

TDE 25 / TDE 65 / TDE 95

EN

ORIGINAL INSTRUCTIONS
ELECTRIC HEATER



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Notes regarding the instructions

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 instructions must be observed.

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

TDE 25



<https://hub.trotec.com/?id=44670>

TDE 65



<https://hub.trotec.com/?id=44671>

TDE 95



<https://hub.trotec.com/?id=44672>



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 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, beds or sofas.
- Make sure that the air inlet and outlet are not obstructed.
- 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 this device near bathtubs, shower trays, swimming pools or other water containers. Risk of electric shock!

Intended use

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

Intended use comprises heating the air in:

- Construction trailers
- greenhouses
- Boathouses
- Garages
- Market stalls
- Workshops
- Gastronomy sector
- Warehouses and halls
- Shipyards

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.
- The device must not be used near swimming pools.
- Do not use the device for heating in vehicles.
- Do not use this device in the immediate vicinity of sinks, bathtubs or other water containers.

Never immerse the device in water.

- Do not place the device on wet or flooded ground.
- The device may not be exposed to moisture or weather effects (rain, sunlight).
- 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 instructions, 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!
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.



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: 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).

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 device serves to generate and to distribute warm air, for speeding up drying processes and for defrosting frozen materials. It can be used either in closed rooms or in dry outdoor areas.

The heating element generates warmth. The air surrounding the heating element is heated. The heated air is distributed in the room by the fan.

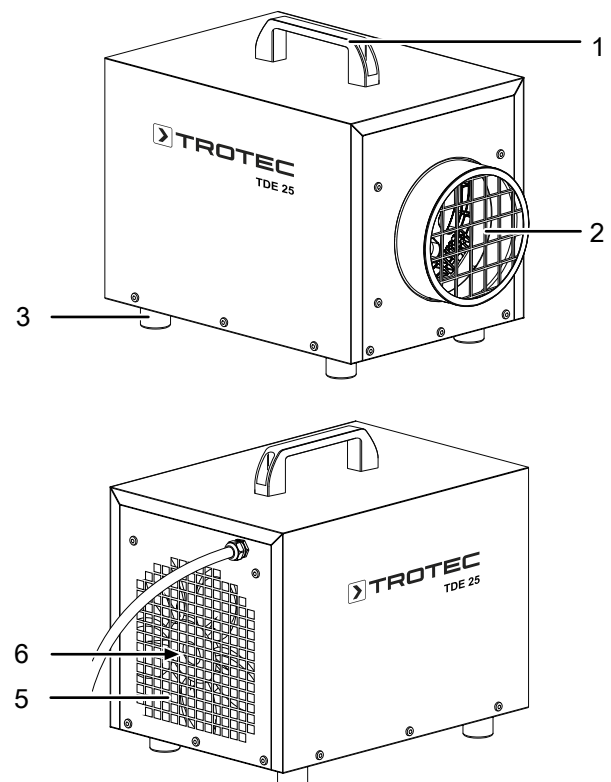
The device TDE 25 is equipped with a heating level which is activated immediately after connecting the mains plug. The devices TDE 65 and TDE 95 are equipped with a fan stage and three heating levels instead which can be adjusted by means of a selection switch.

The devices are further equipped with an overheating protection.

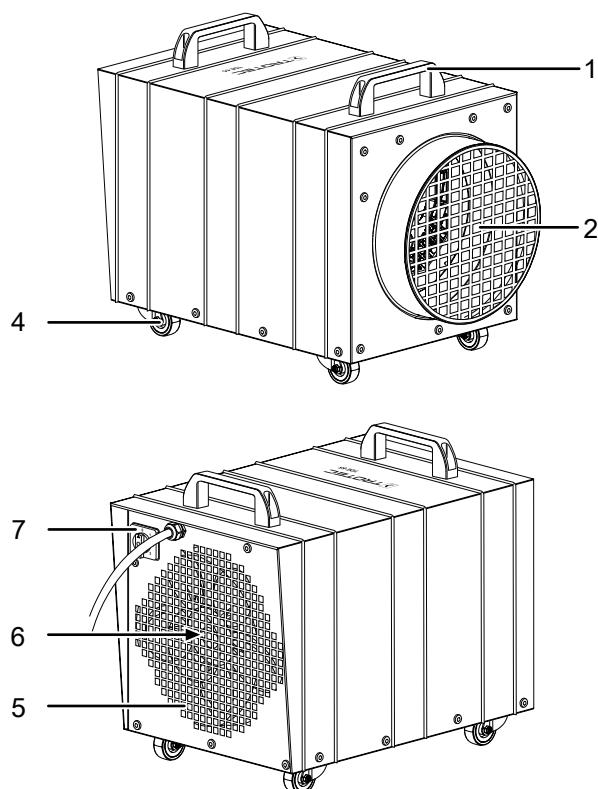
The device is suitable for tough requirements and therefore suited for the use on construction sites (heating and construction drying), in greenhouses or other commercial areas, e.g. for drying earthenware. Besides, the device is suited for continuous operation.

