EN

OPERATING MANUAL
THERMOHYGROMETER

》TROTEC
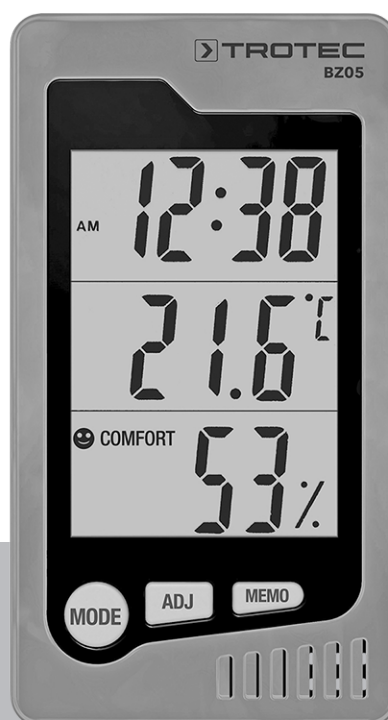
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Notes regarding the instructions

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:

BZ05

https://hub.trotec.com/?id=44140

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.

- Do not immerse the device in water. Do not allow liquids to penetrate into the device.

- The device may only be used in dry surroundings and must not be used in the rain or at a relative humidity exceeding the operating conditions.

- Protect the device from permanent direct sunlight.

- Do not expose the device to strong vibrations.

- 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.
- Observe the storage and operating conditions (see Technical data).

Intended use

Only use the device to measure the indoor air temperature and humidity. Observe and comply with the technical data.

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

Foreseeable misuse

Do not use the device out of doors.

Do not use the device in potentially explosive areas.

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

Personnel qualifications

People who use this device must:

- have read and understood the instructions, especially the Safety chapter.

Residual risks

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 thermohygrometer is a battery-powered measuring device indicating the current indoor climate.

It comes with the following functional properties and equipment features:

- Simultaneous indication of time or date, room temperature, feel-good indication and humidity level
- Alarm function
- Indication of recorded minimum and maximum values for temperature and relative humidity
- Switching option between °C and °F
- Reset function
- Integrated stand for table installation
- Holder for wall mounting

Device depiction
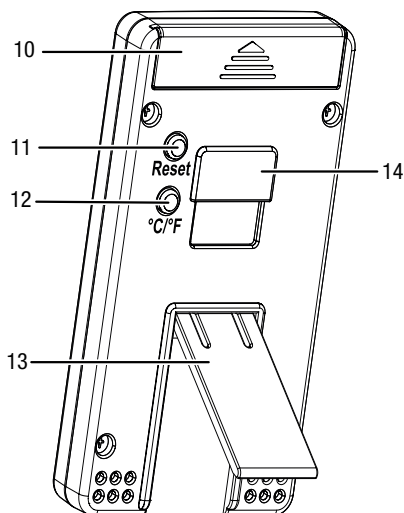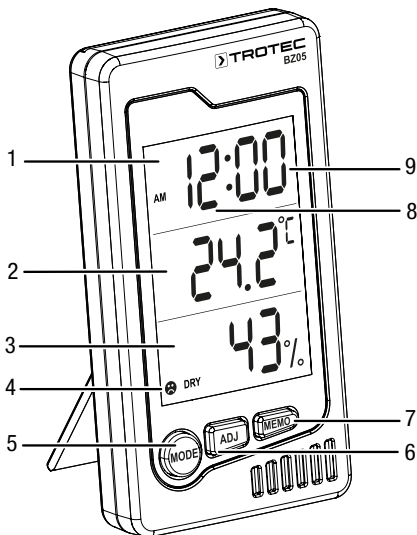
No.	Designation
1	Time/date/wake-up time display
2	Temperature indication (°C / °F)
3	Relative humidity indication
4	Feel-good indication
5	*MODE* button
6	*ADJ* button
7	*MEMO* button
8	Hour indication
9	Minute indication
10	Battery compartment
11	*RESET* button
12	*°C/°F* button
13	Fold-out stand
14	Holder for wall mounting

Technical data

Parameter	Value
Model	BZ05
Display	LCD (monochrome)
Relative humidity	
Measuring range	10 % RH to 90 % RH
Accuracy	± 5 % RH
Resolution	1 %
Air temperature	
Measuring range	0 °C to 50 °C or 32 °F to 122 °F
Accuracy	±1 °C or ±1.8 °F
Measuring range resolution	0.1 °C/°F
Ambient conditions	
Operation	0 °C to 50 °C or 32 °F to 122 °F and 80 % RH (non-condensing)
Storage	-20 °C to 60 °C or -4 °F to 140 °F and 80 % RH (non-condensing)
Power supply	1 battery of type AAA, 1.5 V
Dimensions (length x width x height)	approx. 108 mm x 15 mm x 60 mm
Weight (incl. battery)	approx. 74 g

Scope of delivery

- 1 x Device BZ05
- 1 x Battery, type AAA, 1.5 V
- 1 x manual

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

When transporting the device, ensure dry conditions and and protect the device from external influences e.g. by using a suitable bag.

