

# EN

ORIGINAL INSTRUCTIONS  
SOCKET HYGROSTAT



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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 operating manual must be observed.

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



BH30



<https://hub.trotec.com/?id=40268>

## 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.**

- The device is supplied with a warning sign. Prior to initial start-up, make sure to paste the corresponding warning sign in your local language over the one present at the rear of the device as described in chapter Operation.

**Do not plug in line!  
For use in dry rooms only!  
Voltage-free only with plug disconnected!  
Do not cover during operation!**

EN

- 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.
- Do not use the device with wet or damp hands.
- This appliance is not a toy. Keep away from children and animals.
- Protect the device from permanent direct sunlight.
- Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.
- Do not open the device.
- Never charge batteries that cannot be recharged.
- Different types of batteries and new and used batteries must not be used together.
- Insert the batteries into the battery compartment according to the correct polarity.
- Remove discharged batteries from the device. Batteries contain materials hazardous to the environment. Dispose of the batteries according to the national regulations.
- Remove the batteries from the device if you will not be using the device for a longer period of time.
- Never short-circuit the supply terminal in the battery compartment!
- Do not swallow batteries! If a battery is swallowed, it can cause severe internal burns within 2 hours! These burns can lead to death!
- If you think batteries might have been swallowed or otherwise entered the body, seek medical attention immediately!

- Keep new and used batteries and an open battery compartment away from children.
- Do not connect several devices by plugging one into another.
- Only operate the device in dry surroundings.
- Please note that the device is only de-energized when the plug has been disconnected from the mains.
- Observe the storage and operating conditions (see Technical data).
- Check accessories and connection parts for possible damage prior to every use of the device. Do not use any defective devices or device parts.
- In order to avoid overheating, the device must not be covered during operation!

### Intended use

Only use the device as humidity-controlled plug adapter between mains connection and terminal device whilst adhering to the technical data.

Only use the device in interior spaces.

To use the device for its intended use, only use accessories and spare parts which have been approved by Trotec.

### Foreseeable misuse

The device is not suitable for use with any type of extension cables. The device must not be used in potentially explosive areas, when wet or very humid.

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

### Personnel qualifications

People who use this device must:

- have read and understood the operating manual, especially the Safety chapter.

### Residual risks



#### Warning of electrical voltage

Electric shock due to insufficient insulation! Check the device for damages and proper functioning before each use.

If you detect damages, do not use the device any longer.

Do not use the device when either the device or your hands are damp or wet!

Do not use the device when the battery compartment or the housing is open.



#### Warning of electrical voltage

There is a risk of a short-circuit due to liquids penetrating the housing!

Do not immerse the device and the accessories in water. Make sure that no water or other liquids can enter the housing.



#### Warning of electrical voltage

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



#### Warning

Risk of suffocation!

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



#### Warning

The device is not a toy and does not belong in the hands of children.



#### Warning

Dangers can occur at the device when it is used by untrained people in an unprofessional or improper way! Observe the personnel qualifications!



#### Caution

Keep a sufficient distance from heat sources.

#### Note

To prevent damages to the device, do not expose it to extreme temperatures, extreme humidity or moisture.

#### Note

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

Information about the device

Device description

The device BH30 permits the humidity regulation of dehumidifiers or humidifiers between 20 % RH and 90 % RH. For this purpose, install the device in-between consumer and socket and set the desired humidity level.

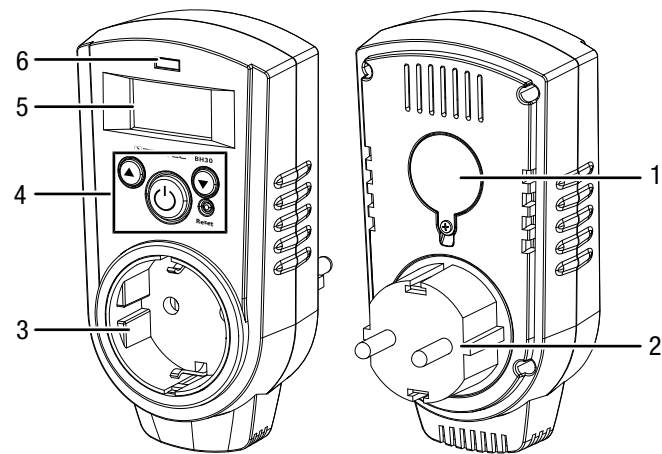
With its integrated sensors the device measures the actual relative humidity and regulates the connected terminal device according to the desired target value.

