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Power of comfort

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Instructions



Power of comfort



2018/01 INSTALLATION

Safety instructions

Connection is done as a rule via an earthed 230 V socket. A 16 ampere fuse is required for a heating rating of 2500 watts and more. We recommend a socket with its own fuse that will only be used for the radiator heater. Only tested H05VV-F 3-1.5 mm² cable should be used for the connecting cables. The accessories that were included in the scope of supply should be used for the installation of the electric heater. Never use adhesives for the installation. An ideal installation area is an outer wall of a room to ensure an even distribution of heat throughout the room. Alternatively, installation on inside walls is also possible, but this can lead to poor circulation of the warmth within the room. We recommend operation using thermostats that are available separately to ensure even heating in the room. The surface of the radiator heater heats up to a maximum of 70 °C, so there is no risk of burns. Ensure nonetheless that the socket that the radiator heater has been plugged into must always be easily accessible. The radiator heater may not be set up immediately underneath wall sockets; we suggest a safe distance of 30 cm as a guideline value. Ensure that the radiator heater is not covered during operation, as that would cause a risk of fire. Note when installing electric heaters in bathrooms that the heater must be set up at a safe distance from the bathtub, shower or bathing pool to ensure that it cannot be operated by persons in them. However, the radiator heater is protected against sprayed water. The room thermostats are to be installed such that they cannot be touched by a person in the bathtub or in the shower. It is necessary to comply with the stipulation of VDE 0700, part 701 in the installation. In the case of a fixed installation there must be an all-phase circuit breaker in accordance with the installation regulations and which meets overvoltage category III. Please note that the connection of an electric radiator heater or the connecting or replacement of the mains connecting cable may only be done by a qualified electrician. Comply with the regulations of the local electricity utility. If the mains connecting cable for the radiator heater is damaged, this must be replaced either by the maker, his after sales service section, or a qualified electrician. This appliance is not intended to be used by persons (including children) with restricted physical, sensory or mental capabilities or who lack the requisite knowledge or experience unless they are supervised by a person who is responsible for their safety or who gives them instructions on how to use the appliance. Children should be supervised to ensure that they do not play with the appliance.



Warning: Do not cover the appliance, as that will cause it to overheat.



Warning: Keep children under 3 years of age away from the appliance unless they are being supervised.

Children over 3 and less than 8 years of age should only switch the appliance on and off if they are being supervised or if they have been instructed in safe use of the appliance and have understood the dangers involved, assuming that the appliance has been placed or installed in its normal working position. Children above the age of 3 and less than 8 years old may not insert the plug into the socket, regulate the unit, clean it and/or carry out the maintenance that can be done by the user.



Attention: Some parts of the product can get very hot and cause burns. Take special care if children and persons requiring supervision are present.

There can be various odours when the electric heating is used for the first time. These disappear after a few hours of use.



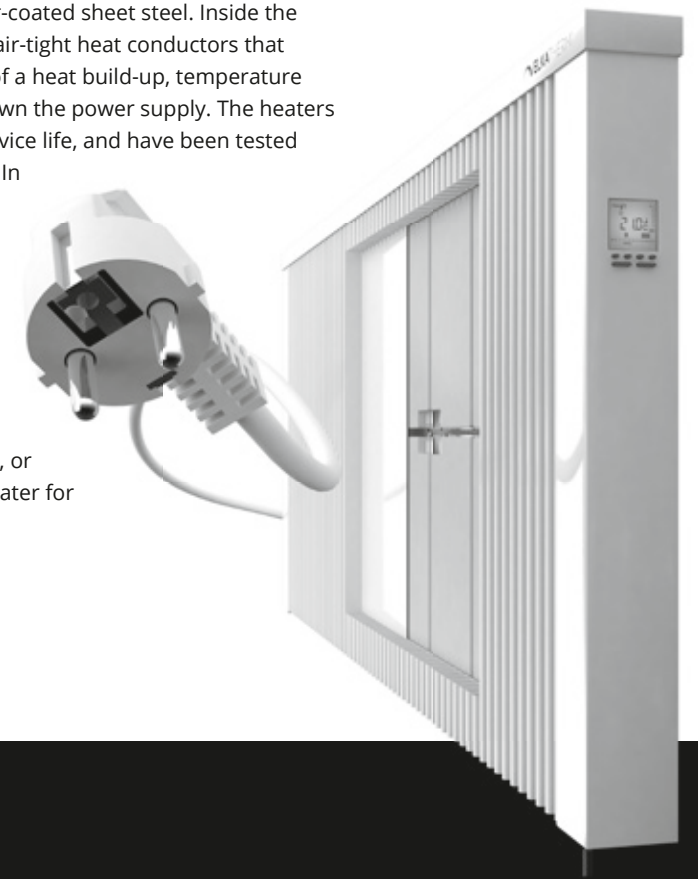
Attention: Electrical appliances contain pollutants and valuable resources. Each consumer is therefore required by law to take used electrical appliances to a designated collecting or acceptance point, for example, at the local recycling centre. Used electrical appliances are accepted there free of charge (in Germany) and are sent on for recycling to save resources and the environment.

