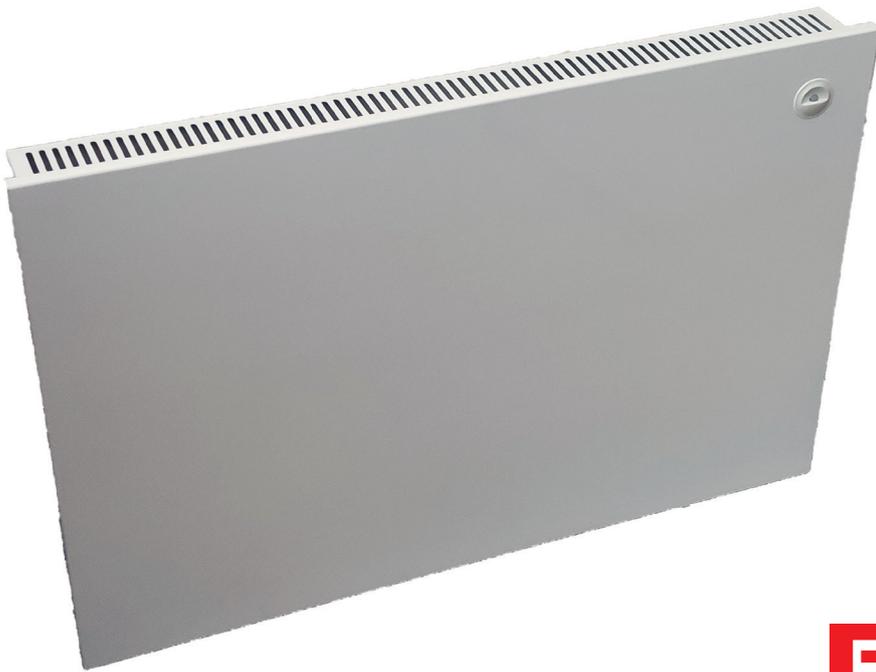


Installation and Operating Instructions Panel Heater MCT for wall mounting



Model



MCT 750 W

MCT 1000 W

MCT 1500 W

MCT 2000 W

Please read attentively and keep in a safe place!

Subject to alterations!

Id_no. 911 360 927

Issue 08/21

1. General information about our electric panel heaters

With our variety of electric heaters, you can find the right solution for your needs in any spatial situation. The TECHNOOTHERM heaters are available as additional or transitional heating for all rooms in the living area, with the exception of the special cases stated in the safety instructions. They are designed for continuous operation.

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Prior to dispatch, all our products undergo an extensive function, safety and quality test. We guarantee a constructive design complying with all currently applicable international, European and German safety standards and rules.

You can see this in the labelling of our products with the well-known certification marks: “TÜV-GS”, “SLG-GS”, “Keymark” and “CE”. Our heaters are evaluated in accordance with the internationally applicable IEC-regulations. The manufacture of our heaters is constantly supervised by a state-accredited test centre.

This heater can be used by children aged from 8 years and above and by physically, sensory or mentally restricted persons if they are supervised or given instructions on safe use and understand the hazards involved as it does not require any experience or knowledge. This device is not a toy for children to play with! Cleaning and user maintenance shall not be carried out by children without supervision. The use of heat radiators is to be given a particular duty of care by supervisors.

Children under the age of 3 are to be kept away unless they are continually supervised. Children between the age of 3 and 8 are

Panel Heater MCT

only allowed to switch the heater on or off if they are supervised or given instructions on safe use and understand the hazards involved, provided that it has been placed or installed in its intended normal operating position.

Children between the age of 3 and 8 shall not plug in, regulate and clean the heater or perform user maintenance.

Caution: Some parts of the product can become very hot and cause burns. Pay particular attention when children and vulnerable people are present.

GB

Warning! this device has to be grounded

This device may only be operated using alternating current and the operating voltage indicated on the power rating plate

- Nominal Voltage 230V AC, 50 Hz
- Protection Class I
- Degree of Protection IP 20
- Room Thermostat 7°C till 35°C

Panel Heater MCT

2. Assembly instruction

This Manual is very important and has to be kept at a safe place at all times. Be sure to hand this manual to any other succeeding owner of the device. The device comes with a power plug that has to be plugged into an outlet.