The device comes with two operating modes, one for dehumidification (activated when exceeding the target value) and one for humidification (activated when falling below the target value).

The currently achieved humidity level and the set operating mode can be gathered from the display.

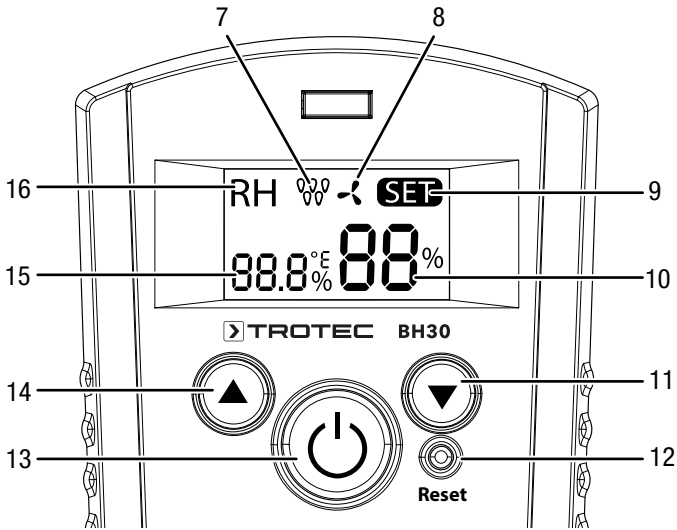
The device is equipped with an internal battery and a memory, that way the settings are retained.

Device depiction



| No. | Designation                                       |
|-----|---------------------------------------------------|
| 1   | Battery compartment                               |
| 2   | Mains plug                                        |
| 3   | Connection for the terminal device (plug adapter) |
| 4   | Operating elements                                |
| 5   | Display                                           |
| 6   | Operation indicator LED                           |

Display and operating elements



| No. | Designation                              |
|-----|------------------------------------------|
| 7   | Humidifier mode indication               |
| 8   | Dehumidifier mode indication             |
| 9   | SET indication                           |
| 10  | Indication of the target humidity value  |
| 11  | Arrow down button                        |
| 12  | Reset button                             |
| 13  | Power button                             |
| 14  | Arrow up button                          |
| 15  | Indication of the current humidity level |
| 16  | RH indication                            |

## Technical data

| Parameter            | Value                                                  |
|----------------------|--------------------------------------------------------|
| Model                | BH30                                                   |
| Article number       | 6.100.004.205                                          |
| Control range        | 20 % RH to 90 % RH                                     |
| Accuracy             | ± 5 % RH                                               |
| Measuring interval   | 10 s                                                   |
| Switching capacity   |                                                        |
| Resistive load       | 16 A / 3680 VA                                         |
| Inductive load       | 9 A / 2070 VA                                          |
| Socket               | CEE 7/3 (Schuko socket type F)                         |
| Mains connection     | 230 V / 50 Hz                                          |
| Connection plug      | CEE 7/7 (plug type F + E)                              |
| Protection class     | I                                                      |
| Protection type      | IP30                                                   |
| Battery              | 1 x 3 V CR2032 button cell                             |
| Operating conditions | 5 °C to 35 °C with max.<br>95 % RH (non-condensing)    |
| Storage conditions   | -10 °C to +50 °C with max.<br>80 % RH (non-condensing) |
| Weight               | 165 g                                                  |
| Dimensions           | 126 mm x 68 mm x 76 mm                                 |

## Scope of delivery

- 1 x Device BH30
- 1 x 3 V CR2032 button cell battery
- 1 x Quick Guide

## 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

For transporting the device, use the transport case included in the scope of delivery in order to protect the device from external influences.

