

# INSTRUCTIONS MANUAL ELECTRIC HEATING ELEMENT WITH CONTROL UNIT

# **ECO DIGITAL MODEL**

WARNING: Read these instructions carefully before using the appliance

#### 1. GENERAL INFORMATION

#### **FOREWORD**

The purpose of this document is to provide important information, regarding the installation and use of this appliance.

To obtain the best possible performance and trouble free operation from your appliance it is very important to carefully read these instructions.

The manufacturer declines all responsibility for any operations effected on the appliance without respecting the instructions reported in this manual.

# 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 is safe to use.
- 27-The device must be disconnected from the mains during cleaning and maintenance.

# **3-INTENDED USE OF DEVICE**

ECO DIGITAL control unit is intended for installation and use in towel rails used for drying towels or clothes.

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

#### 4- TECHNICAL INFORMATION

Model code	ECO DIGITAL
Electric supply	230 V / 50 Hz
Heating output available	100, 200, 250,300, 400,500, 600, 700, 750, 800, 900,1000 W
Device protection class	Class I ,Class II
Towel rail 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 These products carry CE mark accordingly.

# **5-ELECTRIC TOWEL RAIL:**



- 1-Towel rail powered by the heating element only, not connected to the central heating system.
- 2-Water, water with anti-freezing agent or the right type of oil 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.
- 3-Filling the towel rail with too much liquid leads to exceeding of acceptable pressure and damaging of the towel rail or heating element.
- 4-Heating element should not be fitted horizontally or turned downwards.
- 5-The towel rail is to be installed so that switches and other controls cannot be touched by a person in the bath or shower.
- -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.

#### **6-INSTALLATION**

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!

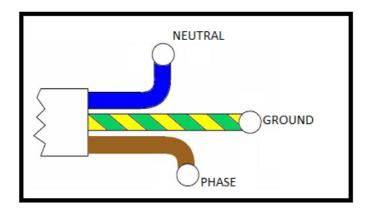
WARNING! Remove the protective coating on the plastic enclosure before use!

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 eco digital smart control unit should 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.

- 1-Connect the cables coming from the control unit following below instructions:
- 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.



- 2-When electrical connection is completed, place the heating element inside the hole of the control unit. Secure the casing at the back with Allen key.
- 3-Make sure that connection "radiator heater" is tight prior to filling the radiator with heating liquid

- 4. Position the element in such a way so that the indent in the head connection was directed towards you or sideways.
- 5. Put the towel rail in an oblique position to make sure that the upper collector opening is in the highest point.

The towel rail must not be rested on the heating element controller or any other parts of the connection at any time!!!

- 6. Fill the towel rail with the heating agent.
- 7. Put the towel rail back in an upright position and check the level of the liquid inside it.
- 8. Make sure that the connection between the towel rail and the heating element is tight.
- 9. Position the controller casing in a way providing an easy and comfortable access.
- 10. Connect the device to electricity and turn on the heating element unit. One can use a hot heating agent of temperature not exceeding 65°C. In such case, fill the entire towel rail, put it in an upright position and turn the heating element unit on
- 11. Set the maximum possible temperature required and observe the liquid level rise the excess liquid may be slopping through the upper opening remove excess liquid in order not to allow for the controller to be flooded or wetted.
- 12. When the level of the heating agent stops rising, wait another 5 minutes, turn off the heating element unit and disconnect the device from electricity.
- 13.Do not wait until the towel rail cools down and pour a small amount of the liquid out to the mid-level of the top pipe.
- 14. Close the upper opening of the collector with a dedicated seal and put it back on the wall.
- 15. Connect the heating element unit to the socket/installation. The device is ready to work.

# 7-PRODUCT DISPOSAL

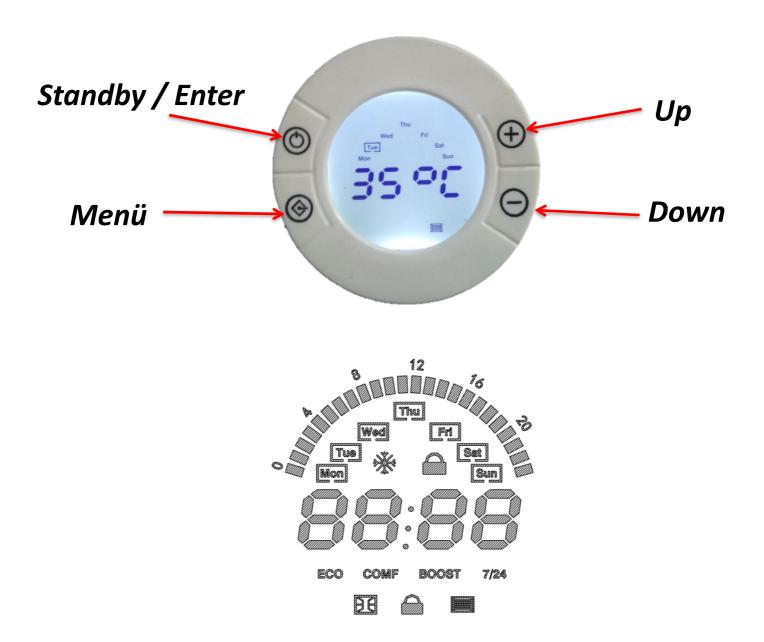


This product should not be disposed of as a general waste but should be brought to the appropriate collection point for re-cycling of electric and electronic devices.

