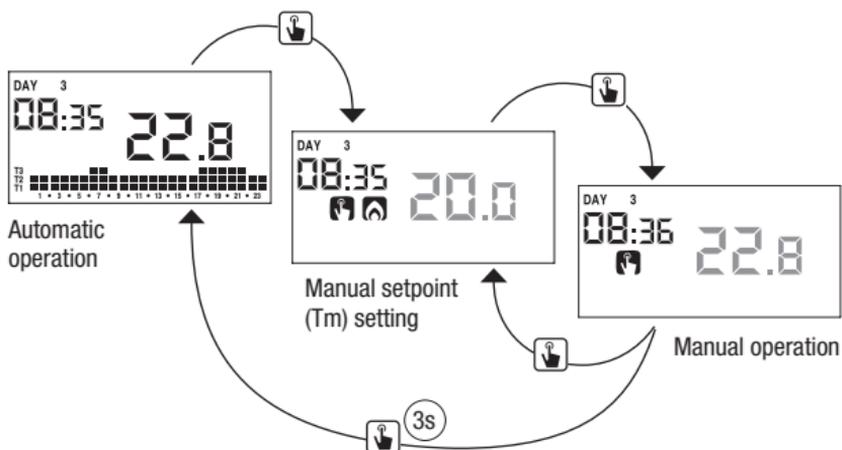
OFF OPERATION

In off mode the device doesn't perform any regulation (*) but it continues to display the day, the time and the measured temperature.

(*) In the case of heating/winter operation the device still maintains a minimum temperature - Toff antifreeze temperature - to avoid the freezing of the system and of the environment where the device is installed.

Toff can have values between 1°C and 10°C or it can be completely excluded; in this last case the maintainance of minimum temperature is not guaranteed.

The default Toff is 6°C but it's possible to modify this value by accessing the ADV menu (see "Antifreeze temperature" on page 22).

To switch the device off press the key ▼ until the symbol ⏻ is displayed (field **(9)**).

To reactivate the regulation, returning to the operating (automatic or manual) preceding the switching off, press the key ▼ for about 3 seconds.
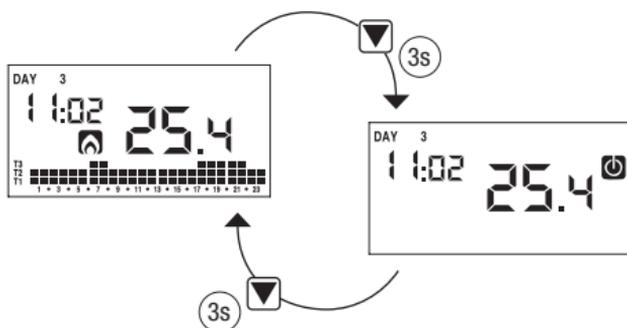
BACKLIGHTING MANAGEMENT

The chronothermostats has a blue backlighting which is normally on.

If the installation makes it necessary (for example in bedrooms) the backlighting can be turned off. In this condition the chronothermostat will continue to operate normally and the backlighting activates only when you enter setpoint modification, advanced programming, pin insertion menu.

It's possible to turn off the backlighting by pressing the key ▲ for 3 seconds.
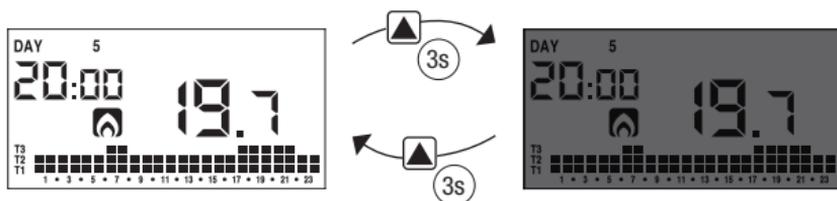
To reactivate the backlighting press the key ▲ for at least 3 seconds.

MINIMUM AND MAXIMUM VALUES

It's possible to display the measured values of minimum and maximum temperature. To display these values press the key ▲ (maximum value h i) o ▼ (minimum value LO).

During the display it's possible the resetting of these values by pressing the key 🖐 until 3 dashes appear in place of the temperature.

SUMMER TIME CHANGE

Summer time is the convention to step up of one hour the dials of the clocks during the summer period in order to prolong the lighting time in the late afternoon to the loss of the early morning.
In European countries summer time starts the last Sunday of march and ends the last Sunday of october.

The chronothermostat manages the summer/winter time change as follows:
- increasing of one hour to move from winter time to summer time
- decreasing of one hour to move from summer time to winter time

The device is default configured to move from summer time the last Sunday of march at 2 o'clock to go back to winter time the last Sunday of October at 3 o'clock in accordance with Europe convention.
However it's possible to deactivate the automatic time change or to change the date or the hour of the time change.

