

TESTING
EQUIPMENT



TESTING EQUIPMENT

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AMPSTIK® HIGH VOLTAGE AMMETER

The sensor is not position sensitive, just slip the Ampstik over a conductor and read the LCD. For those applications where the LCD is not visible, with a push of the button the user can put the meter into the hold mode, slip the instrument over the conductor, and then retrieve the instrument to view the measurement from the conductor.

The Ampstik is easy to use and provides accurate information to anyone working with medium and high voltage. It gives line personnel the right answers so they have the ability to make decisions in the field.

The housing of the Ampstiks are made of urethane and built to operate safely even in severe utility environments. They are resistant to shock, water repellent, and unsusceptible to flame. They also operate in a wide temperature environment.

One meter is all that the user will require. The Ampstik measures in every electric utility setting. Its linear current sensors accurately measure loads from 1 amp to 5000 amps, as well as accurately measures in low to high voltage environments of up to 500kV.

Product Number	Product Description	Voltage	Current	Display	Sensor Opening (cm)
8-020XT	AMPSTIK	0 to 500 kV	1-5000A	3.5 Digit	6.35
8-022	Wide Jaw True RMS Ampstik Ammeter	0 to 69 kV	1-2000A	3.5 Digit	9.8
8-023	5000 Amp Wide Jaw True RMS Ampstik Ammeter	0 to 69 kV	1-5000A	3.5 Digit	9.8
8-024	Wide Jaw High Voltage True RMS Ampstik Ammeter	0 to 400 kV	1-2000A	3.5 Digit	9.8



AMPSTIK® PLUS HIGH VOLTAGE AMMETER

The AmpstikPlus uses the same current technology that was developed for the original SensorLink Ampstik. The key feature of the AmpstikPlus is the ability to hold up to four True RMS amperage readings, ending the need to raise and lower the hotstick for each reading.

The opening of the current sensor is electronically closed, while external currents are electronically rejected. This sensor design enables the user to measure an individual conductor within close proximity to adjacent current carrying conductors.

The SensorLink patented amp sensor is not position sensitive; just slip the AmpstikPlus over the conductor. The meter will store the current measurement within two seconds. Move to the next conductor and repeat the process.

Return the instrument to eye level when all four of the measurements have been completed. This easy storing and retrieval of data makes the AmpstikPlus a practical and labor saving instrument.

The universal hotstick adaptor and internal structure of the AmpstikPlus are made of long glass fiber reinforced thermoplastic polyurethane called Celstran. This space-age polymer is non-conductive and extra tough to protect the amp sensor. The housing is made of urethane and built to operate safely, even in severe utility environments. The AmpstikPlus is resistant to shock, water repellent, unsusceptible to flame and operates in a wide temperature environment.

Product Number	Product Description	Voltage	Current	Display	Sensor Opening (cm)
8-020 XT PLUS	AMPSTIK PLUS	0 to 500 kV	1-500A	3.5 Digit	6.35

OHMSTIK PLUS - LIVE-LINE OHMMETER



The OhmstikPlus Live-Line Micro Ohmmeter measures the micro-ohm resistance of conductors, connectors, splices and switching devices positioned directly on an energized, high voltage lines.

The OhmstikPlus calculates resistance by measuring the AC amperage in the line and the voltage drop due to the resistance of the line segment under test. Using the AC current in the line ensures that realistic current distributions through the connection are being measured. The instrument is pressed against the splice or connector in such a manner that the connection under test is between the two electrodes. In a few seconds the instrument is removed from the line and the line amperage and resistance are displayed on the front panel LCD. The Ohmstik Plus is designed to store up to nine sets of readings. The ability to hold the multiple readings ends the need to raise and lower the hot stick after each measurement.

This measurement is much more direct than infrared thermography, and is not subject to emissivity, weather, current loading, background, and other influences that cause infrared errors.

