

TAC 5000 / TAC 6500

EN

ORIGINAL INSTRUCTIONS
AIR CLEANER



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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

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:



TAC 5000



<https://hub.trotec.com/?id=42770>

TAC 6500



<https://hub.trotec.com/?id=42771>

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.
- 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. 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.
- 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.
- Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.
- Make sure that the suction side is kept free of dirt and loose objects.
- Dispose of replaced filters properly, especially after filtering substances hazardous to health (e.g. asbestos or spray paint mists)
- Never use the device as storage place or footstep.

Intended use

Only use the device to clean atmospheric air from non-conducting and non-combustible dusts, fogs or suspended matter whilst using the appropriate filter classes and adhering to the technical data.

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 the device outdoors.
- Do not use the device to siphon off vapours or fluids.
- 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, 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 electrically driven air cleaners.
- have read and understood the instructions, especially the Safety chapter.

Electrically skilled person

Electrically skilled personnel must be able to read and understand electric circuit diagrams, to put electrical systems into service and to maintain them, to wire control cabinets, to ensure the functionality of electrical components and to identify possible hazards from electrical and electronic systems.

Instructed person

Instructed persons have been informed of the tasks they were entrusted with as well as of potential hazards resulting from inappropriate behaviour. They are allowed to operate and transport the device and perform simple maintenance activities (cleaning the housing, cleaning the fan).

The device is to be maintained and looked after by instructed personnel.

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

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 from parts being whirled up!

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. 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.

Information about the device

Device description

Air cleaners are used to filter the room air. On building sites and renovation areas high concentrations of dust can arise, for instance when using angle grinders or during blasting, chiselling or demolition operations as well as when mixing dry mortar or tile cement.

Depending on the inserted filter, the air cleaners of the TAC series serve to eliminate various dusts, e.g. from asbestos, building rubble, quartz, flour, wood, etc., but also mould spores, paint particles and mineral fibres in the air, possibly arising during the above-mentioned operations.

This dust is to be vacuumed off as close as possible to the point of origin in order to reduce the pollution of the breathing air to a minimum. Depending on the used filter quality it is permissible to employ the device for the separation of quartziferous mineral dusts, wood dust, lead-containing dusts, artificial mineral fibres or high-temperature fibres.

The air cleaners TAC 5000 and TAC 6500 come equipped with a sensor-supported Flowmatic control for the automatic retention of the preselected air volume.

Application as vacuum generator for mould remediation and asbestos abatement is also a possibility. In case of other hazardous substances there are additional requirements; hence observe the corresponding Technical Rules for Hazardous Substances (TRGS) or the country-specific regulations.

The device is suited for:

- producing a vacuum in a room, e.g. in heavily contaminated spaces;
- air purification in workspaces via air circulation, e.g. indoor building sites, workshops etc.;
- producing overpressure in a room, e.g. cleanroom;
- supplying filtered fresh air.

The device is structured as follows:

- housing with stacking aid
- adjustable fan for air transport
- filter monitoring for air volume flow

The device may be equipped with various filters. It provides the user with the possibility of configuring both the filter quality and the filter chain arrangement for the respective field of application. The filters must be selected according to the area of application.

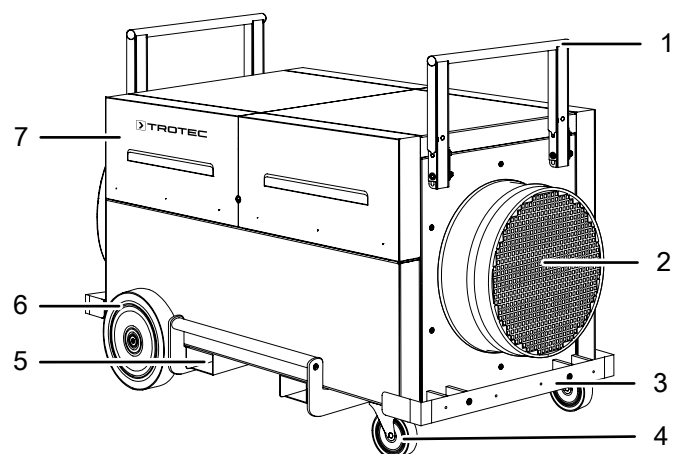
The device is approvable for asbestos abatement as per TRGS 519, dust class H.