The device is designed to be connected to 230V (nominal) alternating current (AC).

3. Wall Installation

When installing the device, the safety distance must be strictly adhered to, so that flammable materials can not ignite. Install the device to a wall which is heat resistant up to 90 ° C.

- Due to possible fire hazard the safety distances are observed during assembly:

| | |
|--|-------|
| Side walls of the heater to any masonry: | 5 cm |
| Side walls of the heater to combustible materials: | 10 cm |
| Distance radiator to the floor: | 10 cm |

Distance from upper radiator boundary to components or covers arranged above (e.g. window sill)

| | |
|--------------|-------|
| flammable | 15 cm |
| nonflammable | 10 cm |

To prevent inflammable materials from catching fire be sure to keep the prescribed safety distance when installing the device. Mount the device to a wall that is fireproof up to 90 °C.

The safety distance to the floor should be 10 cm, and at least 10 cm to all other devices. Furthermore there has to be safety distance of approximately 50 cm between the ventilation grille, windowsills, roof slopes and ceilings.

If you want to install the device in your bathroom, be sure to keep it out of reach for people taking a shower or a bath.

The wall bracket is already mounted, but only „clicked“ into place and can be easily removed again.

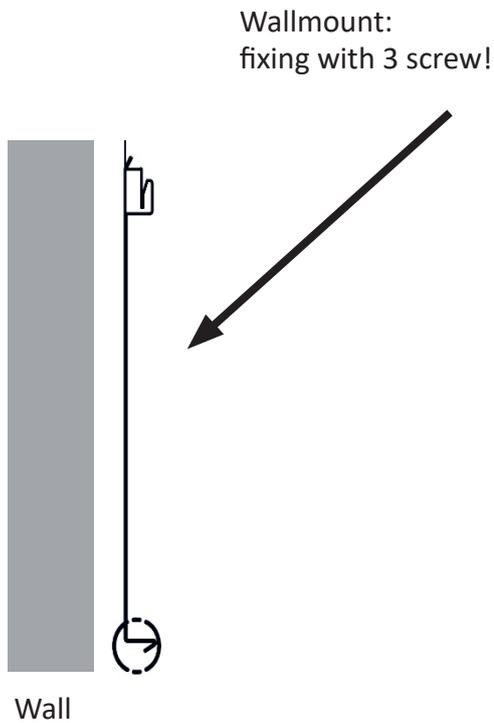
Use the wall bracket as a template and ensure with a spirit level that the wall bracket is mounted exactly horizontally.



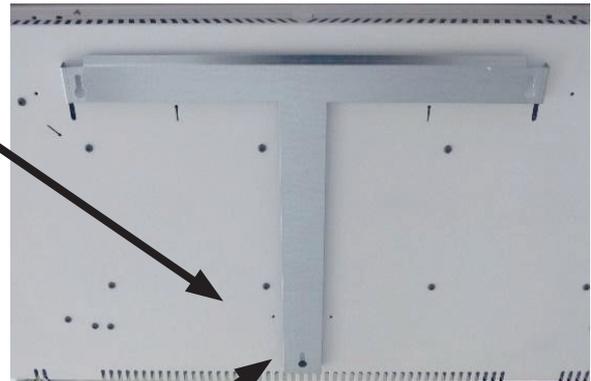
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Additional wall mounting information

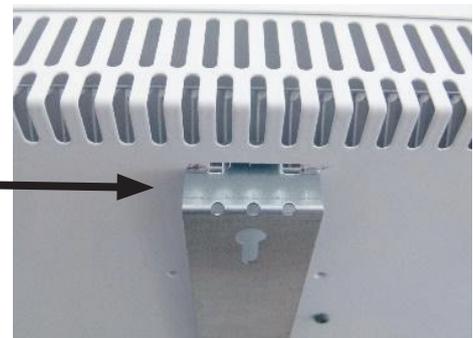
1. Drill three holes of 7mm and fix the wall bracket. Screw in the three 4 x 25 mm screws into the wall
2. Click the heater first at the top into the wall bracket and then at the bottom. The heater will be fixed "automatically".



