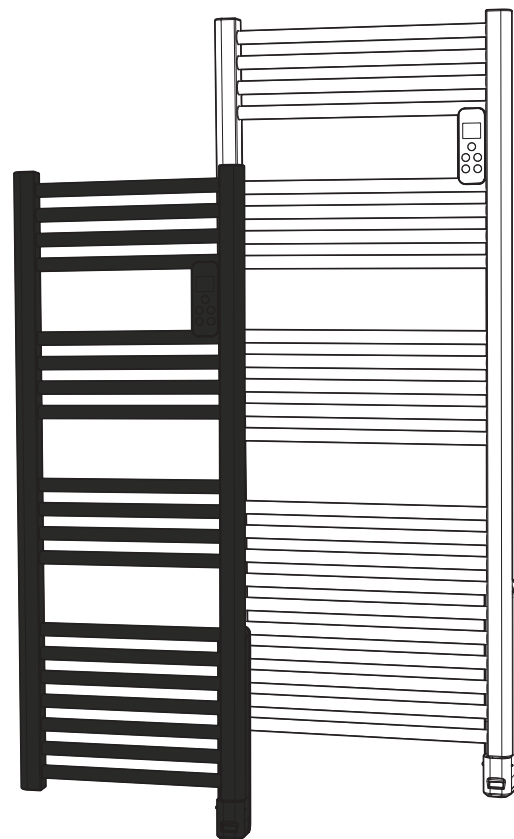


ARUM

Works with the dedicated Heating Management App MySense

Available on Google Play store and App store
Intuitive, cloud-based (IoT) Heating Control application.
Optimise all your heating schedules and running costs by suggesting energy efficient modifications to a specific room.
Dedicated programs tailored according to when the areas or specific zones are detected to be occupied
Detailed energy consumption reporting, analyse to achieve performance optimisation
Secure PIN code lock for rental housing, hotels, offices, shops or public building.

Download it from:



INSTALLATION AND OPERATING

ARUM INSTRUCTIONS

**SMART CONNECTED ELECTRIC TOWEL RAILS WITH 3 WAYS
WIRELESS COMMUNICATION: WIFI - ZIGBEE - BLUETOOTH**

**WEEKLY AND DAILY PROGRAMMING - PROGRAMMABLE HOLIDAY MODE -
TEMPERATURE LIMITATION - ALL AVAILABLE FROM THE MYSENSE APPLICATION**

ECO-DESIGN SMART FEATURES

**OCCUPANCY DETECTION - AUTOMATIC PROGRAMMING WITH SELF-LEARNING
PROCESS AND DUAL OPTIMISATION FEATURE**

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INSTALLING THE HEATING DEVICE

WARNINGS AND PRECAUTIONS

• Safety advice

All damage resulting from non-compliance with this advice gives rise to non-application of the terms of the manufacturer's warranty.

- Do not use the appliance outdoors.
- Your appliance is intended for domestic usage and must not be used for other purposes.

- IMPORTANT: It is strongly recommended NOT to dry out synthetic clothes directly on towel rails.

Unlike towels, this type of material (nylon, lycra, polyester, acrylic...) it often present in clothes and are more sensitive to a direct heat source. If the synthetic material is fragile, this can lead a colour transfer on the heater body which can become permanent.

- If the appliance has fallen on the ground, has been damaged or does not work properly, do not switch it on and ensure that the power supply to it has been cut off (by means of a fuse or of a circuit breaker).
- Never disassemble the appliance. A badly-repaired appliance may present risks for the user. Please consult your local point of sales regarding any problems.
- Please consult your local point of sales regarding any problems.
- If the power supply cable is damaged, it must be replaced by the manufacturer, its after-sales service department or another electrical professional in order to avoid any dangers arising.
- The heating appliance has been filled with a precise quantity of thermal fluid (a product safety data sheet is available upon request). Should a leak occur, switch off the appliance, put it somewhere out of the way so that the fluid spill does not spread and so that the thermal fluid is not accidentally swallowed by a child, and then immediately contact the company that sold you the appliance or a representative of the manufacturer.
Any tasks which require opening one of the closure plugs should only be carried out by a properly accredited representative of the manufacturer.
- When the heating appliance is scrapped, comply with legislation and regulations regarding disposal of the thermal fluid.

- This appliance can be used by children aged from 8 years and above and persons with reduced physical sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

Children of less than 3 years should be kept away unless continuously supervised.

Children aged less than 8 years shall only switch on/off the appliance provided that it has been placed or installed in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

Children aged less than 8 years shall not plug in, regulate and clean the appliance or perform user maintenance.



CAUTION - Some parts of this product can become very hot and cause burns. Particular attention has to be given where children and vulnerable people are present.

When the appliance is in heating, make sure they don't lean on it and don't play nearby. Vulnerable and young children should not be left in the vicinity of the heater unless a suitable protective guard is fitted.

The normal cleaning is the responsibility of an adult who has read the instructions and understands the operation of the appliance.

Any other operation or technical intervention must be performed by a qualified professional installer.

- **WARNING: In order to avoid a hazard for very young children, this appliance should be installed so that the lowest heated rail is at least 600 mm above the floor.**



- **If the removal of the appliance is necessary, do not remove or refit the appliance onto the wall-mounting brackets without making sure it is cold and the main supply to the system is off.**

• Suggestion, positioning, location

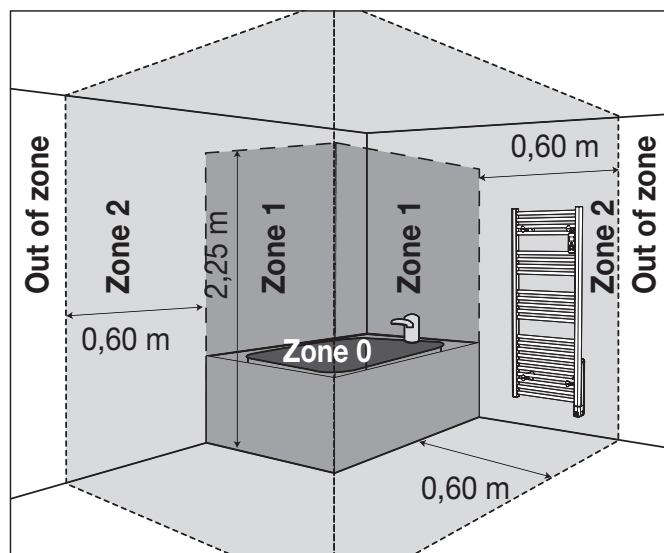
Before connecting the towel rails, switch off the power to the main circuit breaker.

This towel rails is a class II double insulated IP44 device, therefore it can be installed in any of the rooms of a house including in safety zones 2 and out of zone in bathrooms but sheltered from water splashes.

The heating device must be installed in such a way that on-off switches and other control devices cannot be touched by a person located in **a bathtub or in a shower cabinet**. The towel rails must not be located immediately below a socket-outlet.

The towel rails must be installed at least 15cm from any obstacle (ie shelving, curtains, items of furniture, etc.).

In accordance with the applicable installation rules, a means of disconnection must be provided in the fixed line on which the appliance is connected, such as an omnipolar cut-off device protecting the device's power line.



Zone 0

No electric heating device.

Zone 1

Zone 2

Electric heating device of class II and IPX4 protected by a differential circuit breaker 30mA.

Out of zone

Electric heating device of class I or II protected by a differential circuit breaker 30mA.

Defined by the IEE Wiring Regulation BS 7671:2018 (the 18th Edition), electrical towel radiators cannot be fitted in Zone 1.

An IP Rating (Ingress Protection ratings) of IPX4, which defines a product's level of moisture and mechanical protection as "splashproof from any direction", can be positioned within Zone 2. The thermostat must be located at least 60cm away

from a water outlet such as tap, sink, shower or bath.

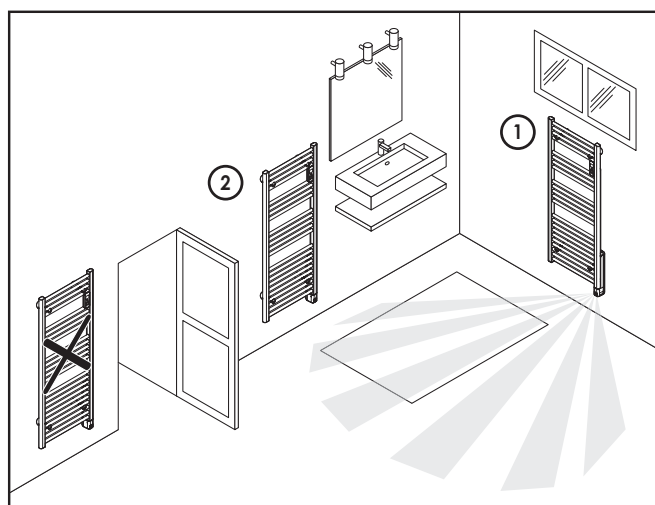
Regulation 701.411.3.3 requires that additional protection shall be provided by the use of a RCDs having the characteristics specified in Regulation 415.1.1 not exceeding 30 mA.



This picture is for illustration. In any case, the product must be installed by a qualified professional installer, according to applicable standards and directives of the country in which it is installed.

Locate the heater within minimum distances from obstacles.

Recommended installation in the context of using automatic open window detection and occupancy detection.



Legend installation layout diagram

- ① = the ideal recommended location
- ② = alternative location

CONNECTING, WALL-MOUNTING PROCEDURE

• Connecting the device

All electrical installation work should be carried out by a suitably qualified Electrician or other competent person.

- The power supply of the device must have a mean of disconnection main supply capable of disconnecting all poles, having a contact separator of at least 3mm in accordance with local regulations and installation rules, a protection by a 30mA differential switch and a protection device against overloads adapted to the characteristics of the connecting line.
- Before you first use the equipment, check that the voltage used does indeed match that listed on the device.
- This electric towel rail is a class II device (mean-

ing that it has double electrical insulation). Connection to earth is prohibited.

- **The three wires** must be connected in an electrical connection fuse spur box which complies with applicable standards.

CONNECTING THE DEVICE

Monophase power supply 230V+/-10% - 50Hz.

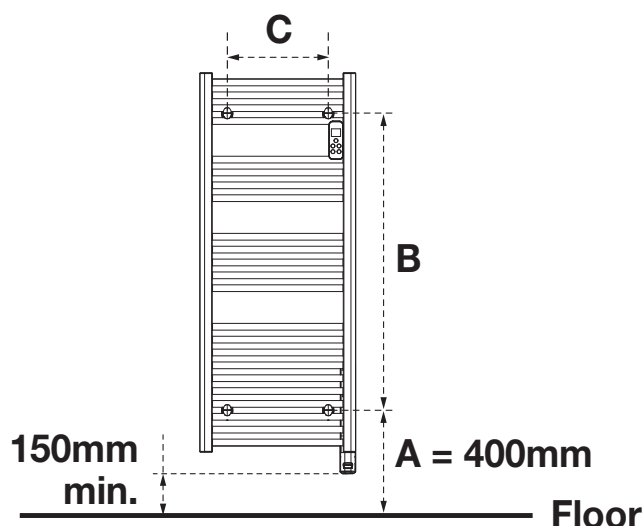
⚠ You must keep the pilot wire insulated if it is not used. Do not connect the pilot wire (black wire) to the earth.

- Blue wire: Neutral
- Brown wire: Phase
- Black wire: Pilot wire - If not used do not connect to the earth

• Positioning of the wall mounting brackets and tracing

IMPORTANT: Leave a gap of at least 150 mm between the bottom part of the electric towel rails (under the receiver) and the floor.

| References | Power outputs (W) | B = Distance between lower and upper drill holes (mm) | C = Horizontal distance between drill holes (mm) |
|---------------------------|-------------------|-------------------------------------------------------|--------------------------------------------------|
| White version | | | |
| Slim | | | |
| ARUS0300WH | 300 | 420 | 260 |
| ARUS0500WH | 500 | 798 | 260 |
| Standard | | | |
| ARU0500WH | 500 | 588 | 330 |
| ARU0700WH | 700 | 966 | 330 |
| ARU1000WH | 1000 | 1344 | 370 |
| Anthracite version | | | |
| Slim | | | |
| ARUS0300AN | 300 | 420 | 260 |
| ARUS0500AN | 500 | 798 | 260 |
| Standard | | | |
| ARU0500AN | 500 | 588 | 330 |
| ARU0700AN | 700 | 966 | 330 |
| ARU1000AN | 1000 | 1344 | 370 |



Use the drilling template supplied to attach your towel rails to the wall.

