# two-pole voltage testers (EN standard 61243-3) BENNING in accordance with VDE0682 Part 401

# Application:

Ident. No. 027-037: for use in all installation fields and renewable energy sectors. CAT IV 690 V, CAT III 1000 V. Tested and approved in line with DIN EN 61243-3(VDE 0682-401):2015.

Ident. No. 056: For checking that cables are de-energised, also suitable for very robust applications up to 600 V AC/DC.

# Execution:

- Ident. No. 027: Continuity test (acoustic/visual)
- Cable break detector
- Diode test
- Voltage display from 50 V even for empty batteries
- TRUE RMS
- Displays high voltages
- Ident. No. 032: Continuity test (acoustic/visual)





Ident. No. 027

Ident. No. 032

- Cable break detector
- Voltage display from 50 V even for empty batteries
- Displays high voltages
- Ident. No. 037: no batteries required
- displays high voltages
- Ident. No. 056:
- Complies with DIN EN 61243-3:2015 and IEC 61243-3:2014
- Can be used on electric circuits in overvoltage categories up to CAT III 600 V and CAT II 690 V
- tester handle locking mechanism for single-handed operation on sockets and for safe storage
- cable break detector (from an alternating voltage of approx. 200 V)
- external conductor tester (single-pole external conductor test possible in earthed systems)
- fully functional voltage display if batteries are flat or removed





Ident. No. 056

Model			PROFIPOL+	DUSPOL, analogue	DUSPOL expert	DUSPOL digital
Display			LED   Audible	LED/moving coil	LED   Audible	LED/LCD   Audible
Min./max. volta	ige range AC		12-690 V/AC	12-1000 V/AC	12-1000 V/AC	1-1000 V/AC
Min./max. volta	ige range DC		12-690 V/AC	12-1000 V/DC	12-1000 V/DC	1-1200 V/DC
Min./max. frequency			-	-	-	1 / 1000 Hz
Min./max. cont	inuity test		0-100 kOhm	-	0-100 kOhm	0-100 kOhm
Min./max. elect	trical-resistance measuring ra	nge	-	-	-	0.1 kOhm-300 kOhm
Phase-sequence	e test		No	Yes	Yes	Yes
Phase sequence test			Yes	Yes	Yes	Yes
Polarity testing			Yes	Yes	Yes	Yes
Vibration control system			No	Yes	Yes	Yes
Measurement point lighting			No	No	Yes	Yes
Length x width x height			-	330 x 85 x 55 mm	330 x 85 x 55 mm	330 x 85 x 55 mm
IP protection cla	ISS		IP 54	IP 65	IP 65	IP 65
Weight (kg)			0.190	0.350	0.370	0.380
Overvoltage protection category		CAT III/600 V   CAT II/690 V	CAT IV/600 V   CAT III/1000 V	CAT IV/600 V   CAT III/1000 V	CAT IV/600 V   CAT III/1000 V	
two-pole	75017	ldent. No.	056	037	032	027
voltage testers	/501/	ident. No.	•	•	•	•
DUSPOL			111	111	111	111
quick-access case	75017	Ident. No.	•	•	•	•

Prod. Gr. 751

# SDT 1 socket tester

# BENNING With finger contact for active PE error detection

### Application:

fast and simple testing for correct connection of shockproof sockets

### Execution:

- clear indication of wiring faults (missing PE, N and L conductors, inversion of L and PE conductors) via 3 LEDs
- easy-to-understand status table provides information on correct connection (OK, green) and the type of fault (red)
- active PE test with contact electrode, LCD warns of dangerous contact voltage (greater than 50 V) at the protective earth connection (PE)
- test button for triggering 30-mA fault current/RCD circuit breaker
- voltage is supplied via test object (no batteries required)

# Technical data:

- Min./max. frequency: 50 / 60 Hz
- Length x width x height: 80 x 72 x 78 mm
- Overvoltage protection category: CAT II/300 V





75024... Ident. No.

Prod. Gr. 751

105



# DUTEST pro continuity tester (EN standard 61010) BENNING For high and low resistance measurement

# Application:

Execution:

Display

75021...

