

TCH 1510 E / TCH 2510 E

EN

OPERATING MANUAL
CONVECTOR



EN This product is only suitable for well insulated spaces or occasional use.

 TROTEC

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You can download the current version of the operating manual and the EU declaration of conformity via the following link:



TCH 1510 E



<https://hub.trotec.com/?id=44797>

TCH 2510 E



<https://hub.trotec.com/?id=44798>

Notes regarding the operating manual

Symbols



Warning of electrical voltage

This symbol indicates dangers to the life and health of persons due to electrical voltage.



Warning of hot surface

This symbol indicates dangers to the life and health of persons due to hot surface.



Warning

This signal word indicates a hazard with an average risk level which, if not avoided, can result in serious injury or death.



Caution

This signal word indicates a hazard with a low risk level which, if not avoided, can result in minor or moderate injury.

Note

This signal word indicates important information (e.g. material damage), but does not indicate hazards.



Info

Information marked with this symbol helps you to carry out your tasks quickly and safely.



Follow the manual

Information marked with this symbol indicates that the operating manual must be observed.

Safety

Read this manual carefully before starting or using the device. Always store the manual in the immediate vicinity of the device or its site of use.



Warning

Read all safety warnings and all instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.



Warning

Children of less than 3 years should be kept away from the device unless continuously supervised.

Children aged from 3 years and less than 8 years shall only switch on/off the appliance provided that it has been placed or installed in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

Children aged from 3 years and less than 8 years shall not plug in, regulate and clean the appliance or perform user maintenance.



Warning

Do not use the device in small rooms if persons are present who cannot leave the room independently and who are not under constant supervision.

- Do not use the device in potentially explosive rooms or areas and do not install it there.
- Do not use the device in aggressive atmosphere.
- Only put up the device in an upright, stable position on firm ground.
- Let the device dry out after a wet clean. Do not operate it when wet.
- Do not use the device with wet or damp hands.
- Do not expose the device to directly squirting water.
- Never insert any objects or limbs into the device.
- Do not cover the device during operation.
- Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.
- Do not sit on the device.
- This device is not a toy. Keep away from children and animals. Do not leave the device unattended during operation.
- Check accessories and connection parts for possible damage prior to every use of the device. Do not use any defective devices or device parts.
- Ensure that all electric cables outside of the device are protected from damage (e.g. caused by animals). Never use the device if electric cables or the power connection are damaged!
- The mains connection must correspond to the specifications in the Technical annex.
- Insert the mains plug into a properly fused mains socket.
- Observe the device's power input, cable length and intended use when selecting extensions to the power cable. Completely unroll extension cables. Avoid electrical overload.
- Before carrying out maintenance, care or repair work on the device, remove the mains plug from the mains socket. Hold onto the mains plug while doing so.
- Switch the device off and disconnect the power cable from the mains socket when the device is not in use.
- Do not under any circumstances use the device if you detect damages on the mains plug or power cable. If the power cable is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard. Defective power cables pose a serious health risk!
- When installing the device, observe the minimum distances from walls and other objects as well as the storage and operating conditions according to the technical data (chapter Technical annex).
- Keep a safety distance of at least 1 m between the air inlet and the air outlet of the device and all combustible materials such as textiles, curtains, beds and sofas.
- Make sure that the air inlet and outlet are not obstructed.
- Make sure that the suction side is kept free of dirt and loose objects.
- Do not place the device on combustible ground.
- Only use original spare parts, for otherwise safe and functional operation cannot be ensured.
- Allow the device to cool down before transport and/or maintenance work.
- Do not use the device if it has been dropped or if it shows visible signs of damage.

Intended use

The device is only suitable for well insulated spaces or occasional use.

Only use the device for heating closed rooms whilst adhering to the technical data.

Intended use comprises heating the air in:

- living spaces
- storerooms
- salesrooms
- construction areas
- containers
- basements
- in wet rooms in compliance with the local or national regulations for the operation of electrical equipment in wet rooms.

Foreseeable misuse

- Do not place the device on wet or flooded ground.
- Do not place any objects, e.g. clothing, on the device.
- Do not use this device in the vicinity of fuel, solvents, varnishes or other easily inflammable vapours or in rooms where these substances are stored.
- Do not use the device out of doors.
- Do not use the device for heating vehicles.
- Do not use the heating device in immediate vicinity of swimming pools, bathtubs and showers.
- Never immerse the device in water.
- Any use other than the intended use is regarded as a reasonably foreseeable misuse.
- Do not make any unauthorised modifications, alterations or structural changes to the device.

