

EN

OPERATING MANUAL
RADIAL FAN



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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!

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.

The current version of the operating manual can be found at:



TFV PRO 1



<http://hub.trotec.com/?id=39587>

Legal notice

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Warranty and liability

The device complies with the fundamental health and safety requirements of the applicable EU regulations and was tested at the factory for perfect functionality multiple times.

However, if faults in the functionality occur and cannot be remedied with the measures in the chapter Errors and faults, please get in touch with your dealer or distributor.

When making a warranty claim, supply the serial number (see nameplate).

When manufacturer's instructions or legal regulations have not been followed, or after unauthorised changes to the device are made, the manufacturer is not responsible for the resulting damages. Changes to the device or unauthorised replacement of individual parts can drastically impact the electrical safety of this product and will result in the loss of the warranty. Liability does not extend to damages to people or property caused by the device being used other than as described in the instructions in this operating manual. Subject to changes to technical design and model changes as part of constant development and product improvement without prior notice.

No liability is accepted for damages resulting from improper use. In such a case, any warranty claims will be voided also.

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!

- 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 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 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. Defective power cables pose a serious health risk.
- Observe the storage and operating conditions (see chapter Technical data).
- 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.

Intended use

Use the device for ventilation, air circulation 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 device can be operated in combination with different accessories.

The device may be used for drying carpets, buildings or screed as well as for the ventilation of poorly accessible intermediate spaces.

Improper use

The device is not suited for installation in fluids or on flooded or boggy grounds.

Any unauthorised changes, modifications or alterations to the device are forbidden.

Personnel qualifications

People who use this device must:

- be aware of the dangers that occur when using high-performance fans.
- 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.

Residual risks

Warning of electrical voltage
 Work on the electrical components must only be carried out by an electrically skilled person or an authorised specialist company.

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

Caution!
 Risk of injury from parts being whirled up!
 Do not operate the device without an inserted air filter!
 Before switching the device on, make sure that there are no loose parts (clothing, hair ...) located near the air inlet or outlet!

Note
 Do not operate the device without an inserted air filter!
 Without the air filter, the inside of the device will be heavily contaminated. This could reduce the performance and result in damage to 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

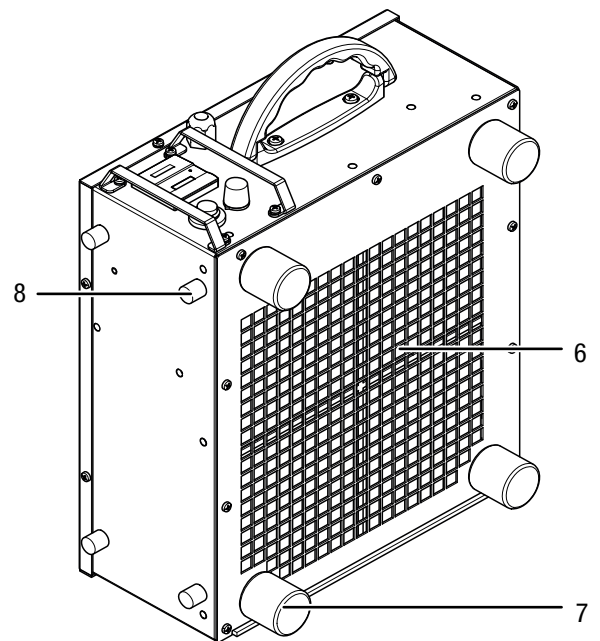
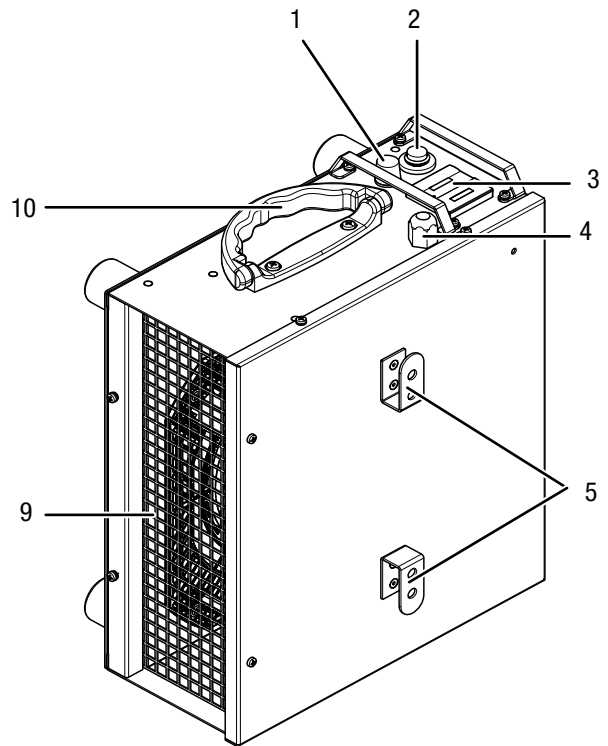
The radial fan TFV PRO 1 was designed for a high air volume flow, while being very space-saving.

