## 2. SAFETY INSTRUCTIONS

Please read the below instructions thoroughly and study the images carefully.

1.Never use the device that is damaged in any way.

2-Always connect the device to the grounded installation (socket with earth pin).

3-Do not install the heater under an electrical socket point.

4- Your electric heater should be filled with a carefully measured amount of liquid.

In any case which demands its supplementation contact your supplier.

5- The heating element is intended to work in a liquid agent environment. It is advised not to turn the device on in dry conditions for longer than 5 seconds.

6- Electric heater is not a toy. Children under the age of 3 should not be allowed within close proximity of the device without the supervision of an adult.

7- Children should be supervised to ensure that they do not play with the appliance.

8- Children aged 3 to 8 should only be allowed to operate the heater when it has been properly installed and connected. The child must be under adult supervision or have been trained to safely operate the device while understanding the risks.

9- Do not touch metal parts – burning risk. Always make sure that the wire does not touch the heating element that is hot.

10- If the device is used to as a clothes and towel dryer, ensure that the fabrics drying on it have only been washed in water, avoiding contact with with any harsh chemicals.

11- To ensure the safety of very small children, install the towel rail so that the lowest tube is at least 60 cm above the floor.

12- The device should only be installed by a qualified installer in accordance with the applicable regulations regarding safety and all other regulations.

13- All installations to which the device is connected should comply with regulations applicable in the country of installation and use.

14- Extension leads or electric plug adapters should not be used in order to supply power to the heater.

15- The electric installation to which the heater is connected should have the right current differential and overcurrent relay (R.C.D.) OF 30 mA

16- An omni-pole cut-out is required for disconnecting the device on all poles ,via joints positioned at least 3 mm apart.

17- Please check regularly if the power wire is not damaged and if the device can be used in a safe manner.

18- The device must not be connected while being installed. Unplug the device or disconnect the power wire from electrical circuit. Put the casing on the body of the heating element unit before plugging the device. It is necessary to secure the control panel with the right tool in order for the device to work as required

19- Do not open the casing.

20- The device is intended for home use only.

21- This appliance is not intended for use by persons ( including children ) with reduced physical, sensory or mental capabilities or lack of experience and knowledge , unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

22- 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.

23- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

24- Before installing or removing the device, make sure it is disconnected from the power source.

25- Do not open the device-any interference with internal components will invalidate the warranty.

26- Regularly check the device for damage to ensure it works and safe to use.

27- The device must be disconnected from the mains during cleaning and maintenance.

## 3- INTENDED USE OF DEVICE

Reina heating elements and control units are electric heating devices and are intended for installation and use in towel rails used for drying towels or clothes.

They are not intended for room heating.

Heating elements are intended to operate in closed installation (not open to atmosphere) only.

## 4- TECHNICAL INFORMATION

| | |
|---|---|
| Electric supply | 230/ 50 Hz |
| Heating output<br>available | 150, 200, 250,300, 400,500, 600, 700, 750, 800, 900 |
| Device protection<br>class | Class I & Class II |
| Towelrail connection | G 1/2" |
| Casing protection mark | IP44 |
| Certification | These products are in compliance with 2014/30/EU Electromagnetic Compatibility Directive and 2014/35/EU Low Voltage Directive<br>These products carry CE mark accordingly. |

# ELECTRIC HEATING ELEMENT

## Instruction Manual

## Important Information

**NEVER SWITCH THE ELEMENT ON UNLESS IT IS FULLY INSTALLED AND COMPLETELY IMMERSED IN FLUID. THE ELEMENT WILL BE DESTROYED IF IT IS OPERATED IN AIR.**

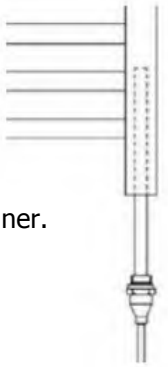
- Ensure the EARTH terminal has been connected.
- Ensure the input voltage conforms to the grid standard.
- Ensure the O-ring is present on the element and Tee piece (if in use).
- This product should be installed by a trained electrician.
- Ensure there are no leaking joints after the unit is switched on.
- Ensure the towel rail is filled approximately 90% with liquid before switching the unit on.
- For dual-fuel installations, ensure the element is not used when the central heating is on.
- Ensure the towel rail is vented shortly after switching the unit on.
- For installations connected to the central heating, ensure the system is thoroughly flushed before installation, to remove any metal, flux and foreign residue. Not doing so can result in pinhole leaks and will not be covered under warranty.

## Tech Information

| | |
|---|---|
| Voltage | 220-240V AC/50Hz |
| Wattage | 100-1000W |
| IP rating | IP55 |
| Thread size | G ½ " |
| Application | This element is not suitable for dry heating. It must be submerged in liquid (either in a liquid-filled electric-only installation, or as part of a dual-fuel installation). |

# INSTALLATION

**'Electric-only' Element Installation**

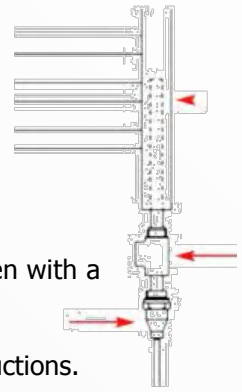


1. IMPORTANT. Always switch off the power supply at the mains during installation and maintenance. We recommend that the fuse is withdrawn or circuit breaker switched off at the distribution board while work is in progress.
2. The element must be fitted to the towel rail before mounting the rail on wall.
3. Ensure all threaded joints are wrapped with PTFE tape.
4. Ensure the O-ring is present on the element thread.
5. Insert the element into the chosen side of the rail, bottom only, and tighten into place using a spanner.
6. Fill the rail approximately 90% with liquid, to allow for expansion.
7. Insert the blanking plug (with PTFE tape) into the open tapping, and tighten with a spanner.
8. Fit the rail to the wall, following the manufacturers fitting instructions.
9. Connect the element to the mains power using a BS fused connection unit.

The wires should be connected as follows: Blue (Neutral), Brown (Live), Green/Yellow (Earth).

10. The fused connection unit should be fitted with a 5 Amp fuse to BS1362.
11. Shortly after switching on the unit, ensure the towel rail is bled for any excess air.
12. Check for leaks and re-tighten joints as necessary.

