

MultiSafe DSP 4

Highest precision from 10 mV up to 1200 V



The MultiSafe DSP 4 is a safe testing device for for all applications in power engineering – easy handling, precise, reliable.

- Precise indication of voltage from 10 mV up to 1200 V AC / 1500 V DC
- Phase, phase sequence and continuity tester (possible with gloves) continuity tester up to 2 MΩ
- Highest degree of safety provided by protective resistors in both test prods
- Easy operation
large illuminated display





Five test functions

Fast and safe measuring and testing of:

- Direct and alternating current
- Resistance / continuity
- Polarity
- Phase
- Phase sequence grounded

Easy operation

Fully automated test procedures obviate operating errors:

- At 24 V the MultiSafe switches on, or from continuity over to voltage testing
- Automatic selection of correct measurement range.
- Type of voltage and polarity are detected
- Self-test per keypress
- „DATA HOLD“

Three readout systems

Unambiguous and rapid recognition of function and result:

1. Round red flares for voltage, green square symbol for resistance and red triangle for phase and phase sequence.
2. The display shows precise values in V or k Ω as well as voltage type and polarity.
3. An acoustic signal indicates continuity up to 10 k Ω .



Display with illumination

Robust design

High-quality elements guarantee function and safety under extreme conditions:

- Impact resistant plastic casing and break-proof display cover
- Dust and water proof (IP65, approved for operation in outdoor areas)
- Spring mounted test contacts
- Twin insulated PUR control cable



Highest level of safety

- Protective resistors located directly behind both test electrodes protect user and device especially against dangerous voltage peaks and energy from external sources.
- CAT IV - highest overvoltage category, device is suitable for operation in all areas of power engineering.
- LED indication also without battery.
- The MultiSafe has been tested and certified by VDE.

Phase sequence and continuity test without sensor

- Exact phase sequence test in grounded mains from 165 V up to 1200 V / 50 Hz by microcontroller analysis
- Phase sequence test possible with gloves

Safety accessories

- test prods for test objects that are difficult to access
- adapter for test lines with 4 mm standard plug
- extensions for tests at overhead lines



Increased security of the connection through tightly screwable extensions. Thread set for MultiSafe test prods required (optionally).

Technical data

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

Nominal voltage

24 ... 1000 V AC / 1500 V DC
(according to VDE: automatic switch on/over at ≥ 24 V)

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 (sineff)

Measuring ranges - resistance

0 ... 1999 k Ω (5% + 3 D)

Frequency

15 Hz ... 10 kHz < 500 V, 15 Hz ... 4 kHz > 500 V

Input resistance

412 k Ω at 50 V
311 k Ω at 1000 V
protective resistors directly behind both test electrodes

Current

3,2 mA at 1000 V

On-time

2 minutes

Indication of voltage/phase/phase sequence

3 red LEDs for voltage 50 V + / - and 120 V
LCD 3½-digit for V-measurement value 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 k Ω and diodes,
LCD 3½-digit for k Ω -measurement value
buzzer ≤ 10 k Ω

Surge voltage strength

> 12 kV case insulation to user
> 12 kV switching mechanism between test prods
tested with 14,8 kV 1,2/50 μ s surge

Insulation test voltage

6 kV unit inspection of case and line

Overvoltage category

CAT IV in accordance with IEC 60664-1 (VDE 0110)

Operating temperature

-10°C ... + 55°C

Power supply

9 V-block IEC 6 F22 or 6 LR61 power saving circuit,
automatic switch-off after 30 s without measuring
indication of battery condition

Casing

ABS, display cover PC impact resistant, test electrodes spring-mounted

Protection category

IP 65, device can be used in moist environments

Line

PUR control cable, 1000 V, 1 m

Dimensions/weight

240 x 62 x 39 mm (device with display) / approx. 270 g

Article number	Type / Label
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84019	Thread set DSP
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