

## EUROSTER 4040TXC6

Wireless, weekly room thermostat, constituting a part of the Euroster C6RX heating control system.



**MANUFACTURER: P.H.P.U. AS, Chumiętki 4, 63-840 Krobia, Poland**

In order to take full advantage of thermostat capabilities please read this installation and operation manual carefully.

This manual is intended for the 01.08.2022 version of the thermostat.

### 1. THERMOSTAT APPLICATION

EUROSTER **4040CXT6** is a wireless, daily thermostat designed for cooperation with the **EUROSTER C6RX** floor heating control module. Wireless communication eliminates the necessity to lay cables between the thermostat and control module and ensures user-friendly operation.

The thermostat operates with two temperature levels: comfort (day ☀) temperature and economical (night 🌙) temperature. Each temperature is modifiable within the range of 5 °C...35 °C. The thermostat is programmable in seven-day cycles with an accuracy of 0.5 hour, therefore it enables 48 temperature changes in 24 hours. It is possible to program different time ranges for each day of the week.

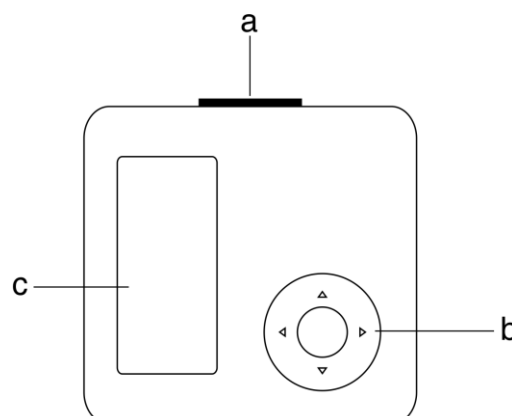
### 2. BASIC THERMOSTAT FUNCTIONS

- User-friendly thermostat enabling easy control of temperature in living and utility rooms
- Bidirectional communication ensures high operational reliability and resistance to interference
- Clear, back-lit E-Ink display
- Two temperature levels: comfort and reduced
- 0.5-hour accuracy of range programming
- Simultaneous display of current and preset temperature value
- Thermostat interlock with a selectable 4-digit code
- Numerous useful functions: temporary temperature setting, constant temperature, vacation mode, discharged batteries indication
- Temperature read-out accuracy of 0.1 °C
- Possibility to switch the thermostat off with an active frost protection temperature after the heating season
- Temperature reading correction
- Surface mounting

### 3. 4040 THERMOSTAT VISIBLE ELEMENTS

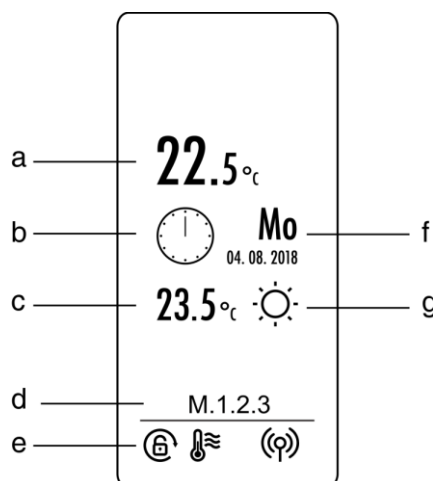
#### BODY

- a) Switch activating battery saving mode.
- b) Thermostat control knob
- c) Display.



#### DISPLAY

- a) Current temperature
- b) Clock
- c) Preset temperature
- d) Number of the zone (1-6) to which the thermostat is assigned (M - thermostat serves as a Master).
- e) Displayed information
- f) Date and day of the week
- g) Current program symbol