It may be used for drying carpets, buildings or screed as well as for the ventilation of poorly accessible intermediate spaces.

The fan speed can be infinitely adjusted.

Using optionally available adapter plates (3, 8 or 12 connectors), you can fit hoses with various diameters to the device.

Device depiction



| No. | Designation |
|-----|---|
| 1 | Fan stage control dial |
| 2 | Power button |
| 3 | Counter for operating hours and kWh consumption |
| 4 | Mains power cable |
| 5 | Power cable holder |
| 6 | Air inlet |
| 7 | Feet, large – non-marking |
| 8 | Feet, small – non-marking |
| 9 | Air outlet |
| 10 | Transport handle |

Transport and storage

Transport

Before transporting the device, proceed as follows:

- Switch off the device.
- 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.

After transporting the device, observe the following:

- Place the device on its feet.

Storage

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
- stackable: up to 5 devices on top of one another

Assembly and installation

Scope of delivery

- Device
- Air filter
- Manual

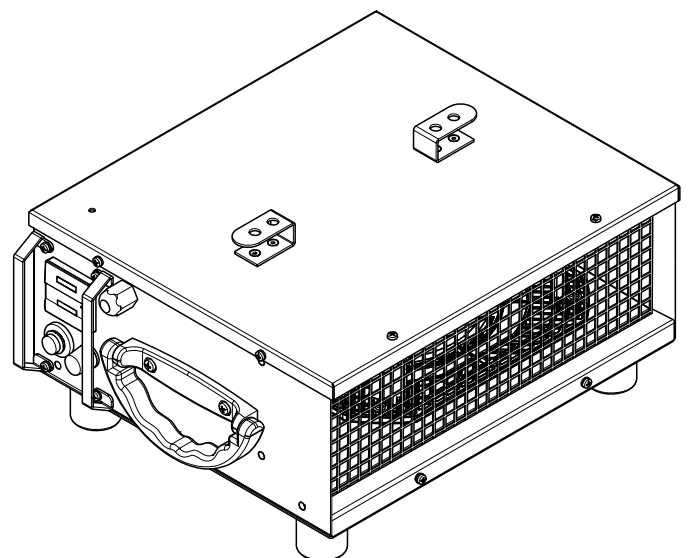
Unpacking the device

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

- Place the device on its feet.

The device can either be set up on the large or on the small feet.



- 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.

Inserting the air filter



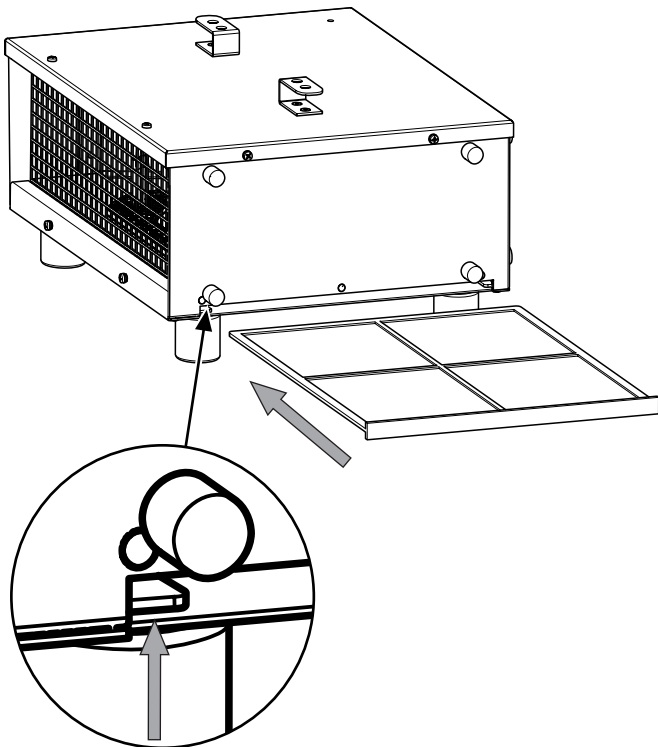
Caution!