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Polarity testing

Acoustic test buzzer

3-stage LED display

Min./max. continuity test Phase sequence test

Overvoltage protection category

For detecting wiring faults and cable disruptions.

Protected for external voltage up to (V/AC)

- Cable break detector
- Advantage:
  - Buzzer volume (adjustable) Powerful high-performance LED pocket torch

LED | Audible

400 0-100 Ohm

Yes

Yes

CAT III/300 V 011

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# TRITEST pro rotation field direction indicator (EN standard 61557-7) BENNING With high-performance LED pocket torch and magnetic hanger

Ident, No.

# Application:

For testing the rotation field direction in three-phase networks.

- Displays phase voltages L1, L2 and L3 via red LED
- Powerful high-performance LED pocket torch Integrated magnet holder and belt clip on back of housing

# Execution:

 Displays "clockwise" or "anticlockwise rotation field" via green/red LED

# Delivery:

Incl. three attachable 4 mm test tips and an alligator clip

Display		LED
Min./max. voltage range AC	400-500 V/AC	
Overvoltage protection category	CAT III/300 V	
75021	ldent. No.	101
/ 502 1	ident. No.	•

Prod. Gr. 751

# **TESTOFON test buzzer**

### Application:

For testing electric appliances, telephones and telecommunication systems, measuring and control equipment as well as electronic circuits.

# Execution:

- No blow out protection
- Tone scale proportional to resistance

# 75022...

Prod. Gr. 751

# MMP3 pocket multimeter (EN standard 61010) BENNING

# Small digital multimeter in leather case for universal use

Technical data:

Max. test voltage: 4.2 V/AC/DC

Voltage-resistant up to: 420 V/AC

 Max. test current: 2 mA Min./max. range: 40-1000 Hz

### Application:

For use in installation fields and simple, industrial fields.

measured value storage (HOLD)

resistance/frequency measurement

# Delivery:

Ident. No.

Execution: Continuity/diode testing Includes leather case, batteries, permanently connected measuring leads

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Model	MM P3		
Display range	5000 digits		
Measuring accuracy	+/- 0.6 %		
Min./max. test voltage (DC)		100 µV/DC-600 V/DC	
Min./max. test voltage (AC)		100 µV/AC-600 V/AC	
Conductivity testing	Yes		
Diode testing	Yes		
Min./max. electrical-resistance measuring range	0.1 Ohm-40 MOhm		
Min./max. frequency	0.000000001 / 5 MHz		
Volt sensor		No	
Memory function		HOLD	
Measuring procedure	RMS		
Overvoltage protection category	CAT III/300 V		
Length x width x height	132 x 86 x 19 mm		
75021	Ident, No.	200	
/ 502 1	ident. NO.	•	

Prod. Gr. 751

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# digital multimeter (EN standard 61010) BENNING

with voltage sensor function

## Application:

For use in installation fields.

### Advantage:

 Volt sensor for non-contact detection of phase voltage and cable breaks (visual/acoustic)



Ident, No. 111 BENNING MM 1-1 Good price/performance ratio

### **Deliverv:**

Ident. No. 111-121: Includes bag, batteries, measuring leads

Ident. No. 131: Includes bag, batteries, measuring leads; includes wire temperature sensor with adapter



