

Electronic control for towel heaters

SMART PLUS PROGRAM is an electronic clock thermostat for electric towel heaters based on fluid heat transfer. SMART PLUS PROGRAM controls the room temperature by means of an external sensor.

The SMART series has the heating element attached to the thermostat. The symmetry of the device enables both right and left side coupling to the towel heater. The device is supplied with a dedicated remote control that can be used for defining a weekly program configurable for each day of the week. The remote control is provided with a bracket for anchoring it to a wall or to the towel heater Twelve different types of electric resistance are available, from 100W to 1000W. The device is available in white and chromed colours, and it can even be mounted on towel heaters with mixed operation.

Operative modes:

Comfort, Night, Antifreeze, Chrono, Boost 2h, ECO, ASC, Open window detection, Fil-Pilote, Key lock.

Available colours:

- White
- Chrome

Directive compliance checklist:

- Ecodesign requirement for energy-related products, 2009/125/EC

(<0.5W no load power)

- EN 55014-2:1997 + A1:2001 + IS1:2007 + A2:2008
- => Cat. 2
- EN 55014-1:2006 + A1:2009 + A2:2011
- EN 61000-3-2:2014
- EN 61000-3-3:201
- EN 62233:2008

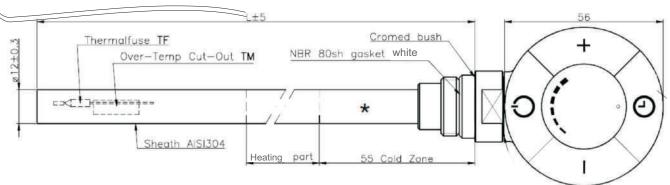




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Product	Electronic control for electric towel radiators
Applications	Towel radiators
Insulation class	Class I, Class II
IP level	IP44
Maximum power	See table below
Supply voltage	230VAC 50Hz
Size	See picture below
Warranty	2 years
Standards	-EN 60335-1:2012+A11:2014 -EN 60335-2-30:2009+A11:2012 -EN 60335-2-43:2003+A1:2006+A2:2008 -EN 61000-3-2:2014 -EN61000-3-3:2013 -EN 62233:2008 -EN 55014-1:2006+A1:2009+A2:2011 -EN 55014-2:1997+A1:2001+A2:2008
Approval mark	CE
Case	ABS+PS-VO
Environmental directives	WEEE, RoHS
Operative modes	Comfort, Night, Antifreeze, Stand-by, Chrono, Boost 2h, ECO, ASC, Open window detection, Key lock
Thermostat status light	Mode LED (red, green, amber)
indicators	On/Stand-by LED (red, green, amber)
Connection to mains	3 cables (neutral, earth, live); 2 cables (live, neutral);
	3 cables (live, neutral, Fil-Pilote); Swiss, UK, Italian plugs; Schuko plug;
Available colours	White RAL9016; Chrome.

Power	(W)	100	200	250	300	400	500	600	700	750	800	900	1000
Length	(mm)	350	350	350	350	370	410	465	520	560	600	670	730
(Heating element) class II													
Length	(mm)	350	350	370	370	430	450	560	630	700	700	760	830
(Heating element) class I													





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Product	Remote control for electronic control			
Applications	Smart Plus Program thermostat			
Colour	White			
Display	LCD			
Keyboard	7 keys			
Temperature selection	Digital			
Operational mode selection	Digital			
Selectable operational modes and functions	Comfort, Night, Antifreeze, Stand-by, Chrono, Boost 2h, ECO,ASC, Open window detection, Key lock			
Selectable temperature range	10°C ÷ 32°C - 7°C in Antifreeze mode.			
Operative temperature range	-10°C ÷ +40°C			
Battery	2 x 1,5V - AAA type			
Signal transmission	Infrared (2 transmitters)			
Size	100 x 42 x 27mm(H x L x W)			
Anchoring	Wall anchoring through dedicated bracket.			
Warranty	2 years			

EN



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Installation

These steps should only be performed by a professional technician/installer.

Caution Risk of electric shock!

Please read these instructions carefully before using the device.

