External condensate pump DS/DH Series

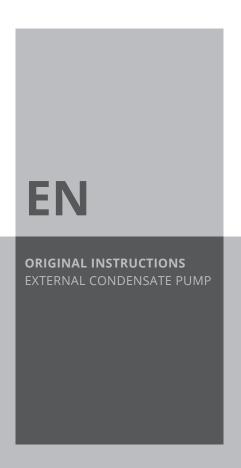








Table of contents

Notes regarding the instructions	. 2
Safety	. 2
nformation about the device	. 3
Fransport and storage	. 4
Assembly and installation	. 5
Errors and faults	. 7
Maintenance	. 8
Technical annex	. 9
Disposal	11

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 via the following link:



EKP DS/DH



https://hub.trotec.com/?id=42513

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.

- 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.
- Do not cover the device during operation.
- Do not sit on the device.
- This device 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 mains connection must correspond to the specifications in the Technical annex.
- Insert the mains plug into a properly fused 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.
- Disconnect the power cable from the mains socket when the device is not in use.
- 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.
- Never insert any objects or limbs into the device.
- Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.
- Discharge the collected condensate before transport and storage. Do not drink it. Health hazard!
- Only use original spare parts, for otherwise safe and functional operation cannot be ensured.

Intended use

Only use the device as a condensate pump in combination with dehumidifiers. The device was designed for continuous operation and is suited for the following pumping media:

- clear water
- slightly chlorinated or salted water

Improper use

- Do not place the device on wet or flooded ground.
- The device is not suitable for pumping potable water.
- The device is not suitable for increasing the pressure of existing water supply networks.
- The device must not be used for aggressive, abrasive, caustic, combustible or explosive pumping media.
- Any unauthorised modifications, alterations or structural changes to the device are forbidden.
- Any use other than the intended use is regarded as a reasonably foreseeable misuse.

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.

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.

Behaviour in the event of an emergency

- 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.
- 2. Do not reconnect a defective device to the mains.

Information about the device

Device description

When combined with a dehumidifier, the external condensate pump can be used for failure-free continuous operation. With its robust and corrosion-resistant housing it is particularly suited for combination with the pool dehumidifiers of Trotec's DS and DH series, but can also be used with other dehumidifiers without a hitch.

The fully automatic condensate pump can be installed quickly and without difficulty and is specifically designed for pumping off condensation water. It is particularly suited for applications with long water discharge distances or for a longer permanent drying of unattended rooms.

The power for the dehumidifier should be supplied via the condensate pump. To do so, either use the socket of the condensate pump (6), or directly wire the dehumidifier to the pump via the connector for direct supply (5). For direct supply, the internal plug connections and a female connector are ready to install.

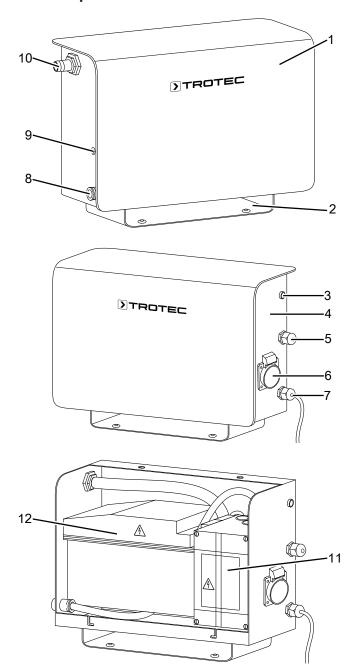
If the condensate cannot be discharged from the dehumidifier (e.g. due to a clogged line), the condensate pump will switch off the connected dehumidifier automatically. Once the fault has been cleared, the dehumidifier will be switched back on (see also Errors and faults).

The pump is suitable for a pump height of up to 4.3 metres.

The device can be mounted to the wall or positioned on the floor for operation.



Device depiction



No.	Designation	
1	Housing cover	
2	Foot	
3	Operating control lamp	
4	Housing	
5	Connector for direct supply	
6	Socket	
7	Power cable	
8	Discharge hose connection	
9	Housing cover fastening screw	
10	Feed hose connection	
11	Electrical box	
12	Pump	

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:

- 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.

