



NT 700-5

Test unit for e-mobility HV-cable harness tests

- Measurement equipment fulfilling the requirements of test norm LV123
- Compact design: 25 RU cabinet on rolls
- Ideal hardware and software features for the use with test tables
- Comfortable test system operation and programming through NT Control
- Individual test reporting with printer, in data file or database
- Ability for software connection to custom specific MES (*Manufacturing Execution Systems*)
- Maximum flexibility and cost efficiency due to free compilation of up to three voltage classes and their associated test points (Mixed Matrix)
 - Voltage level 1: Low voltage
 - Voltage level 2: High voltage max. 4670 VDC / 3300 VAC
 - Voltage level 3: High voltage max. 6000 VDC / 5000 VAC
- Four-wire measurement from 100 μ Ohm for shield and wire resistance (optional)
- Function test editor (optional)

TESTING

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Technical Features	
Operation	<p>Software package NT Control.</p> <p>NT Control is included in the delivery. The installation requires a PC with Windows 7 Pro up to Windows 10 Pro operating system (country variants German or English). Data exchange between NT Control and test system via network.</p> <p>PC is not part of the test system and therefore not included in the delivery.</p>
Test points and voltage levels	<p>Voltage level 1 with test point cards type RM60: Low voltage Voltage level 2 with test point cards type RM10: HV up to 3750 VDC / 2650 VAC Voltage level 2 with test point cards type RM10 TWIN-E: HV up to 4670 VDC / 3300 VAC Voltage level 3 with test point cards type RM9: HV up to 6000 VDC / 5000 VAC</p> <p>The maximum test point range results from the combination of voltage classes and available space inside the 25 RU cabinet.</p> <p>Every test point can be used for every test type, independently of the voltage level. NT Control will automatically limit the test parameters to the permitted values of the respective test point cards.</p>
Low voltage test DC	
Threshold continuity test	1 Ohm – 1 kOhm
Threshold short-circuit test	20 kOhm – 1 MOhm
Component test	Resistors, capacitors, diodes, Zener diodes, LEDs
Insulation test DC	
Test voltage	40 – 1500 V
Threshold isolation	500 kOhm – 2 GOhm (optional up to 10 GOhm)
Dielectric strength test AC/DC	
Test voltage	see Technical Features → Test points and voltage levels
Options	
Four-wire measurement 1 mOhm	1 mOhm – 1000 Ohm; step size 1 mOhm
Four-wire measurement 100 µOhm	100 µOhm – 1000 Ohm; smallest step size 100 µOhm
Function test editor	Editor for convenient programming of function test requirements
Others	Various further options available on request
General	
Power supply	100 – 240 VAC (50 – 60 Hz)
Dimensions (W x H x D, approx.)	600 x 1355 x 800 mm
Basic test points range	No test points included in basic test unit! Test point cards will be quoted project-specifically.
Basic voltage classes	The basic test unit includes one rack for voltage class 1. Further racks will be quoted project-specifically.