

# EN

OPERATING MANUAL  
SOCKET THERMOSTAT



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**Notes regarding the operating manual**

**Symbols**



**Hazardous electric current!**

Warns about hazards from electric current which can lead to injuries or even death.



**Danger!**

Warns of a hazard which can lead to personal injury.



**Caution!**

Warns of a hazard which can lead to property damage.

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



**BN30**



<http://download.trotec.com/?sku=6100007009&id=1>

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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 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 leads to the forfeit 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 cases, entitlements to a warranty are then also forfeited.

## 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.
- 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 with a tool.
- Observe the storage and operating conditions (see chapter Technical data).

### 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.

### Improper use

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 operating manual, especially the Safety chapter.

### Residual risks



#### **Danger!**

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



#### **Danger!**

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



#### **Danger!**

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



#### **Caution!**

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



#### **Caution!**

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

## Information about the device

### Device description

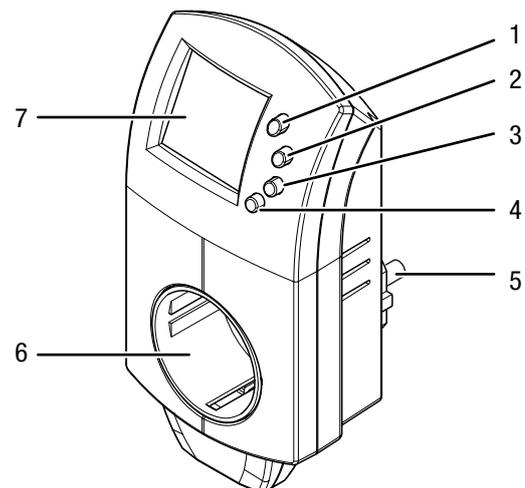
The thermostat BN30 enables temperature control of heating devices and air conditioners from 5 °C to 49 °C. To this end, simply plug the socket thermostat in between the heating device or air conditioner and a socket, and select the desired temperature. Via its integrated sensors, the device measures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

The extremely simple handling and programming of the device enable a multitude of possible applications – for example, the device is particularly well suited for mobile heaters.

The respective current room temperature can be read from the large display.

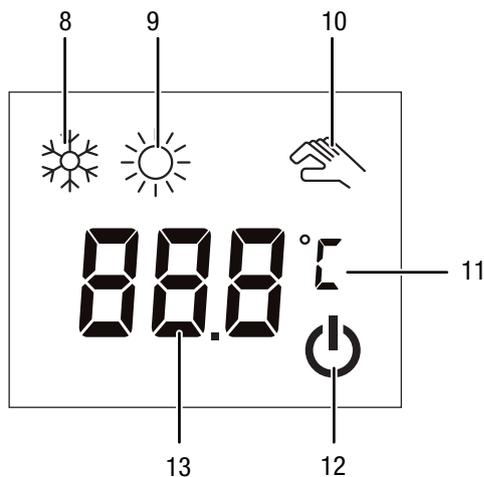
The device is also power failure-proof thanks to an integrated EEPROM.

### Device depiction



No.	Designation
1	SET button
2	UP button
3	DOWN button
4	Power button
5	Socket connection
6	Connection for the terminal device (plug adapter)
7	Display

**Display**



No.	Designation
8	Cooling mode display
9	Heating mode display
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 - 49 °C (41 °F - 85 °F) in steps of 0.5 °
Operating conditions	-10 - 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 Getting started guide

**Transport and storage**

**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.
- Protected from dust and direct sunlight.
- With a cover to protect it from invasive dust, if necessary.

**Operation**

The target temperature value is factory-set to 20 °C and the device is in **heating** mode.

**Switching the device on**

1. Plug the device into a properly fused socket.
2. Connect the terminal device.
3. Press the Power button (4).
  - ⇒ The device is switched on.
  - ⇒ The power symbol (12) does **not** appear on the display.

**Setting the mode**

**Note:**

If the desired temperature is lower than the room temperature, please use the **cooling** mode. If the desired temperature is higher than the room temperature, please 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 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 2 °C lower than the room temperature, otherwise the device will not switch on the plug adapter. If the room temperature is smaller than the set value, the device switches the plug adapter off.

✓ **Cooling** mode is switched on.

1. Press the Up (2) or Down (3) button to set the target temperature value.
  - ⇒ The *SET* indication (10) flashes.
2. Wait until the *SET* indication (10) no longer flashes.
  - ⇒ The set 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 1 °C higher than the room temperature, otherwise the device will not switch on the plug adapter. If the room temperature is larger than the set value, the device switches the plug adapter off.

✓ **Heating** mode is switched on.

1. Press the Up (2) or Down (3) button to set the target temperature value.
  - ⇒ The *SET* indication (10) flashes.
2. Wait until the *SET* indication (10) no longer flashes.
  - ⇒ The set 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

#### Note:

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.

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 thermostat 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.
  - ⇒ The *SET* indication flashes.
2. Press the Up (2) or Down (3) button to set the offset value.
3. Once the offset is adjusted, 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 Power button (4).
  - ⇒ 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. Ensure 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



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

in accordance with the EC Low Voltage Directive 2006/95/EC and the EC Directive 2004/108/EC about electromagnetic compatibility.

Herewith, we declare that the device BN30 was developed, constructed and produced in compliance with the named EC directives.

The C€ marking is found on the rear of the device.

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