Risk of injury from parts being whirled up!
Do not operate the device without an inserted air filter!
Before switching the device on, make sure that there are no loose parts (clothing, hair ...) located near the air inlet or outlet!

Note

Do not operate the device without an inserted air filter!
Without the air filter, the inside of the device will be heavily contaminated. This could reduce the performance and result in damage to the device.

- Make sure that the air filter is installed before switching the device on. The air filter must be seated in the lower guide rail.

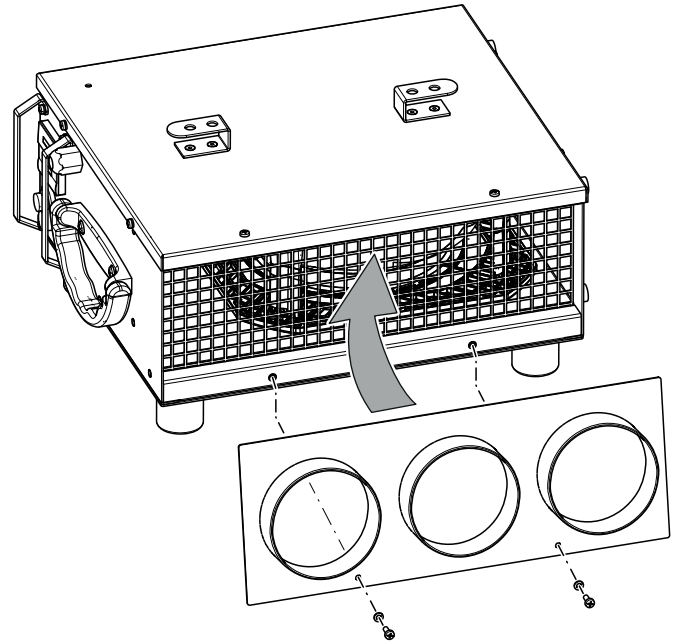


Mounting an adapter plate (optional)

You can mount optionally available adapter plates for 3, 8 or 12 hose connectors to the device.

The adapter plate for 3 connectors is used as an example in the following. The adapter plates with 8 or 12 connectors are installed in the same way.

1. Loosen the two screws at the air outlet.
2. Slide the adapter plate in front of the air outlet from below. Pay attention to slide the adapter plate into the slot so that it fits properly.



3. Fasten the adapter plate with the two screws.

Connecting a hose (optional)

You can fit hoses to all connectors of the optionally available adapter plate.

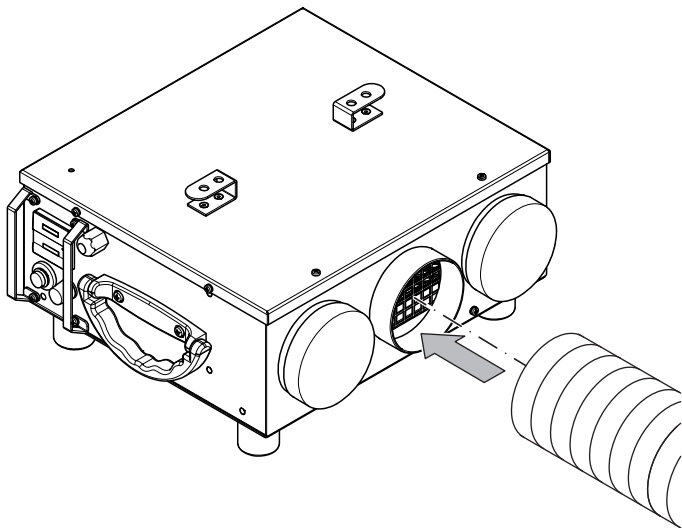
Connectors which are not used should be closed with the suitable sealing caps to avoid weakening the air current.