Device depiction

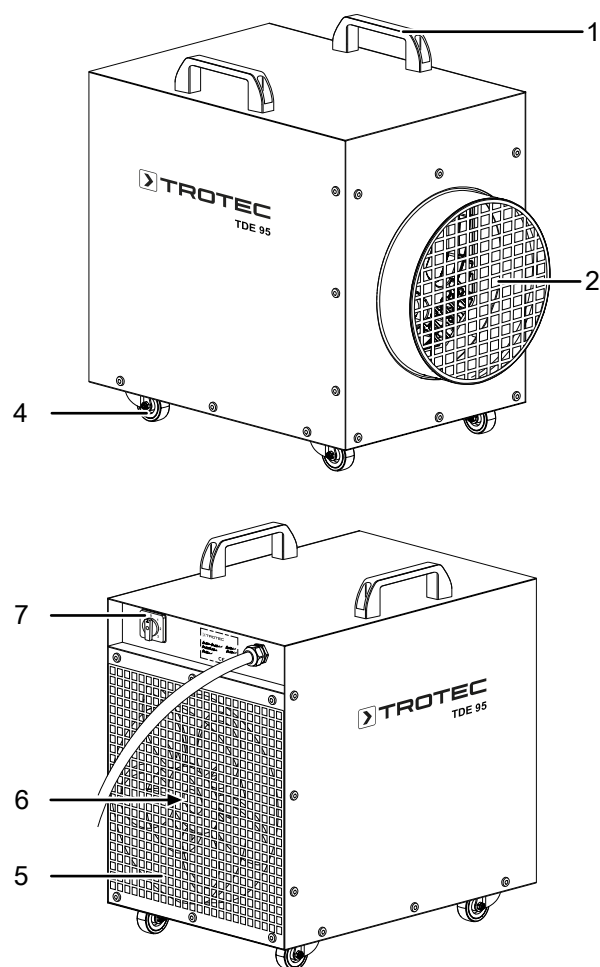
TDE 25



TDE 65



TDE 95



No.	Designation
1	Transport handle
2	Air outlet
3	Foot
4	Wheels
5	Air inlet
6	Fan
7	Selection switch <i>ventilation and heating levels</i>

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:

- 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:

- 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.

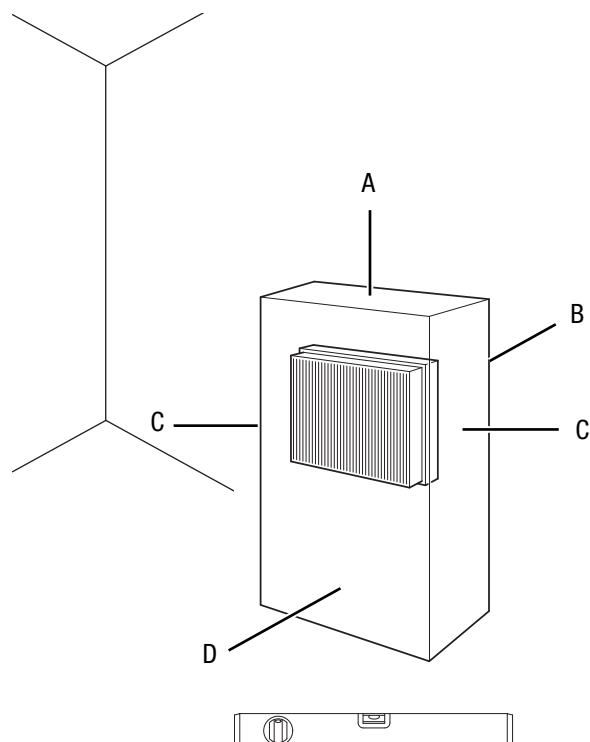
Start-up



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.
- The device may only be used in environments with no excessive formation of dust.
- 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.
- Make sure that the device cannot come into contact with moisture or water.