**'Dual-fuel' Element Installation**



1. IMPORTANT. Always switch off the power supply at the mains during installation and maintenance. We recommend that the fuse is withdrawn or circuit breaker switched off at the distribution board while work is in progress.
2. The element must be fitted to the towel rail before mounting the rail on wall.
3. Ensure all threaded joints are wrapped with PTFE tape.
4. Ensure the O-ring is present on both the element and Tee piece threads.
5. Insert the element into the Tee piece and tighten with a spanner.
6. Insert the Tee piece with electric element into the chosen side of the rail, bottom only, and tighten with a spanner.
7. Fit the rail to the wall and connect to the central heating, following the manufacturers fitting instructions.
8. Once the rail is mounted on the wall and connected securely to the central heating system, open the radiator valves and allow the rail to fill.
9. Once the rail has filled with water, with the central heating OFF, use the air vent to purge any excess from the rail.
10. Connect the element to the mains power using a BS fused connection unit.

The wires should be connected as follows: Blue (Neutral), Brown (Live), Green/Yellow (Earth).

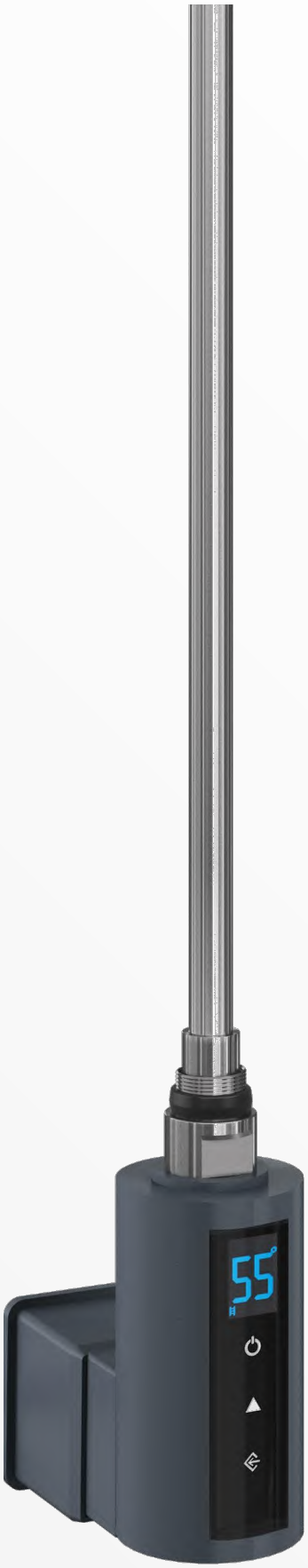
11. The fused connection unit should be fitted with a 5 amp fuse to BS1362.
12. Shortly after switching on the unit, ensure the towel rail is bled again for any excess air.
13. Check for leaks and re-tighten joints as necessary

# Touch Thermostatic Element

## Instruction Manual


**WARNING: Read these instruction carefully before using the appliance**

# COLOR OPTIONS




ANTHRACITE


CHROME


WHITE


BLACK

# SAFETY INSTRUCTIONS

**Please read this instruction carefully before using or installing the heating element.**

• Children of less than 3 years should be kept away unless continuously supervised. Children aged from 3 years and less than 8 years shall only be allowed to operate the heater when it has been properly installed and connected. The child must be under adult supervision or have been trained to safely operate the device while understanding the risks.

• Some parts of this product can become very hot and cause burns. Do not touch the surface when in operation. Do not install close to curtains or other combustible materials. Particular attention should be given where children and vulnerable adults are present.

• The element must be installed by a licensed electrician in accordance with current IEE wiring regulations. Ensure that the electrical supply is fully isolated before commencing installation or servicing. The element must be connected to a 220-240 Volt AC mains power supply via a fused spur cable outlet, and must be earthed.

• The element must NEVER be used unless it has been professionally installed inside a towel rail filled with fluid to the correct level. The element will cease functioning if it is not fully submerged in a suitable fluid during operation.

• The recommend quantity of fluid with the towel rail is 90% of the unit's total volume. If you are installing the element in a towel rail that has been pre-filled for use with this element, do not allow fluid to escape when the element is fitted. In the case of loss of heating fluid, contact your supplier.

• Do not use the device if you detect damage to the mains plug or power cable. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons to avoid a hazard. All repairs and servicing must be carried out by a qualified person.

• The towel rail in which the element is installed must be permanently fixed to the wall. Do not fit the towel rail below or in front of an electric socket.

• The element must be placed where the switches and controllers cannot be touched by a person in a bathtub or shower.

• The element must be disconnected from the mains during cleaning and maintenance.

• Never attempt to disconnect the control head from the heating element. The product is an integrated unit that has been factory sealed.

• Do not open the element — any interference with internal components will invalidate the warranty.

• If the towel rail is used to dry clothing or towels, ensure the fabrics have only been washed in water, to prevent the device coming into contact with harsh chemicals.

• The unit is not to be used by persons (including children) with reduced physical, sensory or mental capabilities. Such persons may only use the device if they are supervised by a responsible person.

## TECHNICAL INFORMATION

| | |
|---|---|
| Voltage | 220-240V AC / 50Hz |
| Wattage | 100-1000W |
| Temperature setting | 30-70 °C (fluid)<br>15-30 °C (ambient) |
| Frost Protection | 7°C |
| IP rating | IP44 |
| Timer mode | Boost 2/4 hours |
| Appliance class | Class I |
| Thread size | G ½ " |
| Application | This element is not suitable for dry heating. It must be submerged in liquid (either in a liquid-filled electric-only installation, or as part of a dual-fuel installation). |

## PANEL DESCRIPTION

# OPERATION INSTRUCTION

## Standby Mode

Once the thermostatic heater is power on, the unit will go into standby mode immediately. An arrow signal ▼ will show on the screen.

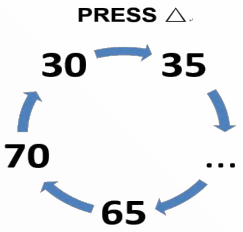
Antifreeze function: When the heater is in stand-by mode, it will automatically default to frost protection state. It means that the fluid temperature falls below 7°C, the heater will be active to work automatically.