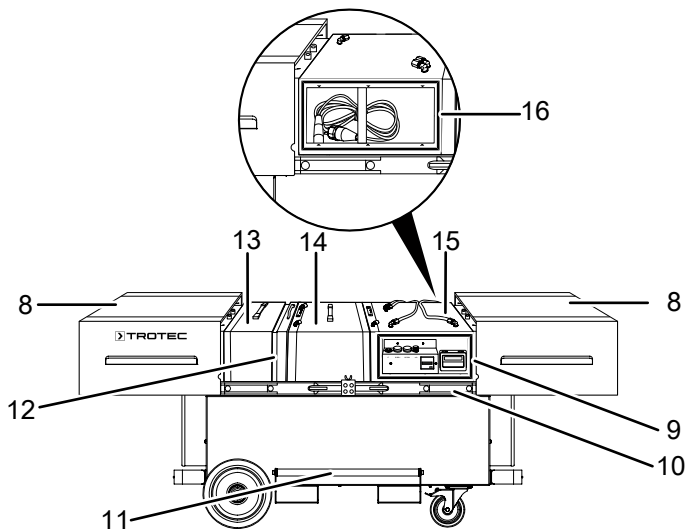


Info

The filters are not included in the scope of delivery! Choose the filters according to the area of application from our filter range. Insert the selected filters prior to initial start-up.

Device depiction





No.	Designation
1	stacking / push handle
2	air intake opening with hose / pipe connection
3	shock protection
4	swivel castor with brake (rubber, non-marking)
5	forklift pocket
6	wheel (rubber, non-marking)
7	hinged cover
8	sliding cover
9	control panel
10	telescopic slide
11	lifting handle
12	tensioning frame
13	pre-filter box
14	main filter box
15	fan box
16	cable storage compartment

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

After transporting the device, observe the following:

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

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

Assembly and start-up

Scope of delivery

- 1 x Device
- 1 x Manual

Unpacking the device

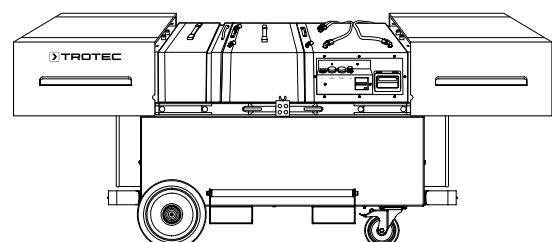
1. Open the cardboard box and take the device out.
2. Completely remove the packaging.
3. Fully unwind the power cable. Make sure that the power cable is not damaged and that you do not damage it during unwinding.

Assembly

Sliding covers

Please proceed as follows to open the sliding covers (8):

1. Pull the stacking handles (1) up and fold them down.
2. Pull the sliding covers (8) outwards with a jerk and shove it apart all the way to the stop.



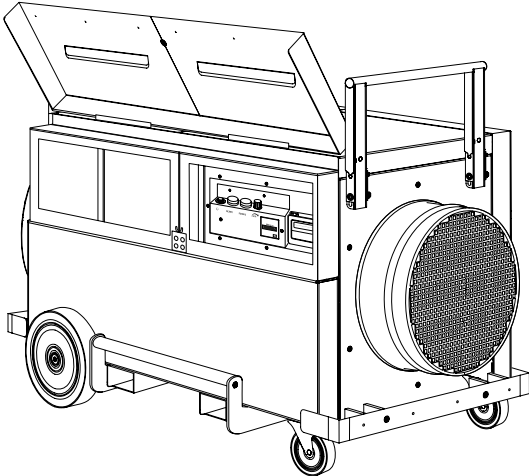
Please proceed as follows to close the sliding covers (8):

1. Push the sliding covers (8) together until they lock in place.
2. Tilt the stacking handles (1) up and lock them in place.

Hinged covers

In order to open the hinged covers (7), swing them up until they are held in place by the magnets.

Proceed in reverse order to close the hinged covers.



