testo clamp meter adapter 0590 0003

Instruction manual [en]

0970 0702 en 02 V01.00

Overview

Instrument

1 Button for offset compensation
2 Clamp opener
3 Clamp meter
4 Battery compartment (at rear)
5 LED
6 ON/OFF button
7 Measuring cable to testo 760

Explanation of icons

	Attention! Warning about a danger spot, refer to instruction manual
	Caution! Dangerous voltage, risk of electric shock
	The product is certified for the USA and Canada markets to applicable American and Canadian standards.
	Continuous double or reinforced insulation in accordance with category II DIN EN 61140/ IEC 536
	This product has been tested to the requirements of CAN/CSA-C22.2 No. 61010-1, second edition, including Amendment 1, or a later version of the same standard incorporating the same level of testing requirements.
CE	Conformity mark, verifies compliance with the valid EU Directives: EMC Directive (2014/30/EU) with the standard EN 61326-1, Low Voltage Directive (2014/35/EU) with the standard EN 61010 2-032
	Certified safety (verified by TÜV Rheinland)
	The instrument complies with the WEEE Directive (2012/16/ EU)
	Application around and removal from HAZARDOUS LIVE conductors is permitted.

Observe prior to use!

- The instruction manual contains information and instructions which are necessary for operating and using the instrument safely. Before using the instrument, read the instruction manual carefully and comply with all aspects of it. Keep this document to hand so that you can refer to it when necessary. Forward this documentation to any subsequent users of the instrument.
- If the manual is not followed, or if you fail to observe the warnings and instructions, there is a risk of fatal injury to the user and damage to the instrument.

Safety instructions

The instrument may only be used by trained personnel. During all operations, please observe the Employers' Liability Insurance Association provisions for health and safety at work.

- In order to prevent electric shock, take safety precautions when working with voltages greater than 120 V (60 V) DC or 50 V (25 V) rms. AC. These values are the limits for contact voltages in accordance with DIN VDE (values in brackets apply to restricted areas, for example agricultural sectors).
- The measuring instrument is only to be used in electrical circuits with up to 600 V nominal voltage.
- Measurements may only be taken near electrical installations under the direction of an authorised qualified electrician - never alone.
- The instrument may only be touched at the designated grip areas, the display elements must not be covered. If the instrument is not held by the designated grip areas, or outside the limits of the grips, the operator will be at risk of electric shock.
- If operator safety can no longer be guaranteed, the instrument is to be taken out of service and prevented from being inadvertently used. This is the case if the instrument:
  - Is obviously damaged. e.g.
    - Housing breakages
    - Defective measurement cables
    - Leaking batteries
  - Does not carry out the required measurements
  - Has been stored too long in unfavourable conditions
  - Has been exposed to mechanical stresses during transit.
- Protect from direct solar radiation to prevent the instrument from heating up. This is the only way to guarantee the instrument will function perfectly and have a long service life.
- If the instrument needs to be opened, this may only be carried out by a qualified specialist. Prior to opening, the instrument is to be switched off and disconnected from all electrical circuits.
- Maintenance work that is not described in this documentation must only be carried out by trained service technicians.
- If the instrument is modified in any way, operational safety cannot be guaranteed.
- Modifications to the instrument will completely void any right to claims under the manufacturer's guarantee and warranty.
- The clamp meter adapter must not be used when the battery compartment is open.
- Check and replace batteries, if necessary, before use.
- Always store in a dry place.
- The instrument must not be used in explosive environments.
- Always check the instrument is in perfect working order prior to and after use. Test the instrument on a known current source.
- If there is any battery leakage, the instrument must not be used until it has been checked by our Customer Service.
- The battery acid (electrolyte) is highly alkaline and electrically conductive. Risk of acid burn! If the battery acid comes into contact with your skin or clothing, thoroughly rinse the areas affected immediately with plenty of water. If battery acid gets into your eyes, rinse them immediately with plenty of water and seek medical advice.

Intended use

The instrument may only be used under the conditions and for the purpose for which it was designed:

- The instrument complies with the CAT IV measurement category and rated voltage of 600 V to earth.

The CAT IV measurement category is used at the source of low voltage installations, e.g. building connection, main fuse, and meter.

The instrument may only be used in the fields of application defined in the instruction manual. Any application deviating from this is considered to be improper and unchecked use and may result in accidents or instrument damage. Any improper use will completely void any right to claims under Testo's guarantee and warranty.

The manufacturer is not responsible for damage to property or personal injury caused by the following:

- Failure to comply with the instruction manual
- Modifications to the instrument not approved by the manufacturer
- The use of spare parts not approved by the manufacturer
- Use when under the influence of alcohol, drugs, or medication

The instrument must not be used for the following purposes:

- In potentially explosive atmospheres: the instrument is not explosion-proof!
- When it rains: risk of electric shock!