Before transporting the device, proceed as follows:

- Hold onto the mains plug while pulling the power cable out of the mains socket.
- Drain the remaining condensate from the device and the condensation drain hose (see chapter Maintenance).

After transporting the device, proceed as follows:

Set up the device in an upright position after transport.

Storage

Before storing the device, proceed as follows:

- Drain the remaining condensate from the device and the condensation drain hose (see chapter Maintenance).
- Hold onto the mains plug while pulling the power cable out of the mains socket.

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 device 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.



Assembly and installation

Scope of delivery

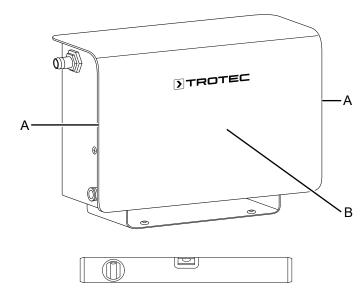
- 1 x device
- 2 x Hose
- 2 x Hose clamp
- 1 x Adapter sleeve, 9 to 20 mm diameter
- 1 x manual

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

Positioning

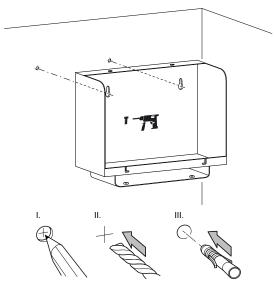


- Before restarting the device, check the condition of the power cable. If there are doubts as to the sound condition, contact the customer service.
- Only put up the device in an upright, stable position on firm ground.
- Do not create tripping hazards when laying the power cable or other electric cables, especially when positioning the device in the middle of the room. Use cable bridges.
- Make sure that extension cables are completely unrolled.
- When positioning the device, keep a sufficient distance to heat sources.

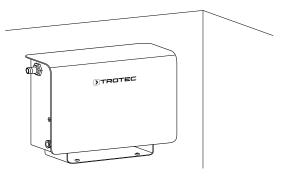
Wall mounting (optional)

Assemble the device as follows:

- 1. Mark the positions for the bore holes on the wall.
- 2. Drill the holes into the wall at the marked positions.
- Insert appropriate wall plugs into the bore holes depending on the type of wall. In doing so, please make sure that the screws protrude approx. 1 cm from the wall plugs so that the device can be attached properly.



- 4. Hook the device into the screws on the wall.
- 5. Slightly shift the device downwards.
- 6. Make sure that the device is attached securely.





Mains supply of the dehumidifier



Warning of electrical voltage

Work on the electrical components must only be carried out by an authorised specialist company!



Warning of electrical voltage

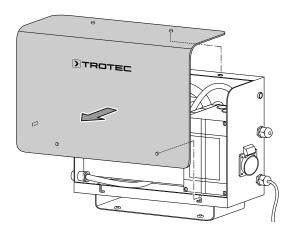
Before any work on the device, remove the mains plug from the mains socket!

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.

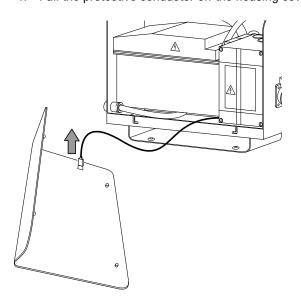
You can insert the plug of the dehumidifier into the socket (6) on the pump. In the event of a failure, the pump switches the dehumidifier off.

However, the mains cable of the dehumidifier can also be directly wired to the electrical system of the pump. To do so, please proceed as follows:

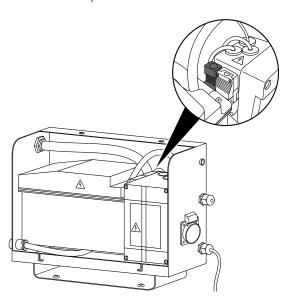
- 1. Loosen and remove the screw (9) from the device.
- 2. Slightly push the housing cover (1) to the right to release it from the suspension of the housing (4).
- 3. Carefully remove the housing cover (1). Please note that there is a protective conductor connected.



