EUROSTER 6060

Wired, programmable room thermostat for all types of heating devices.



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 08.01.2019 version of thermostat

1. THERMOSTAT APPLICATION

Euroster 6060, is a state-of-the-art thermostat designed for controlling temperature in living and utility rooms within temperature range of 5 °C...35 °C. It is used to control the operation of CH boiler and other heating system components. Sensors used in **Euroster 6060** enable temperature reading accuracy of 0.1 °C and temperature programming accuracy of 0.2 °C.

Euroster 6060 operates with three temperature levels: comfort (day), economical (night) and reduced (away). Each temperature is modifiable within the range of 5 °C...35 °C.

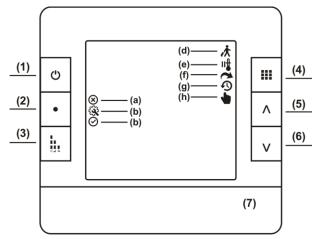
The thermostat is programmable in seven-day cycles with an accuracy of 0.5 hour therefore it enables 48 temperature changes in 24 hours.

It is possible to program different time ranges for each day of the week.

2. BASIC THERMOSTAT FUNCTIONS

- Three temperature levels: comfort, economical and reduced (away)
- Large, legible, backlit LCD
- 0.5-hour accuracy of range programming
- Numerous useful functions: temporary temperature setting, keypad interlock, constant temperature, vacation mode, discharged batteries indication
- Temperature reading accuracy of 0.1 °C
- Possibility to switch the thermostat off with an active frost protection temperature after the heating season
- Temperature reading correction
- Display contrast control
- 24-hour clock
- Operation with window opening sensors (airing function) with selectable activity status – NC/NO.

3. VISIBLE ELEMENTS



3.1. Functions of the buttons

- (1) On/off button
- (2) Configuration button (menu)
- (3) Temperature setting: comfort, economical and reduced (away)
- (4) Selection of operating mode
- (5) Change of parameters increase
- (6) Change of parameters decrease
- (7) Battery compartment cover

3.2. Description of symbols

(a) Cancel

(b) Settings – date, time, program, hysteresis, energy saving, temperature calibration, display contrast, reset

- (c) Confirm
- (d) Vacation mode
- (e) Temperature maintenance (constant temperature)
- (f) Next item
- (g) Operation with weekly program
- (h) Manual override

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Keypad lock Frost protection



Heating switch-on icon

- Discharged batteries indication
- **'** Switched-off thermostat icon
- ★ Comfort temperature setting
- Economical temperature setting
- Reduced temperature setting (away)

DAY 1 2 3 4 5 6 7: adequately MON TUE WED THU FRI SAT SUN

4. INSTALLATION

4.1. Safety rules

ATTENTION!

• Prior to the commencement of any installation works read this manual carefully!

- Prior to mounting or dismantling the thermostat make sure that the heating system is de-energized.
- Voltages hazardous to life may be present on thermostat output cables (power supply phase voltage), therefore only qualified technicians may install the thermostat!
- The electric connections performed and cables used shall be adequate to the applied loads and must conform to all requirements!
- Do not install the thermostat in rooms with increased humidity; protect it against water and other liquids!
- Do not install a thermostat showing any signs of mechanical damage!
- The thermostat is not a safety component. Additional protection devices must be used in systems prone to the risk of damage due to the failure of control systems!
- The device is not intended for use by children!
- Should there be any problem with proper operation of the thermostat, please contact your technician or the manufacturer!

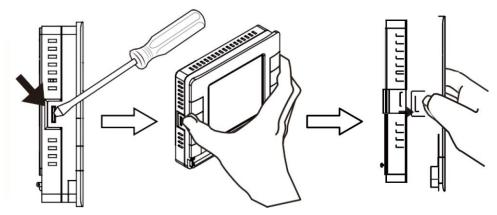
4.2. Proper place of installation

The thermostat is designed for indoor mounting at the height of approximately 1.5 m above the floor. Avoid places with strong sunlight, near heating or cooling devices, situated near doors, windows and other similar locations, where 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 device.

