

TFC 1 E / TFC 2 E

EN

OPERATING MANUAL
FAN HEATER



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

 TROTEC

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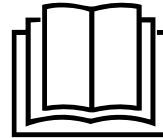
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You can download the current version of the operating manual and the EU declaration of conformity via the following link:



TFC 1 E



<https://hub.trotec.com/?id=41868>

TFC 2 E



<https://hub.trotec.com/?id=41869>

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 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.
- Do not use the device in aggressive atmosphere.
- 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 or transport 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.
- This appliance 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 electrical connection must correspond to the specifications in chapter Technical data.
- Insert the mains plug into a properly secured mains socket.
- Switch the device off and disconnect it from the mains socket when the device is not in use.
- Remove the mains plug from the mains socket before carrying out maintenance, care or repair work on the device.
- Do not under any circumstances use the device if you detect damages on the mains plug or power cable. 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. Defective power cables pose a serious health risk!
- When positioning the device, observe the minimum distances from walls and other objects as well as the storage and operating conditions specified in the Technical data chapter.
- Do not use the device in immediate proximity to curtains.
- 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.

- Allow the device to cool down before transport and / or maintenance work.
- Do not use this device near bathtubs, shower trays, swimming pools or other water containers. Risk of electric shock!

Intended use

This product is only designed for use inside well insulated rooms or for occasional use.

The fan heater serves the purpose of heating and ventilating closed rooms. The device was designed for private usage and is not suited for commercial use. The device is particularly well suited for additional heating, but not quite appropriate as the sole source of heating in larger rooms.

The device must be connected to a wall socket.

Improper use

- 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 outdoors.
- Do not use the device for heating vehicles.
- The device must not be connected to a multiple socket.
- The device must not be connected to the mains via an extension cable.
- The device must not be used near swimming pools.
- Do not use this device in the immediate vicinity of sinks, bathtubs or other water containers. Never immerse the device in water.
- Any operation other than as described in this manual is prohibited. Non-observance renders all claims for liability and guarantee null and void.
- Any unauthorised modifications, such as alterations or structural changes to the device, are forbidden.

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
DO NOT COVER	The inscription 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!



Warning of hot surface

Some parts of this product can become very hot and cause burns. Particular attention has to be given where children and vulnerable people are present!



Warning

Improper handling entails a risk of burning and electric shock.

Only use the device as intended!



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 off the device.
2. In an emergency, disconnect the device from the mains feed-in: Unplug the device from 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 heating will be turned off. The fan keeps running.

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

Investigate the cause of overheating.

If the fan heater has been switched off by the overheating protection, you have to set the switch to **0** and pull the plug. Allow the fan heater to cool down, eliminate the cause of overheating, and switch the fan heater back on. If the problem persists or if you cannot find the cause of overheating, switch the fan heater off immediately and pull the plug. Please contact the customer service in this case.