- This device has been designed to be used exclusively in conjunction with heated towel rails
- This thermostat is used to heat up the liquid contained inside of a heated towel rail in combination with a heating element. Every other use is prohibited
- Before use, check that the mains voltage is the same as the one indicated on the thermostat (see technical specifications)
- Only use heating elements appropriate for the type of heated towel rail used
- Unplug the device before cleaning or maintenance
- In case you notice any kind of damage to the power cord, switch off the device and do not attempt any repair. Damaged power cables can be replaced only by the manufacturer or at an authorized service centre. Failure to comply with the above may compromise the safety of the system and invalidate your warranty
- Store and transport the heating element and the thermostat in its protective packaging
- Replacement of the heating element can only be performed from authorized personnel
- Cleaning and maintenance must not be carried out by unsupervised children.

Do NOT fill the towel rail body up to the rim with the heating fluid. Check and observe the recommended level. Do not overfill for any reason.

Available versions: type of connections

The device is compatible with the following types of electrical connections:

- 1 schuko/EU/Swiss/British plug (class I or class II) for direct connection
- 3 wires for class I models: phase (brown), neutral (blue), ground (green-yellow)
- 2 wires for class II models: phase (brown), neutral (blue)
- 3 wires for class II models with pilot-wire: phase (brown), neutral (grey), pilot-wire (black)

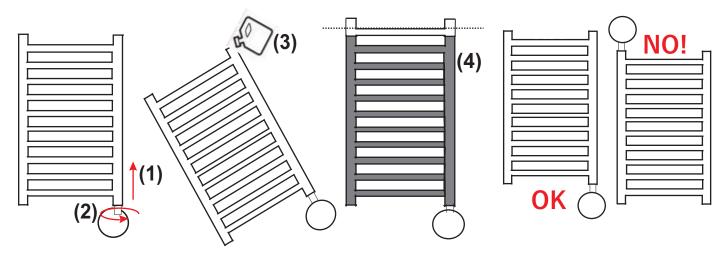




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Heating element installation guide

- Do not install your heating element while the thermostat is plugged into the mains
- The thermostat must be connected to the heating element by qualified personnel
- Make sure that the resistance power does not exceed the allowed maximum power



Top-up the towel rail by removing one of the top plugs and fill it with water only allowing around 10% of the height for expansion when the water gets hot. If you are refilling a towel warmer from empty then a combination of 85% water and 15% corrosion inhibitor is recommended.

- 1. Insert the heating element into the threaded opening in the lower part of the towel rail.
- 2. Properly tighten the resistance with the electronic control to the towel warmer body.
- 3. The special gasket ensures the tightness of the assembly and allows a slight additional twist in case you need to align the thermostat with the towel warmer.
- 4. Tilt the heating rail to make sure that the top opening of the towel warmer is in the highest part.
- 5. Fill the heating rail with the appropriate liquid.
- 6. Position the towel warmer vertically and check the level of the internal liquid.
- 7. Make sure that the heating rail and the heating element are correctly tightened.
- 8. Connect the device to the mains and activate the heating. During this phase do not close the upper lid of the towel rail.
- 9. Set the maximum temperature and observe the increase in the liquid level. The fluid should not overflow. Remove liquid in excess (carefully avoid burning yourself) in order not to wet the thermostat and make sure that the liquid does not reach the edge.
- 10. When the liquid level stops rising, wait another 5 minutes and turn everything off.
- 11. If the towel warmer needs to be topped up, do not wait for it to cool. Always pay attention to the temperature of the internal liquid.
- 12. Close the upper opening of the heating rail with the dedicated cap.
- 13. Hook the towel warmer with the special supports to the wall.
- 14. Connect the thermostat to the mains. For versions without electric plug it is necessary to install an appropriate device to ensure complete omnipolar disconnection in case of overvoltage category III.





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Safety instructions

A damaged power cable MUST be replaced by the manufacturer, the manufacturer's customer service or qualified personnel to prevent potentially hazardous situations. Do not attempt any repair yourself.

WARNING!

Power cords that are damaged, broken, modified, trapped under heavy objects, pulled hard or bent severely can cause electric shock and fire hazards! Please observe all warnings contained in this user's guide.