Technical data

Specifications valid at 23 °C ± 5 °C, <80% relative humidity:

Feature	Value
Measuring range	1.0-400 A AC RMS, 1-400 A DC
DC accuracy (offset-compensated and conductor-centred)	± (2% + 0.5 A) at +23 °C; ± 5 °C at <80% RH
AC accuracy	± (2% + 0.5 A), 45-400 Hz, Crest Factor 3 at +23 °C; ± 5 °C at < 80% RH
Temperature coefficient	± (0.05 x specified accuracy per 1 °C (0-18 °C; 28-50 °C)
Transfer function	1 mV per 1 A
Height	To 2000 m
Measurement category	CAT IV/600 V
Level of contamination	2
Protection class	IP 40
Power supply	3 x 1.5 V (AAA/IEC LR03)
Battery life	approx. 100 h (continuous operation with alkaline batteries)
Output signal	1 mV per 1 A DC or AC
Max. permitted conductor current	≤ 600 V
Max. conductor size	Ø 30 mm (1.18 in.)
Load impedance	> 1 MΩ; ≤ 100 pF
Automatic power off function (APO)	after approx. 15 min.
Dimensions (WxHxD)	210 mm x 100 mm x 42 mm
Temperature range	Operation: 0 to 50 °C Storage: -15 to 60 °C
Humidity	0 to 95% (0-30 °C) 0 to 75% (30-40 °C) 0 to 45% (40-50 °C)
Weight	Approx. 370 g
Standards	WEEE 2012/16/EU, EMV 2014/30/EU, EN 61326-1, Low Voltage Directive 2014/35/EU with the standard EN 61010-2-032, and insulation complying with class II IEC 536/DIN EN 61140
Certifications	TÜV GS, CE, CSA
Warranty	Duration: 2 years Warranty terms: see website www.testo.com/warranty

Operating the instrument

Switching the instrument on

> Press the **on/off** button briefly.
- The instrument switches on

Switching the instrument off

> Press the **on/off** button briefly.

Automatic switch-off: after approx. 15 minutes of no button being pressed.

Carrying out a test

The contents of the testo 760 documentation must have first been read and understood.

Measuring direct currents (DC)

1. Connect the testo 760 and clamp meter adapter to the measurement cables: black cable to the **COM** jack; red cable to jack **V/Ω/diode/capacity**.
2. Switch on the testo 760.
3. Activate DC mV measuring mode for current measurement: press key V 4 x.
4. Switch on the clamp meter adapter.
- A green or red LED indicates readiness for operation.
5. Close the clamp jaws of the clamp meter adapter. Make sure that no conductor is enclosed.
> Compensate the direct current offset: press **ZERO** < 1 second.
6. Place the cables being measured centrally within the clamp.
- The measured value is shown on the LC display.

Measuring alternating currents (AC)

1. Connect the testo 760 and clamp meter adapter to the measurement cables: black cable to the **COM** jack; red cable to jack **V/Ω/diode/capacity**.
2. Switch on the testo 760.
3. Activate AC mV measuring mode for current measurement: Press button **V** 3 x.
4. Switch on the clamp meter adapter.
- A green or red LED indicates readiness for operation.
5. Place the cables being measured centrally within the clamp.
- The measured value is shown on the LC display.
- The displayed mV value indicates the measured current in amperes.

Service and maintenance

Replacing the batteries

If the battery voltage is high enough, the LED lights up green. When batteries start running out, the LED lights up red, which means the batteries need changing soon.

1. Switch the instrument off.
2. Fully disconnect the instrument from all measurement circuits.
3. Open the battery compartment: undo the screw and remove the battery compartment cap.
4. Remove the spent batteries.
5. Insert new batteries in accordance with the battery icon.
6. Close the battery compartment: put the battery compartment cap on and tighten the screw.

Maintenance

When operated in accordance with the instruction manual, the instrument does not require any particular maintenance. If a malfunction occurs during operation, the ongoing measurement should be stopped immediately. Send the instrument to Testo Service for checking.

Storage

- Make sure the instrument is stored in a dry place.
- If the instrument is not in use for a significant period of time: remove the batteries in order to prevent any danger or damage due to any potential leaking of the batteries.

Cleaning

- Always switch off the instrument prior to cleaning and disconnect it from external voltage, other connected instruments (e.g. test piece, and control devices, etc.), or a clamped conductor.

> Wipe the instrument with a damp cloth and a small amount of mild household detergent.

Never use any harsh cleaning agents or solvents to clean the instrument! After being cleaned, the instrument must not be used until it has completely dried.

Protecting the environment

> Dispose of faulty rechargeable batteries/spent batteries in accordance with the valid legal specifications.

> At the end of its useful life, send the product to the separate collection for electric and electronic devices (observe local regulations) or return the product to Testo for disposal.