# MultiSafe DSP3-12M



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Member of DEHN group www.desitek.dk

**№ 6** ( **€** 

EN/IEC 61243-3

# Voltage detector



#### **Test functions**

#### Fast and safe measuring and testing of:

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

# Easy operation

# Fully automated test procedures obviate operating errors:

- At 40 V the MultiSafe switches on, or from continuity over to voltage testing
- Selection of correct measurement range
- Type of voltage and polarity are detected
- Assignable function key for:
   HOLD, phase sequence unearthed, frequency measurement, light on/off
   Self-test per keypress
   "DATA HOLD"

### Three readout systems

# Unambiguous and rapid recognition of function and result:

- 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  $k\Omega$  as well as voltage type and polarity.
- 3. An acoustic signal indicates continuity up to 10 k $\Omega$ .



# Robust design

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

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



5303b / EN / 0912

EN/IEC 61243-3



## 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.
- The MultiSafe has been tested and certified by VDE

# Wide range of 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
- Bags
- Tightly screwable test prods for voltages up to 5000 V



# **DESITEK A/S**



#### Technical data

Two-pole voltage-continuity tester MultiSafe DSP 3–12 M tested and certified in accordance with EN/IEC 61243-3 (VDE 0682 part 401)

#### Nominal voltage

8 ... 1000 V AC / 1500 V DC (according to VDE: automatic switch on/over at  $\geq$  40 V)

#### Frequency

0...2.000 Hz

#### Input resistance

12,1  $\mbox{M}\Omega$  protective resistors directly behind both test electrodes

# Current peak value

 $83 \,\mu\text{A}$  at  $1000 \,\text{V}$ 

# Indication of voltage/phase/phase sequence

3 red LEDs for voltage 50, 120, 1000 V 3½-digit LCD for V-measurement value and type of voltage -/~ and additional functions red LED-triangle for phase and phase sequence

# Indication of resistance/continuity/diodes

green LED for continuity up to 2000 k $\Omega$  and diodes LCD 3½-digit for  $\Omega$ -measurement value buzzer signal,  $\leq$  10 k $\Omega$ 

## Measuring ranges - voltage

DC: 0,1...9,9/10,0...99,9/100...1500 V (3% + 4 D) AC: 2,5...99,9/100...1200 V (TRMS)(3% + 4 D) (TRMS 15...1800 Hz)

# Measuring ranges - resistance

 $0...2 \text{ M}\Omega (5\% + 2 \text{ D})$ 

# Measuring ranges - frequency

15 ... 1999 Hz

# Surge voltage strength

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

# Overvoltage category

Insulation test voltage 6 kV unit inspection of case and line CAT IV in accordance with IEC 60664-1 (VDE 0110)

# Operating temperature

-10°C ... + 55°C

# Power supply

9 V-block IEC 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 electro¬des spring-mounted, contact electrode (Pol-L1-sensor)

# Protection category

IP 65, device can be used in moist environments

### Test cable

PUR control cable, 1000 V, 1 m

### Dimensions / weight

 $240 \times 62 \times 39 \text{ mm}$  (device with display) / approx. 270 g