- The controller can be used to regulate the room temperature in conjunction with an electrical heating element in stationary and electrical radiators. Any other use is contrary to its intended purpose and therefore is considered a risk for the user

Always ensure that power is disconnected before working on the heating element.

- Connect the temperature controller only to electrical heating elements suitable to be connected to it
- Ensure that the output of the heating element is approved for the available radiator size (see manufacturer's documentation).

The use of a heating element with a greater output:

- does not increase the effective output of the radiator
- can cause early depletion of the heating element
- could damage your radiator
- Ensure that the output of the heating element does not exceed the output of the controller (see type plate)
- When installed in rooms with bath or shower facilities observe the protection zones (in the UK according to IEE Wiring Regulations). In addition, observe all the local regulations
- The device must be protected by a 30mA residual-current device (RCD)
- Only operate the device with the approved voltage (see specs on the element)
- If a device is connected directly to the fixed electrical installations, install a disconnector in accordance with the local regulation for mains disconnection

Conditions of use

- Remember to store and transport the heating element only in the provided protective packaging
- Make sure the towel rail body has no leaks or bubbles of air inside
- You must leave some distance from any power outlets
- The whole appliance should not come in contact with water
- Connect the thermostat only to a heating element suitable to work with such kind of device
- Check that the voltage is the same as specified in the technical specifications

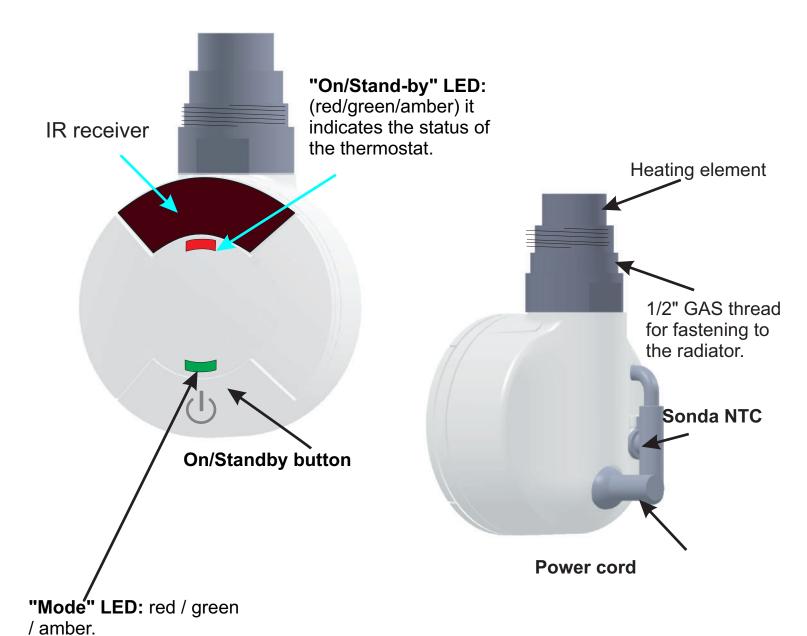


A small light indication showing the active function / operating

mode.

Smart Plus Program

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User guide

Press the [On/Stand-by] button on the remote control or on the thermostat to turn on the device or to switch to "Stand-by" mode

NOTES:- When the device goes into "Stand-by" mode it beeps twice for 0.5s.

- When the device is activated it beeps once for 1s

Turning on the device using the button on the thermostat will directly activate the "Comfort" mode with a default selected temperature of 20°C. It is necessary to use the remote control for further modifying the temperature or for changing the operating mode.

2. Operational modes

Press the **[Mode]** key on the remote control to select the desired operating mode. An icon on the display indicates the selected mode. The mode icons are shown in the following table

Fil-Pilote	1	Night	C	Comfort	anti-Ice	*	Crono	
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To enter into the following two operating modes, see the dedicated section:

Open Window Eco Detection	ECO	Boost 2h	2h ASC	ASC
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Comfort Mode

The "Comfort" temperature corresponds to the desired temperature for the room.

- -Press the [Mode] key until the "Comfort" icon is displayed.
- -Set the desired temperature using the [+] and [-] keys.

In "Comfort" mode, the "Mode" LED turns red.