Inserting the filters



Info

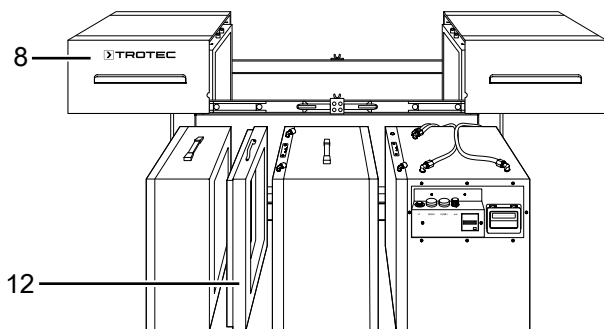
The filters are not included in the scope of delivery! Choose the filters according to the area of application from our filter range. Insert the selected filters prior to initial start-up.

Prior to start-up the filter chain of the device must be configured according to the desired field of application. For this, two filter boxes are available.

1. Open the sliding cover (8).
2. Pull out the tensioning frame (12) towards the top.
3. Remove further boxes from the device as required.

Note

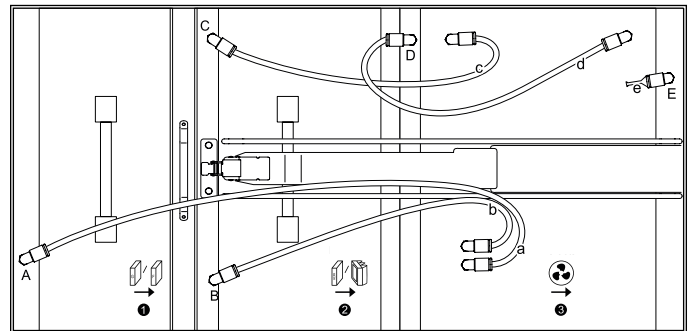
For all filter installations always observe the correct flow direction according to the direction of the air current (air flow direction: from back to front)!



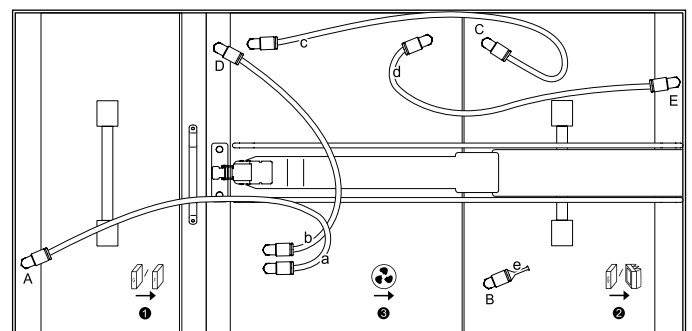
Configuration

The TAC series is equipped with Vario-shift function. This means that the filter elements can be variably arranged for all application scenarios and in line with the regulations.

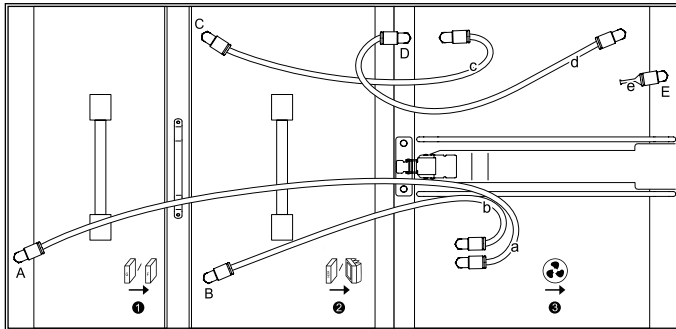
- The **building site configuration** for the separation of suspended matter as per DIN EN 60335-2-69 to dust class H; main priority with these applications has the filtering of dust particles dangerous to health, to some extent even carcinogenic. The entire filter ladder has to be operated at underpressure to prevent unfiltered air from escaping even in case of leakages when sucking off these dusts. Which means that the **fan is to be positioned downstream of the main filter!** Both are to be braced using tensioning elements on the unit side so that the high-efficiency particulate air filter does not come into contact with polluted air at the outlet during the entire operating time and the risk of leaks is minimized!



- The **cleanroom configuration** for the separation of suspended matter as per DIN EN 1822-1:1998 to filter class H14 (in case of a substantially reduced air volume filters with higher filtration efficiencies are also an option); as a rule, air from a polluted area is fed to a cleanroom, e.g. as fresh air supply. The applicable regulations usually demand that the filtered air may only come into contact with a clean air pipe/duct operated at overpressure. Therefore, the **fan is to be positioned upstream of the main filter!** Here, too, the elements are to be braced as stated for the building site configuration!