### 4. INSTALLATION

#### 4.1. Safety rules

##### CAUTION!

- **Prior to the commencement of any installation works read this manual carefully! Incorrect installation and improper use may lead to serious hazards to users or other persons and result in property damage!**
- **Do not install the device in rooms of increased humidity, substantial dustiness or with the presence of caustic or flammable vapors, protect it against water and other liquids!**
- **Do not install any set showing signs of mechanical damage!**
- **The thermostat is not a safety component of the heating system. Additional protection devices must be used in the heating systems prone to the risk of damage due to failure of the control systems!**
- **Do not misuse the thermostat!**
- **The device is not intended for use by children!**
- **Failure to meet the safety and maintenance rules results in loss of warranty!**

## 4.2. Proper place of installation

The thermostat is designed for indoor installation. No cables are connected to the thermostat, thus it can be placed anywhere. In order to ensure fully efficient operation of the thermostat, please make sure that the following recommendations regarding the location of the thermostat are observed:

- Locate the thermostat at a height of approximately 1.5 m above the floor
- Avoid places exposed to intense sunlight, situated near heating or cooling devices, directly by doors, windows and other similar locations, where the temperature measurement could be easily disturbed by external conditions.
- Avoid places with poor air circulation, e.g. behind furniture.
- Avoid moist places due to the negative effect of moisture on the service life of the device.

**Caution!!! Having selected a place of installation check if radio communication between the thermostat and C6RX module is maintained.**

## 4.3. Insertion and replacement of batteries

Place the batteries in the thermostat while observing their correct polarity. There are installation markings in the battery compartment. Then install (snap) the thermostat onto the base.

**CAUTION! Use only alkaline AAA batteries to power the thermostat. Do not use rechargeable batteries because their voltage is lower and their effective time is shorter.**


**It is recommended to replace batteries before each heating season.**

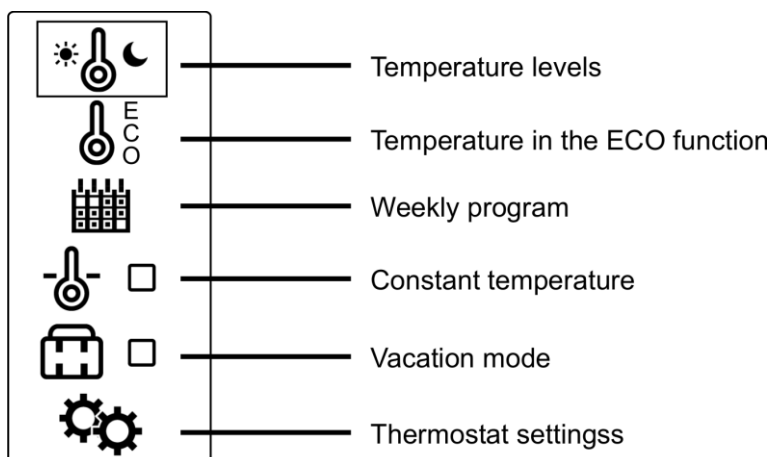
## 5. USER SETTINGS

In this mode, you may set basic parameters and select functions. Enter settings by pressing the central button. Use ▲▼ buttons to select the item you want to modify and press the central button again, then introduce changes and press ◀ to exit the menu. The introduced changes are stored.

### 5.1. Manual (one-off) temperature modification




The manual override function enables a temporary change of temperature without introducing changes in a program. The thermostat will operate according to the new temperature setting over the period of the current program. With the beginning of the subsequent program the manual override is completed and the thermostat restores operation according to programmed temperatures.

In order to activate the manual override set the desired temperature using ▲▼ buttons. At this point, the manual override icon  is displayed. In order to finish the manual override earlier press the left ◀ button.



### 5.2. Temperature level modification


Two temperature levels are available in the thermostat: comfort temperature and economical temperature. These temperatures apply for all days of the week. Temperature values may be changed freely within the range of 5 °C...35 °C (in cabled sensor mode: 5 °C...85 °C). Factory settings are the following: comfort temperature 21 °C, economical temperature 20 °C.




In order to modify the temperature go to the menu, select , and use the central button to select the temperature to be modified. Use   buttons to set the desired temperature. The longer the button remains pressed, the quicker the values change. Exit the menu by pressing the button or holding it for a few seconds.

