

IMPORTANT

Read the instructions carefully before installing or using the regulator and keep the manual to hand for future consultation

- Regulator for the control of electric towel warmers used for drying items of clothing washed in water, and room heating. Any other use is forbidden.
- Always check that the master switch has been turned off before starting any installation or maintenance operations.
- Do not use the device before it has been properly and completely installed.
- Do not turn on before attaching the heating element recommended by the manufacturer and checking that the O-ring is intact and properly positioned (see paragraph on installation).
- Do not cut the power lead to stop regulation.
- Do not use the regulator with heating elements if there is no safety device.
- If the power lead is damaged the device must be replaced.
- Nominal voltage for the regulator must be the same as that on the mains (230V AC $\pm 10\%$).
- The socket (only for devices with plugs) and electricity supply must be adequate to support the required power.
- The socket must be compatible with the regulator plug (only for devices with plugs).
- Check that the electricity supply system is provided with a differential omni-pole safety cut-out connected directly to the socket or connection box involved.
- Class I devices (yellow-green wire or earthed plug) must be connected exclusively to sockets or connector blocks with earthed contacts to current standards.
- Class II devices may have a black wire for a pilot wire remote control. If it is not used it must be insulated and must never be connected to earth.
- Avoid contact with any chemical product or alcohol, including the liquid in the radiator.
- The appliance is not for use by people (including children) with reduced physical sensorial or mental capacities, or with no experience or knowledge of the appliance, unless they are accompanied by a person or guardian responsible for their safety or have been able to read the instructions for its use.
- Always be in attendance to make sure children do not play with the appliance.
- Install the towel warmer so that the bottom part is at least 60 cm from the floor.
- Do not insert metal objects or fingers, even temporarily, into the area where the radiator or towel warmer is connected.
- The letters "ErrS" on the display indicates that the temperature reading is outside the allowed limit. This occurs when ambient temperature is below -10°C , above 40°C or when the temperature measuring element is faulty.
- Do not install the towel warmer with the regulator on top.
- Do not install the towel warmer under or in front of a power socket or connector box.
- The regulator must not be in contact with the wall or floor.
- The electronic regulator must be installed to 230V systems only. For devices without a plug, observe the following colours:

Installation of towel warmer radiator

The towel warmer must be attached to the wall with the brackets provided. The regulator must be installed at a distance from the wall of 40 mm (minimum) to 80 mm.

ATTENTION: To avoid hazards for children this appliance should be installed so that the lowest heated grille is at least 600 mm from the floor.

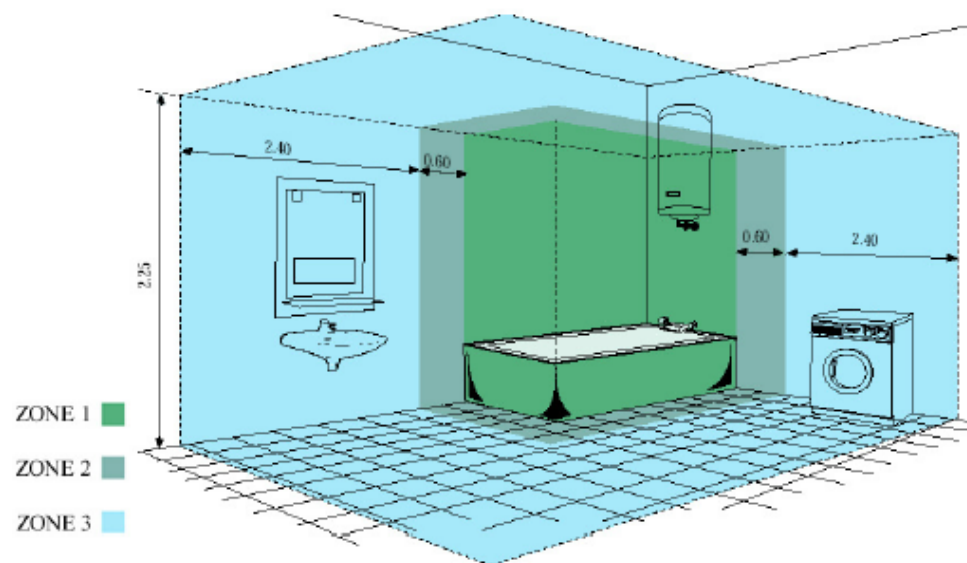
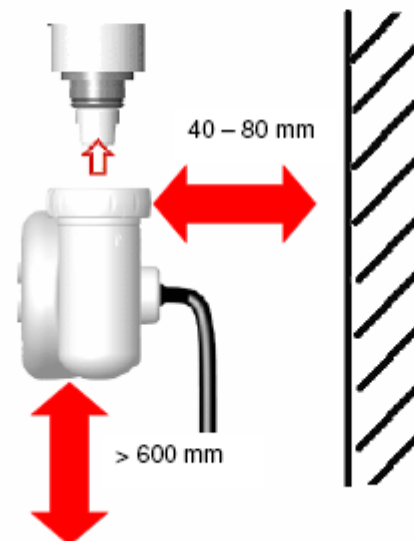