## Work Mode

Once the thermostatic heater is in standby state, by pressing ⏻ it will enter into work mode.

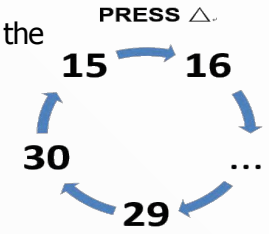
**Liquid temperature control:**

The first indicating temperature on display is always 40°C. You can set your desired temperature by pressing ▲ key on the control, when it goes to 70°C, it will recirculate from 30°C to 70°C. 5°C increments between 30°C and 70°C. For example:




**Ambient temperature control:**

If you want to control the ambient temperature from the thermostatic controller, press the button ⏎ to AC state shown on the display, then press ▲ on the controller, it is at ambient control condition. 1°C increments between 15°C and 30°C, when it goes to 30°C, it will recirculate from 15°C to 30°C. For example:




If the enter target temperature is higher than the current temperature, a flashing sun symbol will appear on the display. If the actual temperature is falling in order to reach the target temperature, the sun symbol will flash quickly. Instead, the sun symbol will disappear when the target temperature is reached. If no sun symbol on the display, it means that the actual temperature is same as setting temperature shown on the display.

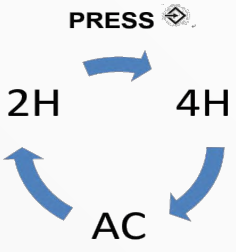
A: radiator temperature control

B: room temperature control

## Boost Mode

If you need a short boost Maximum heating performance, then press the button ⏎ on the control unit, boost time option is 2 and 4 hours.

The element will stay working at the setting boost hours at maximum performance. After heating at the setting hours, it will revert back to previous chosen mode and temperature.



# AUTOMATIC SETTINGS

## Over heated protection

If the automatic control system is faulty and the water temperature in the radiator is increasing in an uncontrolled manner, the system has two safety mechanisms to prevent excessive pressure in the radiator. Firstly, the entire system is completed shut down electronically when a water temperature of 95°C is reached. If this protection mechanism fails for whatever reason, a simple downstream thermal fuse ensures complete shut-down, and the heating rob dies.

## Freeze protection

Once the control unit is in "STANDBY" mode(Power on), The control unit has an automatic freeze-protection setting. The default setting for frost protection is between ＜7°C and 15°C. If the radiator temperature falls below 7°C, the heating system switches on automatically, heats the liquid in the radiator to 15°C and then switch off again. An Ice ❄ appears on the display. And it will work as a circulation way.

## Room temperature compensation

As the NTC that measures the room temperature and feeds back information to the controller is located on the back of the controller, it is close to the warm radiator. The measured temperature will therefore not accurately reflect the temperature in other part of the room. For this reason, there is an automatic temperature adjustment of -3°C in the control unit.

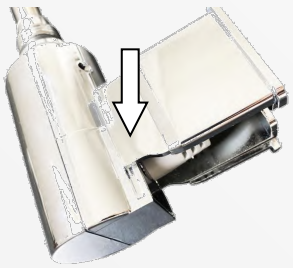
## Open window/open door detection

This automatic function detects when the temperature falls by 2°C or more over a short period of time. In this case, the system assumes that this reduced temperature is due to opened windows or open doors, "**OP**" will be displayed on the controller unit and heating system is switched off automatically and will be active to heat automatically once the temperature is detected back to stable condition .

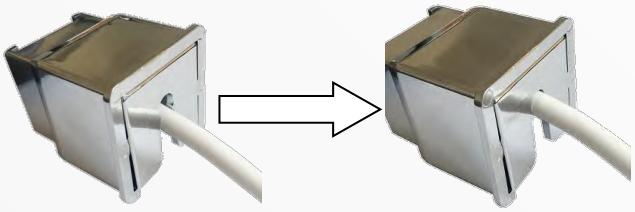
# INSTALL THE CABLE MASK

**How to install the cable mask to the element box after installing the element to the towel radiator**

Step 1: Slide the decorative cable mask into track on the back of element box



Step 2: Lock the cable to the hole on the mask



# INSTALLATION

These are general-purpose instructions for fitting your element into a suitable towel rail. Always check with the manufacturer to ensure the product is suitable for use with the element, and follow any additional installation guidance provided with the unit. Installation must be completed by a qualified electrician. Do not attempt installation DIY.

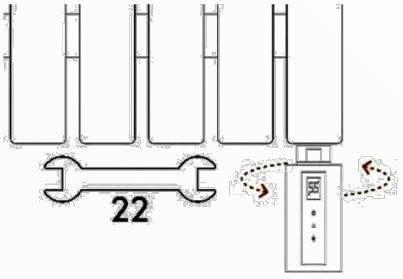
**'Electric-only' Element Installation**

1. IMPORTANT. Always switch off the power supply at the mains during installation and maintenance. We recommend that the fuse is withdrawn or circuit breaker switched off at the distribution board while work is in progress.
2. The element must be fitted to the towel rail before mounting the rail on wall.
3. Ensure all threaded joints are wrapped with PTFE tape.
4. Ensure the O-ring is present on the element thread.
5. Insert the element into the chosen side of the rail, bottom only, and tighten into place using a spanner.
6. Fill the rail approximately 90% with liquid, to allow for expansion.
7. Insert the blanking plug (with PTFE tape) into the open tapping, and tighten with a spanner.
8. Fit the rail to the wall, following the manufacturers fitting instructions.
9. Connect the element to the mains power using a BS fused connection unit.

The wires should be connected as follows: Blue (Neutral), Brown (Live), Green/Yellow (Earth).

10. The fused connection unit should be fitted with a 5 Amp fuse to BS1362.
11. Shortly after switching on the unit, ensure the towel rail is bled for any excess air.
12. Check for leaks and re-tighten joints as necessary.

