#### User manual PMH-ET2

#### GT/GTX 16092019



#### 1. USER MANUAL IDENTIFICATION

- 1.1 Number GTGTX13052020EX
- 1.2 Date -13052020
- 1.3 Publisher name CINI Sp. z o.o.

#### 2. ITEM IDENTIFICATION

- 2.1. GT, GTX type heater with electronic thermostat for towel rails and bathroom radiators Models GT/GTX 150, 300, 500, 600, 900, 1200
- 2.2. MANUFACTURER:
- CINI Sp. z o.o. Borowa 85, 41-253 Czeladź, Polska (Made in Serbia)
- 2.3. The product complies with the standards
- EN 60335-1; EN 60335-2-73; EN 62233; EN 55014-1; EN 55014-2; EN 61000-3-2; 61000-3-3
- 2.4. The immersion heater is an electrical device designed for users who need to heat smaller living spaces, bathrooms, pantries... as well as for users who use towels dryers.

#### 3. GENERAL SAFETY MEASURES

#### 3.1 WARNING: Please read the instructions carefully

#### **3.2 WARNING: Keep the enclosed instruction manual for as long as the product is in use.**

#### 3.3 Keep the product's original packaging for the duration of the warranty.

3.4. An immersion heater with an GT / GTX electronic thermostat is an electrical device intended for installation is radiators and towel dryers. Any other use is prohibited and potentially dangerous.

3.5. The heater can be used alone as an electrical element in the central heating system when the rest of the system is turned off (eg. during summer). It should not be used when the central heating system is on.

3.6 It is forbidden to install the heating elements by fittings, outside the radiator, such as pipes, vessels etc.

3.7. The heater is not intended for installation in panel radiators (or other radiators that do not have a



collector tube into which the heater can be easily installed).

3.8. For filling the radiators or towel rails, use only clean (distilled) water or a mixture of water and antifreeze (water + glycol).

#### 3.9. It is FORBIDDEN to use THERMAL OIL to fill heating elements.

#### 3.10 It is forbidden to use the heating element, unless it is completely immersed in the water.

3.11. For optimum operation and optimum heating effects, proper selection of the heater is very important.

3.12. The heater power must not exceed 70% of the radiator or towel rail power output. For information about the power, refer to the instructions supplied with the radiator or contact your radiator distributor or manufacturer.

3.13. Assembling/disassembling of the appliance and the choice of radiator should be entrusted to a qualified person.

## **3.14.** <u>DANGER: Make the connection to the power outlet only in the manner suggested by the manufacturer.</u>

3.15. Do not use attachments or adapters to connect the heater to the power source.

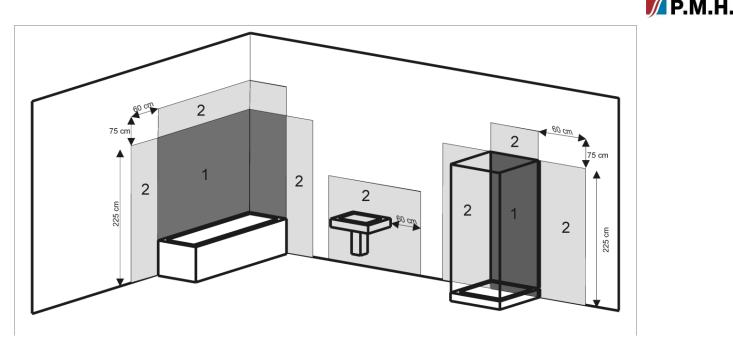
3.16. All installations to which the heater is connected must comply with the requirements prescribed by law and the relevant regulations in force in the country where the heater is installed.

3.17. The outlet into which the unit is plugged must be grounded

3.18 When connecting the heater to the electrical installation, ensure that the circuit has a differential protection of switch with a sensitivity of 30mA as well as adequate overcurrent protection

3.19. On an electrical outlet without plugs, ensure that the circuit of the heater has a multi-pole switch for all poles, with a minimum distance of 3mm at the contacts.

## **3.20.** <u>WARNING: Do not install the device in zones 0 or 1</u>. <u>The device must be out of reach of people</u> in the bathtub or in the shower. Picture 1





## 3.21. WARNING: Some parts of the radiator may be hot and cause burns. Particular attention is required if children or persons with special needs are present.

3.22. For the safety of very young children, install the outside radiator tube at least 600mm away from the floor.

#### 3.23. CAUTION: When drying fabrics, pay special attention to the temperature.

3.24. WARNING: The thermostat housing must not be covered and at least 400mm away from flammable objects and materials.

3.25. WARNING: Do not try to tighten the unit by hand. Do not act by force . Mechanical damage to the thermostat can result, as well as electric shock.

