

TTV 4500 / TTV 4500 HP / TTV 7000

EN

ORIGINAL INSTRUCTIONS
AXIAL FAN



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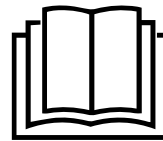
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You can download the current version of these instructions via the following link:



TTV 4500

<https://hub.trotec.com/?id=42498>



TTV 4500 HP

<https://hub.trotec.com/?id=42499>



TTV 7000

<https://hub.trotec.com/?id=42500>

Information on the use of this instructions

Symbols



Warning of electrical voltage

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



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.

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.

- 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.
- Place the device in an upright and stable position on horizontal and stable ground.
- Observe a minimum distance of 3 m between walls, objects and the suction side.
- 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 sit on the device.
- This appliance is not a toy. Keep away from children and animals.
- 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 technical data when selecting extensions to the power cable. Completely unroll the extension cable. 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 positioning the device, observe the minimum distances from walls and other objects as well as the storage and operating conditions specified in the Technical annex.
- Make sure that the air inlet and outlet are not obstructed.
- Make sure that there are no loose items or dirt located in the immediate surroundings of air inlet and air outlet.
- Protect yourself and your environment from whirled up parts.
- Improper installation can lead to a fire, electric shock or severe personal injury.

Intended use

- Use the device for ventilation, air circulation, dust extraction or air transport whilst adhering to the technical data and the safety instructions.
- The device was designed for the generation of a powerful, large-volume air circulation, e.g. for the accelerated drying of buildings and rooms. The fan can be operated in combination with different accessories.

Any use other than the intended use is regarded as misuse.

Reasonably foreseeable misuse

- The device is not suited for installation in fluids or on flooded or boggy grounds.
- Do not make any unauthorised modifications, alterations or structural changes to the device.

Personnel qualification

People who use this device must:

- be aware of the dangers that occur when using high-performance fans.
- have read and understood the instructions, especially the Safety chapter.

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

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.



Caution

Risk of injury due to parts being whirled up by the strong air current.
Before switching the device on, make sure that there are no loose parts (clothing, hair etc.) located near the air inlet or outlet!



Caution

Keep a minimum distance of 3 m to the suction side of the device!

Note

Do not use abrasive cleaners or solvents to clean the device.

Behaviour in the event of an emergency

1. In an emergency, disconnect the device from the mains feed-in: Switch the device off and disconnect it from the mains.
2. Remove persons from the danger area.
3. Do not reconnect a defective device to the mains.

Information about the device

Device description

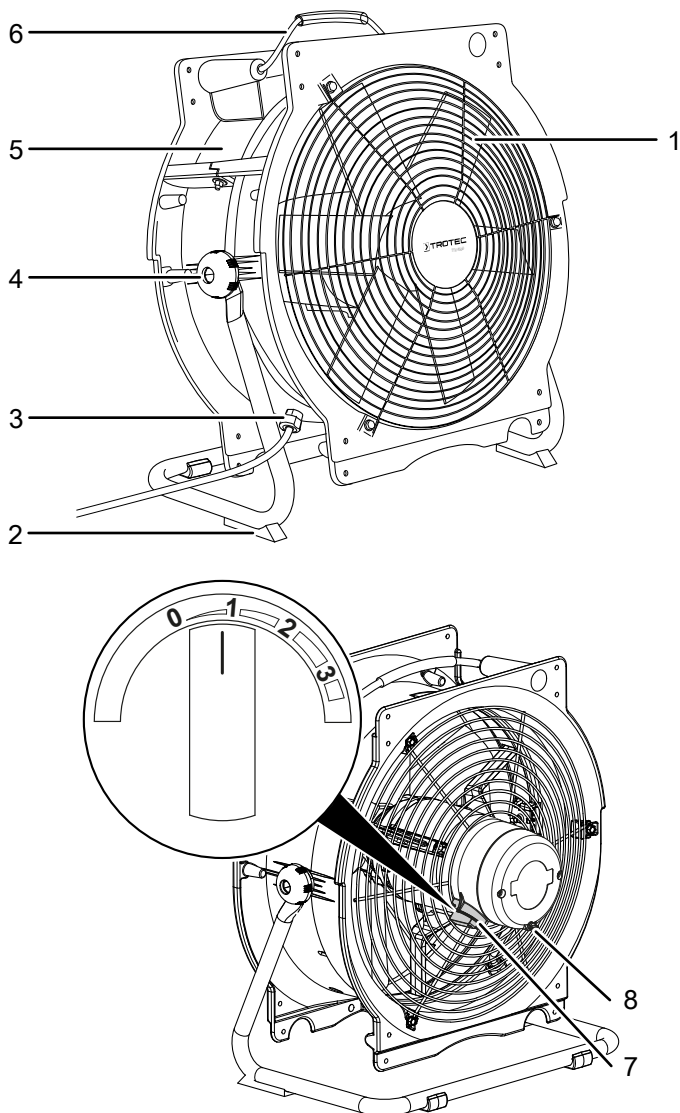
The axial fans TTV 4500 / TTV 4500 HP / TTV 7000 were designed for a very high air flow; the TTV 4500 HP was additionally designed for particularly high air pressure even over long air transport distances.