**'Dual-fuel' Element Installation**




1. IMPORTANT. Always switch off the power supply at the mains during installation and maintenance. We recommend that the fuse is withdrawn or circuit breaker switched off at the distribution board while work is in progress.
2. The element must be fitted to the towel rail before mounting the rail on wall.
3. Ensure all threaded joints are wrapped with PTFE tape.
4. Ensure the O-ring is present on both the element and Tee piece threads.
5. Insert the element into the Tee piece and tighten with a spanner.
6. Insert the Tee piece with electric element into the chosen side of the rail, bottom only, and tighten with a spanner.
7. Fit the rail to the wall and connect to the central heating, following the manufacturers fitting instructions.
8. Once the rail is mounted on the wall and connected securely to the central heating system, open the radiator valves and allow the rail to fill.
9. Once the rail has filled with water, with the central heating OFF, use the air vent to purge any excess from the rail.
10. Connect the element to the mains power using a BS fused connection unit.

The wires should be connected as follows: Blue (Neutral), Brown (Live), Green/Yellow (Earth).

11. The fused connection unit should be fitted with a 5 amp fuse to BS1362.
12. Shortly after switching on the unit, ensure the towel rail is bled again for any excess air.
13. Check for leaks and re-tighten joints as necessary

## MAINTENANCE

- Before performing maintenance, always unplug the unit from the mains system.
- Periodically check the fluid level in the towel rail and ensure the heating element is completely submerged.
- Clean the product with a dry or damp cloth. If necessary, use a very small amount of detergent, ensuring that it contains no solvents or abrasives

## NOTES PRIOR TO REMOVAL

- Before dismantling permanently, disconnect the heating element from the mains and ensure that the towel rail is not hot.
- Be aware. A towel rail filled with liquid can be very heavy. When moving the towel rail, ensure that you take the necessary safety precautions.
- Before disassembly, close the appropriate valves and drain the towel rail completely to avoid causing any damage.

## PRODUCTION DISPOSAL

- This product should not be disposed of as general waste but should be brought to the appropriate collection point for re- cycling of electric and electronic devices. This information is provided by the sign on the product, user manual and packaging. Information on the appropriate point for used devices can be provided by your local authority, product distributor or the store from where the product was purchased. Thank you for your effort towards protecting the environment.

## 4-INSTALLATION OF HEATING ELEMENT

**Installation for these models ;**

- Standard Electric Element (ELM/S)
- Mini Round Thermostatic Control Unit (ELMMRN)
- Weekly Thermostatic Control Unit (ELMWKY)

WARNING! The device must not be connected to electricity during installation. unplug the device prior to installation.

WARNING! Please take every precaution when filling the towel rail in order to avoid being burnt by hot liquid

WARNING! Do not switch the heating element on if it is not fully immersed in the towel rail.
WARNING!
Do not install the heating element by turning the enclosure itself!
Tightening of the unit should be made by the help of wrench!

WARNING! Remove the protective coating on the plastic enclosure before use!

WARNING! For IP44 Protection the heating element assembly must be made together with the special gasket given inside the package.

WARNING! Protective earthing conductor (yellow & green wire) of control unitshould be connected to earthing wire of the heating element .This connection is necessary secure the earthing continuity.

WARNING! The device should only be installed by a qualified installer in accordance with the applicable regulations regarding safety and all other regulations.

WARNING ! The towel rail is to be installed so that switches and other controls can not be touched by a person in the bath or shower.

WARNING! Heating element should not be fitted horizontally or turned downwards.

WARNING! Connect the cables coming from the control unit following below instructions:

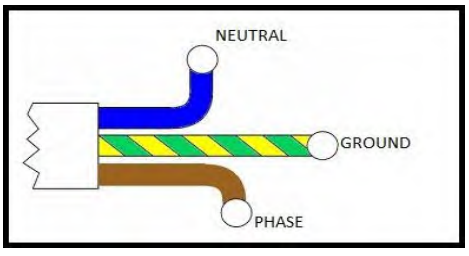
WARNING ! Filling the towel rail with too much liquid leads to exceeding of acceptable pressure and damaging of the towel rail or heating element.

WARNING ! Water, water with anti-freezing agent should be used as a heating agent – possibility of installation and correct use is conditioned by meeting manufacturer's requirements on the towel rail and heating element.

a. Brown wire — connection to live circuit (L) of the heating element

b. Blue wire — connection to neutral circuit (N) of the heating element

c. Yellow & green wire — connection to earth (PE) of the heating element.



1) The resistance will be placed inside the towel rail.

a)

Faston Element - Standard

Standard Electric Element

b)

Towel rail.

2) The resistance part shown in the figure is fixed to the towel warmer by using the 26 numbered key.

a)

Heating element.

Key number 26.

b)

In this figure is fixed to the towel warmer by using the key number 26.

3) Tilt the towel rail to ensure that the top collector opening is at its highest point.

4) Before filling the radiator with heating fluid, make sure that the "radiator - heater" connection is tight.

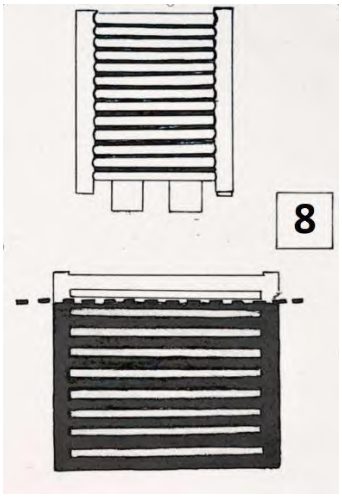
5) Position the controller so that it faces you or to the side.

6) The towel warmer should never rest on the heating element controller or any part of its connection!

7) Tilt the towel and fill the towel with warming agent.

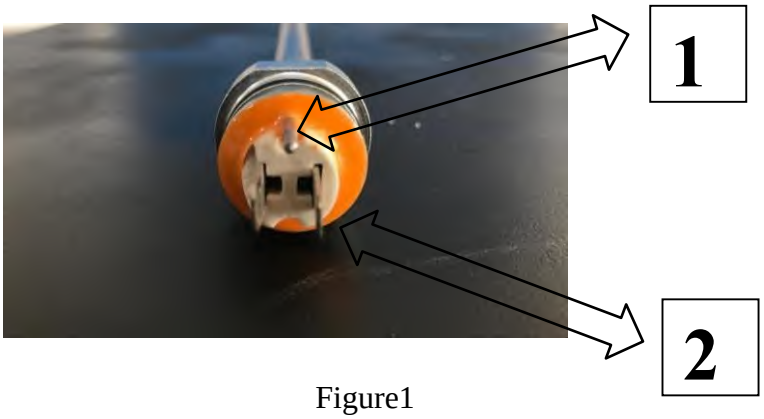

8) Return the towel to the upright position and check the level of the liquid inside

.




