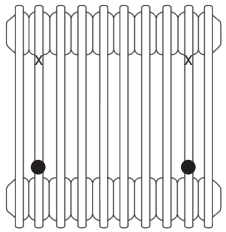
STEEL MULTI COLUMN Fitting Instructions (Horizontal & Vertical)

Please read these instructions and terms and conditions carefully prior to installation. Failure to do so may invalidate the warranty.

Drawings

Bracket Positions

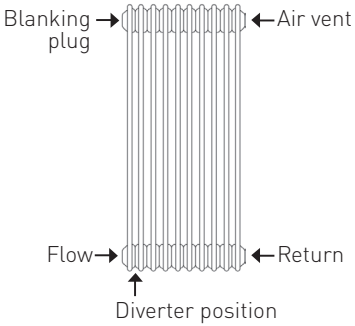


Wall Ties should be logically positioned to prevent Steel Multi Column from falling away from the wall, usually in line with Wall Brackets. If more than 2 brackets have been supplied these should be spaced evenly.

● = typical Wall Bracket positions

x = typical Wall Tie positions

Multi Column Orientation



Wall Ties are supplied with every order

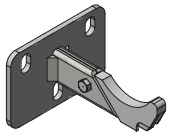
Wall ties adjust from 32mm to 42mm

Mounting Options

Depending on which mounting option you have chosen you will receive the correct number of brackets / feet from one of the following;

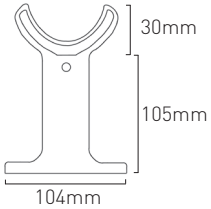
1 - Standard Wall Brackets

2 - Stud Wall Brackets



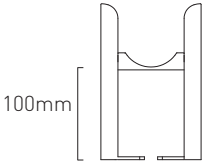
3 - Floor Mounts

If ordered position evenly between sections beneath the radiator.



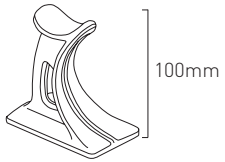
4 - Slip on Feet

If ordered slip on desired sections evenly beneath radiator.



5 - Cast Feet

If ordered position evenly between sections beneath the radiator.



Pipe Centres

Pipe centres left to right = width of radiator plus valves

Pipe centres from wall =

Mounting Option	2 Columm	3 Columm	4 Columm	5 Columm	6 Columm
Standard Wall Brackets	64mm - 74mm	82mm - 92mm	102mm - 112mm	120mm - 130mm	140mm - 150mm
Stud Wall Brackets	70mm- 80mm	70mm- 80mm	95mm-130mm	95mm-130mm	129mm-148mm
Floor Mounts / Slip on Feet / Cast Feet	64mm - 74mm	82mm - 92mm	102mm - 112mm	120mm - 130mm	140mm - 150mm

1. Unpack & Inspect

This product should have reached you in perfect condition. Please carefully unpack & inspect this radiator & all fittings. Your point of purchase must be notified of any shortages or damage within 28 days of delivery.

2. Contents

You should have:

- 1 Radiator
- 1 Diverter
- 4 Bushes
- 1 Manual Airvent
- 1 Blank Plug

Plus your chosen mounting option:

- Standard Wall Brackets
- Stud Wall Brackets
- Floor Mounts
- Cast Feet
- Slip on feet

You will need:

- Tape measure
- Electric drill and bits
- Spirit level
- Suitable screws and plugs

PLEASE NOTE: We will supply the correct number of brackets and wall ties with each order; prices for extra brackets / feet & wall ties are available on request.

3. Orientation and Fitting Bushes

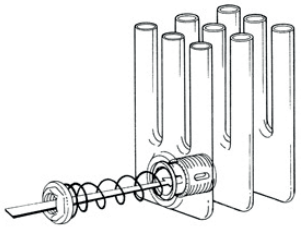
Steel Multi Column radiators have specific left & right hand threaded bushes & these can be easily damaged if forced or incorrectly fitted (this will inevitably cause leaks).