The adapter plate for 3 connectors is used as an example in the following. The hoses for the adapter plates with 8 or 12 connectors are connected in the same way.

In order to connect a hose, please proceed as follows:

1. Check the adapter plate for tight fit.
2. Connect the hose with the correct diameter to one of the hose connectors.

For improved fit of the hoses, use an appropriate hose clamp or cable tie.

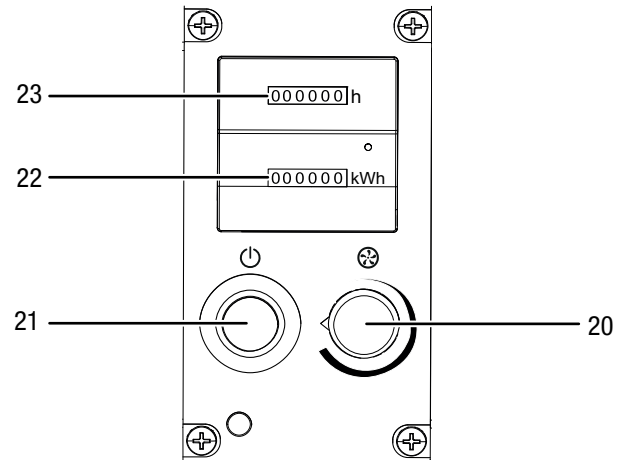


Connecting the power cable

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

Operation

Operating elements



| No. | Designation |
|-----|---------------------------------|
| 20 | Fan speed rotary control |
| 21 | Power button |
| 22 | Kilowatt hours counter with LED |
| 23 | Operating hours counter |

Switching the device on

1. Press the power button (21).
⇒ The power button (21) lights up.
2. Turn the rotary control (20) to the right until the fan starts running.



Info

You can read the number of operating hours from the operating hours counter (23) and the power consumption from the kilowatt hours counter (22) at all times. The LED at the kilowatt hours counter flashes when power is being consumed.

Fan speed

1. Set the desired fan speed using the rotary control (20).

Shutdown

1. Press the power button (21).
2. Wait until the fan has come to a standstill.
3. Remove the mains plug from the mains socket.
4. Clean the device according to the Maintenance chapter.
5. Store the device according to the Storage chapter.

Available accessories



Warning!

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

| Accessories | Article number |
|---|----------------|
| Adapter plate 3 x 100 mm, with sealing caps | 6.100.005.069 |
| Adapter plate 8 x 50 mm, with sealing caps | 6.100.005.070 |
| Adapter plate 12 x 38 mm, with sealing caps | 6.100.005.071 |
| Sealing cap set 12 x 38 mm | 7.310.000.301 |
| Sealing cap set 8 x 50 mm | 7.310.000.302 |
| Sealing cap set 3 x 100 mm | 7.310.000.303 |
| 38 mm hose Tronect PV-A | 6.100.001.010 |
| 50 mm hose Tronect PV-A | 6.100.001.020 |
| 100 mm hose Tronect TF-L | 6.100.001.115 |
| Air filter | 7.160.000.008 |

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 fan is not running:

- Check whether the unit is switched on.
- Check the power supply.
- Check the cable and power plug for defects.

The fan operates only for a short time, then switches off automatically:

- Check the air inlet for dirt. Clean it if required.
- The motor bearing or cable connections might be defective. If so, contact Trotec or a specialist electrical company.
- Check the air filter for dirt. If necessary, clean or replace the air filter.

The motor or fan is noisy or runs unevenly:

- The fan is soiled. Clean the fan according to the Maintenance chapter.
- The fan is damaged. If so, contact Trotec or a specialist electrical company.
- The motor bearing might be damaged. If so, contact Trotec or a specialist electrical company.

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 according to the Maintenance chapter.
- The fan blades might be damaged. If so, contact Trotec or a specialist electrical company.

The device vibrates heavily:

- Check the floor space of the fan. Position the device on a level and firm surface.
- There might be an imbalance in the fan blades. If so, contact Trotec or a specialist electrical company.