Step 1

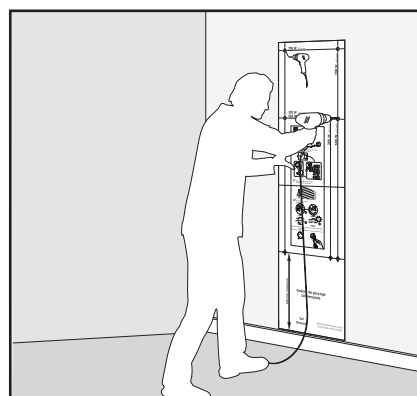
Open the template and position it against the wall, at the desired location. Ensure that the bottom of the template touches the floor or the top of the skirting board, in order that the fitting height can be adjusted.



IMPORTANT: In the presence of very young children, it is recommended to install this device in such a way that the lowest rail is at least 600mm above the ground. For this, use the flap of the drilling template.

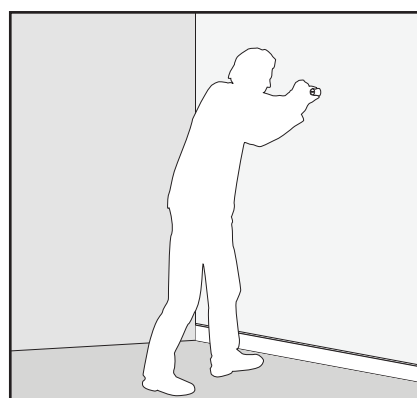
Step 2

Find the power of your electric towel rails and drill the corresponding holes into the wall.



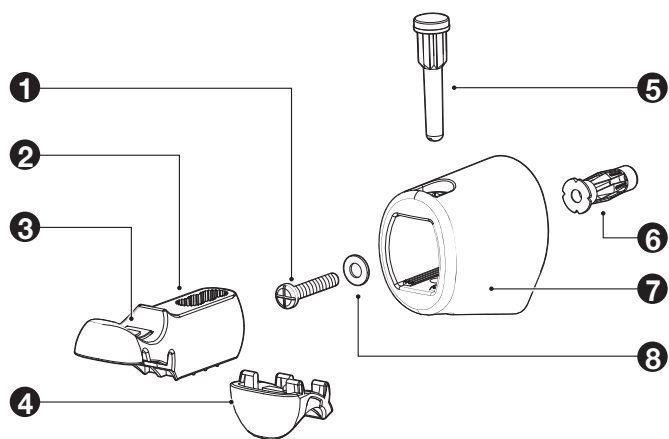
Step 3

Remove the template then screw the wall-mounting brackets of the electric towel rails into the wall.



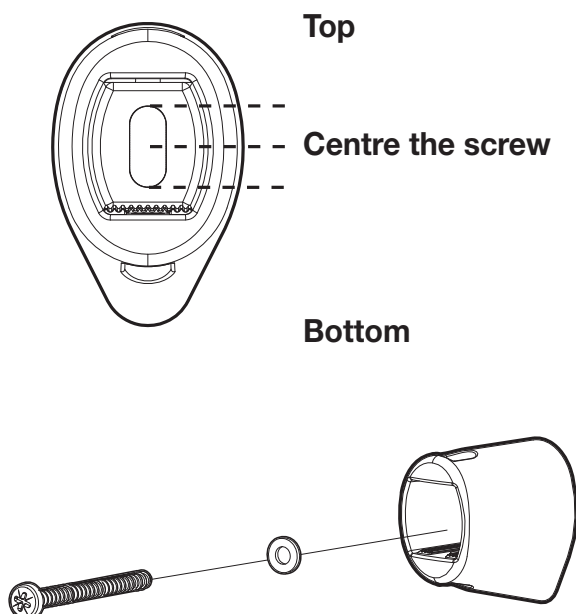
IMPORTANT: Use a screw anchor which is suitable in relation to the wall type (screws and screw anchors not supplied)

• Description of wall-mounting brackets



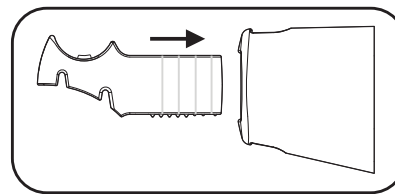
- 1** Fixing screw of the wall-mounting bracket \varnothing 6mm max (not supplied)
- 2** Support
- 3** Compensator damper pad (if the mounting is not tight enough, you can add the second compensator damper pad provided)
- 4** Locking part
- 5** Pin
- 6** Screw anchor (not supplied) - **IMPORTANT:** adapt the type of screw anchor to the nature of the partition wall (Example: plasterboard)
- 7** Sleeve
- 8** Washer

1- Mounting of the 4 patented wall mounting brackets

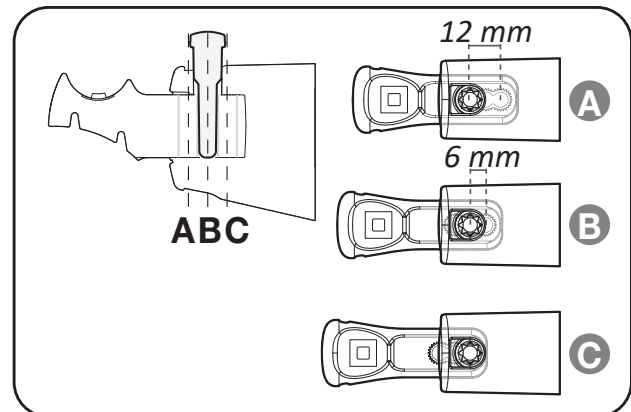


2- Insert and set the depth of the supports

1- Insert



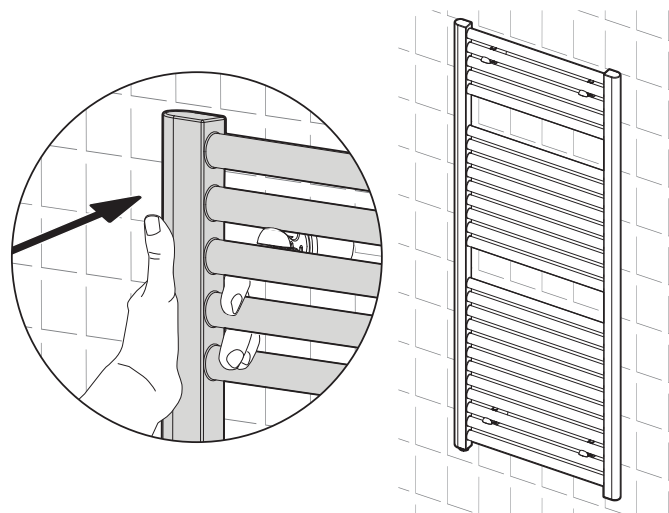
2- Setting of the depth



3- Locking

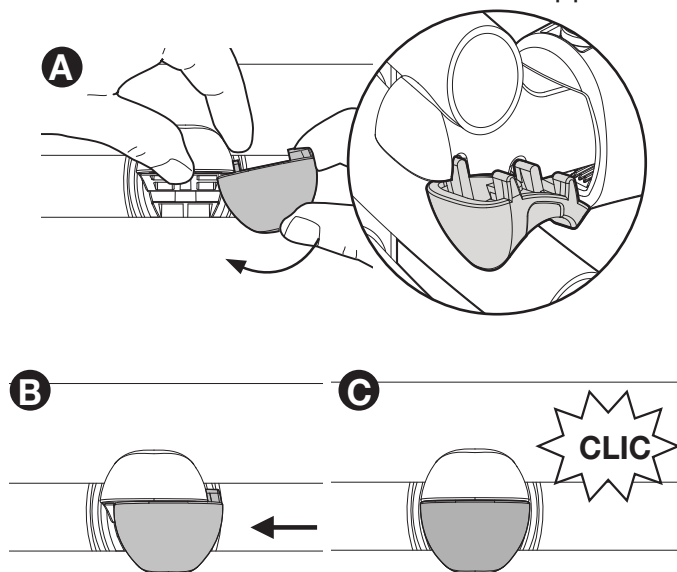


3- Setting up of the towel rails on the wall-mounting brackets



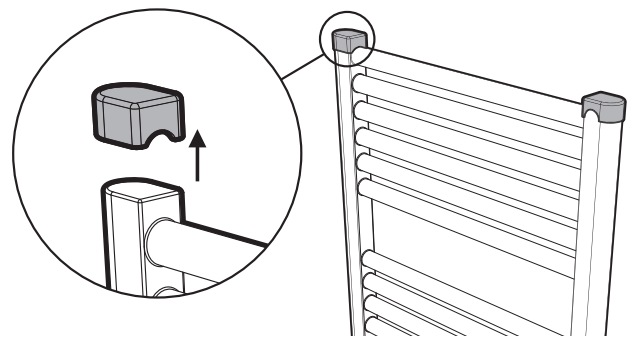
4- Locking of supports

Insert the locking parts (1 per support) making sure to position the notches in the 2 grooves located below the head of the mobile support.



IMPORTANT:

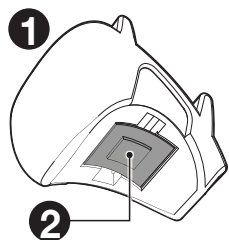
Before turning the heating on, it is imperative to remove the protective caps at the ends of the towel rails. Indeed, these are exclusively intended to protect the edges of the device during transport.



OVERVIEW

Important:

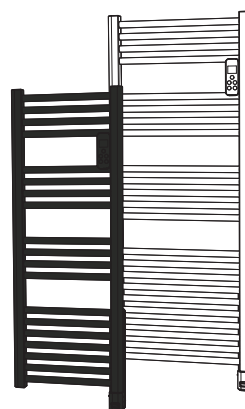
Each locking part (1) is equipped with a small pad in translucent silicone (2). This pad serves to counterbalance the assembly and the mounting tolerances. If the setting up is not tight enough, you can add the second lower silicone pad that is provided in the plastic bag.



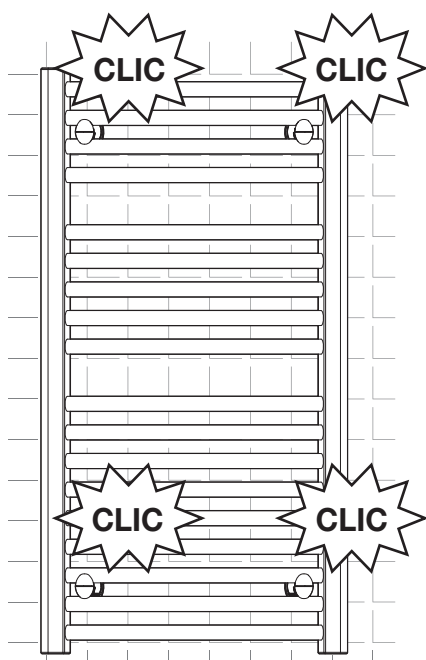
Thank you for choosing one of our products we are confident that you will get many years of service.

Our range of electric towel rails with thermal fluid and digital controls are designed and developed to bring you the comfort of heating without maintenance and significant energy savings thanks to its smart features: your towel rails incorporate innovative technologies designed for your comfort and to increase your energy savings, these technologies include: control performance PID (stability), occupancy detection, open window detection, 7 day and daily programming, and optimisation features.

In new build or renovation applications, our products will provide you with comfort and satisfaction!



The towel rails is now secured and locked on its supports.



BENEFITS

Discover the true vocation of connected objects: manage, control your comfort and your energy budget.

- 3 powerful communication protocols in one product to ensure perfect connectivity and control!
 - The ZigBee® 3.0 to join a home automation box and guarantee a level of connectivity with other products equipped with the same protocol.
 - The WiFi to connect directly to the MYSENSE ecosystem.
 - The Bluetooth® for the configuration of the product without being connected to an Internet router, it facilitates and secures the association of the product with the Cloud it will join.
- Possibility to use the product locally without having to be connected to a WiFi network thanks to Bluetooth and the MYSENSE app.
- Control and remote control from a smartphone, tablet or PC.
- Free web-based App to download on Apple IOS and Android platforms:
 - Up to 1000 products controlled by our free MYSENSE mobile application!
 - Supervision and control of the installation in 3 levels: All connected products within a house, connected products within a zone/level/room, or a single connected product.

- **Visualisation of the operating status, settings and weather.**
- **Real-time information:** notifications, news feed, alerts.
- **Remote contingency management** to save money when I'm away and anticipate heating up when I return.
- **Control:** interact, schedule, adjust at any time.
- **Optimisation of consumption:** display of consumption in kWh or in £, display of the consumption history on day, week, month, year with possible comparison between 2 periods given, savings wizard and predictive system of consumption, anticipation and optimisation of consumption.
- **Ultra-secure system:** Secure cloud design with backup security and localization of hosted data in EUROPE.