Your radiator has 4 open water ways, protected by plastic bungs, 3 black and one red, the top of the radiator is indicated by the red plastic bung. The bungs must be removed to allow the bushes to be fitted. Bushes require a dry fit connection only; you must not use any Compound materials (e.g. Jet Blue) or Plumbers Hemp.

Please be aware that the bushes are left and right-handed so you will need to look closely at the threads to identify which side to fit the bushes.

4. Fit Diverter

The spring diverter is recommended for all radiator sizes, however, please be aware it is essential for all radiators over 1000mm high.
The diverter is inserted into the lower water way, the metal cap goes in first followed by the spring and is located pushed tight up against the first internal barrel nipple and held in place by a bush. The flow must enter this end first (please see diagram right).



5. Mark Bracket Positions

Wall brackets are typically positioned two or three sections in from either end (please see **bracket positions drawing** on the other page). The standard wall bracket is a clamp style with a separate mounting plate that is fixed to the wall. When securing the brackets to the radiator wrap masking tape around your screwdriver to reduce the risk of damaging the paint finish. Fit the wall brackets and wall ties on to the back of the radiator two sections in from each end.

PLEASE NOTE: It is essential that all brackets are level to ensure a vertical alignment for connecting the pipework.

6. Fix Wall Brackets / Feet

For standard wall brackets fix the clamp bracket and the complete wall tie to the radiator and mark their positions on the wall. Drill holes and fix the wall plates for the bracket ensuring they are all level. Hang the radiator clamp brackets onto the wall plates, then using a long screwdriver secure the wall ties to the wall. For slip on feet and floor mounts fix the wall ties in place on the top of the radiator and place the radiator in situ, mark the wall ties position, fix the wall plates, then position the radiator and secure the wall ties to the wall plates.

PLEASE NOTE: It is essential that all brackets are level to ensure a vertical alignment for connecting the pipework.
Please ensure the correct fixings (screws /raw plugs) are used for the wall type you are fitting your radiator to.

7. Hang & Commission

With all bracket positions marked and / or fixed, the radiator is placed in its final position for valve and pipe work connections. Please ensure the flow is connected to the correct end nearest the diverter (please see **multi column orientation drawing** on the other page). When commissioning your radiator on an indirect/closed system we recommend using a suitable quality & quantity of mixed metal inhibitor to protect against scale & corrosion.

Damage caused to systems not protected by a suitable inhibitor will not be covered by manufacturer's guarantee.

Technical Specifications

Materials	Mild Steel.	**Maximum operating pressure**	8 Bar
Connections	½" flow & return	**Maximum working temperature**	95ºC
Test pressure	13 Bar	**Packaging**	Wrapped in polyethylene with cardboard protectors
Testing authority	EN442		

PLEASE NOTE: Systems using micro bore pipework must have adequate pressure and flow rates for the number and style of radiators on the system.

Guarantees & Liabilities

This product is guaranteed for 10 years. The guarantees in all cases are subject to the products being installed in accordance with British and or European standards as well as these fitting instructions. The guarantees in all cases are restricted to the free of charge replacement or repair of the failed product only. Our liability will under no circumstances extend beyond the repair or replacement of the product supplied by us. Claims for either labour in replacement or damage to property are not admissible. Any goods that are returned, in the event of a problem, will belong to us.

Terms & Conditions

All products must be inspected once removed from the packaging and your point of purchase notified within 28 days of delivery of any scratches, blemishes or other damage. Your point of purchase will then agree appropriate action. Imperfect radiators should therefore not be fitted and your point of purchase will not accept responsibility for replacement of scratched or damaged radiators once they have been fitted. This includes any consequential loss or cost of fitting. If your point of purchase are not notified within 28 days of the date on the signed delivery note then it will be deemed that they have fully complied with their obligations and claims will not be considered.
Failure to comply with any of the above may invalidate any claims. Your point of purchase recommend that after you check the product on delivery that it is stored in its packaging to prevent damage prior to installation, they cannot accept responsibility for items damaged after delivery.

“TESI3/EH” radiator with electronic thermostat.