Product Number	Product Description	Voltage	Current	Micro-Ohms	Display	Sensor Opening (cm)
8-082 XT PLUS	OHMSTIK PLUS	0 to 500 kV	1 to 1400A	5 to 2500	Graphics LCD	6.35
8-084 PLUS	Wide Jaw Liveline Micro Ohmmeter Stores 9 Readings	0 to 500 kV	1 to 1400A	5 to 2500	Graphics LCD	9.8
8-090 PLUS	Ultra Wide Ohmmeter	0 to 500 kV	1 to 1400A	5 to 2500	Graphics LCD	15

QUALSTIK PLUS POWER QUALITY METER



The Qualstik Power Quality Meter has been developed specifically for measurement of four important items of power quality in the electric utility industry. These are Current, True Power Factor, Total Harmonic Distortion and the Direction of Current Flow.

The Qualstik is not position sensitive, just slip it over a conductor and touch the electrode in the bottom of the fork to the line. The meter will store and calculate the three measurements within 10 seconds. The current reading is shown on one line of the display while the power factor and THD readings share the other line. The direction of current flow indication shows below the other readings on the display.

The housing of the Qualstiks are made of urethane and built to operate safely even in severe utility environments. They are resistant to shock, water repellent, and unsusceptible to flame. They also operate in a wide temperature environment.

The Qualstik is an excellent survey tool to assist determining placement of power factor correction devices as well as identifying other power quality problems.

The QualstikPlus is designed to store up to eight sets of readings, which the user is then able to delete on the instrument.

Product Number	Product Description	Voltage	Current	Display	Sensor Opening (cm)
8-061 XT PLUS	Qualstik Live-Line Power Quality Meter	600V to 500 kV	1-2000A	Graphics LCD	6.35
8-062 PLUS	Wide Jaw Qualstik Live-Line Power Quality Meter	600V to 500 kV	1-2000A	Graphics LCD	9.8



RADIO AMPSTIK® - RADIO LINKED MULTIPLE READING AMMETER

The Radio Ampstik uses the same current sensor technology as the original Ampstik. Its key feature is the ability to display the current reading up to 50 feet away from the sensor. The user has the option to hold the display in their hands, mount it to their hotstick, or hang it on their bucket.

The Radio Ampstik display can hold up to four True RMS amperage readings, and makes it easy to record the measurements for further review. The easy storage and retrieval of data make it a labor saving and useful instrument.

The sensor for the Radio Ampstik was re-engineered to optimize its new wider opening (2.5 inch, 6.35 cm) that is more durable and can accurately measure from 1 to 5000 amps.

The sensor is based on the SensorLink patented amp inductive sensor, which does not use magnetic materials and has no moving parts. The opening of the sensor is electronically closed and external currents are also electronically rejected. The sensor is not position sensitive; just slip the Radio Ampstik sensor over a conductor.

The display will show the current measurement and continue to update the reading 3 times per second. A single push button switch operates the display.

By holding down the switch, the user is able to change the mode: to Hold up to four readings, to continuously display readings in the RUN mode, to Erase readings; or Power Off the display. When in the Hold mode, by pressing and quickly releasing the switch, the user can review each of the recorded readings.

The Radio Ampstik puts the display wherever the user finds it the most useful. The easy storing and retrieval of data make it a labor saving and practical instrument.

Product Number	Product Description	Voltage	Current	Display
6-120	RADIO AMPSTIK	0 to 69 kV	1-5000A	5 Digit

TROUBLEMAN'S KIT - RADIO BASED AMMETER & VOLTMETER



The SensorLink Troubleman's Kit consists of the Radio Ampstik and the radio-based Voltstik. These instruments are designed to assist the modern day electric utility troubleshooter in resolving problems in their low and medium distribution circuits.

Troubleshooting Voltage Problems

The Voltstik allows the user to measure the potential of any two points within a medium voltage distribution system. Voltage drop along a line can be measured or a check of phase to ground voltage on both the primary and secondary voltages. It can determine if the cause belongs to the utility or the customer.

Phasing

The most common use for measuring voltage in a distribution system is measuring the phase to phase voltage. In the past, this has been performed with a dedicated instrument called a "Phasing Set", which involves two men and two hot sticks.

Non-Conductive

The universal hotstick adaptor and internal structure of both the Ampstik and Voltstik are made of a long, glass, fiber reinforced, thermoplastic polyurethane called Celstran®. This space-age polymer is non-conductive and extremely strong.

Remote Display

The display shows the amp or voltage measurement and continues to update the reading three times per second using a non-licensed 900 MHz radio. The Remote display gives the user instant confirmation of the reading.