Thank you for buying an ELKATHERM product

For more than 50 years, ELKATHERM has been a household name for innovative heating systems and fireplaces. We thank you for choosing an ELKATHERM electric panel storage heater. Our storage heaters fit any room, as they are available in a wide range of sizes and are only 8 cm wide. The storage blocks made from fireclay release heat gradually for extra room comfort. On the next pages, we tell you all you need to know about your new panel storage heater and give you instructions for its installation and commissioning.

The electric panel storage heater

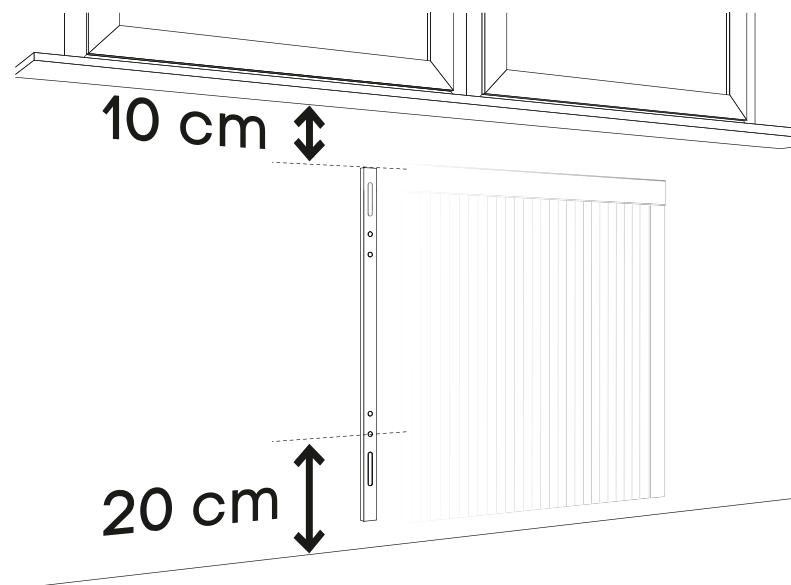
The housing of the panel storage heater is made in powder-coated sheet steel. Inside the housing, there are fireclay storage plates with embedded, air-tight heat conductors that gradually release a constant amount of heat. In the event of a heat build-up, temperature sensors inside the heater prevent overheating and shut down the power supply. The heaters are made from top-quality materials that ensure a long service life, and have been tested and approved by the regulatory appliances approval body. In contrast to conventional electric heaters, our panel storage heaters convert nearly all the energy they consume into heat, with minimum loss, no oxygen consumption and without causing draughts. They can be installed with minimum effort, as all there is required is a connection to a power socket or a permanent connection to a 230V supply line. Electric panel storage heaters require no maintenance. The room temperature can be controlled manually with a thermostat, or electronically. Heaters equipped with a digital thermostat cater for automatic temperature reduction during night time.



Electric heaters from ELKATHERM are easy to install.
All installation steps are explained in our video:
<http://www.elkatherm.com/de/service/mediathek>


The instructions only available in german language!

Wall installation of electric panel storage heater

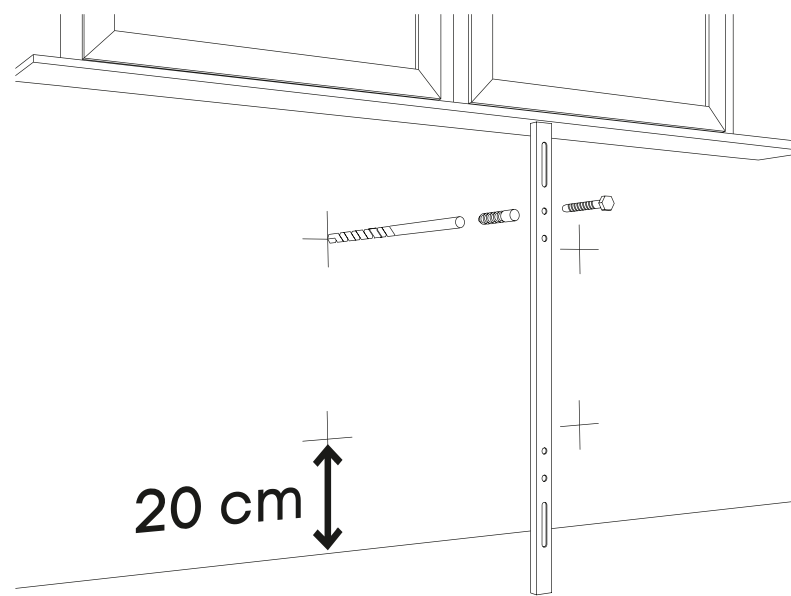
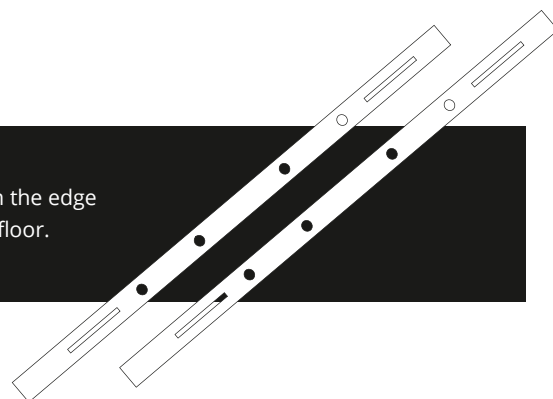


Suitable locations for installation:

We recommend installing the heater under a window or elsewhere on an outer wall. Where this is not possible, the heater can be installed on an internal wall, although heat distribution might not be as efficient in this case. For wall installation, keep a minimum distance of approx. **10 cm** from the bottom edge of the heater to the floor and from the top edge of the heater to the upper edge of the windowsill, in order to ensure free air circulation. At both sides of the heater, keep a minimum distance of **5 cm** to objects or building structures. Install the heater so that the power connection is at its right side. Do not install the electric heater close to a toilet or urinal. Urine can cause damage to the powder coating, and such damage is not covered by warranty.



