

### SLOVENSKI STANDARD SIST EN 60670-22:2007

01-marec-2007

Ca Uf]WY]b'c\]\'\'\'UnU'YY If] bc'cdfYa c'nU[cgdcX]b'gh; c']b'dcXcVbY'bYdfYa] bY YY\_lf] bY']býltJUV[Y'!'&&"XY.'DcgYVbY'nU\ hYj Y'nU'df]\_`1 bY'ca Uf]WY']b'c\ ]ý'U fl97 \* \$\* +\$!&& &\$\$' zgdfYa Yb YbL

Boxes and enclosures for electrical accessories for household and similar fixed electrical installations -- Part 22: Particular requirements for connecting boxes and enclosures (IEC 60670-22:2003, modified)

iTeh STANDARD PREVIEW

Dosen für Installationsgeräte für Haushalt und ähnliche ortsfeste elektrische Installationen – Teil 22: Besondere Anforderungen für Verbindungsdosen

Boîtes et enveloppes pour appareillage électrique pour installations électriques fixes pour usage domestique et analogue et Partie 22: Regles particulieres concernant les boîtes et enveloppes de connexion (IEC 60670-22:2003, modifiée)

Ta slovenski standard je istoveten z: EN 60670-22:2006

ICS:

Ö¦ \* æÁ |^\ dã } æÁa[ åæð} æ 29.120.99 Other electrical accessories

[]¦^{ æ

SIST EN 60670-22:2007 en,fr,de

## iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60670-22:2007</u> https://standards.iteh.ai/catalog/standards/sist/678c7703-0e02-4c22-961a-998a0fd74ec1/sist-en-60670-22-2007

### **EUROPEAN STANDARD**

### EN 60670-22

## NORME EUROPÉENNE EUROPÄISCHE NORM

December 2006

ICS 29.120.10

#### English version

# Boxes and enclosures for electrical accessories for household and similar fixed electrical installations Part 22: Particular requirements for connecting boxes and enclosures

(IEC 60670-22:2003, modified)

Boîtes et enveloppes pour appareillage électrique pour installations électriques fixes pour usage domestique et analogue Partie 22: Règles particulières concernant les boîtes et enveloppes de connexion (CEI 60670-22:2003, modifiée) ANDARD

Dosen für Installationsgeräte für Haushalt und ähnliche ortsfeste elektrische Installationen Teil 22: Besondere Anforderungen für Verbindungsdosen (IEC 60670-22:2003, modifiziert)

(standards.iteh.ai)

#### SIST EN 60670-22:2007

This European Standard was approved by CENELEC on 2006-07-01. 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, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the 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 text of the International Standard IEC 60670-22:2003, prepared by SC 23B, Plugs, socket-outlets and switches, of IEC TC 23, Electrical accessories, together with the common modifications prepared by the Technical Committee CENELEC TC 23B, Switches for household and similar fixed electrical installations, was submitted to the CENELEC Unique Acceptance Procedure and approved on 2005-08-26.

However, due to some omissions in the text and taking into account the comments submitted by National Committees during the voting period, the CLC/TC 23B Secretary asked BT not to ratify the document. A new draft was submitted to the formal vote and was approved by CENELEC as EN 60670-22 on 2006-07-01.

The following dates were fixed:

 latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement

(dop) 2007-07-01

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2009-07-01

This Part 22, which specifies particular requirements for connecting boxes and enclosures, is to be used in conjunction with EN 60670-1:2005. This Part 22 supplements or modifies the corresponding clauses of EN 60670-1. Where a particular clause or subclause of Part 1 is not mentioned in this Part 22, that clause or subclause applies as far as is reasonable. Where this Part 22 states "add", "replace" or "delete", the relevant text of Part 1 is to be adapted accordingly.

Annexes ZA and ZB have been added by CENELEC 2007

https://standards.iteh.ai/catalog/standards/sist/678c7703-0e02-4c22-961a-998a0fd74ee1/sist-en-60670-22-2007

#### **Endorsement notice**

The text of the International Standard IEC 60670-22:2003 was approved by CENELEC as a European Standard with agreed common modifications as given below.

#### **COMMON MODIFICATIONS**

#### 2 Normative references

Replace the reference to IEC 60999-1 by:

IEC 60999 (series), Connecting devices - Electrical copper conductors - Safety requirements for screw-type and screwless-type clamping units

#### 3 Definitions

#### 3.107 Replace by:

3.107

terminal

conductive part of one pole comprising one or more clamping unit(s) and insulation if necessary

## 4 General requirements TANDARD PREVIEW

Replace the text by: (standards.iteh.ai)

This clause of Part 1 is applicable with the following addition:

https://standards.iteh.ai/catalog/standards/sist/678c7703-0e02-4c22-961a-

Terminals and connecting devices incorporated in connecting boxes shall comply with the requirements of the EN 60998 series; integrated clamping units shall comply with the requirements of the EN 60999 series.

#### 6 Ratings

- 6.1 Replace by:
  - **6.1** The preferred values of the rated voltage of the integrated or incorporated connecting devices are 250 V, 300 V, 400 V, 500 V, 600 V, 690 V, 800 V, 1 000 V a.c. and 1 500 V d.c.
- **6.2 Delete** notes 1, 2, 3 and 4.