Product Number	Product Description	Range of Operation			Resolution		Display
		Voltstik	Ampstik	Current Sensor	Voltage	Amps	
6-333	TROUBLEMAN'S KIT	0-37kV	0-69kV	1-5000A	1 Volt	0.1A	5 Digit

VOLTSTIK - RADIO BASED DISTRIBUTION VOLTMETERS



The Voltstik is a distribution voltage voltmeter designed for use on lines and in substations. This meter is employed onto a line by using a hot stick and universal chuck adapter. It is capable of measuring voltage phase to phase, and phase to ground. This high impedance instrument is an excellent choice for solving multiple problems associated with operating a medium voltage system. Its key applications are defined under three groups, safety confirmation of the voltage present, troubleshooting voltage problems, and phasing.

The only points on the entire meter that conduct a signal are the two ends. This design is the safest method to make a two-point voltage measurement.

The Remote display gives the user instant confirmation of the reading. The user has the option to hold the display in their hands or mount it to a hot stick.

The display shows the voltage measurement and continues to update the reading three times per second using a non-licensed 900 MHz radio. The display features a five-digit display that shows full scale 1-volt resolution. While in the HOLD mode the display will hold up to four readings. This handy display allows the user to keep both eyes and hands on the task of taking the measurement.

Product Number	Product Description	Voltage	Resolution	Display
6-133	VOLTSTIK	0-37kV	1 Volt	5 Digit



AMCORDER - RECORDING AMMETER

The True RMS inductive sensor does not use magnetic materials and has no moving parts. The opening of the sensor is electronically closed and external currents are electronically rejected. The accuracy, external current reject, and range of currents measured by the patented amp sensor substantially exceed the performance of the best clamp-on sensors. The key feature of the unit is the ability to leave it deployed on the line to record average current readings every 15 minutes for 30+ days. It easily attaches to the line with a standard shotgun style hotstick. Once on the line, it immediately begins to collect and record the current load on the line.

An Amcorder is equipped with an infrared serial port for communicating the recorded data into the user's PC. The data is downloaded through SensorLink's Softlink software, which allows the user to download, view and query the data stored on the Amcorder.

Softlink is a user-friendly software interface that allows the user to download, view, graph and export data from the Amcorder into Microsoft Excel. The data directly transfers from the Amcorder into Excel through an Infrared Port. Microsoft Excel not included.

Product Number	Product Description	Range of Operation		Resolution
		Voltage	Current	
6-920-3	3 x AMCORDER	69kV	1-1000A	0.1A



VARCORDER - AMP, POWER FACTOR & VAR RECORDER

The Varcorder measures and records Amps and Power Factor. A voltage constant is then applied in software to calculate VARs. The Varcorder uses the same current sensor technology as the original Ampstik. This patented amp sensor does not use magnetic materials and has no moving parts. The opening of the sensor is electronically closed, and external currents are electronically rejected. The accuracy, external current reject, and range of currents measured by the patented amp sensor substantially exceed the performance of the best clamp-on sensors. The true power factor is calculated by measuring the electric field in comparison with the current reported from the amp sensor. The key feature of the unit is the ability to leave it deployed on the line to record readings every 15 minutes for 90+ days. It easily attaches to the line with a standard shotgun style hotstick. Once on the line, it immediately begins to collect and record the current and power factor on the line.

The Varcorder is equipped with an infrared serial port for communicating the recorded data into the user's PC. The data is downloaded through SensorLink's SoftLink software, which allows the user to download, view and query the data stored on the Varcorder.

SoftLink is a user-friendly software interface that allows the user to download, view, graph and export data from the Varcorder into Microsoft Excel. The data directly transfers from the Varcorder into Excel through an Infrared Port. Microsoft Excel not included.

Product Number	Product Description	Range of Operation		Resolution	Power Factor
		Voltage	Current		
6-910-3	3 x VARCORDER	69kV	1-2000A	0.1A	-0.71 to 0.71



CC-363-C

CC-363-K



C

K

STANDARD ELECTRONIC VOLTAGE DETECTOR FOR INDOOR AND OUTDOOR USE

With a precise and absolutely stable operating threshold, the ELECTRONIC VOLTAGE DETECTORS offer users maximum safety on MV lines and installations.