Note: the end of the U-rail with the longer distance from the edge to the slot is the bottom end. This end must face to the floor.



Positioning U-rails:


The distance between the floor and the first bore from the bottom must be **20 cm**. Mark the position of the first bore from the bottom and align the U-rail in a vertical position, using a spirit level. Then mark the position of the first bore from the top.

Securing U-rails to the wall:

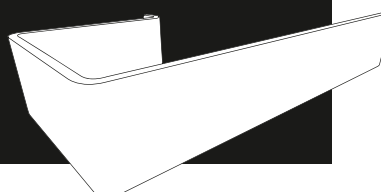
Using a **8 mm masonry drill bit**, drill holes at the marked points (**drilling depth approx. 60 mm**) into the wall. Place the wall plugs in the holes. Hold the U-rail against the wall so that you can insert the hex head screws through the U-rail into the wall plugs. **Tighten the hex head screws with an open-end spanner.**

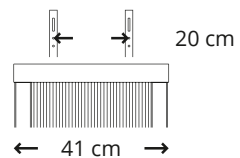
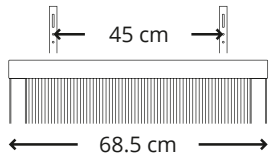
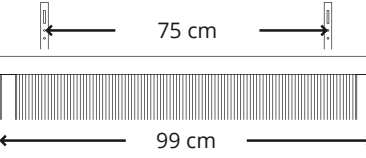
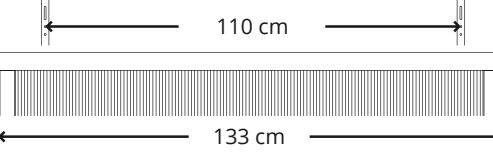
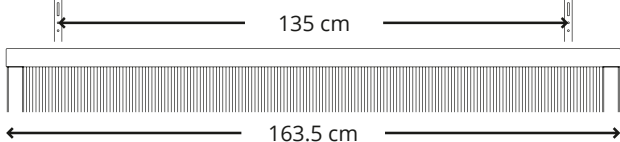
Distance between U-rails:

To determine the position of the second U-rail, refer to the drawings below. The distance between the U-rails depends on the width of your electric panel storage heater.



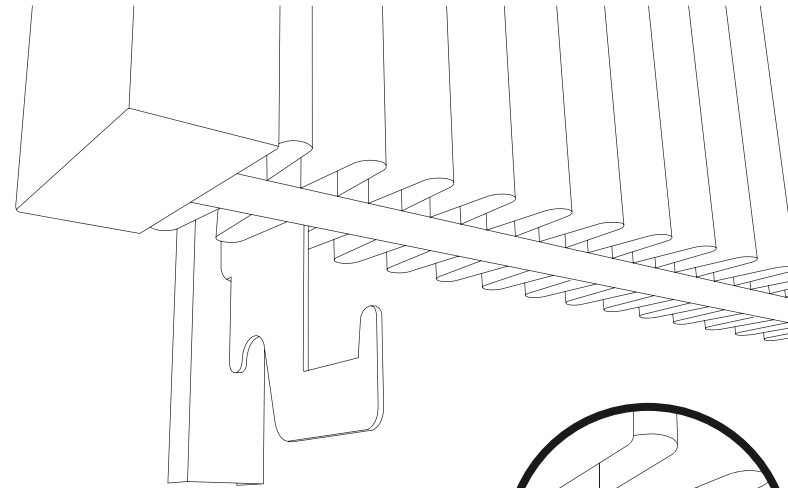
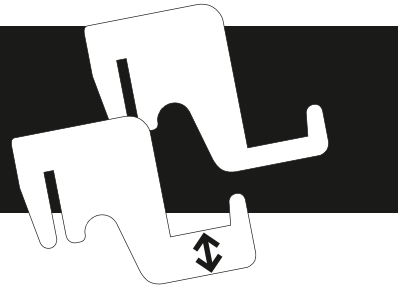
Please note: if you wish to install Style towel rails (product no. 410 Style/685 Style), reposition the U-rails by 2 cm towards the outer edge of the heater, and align the U-rails so that the sides with the bores face outwards.



Width	Distance between U-rail bores:	With Style towel rail
	from 41 cm	24 cm
	from 68.5 cm	49 cm
	from 99 cm	79 cm
	from 133 cm	114 cm
	from 163.5 cm	139 cm

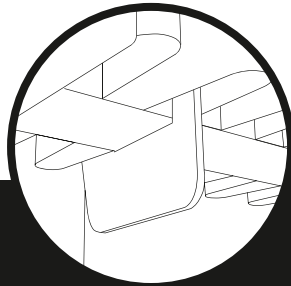


The heater is shipped with two different types of hooks. The wide hook is installed at the bottom to carry the weight of the heater.

