

FLUKE.

**Portable appliance tester, Type: 6500****Order data**

Order number	473094 6500
GTIN	095969666794
Item class	47H

**Description****Version:****Fluke 6500-2 portable appliance tester****Perform more tests each day**

The Fluke 6500-2 appliance tester is a lightweight, compact, one-touch solution with redesigned auto-test capabilities to help you complete more portable appliance tests each day. The 6500-2 appliance tester enables you to take measurements faster without compromising the test results.

- **One-button operation: each test function is started via a dedicated button**
- **Complies with the new standards EN 50678 and EN 50699**
- **Pre-set pass/fail levels save time**
- **Large backlit display to easily read off the data**
- **Single mains socket for connecting appliances**
- **Separate IEC socket to easily test low-power mains cables**
- **Detachable test leads for quick replacement in the field**
- **Integral carrying handle**
- **USB port for data transmission**
- **Built-in keyboard for rapid data entry**
- **Save measurement data on USB storage media and transfer it to a PC**
- **Large backlit graphic display**
- **Pre-set, auto-test sequences for enhanced user-friendliness**
- **Integral codes for the site, measuring point and description enable faster data entry**
- **Memory review facility for more on-site control**

- **USB port for data transmission**

**Fast one-button operation**

Each of the pre-set test routines is called up by pressing a single button. This is much easier than using menus or selecting multiple functions and facilitates a faster, more efficient way of working. The 6500-2 model also includes user-definable test routines and an alphanumeric keyboard for rapid data entry.

**Low weight ...**

The 6500-2 portable appliance tester is extremely compact and easy to carry when working out in the field. The hard, rugged carrying case (supplied) not only offers protection during transit but also provides space for accessories and other appliances.

**Robust**

Like all Fluke appliances, this portable appliance tester is robust and designed for use out in the field. Packed with all the features you need for testing portable appliances, a Fluke portable appliance tester is a complete all-in-one solution.

**Description:****Faster and simpler measurements according to VDE 0701-0702 on portable appliances**

- **One-button operation: each test function is started via a dedicated button**
- **Complies with the new standards DIN EN 50678 (VDE 0701) and DIN EN 50699 (VDE 0702)**
- **Pre-set pass/fail levels save time**
- **Large backlit display to easily read off the data**
- **Single mains socket for connecting appliances**
- **Separate IEC socket to easily test low-power mains cables**
- **Detachable test leads for quick replacement in the field**
- **Integral carrying handle**
- **Built-in keyboard for rapid data entry**
- **Save measurement data on USB storage media and transfer it to a PC**
- **Large backlit graphic display**
- **Pre-set, auto-test sequences for enhanced user-friendliness**
- **Integral codes for the site, measuring point and description enable faster data entry**
- **Memory review facility for more on-site control**

**Feature:****Power-on test**

The test indicates reversed conductors and missing protective conductors and measures the mains voltage and mains frequency.

Display range: 90 V to 264 V

Inaccuracy at 50 Hz:  $\pm (2\% + 3 \text{ digits})$

Resolution: 0.1 V

Input impedance:  $>1 \text{ M}\Omega // 2.2 \text{ nF}$

Maximum mains input voltage: 264 V

**Earthing test ( $R_{pe}$ )**

Display range: 0 to 19.99  $\Omega$

Inaccuracy (after conductor test zeroing):  $\pm (5\% + 4 \text{ digits})$

Resolution: 0.01  $\Omega$

Test current: 200 mA AC -0% +40% into 1.99  $\Omega$ ; 10 A AC  $\pm 20\%$  into 25 m $\Omega$  at 230 V

Open circuit voltage:  $>4\text{ V}$ ,  $<24\text{ V}$  (AC)

Test lead compensation: max. up to  $1.99\ \Omega$

#### **Insulation test ( $R_{iso}$ )**

Display range: 0 to  $299\text{ M}\Omega$

Inaccuracy:  $\pm (5\% + 2\text{ digits})$  from 0.1 to  $300\text{ M}\Omega$

Resolution:  $0.01\text{ M}\Omega$  (0 to  $19.99\text{ M}\Omega$ );  $0.1\text{ M}\Omega$  (20 to  $199.9\text{ M}\Omega$ );  $1\text{ M}\Omega$  (200 to  $299\text{ M}\Omega$ )

Test voltage:  $500\text{ V DC}$   $-0\%$   $25\%$  at  $500\text{ k}\Omega$  load or  $250\text{ V DC}$   $-0\%$   $+25\%$  at  $250\text{ k}\Omega$  load