Connecting the power cable

Note

Note that the device TDE 25 switches on immediately after connecting the power cable.

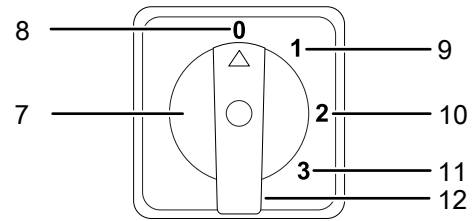
The devices TDE 65 and TDE 95 only switch on immediately if the selection switch *ventilation and heating levels* (7) is not set to **0**.

- Insert the mains plug into a properly secured mains power 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 – TDE 65 / TDE 95



No.	Designation	Meaning
7	Selection switch <i>ventilation and heating levels</i>	Switching the device on/off Setting the heating level
8	Position 0	The device is switched off.
9	Position 1	Ventilation (no temperature increase)
10	Position 2	Heating level 50 %
11	Position 3	Heating level 75 %
12	Position 4	Heating level 100 %

Switching the device on

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

Shutdown



Warning of electrical voltage

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

TDE 25

1. Remove the mains plug from the mains socket.
2. Clean the device according to the Maintenance chapter.
3. Store the device according to the Storage chapter.

TDE 65 / TDE 95

1. Set the selection switch *ventilation and heating levels* (7) to **1** (9) where ventilation mode only is activated.
2. Keep the fan running until the device has cooled down.
The fan motor stops automatically.
⇒ **Never pull the mains plug from the socket while the fan is running. The device may overheat.**
3. Set the selection switch *ventilation and heating* (7) to **0** (8) to switch the device off.
4. Remove the mains plug from the mains socket.
5. Clean the device according to the Maintenance chapter.
6. Store the device according to the Storage chapter.

Available accessories



Warning

Only use accessories and additional equipment specified in the instructions. Using insertion tools or accessories other than those specified in the instructions may cause a risk of injury.

Designation	Article number
Room thermostat TDE 65/95	6.100.007.011

Errors and faults

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.
- 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 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 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 heating element may be defective. If the heating element is defective, have it replaced by a specialist electrical company.

The fan is not running:

- Check whether the device is switched on.
- Check the power connection.
- Check the power cable and mains plug for damages.
- 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.
- Check the fan for dirt or damages.
- Have the motor checked by an authorised specialist company or by Trotec. There may be a bearing damage on the motor.
- Check the fan blades for dirt and clean them if required (see chapter Maintenance).
- If the fan blades are defective, have them replaced by a specialist company or by Trotec.

Your 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

Maintenance intervals

Maintenance and care interval	before every start-up	as needed	at least every 2 weeks	at least every 4 weeks	at least every 6 months	at least annually
Check air inlets and outlets for dirt and foreign objects and clean if necessary	X					
Check air inlet grid(s) for dirt and foreign objects and clean if necessary	X		X			
Clean the exterior		X				X
Visually check the inside of the device for dirt		X		X		
Check for damage	X					
Check attachment screws		X				X
Test run						X

Maintenance and care log

Device type:

Device number:

Maintenance and care interval	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Check air inlets and outlets for dirt and foreign objects and clean if necessary																
Check air inlet grid(s) for dirt and foreign objects and clean if necessary																
Clean the exterior																
Visually check the inside of the device for dirt																
Check for damage																
Check attachment screws																
Test run																
Comments																

1. Date: Signature:	2. Date: Signature:	3. Date: Signature:	4. Date: Signature:
5. Date: Signature:	6. Date: Signature:	7. Date: Signature:	8. Date: Signature:
9. Date: Signature:	10. Date: Signature:	11. Date: Signature:	12. Date: Signature:
13. Date: Signature:	14. Date: Signature:	15. Date: Signature:	16. Date: Signature:

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

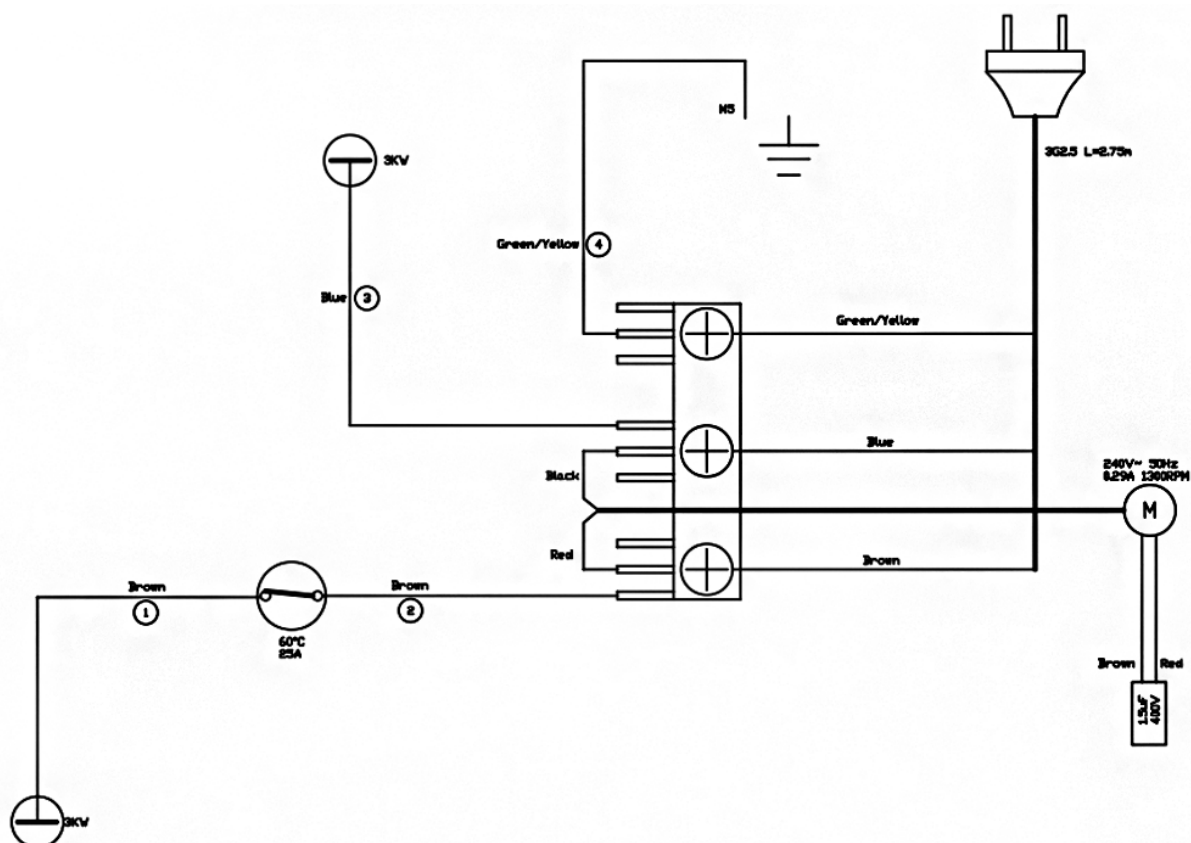
Never immerse the device in water!

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	TDE 25	TDE 65	TDE 95
Heating capacity	3 kW (2586 kcal/h)	6/9/12 kW (5160/7740/10300 kcal/h)	9/13.5/18 kW (7740/1610/15400 kcal/h)
Air volume	250 m ³ /h	600 m ³ /h	1520 m ³ /h
Temperature increase ΔT	36 °C	60 °C	35 °C
Mains connection	230 V / 50 Hz	400 V / 50 Hz	400 V / 50 Hz
Nominal current consumption	13.4 A	18 A	27.2 A
Recommended fusing	16 A	32 A	32 A
Power consumption	3 kW	12 kW	18 kW
Sound pressure level (at a distance of 1 m)	55 dB(A)	63 dB(A)	67 dB(A)
Dimensions (length x width x height)	315 x 260 x 355 mm	605 x 365 x 465 mm	480 x 405 x 585 mm
Minimum distance to walls and other objects	top (A): 50 cm rear (B): 50 cm sides (C): 50 cm front (D): 50 cm	50 cm 50 cm 50 cm 50 cm	50 cm 50 cm 50 cm 50 cm
Weight	11 kg	25 kg	30 kg