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Cod. 1115M1119

IRSAP
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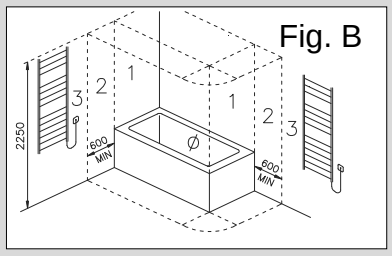
CE

Modello	Codice	Elementi	Profondità	Altezza	Largh. tot.	Larghezza	Peso	Potenza Elettrica
Modèle	Code	Eléments	Profondeur	Hauteur	Largeur tot.	Largeur	Poids	Puissance ölectrique
Model	Code	Elements	Depth	Height	Width tot.	Width	Weight	Electrical Power
Modelo	Codigo	Elementos	Profundidad	Altura	Largo tot.	Largo	Peso	Potencia Eléctrica
Modell	Bautyp	Glieder	Tiefe	Bauhöhe	Baulänge tot.	Baulänge	Gewicht	Elektrische Leistung
Model	Cod	Părţile	Adîncime	Înălţime	Lărgime tot.	Lărgime	Greutate	Puter electrică
Model	Kod	Elementy	Głębokość	Wysokość	Szer. ogółem	Szerokość	Ciężar	Moc elektryczna
		n.	P mm	H mm	L mm	L mm	Kg	Watt
TESI3 EH-600-8	RT306000801IRH0N	8	101	602	428	384	18.7	**400**
TESI3 EH-600-12	RT306001201IRH1N	12	101	602	608	564	27.6	**600**
TESI3 EH-600-14	RT306001401IRH2N	14	101	602	698	654	32.0	**800**
TESI3 EH-600-17	RT306001701IRH3N	17	101	602	833	789	38.7	**1000**
TESI3 EH-600-20	RT306002001IRH4N	20	101	602	968	924	45.4	**1200**
TESI3 EH-600-23	RT306002301IRH5N	23	101	602	1103	1059	52.1	**1500**
TESI3 EH-600-29	RT306002901IRH6N	29	101	602	1373	1329	65.4	**2000**



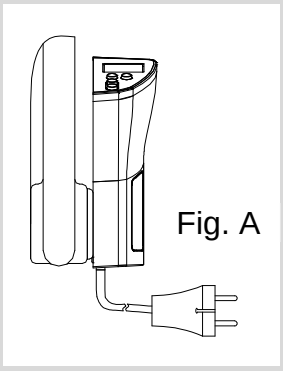
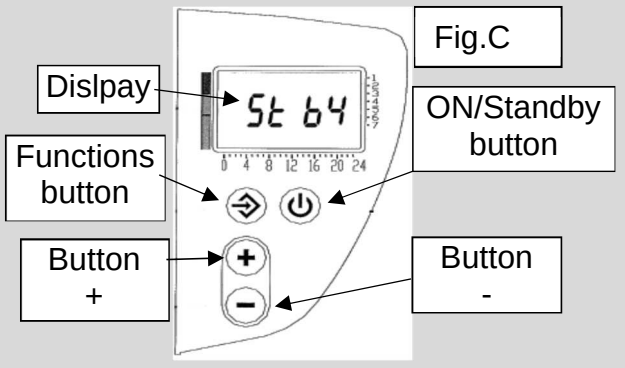


Fig. A



ENGLISH (UK)

TECHNICAL FEATURES

The radiator is an appliance endowed with the following electric features:
- Voltage-feed 230V 50Hz, 1ph
- Insulation: CLASS II
- Protection degree IP44
- Length electrical cable 1200 mm
- Safety fuse calibrated: at 128°C (400,600,800,1000 Watt); at 144°C (1200,1500,2000 Watt)

HEATING ELEMENT TECHNICAL CHARACTERISTICS

The thermostat can work exclusively when paired with a specially prepared electric heating element, equipped with safety devices to limit excess temperature and make the system safe in the event of abnormal factors (see Warnings).