DOUBLE SIGNALLING

Voltage presence is indicated by both:

- extremely bright red flashing LED's (visible at more than 50 meters even in unfavourable light),
- powerful rated audible signal > 60 dB/2 m.

CHECKING

By pressing the test button, the operator checks that the detector is working properly. When the test button is released, a timed green LED lights, indicating both the detector is operational and the self testing of the unit continues.

Continuous monitoring conditions

HIGH RELIABILITY

Tropicalized: -25 / +55 °C.
- housing made from polycarbonate with high mechanical properties and dielectric strength.

Removable electrode

POWER SUPPLY

- four 1.5 V batteries type LR 61.

END FITTINGS:

- "C" for hexagonal sticks.
- "K" for universal sticks.

WEIGHT

500 g with batteries

Product Number	Frequency (Hz)	Operating Voltage (kV)	Weight Detector (g)
CC-365-101-(*)	50	5 - 10	500
CC-365-10/30-(*)	50	10 - 30	500

* Specify type of mounting when ordering: C or K.
Packaging: unit supplied complete in a case with batteries and contact electrodes (straight and V-shaped).
Total weight: 1100 g. Total size: 340 x 275 x 83 mm. For other voltages, please consult us.



CC-875-3.3/66-K



CC-875-10/36-C



C

K

IEC ELECTRONIC VOLTAGE DETECTORS, "COMPACT SERIES" FOR INDOOR AND OUTDOOR USE

COMPACT AND LIGHT, IT OFFERS:

CC-875-10/36 MODEL:

- + a wide band (10/36 kV)
- + a universal application (50/60 Hz)

CC-875-3.3/66 MODEL:

- + an automatic multi range (3.3/11 kV and 22/66 kV)
- + a universal application (50/60 Hz)

VOLTAGE PRESENCE IS INDICATED BY

CC-875-10/36 MODEL:

- + red flashing LED (very bright -visible at more than 50m in direct lighting)
- + powerful rated audible signal > 60 dB(A) / 2m

CC-875-3.3/66 MODEL:

- + red flashing LED (very bright -visible at more than 50m in direct lighting)
 - one red flashing LED for voltage 3.3/11 kV
 - one red flashing LED and one fixed LED for voltage 22/66kV
- + powerful rated audible signal > 60 dB(A) / 2m

OPERATING CHECK

CC-875-10/36 MODEL:

By pressing the TEST button, correct operation is indicated as follows :

- + a red LED flashes on
 - + sound signal
- (during and after this test, the timed green LED lights up and indicates that the detector is ready)

CC-875-3.3/66 MODEL:

By pressing the TEST button, correct operation is indicated as follows :

- + sound signal
- + two lights (one red flashing LED and one fixed LED flashes on)

CHARACTERISTICS

- + Detectors have unitary adjustment and are checked by routine test
- + Dielectrically tested on substation bars (bridging test)
- + Precise and stable operating threshold
- + Reduced sensitivity to induced voltages
- + Reduced sensitivity to interference fields
- + High environmental resistance (impacts, vibrations, moisture)

USE FROM 50 TO 60 Hz

Temperature conditions: class N (IEC-61243-1 standard)

Storage and operation: -25/ +55 °C

Robust housing

Power supply: 1 x 9V alkaline battery type 6LR61

Contact electrodes fitted to the housing by screwing and are easily interchangeable

END FITTINGS

C = hexagonal 12mm, for hexagonal end-fitting sticks

K = universal, for universal end-fitting sticks

Weight of the detector: 420g

Size of the detector: Ø 59 x 270mm

PACKAGING

unit supplied complete in a case with batteries and contact electrodes

Total weight: 1100g

Total size: 340 x 275 x 83mm

Product Number	Operating Voltage (kV)	Frequency (Hz)	Weight (kg)	
			Detector	Detector and Case
CC-875-10/36*	10 - 36	50-60	0.42	1.1
CC-875-11/33*	11 - 33	50-60	0.42	1.1

* Specify type of mounting when ordering: C or K.



