



TESTING AND MEASURING EQUIPMENT/ALLOWED SUBCONTRACTING

IEC 60252-1:2001-02, Edition 1.0

AC motor capacitors – Part 1: General – Performance, testing and rating – Safety requirements and operation

R=Required by Lab

S=May be subcontracted

3PPS=Three Phase Power Supply required

Clause	Measurement/testing	Testing / measuring equipment / material needed	Subcontracting
2.6	Visual examination	No special equipment required	R
2.7	Electrical tests: High voltage test between terminals	AC source Voltage measurement instrument	R
2.8	Electrical tests: High voltage test between terminals and case	AC high voltage tester (0 to 3 kV) Voltage measurement instrument	R
2.9	Capacitance	Capacitance meter (measurement at rated voltage)	R
2.10	Check of dimensions	Sliding gauge	R
2.11.1.1	Test U _a : Tensile	Dynamometer	R
2.11.1.2	Test U _b : Bending	Dynamometer	R
2.11.1.3	Test U _c : Torsion	Dynamometer	R
2.11.1.4	Test D _u : Torque	Torque meter	R
2.11.2	Solderability	Soldering iron / soldering bath	S
2.11.3	Vibration	Vibrating device	S
2.12	Sealing	Ventilation oven 40 to 150 °C ± 2 °C	R



Clause	Measurement/testing	Testing / measuring equipment / material needed	Subcontracting
2.13	Endurance	AC source 200 to 850V \pm 2 % Ventilated oven 40 to 150°C \pm 2 °C	R
2.14	Damp heat	Climatic chamber 40°C \pm 2°C / 93 % \pm 3% RH	R
2.15	Self-healing test	AC source Voltage measurement instrument Apparatus for detection of self-healing breakdowns (e.g. acoustic detection) Megaohmmeter	R
2.16	Destruction test	AC source Voltage measurement instrument DC high voltage tester Variable inductor or range of inductors Temperature chamber (forced circulation) Current measurement instrument	R
2.17	Resistance to heat, fire and tracking	Ball pressure test apparatus; Heating cabinet Glow-wire test apparatus Tracking test device	R
4.1	Creepage distances and clearances	Slide caliper	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.