9) When the towel rail is in an upright position, it is connected to the control unit.

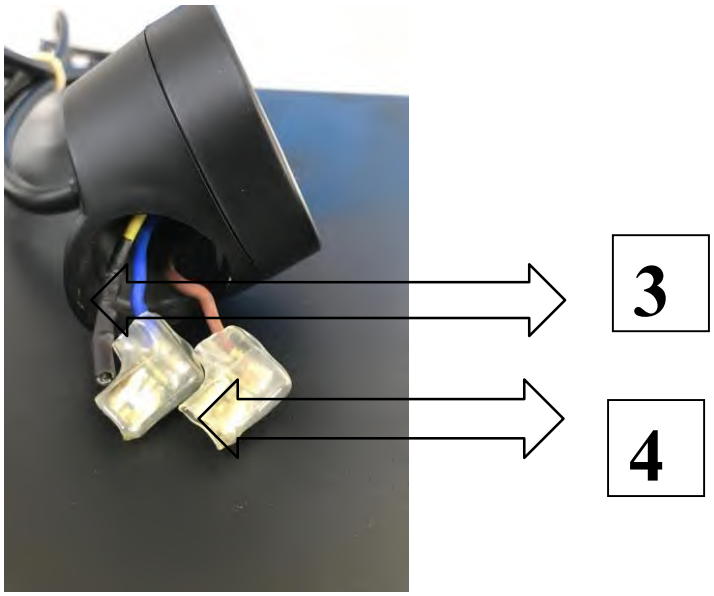
10) The connection between the control unit and the terminals of the resistor is made. The following steps are applied in order;




1:Ground terminal

2: Power terminals

Figure1




3: Ground wire

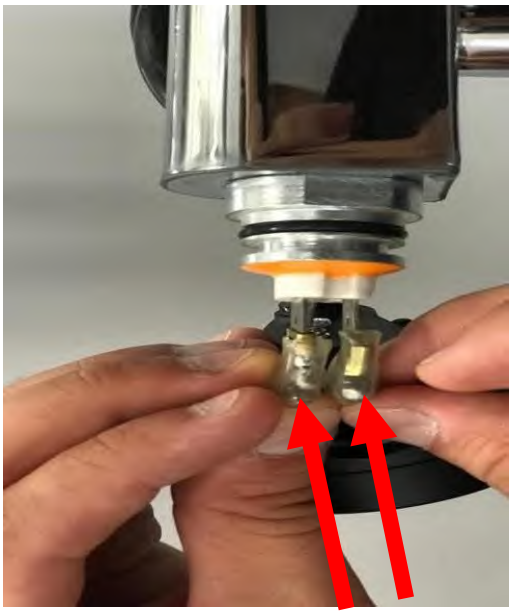
4:Power wires

Figure2

**i) Connecting the grounding terminal number 1 in Figure 1 and the grounding cable number 3 in Figure 2 connections are made.**

i)

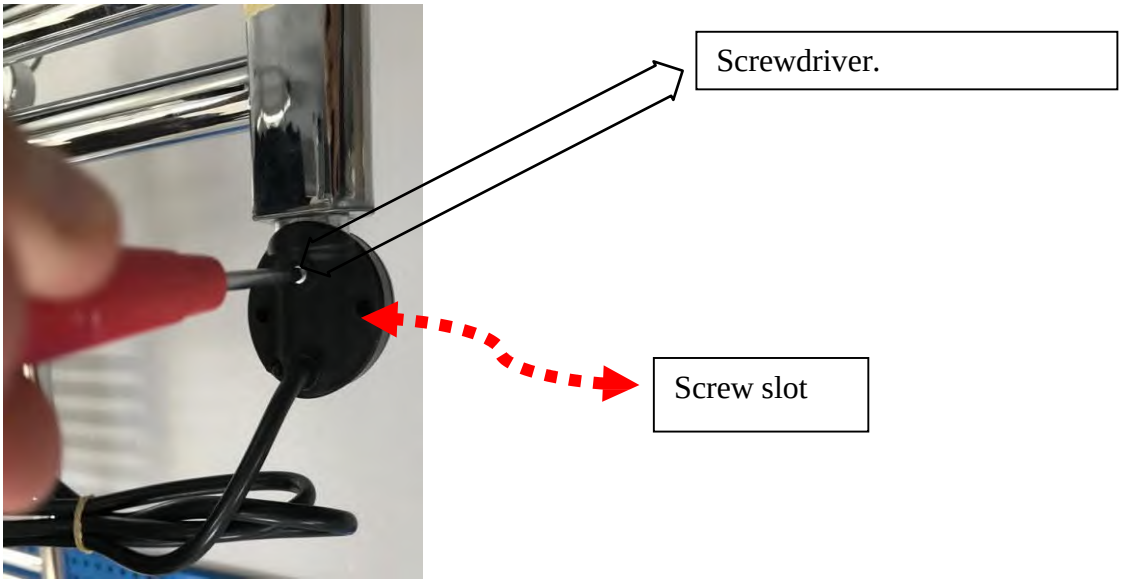
**ii) In Figure 2, power cables number 4 are connected to power terminals number 2 in Figure 1, regardless of the cable color.**



ii)

11) The screw on the back of the control unit is fixed with the help of a screwdriver.

