

TESTING AND MEASURING EQUIPMENT/ALLOWED SUBCONTRACTING  
IEC 61347-1:2024, Edition 4.0  
Part 1: Controlgear for electric light sources – Safety – Part 1: General requirements

Abbreviations to be used at the column “Equipment Classification”:

“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	Subcontracting
6.3	Durability and legibility of marking	Pieces of cloth / Petroleum spirit	
7	Screw / screwless terminals	Test screwdriver, digital caliper (or equivalent), test cables, pull device, screwless terminals apparatus (Section 15 – IEC 60598-1)	
8	Earthing	Earthing test equipment	<a href="#">WB2678A</a>
9	Protection against accidental contact with live parts	Test finger (fig. 1 IEC 60529) with force indicator	<a href="#">SMT-TB11</a>
9.2	Capacitor discharge test	Voltmeter, Oscilloscope / Discharge voltage measurement instrument (as alternative)	
9.4	Touch current testing	Touch current tester	
10	Moisture resistance and insulation	Humidity cabinet, mega ohmmeter	<a href="#">WB2681A</a> <a href="#">GDJS-015B</a>
10.3	Electric strength	High voltage transformer	<a href="#">LSP-500VARC</a>
11	Fault conditions	Variable Supply, temperature measurement device, heating cabinet, high-frequency spark generator, tissue paper, voltmeter, mega ohmmeter	

Clause	Measurement/testing	Testing / measuring equipment / material needed	Subcontracting
	Fault conditions	High-power a.c. and d.c. supply (Test circuit of Fig. 2)	
13	Creepage distances and clearances	Digital caliper (or equivalent)	<a href="#">CK-1</a>
14	Screws, current-carrying parts and connections	Test screwdriver, test rods, Clause 4.11.6 – IEC 60598-1 equipment	
15	Resistance to heat	Ball pressure test apparatus (see also CTL DSH 391 D), Heating cabinet, digital caliper (or equivalent), timer, Glow wire apparatus, tissue paper, measuring device	<a href="#">GDJS-015B</a> <a href="#">ZBP-T</a>
	PCB resistance to fire	Test equipment required - IEC 61189-2 - Clause 8.7	<a href="#">ZRS-3H</a>
	Resistance to flame	Needle flame burner, tissue paper, timer, measuring device	<a href="#">ZY-3</a>
	Resistance to tracking	Tracking test apparatus	<a href="#">TTC-1</a>
16	Thermal endurance of windings	Supply unit, ammeter, oven, ohmmeter, voltmeter, test lamp mega ohmmeter	
Annex A (A.2)	Test to establish whether a conductive part is a live part which may cause an electric shock (measured voltage)	Non-inductive resistor 50 K $\Omega$ , voltmeter	
Annex A (A.3)	Test to establish whether a conductive part is a live part which may cause an electric shock (touch current)	Measuring circuit for touch current according to Annex G.2 of IEC 60598-1:2014	
Annex B	Electronic lamp controlgear protected against overheating  (Limitation of heating)	Oven, adjustable supply, ammeter, temperature measurement device	

Clause	Measurement/testing	Testing / measuring equipment / material needed	Subcontracting
Annex E	Lamp controlgear heating	Oven, adjustable supply unit, amperometer, ohmmeter, temperature measurement device, wooden blocks, draught-proof enclosure according to Annex F, test corner	
Annex H	Requirements for insulation materials used for double or reinforced insulation	Mandrel apparatus	
Annex I	Cr/Cl and dti: Control gear protected against pollution by the use of coating or potting	Additional test equipment: Rapid temperature changing chamber, 1,2/50 $\mu$ s generator	<a href="#">GDWJS-0100D</a> <a href="#">SG61000-5</a>