



Messgeräte Measuring Instruments



Spannungsprüfer / Voltage tester

Drehfeldrichtungsanzeiger / Rotating field indicator

Multifunktionsmessgeräte / Multifunction tester

Zangenmessgeräte / Current clamp

Isolationmessgeräte / Isolation tester

Phasenvergleichler / Phase comparator

the strong
Partner
for your
Safety

measuring instruments

low voltage

two-pole voltage tester

continuity tester - Dutest

- continuity tester and circuit tester
- measure range 0 - 100 Ohm/ 1 kOhm/10 kOhm
- nominal voltage range up to 400 VAC/DC
- polarity test
- flashlight function
- DIN EN 61010-1
- CAT III 300 V
- power supply 3 x 1,5 V IEC LR 6



Description	Material number
circuit indicator Dutest	9003000

voltage tester with rotating field indicator Duspol Analog

- voltage range 12 – 1.000 V AC/DC
- LED display without push button confirmation (high-ohm test)
- load switch through push button (low-ohm test)
- battery independent voltage-display from 50 V AC/DC
- vibration alert at test-grip
- knowingly trigger of an 30 mA ground fault circuit interrupter
- rotating field direction test at three phase current grid
- one-pole outer cable test (phase)
- protection class IP 65
- CAT IV 600 V
- DIN EN 61243-3 (VDE 0682-401):2015



Description	Material number
voltage detector with rotating field indicator Duspol analog	9003024
storage bag for voltage tester Duspol	9007010

voltage and continuity tester Duspol Expert

- voltage range 12 – 1.000 V AC/DC
- LED display without push button confirmation (high-ohm test)
- load switch through push button (low-ohm test)
- battery independent voltage-display from 50 V AC/DC
- vibration alert at test-grip
- knowingly trigger of an 30 mA ground fault circuit interrupter
- rotating field direction test through green LED (left/right)
- one-pole outer cable test (phase)
- acoustic continuity test through loud test-buzzer and optical through yellow LED
- measuring point lighting through white High Power LED
- protection class IP 65
- CAT IV 600 V
- DIN EN 61243-3 (VDE 0682-401):2015



Description	Material number
voltage and continuity tester Duspol Expert	9003022
storage bag for voltage tester Duspol	9007010

voltage tester Duspol Digital

- voltage range 1 – 1.000 V AC, 1.200 V DC
- low voltage range: 1.0 V up to 11.9 V
- TRUE RMS
- frequenz range 1 - 1.000 Hz
- resistance measurement up to 300 kΩ
- measurement of forward voltage of diodes
- LED display without push button confirmation (high-ohm test)
- load switch through push button (low-ohm test)
- battery independent voltage-display from 50 V AC/DC
- vibration alert at test-grip
- knowingly trigger of an 30 mA ground fault circuit interrupter
- rotating field direction test through green LED (left/right)
- one-pole outer cable test (phase)
- acoustic continuity test through loud test-buzzer and optical through yellow LED
- measuring point lighting through white High Power LED
- protection class IP 65
- CAT IV 600 V
- DIN EN 61243-3 (VDE 0682-401):2015



Description	Material number
voltage detector Duspol Digital	9003021
storage bag for voltage tester Duspol	9007010

voltage tester SPB 500 PR Analog

- voltage range 50 - 500 V
- voltage warning (LED) and voltage display (value) without battery
- load switch through push button (low Ohm test)
- vibration alert at test grip
- phase test one-pole
- rotary field direction test
- continuity test
- LED-signal for dangerous voltage from 50 V AC / 120 V DC
- impact resistant case out of EPDM
- integrated Lithium-accumulator, maintenance free
- protection class IP 65
- CAT IV 500 V
- DIN EN 61243-3 (VDE 0682-401):2015



Description	Material number
voltage detector SBP 500 PR analog	9003007

voltage tester SPB 500 PRA analog

- voltage range 50 - 500 V
- voltage warning (LED) and voltage display (value) without battery
- load switch through push button (low Ohm test)
- acoustic signal
- phase test one-pole
- rotary field direction test
- continuity test
- LED-signal for dangerous voltage from 50 V AC / 120 V DC
- impact resistant case out of EPDM
- integrated Lithium-accumulator, maintenance free
- protection class IP 65
- CAT IV 500 V
- DIN EN 61243-3 (VDE 0682-401):2015



