

EN

OPERATING MANUAL
FAN HEATER



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

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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.

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




TFC 16 E




<https://hub.trotec.com/?id=42341>

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.
- Set the device up in an upright and stable position.
- 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.
- Do not sit on the device.
- 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.
- 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 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.
- Ensure that the air inlet and outlet are not obstructed.
- Ensure that the side of the device where the air inlet is found is kept free of dirt and loose objects.
- Do not place the device on combustible ground.
- 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!
- The device must not be positioned directly beneath a wall socket.

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 is only intended for floor installation.

Improper use

- 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 outdoors.
- Do not use the device for heating vehicles.
- 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.
- Never heat rooms with a cubature of less than 4 m³. Risk of overheating!
- 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
	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.



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 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!
Hold onto the mains plug while pulling the power cable out of 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.

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.

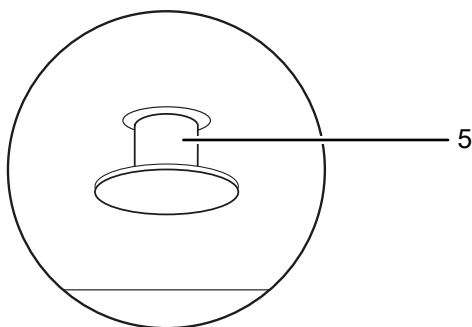
Investigate the cause of overheating.

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.

Tilt protection

The device TFC 16 E is equipped with a tilt protection switch. The tilt protection is a safety device intended to minimize the risk of fire in case the device is tipped over inadvertently. The device will be switched off when knocked over (or if its upright position is changed in any other manner).

The tilt protection switch is located at the bottom of the device.



It is impossible to use the device unless the tilt protection switch (5) was pushed entirely into the device. This occurs automatically when placing the device on suitable ground.

The tilt protection switches the device off when it is inclined by a few degrees out of its vertical position. The tilt protection is also tripped when lifting the device a little, e.g. for transport during operation. The device can again be used as usual only a few seconds after placing it back in vertical position and on solid ground.

Information about the device

Device description

The ceramic heater serves to generate and distribute warm air, e.g. in interior spaces.

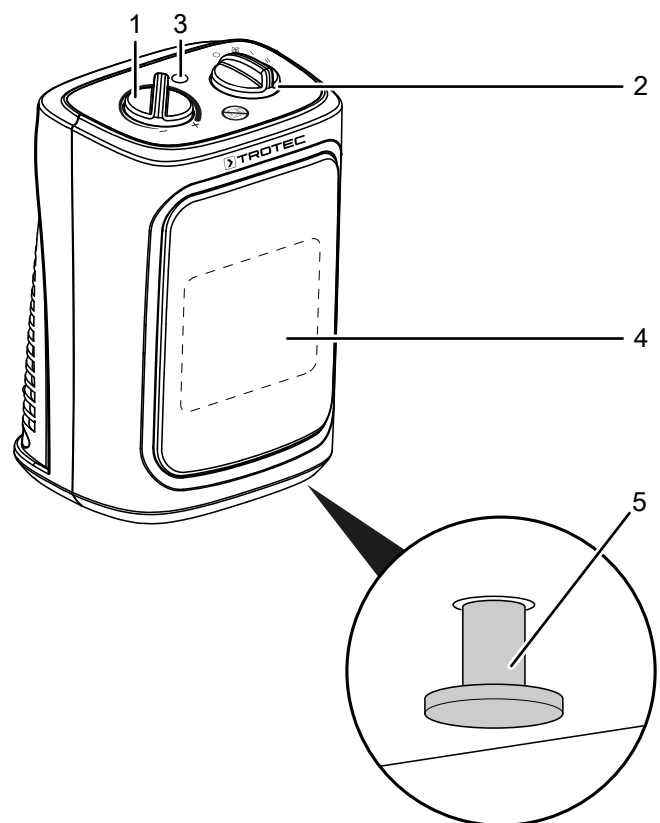
The device generates heat by means of a ceramic heating element. The air surrounding the ceramic heating element is heated. The heated air is blown into the room by a fan.

