Passive measuring adapters for single-phase and three-phase equipment up to 32 A

leakage current, fault current and load current measurements by means of leakage current clamp

NEW!

BENNING MA 3 measuring adapter

- easy to use for efficient and quick testing
- connection for equipment with CEE connector
- suitable for appliance testers BENNING ST 725/ 750A/ 755/ 760
- test functions in combination with appliance testers:
- protective conductor resistance and insulating resistance
- functional test and phase sequence test of CEE cables
- alternative leakage current measurements

BENNING triple CEE measuring adapter

- connection for equipment with CEE connector
- suitable for all common appliance testers
- test functions in combination with appliance testers:
 - protective conductor resistance and insulating resistance
 - alternative leakage current measurements

TRUE RMS leakage current clamp

BENNING CM 9-1

When using passive test adapters for testing in compliance with DGUV Regulation 3, an additional active leakage/fault current measurement may be required. For this, current clamps with a suitable filter and low resolution can be used.

- leakage/fault current measurement from 0.001 mA AC (1 µA AC)
- preset filter (1 kHz) for appliance testing
- connectable low-pass filter LPF (40 Hz to 70 Hz)
- load current measurement up to 60.00 A AC
- voltage measurement: 0.01 V 600,0 V AC/DC
- resistance measurement up to 600 $k\Omega$
- · continuity test

Intermediate adapters are required for current measurement and for correct contacting for differential current measurement, direct protective conductor current measurement or load current measurement (see table below).



Optional accessories

		item no.
	measuring adapter BENNING MA 3 (16 A CEE 3-pin, 16 A/32 A CEE 5-pin) for testing CEE extension cables (Rer, Rinsu, Ire/Iconr, functional test and phase sequence test) and single-/ three-phase loads (passive)	044159
	triple CEE measuring adapter 16 A 3-pin, 16 A/32 A 5-pin for passive testing of three-phase loads (RPE, RINSU, IPE/ICONT (alternative leakage current measurement method)	044147
	See page 14 for further accessories	

Leakage Current Clamp and suitable Measuring Adapter

	item no.
TRUE RMS leakage current clamp BENNING CM 9-1 ideal for supporting active leakage and fault current measurements during appliance testing	044682
measuring adapters with individual lines led through for current measurements on CEE equipment	
single-phase, shock-proof plug/coupling	044131
three-phase, 16 A/ 400 V CEE plug/ coupling	044127
three-phase, 32 A/ 400 V CEE plug/ coupling	044128

VDE 0701-0702 Appliance Tester

BENNING

mobile and network-independent testing of electrical appliances

BENNING ST 710

battery-operated appliance tester for mobile testing of electrical devices

- testing in compliance with VDE 0701-0702, ÖVE/ÖNORM E 8701, **NEV, NEN 3140**
- · easy operation by means of three keys
- · quick complete testing within 10 seconds
- · mobile testing can be made network-independently

Application

Safety-related testing of electrical devices/work equipment such as e.g. electrical devices/tools with ON/OFF switch, motorized equipment, lamps, cable reels, multiple distributors and household appliances. The protective conductor current/contact current is measured by means of the alternative leakage current measurement method.

Features

- · automatic testing procedure for devices of class I, class II/III and line test
- testing of cable reels, multiple distributors and device connecting cables with rubber connector
- measuring result with "pass/fail" information
- · limiting values preset in compliance with VDE standard
- · indication in case of incorrect operation and if the test sample is not switched on
- sufficient battery capacity for > 2500 test samples
- three-phase test objects can be tested by means of optional measuring adapter

Measuring functions

- · protective conductor resistance with a testing current of 200 mA DC and automatic polarity reversal
- insulating resistance with a testing voltage of 500 V DC
- · protective conductor current and contact current by means of alternative leakage current measurement method
- voltage measurement on external shock-proof socket (L-N, L-PE, N-PE)



Forms for test ce Testing of electrical devices' available for download free of charge at <u>www.benning.de</u> (050309): with socket of type E (BE/FR/CZ/SK/PL) Scope of delivery

-ò RO PEAK HOLD CM 9-1

Appliance Tester

(050315): with socket of type CH (CH)

	BENNING ST 710
display	graphic display
protective conductor resistance (RPE)	0.05 Ω - 20 Ω
insulation resistance (Riso)	0.1 MΩ - 20 MΩ (500 V DC)
protective conductor current/contact current by means of alternative leakage current measurement method (IEA)	0.1 mA - 20 mA
line test	RPE, RISO, short-circuit test and continuity test of phase conductor (L) and neutral conductor (N)
voltage	50 V - 270 V
scope of delivery	carrying case, test cable with alligator clip, appliance cable, batteries
item no.	050308

Measuring range indications refer to ranges from highest resolution to the final measuring range value.

Optional accessories

	item no.		
TRUE RMS leakage current clamp BENNING CM 9 -1 for the measurement of differential current, protective conductor current and load current of single-phase and three-phase loads (see page 10, 42)	044682		
measuring adapters for TRUE RMS leakage current clamp BENNING CM 9-1			
single-phase, shock-proof plug/coupling	044131		
three-phase, 16 A CEE-CEE, 5-pin	044127		
three-phase, 32 A CEE-CEE, 5-pin	044128		
See page 14 for further accessories			