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 form where the product was purchased.

# **8- ECO DIGITAL MODEL**

ECP DIGITAL 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.

# 9- FUNCTIONS

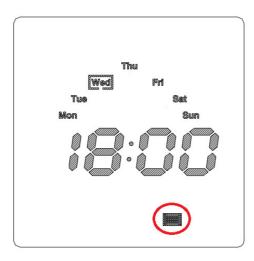
#### STAND BY MODE



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 water temperature value is not displayed on the screen.

#### TIME ADJUSTMENT

If desired, time adjustment can be made. With pressing standby / menu 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.

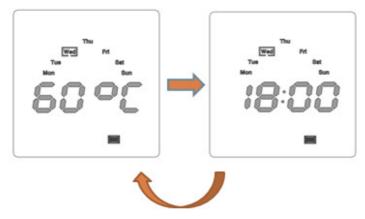
ECO -> COMFORT -> BOOST -> 7/24

#### **MANUAL MODE**

Manual mode is active when the user is in the main menu. By using up and down buttons, the set temperature value (35-70 degrees) can be adjusted.

If up or down button is pressed for a long time, the set temperature value will increase or decrease rapidly.

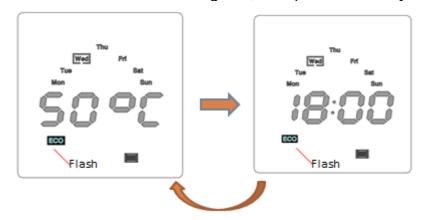
The set temperature value and time are displayed on the screen in sequence (one after the other)



#### **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 50 degrees. The set temperature value and time are displayed on the screen in sequence (one after the other).

Since this mode is set 50 degrees, the up and down keys are nonfunctional for this mode.

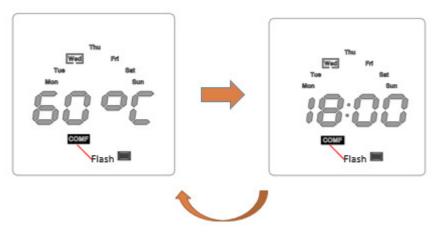


# **COMFORT MODE**

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 60 degrees. The set temperature value and time are displayed on the screen in sequence (one after the other)

Since this mode is set 60 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 70 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.

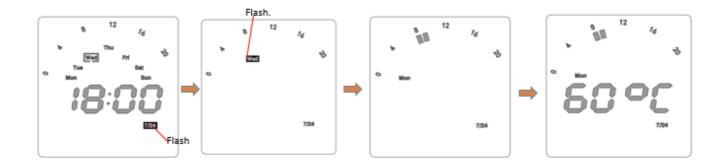


#### **OPEN WINDOW**

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.

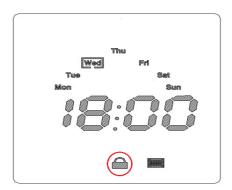
After the desired hours of the day selected in the weekly program are programmed, confirmation is given by pressing the standby / enter button.

#### 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.

#### **CHILD LOCK**

Child lock mode is selected by long pressing the up and down buttons. When the mode is selected, the lock icon symbol lights. 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. This mode can be selected during long periods away from home. In the case of antifreeze, ice symbol \*\* is displayed on the screen.

#### **FAILURE MODE**

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



# **10- WARRANTY**

- 1-The subject of this warranty is an electric heating element with control unit. Product name and characteristics are specified on the packaging.
- 2-By accepting the device on purchase, the Client confirms that the product is of full value. The Client should immediately inform the Seller of any discovered faults otherwise it will be understood that the Product was faultless at the time of purchase. This refers especially to any faults or damages of the control panel case.
- 3-Warranty period for the Product is 24 months from the date of purchase
- 4-Any claims made will be processed on production of the warranty card and the evidence of purchase. Manufacturer has the right to reject any claim on the grounds of not presenting of any of the above documents.
- 5-This warranty does not comprise any faults that are due to:
  - incorrect (not in accordance with the manual) installation, use or disassembly,
  - incorrect use of the heating element (ie. for any purpose that is not specified by the Manufacturer as intended for this type of product),
  - Product being handled by unauthorized persons,
- -Any faults or damages caused by the Client after having purchased and accepted the Product.
- 6-Should the repair turn out impossible, Manufacturer is obliged to replace the faulty Product with a new, full-value unit of identical parameters.