



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 **SPEEDTEST HT2018**

Descripción



Instrumento multifunción para la medida de los diferenciales, la resistencia de tierra de bucle y la presunta corriente de cortocircuito.

SPEEDTEST permite la verificación de los tiempos y de la corriente de disparo de cualquier tipo de diferencial (A, AC, y selectivos), con la posibilidad de comparar los tiempos de disparo detectados con los exigidos por las normativas vigentes, puede realizar la prueba en modo manual o automático con valoración final de los resultados detectados. Otra prueba fundamental que el SPEEDTEST realiza es la medida de la resistencia de tierra de bucle desde la toma de corriente con o sin la intervención del diferencial y la medida de la presunta corriente de cortocircuito. Permite realizar las verificaciones necesarias en las instalaciones eléctricas para la seguridad y la certificación, utilizando un sólo instrumento manejable y ligero.

- Incluye certificado de calibración (ISO9000)
- Salida serie RS232 para PC o impresora
- 350 posiciones de memoria.
- Sobretensión CAT.III.
- Construido bajo normas EN 61010 y EN 61557.
- Autoapagado

SPEEDTEST2018

Metel: HV002018

● RCD TRIPPING TESTS

Rated tripping current ($I_{\Delta N}$) 10mA, 30mA, 100mA, 300mA, 500mA
 Type of RCD AC, A General and Selective
 Range phase to earth voltage 100V – 250V 50, 60 Hz

● MEASUREMENT OF TRIPPING TIME IN TEST OF GENERAL AND SELECTIVE RCD, TYPE AC AND A.

Tripping time $t_{\Delta N}$

Measuring Range (ms)	Resol (ms)	Accuracy
$\frac{1}{2} I_{\Delta N}$, $I_{\Delta N}$	0÷999	1 $\pm(2\% \text{ Reading} + 2 \text{ dgt})$
$2 I_{\Delta N}$	0÷200 general	
	0÷250 selective	
$5 I_{\Delta N}$ RCD	0÷50 general 0÷160 selective	

Contact voltage U_t

Range (V)	Resolution (V)	Accuracy
$0 \div 2U_{t \text{ lim}}$	0.1	- 0%, +(2% Reading + 2 dgt)

 $U_{t \text{ LIM}} (U_t)$: 25V o 50VEarth resistance R_E without RCD tripping

Range (Ω)	Resolution (Ω)	Accuracy $I_{\Delta N}$
$1 \div 1999$	1	$\pm(5\% \text{ Reading} + 2 \text{ dgt})$

Test current 0.5 $I_{\Delta N}$ (during U_t test)
15mA (during $R_{a 15mA}$)

● TRIPPING CURRENT FOR GENERAL RCD TYPE A AND AC

General RCD with $I_{\Delta N} \leq 10\text{mA}$

Type RCD	Range $I_{\Delta N}$ (mA)	Resol. (mA)	Accuracy $I_{\Delta N}$
AC	$(0.5 \div 2) I_{\Delta N}$	0.1 $I_{\Delta N}$	- 0%, +5% $I_{\Delta N}$
A	$(0.5 \div 2.4) I_{\Delta N}$	0.1 $I_{\Delta N}$	-0%, +5% $I_{\Delta N}$

General RCD with $I_{\Delta N} > 10\text{mA}$

Type RCD	Range $I_{\Delta N}$ (mA)	Resol. (mA)	Accuracy $I_{\Delta N}$
AC	$(0.5 \div 1.4) I_{\Delta N}$	0.1 $I_{\Delta N}$	-0%, +5% $I_{\Delta N}$
A	$(0.5 \div 2) I_{\Delta N}$	0.1 $I_{\Delta N}$	- 0%, +5% $I_{\Delta N}$

● FREQUENCY MEASUREMENT

Range (Hz)	Resol. (Hz)	Accuracy
$15.3 \div 99.9$	0.1	$\pm(0.1\% \text{ Reading} + 1 \text{ digit})$

● VOLTAGE MEASUREMENT

Electrical System	Range (V)	Resol (V)	Accuracy
Single phase	0 ÷ 250	1	$\pm(2\% \text{ Reading} + 2 \text{ digit})$
Two or Three phase system	0 ÷ 440		$\pm(5\% \text{ Reading} + 2 \text{ digit})$

● LINE IMPEDANCE MEASUREMENT (phase-phase, phase-neutral)

Range (Ω)	Resolution (Ω)	Accuracy
$0.01 \div 19.99$	0.01	$\pm(5\% \text{ Reading} + 2 \text{ digit})$
$20.0 \div 199.9$	0.1	

Max peak test current 100V (test voltage) 3.17A test duration: 80ms
230V 6.64A test duration: 40ms
400V 11.5A test duration: 40ms

Accuracy current measurement $\pm 10\% I_{\text{max Pk}}$
Test frequency 50, 60Hz

● FAULT LOOP IMPEDANCE MEASUREMENT (phase-earth)

Range (Ω)	Resolution (Ω)	Accuracy
$0.01 \div 19.99$	0.01	$\pm(5\% \text{ Reading} + 2 \text{ digit})$
$20.0 \div 199.9$	0.1	
$200 \div 1999$	1	

Max peak test current 100V (test voltage) 3.17A test duration: 80ms
230V (test voltage) 6.64A test duration: 40ms

Accuracy current measurement $\pm 10\% I_{\text{max Pk}}$
Test frequency 50, 60Hz

● FAULT LOOP IMPEDANCE MEASUREMENT WITHOUT RCD TRIPPING (phase-earth $R_{a 15mA}$)

Range (Ω)	Resolution (Ω)	Accuracy
$1 \div 1999$	1	$\pm(5\% \text{ Reading} + 2 \text{ digit})$

Max peak test current 15mA
Test frequency 50, 60Hz

● MECHANICAL FEATURES

Dimensions 222(L)x162(La)x57(H)mm
Weight (batteries included) approx. 1000g

● POWER SUPPLY

Battery type 6 batteries 1.5-LR6-AA-AM3-MN 1500
Battery life approx. 40 hours in stand-by or 1000 LOOP or RCD or PHASE SEQUENCE
Fuseable 3.15A - 500V (*)
200mA - 250V (*)

(*) Not accessible to the operator

● DISPLAY and MEMORY

Display LCD custom 65mmx65mm
Memory 350 tests
Interface optical RS232 to print or to download the tests

● ENVIRONMENTAL WORKING CONDITIONS

Reference temperature $23^\circ \pm 5^\circ\text{C}$
Working temperature $-10^\circ\text{C} \div 50^\circ\text{C}$
Relative humidity allowed $< 80\%$
Storage temperature $-20 \div 60^\circ\text{C}$
Storage humidity $< 70\%$

● STANDARDS

- ELECTRICAL STANDARDS

EN61557-5 earth resistance
EN61557-3 fault loop impedance
EN61557-6 RCD tripping test

CEI EN 60947-2 point B 4.2.4.1. (CEI 17-5)

- SAFETY STANDARDS

The instrument complies with: EN 61010-1 e EN 61557
Insulation class 2, double insulation
Pollution level 2
Inside use, max height 2000m
Overvoltage category CAT III
Max voltage P-PE (phase-earth) 250V
Max voltage P-P (phase-earth) 440V

- 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 $23^\circ\text{C} \pm 5^\circ\text{C}$ with a relative humidity of $< 75\%$.