Topside of heater



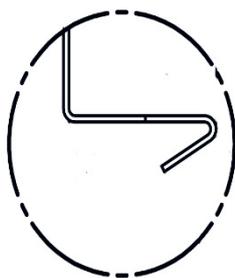
Underside detailview



Mount locked!



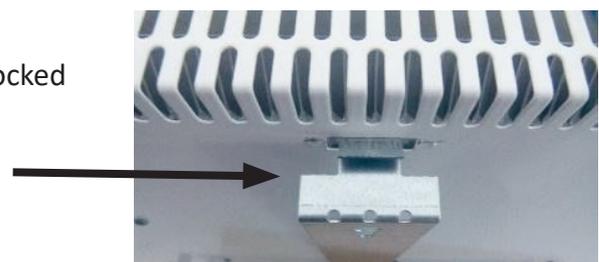
Press a screwdriver into the groove to unlock the mount.



Removing the Heater from the Wall:

1. Press the screwdriver into the groove.
2. Remove the Heater from the Wall

Mount is unlocked



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Panel Heater MCT

4. Instructions for use

The MCT radiator is an electric radiator intended for heating dry indoor areas. The radiator is ideally suited to be used in rooms such as living rooms, bedrooms, (home) offices, hobby rooms, etc. The radiator is equipped with a built-in controller with clock / week program. In addition, there are a number of other functions included in the radiator:

- **Presence detection** with adjustable time interval,
- **3 Temperature levels** (comfort, economy and frost-free),
- **User behaviour indication** through 3 background colours,
- **Babycare function** (maximum casing Temperature of approx. 60°C),
- **Open window function**,
- **Energy consumption meter**,
- **Key lock**

5. Setting Temperature levels

The built-in thermostat controls the heating based on set room Temperatures. Three different Temperature levels apply:

- Comfort Temperature (self-adjustable)
- Economy Temperature (self-adjustable)
- Frost-free Temperature (preset at 7°C and not changeable by the operator)



- A: Set Temperature for the displayed mode
- B: Open-Window function active
- C: Presence function active
- D: Comfort Mode
- E: Eco Mode
- F: Frost Mode
- G: Baby care function active

PLUS MINUS MODE STOP
OK Weekprogramm

By pressing the „mode“ button from the main screen, you can switch between the different levels, and then use the + and - buttons to set the desired Temperature. To set to Frost mode, hold down the „mode“ button. Frost mode set temperature is fixed at 7° C and cannot be adjusted.

Comfort Temperature can be set between 7 - 35 degrees.

Economy Temperature can be set between 7 - 31.5 degrees, but can never be less than 3.5 degrees below the Comfort Temperature.

Please note:

When you set the radiator manually with the mode button to a certain mode, it is continuously switched to this mode, and will therefore continue to heat until the requested Temperature is reached. It is preferable to set the radiator to a preset programme, so that heating is provided only when desired and necessary.

The presence sensor is (if the function is enabled) an addition to the timer programme.

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6. Setting the clock programme

The MCT radiator is equipped with a number of different timer programs. To make use of a timer program, it is of course important that the correct day and time is set on the radiator. How to do this is described in chapter 7.

The radiator has 4 different timer programs:

- PRO (pre-programmed as standard, but can be adjusted by the user),
- PRO 1 (fixed pre-programmed)
- PRO 2 (fixed pre-programmed)
- PRO 3 (fixed pre-programmed)

The programmes PRO 1 to 3 are fixed, pre-set programmes that cannot be changed. If they suit your usage pattern, you can select such a programme. Although the timer programme is fixed, you can of course set the control Temperatures for the comfort and economy periods yourself at any time. This is described in section 5.