Night Mode

The "Night" mode sets a value of temperature to a lower value than the one set for the "Comfort" temperature.

It is suggested to use this operating mode during the night or when the room is not occupied for 2 or more hours.

- -Press the [Mode] key until the display shows the "Night" icon.
- -Set the desired temperature using the [+] and [-] keys.

In "Night" mode, the "Mode" LED turns green.

Antifreeze Mode

In "Antifreeze" mode the device activates the heating element when the room temperature falls below 7° C. It is suggested to set this operating mode when the room is not occupied for several days.

-Press the [Mode] key until the display shows the "Antifreeze" icon.

In "Antifreeze" mode, the "Mode" LED blinks green.

Boost 2h Mode

The "Boost 2h" can be used for quickly warming the room.-To activate the "Boost 2h" mode, press the corresponding key until the "2h" icon is displayed. To exit this mode, press either the [Boost 2h] key or the [On/Stand-by] key.

For safety reasons, the temperature will be automatically limited to 32° C.

In "Boost 2h" mode, the "Mode" LED blinks red.





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Chrono Mode

This operating mode allows the definition of a weekly program configurable for each day of the week. To enter into this mode, press the [Mode] key until the display shows the "Chrono" icon. When the Chrono mode is active, the "On/Stand-by" LED turns amber; the "Mode" LED turns green during the "Night" period and it turns red during the "Comfort" period.

Configuring the hours sequence:

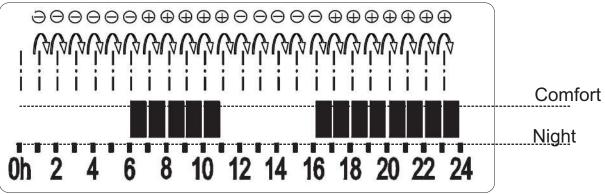
Press the [Chrono] key to start the programming procedure.

- a) Set the time and day of the week.
- -The blinking number shows the day of the week: press [+] and [-] keys to set the correct day, then press [Mode] to confirm.
- -Press the [+] and [-] keys to set the hour then press [Mode] to confirm and proceed with the configuration of the minutes. -For configuring the minutes, repeat the same procedure and confirm with the [Mode] key at the end.

b) Configuring the weekly program.

The procedure starts automatically from day 1, and requires specifying the desired temperature (either "Comfort" or "Night") for each hour of the day. This is done by pressing for the current hour either the [+] key (for setting the "Comfort" temperature) or the [-] key (for setting the "Night" temperature). Once one of the two keys is pressed, the configuration process moves to the following hour (for a total of 24 steps). The "Comfort" temperature is represented with a filled rectangle while the "Night" temperature is represented with an empty space.

Example



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Fil-Pilote Mode (only for models equipped with "Fil-Pilote" feature)

In this mode the device is managed by a remote control unit.

- 1. Press the [Mode] key until the corresponding icon is shown on the display.
- 2.Use the [+] and [-] buttons to select the desired temperature.

The remote Fil-Pilote control unit will configure the operational mode. The device operates with the most advanced "Fil-Pilote" system with six commands, which allows the following functions

- 1. Stand-by: power off the heating element, the device remains active.
- 2. Comfort: maintains the "Comfort" temperature set by the user.
- 3. Eco: maintains the room temperature 3,5° C below the "Comfort" temperature.
- 4. Antifreeze: maintains the room temperature at 7° C.
- 5. Comfort-1: maintains the room temperature 1° C below the "Comfort" temperature.
- 6. Comfort-2: maintains the room temperature 2° C below the "Comfort" temperature.

NOTE: When this operating mode is activated on models not equipped with the "Fil-Pilote" feature, the device will operate in "Comfort" mode.

Key lock

This function allows locking the buttons of the device to avoid inadvertent modifications of the settings. All the keys are disabled except the [On/Stand-by] button.

Press together the [Mode] and [+] keys for 3 seconds to activate this mode.

To unlock the buttons repeat the procedure.

ECO Mode

In this mode the selected temperature is reduced of 3°C, independently by the other device settings. This function allows reducing the energy consumption.

To activate/deactivate the "ECO" mode, press the corresponding [ECO] key.