Circuit diagram TDE 25


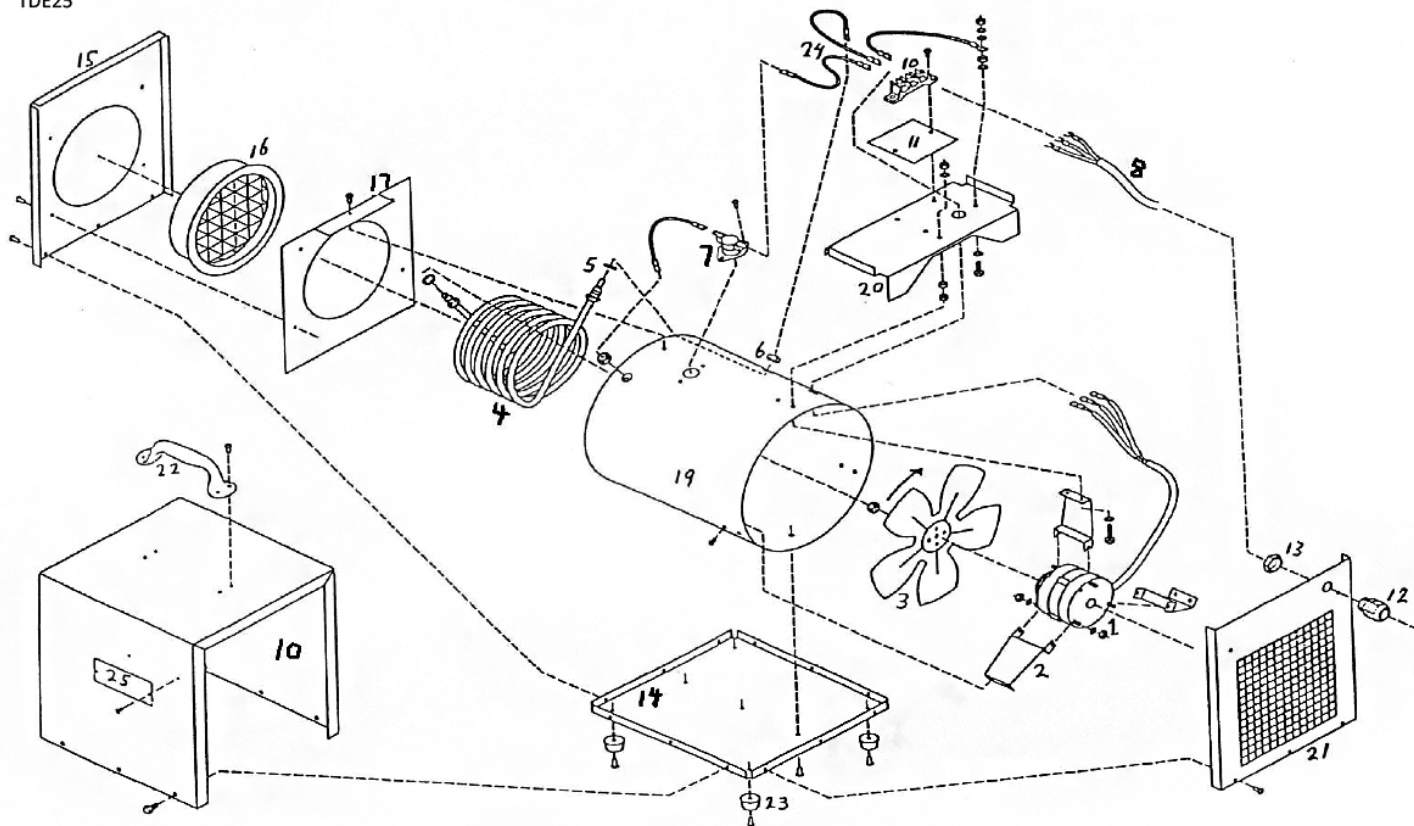
Overview of spare parts TDE 25



Info

The position numbers of the spare parts differ from those describing the positions of the components mentioned in these instructions.