### Storage

When the device is not being used, observe the following storage conditions:

- dry and protected from frost and heat
- protected from dust and direct sunlight
- For storing the device, use the transport case included in the scope of delivery in order to protect the device from external influences.
- the storage temperature complies with the values specified in the Technical data
- Remove the battery from the device.

## Operation

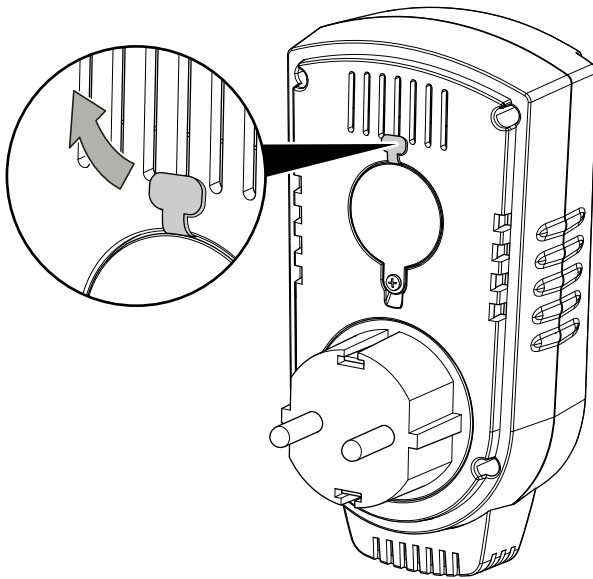
### Removing the battery insulation tab

#### Note

Make sure that the surface of the device is dry and the device is switched off.

The battery is already inserted. The battery tab must be removed before initial start-up to close the contact between battery and device. To do so, please proceed as follows:

1. Pull the plastic strip out of the battery compartment.

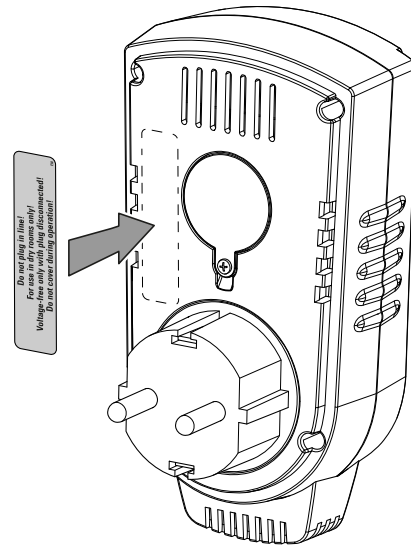


⇒ The device is ready for operation.

### Attaching the warning sign

Prior to initial start-up, check whether the warning sign at the rear of the device is in your local language, if not, paste the proper one over it. A warning sign in your native language is supplied along with the device. Please proceed as follows to attach the warning sign to the rear of the device:

1. Remove the label in your local language from the supplied film.
2. Affix the label in the intended position at the rear of the device.



### Switching the device on

1. Plug the device into a properly fused socket.
2. Plug the power cable of the terminal device (consumer) into the plug adapter.
3. Press the Power button (13).
  - ⇒ The operation indicator LED (6) is illuminated in red.
  - ⇒ The device is switched on.

## Setting the target humidity value

The target value defines at which humidity level the plug adapter switches on or off. The switch-on/-off depends on the selected mode. The operation indicator LED (6) indicates whether the plug adapter is switched on or off:

- LED illuminated in red: plug adapter inactive  
=> on-conducting.
- LED illuminated in green: plug adapter active  
=> conducting.



### Info

Please bear in mind that it may take a few minutes until the load circuit is fully enabled for the first time. There is no malfunction of the device. This is a delay due to technical reasons and depends, among other things, on the ambient conditions. The measured humidity level should be at least 5 % above or below the target value over a specific period of time before the plug adapter is switched on. This prevents excessive switching in highly fluctuating conditions or with a permanently but only slightly changing humidity level.

## Humidifier mode

Choose this mode if you want to connect e.g. a humidifier without hygrostat or an air cooler. The room's humidity level is lower than the set target value. The device switches off the plug adapter upon reaching the set target value.

