

PHASE SEQUENCE INDICATORS CIRCUIT BREAKER FINDER VOLTAGE DETECTORS



PHASE DETECTORS, SWITCH DETECTORS AND PHASE SEQUENCE INDICATORS



MAIN MEASUREMENTS	LINESPLITTER	HT82	HT70	HT20S	HT38	HT5
Measuring range	0÷240VAC 0÷16A 50÷60Hz	40÷600VAC 15÷400Hz	100÷1000VAC 50÷60Hz	100÷1000VAC 50÷60Hz	200÷250VAC 50Hz	60÷250VAC 50÷60Hz
Localization of protection devices	-	-	-	-	•	-
Detection of AC voltage without contact also on insulating sheaths	-	-	•	•	-	-
Indications "R" and "L" on the display to measure phase sequence	-	•	-	-	-	-
Phase sequence and phase concordance without contact also on insulating sheaths	-	-	•	-	-	-
LED and sound indications	-	-	•	•	•	•
Network voltage (L-N, L-PE, N-PE)	•	-	-	-	-	-
Absorbed phase current	•	-	-	-	-	-
Absorbed phase current multiplied by 10 (for low-power users)	•	-	-	-	-	-
Leakage current on protection conductor	•	-	-	-	-	-
Leakage current measured in differential mode (L-N)	•	-	-	-	-	-
ADDITIONAL MEASUREMENTS						
Test of neon-filled lamps	-	-	-	-	-	•
Test of internal gas of compact fluorescent lamps	-	-	-	-	-	•
Test of internal gas of energy-saving lamps	-	-	-	-	-	•
Test of internal gas of high and low-pressure sodium-vapor lamps	-	-	-	-	-	•
Test of internal gas of halogen lamps	-	-	-	-	-	•
Test of internal gas of mercury-vapor lamps	-	-	-	-	-	•
Phase detection function with contact for AC voltage 60-250V 50/60Hz	-	-	-	-	-	•
Continuity test on non-electronic starters/reactors	-	-	-	-	-	•
Diode test	-	-	-	-	-	•
ADDITIONAL CHARACTERISTICS						
LCD display	-	•	-	-	-	-
Sound indications with buzzer	-	-	•	•	•	•
Practical breast pocket holder	-	-	•	•	-	-
Anti-shock protection sheath	-	•	-	-	-	-
Integrated torch	-	-	-	•	-	•
Schuko plug	•	-	-	-	•	-
Measurement category	CAT II 240V	CAT III 600V	CAT IV 1000V	CAT IV 1000V	CAT III 250V	CAT II 300V
Reference standard for safety	IEC/EN61010-1, IEC/EN61010-02-030	IEC/EN61010-1	IEC/EN61010-1	IEC/EN61010-1	IEC/EN61010-1	IEC/EN61010-1
Power supply	240VAC (±10%) 50/60Hz	From mains	2x 1,5V AAA	2x 1,5V AAA	From mains (HT38T) 1x 9V (HT38R)	1x 9V
Size (LxWxH) (mm)	210x60x35mm	130x69x22	160x26x20	160x26x20	95x60x30	255x60x40
Weight in grams	385g	130g	48g	48g	140g	170g
Order code	HA000951	HA000156	HR000070	HR000296	HR000038	HA000138



ORDER CODE HA000951

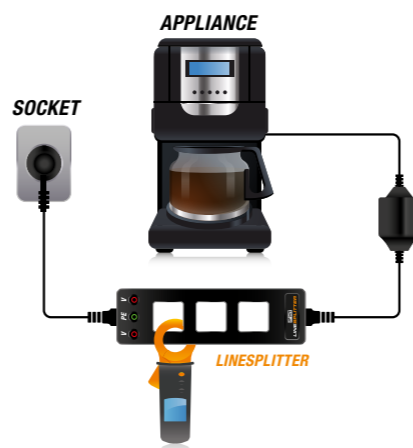
LINESPLITTER

CONDUCTOR SPLITTER

LINESPLITTER is an indispensable accessory every time you need to measure the current/power absorption or leakage current of a single-phase load supplied from socket (max 16A). This accessory separates the active conductors and the protective conductor, thus making the following measuring spots directly accessible to suitable instruments (clamp meters, clamps for measuring leakage currents, wattmetric clamps, mains analyzers):

- Mains voltage (L-N, L-PE, N-PE)
- Absorbed phase current
- Absorbed phase current multiplied by 10 (for low-power users)
- Leakage current on protection conductor
- Leakage current measured in differential mode (L-N)

In particular, the comparison between the readings obtained in the two last measuring spots, also allows evaluating whether the leakage current flows to alternative paths to the protective conductor (e.g.: current leaked in water or in the metal tubes of a boiler, immersion pump, etc.).



Functions

- Separation of phase conductor L from conductors N and PE on 2-pole and 3-pole cables
- Simple AC voltage measurement (L-N, L-PE, N-PE) through clamps/multimeters
- Simple AC current measurement through external clamps
- Current loop x1 for a direct measurement of AC current
- Current loop x10 for a direct measurement of low AC currents
- Direct measurement of leakage current on PE cable
- Indirect measurement of leakage current on L and N cables
- Use for loads with maximum current absorption 16A

Main features

Power supply:	240VAC (±10%) 50/60Hz
Connection to mains:	In-built Schuko plug, length 50cm
Connection to user:	In-built Schuko socket
Output current:	max 16A
Safety:	IEC/EN61010-1, IEC/EN61010-02-030
Measurement category:	CAT III 240V
Size (LxWxH):	210x60x35mm
Weight (batteries included):	385g

Accessories provided

User Manual



**PHASE DETECTORS,
SWITCH DETECTORS
AND PHASE
SEQUENCE
INDICATORS**



ORDER CODE **HA000156**

HT82

PHASE SEQUENCE

HT82 is a mobile device to display the **phase sequence** with **3 terminals** in a generic **three-phase** system. The device provides an **“R”** indication in case of **correct phase sequence** or **“L”** indication in case of **incorrect phase sequence**.