The table below shows the set time periods for the programmes PRO 1 to 3:

| | PRO1 | PRO2 | PRO3 |
|----------------------|------|------|------|
| DAY 1 (Monday) | | | |
| DAY 2 (Tuesday) | | | |
| DAY 3 (Wednesday) | | | |
| DAY 4 (Thursday) | | | |
| DAY 5 (Friday) | | | |
| DAY 6 (Saturday) | | | |
| DAY 7 (Sunday) | | | |

When there is a block after the „sun“ symbol, the radiator will heat the room in that hour to the „Comfort“ Temperature you have set.

When there is a block behind the „moon“ symbol, the radiator will heat the room during that hour to the „Economy“ Temperature you have set.

When there is no block above a time block, the radiator will keep the room frost-free (7°C) during that hour.



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If you wish to enter a different programme, you must select the PRO programme and set it yourself if you wish. The PRO user programme is preset to the following pattern:

| PRO | |
|----------------------|--|
| DAY 1 (Monday) | |
| DAY 2 (Tuesday) | |
| DAY 3 (Wednesday) | |
| DAY 4 (Thursday) | |
| DAY 5 (Friday) | |
| DAY 6 (Saturday) | |
| DAY 7 (Sunday) | |

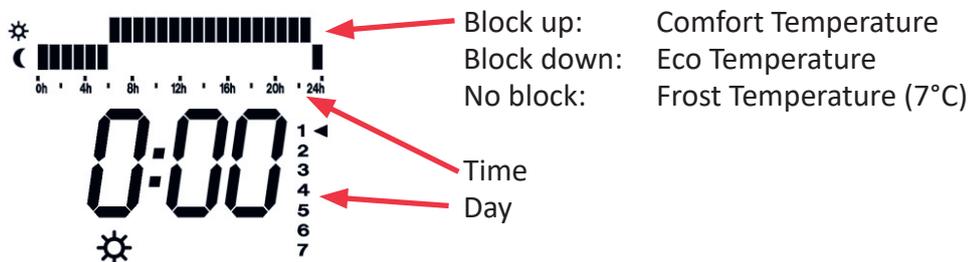
To change this programme to your preferences, follow the steps below:

Make sure the device is switched off. You can do this by pressing the STOP button.

If only the time is displayed, or ---:--, then the radiator is off.

- Then press the "STOP" button for 5 seconds to go to manual programming.
- „Mode“ = change mode
- +/- = select hour
- +/- together = copy mode to next hour
- STOP = confirm program

You will see the following display:



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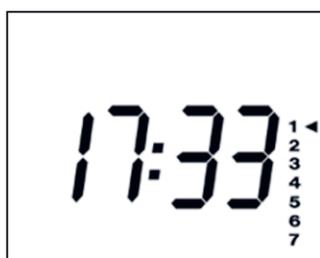
- With the „plus“ and „minus“ buttons you can scroll through the different hours.
- With the „mode“ key, you can select the desired operating mode per hour.
- If you press the plus or minus key for a longer time, you can scroll through the day more quickly. This can be useful when you do not want to change the layout.
- To move to the next day, press the plus key until you get past „24h“.
- The day pointer on the right will then indicate the next day and you can fill in this day as you wish
- If you have set an hour and want to set the next hours in the same mode, press the plus and minus buttons simultaneously. The next hour will then be programmed in the same way.

To exit the programming mode, press the STOP button.

7. Setting the current time and day

Make sure that the device is switched off. You can do this by pressing the „STOP“ button. If only the time is displayed or --:-- , the radiator is switched off.

- Then press and hold the „STOP“ button for 5 seconds to go to manual programming. Briefly press the „STOP“ button again. You will see a similar screen:



- Set the correct day with the „plus“ or „minus“ button (Monday = 1, Sunday = 7)
 - Confirm by pressing the „Mode“ button.
 - Set the correct time using the „plus“ or „minus“ button and confirm by pressing the „Mode“ button.
- Once confirmed, the radiator returns to the „off“ mode.

8. Presence Detection

The MCT radiator has an adjustable presence detection function.

