





ORDER CODE HV000570

MULTIFUNCTION DEVICE FOR VERIFICATION OF ELECTRIC SAFETY AND POWER ANALYSIS ON SINGLE-PHASE AND THREE-PHASE INSTALLATIONS

GSC57F is the first big **multifunction** device developed by HT!

In a single device, all functions of the most advanced systems for safety testing; power analyses, THREE-PHASE or SINGLE-PHASE (voltages, currents, powers, power factor, energies, etc.), voltage/ currentharmonic analysis (up to the 49th) and an analysis of the anomalies on power supply voltages (dips, peaks); continuity test with test current 10A.

The device has a whole variety of functions and can be used with external probes for measuring environmental parameters such as temperature/humidity of air, illuminance (Lux) further to measuring leakage currents, Loop/Line impedance and calculating the prospective short-circuit current with high resolution (0.1m0hm) in TN systems with the use of the optional accessory IMP57.

Cutting-edge management of measurement with indication, at the end of each safety test, of compliance or non-compliance with requirements with simple symbols OK or NOT OK

Reference standards

The device has been developed to carry out measurements, tests and analyses in compliance with the following standards:

- CEI 64-8
- IEC/EN61557-1 VDE 0100
- VDE 0413
- IEC/EN61010-1
- 17th edition







ORDER CODE HV000047

MULTIFUNCTION DEVICE FOR VERIFICATION OF ELECTRIC SAFETY AND POWER ANALYSIS ON SINGLE-PHASE AND THREE-PHASE INSTALLATIONS

ZG47 is the complete and versatile **multifunction device** developed starting from real installation needs. In a single device, all functions of the most advanced systems for safety testing developed by HT; possibility of carrying out power analyses, THREE-PHASE or SINGLE-PHASE (voltages, currents, powers, power factor, energies, etc.), voltage/current harmonic analysis (up to the 49th) and an analysis of the anomalies on power supply voltages (dips, peaks). The device has a whole variety of functions and can be used with external probes for measuring environmental parameters such as temperature/humidity of air, illuminance (Lux) further to measuring leakage currents, Loop/Line impedance and calculating the **prospective short-circuit current** with high resolution (0.1mOhm) in TN systems with the use of the optional accessory IMP57. Cuttingedge management of measurement with indication, at the end of each safety test, of compliance or non-compliance with requirements with simple symbols **OK** or **NOT OK**.

Reference standards

The device has been developed to carry out measurements, tests and analyses in compliance with the following standards:

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- VDE 0413 • IEC/EN61010-1
- VDE 0100
- 17th edition

Functions and characteristics

- Continuity of protective and equipotential conductors with 200mA and 10A
- Insulation with test voltage 50, 100, 250, 500, 1000VDC
- Tripping time and current on type A RCDs, AC General and Selective RCDs up to 500mA
- · Non-trip earth resistance
- Line/Loop impedance P-N, P-P, P-PE also with high resolution (0.1mΩ) with optional accessory IMP57
- Earth resistance by voltammetric method
- Ground resistivity by 4-terminal method
- Phase sequence
- Leakage current (with optional clamp HT96U)
- Measurement of electric parameters (voltages, currents, powers, energies, frequency cosphi) in single-phase and three-phase systems
- Recording of electric parameters with integration period from 5s to 60min
- Voltage and current harmonic analysis up to the 49th with THD% calculation
- Analysis of voltage anomalies (dips, peaks) with resolution 10ms
- Numerical display, display of waveforms and harmonic histogram
- Measurement of air temperature (°C/°F), relative humidity (%RH) and Illuminance (Lux) with optional external probe
- · Internal memory: 2MB
- Optical/USB interface for transferring data onto the PC
- · Backlight LCD display
- Power supply: 6x1.5V batteries type AA LR6
- Safety: IEC/EN61010-1
- · Measurement category: CAT III 600VAC between inputs, 300VAC to earth
- Size (L x W x H): 225x165x105mm
- Weight (batteries included): 1.2 kg (approx.)



Accessories provided

C2033X	Cable with 3-terminal Shuko plug
UNIVERSALKITG3	Set of 4 cables + 4 alligator clips + 3 leads
KITTERRNE	Set of 4 cables + 4 earth probes
C5700	Power supply cable for test with 10A
HTFLEX3003	Set of 3 flex 300-3000A AC clamps, diameter174mm
A0050	Power power supply 230VAC/12VDC
TOPVIEW2006	Windows software for PC + optical/USB cable
BORSA 2051	Soft carrying bag
	ISO9000 calibration certificate



Optional accessories

HT96U	Standard 1-100-1000A AC clamp, diameter 54mm
HT97U	Standard 10-100-1000A AC clamp, diameter 54mm
HP30C2	Standard 200-2000A AC clamp, diameter 70mm
HP30C3	Standard 3000A AC clamp, diameter 70mm
HT4005N	Standard 5-100A AC clamp, diameter 20mm
HT903	3x1-5A/1V box for external TA connection
C7000/05	Set of cables for continuity test 10A, 5m
C7000/10	Set of cables for continuity test 10A, 10m
HT52/05	Probe for measuring air temperature/humidity
HT53/05	Probe for illuminance measurement (Lux)
IMP57	Access. for measuring Loop impedance with high resolution
A0053	External power supply 110VAC-60Hz /12VDC
CN0050	Strap for slinging the device over one's shoulder
606-IECN	Connector with magnetic terminal
1066-IECN	Connector for cable extension banana 4mm

Functions and characteristics

- · Continuity of protective and equipotential conductors with 200mA
- Insulation with test voltage 50, 100, 250, 500, 1000VDC
- Tripping time and current on type A, AC General and Selective RCDs up to 500mA
- · Non-trip earth resistance
- Line/Loop impedance P-N, P-P, P-PE also with high resolution (0.1m0hm) with optional accessory IMP57
- · Earth resistance by voltammetric method
- · Ground resistivity by 4-terminal method
- Phase sequence
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- Internal memory: 2MB
- · Optical/USB interface for transferring data onto the PC
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- Size (L x W x H): 225x165x105mm
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Accessories provided

C2033X	Cable with 3-terminal Shuko plug
UNIVERSALKITG3	Set of 4 cables + 4 alligator clips + 3 leads
KITTERRNE	Set of 4 cables + 4 earth probes
HTFLEX33E	Flex clamp 3000A, diameter 174mm, 3 pieces
A0050	Power power supply 230VAC/12VDC
TOPVIEW2006	Windows software for PC + optical/USB cable
BORSA 2051	Soft carrying bag
	ISO9000 calibration certificate



Optional accessories

HTFLEX35	Flex 3000A AC clamp, diameter 274mm
HT96U	Standard 1-100-1000A AC clamp, diameter 54mm
HT97U	Standard 10-100-1000A AC clamp, diameter 54mm
HP30C2	Standard 200-2000A AC clamp, diameter 70mm
HP30C3	Standard 3000A AC clamp, diameter 70mm
HT4005N	Standard 5-100A AC clamp, diameter 20mm
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