CL-8-36

TWO-POLE PHASE COMPARATORS FOR INDOOR USE

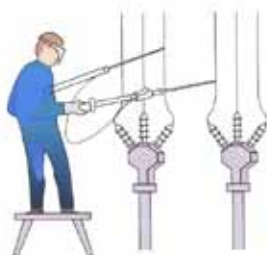
The DETEX CL-8-36 detects differences in voltage between any two points of an installation indicated by LED's. It also enables assessment of the order of magnitude of the residual voltage induced by nearby live lines or circuits, and thus differentiates it from the one provided directly from a high voltage source.

WIDE RANGE OF VOLTAGES

- + 2 to 36 kV.
- + High luminosity.

COMPACT

- + 0.62m with probes dismounted.
- + High dielectric quality insulating material.
- + Two 1.25m elements with removable probes, connected via a high-insulation lead.
- + Max. use distance: 2.25m (with probe extenders).
- + Operation testing: with a checking device.
- + Lead length is 1.5m



Checking for phase matching



Checking for H.V. fuse failure

Product Number	Product Discription	Operating Voltage (kV)	Tester and Case	
			Dimensions (mm)	Weight (kg)
CL-8-36	Tester in plastic case	2 - 36	150 x 195 x 650	7.5
CL-8-36/1	Tester with two probeextenders	2 - 36	150 x 195 x 650	7.8