## 3.26. WARNING: The equipment may use children from 8 years and adults with limited physical, sensory and mental ability only if they are under the care of another person or have been instructed about precautions and safety and understand the dangers involved.

3.27. The device is not intended for play by children.

3.28. Appliances are not allowed clean and be subjected to customer maintenance by children, without proper supervision.

3.29. Do not disassemble or modify the product, as well as any installation or use that does not comply with the manufacturer's instructions and recommendations. Do not open the device housing - any interference with the device poses a risk and make in void the factory warranty.

3.30. When assembling and using, be sure to follow the instructions given.



you have additional questions about technical data, please contact the manufacturer

3.32. In case of any doubts or insufficient information, do not install or use the heater, but contact the manufacturer or distributor.

## **3.33.** The manufacturer is not responsible for the consequences resulting from non-compliance with this manual.

#### 4. TECHNICAL DATA

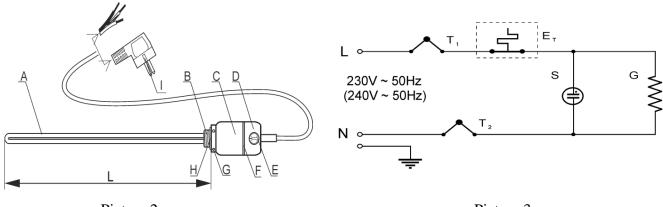
- 1. Model
- 2. Electric power supply
- 3. Heater power
- 4. Temperature control range
- 5. Connection cable
- 6. Thermal fuse
- 7. Mechanical connection
- 8. Insulation class
- 9. Weight (g)
- 10. Length (mm)

1	)	GT/GTX150 GT/GTX300 GT500 GT/GTX600 GT/GTX900	GT1200
$\overline{2}$	)——	230V~50Hz 230-240V~50Hz 230-240V~50Hz 230V~50Hz 230V~50Hz 230V~50Hz	230V~50Hz
3	)——	150 300 500 600 900	1200
4	)——	5 - 65 C +/- 5°C	
5	)——	OMY 3x0,75	OMY 3x1 <sup>∎</sup>
6	)——	94°C	
7	)——	G1/2"	
8	)——		
9	)	384 389 404 404 424	<u> </u>
10	)——	300 305 360 360 410	460



#### 4.1. DEVICE ELEMENTS are shown in pic. 2 and 3

- A. the heater
- B. the heater bracket
- C. thermostat housing
- D. potentiometer housing -(revolving cap)
- E. potentiometer knob
- F. indicator
- G. holes for "S" clamp
- H. sealing ring
- I. electrical plug



Picture 2

Picture 3

- T1 thermal fuse
- $T2-thermal\ fuse$
- ET electronic thermostat
- S signal lamp
- G-heater

#### 5. ASSEMBLING

#### / P.M.H.



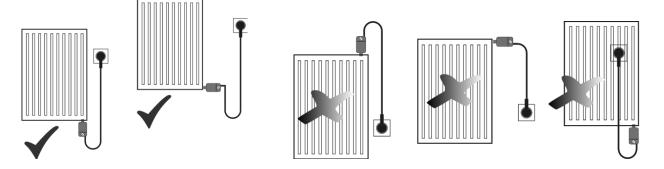
#### **5.1. SAFETY REQUIREMENTS**

5.2. The installation of the unit should be only entrusted to a qualified person.

5.3. Before mounting the appliance, check for visible damage and if you notice, do not to connect the appliance to the power supply, and please contact distributor or manufacturer.

5.4. The radiator must not be install under or over the power outlet.

5.5. The heating element is exclusively mounted in the lowest radiator tube.



Picture 4 - CORRECT

Picture 5 - WRONG

5.6. The heating element is designed for direct installation in bathroom radiators and towel dryers filled only with clean (distilled) water or a mixture of water and antifreeze (water + glycol).

5.7. The radiator should not be filled with liquid more than 90% of its volume or more than 92% of height, which is easier to measure.

5.8. If the heater is used to heat water in a radiator that exists in a central heating system, always leave one vent open at the top of the radiator during operation.

5.9. It is forbidden to connect the heater to a power source, unless it is completely immersed in the water.

## 5.10. Connect the device to the proper electrical installation (see technical data of the heating element and GENERAL SAFETY MEASURES).