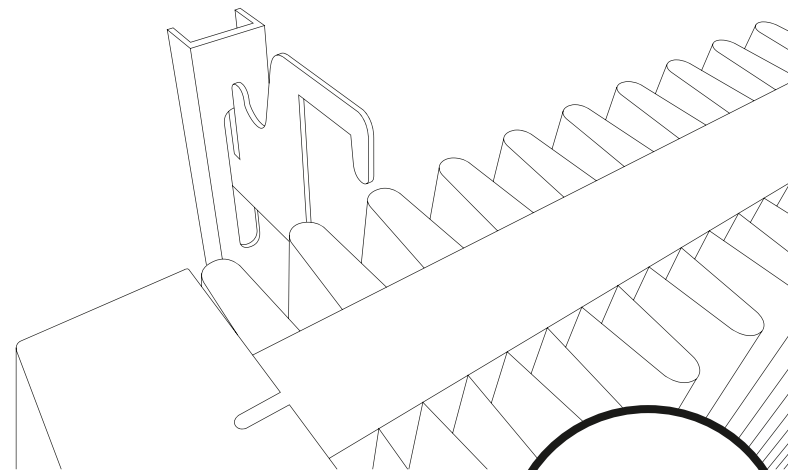


Attaching hooks:

Engage the **wide hooks** in the bottom slots of the U-rails and then place the electric panel storage heater on the hooks as described below.



Please note that the bottom hooks must fit into the fins of the heater.

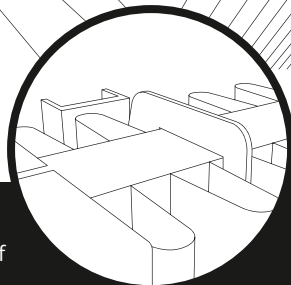


Mounting electric panel storage heater:

Place the heater in a vertical position in front of the rails and hooks and remove the cover panel. Lift the heater and place it on the hooks so that these engage in the fins.

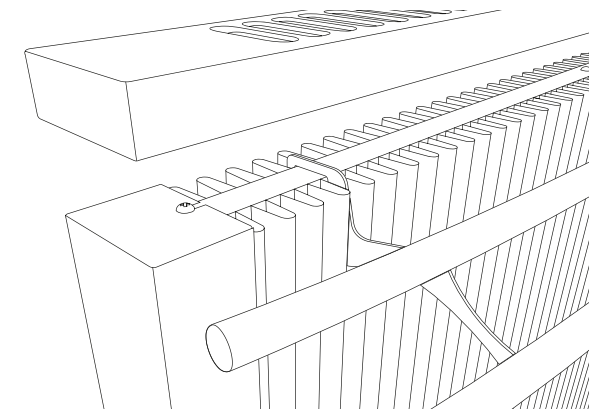
Mounting hooks at the top:

Tilt the heater slightly away from the wall towards yourself and insert the upper (small) hooks in the U-rail slots. Slowly move the heater into a vertical position while lifting the upper hooks, and then release the hooks so that they engage in the fins of the heater. Replace the cover panel of the heater.



Please note that the hooks at the top must fit into the fins of the heater.

Installing Standard or Swing towel rail:



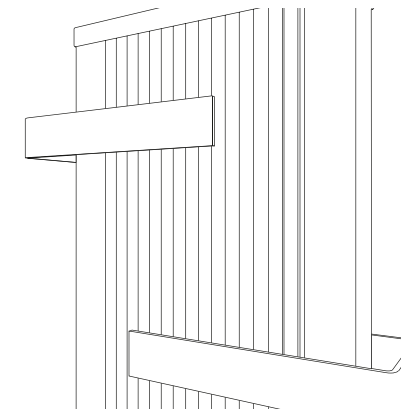
Prod. no. 410 H/685 H towel rail "Standard" and prod. no. 410 Swing/685 Swing towel rail "Swing"

To mount a Standard or Swing towel rail, remove the cover panel of the heater.

Centre the Standard or Swing towel rail on the heater and slide its bracket between the heater fins.

Replace the cover panel.

Installing Style towel rail



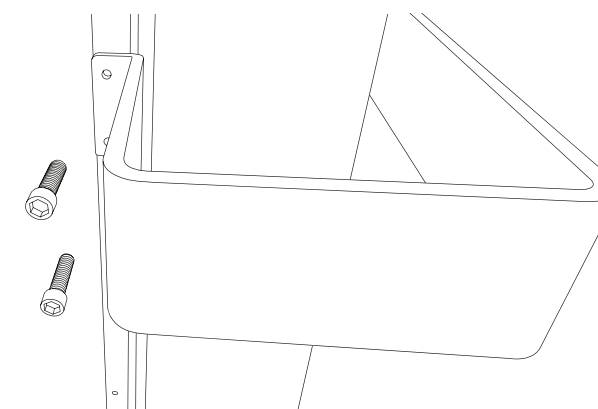
Prod. no 410/685 Style

Depending on the height of the electric panel storage heater, you can install one, two or three Style towel rails by securing them to the U-rails. The number of towel rails you can install corresponds to the number of side bores in the U-rails.

To install the towel rails, use the installation kit, consisting of a set of socket screws and an Allen key.