- **A range of straight towel rails adapted to the dimension of your bathroom:**

- **4 powers:** 300W (for Slim version only), 500W, 700W and 1000W.
- **5 heights:** 721, 931, 1141, 1309, 1687 mm.
- **3 widths:** 400, 508 and 558 mm.
- **The comfort of central heating:** This concept with mineral oil circulation ensures a gentle heat and a stable temperature. The aluminium alloy heating body optimises the heat diffusion.
- **Stylish design:** the towel rails are equipped with 22mm diameter rails which give them a robust and professional appearance while maintaining a harmonious and uncluttered style.
- **The Slim version has been especially designed to meet the layout constraints.** The small width of the ARUM towel rails slim means it will easily fit in bathrooms, freeing space for furniture and decoration.
- **Help for the visually impaired:** 2 buttons on the receiver are easily identifiable by touch (Power on/heating standby mode and Bluetooth, WiFi or Zigbee network connection see page 9 and 10). The device has audible beeps indicating the change from the heating standby mode to active mode.
- **Ergonomic settings:** The digital controls are located on the remote control of the towel rails and have a black screen with white digits for easy access and viewing. Adjustment is simple, direct and intuitive!

New smart features

- **Gauge consumption:** An automatic indication of the level of energy consumption according to the setting temperature.
- **Open window detection:** Automatic switching to frost protection mode when the towel rails detects a significant drop in temperature.
- **Occupancy detection integrated:** During an unoccupied period, the towel rails decreases automatically and progressively the temperature setting.
- **Smart Auto-programmable towel rails:** The towel rails adopts to their learning mode as soon as they are put into operation and without any prior adjustment, this enables it to understand and memorise your life patterns: detecting and adapting to periods of absence and presence. The initial learning phase lasts 7 days, but the product will perpetually learn and adapt to changes in your occupancy patterns, adapting week after week to optimise to any changes. The products smart algorithm analyses this information in real-time in order to optimise and adapt the program for the coming weeks. The goal: to simplify your life, to anticipate your comfort needs and to continuously maximise energy savings.
- **Dual optimisation feature allows you to optimise your programming by favouring comfort or savings (setting can be modified from the MYSENSE application):** dependent on various parameters: inertia of the room, ambient temperature, desired temperature, seasonality, the towel rails will calculate and optimise its programming for the periods of comfort and economy (Eco) depending on your preference:
 - **Whilst in the OPTI ECO mode (priority to economy),** the processors within the towel rails will calculate the best compromise to guarantee maximum energy efficiency throughout the programmed periods of temperature variation (increase/decrease). This mode effectively accepts a slight reduction in the temperature levels both at the beginning and the end of the comfort periods, to maximise energy efficiency.
 - **Whilst in the OPTI COMFORT mode (priority to comfort),** the processors within the towel rails will calculate the best compromise to guarantee maximum user comfort throughout the programmed periods of temperature variation (increase / decrease). This mode will look to anticipate and maintain the set comfort temperature during all detected periods of occupancy within the area.
- **7 day and daily programme:** In addition to the auto-programming, you have the option, for each day of the week, to assign one cus-

tomised programs. (pre-recorded program available and editable day by day or by group of days, other modifiable programs are available on the **MYSENSE** application).

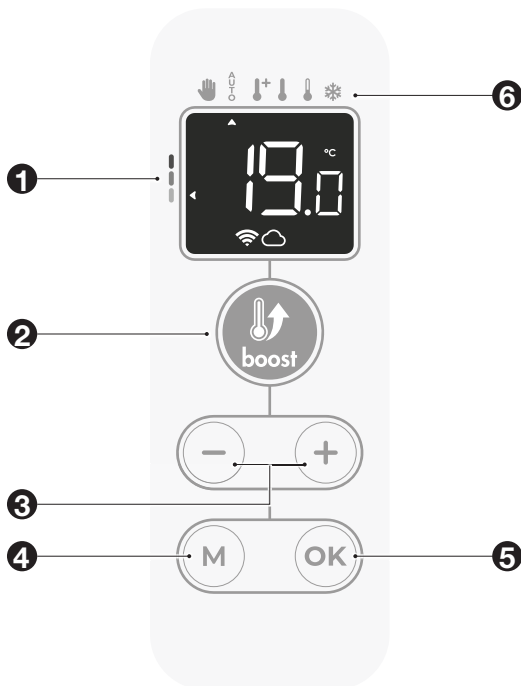
- **Special safety for social or private rental housing:**

- Limits of the adjustment range of the Comfort setting temperature (Available and from the **MYSENSE** app).
 - PIN code lock, lock of settings reserved for professionals, available on the product and the **MYSENSE** app.
 - **Boost:** Adjustable up to 90 minutes by 5 minutes steps, increases the speed at which your bathroom heats up and also allows damp clothes and towels to dry quickly.
 - **Programmable holidays mode (available through the MYSENSE application):** Frost protection enabled for a long-scheduled absence.
 - **Automatic changeover summer / winter of the timer when the device is connected to WiFi or Zigbee.**
 - **"Smart" electronic controller:** This means stable and accurate temperatures in your room all year around.
 - **Setting temperature can be viewed in all operating modes.**
 - **Active memory:** Permanent backup of all settings and programming.
 - **Overheating protection:**
 - Immersion heater with dual safety:
 - Safety level 1: an integrated thermostat protects the towel rails against any temporary overheating ;
 - Safety level 2: an integrated thermal-fuse is triggered if the overheating itself extended beyond the authorized temperature limit.
 - Ambient temperature limit during the Boost: when Boost is active, the towel rails must heat the room up to an ambient temperature limit. When it is reached, the Boost automatically stops.
-
- **4 patented wall-mounting brackets:**
- Innovative style and discreet.
 - Quick to install: up to 3 times less than a standard screw installation.
 - Easy to install, towel rails is secured by wall-mounting brackets before locking.
 - Setting of the depth ideal for renovation.
 - Mechanical strength, high resistance to weight and heat.
-
- **Child anti-tamper:** Keypad lock on the remote control, making unintentional changes impossible.

OVERVIEW

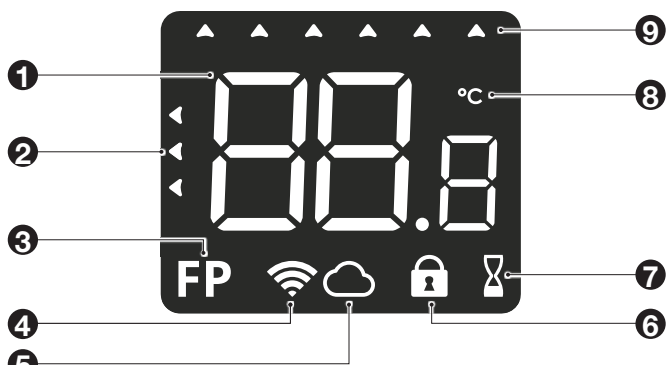
A-Remote control:

- Controls:



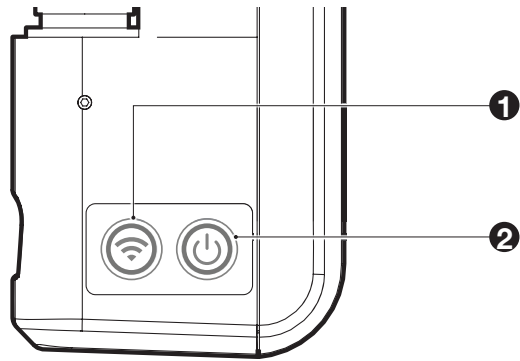
- 1 Gauge consumption
- 2 Boost
- 3 Temperature settings
- 4 Selecting operating modes
- 5 Set and save settings
- 6 Operating modes:
 - Hand icon: Manual or pilot wire override
 - Sun icon: Auto mode
 - Cloud icon: Comfort+ mode
 - Cloud icon: Comfort mode
 - Snowflake icon: Eco mode
 - Snowflake icon: Frost protection mode

- LCD display (indicators overview):



- 1 Setting temperature/Information
- 2 Gauge consumption
- 3 Pilot wire indicator
- 4 WiFi indicator
- 5 MYSense account login
- 6 Keypad lock
- 7 Boost / aeration indicator
- 8 Temperature unit
- 9 Select operating mode

B-Receiver:



- 1 **Left button:** Connection/Disconnection of the device to WiFi, Bluetooth or Zigbee network.

Left indicator light: Visualisation of the status of the association with WiFi, Bluetooth or Zigbee.

- 2 **Right button:** Towel rails power on/heating standby mode.

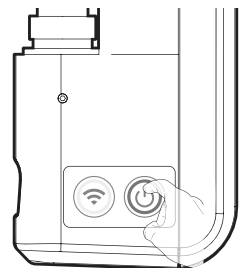
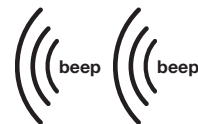
Right indicator light: Visualisation of the operating status.

OPERATING

OVERVIEW

Power on feature

Briefly press the button located on the right side of the receiver to put the device in its operating mode, in Auto mode.



On the remote control, Auto and Comfort modes are selected and the preset temperature appears.



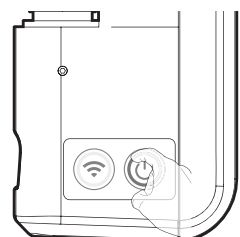
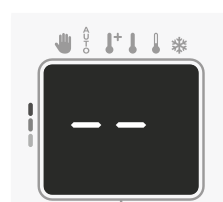
Help for the visually impaired: Sound signals

The device makes two successive short beeps to notify that it is in operation.

Heating standby mode

This feature allows you to stop the heating.

Press briefly the right button to put the device in heating standby mode.



Help for the visually impaired: Sound signals

The device makes one short beep to notify that it is in heating standby mode.

• Visualisation of the receiver operating status

- Right light :

| Operating status of the receiver | Light status and colour |
|---------------------------------------|--------------------------------------------------------------------------|
| Power on | Red light |
| Heating standby mode | Green light |
| Ongoing Boost | Blinking red |
| Malfunction | Blinking orange |
| Bluetooth/WiFi connection in progress | Fast blinking red |
| Zigbee connection in progress | Fast blinking green |
| Disconnection in progress | Blinking alternately in red and green with the left light |
| Back to factory settings | Blinking for 3 seconds in orange simultaneously with the left-hand light |

- Left light :

| Operating status of the receiver | Light status and colour |
|----------------------------------------------|-------------------------------------------------------------------------|
| No connection to the WiFi or Zigbee network | Red light |
| Connection to the WiFi or Zigbee established | Green light |
| Receipt of a message in progress | Fast blinking green during 1 second |
| Exceeded WiFi connection time | Orange light |
| Malfunction | Blinking orange |
| Connection Bluetooth / WiFi in progress | Fast blinking red |
| Connection Zigbee in progress | Fast blinking green |
| Disconnection in progress | Blinks alternately in red and green with the right-hand light |
| Back to factory settings | Blinks for 3 seconds in orange simultaneously with the right-hand light |

BLUETOOTH, WIFI OR ZIGBEE NETWORK CONNECTION

Connect your product directly to the **MYSENSE** ecosystem via the WiFi network of your internet router or to a Zigbee 3.0 collaborative home automation box!

Your device offers you the possibility to be controlled in 2 different ways:

- Locally in your home via Bluetooth if your product is not connected to internet.
- Remotely via WiFi or the Zigbee home automation network.

Note: If your product is connected to WiFi and there is a loss of WiFi communication or a problem with the internet box, the product will automatically switch to Bluetooth and can always be controlled locally until the WiFi connection is restored. Combining the device with the Bluetooth/WiFi or Zigbee network can be done from the remote control or from the receiver.

• Connection to Bluetooth / WiFi network

Your towel rails has been specially designed to be connected directly to your internet router without any other accessories.

In Bluetooth connection only, information on the status of Bluetooth connection between your application and your product are available on the mobile application, these indications are as follows:



Pairing in progress



Successful pairing



Product not connected




Product out of reach Bluetooth, bring your smartphone closer to the product or restart the pairing process




Product already connected to a smarthone, add?

- Via the remote control:



Proceed in the following order:

- 1- From the Auto, Comfort, Comfort+, Eco or Frost protection mode, press  for 5 seconds.

 and  blink.



- 2- Your device is in connection mode. Please refer to the instructions on your **MYSENSE** mobile app to guide you through the full Bluetooth or WiFi connection of the device.