The device is rated with IP55 type of protection and is thus suitable for application both inside rooms and outdoors.

The fan speed can be set to one of 3 stages.

Depending on the type, the devices can be expanded with a range of accessories. For example, one or two hose adapters may be used for connecting air transport hoses and/or dust bags. Furthermore, some device sizes allow the connection of a combination distributor e. g. for air distribution with up to eight hoses.

Device depiction



No.	Designation
1	Air outlet
2	Foot (lockable)
3	Power cable with Schuko plug
4	Locking screw
5	Housing
6	Transport loop
7	<i>Fan stage</i> selection switch
8	Condensate plug

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.
- To make the device easier to transport, it is fitted with a transport loop.
- Do not use the power cable to drag the device.

After transporting the device, proceed as follows:

- Set up the device in an upright position after transport.

Storage

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 appliance 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.
- Stackable: up to 3 devices may be stacked on top of one another.



Info

Do not take the devices into operation when stacked. Stacking rules out an efficient usage of the devices.

Assembly and start-up

Scope of delivery

- 1 x Device
- 1 x foot
- 2 x locking screw
- 2 x large washer
- 2 x small washer
- 1 x Manual

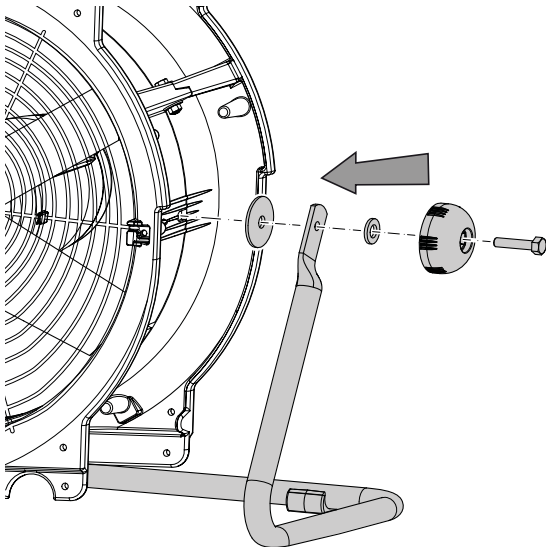
Unpacking the device

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

Mounting the foot

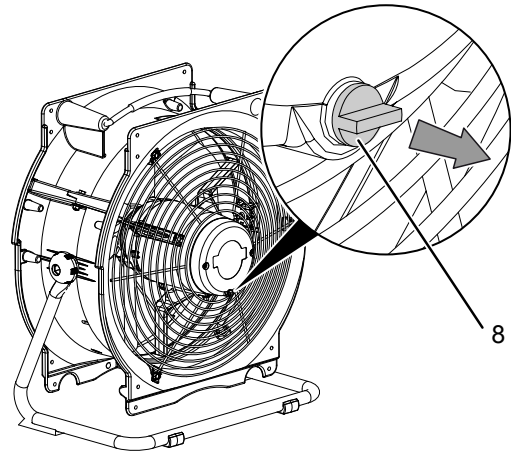
1. Attach the foot, the locking screws and the washers as depicted in the figure.