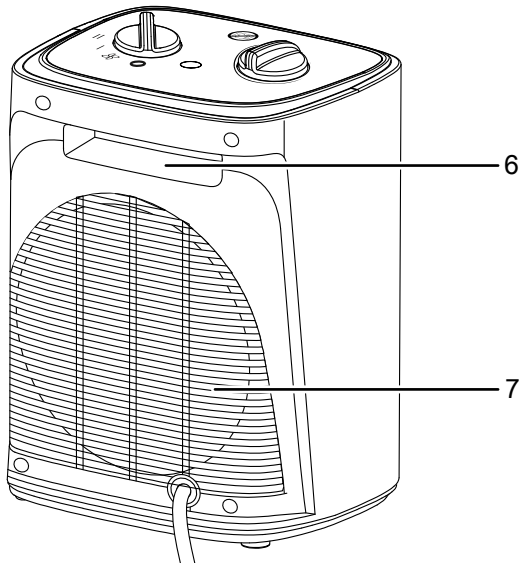
The device is equipped with an integrated thermostat and so generates a constant flow of warm air.

Fan operation without heating function is also possible.

The device is further equipped with an overheating protection and a tilt protection switch integrated in the device base.

Device depiction





No.	Designation
1	Rotary switch room thermostat
2	Function selector switch for heating levels and ventilation
3	Operating light
4	Air outlet
5	Tilt protection switch
6	Transport handle
7	Air inlet

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

To make the device easier to transport, it is fitted with a carry handle.

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.

Storage

Before storing the device, observe the following:

- 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. Fully unwind the power cable. Make sure that the power cable is not damaged and that you do not damage it during unwinding.

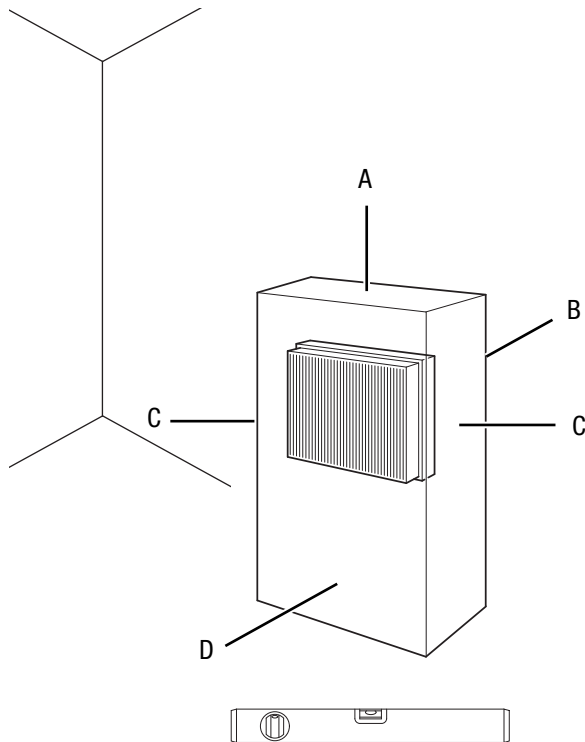
Start-up



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.



- Before restarting the device, check the condition of the power cable. If there are doubts as to the sound condition, contact the customer service.
- 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.

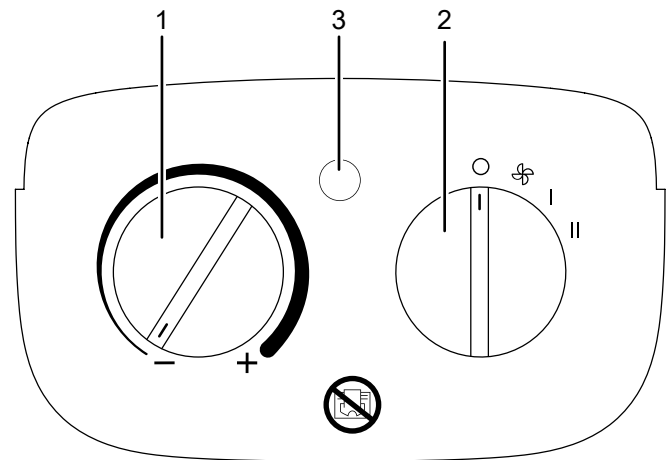
Connecting the power cable


- Insert the mains plug into a properly secured 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



No.	Designation
1	Rotary switch room thermostat
2	Function selector switch for heating levels and ventilation 0 : OFF  : cold air / ventilation I : heating level 1 (1200 W) II : heating level 2 (2000 W)
3	Operating light

Switching the device on

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



Info

The device will not be switched on until the room temperature falls below the temperature set at the room thermostat.

Setting the heating level




Info

Choose the smaller power stage e.g. for a smaller room. Should it turn out to be insufficient, switch to the higher level.