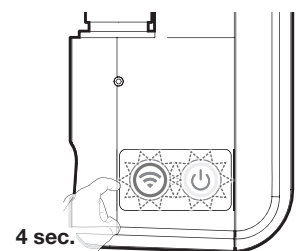
Once the device is connected in WiFi, it automatically returns to the main screen with the  and  displayed.



- 3- Once the connection to the Bluetooth network is established, a long beep will be heard.

- Via the receiver:

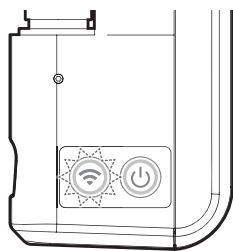
- 1- Press and hold the left button for approximately 4 seconds until both lights blinking red quickly.



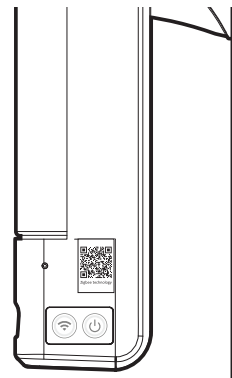
- 2- Your device is in connection mode. Please refer to the information on your **MYSENSE** mobile app and refer to the instructions on how to fully connect the device.

3- Once connected to the Bluetooth network, a long beep sounds.

4- Once the connection to the WiFi network has been established, the left-hand blinking green and then turns fixed green and the right indicator will return to its state before the connection.



Note: Some Zigbee ecosystems will require scanning the Zigbee QR code to connect the product. The QR code is located on the side of the device. Please refer to the instructions on the app or in the user manual for your Zigbee ecosystem and be guided to the full connection of the device.





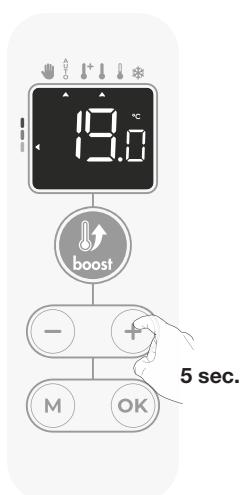
Side view


• Connection to the Zigbee network

- Via the remote control:

If you have a home automation box using a Zigbee network connection, proceed in the following order to associate the device with this network:

1- From the Auto, Comfort, Comfort+, Eco or Frost protection mode, press (+) for 5 seconds.  and  blink alternatively.



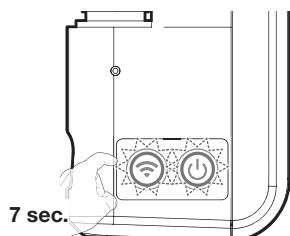
2- Your device is in connection mode. Please refer to the instructions on the app or in the instruction manual of your Zigbee ecosystem and let us guide you to the complete connection of the device. Once the product is connected, the symbol  appears on the screen.



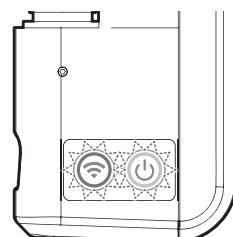
3- Press (OK) to exit the connection mode. The device automatically returns to the main screen.

- Via the receiver:

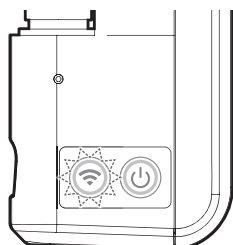
1- Press and hold the left button for 7 seconds until the two lights blinking red.



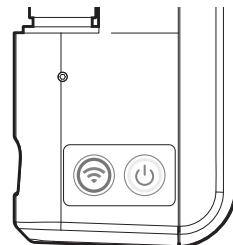
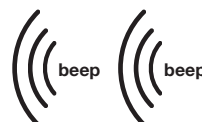
- After 10 seconds, the two lights blinking alternately in red and green, the receiver deletes the Bluetooth/WiFi or Zigbee network association code.




2- Once the connection to the Zigbee network is established, the left light blinking green and a long beep sounds. The left light will return to its state before the connection.



- After 12 seconds, two shorts beep will be heard and the left light will be red: the network connection has been erased.



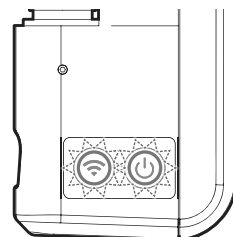
DISCONNECTION

In case you want to disconnect the product from the Bluetooth/WiFi or Zigbee network without forgetting your network information: On the receiver, press and hold the left button  for 12 seconds without releasing it.

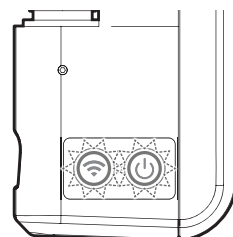
The following sequence takes place:

Note: If you release the button before 12 seconds, the sequence will be uninterrupted, and the product will remain associated with the Bluetooth/ WiFi or Zigbee network.

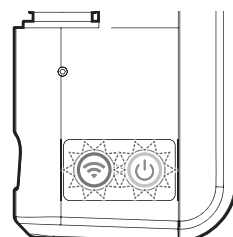
- After 4 seconds, both lights start blinking red.



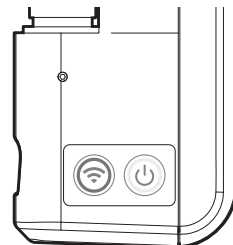
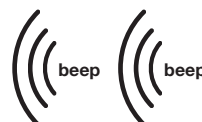
- After 7 seconds, both lights blinking green.





- After 10 seconds, the two lights blinking alternately in red and green, the receiver deletes the Bluetooth/WiFi or Zigbee network association code.



- After 12 seconds, two shorts beep will be heard and the left light will be red: the network connection has been erased.





On the remote control display, the symbols   will have disappeared from the screen: the device is indeed disconnected from the network.

If you want to connect your device again, see "Bluetooth, WiFi or Zigbee network connection" on page 10.



SELECTION OF AN OPERATING MODE

The  button allows you to select an operating mode that is adapted to your needs according to the seasons and periods of occupancy. By pressing the button  successively, select the desired mode.



Mode sequence:

| | | | | |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  |  |  |  |  |
| Auto | Comfort+ | Comfort | Eco | Frost protection |

Mode description

Display

• Auto mode

In automatic mode, the device will automatically change from one operating mode to another according to the established programme.



2 different cases depending on your set-up:

1 7 day and daily programme

Your towel rail has been programmed and is executing Comfort and Eco mode orders in line with the settings and time periods you have selected (see "Programming" chapter page 14).

2 Programming by pilot wire (not normally used in the UK)

Orders sent by the pilot wire will only be applied **in Auto mode**, thus your device will automatically receive and apply the programmed orders sent by your power manager or your time switches (see "Information about remote control by pilot wire" chapter page 16).

• Comfort+ mode

Non-stop Comfort+ mode. The towel rail runs 24 hours a day at the set temperature (default 21°C). This enables you to increase or decrease the temperature without changing the Comfort mode temperature.

Select this mode for short-term periods. The Comfort+ mode temperature level can be set by the user (See the Adjustment of setting temperatures in chapter on page 13).



• Comfort mode

Non-stop Comfort mode.

The towel rails will operate 24 hours a day to achieve the set temperature (e. g. 19°C).

The Comfort mode temperature level can be set by the user (see page 13).



Mode description

Display

• Eco mode

Eco mode, which means the Comfort Mode temperature minus 3.5°C.

This enables you to lower the temperature without having to reset the Comfort Mode temperature.

Select this mode for short-term absences (between 2 and 24h) and during the night.




• Frost protection mode

This mode enables you to protect your home against the effects of cold weather (frozen pipes, etc.) by maintaining a minimum temperature of 7°C in it at all times. Select this mode when you will be away from your home for a long time (more than 5 days).





BOOST

Important: Boost mode can be activated at any time, regardless of the current operating mode (Auto, Comfort +, Comfort, Eco or Frost protection).

To activate the Boost mode, press the  button, the setting temperature is raised to the maximum for the requested time. 60 minutes flashes by default.

- First press = Boost.

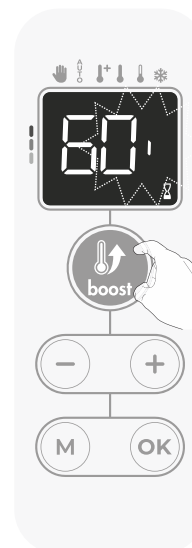
During the 1st minute: The Boost indicator is displayed, the time countdown is flashing.

During the first minute, you can modify the Boost duration from 5 to 90 minutes by intervals of 5 minutes (or faster if pressed for more than 2 seconds) by pressing  or .

This modification will be saved and effective for the next Boost.


After 1 minute, the Boost count begins and the time is running, minute by minute.

Note: After 1 minute, you can modify temporarily the duration: it will be valid only for this active Boost and therefore non-recurring.



The Boost can stop for 2 different reasons:

- A "stop heating" command has been issued by your energy manager via the pilot wire:

The device stops, -- appears. The cursor moves above . When the order Comfort is sent, the device will be restarted until the count end.



- If the ambient temperature reaches the maximum Boost temperature during the count:

The device switches off but the Boost mode is always active : the count is always displayed, the Boost symbol flashes. When the temperature drops under the maximal authorised temperature (35°C, which cannot be changed), the device will be restarted until the count ends.



- Second press = Boost cancellation

The cursor moves above the previous active mode and the setting temperature appears.

MANUAL AND TEMPORARY OVERRIDE TO A CURRENT OPERATING MODE

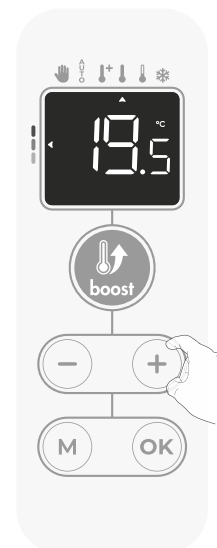
By pressing or this feature allows you to temporarily modify the setting temperature until the next programmed temperature change (via integrated programming) or when the clock reaches 00:00. A cursor will appear under the symbol. The temperature override is only available in Auto mode.

You can cancel this override at any time by selecting the desired operating mode by pressing .



ADJUSTMENT OF SETTING TEMPERATURES

- 1- On the remote control, press to select the desired mode: Comfort+, Comfort, Eco or Frost protection. The arrow corresponding to the mode flashes and then becomes fixed to indicate that the mode is selected.
- 2- Once the mode is selected, adjust the desired setting temperature with or . The modified value is saved automatically.



- 3- Once the temperature setting is set, you can either remain in the selected mode or choose another mode by pressing .

GAUGE CONSUMPTION, ENERGY SAVINGS

The Energy Saving Trust (EST) and carbon trust recommend reducing temperature control down by 1°C to save up to 10% of your energy bill.

In the towel rails display, a selector indicates the energy consumption level by positioning it in front of the colour: red, orange or green. So, depending on the set temperature, you can choose your level of energy usage.

As the temperature setting increases, the consumption will be higher. The gauge appears in Auto, Comfort+, Comfort, Eco and Frost protection modes regardless of the level of temperature.

| | | |
|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|--|
| Red Colour High temperature level: it is advisable to significantly reduce the setting temperature | Setting temperature > 22°C When the set temperature is higher than 22°C | |
| Orange colour Average temperature level: it is advisable to slightly reduce the setting temperature | 19°C < Setting temperature ≤ 22°C When the set temperature is higher than 19°C and lower or equal to 22°C | |
| Green colour Ideal temperature | Setting temperature ≤ 19°C When the setting temperature is lower or equal to 19°C | |

Comfort+ temperature

| | | |
|----------------|--------------------------------------------------------------------------------------------------------------|--|
| Preset at 21°C | Adjustable from comfort +1°C to 30°C by intervals of 0.5°C and according to the Comfort setting temperature. | |
|----------------|--------------------------------------------------------------------------------------------------------------|--|

Comfort temperature

| | | |
|----------------|--------------------------------------------------------------------------------------------------------------------------|--|
| Preset at 19°C | Adjustable from 7°C to 30°C by intervals of 0.5°C. It is possible to limit this Comfort period, see page 18 for details. | |
|----------------|--------------------------------------------------------------------------------------------------------------------------|--|

Eco temperature

| | | |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Pre-set at 15.5°C (equivalent to Comfort -3.5°C) | Adjustable from 5°C to 19°C by intervals of 0.5°C and according to the Comfort setting temperature (from Comfort -8°C to Comfort -1°C). For example, if the Comfort temperature is set to 20°C, the eco temperature is adjustable from 12°C to 19°C. Important: the Eco setting temperature will never exceed 19°C. | |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

Frost protection temperature

| | | |
|---------------|----------------------------------------------------|--|
| Preset at 7°C | Adjustable from 5°C to 12°C by intervals of 0.5°C. | |
|---------------|----------------------------------------------------|--|

Note: The temperature settings are also available via the **MYSENSE** mobile application.