Removing the condensate plug

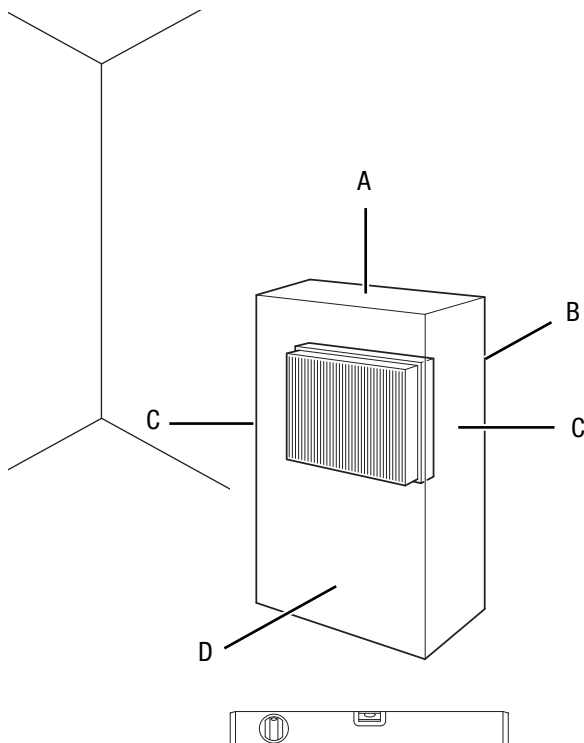
The condensate plug, which is located at the lowest point of the motor, must be removed before start-up. Store the condensate plug safely as it must be reinserted for cleaning and maintenance work.

1. Remove the condensate plug.



Start-up

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

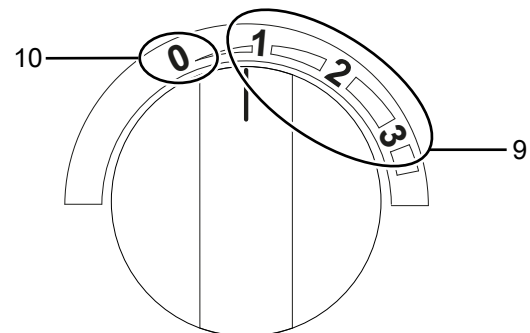


- Before starting the device, check the condition of the power cable. If there are doubts as to their sound condition, contact the customer service.
- Only put up the device in an upright, stable position on firm ground.
- Make sure the device is only placed on firm, dry and vibration-free ground.
- When positioning the device, keep a sufficient distance to heat sources.
- Make sure that the air inlet and outlet are not obstructed.
- Make sure that extension cables are completely unrolled.
- Insert the mains plug into a properly fused mains socket.

Operation

Operating elements

TTV 4500 / TTV 4500 HP / TTV 7000



No.	Designation	Meaning
9	Fan stage selection switch	Setting the fan speed: stage 1 = low stage 2 = medium stage 3 = high
10	Stage 0	Device switched off

Switching the device on

- ✓ The device has been completely installed as described in the Assembly and start-up chapter.
1. Switch the device on by turning the *fan stage* selection switch (9) to the desired position.

Shutdown



Warning of electrical voltage

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

1. Switch the device off by turning the *fan stage* selection switch (9) to the 0 position.
2. Hold onto the mains plug while pulling the power cable out of the socket.
3. Clean the device according to the Maintenance chapter.
4. 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.