Personnel qualifications

People who use this device must:

- be aware of the dangers that occur when working with electric devices in damp areas.
- have read and understood the operating manual, especially the Safety chapter.

Maintenance tasks which require the housing to be opened must only be carried out by specialist electrical companies or by Trotec.

Symbols on the device

Symbols	Meaning
	This symbol located on the device indicates that it is prohibited to place objects (such as towels, clothes etc.) above or directly in front of the device. In order to avoid overheating and fire hazards, the heater must not be covered.

Residual risks



Warning of electrical voltage

Work on the electrical components must only be carried out by an authorised specialist company!



Warning of electrical voltage

Before any work on the device, remove the mains plug from the mains socket!

Do not touch the mains plug with wet or damp hands. Hold onto the mains plug while pulling the power cable out of the mains socket.



Warning of electrical voltage

Risk of electric shock!

Risk of an electric shock if the heating device comes into contact with water in bathtubs, showers or swimming pools!

Do not use this heating device in immediate proximity to bathtubs, showers or swimming pools!



Warning of hot surface

Parts of this appliance can become very hot and cause burns. Particular attention is to be paid when there are children or vulnerable persons present!



Warning

A falling device can cause injuries! **Always transport and assemble the device with the help of other persons.** Never stand below the device when it is suspended. Ensure adequate stability of the device's wall fixing.



Warning

Dangers can occur at the device when it is used by untrained people in an unprofessional or improper way! Observe the personnel qualifications!



Warning

The device is not a toy and does not belong in the hands of children.



Warning

Risk of suffocation!

Do not leave the packaging lying around. Children may use it as a dangerous toy.



Warning

Improper installation entails a risk of fire.
Do not place the device on combustible ground.
Do not place the device on high-pile carpets.



Warning

In order to avoid overheating and fire hazards, the device must not be covered!

Behaviour in the event of an emergency

1. Switch the device off.
2. In an emergency, disconnect the device from the mains feed-in: Hold onto the mains plug while pulling the power cable out of the mains socket.
3. Do not reconnect a defective device to the mains.

Overheating protection

The device is provided with a safety thermostat which is activated by overheating of the device (when exceeding the operating temperature).

Once the safety thermostat has switched itself on, the device will be turned off.

When the device has cooled down sufficiently, the heating will be switched back on.

Investigate the cause of overheating.

If the safety thermostat does not switch in the event of overheating, the overheating protection will be tripped. In that case the device switches off completely. If so, please contact the customer service to have the overheating protection replaced.

Information about the device

Device description

The convector TCH 1510 E / 2510 E is used to generate warm air for interior spaces.

The device generates heat by means of an electric heating element. The air surrounding the heating element is heated. The heated air rises through the air outlet and thus creates a natural suction that makes the cold room air flow into the device.

The device is equipped with an integrated temperature sensor which controls the heating depending on the current and the desired room temperature.

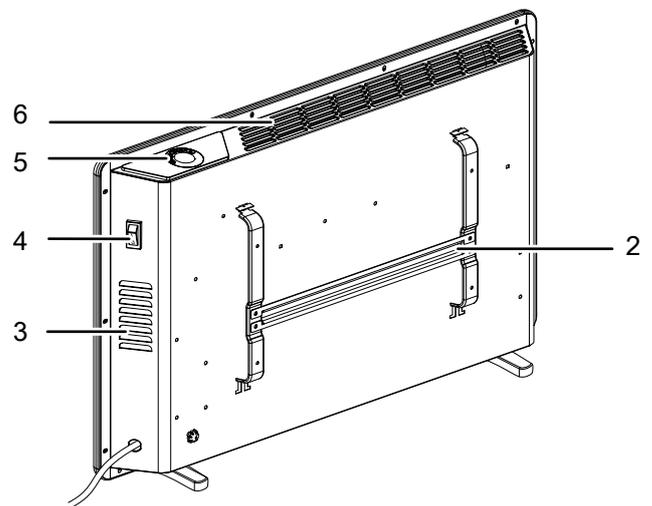
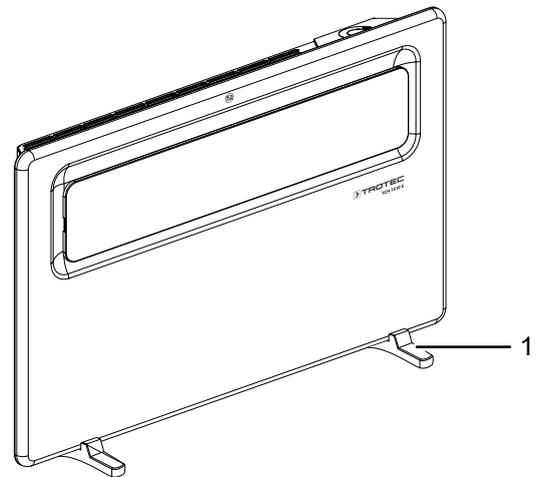
The appliance is also equipped with a child lock which prevents access to the control panel by means of a lock.