Description	Material number
voltage tester SPB 500 PRA analog	9003008

voltage tester SPB 1000 L Digital

- voltage range 50 -1000 V AC / DC
- LED display
- voltage warning (LED) and voltage display (value) without battery
- frequency range 0 – 2000 Hz
- load switch through push button 30 mA RCD
- phase test one-pole
- rotary field direction test
- continuity test
- resistance measurement
- impact resistant out of EPDM
- integrated Lithium-accumulator, maintenance free
- protection class IP 65
- CAT IV 1000 V
- DIN EN 61243-3 (VDE 0682-401):2015



Description	Material number
voltage detector SPB 1000 L (digital)	9003015

voltage tester Profi Safe LSP 4B

- voltage range 12 - 690 V
- LED display with 7 levels (12, 24, 50, 120, 230, 400, 690 V)
- voltage warning (LED) and voltage display (value) without battery
- frequency range 0 – 500 Hz
- phase test one-pole
- rotary field direction test
- continuity test
- impact resistant case out of EPDM
- integrated Lithium-accumulator, maintenance free
- protection class IP 65
- CAT IV 600 V
- CAT III 690 V
- DIN EN 61243-3 (VDE 0682-401):2015



Description	Material number
voltage detector Profi Safe LSP 4B	9003005

voltage tester equipment, SPB 500

- synthetic leather storage bag
- test probes for overhead line
- plastic case for test probes
- probes for buried cables
- pen tip for inspection hole in protection cover
- function tester SG 1 with 9 V battery, test voltage 500 V
- for 1000 L on request



Description	Material number
synthetic leather bag	9003009
test probe 500 mm	9003010
plastic casing for test probe	9003011
grooving tip for buried cables	9003012
tip for test holes 70 mm	9003013
function-tester 500 V including battery	9003014

voltage detector C.A. 773

- voltage range 12 - 1.000 V AC and 12 - 1.400 V DC
- digital lighted display
- testing of RCD tripping
- complete integrated self-test
- with lamp to illuminate the measuring point
- extended and acoustical continuity test (R< 2 k Ω , 60 k Ω , 300 k Ω)
- two-pole rotary field direction test according to "two conductor method"
- protection class IP 65
- CAT IV 1000 V
- DIN EN 61243-3
- weight: 350 g
- dimensions: 228 x 60 x 39 mm



Description	Material number
voltage detector C.A. 773	9003016
set of 2 pair test probe IP2X for C.A. 773	9003017

meter start tester

meter start tester ZAP

- voltage range 50 – 500 V AC/DC
- display through LEDs and LCD from 50 V
- voltage warning (LED) and voltage display (display)
- load switch through push button 30 mA RCD
- additional load for für electric meter 350 W
- phase test one-pole
- rotary field direction test
- continuity test
- resistance measurement
- thermal and overvoltage protection
- integrated Lithium-Accumulator, maintenance free
- solid rubber case
- protection class IP 65
- CAT IV 600 V



Description	Material number
meter start-tester ZAP 350 L (digital)	9007500

rotating field indicator

rotating field indicator Elma RT 606 A

- rotating field indicator with phase display
- LED display
- incl. test probe and crocodile clamps
- no battery necessary
- size 130 x 72 x 30 mm
- CAT III / up to 300 V
- voltage range: 150-500 V
- degree of protection IP40



Description	Material number
rotation field indicator Elma RT 606 A	9001100

rotating field indicator Kyoritsu

- optical and accoustic rotating field indicator
- with phase display
- LED display, incl. crocodile clip
- size ca. 130 x 72 x 30 mm
- safety according to CAT IV / up to 600 V
- voltage range: 70-1000 V

High safety through:

- touchless metering, metering direct at insulated strands
- all-insulated terminals, no bypass possible



Description	Material number
rotating field indicator Kyoritsu	9001200

TRMS-Digital-Multimeter C.A. 5275

Multimeter with all classic measurement functions for maintenance and repairs and additional functions for On-Site work.