KIT82 Kit of 3 cables + 3 alligator clips.



ORDER CODE **HR000070** / **HR000296**

HT70|HT20s

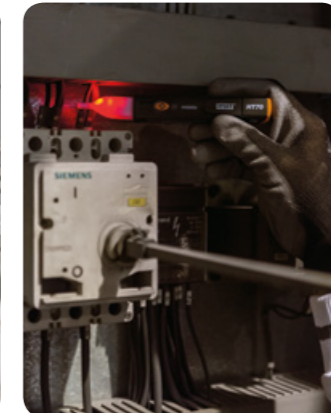
VOLTAGE DETECTOR WITH MEASUREMENT OF PHASE SEQUENCE (HT70)



HT70 is a practical innovative device capable of carrying out, further to the **phase detection** function, a **phase sequence** and **phase conformity** test with **LED** indications and **buzzer**, also on the **insulating sheath of the conductors**. The result of the test is indicated by the **red LED** (**incorrect phase sequence**) or the **green LED** (**correct phase sequence**) turning on, by simply moving the sensor first on the L1 and then on the L2 phase. HT20s is instead the model dedicated only to **searching live cables**. Also carries out measurements on insulating sheath of cables and therefore **without direct contact with live parts**.



Step1 - Take HT70 and rest it on the assumed phase L1 of the three-phase system (on the conductor or sheath) for **at least 5s** and wait for the **red LED** to flash together with the buzzer sounding.



Step2 - Now rest and keep HT70 on the assumed phase L2 (on the conductor or sheath) for **at least another 5s** and wait for the **LED** to flash together with the buzzer sounding.



Step3 - If the **green LED** turns on with steady light, phase sequence is **correct**. If, however, the **red LED** flashes, phase sequence is **incorrect**.

Functions

- Indications “R” and “L” on the display to measure phase sequence

Main features

Power supply:	from power 40V ÷ 600V / 15-400Hz
Display:	LCD display
Pollution level:	2
Safety:	IEC/EN61010-1
Measurement category:	CAT III 600V
Size (LxWxH):	130x69x22mm
Weight (batteries included):	130 g

Included accessories

KIT82	Set of 3 cables + 3 alligator clips
	Bag and user manual

Optional accessories

404-IEC#	Measuring lead with safety cap, diameter 4mm
5004-IEC#	Insulated alligator clip (20A) for 4mm banana cables
5001-#	Cable with 4mm banana-banana connector, 1.5m long

Functions

	HT70	HT20s
AC voltage detection	•	•
Led and buzzer indication	•	•
Battery check with LED indication	•	•
Phase sequence detection	•	-
Pocket clip	•	•

Main features

AC reference voltage:	100V ÷ 1000V to earth
Frequency:	50/60Hz
Power supply:	2x1.5V alkaline batteries type AAA NEDA24A LR03
Pollution level:	2
Safety:	IEC/EN61010-1
Measurement category:	CAT IV 1000V
Size (LxWxH):	160x26x20mm
Weight (batteries included):	48 g

Included accessories

Battery
User manual

**PHASE DETECTORS,
SWITCH DETECTORS
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SEQUENCE
INDICATORS**



ORDER CODE **HR000038**

HT38

CIRCUIT BREAKER FINDER

HT38 belongs to that category of instruments (not necessarily meters) that make the job easier for all engineers that need to **detect reference switches** in power lines. The instrument consists of two elements: HT38T which, once plugged in, generates a signal and a receiver HT38R, that recognizes the signal, **indicates the reference switch** via a LED and a sound.



ORDER CODE **HA000138**

HT5

VOLTAGE DETECTOR
WITH TEST OF GAS-FILLED LAMPS

Model HT5 is a practical mobile device for **quickly carrying out tests on the operation of low-pressure, sodium-vapor -pressure and high-pressure internal gas lamps**, by simply touching the lamp's surface. Other available characteristics are the **phase detector function, Continuity test and Diode test**.



Functions

- LED visual indication and sound signalling with variable tone
- Location of security devices
- Use in circuits with voltage up to 250VAC to ground
- low battery level LED signalling
- Auto Power OFF



Included accessories

HT38T Transmitter

HT38R Receiver

Battery (receiver)

Transport bag

User manual



Main features of HT38T

Power supply:	230VAC, 50Hz
Max signal output current:	<20mA
External connection:	integrated Schuko Europlug plug
Operating temperature:	0°C ÷ 40°C (32°F ÷ 104°F)
Operating humidity:	<80%RH
Storage temperature:	0°C ÷ 50°C (32°F ÷ 122°F)
Storage humidity:	<95%RH
Dimensions (L x P x H):	95x60x30mm
Weight:	140 g



Main features of HT38R

Safety:	IEC/EN61010-1
EMC:	IEC/EN61326-1
Insulation:	double insulation
Pollution Level:	2
Measurement category:	CAT III 250V
Max operating altitude:	2000m



Functions and characteristics

- Operation test of neon and fluorescent tubes
- Operation test of neon lamps with E27 coupling
- Operation test of sodium-vapor lamps
- Operation test of halogen lamps
- Phase detector function for AC voltage 60-250V 50/60Hz
- Continuity test with buzzer
- Diode test
- LED indications and sound notifications
- Integrated torch



Main features

Power supply:	1x9V batteries type IEC 6F22
Safety:	IEC/EN61010-1
Measurement category:	CAT III 300V
Size (LxWxH):	255x60x40mm
Weight (batteries included):	170g



Included accessories

Batteries

User manual