4.3. Opening the thermostat

The thermostat housing consists of two main parts – a base with a connector for cables and a front panel with an LCD. Thermostat components are joined together with a connector and a screw.

To open the thermostat loosen the base locking screw. Carefully separate the front panel and the base while paying attention to the connector.



4.4. Installing the thermostat

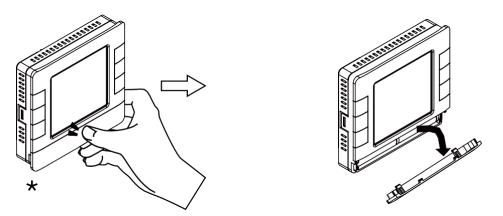
Lead all necessary cables prior to mounting the controller. Connect the thermostat using a wire with a diameter adequate to the switched load. Mounting holes of the thermostat enable installation in standard Ø60 mm flush-mount back boxes or directly on walls using screw anchors.

Unscrew the connector compartment cover, put the cables through the opening, fix the thermostat base on the wall in possibly most horizontal position and tighten the cables. When the installation is finished check the correct connection of the cables. Retighten the joint cover and fix the front panel of the thermostat.

4.5. Insertion and replacement of batteries

Open the battery cover and insert batteries while paying attention to their polarity. There are markings for proper installation in the battery compartment.

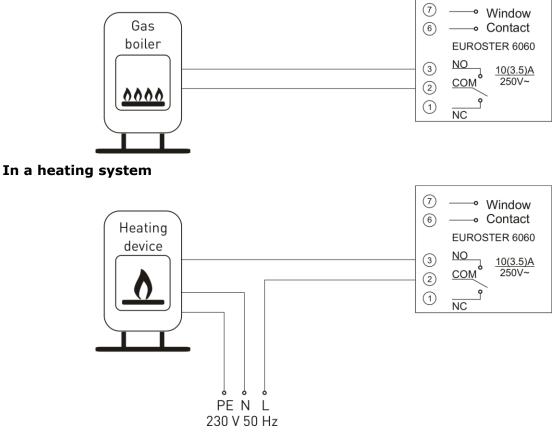
ATTENTION! Use only AA batteries to power the thermostat. Do not use rechargeable batteries because their voltage is lower and their effective time is shorter. It is recommended to replace batteries before each heating season.



4.6. Sample Connection Diagrams

The following diagrams are simplified and do not cover all the elements necessary for the correct installation.

In a system with a gas boiler



5. TEMPERATURE LEVEL MODIFICATION

The thermostat features three temperature levels: comfort, economical and reduced (away) These temperatures are in place for all days of the week. Temperature values may be changed freely in the range of 5 °C...35 °C.

For factory settings see the table below:

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Setting type	Reduced (AWAY)	Comfort (COMF)	Economical (ECO)
Default	19 °C	21 °C	20 °C
temperature			
Icon	∎î î⊧	*	

Press in to select temperature level to be changed – COMF/AWAY/ECO.

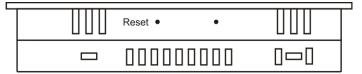
Use \blacktriangle buttons to set the desired temperature value. Press \curvearrowright to exit programming mode and restore basic display layout.

6. THERMOSTAT CONFIGURATION

In order to enter programming mode press and hold the programming button \bullet for 3 s. In the programming mode you may configure date (DATE), time (TIME), programs (PROG), hysteresis (DIFF) and airing function (ES), temperature calibration (T CAL), contrast (CONT) or reset the device (restore factory settings). Enter the item you want to program and confirm with O or select the next item using O and complete the programming. The preset value will be stored automatically before proceeding to setting the subsequent item.

6.1. Deleting programs – thermostat reset

Prior to programming press RESET button.