Information about the device

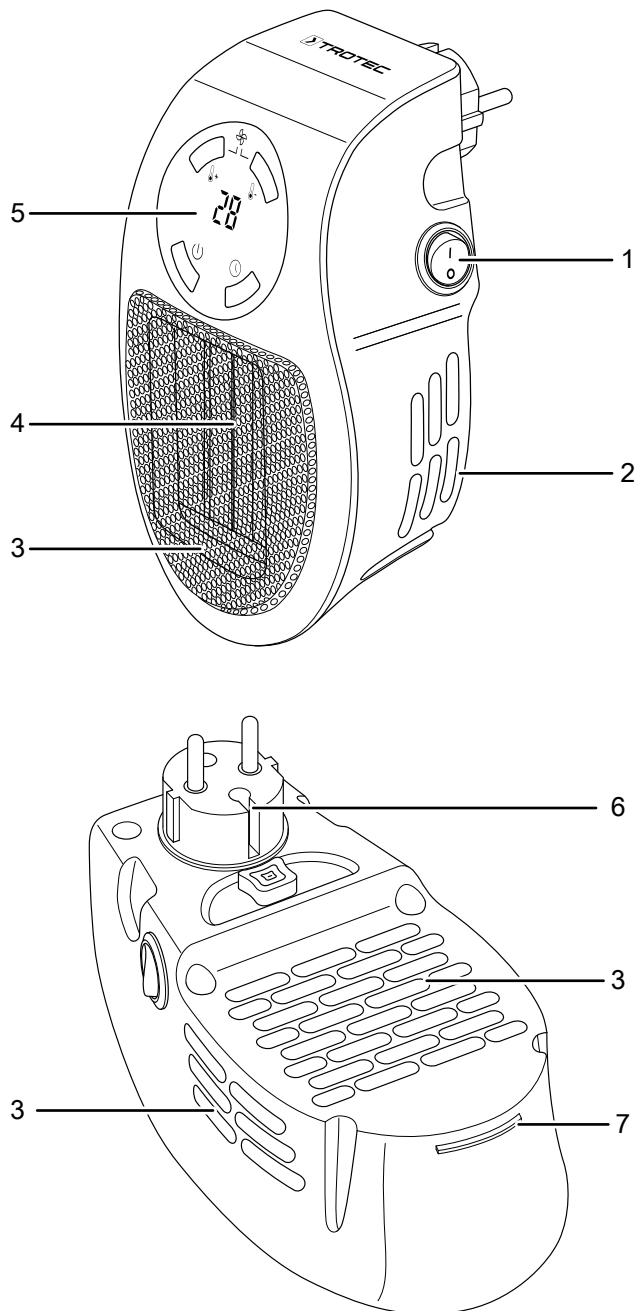
Device description

The socket fan heater serves to generate and distribute warm air, e.g. in interior spaces. The device generates heat by means of a ceramic heating element.

The air surrounding the ceramic heating element is heated. The heated air is blown into the room by a fan. The device is further equipped with an overheating protection.

The device TFC 1 E is available in white and the device TFC 2 E is available in black.

Device depiction



No.	Designation
1	Main switch
2	Air inlet
3	Air outlet
4	PTC element
5	Control panel
6	Mains plug
7	Operating control lamp

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.
- Remove the mains plug from the mains socket.
- Allow the device to cool down sufficiently.

Storage

Before storing the device, proceed as follows:

- Allow the device to cool down sufficiently.

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

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

Assembly and installation

Scope of delivery

- 1 x Device
- 1 x Manual

Unpacking the device

1. Open the cardboard box and take the device out.
2. Completely remove the packaging.
3. Make sure that the mains plug is not damaged.

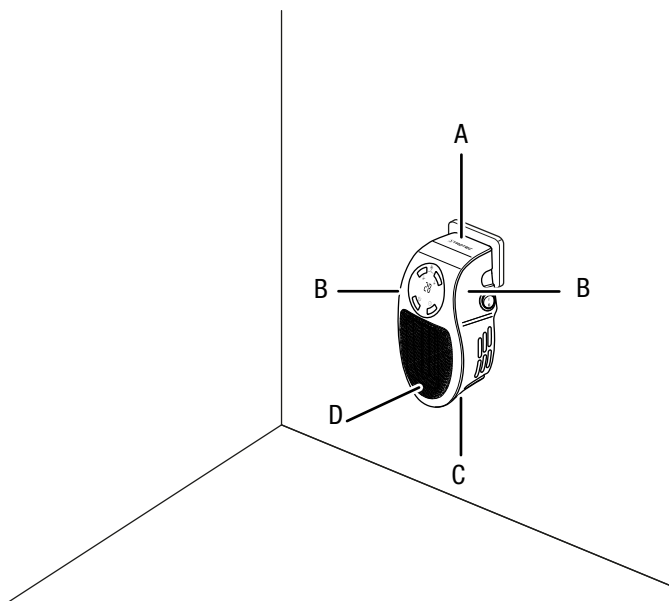
Start-up



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 Technical data chapter.



- Make sure that no curtains or other objects interfere with the air flow.
- Make sure that the device cannot come into contact with moisture or water.

Connecting the mains plug

- Insert the mains plug into a properly secured mains socket.

Operation

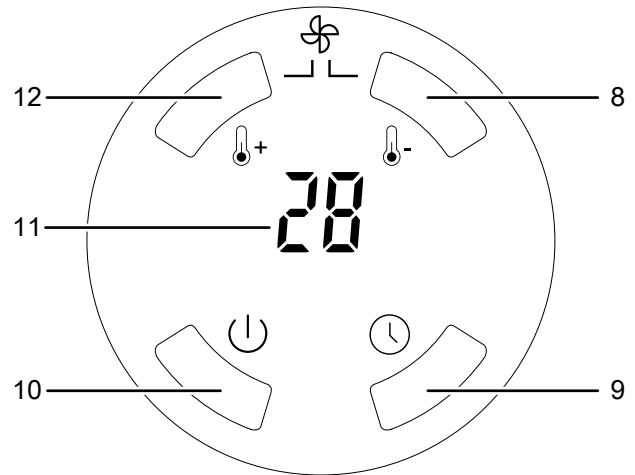
- Avoid open doors and windows.



Caution

Do not leave small children unattended nearby the device during operation. In case of direct contact with the device, there is a risk of injury due to burns or electric shock for small children.