INSTALLATION

Children younger than 3 years old should be kept at distance, if they are not continuously supervised.
Always fix the radiator to the wall as per the assembly instructions enclosed.
The installation must be carried out by a specialized firm in compliance with the standards in force.
When installing the radiator the IEC 64-8/7 according to the edition in force must be complied.
For the supply of the radiator, an omnipolar switch with at least 3 mm of distance between contacts, must be employed.
When installing in bathrooms or in shower-rooms, the appliance should be installed in such a way to avoid the switch and other controls to be reached by people using the bathroom or the shower. (see Fig. B)
The radiator must not be installed immediately beneath a fixed current outlet.

DIRECTIONS FOR USE

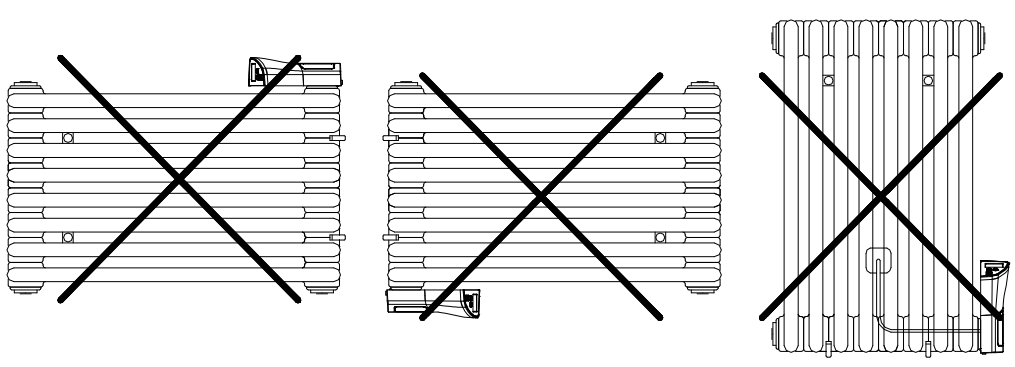
The towel warmer must be used only for the purpose described in the manual. In particular, children must not play with the appliance.
Do not apply on the towel warmer radiator accessories other than those prescribed or recommended by the manufacturer.
Connect the towel warmer to the mains power supply only after it has been fixed to the wall.
Children under 3 must be kept at a distance unless under continuous surveillance.
Children between 3 and 14 years of age and persons with reduced physical, sensory or mental capacities, or who lack experience or the necessary knowledge can use the towel warmer on condition that it has been positioned or installed in the normal position contemplated and they have been instructed and trained in its safe use and are aware of the potential risks.
Children under the age of 14 must not connect the power plug, nor adjust or clean the appliance.
Children and persons with reduced physical, sensory or mental capacities, or who lack experience or the necessary knowledge must not perform cleaning or routine maintenance of the towel warmer towel warmer.
It is absolutely prohibited:

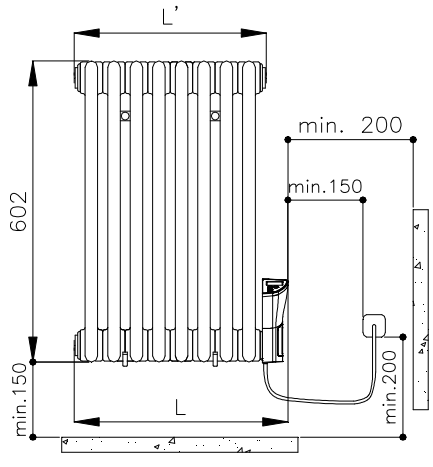
- To power the heating element control before having checked the correct installation of the thermostat on the towel warmer towel warmer.
- To cut the power supply cable to disconnect the appliance
- To damage the power supply cable. If the power cable is damaged the complete electric heating element must be repaired or replaced by the manufacturer or by their technical assistance service, or by a qualified person authorised by the manufacturer, so as to prevent any risk.