The air flow rate is low:

- Check the air inlet for dirt. Clean it if required.
- Check whether the hose connectors which are not needed are fitted with a sealing cap. Close hose connectors which are not used with a sealing cap if necessary.
- Check the air filter for dirt. If necessary, clean or replace the air filter.

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 off the device.
- Hold onto the mains plug while pulling the power cable out of the mains socket.

Cleaning the housing

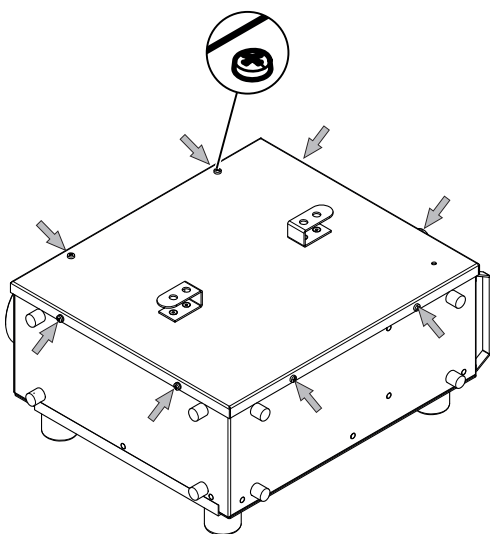
Clean the device with a soft, damp and lint-free cloth. Ensure that no moisture enters the housing. Protect electrical components from moisture. Do not use any aggressive cleaning agents such as cleaning sprays, solvents, alcohol-based or abrasive cleaners to dampen the cloth.

Cleaning the fan

If the fan runs unevenly or produces grinding noises, it should be cleaned.

Should the problems persist after cleaning, contact Trotec or a specialist electrical company.

1. Open the upper cover of the housing by loosening the attachment screws.
2. Clean the inside of the housing and the fan blades carefully with a slightly damp cloth.
3. Allow the fan to dry.
4. Reattach the upper cover to the housing. Make sure that the cover is positioned correctly and that the seals fit exactly and are not damaged.
5. Screw the upper cover to the housing again.



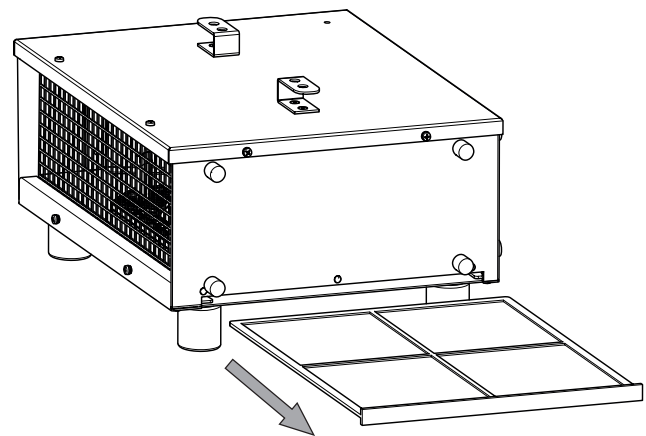
Cleaning the air filter

The air filter should be cleaned prior to every use.

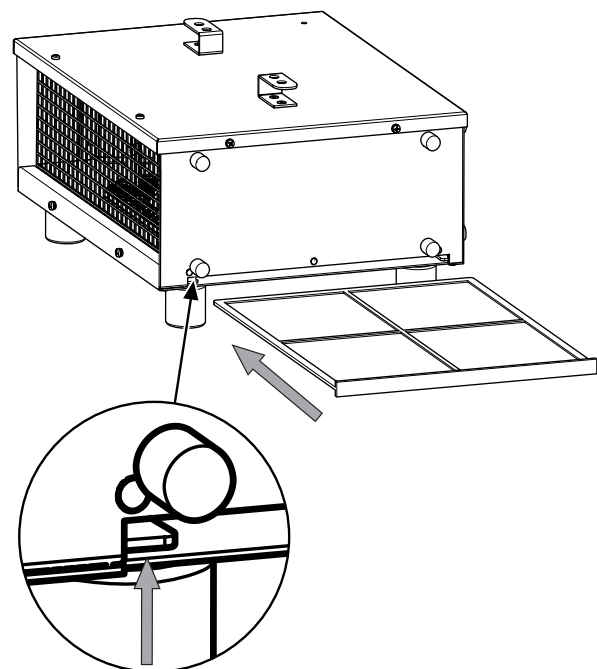
Note

Ensure that the air filter is not worn or damaged. The corners and edges of the air filter must not be deformed or rounded. Before reinserting the air filter, make sure that it is undamaged and dry!

