

# 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 k $\Omega$
Overload protection	660 V rms
Continuity testing (RLO)	
Range (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)	
Accuracy of test voltage (at rated test current)	+10%, -0%
Test voltage	100 V 250 V 500 V 1000 V
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 @ 50 k $\Omega$ 1 mA @ 100 k $\Omega$ 1 mA @ 250 k $\Omega$ 1 mA @ 500 k $\Omega$ 1 mA @ 1 M $\Omega$
Loop and line impedance (ZI)	
Range	10 $\Omega$ / 0.001 $\Omega$ / High current m $\Omega$ mode
Resolution	0.01 $\Omega$ / 0.1 $\Omega$ / 1 $\Omega$

Prospective earth fault current, PSC test		
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 ( $\Delta T$ )		
Current settings <sup>1</sup>	10-30-100-300-500-1000 mA – VAR 10-30-100 mA	
Multiplier	x ½, x 1 x 5	
Measurement range	RCD Type G	310 ms 50 ms
	RCD Type S	510 ms 160 ms
Notes	<sup>1</sup> 1000 mA type AC only 700 mA maximum type A in VAR mode VAR mode not available for type B.	
RCD/FI-Tripping Current Measurement/Ramp Test ( $I\Delta N$ )		
Current range	30% to 110% of RCD rated current <sup>1</sup>	
Step size	10% of $I\Delta N$ <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 35% to 140% for Type A (>10 mA) 35% to 200% for Type A (≤10 mA) 50% to 200% for Type B <sup>2</sup> 5% for Type B	
Notes	<sup>1</sup> 30% to 150% for Type A $I\Delta N > 10$ mA 30% to 210% for Type A $I\Delta N = 10$ mA 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. batteries)	1.3 (kg)
Battery 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

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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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