

SLOVENSKI STANDARD SIST EN 60838-1:1995

01-december-1995

Miscellaneous lampholders - Part 1: General requirements and tests (IEC 838-1:1993 + Corrigendum 1993)

Miscellaneous lampholders -- Part 1: General requirements and tests

Sonderfassungen -- Teil 1: Allgemeine Anforderungen und Prüfungen

Douilles diverses pour lampes — Partie 1: Prescriptions générales et essais (standards.iteh.ai)

Ta slovenski standard je istoveten z: EN 60838-1:1994

https://standards.iteh.ai/catalog/standards/sist/656d0f51-aff2-47b5-b2fb-

140a4b7a9e90/sist-en-60838-1-1995

ICS:

29.140.10 Grla in držala žarnic Lamp caps and holders

SIST EN 60838-1:1995 en

SIST EN 60838-1:1995

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60838-1:1995</u> https://standards.iteh.ai/catalog/standards/sist/656d0f51-aff2-47b5-b2fb-140a4b7a9e90/sist-en-60838-1-1995 EUDOPEAN STANDARD

NORME EUROPEENNE

EUROPAISCHE NORM

September 1994

EN 60838-1

UDC 621.316.58:620.1

Descriptors: Lamp, lampholder, definition, safety, test conditions, classification, marking, protection against electric shock, terminal, electrical earthing, construction characteristics, protection against modisture, 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
(IEC 838-1:1993 * conrigendum 1993)

Douilles diverses pour lampes Partie 1: Prescriptions Ténérales et essais (CEI 838-1:1993 + Corrigendum 1993) Sonderfassungen
Theil 18: Allgemeine Anforderungen
und Prüfungen
(IEC 838-18:1993 + Corrigendum :1993)

This European Standard was approved by CEMELEC on 1994-05-15.
CEMELEC 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 itsts and bibliographical references conserning such national standards may be be beathful on application to the central secretariat or to any CENELEC member.

This European Standard exists in three official, versions (Epglish, French, German).

Al persion in any other language made by translation under the responsibility of

a central secretariat

has the same status as the official versions.

CENELECTMembers are the national electrotechnical committees of Austria, gelgium, Denmark, Fihland, France, Germany, Greece, Lichland, Italy, Luxembourg, Notherlands, Notway, Portugal, Spain, Sweden, Switzerland, and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization Commit European de Normalisation Electrotechnique Europal Sches Komittee für Elektrotechnische Normung

Contra Precretariat : rue de Stassart 35 f-8-1050 Brussels

(c) 1994 Copyright reserved to CENELEC members

Refer HeNo. THEN 260838-1-1994 E

Page 2 EN 60838-1:1994

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, annexes A, B, C, D and ZA are normative.

(standards.iteh.ai)

ENDORSEMENT NOTICE

https://standards.iteh.ai/catalog/standards/sist/656d0f51-aff2-47b5-b2fb-

140a4b7a9e90/sist-en-60838-1-1995
The text of the International Standard IEC 838-1:1993 and its corrigendum August 1993 was approved by CENELEC as a European Standard without any modification.

ANNEX ZA (normative)

OTHER INTERNATIONAL PUBLICATIONS QUOTED IN THIS STANDARD WITH THE REFERENCES OF THE RELEVANT EUROPEAN PUBLICATIONS

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

NOTE: When the international publication has been modified by CENELEC common modifications, indicated by (mod), the relevant EN/HD applies.

IEC Publication		Title	EN	/HD	Date
61-1	1969	Lamp caps and holders together with gauges for the control of interchangeability and safety Part 1: Lamp caps	EN	60061-1*	1993
61-2	1969	Part 2: Lampholders	EN	60061-2*	1993
61-3	1969	parten Gauges NDARD PREVIEW	EN	60061-3*	1993
68-2-20	1979	Test T: Soldering	HD	323.2.20 \$3*	1988
112	1979	SISTEN 60838-1:1995 hMethodiaforedetermining the 6000000000000000000000000000000000000	₽HD	214 \$2	1980
227, mod	series	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V	HD	21	series
245, mod	series	Rubber insulated cables of rated voltages up to and including 450/750 V	НD	22	series
352-1	1983	Solderless connections - Part 1: Solderless wrapped connections - General requirements, test methods and practical guidance	НD	476.1 S1	1986

^{*} EN 60061-1 includes supplements A:1970 to N:1992 to IEC 61-1 EN 60061-2 includes supplements A:1970 to K:1992 to IEC 61-2 EN 60061-3 includes supplements A:1970 to M:1992 to IEC 61-3