Ident, No. 121 BENNING MM 1-2



Ident, No. 131 BENNING MM 1-3

Model		MM 1-1	MM 1-2	MM 1-3
Display range		2000 digits	2000 digits	2000 digits
Measuring accuracy		+/- 0.5 %	+/-0.5%	+/-0.5 %
Min./max. test voltage (DC)		100 µV/DC-1000 V/DC	100 µV/DC-1000 V/DC	100 µV/DC-1000 V/DC
Min./max. test voltage (AC)		100 µV/AC-750 V/AC	100 µV/AC-750 V/AC	100 µV/AC-750 V/AC
Min./max. alternating current of meas	uring range	-	1 mA-10 A	1 mA-10 A
Min. alternating current of measuring	range (mA)	-	1	1
Max. alternating current of measuring range (A)		-	10	10
Min./max. direct current of measuring range		- 1 mA-10 A		1 mA-10 A
Conductivity testing		Yes	Yes	Yes
Diode testing		Yes	Yes	Yes
Min./max. electrical-resistance measu	Min./max. electrical-resistance measuring range		0.1 Ohm-20 MOhm	0.1 Ohm-20 MOhm
Min./max. frequency	Min./max. frequency		0.000001 / 20 MHz	0.000001 / 20 MHz
Volt sensor		Yes	Yes	Yes
Memory function	Memory function		HOLD, MAX/MIN	HOLD, MAX/MIN
Measuring procedure		-	RMS	RMS
Overvoltage protection category		CAT III/600 V   CAT II/1000 V	CAT III/600 V   CAT II/1000 V	CAT III/600 V   CAT II/1000 V
Length x width x height		156 x 74 x 44 mm	156 x 74 x 44 mm	156 x 74 x 44 mm
75024	Ident. No.	111	121	131
/5024	ident. No.	•	•	•

Prod. Gr. 751

### digital multimeter (EN standard 61010) BENNING with the TRUE RMS effective value measurement method

### Application:

Ident. No. 215: for use in industry, service and trade Ident. No. 231: For use in installation fields/ industry

Ident. No. 245: For demanding measuring tasks in industry and craftsmanship

# Execution:

- Ident. No. 215:
- functions: HOLD, MIN/MAX, PEAK, REL microampere measuring ranges (400.0 µA
- DC/4000 µA DC) for ionisation current measurement on heating systems volt sensor

# Ident. No. 215, 245:

- LCD backlighting
- continuity/diode testing
- Ident. No. 231: Automatic voltage detection (AutoV)
- Ident. No. 231–245:
- bar graph display
- LoZ voltage measurement with low input impedance

- Ident. No. 245:
- Datalogger function LOG (40,000 measuring points)
- automatic voltage detection (AutoV)
- Low-pass filter (HFR) for measurements of clocked motor drives
- PC software: transfer measured values in real time (USB), sampling rate is adjustable, measured value storage (MS EXCEL)
- Download the free app! Monitors up to 5 multimeters. Transfer measured values in real time (Bluetooth 4.0). Measured value storage (CSV).
- interfaces: Bluetooth® Low Energy 4.0, USB

### Delivery:

Ident. No. 215: Protective rubber frame, batteries, measuring leads, wire temperature sensor, bag Ident. No. 231: protective rubber frame, measuring leads, wire temperature sensor with adapter, bag Ident. No. 245: incl. PC software, serial data cable

with USB connection, protective rubber frame, magnetic hanger, case, batteries, test leads, wire temperature sensor and calibration certificate



Ident. No. 215





# Electric testing devices \ Multimeter/current clamps

Model		MM 5-2	MM 7-1	MM 12
Display range		6000 digits	6000 digits	4000 digits   40000 digits
Measuring accuracy		+/-0.5%	+/- 0.08 %	+/-0.5 %
Min./max. test voltage (DC)		100 µV/DC-600 V/DC	10 µV/DC-1000 V/DC	10 µV/DC-1000 V/DC
Min./max. test voltage (AC)		100 µV/AC-600 V/AC	10 µV/AC-1000 V/AC	10 µV/AC-1000 V/AC
Min./max. alternating current of measu	ring range	1 mA-10 A	10 µA-10 A	10 µA-10 A
Min. alternating current of measuring range		1 mA	10 µA	10 µA
Max. alternating current of measuring range (A)		10	10	10
Min./max. direct current of measuring range		0.1 µA-10 A	10 µA-10 A	10 µA-10 A
Conductivity testing		Yes	Yes	Yes
Diode testing		Yes	Yes	Yes
Min./max. electrical-resistance measuring range		100 mOhm-40 MOhm	0.1 Ohm-40 MOhm	0.1 Ohm-40 MOhm
Min./max. frequency		0.00001 / 50 kHz	0.00001 / 100 kHz	0.0001 / 100 kHz
Min./max. temperature measuring range		-40 to 400 °C	-40 to 400 °C	-200 to 1200 °C
Volt sensor		Yes	Yes	Yes
Memory function		HOLD, PEAK	HOLD, MAX/MIN	HOLD, PEAK-HOLD, MAX/MIN/ AVG, REL
Measuring procedure		TRUE RMS	TRUE RMS	TRUE RMS AC   AC+DC
Overvoltage protection category		CAT IV/300 V   CAT III/600 V	CAT IV/600 V   CAT III/1000 V	CAT IV/600 V   CAT III/1000 V
Length x width x height		150 x 77 x 44 mm	190 x 94 x 48 mm	206 x 94 x 54 mm
		215	231	245
75024	Ident. No.	•	•	•