5.11. Follow the regulations for bathroom safety zones. Do not installation the device in zones 0 or 1.

5.12. The device must be out of reach of people in the bathtub or in the shower.

5.13. Do not let the power cord touch the heating element or radiator.

5.14. Do not open the device housing - any interference with the device poses a risk and make in void the factory warranty.



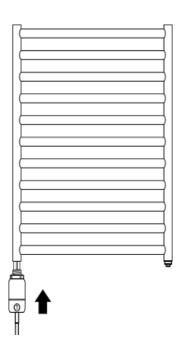
#### 5.15. ASSEMBLING PROCEDURE

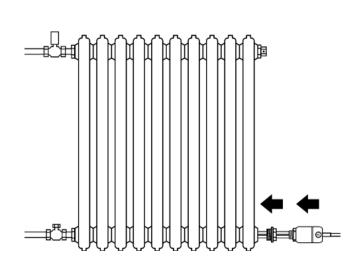
5.16. Install the heating element in the lowest zone of the heater at the plug location  $\frac{1}{2}$  "on the left or right side. If the radiator exists in a central heating system, empty the radiator. Unscrew the radiator cap on the lower tube, insert the heater into the tube and gently screw the heating element into place of the cap, as shown in **pictures 6** and 7.

5.17. WARNING: The heating element has seal <sup>1</sup>/<sub>2</sub>". Do not use aditional elements or materials to seal the thread

<u>5.18. CAUTION: Do not try to tighten the unit by hand.</u> Picture 8

<u>The "S" clamp (coming with every unit) is used for tightening the unit, using the existing clamp holes on</u> the heater bracket. Tighten the heater completely until the heating barcket and radiator are connected. <u>Picture 9.</u>

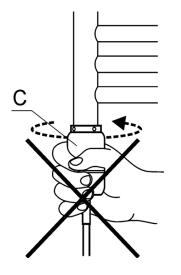


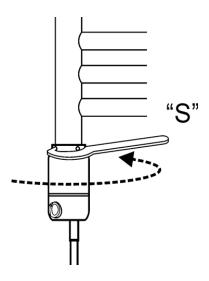


Picture 6 – Vertical

Picture 7 – Horizontally



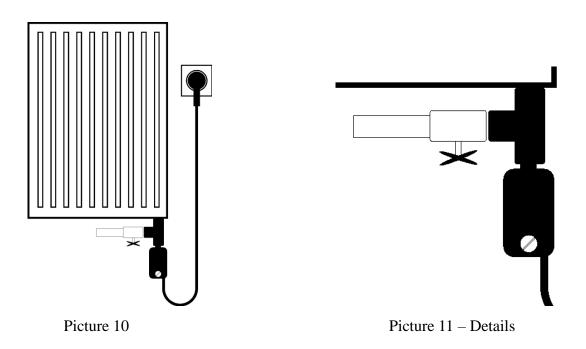




Picture 8 - Wrong assembling

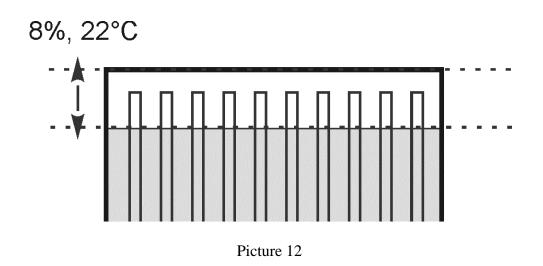
Picture 9 – Correct assembling

5.19. In radiators connected to the central heating system, heating element can be install by using the T-piece according to the assembling procedure. **Pictures 10 and 11** 





5.20. Fill the radiator with clean (distilled) water or a mixture of water and antifreeze up to 90% of its volume or approx. 8% lower than the radiator's top. **Picture 12** 

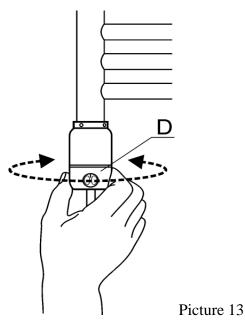


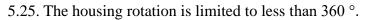
5.21. For horizontal installation, fill the radiator with water to a level approx. 2 cm below the top cap.

5.22. The radiator can be filled by the plug hole on the top of the radiator or by a radiator valve on the central heating system, ensuring that the valve at the bottom of the radiator is closed all the time.

5.23. Filling should be done slowly to avoid to retetention of the air in the radiator

5.24. After fitting the unit to the radiator, place the potentiometer housing into desired position by carefully turning it by hand. Picture 13







## 5.26. CAUTION: Do not try to tighten the unit by hand, by turning the plastic cover. If it gives resistance, try turning the housing to the other side. (Thermostat housing rotation is mechanically restricted).

