

# TESTING AND MEASURING EQUIPMENT/ALLOWED SUBCONTRACTING

## IEC 62208:2011, Edition 2.0

### Empty enclosures for low-voltage switchgear and controlgear assemblies – General requirements

“R” Required  
 “S” May be subcontracted, see OD 2012  
 “SP” Specialized Facility, see IECEE 02-2  
 “W” Witness testing in the categories “MED” and “MEAS”  
 “3PPS” Three Phase Power Supply required

Clause	Measurement/testing	Testing / measuring equipment / material needed	Equipment Classification
9.3	Marking	Cloth Water n-Hexane Timer	
9.4	Static loads	Weights Force gauge Timer Heating cabinet Protractor	<a href="#">GDJS-015B</a>
9.5	Lifting	Crane or similar lifting equipment Weights Timer Ruler	
9.6	Axial loads of metal inserts	Force gauge Timer	

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9.7	Degree of protection against external mechanical impacts (IK code)	Suitable test hammer according to IEC 62262	<a href="#">IK01-06</a>
9.8	Degree of protection against access to hazardous parts and against ingress of solid objects and/or water (IP code)	Sphere 50 mm diameter Jointed test finger Test rod 2,5 mm diameter Test wire 1,0 mm diameter Sphere 12,5 mm diameter	<a href="#">SMT-02T50</a> <a href="#">SMT-CT3</a> <a href="#">SMT-DT1</a>
		Dust chamber Drip box Drip box 15° Oscillating tube/spray ± 60° or spray nozzle/spray ± 60° Oscillating tube/spray ± 180° Water jet hose nozzle - nozzle 6,3 mm diameter Water jet hose nozzle - nozzle 12,5 mm diameter Immersion tank Fan jet nozzle and force sensor for measuring the impact force of the water jet	<a href="#">SC-015</a> <a href="#">JL-X</a>
9.9.1	Thermal stability	Climatic chamber according to IEC 60068-2-2 (dry heat test at +70 °C) Rough cloth, force gauge or scale + weight of 500g	<a href="#">GDJS-015B</a>
9.9.3	Resistance to abnormal heat and fire due to internal electric effects	Glow-wire test apparatus according to IEC 60695-2-11	<a href="#">ZRS-3H</a>
9.10	Verification of dielectric strength	AC High-voltage source (0 - min. 3,5 kV) Voltmeter (min. 3,5 kV) Humidity cabinet	<a href="#">GDJS-015B</a>
9.11	Continuity of the protective circuit	Resistance measuring instrument with a driving current of at least 10 A (a.c. or d.c.).	
9.12	Resistance to ultra-violet (UV) radiation	Test chamber according to ISO 4892-2 Test equipment according to ISO 178 or ISO 179	<a href="#">UV-263LS</a>
9.13	Resistance to corrosion	Climatic chamber according to IEC 60068-2-30 (damp heat cycling test at +40 °C) Test chamber according to IEC 60068-2-11 (salt mist at +35 °C) Demineralized water Timer	<a href="#">YWX/Q-010</a>

Clause	Measurement/testing	Testing / measuring equipment / material needed	Equipment Classification
9.14	Thermal power dissipation capability	Load resistors Temperature acquisition unit Current/voltage source Voltmeter Amperemeter	