PROMAX

IC-600

MULTI FUNCTIONAL INSTALLATION TESTER

FOR TT AND TN SYSTEMS

TRUE RMS VOLTAGE AND FREQUENCY
MAXIMUM ACCURACY

UNIVERSAL TESTER
FOR DOMESTIC AND INDUSTRIAL INSTALLATIONS

STEP-BY-STEP ON-SCREEN GUIDE
FOR AN ERROR-FREE TESTING

UPGRADABLE FIRMWARE
KEEP THE INSTRUMENT UP-TO-DATE TO THE REGULATIONS

ANALYZES, DIAGNOSES AND CERTIFIES THE SAFETY IN BOTH DOMESTIC AND INDUSTRIAL INSTALLATIONS

The **IC-600** is an instrument designed for professional electricians and installers of electric (EVSE) and plug-in hybrid vehicles.

The instrument performs all the necessary tests for installation safety testing on TT and TN systems, including continuity, isolation, RCD, loop, line, voltage, frequency, earth resistance testing and phase sequence tests.

The user interface includes step-by-step guides for each test that assists the user to connect the instrument to the installation and perform the measurements. The large graphic LCD display comes with two red and green PASS/FAIL LED indicators located at both sides for an easy interpretation of the measurement results.

The results can be quickly stored and checked in the instrument itself and also can be downloaded using the included software to evaluate them and to generate measurement reports after the tests have been completed.

MEASUREMENT FUNCTIONS

- Insulation resistance with DC voltage
- Continuity of PE conductors with 200 mA test current with polarity change
- Continuity of PE conductors with 7 mA test current (continuous measurement) without RCD tripping
- Line and Loop impedance
- Loop impedance with Trip Lock RCD function
- TRMS voltage and frequency
- Phase sequence
- RCD testing (general and selective, type AC, A, F, B, B+ and EV RCD)
- Earth resistance (3-wire method)

MAIN FEATURES

- Wide **Pass/Fail LED** to avoid misreadings.
- **On-screen help** per function.
- **Earth resistance measurement** with the 3-wire method with two additional rods.
- **Built-in fuse tables** (unique feature) for an automatic evaluation of the line / loop impedance compared to the regulations.
- Real-time **online 3-voltage line monitoring**.
- **Upgradable** to keep the instrument up-to-date to the regulations.
- Automatic **polarity reversal on continuity test.**
- **Insulation test voltages** from 50 V up to 1000 V (readings up to 1000 MΩ).
- **Trip Lock function** to perform a loop impedance test without tripping the (EV) RCD.
- **Multi-system** for single and multiphase TT and TN systems
- **Built-in charger & NiMh rechargeable batteries** included as standard.
- **Automated RCD testing** procedure significantly reduces test time.
- Supports **Type B RCD** testing.
- **Bluetooth communication** with Android tablets and smart phones.
- Includes **PC software** to download test results and parameters and to create reports.

