



proyectos s.a.c.i.

Montevideo 581 3P -H C1019ABK - Tel. 54 011 43714928/54 011 43723795 - Fax. 54 011 43723795
email:proyectos@proyectos1.com.ar - WEB: www.proyectos1.com.ar

Instrumentos de verificación multifunción **MACROTEST HT5030**

Características



Multifunción registrador de anomalías de tensión y picos de intensidad. Es un instrumento electrónico para verificaciones en esquemas eléctricos del tipo TT, TN o IT, con tensiones de servicio de 380/220V.

- Medida de la continuidad de los conductores de protección equipotenciales (200mA)
- Medida de la resistencia de aislamiento (100, 250, 500 y 1000 VCC)
- Medida del Tiempo y Corriente real de disparo de los diferenciales, en manual o automático, del tipo A, AC o selectivos y comparación con los tiempos establecidos en la norma
- Medida de la tensión de contacto
- Medida de la Resistencia del bucle de Tierra con y sin intervención del diferencial
- Medida de la resistencia de tierra con picas
- Medida de la resistividad del terreno (ρ)
- Medida de la presunta corriente de cortocircuito
- Medida de tensión, frecuencia
- Medida del sentido cíclico de las fases (RST)
- Visualizador numérico digital/gráfico y histográfico
- Salida RS232 para PC
- Certificado de calibración
- Construido bajo normas EN61010 y EN61557
- Autoapagado

MACROTEST5030

Metel: HV005030

CONTINUITY TEST OF EARTH, PROTECTIVE AND EQUALISING POTENTIAL CONDUCTORS

Range (Ω)	Resolution (Ω)	Accuracy (*)
0.01 – 19,99	0.01	± (2% Reading + 2 dgt)

(*) Include the resistance of the calibration.

Test current > 200mA DC
Open circuit voltage > 4,5V**INSULATION RESISTANCE MEASUREMENT**

Range (MΩ)	Resolution (kΩ)	Accuracy (*)
0.01 – 99.99	10	± (2% Reading + 2 dgt)
100.0 – 999.9	100	

Automatic selection of the measuring range.

DC test voltage 100V, 250V, 500V, 1000V

Open circuit voltage 1.3 x Tensione di Prova.

Short circuit current 1.4mA (max).

Rated measuring current 1mA.

MEASUREMENT OF TRIPPING TIME, CONTACT VOLTAGE, EARTH RESISTANCE (R_E) IN TEST OF GENERAL AND SELECTIVE RCD, TYPE AC AND A.**Tripping time t_{ΔN}**

Range (ms)	Res (ms)	Accuracy
½ I _{ΔN} , I _{ΔN}	0 – 999	± (2% Reading + 2 dgt)
2 I _{ΔN} (***)	0 – 999	
5 I _{ΔN} RCD s (*)	0 – 150 (**)	
5 I _{ΔN} RCD (*)	0 – 50 (**)	

(*) Not for 500mA and 1000mA.

(**) With contact voltage monitoring.

(***) Not for 1000mA.

Contact voltage U_t

Range (V)	Resolution (V)	Accuracy
0 – 2 U _{BLIMITE}	0.1	+10% - 0% of U _{BLIM} U _{BLIM} : 25V o 50V

Earth resistance measurement R_E without RCD tripping

Range	Resolution (Ω)	accuracy I _{ΔN}
1Ω - 2kΩ	1	+10% - 0% ± 0.2 V/ I _{ΔN}

Test current 0.5 I_{ΔN} of RDC**TRIPPING CURRENT FOR GENERAL RCD TYPE A AND AC.**

Range I _{ΔN}	Resolution	Accuracy I _{ΔN}
0.5 – 1.1 I _{ΔN}	0.1 I _{ΔN}	± 0.15 I _{ΔN}

Test current 0.5 I_{ΔN} of RDC**TEST OF RCD.**Rcd type AC, A
Minimum Phase – Earth voltage 127V_(RCD INDE AC), 230V_(RCD INDE A)
Rated tripping current (I_{ΔN}) 10mA, 30mA, 100mA, 300mA, 500mA, 1000mA**FREQUENCY MEASUREMENT.**

Range (Hz)	Resolution (Hz)	Accuracy
15.3 – 99.9	0.1	± (0.1%Reading + 1 dgt)
100 - 499	1	

VOLTAGE MEASUREMENT

Range (V)	Resolution (V)	Accuracy
500	1	± (2%Reading + 2 dgt)

LINE IMPEDANCE MEASUREMENT (phase-phase, phase-neutral) or FAULT LOOP IMPEDANCE (phase-earth)

Range (Ω)	Resolution (Ω)	Accuracy
0.01 – 99.99	0.01	± (2%Reading + 2 dgt)
100.0 – 999.9	0.1	
1000 - 1999	1	

Test current 10A ± 10%

Test duration 10ms

CALCULATION OF SHORT CIRCUIT CURRENTI_k max 40kA**EARTH RESISTANCE MEASUREMENT**

Range R _E (Ω)	Resolution (Ω)	Accuracy
0.01 – 99.99	0.01	± (2%Reading + 2 dgt)
100.0 – 999.9	0.1	
100 - 1999	1	

Test frequency 125Hz ± 1Hz

Test current ≤10mA

Open circuit voltage ≤80V

Test voltage waveform Sine

SAFETY STANDARDSThe instrument complies with the: EN 61010-1 and EN 61557
Insulation class 2, double insulation
Pollution level 2
Inside use; max height: 2000m
Overvoltage category CAT III 300V (phase - earth)**MECHANICAL FEATURES**Dimensions 230(L)x220(La)x90(H)mm
Weight (batteries include) approx. 1500g
Jaws opening HT99 21mm
Max conductor size 20mm**POWER SUPPLY**Battery type 4 batteries 1.5-LR14-E93
Battery life approx. 50 ore
Fusible F315mA-250V**DISPLAY**

Grafic

MEMORY

128kByte

ENVIRONMENTAL WORKING CONDITIONSReference temperature 23° ± 5°C
Operating temperature -5°C ÷ 50°C
Allowed relative temperature < 80%
Storage temperature -10 ÷ 60°C
Storage humidity < 70%**STANDARDS**CEI 64-8 612.2 Test continuity
CEI 64-8 612.3 Insulation resistance
CEI 64-8 612.6.2 Earth resistance
CEI 64-8 612.6.3 Fault loop impedance
CEI 64-8 612.9 and app.D RCD tripping test
CEI EN 60947-2 point B 4.2.4.1. (CEI 17-5)**EMC**

This instrument was designed in compliance with the EMC standards in force and its compatibility was tested relating to:

EN 55011 radiated emission
EN 50140, EN 61000 immunity
EN 61000-4-2 electrostatic discharges
EN 50140 R.F. field
EN 61000-4-4 Fast transient

This instrument was designed in compliance with the 72/23/CEE, CEM 89/336/CEE, and the 93/68/CEE.

NOTE ABOUT ACCURACY

Accuracy is indicated as [% reading + digit number]. It refers to the following atmospheric conditions: temperature 23°C ± 5°C with a relative humidity of <75%.