Via the control panel you can set a target temperature value between 0 °C and 50 °C.

The device can be positioned firmly in the room by means of the feet. In addition, the device can alternatively be mounted on the wall.

The functioning of the two devices is identical, the devices differ in heating capacity and dimensions.

Device depiction



No.	Designation
1	Foot
2	Wall holder
3	Air inlet
4	On/off switch (operating control lamp)
5	Control panel
6	Air outlet

Transport and storage

Note

If you store or transport the device improperly, the device may be damaged.

Note the information regarding transport and storage of the device.

Transport

Before transporting the device, observe the following:

- Switch the device off.
- Hold onto the mains plug while pulling the power cable out of the mains socket.
- Do not use the power cable to drag the device.
- Allow the device to cool down sufficiently.

After transporting the device, proceed as follows:

- Place the device on its feet.

Storage

Before storing the device, proceed as follows:

- Switch off the device.
- Hold onto the mains plug while pulling the power cable out of the mains socket.
- Allow the device to cool down sufficiently.

When the device is not being used, observe the following storage conditions:

- Store the device in a dry location and protected from frost and heat.
- Store the device in an upright position where it is protected from dust and direct sunlight.
- If required, use a cover to protect the device from invasive dust.
- Place no further devices or objects on top of the device to prevent it from being damaged.

Assembly and start-up

Scope of delivery

- 1 x Convector
- 2 x Foot
- 4 x Screw (for foot)
- 1 x Wall holder
- 2 x Screw (for wall holder) and 4 x screw and wall plugs (for wall)
- 1 x Manual

Unpacking the device

1. Open the cardboard box and take the device out.
2. Completely remove the packaging.
3. Fully unwind the power cable. Make sure that the power cable is not damaged and that you do not damage it during unwinding.

Assembly



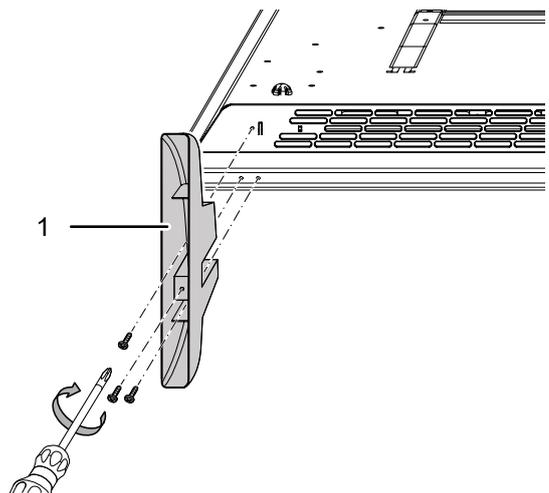
Warning of electrical voltage

Risk of injury due to incorrect assembly!

Local or national regulations may apply for installation, especially for wet rooms. We recommend to have the installation carried out by a qualified electrician.