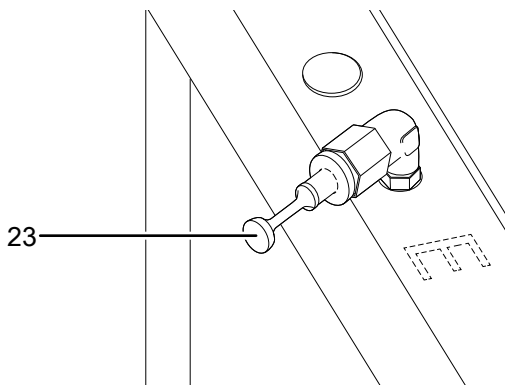
- **Generic configuration** for air purification applications filtering coarse dust or fine particulates as per DIN EN 779 to filter class F9; these applications do not require any particular fan position. For reasons of simplified filter change management it is recommended for the fan to be the **last element** to be incorporated and braced.



Note

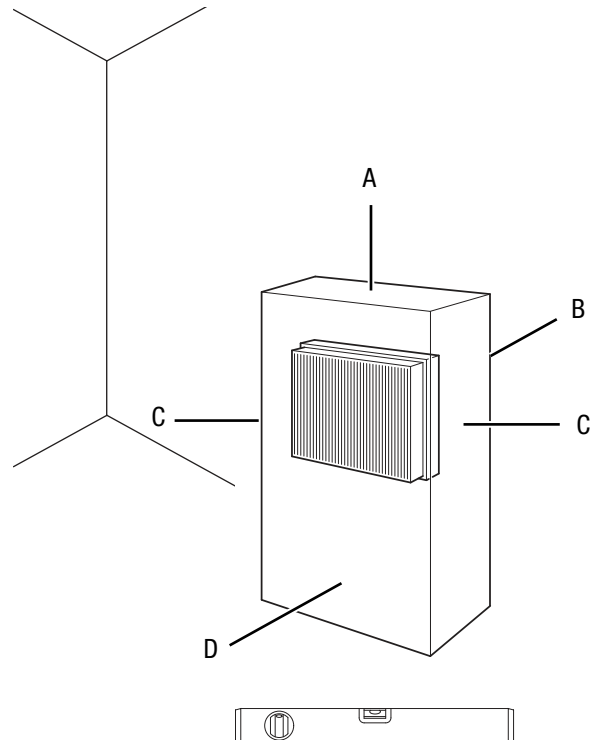
For the individual configurations it is important to make sure that the air hoses (marked a, b, c, d) and the dummy plug (23) are connected to the measuring points (marked A, B, C, D, E) according to the box arrangement (pre-filter = 1 + main filter = 2 + fan = 3). Otherwise the filter monitoring will not be working!

Example:



Start-up

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

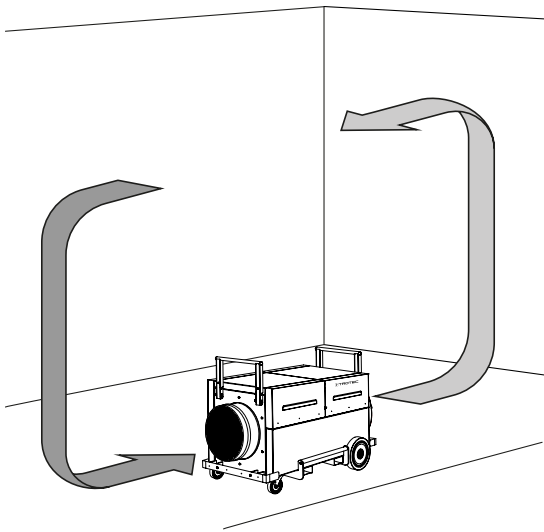


- Before restarting the device, check the condition of the power cable. If there are doubts as to the sound condition, contact the customer service.
- Set the device up in an upright and stable position.
- Do not create tripping hazards when laying the power cable or other electric cables, especially when positioning the device in the middle of the room. Use cable bridges.
- Make sure that extension cables are completely unrolled.
- Position the device near the source of air contamination.
- When positioning the device, keep a sufficient distance to heat sources.
- Make sure that no curtains or other objects interfere with the air flow.
- Make sure that the air inlet and outlet are not obstructed.