SPECIFICATIONS	IC-600 - MULTI FUNCTIONAL INSTALLATION TESTER		
	Measurement margin	**Resolution**	**Accuracy**
Insulation resistance (EN 61557-2)	[U] 50, 100, 250 VDC From 0 MΩ to 19.99 MΩ From 20 MΩ to 99.9 MΩ From 100 MΩ to 199.9 MΩ [U] 500 VDC, 1 kVDC From 0 MΩ to 19.99 MΩ From 20 MΩ to 99.9 MΩ From 200 MΩ to 999 MΩ	 0.01 MΩ 0.1 MΩ 0.1 MΩ 0.01 MΩ 0.1 MΩ 1 MΩ	 ±(5% rdg. + 3 digits) ±10% rdg. ±20% rdg. ±(5% rdg. + 3 digits) ±5% rdg. ±10% rdg.
Continuity 200 mA of PE conductor with polarity change (EN 61557-4)	From 0 Ω to 19.99 Ω From 20 Ω to 199.9 Ω From 200 Ω to 1999 Ω	0.01 Ω 0.1 Ω 1 Ω	±(3% rdg. + 3 digits) ±5% rdg. ±5% rdg.
Low resistance continuity measurement, test current 7 mA (continuous measurement)	From 0 Ω to 19.9 Ω From 20 Ω to 1999 Ω	0.1 Ω 1 Ω	±(5% rdg. + 3 digits) ±(5% rdg. + 3 digits)
Loop impedance (EN 61557-3)	From 0 Ω to 9.99 Ω From 10 Ω to 99.9 Ω From 100 Ω to 999 Ω From 1 kΩ to 9.99 kΩ	0.01 Ω 0.1 Ω 1 Ω 10 Ω	±(5% rdg. + 5 digits) ±(5% rdg. + 5 digits) ±10% rdg. ±10% rdg.
Line impedance (EN 61557-3)	From 0 Ω to 9.99 Ω From 10 Ω to 99.9 Ω From 100 Ω to 999 Ω From 1 kΩ to 9.99 kΩ	0.01 Ω 0.1 Ω 1 Ω 10 Ω	±(5% rdg. + 5 digits) ±(5% rdg. + 5 digits) ±10% rdg. ±10% rdg.
Voltage drop	From 0% to 99.9%	0.1%	Consider accuracy of line impedance
Voltage	From 0 V to 550 V	1 V	±(2% rdg. + 2 digits)
Frecuency	From 0,00 Hz to 9.99 Hz From 10,0 Hz to 499.9 Hz	0.01 Hz 0.1 Hz	±(0,2% rdg. + 1 digits)
Phase sequence (EN 61557-7)	1-2-3 or 3-2-1		
RCD testing (EN 61557-6)	IΔN: 10 mA, 30 mA, 100 mA, 300 mA, 500 mA, 1 A		
Contact voltage UC	From 0 V to 19.9 V From 20 V to 99.9 V	0.1 V 0.1 V	(-0% / +15%) lectura ± 10 dígitos (-0% / +15%) lectura
Trip-out time	From 0 ms to 40 ms From 0 ms to max. time	0.1 ms 0.1 ms	±1 ms ±3 ms
Trip-out current	0.2 x IΔN to 1.1 x IΔN (type AC) 0.2 x IΔN to 2.2 x IΔN (type A, IΔN < 30 mA) 0.2 x IΔN to 1.5 x IΔN (type A, IΔN ≥ 30 mA) 0.2 x IΔN to 2.2 x IΔN (type B)	0.05 x IΔN 0.05 x IΔN 0.05 x IΔN 0.05 x IΔN	±0.1 x IΔN ±0.1 x IΔN ±0.1 x IΔN ±0.1 x IΔN
Earth resistance (EN 61557-5)	From 0 Ω to 19.99 Ω From 20 Ω to 199.9 Ω From 200 Ω to 9999 Ω	0.01 Ω 0.1 Ω 1 Ω	±(5% rdg. + 5 digits) ±(5% rdg. + 5 digits) ±(5% rdg. + 5 digits)
Power supply	6 x 1.2 V rechargeable batteries, type AA		
Overvoltage category	CAT III / 600 V; CAT IV / 300 V		
Protection class	Double insulation		
COM port	RS-232 and USB		
Dimensions	140 x 80 x 230 mm		
Weight	1 kg		

APPLICABLE STANDARDS	
Functionality	IEC/EN 61557
Electromagnetic compatibility	IEC/EN 61326-1, IEC/EN 61326-2-2
Safety	IEC/EN 61010-1, IEC/EN 61010-031
Other reference standards for testing	VDE 0413, IEC/EN 61008, IEC/EN 61009, IEC/EN/HD 60364, HD 384, BS 7671, IEC/TR 60755, CEI 64.8, AS/NZ-3760, AS/NZ 3018

Francesc Moragas, 71 * 08907 L'HOSPITALET DE LLOBREGAT * BARCELONA * SPAIN
Tel: (+34) 93 184 77 02 * e-mail:promax@promaxelectronics.com * www.promaxelectronics.com