6.2. Setting date (DATE)

In order to set the date press $\boldsymbol{\oslash}$.

The configuration sequence is: year > month > day.

Using $\blacktriangle \forall$ buttons select year. Press \heartsuit . Using $\blacktriangle \forall$ buttons select month. Press \heartsuit . Using $\blacktriangle \forall$ buttons select day. Press \heartsuit .

Press
to store date settings and proceed to setting the clock or exit menu.

6.3. Setting the clock (TIME)

Press O to set the clock.

The configuration sequence is: hours > minutes.

Using \blacktriangle buttons select hour. Press \heartsuit . Using \blacktriangle buttons select minutes. Press \oslash . Press \bigstar to store clock settings and proceed to setting the programs or exit menu.

6.4. Programming (PROG)

In order to start programming press \oslash .

The thermostat operates based on the following programming modes: 5+2 days, 7 days or 1 day. Using \blacktriangle buttons, select the desired thermostat operating mode, then press Θ .

1 DAY mode is used for setting a separate program for each day of the week.

5+2D mode is used for setting one separate program for all business days and another program for a weekend.

7 DAY mode is used for setting a separate program for each day of the week.



The programming starting point is Monday midnight (0:00). The set-point period is regulated in steps of 30 minutes.

Using is button select comfort setting (three lines), economical setting (two lines) or

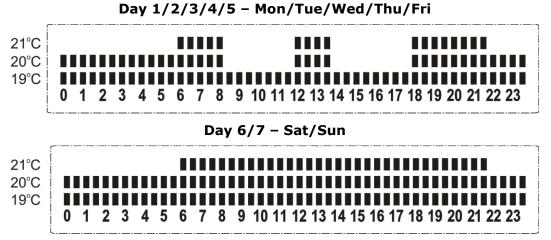
reduced setting \bullet (one line). As the next step use \bullet button to set a time period in which the given temperature level will be maintained. Time of range will be displayed for convenience. Hold the \bullet button pressed for faster changing.

Use \blacktriangle buttons to change only the time period of the range without changing the schedule, e.g. if it is necessary to correct the schedule.

Press ${}^{\bullet}$ button to change the day of week for the programs being set.

Press 🏞 to store program settings and start setting hysteresis.

An exemplary program in 5+2 mode.



6.5. Setting hysteresis (DIFF)

Hysteresis is a difference between current and preset temperature allowed by the thermostat. It determines the accuracy of room temperature control. In order to start setting hysteresis press Θ .

Use \blacktriangle buttons to change the value of hysteresis (available values: 0.2/0.4/0.5/0.6/0.8/1; the default value is: 0.5).

Store the new value using Θ .

Use 🟞 to proceed to setting airing function.

6.6. Airing function (ES)

Euroster 6060 may be connected to a sensor that signalizes an open window or door. When a window is open the thermostat reduces the heating temperature to the preset value. The function of energy saving during airing permits optimization of the heating costs.

The energy saving contact may operate in two modes:

Switch on when the contact is "shorted". / - J - Switch on when the contact is "open".

Use the \blacktriangle buttons to select the required contact operation mode and press \oslash .

Use the \blacktriangle buttons to change the temperature setting (the factory setting is 18 °C). Adjustment range: 5 °C...35 °C.

If you do not use the energy saving function use "shorted mode" (default setting).

The LCD displays "ES" throughout the entire time of operation in energy saving mode and maintenance of the preset energy saving temperature until the "ES" contact operation mode is changed.

Press 🗪, to store energy saving settings and proceed to temperature reading calibration.

6.7. Temperature reading calibration (T CAL)

Temperature calibration serves for adjusting the temperature reading within a range of +/- 3.5 °C. The function is convenient if the thermostat is located in a slightly warmer or cooler area of the room.

Press O to introduce changes. Use $\blacktriangle \bigtriangledown$ buttons to set the new value. Store the new value using O. Press the O button to start setting LCD brightness.