Installation of the device in the room, the air of which is to be purified

- When positioning the device, make sure it is located in the centre of the room the air of which is to be cleaned. Alternatively, you can also position the device near the source of air contamination.
- Prior to operation you have to ensure that the filters have been installed in the device as desired.
- The device works in recirculation mode, this means that the contaminated air enters the air cleaner via the air inlet opening and is blown out through the air outlet opening in purified state.

Air purification in sealed off area via air circulation:

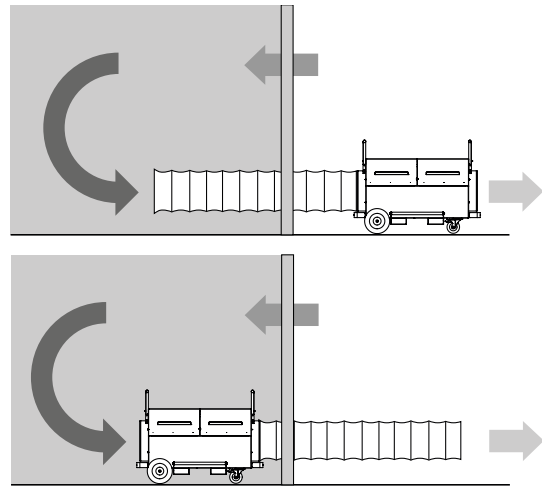


Installation of the device outside the room, the air of which is to be purified

The device can be connected in either recirculation or ventilation mode.

- In recirculation mode, the air to be cleaned is led via a hose from the room into the air inlet opening of the device. The purified air is fed through another hose from the air outlet opening and back into the room.
- In ventilation mode, the air to be cleaned is led via a hose from the room into the air inlet opening of the device. This creates a slight negative pressure in the room. Clean, fresh air flows in from outside.

Installation variants for maintaining the pressure:



When connecting hoses, the following must be observed:

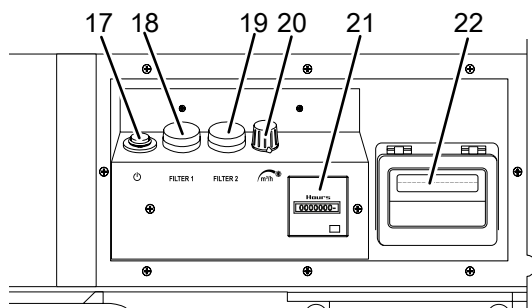
- The used pipes and hoses must be designed for the available static compression of the fans. They should preferably be laid in a straight line and at full length. 7.6 m of air hose each can be connected to the air inlet and air outlet openings of the device.
- There ought to be a minimum distance of 1 m between air inlet and air outlet opening.

Connecting the power cable

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

Operation

Operating elements



No.	Designation	Meaning
17	<i>power</i> button	For switching the device on or off
18	<i>filter 1</i> warning light	Indication of required coarse or fine filter change
19	<i>filter 2</i> warning light	Indication of required HEPA or bag filter change
20	<i>air volume</i> control dial	For setting the desired air volume
21	operating hours counter	Indication of operating hours
22	Flowmatic with display	Indication of the air volume (volumetric flow)

Switching the device on

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

1. Make sure that neither the air inlet nor the air outlet opening is covered.
2. Turn the *air volume* control dial (20) counter-clockwise to the lowest level.
3. Press the *power* button (17).
⇒ The *power* button (17) lights up.

Adjusting the air volume

By use of the stepless *air volume* control dial (20) you can adjust the fan speed and thus regulate the air volume conveyed by the device.

Shutdown



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.
- Clean the device according to the Maintenance chapter.
- 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 TAC 5000	Article number TAC 6500
G4 Z-line filter	7.160.000.448	7.160.000.454
F7 pleated filter cartridge	7.160.000.449	7.160.000.476
F7 bag filter	7.160.000.450	7.160.000.477
H13 HEPA filter approved for dust class H	7.160.000.451	7.160.000.478
Spray paint filter	7.160.000.452	7.160.000.479
Air transport hose Tronect SP-T, length 7.6 m	6.100.001.212	6.100.001.214

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.
- 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 loud or vibrates:

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

The device gets very warm, is loud or loses power:

- Check the air inlets and air filters for dirt. Remove external dirt.