Feet assembly

1. Place the device on its front side.
2. Fasten both feet (1) with four screws each.

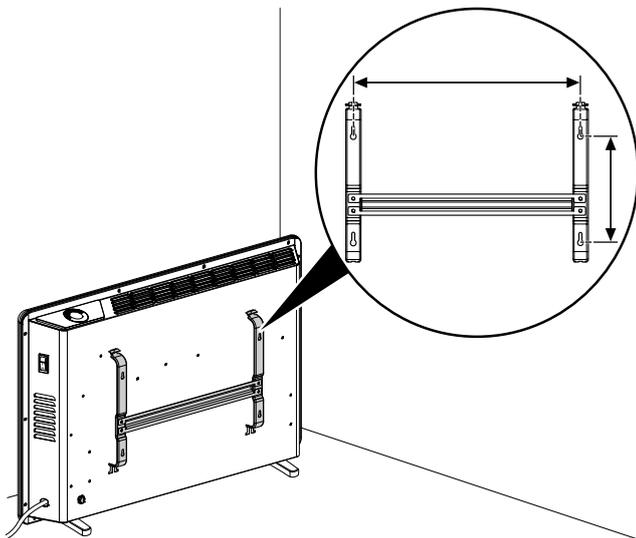


3. Check the feet (1 for tight fit).
4. Set the device up in an upright and stable position.

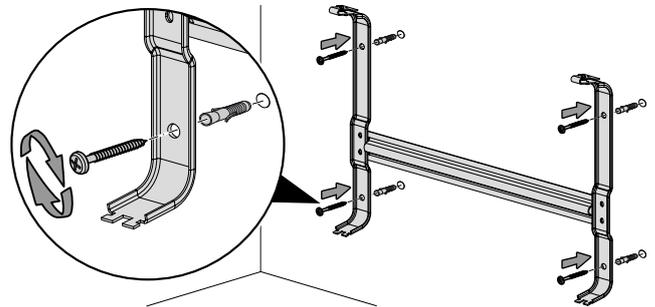
Wall mounting

Always utilize the help of another person to assemble the device. Do not try to assemble the device without the help of another person. The attachment of the device is shown as an example.

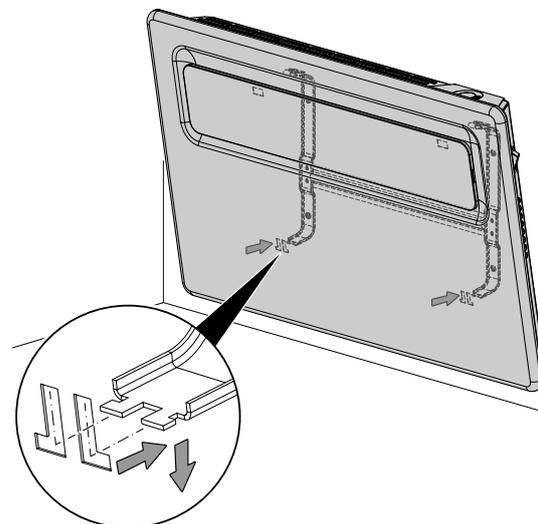
1. Mark the positions for the bore holes on the wall. Observe the minimum distances specified in the technical data.



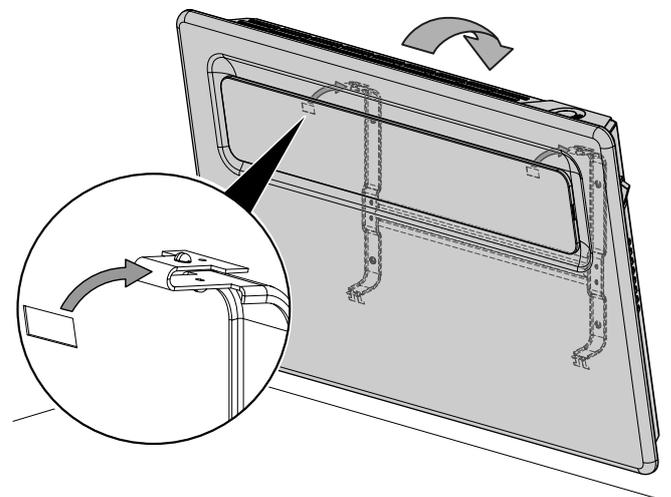
3. Insert appropriate wall plugs into the bore holes depending on the type of wall. Position the holder on the wall as indicated and attach the holder in place with the 4 screws.



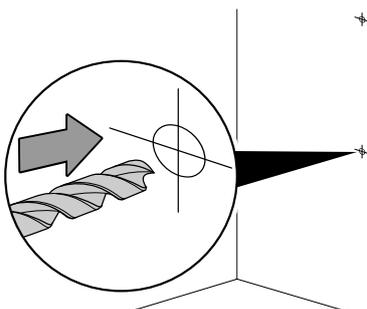
4. Hook the lower part of the device into the lower part of the holder.