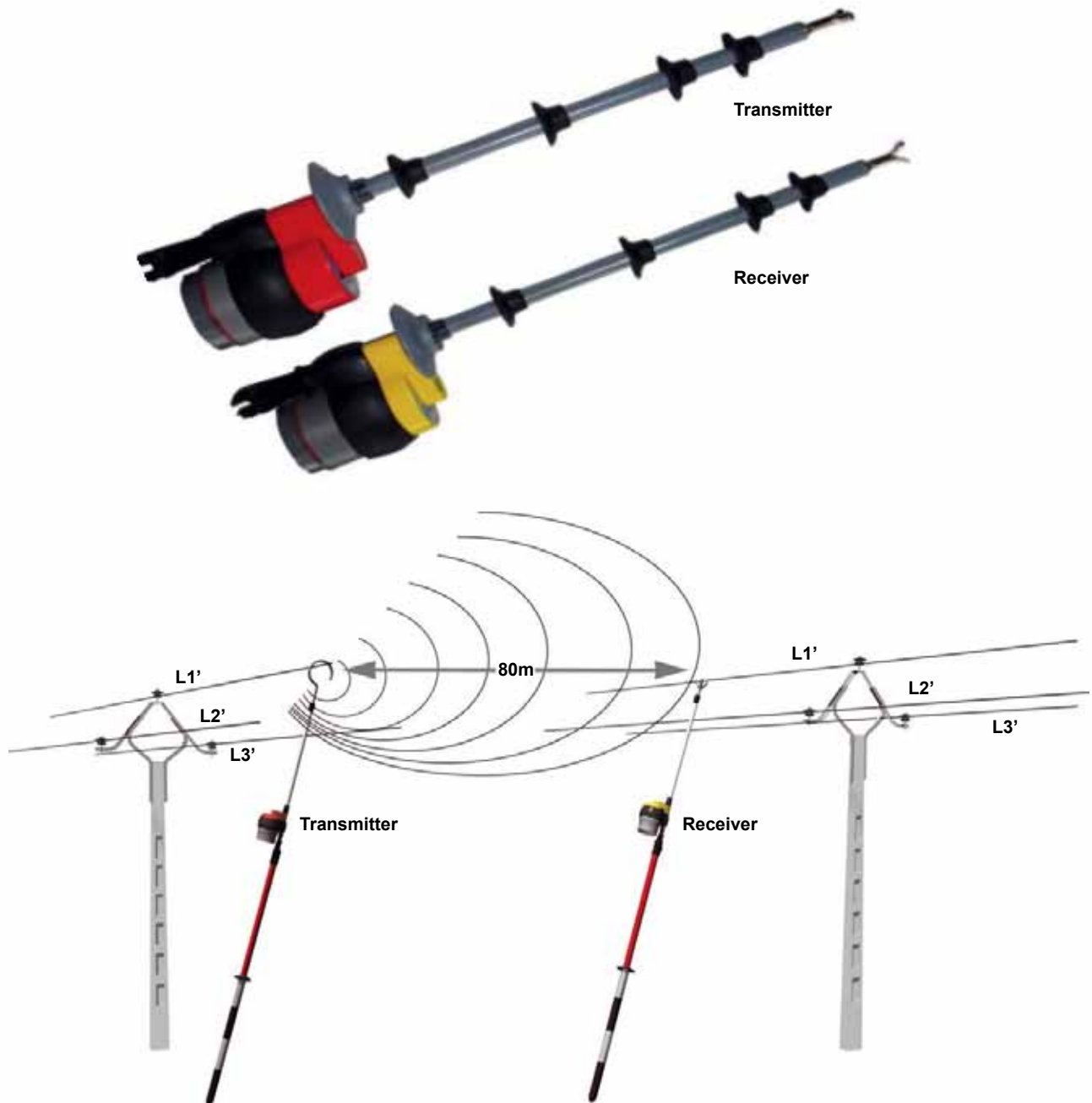


CL-1-06

PIEZOTESTTM SEPARATE TESTING DEVICE FOR PHASE COMPARATOR

- + Piezo-electric generator activated via a handle mechanism providing a high frequency voltage.
- + Metal contact at the tip of the device. This contact may connect to the "banana" plug of the extension lead to facilitate testing on very long detectors.
- + Earth socket at the base of the unit receiving a plug for making closed-circuit tests.

Product Number	Product Discription	Dimensions (mm)	Weight (kg)
CL-1-06	In case with lead	190 x 32 x 65	0.3



WIRELESS PHASE COMPARATOR

The wireless phase comparator allows to check if the 2 active conductors' voltage are in phase or not.

- + Distances between both points of measurement until 80m in openfield.
- + Wireless and without maximum time measurement.
- + Autotest of the receiver, the transmitter and good radio link between both device.
- + IEC 61481 (phase comparator).
- + Sound and luminous indication.
- + Communication frequency 433 MHz. Battery 9V.

Product Number	Frequency (Hz)	Voltage (kV)	Antenna Length (m)	Battery	Weight (g)
CL-12-4/12 *	50 / 60	4 - 12	0.6	2x 9 V	1750
CL-12-12/36 *	50 / 60	13 - 36	0.6	2x 9 V	1750
* To be use with insulating sticks: CM-4400 and CM-4600 series and K end-fittings adaptors.					



STANDARD ELECTRONIC VOLTAGE DETECTOR FOR INDOOR AND OUTDOOR USE

- + Frequency and voltage phase memory.
- + Integrated TEST push-button.
- + Orange LED = indication that frequency and voltage are in memory.
- + Green LED = phasing indication.
- + Red LED = non-phasing indication.
- + Powered by a 6V LR 61 9 V battery.
- + Delivered in carrying case.

Product Number	Voltage (kV)	Length of Antenna (m)
CL-7-06/18*	6 - 18	0.55
CL-7-10/30*	10 - 30	0.85
CL-7-10/30-1*	10 - 30	1.15
CL-7-12/36*	12 - 36	1.2

* Specify type of mounting when ordering: C or K.



CL-5-36
CL-5-03

TWO-POLE PHASE COMPARATOR FOR INDOOR AND OUTDOOR USE

- + Precise indications provided by the galvanometer needle;
- + Dials are calibrated according to voltage.
- + Assessment of the voltage value on testers/measurers.
- + Complete function testing built-in, with TEST push-button (battery supplied).
- + Consists of two elements connected by a high-insulation lead.
- + Removable handles.
- + Device delivered in metal case.
- + 140 x 250 x 850 mm - 7.5 kg.

Product Number	Voltage (kV)	Dial Scale (kV)	Observations	Device in Metal Case	
				Dimensions (mm)	Weight (kg)
Phase Tester					
CL-5-36	6 - 36	5 - 10 - 15 - 20 - 25 - 30 - 36 A.C/D.C	straight antennae	140 x 250 x 850	7.5
Tester-measurer					
CL-5-03	0.75 - 3	0.75 - 1 - 1.25 - 1.5 - 3 A.C/D.C	straight antennae	140 x 250 x 850	7.5



CC-245-63/9-C

C



CC-245-150/420-K

K

AC HIGH VOLTAGE DETECTORS

Designed to give users maximum safety, these detectors of the CC-245 Series are the result of the most modern developments in electronic research. They offer a number of important properties and advantages.