#### 8 Marking

**8.1** Add the following paragraph after m):

The information I) and m) are optional for boxes classified according to 7.101.4.

8.101 Replace the second line by:

Rated connecting capacity			•
Rated connecting capacity	mm <sup>2</sup> O	rı	

#### 17 Creepage distances, clearances and distances through sealing compound

Add after the first paragraph:

This test does not apply to boxes for floating terminals or connecting devices classified according to 7.101.4.

**Delete** the last but one paragraph.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60670-22:2007</u> https://standards.iteh.ai/catalog/standards/sist/678c7703-0e02-4c22-961a-998a0fd74ec1/sist-en-60670-22-2007

## Annex ZA (normative)

## Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
Addition:				
IEC 60998 (mod)	Series	Connecting devices for low-voltage circuits for household and similar purposes	EN 60998	Series
IEC 60999	Series	Connecting devices - Electrical copper conductors - Safety requirements for screw-type and screwless-type clamping units	EN 60999	Series

## iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 60670-22;2007 https://standards.iteh.ai/catalog/standards/sisv6/8c7703-0e02-4c22-961a-998a0fd74ec(normative)22-2007

#### Special national conditions

**Special national condition**: National characteristic or practice that cannot be changed even over a long period, e.g. climatic conditions, electrical earthing conditions.

NOTE If it affects harmonization, it forms part of the European Standard.

For the countries in which the relevant special national conditions apply these provisions are normative, for other countries they are informative.

Subclause Special national condition

#### 6.2, Note 3 United Kingdom

In the United Kingdom, a standard connecting capacity of 1,25 mm<sup>2</sup> is used.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60670-22:2007</u> https://standards.iteh.ai/catalog/standards/sist/678c7703-0e02-4c22-961a-998a0fd74ec1/sist-en-60670-22-2007

## NORME INTERNATIONALE INTERNATIONAL STANDARD

CEI IEC 60670-22

> Première édition First edition 2003-05

Boîtes et enveloppes pour appareillage électrique pour installations électriques fixes pour usage domestique et analogue –

#### Partie 22:

r Règles particulières concernant les boîtes et enveloppes de connexion (standards.iten.ai)

Boxes and enclosures for electrical accessories for household and similar fixed electrical installations –

#### **Part 22:**

Particular requirements for connecting boxes and enclosures

© IEC 2003 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.

International Electrotechnical Commission, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch



#### CONTENTS

FΟ	REWORD	5
1	Scope	9
2	Normative references	9
3	Definitions	9
4	General requirements	11
5	General notes on tests	11
6	Ratings	13
7	Classification	13
8	Marking	13
9	Dimensions	15
10	Protection against electric shock	15
11	Provision for earthing	15
12	Construction	15
13	Resistance to ageing, protection against ingress of solid objects and against harmful ingress of water	17
14	Insulation resistance and electric strength	17
15	Mechanical strength eh. ST.A.N.D.A.R.D. P.R.E.V.IE.W.	19
16		
17	Resistance to heat	23
18	Resistance of insulating material to abnormal heat and to fire	23
19	Resistance to tracking dards, itch.ai/catalog/standards/sist/678c7703-0e02-4c22-961a-	
20	Resistance to rusting998a0fd74ec1/sist-en-60670-22-2007	25
21	Electromagnetic compatibility	25
Anı	nex AA (informative) Examples of connecting boxes/enclosures	27
Fig	ure 101 – Single terminal device	25
Fig	ure 102 – Multiway terminal device	25
Tal	ole 101 – Relationship between rated connecting capacity and test current	21
Tab	ole 102 – Creepage distances, clearances and distances through sealing compound	23

#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

## BOXES AND ENCLOSURES FOR ELECTRICAL ACCESSORIES FOR HOUSEHOLD AND SIMILAR FIXED ELECTRICAL INSTALLATIONS –

#### Part 22: Particular requirements for connecting boxes and enclosures

#### **FOREWORD**

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation 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 interested in the 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 express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense and they are accepted by the National Committees in that sense are accepted by the National Committees in that sense are accepted by the National Committees in that sense are accepted by the National Committees in that sense are accepted by the National Committees in that sense are accepted by the National Committees in that sense are accepted by the National Committees in that sense are accepted by the National Committees in that sense are accepted by the National Committees in that sense are accepted by the National Committees in that sense are accepted by the National Committees in that sense are accepted by the National Committees in that sense are accepted by the National Committees in that sense are accepted by the National Committees in that sense are accepted by the National Committees in that sense are accepted by the National Committees in that sense are accepted by the National Committees in that sense are accepted by the National Committees in that sense are accepted by the National Committees are accepted by the Nat
- 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.
- 5) The IEC provides no marking procedure to Sindicate its (approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards: c7703-0e02-4c22-961a-
- 6) Attention is drawn to the possibility that some of the elements of the elements of the report may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60670-22 has been prepared by subcommittee 23B: Plugs, socket-outlets and switches, of IEC Technical Committee 23: Electrical accessories.

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

FDIS	Report on voting
23B/700/FDIS	23B/704/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This standard shall be used in conjunction with IEC 60670-1. It lists the changes necessary to convert that standard into a specific standard for connecting boxes and enclosures.