1. Set the function selector switch (2) to **I**.
2. Turn the rotary switch room thermostat (1) until the device switches on.
 - ⇒ The operating light (3) is illuminated.
 - ⇒ The device operates at heating level 1.
3. In order to achieve the maximum heating performance, set the function selector switch (2) to position **II**.
 - ⇒ The device operates at heating level 2.

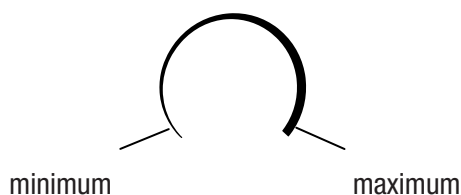
Cold air operation

The device can also be used in cold air operation mode. Please proceed as follows to use the device as a fan:

1. Set the function selector switch (2) to the fan stage .
2. Turn the rotary switch room thermostat (1) until the device switches on.
 - ⇒ The device runs in cold air operation mode.

Setting the room thermostat

1. Select the desired temperature via the stepless rotary switch (1) of the room thermostat.



To find the ideal thermostat setting, please proceed as follows:

- Set the thermostat control to maximum.
- As soon as the desired temperature has been reached, slowly turn the thermostat control back until the device is switched off.
- The operating light goes out.
- The device now automatically maintains the desired temperature level.

The room thermostat controls the room temperature automatically:

- When the set value is exceeded, the heating switches off.
- When the set value is fallen below, the heating automatically switches back on.



Info


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

Shutdown



Warning of electrical voltage

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

- Set the rotary switch (1) of the room thermostat to the lowest level.
- Turn the function selector switch (2) to the  position (ventilation only).
- Keep the fan running for 3 minutes before switching the device off.
- Switch the device off by setting the function selector switch (2) to the **0** position.
- Hold onto the mains plug while pulling the power cable out of 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 power cable and mains plug for damages.
- Check the on-site fusing.
- Check the room temperature. The room thermostat may have switched off, because the desired room temperature has been reached.
- The motor might be defective. Have a defective motor replaced by a specialist electrical company.
- Check whether the device is standing upright and on level ground. The tilt protection may have been tripped owing to the fact that the device was knocked over. Always put up the device in an upright position on a suitable, sufficiently dimensioned surface.
- The room thermostat might be defective. Have a defective room thermostat replaced by a specialist electrical company.
- The overheating protection may have been tripped. Have a specialist electrical company or Trotec check the electrics and replace the overheating protection.
- Wait for 10 minutes before restarting the device. If the device is not starting, have the electrics 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 the room temperature. The room thermostat may have switched off, because the desired room temperature has been reached.
- 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 room thermostat might be defective. Have a defective room thermostat replaced by a specialist electrical company.

The fan does not run:

- Check whether the device is switched on.
- Check the power connection.
- Check the power cable and mains plug for damages.
- Check whether the fan stage has been selected.
- Check whether the room thermostat is switched on. Use the stepless rotary switch of the room temperature to set a temperature that is higher than the current room temperature.
- The fan motor might be defective. Have a defective fan motor 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.

The device is loud or vibrates:

- Check whether the device is set up in a stable and upright position.

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.
- 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 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 16 E
Heating capacity	level 1: 1200 W level 2: 2000 W
Operating range	-5 °C to +25 °C
Mains connection	220 – 240 V / 50 Hz
Max. power input	2000 W
Nominal current consumption	8.7 A
Fusing	10 A
Plug type	CEE 7/17
Cable length	1.5 m
Sound pressure level (1 m distance)	60 dB(A)
Protection class	II / 
Overheating protection	65 °C
Dimensions (depth x width x height)	175 x 135 x 228 mm
Minimum distance to walls and other objects	A: top: 100 cm B: rear: 100 cm C: side: 100 cm D: front: 100 cm
Weight	1.5 kg

Information requirements for electrical local space heaters

Parameter	Value / item
Model	TFC 16 E
Heat output	
Nominal heat output P_{nom}	2.0 kW
Minimum heat output (indicative) P_{min}	1.2 kW
Maximum continuous heat output $P_{max,c}$	2.0 kW
Auxiliary electricity consumption	
At nominal heat output $e_{l,max}$	1.933 kW
At minimum heat output $e_{l,min}$	1.352 kW
In standby mode $e_{l,sb}$	0.000 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	YES
With electronic room temperature control	NO
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	NO
With black bulb sensor	NO
Contact details	Trotec GmbH & Co. KG Grebbener 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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