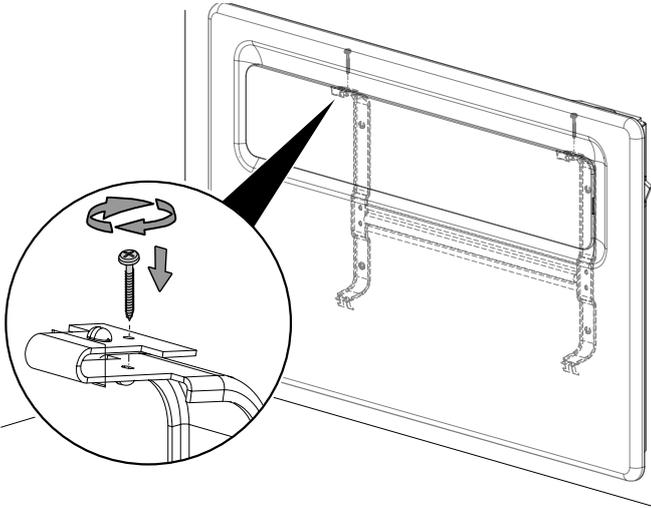
5. Hook the device's upper part into the holder.



2. Drill the holes into the wall at the marked positions.



- Using the two screws, attach the upper part of the holder in place as indicated.



- Make sure that the device is attached securely.

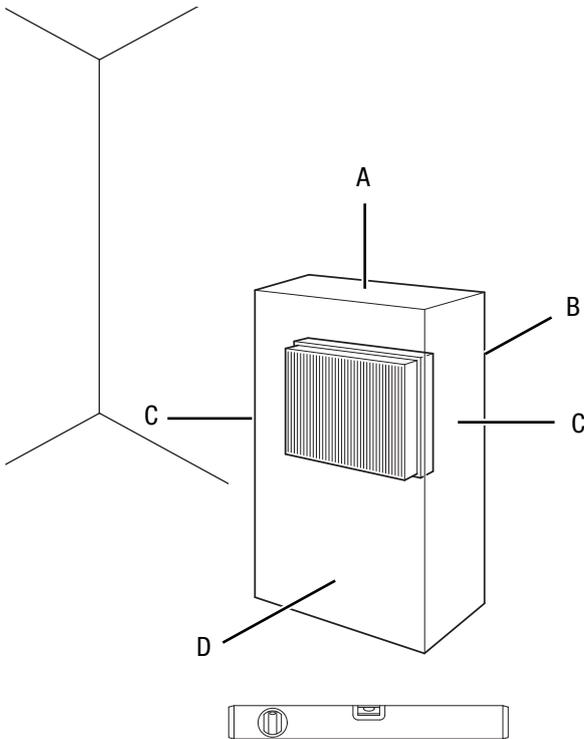
Start-up



Info

Odours might arise upon initial start-up or after a longer period of non-use.

When positioning the device, observe the minimum distance from walls or other objects as described in the chapter Technical annex.



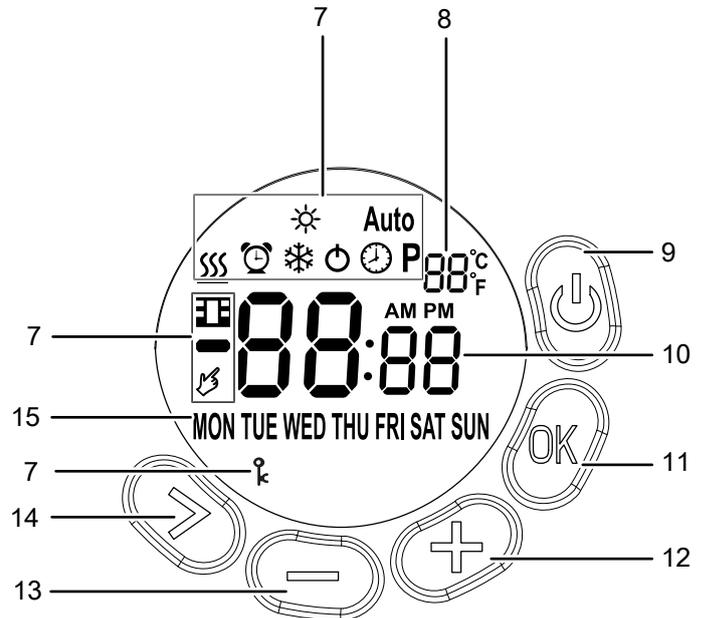
- Before restarting the device, check the condition of the power cable. If there are doubts as to the sound condition, contact the customer service.
- Set the device up in an upright and stable position.
- Do not create tripping hazards when laying the power cable or other electric cables, especially when positioning the device in the middle of the room. Use cable bridges.
- Make sure that extension cables are completely unrolled.
- Make sure that no curtains or other objects interfere with the air flow.
- Do not position the device directly below a wall socket.
- Make sure that the device cannot come into contact with moisture or water.