Features:

- double digital display with 2 operating types and bargraph
- voltage measurement with low impedance VLowZ with lowpass-filter
- maximum resolution 10 µV und 1 µA
- measurement of ionisation current at flame detector
- fast measuring rhythm with 5 measurements per second and high peak factor
- automatic range selection
- min-,max-, PEAK-function, relative- and difference measurement
- voltage measurement range AC/DC: 60 mV, 600 mV, 6 V, 60 V, 600 V, 1000 V
- current measurement range AC/AC: 6000 µA, 60 mA, 600 mA, 6 A, 10 A (20 A / 30s)
- frequency measurement range: 600 Hz, 6 kHz, 50 kHz
- capacity measurement range: 6 nF, 60 nF, 600nF, 6 µF, 60 µF, 600 µF, 6 mF, 60 mF
- resistance measurement range: 600 Ω, 6000 Ω, 60 kΩ, 600 kΩ, 6 MΩ, 60 MΩ
- temperature measurement range: -59,6 bis 1200 °C
- acoustic continuity test, diad test, hold function
- protection class IP 64
- CAT IV 600 V
- CAT III 1000 V
- power supply: 1x 9 V
- scope of delivery: bag with 2 measurement lines, 2 test point, battery and 1 K-probe(C.A 5277), multi-use magnet holder, additional parts on request
- size: 90 x 190 x 45 mm
- weight: 400g



Description	Material number
TRMS digital multimeter C.A. 5275	9004016

earthing test plier C.A. 6416

- Safe control of ground loops without ground spike and open of separator.
- OLED Display
- maximum circumvallation diameter: 35 mm
- display of contact voltage
- force compensating system
- automatic Pre-Hold-Modus
- automatic comparison of the air gap
- plier-comparison without to send back to the manufacturer
- to O, A, V programmable alerts
- alert shows a dangerous voltage
- measurement of ground loops resistance from 0,01 to 1500 Ohm
- measurement of ground loops inductivity from 10 to 500 µH
- measurement of fault current from 0,2 mA to 40 A
- data storage of 300 measurements with timestamp
- protection class IP 40
- CAT IV 600 V
- power supply: 4x 1,5 V
- scope of delivery: bag, battery, manual on CD-ROM
- size: 55 x 95 x 262 mm
- weight: 935g



Description	Material number
earthing test plier C.A. 6416	9004010
calibration loop CL1 for C.A. 6416	9004019

Multimeter F205

multi-measuring pliers at low voltage areas with small and medium power levels, like maintenance of electro installations and machinery at service and industry areas, dimensioning of power supply and fault search, installation of heating and cooling systems, repairing of electro vehicle.

- Features:
- LCD-Display with backlight
 - maximum circumvallation diameter: 34 mm
 - acquisition process TRMS
 - display of measuring value
 - Min-, Max-, PEAK-function, relative- and difference measurement
 - voltage measurement range AC/DC: 0,15 V bis 1000 V (1500 V Spitze)
 - current measurement range AC/AC: 0,15 A bis 600 A (900 A Spitze)
 - frequency measurement range: 5 Hz bis 3000 Hz(l) bzw. bis 20 kHz (U)
 - resistance measurement range: 0,1 Ω bis 59,99 kΩ
 - acoustic continuity test, phase sequence, Hold function, diode test, True Inrush (initial current)
 - CAT IV 600 V
 - CAT III 1000 V
 - power supply: 1x 9 V
 - scope of delivery: bag with 1 set measurement lines with banana jack, 1 set measuring points, 1 alligator clamp and battery
 - size: 78 x 222 x 42 mm
 - weight: 340 g



Description	Material number
multimeter F205	9004005

Digital TRMS-Amperemeter

- for metering AC current strength in TRMS-Quality at hard-to-reachable conductors
- direct display of AC current strength
- metering range from 0,020 A up to 3999 A (care device assignment)

enclosing diameter:

- MA400D: up to 170 mm or 250 mm
- MA4000D: 100 mm up to 350 mm

- maximum value storage
- CAT IV
- with optional magnet holding for user-friendly placement



Description	Material number
digital TRMS-amperemeter MA400D up to 400 A, 170 mm	9004030
digital TRMS-amperemeter MA400D, up to 400 A, 250 mm	9004031
digital TRMS-amperemeter MA4000D, up to 4000 A, 350 mm	9004032
magnet-holding for multimeter	9004033
transport bag for multimeter	9004034

insulation and continuity tester C.A. 6526

The insulation and continuity tester serves the industrial regular maintenance of electrical insulations at industrial installations and equipment and protects through the early spotting of damages and aging process before disturbance and accidents.