Control panel



No.	Designation
8	Reduce temperature button
9	Timer button
10	ON / standby button
11	Segment display
12	Increase temperature button
8 + 12	Control fan speed buttons

Switching the device on

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

- ✓ The fan heater must be switched off (main switch (1) set to 0) before you plug the mains plug into a 220–240 V / 50 Hz socket.
1. Set the main switch (1) to I.
 - ⇒ The fan heater is in standby mode and the operating control lamp (7) is illuminated.
 2. Press the ON / standby button (10) on the control panel (5).
 - ⇒ The fan heater switches on.

Setting the temperature

The device is equipped with an integrated thermostat. The thermostat will activate the fan heater as soon as the measured temperature drops below the desired temperature, and will deactivate the fan heater once the desired temperature has been reached.

Please proceed as follows to manually set the temperature at which the device will be activated/deactivated automatically:

1. Switch the device on.
2. Press the *Reduce temperature* button (8) to reduce the temperature set at the device.
3. Press the *Increase temperature* button (12) to increase the temperature set at the device.
 - ⇒ The segment display (11) indicates the set temperature.

Setting the fan speed

1. Simultaneously press the *Reduce temperature* button (8) and the *Increase temperature* button (12) to increase or slow down the fan speed.
 - ⇒ The segment display (11) indicates the following for a moment:
 - ⇒ **LL** = low, **HH** = high

Setting the timer

The timer has two modes of operation:

- automatic switch-on upon expiry of a preset number of hours
- automatic switch-off upon expiry of a preset number of hours

The number of hours can range from 1 to 12 and can be adjusted in increments of 1 h.

Note

Do not leave the operating device unattended in a freely accessible room with an activated timer.

If you set the timer while the fan heater is in operation, you will set the number of hours after which the fan heater will switch off. If you set the timer while the fan heater is in standby mode, you will set the number of hours after which the fan heater will switch on.

Please proceed as follows to set the timer:

1. Press the *timer* button (9).
 - ⇒ The segment display (11) will change over from degrees to hours for a moment.
2. Now press the *timer* button (9) again to set the desired number of hours.

Shutdown



Warning of electrical voltage

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

- Switch the device off by setting the main switch to **0**.
- Unplug the device from the mains socket.
- Allow the device to cool down completely.
- Clean the device according to the Maintenance chapter.
- Store the device according to the Storage chapter.

Errors and faults



Warning of electrical voltage

Tasks which require the housing 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 mains plug for damages.
- Check the on-site fusing.
- The motor might be defective. Have a defective motor 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, the fan is operating, the heating is not:

- Check whether a heating level is selected.
- Check whether the overheating protection has tripped, see chapter Safety.
- The heating resistor might have blown. Have a defective heating resistor 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.

Your device still does not operate correctly after these checks?

Please contact the customer service. If necessary, bring the device to an authorized 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.
- Remove the mains plug from the mains socket.
- Allow the device to cool down completely.



Warning of electrical voltage

Tasks which require the housing 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. Ensure 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	TFC 1 E / TFC 2 E
Heating capacity	500 W
Setting range	15 °C to 30 °C
Room size	10 m ² / 25 m ³
Mains connection	220-240 V, 50/60 Hz
Plug type	CEE 7/17
Protection class	II / <input type="checkbox"/>
Dimensions (depth x width x height)	110 x 130 x 202 (mm)
Minimum distance to walls or other objects	A: top: 25 cm B: sides: 25 cm C: bottom: 25 cm D: front: 50 cm
Weight	0.4 kg

Information requirements for electrical local space heaters

Parameter	Value / item
Model	TFC 1 E / TFC 2 E
Heat output	
Nominal heat output P_{nom}	0.5 kW
Minimum heat output (indicative) P_{min}	0 kW
Maximum continuous heat output $P_{max,c}$	0.5 kW
Auxiliary electricity consumption	
At nominal heat output $e_{l,max}$	NA
At minimum heat output $e_{l,min}$	NA
In standby mode $e_{l,sb}$	0.00038 kW
Type of heat input	
Manual heat charge control, with integrated thermostat	NO
Manual heat charge control with room and/or outdoor temperature feedback	NO
Electronic heat charge control with room and/or outdoor temperature feedback	NO
Fan assisted heat output	NO
Type of heat output/room temperature control	
Single stage heat output, no room temperature control	NO
Two or more manual stages, no room temperature control	NO
With mechanic thermostat room temperature control	NO
With electronic room temperature control	YES
With electronic room temperature control plus day timer	NO
With electronic room temperature control plus week timer	NO
Other control options	
Room temperature control, with presence detection	NO
Room temperature control, with open window detection	NO
With distance control option	NO
With adaptive start control	NO
With working time limitation	YES
With black bulb sensor	NO
Contact details	Trotec GmbH Grebener Straße 7 D-52525 Heinsberg

NA: not applicable

Disposal



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. For further return options provided by us please refer to our website www.trotec24.com.

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.

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