The device gives off an unpleasant odour:

- Smoke, e.g. dense tobacco smoke, may produce odours and contaminations in the air. Ventilate the room.

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.



Warning of electrical voltage

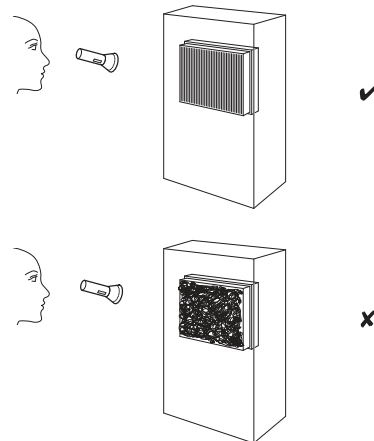
Tasks which require the housing to be opened must only be carried out by authorised specialist companies or by Trotec.

Cleaning the housing

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.

Visual inspection of the inside of the device for dirt

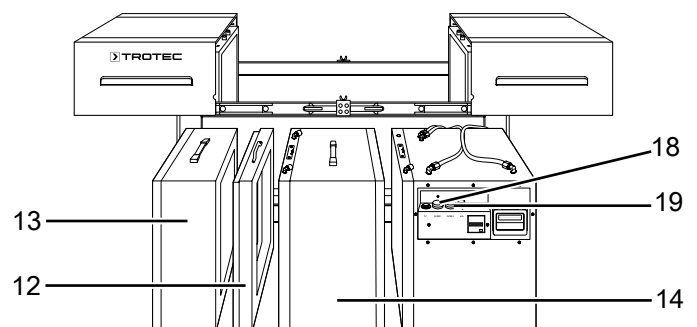
1. Remove the air filters.
2. Use a torch to illuminate the openings of the device.
3. Check the inside of the device for dirt.
4. If you see a thick layer of dust, clean the inside of the device with a vacuum cleaner.
5. Reinsert the air filters.



Filter change

The filters must be replaced when the filter change warning light for filter 1 (18) or filter 2 (19) lights up during operation and an acoustic signal is emitted.

1. Detach air hose A from the measuring point.
2. Pull out the tensioning frame (12) towards the top.
3. Pull the pre-filter box (13) out of the device in an upward motion and remove the filters from the box.
4. If required, also loosen the clasp and the locking lever on the filter boxes.
5. Disconnect the air hoses B and C from the measuring points.
6. Move the main filter box (14) a little sideways.
7. Pull the main filter box (14) out of the device in an upward motion and remove the filters from the box.
8. For assembling the filter boxes please proceed in reverse order.



Lubricating the telescopic slides

The covers' telescopic slides (10) are to be lubricated after cleaning or as needed.