Prod. Gr. 751

# digital current clamp multimeters (EN standard 61010)

BENNING for alternating and direct current

### Application: Ident. No. 300: For measurements in electrical

# Execution:

- Ident. No. 320:
- Fork-shaped current clamp head (slimline design)Volt sensor

installations. Ident. No. 310-320: For measurement in electrical installations.

# Delivery:

Ident. No. 310-320: Includes measuring leads



Ident. No. 310 BENNING CM 1-2



Ident. No. 320 BENNING CM 1-3

Model		CM 1-1	CM 1-2	CM 1-3
Display range		2000 digits 2000 digits		2000 digits
Measuring accuracy		+/-2%	+/-1%	+/-1%
Min./max. test voltage (DC)		-	0.1 V/AC-600 V/AC	0.1 mV/AC-1000 V/AC
Min./max. test voltage (AC)		-	0.1 V/AC-600 V/AC	0.1 mV/AC-750 V/AC
Min./max. alternating current of meas	uring range	0.01 A-400 A	0.1 A-400 A	0.1 A-200 A
Min. alternating current of measuring range (A)		0.01	0.1	0.1
Max. alternating current of measuring range (A)		400	400	200
Conductivity testing		No	Yes	Yes
Diode testing		No	No	Yes
Min./max. electrical-resistance measuring range		-	0.1 Ohm-20 MOhm	0.1 Ohm-20 MOhm
Max. collet opening (mm)	Max. collet opening (mm)		30	16
Memory function		HOLD, MAX	HOLD	HOLD
Measuring procedure		RMS	RMS	RMS
Overvoltage protection category		CAT III/600 V	CAT III/600 V	CAT IV/600 V   CAT III/1000 V
Length x width x height		180 x 70 x 42 mm	190 x 70 x 38 mm	190 x 60 x 40 mm
75024	Ident No.	300	310	320
75024	Ident. No.	•	•	•

Prod. Gr. 751



# Digital current clamp multimeters (EN standard 61010) BENNING With TRUE RMS current measurement

## Application:

For measurement in electrical installations/ industry/PV.

# Execution:

# Ident. No. 330:

- Relative measurement (REL)
- VDE electrical standard approval
- Ident. No. 335:
- Automatic selection of correct measuring function
- Prevents measurement errors
- Rapid response
- Ident. No. 335-340:

- LoZ function to suppress capacitively/inductively induced voltages
- ZERO function
- Ident. No. 340:
  - · Power measurement with power factor cos phi,
- Load type display Phase sequence indicator

# Delivery:

Ident. No. 330-335: Includes accessories such as bag, battery/batteries, measuring leads

Ident. No. 340: Includes accessories such as bag, battery/batteries, measuring leads and wire temperature sensor with adapter