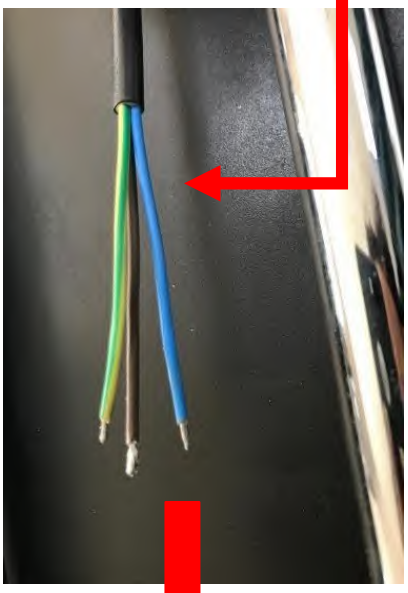
WARNING! !After making sure that the screw is fully seated in the hole on the back of the controller, tighten it all the way.

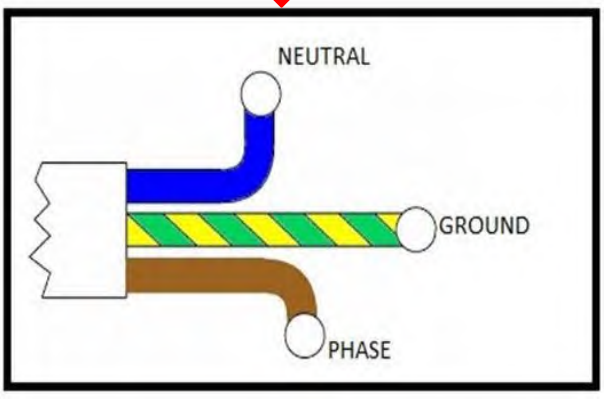



12) Make sure the connection between the towel warmer and the heating element is tight.

13) Position the controller for easy and convenient access.

14) To connect the device to the mains, the cable colors shown in the figures must be taken into account. When connecting the control unit to the mains, phase, neutral and earth connections must be made carefully




NEUTRAL
GROUND
PHASE

WARNING! You have must to check the position before start the device. The towel rail must be verticonal positon.

15) Connect the heating element unit to the outlet / plumbing. The device is ready for operation.

16) Set the maximum possible temperature and observe the liquid level rise, excess liquid may overflow from the upper cavity. Clean up excess fluid to prevent the controller from flooding or getting wet.

17) When the heating element level stops rising, wait 5 minutes, turn off the heating element unit and turn off the power to the appliance.

18) Do not wait until the towelette has cooled down and pour a small amount of liquid into the middle of the upper tube.

19) Close the upper opening of the collector with a special gasket and put it back on the wall.

**Installation for On Off Touch Element (ELMOOT)**

1) The product is placed inside the towel rail.

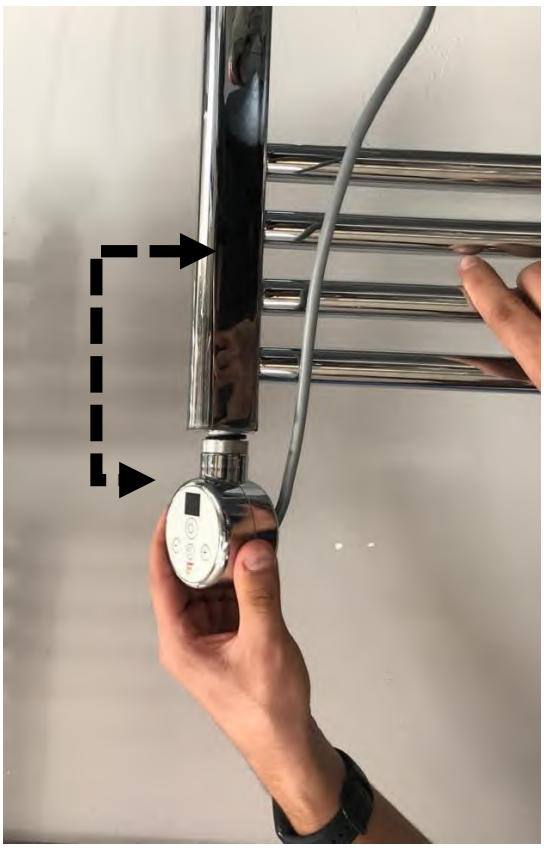
2) Since the control box comes pre-assembled with a resistor, at this stage we fix the resistor to the towel warmer. The part of the resistance shown in the figure is fixed to the towel warmer by using the key number 26.


Key number 26.

i)

Fix to the towel rail

ii)



After the resistance is fixed well, it has a tolerance of up to 60°(degrees)and can be corrected manually.

iii)

3) Tilt the towel rail to ensure that the top collector opening is at its highest point.

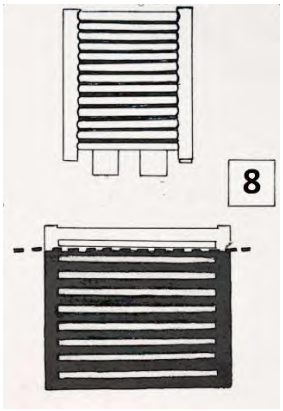
4) Before filling the radiator with heating fluid, make sure that the "radiator - heater" connection is tight.

5) Position the controller so that it faces you or to the side.

6) The towel warmer should never rest on the heating element controller or any part of its connection!

7) Tilt the towel and fill the towel with warming agent.

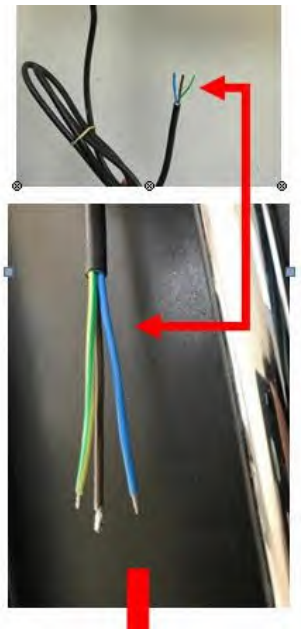
8) Return the towel to the upright position and check the level of the liquid inside.

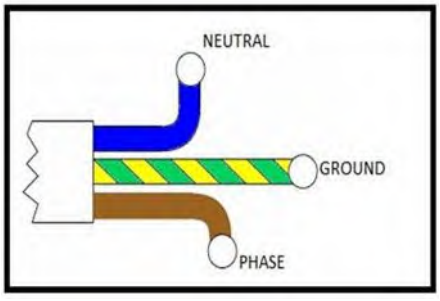



9) Make sure the connection between the towel warmer and the heating element is tight.