Features:

- double display of 2 values
- test voltages from 10 V to 1 000 V / 200 GOhm
- kinds of operations: manuel, Lock, Timer and PI- / DAR-determination
- optical Pass-/Fail-display through Green / Red colors
- continuity test with 200 mA / 20 mA with active protection without safety fuse
- measurement of V (TRMS & DC), F, Ohm, kOhm, C, sowie von Leitungslangen
- function ?Rel & adjustable alerts
- measurement values
- protection class IP 54
- CAT IV 600 V
- power supply: 6x 1LR 6 (AA)
- scope of delivery: bag, 2 safety measurement lines (1,50 m length, straight/curved plug), 1 red alligator clamp, 1 black measuring point, battery, CD-ROM manual, 1 CD with software Megohmmeter Transfer.
- additional, e.g. probe for remote control, thermometer etc. on request
- size: 211 x 180 x 60 mm
- weight: 850 g



Description	Material number
insulation meter C.A. 6526	9004020

insulation meter 10 kV / 15 kV

- portable insulation meter with robust case up to 10/15 kV
- for insulation tests at all electrical systems and devices
- for incoming inspections at commissioning, production final inspections
- for periodically insulation tests or for test after maintenance
- usage at transformer, rotating machines, switching stations, circuit breaker, insulators, cables etc.
- metering of insulation resistance from 10 kilo Ohm up to 25/30 tera Ohm
- metering under fix and adjustable test currents from 10 V up to 10/15 kV
- 5 mA maximum charging current
- automatic calculation of ratios for evaluation of insulation quality (DAR, PI, DD, Delta-R)
- optional magnet holding for user-friendly placement
- different test-modes (Ramp and Step, "burning", "early break", "I-limit")
- storing of test values
- optical-insulated USB-Communication with the PC for report generating with DataView-Software
- 1000 V CAT IV, IP 54
- more extensive equipment (extended measurement lines, bigger crocodile clamp) and spare parts on request



Scope of delivery:

transport bag, 2 safety measurement lines with high voltage plugs (bule/red), 1 Guars-Safety measurement lines (black) with 1 high voltage plug and 1 high voltage plug with axial plug, 3 crocodile clamps, 2 test prods (red/black), measurement line (blue), power supply cable, USB-wire with optical separation and Software DataView

Description	Material number
insulation meter 10 kV C.A. 6550	9004022
insulation meter 15 kV C.A. 6555	9004023

insulation tester C.A. 6528

The insulation tester C.A 6528 is suitable for maintenance and repair work on electrical equipment such as motors, cables etc.

With the transport bag for "hands-free operation", the C.A 6528 allows unrestricted work on site. The shock-absorbing cover with stand ensures stability when the inspector is in place.

The large LCD display, with its dual display, allows simultaneous indication of the insulation value and the actual test voltage, and the display illumination ensures perfect legibility under all circumstances.

The Megohmmeter C.A 6528 performs resistance, insulation and continuity measurements according to the applicable international standards through: IEC 60364, NF C 15-100, VDE 100... The continuity test is performed with measuring line compensation. Insulation measurement is possible in manual, inhibited or timed mode. For voltage measurement, an indicator shows the battery charge level.

The C.A 6528 shows the test results immediately, as the display turns red as soon as the threshold value is exceeded. Hazardous voltage (> 30V) is automatically detected by the C.A 6528, in which case an insulation test is not possible.

Features:

- Insulation test under 250 / 500 / 1 000 V
- Voltage measurement AC and AC+DC up to 700 V
- continuity test: from 0.02 - 40 Ohm (200mA)
- Insulation resistance up to 11 Gigaohm
- Mode manual, continuous operation or with timer
- Visual alarm, blue/red display illumination
- Complies with IEC 61557-1-2-4-10
- IEC 61010, 600 V VAT IV
- Scope of delivery: 1 insulation tester CA 6528, delivered in a carrying bag for hands-free operation ,
2 safety test leads (red + black), 1 red alligator clip, 1 black test probe, 1 protective cover mounted on the device, 6x LR6 or AA batteries, 1 safety data sheet, 1 quick start guide, 1 test confirmation
- Dimensions: 218 x 95 x 63mm
- Weight: 760 g



Description	Material number
Insulation measuring instrument C.A 6528	9004001

earthing tester

earthing tester C.A. 6460

digital, grid independent earthing- and ground resistance measurement for power supply companies and industry.