TTV 4500 / TTV 4500 HP

Designation	Article number
Hose adapter	6.100.005.010
Combination distributor	6.100.005.011
Dust bag class M, length: 3 m	7.160.000.110
Dust bag class M, length: 5 m	7.160.000.112
Air transport hose Tronect SP-T, length: 7.6 m	6.100.001.214
Air transport hose Tronect TF-L, length: 5 m	6.100.001.115
Universal lashing strap	6.100.001.995

TTV 7000

Designation	Article number
Hose adapter	6.100.005.020
Dust bag class M, length: 5 m	7.160.000.112
Air transport hose Tronect SP-T, length: 7.6 m	6.100.001.217
Universal lashing strap	6.100.001.995

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.

Note

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

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.
- Check the on-site fusing.

The fan operates only for a brief period, then switches off:

- Check whether the protective grid at the air inlet is obstructed in some way. If applicable, remove foreign objects.
- The motor bearing might be damaged. Please contact the customer service.

The motor or fan is noisy or runs unevenly:

- The fan is soiled. Clean the fan according to the Maintenance chapter.
- The fan or the blower unit is damaged. Please contact the customer service. If necessary, bring the device to an authorized specialist electrical company or to Trotec for repair.
- The motor bearing might be damaged. Please contact the customer service. If necessary, bring the device to an authorized specialist electrical company or to Trotec for repair.

The fan produces grinding noises:

- The fan blades are dirty or foreign objects are located in the rotation range of the fan. Clean the fan blades or the blower unit according to the Maintenance chapter.
- The fan blades might be damaged. Please contact the customer service. If necessary, bring the device to an authorized specialist electrical company or to Trotec for repair.

The device vibrates heavily:

- Check the floor space of the fan. Position the device on a level and firm surface.
- Check the screwed connections, particularly between blower unit and foot. If necessary, retighten the screws.
- Check the fan blades for dirt and clean them if required.
- There might be an imbalance in the fan blades. Please contact the customer service. If necessary, bring the device to an authorized specialist electrical company or to Trotec for repair.

The fan changes its position during operation:

- Check the parking brakes for tight fit and retighten them if necessary.

The air flow rate is low:

- Check whether the protective grid is blocked and clean it if required.

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.
- Always be mindful of atypical sounds and consult a specialist dealer if in doubt.
- Hold onto the mains plug while pulling the power cable out of the mains socket.

**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

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.

Cleaning the fan and device interior**Warning**

Risk of injury caused by ejected compressed air upon activation of the compressed air supply.

Hold the compressed-air hose away from your body. Pointing the compressed-air hose at another person is prohibited.

