

**TECHNICAL DATA** 

# Fluke 1662 Multifunction Testers







### **Key features**

A solid, reliable, basic installation tester

- Tests voltage and frequency
- Checks wiring polarity to detect broken N wires
- Measures insulation resistance and loop and line resistance
- Measures motor windings with continuity test
- Calculates prospective earth fault current (PEFC/IK) and prospective short-circuit current (PSC/IK)

#### **Product overview: Fluke 1662 Multifunction Testers**

#### Fluke 1662 Multifunction Installation Tester delivers solid, basic installation testing features

The Fluke 1662 installation tester gives you Fluke reliability and all the basic testing power you need for day-in, day-out installation testing. It tests to all local regulations and is easy and intuitive to use. Additional helpful features like the On/Off switchable auto-start for RCD and loop test, and self-test save time and give you more confidence in your results.

• Measures RCD switching time and tripping level (ramp test)



- Measures trip time and current for RCD type A & AC in one test
- Measures RCD variable current
- Provides automatic RCD test sequence
- Includes Z-max memory for loop tests to support easy evaluation of the highest loop test value
- Provides unique zero adapter for fast, reliable and accurate test lead and mains cord compensation
- Includes a phase sequence indicator
- Comes with hard carrying case, padded carrying and waist strap, and remote control probe and lead

## **Specifications: Fluke 1662 Multifunction Testers**

| AC voltage measurement                           |  |  |
|--|--|--|
| Range  | 500 V  |  |
| Resolution                                       | 0.1 V  |  |
| Accuracy 45 Hz – 66 Hz                           | 0.8% + 3   |  |
| Input impedance                                  | 360 kΩ   |  |
| Overload protection                              | 660 V rms  |  |
| Continuity testing (RLO)                         |  |  |
| Range (autoranging)                              | 20 Ω / 200 Ω / 2000 Ω  |  |
| Resolution                                       | 0.01 Ω / 0.1 Ω / 1 Ω   |  |
| Open Circuit Voltage                             | >4 V   |  |
| Insulation resistance measurement (RISO)         |  |  |
| Accuracy of test voltage (at rated test current) | +10%, -0%  |  |
| Test voltage                                     | 100 V<br>250 V<br>500 V<br>1000 V  |  |
| Insulation resistance range                      | 20 MΩ / 50 MΩ<br>20 MΩ / 100 MΩ<br>20 MΩ / 200 MΩ<br>20 MΩ / 200 MΩ / 500 MΩ<br>20 MΩ / 200 MΩ / 1000 MΩ       |  |
| Resolution                                       | 0.01 MΩ / 0.1 MΩ<br>0.01 MΩ / 0.1 MΩ<br>0.01 MΩ / 0.1 MΩ<br>0.01 MΩ / 0.1 MΩ / 1 MΩ<br>0.01 MΩ / 0.1 MΩ / 1 MΩ |  |
| Test current                                     | 1 mA @ 50 kΩ<br>1 mA @ 100 kΩ<br>1 mA @ 250 kΩ<br>1 mA @ 500 kΩ<br>1 mA @ 1 MΩ                                 |  |
| Loop and line impedance (ZI)                     |  |  |
| Range  | 10 $\Omega$ / 0.001 $\Omega$ / High current m $\Omega$ mode  |  |
| Resolution                                       | 0.01 Ω / 0.1 Ω / 1 Ω   |  |



| Dange                                      | 1000 A / 10 kA (F0 kA)   |                         |  |
|--|--|-------------------------|--|
| Range                                      | 1000 A / 10 kA (50 kA)   |                         |  |
| Resolution                                 | 1 A / 0.1 kA   |                         |  |
| Computation                                | Prospective earth fault current (PEFC) or Prospective short circuit current (PSC) determined by dividing measured mains voltage by measured loop (L-PE) resistance or line (L-N) resistance, respectively. |                         |  |
| RCD testing, RCD types tested              |  |                         |  |
| RCD Type                                   | A <sup>4</sup> , AC <sup>1</sup> , G <sup>2</sup> , S <sup>3</sup>   |                         |  |
| Notes                                      | <sup>1</sup> Responds to AC <sup>2</sup> General, no delay <sup>3</sup> Time delay <sup>4</sup> Responds to pulsed signal <sup>5</sup> Responds to smooth DC signal  |                         |  |
| Tripping speed test (ΔT)                   |  |                         |  |
| Current seings <sup>1</sup>                | 10-30-100-300-500-1000 mA – VAR<br>10-30-100 mA  |                         |  |
| Multiplier                                 | x ½, x 1<br>x 5  |                         |  |
| Measurement range                          | RCD Type G   | 310 ms<br>50 ms         |  |
|  | RCD Type S   | 510 ms<br>160 ms        |  |
| Notes                                      | 11000 mA type AC only<br>700 mA maximum type A in VAR mode<br>VAR mode not available for type B.   |                         |  |
| RCD/FI-Tripping Current Measuremer         | nt/Ramp Test (I∆N)   |                         |  |
| Current range                              | 30% to 110% of RCD rated current <sup>1</sup>  |                         |  |
| Step size                                  | 10% of I∆N <sup>2</sup>  | 10% of IΔN <sup>2</sup> |  |
| Dwell time                                 | Type G   | 300 ms/step             |  |
|  | Type S   | 500 ms/step             |  |
| Measurement accuracy                       | ±5%  |                         |  |
| Specified trip current ranges (EN 61008-1) | 50% to 100% for Type AC<br>35% to 140% for Type A (>10 mA)<br>35% to 200% for Type A (□10 mA)<br>50% to 200% for Type B<br><sup>2</sup> 5% for Type B  |                         |  |
| Notes                                      | <sup>1</sup> 30% to 150% for Type A IΔN > 10 mA<br>30% to 210% for Type A IΔN = 10 mA<br>20% to 210% for Type B  |                         |  |
| Phase Sequence Indication                  | ·  |                         |  |
| Icon                                       | Phase Sequence indicator is active.  |                         |  |
| General Specifications                     | '  |                         |  |



| Size (L x W x H)       | 10 x 25 x 12.5 cm                                   |
|------------------------|---|
| Weight (incl. baeries) | 1.3 (kg)  |
| Baery size, quantity   | Type AA, 6 ea.                                      |
| Sealing                | IP-40   |
| Safety                 | Complies with EN/IEC 61010-1 and EN/IEC 61010-2-034 |
| Overvoltage            | CAT III / 500V; CAT IV 300V                         |
| Performance            | EN61557-1 to EN61557-7 and EN61557-10               |



# **Ordering information**

#### FLK-1662

Fluke 1662 Multifunction Installation Tester

#### Includes:

- 6x AA (IEC LR6) cell batteries
- C1600 hard carrying case
- Zero adapter
- Heavy duty mains cord
- STD standard test lead set
- Padded carrying and waist strap
- Quick reference guide
- TP165X remote control probe and lead



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