



TESTING AND MEASURING EQUIPMENT/ALLOWED SUBCONTRACTING
IEC 61347-1, Second Edition (2007) – A1/2010 – A2/2012
Lamp controlgear – Part 1: General and safety requirements

“R” Required
 “S” May be subcontracted, see OD 2012
 “SF” 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	Subcontracting
7.2	Durability and legibility of marking	Pieces of cloth / Petroleum spirit	R
8	Screw / screwless terminals	Test screwdriver, digital caliper (or equivalent), test cables, pull device, screwless terminals apparatus (Section 15 – IEC 60598-1)	R
9	Provisions for protective earthing	Earthing test equipment 25A (Clause 7.2.1 – IEC 60598-1 also refers)	R
9.5.2	Earth continuity test	Earthing test equipment	R
10	Protection against accidental contact with live parts	Test finger (fig. 1 IEC 60529) with force indicator	R
10.2	Capacitor discharge test	Voltmeter, Oscilloscope / Discharge voltage measurement instrument (as alternative)	R
10.4	Touch current testing	Touch current tester	R
11	Moisture resistance and insulation	Humidity cabinet, mega ohmmeter	R
12	Electric strength	High voltage transformer	R
13	Thermal endurance of windings	Supply unit, ammeter, oven, ohmmeter, voltmeter, test lamp mega ohmmeter	R
14	Fault conditions	Variable Supply, temperature measurement device, heating cabinet, high-frequency spark generator, tissue paper, voltmeter, mega ohmmeter	R

Clause	Measurement/testing	Testing / measuring equipment / material needed	Subcontracting
14.6	Fault conditions	High-power a.c. supply (Test circuit of Fig. 3)	R
16	Creepage distances and clearances	Digital caliper (or equivalent)	R
17	Screws, current-carrying parts and connections	Test screwdriver, test rods, Clause 4.11.6 – IEC 60598-1 equipment	R
18.1 18.3	Resistance to heat	Ball pressure test apparatus (see also CTL D.S. N. 391.mod), Heating cabinet, digital caliper (or equivalent), timer, Glow wire apparatus, tissue paper, measuring device	R
18.2	PCB resistance to fire	Test equipment required - IEC 61189-2 - Clause 8.7	R
18.4	Resistance to flame	Needle flame burner, tissue paper, timer, measuring device	R
18.5	Resistance to tracking	Tracking test apparatus	R
19	Resistance to corrosion	Solution of ammonium chloride in water, humidity cabinet, oven	R
Annex B (B.9)	Thermally protected lamp controlgear (Heating)	Oven, adjustable supply unit, ammeter, temperature measurement device, ohmmeter, test enclosure according to annex D, wooden blocks	R
Annex B (B.9.5)	Thermally protected lamp controlgear (Heating)	Test circuit of Fig. B.1	R
Annex C (C.7)	Electronic lamp controlgear protected against overheating (Limitation of heating)	Oven, adjustable supply, ammeter, temperature measurement device	R
Annex H (H.12)	Lamp controlgear heating	Oven, adjustable supply unit, amperometer, ohmmeter, temperature measurement device, wooden blocks, draught-proof enclosure according to Annex F, test corner	R
Annex N	Distances through insulation	Mandrel apparatus	R