TDE25



No.	Spare part	No.	Spare part	No.	Spare part
1	400 V electric motor, 9 W 1300 UpM	10	3 x 3 (SFK 3F KR) connector strip	19	Protective housing heat resistant 1 mm
2	Motor bracket 1.5 mm with mounting material	11	Insulation plate 80 x 80 mm below connector strip	20	Mounting plate heat resistant 1.5 mm
3	9" fan blade, 31° 5 -blade	12	PG 13.5 cable coupler	21	Perforated stainless steel intake plate 1 mm thick
4	Stainless steel heating coil 230 V~ 3 kW	13	PG 13.5 nut	22	Grip 142 mm black plastic
5	19 x 13 x 2 mm insulating discs	14	Galvanised base plate 1.5 mm	23	Rubber feet , black 30 x 15 mm
6	Brass nuts ¼" x 5 ½ mm – spanner size 19	15	Front cover plate - galvanised	24	Wiring set with heat protection 150 °C 2.5 mm²
7	Clixon thermostat 63 °C, 25 A.	16	Grille160 Ø – black finish RAL 9005	25	Type plate with CE symbol
8	Electric cable 3 x 2.5mm², Length 2.75 m with M5 cableclips	17	Clamping plate 1.5 mm		
9	Safety plug 2-pin with 16 A fuse	18	Covering case galvanised 1.5 mm		