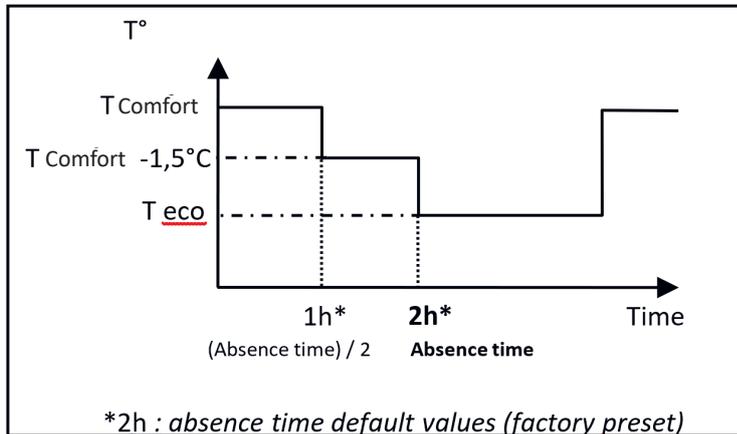
For correct operation, it is important that the sensor can actually look freely into the room. If, for example, the sensor is placed behind the couch (at a sufficient distance, of course), the control will not work correctly, as it will never detect movement or people. In that case, it might be better to switch off the function, so that the radiator can still be used normally.

Presence detection, when enabled, works in comfort mode to automatically adjust your heating depending on the room's occupancy. When you enable presence detection, you will select a value between 10 minutes and 4 hours to serve as the "set detection period". If the radiator detects no person or movement for half the set detection period, it will reduce the set room temperature by 1.5 °C. If the full set detection period elapses with no person or movement sensed, the radiator will switch to economy temperature. If at any time in this mode movement is detected, normal settings will resume.

Panel Heater MCT

The set detection period is adjustable between 10 minutes and 4 hours.
By default, this period is set to 2 hours.

The graph below shows an example of how presence detection controls the Temperature back:



To change the presence detection settings, follow the steps below:

Make sure the device is off. You can do this by pressing the „STOP“ button. If only the time is displayed, or --:-- , then the radiator is off.

- Press the "Mode" button for 3 seconds.
- With the "plus" and "minus" buttons you can set the desired duration of absence.

If you want to switch off the function, set the time smaller than 10 minutes. Then "off" will appear on the screen.

- Confirm with the „Mode“ or „STOP“ button



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9. Open window detection function

The open window detection function ensures that the radiator does not start heating continuously when the window is open and one has forgotten to switch off the radiator. For the function to work correctly, the radiator must also be installed close to the window. For example, against the parapet below the opening window.

When a rapid Temperature drop in the room is detected, between 1.5°C and 2°C within less than 14 minutes, the radiator stops heating for 3 hours. The time is shown in the display, as well as a blinking window symbol.

When the Temperature rises by 0.4°C during these 3 hours, the radiator will resume the previously set heating function. The function can also be overridden manually by briefly pressing the „stop“ button twice. The open window detection function can, if desired, be switched on or off by following the steps below:

Make sure the device is switched off. You can do this by pressing the „STOP“ button. If only the time is displayed, or --:--, then the radiator is off.

- Press the „Mode“ button for 3 seconds.
- You are now in the parameter to set the presence detection. Briefly press the „Mode“ button again to enable or disable the open window function.
- Using the „plus“ or „minus“ button you can switch the function on or off.
- You leave the menu with the „Mode“ or „STOP“ button

10. Babycare function

The MCT radiator is equipped with a babycare function.

This means that, when this function is activated, the radiator has a maximum surface Temperature of approx. 60°C. This makes the radiator touch-safe, so that there is no direct danger of burning.

When there is a heating demand, the radiator will start heating up. As soon as the casing has reached the maximum Temperature (60°C), the radiator stops heating for a moment. As soon as the casing has cooled down a little, the radiator will automatically start heating again.

This function makes the radiator ideal for use in a nursery, care institution, etc.

An additional advantage is that the radiator actually has a more constant Temperature throughout the day, because the radiator will heat little and often, as opposed to raising its temperature high and then spending long periods not heating. Remember - whether or not you use the Babycare function, the radiator will still only heat when there is demand.

