



IEC 60238 Edition 8 (2004) – A1 (2008) – A2 (2011)

TESTING AND MEASURING EQUIPMENT/ALLOWED SUBCONTRACTING

Edison screw lampholders

R = Required by Lab

S = May be subcontracted

W = Witness testing

3PPS = Three Phase Power Supply required

Clause	Measurement/testing	Testing / measuring equipment / material needed	Subcontracting
7.5	Marking shall be durable and easily legible.	Petroleum spirit hexane, water, cloth, timer	R
8.1	Dimensions	Standard Sheet and gauges according to IEC 60061-3, sheet 7006-25, 7006-25A, 7006-26, IEC 60399 Relevant lamps where gauges are not available E5 / E10	R S
8.2	Dimensions	Gauges according to IEC 60061-3, sheets 7006-21, 7006-22A, 7006-23, 7006-24, 7006-30, 7006-30A, 7006-31 Relevant lamps where gauges are not available E5 / E10	R S
8.3	Thickness	Micrometer with pointed noses and ratchet screw.	R
8.4	Screws length	Digital calliper (or equivalent)	R
8.5	Screw threads	Gauges according to figures 2a or 2b. Torque tester 0,5 Nm	R



**IEC SYSTEM FOR CONFIRMITY TESTING
AND CERTIFICATION OF ELECTRICAL
EQUIPMENT**

COMMITTEE OF TESTING LABORATORIES

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8.6	Dimensions of threaded entries and set screws	Calliper	R
8.7	Lampholder dimensions	E27, gauge according to IEC 60061-3 sheet 7006-22B.	R
9.1 – 9.2	Protection against electric shock	Gauges according to IEC 60061-3: – 7006-31 for lampholders E14; – 7006-22A for lampholders E27; – 7006-24 for lampholders E40. Relevant lamps where gauges are not available E5 / E10 Test finger with indicating device and with force meter and indicating device	R S R
9.3	Torque test	Test caps according to Figures 13 & 14 Torque tester	R
10.2.2	Screwless terminals	Screwless terminals test apparatus (according to Section 15 of IEC 60598-1)	R
10.3	Terminals	Torque meter, torque screw driver	R
10.5 – 10.6	Dimensions of screw type terminals	Calliper	R
10.7	Escaped conductor test	Calliper	R
10.8, 10.9	Dimensions or pillar terminals	Calliper	R
10.10	Connecting lead pull test	Force gauge (N)	R
11	Provision for earthing	Earth continuity tester 10A, torque tester, voltmeter	R
12	Construction	Length of thread according to IEC 60061-2, sheet 7005-20 Feeler gauges	R
12.2	Space for the supply wires	Torque meter 1,0 to 1,6 Nm, test cables	R
12.6	Strain and twist relief	Pull test apparatus 30N – 120N, torque tester, test cables	R
12.8	Backplate lampholders recess	Calliper	R
12.9	Back plate lampholders	Gauge according to figure 3.	R



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12.14	Unscrewing torque	Torque meter 0,5 Nm to 4,0 Nm	R
13	Switched lampholders	Switch test apparatus for 20 000 cycles and load current $\cos(\phi) = 0,6$	R
14	Moisture resistance, insulation resistance and electric strength	Drip proof tester Fig. 13 of IEC 60529	R
14.3	Humidity conditions	Climatic chamber	R
14.4	Insulation resistance / electric strength	Insulation resistance meter, electric strength tester with 200 mA short circuit current, test cap to figure 11	R
15.2	Mechanical strength of the outer shell	Test caps and torque meter 0,3 Nm – 4 Nm, test apparatus to figure 6	R
15.3	Shell to dome connection	Torque tester	R
15.4	Locking screw	Torque tester	R
15.5	Strength of the connection between dome and threaded entry	Bending apparatus to figure 12	R
15.6	Mechanical strength of the outer shell	Pendulum test hammer according to IEC 60068-2-75 / For E5 – E10 Free fall test apparatus according to IEC 60068-2-32	R
15.6.1	Snap-on outer shell	Mass of 5 kg for push and pull force test	R
15.7	Metal lampholders	Test apparatus to figure 9	R
15.8	Entry spouts and glands	Cylindrical metal rod with different diameters	R
15.9	Backplate lampholders	Steel plate and torque screw driver 0,5 Nm to 1,2 Nm	R
16	Screws, current-carrying parts and connections	Torque meter 0,2 Nm to 114,0 Nm, calliper	R
17	Creepage distances and clearances	Digital calliper (or equivalent), gauges	R
18	Normal operation	Test apparatus to figure 4 and test cap to figure 5	R



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19	General resistance to heat	Gauges according to IEC 60061-3, sheets 7006-22C - 7006-22D – 7006-25 and 7006-25A, Test cap to figure 13 – 14 – 15 Resistance meter, heating cabinet	R
19.3	Contacts and all other current-carrying parts	Thermo couplers, temperature recorder, test cap according to figure 11 Torque meter	R
20	Resistance to heat, fire and tracking	Ball pressure test apparatus to figure 10, heating cabinet (see also CTL D.S. N. 391.mod), Glow wire test apparatus, Needle flame test apparatus, CTI test apparatus	R
21	Resistance to excessive residual stresses (season cracking) and to rusting	Acetone and petroleum spirit, test cabinet, optical 8x magnifier, heating cabinet, timer, humidity cabinet	R
Annex A	Season cracking/Corrosion test	Glass bowls, test solution, heating chamber 30°C +/- 1°C	R