Technical annex

Technical data

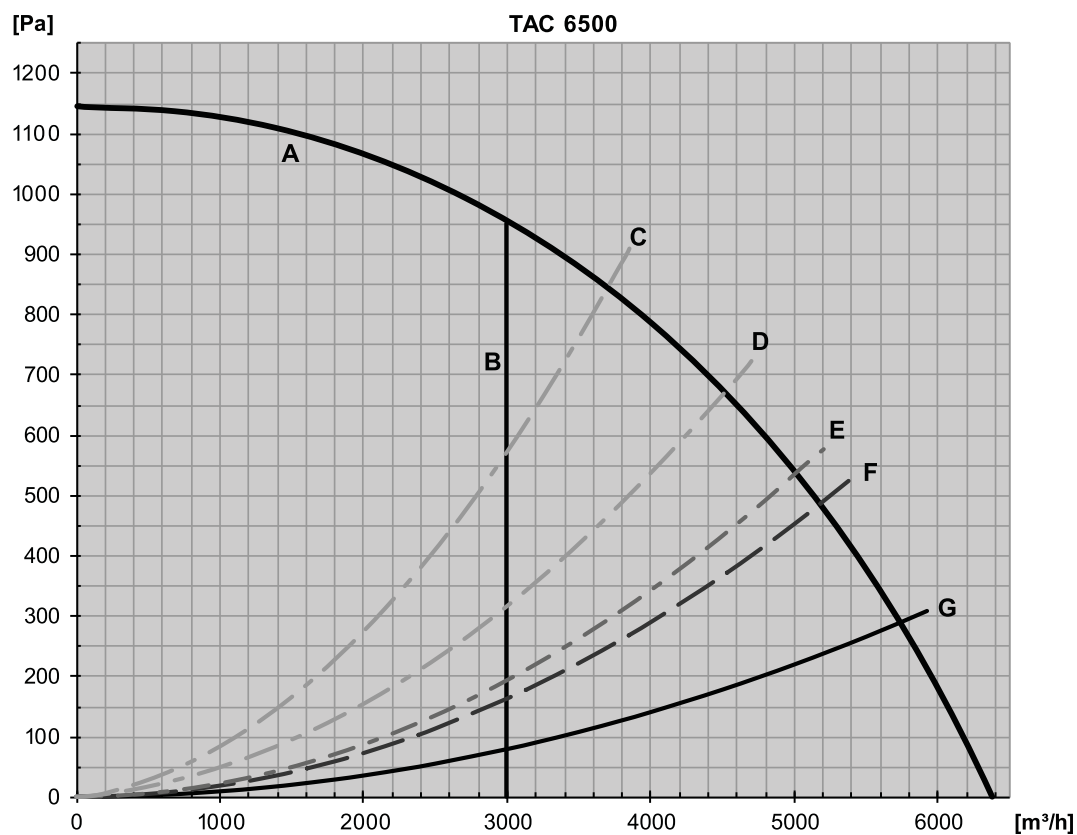
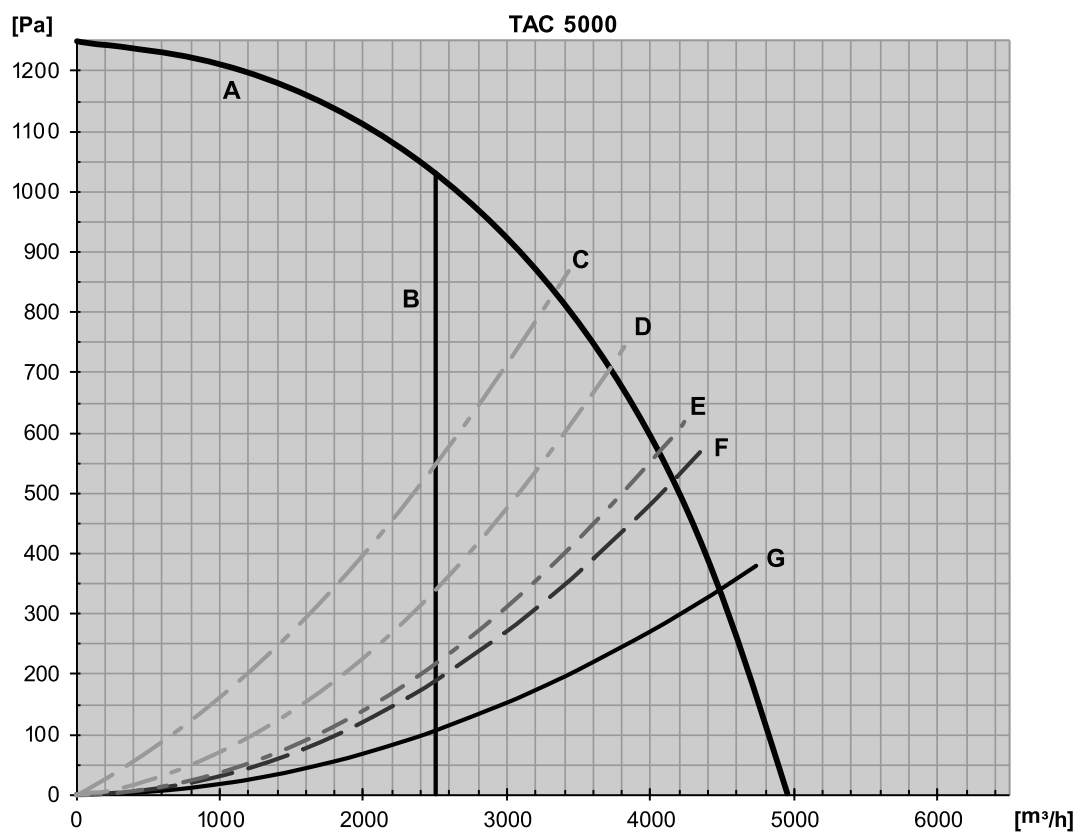
Parameter	Value	
Model	TAC 5000	TAC 6500
Article number	1.580.000.125	1.580.000.135
Max. air volume	4500 m ³ /h	5700 m ³ /h
Recommended amount of air for dust class H	2500 m ³ /h	3000 m ³ /h
Room size with filter surface H13	170 m ³ 18 m ²	200 m ³ 26 m ²
Dust class (as per DIN 60335-2-69)	dust class H (transmittance $\leq 0.005\%$) for substances with a max. allowable concentration of $\leq 0.1 \text{ mg/m}^3$, carcinogenic hazardous substances as per GefStoffV § 11 (Ordinance on Hazardous Substances), TRGS 905 or 906 (Technical Rules for Hazardous Substances), approvable for asbestos abatement as per TRGS 519	
Motor power	1270 W	1400 W
Mains connection	1/N/PE ~ 230 V / 50-60 Hz	1/N/PE ~ 230 V / 50-60 Hz
Nominal current	5.6 A	6.0 A
Connection cable	CEE 7/7, cable length 2.5 m rubber conduit (H05RR-F) length = 2.5 m	
Air transport hose connector inlet/outlet side	400 mm	450 mm
Sound level (at a distance of 1 m)	68 dB(A)	68 dB(A)
Dimensions (length x width x height)	1252 x 690 x 926 mm	1252 x 790 x 1026 mm
Weight	125 kg	136 kg

