

DUSPOL® Voltage Testers

safe voltage testing up to 1000 V



tested and approved



IEC/EN 61243-3
(VDE 0682-01):
2015 standard

The international standard for voltage testers IEC EN 61243-3 (VDE 0682-401) increases safety for work under voltage

Your work as an expert requires safe testing. Therefore, you should not make any compromises concerning safety! Voltage testers which are used on electrical systems of up to 1000 V have to comply with the standard IEC/EN 61243-3 (VDE 0682-401):2015. The standard creates uniform testing and safety criteria on an international level and remarkably which concentrates on user safety.

The generation of DUSPOL® voltage testers exceeds the demands of the standards concerning both the protection category for housings (IP 65) and overvoltage protection (CAT IV 600 V). The nominal voltage range has been increased to a minimum of 1000 V AC/DC in order to ensure safe testing of increased system voltages of industrial applications, photovoltaic systems and wind power plants as well as of hybrid automotive engineering.

- 1 phase-sequence test (counter-clockwise/clockwise)
- 2 sensor of non-contact cable break detector
- 3 single-pole phase test
- 4 measuring point illumination
- 5 acoustic and optical continuity test
- 6 frequency indication
- 7 LC display with background lighting

DUSPOL® digital
1000 V AC
1200 V DC
CAT IV 600 V

7
voltage indication
1 – 1000 V AC TRUE RMS
1 – 1200 V DC

TRUE
RMS

resistance measurement and
diode test with conducting state
voltage indication

Ω
+/-

8
load connection via
push buttons

FI/RCD
OFF
ON

9
vibrating alert in
the test handle

VIBRATION

10
housing with protection
against dust and water jets

IP 65



DUSPOL® expert
1000 V
AC/DC
CAT IV 600 V

DUSPOL® analog
1000 V
AC/DC
CAT IV 600 V



All DUSPOL® voltage testers are equipped with a direct display system without loading the test point. In case of need, a load circuit can be connected via a push-button which suppresses inductive and capacitive reactive voltages. Thus, it is possible to clearly distinguish between high-energy and low-energy electric circuits.

A vibrating motor can be activated additionally. The vibrating power of this motor increases proportionally to the applied voltage. This is an additional indication of voltage being applied.

The DUSPOL® voltage testers underlines once again the BENNING expertise in the field of testing, measuring and safety technology. With a DUSPOL® voltage tester you acquire an innovative product which has been tested and approved by the independent VDE Test and Certification Institute.

DUSPOL® Voltage Testers

- safe voltage testing up to 1000 V AC/DC
- load connection with vibration alert
- intentional tripping of a 30 mA RCD
- phase sequence test in a three-phase mains
- single-pole external conductor test and polarity test

Additionally for DUSPOL® expert, DUSPOL® digital:

- LED step indicator from 50 V even in case of empty batteries
- acoustic continuity test with loud test buzzer and visual indication by means of yellow LED (continuity tests even of live components, such as e. g. fuses in “intermeshed” systems).
- measuring point illumination by means of white high-power LED
- phase sequence test by means of green LED (left/right)
- detector for non-contact localization of cable breaks on exposed and live lines
- delivery including batteries

Additionally for DUSPOL® digital:

- voltage testing up to 1000 V AC TRUE RMS/1200 V DC
- TRUE RMS measuring method
- low-volt range: 1.0 V to 11.9 V
- frequency indication up to 1000 Hz
- resistance measurement up to 300 kΩ
- conducting-state voltage measurement of diodes
- automatic LC display illumination by means of a light sensor

A wide range of applications

Ideal for voltage tests

- in photovoltaic systems and wind power plants
- in hybrid vehicles
- of high system voltages in industrial applications
- in service and crafts



Testing an AC voltage of 1000 V in an industrial power distribution system



Testing the high DC voltage of a HV electric vehicle

Set offer:

Set DUSPOL® digital with premium case



DUSPOL® digital SET
item no. 050264

Voltage and Continuity Tester

	DUSPOL® digital	DUSPOL® expert	DUSPOL® analog
indication	LED/LCD (illuminated)	LED	plunger system (illuminated)/LED
voltage range	1.0 V - 1000 V AC/1200 V DC	12 V - 1000 V AC/DC	12 V - 1000 V AC/DC
frequency range	1 - 1000 Hz	–	–
acoustic and visual continuity test	buzzer + yellow LED 0 - 100 kΩ	buzzer + yellow LED 0 - 100 kΩ	–
diode test	0.3 - 2.0 V	conducting-state/ non-conducting direction	–
resistance measuring range	0.1 kΩ - 300 kΩ	–	–
phase-sequence test	green LEDs (right/left)	green LEDs (right/left)	LCD (“R” symbol)
single-pole external conductor test	red “lightning” LED	red “lightning” LED	LCD (“R” symbol)
polarity test	LCD (+/-)	LED (+/-)	LED (+/-)
cable break detector	yellow LED (flashing)	yellow LED (flashing)	–
load connection via push button	I _s = 550 mA (1000 V) 30 mA RCD trip	I _s = 550 mA (1000 V) 30 mA RCD trip	I _s = 550 mA (1000 V) 30 mA RCD trip
vibrating alarm	•	•	•
measuring point illumination	white LED	white LED	–
protection class	IP 65	IP 65	IP 65
item no.	050263	050262	050261

See page 36 for further accessories