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# Information on the use of these 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.

#### **Notice**

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:



BE14



https://hub.trotec.com/?id=40086

# **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.
- Protect the device from permanent direct sunlight.
- Do not open the device.
- Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.
- Use batteries of type AAA.
- 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. 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.
- Immediately before and after each use, test the functionality of the device on a known voltage source. The device must not be used if its functionality cannot be clearly clearly recognised.
- The voltage detector must not be used when the battery compartment is open.
- Observe the storage and operating conditions (see Technical data).

#### Intended use

Only use the device for detecting alternating voltages whilst adhering to the technical data.

Any use other than the intended use is regarded as misuse.

### Reasonably foreseeable misuse

Do not use the device in potentially explosive atmospheres, when wet or very humid.

Unauthorized modifications of the device are forbidden.

# **Personnel qualification**

People who use this device must:

- master the 5 safety rules of electrical engineering
  - 1. De-energise
  - 2. Secure against restart
  - 3. Verify de-energised state (bipolar)
  - 4. Earth and short-circuit
  - 5. Cover neighbouring live parts
- use the voltage detector following safe working procedures.
- be aware of the dangers that occur when working with electric devices in damp areas.
- take measures to protect themselves from direct contact with live parts.
- 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

Electric shock due to contact with live parts! Do not touch any live parts. Secure neighbouring live parts by covering them or by switching them off.



### 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 of electrical voltage

Electric shock due to undetected voltage.

Before each use, check the function of the device on a known voltage source, e.g. a known and safe 230 V voltage source. Do **not** use the device for voltage detection if it does not indicate the voltage of the



#### **Warning**

Risk of suffocation!

known source.

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.

#### **Notice**

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

#### **Notice**

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



# Information about the device

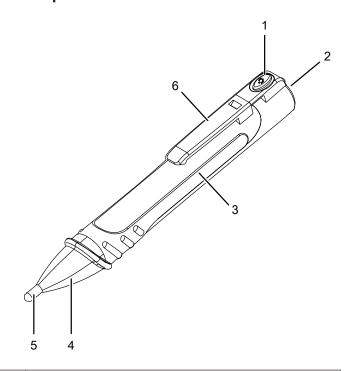
# **Device description**

The voltage detector detects alternating voltage (AC) and signals it to the user via a flashing LED and an acoustic signal.

The device can be used for finding a cable break or determining the presence of alternating voltage in fuses, wires and cables.

Additionally the measuring device is equipped with an integrated LED torch.

# **Device depiction**



No.	Designation
1	Light button
2	LED torch
3	Battery compartment with cover
4	LED voltage indicator
5	Measuring tip
6	Fastening clip

#### **Technical data**

Parameter	Value
Detection range	200 V AC to 1000 V AC
Overvoltage category	CAT IV 600 V, CAT III 1000 V
Degree of pollution	2
Battery type	2 x 1.5 V batteries AAA (Micro)
Dimensions (length x diameter)	176 mm x 26 mm
Weight	48.5 g
Ambient conditions	-10 °C to 50 °C with max. 95 % RH
Storage conditions	-10 °C to 50 °C with max. 95 % RH

## Scope of delivery

- 1 x Voltage detector BE14
- 1 x Quick guide

# **Transport and storage**

#### **Notice**

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
- Batteries are removed from the device



# **Operation**

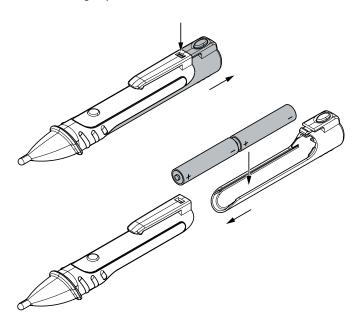
# **Inserting the batteries**

Insert the batteries before first use. Observe the specifications in the technical data.

#### **Notice**

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

- 1. Press the cover of the battery compartment out of the recess on the fastening clip and pull it off.
- 2. Insert the batteries with correct polarity.
- 3. Slide the cover back on until it locks in place on the fastening clip.



# **Determining the voltage**

# A

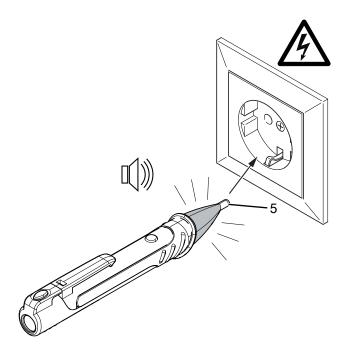
### Warning of electrical voltage

Before each use, check the function of the device on a known voltage source, e.g. a known and safe 230 V voltage source or a known and safe 9 V battery.

1. Move the measuring tip (5) of the voltage detector along the surface to be tested.

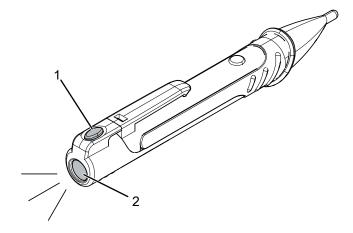
The presence of voltage is shown as follows:

- ⇒ The LED voltage indicator (4) flashes red.
- ⇒ The device emits a repetitive acoustic signal.



# Using the torch

- 1. Press and hold the *Light* button (1).
  - ⇒ The LED torch (2) is illuminated.
- 2. Release the *Light* button.
  - ⇒ The LED torch goes out again.





# Maintenance and repair

## **Battery change**

A battery change is required when the device can no longer be switched on (see section Inserting the batteries).

### **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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