CONSUMPTION INDICATION ACCUMULATED IN KWH, ENERGY SAVINGS

To view the estimated energy in kWh consumed by the device since the last reset of the energy meter, refer to the **MYSENSE** mobile application.

CHILD ANTI-TAMPER, KEYPAD LOCK/ UNLOCK

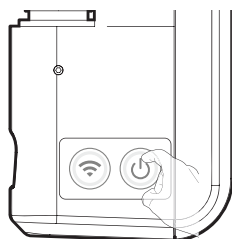
From the Auto, Comfort+, Comfort, Eco, Frost protection or override mode, to lock or unlock the keypad, press simultaneously and hold **-** and **+** for 5 seconds.

The padlock symbol  appears on display, the remote control buttons are locked.



Important: When the keypad is locked, only the  button is active.

If the device is on heating standby mode when the keypad is locked, you have to unlock it for the next heating on to access the setup.



7 DAY AND DAILY PROGRAMME INTEGRATED, ENERGY SAVINGS

AUTOMATIC PROGRAMMING WITH SELF- LEARNING PROCESS

● Overview

Auto-programming (Auto): After an initial learning period of one week, the towel rails will analyse occupancy cycles to determine and implement a weekly program adapted to your lifecycle alternating periods in comfort and periods in eco, the goal being to deliver the most efficient yet comfortable and user focused heating cycle. The products algorithm will perpetually learn and adapt to changes in your occupancy patterns, adapting week after week to optimise the heating program to any changes in your evolving occupancy patterns.

● Operating

Upon the first activation of your towel rails, the mode "auto-program" is activated by default, in Auto mode. To deactivate and change the programme, please refer to the **MYSENSE** application. The first week of operation is a learning week during which the towel rails memorises your habits and creates a program for the week. It therefore defines a programme built up of



Example of display in
Comfort period

Comfort and Eco periods, independently for each day of the week.

During this learning week, the device will provisionally function in permanent "Comfort" mode.

Important: To ensure the auto-programming is optimised, please ensure the presence detection sensor is not interrupted by an external source, see important information concerning the presence detection system on page 16.



Example of display in
Eco period

● Application of the intelligent program

One week after switching on, the device will apply the new program for the next 7 days. Then week after week the device will continue to optimise the intelligent program "Auto", adjusting the Comfort and Eco periods to fit closely with your lifestyle.

When the product is in Frost Protection or Heating Standby mode or when it is in Auto, Comfort or Eco mode without any presence being detected after 72 hours, the learning and optimisation of the intelligent program stops: the device stores the previously recorded program from the last week before switching to the Frost protection or standby mode.

- **Example 1:** If the product is installed in mid-season or if its installation is anticipated on the construction site, it can be switched on in stand-by mode. When you select the Auto mode, the learning week will start automatically. The device will be in permanent comfort and will memorise your habits to apply the adapted program the following week.

- **Example 2:** You select frost protection mode before going on holiday. Upon your return, when you return to Auto mode, the radiator will automatically apply the previously stored intelligent program from the last week before you left.

In the case of control by pilot wire coming from an energy manager for example, the pilot wire will take precedence over the AUTO program which results from the Self-learning algorithm.

7 DAY AND DAILY PROGRAMME (AVAILABLE FROM THE MYSENSE APPLICATION)

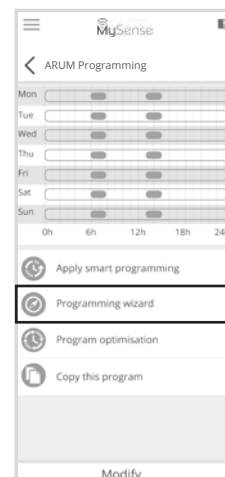
The product is delivered by default in the Auto-programming mode described in the previous paragraph. If you are happy with this program, you do not need to do anything else, the towel rails, after its learning phase, will program itself according to your life rhythm. If this is not convenient for you, you have the possibility to program your towel rails by assigning a personal program for one or more days of the week.

This feature is available on the **MYSENSE** mobile application.

● Customised programming

From the **MYSENSE** application, you can programme your towel rails by assigning 1 of the 9 proposed programmes to each day of the week.

Go to the settings of your product, then to the *Programming* menu, and you will have access to the *Programming wizard*.





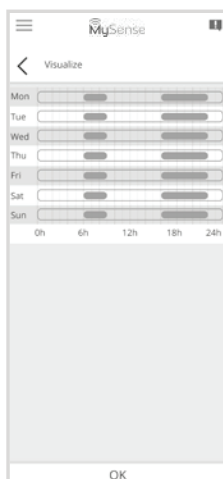
For each day of the week, you will have to choose a pre-recorded programme, which you can then modify if necessary.



Select and change the Comfort, Frost protection and Comfort+ periods.



You can duplicate your programme for the other days of the week by pressing  and to view it by pressing .



savings.

- In **OPTI COMFORT mode (priority to comfort)**, the towel rails intelligence calculates the best compromise in order to guarantee maximum comfort during the programmed increase and decrease phases.

In OPTI COMFORT mode, the priority is given to anticipating and maintaining the comfort temperature during periods of detected occupancy.

The **OPTI COMFORT** is activated by default.

To find this feature, please refer to the **MYSENSE** mobile application.

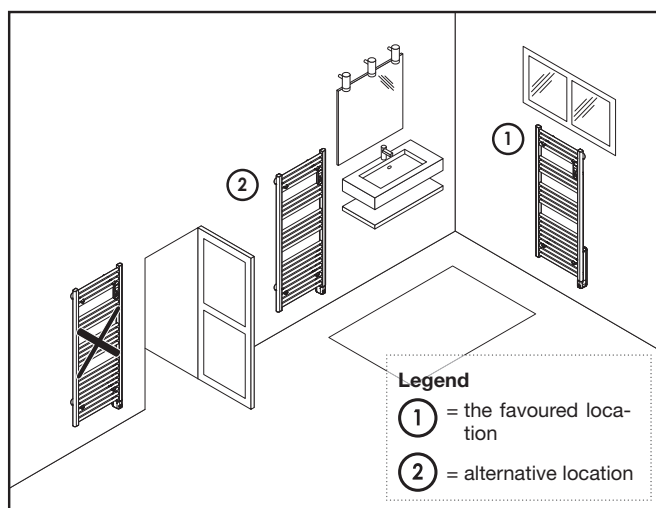
OPEN WINDOW DETECTION, ENERGY SAVINGS

• Important information about the open window detection

Important: The open window detection is sensitive to temperature variations. The device will react to the window openings in accordance with different parameters: temperature settings, rise and fall of temperature in the room, the outside temperature, the location of the device...

If the device is located close to a front door, the detection may be disturbed by the air caused by opening door. If this is a problem, we recommend that you disable the open window detection mode (see page 19).

You can, however, use the manual activation (see page 16).



• Overview

Lowering temperature cycle to Frost protection during aeration of a room by opened window. You can access the opened window detection from the Auto, Comfort+, Comfort and Eco mode.

Two ways to enable the detector:

- **Automatic activation**, the lowering temperature cycle starts as soon as the device detects a temperature change.
- **Manual activation**, the cycle of lowering temperature starts by pressing a button.



• Automatic activation (activated by default):

To disable this mode, (accessible in the advanced settings on the application): see page 18.

The device detects a temperature fall. An opened window, a door to the outside, can cause this temperature fall.

Note: The difference between the air from the inside and the outside must cause a significant temperature to fall to be perceptible by the device. This temperature drop detection triggers the change to Frost protection mode.

• Manual activation:

From the Auto, Comfort+, Comfort, Eco, or Frost protection mode, press  for 5 seconds. The device will switch on Frost protection mode and the display shows a time and .



DUAL OPTIMISATION FEATURE (AVAILABLE FROM THE MYSENSE APPLICATION)

Dual feature optimisation, priority to comfort or energy savings, the choice is yours: Depending on various parameters: room inertia, ambient temperature, desired temperature, the towel rails calculates and optimises the programming for each heating period whether set to Comfort or Savings (Eco):

- In **OPTI ECO mode (efficiency priority)**, the towel rails inbuilt algorithms will calculate the best compromise in order to guarantee maximum energy savings throughout the programmed increase and decrease phases.

In this mode, a slight drop in the temperature level at the beginning and end of the comfort period is allowed to maximize energy

- Aeration cycle time

The frost protection mode is active for an adjustable time of 30 minutes by default. The countdown of the aeration cycle begins and the time elapses. You can temporarily change the duration of the aeration cycle from 5 to 90 minutes, by intervals of 5 minutes by pressing (−) or (+). This modification will only be valid for this active, and therefore non-recurring, aeration cycle (see page 18 to permanently change the duration of the aeration cycle).

- Stopping the aeration cycle

- **Manual shutdown:** At any time, you can stop the aeration cycle by pressing (M).

- **Automatic shutdown:** At the end of the countdown, the aeration cycle stops.

When the aeration cycle is stopped, the device automatically returns to the original operating mode (active mode before the aeration cycle activated).

Note: In automatic activation, if a sufficient rise in temperature is perceived, the device can return to the original mode (active mode before the opened window detection).

OCCUPANCY DETECTION, ENERGY SAVINGS

• Important information about the occupancy detection

The occupancy detector is sensitive to temperature variations and light. It is likely to be disturbed by the following items:

- Hot or cold sources such as forced air vents, lights, air conditioners.
- Reflective surfaces such as mirrors.
- Animal crossing in the detection area.
- Objects moving with the wind like curtains and plants.

Disable the occupancy detection if your towel rails was installed near one of these.

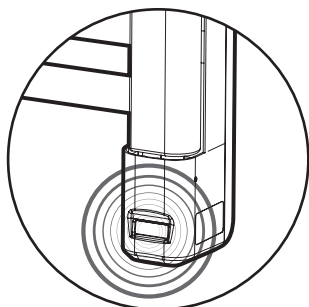
To disable the occupancy detection, see page 17.

Note: The detection range varies depending on the ambient temperature.

• Overview

ARUM fits your lifestyle while keeping your power consumption under control.

With its front infrared sensor, ARUM smartly optimises the management of heating: it detects movement in the room where it is installed and in case of absence, automatically performs a progressive lowering of the setting temperature resulting in: energy savings. To ensure proper operation do not block the sensor's field of view by any obstacle (curtains, furniture...).



| Unoccupied periods* | Lowering setting temperature* |
|---------------------|-------------------------------|
| 20 minutes | Comfort -1°C |
| 40 minutes | Comfort -1.5°C |
| 1 hour | Comfort -2°C |
| 72 hours | Frost protection |

* Unchangeable factory settings

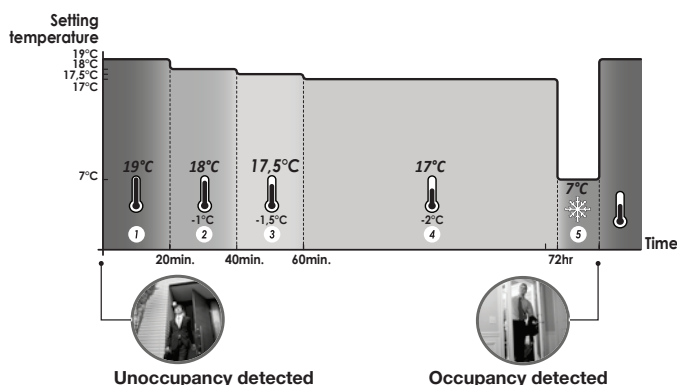
Note: When presence is detected in the room, the device automatically returns to the initial mode.

Remarks:

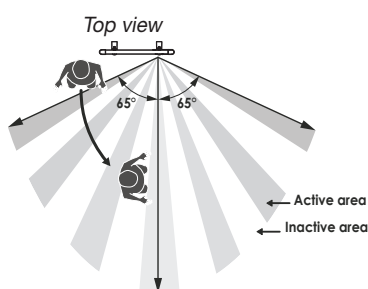
By default, when the sensor is enabled and detects movement in the room, the display lights up for a few seconds then turns off. To remove the backlight when a presence detection is detected, refer to the user settings of your **MYSENSE** application.