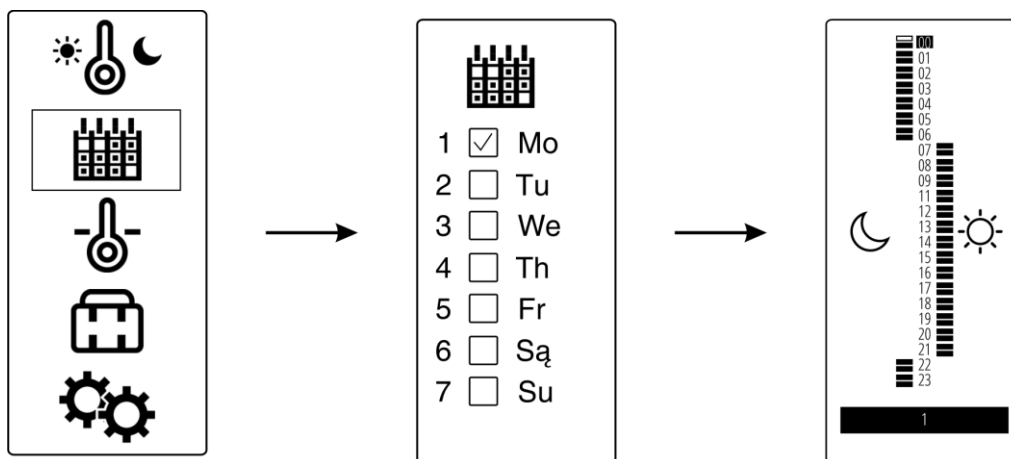
### 5.3. ECO

ECO function if activated with Euroster C6RX module by shortening the ECO input. The range is between 5°C and 35°C. Upon shortening the input, the thermostat maintains the preset temperature.




### 5.4. Weekly program

A separate period is provided for each day of the week. Select  item in the menu. Abbreviated names of weekdays are displayed. Use the central button to tick a day or individual days to be modified (if the identical program is to be set for them). Use the right button to enter the period. Use the left button to set the period for economical temperature and the right button to set the period for comfortable temperature. Whenever you press a button the temperature is programmed with 0.5 hours.

Use   buttons to change the period of the range without changing the schedule, e.g. if it is necessary to correct the program. Confirm the introduced modifications with the central button. Exit the menu by pressing  button or holding it for a few seconds.



### 5.5. Temperature maintenance – constant temperature


The thermostat maintains the preset temperature regardless of the preset weekly program. In order to activate the operation with a constant temperature setting go to the menu and select . Use   buttons to set the desired temperature. Confirm the entered temperature with the central button. The constant temperature icon is displayed. At this point, the thermostat starts operating in constant temperature mode. In order to restore operation according to the weekly program, switch off the constant temperature function.

### 5.6. Vacation mode

Maintenance for a vacation period is used to set a desired temperature for the time of being away on vacation. It will allow you to significantly reduce heating system energy consumption.

In order to switch to vacation mode go to menu and select . Use   buttons to set:

- the year when the vacation commences; confirm it with the central button
- the month and day when the vacation commences; confirm them with the central button
- the hour when the vacation commences; confirm it with the central button
- the year when the vacation ends; confirm it with the central button
- the month and day when the vacation ends; confirm them with the central button
- the hour when the vacation ends; confirm it with the central button
- the temperature applicable throughout the entire vacation mode period.

Confirm the settings with the central button. Upon its commencement, the vacation mode  icon is displayed.