Figure 1: Bathroom zone classification

WIRE COLOUR	CONNECTION POINT
Brown	Phase
Blue (class I) Grey (class II)	Neutral
Yellow green	Earth (class I only)
Black	Pilot wire (only class II with pilot wire remote connection)

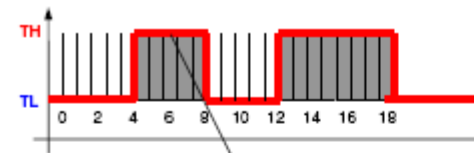
- An omni-pole cut-out exclusively for the appliance is obligatory. All contacts must be at least 3 mm apart.
- It is obligatory for the power supply system to which the regulator is connected to have **extra-sensitive differential protection**.
- The regulator may be in class I or II. In the bathroom it can be installed in zone 3 (see figure 1) so long as the control device is out of the reach of people using the shower or bath tub.
- The power lead must be connected to a socket or connection block, which must be at least 25 cm from the floor (without an intermediate plug for devices sold without plugs).

OPERATING MODES

MODE	SYMBOL	Description
CHRONO		The temperature used by the regulator depends on the day, time and bar settings: if the bar corresponding to the time zone is on the temperature is TH, otherwise it is TL. All PILOT WIRE commands, except for STOP, are ignored.
PILOT WIRE		The temperature used is TH modified by the command from the PILOT WIRE control unit. All six PILOT WIRE commands are executed.
STOP		The device is on stand-by and there is no ambient temperature regulation active. All PILOT WIRE commands are ignored.
COMFORT		The device regulates ambient temperature using the TH setting. All PILOT WIRE commands, except for STOP, are ignored.
REDUCTION		The device regulates ambient temperature using the TL setting. All PILOT WIRE commands, except for STOP, are ignored.
ANTIFREEZE		The device regulates ambient temperature to approximately 7 °C. All PILOT WIRE commands, except for STOP, are ignored.
TIMER	2h	The radiator heats at maximum power for two hours. All PILOT WIRE commands, except for STOP, are ignored.


CHRONO mode

This mode is used for weekly programming of ambient temperature at TH and TL levels. To set the levels and time zones, see the section "Using the regulator" in this manual.



PILOT WIRE mode

This is normal operating mode for room heating, if the device is connected to a programming unit operating to PILOT WIRE standards.


1. Press push button 1 (mode) until the  icon illuminates.
2. Set the required temperature by means of push buttons 3 and 4 (plus and minus). The temperature level (comfort or reduced) will be set according to the command received from the PILOT WIRE unit.

Note:

- If the device is not connected to a PILOT WIRE unit, or is in class I (which does not have this type of connection), the PILOT WIRE mode is equal to the comfort mode.
- The temperature used for regulation is shown on the display.
- This device acknowledges the six commands (orders) of PILOT WIRE standards.

COMFORT mode

This is normal operating mode for room heating.

1. Press push button 1 (mode) until the  icon illuminates.
2. Set the required temperature by means of push buttons 3 and 4 (plus and minus).

2H Timer

The radiator operates at maximum power for two hours: select this operating mode to dry clothes or towels.