Connecting the power cable

- Insert the mains plug into a properly fused mains socket.
- Make sure that the power cable is guided along the back of the device. Never guide the power cable along the front of the device!

Operation

- Avoid open doors and windows.



Control panel and display

No.	Designation	Meaning
7	Display of the operating modes and functions:	<ul style="list-style-type: none"> <i>Week mode</i> is activated: for P1-P4, temperature and time are preset but can be adjusted. Auto <i>Automatic mode</i> is activated Device is heating Set <i>week mode</i> <i>Frost monitor mode</i> is activated Standby mode <i>Time and day setting</i> is activated Open window detection is activated P Displays the current week mode P1, P2, P3 or P4: Hours, minutes and temperature can be preset. Operating hours display Screen is locked
8	Temperature indication	Indicates the current room temperature.
9	On/off button	Switching the device on or off
10	Time display	Displays the current time, the set time of the timer or the operating hours
11	OK button	Confirm selection
12	Increase value button	Setting the desired room temperature (0 °C to 50 °C) or the timer run-time (1 min to 24 h)
13	Decrease value button	
14	Mode button	Select operating mode or setting
15	Weekday display	Displays the current weekday



Info

The control panel comes with a background illumination. The background illumination switches on as soon as the device is switched on. After approx. 5 s without any input, the background illumination switches back off.

Switching the device on

Once you have completely installed the device as described in the chapter Assembly and start-up, you can switch it on.

1. Set the On/off switch (4) to position I.
⇒ An acoustic signal is emitted.
2. Press the *On/off* button (9).
⇒ The indication **00:00** (10) appears on the display.
⇒ The current temperature (8), any day of the week (15) and the symbol (7) are displayed on the control panel.

Setting the time and day

1. Press the *Mode* button (14) until the symbol (7) appears on the control panel.
2. Press the *OK* button (11). Then press the *Increase value* button (12) or the *Decrease value* button (13) to set the current time and day of the week.
⇒ The set time (10) and the weekday are displayed on the control panel.
3. Press the *OK* button (11) to save the setting.

Setting the operating mode

- *Automatic mode*
- *Week mode*
- *Frost monitor mode*

The device TCH 1510 E operates with a heating capacity of 1500 W and the device TCH 2510 E operates with a heating capacity of 2500 W until the desired room temperature is reached.

If the determined room temperature exceeds the desired room temperature, the heating switches off.



Info

The desired room temperature should be higher than the current room temperature.

Automatic mode

In automatic mode, the device heats according to a preset temperature.

1. Press the *Mode* button (14) until the *Auto* indication (7) appears on the control panel.
2. Press the *Increase value* button (12) or the *Decrease value* button (13) to adjust the temperature setting.
⇒ The set temperature (8) is shown flashing on the control panel.
3. Press the *OK* button (11) to start the automatic mode.
⇒ The room temperature display (8) now initially indicates the current room temperature.
⇒ The device heats and the symbol (7) is displayed on the control panel.

Week mode

Note

To activate the week mode, you have to preset all weekdays (Monday – Sunday).

Note

The device must not be operated unattended in a room in week mode.

In *week mode*, the device heats at a preset time and according to a preset temperature.

Alternatively, you can set values for temperature and heating duration for four different times.

1. Press the *Mode* button (14) until the  symbol (7) appears on the control panel.
2. Press the *OK* button (11) to confirm the selection.
3. If you want to keep the preset times and temperatures (P1-P4), press the *OK* button (11) until you have viewed all preset programmes.
4. If you want to change the preset times (P1-P4), press the *Increase value* button (12) or the *Decrease value* button (13) in the respective programmes.
5. Press the *OK* button (11) to confirm the selection.
6. If you want to change the preset temperatures (P1-P4), press the *Increase value* button (12) or the *Decrease value* button (13) in the respective programmes after you confirmed the time.
7. Press the *OK* button (11) to confirm the selection.
 - ⇒ The device heats according to the selected week mode.
 - ⇒ The  symbol (7) indicates that the week mode is set and activated.
 - ⇒ The **P** symbol (7) is displayed on the control panel according to the selected week mode P1, P2, P3 or P4.
 - ⇒ The device heats and the  symbol (7) is displayed on the control panel.