To change settings:

1. Access the menu of time and date change, pressing for a long time the key [SET] until the symbol ⊘ starts flashing
2. Press the key 👆 to access the time and date modification. At this point, during the modification of any parameter (seconds, minutes, hour, year, month or day) press for a long time the key 👆 until the display shows the writing $RUtD$ on field **(3)**.
3. Choose with the keys ▲ and ▼ the automatic time change activation ($RUtD$ Dn) or the deactivation ($RUtD$ DFF) and confirm with the key 👆
4. If DFF you go back to the date/time change; if Dn the current setting for the passage to summer time is displayed (indicated with the symbol ❄). In the example:
   a. the Sunday (7) of the last week (LR) of march ($D3$) at 2 o'clock ($D2$)
   b. if it's necessary change the parameters with the keys ▲ and ▼ and move to the next parameter with the key 👆. The sequence requires the insertion of:
      i. day (1…7) of the week
      ii. the week of the month (first, second, third, fourth, last – LR)
      iii. the month (1…12)
      iv. the hour
5. Press the key 👆: the current setting for the passage to the winter time is displayed (indicated with the symbol ⊙). In the example:
   a. the Sunday (7) of the last week (LR) of october(ID) at 3 o'clock ($D3$)
   b. if it's necessary change the parameters with the keys ▲ and ▼ and move to the next parameter with the key 👆. The sequence requires the insertion of:
      i. day (1…7) of the week
      ii. the week of the month (first, second, third, fourth, last – LA)
      iii. the mont
      iv. the hour

6. Once all parameters are set, to exit and go back to the programming menu, press for a short time the key [SET].
To exit and go back to the normal operation press for a long time the key [SET] or wait for the time-out expiration (30 seconds about).

REGULATION TYPE

The chronothermostats have two types of regulation:

On/off regulation

During on/off regulation the chronothermostat measures once a minute the environment temperature and it carries out the regulation on the basis of the following logic:
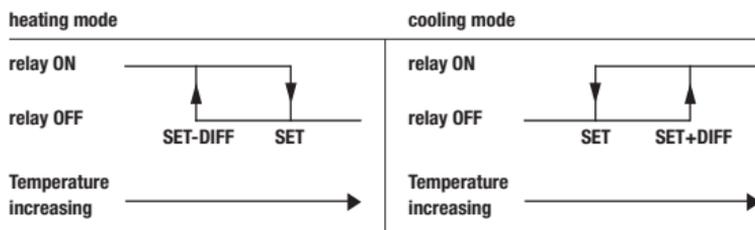
where SET represents the setpoint and DIFF the differential (useful to avoid continuous switches on/switches off dangerous for the system in proximity to the reaching of the setpoint).

Proportional regulation (heating only)

In heating mode, the on/off regulation is available and also the proportional regulation which in some systems allows a more precise regulation to obtain a constant temperature.

This regulation requires to specify two parameters:

• the band, which represents the temperature values within whom to perform the proportional regulation. The band is centered on the setpoint and it can have values between 0.5°C and 5°C; outside these values the heating will be always on (if setpoint-band > environment temperature) or always off (if setpoint + band < measured temperature).

- the regulation period which represents the duration of the regulation cycle (activation time + deactivation time of heating) and it can have values of 10, 20 or 30 minutes.

During the operating, at the beginning of the regulation period, the device measures the environment temperature and it compares it with the programmed setpoint; on the basis of this difference the activation time is calculated (and consequently the deactivation time). The more the measured temperature is next to the setpoint value – band, the more the activation time will be predominant in comparison with the deactivation time; on the contrary, the more the measured temperature is nex to the setpoint value + band, the more the deactivation time will be predominant in comparison with the activation time).
Once regulation period is passed, the device compares again the environment temperature with the setpoint and it updates the activation and deactivation times for the new period.

The result of the proportional regulation is subordinated to the correct selection of the parameters.

Select the value of the regulation type as follows:

- 10' for low thermal inertia systems (fan-coil)
- 20' for medium thermal inertia systems (aluminium radiators)
- 30' for high thermal inertia systems (cast-iron radiators)

Select the regulation band value as follows:

- broad band (5°C) for systems with high thermal gradient
- narrow band (0.5°C) for systems with low thermal gradient

Attention: the device is default configured to operate in on/off with differential set at 0.3°C. This configuration is suitable for the most part of the situations and for this reason it's advisable to modify it only in particular situations.

To modify the regulation type, the differential value (on/off regulation), band and period (proportional regulation) see chapter "Regulation parameters" on page 22.

Emergency regulation (winter mode only)

The device performs a regulation of emergency if an error occurs during the reading of the probe or in case of time loss.

In case of probe error, if the antifreeze function is not excluded, the device activates the load for 10 minutes every 4 hours. The display shows the writing Err on field **(7)**.

In case of **time loss** (because of depleted batteries or blackout of a duration higher than the charge reserve) the instrument restarts from the off mode, adjusting on the basis of the antifreeze temperature, if it hasn't been deactivated before. Reset date/time to go back to the normal operation (programs modifications and settings remain memorized).

TIMINGS: WHAT THEY ARE

Timings allow to maintain the current operation (automatic, manual, off) for a certain period (hours or days) and once passed the chronothermostat changes the operating mode, as described below.