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
- the storage temperature complies with the values specified in the Technical data
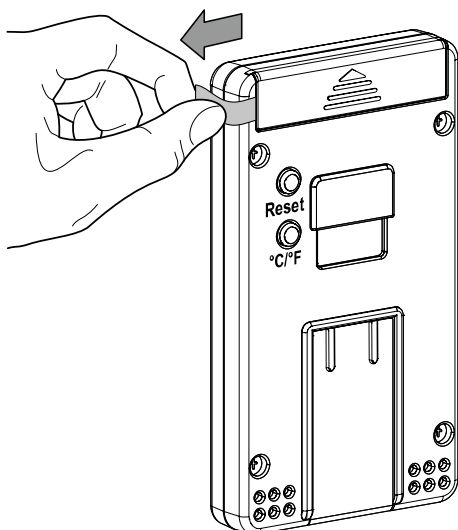- Remove the battery from the device.
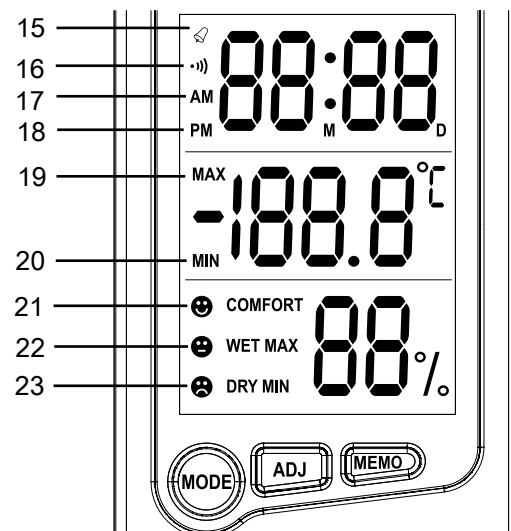
Operation

Removing the plastic strip

Before first use, remove the plastic strip from the battery compartment which serves to prevent contacting during storage.

Note

Make sure that the surface of the device is dry.

Symbols on the display

No.	Designation
15	Alarm activated
16	Hourly alarm activated
17	Time *AM*
18	Time *PM*
19	Maximum value
20	Minimum value
21	Ambient temperature is between 20 °C and 26 °C, relative humidity is between 50 % and 70 %.
22	The relative humidity level is higher than 70 % (temperature-independent).
23	The relative humidity level is lower than 50 % (temperature-independent).

Setting time, hour format and date
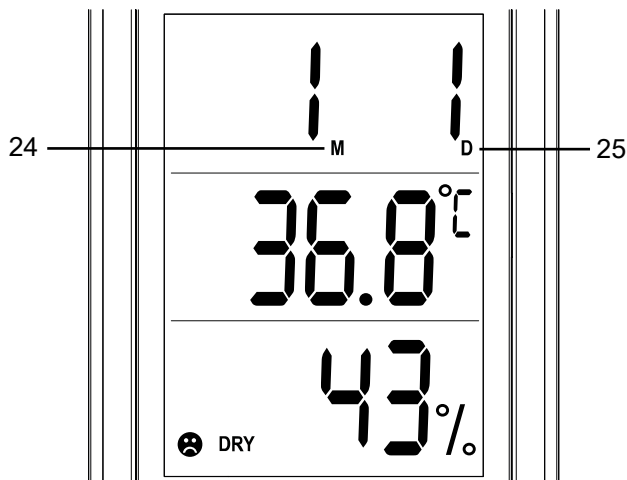
No.	Designation
24	Month indication
25	Day indication

Info

You can readjust a value more quickly by means of the *ADJ* button (6) if you keep this button pressed.

Please proceed as follows to set time and date:
1. Press the *MODE* button (5) for approx. 2 seconds.
   ⇨ The minute indication (9) starts flashing.
2. Press the *ADJ* button (6) to adjust the minutes.
3. Press the *MODE* button (5) to switch to the hour indication (8).
   ⇨ The hour indication (8) starts flashing.
4. Press the *ADJ* button (6) to set the hours.
5. Press the *MODE* button (5) to switch to the hour format setting (12/24).
   ⇨ The previously set format starts flashing on the display.
6. Press the *ADJ* button (6) to set the desired hour format. If you select the 12 h format, all times between 0:00 o'clock and 12:00 o'clock will be displayed with the symbol *AM* (17) next to them. Times between 12:00 o'clock and 24:00 o'clock will be displayed with the symbol *PM* (18) next to them.
7. Press the *MODE* button (5) to switch to the month indication (24).
   ⇨ The month indication (24) starts flashing.
8. Press the *ADJ* button (6) to set the month.
9. Press the *MODE* button (5) to switch to the day indication (25).
   ⇨ The day indication (25) starts flashing.
10. Press the *ADJ* button (6) to set the day.
   ⇨ Time and date are now set.
11. Press the *MODE* button (5) to exit the setting mode.