10) Position the controller for easy and convenient access.

11) To connect the device to the mains, the cable colors shown in the figures must be taken into account. When connecting the control unit to the mains, phase, neutral and earth connections must be made carefully.





WARNING! You have must to check the position before start the device. The towel rail must be verticonal positon.

12) Connect the heating element unit to the outlet / plumbing. The device is ready for operation.

13) Set the maximum possible temperature and observe the liquid level rise, excess liquid may overflow from the upper cavity. Clean up excess fluid to prevent the controller from flooding or getting wet.

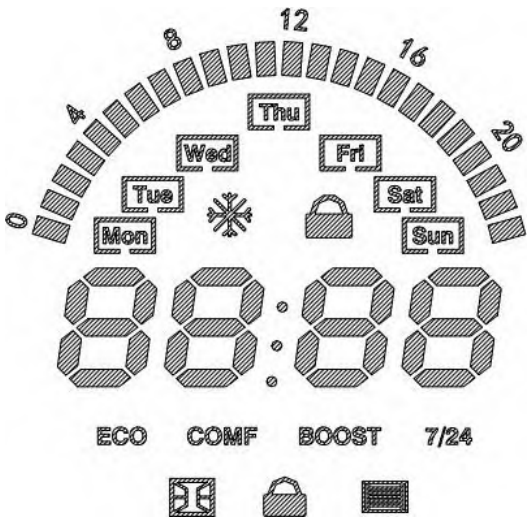
14) When the heating element level stops rising, wait 5 minutes, turn off the heating element unit and turn off the power of the appliance.

15) Do not wait until the towel rail has cooled down and pour a small amount of liquid intothe middle of the upper tube.

16) Close the upper opening of the collector with a special gasket and put it back on the wall.

## 5-MODELS DESCRIPTIONS

*A) Weekly Thermostatic Control Unit model is controlled by 4 buttons.*

When the device is energized for the first time (plugged in), the device starts on the main screen (in manual mode).

When the buttons are pressed to reach the functions, the lighting is turned on. After a while (30sec), the backlight is turned off to save power.

## FUNCTIONS:

### STAND BY MODE


By pressing the Standby / Enter button, the product switches to stand-by mode. When the product is in stand-by mode, if Standby / Enter buttons are pressed again, you can exit stand-by mode.
In stand-by mode, only ‘stby’ is displayed on the screen.

### RESISTANCE OPERATION ICON


If the set temperature is higher than the water temperature, the resistance connected to the product gets hot. If the set temperature is lower than the water temperature, the resistance connected to the product will not heat up. While the resistance is being heated, the resistance symbol on the screen is lit.
The measured  temperature value is not displayed on the screen.

## TIME ADJUSTMENT

If desired, time adjustment can be made. With pressing standby / enter and up button together, time adjustment made. When entered to time adjustment mode, the second 2 seven segments flash, prompting the user to set the minutes. The user sets the minute with the up and down buttons and confirms by pressing the Standby / Enter button.
Next step is hour adjustment. The first 2 seven segments flash, prompting the user to set the clock. The user sets the time with the up and down buttons and confirms by pressing the Standby / Enter button.

Then it comes to the day setting section. The user chooses the day using up and down buttons. The user confirms by pressing the Standby / Enter button. After selecting the minute, hour and day, the user presses the menu button to exit the setting.

## MENU TRANSITIONS

When the device is on, the user can switch between the menus by pressing the menu button. Menu transitions are performed in the following order.
ECO -> COMFORT -> BOOST -> 7/24

## MANUAL MODE

Manual mode is active when the user is in the main menu. By using up and down buttons, the set temperature value (10-35 degrees) can be adjusted.
If up or down button is pressed for a long time, the set temperature value will increase or decrease rapidly.The set temperature value and time are displayed on the screen in sequence (one after theother)


## ECO MODE

By pressing the menu button once ECO mode can be selected. 'ECO' icon flashes on the screen. In this mode, the set temperature value of the device is set to 20 degrees. The set temperature value and time are displayed on the screen in sequence (one after the other).

Since this mode is set 20 degrees, the up and down keys are nonfunctional for this mode.


## COMFORT MODE

If the user presses the menu button twice while in the main menu, comfort mode is selected. When the mode is selected, the 'COMF' icon flashes on the screen. In this mode, the set temperature value of the device is set to 25 degrees. The set temperature value and time are displayed on the screen in sequence (one after the other)

Since this mode is set 25 degrees, the up and down keys are nonfunctional for this mode.


## BOOST MODE

If the user presses the menu button three times, the boost mode is selected. When the mode is entered, the 'BOOST' icon lights up on the screen. In this mode, the set temperature value of the device is fixed at 35 and can be adjusted from half hour to 8 hours for the selected time. The duration can be adjusted starting from 30 minutes up to 8 hours, with the up and down buttons.

The time flashes and the user's approval is awaited. The user confirms the time with the standby / enter button. Afterwards, the BOOST icon will flash for the selected time. And countdown is made from the selected time on the screen.

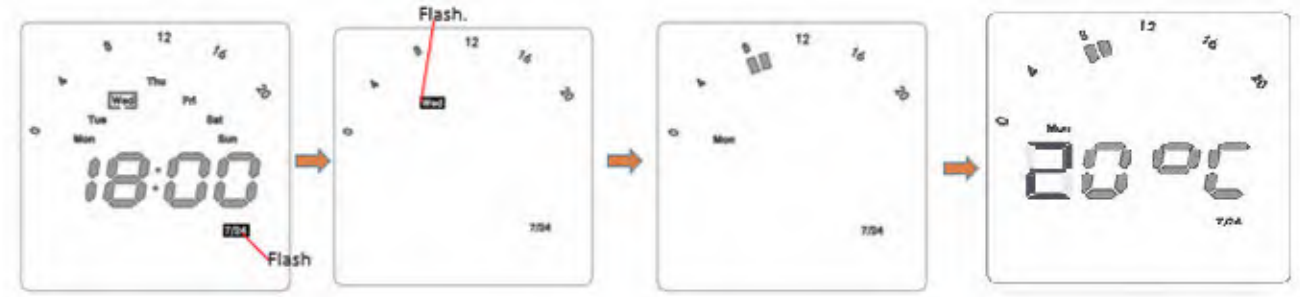
When boost mode is selected, standby button is used as enter button to make time setting . After the mode is set the button can be used for standby function.