Double signalling

Voltage presence indicated at the same time by:

- + 4 extremely bright red flashing electro-luminescent diodes (visible at more than 50 meters even in direct lighting),
- + a powerful rated acoustic signal (60 dB/2 m).

Checking

Satisfactory operation of the unit is indicated:

- + When pressing the test button, by:
 - the red diodes flashing,
 - the acoustic signal sounding.
- + When releasing the TEST button, by:
 - timed green up diodes lighting.

As long as they light, the unit continues its self-testing and the detector is fully operational.

High specifications

- + Detectors are adjusted, tested and controlled one by one.
- + Remarkably resistant to impacts, vibrations, extreme temperatures, humidity and sudden changes in the atmosphere (condensation, freezing).

- + Precise and stable operating threshold. Insensitivity to induced voltages by limiting the operating voltage range.
- + Robust housing made from polycarbonate with high mechanical properties and dielectric strength.
- + The contact electrodes are simply screwed to the housing and are therefore easily interchangeable.

Power supply

- + One 9 V battery type 6 LR 61.

End fittings:

- + "C" for hexagonal sticks.
- + "K" for universal sticks.

Weight

650 g (with battery).

Packaging

Units supplied complete with battery and electrode in a rigid synthetic case with handle.

Product Number	IEC 61243-1 edition 2	Operating Voltage (kV)	Contact Electrode Ø mm	Body Colour	Temperature	Weight (g)
CC-245-63/90-(*)	•	63-90	120	Yellow	-25/+55 C°	650
CC-245-150-(*)	•	150	120	Red	-25/+55 C°	650
CC-245-225/420-(*)	•	225-420	200	Red	-25/+55 C°	650
CC-245-60/150-(*)	•	60-150	120	Red	-25/+55 C°	650
CC-245-63/150-(*)	•	63-150	120	Red	-25/+55 C°	650
CC-245-90/225-(*)	•	90-225	120	Red	-25/+55 C°	650
CC-245-150/420-(*)	•	150-420	120	Red	-25/+55 C°	650
CC-245-225/550-(*)	-	225-550	200	Red	-25/+55 C°	650
CC-245-315/765-1-(*)	-	315-765	200	Red	-25/+55 C°	650
* Please specify type of mounting when ordering: C or K.						

INFRARED THERMOMETER



MX704 - INFRARED THERMOMETER

High-performance MX-704 infrared thermometer. Offers adjustable emissivity functions.

Allows users to measure temperature without knowing the target and the emissivity checking the material properties of the surface.

- + Temperature data storage.
- + Accuracy $\pm 2^{\circ}\text{C}$ with a resolution of 0.10.
- + Response time: 500ms.
- + Auto Power off: Automatically after approx.6 seconds.
- + LCD display 3 + 1/2 back light in accordance with temperature sensibility.
- + Low battery indicator.
- + Switchable on/off laser sighting.
- + Electronic trigger lock.

Product Number	Measure Temperature	Operation Temperature	Battery	Dimensions	Weight (g)
MX-704*	Measure: -32 to +535°C -25 to +995°F	Operation 0 to +50°C	1 battery 9 V 6 LR61	130 x 180 x 40	195

* Includes battery, soft carrying case and instruction manual.



CL-4-10/30-M *

CL-4-10/30-2 **



VOLTAGE DETECTOR WITH LEDS FOR INDOOR USE WITHOUT BATTERIES

Built-in device for checking operation of the led's indicator via a piezo-electric generator.
High-brightness led's indicator.

- + Pivoting contact electrode enabling wire contact at any angle.
- + Sturdy thermo-plastic moulded case providing.
- + Ø 58.5 mm compatible with aperture housing.
- + Fixed stick or Telescopic insulating stick.

Product Number	Voltage (kV)	Length - Folded (m)	Length (m)	Weight (g)
CL-4-10/30-M *	10 - 30	-	1.35	1000
CL-4-10/30-2 **	10 - 30	0.85	1.26	950

* Delivered inn vinyl sheath with wall brackets CI-06-D.
** Delivered in canvas, waterproof with ramp.

VOLTAGE DETECTOR WITH LEDS FOR INDOOR USE (COMPACT SERIE) WITHOUT BATTERIES

For indoor use. This compact serie voltage detector is designed to be carried easily by operators. Voltage presence is indicated by a high-brightness LED's indicator. Built-in device for checking of the LED's indicator by a piezotest generator.