Please note that, for the installation of Style towel rails, the U-rails must be placed at a different distance to each other. For details, see to page 5.



The towel rails must be attached after the electric panel storage heater has been installed. The towel rail is screwed to the U-rail holding the heater. The towel rail can be attached to the left or right U-rail of the heater.

Position the Style towel rail so that its bore and that in the U-rail are aligned with each other and insert a socket screw. Insert the second socket screw through the second bore of the towel rail and tighten both screws.

Installing "GLASS" front panel

To install the "GLASS" front panel, use the supplied mounting kit and tools:

- 1** 4x caps
- 2** 4x screws
- 3** 4x screw bushings
- 4** 4x spacers
- 1x Allen key (not shown)

The front panel **A** must be installed on the heater in a horizontal position. Simply place the electric panel storage heater on the original packaging on the ground, or place it on a piece of cardboard or carpet to protect its surface finish.

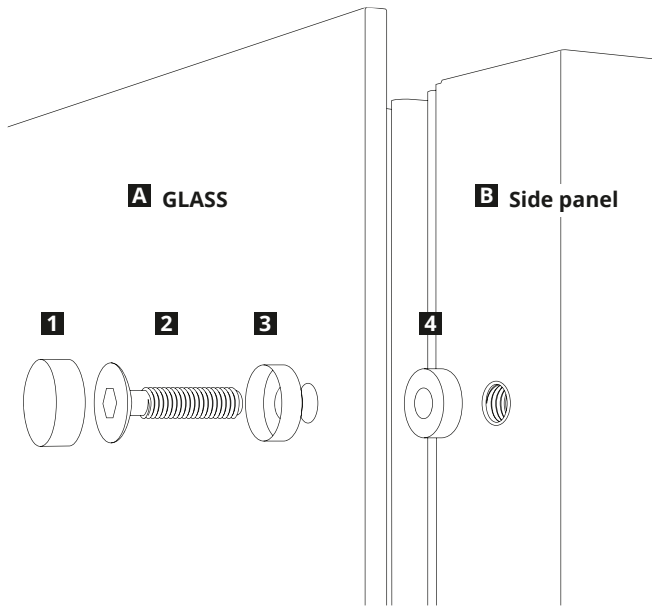
The side panels **B** of the heater feature four threaded bores, two at the top and two at the bottom.

Align the spacers **4** to the threaded bores so that the screws can be easily placed in the bores and engage in the threads.

Place the glass panel **A** on the spacers **4** and align it. We recommend doing this with the help of another person.

Place the screw bushing **3** on the glass panel **A**, insert the screw **2** into the thread and tighten it lightly. Do the same with all screws.

Tighten the screws **2** a bit more (so that the glass panel **A** is held in position) and then push the caps onto the **1** screws **2**.

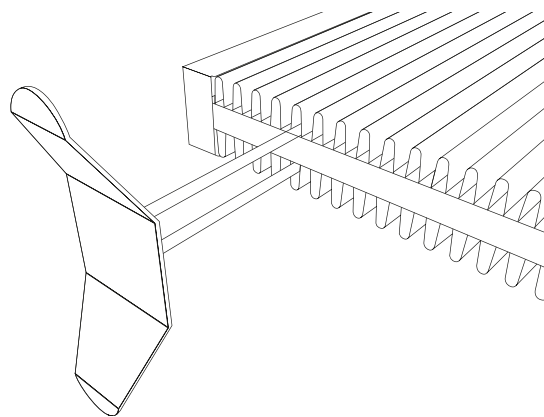


Prod. no. GLASS
6 mm toughened glass



Please note that the glass panel is only a decorative feature. Never attempt to lift the heater by the glass panel.

Mounting feet



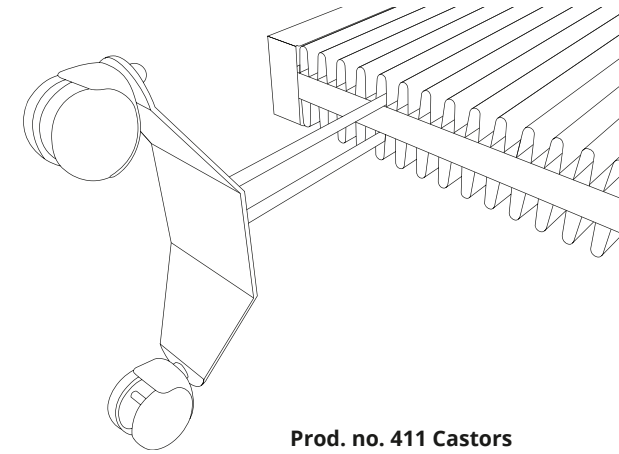
Prod. no. 410 Feet

Feet and castors ensure that free-standing heaters, i.e. heaters not permanently secured to a wall, are stable and safe. Heaters with feet or castors can be moved to any place where you need heat.

To mount the feet, place the heater carefully on its side. We recommend using the original packaging as padding so as to protect the powder coating.

Lift the bottom of the heater and slide the rods of the feet or castors into the 5th heater fins from the sides so that the fins cover the rods fully.