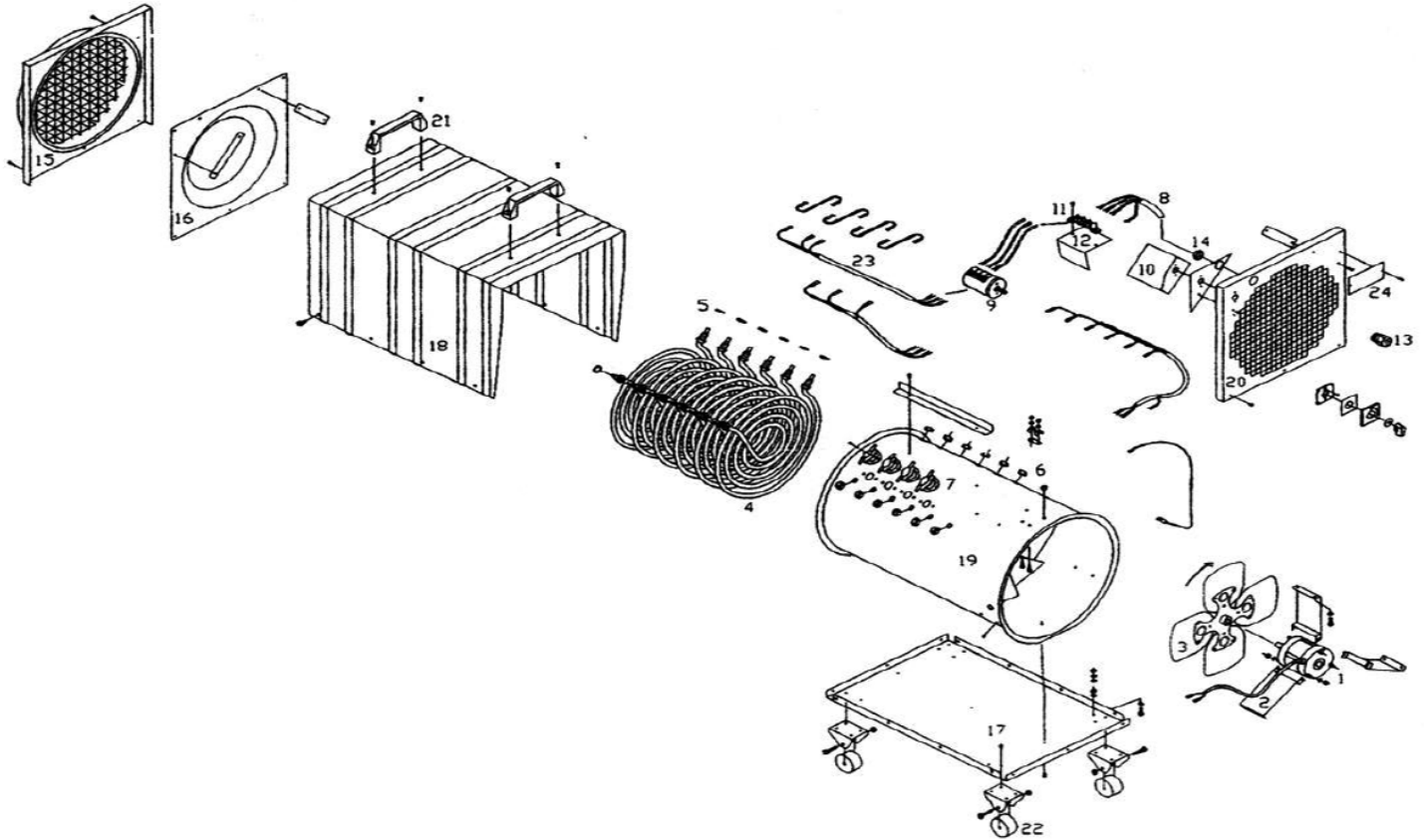
Overview of spare parts TDE 65



Info

The position numbers of the spare parts differ from those describing the positions of the components mentioned in these instructions.

TDE65



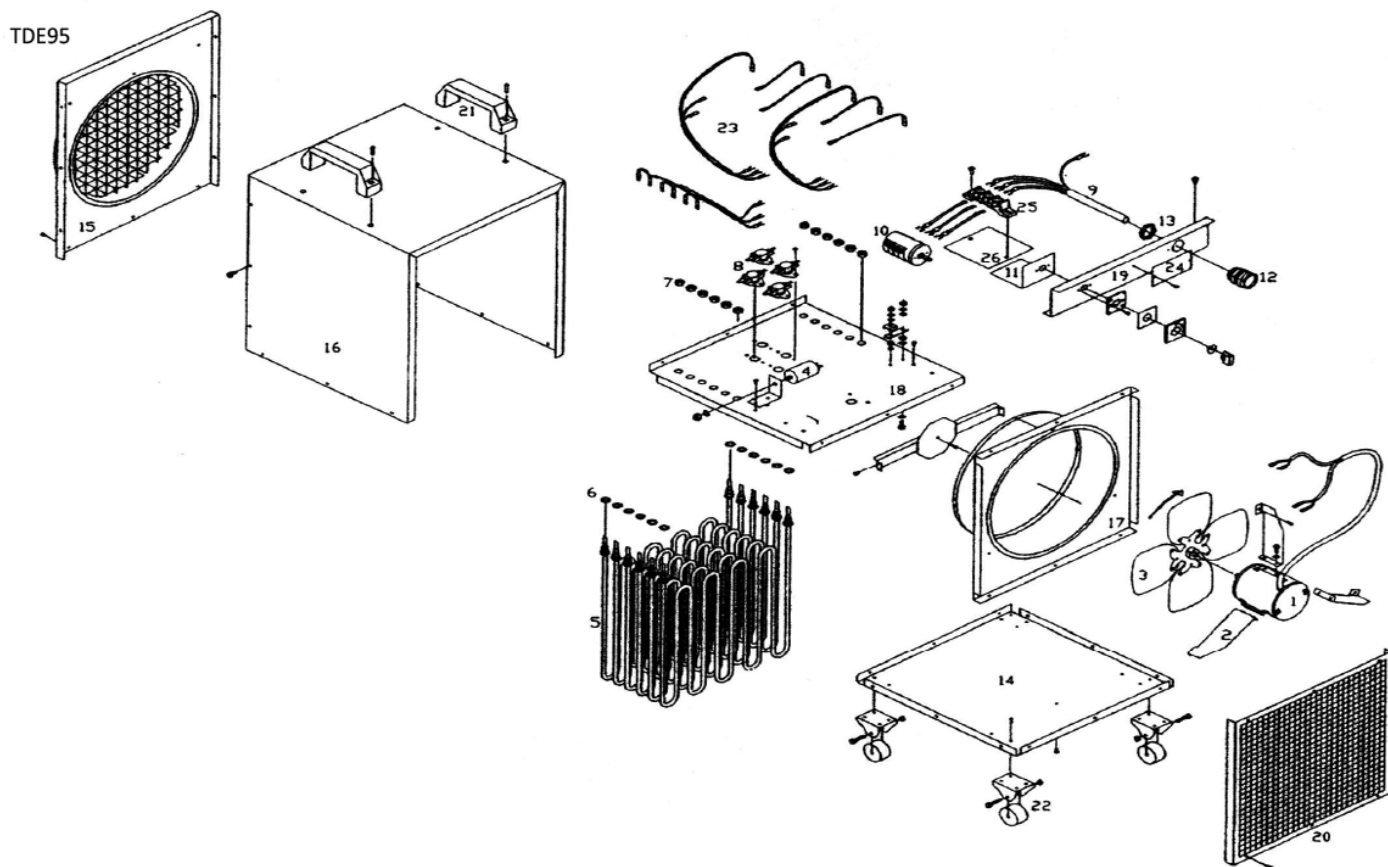
No.	Spare part	No.	Spare part	No.	Spare part
1	400 V electric motor, 25 W 1250 UpM	9	5-stage switch	17	Base plate
2	Motor bracket with mounting material	10	Insulation plate for switch	18	Cover plate
3	12" fan blade, 15° 4 -blade	11	3 x 3 (SFK 3F KR) connector strip	19	Protective housing with mounting plate SFK3FKR
4	Stainless steel heating coil 230 V~ 2 kW	12	Insulation plate (SFK 3F KR)	20	Perforated intake plate
5	IT 400 19 x 13 x 2 mm insulating discs	13	PG 16 cable coupler	21	142 mm grips black
6	Brass nuts ¼" x 5 ½ mm – spanner size 19	14	PG 16 nut	22	Ø50 mm rolls – full-rubber
7	Clixon thermostat 82 °C, 25 A.	15	Grille with Ø300 mm hose connecting point	23	Wiring set with heat protection 150 °C 2.5 mm ²
8	Electric cable 4 x 2.5mm ² , l = 0.55 m with 4 M5 cable clips	16	Aluminum discharge hopper	24	Type plate