5.27. If the heater is used to heat water in a radiator that exists in a central heating system, always leave one vent open at the top of the radiator during operation. If you are sure that you have installed the heating element as instructed and if the radiator is completely filled with water, you can connect the heater to the power supply.

## 5.28. CAUTION: The power outlet, into which the heater is plugged, must be grounded. Do not use attachments or adapters to connect the heater to the power source.

5.29. Turn the knob "E" to maximum and wait for the "F" indicator to turn off. When the indicator turns off, the radiator is heated to approximately 65 ° C, you can now turn the cap on the top of the radiator, or close the valve on the top of the radiator.

#### 5.30. CAUTION: During the first heating of the radiator, some liquid may leak out from the open top cap due to the expansion of the liquid at a temperature higher than room temperature. This happens if you overfill the radiator over 92% of the volume.

5.31. Clean the leakage and continue the assembling.

# 5.32 WARNING: Do not remove the cap from the radiator while the radiator is warm, the liquid is under pressure. Disconnect the heater from the power supply, allow the radiator to cool completely, then remove the cap if necessary.

5.33. If you have completed the installation procedure in accordance with the above instructions, the radiator is ready for use.

#### 6. Disassembly

6.1 Safety requirements

#### **6.2. WARNING: Before mounting the appliance, disconnect it from the power source.**

6.3. If the radiator is hot, allow the radiator to cool completely.

## 6.4 WARNING: When the radiator is warm, the system is under pressure, so you must not remove the cap or vent until the radiator has cooled down.

#### 6.5 CAUTION: Filled radiator can be very heavy, do not take it off from the rack before empty it.



#### 6.6 Dismantling procedure

- 6.7 Disconnect the device from the power source.
- 6.8 If it is warm, allow the radiator to cool completely.

6.9. Empty the radiator by open the ventils of the radiator, if any, and put under the radiator some box, gently unscrew the lower cap to allow the liquid to leak into the container, then open the upper cap as well, so that the liquid will drain out more easily. When the radiator will be empty, use the "S" clamp to unscrew the heating element from the radiator.

6.10. If the heating element is out of service, return it to its original packaging.

#### 7.USING

#### 7.1. Safety requirements



#### 7.2. WARNING: The power outlet, into which the heater is plugged, must be grounded!

- 7.3. The heating element must be permanently connected to the appropriate power supply using the cable provided.
- 7.4. Do not connect the heating element to the power supply before proper installation on the radiator is completed.

#### 7.5. WARNING: It is forbidden to use the heater unless it is completely immersed in water.

- 7.6. Never turn on the heater when the radiator or towel rail is empty.
- 7.7. The heating element should not be tested without water.
- 7.8. For safety reasons, check the device regularly and check for damage.

#### 7.9. WARNING: In case of the cable or the thermostat housing is damaged, the device must not be used.

#### In this case, disconnect the device from the power source and contact the manufacturer or distributor.

7.10. Change of the connecting cable should be entrusted only to the qualified and authorized person.

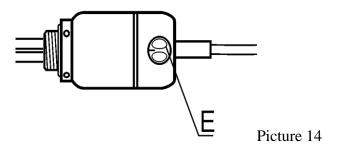
## <u>7.11. DO NOT COVER -The heater housing can not be covered and must be at least 400mm away from flammable objects and materials.</u>

- 7.12. When the maximum temperature is reached, the radiator can be hot so it is not suitable for use in places where it may cause danger (eg. where unattended children may be present).
- 7.13. Ensure that children over the age of 8 and adults with limited physical, sensory and mental capabilities are supervised while using the device.
- 7.14. This device is not a toy. Make sure that the device is out of the reach of children.



#### 7.15. USING PROCEDURE

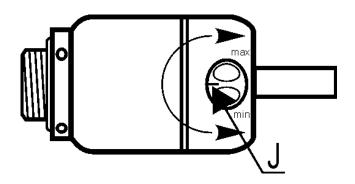
7.16. If you have installed the heater according to the instructions above, it is ready for use. It is designed to be very easy to use. The temperature of the heater can be adjusted as needed by using the potentiometer button "E". Picture 14



7.17. Position "min" in E button ensures minimum temperature which protect the water from frost. It does not mean that the heater is out of service. If you want to completely put the heater out of service, unplug it. Other numerical symbols on the potentiometer housing indicate the approximate temperature in the radiator. The maximum temperature at position "65" is about 65°C, which depends on the type of radiator and the ambient temperature.