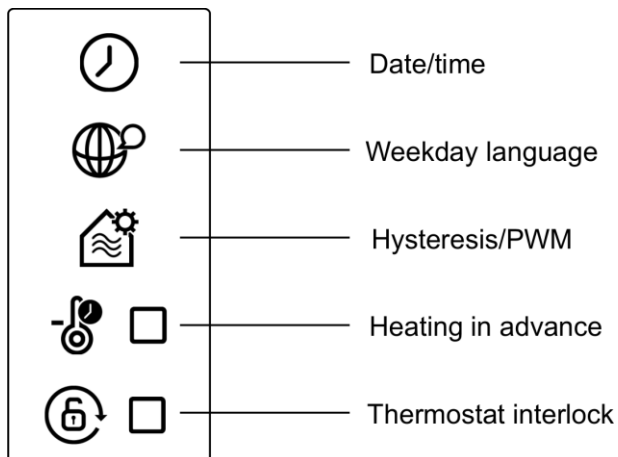
## 5.7. 4040TXC6 thermostat operating as the MASTER

If the 4040TXC6 thermostat is paired with the first zone of the C6RX module, it automatically becomes the Master thermostat. Setting a vacation with the MASTER thermostat causes switching on the vacation mode in all thermostats assigned to the C6RX module.

Similarly, switching the Master thermostat off causes switching the other thermostats off.

## 5.8. THERMOSTAT SETTINGS

In this menu, you may change and select the following functions:



- **Date/time**



The date setting sequence is year > month > day. Using ▲▼ buttons select a year. Confirm with the central button. Set a month and day. Follow the same procedure to set hours and minutes.

- **Weekday language**


The thermostat may display weekdays in Polish, English, Italian, Spanish, French, and German or using universal symbols, where "1" stands for Monday, "2" for Tuesday, etc.

- **Hysteresis/PWM**

Two operational options for activating the heating (cooling) algorithm are available: hysteresis or PWM.


In the case of hysteresis, the device is activated based only on a difference between the preset and current temperature. In order to set hysteresis go to the menu and select , then select .

Use ▲▼ buttons to change the hysteresis value (the range is 0.2 °C... 10 °C; the factory setting is: 0.2 °C).



PWM () is a more advanced method to achieve the preset temperature. It is suited for systems with underfloor water heating. It is used to limit room temperature fluctuations. Unlike in on/off controls the current status of the transmitter depends not only on the current difference between the preset and measured temperature but also on the past changes of temperature. For example, if the measured temperature is lower than the preset temperature for a long period the thermostat switches the heating device permanently on. To activate this function it is necessary to set three additional operation parameters:

- ✓ CPH – maximum number of cycles per hour (3-10). The thermostat calculates the number of switch-ons and switch-offs (cycles) per hour (according to temperature changes).
- ✓ CON – cycle duration period (2-10). It is the minimum period (minutes) for which the thermostat switches the transmitter each time.
- ✓ PB – control bandwidth (0.5 °C...3 °C). If the difference between the preset and measured temperature is included in the proportional control band, then the thermostat selects the switch-on and switch-off times. Outside of this band, the output is in continuous on or off operation.

- **Heating in advance**

Activating this function results in switching the heating on earlier in order to obtain the preset temperature at the required time. The time of advance in switching the heating on is calculated with an advanced algorithm, taking into account previous room heat-up times and the current temperature read-out. It takes the thermostat several days to calculate times for various temperatures correctly. To activate this function go to the thermostat menu and select .