- + Equipped with a telescopic handle.
- + Contact electrode.



Product Number	Voltage (kV)	Length - Folded (m)	Length (m)	Weight (g)
CL-2-5/36-2	5 - 36	0.33	0.9	400
CL-2-10/30-2	10 - 30	0.33	0.9	400

Other models fixed or telescopic, please contact us.
Delivered in holster.



VOLTAGE TESTER FOR M.V. SEPARABLE CONNECTORS

- + Check the absence of voltage on the capacitive terminals of plug-in M.V. bushings.
- + Sensor in the form of a bent finger enabling removal and reinstallation of the terminal insulating cover.
- + Signal via beeping and bright red flashing of electro-luminescent diodes.
- + Built-in function test via the "TEST" button which covers the entire device.
- + Permanent stand-by state.
- + Power supply: four 1.5 V, R-6 batteries.
- + Mounting on insulating stick via a universal end.

Product Number	Product Discription	Dimensions (mm)	Weight (kg)
CC-151-K	Tester in rigid case with batteries	70 x 100 x 165	0.7
CC-45-K	Special 45kV insulation stick	Length = 125	0.6

VOLTAGE DETECTOR



- + For indoor use
- + Built-in device for checking operation of the LED's indicator via a piezo-electric generator.
- + High-brightness LED's indicator.
- + Sturdy thermo-plastic moulded case providing.
- + Pivoting contact electrode enabling wire contact at any angle.
- + Telescopic insulating stick.

Product Number	Product Discription	Operating Voltage (kV)	Length (m)		Weight (kg)
			Extended	Folded	
CL-4-41/2	Delivered in a waterproof fabric case with strap	5 - 40	1.26	0.85	0.95

PERMANENT LIMINOUS INDICATOR



- + Permanently installed on bus bars, luminous indicator signals the presence of voltage at a glance.
- + Single-pole 5 to 75 kV indicators.
- + Signaling the presence of voltage by 7 electroluminiscent diodes.
- + For indoor use.

Product Number	
CL-40010	For round 5 to 20 mm \varnothing wires and 1 to 20 mm flat bars



MX-430-M EARTH RESISTANCE TESTER

The MX-430-M allows for the measurement of earth resistance and earth specific resistivity and also the spurious voltages caused by grounding parasitic voltage presence. This equipment is suitable for fast and easy measurement of the grounding resistance in home, industrial buildings and substations.

- + Wide range of measurement from 0.01 Ω to 20 K Ω
- + High visibility 3 1/2 digit display with direct readings, even under sunlight
- + Supplied with a rechargeable internal battery. A smart charger is microprocessor-controlled and can be powered from the mains by a power plug provided source or from a 12 V car battery.

TECHNICAL FEATURES

- + Application: measurement of grounding resistances (with 3 earth rods) earth resistivity (with 4 earth rods) and spurious voltage presence
- + Range of measurement: 0 - 20 Ω ; 0-200 Ω ; 0-2000 Ω and 20 K Ω
- + Voltmeter: voltmeter function in AC range as a conventional voltmeter 0-200 V AC
- + Operation frequency: 1470 Hz
- + Current in and out put power: less than 0,5 W and the out put current is limited to less than 15 mA (peak to peak)
- + Operation temperature: -10°C / +50°C
- + Storage temperature: -25°C / +65°C
- + Humidity: 95% RH (without condemnation)

ACCESSORIES INCLUDED

- + Connection wire to supply the charger with a 12 V battery
- + Battery charger 220-240 V
- + Storage bag

Product Number	Dimensions (mm)	Weight (kg)
MX-430-M	221 x 189 x 99	2

ACCESSORIES (MEASUREMENT KIT) MX-433-T



- + 1 storage bag
- + 4 earth rods copper plated steel
- + 1 x 5 meters black cable
- + 1 x 40 meters red cable
- + 2 x 20 meters cable (1 blue and 1 green)
- + 1 x 5 meters green cable to connect to the grounding system
- + 1 hammer

Product Number	Dimensions (mm)	Weight (kg)
MX-433-T	570 x 220 x 160	7.7