HD 323.2.20 S3 includes A1:1986 + A2:1987 to IEC 68-2-20

Page 4

EN 60838-1:1994

IEC Publication	Date	Title	EN/HD	Date	
Publication		11010			
529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529	1991	
598-1, mod	1992	Luminaires - Part 1: General requirements and tests	EN 60598-1	1993	
664	1980	Insulation co-ordination within low-voltage systems including clearances and creepage distances for equipment	-	-	
664A	1981	First supplement	- .	-	
695-2-1	1991*	Fire hazard testing - Part 2: Test methods - Section 1: Glow-wire test and guidance	-	-	
695-2-2	1991	Section 2 - Needle-flame test	EN 60695-2-2	1994	
Other publications quoted:iTeh STANDARD PREVIEW					
ISO 1456	ISO 1456 1988 Metallic coatings - Electroplated coatings of nickel plus chromium and of copper plus nickel plus chromium			5	
ISO 2081	SIST EN 60838-1:1995 1986 Hetallic coatings Flectroplated coatings of zinc on iron or steel-b7a9e90/sist-en-60838-1-1995				
150 2093	1986	Electroplated coatings of tin - Specifica	tion and test me	ethods	
ISO 4046	0 4046 1978 Paper, board, pulp and related terms - Vocabulary Bilingual edition				
ASTM D					

785-65 1981 Specification

^{*} IEC 695-2-1:1980 is harmonized as HD 444.2.1 S1:1983

NORME INTERNATIONALE INTERNATIONAL STANDARD

CEI IEC 838-1

Deuxième édition Second edition 1993-02

Douilles diverses pour lampes

Partie 1:

Prescriptions générales et essais

iTeh STANDARD PREVIEW

Miscellaneous lampholders

Part 1:5T EN 60838-1:1995

https://standard.General/requirements/and/tests/fb-140a4b7a9e90/sist-en-60838-1-1995

© CEI 1993 Droits de reproduction réservés — Copyright – all rights reserved

Aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'éditeur. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Bureau Central de la Commission Electrotechnique Internationale 3, rue de Varembé Genève, Suisse



Commission Electrotechnique Internationale International Electrotechnical Commission CODE PRIX
PRICE CODE

U

Pour prix, voir catalogue en vigueur For price, see current catalogue

CONTENTS

		Page
FOR	EWORD	5
INTR	ODUCTION	. 7
Clause		
1	General	9
	1.1 Scope	9
	1.2 Normative references	9
2	Definitions	11
3	General requirement	13
4	General conditions for tests	13
5	Classification	15
6	Marking iTeh STANDARD.PREVIEW	15
7	Protection against electric shock ndards.iteh.ai)	. 19
8	Terminals	19
9	https://standards.iteh.ai/catalog/standards/sist/656d0f51-aff2-47b5-b2fb- Provision for earthing140a4b7a9e90/sist-en-60838-1-1995	23
10	Construction	25
11	Moisture resistance, insulation resistance and electric strength	27
12	Mechanical strength	29
13	Screws, current-carrying parts and connections	31
14	Creepage distances and clearances	33
15	Endurance	35
16	Resistance to heat and fire	37
17	Resistance to excessive residual stresses (season cracking) and to rusting	43
ANN	IEXES	
A B C D	Examples of lampholders covered by this standard	. 49 . 51

INTERNATIONAL ELECTROTECHNICAL COMMISSION

MISCELLANEOUS LAMPHOLDERS

Part 1: General requirements and tests

FOREWORD

- 1) The IEC (International Electrotechnical Commisssion) is a world-wide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international cooperation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee in terested inthe subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters, prepared by technical committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with
- 3) They have the form of recommendations for international use published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.

 140a4b7a9e90/sist-en-60838-1-1995
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.

International Standard IEC 838-1 has been prepared by sub-committee 34B: Lamp caps and holders, of IEC technical committee 34: Lamps and related equipment. This second edition cancels and replaces the first edition which was issued as a technical report in 1987. It constitutes a technical revision and now has the status of an International Standard.

The text of this standard is based on the following documents:

DIS	Report on voting	
34B(CO)718	34B(CO)745	

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

In this standard, the following print types are used:

- requirements proper: in roman type;
- test specifications: in italic type;
- notes: in smaller roman type.

Annexes A, B, C and D form an integral part of this standard.

838-1 © IEC

-7-

MISCELLANEOUS LAMPHOLDERS

Part 1: General requirements and tests

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.

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60838-1:1995</u> https://standards.iteh.ai/catalog/standards/sist/656d0f51-aff2-47b5-b2fb-140a4b7a9e90/sist-en-60838-1-1995

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 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.

iTeh STANDARD PREVIEW

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 dards/sixt/656d051-aff2-47b5-b2fb-

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

- 11 -

838-1 © IEC

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.
- 2.3 rated current: The current declared by the manufacturer to indicate the highest current for which the lampholder is intended.
- 2.4 lampholder for building-in: A lampholder designed to be built into a luminaire, an additional enclosure or the like.
- 2.4.1 unenclosed lampholder: A lampholder for building-in so designed that it requires additional means, for example enclosures, to meet the requirements of this standard with regard to protection against electric shock.
- 2.4.2 enclosed lampholder: A lampholder for building-in so designed that it fulfills on its own the requirements of this standard with regard to protection against electric shock.
- 2.5 rated operating temperature: The highest temperature for which the lampholder is designed.
- 2.6 rated pulse voltage: The highest peak value of pulse voltages the holder is able to withstand.
- 2.7 lamp connectors: A set of contacts specially designed for that purpose, which provide for electrical contact but do not support the lamp.