

BE17

EN

OPERATING MANUAL
VOLTAGE DETECTOR



table of contents

Notes regarding the operating manual..... 1

Safety 2

Information about the device..... 3

Technical data 3

Transport and storage..... 4

Operation 4

Maintenance and repair 5

Disposal 5

Declaration of conformity 5

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:



BE17



<http://download.trotec.com/?sku=3510205227&id=1>

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The only party responsible for determining valid measured results, drawing conclusions and deriving actions is the user! Trotec accepts no claims of warranty for the correctness of the determined measured values or measured results. Further, Trotec accepts no liability whatsoever for possible mistakes or damage which have been caused by utilising the determined measured results.

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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 to indicate voltage ranges between 12 and 400 V DC or 12 and 400 V AC whilst adhering to the technical data. The device may be used in facilities of overvoltage category 3 (CAT III = domestic installations).

Improper use

Operation under inappropriate surrounding conditions is prohibited! These include an excessive humidity level, dust, flammable gases, vapours or air containing solvents, thunderstorms or similar conditions such as strong electrostatic fields.

The entire product must neither be modified nor converted!

Personnel qualifications

People who use this device must:

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

Residual risks



Danger!

Electric shock from contact with live parts. Do not touch any live parts. Secure neighbouring live parts by insulating them or switching them off.



Danger!

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

If you notice damages, no longer use the device. Do not use the device when the device or your hands are damp or wet!



Hazardous electric current!

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



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!

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



Danger!

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



Caution!

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



Caution!

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

Information about the device

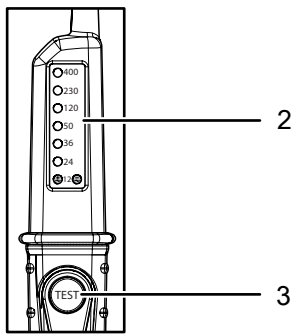
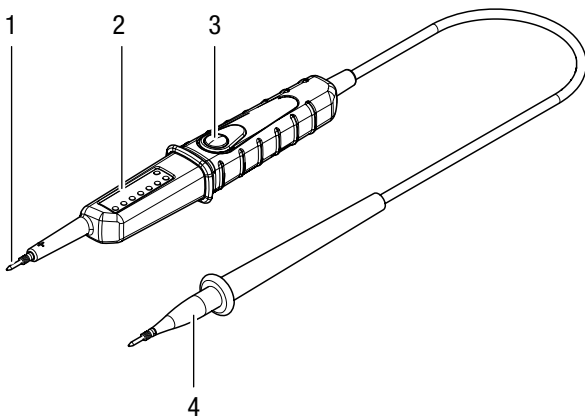
Device description

The bipolar voltage detector serves to indicate voltage ranges between 12 and 400 V DC or 12 and 400 V AC. The voltages are indicated on an LED display in 7 ranges and their polarity is displayed also.

The device may be used in facilities of overvoltage category 3 (CAT III = domestic installations).

Moreover, the device comes equipped with a function for FI/RCD testing or for triggering the residual current device.

Device depiction



No.	Designation
1	probe tip L1 (+)
2	LED display
3	TEST button
4	probe tip L2 (-)

Technical data

Parameter	Value
Voltage indication	12/24/36/50/120/230/400 V AC/DC
Display tolerance	-30 % to 0 % of the indicated value
Voltage test	automatic(ally)
Polarity indication	+ / - / ~
Display delay	< 0.1 s LED
Frequency range	50 / 60 Hz
Power consumption	approx. 10.0 W at 400 V
Peak current	Is = 1 s <0.2 A / 5 s <3.5 mA
Test time	5 s <230 V AC/DC, 3 s < 400 V AC/DC
Recovery time	10 min
LED display starting from	> 6 V AC/DC
Operating temperature	-10 °C to +55 °C
Relative humidity	max. 85 %
Overvoltage category	CAT III - 400 V
Dimensions	240 x 26 x 45 mm
Weight	130 g

Scope of delivery

- 1 x Voltage detector BE17
- 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

Functional check

Before every voltage test, check the device for proper functioning by means of a known voltage source.

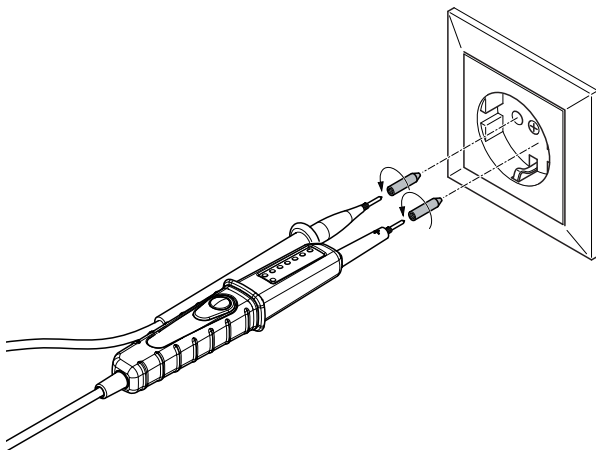
Note:

For technical reasons the instrument cannot display direct current voltage in the range of approx. 0 V +/- 6 V.

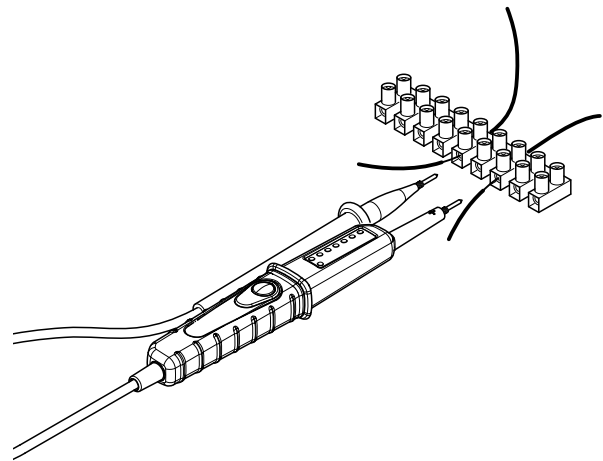
Voltage test

Note:

Please remember to screw the supplied tips onto the two probe tips before testing a socket. This way it is easier to test the socket's voltage.



1. Only hold the voltage detector by the provided handhold and never reach beyond the grips' boundaries.
2. Lead the two probe tips (1, 4) to the measuring spots to be tested.



- ⇒ The LED display (2) lights up according to the voltage present.
- ⇒ The LED display (2) indicates the voltage type and the corresponding polarity. If the displays for + and - are illuminated simultaneously, this indicates AC voltage.

Testing the residual current protection

The residual current device can be checked for proper functioning via the *TEST* button (3) (RCD test).

If phase and protective earth conductor are contacted whilst actuating the test button, a residual current is simulated, which trips the respective residual current device (RCD). If the residual current device is not tripped, the electrical installation must be checked by an electrically skilled person.

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 BE17 was developed, constructed and produced in compliance with the named EC directives.

The **CE** marking is found on the rear of the device.

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