1. Press push button 1 (mode) until the icon illuminates and the display shows the wording "2h".
2. The electronic control powers the radiator at maximum for two hours. Timer operation can be interrupted at any time by pressing push button 1 (mode). At the end of two hours the system returns to the Chrono mode.

USING THE REGULATOR

The regulator is used to control ambient temperature and comes with a two-hour on function for drying towels placed on a towel warmer. It has four push buttons and a display, as shown in figure 2. Appliances in class II FP can also be regulated at a distance by means of a pilot wire protocol central unit.

To activate temperature regulation or turn off the thermostat, press push button 1 briefly (stand-by). When the device is on stand-by, the radiator is off and the display shows a flashing dot; when it is on the display shows the time (chrono mode) or temperature setting (pilot wire mode, comfort, reduction or anti-freeze).



Setting the operating mode

Press the mode push button to change modes:

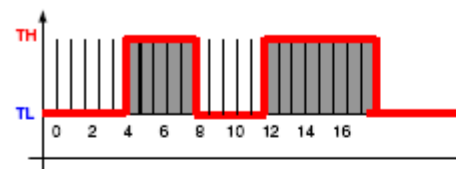


Setting temperature T_high or T_low

The thermostat regulates ambient temperature by means of two user-definable levels: T_high (TH) is the setting used in chrono, pilot wire and comfort modes; T_low (TL) is the setting used for reduced night operation. These two temperature settings can be edited by means of push buttons 3 or 4 (plus and minus). The thermometer symbol flashes to indicate the setting mode.



The two levels can also be used in chrono mode:



Blocking the push buttons

There is a blocking function so that children cannot edit the settings. Press push buttons 3 and 4 simultaneously and hold them down for approximately three seconds to block the push buttons. A padlock symbol will appear to show that the buttons are blocked.



Press push buttons 3 and 4 (plus and minus) again for approximately three seconds to release the push buttons.

Setting the clock and weekly programming

Press push buttons 1 and 2 (mode and stand-by) simultaneously and hold them down for approximately three seconds.



The day indicator will flash; the day can be changed by means of buttons 3 or 4 (plus and minus). Press push button 1 (mode) to confirm.

The hour digits will begin to flash;



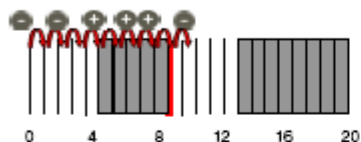
Use buttons 3 or 4 (plus or minus) and confirm with push button 1 (mode).

The minute digits will begin to flash;



Use buttons 3 or 4 (plus or minus) and confirm with push button 1 (mode).

The weekly program can now be set up or edited: start with day 1, set the configuration bar on the bottom of the display by means of push buttons 3 or 4 (plus or minus) to turn the bars on or off.



Press push button 1 (mode) to confirm the setting and go on to set the following days.

TECHNICAL CHARACTERISTICS OF THE REGULATOR

Operating voltage	230V \pm 10% AC 50 Hz
Maximum power of heating element	2000W
Insulation class	Class I or II
Water protection class	IPX4
Mechanical protection for connection block	IK05
Operating temperature	0 – 50°C
Storage temperature	-20 – 70 °C
Permitted humidity rating	0 – 85% without condensation
Regulation scale	7 – 35°C
Temperature setting steps	0.1 °C

WARRANTY

The product is guaranteed against manufacturing defects for two years from the date of purchase. In the event of replacements, parts are guaranteed for one year, labour and installation excluded. The warranty will be taken into consideration on presentation of a receipt showing the date of purchase to the after-sales service engineer who carries out the repairs.



Installation must be carried out in a workmanlike way and comply with the current standards in the country where the product is installed.

NOTES FOR DISPOSAL OF THIS PRODUCT VALID FOR THE EUROPEAN UNION

The crossed-out wheeled-bin symbol on your product reminds you that in the European Union all electrical and electronic products and batteries must be taken to separate collection at the end of their working life. Do not dispose of these products as unsorted municipal waste. Return the products to collection to prevent possible harm to the environment or human health from uncontrolled waste disposal and to promote the sustainable reuse of material resources. Collection information is available from the product retailer, local waste authorities or national producer responsibility organizations. For more information, see product country-specific information.

