

AT3-II S

3-Phase 16 (20) Current Adapter with Residual Current Logging

3-349-245-03
5/3.21

DIN VDE tests without mains operation

- Protective conductor resistance
- Insulation resistance
- Equivalent leakage current

DIN VDE tests with mains operation

- Residual current
- Touch current
- Protective conductor current

Equipment

- 5-pin CEE 32 A (max. 20 A) and CEE 16 A



Application

With the AT3-II S CEE adapter, devices which are equipped with a 16A/6h or 32A/6h 5-pin CEE plug can be quickly and efficiently connected to test instruments designed for testing portable devices and which are furnished with only an earthing contact outlet.

The following tests can be performed on devices with CEE plugs with the help of the AT3-II S adapter:

- Testing of protective conductor continuity
- Insulation resistance measurement
- Measurement of protective conductor resistance with the following measurement types:
 - Direct (direct measuring method via test socket)
 - Differential (differential current measuring method)
 - Alternative (equivalent leakage current measuring method)

The CEE adapter is additionally equipped with an earthing contact outlet, to which single-phase devices under test can be connected, that are not suitable for direct connection to a test instrument, e.g. due to high starting current.

Application with SECUTEST.../SECULIFE...

The AT3-II S is a perfect match for suitable test instruments from the SECUTEST... and SECULIFE... product ranges for testing portable devices.

The AT3-II S allows for tests in accordance with the menu-driven test sequences of these test instruments either fully automatic or manual including the transfer of the test results to the test instruments and evaluation via the test instruments.

Applicable Regulations and Standards

IEC/EN 61 010-1:2001 VDE 0411-1:2002	Safety requirements for electrical equipment for measurement, control and laboratory use – general requirements
DIN VDE 0404 Part 1: 2002	Test and measuring equipment for testing the electrical safety of electrical devices – general requirements
DIN VDE 0404 Part 2: 2002	Test and measuring equipment for testing the electrical safety of electrical devices – Devices for testing the safety measures of electrical equipment – devices for periodic tests
EN 60529 VDE 0470 Part 1	Degrees of protection provided by enclosures (IP code)
DIN EN 61140 VDE 0140-1	Protection against electric shock Common aspects for installations and equipment
DIN EN 61326-1 VDE 0843 Part 20-1	Electrical equipment for measurement, control and laboratory use – EMC requirements

Regulations and Standards for the Application of the Safety Tester

	Testing after Repairs / Periodic Testing	
Devices under test to be tested in accordance with the following regulations	DIN VDE 0701-0702: 2008	IEC 62353:2007 DIN EN 62353:2008 (VDE 0751-1)
Electrical equipment	•	
Appliances and electric equipment	•	
Mains operated electronic devices	•	
Hand-held electric tools	•	
Extension cables	•	
Data processing devices	•	
Electrical medical devices, application parts		•

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Characteristic Values

Signalling Device

The orange signal lamp at the AT3-II S signals that the terminals at the mains outlet from which power is supplied are connected to the test/mains outlet or coupling at the AT3-II S adapter without the use of a fuse or any other protective devices.

Reference Conditions

Ambient temperature	+23 °C ±2 K
Relative humidity	40 ... 60 %
Line voltage	230 V ±1 %
Frequency of measuring quantity	50 Hz ±0.2%
Waveshape of measuring quantity	sine (deviation between RMS value and rectified value ±0.5%)

Ambient Conditions

Operating temperatures	0 ... + 40 °C
Storage temperatures	-20 ... + 70 °C
Humidity	max. 75%, no condensation allowed
Elevation	max. 2000 m

Electrical Safety

Safety class	I per DIN EN 61140/VDE 0140-1
Operating voltage	300 V
Test voltage	2.2 kV
Current-carrying capacity	20 A 3-phase current
Proprietary connector cable "mains active"	7 VA, cos φ ~ 0.5
Measuring category	II
Contamination degree	2

Electromagnetic Compatibility EMC

Product standard	EN 61326-1
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Residual Current

Measuring range	0.08 mA ... 10.0 mA AC
Intrinsic error	4% rdg. ±40 µA
Measuring error	6% rdg. ±60 µA

Mechanical Design

Protection Housing IP40, terminals IP20

Extract from table on the meaning of IP codes

IP XY (1 st digit X)	Protection against foreign object entry	IP XY (2 nd digit Y)	Protection against the penetration of water
2	≥ 12.5 mm Ø	0	not protected
4	≥ 1.0 mm Ø	0	not protected

Dimensions W x H x D: 290 mm x 120 mm x 105 mm (without cables and grommets)

Weight 2.4 kg


Order Information

Description	Type	Article Number
Safety tester	AT3-II S	Z745T

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