When the baby care function is switched on, the baby symbol is shown on the display constantly.

When the baby care function switches the heater off temporarily, the baby symbol is shown on the display flashing:



Note: If the babycare function is switched on, it may happen that after increasing the room Temperature, the radiator reacts slightly slower.

To switch on: press the „Minus“ and „Mode“ buttons simultaneously for approx. 2 sec.

To switch off: press the „Minus“ and „Mode“ buttons simultaneously for approx. 2 sec.

Note - radiator must be on one of the heating modes for the Babycare function to be set. It cannot be set in standby mode.

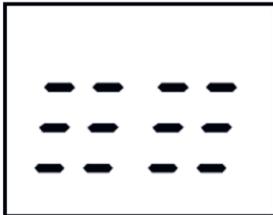
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11. Key lock

If, after setting a certain heating programme correctly, you do not want other people to be able to operate the radiator, you can lock the control.

- To activate this function, press the "Plus" and "Minus" buttons simultaneously for >3 sec.
- To deactivate the function, press the "Plus" and "Minus" buttons simultaneously for >3 sec.

When the key lock is activated, and any key is pressed, horizontal dashes appear on the display:



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12. End user behaviour indicator

To help you to use energy consciously, the background changes colour according to whether a higher or lower Temperature is selected.

There are three Temperature levels with different colours:

- If the Temperature is set up to 19°C, the display is green,
- If the Temperature is set between 19°C and 24°C, the display will turn yellow,
- If the Temperature is set above 24°C, the display will turn red



13. Energy consumption counter

The MCT electric radiator has a function for keeping track of the approximate energy used. Here, the counter registers the number of heating hours/minutes and multiplies this value by the wattage of the radiator. This makes it possible to read how much power has been consumed.

In order to use this function correctly, it is important that the power is set correctly once, so that the counter knows how much power the radiator has.

- To set the correct power, follow the steps below:
 Make sure that the device is switched off. You can do this by pressing the „STOP“ button. If only the time is displayed, or --:-- , then the radiator is off.
- Then press the „Min“ button for 2 seconds to display the power setting:



Set the correct power level with the "Plus" or "Minus" button and confirm with the "Mode" button.

Please note: setting an incorrect output will result in an incorrect consumption display. Therefore, always check on the basis of the type plate on the radiator whether the power corresponds to the set value.

To display the energy consumption, follow the steps below:

- Make sure the appliance is switched off. You can do this by pressing the „STOP“ button. If only the time is shown, or --:-- , then the radiator is off.
- Then press the "Plus" button for 2 seconds to display the energy consumption. The consumption is displayed for approx. 8 seconds.
- If you want to reset the counter, press "Plus" for 2 seconds until the value is 0.
- You can exit the menu with the "Mode" or „STOP“ button.

Panel Heater MCT

14. Temperature calibration

In some cases it can happen that a radiator measures a room Temperature that is not representative for the room in which it is mounted. This can have several causes. For instance, when the sensor measures just in a draught. Sometimes residents also have other measuring devices where they want to see the same Temperatures. In that case one can adjust the Temperature sensor.

If, for example, the radiator switches off 1° too early (so the room remains too cold), the parameter should be set to -1 in these settings.

If, for example, the radiator switches off 1° too late (i.e. the room becomes too warm), the parameter should be set to +1 in these settings.

Changing the Temperature calibration is done by following the steps below:

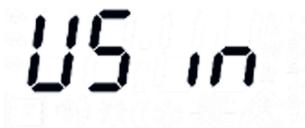
- Make sure that the device is switched off. This can be done by pressing the rightmost ("Off") button. If only the time is shown, or --:-- , then the radiator is switched off.
- 1. Now press the „MODE“ button for 5 seconds.
- 2. Now briefly press the „Mode“ button twice.
- 3. You can adjust the value with the „plus“ and „minus“ button. Standard it is set on „0“ offset.
- 4. When you have changed the value, confirm with the „Mode“ or „STOP“ button.

15. Reset to factory settings

This function resets all settings made, and returns the unit to the factory settings.

Please note that all self-set heating programs will also be deleted.