 7.17.1 WARNING: Blind and weak-eyed persons, while adjusting the temperature, may be oriented by bulge on regulation knob "J" (picture 14.1.), so they will know that the end left position is minimum, and end right position is maximum of temperature range.







# 7.18. CAUTION: The temperature in the heater does not control the room temperature (does not have a room temperature sensor). The controller regulates exclusively the water temperature in the radiator.

7.19. For drying towels, the recommended position of the controller is 55, while for heating the rooms the user can use the full range of temperatures as needed.

### 7.20. When drying fabrics, pay special attention to the temperature and the type of fabric you dry.

7.21. The "F" indicator light light when the heater is on - while the radiator is warming up, when the radiator reaches the desired temperature, the "F" light will turn off. If the ambient temperature is lower, the heating element will be longer activated.

7.22. If the radiator is too large (improperly selected), if the heated room is too large or the ambient temperature is too low, the heating element may work continuously without switching off. You can confirm this fact, by moving regulator knob to position "min" (lowering the temperature) and signal lamp will off.

## 7.23. CAUTION: If the radiator is warm and fitting the potentiometer button to "min" position does not cause the "F" indicator light turn off, unplug the heater and consult an authorized service center or dealer.

## 7.24. CAUTION: If you notice that water is leaking from the radiator, unplug the heater from the power supply and check the water level in the radiator, otherwise it may damage the radiator or fabric items that may be on the radiator.

7.25. During the work of a properly installed heater, noise in the radiator may appear, which is considered to be a non-harmful occurrence and it is not necessary intervention within the warranty period.



#### POSSIBLE PROBLEMS AND SOLUTIONS:

PROBLEM	POSSIBLE CAUSE	SOLUTION
The heating element is on, the potentiometer housing does not respond, the light is off	Connection problems	Check the connection to the power supply
The heating element is on, the indicator light illuminates in the "min" position of the potentiometer housing	The radiator is cold. Its temperature is under 7°C.	Wait until the radiator heat
The heating element is on, the indicator light illuminates constantly in the "65" position of the potentiometer housing, when setting the "min" light of potentiometer turn off	The radiator is too big	Replace the radiator with a smaller one. Lower the temperature on the potentiometer
The heating element is on. Signal light illuminates constantly in all positions of the potentiometer	The radiator is not immersed by liquid	Disconnect radiator from the power supply and check the level of liquid
	Thermoregulatory is out of order	Disconnect radiator from the power supply and call an authorized service
Liquid only leaks from the radiator when the radiator is heated	Radiator overflowed by liquid	Unplug the radiator, wait until it cool down and repeat the procedure in the section ASSEMBLING



Liquid leaks from the radiator even when the radiator is cold	Problem in sealing	Disconnect the heater from the power supply and check sealing of all connections			
While the indicator light is on, there is a noise in the radiator	Mechanical oscillations due to heating of the liquid, especially in water that is not demineralized	Non-harmful occurrence. If it is annoying, you can disassemble the heater, gently separate the heating element pipes, re-install, and pour a mixture of distilled water and antifreeze into the radiator.			
If the problem persists, contact your nearest authorized service or distributor					

#### 8. MAINTENANCE

#### 8.1. Safety requirements

- 8.2. Service and repair of the device should be performed by qualified persons.
- 8.3. Before mounting the appliance, check for visible damage and if you notice, do not to connect the appliance to the power supply.
- 8.4Ensure that children over the age of 8 are supervised while using the device.

## **<u>8.5. WARNING: BEFORE accessing any device maintenance, MUST disconnect the heater from the power supply and wait for the radiator to cool completely.</u>**

#### **8.6 MAINTENANCE PROCEDURE**

- 8.7. Before starting the heating season or periodically please follow the steps:
- 8.8. Check if the radiator is filled with liquid.
- 8.9. If you notice that liquid is missing, refill the radiator and check where is the leakage.
- 8.10. Remove dust from the thermostat housing with a humid cloth (do not use aggressive liquids).
- 8.11. Regularly clean the radiator from dust with a humid cloth (do not use aggressive liquids).





#### 9 ENVIRONMENTAL PROTECTION



### **9.1.** Old electrical appliances contain valuable and difficult to decompose materials and therefore should not be disposed of with municipal waste.

**9.2.** We encourage you to actively protect natural resources and the environment, and to hand over old electrical devices to reduce disposal points.

**9.3.** You can contact your local authorities, distributor, or the point of sale where you purchased the heating element for information about collection points for disposal of your device.



**9.4.** The packaging materials are selected from an environmental point of view and are therefore recyclable.

**9.5.** Thank you for the actions that support the environment.