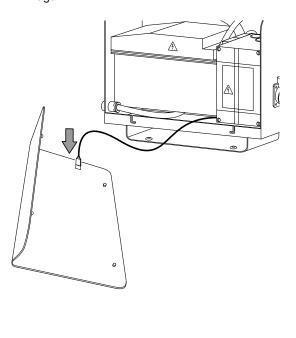
4. Pull the protective conductor off the housing cover (1).



- 5. Observe the dehumidifier's technical data and use the suitable connection plug.
 - ⇒ white connection plug for 230 V.
 - ⇒ black connection plug for >230 V (potential-free contact).

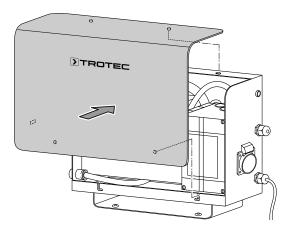


- 6. Guide the mains cable of the dehumidifier through the connector for direct supply (5).
- 7. Connect the mains cable of the dehumidifier properly. Pay attention to the wiring diagram in the Technical annex.
- 8. Tighten the cable gland at the connector for direct supply (5).
- 9. Connect the protective conductor to the housing cover (1) again.



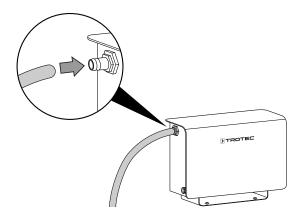


10. Then fit the housing cover (1) and secure it with the screw (9).

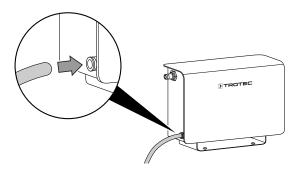


Hose connections

 Connect the condensation drain hose of the dehumidifier to the feed hose connection (10). If required, use the supplied adapter sleeve and hose clamps.



2. Firmly insert the supplied hose (12 mm diameter) into the quick coupling at the discharge hose connection (8).



3. Completely unwind the hose and guide the other end to a water drain.

Note

Avoid kinking or pinching the hose. The hose end must not lay in the water.

Connecting the power cable

 Insert the mains plug into a properly secured mains socket

During operation, the pump runs fully automatically and the operating control lamp (3) is illuminated.

Shutdown



Warning of electrical voltage

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

Note

When switching the dehumidifier off, wait for approx. 30 minutes. During this time, the residual water flows of out of dehumidifier's evaporator and to the pump. After this waiting period, you can shut down the pump.

- Hold onto the mains plug while pulling the power cable out of the mains socket.
- If necessary, remove the condensation drain hose and any residual fluid from it.
- Clean the device according to the Maintenance chapter.
- Store the device according to the Transport and storage chapter.

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 operating light of the pump is not illuminated:

- Check the power connection.
- If the device is not starting, have the electrics checked by a specialist company or by Trotec.

The pump does not operate:

Check whether the dehumidifier produces condensate.

The condensate is not discharged correctly (leak):

- Check all connections and hoses for damages and correct installation.
- Check the hoses and connections for dirt and kinks. The hoses must be clean and without kinks (see chapter Maintenance).

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.

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

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 inside of the device

The air sucked in by the dehumidifier may contain dust and other contaminants. This dust and dirt may collect at the water outlet of the condensate collection tray or in the container of the pump and clog it. To guarantee failure-free operation, the pump and the dehumidifier should be cleaned at regular intervals to remove any deposits.

Normal cleaning

Perform this activity at least every three months.

For normal cleaning it is sufficient to rinse the pump with clean water, e.g. after dehumidification in a clean room, or by having the pump (12) pump clean water as follows:

- ✓ The connected dehumidifier is switched off.
- 1. Provide a container with clean water.
- 2. Remove the condensation drain hose from the dehumidifier and pour clean water into the hose end.
- 3. Switch on the condensate pump and operate it until only clean water is pumped by the pump (12).

