



TESTING AND MEASURING EQUIPMENT/ALLOWED SUBCONTRACTING

IEC 60691:2002-12, Edition 3.0

Thermal links

R=Required by Lab

S=May be subcontracted

3PPS=Three Phase Power Supply required

Clause	Measurement/testing	Testing / measuring equipment / material needed	Subcontracting
4	General requirements	None	-
5	General notes on tests	None	-
6	Classification	None	-
7	Marking	Cloth soaked with water, or apparatus for testing the indelibility of markings according to Annex C	R
8	Documentation	None	-
9	Mechanical requirements	Force gauge tester, tensile force 40 N, pushing force 8 N Tensile and bending test according to IEC 60068-2-21, Test U (U _a , tensile 10 N; U _b , bending 5 N)	R
10	Electrical requirements		
10.1		Suitable measurements e.g. slide gauge	R
10.2		Humidity chamber according to IEC 60068-2-3	R
10.3		High-voltage transformer, AC 45 – 62 Hz	R
10.4		DC-Insulation tester for 2 x U _r	R



Clause	Measurement/testing	Testing / measuring equipment / material needed	Subcontracting
10.5		Tracking test apparatus (PTI) according to IEC 60112	R
10.6		AC Power supply, resistive- and inductive loads, voltmeter, ammeter, power analyzer meter, heating cabinet, insulation resistance meter	R
10.7		D.C. current pulses test apparatus 100 cycles, amplitude of $15 I_R$, duration of 3ms with 10s intervals	R
11	Temperature tests	Suitable signal measurement for the operation of thermal links. Heating cabinet, temperature meter/recorder, fine wire thermo-couples, high voltage tester	R
12	Resistance to rusting	Humidity chamber	R

Note: The presence of equipment alone does not indicate a satisfactory situation. Assessors must evaluate the equipment design, calibration, uncertainty and documentation to ensure compliance with the directions of the standard. The requirements of ISO Guide 25 regarding validation are applicable, as the tests of this standard are not standardized tests.