6.8. LCD contrast (CONT)

The function serves for adjusting display contrast. Press O to start setting LCD brightness. Use

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A to select adequate setting $(1 \sim 10)$.

Press O to store the setting, then press \Huge{O} to proceed to restoring factory settings.

6.9. Restoring factory settings (RESET)

The function serves for deleting all entered settings and restoring the thermostat factory settings. Press Θ to proceed to "restoring factory settings".

Use **A** buttons to select

Caution!

Selecting "yes" results in deleting all entered settings. Press results to exit programming mode and restore basic display layout.

7. FUNCTIONS AVAILABLE DURING OPERATION

So icon is displayed when the thermostat operates with the programmed settings (operates in a weekly program). Press to select one of the functions:

- manual override

- manual override with preset duration
- constant temperature
- vacation mode.

Confirm the selection using \mathfrak{O} or quit selecting functions by pressing \mathfrak{S} .

7.1. Manual override 🖑

Manual override function enables a temporary change of temperature without introducing changes in the stored thermostat programs. 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 switch on the manual override just press \blacksquare , and change the temperature using \blacktriangle . Then press \oslash to activate the manual override mode. The manual override icon \checkmark will be displayed next to the current temperature.

Press \bigotimes to finish the operation in manual override mode and restore operation according to programmed temperatures.

7.2. Manual override with its preset duration

The function enables a temporary change of temperature for a certain number of hours (one to nine) without changing the stored thermostat programs. The thermostat operates according to a new temperature setting for a preset period of time and then it restores operation according to the weekly program.

To switch on the manual override of comfort temperature press **button** twice to switch from

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O mode to manual override mode O. Using \blacktriangle buttons set the desired period for the temperature. Number of operating hours will be displayed. Confirm the setting by pressing O. Then use \blacktriangle button to set the desired temperature. Press O to activate the function. The period of manual override will be displayed.

To deactivate the function before the lapse of its preset operating period press \bigotimes . The thermostat restores operation according to the programmed settings.

7.3. Temperature maintenance (constant temperature)

The thermostat maintains the set temperature regardless of programmed settings. In order to

turn on the operation with constant temperature press **button**, which serves for switching

from \mathfrak{G} mode to \mathbb{I} maintenance mode.

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Use $\blacktriangle \nabla$ buttons to set the desired temperature. Start the operation in maintenance mode by pressing \oslash . Press \bigotimes to finish the operation in maintenance mode and restore operation according to the programmed temperatures.

7.4. Vacation mode 🕅

To enter vacation mode press \blacksquare and proceed from O mode to \bigstar 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. Set the number of vacation days using \bigstar buttons. The clock shows the desired number of vacation days. Having selected an adequate number of vacation days press O and set the desired temperature using \bigstar buttons. You may adjust the temperature in this mode within the range of 5 °C...35 °C. Press O to activate vacation mode.

The vacation ending date and the symbol of frost protection appear on the display.

Press \bigotimes to finish the operation in vacation mode before the lapse of the preset time limit and restore operation according to the programmed temperatures.

7.5. Switching the thermostat off after the heating season $oldsymbol{\circlearrowright}$

In this mode the thermostat switches to maximum energy saving. It is not possible to change the temperature. Frost protection ensures that the heating is turned on only to prevent temperature dropping below 5 $^{\circ}$ C.

Turning the function on – press \mathbf{U} . Power supply icon \mathbf{U} and frost protection icon \mathbf{W} appear

on the display. Press ${f U}$ to turn the thermostat on. The thermostat operates according to the settings.

7.6. Keypad lock function

The thermostat features a keypad lock function. Active lock is indicated by O symbol. If keypad lock is active it is not possible to change the settings. Simultaneously press and hold both buttons $\blacktriangle \bigtriangledown$ for 5 s until the keypad lock function is activated and the lock icon is displayed. To switch the keypad lock off press and hold the buttons $\blacktriangle \bigtriangledown$ for approximately 5 s again.