Mounting castors



Prod. no. 411 Castors

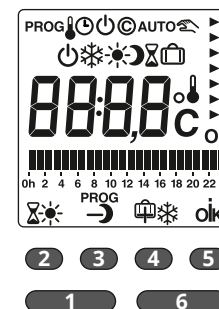
Proceed as described above for the heater feet. To place the heater on the castors, hold its feet. Lift the heater together with the feet and place it in a vertical position on the castors.

Heaters placed on feet and/or castors must be connected with a flexible cable with a safety plug to a power socket. Minimum requirements PVC insulated & sheathed flexible cord H05 VV-F, 3 x 1.5 mm² or higher.

Operation of integrated digital thermostat

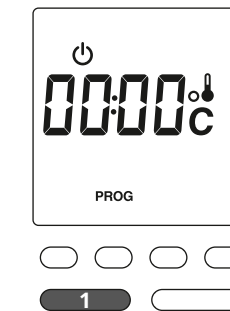
The integrated digital thermostat is built into the side panel of the electric panel storage heater. The temperature is measured by a sensor under the side panel. The thermostat allows for the entry of week programs, eco and comfort settings and features a self-learning function so that, after a few days of operation, it is able to determine the exact time when heating needs to start to reach the programmed room temperature. In addition, the thermostat detects if a window is open, and then automatically switches to frost protection mode to save energy.

Should the thermostat be shut down for several hours, e.g. following a power cut, the programmed data is not lost and the thermostat automatically returns to the operating mode it was in prior to the power cut.



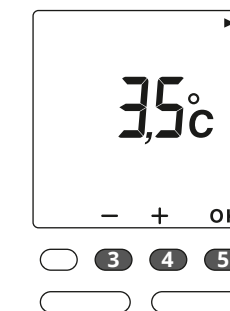
Buttons:

- 1** ON/OFF
- 2** Comfort/automatic function
- 3** Minus/economy mode
- 4** Plus/frost protection/absence function
- 5** OK/confirmation/info
- 6** Mode/time



Basic configuration:

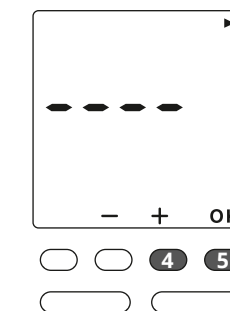
To enter the basic configuration parameters, ensure that the thermostat is in "OFF" mode and then call up the configuration menu by pressing the \odot "ON/OFF" **1** button for approx. 5 seconds. The "ECO" menu is displayed where you can enter the "ECO" value.



Menu 1: Setting "ECO" value (night-time temperature reduction)

Based on the "Comfort" value, enter an "ECO" value between 0 and -10°C. Press the "+" **4** or "-" **3** button to change the temperature in steps of 0.5°C. Confirm the set temperature by pressing the "OK" **5** button.

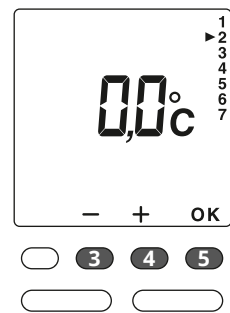
Example of calculation: If you have set a standard comfort temperature of 21°C and wish to set the "Economy" temperature to 17°C, enter a value of 4°C.



To enter the "ECO" value directly, press and hold the "+" **4** button until the display reads "----".

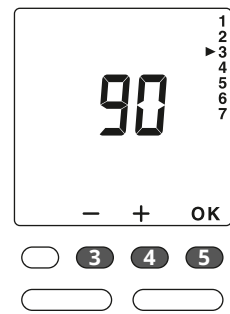
To call up the next menu, confirm your settings by pressing the "OK" **5** button.

Operation of integrated digital thermostat



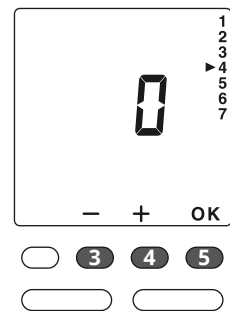
Menu 2: Correction of measured temperature

If the temperature indicated by the thermostat differs from the actual temperature, you can enter a correction value in menu 2 to eliminate the difference. Press the "+" **4** or "-" **3** button to correct the temperature difference in steps of 0.1°C between -5°C and +5°C. Example: if the temperature shown on the display is 19°C and the temperature measured with a thermometer is 20°C, enter correction value +1°C. Confirm your entry by pressing the "OK" **5** button. The next menu is displayed.



Menu 3: Background lighting

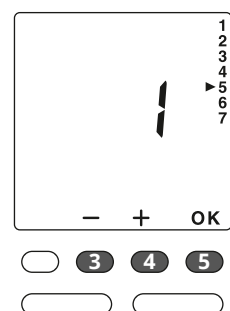
The time for which the background lighting is on can be set in steps of 15 seconds to a value between 0 and 225 seconds (default: 90 seconds). To change the background lighting time, press the "+" **4** or "-" **3** button. Confirm your entry by pressing the "OK" **5** button. The next menu is displayed.



Menu 4: Selecting temperature displayed in AUTO mode

To select the temperature that is displayed in AUTO mode, press the "+" **4** or "-" **3** button. Confirm by pressing the "OK" **5** button.

- 0 = Room temperature is displayed
- 1 = Setpoint temperature is displayed



Menu 5: Open Window detection

The detection of an open window occurs when the room temperature falls rapidly.