Overview of spare parts TDE 95



Info

The position numbers of the spare parts differ from those describing the positions of the components mentioned in these instructions.



No.	Spare part	No.	Spare part	No.	Spare part
1	400 V electric motor, 60 W 1350 UpM	10	5-stage switch	19	Mounting plate for switch
2	Motor bracket with mounting material	11	Insulation plate for switch	20	10 mm perforated intake plate
3	12" fan blade, 40° 4 -blade	12	PG 21 cable coupler	21	160 mm grip
4	Condensor 4 µF 500 V~	13	PG 21 nut	22	Ø50 mm rolls – full-rubber
5	Stainless steel heating coil 230 V~ 3 kW	14	Base plate	23	Wiringset with heatprotection 150 °C 2.5 mm ²
6	IT 400 19 x 13 x 2 mm insulating discs	15	Grille with Ø300 mm hose connecting point	24	Type plate
7	Brassnuts ¼" x 5 ½ mm – spanner size 19	16	Cover plate	25	3 x 3 (SFK 3F KR) connector strip
8	Clixon thermostat 63 °C, 25 A.	17	Fan plate	26	Insulation plate (SFK 3F KR) (80 x 80) mm
9	Electric cable 4 x 4 mm ² , l= 0.65 m with cableclip	18	Mounting plate		

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 <https://de.trotec.com/shop/>.

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.

Declaration of conformity

The text below sets out the contents of the declaration of conformity. The signed declaration of conformity can be found at <https://hub.trotec.com/?id=44670>.

Declaration of conformity

in accordance with the EC Machinery Directive 2006/42/EC,
Annex II, Part 1, Section A

Herewith, we – Trotec GmbH – declare that the machinery designated below was developed, constructed and produced in compliance with the requirements of the EC Machinery Directive in the version 2006/42/EC.

Product model / product: TDE 25, TDE 65, TDE 95

Product type: electric heater

Year of manufacture as of: 2020

Relevant EU directives:

- 2011/65/EU: 01/07/ 2011
- 2014/30/EU: 29/03/2014

Applied harmonised standards:

- EN ISO 12100:2010
- EN 60335-1:2012
- EN 61000-6-2:2005
- EN 61000-6-2:2005/AC2005
- EN 61000-6-3:2007
- EN 61000-6-3:2007/A1:2011

Applied national standards and technical specifications:

- EN ISO 13857:2019
- EN IEC 61000-6-2:2019
- EN 60335-2-30:2009
- EN 60335-2-30:2009/Cor.:2010
- EN 60335-2-30:2009/A11:2013

Manufacturer and name of the authorised representative of the technical documentation:

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Place and date of issue:

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