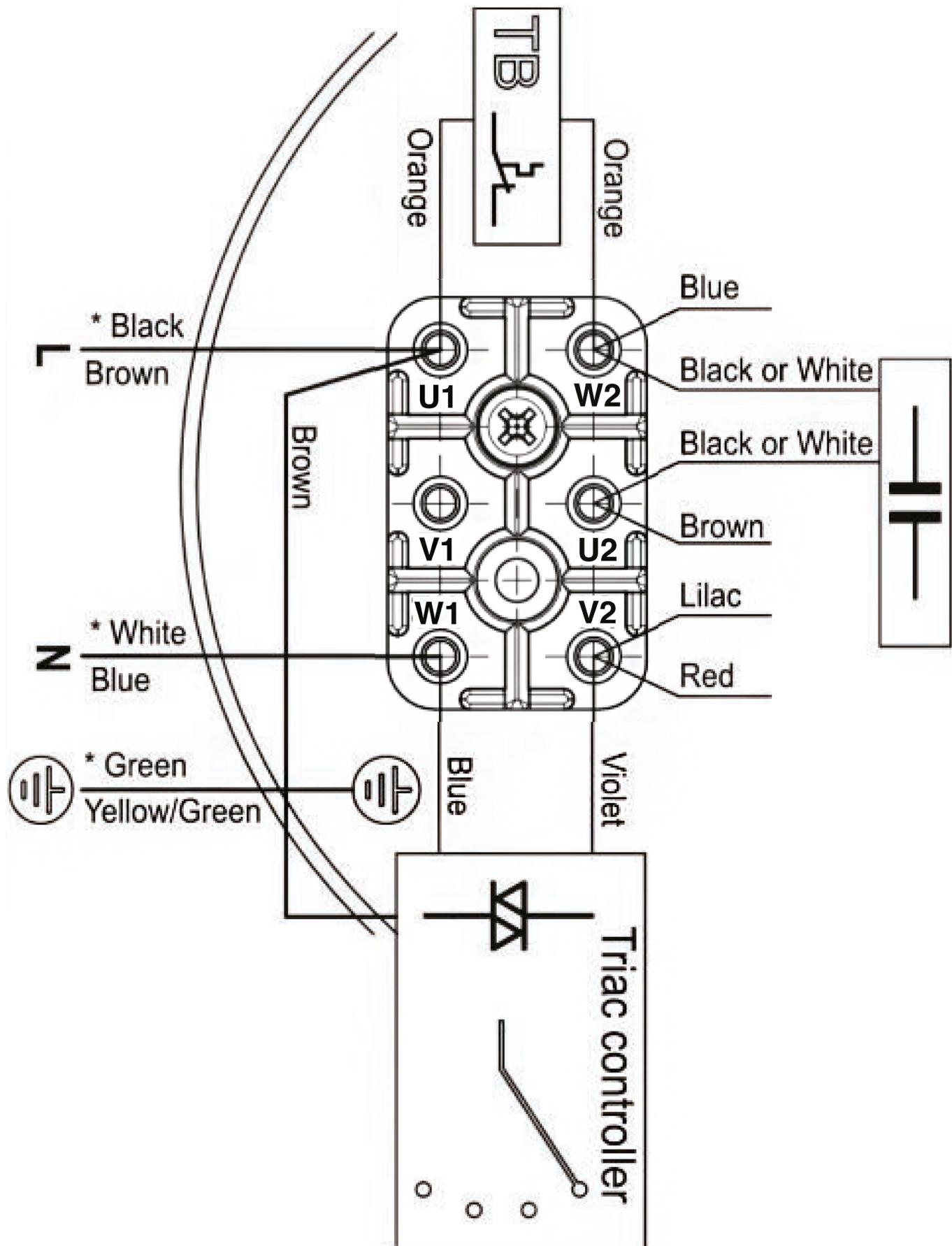
- Check fan and protective grid for perfect condition before and after each application.
- Clean the fan after each operation.
- Use compressed air to remove particles, lint, dust and dirt from motor, fan wheel and protective grid. Do not in any event use a high-pressure cleaner to clean the fan.
- Other than that, the device does not require maintenance.

Technical annex
Technical data

Parameters	Value		
Model	TTV 4500	TTV 4500 HP	TTV 7000
Article number	1.510.000.010	1.510.000.012	1.510.000.030
Air volume stage 1	2000 m ³ /h	1500 m ³ /h	2500 m ³ /h
Air volume stage 2	3700 m ³ /h	3000 m ³ /h	5000 m ³ /h
Air volume stage 3	5100 m ³ /h	4800 m ³ /h	7400 m ³ /h
Nominal air volume	3,200 m ³ /h @ 85 Pa	2,850 m ³ /h @ 155 Pa	4,450 m ³ /h @ 95 Pa
Air current	blowing out / sucking in	blowing out / sucking in	blowing out / sucking in
Air discharge velocity	10 m/s (36 km/h)	9.3 m/s (33.5 km/h)	9.3 m/s (33.5 km/h)
Discharge distance (@ v=0.5 m/s)	47.5 m	44.3 m	54.7 m
Max. air pressure	85 Pa	155 Pa	95 Pa
Max. transport medium temperature	45 °C	45 °C	45 °C
Power supply	1 / N / PE ~ 230 V / 50 Hz	1 / N / PE ~ 230 V / 50 Hz	1 / N / PE ~ 230 V / 50 Hz
Power consumption	0.246 kW	0.266 kW	0.32 kW
Protection	3.15 A	3.15 A	3.15 A
Type of protection	IP 55	IP 55	IP 55
Max. sound level (distance 3 m)	53 dB(A)	64 dB(A)	58 dB(A)
Mobility	portable / stackable	portable / stackable	portable / stackable
Hose connection with hose adapter* and/or combination distributor**	450 mm ***/ 8 x 100 mm**	450 mm ***/ 8 x 100 mm**	560 mm */ -
Permissible surrounding conditions	- 25 °C to + 40 °C	- 25 °C to + 40 °C	- 25 °C to + 40 °C
Dimensions (length x width x depth)	358 x 515 x 520 (mm)	358 x 515 x 520 (mm)	365 x 620 x 620 (mm)
Minimum distance to walls and other objects	top (A): 0.5 m rear / suction side (B): 3.0 m sides (C): 0.5 m front (D): 0.5 m	0.5 m 3.0 m 0.5 m 0.5 m	0.5 m 3.0 m 0.5 m 0.5 m
Weight	13 kg	13.5 kg	15 kg