Example:

- The target value is set to 65 % RH and the measured room humidity amounts to 40 % RH.
- The plug adapter remains active until the humidity level in the room reaches or exceeds 65 % RH.
- The plug adapter switches off as soon as the humidity value exceeds 65 % RH.
- The plug adapter will switch back on when falling below the value of 65 % RH for a while.

## Dehumidifier mode

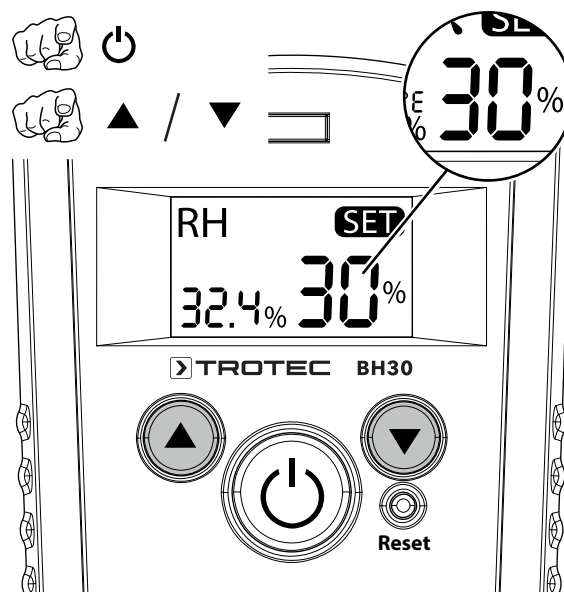
Choose this mode if you want to connect e.g. a dehumidifier without hygrostat or a fan. The room's humidity level is higher than the set target value. The device switches off the plug adapter upon reaching the set target value.

Example:

- The target value is set to 50 % RH and the measured room humidity amounts to 75 % RH.
- The plug adapter remains active until the humidity level in the room reaches or falls below 50 % RH.
- The plug adapter switches off as soon as the humidity value falls below 50 % RH.
- The plug adapter will switch back on when exceeding the value of 50 % RH for a while.

Please proceed as follows to set the target humidity value:

- ✓ The device is switched on.
  - ✓ The SET indication (9) appears on the display.
1. Press the buttons Arrow up (14) or Arrow down (11) to set the target humidity value.



⇒ The SET indication (9) flashes.