Frost monitor mode

In *frost monitor mode* () the device heats automatically if the room temperature is below 5 °C. This temperature cannot be changed.

- ✓ The device is switched on and the *On /off* button (9) has been actuated.
1. Press the *Mode* button (14) until the  symbol (7) appears on the control panel.
 2. Press the *OK* button (11) to set the frost monitor mode.
 3. Press the *Increase value* button (12) to set the frost monitor mode to *ON*.
 4. Press the *OK* button (11) to confirm the selection.
 - ⇒ The device heats as soon as the room temperature is below 5 °C. It stops heating as soon as the room temperature exceeds 5 °C.
 - ⇒ The  symbol (7) appears on the control panel.

Please proceed as follows to switch off the frost monitor mode:

- ✓ The frost monitor mode is switched on.
1. Press the *Mode* button (14) until the  symbol (7) appears on the control panel.
 2. Press the *OK* button (11).
 3. Press the *Increase value* button (12) to set the frost monitor mode to *OFF*.
 4. Press the *OK* button (11) to confirm the selection and to exit the frost monitor mode.
 - ⇒ The  symbol (7) no longer appears on the control panel.

Open window detection

The *open window detection* is deactivated by default. Please proceed as follows to activate the function:

1. Press the *OK* button (11).
2. Press the *Increase value* button (12).
3. Press the *On/off* button (9) to confirm the function.
 - ⇒ If the temperature quickly decreases by 5 °C, the current operating mode is quit instantaneously.
 - ⇒ The symbols  (7) and  (7) are displayed on the control panel.

Switching the locking function on and off

The locking function prevents the buttons on the control panel from being used.

Please proceed as follows to lock the control panel:

1. Press the *Mode* button (14) until the  symbol (7) appears on the control panel.
2. Press the *OK* button (11) to lock the control panel
 - ⇒ After 3 seconds, an acoustic signal is emitted.
 - ⇒ The locking function is activated.
 - ⇒ The buttons on the control panel cannot be used.
3. Press the *Mode* button (14) again to switch the function off.
 - ⇒ The device switches back to the previous operating mode.

Operating hours display

Proceed as follows to display the expired operating hours:

1. Press the *Mode* button (14) until the  symbol (7) appears on the control panel.
2. Press the *OK* button (11) to display the expired operating hours.
 - ⇒ Only full operating hours (10) are displayed.
3. Press the *Mode* button (14) or the  button (7) to exit the preview.
 - ⇒ The operating hours are indicated in full hours. The example shows 1,503 operating hours.



Shutdown



Warning of electrical voltage

Do not touch the mains plug with wet or damp hands.

1. Switch off the device by pressing the *On/off* button (9).
 - ⇒ The device is now in standby mode.
2. Set the On/off switch (4) to position **0** to switch the device off.
3. Hold onto the mains plug while pulling the power cable out of the mains socket.
4. Allow the device to cool down sufficiently.
5. Clean the device according to the Maintenance chapter.
6. Store the device according to the Storage chapter.

Errors and faults



Warning of electrical voltage

Tasks which require the device to be opened must only be carried out by authorised specialist companies or by Trotec.

The device has been checked for proper functioning several times during production. If malfunctions occur nonetheless, check the device according to the following list.

The device does not start:

- Check the power connection.
- Check the power cable and mains plug for damage. If you notice damages, do not try to take the device back into operation.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

- Check the on-site fusing.
- The room thermostat might be defective. Have a defective room thermostat replaced by a specialist electrical company.
- Wait for 10 minutes before restarting the device. If the device is not starting, have the electricians checked by a specialist company or by Trotec.

The device is switched on, but the heating is not operating:

- The heating resistor might have blown. Have a defective heating resistor replaced by a specialist electrical company.
- The room thermostat might be defective. Have a defective room thermostat replaced by a specialist electrical company.
- The room thermostat might be defective. Have a defective room thermostat replaced by a specialist electrical company.

The air current is reduced:

- Check the air inlet and outlet. Make sure that air inlet and outlet are not obstructed. Remove any dirt. Observe the minimum distance from walls or other objects according to the technical data.

Note

Wait for at least 3 minutes after maintenance and repair work. Only then switch the device back on.

The device still does not operate correctly after these checks:

Please contact the customer service. If necessary, bring the device to an authorised specialist electrical company or to Trotec for repair.

