

Miscellaneous lampholders —

Part 1: General requirements and tests

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National foreword

This British Standard has been prepared by Technical Committee CPL/34/2 (formerly LGL/22) and is the English language version of EN 60838-1:1995 *Miscellaneous lampholders. Part 1: General requirements and tests*, including its corrigendum: 1993 and its amendment A1:1997, published by the European Committee for Electrotechnical Standardization (CENELEC). It is identical with IEC 838:1993 including its amendment 1, published by the International Electrotechnical Commission (IEC).

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 22, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Descriptors: Lamp, lampholder, definition, safety, test conditions, classification, marking, protection against electric shock, terminal, electrical earthing, construction characteristics, protection against moisture, insulation resistance, electric strength, mechanical strength, electrical connection, creepage distance, insulation clearance, heat resistance, fire resistance, protection against rusting

English version

Miscellaneous lampholders Part 1: General requirements and tests

(includes amendment A1:1997)
(IEC 838-1:1993 + corrigendum 1993 + A1:1996)

Douilles diverses pour lampes
Partie 1: Prescriptions générales et essais
(inclut l'amendement A1:1997)
(CEI 838-1:1993 + corrigendum 1993
+ A1:1996)

Sonderfassungen
Teil 1: Allgemeine Anforderungen und
Prüfungen
(enthält Änderung A1:1997)
(IEC 838-1:1993 + corrigendum 1993
+ A1:1996)

This European Standard was approved by CENELEC on 1994-05-15. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B-1050 Brussels

Foreword

The CENELEC questionnaire procedure, performed for finding out whether or not the International Standard IEC 838-1:1993 and its corrigendum August 1993 could be accepted without textual changes, has shown that no common modifications were necessary for the acceptance as European Standard.

The reference document was submitted to the CENELEC members for formal vote and was approved by CENELEC as EN 60838-1 on 15 May 1994.

The following dates were fixed:

- latest date of publication of an identical national standard (dop) 1995-03-15
- latest date of withdrawal of conflicting national standards (dow) 1995-03-15

For products which have complied with the relevant national standard before 1995-03-15, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2000-03-15.

Annexes designated “normative” are part of the body of the standard. In this standard, Annex A, Annex B, Annex C, Annex D and Annex ZA are normative.

Foreword to amendment A1

The text of amendment 1:1996 to the International Standard IEC 60838-1:1993, prepared by SC 34B, Lamp caps and holders, of IEC TC 34, Lamps and related equipment, was submitted to the Unique Acceptance Procedure and was approved by CENELEC as amendment A1 to EN 60838-1:1994 on 1997-03-11 without any modification.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1997-12-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 1997-12-01

For products which have complied with EN 60838-1:1994 before 1997-12-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2002-12-01.

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Introduction

The first edition of IEC 838 was issued as a technical report, specifying the main requirements for miscellaneous types of lampholders, intended to provide a clear understanding between the wishes of the user and the technical information provided by the manufacturer, but not constituting a type test specification.

The present revision includes the additional requirements necessary for type testing. Among others, requirements have been introduced for general conditions on tests, provision for earthing, moisture resistance, electric strength and mechanical strength.

1 General

1.1 Scope

This International Standard applies to lampholders of miscellaneous types intended for building-in (e.g. used with general purpose lamps, projection lamps, floodlighting lamps and street-lighting lamps with caps as listed in Annex A) and the methods of test to be used in determining the safe use of lamps in lampholders.

Requirements for lampholders for tubular fluorescent lamps, Edison screw lampholders and bayonet lampholders are covered by separate standards.

1.2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards. IEC 61:1969, *Lamp caps and holders together with gauges for the control of interchangeability and safety*.

IEC 61-1:1969, *Lamp caps and holders together with gauges for the control of interchangeability and safety — Part 1: Lamp caps*.

IEC 61-2:1969, *Lamp caps and holders together with gauges for the control of interchangeability and safety — Part 2: Lampholders*.

IEC 61-3:1969, *Lamp caps and holders together with gauges for the control of interchangeability and safety — Part 3: Gauges*.

IEC 68-2-20:1979, *Environmental testing — Part 2: Tests — Test T: Soldering*.

IEC 112:1979, *Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions*.

IEC 227, *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V*.

IEC 245, *Rubber insulated cables of rated voltages up to and including 450/750 V*.

IEC 352-1:1983, *Solderless connections — Part 1: Solderless wrapped connections — General requirements, test methods and practical guidance*.

IEC 529:1989, *Degrees of protection provided by enclosures (IP code)*.

IEC 598-1:1992, *Luminaires — Part 1: General requirements and tests*.

IEC 664:1980, *Insulation co-ordination within low-voltage systems including clearances and creepage distances for equipment*.

IEC 664A:1981, *First supplement*.

IEC 695-2-1:1991, *Fire hazard testing — Part 2: Test methods — Section 1: Glow-wire test and guidance*.

IEC 695-2-2:1991, *Fire hazard testing — Part 2: Test methods — Section 2: Needle-flame test*.

ISO 1456:1988, *Metallic coatings — Electroplated coatings of nickel plus chromium and of copper plus nickel plus chromium*.

ISO 2081:1986, *Metallic coatings — Electroplated coatings of zinc on iron or steel*.

ISO 2093:1986, *Electroplated coatings of tin — Specification and test methods*.

ISO 4046:1978, *Paper, board, pulp and related terms — Vocabulary — Bilingual edition*.

ASTM D 785-65:1981, *Specification*.

2 Definitions

For the purpose of this International Standard, the following definitions apply:

2.1

rated voltage

the voltage declared by the manufacturer to indicate the highest working voltage for which the lampholder is intended

2.2

working voltage

the highest r.m.s. voltage that may occur across any insulation, transients being disregarded, both when the lamp is operating under normal conditions and when the lamp is removed