1. Remove the air filter from the device.



2. Clean the filter using a slightly damp, soft, lint-free cloth. If the filter is heavily contaminated, clean it with warm water mixed with a neutral cleaning agent.
3. Allow the filter to dry completely. Do not insert a wet filter into the device!
4. Reinsert the air filter into the device. Make sure to slide the air filter into the lower guide rail.

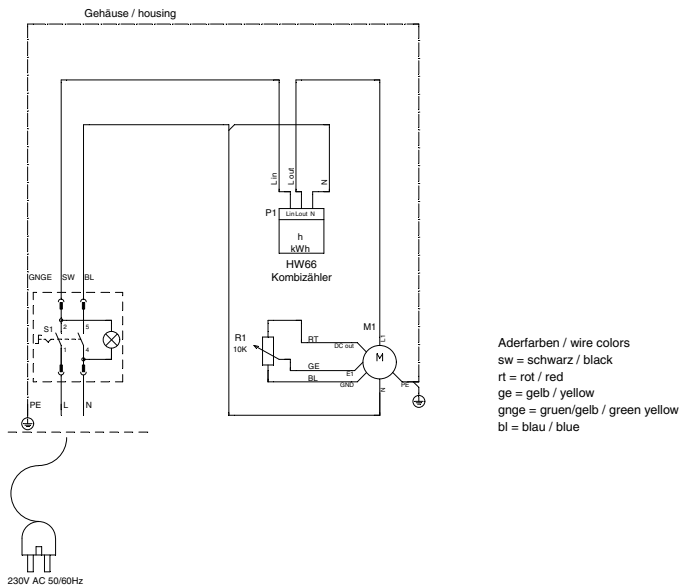


Technical annex

Technical data

| Parameter | Value |
|---|--------------------------|
| Model | TFV PRO 1 |
| Article number | 1.510.003.001 |
| Air volume (max. stage, freely blowing) | 1,250 m ³ /h |
| Air pressure (max. stage) | 1,050 Pa |
| Fan stages | Infinitely variable |
| Mains connection | 1/N/PE~ 230 V / 50 Hz |
| Power input | 170 W |
| Sound pressure level (distance 1.5 m) | 73 dB(A) |
| Weight | 6.0 kg |
| Dimensions (length x width x height) | 355 mm x 430 mm x 235 mm |

Wiring diagram



Disposal



In the European Union, electronic equipment must not be treated as domestic waste, but must be disposed of professionally in accordance with Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE). At the end of its life, please dispose of this device according to the valid legal requirements.

Declaration of conformity



EC Declaration of Conformity

(Translation of the original)

in accordance with EC Machinery Directive 2006/42/EC

Trotec GmbH & Co. KG

Grebbener Straße 7

D-52525 Heinsberg

herewith declares, that due to its design and construction, and in the version introduced by us, the following machinery conforms with the relevant fundamental requirements of the listed EC directives.

Important note:

In case of improper use, installation, maintenance etc. or unauthorized changes of the factory-supplied device version, this declaration loses its legal validity.

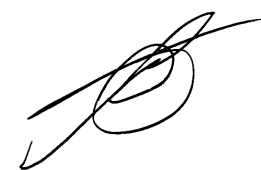
| | | |
|-------------------------|--|---|
| Device version: | Radial fan | |
| Series: | TFV PRO 1 | |
| Year of manufacture: | as of 06/2016 | |
| Applicable regulations: | 2006/95/EG 2014/35/EU 2014/30/EU | Machinery Directive Low Voltage Directive EMC Directive |

Applied harmonised standards:

Producer and authorised representative of the technical documentation:

| | | |
|----------------------|--------------------|-------------------|
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