In "ECO" mode, the "Mode" LED turns amber.

ASC FUNCTION

To enable the "ASC" function press the [mode] key until the "Crono" icon is shown on the display.

- -press simultaneously the keys [ECO] and [+] for at least three seconds.
- -To disable this function, repeat the procedure.

OPEN WINDOW DETECTION FUNCTION

Press together the [ECO] and [-] keys for more than 3 seconds to activate the "Open Window Detection" function. To deactivate the function repeat the procedure.

The "Open Window Detection" function enables detecting of an open window by sensing a sudden decrease of the temperature in the room. In such a case, the device deactivates the heating element for a maximum of 30 minutes or until an increase of the room temperature reveals that the window has been closed. At the end the device returns to the previous operating mode.





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Summary table of the "On/Stand-by" LED statuses

Green	The device is in stand-by mode
Red	The device is active
Amber	The device is in "Chrono" mode

Summary table of the "Mode" LED statuses

- "Comfort": Red - "Night": Green

- "Antifreeze": Blinking green

- "ECO": Amber

- "Boost 2h": Blinking red

- "Fil-Pilote": The colour depends by the operating mode configured by the remote Fil-Pilote control unit (according to the previous list).

NOTES:

- 1) In case of interruption of the power supply, the thermostat returns to the previous operating mode with the exception of "Boost 2h" and "Chrono" modes. The state of the thermostat is saved few seconds after a function is activated.
- 2) The device will beep to confirm the reception of a signal from the remote control.
- 3) The device could fail in detecting an opened window e.g. if the thermostat is located on an isolated area of the room and far from air currents or if the thermostat is placed close to an external heating source, or if the temperature variation in the room is too slow.
- 4) "Mode" LED blinking amber: Indicates that the probe is defect; the device is deactivated.

Accessory: To allow a mixed usage of the SMART device, connect the T-piece to the towel radiator, insert the SMART device into the vertical manifold of the T-piece and connect the return line of the heating circuit to the orthogonal connector of the T-piece.



Available colours: White; Chromed

Repairs carried out by unauthorized personnel invalidate warranty

The manufacturer reserves the right to make any changes to the product described in this manual, at any time, and without prior warning.





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RAEE guideline 2012/19/CE concerning electric and electronic equipment.

This appliance is NOT ordinary domestic waste. When it is no longer needed, it must be disposed of through an appropriate recollection centre to be recycled together with its packaging. In case of replacement, it can be sent back to your distributor.

Correct handling of the product at the end of its life cycle will allow us to preserve the environment and limit the consumption of natural resources. This symbol, applied on the product, states the obligation to consign it to a special recollection centre to be disposed of in accordance to existing legislation.



At any time, the manufacturer reserves the right to make all the changes necessary to improve its products without notice.

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Electronic control for towel heaters

The Galaxy is a digital electronic smart device which is great for temperature control in electric heated tower rails and electric radiators. It can be used in conjunction with all SELMO heaters that come with an IR module, such as the Smart Plus Program, which allows perfect real time mirroring between the device and the remote control.

The 7-button on-board keypad allows the user to access all functions available in your exhisting device, and the large back-lit display constantly shows all the information concerning the functioning of the heater through pleasantly placed icons.

The functions packed in the device (COMFORT, NIGHT, ANTI FREEZE and CHRONO) also include a PILOT WIRE mode, in case of such input arrangement. CHRONO mode offers a separate programmable time schedule for each day of the week. The two-hour boost function quickly heats up the room.

Advanced settings are available, such as keypad lock, to prevent young children from using it, while ECO and the open window detection function are very useful when it comes to saving energy. When the control is not in use, the display constantly shows all the basic information, guaranteeing an elegant unique look no matter what part of the house it is used in.

All this in such a small and ergonomic design.

The Galaxy makes living more comfortable, because all members of the family can get access to and control every **Smart Plus Program**. Two infrared transmitters, one at the top and one at the bottom of the remote, also allow on-wall installation.

Galaxy is provided together wish your Smart Plus Program

Directive compliance checklist

- Ecodesign requirement for energy-related products. 2009/125/EC (<0.5W no load power)

- 2015/863/EU (RoHS III)