Display wake-up time

✓ The time/date/wake-up time (1) display indicates the time. Both points between hour and minute display are flashing.
1. Briefly press the *MODE* (5) button.
   ⇨ The time/date/wake-up time (1) display changes from indicating the time to the indication of the wake-up time.
   ⇨ Both points between hour and minute display stop flashing.

Note

If no settings are made regarding the wake-up time, the display changes back to the indication of the time after one minute.

Setting and activating the wake-up time

Info

You can readjust a value more quickly by means of the *ADJ* button (6) if you keep this button pressed.

Please proceed as follows to set the wake-up time:
1. Switch over to the wake-up time display by pressing the *MODE* button (5).
   ⇨ The time/date/wake-up time (1) display changes from indicating the time to the indication of the wake-up time.
   ⇨ Both points between hour and minute display stop flashing.
2. Press the *MODE* button (5) for approx. 2 seconds.
   ⇨ The minute indication (9) starts flashing.
3. Press the *ADJ* button (6) to adjust the minutes.
4. Press the *MODE* button (5) to switch to the hour indication (8).
   ⇨ The hour indication (8) starts flashing.
5. Press the *ADJ* button (6) to set the hours.
   ⇨ The alarm for the wake-up time is now set. By pressing the *MODE* (5) button you can exit the setting mode.
   ⇨ The ♡ symbol (15) appears in the top left corner in the first row on the display next to the set alarm time.

Switching off and deactivating the wake-up time

1. To deactivate the alarm function for the wake-up time, press one of the buttons on the front of the device at first.
2. In order to permanently deactivate the alarm function for the wake-up time, press the *ADJ* (6) button 3 x.
   ⇨ The ♡ symbol (15) is no longer displayed. The alarm for the wake-up time is now deactivated.

Note

The alarm will stop automatically after 1 minute if no button is pressed.

Activate and deactivate hourly alarm

1. Press the *ADJ* button (6) 2 x to activate the hourly alarm.
   ⇨ An acoustic signal is emitted every full hour.
   ⇨ The •᠉⁾⁾ symbol (16) appears in the top left corner in the first row on the display.
2. In order to permanently deactivate the hourly alarm function, press the *ADJ* (6) button 2 x.
   ⇨ The •᠉⁾⁾ symbol (16) is no longer displayed. The hourly alarm is deactivated.

Feel-good indication

If the relative ambient temperature ranges between 20 °C and 26 °C (68 °F and 78.8 °F) and the relative humidity is between 50 % and 70 %, the ☻ symbol for feel-good indication (21) appears on the display.

If the relative humidity exceeds 70 %, the ☻ (22) symbol appears on the display regardless of the temperature and indicates that the humidity level is too high.

If the relative humidity falls below 50 %, the ☻ (23) symbol appears on the display regardless of the temperature and indicates that the humidity level is too low.

> **Note**
>
> Always make sure that the humidity level ranges from 50 % and 70 %.
>
> If the relative humidity level is too low, this can often lead to headaches and the mucous membranes drying out, especially of nose and eyes. As a vicious cycle, this irritation increases the vulnerability for pathogens to exploit, and is therefore often the ideal basis for infections.
>
> If the relative humidity level is too high, this will have negative impacts on the wellbeing of persons with a poor cardiovascular system in particular. Besides, in closed rooms that are insufficiently ventilated, there is an increased risk of mould growth which actually presents another risk for your health.
>
> Therefore, always make sure that all rooms are well and regularly ventilated and ensure a healthy ratio of temperature and relative humidity.

Indication of minimum and maximum values

The device saves the minimum and maximum values for temperature and relative humidity.

1. Press the *MEMO* (7) button 1 x to display all measured maximum values (19) that have been measured since the last reset.
2. Press the *MEMO* (7) button 2 x to display all measured minimum values (20) that have been measured since the last reset.
3. Press the *MEMO* button (7) 3 x to exit the mode and to go to the standard display mode.

> **Note**
>
> If you do not press the *MEMO button* (7) 3 x, you will automatically return to the standard display mode after 10 seconds.

Switching the temperature indication between °C and °F

Press the *°C/°F* button (12) at the rear of the device to switch between °C and °F.

Resetting the system

To reset the system of the device to the default configuration, press the *RESET* (11) button at the rear of the device.

Afterwards, the device will return to the preset default mode.
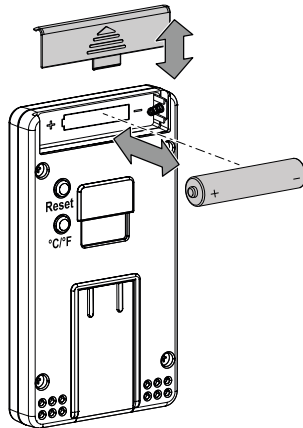
Maintenance and repair

Battery change

A battery change is required if the values on the display are no longer or only partly visible.

> **Note**
> Make sure that the surface of the device is dry.

To change the battery, please proceed as follows:

1. Open the battery compartment (10) at the rear of the device towards the direction of the arrow.
2. Remove the old battery from the device.
3. Insert the new battery in the compartment with correct polarity.
4. Close the battery compartment (10) at the rear of the device.

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.