MultiSafe DSP 4

Voltage tester

NEW

Voltage indication also without battery
Phase sequence test with gloves possible

The **MultiSafe DSP 4**
is an absolutely safe test device
for operation in all fields of power
engineering.
- easy to operate, reliable, precise -

- Highest degree of safety
  provided by protective resistors
  in both test prods

- Surge voltage strength >12 kV - **CAT IV**

- Voltage indication also
  without battery **NEW**

- Precise indication of voltage
  up to **1200 V**

- phase and phase **NEW**
  sequence test without sensor
  (with gloves possible)

- Easy operation
  unambiguous signals
  illuminated display

- Robust casing
  Water and dust proof - **IP 65**

EN/IEC 61243-3

MultiSafe DSP 4

Voltage tester

Test functions
Fast and safe measuring and testing of:
- Direct and alternating current
- Resistance / continuity / diodes
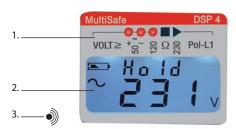- Polarity
- Phase / Phase sequence

Easy operation
Fully automated test procedures obviate operating errors:
- At 24 V the MultiSafe switches from continuity test to voltage test mode.
- Automatic selection of measurement range.
- Type of voltage and polarity is detected.

Further functions:
- Self-test per keypress
- „DATA HOLD"
- Zero balance in resistance range „CAL"

Three readout systems
Unambiguous and rapid recognition of function and result:
1. Round red flares for voltage (ELV), green square symbol for resistance and red triangle for phase and phase sequence.
2. The display shows precise values in V or kΩ as well as voltage type and polarity.
3. An acoustic signal signifies continuity up to 10 kΩ.

Display with illumination

Robust design
High quality elements guarantee function and safety under extreme conditions:
- Impact-resistant plastic housing and break-proof display cover
- Dust and water proof (IP65, approved for operation in outdoor areas)
- Spring-mounted test contacts
- Twin-insulated rubber hose

EN/IEC 61243-3

Highest level of safety
- Protective resistors **in both probes located directly behind test electrodes** protect user and device especially against dangerou voltage peaks and energy from external sources.
- With CAT IV, the device is in the highest surge voltage category and is suitable for operation in all areas of power engineering.
- The MultiSafe has been tested and certified by VDE.

NEW:
- LED display works without battery.
- The MultiSafe has been tested an certified by VDE.

Phase and phase sequence test without sensor
- Accurate phase sequence test from 165 up to 1200 V / 50 Hz by microcontroller interpretation
- Phase sequence test with gloves possible

Extensive protective features
1. Extension for reaching test objects that are difficult to access
2. Adapter for all test leads with 4 mm standard plug
3. Extension for tests at overhead lines

NEW

Extensions securely screwable on thread of MultiSafe test probes (option).

Technical data

Two-pole voltage and continuity tester MultiSafe DSP 4
Tested and certified in accordance to EN/IEC 61243-3 (VDE 0682 part 401)

Nominal Voltage	
24 ... 1000 V AC / 1500 V DC (according to VDE: automatic switch on/ change over at ≥ 24 V)	
Frequency	0...10.000 Hz
Input resistance	
311 kΩ, protective resistors directly behind both test probes	
Current	3,2 mA at 1000 V
Indication of voltage/phase/phase sequence	
3 red LEDs for voltage 50 V, 120 V LCD 3½-digit for V-measurement result and type of voltage/AC and additional functions red LED-triangle for phase and phase sequence	
Indication of resistance/continuity/diodes	
green LED for continuity up to 1999 kΩ and diodes, LCD 3½-digit for kΩ measurements result buzzer signal ≤ 10 kΩ	
Measuring ranges - voltage	
DC: 0,01...8,99/9,0...99,9/100...1500 V (1,5% + 3 D) AC: 1...99,9/100...1200 V (TRMS) (1,5% + 3 D), 15...1800 Hz >1,8...10 kHz: (15% + 3 D) 15...1200 V ($\sin_{eff}$)	
Measuring ranges - resistance	
0 ... 1999 kΩ (5% + 3 D)	
Surge voltage strength	
>12 kV, case insulation to user >12 kV, circuit between contacts tested with 14,8 kV 1,2/50 μs surge	
Surge voltage category	
CAT IV 1000 V in accordance with IEC 60664-1 (VDE 0110)	
Routine test	Test voltage 6 kV
Operating temperatures	-10° ... + 55°C
Power supply	
9 V-block IEC 6 F22 or 6 LR61 Energy saving circuit, automatic switch-off after 30 s when no measurement is taken. Indication of battery status	
Casing	
ABS impact-proof, display cover PC impact-proof, test electrodes spring moulded, contact electrode (Pol-L1-Sensor)	
Protection category	
IP 65, device can be used in rain	
Connection lead	
Rubber hose, H 07 RNF, highly flexible, 1 m	
Dimensions/weight	
240 x 62 x 39 mm (display) 270 g (incl. battery)	

Subject to technical modifications 08-2009. Made in Germany

Tietzsch
Measurement + testing devices
Quality creates safety.