

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 Ω
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 250 V 500 V 1000 V
Insulation resistance range	20 M Ω / 50 M Ω 20 M Ω / 100 M Ω 20 M Ω / 200 M Ω 20 M Ω / 200 M Ω / 500 M Ω 20 M Ω / 200 M Ω / 1000 M Ω
Resolution	0.01 M Ω / 0.1 M Ω 0.01 M Ω / 0.1 M Ω 0.01 M Ω / 0.1 M Ω 0.01 M Ω / 0.1 M Ω / 1 M Ω 0.01 M Ω / 0.1 M Ω / 1 M Ω
Test current	1 mA @ 50 k Ω 1 mA @ 100 k Ω 1 mA @ 250 k Ω 1 mA @ 500 k Ω 1 mA @ 1 M Ω
Loop and line impedance (ZI)	
Range	10 Ω / 0.001 Ω / High current m Ω mode
Resolution	0.01 Ω / 0.1 Ω / 1 Ω

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 ⁴ , AC ¹ , G ² , S ³	
Notes	¹ Responds to AC ² General, no delay ³ Time delay ⁴ Responds to pulsed signal ⁵ Responds to smooth DC signal	
Tripping speed test (ΔT)		
Current settings ¹	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	¹ 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 ¹	
Step size	10% of $I\Delta N$ ²	
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 ² 5% for Type B	
Notes	¹ 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. 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
-



Fluke. *Keeping your world up and running.®*

Fluke Corporation
PO Box 9090, Everett, WA 98206 U.S.A.

For more information call:
In the U.S.A. (800) 443-5853
In Canada (800) 36-FLUKE
From other countries +1 (425) 446-5500
www.fluke.com

©2025 Fluke Corporation.
Specifications subject to change without notice.
03/2025

**Modification of this document is not permitted
without written permission from Fluke
Corporation.**