2. The target humidity value has been set if the SET indication (9) is again permanently displayed after approx. 5 s.



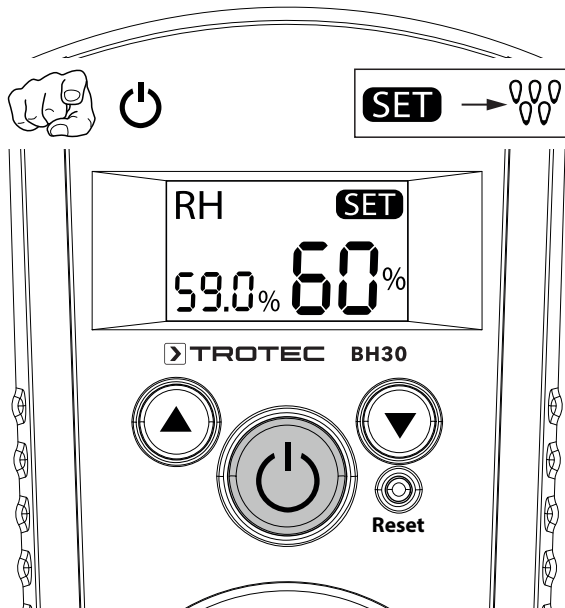
## Setting the mode



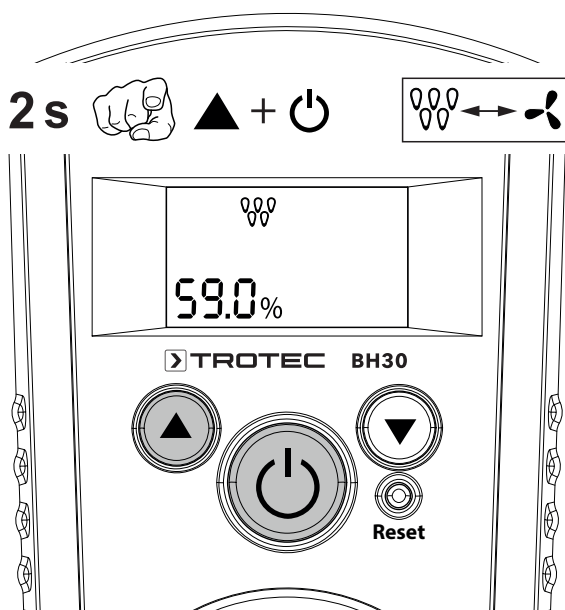
### Info

If the desired humidity value is lower than the humidity level of the room, please use **Dehumidifier** mode. If the desired humidity value is higher than the humidity level of the room, please use **Humidifier** mode.

- ✓ The device is switched on.
- ✓ The SET indication (9) appears on the display.



1. Press the Power button (13).
  - ⇒ The device now enters standby mode.
  - ⇒ The currently active mode is indicated at the top of the display.



2. Press and hold the Arrow up button (14).
3. Press and hold the Power button (13) for 2 s.
  - ⇒ The respectively other mode is set.

## Resetting the device to factory settings

You can reset the device to its factory settings. The saved target values for the Humidifier and Dehumidifier modes will be set back to 40 % RH.

1. Use a suitable tool (e. g. the end of a straightened paperclip or the tip of a pencil) to press the Reset button (12) for approx. 2 s.

## Switching the device off

1. Press the Power button (13).
  - ⇒ The operation indicator LED (6) goes out.
  - ⇒ The device is switched off.
2. Remove the mains plug of the terminal device from the plug adapter by holding the device with one hand and pulling the plug with the other.
3. Unplug the device from the mains socket.

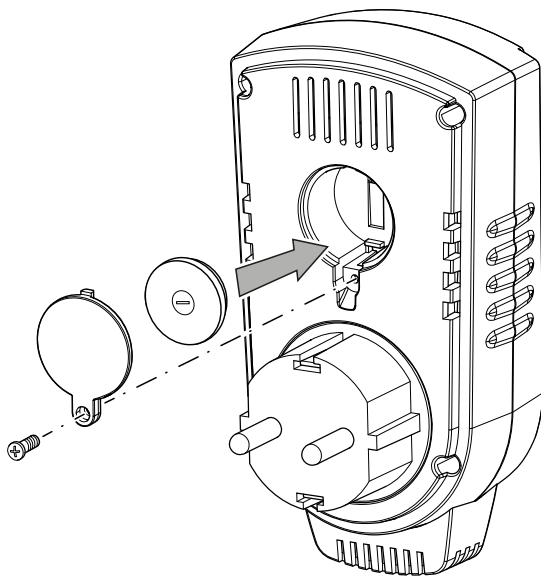


## Maintenance and repair

### Battery change

The battery is to be changed when the device can no longer be switched on or the target value indication (10) instead displays *Lo*.

1. Open the battery compartment at the rear of the device by loosening the screw at the battery compartment.



2. Remove the used battery and dispose of it according to the national regulations.
3. Insert the new battery in the compartment with correct polarity.
4. Reattach the cover of the battery compartment and tighten the screw.

### Cleaning

Clean the device with a soft, damp and lint-free cloth. Make sure that no moisture enters the housing. Do not use any sprays, solvents, alcohol-based cleaning agents or abrasive cleaners, but only clean water to moisten the cloth.

### Repair

Do not modify the device or install any spare parts. For repairs or device testing, contact the manufacturer.

## 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.



In the European Union, batteries and accumulators must not be treated as domestic waste, but must be disposed of professionally in accordance with Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators. Please dispose of batteries and accumulators according to the relevant legal requirements.

### Only for United Kingdom

According to Waste Electrical and Electronic Equipment Regulations 2013 (SI 2013/3113) (as amended) and the Waste Batteries and Accumulators Regulations 2009 (SI 2009/890) (as amended), devices that are no longer usable must be collected separately and disposed of in an environmentally friendly manner.

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