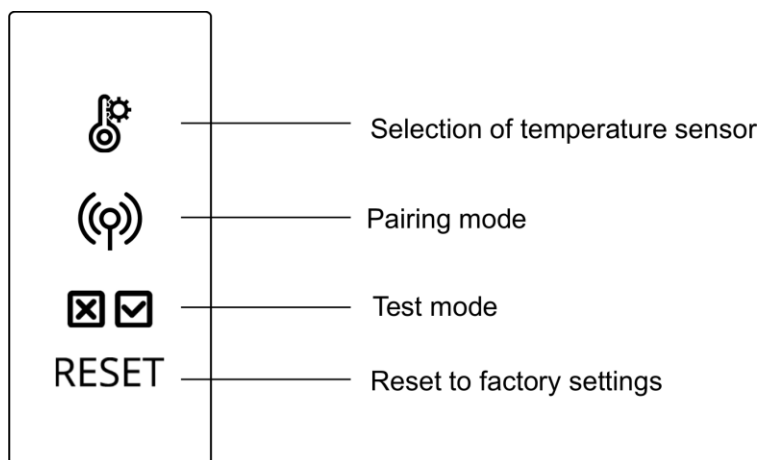
- **Thermostat interlock**

The thermostat features a setting interlock function. A four-digit code of your choice may be entered. In such cases, it is not possible to change the settings. A setting interlock does not affect the thermostat operation. To activate the interlock go to the setting menu and select , then use the ▲▼ keys to enter your code. Activating the interlock is signaled with  icon. Follow the same steps to unlock the thermostat. This function is not active by default.

## 5.9. SERVICE SETTINGS

The service menu permits thermostat configuration according to the type of system. We suggest that you exercise special prudence when modifying these settings, because inappropriate settings may result in improper functioning of the system or extreme cases lead to damaging system components.

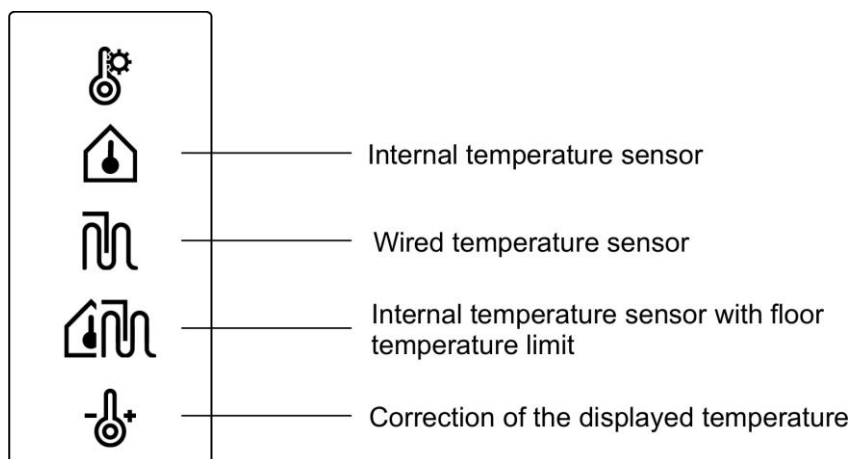
In order to enter service settings press and hold for 5 seconds two buttons – the central and the right button. The window presented below is displayed. Service settings are unavailable when the thermostat is switched off or the batteries are flat. Navigate the menu the same way you did in previous windows. The service menu consists of the following elements:



- **Selection of temperature sensor**

This option permits the selection of the temperature sensor to cooperate with the thermostat. There are three operation modes available:

- ✓ the thermostat measures and maintains the temperature based only on internal sensor operation
- ✓ the thermostat measures and maintains the temperature based only on external (cabled) sensor operation
- ✓ the thermostat measures the temperature of both sensors; it maintains the temperature of an internal sensor, and the external sensor acts as a temperature limit. Having selected this operation mode set the floor temperature limit value. This parameter is used to establish the maximum safe floor temperature. When the preset temperature is reached, the device gets switched off.
- ✓ Temperature sensor correction. It adjusts the temperature read-out within the range of +/- 5 °C. The function is convenient if the thermostat is located in a slightly warmer or cooler area of the room. Press the central button to introduce a change. Use ▲▼ buttons to set the new value. Confirm with the central button.



**CAUTION! The floor temperature sensor is not included in the basic kit. Please order it separately. Connecting the sensor requires changing the thermostat base, therefore wall-mounting becomes necessary.**

- **Pairing mode**

It is used to establish the radio connection between the thermostat and the Euroster C6RX module.

Each thermostat has a unique number distinguishing it from other ones. It is not possible for any thermostat not paired with the particular C6RX module to interfere with the operation of another set. The thermostat may be paired with the module again at any time. A blackout, battery replacement, as well as a complete reset of all thermostat settings, do not affect the pairing of devices in any way.