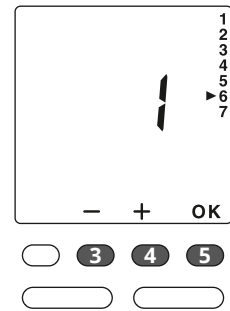
In this case, the display shows a flashing pictogram, as well as the frost protection set-point temperature.

To change this setting, press the "+" **4** or "-" **3** button. Confirm your entry by pressing the "OK" **5** button. The next menu is displayed.

- 0 = Open window detection is deactivated
- 1 = Open window detection is activated



Please note: an open window cannot be detected in OFF-Mode ϕ . This feature can be temporarily interrupted by pressing on \ast .



Menu 6: Adaptive start control

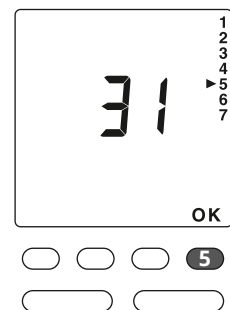
This feature enables to reach the set-point temperature at a set time. When this feature is activated, the display shows a flashing \ast .

- 0 = Adaptive start control deactivated
- 1 = Adaptive start control activated

To change this setting, press the "+" **4** or "-" **3** button. Confirm your entry by pressing the "OK" **5** button. The next menu is displayed.

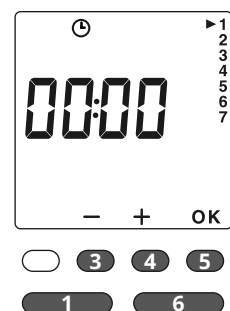
Adjusting the time-temperature-slope (when adaptive start control is activated)

From 1°C to 6°C, in steps of 0.5°C. If the set-point temperature is reached too early, then a lower value should be set. If the set-point temperature is reached too late, then a higher value should be set.



Menu 7: Display of product no.

Call up this menu to view the product number of the thermostat. To exit the menu, press the "OK" **5** button.



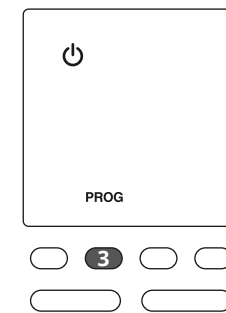
Date and time settings:

When the thermostat is in "OFF" ϕ , mode press the "Time" **6** button. The weekday display flashes.

Select the day of the week by pressing the "+" **4** button, e.g. 1 for Monday, 2 for Tuesday, etc. Confirm your settings by pressing the "OK" **5** button. The hour display flashes. Press the "+" or "-" **4** / **3**

button to set the time (hours). Confirm by pressing the "OK" **5** button. The minute display flashes. To enter the minutes, proceed as for the entry of the hour. To exit the menu, press the "ON/OFF" **1** button.

Operation of integrated digital thermostat



Entry of week program

At the factory, the thermostat is configured so that program "Comfort from 08:00 to 22:00 o'clock" is used for every day of the week. To change the program, press the "PROG" **3** button when the thermostat is in "OFF" ϕ or "AUTO" mode.

The 1st time window flashes.



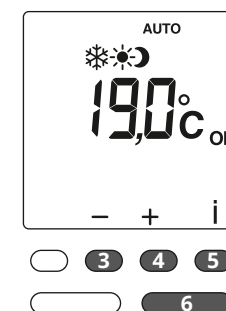
In the bar diagram at the bottom of the display, the lower bars represent the "Economy" times, and the higher bars represent the "Comfort" times.

The numbers to the right represent the days of the week (e.g. 1 for Monday, 2 for Tuesday, etc.). The arrow points to the day you have selected.

Press the **2** button to enter a "Comfort" \ast hour, adding a high bar to the row at the bottom of the display. Press the **3** button to enter an "Economy" \triangleright hour, adding a low bar to the row at the bottom of the display. Press the **4** button to add a "Frost protection" \ast hour to the program (no bar). Confirm your settings by pressing the **5** button. The program automatically changes to the next day of the week.

Quick setup:

If you wish to run the same program on all days of the week, press and hold the "OK" **5** button for approx. 3 seconds until the program for the next day is displayed. To exit the menu, press the "ON/OFF" **1** button.

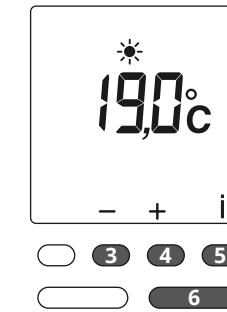


Selecting operating mode:

Press the "MODE" **6** button to select the operating mode. Available options: "Comfort" \ast , "Economy" \triangleright , "Frost protection" \ast and "AUTO" AUTO with program.

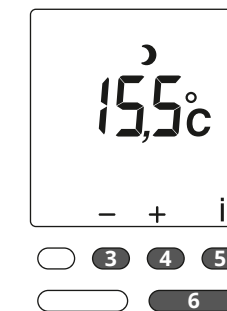
To view the temperature, press the "i" **5** button to call up the room temperature or the setpoint temperature (depending on your selection in menu 4). "ON" ON on the display indicates that the heater is in heating mode.