Circuit diagram

TTV 4500 / TTV 4500 HP / TTV 7000

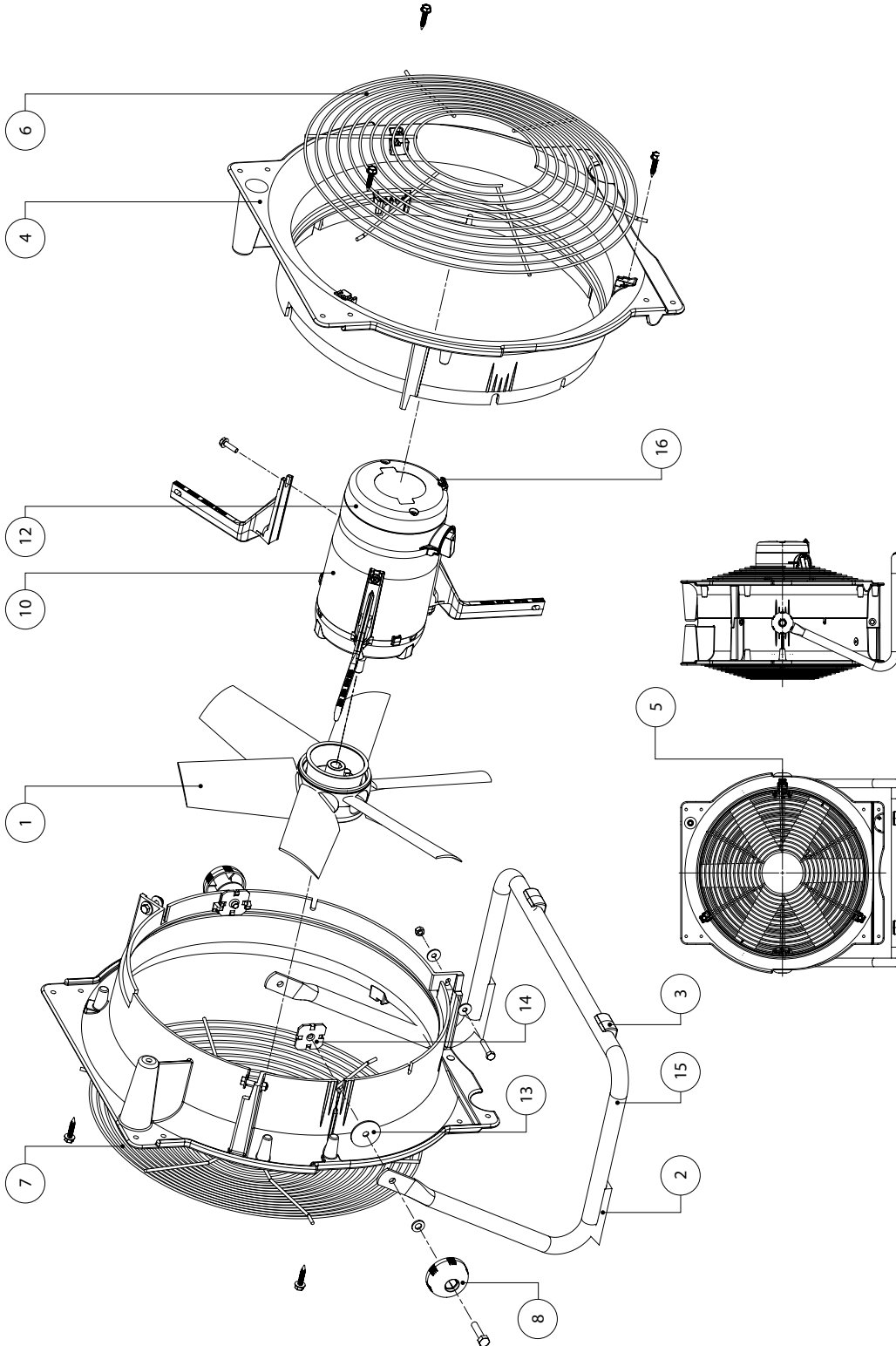


Exploded assembly drawing TTV 4500 / TTV 4500 HP



Info

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

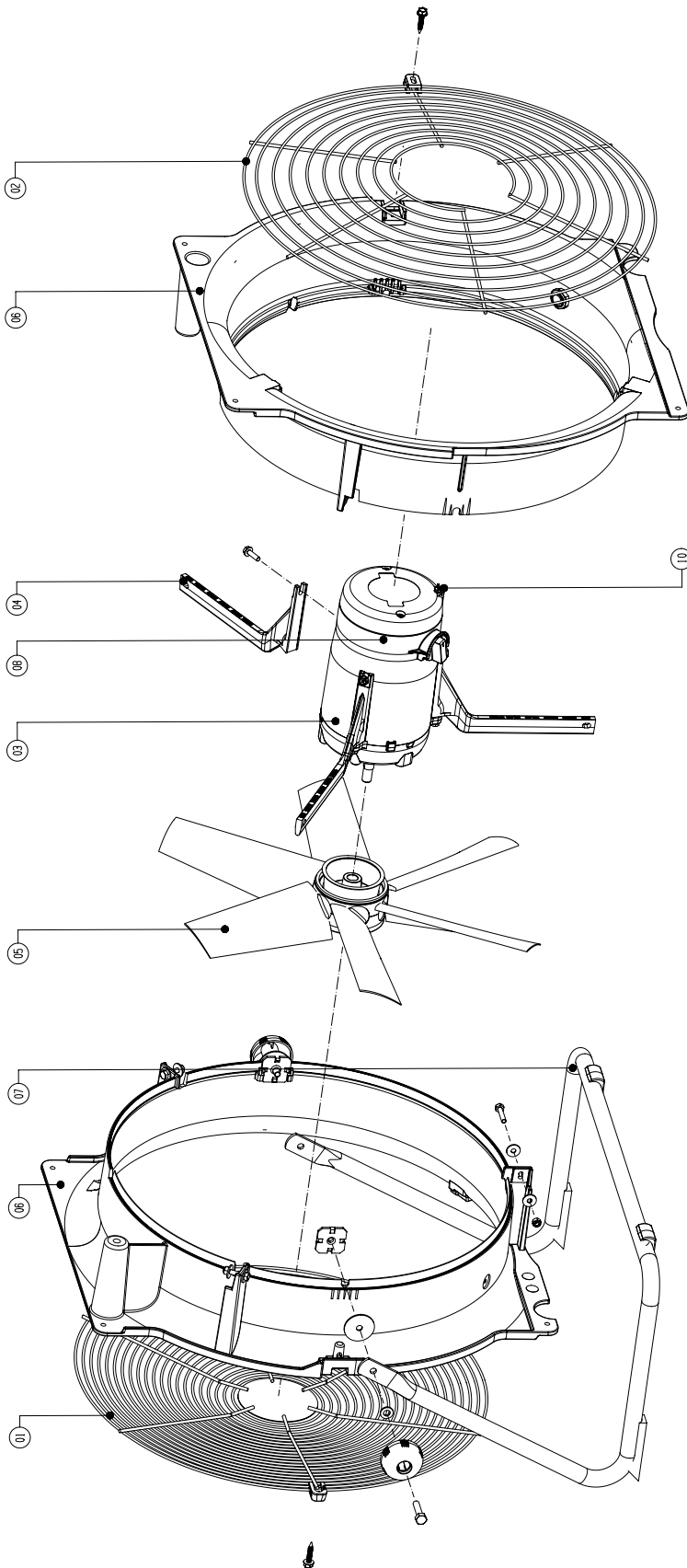


Spare parts list TTV 4500 / TTV 4500 HP

No.	Designation	Article number	No.	Designation	Article number
1	Fan rotor TTV 4500	7310000634	10	Motor 4E40 TTV4500/ TTV 4500 HP	7110000157
2	Rubber feet back TTV 4500	7300001246	11	Connector assembly kit TTV-series	7320001271
3	Rubber feet front TTV 4500	7300001245	12	Switch TTV 4500	7130000060
4	Housing TTV 4500/HP	7310000936		Switch TTV 4500 HP	7130000064
5	Safety clamp grid BVWP0023 TTV-series	7310000642	13	Rubber washer TTV 4500	7330001155
6	Safety grid airinlet TTV 4500	7242000638	14	Plastic washer TTV 4500	7310001154
7	Safety grid airoutlet TTV 4500	7242000639	15	Tube feet TTV 4500	7240000937
8	Fixing knob TTV-series	7310000710	16	Condense plug	7300001248