WARNING:

DURING OPERATION, THE TOWEL WARMER PRESENTS HOT SURFACES, SOME PARTS CAN GET VERY HOT, AND CAUSE BURNS UNLESS PARTICULAR CARE IS TAKEN. Particular attention should be paid to the presence of children and vulnerable people

- Do not use corrosive or abrasive products or solvents to clean towel warmer or the plastic parts that contain the electrical parts





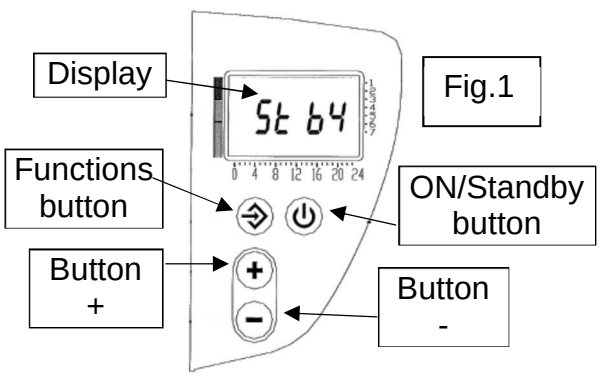
INSTRUCTIONS FOR USE OF THE ELECTRONIC THERMOSTAT
(Fig. C)

The electronic control consists of a thermostat that allows you to choose the ambient temperature from 7°C to 35°C.

INSTRUCTIONS FOR USE AND OPERATION

1. PRESENTATION

The electronic thermostat has 4 buttons and 1 display (Figure 1). The electronic thermostat is started by pressing the [ON/Standby] button: when the electronic thermostat is in standby, the flashing letters “St by” appear on the display; when it is in the chrono modes, the program appears with the indication of the time or the number of the selected integrated program (P1, P2, P3), or the setting of the mode temperature.



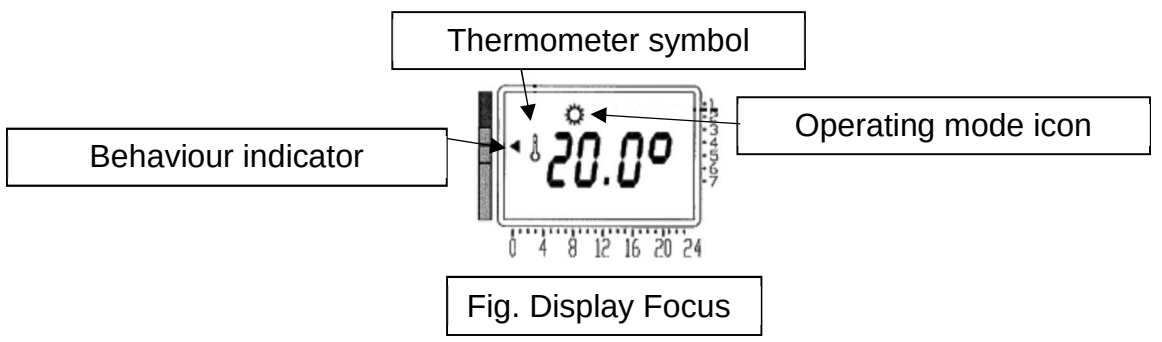


Fig. Display Focus

2. STAND-BY OPERATION

When changing from STAND-BY to one of the operating modes, the electronic thermostat emits a sound lasting 1 second.
Vice-versa, when changing from one of the operating modes to STAND-BY, the electronic thermostat emits two short sounds with a pause of half a second between them.
When it is powered, the electronic thermostat emits a warning sound to indicate its status according to the logic described above.

Next to the display is a coloured bar: an arrow on the display indicates one of the three colours depending on the current temperature setting, as in the table below. This indicator provides a visual indication that setting high temperatures results in a higher energy consumption.

Colour	*Temperature setting*
Red	>24 °C
Yellow	>19 °C and ≤24 °C
Green	≤19 °C

Table 1: Indication of consumption

3. DESCRIPTION OF USE

The electronic thermostat has 8 operating modes: 1 pre-set free chrono program, 3 integrated chrono programs, pilot-wire, comfort, night and antifreeze. To change from one mode to another, press the FUNCTIONS button