- Make sure that the unit is switched off. You can do this by pressing the rightmost („Off“) button. If only the time is displayed, or --:-- , then the radiator is off.
- 1. Press the „Mode“ and „STOP“ button simultaneously, and hold for at least 10 seconds. The following screen will appear:



- 2. Then press these buttons again simultaneously and hold for at least 5 seconds. The following screen appears:



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16. Error messages

If one of the following error messages appears on the display, the Temperature sensor must be replaced:

SC

Temperature sensor short-circuited

OC

Temperature sensor has no resistance (Open Circuit)

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The Temperature sensor is an NTC, with a 10kOhm resistance at 25°C.

Panel Heater MCT

17. Installation of Electricity

The device was developed for an electrical voltage of 230 V(nominal) and an alternating current of (AC) 50 Hz. The electrical installation may only be performed according to the user manual and only by a qualified Electrician. The device was designed to be used with termination and the connection cable has to be plugged into an appropriate socket at all times. (Notice Permanent cables may not be used) The distance between the receptacle and the device has to be at least 10cm. The connection line may not touch the device at any time.

18. Regulation

From 01.01.2018, the EU conformity of these devices is additionally linked to the fulfillment of the Ecodesign requirements 2015/1188.

The installation and commissioning of the devices is only permitted in conjunction with external room Temperature controllers that fulfill the following functions:

- electronic room Temperature control

and has at least one of the following properties:

- room Temperature control, with presence detection
- room Temperature control, with open window detection
- with distance control option
- with adaptive start control

The following room Temperature controller systems

- MCT-Thermostat

from TECHNOTHERM meet the following requirements and therefore the ErP Directive:

- electronic room Temperature control plus week timer
- room Temperature control, with open window detection
- room Temperature control, with presence detection

Use of the Standard range (without external/internal thermostat control) is only permitted on feet.

For customer service - see last page.

Failure to comply with these requirements will result in the loss of the CE mark.

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| Model: MCT | | | | | | | | | |
|--|---|-------|------|------|------|------|---|--|-------|
| Item | Symbol | Value | | | | | Value | Item | Value |
| Heat output | | | | | | | Type of heat input, for electric storage local space heaters only (select one) | | |
| Nominal heat output | P_{nom} | 750 | 1000 | 1200 | 1500 | 2000 | Watt | manual heat charge control, with integrated thermostat | NO |
| Minimum heat output (indicative) | P_{min} | 750 | 1000 | 1200 | 1500 | 2000 | Watt | manual heat charge control with room and/or outdoor Temperature feedback | NO |
| Maximum continuous heat output | $P_{max,c}$ | 750 | 1000 | 1200 | 1500 | 2000 | Watt | electronic heat charge control with room and/or outdoor Temperature feedback | NO |
| Auxiliary electricity consumption | | | | | | | | fan assisted heat output | NO |
| At nominal heat output | $e_{l,max}$ | 750 | 1000 | 1200 | 1500 | 2000 | Watt | Type of heat output/room Temperature control (select one) | |
| At minimum heat output | $e_{l,min}$ | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | Watt | single stage heat output and no room Temperature control | NO |
| In standby mode | $e_{l,SB}$ | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | Watt | Two or more manual stages, no room Temperature control | NO |
| | | | | | | | | with mechanic thermostat room Temperature control | NO |
| | | | | | | | | with electronic room Temperature control | NO |
| | | | | | | | | electronic room Temperature control plus day timer | NO |
| | | | | | | | | electronic room Temperature control plus week timer | YES |
| | | | | | | | | Other control options (multiple selections possible) | |
| | | | | | | | | room Temperature control, with presence detection | YES |
| | | | | | | | | room Temperature control, with open window detection | YES |
| | | | | | | | | with distance control option | NO |
| | | | | | | | | with adaptive start control | NO |
| | | | | | | | | with working time limitation | NO |
| | | | | | | | | with black bulb sensor | NO |
| Contact: | TECHNOTHERM Reinhard-Schmidt-Str. 1 09217 Burgstädt Germany | | | | | | | | |



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service:

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