Features:

- lighted LED-Display
- one button for all measurements
- high measuring reliability through self-test
- measurement of earthing-, ground- and transfer resistance
- measurement in 3 ranges with automatic switch from 0 to 2000 Ohm
- measurement frequency 128 Hz
- protection class IP 53
- power supply: 8x 1,5 V LR 14
- scope of delivery: batteries
- size: 273 x 247 x 127 mm
- weight: 2,8 Kg



Description	Material number
digital earth- and ground resistance meter C.A. 6460	9004008

earthing equipment set

- for earthing measurements

consists of

- 1 reel with measuring wire 50 m (red)
- 1 reel with measuring wire 50 m (blue)
- 1 reel with measuring wire 10 m (green)
- 2 earth (T-form)
- 1 hammer
- 1 set adapter (5 pieces)
- 1 transport bag



Description	Material number
earth fault equipment set - standard	9004009

digital device tester C.A. 6108

digital device tester for safety test and retests of :

- portable electrical devices according DIN VDE 0701-0702 / ÖVE-8701
- electromedical devices according DIN VDE 0751-1 / ÖVE 8751 / EN 62353 (Standard)
- arc welder according DIN VDE 0544-4 / IEC 60974-4 (Option)

Features:

- big display with high contrast
- earth wire resistance measurement with 200 mA and 10 A test current
- direct identification of test objects through keyboard, barcode- or transponder-scanner
- current pliers connection for the test objects of devices with termination and rotary current test objects through CEE-adapter
- tests of extension cables standard or with RCD type A/B (Baustromverteiler) bzw. PRCD, PRCD-S, PRCD-K (Option)
- besides the master data entry fields there are an additional 2 extra freely definable fields
- cold device connection and extension cables can be tested directly
- automatic test sequence with text instructions in German
- Good-/Bad- evaluation with LEDs(green/red)
- functional test with power measurement in real effective value - harmonics are considered
- review of the grid connection. Automatic switch off when examiner is in danger.
- tested according to DIN VDE 0544-4 / IEC 60974-4 (option)
- testing of the standby current consumption according to EU regulation 1275/2008 (option)
- data storage for 100 000 measurements and 100 customers
- data exchange via USB memory stick and USB cabel
- software database with upload of master data files from PC
- robust case for field operation
- CAT II 300 V
- scope of delivery: power cable 16A, USB- cabel, special measurement line for RSL + IB (2,0m),
operating manual on CD, DEMO software
- Options have to be ordered with the basic device, no upgrade possible
- dimensions: 270 x 245 x 120 mm
- weight: 3000 g



Description	Material number
digital device-tester C.A. 6108	9001610

Installation tester

installation tester C.A. 6113

Multifunctional measure for testing electrical installations according to DIN VDE 0100-600, DIN 0105-100, DIN VDE 0413, NIV/NIN, EN 61557 and IEC 60364

features

- monochrom display with backlight
- continuity test / resistance measurement
- insulation resistance measurement
- earth measurement
- loop impedance measurement
- RCD measurement type AC and A
- current measurement with clamp
- voltage measurement up to 550 V AC/DC
- frequency measurement 10 - 500 Hz
- phase sequence measurement
- power from battery 9,6 V NiHM (up to 24 h)
- protection class: IP 53
- CAT IV till 300 V and CAT III till 600 V
- dimensions: 280 x 190 x 128 mm
- weight: 2200 g

scope of delivery

- transport bag, power adaptor, 1x 3-pole measuring line with 3 safety measuring lines (red, blue and green), 3 test prods 4 mm (red, blue and green), 3 crocodile clamps (red, blue and green), 2 safety measuring lines 3,0 m (red and black).