Table 2: Operating modes

Operating mode	Icon	Operating mode description
CHRONO		Follows the weekly programming on two temperature levels (high and low) defined by the user hour by hour. All the PILOT-WIRE controls are disabled except STOP.
P1 FIXED PROGRAM	+ P1	P1 fixed weekly program (working week program) on two temperature levels (high and low) pre-defined time hour by hour. All the PILOT-WIRE controls are disabled except STOP.
P2 FIXED PROGRAM	+ P2	P2 fixed weekly program (working week program) on two temperature levels (high and low) pre-defined time hour by hour. All the PILOT-WIRE controls are disabled except STOP.
P3 FIXED PROGRAM	+ P3	P3 fixed weekly program (working week program) on two temperature levels (high and low) pre-defined time hour by hour. All the PILOT-WIRE controls are disabled except STOP.
PILOT-WIRE		The locally set high temperature is modified according to the controls received from the Pilot-Wire unit. If the Fil-pilote is not connected or is not present, the thermostat operates in comfort mode.
COMFORT		Regulation without time limits on the high temperature level. All the PILOT-WIRE controls are disabled except STOP.
NIGHT		Regulation without time limits on the low temperature level. All the PILOT-WIRE controls are disabled except STOP.
ANTIFREEZE		Regulation without time limits on 7°C. All the PILOT-WIRE controls are disabled except STOP.

Two different temperature levels can be set, high and low. High temperature is used in the chrono modes, P1, P2, P3, Pilot-Wire and comfort. Low temperature is used in the chrono modes, P1, P2, P3 and night. High temperature can be modified in comfort mode while low temperature can be modified in night mode using the [+] and [-] keys. The flashing thermometer symbol indicates that modification is in progress. During modification, the high temperature can be decreased to the current low temperature value and, vice-versa, the low temperature can be increased to the current high temperature value.

IMPORTANT: changes in the ambient temperature are normal when using electronic thermostats when there are variations in the power requested or when the environmental conditions change outside the room that is to be heated. The set value is correct only for radiators installed in standard environments. It is normal for the regulator setting to be different to obtain the same temperature in different environments (influence of the surrounding environment).

In chrono mode the temperature levels are used as illustrated in figure 3.

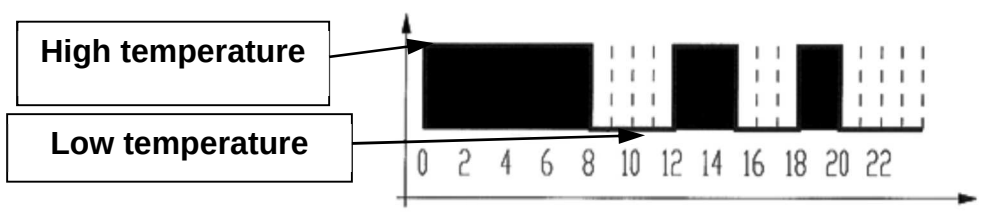


Figure 3: Chrono mode temperature levels

4. KEY LOCK

This function allows you to block the use of the keys. It may be useful to activate this setting to avoid accidental changing of settings by unauthorised persons or children. To activate it, hold down the [+] and [-] keys together for at least 3 seconds. A padlock icon appears when the keys are locked, figure 4.

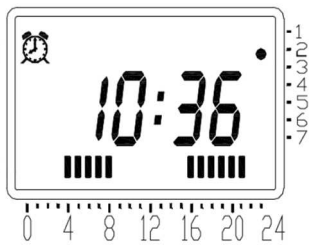
Key Lock Icon

Figure 4: Key lock active

With the key lock active, it is still possible to put the thermostat in standby or in operation by pressing the [ON/Standby] button, but it is not possible to change the temperature setting and the operating mode.
To deactivate the function, hold down the [+] and [-] keys together again for at least 3 seconds. The padlock icon disappears and the buttons resume the normal functions.
For safety reasons, always prevent children playing with this product.

5. TIME SETTING AND FREE WEEKLY PROGRAMMING

Hold down the [ON/standby] and [Functions] buttons together for at least 3 seconds. The hour numbers will start to flash. Use [+] and [-] to set the current hour and press the [Functions] button to confirm. Set the current minutes and day in the same way. The latter is indicated by a corresponding point on the vertical numbered scale, figure 5.