Ident. No. 330 BENNING CM 2



Ident. No. 335 **BENNING CM 5-1** 

Model		CM 2	CM 5-1	CM 8
Display range		4000 digits	9999 digits	6000 digits
Measuring accuracy		+/- 0.5 %	+/-0.9%	+/-0.7%
Min./max. test voltage (DC)		0.1 mV/DC-600 V/DC	1.3 V/DC-750 V/DC	10 mV/DC-600 V/DC
Min./max. test voltage (AC)		1 mV/AC-600 V/AC 1.3 V/AC-1000 V/		10 mV/AC-600 V/AC
Min./max. alternating current of measuring range		100 mA-300 A 0.9 A-600 A		0.1 A-600 A
Min. alternating current of measuring r	ange	100 mA	0.9 A	0.1 A
Max. alternating current of measuring	Max. alternating current of measuring range (A)		600	600
Min./max. direct current of measuring range		10 mA-300 A	0.9 A-600 A	0.1 A-600 A
Conductivity testing		Yes	Yes	Yes
Diode testing		No	Yes	Yes
Min./max. electrical-resistance measuring range		0.1 Ohm-40 MOhm	1 Ohm-10 kOhm	0.1 Ohm-20 kOhm
Min./max. frequency		-	-	0.0001 / 4 kHz
Min./max. effective power		-	-	0.001-360 kW
Max. collet opening (mm)		25	35	40
Memory function		HOLD, MAX	HOLD	HOLD, MAX/MIN, PEAK, INRUSH
Measuring procedure		TRUE RMS	TRUE RMS	TRUE RMS
Overvoltage protection category		CAT III/300 V   CAT II/600 V	CAT IV/600 V   CAT III/1000 V	CAT III/600 V
Length x width x height		192 x 66 x 27 mm	215 x 85 x 51 mm	235 x 85 x 51 mm
75024	ldent. No.	330	335	340
/ 5024	ident. No.	•	•	•

Prod. Gr. 751

### CM 11 TRUE RMS AC/DC milliampere current clamp multimeter BENNING Precise measurement of low AC/DC currents with a maximum resolution of 100 $\mu$ A

### Application:

Ideal for troubleshooting problems in electrical installations, control systems, devices and motor vehicle electrical systems.

### Execution:

 Measures stray, differential, leakage and load currents

Delivery:
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ZERO function

includes accessories: bag, batteries, measuring leads

Measures 4 mA - 20 mA process signals without

Standby current measurement for batteries to

monitor battery discharge via leakage

interrupting the current loop

Model	CM 11		
Display range	6000 digits		
Measuring accuracy		+/-1%	
Min./max. test voltage (DC)	10 mV/DC-600 V/DC		
Min./max. test voltage (AC)	10 mV/AC-600 V/AC		
Min./max. alternating current of measuring rang	ge	100 µA-20 A/AC	
Min. alternating current of measuring range (µA)		100	
Max. alternating current of measuring range (A/	20		
Min./max. direct current of measuring range	100 µA-10 A/DC		
Conductivity testing	Yes		
Diode testing	No		
Min./max. electrical-resistance measuring range	9	0.1 Ohm-600 kOhm	
Max. collet opening (mm)		23	
Memory function		HOLD, MAX/MIN	
Measuring procedure	TRUE RMS		
Overvoltage protection category	CAT IV/300 V   CAT III/600 V		
Length x width x height	206 x 76 x 33 mm		
75024	Ident, No.	391	
/ 3024	ident. No.	•	

Prod. Gr. 751



# BENNING IT101 insulation and resistance measuring instrument TRUE RMS voltage measurement with low-pass filter

### Application:

For insulation resistance and low impedance measurement in electrical installations.

### Execution:

- R ISO test voltages 50 V to 1000 V
- R PE test current 200 mA
- Polarisation index (PI), dielectric absorption ratio (DAR)
- Switchable probe for triggering measuring procedures

# Advantage:

- Selectable limit values for ISO measurement, clear display (green LED for passed, red LED for test voltage/external voltage)
- Internal memory

# Delivery:

Includes bag, switchable probe, measuring leads, crocodile clips, protective rubber frame, batteries



**BENNING IT 101** 



Display range		4000 digits
Min./max. low impedance resistance		0.01 Ohm-40 kOhm
Min./max. insulation resistance		50 kOhm-20 GOhm
Min./max. electrical-resistance measuring range		0.01 Ohm-40 kOhm
Min./max. test voltage (DC)		0.1 V/DC-600 V/DC
Min./max. test voltage (AC)		0.1 V/AC-600 V/AC
Measured value memory		500 measuring results
Measuring procedure		TRUE RMS
Overvoltage protection category		CAT IV/600 V
Length x width x height		207 x 95 x 52 mm
75024	Ident. No.	610
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Prod. Gr. 751