• Operating

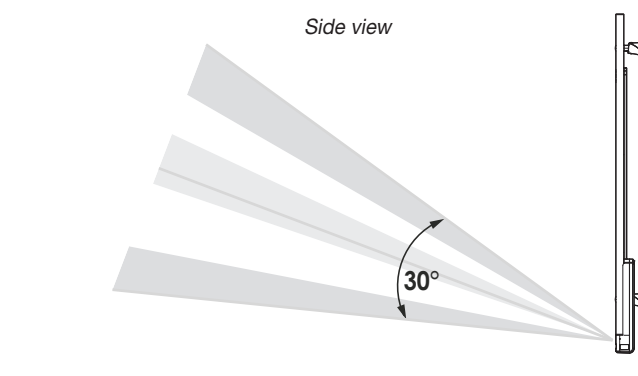
Example of reduction with a Comfort setpoint temperature of 19°C.



• Divisions of the detection zone



Detection zone, for an ambient temperature of 19°C. The detection zone is divided into active and inactive areas. A person that crosses the area will be detected by the infrared sensor.



INFORMATION ABOUT REMOTE CONTROL BY PILOT WIRE (IF CONNECTED)

• Overview

Your heating device can be controlled by a central control unit through a pilot wire to an external energy manager (central programming unit, load shedder etc). In which case the commands carried on the pilot wire are only taken into account in Auto mode.

In general, the pilot wire makes it possible to externally impose a lowering of the temperature set point, combined with internal programming and occupancy detection.

If several lowering requests appear simultaneously, priority is given to the lowest temperature setpoint, thus maximizing savings (see information on priorities for different modes beside).

When a signal is sent from the pilot wire, the self-learning optimisation function is suspended.

Below are the different views of the display for each order sent by pilot wire:

Examples with a Comfort setpoint temperature of 19°C



Pilot wire = **Comfort**



Pilot wire = **Eco**
(Comfort -3.5°C)



Pilot wire = **Eco - 1**
(Comfort - 1°C)



Pilot wire = **Eco - 2**
(Comfort - 2°C)



Pilot wire = **Frost protection**
7°C

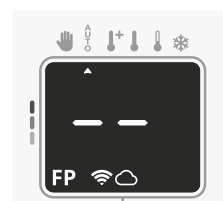


Pilot wire = **Stop**
(Heating standby mode)

- | | |
|-------------------------------|--------------------|
| + 7 day and daily programming | = Comfort |
| + Pilot wire 6 orders | = Eco |
| + Occupancy detector | = Frost protection |
- = Frost protection**



- | | |
|-------------------------------|-------------------------------|
| + 7 day and daily programming | = Eco |
| + Pilot wire 6 orders | = Stop (heating standby mode) |
| + Occupancy detector | = Eco |
| + Open window detector | = Frost protection |
- = Heating standby mode**



INFORMATION ABOUT PRIORITIES BETWEEN THE DIFFERENT MODES

● Principle

In Comfort+, Comfort, Eco and Frost protection mode, only orders of the occupancy sensor and those of the opened window sensor will be considered.

In Auto mode, the towel rails can receive different orders coming from:

- 7 day and daily programme integrated (Comfort or Eco orders) ;
- Pilot wire 6 orders, if connected to a central control unit ;
- Opened window detector ;
- Occupancy detector.

In general, it is the lowest received order which prevails.

If an open window detection or an occupancy absence of more than 72 hours is detected, switching to frost protection takes precedence unless a load shedding order is present on the pilot wire (see page 20).

Special case of self-programming where the temperature level in the room is decided according to the learning of the lifestyle and the optimisation mode selected (Opti Comfort or Opti Eco):

- During the programmed passage in period Eco, if a presence is detected in the room, it will be taken into account and the appliance automatically switches to Comfort mode.
- During the programmed passage to the Comfort mode period, the absence detection system is temporarily suspended (30 minutes).

● Examples

- | | |
|-----------------------------|-----------|
| 7 day and daily programming | = Comfort |
| + Pilot wire 6 orders | = Eco |
- = Eco**



SETTINGS

The remote control has been designed to provide quick access to essential features and settings used in everyday life:

- Display of the setting temperature.
- Adjustment of setting temperatures.
- Manual and temporary exemption override to a temperature.
- Change of mode.
- Start of Boost.
- Manual window opening detection.
- Child anti-tamper.
- Pairing.

More advanced settings and features are available in the **MYSENSE** application which can be download for free from the App Store and Google Play Store.

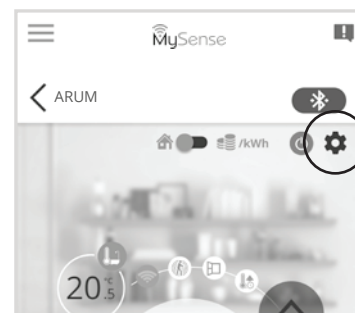


Download the application on Apple Store



Download the application on Play Store

User, advanced and expert settings are available in the **MYSENSE** application by clicking on



3 levels of settings are available from application, see below:

USER SETTINGS (AVAILABLE FROM THE MYSENSE APPLICATION)

● Holidays mode:

You can program an absence period during which your installation will be protected from frost. At the end of this period, the device will return to Auto mode. This guarantees you maximum savings during your holidays and an optimal level of comfort when you return.

The holiday mode can only be activated, deactivated and adjusted via the **MYSENSE** application.

Once you have set the number of days of holiday on the mobile application, the remote control automatically displays and alternates with the countdown of the remaining days until your return.

Tip: It is advisable to set a return date on a day prior to the actual date. In this way, you will find the right temperature when you return. Example: if you return from vacation on February 20, schedule a return to February 19 and have the right temperature on your return!

• Resetting user settings:

To reset the user settings, you must press and hold the 2 receiver buttons on the side of the device simultaneously for 5 seconds.


The buttons will flash alternately in orange and the device will emit a long beep to notify the user settings reset. Then the device will return to the default active mode.

• If the settings lock is activated, only the following settings will be reset:

| Settings | Factory settings |
|--------------------------------------|------------------|
| Comfort setting temperature | 19°C |
| Comfort+ setting temperature | 21°C |
| Eco setting temperature | 15,5°C |
| Frost protection setting temperature | 7°C |

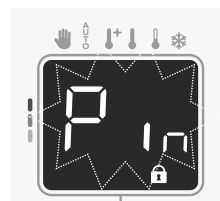
• If the settings lock is deactivated, the following settings will be reset:

| Settings | Factory settings |
|--------------------------------------|------------------|
| Comfort setting temperature | 19°C |
| Comfort+ setting temperature | 21°C |
| Eco setting temperature | 15,5°C |
| Frost protection setting temperature | 7°C |
| Active operating mode | Auto |
| Active programme | Auto-programming |
| Backlighting | 100% |
| Brightness | 50% |
| Boost duration | 60 min. |

- When the PIN CODE is enabled, the padlock symbol  appears on the display to indicate that a lock has been set up.



- To access a setting locked by PIN code, the lock symbol appears and **PIN** flashes for 2 seconds.



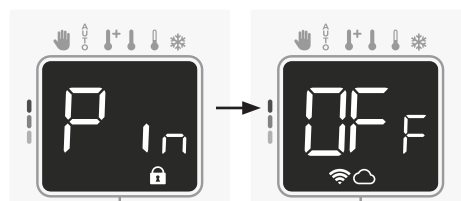
• PIN code initialisation

By default, the PIN code is not enabled.

Press **M** and **OK** simultaneously for 5 seconds on the remote control to initialise the PIN code.



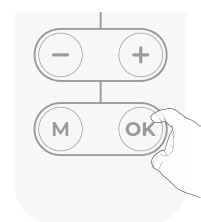
1- The inscription **PIN** appears briefly on the display and then **OFF** is displayed.



2- By default registered PIN code is 0000. Press **-** or **+** to select 0. Press **OK** to confirm.



3- For others numbers, select 0 by press **OK**. When 0000 appears, press on **OK** again to save.



ADVANCED SETTINGS (INSTALLER OR ADVANCED USERS)

PIN CODE LOCK

• Overview

Your heating device is protected by a safety code against non-authorized use. The PIN code (Personal identity Number) is a customisable 4 numbers code. When enabled, it prevents access to the following settings:

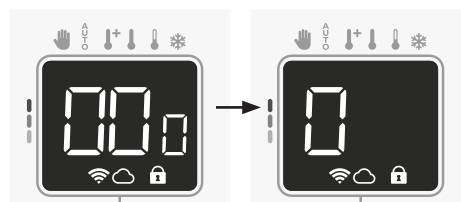
- **Selecting the Comfort and Comfort+ modes:** The access to the Comfort and Comfort+ modes is forbidden, only the Auto, Eco and Frost protection modes are available.

- **Changing the Eco and Frost Protection setpoint temperatures**

3 important steps are needed for the first use of the pin code lock:

- 1- **PIN code initialisation**, enter the preset PIN code (0000) to access to the feature.
- 2- **Activation of the PIN Code** to lock settings which will be protected by the PIN code.
- 3- **Customizing the PIN code**, replace 0000 by the customized code and lock the settings, which will be protected by the PIN code.

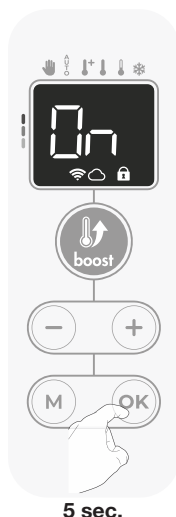
Note: As the display has 3 digits, the PIN code is displayed on 2 displays. The 4th number of the PIN code appears to the left of the 2nd display as shown below.



The PIN code is initialised, the device will automatically suggest you the following setting: activation of customising or activation of the PIN code.

• Customising and activating of the PIN code

- 1- **Pin** appears on the display.
Press **OK** for 5 seconds.



- 1- **Pin** appears on the display then enter the PIN code using **-** and **+**. Press **OK** to save.

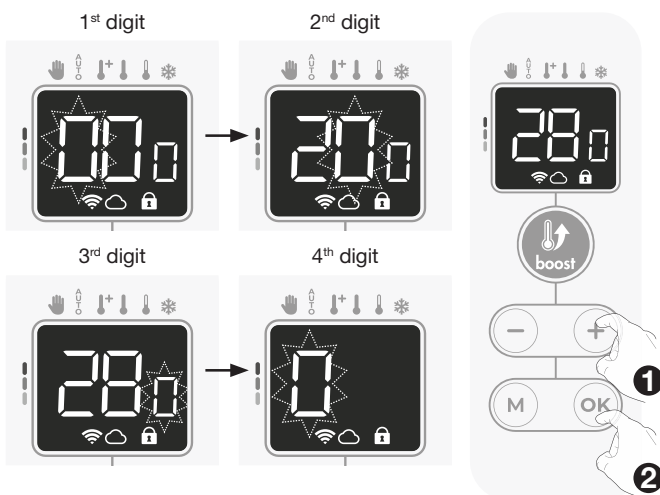


- 2- Press **-** or **+** to disable PIN code.
Pin = PIN code enabled.
OFF = PIN code disabled.

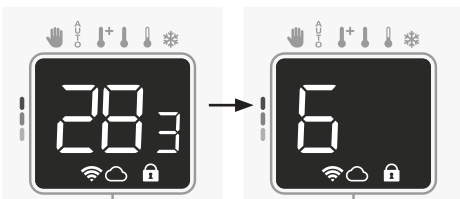


- 3- Press **OK** to save. The device automatically returns to the current operating mode.

- 2- The 0000 code appears and the first number blinks. Press **-** or **+** to select the first desired number then press **OK** to save. Repeat this operation for remaining 3 numbers.



- 3- Then press **OK** to save the PIN code.
The personalised code appears on 2 displays, in our example the PIN code is 2836.

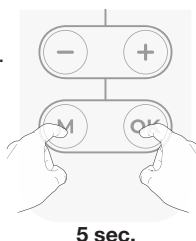


- 4- **Pin** appears again on the display.
Press **OK** to activate the PIN code you have just personalised.
The device automatically returns to the current operating mode.
The PIN code is enabled. Any modification of settings listed in "Overview" is now impossible.
To access the locked settings, it will be necessary to deactivate the PIN code.



• Deactivation of the PIN code

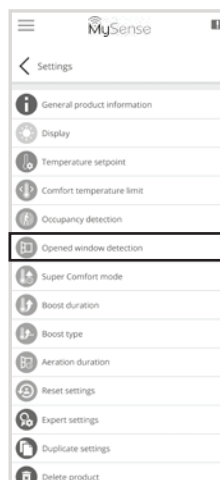
- Press **M** and **OK** simultaneously for 5 seconds.