Description	Material number
installation tester C.A. 6113	9004045

installation tester C.A. 6117

Multifunctional measure for testing electrical installations according to DIN VDE 0100-600, DIN 0105-100, DIN VDE 0413, NIV/NIN, ÖVE E 8001, EN 61557 and IEC 60364

features

- big colour display
- continuity test / resistance measurement
- insulation resistance measurement
- earth measurement
- loop impedance measurement
- fuse chart in the device
- RCD measurement type AC, A and B
- current measurement with clamp
- voltage measurement up to 550 V AC/DC
- frequency measurement 10 - 500 Hz
- phase sequence measurement
- harmonics in voltage and current up to 50th level THD-F / THD-R
- internal memory
- power from battery 10,8 V - 5,8 AH lithium-ions (uo to 30 h)
- protection class: IP 53
- CAT IV till 300 V and CAT III till 600 V
- dimensions: 280 x 190 x 128 mm
- weight: 2200 g

scope of delivery

- transport bag, power adaptor, 1x 3-pole measuring line with 3 safety measuring lines (red, blue and green), 3 test prods 4 mm (red, blue and green), 3 crocodile clamps (red, blue and green), 2 safety measuring lines 3,0 m (red and black). 1x 3-pole euro power cable, 1x 2-pole euro power cable, sensore for remote control

accessories

- CEE adaptor 16 A or 32 A for insulation resistance measuring and phase sequence at CEE-sockets CAT IV



Description	Material number
installation tester C.A. 6117	9004046
CEE-adaptor 16 A for C.A.6117	9004047
CEE-adaptor 16 A for C.A.6117	9004047
CEE-adaptor 32 A for C.A.6117	9004048
CEE-adaptor 32 A for C.A.6117	9004048

Cable locator

cable locator C.A. 6681

Detects faults in cables, telecommunication and pipelines.
The C.A. 6681 consists of sending and receiving unit.

sending unit

- LCD display
- signal frequency 125 kHz
- measurement range for external voltage from 12 to 600 V AC/DC
- digital selectable signal encoding for easy identification
- strong light
- battery 9 V
- dimensions: 190 x 89 x 42,5 mm
- weight: 420 g (battery included)

receiving unit:

- LCD display with backlight
- localization for single-pole use up to 2 m depth
- localization for double-pole use up to 0,5 m depth
- localization for single loop connection up to 2,5 m depth
- detection of voltage up to 0,4 m depth
- automatic shut-off, strong light
- 6 batteries AAA with 1,5 V
- dimensions: 241,5 x 78 x 38,5 mm
- weight: 360 g (batteries included)

scope of delivery

- sending and receiving unit in transport case
- 1 set measure lines (red/black)
- 1 set crocodile clamps, 1 ground spike
- 1 set batteries, 1 adaptor B22 and 1 adaptor E14
- 1 socket adaptor



Description	Material number
cable locator C.A. 6681	9004060

Power and Energyrecorder

power and energyrecorder PEL 103

- optimize consumption, manage energy costs, monitor gridquality
- for all types of control cabinets
- for single-pole, double-pole and three-phase current
- connect without current interruption
- harmonics analysis
- bluetooth, ethernet and USB communication
- sd-card for data storage
- data transfer in real time with pc and analysis with PEL-software
- 3 inputs for voltage and 3 inputs for current
- frequency DC: 50 Hz, 60 Hz and 400 Hz
- voltage range 10 to 1.000 V AC/DC
- voltage and current transformer ratio up to 650 kV / 25 kA
- 1 measurement per second
- dimensions: 256 x 125 x 37 mm
- power: 110 V - 250 V via power adaptor up to 480 V (accessory)
- CAT IV up to 600 V, CAT III up to 1.000 V

scope of delivery

- 3 MiniFlex MA 193, 4 measuring lines (banana/banana, straight 3 m, black)
- 4 crocodile clamps (black), 1 sd-card 8 GB, 1 set for labeling cable ends.
- 1 power adaptor, 1 USB adaptor
- 1 transportation bag and 1 PEL software



Description	Material number
power and energy recorder PEL 103	9004061

medium voltage

Interface test devices

Voltage indicator HR-ST

- according to VDE 0682-415 (IEC 61243-5)
- for low ohmic systems
- no battery supply
- Voltage indication via flashing LED



Description	Material number
Voltage indicator HR-ST	9007200

Voltage indicator LRM-ST

- according to VDE 0682-415 (IEC 61243-5)
- for low ohmic systems
- no battery supply
- Voltage indication via flashing LED



