



**DTROTEC** 

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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.



#### Into

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:



BN30



https://hub.trotec.com/?id=39943

## 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, if available, over the one present at the rear of the device as described in chapter Operation. Otherwise, choose a label in a language you know.

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

- 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.
- 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.

#### Intended use

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

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

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### 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.

## **Personnel qualifications**

People who use this device must:

 have read and understood the instructions, 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

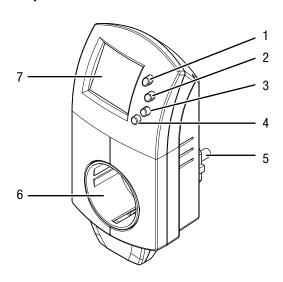
# **Device description**

The thermostat BN30 enables the temperature control of heating devices and air conditioners from 5 °C to 49 °C. To to so, plug the socket thermostat in between the heating device or air conditioner and a socket, and select the desired temperature. Via its integrated sensors, the device measures the current room temperature and regulates the heating device or air conditioner according to the desired target value.

The operation and programming of the device allow for a wide range of applications. The device is particularly suitable for mobile heating systems.

The current room temperature can be read from the display. The device is also power failure-proof thanks to an integrated EEPROM.

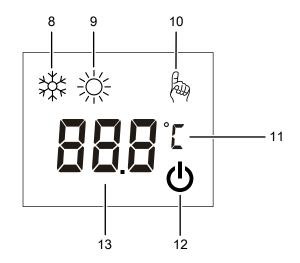
## **Device depiction**



No.	Designation	
1	SET button	
2	<i>Up</i> button	
3	<i>Down</i> button	
4	Power button	
5	Socket connection	
6	Connection for the terminal device (plug adapter)	
7	Display	



# **Display**



No.	Designation
8	Cooling mode indication
9	Heating mode indication
10	SET indication
11	°C/°F indication
12	OFF indication
13	Target value or current room temperature display

## **Technical data**

Parameter	Value
Model	BN30
Weight	220 g
Dimensions (height x width x depth)	140 x 60 x 75 mm
Temperature setting range	5 °C to 49 °C (41 °F bis 85 °F) in
	increments of 0.5
Operating conditions	-10 to 70 °C
Measuring interval	10 s
Power supply	230 V AC / 50 Hz
Load (max.)	16 A / 3680 VA - ohmic load 2 A / 460 VA - inductive load

## Scope of delivery

- 1 x Socket thermostat BN30
- 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 a suitable bag to protect it 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
- with a cover to protect it from invasive dust if necessary
- the storage temperature complies with the values specified in the Technical data



# **Operation**



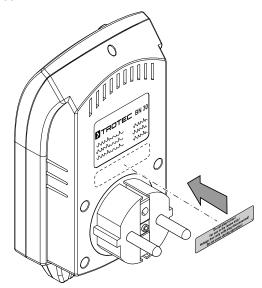
#### Info

Please note that moving from a cold area to a warm area can lead to condensation forming on the device's circuit board. This physical and unavoidable effect can falsify the measurement. In this case, the display shows either no measured values or they are incorrect. Wait a few minutes until the device has become adjusted to the changed conditions before carrying out a measurement.

The target temperature value is preset to 20 °C by default and the device starts in **heating** mode.

## Switching the device on

 Make sure to paste the corresponding warning sign in your local language over the one present at the rear of the device.



- 2. Plug the device into a properly fused socket.
- 3. Connect a terminal device to the connection for the terminal device (plug adapter) (6).
- 4. Press the on/off button (4).
  - ⇒ The device is switched on.
  - $\Rightarrow$  The *OFF* indication (12) is **not** shown on the display.

### Setting the mode

#### **Note**

If the desired temperature is lower than the room temperature, use the *cooling* mode. If the desired temperature is higher than the room temperature, use the *heating* mode.

- ✓ The device is switched off.
- 1. Press the *down* button (3) for approx. 5 s to switch between *heating* and *cooling* mode.

## Changing the temperature unit °C / °F

- ✓ The device is switched on.
- 1. Press the *SET* button (1) for approx. 5 s to change the temperature unit from degrees Celsius to degrees Fahrenheit or vice versa.

## Setting the target temperature value

### Cooling mode

In *cooling* mode the target temperature value should be at least 2 °C below the room temperature, otherwise the plug adapter will not be switched on by the device. If the room temperature is below the target value, the device switches the plug adapter off.

- ✓ The device is switched on.
- ✓ Cooling mode is switched on.
- 1. Press the *up* (2) or *down* (3) button to set a target temperature value.
  - $\Rightarrow$  The *SET* indication (10) flashes.
- 2. Wait until the SET indication (10) no longer flashes.
  - ⇒ The target value is saved.
  - ⇒ The *cooling* mode indication (8) flashes.
  - After approx. one minute the device switches on the plug adapter.

## Heating mode

In *heating* mode the target temperature value should be at least 1 °C above the room temperature, otherwise the plug adapter will not be switched on by the device. If the room temperature is above the target value, the device switches the plug adapter off.

- ✓ Heating mode is switched on.
- 1. Press the *up* (2) or *down* (3) button to set a target temperature value.
  - $\Rightarrow$  The *SET* indication (10) flashes.
- 2. Wait until the SET indication (10) no longer flashes.
  - ⇒ The target value is saved.
  - ⇒ The *heating* mode indication (9) flashes.
  - After approx. one minute the device switches on the plug adapter.

## Setting the room temperature offset

With this device it is possible to set an offset value (zero offset of the temperature curve). This can be useful when the ambient temperature measured by the device after a period of acclimatization still deviates excessively with regard to an existing, precise reference thermometer.

- ✓ The device is switched off.
- 1. Press the *SET* button (1) for approx. 5 s to access the settings menu.
  - $\Rightarrow$  The *SET* indication (10) flashes.
- 2. Press the *up* (2) or *down* (3) buttons to set the offset.
- 3. Return to the ambient temperature display by pressing the *SET* button (1) several times. In doing so, skip various menu items which are irrelevant for the device at hand.



## Switching the device off

- 1. Press the *on/off* button (4).
  - $\Rightarrow$  The *OFF* indication (12) appears on the display.
  - ⇒ The plug adapter is switched off regardless of the target value and current room temperature.

# Maintenance and repair

## **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.

# **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.

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