OTHER SETTINGS AVAILABLE FROM THE MYSENSE APPLICATION

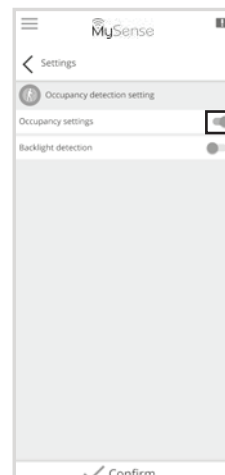
The advanced settings are as follows:

- **Open window detection:** Activation and deactivation of the automatic window opening detection when the device detects a rapid drop in temperature and goes into frost protection mode.
Go to the product settings on the **MYSENSE** app and click on *Opened window detection*, from here you can choose to activate or deactivate the feature.



- **Occupancy detection:** Activation and deactivation of the occupancy detection in the room. If this setting is deactivated, the device will no longer be able to provide self-programming by learning the rhythm of life.

To activate or deactivate this feature, go to your product settings on the **MYSENSE** application and press *Occupancy detection*.



- **Comfort setting temperature limitation:** You can limit the setting temperature adjustment range by setting a maximum and/or minimum stop to prevent unintentional temperature changes above and below these limits.

- **Low temperature limitation:** A minimum stop is set to prevent the temperature from falling below the setpoint. You can vary it from 7°C to 15°C by intervals of 1°C.
- **High temperature limitation:** A maximum limit stop is installed to prevent the set temperature from being increased above it. You can vary it from 19°C to 30°C by intervals of 1°C.

- **Aeration cycle time:** Duration of the aeration cycle when an open window is detected. You can change it from 5 to 90 minutes by intervals of 5 minutes. The duration of the aeration cycle is preset to 30 minutes, but you can change this via the **MYSENSE** application, by going to the settings of your product, and by clicking on Aeration duration setting.



- **Dual optimisation feature:** Choice between comfort priority, economy priority or deactivation (see page 15).
- **Settings lock:** This lock feature, when activated via the mobile application, prevents access to the following user settings:

On the remote control:

- Selection of Comfort and Comfort+ modes: access to Comfort and Comfort+ modes is not allowed, only Auto, Eco and Frost protection modes are accessible.
- Modification of the pre-recorded setting temperature of the Eco and Frost protection modes.

The settings lock also prevents resetting of the advanced and expert settings.

● Resetting the advanced settings:

To reset the advanced settings, you must press and hold the 2 receiver buttons on the side of the device simultaneously for 10 seconds.

The buttons will flash alternately in orange and the device will emit a long beep to notify the reset of the advanced settings. Then the device will return to the default active mode.

● The following parameters are reset:

| Settings | Factory settings |
|--------------------------------------|------------------|
| User settings | |
| Comfort setting temperature | 19°C |
| Comfort+ setting temperature | 21°C |
| Eco setting temperature | 15,5°C |
| Frost protection setting temperature | 7°C |
| Active operating mode | Auto |
| Active programme | Auto-programming |
| Backlighting | 100% |
| Brightness | 50% |
| Boost duration | 60 min. |
| Advanced settings | |
| PIN code value | 0000 |
| Automatic window opening detection | Enabled |
| Presence/absence detection | Enabled |
| Minimum Comfort setpoint stop | 7°C |
| Maximum Comfort setpoint stop | 30°C |
| Aeration cycle | 30 min. |
| Dual optimisation feature | Opti Comfort |
| WiFi connection | Enabled |
| Locking the settings | Disabled |

EXPERT SETTINGS (AVAILABLE FROM THE MYSENSE APPLICATION)

The expert settings are as follows:

- Ambient temperature sensor adjustment: In which case?

If the temperature measured (measured by a reliable thermometer) is different by at least 1°C or 2°C compared to the set temperature of the towel rails.

The calibration adjusts the temperature measured by the ambient temperature sensor to compensate for a deviation from + 5°C to - 5°C by intervals of 0.1°C.

IMPORTANT: expert settings are reserved for professional installers only; any wrong changes would result in control anomalies.

● Reset experts settings:

To reset the expert settings, you must press and hold the 2 receiver buttons on the side of the device simultaneously for 15 seconds.

The buttons will flash alternately in orange and the device will emit a long beep to notify the reset of the expert settings. The device will then return to the default active mode.

● The following setting will be reset:

| Settings | Factory settings |
|--------------------------------------------|------------------|
| User settings | |
| Comfort setting temperature | 19°C |
| Comfort+ setting temperature | 21°C |
| Eco setting temperature | 15,5°C |
| Frost protection setting temperature | 7°C |
| Active operating mode | Auto |
| Active programme | Auto-programming |
| Backlighting | 100% |
| Brightness | 50% |
| Boost duration | 60 min. |
| Advanced settings | |
| PIN code value | 0000 |
| Automatic window opening detection | Enabled |
| Presence/absence detection | Enabled |
| Minimum Comfort setpoint stop | 7°C |
| Maximum Comfort setpoint stop | 30°C |
| Aeration cycle | 30 min. |
| Dual optimisation feature | Opti Comfort |
| WiFi connection | Enabled |
| Locking the settings | Disabled |
| Expert settings | |
| Calibration of the room temperature sensor | +0.0 °C |

POWER CUT

MANAGEMENT OF POWER SHUTDOWN



Important: the power supply of the device should be cut when working on the electrical system only. The load shedding does not be operated by an additional system with mechanized power shutdown (with contactor...). Unlike pilot wire shedding, the load shedding with frequent mechanized power shutdowns can cause deterioration of the device depending of the quality of switching elements used. This type of deterioration would not be covered by the manufacturer's warranty. If remotely stop or standby orders should be frequently operated, you must use the pilot wire.

IN CASE OF POWER CUT, BACKUP

The device will start up again without any outside input being required – you do not have to do anything. All of the settings and the correct time will be saved. When the main power supply returns, your device will again operate using the correct time and the settings that were programmed before the power cut (as regards desired temperatures, operating modes, programs, etc.). It will start up again in the mode which was active before the power outage.




- **After short power cuts (less than 16hrs)**, the device will start up again without any outside input being required – you do not have to do anything. All the settings and the correct time will be saved. When the main power supply returns, your device will again operate using correct time and the settings that were programmed before the power cut (as regards desired temperature, operating mode, programs, etc.). It will start up again in the mode which was active before the power outage.
- **For longer power supply cuts (more than 16 hrs)**, check the timer setting. All the other settings are automatically and permanently saved.

TROUBLESHOOTING

DIAGNOSIS SUPPORT

• Connection to WiFi, Bluetooth or Zigbee network

When the device's connection to your network has encountered an anomaly:

- if your installation is in a WiFi network:  blink.
- if your installation is in a Bluetooth network only:  blink.
- if your installation is in a Zigbee network:  blink.

This flashing indicates that the device cannot connect to the network.

You may have entered your WiFi key numbers incorrectly into the application.

- Check that the WiFi settings, SSID or your password have not changed.
- Check that your smartphone application has Bluetooth enabled and is close to your device.
- Check that your device and your internet box or home automation box are plugged in and switched on.
- If your installation is in a WiFi or Bluetooth network, restart the pairing (see page 11).
- If your installation is in a Zigbee network, restart the pairing (see page 11).



This will restart the pairing procedure to the WiFi, Bluetooth or Zigbee network. Follow the instructions in the **MYSENSE** application associated with the Zigbee product.



The device does not connect to the WiFi network.

The ARUM only works with a 2.4GHz network. Following an update of your Internet box, it is possible that a 5GHz network has been created.

Please check that network is 2.4GHz.

If this is not the case, please refer to the user manual of your internet box to change it or call your internet service provider to make the change.

• Updating the device software

We periodically perform software updates to optimise the performance of your device. You don't have to do anything. When you update, all your settings are preserved.

• Heating body

The device doesn't heat :

- Check the position of the circuit breaker/power supply protection fuse in your fuse board.
- Check the active operating (see page 12), you could be in Standby mode or in Auto mode, with an imposed stop order by the energy manager (see page 18).
- Check the ambient temperature using a thermometer: if it is elevated, the device has reached the desired temperature setting, therefore it is normal that it doesn't heat more.
- Turn off the power to the device for 5 seconds by turning on the circuit breaker of the power circuit at the electrical panel.

The room temperature is not high enough, the device is not providing enough heat:

- Check the active operating mode (see page 12), you may be in Eco, Frost protection, Standby or in Auto mode, with an imposed stop order by the integrated programming or the energy manager. Activate the permanent Comfort mode.
- Check the active temperature setting and increase it if necessary (see page 13).
- Check the adjustment of the set temperature limit (see page 19).
- If the problem persists, check the towel rails sizing compared with the room dimension and insulation.
- The temperature sensor may not be calibrated correctly (see page 20).

The device heats up continuously and is very hot on the surface:

- Check that the device is not influenced by a airstream.
- Check that the set temperature has not been changed.
- In operation, it is normal that the device surface is hot, the maximum surface temperature being limited.
- If the problem persists, check the towel rails sizing compared with the room dimension and insulation.

Several situations can generate a slight metallic slam:

- The device is fixed on an irregular wall.
- The device is fixed on an uninsulated wall.
- The device is in a stream of a cold air.
- The device is badly positioned in the wall-mounting brackets.
- Heat up or sudden temperature change.

Important: Failure of the internal thermal limit due to overheating caused by the user e.g. covering with clothing is not covered by warranty.

• Controller

The ambient temperature is lower than the set temperature:

- Check the programming in your **MYSENSE** application. You may be in a programmed Eco period.
- Otherwise, switch the power off for 5 seconds at the mains supply circuit then switch back on again.

The ambient temperature measured by a thermometer doesn't correspond to the set temperature after several hours:

- An offset is always possible, you can refine the device setting (see page 20).

The device doesn't heat while the heating indicator is on:

- The right light is on, the appliance remains cold, contact your installer.

The device doesn't automatically lower the temperature in the absence period:

- Check that presence/absence detection is activated (refer to the product settings in your **MYSENSE** application).
- Check that nothing disturbs the operation of the occupancy detection (see page 16 et 19).

After a subsequent temperature drop at the opening of a window, the device will not enter in Frost protection mode:

- Check that the automatic mode of the open window detection is enabled (refer to the product settings in your **MYSENSE** application).
- Check the location of your towel rails (see page 4).
- Check that the temperature difference between the room air and outside air is significant. The Frost protection mode is activated if the temperature difference is 1°C per minute for a period of more than 15 minutes.

The device automatically enters in Eco or Frost protection mode in your presence and closed windows:

- If the pilot wire is connected to a central programming via pilot wire, check the programming of the central.
- Disable the automatic open window detection mode (refer to the product settings in your **MYSENSE** application).
- Disable the occupancy detection (refer to the product settings in your **MYSENSE** application).

The device is in self-programming mode and you observe a delay between the active mode Comfort or Eco and your requirement:

- The self-programming works by detecting and learning of your occupancy cycles, the device defines the future program by adapting to the different observations made in occupancy in the previous week. If your lifestyle is very irregular, for example every week is different, it is impossible to determine exactly your requirements in advance. Self-programming, such as weekly and daily programming, can never fully match. In this case, it is advisable to use only the presence/absence detection and to program your device in permanent Comfort (see pages 15 et 18).
- The optimisation feature can generate slight offsets to guarantee the

level of comfort at the right time or to save energy by slightly anticipating an Eco passage.

- Check that the presence/absence detector is not disturbed or blocked by an external (see page 16).

The device is self-programming mode, but no period is programmed:

- Check that the presence/absence detector is not disturbed or blocked by an external source (see page 16).

The towel rails is in self-programming mode but the ambient temperature is not sufficient at the beginning of the period Comfort:

- Check the Eco lowering level (see page 13):
 - If the temperature difference between the two modes Eco and Comfort is higher than 3.5°C, it is considered too high, which explains the temperature difference perceived at the beginning of the Comfort period. It is therefore recommended to set it to its initial value of -3.5°C.
 - If the Eco lowering level is -3.5°C, set it to -2°C to reduce the difference between the Comfort and Eco setpoint temperatures.
- The optimisation feature must be in comfort mode or deactivated.

The device is in Auto mode, remotely controlled by an energy manager or programmer but the programming orders are not executed by the device:

- Make sure the energy manager or programmer is in good condition, refer to the user instructions.
- Change the batteries of the energy manager or the programmer if this one contains it.
- Check the order of priority. The pilot wire may have a lower priority.

No symbol appears on the display:

- Check the position of the circuit breaker/power supply protection fuse in your distribution/fuse board.