Thermostat operation:



Comfort continuous mode:

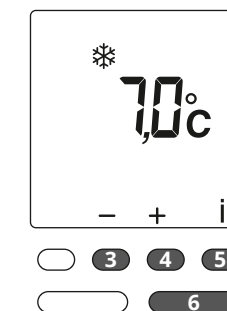
Press the "+" **4** or "-" **3** button to change the temperature in steps of 0.5°C to a value between +5 and +30°C.



Economy continuous mode:

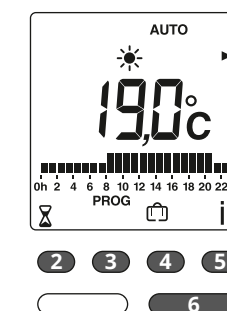
The "Economy" temperature is based on the set "Comfort" temperature. To program the "Economy" temperature, call up configuration menu 1 (see page 22, Setting "ECO" value).

If "ECO" mode is enabled (see page 9, Setting "ECO" value), you can change the temperature in steps of 0.5°C to a value between +5 and +30°C by pressing the "+" **4** or "-" **3** button.



Permanent frost protection mode:

Press the "+" **4** or "-" **3** button to change the temperature in steps of 0.5°C to a value between +5 and +30°C.



Automatic mode:

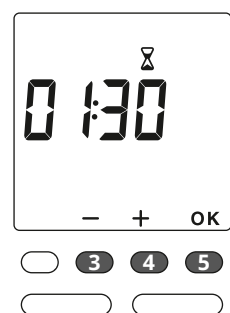
In automatic mode, the heater is controlled by the set program. To change the program, press the "PROG" **3** button.

Temporary temperature settings:

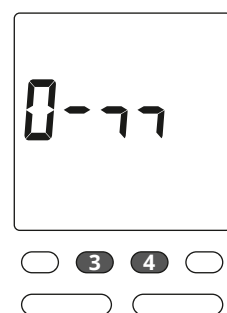
In AUTO mode, press the X **2** button, and enter the temperature value you wish to use for a limited time period.

Enter the desired temperature (+5°C to +30°C) by pressing the "+" **4** or "-" **3** button. Confirm by pressing the "OK" **5** button and enter the time period for which you wish to use the set temperature.

Operation of integrated digital thermostat



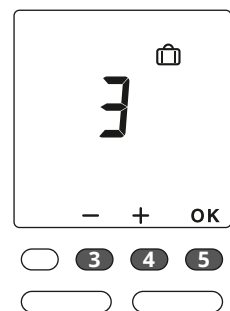
Enter the time (30 minutes to 72 hours) by pressing the "+" **4** or "-" **3** button (e.g. 1h30) and confirm by pressing the "OK" **5** button. To delete the temporary temperature settings, press the "OK" **5** button again.



Keypad lock:

To lock the keypad, simultaneously press the buttons "+" **4** and "-" **3** for 5 seconds. A key icon is displayed for a few seconds.

To unlock the keypad, simultaneously press the buttons "+" **4** and "-" **3** again for 5 minutes.



Absence function:

To set the heater to "Frost protection" mode for a number of days (1 to 365 days), press the key icon button **4**.

Enter the days of your absence by pressing the "+" **4** or "-" **3** button and confirm by pressing the "OK" **5** button.

To delete the absence day program, press the "OK" **5** button again.

General information

Installation of thermostats:

Available thermostats: plug-in thermostat, integrated thermostat or wireless thermostat. For the installation and operation of your thermostat, please refer to the operating instructions supplied with the device.

Commissioning your electric panel storage heater:

The heater is commissioned through a thermostat. We recommend setting the temperature to 20 or 21 °C. The energy supplied through the heating conductors is instantly converted into heat that is stored in the fireclay elements. The electric panel storage heater now works in automatic mode. When the setpoint temperature is reached, the power supply is automatically shut down. The electric panel storage heater continues however to release the heat stored in the fireclay elements. If the room temperature drops below the setpoint temperature, the thermostat automatically switches on the power supply. This process is repeated as long as the electric panel storage heater is in operation. We do not recommend operating the heater without a thermostat, as such operation does not guarantee a constant room temperature.

How to heat your room:

If your room has not been heated for a number of days, every heating system needs a few hours to bring the room back to a comfortable temperature. We therefore recommend that you continuously heat the rooms in which you spend most of your time during the day. For day times, select a setpoint temperature of 20 or 21 °C. For the night, set the thermostat to 15 or 16 °C. This ensures that your rooms do not become too cold while you still save energy during the night-time hours. In the morning, set the thermostat back to 20 or 21 °C, so a comfortable room temperature is reached quickly. The electric panel storage heater is designed for continuous operation. Its service life is not affected by constant operation. Due to the thermostat control, the electric panel storage heater is repeatedly switched on and off while in contiguous heating mode. This does however not have a negative effect on its storage and heat radiation capacity. Please also be rest assured that continuous operation of the heater does not significantly increase your electricity costs.

Warranty:

Provided that the appliance is handled and operated properly, we offer the following warranty cover, starting upon delivery: Fireclay elements with embedded heating conductors come with a 25-year warranty, while electronic components come with a 2-year warranty. Water damage and damage caused to the electric panel storage heater from toppling over is not covered by warranty.

For your safety:

All materials contained in the heater have been tested and approved by the regulatory appliances approval body.



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Please note that the VDE warranty ceases the moment the heater is equipped with feet or castors, or fitted with a "GLASS" surface panel.