Description	Material number
Voltage indicator LRM-ST	9007201

interface tester PocketDetect HR/LRM

- quick test on capacitiv interfaces according to IEC 61243-5
- easy handling, with clear LED indicator (red/green) for short or long-term test
- after 60 s of full showing it turns into energy saving mode
- after 4 h of showing it shuts down completly
- different self-tests and diagnostics
- power through 3 V lithium-ions battery
- connection possible with HR, MR, LR, LRM or LRP
- input voltage:
- 0...65 V ~ (LR, LRM, LRP)
- 0...390 V ~ (MR)
- 0...1170 V ~ (HR)
- frequency: 50 Hz



Description	Material number
Interface tester PocketDetect HR 150 x 80 x 35 mm	9007100
Interface tester PocketDetect LRM 150 x 80 x 35 mm	9007101
Interface tester PocketDetect HR+LRM (twin-set), 150 x 80 x 35 mm	9007102
helpadaptor HR/HR duo for PocketDetect	9007110

double-pole voltage detector and interface tester VisualPhase LCD

- test on capacitiv interfaces according to IEC 61243-5 with exact test result and showing on LCD display
- differentiated self test with diagnostic
- 2 lithium batteries 6 V
- connection to LR-systems
- adaption to HR, MR, LRM and LRP
- input voltage 0...65 V
- frequency: 50 Hz
- voltage detectors (VDS) adjustable
- micro ammeter adjustable (2,1 – 2,4 μ A)
- phase comparator and phase sequence detector
- phase rotary indification
- plug system: 2 jack plugs with 1.5 m measuring line
- protection class: IP54
- dimensions 150 x 80 x 35 mm
- weight: 450 g
- set with 2 adaptors HR-LR



Description	Material number
double-pole voltage detector and interface tester VisualPhase LCD	9007105

double-pole voltage detector and interface tester MicroPhase I

- test on capacitiv interfaces according to IEC 61243-5 with exact test result and showing on LED display
- differentiated self test with diagnostic
- 2 lithium batteries 6 V
- connection to LR-systems
- adaption to HR, MR and LRM
- input voltage 0...65 V
- frequency: 50 Hz
- voltage detectors (VDS) 10 / 20 kV
- phase comparator
- phase rotary indication
- plug system: 2 jack plugs with 1.5 m measuring line
- protection class: IP54
- dimensions 150 x 80 x 35 mm
- weight: 400 g
- set with 2 adaptors HR-LR



Description	Material number
double-pole voltage detector and interface tester MicroPhase I	9007107

accessories for PocketDetect, VisualPhase LCD and MicroPhase I



Description	Material number
helpadaptor HR/HR duo for PocketDetect	9007110
adaptor LRM to LR, type D, variable contact distance	9007111
adaptor LRM to LR, 14 mm contact distance	9007112
LR measuring line 1.0 m, jack plug mono	9007113
LR measuring line, 2x 5 m, only for phase comparison	9007114

high voltage tester

high voltage detector PHG II

- certified according to DIN VDE 0682 part 411
- glow lamp display for indoor installations
- blinking light display of the glow lamps at "voltage present"
- insulation rod out of fiber glass reinforced polyester
- display device - plastic - black
- forked working electrode
- passiv voltage detector without batteries
- total length: 1425 mm
- immersion depth: 720 mm
- only adapted for indoor installation!



Description	Material number
voltage detector PHG II 6 kV	9006000
voltage detector PHG II 10 kV	9006001
voltage detector PHG II 20 kV	9006002

voltage detector PHE III

- certified according to DIN VDE 0682 part 411
- with optical and acoustic display
- with self-testing installation
- low total length
- for switchgear installations and overhead lines
- low transport length through demountable insulation rod and test tips
- additional nominal voltages on request

Also useable during rainfall!



Description	Material number
voltage detector typ PHE III, immersion depth: 285 mm, 3 kV	9008003
voltage detector typ PHE III, immersion depth: 285 mm, 6 kV	9008006
voltage detector typ PHE III, immersion depth: 285 mm, 10 kV	9008010
voltage detector typ PHE III, immersion depth: 435 mm, 20 kV	9008020
voltage detector typ PHE III, immersion depth: 620 mm, 30 kV	9008030

voltage detector PHE III switchable

- certified according to DIN VDE 0682 part 411
- nominal voltage 3 - 30 kV / 50 Hz
- with optical and acoustical display
- for switchgears and overhead lines
- total length: 1675 mm
- immersion depth: 880 mm
- short transport length through dismountable insulation rod and test prod
- also useable during rainfall!