Chrono operating mode icon

Time setting bar

Point indicating the day of the week

Numbered scale of the days of the week

Figure 5: Time and day of the week

After the time, proceed to the weekly programming. Set the sequence for each hour and for each day of the week. The selection is made using the [+] and [-] keys; at that time [+] regulates the high temperature and [-] the low temperature. On the time setting bar, a dash corresponds to the high temperature and the empty space corresponds to the low temperature. Press the [Functions] button to save the day and start the next day with the same procedure. For example, to have a high temperature from 6 to 10 a.m. and from 7 to 11 p.m. (and a low temperature in the remaining intervals), see figure 6.

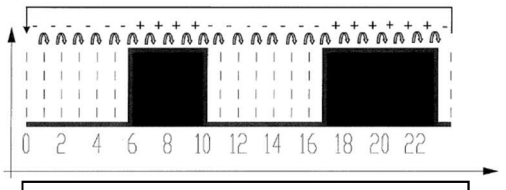


Figure 6: Free weekly programming

If the [ON/Standby] button is pressed when setting the time and the weekly programming, the electronic thermostat goes into standby status and the new time/date setting is saved, while the new weekly programming is not saved. Pressing the [ON/Standby] button again brings the thermostat into the present status before starting the procedure for setting the time.

If there is an interruption in the 230V ac power supply, the weekly programming made remains in the memory, along with the current mode (including keyboard lock) and the high and low temperature settings, while the time must be reset. When the 230V ac power returns, if one of the chrono modes is selected (free weekly programming P1, P2 or P3) the “Chrono” symbol flashes and the writing on the display (the current time or P1, P2 and P3 depending on the mode): in this case, follow the procedure illustrated at the start of the paragraph to reset the current time. Until the operation is performed, the thermostat provisionally counts the time that passes from the moment the 230V ac power returns (and this “provisional” time is used if one of the chrono modes is selected).

6. INTEGRATED WEEKLY PROGRAMMING

As well as the classic weekly programming defined by the user, the electronic thermostat has 3 integrated programs named respectively P1, P2 and P3. To change from one to another, press the [Functions] button to select the desired mode as in figure 7.

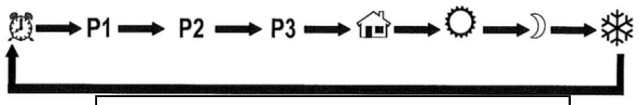
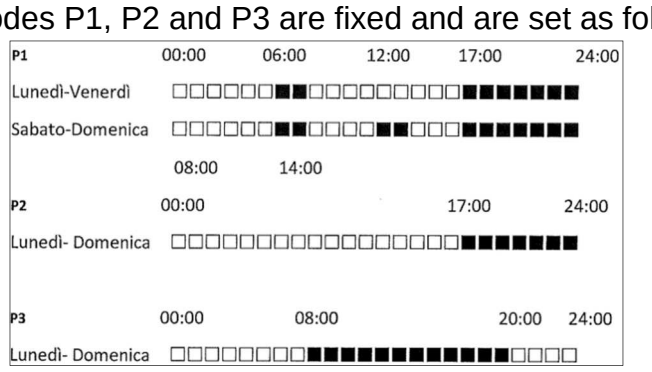


Figure 7: Operating modes selection order

Modes P1, P2 and P3 are fixed and are set as follows:



where:
■ = high temperature (“Comfort”);
☐ = low temperature (“ECO”).

The programs P1, P2 and P3 are completely independent of one another and can only be used one at a time. If one of these is selected (for example P3), the display appears as in figure 8.

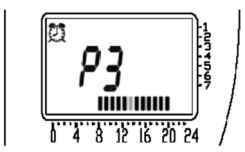


Figure 8: Program P3 active.

The flashing dash (in grey in figure 8) indicated the time interval currently active.
If the user wants to use a weekly program other than P1, P2 or P3, he can make one with his own settings using the standard chrono program illustrated in the previous paragraph.

7 WINDOW DETECTION FUNCTION

This function allows you to avoid wasting energy if the room in which the radiator is located is being aired by opening a window or a door that leads onto a colder environment. As detection is indirect, the intervention of the function is linked to different variables, including the environment temperature and the outdoor temperature, the position of the radiator, the time passed since the window was opened/closed, the type of construction of the room and, last but not least, the radiator status. The optimum position of the radiator in the room is near the window, as shown in figure 10.