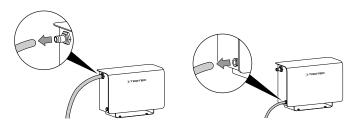
Note

Clean the pump thoroughly while it is not pumping any water.

Thorough cleaning

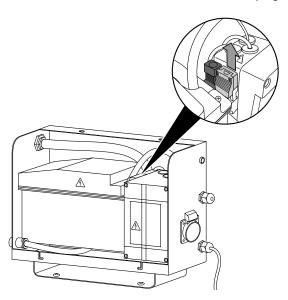
Perform this activity at least once a year.

1. Remove the hose lines at the discharge hose (8) and feed hose (10) connections.

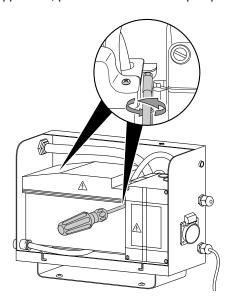


2. Clean the hose lines and connections at the pump and remove any dirt.

- 3. Remove the housing cover (1), see chapter Assembly and installation.
- 4. Remove the white and black connection plug.

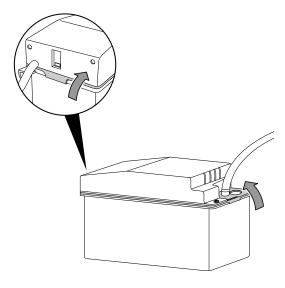


5. Loosen the two nuts holding the pump on the housing wall. If applicable, pull the hose out of the pump's container.





6. Open the hooks on the right- and left-hand side that connect the lower container and the upper part of the pump.



- 7. Clean the container with a cloth.
- 8. Close the container and check all hose connections.
- Finally check the pump: Connect the device to the mains.
 Let some fresh water flow into the container. The pump should now pump off the water. Make sure that there is no leak in the hose connections.
- 10. Attach the housing cover (1), see chapter Assembly and installation.

Technical annex

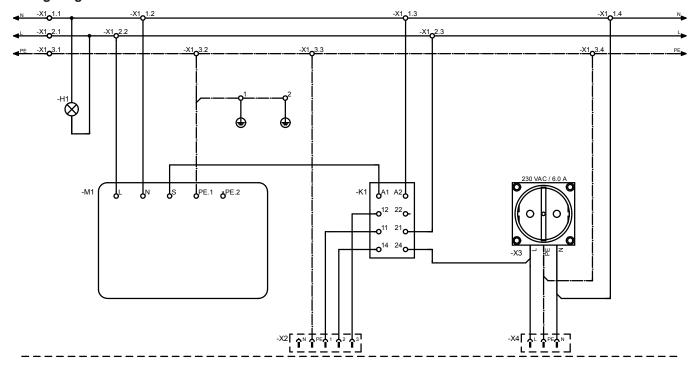
Technical data

Parameter	Value
Model	External condensate pump DS/DH series
Article number	6.100.000.019
Feed hose connection	Ø 1/2 inch*
Discharge hose connection	Ø 12 mm
Tank volume	0.8 l
Feed rate	160 l/h
Pump height	4.3 m
Max. temperature of medium	50 °C
Operating range (temperature)	1.5 °C to 50 °C
Input voltage	230 V / 50 Hz
Power input	140 W
Nominal current consumption	0.6 A
Max. current consumption	0.75 A
Protection type	IP44
Cable length	3.5 m
Dimensions (length x width x height)	152 x 421 x 292 mm
Minimum distance to walls and other objects:	
sides (A): front (B):	
Weight	8.45 kg
*aan ba adii.atad far (i bahir	and 00 mans by magains of the

*can be adjusted for \emptyset between 9 and 20 mm by means of the supplied adapter sleeve



Wiring diagram





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 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. 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.

Trotec GmbH

Grebbener Str. 7
D-52525 Heinsberg
1+49 2452 962-400
4+49 2452 962-200

info@trotec.com www.trotec.com