The timed operations are the following:

Timed automat

If you set a timing in automatic status, this off status will be maintained until the end of the timing, will then switched to off mode.
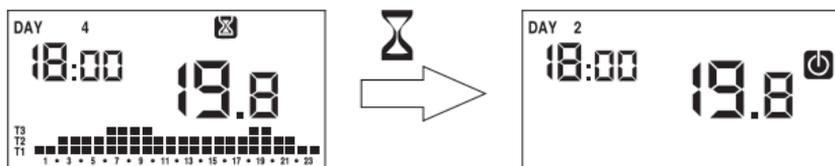
Timed manual

If you set a timing in manual status, this off status will be maintained until the end of the timing, operation will then switched to automatic mode.
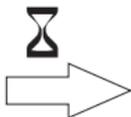
Timed off

If you set a timing in off status, this off status will be maintained until the end of the timing, will then switched to the operation that preceded the deactivation (automatic or manual).
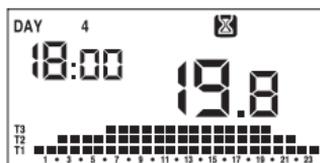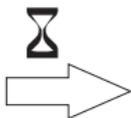
If you set a timing, the display shows the symbol ⌛.

Attention: the timing is calculated in minutes and for this reason if for example you set a timing of 3 days at 12:15 on Tuesday it will expire at 12:15 on Friday.

Attention: the timings can end before their programmed expiration if one of these actions occur:

- time/date modification (modification of the summer time change included)
- manual modification of the operating mode
- switching of digital input (for battery models only)
- change of the operating logic from winter to summer (or viceversa)

To set a timing, see chapter "Timing setting" on page 19.

DEVICE RESET

If you want to erase all performed settings and to recharge the default values, proceed as follows:

1. to switch off and to switch on the power of the chronothermostat
2. during the flashing of the backlighting press the key [SET] until the display shows the writing *dEF*.

Default values are indicated on page 34 of this manual..

REFERENCE STANDARDS

Compliance with Community Directives
2014/35/EU (LVD)
2014/30/EU (EMCD)
is declared in reference to the harmonized standards:

EN 60730-2-7, EN 60730-2-9

DEFAULT VALUES

Parameter	min	max	step	default
winter manual setpoint	2.0°C	35.0°C	0.1°C	21°C
summer manual setpoint	2.0°C	35.0°C	0.1°C	25°C
T1 winter	2.0°C	T2	0.1°C	15.0°C
T2 winter	T1	T3	0.1°C	18.0°C
T3 winter	T2	35.0°C	0.1°C	21.0°C
T2 summer	10.0°C	T3	0.1°C	23.0°C
T3 summer	T2	35.0°C	0.1°C	25.0°C
antifreeze temperature	1.0°C	10.0°C	0.1°C	6.0°C
operating mode	winter	summer	-	winter
regulation type	ON/OFF	PROP	-	ON/OFF
ON/OFF differential	0.1°C	1.0°C	0.1°C	0.3°C
proportional band	0.5°C	5.0°C	0.1°C	0.5°C
proportional period	10'	30'	10'	10'
password	0	999	1	000 (disattivato)
winter hour meter	0		1	0
summer hour meter	0		1	0
winter/summer time	ON	OFF	-	ON
winter/summer time change				Estate: LAST DAY7 marzo 02:00
				Inverno: LAST DAY7 ottobre 03:00
activation delay	0'	45'	15'	0'
timed operations	0h	99d	1h	0h

P1

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3							■	■										■	■	■	■	■		
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P2

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■			
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P3

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3							■	■					■	■				■	■	■	■			
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P4

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3								■	■	■	■	■	■	■	■	■	■	■						
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P5

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3							■	■						■	■	■	■	■	■	■	■			
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P6

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3																								
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P7

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3																								
T2																								
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

SUMMER PRESET PROGRAMS

P1

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3	■	■	■	■	■	■			■	■	■	■	■	■	■	■							■	■
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P2

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3	■	■	■	■	■	■	■																■	■
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P3

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3	■	■	■	■	■	■			■	■	■	■			■	■	■						■	■
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P4

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3	■	■	■	■	■	■													■	■	■	■	■	■
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P5

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3	■	■	■	■	■	■			■	■	■	■	■										■	■
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P6

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3																								
T2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

P7

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
T3																								
T2																								
T1	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

DISPOSAL

According to the provisions of the following European directives 2011/65/EU, 2012/19/EU, and 2003/108/CE, concerning the restriction of the use of certain hazardous substances in electrical and electronic equipment, as well as waste disposal.

The crossed out wheelie bins symbol on the equipment indicates that, at the end of its useful life, the product must be collected separately from general waste. Therefore, at the end of its useful life, the user must take the equipment to a designated electrical and electronic waste collection point , or return it to the dealer that, against the purchase of an equivalent appliance, it is obliged to collect the product for disposal free of charge. Appropriate differentiated waste collection for subsequent recycling, treatment and environment-friendly disposal of the discarded equipment helps preventing possible negative environmental and health effects and encourages recycling of the component materials of the equipment. Illegal disposal of the product by the user entails the application of sanctions provided by the regulations in force.

COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV GL = ISO 9001 =