If the function is active, the system detects when the window is open or closed. The function can be selected and activated only in Comfort mode (“sun” icon lit) or Pilot-Wire mode (“house” icon lit), with the comfort signal present.
To activate the function hold down the [Functions] and [-] keys together for a few seconds until the message “F on” appears on the display, after which the system returns to the previous screen, figure 11.

When the system detects that the window is open, the “antifreeze” icon also appears on the display and flashes continuously (in grey in figure 12), while at the internal regulation level the set-point is set at 7°C. This status remains until closing of the window is detected, or until 2 hours have passed, which is the maximum period after which the radiator will start heating again in any case.

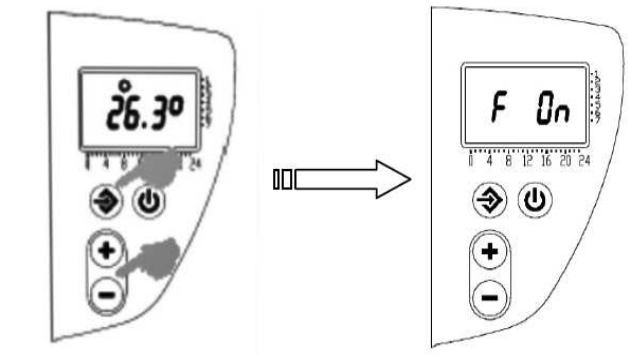


Figure 11: Activation of the open window detection function

Figure 12: Operation blocked after detecting open window

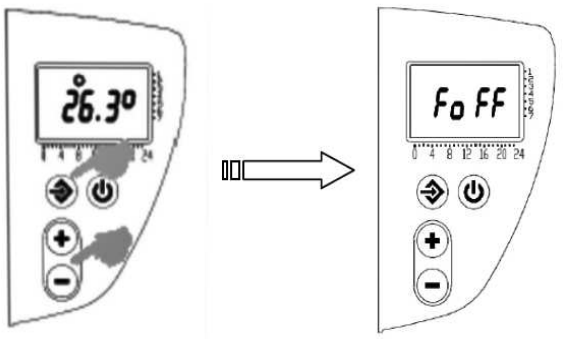


Figure 13: Deactivation of the open window detection function

To exclude the function hold down the [Functions] and [-] keys together for a few seconds until the message “F off” appears on the display, after which the system returns to the previous screen, figure 13.

NOTE 1: If the electronic thermostat seems to be working correctly and the radiator is not heating at all, this situation indicates a probable intervention of the protection devices built into the heating element. If the message “Err1” appears on the display, it means that the ambient temperature sensor is damaged or that the temperature is outside the allowed operating limits.

NOTE 2: in the case of faults or malfunctions, contact the assistance service; no spare parts are provided.

INFORMATION FOR USERS

in accordance with article 14 of the Directive 2012/19/UE of 07/07/2012 on waste electrical and electronic equipment.

- The symbol shown above, present also on the equipment, indicates that it has been placed on the market and that, when the user decides to get rid of it, it must be disposed of in separate waste collection (including all the components, sub-assemblies and consumer materials which are an integral part of the product).
- For information on the systems for collecting these appliances, please contact the company IRSAP SPA or another subject enrolled in the various National Registers for other countries in the European Union. Waste produced in the home (or of similar origin) may be consigned to systems for the separate collection of urban waste.
- When buying a new appliance of an equivalent type, it is possible to hand over the old equipment to the seller. The seller will then contact the subject in charge of the collection of the equipment.
- The appropriate separate collection of the scrapped equipment and the subsequent operations of processing, recovery and environment-compatible disposal, allows the avoidance of potential negative effects on the environment and on human health, while favouring the recycling and recovery of the component materials.

The unauthorised disposal of the product by the user entails the application of the sanctions contemplated under the national approval of Directives 2011/65/UE, 2008/98/CE and 2015/1127/UE