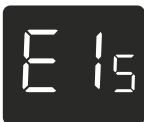
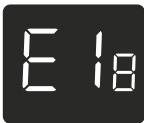
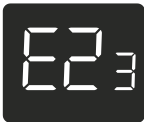
You want to increase or decrease the set temperature but pressing a key on the keyboard has no effect:

- If the padlock symbol is displayed, the keypad lock is enabled. Unlock the keypad as shown in the manual, child anti-tamper section (see page 14).
- Check the lock PIN code and the Comfort setpoint temperature (see Lock PIN on page 18).
- The temperature may be limited by a high or low stop (see page 19).

You made a mistake while setting the advanced settings:

- Just return to the factory settings by going to the expert settings of your product in the **MYSENSE** application. This will erase any programs that you would have implemented.

Error messages:

| Error message | Description | What to do? |
|-------------------------------------------------------------------------------------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Faulty temperature sensor | Turn off the power to the product for 5 seconds by turning on the circuit breaker of the supply circuit to the electrical panel and then reset* |
|  | | |
|  | Anomaly on the presence/absence detector | Turn off the power to the product for 5 seconds by turning on the circuit breaker of the supply circuit to the electrical panel and then reset* |
|  | System anomaly | Turn off the power to the product for 5 seconds by turning on the circuit breaker of the supply circuit to the electrical panel and then reset* |
|  | Memory anomaly | Turn off the power to the product for 5 seconds by turning on the circuit breaker of the supply circuit to the electrical panel and then reset* |

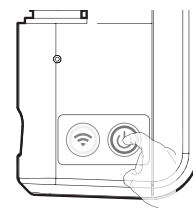
*If the problem persists, then contact your reseller.

TECHNICAL INFORMATION

MAINTENANCE

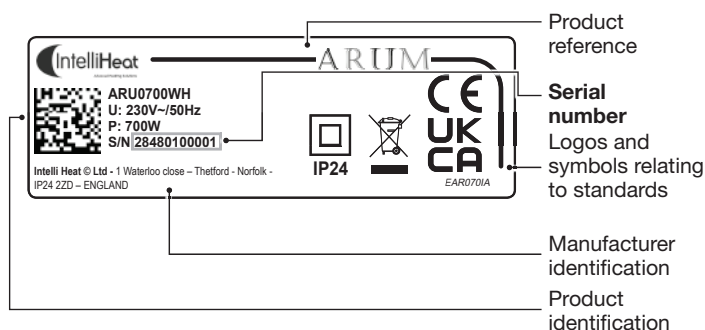
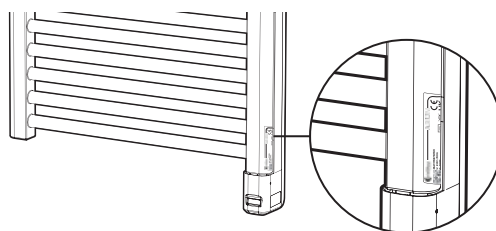
Before any maintenance work, select the standby mode by pressing the right button on the receiver and wait until the device is cold.

The device can be cleaned with a damp cloth; **never use abrasives or solvents.**



PRODUCT LABEL

The product label is the identify card of your device. It contains all information required of its traceability through time.



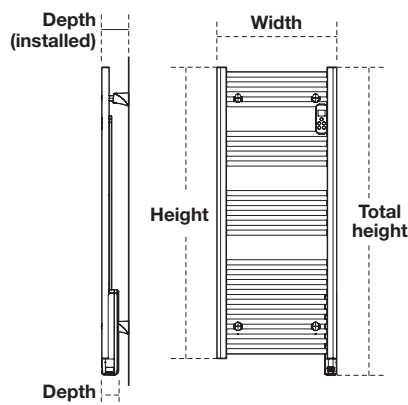
Important: the serial number allow the manufacturer to identify your device. If you contact your installer about the product you have purchased, take the references of your towel rails.

Make sure to keep instructions even after the product installation.

DIMENSIONAL SPECIFICATIONS

| References | Power outputs (W) | Height (mm) | Total height (mm) | Width (mm) | Depth* (mm) | Number of towels spaces |
|---------------------------|-------------------|-------------|-------------------|------------|-------------|-------------------------|
| White version | | | | | | |
| Slim | | | | | | |
| ARUS0300WH | 300 | 650 | 721 | 400 | 71 | 2 |
| ARUS0500WH | 500 | 1070 | 1141 | 400 | 71 | 3 |
| Standard | | | | | | |
| ARU0500WH | 500 | 860 | 931 | 508 | 71 | 2 |
| ARU0700WH | 700 | 1238 | 1309 | 508 | 71 | 3 |
| ARU1000WH | 1000 | 1616 | 1687 | 558 | 71 | 4 |
| Anthracite version | | | | | | |
| Slim | | | | | | |
| ARUS0300AN | 300 | 650 | 721 | 400 | 71 | 2 |
| ARUS0500AN | 500 | 1070 | 1141 | 400 | 71 | 3 |
| Standard | | | | | | |
| ARU0500AN | 500 | 860 | 931 | 508 | 71 | 2 |
| ARU0700AN | 700 | 1238 | 1309 | 508 | 71 | 3 |
| ARU1000AN | 1000 | 1616 | 1687 | 558 | 71 | 4 |

* For the depth of ARUM installed, add 53 to 66 mm at the value of their depth.




Compliance declaration: We hereby declare under our sole responsibility that the products described in these instructions comply with the provisions of Directives and harmonized standards listed below:



- RED 2014/53/EU:
 - Article 3.1a (Safety): EN 60335-1:2012 +A11:2014 +A13:2017 +A1:2019 +A2:2019 +A14:2019 +A15:2021 / EN 60335-2-30:2009 +A11:2012 +A1:2020 +A12:2020 +A2:2022 +A13:2022 / EN IEC 60335-2-43:2020 +A11:2020 / EN 62233:2008
 - Article 3.1b (EMC): ETSI EN 301489-1 V2.2.3 (11-2019)/ ETSI EN 301489-17 V3.2.4 (09-2020)
 - Article 3.2 (RF): ETSI EN 300 328 V2.2.2 (07-2019)
- ROHS 2011/65/EU, amended by Directives 2015/863/EU and 2017/2102/EU : EN IEC 63000:2018
- ERP directive 2009/125/EC: standard 2015/1188/EU.



The symbol , affixed on the product indicates that you must dispose of it at the end of its useful life at a special recycling point, in accordance with European Directive WEEE 2012/19/EU. If you are replacing it, you can also return it to the retailer from which you buy the replacement equipment. Thus, it is not ordinary household waste. Recycling products enables us to protect the environment and to use less natural resources.

TECHNICAL SPECIFICATIONS

General specifications:

- Power supply: 230V +10/-10 % AC 50Hz.
- Radio frequencies Zigbee 3.0, WiFi 802.11 b/g/n, BLE 2.0: 2400 – 2483.5 MHz.
- Maximum RF power transmitted: <20dbm.
- Receiver category 1.
- Consumption in heating standby mode: <1W.
- Proportional Integral Derivate control, with engagement by relay + triac.
- Thermal Safety: The towel rails are equipped with a system to protect the device against overheating.

WiFi specifications

- Use of standard WiFi: IEEE802.11b / g / n 2.4GHz.
- The network name (SSID) must be between 1 and 32 characters without an accent. Spaces and special characters are allowed.
- The WiFi network password must be between 8 and 64 characters without an accent. Spaces and special characters are allowed.
- It is recommended to use the security type WPA2 AES.
- The range of Wi-Fi in a standard home is generally 10-12 metres, depending on the presence of obstacles.
- Limit interference from wireless devices.
- Check that there are no obstacles between the device and the internet router. The WiFi signal strength can be reduced by electrical devices, thick walls, etc.
- The use of a WiFi repeater/extender is recommended for larger homes/buildings.
- Ports **443** and **8883** of your internet box must be open to facilitate proper connectivity of the devices.
- The use of the following domain name is required: *.imhotepcreation.com.

Environment:

- Safety: Classe II, IP44.
- Storage temperature: -20°C to +70°C.

Features :

- Adjustment of the setting temperature from +7°C to +30°C.
- Saving settings users in case of power failure.
- Programming: assigning a Comfort / Eco profile for each day of the week.
- Pilot wire orders.

UKCA declaration of conformity: We, Intelliheat Ltd, hereby declare under our sole responsibility that the products described in these instructions comply with statutory instruments 2017 No. 1206 (Radio Equipment Regulations), 2012 No.3032 (ROHS), 2019 No. 539 (The Ecodesign for Energy-Related Products and Energy Information (Amendment) (EU Exit) Regulations) and following designated standards listed below:



- Radio Equipment Regulations 2017 (2017 No. 1206) :
 - Article 3.1a : EN 60335-1:2012/ AC:2014/ A11:2014/ A13:2017/ A1:2019/ A14:2019/ A2:2019/ A15:2021 , EN 60335-2-30:2009/ A11:2012/ AC:2010/ AC:2014/ A1:2020/ A12:2020/ A13:2022/ A2:2022, EN IEC 60335-2-43:2020/ A11:2020, EN 62233:2008/ AC:2008
 - Article 3.1b : EN 301 489-1 V1.9.2
 - Article 3.2 : EN 300 328 V2.2.2
- RoHS Regulations 2012 (2012 No.3032) : EN IEC 63000:2018

INTELLI HEAT® Advanced Heating Solutions

1 Waterloo close – Thetford - Norfolk - IP24 2ZD – ENGLAND
Email: support@intelligentheat.co.uk - Web site: intelligentheat.co.uk

INFORMATION REQUIREMENTS FOR ELECTRIC LOCAL SPACE HEATERS

| Item | Symbol | | | | | Unit |
|-------------------------------------------------------------------------------------------------------|-------------|----------------|---------------------------------|---------------|---------------|------|
| Heat output | | | | | | |
| Nominal heat output | P_{nom} | ARUS0300/WH/AN | ARUS0500/WH/AN ARU0500/WH/AN | ARU0700/WH/AN | ARU1000/WH/AN | kW |
| | | 0.3 | 0.5 | 0.7 | 1.0 | |
| Minimum heat output (indicative) | P_{min} | ARUS0300/WH/AN | ARUS0500/WH/AN ARU0500/WH/AN | ARU0700/WH/AN | ARU1000/WH/AN | kW |
| | | 0 | 0 | 0 | 0 | |
| Maximum continuous heat output | $P_{max,c}$ | ARUS0300/WH/AN | ARUS0500/WH/AN ARU0500/WH/AN | ARU0700/WH/AN | ARU1000/WH/AN | kW |
| | | 0.3 | 0.5 | 0.7 | 1.0 | |
| Auxiliary electricity consumption | | | | | | |
| At nominal heat output | e_{lmax} | None | | | | kW |
| At minimum heat output | e_{lmin} | None | | | | kW |
| In standby mode | e_{lsB} | 0 | | | | kW |
| Item | | | | | | Unit |
| Type of heat input, for electric storage local space heaters only | | | | | | |
| Manual heat charge control, with integrated thermostat | | | | | | NO |
| Manual heat charge control with room and/or outdoor temperature feedback | | | | | | NO |
| Electronic heat charge control with room and/or outdoor temperature feedback | | | | | | YES |
| Fan assisted heat output | | | | | | NO |
| Type of heat output/room temperature control | | | | | | |
| Single stage heat output and no room temperature control | | | | | | NO |
| Two or more manual stages, no room temperature control | | | | | | NO |
| With mechanic thermostat room temperature control | | | | | | NO |
| With electronic room temperature control | | | | | | NO |
| Electronic room temperature control plus day timer | | | | | | NO |
| Electronic room temperature control plus week timer | | | | | | YES |
| Other control options | | | | | | |
| Room temperature control, with presence detection | | | | | | YES |
| Room temperature control, with open window detection | | | | | | YES |
| With distance control option | | | | | | YES |
| With adaptive start control | | | | | | YES |
| With working time limitation | | | | | | NO |
| With black bulb sensor | | | | | | NO |
| Contact details | | | | | | |
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NOTES

[illegible]

NOTES

[illegible]

PLEASE TAKE NOTE



THIS RADIATOR IS DOUBLE INSULATED

Being double insulated, the cable from this radiator does not carry an Earth wire, it has a Live (brown), Neutral (grey) and a **BLACK** wire, which is a pilot wire. **Never connect the black Pilot Wire to an Earth, Live or Neutral connection**, if this occurs it will destroy the thermostat. The black pilot wire is a signal wire, only to be connected to an external programmer. Please contact INTELLI HEAT for advice on such systems. If the pilot wire is not used it must be properly insulated and isolated to avoid accidental connection.

CLASSE II



Double insulated



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