Test current:  $>1\text{ mA}$  at  $500\text{ k}\Omega$  load,  $<15\text{ mA}$  at  $0\ \Omega$

Automatic discharge time:  $<0.5\text{ s}$  for  $1\ \mu\text{F}$

Max. capacitive load: operational up to  $1\ \mu\text{F}$

#### **Measurement of the contact current (IB)**

Display range: 0 to  $1.99\text{ mA AC}$

Inaccuracy:  $\pm (4\% + 2\text{ digits})$

Resolution:  $0.01\text{ mA}$

Internal resistance (via probe):  $2\text{ k}\Omega$

Measurement method: probe (the appliance under test is supplied with mains voltage during the test)

#### **Measurement of the substitute leakage current (IEA)**

Display range: 0 to  $19.99\text{ mA AC}$

Inaccuracy:  $\pm (2.5\% + 3\text{ digits})$

Resolution:  $0.01\text{ mA}$

Test voltage:  $100\text{ V AC} \pm 20\%$

#### **Load/differential current measurement: load current**

Display range: 0 A to 16 A

Inaccuracy:  $\pm (4\% + 2\text{ digits})$

Resolution:  $0.1\text{ A}$

#### **Load/differential current measurement: power**

Display range –  $230\text{ V}$  mains voltage: 0 VA to  $3.7\text{ kVA}$

Inaccuracy:  $\pm (5\% + 3\text{ digits})$

Resolution:  $1\text{ VA}$  (0 to  $999\text{ VA}$ ),  $0.1\text{ kVA}$  ( $>1.0\text{ kVA}$ )

#### **Load/differential current measurement: protective conductor current**

Display range: 0 to  $19.99\text{ mA}$

Inaccuracy:  $\pm (4\% + 4\text{ digits})$

Resolution:  $0.01\text{ mA}$

#### **PELV test**

Inaccuracy at  $50\text{ Hz}$ :  $\pm (2\% + 3\text{ digits})$

Overload protection:  $300\text{ V rms}$

Warning threshold:  $25\text{ V rms}$

#### **FI test: tripping current**

Operational error:  $\pm 10\%$

Nominal value:  $30\text{ mA}$

Inaccuracy:  $\pm 5\%$

#### **FI test: tripping time**

Standard requirement: EN 61557 Part 6; tolerance of nominal test current:  $0\%$  to  $+10\%$

Operational error:  $\pm 10\%$   
 Type of RCD: AC mains voltage 30 mA  
 Display range: 310 ms  
 Resolution: 0.1 ms  
 Inaccuracy: 0.3 ms  
 Maximum tripping time values at 100% (30 mA): 300 ms  
 Maximum tripping time values at 500% (150 mA): 40 ms

#### Environmental data

Operating temperature: 0 to 40°C  
 Relative humidity: non-condensing < 10°C; 95% from 10 to 30°C; 75% from 30 to 40°C

#### Safety specifications

Specification: complies with EN 61010-1, 3rd edition; CAT II, 300 V, pollution degree 2; DIN VDE 0404-1 and DIN VDE 0404-2; DIN VDE 0413/EN 61557 Parts 1, 2, 4, 6, 10; CAT II, 300 V, pollution degree 2

#### Mechanical and general data

Dimensions (LxWxH): 200x275x114 mm  
 Weight: 3.13 kg  
 Sealing: IP40 (housing); IP20 (plug connector)  
 EMC: complies with EN 61326-1, portable  
 EMI immunity: 3 V/m

#### Specification:

- **The accuracy specification for the display range is defined as  $\pm$  (% of reading + digits) at 23°C  $\pm$  5°C,  $\leq$  75% rel.**
- **Between 0°C and 18°C and between 28°C and 40°C, the inaccuracy values may deteriorate by 0.1 x (inaccuracy specification) per °C.**
- **The accuracies for the measurement ranges are specified in accordance with the standards EN 61557-1: 1997, EN 61557-2: 1997, EN 61557#4: 1997, EN 61557-6: 1997, DIN VDE 0404-2.**

#### Supplied with:

- **Fluke 6500-2 portable appliance tester**
- **Quick guide**
- **Hard carrying case**
- **Test prod**
- **Measurement tip**
- **Crocodile clip**
- **Mains cable**

## Technical description

Power supply	Mains-powered
Type of product	Multimeter