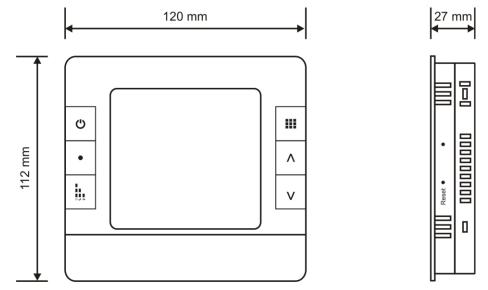
7.7. Discharged batteries indication

The discharged batteries icon D appears on the display when the energy level in batteries is too low and it is necessary to replace them as soon as possible.

8. 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.

9. **DIMENSIONS**



10. TECHNICAL DATA

Controlled device Supply voltage Thermostat output Maximum load Temperature measurement range Temperature control range Temperature control accuracy Temperature control accuracy Hysteresis range Visual signalization: Operating temperature Storage temperature: Ingress protection rating Color Installation method Thermostat weight without batteries Warranty period	heating systems $3 \vee (2 \text{ pieces of AA batteries})$ relay, voltage-free type, SPDT $10 (3.5) \wedge 230 \vee 50 \text{ Hz}$ $0 \circ \text{C}+50 \circ \text{C}$ $+5 \circ \text{C}+35 \circ \text{C}$ $0.2 \circ \text{C}$ $0.1 \circ \text{C}$ $0.2 \circ \text{C}/0.4 \circ \text{C}/0.5 \circ \text{C}/0.6 \circ \text{C}/0.8$ backlit LCD $+5 \circ \text{C}+45 \circ \text{C}$ $-10 \circ \text{C}+60 \circ \text{C}$ IP20 white wall-mounted device 195 g 2 years	°C/1 °C
Thermostat class Thermostat contribution to the energy efficie	I	1%

11. KIT CONTENTS

- Euroster 6060 thermostat
- 2 pieces of alkaline AA batteries
- screw anchors
- Installation and Operation Manual with Warranty Certificate

12. SIMPLIFIED DECLARATION OF CONFORMITY

P.H.P.U. AS AGNIESZKA SZYMAŃSKA-KACZYŃSKA hereby represents that the type of EUROSTER 6060 equipment conforms to the following directives: 2014/35/EU (LVD), 2014/30/EU (EMC), 2011/65/EU (RoHS).

The complete text of the Declaration of EU conformity is available at the following Internet site: **www.euroster.pl**

13. ELECTRONIC WASTE MANAGEMENT INFORMATION



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

The crossed out wheelie bin symbol located on the product (Fig. 1) means that

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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 wheelie bin symbol (Fig. 1). The batteries are subject to the selective collection in accordance with the provisions of the 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 handover of such equipment and batteries and accumulators. The proper disposal of waste equipment, batteries and accumulators to 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 protection of the common good of clean environment are shaped at this level. Households are also one of 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 6060 thermostat

Warranty terms:

- 1. The warranty is valid for 24 months from the device sale date.
- 2. Rights under the warranty are exercised within the territory of the Republic of Poland.
- 3. Claimed thermostat together with this warranty certificate must be supplied to the seller or directly to the manufacturer.
- 4. Warranty claims shall be processed within 14 business days upon the day when the manufacturer received the claimed device.
- 5. The device may be repaired exclusively by the manufacturer or by a party clearly authorized by the manufacturer.
- 6. Warranty becomes void in case of any mechanical damage, incorrect operation and repairs made by unauthorized persons.
- 7. 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.

Sale date	Serial number / date of manufacture	Stamp and signature	Service: Phone No. (+48) 65-57-12-012

Business entity that issued this warranty certificate is: P.H.P.U. AS Agnieszka Szymańska-Kaczyńska, Chumiętki 4, 63-840 Krobia, Poland