9	Condensator 5uF motor TTV 4500 HP	7140000563			
	Condensator 4uF motor TTV 4500	7140000564			

Exploded assembly drawing TTV 7000**Info**

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



Spare parts list TTV 7000

No.	Designation	Article number	No.	Designation	Article number
01	Wire guard impeller side	7242000646	06	Housing (set, 2 pieces)	7310000939 (Ventilator) + 7310000938 (Motor)
02	Wire guard motor side	7242000645	07	Frame	7240000939
03	Motor	7110000156	08	Controller (under cap)	*)
04	Bracket	*)	10	Condense plug	7300001248
05	Impeller	7310000633			

*) on request

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 is taken from Directive 2012/19/EU. It states that this device 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) (as amended) devices that are no longer usable must be collected separately and disposed of in an environmentally friendly manner.

Declaration of conformity

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

We – Trotec GmbH – declare in sole responsibility that the product 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: TTV 4500
TTV 4500 HP
TTV 7000

Product type: axial fan

Year of manufacture as of: 2023

Relevant EU directives:

- 2011/65/EU
- 2012/19/EU
- 2014/30/EU

Applied harmonised standards:

- EN IEC 63000:2018
- EN ISO 11201:2010
- EN ISO 11203:2009/A1:2020
- EN ISO 11204:2010
- EN ISO 12100:2010
- EN ISO 13732-1:2008
- EN ISO 13854:2019
- EN ISO 13857:2019
- EN ISO 14120:2015
- EN 60204-1:2018
- EN 61000-6-2:2005/AC:2005
- EN 61000-6-4:2007/A1:2011
- EN 61800-3:2004/A1:2012

Applied national standards and technical specifications:

- EN IEC 61000-6-2:2019
- EN IEC 61000-6-4:2019
- EN IEC 61800-3-2018
- EN ISO 12499:2008
- EN ISO 13857:2008
- EN ISO 5801:2017
- EN 349:1993/A1:2008
- EN 50581:2012
- EN 60204-1:2006/AC:2010
- ISO 13348:2007
- ISO/TR 14121-2:2012
- ISO 9001:2015

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