The procedure of coupling the thermostat with the module is described in detail in the EUROSTER C6RX module user manual.

- **Test Mode**

In the test mode, you may check the main parameters of the kit:


- ✓ program version and compilation date
- ✓ RX receiver relay operation - use ▲ to change the status of the relay
- ✓ internal sensor temperature measurement
- ✓ cabled sensor temperature measurement (if installed)
- ✓ backlight operation – use ▼ to switch it on/off
- ✓ light sensor operation
- ✓ Strength of the radio signal between the thermostat and the receiver (transmission and reception)

- **Reset**

By selecting and confirming this item you restore the thermostat factory settings.

## 6. AIR-CONDITIONING

Air-conditioning mode is switched on by shortening the heating/cooling input in the C6RX module. It is not possible to switch over heating/cooling using the thermostat.


Switching the air-conditioning on causes replacing the preset thermostat ranges with another - the ones stored for cooling. Returning to heating functions restores the previous ranges. This function enables the thermostat to operate with air-conditioning and heating without losing the settings. The switched-on device icon - \* also changes.

## 6. NO RADIO COMMUNICATION


If the communication between the thermostat and the C6RX module is interrupted (e.g. due to discharged batteries) and such condition lasts for 60 minutes, the given output in the C6RX module switches to the anti-frost mode. The heating device will be switched on for 20 minutes every 3 hours, in order to prevent extensive cooling of the rooms. At the time of re-establishing communication (replacement of batteries), the receiver switches the system off and automatically resumes operation.

No radio communication is signaled with the green diode flashing fast.

## 7. BATTERY SAVING FUNCTION

In order to activate the battery saving function put the operation mode switch in  position. The date and time will not be displayed, the time of thermostat response to the data sent to and from the C6RX module will lengthen to 20 minutes. The weekly schedule will operate normally.

## 8. SWITCHING THE THERMOSTAT OFF


In order to switch the thermostat off hold the central button for 5 seconds. The  symbol appears on the display. Frost protection ensures that the heating is turned on only to prevent the temperature from dropping below 4°C.


Hold the same button again in order to switch the thermostat on.

## 9. MAINTENANCE

Do not use solvents and aggressive detergents to clean the thermostat, since they may damage the surface of the housing and the display. Clean the thermostat housing with a soft cloth.