Recommendation for filter combinations specific to the application and corresponding room size suitability		TAC 5000		TAC 6500	
		suitable for rooms sized up to ¹⁾			
Fields of application	Filter combination	m ³	m ²	m ³	m ²
Coarse dust ²⁾ (≤ 3 ACH ⁶⁾)	G4	1200	480	1400	560
Fine particulates ³⁾ (≤ 3 ACH ⁶⁾)	G4 + F7 to F9	600	240	750	300
Suspended matter ⁴⁾ (≤ 3 ACH ⁶⁾)	G4 + H13	150	60	200	80
Hygienic areas ⁵⁾ (≤ 3 ACH ⁶⁾)	G4 + H13	110	44	135	54

¹⁾ With an assumed room height of 3 m; ²⁾ Typical coarse dust tasks: sawing, filing; ³⁾ Typical fine dust tasks: restoration works with materials containing minerals or glass wool; ⁴⁾ Typical suspended matter tasks: grinding, asbestos abatement or mould remediation, mineral dusts etc.; ⁵⁾ H13 downstream; ⁶⁾ Air exchange per hour

Optional equipment	TAC 5000	TAC 6500
Guiding wheels with pneumatic tyres, traceless	on request	on request
Trestle rollers (instead of guiding wheels)	on request	on request
Fork pockets for fork lifts	on request	on request

Performance charts



A	Fan
B	Recommended amount of air for dust class H
C	With G4+H13 filter combination (approval for dust class H) and air transport hose*
D	With G4+F7 filter combination and air transport hose*
E	With G4 filter and air transport hose*
	With spray paint filter and air transport hose*
F	Without filter, with air transport hose*
* Connected to the pressure side, standard length 7.6 m, laid with one 90° arc. When the air hose is laid stretched and arc-free, an increase of air volume by up to 25 % is possible!	

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.

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=42770>.

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: TAC 5000
TAC 6500

Product type: air cleaner

Year of manufacture as of: 2019

Relevant EU directives:

Applied harmonised standards:

- EN ISO 12100:2010
- EN ISO 13849-1:2015
- EN ISO 13857:2008
- EN 55011:2009
- EN 60204-1:2006
- EN 60335-1:2012/AC:2014
- EN 60335-2-65:2003/A11:2012
- EN 61000-6-1:2007
- EN 61000-6-3:2007+A11:2011+AC:2012

Applied national standards and technical specifications:

- EN ISO 14118:2018
- EN 60335-2-65:2003/A1:2008

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

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