## OPEN WINDOW

When there is a sudden temperature drop in the device (15 degrees in 20 minutes), the temperature of the resistance connected to the towel warmer is cut off.

The open window icon is displayed on the screen.

## WEEKLY TIMER (7/24) PROGRAMMING




If the user presses the menu button four times, the weekly program mode is reached. '7/24' icon flashes on the screen, press standby / enter button to select the mode.
The '7/24' icon is illuminated on the screen.

Day adjustment:

The current day of the week flashes on the display. The desired day can be reached with the up or down buttons. The day to be adjusted is selected by pressing the standby / enter button.

Hour adjustment for selected days:

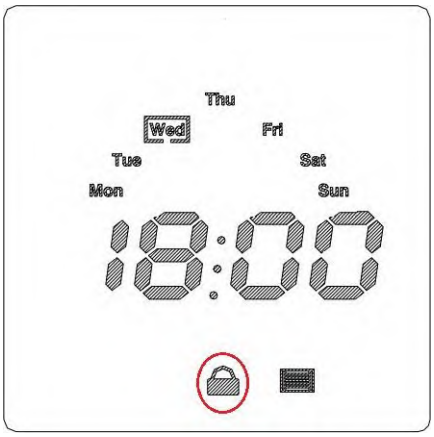
Hour adjustment can be made from 00:00 to 23:00 at one hour intervals. The desired hour can be reached with the up or down buttons. As many hours as desired can be selected in the program. The desired time is selected by pressing the menu button. After the selection is made, the boxes representing that hour are lit at the top of the screen.

In addition, the program can be removed by highlighting it with the up or down buttons and pressing the menu button.
After the desired hours of the day selected in the weekly program are programmed, confirmation is given by pressing the standby / enter button.
Temperature adjustment :

The temperature setting should be made for the selected day. The desired temperature can be selected with the up or down buttons. Press the menu button to confirm. Then press the mode button once to exit the weekly program. In this way, a weekly schedule can be set for 7 days of the week.

## CHLID LOCK

Child lock mode is selected by long pressing the up and down buttons. When the mode is selected, the lock icon symbol lits. In this mode, the buttons are disabled. Again, long press the up and down buttons to exit the child lock mode.

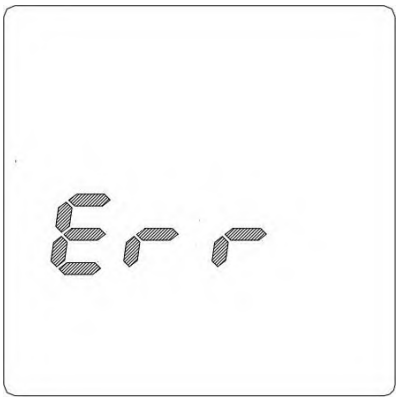



## ANTIFREEZE

This mode provides protection against the effects of cold. The device operates at 7 °C. When the temperature is below 7°C antifreeze mode becomes active and ice symbol ❄ is displayed on the screen.

## FAILURE MODE

In case of thermostat failure below warning flashes on the screen:



## *B)* On Off Touch Element (ELMOOT)

Heating element unit heats the towel rail that it is installed in.

Button  is used to turn the device on / off. Green led will illuminate when the device is turned on. The light will go off when the device is turned off.

## C ) Mini Round Thermostatic Control Unit (ELMMRN)

Heating element unit heats the towel rail that it is installed in.

Button  is used to turn the device on / off. Buttons  and  are used to regulate temperature. The values can be seen on the digital screen.

Button  is used to set the time period from 1 to 5 hours.(H1 ,H2,H3, H4, H5 will be displayed on the screen)

When the timer is set ,(from 1 hour to 5 hours) a flashing dot will appear on the display between the two numbers . It shows that the timer is working. To cancel timer select zero (H0).

NOTE – If you set the temperature of the control unit lower than the room temperature, the unit will not operate. The control unit operates when the temperature is set at least 1 degree higher than the room temperature.

REINA
DESIGNER RADIATOR

# Electric Conversion Instructions

The instructions below are to be followed when installing a thermostatic heater element into a filled hydraunic towel rail. The element can be installed into either side of the rail.

1. Remove the towel radiator from the packaging
2. Decide where the rail is to be situated. Make sure you have a minimum of 125mm between the bottom of the rail and the floor.
3. Mark out the position of the support brackets and fix them to the wall.
4. Offer the rail to the brackets to make sure it is completely level.
5. Decide which side the thermostatic element is to be installed to.
6. Turn the rail upside down and remove the plug where the thermostatic element is to be installed
7. Install the thermostatic element making sure the joint is water tight. Under no circumstances must the element be turned by twisting the thermostatic head. The element can be positioned on the large gasket seal only by fitting a spanner to the hex face underneath the chrome head and turning the full unit.
8. Do not stand the rail on the thermostatic element as this may cause serious damage.
9. Install the rail onto the wall brackets.
10. Make the electric connection
11. Open the top air vent, set the temperature to maximum and allow the rail to heat up fully, this may take 45 minutes.
12. Air will escape through the open air vent whilst the heater is achieving its temperature, in some cases if the fluid level is too high this may start to come through the air vent as well. This is quite normal and will ensure the correct expansion gap within the rail.
13. The thermostatic heaters have a temperature range of 20$^{o}$C - 70$^{o}$C so any escaped fluid will be hot.
14. When the rail has reached its maximum temperature, close the air vent fully and switch off the thermostatic element.
15. If more fluid is needed due to a cool spot at the top, allow the rail to cool before removing the top plug and adding additional water. Then follow steps 10 -13 again.
16. Allow the rail to cool then switch the thermostatic element back on and bring up to maximum temperature again. Check to make sure the joints are fully water tight.

**This work must be carried out by a fully qualified electrician otherwise you will void your guarantee**