Maintenance

Activities required before starting maintenance



Warning of electrical voltage

Do not touch the mains plug with wet or damp hands.

- Switch the device off.
- Hold onto the mains plug while pulling the power cable out of the mains socket.
- Allow the device to cool down completely.



Warning of electrical voltage

Tasks which require the device to be opened must only be carried out by authorised specialist companies or by Trotec.

Cleaning the housing



Warning of electrical voltage

Never immerse the device in water!

Clean the housing with a soft, damp and lint-free cloth. Make sure that no moisture enters the housing. Protect electrical components from moisture. Do not use any aggressive cleaning agents such as cleaning sprays, solvents, alcohol-based or abrasive cleaners to dampen the cloth.

Wipe the housing dry after cleaning.

Technical annex

Technical data

Parameter	Value	
Model	TCH 1510 E	TCH 2510 E
Heating capacity	1500 W	2500 W
Setting range	0 °C to 50 °C	0 °C to 50 °C
Mains connection	220–240 V / 50–60 Hz	220–240 V / 50–60 Hz
Power input	1500 W	2500 W
Nominal current consumption	6.5 A	10 A
Cable length	1.8 m	1.8 m
Plug type	CEE 7/7	CEE 7/7
Protection class	IP 24	IP 24
Dimensions (depth x width x height)	260 x 690 x 535 mm	280 x 1250 x 525 mm
Minimum distances from walls or other objects (only in stationary operation)		
	A: top: 100 cm	100 cm
	C: side: 100 cm	100 cm
	D: front: 100 cm	100 cm
Weight	6 kg	9 kg

Information requirements for electrical local space heaters

Parameter	Value / item	
	TCH 1510 E	TCH 2510 E
Model	TCH 1510 E	TCH 2510 E
Heat output		
Nominal heat output P_{nom}	1.5 kW	2.5 kW
Minimum heat output (indicative) P_{min}	NA	NA
Maximum continuous heat output $P_{max,c}$	1.5 kW	2.5 kW
Auxiliary electricity consumption		
At nominal heat output $e_{l,max}$	0.000 kW	0.000 kW
At minimum heat output $e_{l,min}$	0.000 kW	0.000 kW
In standby mode $e_{l,sb}$	0.000 kW	0.000 kW
Type of heat input		
Manual heat charge control, with integrated thermostat	NA	NA
Manual heat charge control with room and/or outdoor temperature feedback	NA	NA
Electronic heat charge control with room and/or outdoor temperature feedback	NA	NA
Fan assisted heat output	NA	NA
Type of heat output/room temperature control		
Single stage heat output, no room temperature control	NO	NO
Two or more manual stages, no room temperature control	NO	NO
With mechanic thermostat room temperature control	NO	NO
With electronic room temperature control	NO	NO
With electronic room temperature control plus day timer	NO	NO
With electronic room temperature control plus week timer	YES	YES
Other control options		
Room temperature control, with presence detection	NO	NO
Room temperature control, with open window detection	YES	YES
With distance control option	NO	NO
With adaptive start control	NO	NO
With working time limitation	NO	NO
With black bulb sensor	NO	NO
Contact details	Trotec GmbH Grebbener Straße 7 D-52525 Heinsberg	

NA: not applicable

Disposal

Always dispose of packing materials in an environmentally friendly manner and in accordance with the applicable local disposal regulations.



The icon with the crossed-out waste bin on waste electrical or electronic equipment stipulates that this equipment must not be disposed of with the household waste at the end of its life. You will find collection points for free return of waste electrical and electronic equipment in your vicinity.

The addresses can be obtained from your municipality or local administration. You can also find out about other return options that apply for many EU countries on the website <https://hub.trotec.com/?id=45090>. Otherwise, please contact an official recycling centre for electronic and electrical equipment authorised for your country.

The separate collection of waste electrical and electronic equipment aims to enable the re-use, recycling and other forms of recovery of waste equipment as well as to prevent negative effects for the environment and human health caused by the disposal of hazardous substances potentially contained in the equipment.

Only for United Kingdom

According to Waste Electrical and Electronic Equipment Regulations 2013 (SI 2013/3113) devices that are no longer usable must be collected separately and disposed of in an environmentally friendly manner.

Trotec GmbH

Grebener Str. 7
D-52525 Heinsberg

☎ +49 2452 962-400

☎ +49 2452 962-200

✉ info@trotec.com

www.trotec.com