Description	Material number
voltage detector PHE III 3-30 KV	9006016

voltage detector PHE4

- certified according to DIN VDE 0682 part 411
- with optical and acoustic indication
- with self-testing system
- for switchgear and overhead line
- Insulating rod made of glass fibre reinforced polyester tube
- indicator - plastic, fully insulated
- Battery - Lithium AA 1.5 Volt
- other nominal voltages on request
- can also be used during precipitation



Description	Material number
Voltage detector PHE4 Insertion depth: 230 mm, 10 kV	9006018
Voltage detector PHE4 Insertion depth: 400 mm, 20 kV	9006019
Voltage detector PHE4 Insertion depth: 920 mm, 30 kV	9006020

voltage detector PHE4 switchable

- certified according to DIN VDE 0682 part 411
- with optical and acoustic indication
- with self-testing system
- for switchgear and overhead line
- Insulating rod made of glass fibre reinforced polyester tube
- indicator - plastic, fully insulated
- Battery - Lithium AA 1.5 Volt
- other nominal voltages on request
- can also be used during precipitation



Description	Material number
Voltage detector PHE4, 6 - 20 kV Insertion depth: 920 mm	9006021
Voltage detector PHE4, 10 - 30 kV Insertion depth: 920 mm	9006022

electrodes

- for safe contact with the system part to be tested
- with M8 thread to screw on
- suitable for voltage detectors PHE4, PHE III, PHE and phase comparator PHV I

Needle electrode

- For touching on painted busbars

Fork electrode

- for touching the overhead line
- for overhead line only

V-electrode

- for probing on round conductors

Hook electrode

- for touching the overhead line
- for overhead line only



Description	Material number
Needle electrode screw-on	9008007
Fork electrode screw-on	9008005
V - electrode screw-on	9008004
hook electrode screw-on	8114015

voltage test head for operation rods

- 10-30 kV
- suitable to operation rods with coupling
- useable for indoor and overhead lines
- with hook electrode to clip in overhead lines
- from ground useable through insulating telescope rod



36 kV

Description	Material number
voltage detector head 10-36 kV	8114010
hot stick working heads 1,5 m locking 36 kV	7480052
hot stick working heads 2,0 m locking 36 kV	7480056
telescopic rod, insulating up to 36 kV with gear coupling and scale up to 10,6m	7510020
storage bag 1,8 m with pocket for telescope measuring rod	7510021
hook electrode screw-on	8114015

phase comparator

phase comparator PHV I, unipolar

- according to DIN/VDE 0681/431
- one-pole phase comparator
- for indoor- and outdoor installations
- frequency range 49,90 - 50,10 Hz
- short transport length through unscrewable insulation rod
- with self test function
- total length: 1400 mm and 1600 mm
- also useable during rainfall!



Description	Material number
phase comparator PHV I, unipolar, immersion depth: 775 mm, 12 - 24 kV	9006624

phase comparator PHV I, adjustable

- according to DIN/VDE 0681/431
- one-pole phase comparator
- 3 nominal voltage ranges 6-12 kV / 12-24 kV / 24-36 kV switchable
- for indoor- and outdoor installation
- frequency range of 49,90 - 50,10 Hz
- short transport length through unscrewable insulation rod
- with self-test function
- total length: 1600 mm
- immersion depth: 775 mm
- also useable during rainfall!



Description	Material number
phase comparator PHV I, unipolar immersion depth: 775 mm, 6 - 36 kV	9006100

storage bag

- carrying strap
- diameter 250 mm
- suitable for voltage tester and phase comparator PHV



Description	Material number
storage bag for voltage detector and phase comparator	9006102

storage bag, empty

- with nap foam
- for phase comparator PHV I
- for voltage detectors PHE4 and PHE III
- maximum equipment with one basic unit
- Case 9006101 max. length basic unit 3420 mm
- Case 9006103 max. length basic unit 1450 mm



Description	Material number
storage bag, empty 1270 x 280 x 126 mm	9006101
storage bag, empty 920 x 280 x 126 mm	9006103