

MultiSafe DSP 5

Highest precision and safety up to 1200 V AC / 1500 V DC



NEW



DSP 5ST - Slide tip with adjustable electrode length 4 mm / 16 mm.



Colour change of the LCD lighting during voltage

Der MultiSafe DSP 5 is a safe testing device for all applications in power engineering - easy handling, high-precision, multifunctional and reliable.

- Precise indication of voltage from 100 mV up to 1200 V AC
10 mV up to 1500 V DC
- Extended measuring range for low- and battery-voltage up to 19,99 V
- Phase, phase sequence tester (possible with gloves)
- Fast continuity test 0,01 kΩ up to 1000 kΩ
- Easy operation, large illuminated display with two colour display
- Additional load to determine interference voltages and RCD-tripping (not DSP 5B)



EN/IEC 61243-3

CAT IV 1000 V



Many functions

Fast and safe measuring and testing of:

- Direct and alternating voltage (TRMS)
- Resistance / continuity
- Polarity
- Phase
- Phase sequence grounded from 165 up to 1200 V / 50 Hz
- Phase sequence ungrounded (IT power grids)
- Frequency measurement
- Monitored additional load / RCD-tripping (not DSP 5B)
- Additional load for start-up tests of electronic electricity meters
- Front spot point lightning

Easy operation

Fully automated test procedures obviate operating errors:

- The MultiSafe DSP 5 switches on, or from continuity over to voltage testing
- Direct indication of the type of voltage / polarity / frequency
- Automatic range selection from 0,10 V up to 1500 V
- Integrated self-test per keypress
- One-hand operation for testing sockets
- Integrated flashlight function for working in any environment
- Belt clip for easy transport

Robust design

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

- Impact resistant plastic casing and break-proof display cover
- Dust- and waterproof (IP 65, approved for operation in outdoor areas)
- Tightly integrated test contacts
- Twin insulated PUR control cable



Additional load / RCD-tripping, backwards

Highest level of safety

- Large protective resistors protect the user and device especially against dangerous voltage peaks and energy from external sources.
- Large two-colour display for hazardous voltages > 50 V AC / 120 V DC, and LED-warning which works without battery
- The MultiSafe has been tested and certified by VDE

Safety accessories

Accessories are not included in scope of delivery

- Pin prods for measuring points that are difficult to reach
- Adapter for test lines with 4 mm plug
- Extensions for overhead lines



Front spot lighting

Technical data

Two-pole voltage- and continuity tester
MultiSafe DSP 5 / DSP 5B / DSP 5ST
tested and certified by VDE in accordance with
EN/IEC 61243-3 (VDE 0682 part 401)

Nominal voltage

12 ... 1000 V AC / 1200 V DC DSP 5 / DSP 5ST
12 ... 1000 V AC / 1500 V DC DSP 5B
(according to VDE: automatic switch on / over >12 V
and additional load up to max. 1200 V AC / DC)

Display range

0,01 V ... 1500 V DC
0,10 V ... 1200 V AC

Frequency

15 Hz ... 10 kHz < 500 V,
15 Hz ... 2 kHz > 500 V

Indication of voltage/phase/phase sequence

Red LED for voltage, green for continuity, yellow for
phase sequence, LC display, two color backlighted
7-segment-letters, 2 lines, 0 ... 1999 Digit

Measuring ranges - voltage

DC: 0,01...19,99/20,0...99,9/100...1500 (1,5% + 3 D)
AC: 0,10...19,99/20,0...99,9/100...1200 V
TRMS 15... 500 Hz (1,5% + 3 D)
sineff > 500 Hz (15% + 3 D)

Indication of resistance/continuity/diodes

Green LED for continuity up to 1000 kΩ
and diodes, LCD 3½-digit for kΩ-measurement
value, buzzer ≤ 10,00 kΩ

Measuring range - resistance

0,01 ... 1000 kΩ (5 % + 4 D)

Measuring ranges - frequency

15,0 ... 99,9 Hz / 100 ... 9999 Hz

Input resistance

412 kΩ at 50 V / 50 Hz
200 kΩ at 1000 V AC, 720 kΩ at 1000 V DC

Current peak value

5 mA at 1000 V direct
< 300 mA at 1000 V switched (not for DSP 5B)

On-time t_{on} / recover-time t_{off}

at 230 V / 400 V unlimited
at U_N 2 min t_{on} / 2 min t_{off}

Overvoltage category

CAT IV 1000 V
in accordance with IEC 60664-1 (VDE 0110)

Surge voltage strength

>19,2 kV case insulation to user
>12 kV circuit between test prods

Insulation test voltage

6 kV unit inspection of case and line

Operating temperature

-15°C ... + 55°C

Power supply

2 x 1,5 V AAA energy- saving circuit,
automatic switch-off after 30 s without measuring
multi-stage battery indicator

Casing

ABS-PC/ TPE , display cover PC impact resistant,
handgrip to clip in, belt clip

Protection category

IP 65, device can be used in moist environments

Connection line

PUR sheathed cable, 1000 V, 1 m, with protective cap

Repeated inspection / calibration

Recommended every 6 years

Dimensions / Weight

275 x 89 x 35 mm (handgrip and display part)
275 x 60 x 35 mm (display part)
270 g

Type	Article no.	Phase-/ phase sequence test	Phase sequence test for IT power grids	Continuity test with value	Additional load 30 mA-RCD-tripping	4 / 16 mm slide tip
DSP 5B 0,3 - 1200 V AC 0,01 - 1500 V DC	84502	■	■	■		
DSP 5 0,3 - 1200 V AC 0,01 - 1500 V DC	84501	■	■	■	■	
DSP 5ST 0,3 - 1200 V AC 0,01 - 1500 V DC	84503	■	■	■	■	■