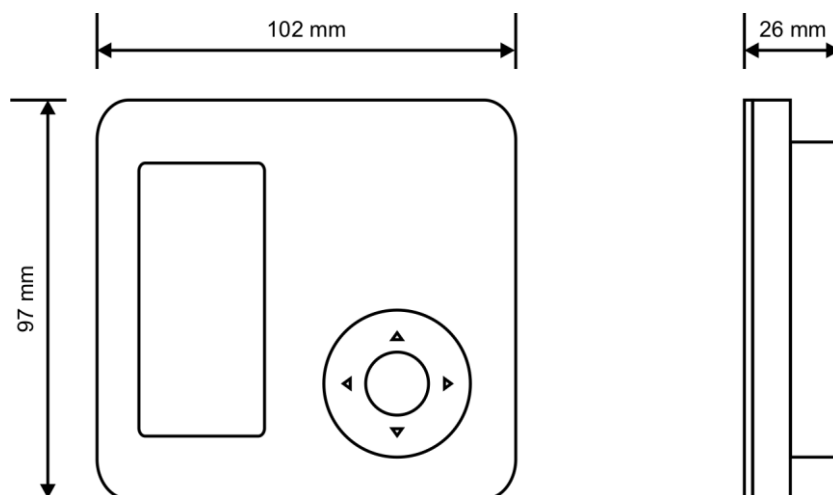
## 10. ERROR INDICATION

 - no sensor, sensor short-circuit or damage

 - discharged batteries indication

 - no radio communication

## 11. DIMENSIONS



## 12. TECHNICAL DATA

Controlled device	Euroster C6RX control module
Supply voltage	3 V (2 pieces of alkaline AAA batteries)
Temperature measurement range	0°C...+100°C
Temperature adjustment range	+5 °C...+35 °C
Temperature adjustment accuracy	0.1 °C
Temperature reading accuracy	0.1 °C
Hysteresis range	0.2 °C... 10 °C with step of the change of 0.1 °C or PWM mode
Visual signalization	Back-lit E Ink display
Operation temperature	+5 °C...+40 °C
Storage temperature	-10°C...+50°C
Ingress protection rating	IP20
Color	white/gray
Mounting method	Wall-mounted/stand
Weight	Thermostat without batteries – 115 g
Warranty period	2 years
Frequency of operation	868 MHz
Maximum power of transmission	< 25 mW



Thermostat class: IV (PWM mode)  
Thermostat contribution to the seasonal energy efficiency of room heating: 2% (PWM mode)

### 13. KIT CONTENTS

- Euroster 4040TxC6 thermostat
- 2 pieces of alkaline AAA batteries
- thermostat stand (wall-mounted and stand-alone type)
- Installation and Operation Manual with Warranty Certificate

### 14. SIMPLIFIED DECLARATION OF CONFORMITY

P.H.P.U. AS AGNIESZKA SZYMAŃSKA-KACZYŃSKA hereby represents that the type of Euroster 4040TxC6 equipment conforms to the following directives: 2014/30/EU (EMC), 2011/65/EU (RoHS).

The complete text of the Declaration of EU conformity is available at the following Internet address: [www.euroster.pl](http://www.euroster.pl)

### 15. ELECTRONIC WASTE MANAGEMENT INFORMATION



This product is designed and manufactured from high-quality materials and components suitable for reuse.

The crossed-out wheellie bin symbol located on the product (Fig. 1) means that the product is subject to selective collection in accordance with the provisions of the Directive 2012/19/EU of the European Parliament and of the Council.

The product contains batteries, which are marked with a crossed-out wheellie bin symbol (Fig. 1). The batteries are subject to selective collection in accordance with the provisions of Directive 2006/66/EC of the European Parliament and of the Council.

Such marking informs that the electrical and electronic equipment as well as batteries and accumulators may not be disposed of together with other household waste after their service life has ended. The user is obliged to take the used devices and batteries or accumulators to a point of collection of waste electrical and electronic equipment and batteries and accumulators. The entities collecting such equipment, including the local collection points, shops, and municipal entities, set up an appropriate system enabling the handover of such equipment and batteries and accumulators. The proper disposal of waste equipment, batteries and accumulators contributes to the prevention of consequences hazardous to the health of persons and nature, resulting from the possible presence of hazardous components in the equipment and batteries and from inaccurate storage and processing of such equipment and batteries.

Households play an important role in contributing to reuse and recovery, including recycling, of waste equipment. The attitudes influencing the protection of the common good of a clean environment are shaped at this level. Households are also one of the larger users of small equipment and its rational management at this level impacts the recovery of recyclables.

**Inaccurate disposal of this product may be penalized in accordance with national legislation.**

**WARRANTY CERTIFICATE**  
**EUROSTER 4040TXRX thermostat**

Warranty terms:

1. The warranty is valid for 24 months from the device's sale date.
2. The claimed thermostat together with this warranty certificate must be supplied to the seller.
3. Warranty claims shall be processed within 14 business days from the day when the manufacturer received the claimed device.
4. The device may be repaired exclusively by the manufacturer or by a party clearly authorized by the manufacturer.
5. Warranty becomes void in case of any mechanical damage, incorrect operation and repairs made by unauthorized persons.
6. This consumer warranty does not exclude, restrict nor suspend any right of the buyer if the product does not meet any of the sale contract terms.

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Sale date	serial number/date of manufacture	Stamp and signature	Service: Phone No. 65-57-12-12
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The business entity that issued this Warranty Certificate is:  
P.H.P.U. AS Agnieszka Szymańska-Kaczyńska, Chumiętki 4, 63-840 Krobia, Poland