BENNING World Class Test Equipment

## The generation DUSPOL<sup>®</sup> voltage testers safe voltage testing up to 1000 V

#### The international standard for voltage testers DIN EN 61243-3 (VDE 0682-401):2015 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 DIN 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*<sup>®</sup> 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.





tested and

approved

DIN EN 61243-3

(VDE 0682-401):

2015 standard

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

### DUSPOL<sup>®</sup> voltage testers The original!

#### Product safety at the highest level:

- safe voltage testing up to 1000 V AC/DC
- direct display without actuating a push-button (high-impedance testing)
- load connection via push-button (low-impedance testing)
- battery-independent voltage indication from 50 V AC/DC on
- · vibration alert in the test handle
- robust round housing with rubberized gripping surface for outdoor use (protection category IP 65)
- tested and approved in compliance with the current DIN EN 61243-3 (VDE 0682-401):2015 standard

#### **BENNING World Class Test Equipment**

# DUSPOL<sup>®</sup> voltage testers – the testers with the VDE mark of conformity PROFIPOL<sup>®</sup>+ a plus in functionality

#### The generation 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 (phase)

#### Additionally for DUSPOL® expert, DUSPOL® digital:

- · acoustic continuity test with loud test buzzer and visual indication by means of yellow LED
- · 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

#### 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

#### Optional DUSPOL® stand-by case:



(see page 18)

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#### The new PROFIPOL®+ voltage tester with additional functions and convenient design

- slim and compact design
- test handle lock for one-hand operation on sockets and for safe storage
- indicating steps from 12 V to 690 V AC/DC, fully operational even with batteries being exhausted or removed
- · reduced testing current without RCD tripping
- · acoustic continuity test with loud buzzer and visual indication by means of yellow LED
- · single-pole external conductor test (phase) and polarity test
- non-contact cable break detector (yellow LED)



PROFIPOL®+

voltage and continuity rester				
	DUSPOL <sup>®</sup> analog	DUSPOL <sup>®</sup> expert	DUSPOL <sup>®</sup> digital	PROFIPOL®+
indication	plunger system (illuminated)/LED	LED	LED/LCD (illuminated)	LED
voltage range	12 – 1000 V AC/DC	12 – 1000 V AC/DC	1.0 - 1000 V AC/1200 V DC	12 – 690 V AC/DC
frequency range	-	-	1 – 1000 Hz	-
acoustic and visual	-	buzzer + yellow LED	buzzer + yellow LED	buzzer + yellow LED
continuity test		0 – 100 kΩ	0 – 100 kΩ	0 – 100 kΩ
diode test	-	conducting-state/	0.3 – 2.0 V	-
		non-conducting direction		
resistance measuring range	-	-	0.1 kΩ – 300 kΩ	-
phase-sequence test	LCD ("R" symbol)	green LEDs (right/left)	green LEDs (right/left)	-
single-pole outer conductor test	LCD ("R" symbol)	red "lightning" LED	red "lightning" LED	red "lightning" LED
polarity test	LED (+/-)	LED (+/-)	LCD (+/-)	LED (+/-)
cable break detector	-	yellow LED (flashing)	yellow LED (flashing)	yellow LED
load connection	I <sub>s</sub> = 550 mA (1000 V)	I <sub>s</sub> = 550 mA (1000 V)	I <sub>s</sub> = 550 mA (1000 V)	
via push button	30 mA RCD trip	30 mA RCD trip	30 mA RCD trip	-
vibrating alarm	yes	yes	yes	-
measuring point illumination	-	white LED	white LED	-
protection class	IP 65	IP 65	IP 65	IP 54
item no.	050261	050262	050263	020023