

**FLUKE.**

## Multifunction tester 1663KIT



### Order data

Order number	473093 1663KIT
GTIN	195112035740
Item class	47H

### Description

#### Version:

**The Fluke 1663 multifunction installation tester is the ideal choice for hard-working professionals**

The 1663 installation tester provides the full range of features and advanced measurement capabilities that professional electrical installers need. It is compact and lightweight (weighing less than 1.3 kg) and has a padded carrying and hip strap to make it easy to handle. It is intuitive and simple to use for all users, meaning it can be put to work straight away for fast and efficient tests in compliance with the relevant standards. You also save time with additional features such as the automatic start for RCD and loop impedance measurements, which can be switched on and off. The self-test saves you time and gives you more confidence in the measuring results.

#### **Test DC protective devices on electric-vehicle charging stations – RCD type A EV or RDC-DD**

Perform tests on DC protective devices on electric-vehicle charging stations using the VAR mode (variable RCD test current) for RCD type B (smooth residual direct currents), which generates the installation tests for RCD type A EV or RDC-DD according to IEC 62.955 (6/60/200 mA and ramp <math><2\text{ to }6\text{ mA}</math>). This allows quick and easy testing of additional 6 mA DC monitors on charging points and can be used in conjunction with the Fluke FEV100 or FEV300 test adapters.

#### **Compatible with software**

The Fluke 1663 is compatible with TruTest™, a software program from Fluke designed to eliminate the hassle associated with traditional data management and reporting for testing electrical appliances. Whether you are testing fixed-wire installations, or appliances in an office, verifying repairs in a workshop or performing repeat testing, proper data management is critical for producing easy-to-understand reports for clients. The TruTest™ software makes it quick and

easy to import measuring results directly from test and measuring devices, and it enables files transferred from other devices to be managed and data to be entered manually if required.

**Other useful features include:**

- **Tests the polarity of the wiring; detects broken N conductors**
- **Measures insulation, loop and line resistances**
- **Zmax memory function for line and loop impedance measurement**
- **Unique zero adapter for fast, consistently reliable and accurate test lead and mains cord compensation**
- **Measures motor windings with a continuity test**
- **Computes the prospective earth fault current (PEFC/IK) or prospective short-circuit current (PSC/IK)**
- **Measures the RCD tripping time and RCD tripping current (ramp test)**
- **Measures the tripping time and tripping current in just one test for RCDs type A & AC**
- **Measures the variable test current for RCDs**
- **Automatic test sequence for RCDs/residual current protection devices**
- **Includes phase sequence indicator**
- **Safety rating according to overvoltage categories CAT III 500 V and CAT IV 300 V**

**Feature:**

**AC voltage measurement**

Range: 500 V

Resolution: 0.1 V

Accuracy at 45 to 66 Hz: 0.8% + 3 digits

Input impedance: 360 k $\Omega$

Overload protection: 660 V rms

**Continuity testing (RLO)**

Measuring ranges (autoranging): 20  $\Omega$  / 200  $\Omega$  / 2000  $\Omega$

Resolution: 0.01  $\Omega$  / 0.1  $\Omega$  / 1  $\Omega$

Open circuit voltage: >4 V

**Insulation resistance measurement (RISO)**

Test voltage: 50 / 100 / 250 / 500 / 1,000 V

Accuracy of test voltage (at rated test current): +10%, -0%

Insulation resistance range: 20 M $\Omega$  / 50 M $\Omega$ ; 20 M $\Omega$  / 100 M $\Omega$ ; 20 M $\Omega$  / 200 M $\Omega$ ; 20 M $\Omega$  / 200 M $\Omega$  / 500 M $\Omega$ ; 20 M $\Omega$  / 200 M $\Omega$  / 1000 M $\Omega$

Resolution: 0.01 M $\Omega$  / 0.1 M $\Omega$ ; 0.01 M $\Omega$  / 0.1 M $\Omega$ ; 0.01 M $\Omega$  / 0.1 M $\Omega$ ; 0.01 M $\Omega$  / 0.1 M $\Omega$  / 1 M $\Omega$ ; 0.01 M $\Omega$  / 0.1 M $\Omega$  / 1 M $\Omega$

Test current: 1 mA at 50 k $\Omega$ ; 1 mA at 100 k $\Omega$ ; 1 mA at 250 k $\Omega$ ; 1 mA at 500 k $\Omega$ ; 1 mA at 1 M $\Omega$

**Loop and line impedance (ZI)**

Range: 10  $\Omega$  (Hi current m $\Omega$  mode) / 20  $\Omega$  / 200  $\Omega$  / 2000  $\Omega$

Resolution: 0.001  $\Omega$  / 0.01  $\Omega$  / 0.1  $\Omega$  / 1  $\Omega$

**Short-circuit current (Ik), PSC test**

Range: 1,000 A / 10 kA (50 kA)

Resolution: 1 A / 0.1 kA

Computed values: the prospective earth fault current (PEFC) or prospective short-circuit current (PSC) are determined by dividing the measured mains voltage by the measured loop impedance (L-PE) or line impedance (L-N), respectively.

**Earth resistance test (RE)**

Range: 200  $\Omega$  / 2000  $\Omega$

Resolution: 0.1  $\Omega$  / 1  $\Omega$

Frequency: 128 Hz

Output voltage: 25 V

**Phase sequence indication:** YES

**General specifications**

Size (LxWxH): 10x25x12.5 cm

Weight incl. batteries: 1.3 kg

Battery type, quantity: 1.5 V type AA (LR6 Mignon), 6 per unit

Index of protection: IP40

Safety: according to EN/IEC 61010-1 and EN/IEC 61010-2-034

Overvoltage category: CAT III 500 V; CAT IV 300 V

Relevant standards: EN 61557-1 to EN 61557-7 and EN 61557-10

**Supplied with:**

- **Fluke 1663 multifunction installation tester**
- **6 AA batteries (IEC LR6)**
- **Hard case C1600**
- **Zero adapter**
- **Robust mains cord**
- **Set of test leads**
- **Padded carrying and hip strap**
- **Quick guide**
- **TP165X probe and test leads for remote control**

---

**Technical description**

Power supply	Battery-powered
Battery type	LR6
Number of batteries contained	6
Type of product	Multimeter