

## **Seadme-pistikühendused majapidamis- ja muuks taoliseks üldkasutuseks. Osa 1: Üldnõuded**

Appliance couplers for household and similar  
general purposes - Part 1: General requirements

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 60320-1:2002 sisaldab Euroopa standardi EN 60320-1:2001 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.12.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 60320-1:2002 consists of the English text of the European standard EN 60320-1:2001.</p> <p>This document is endorsed on 18.12.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> Applicable to two-pole appliance couplers for a.c. only, with and without earthing contact, with a rated voltage not exceeding 250 V and a rated current not exceeding 16 A.</p>	<p><b>Scope:</b> Applicable to two-pole appliance couplers for a.c. only, with and without earthing contact, with a rated voltage not exceeding 250 V and a rated current not exceeding 16 A.</p>
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Võtmesõnad:

EUROPEAN STANDARD

**EN 60320-1**

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2001

ICS 29.120.30

Supersedes EN 60320-1:1996 + A1:1996 + A2:1998

English version

**Appliance couplers for household and similar general purposes**  
**Part 1: General requirements**  
(IEC 60320-1:2001)

Connecteurs pour usages domestiques  
et usages généraux analogues  
Partie 1: Prescriptions générales  
(CEI 60320-1:2001)

Gerätesteckvorrichtungen für den  
Hausgebrauch und ähnliche  
allgemeine Zwecke  
Teil 1: Allgemeine Anforderungen  
(IEC 60320-1:2001)

This European Standard was approved by CENELEC on 2001-07-01. 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.

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**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 document 23G/215/FDIS, future edition 2 of IEC 60320-1, prepared by SC 23G, Appliance couplers, of IEC TC 23, Electrical accessories, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60320-1 on 2001-07-01.

This European Standard supersedes EN 60320-1:1996 + A1:1996 + A2:1998.

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) 2002-04-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2004-07-01

Annexes designated "normative" are part of the body of the standard.

In this standard, annexes A and ZA are normative.

Annex ZA has been added by CENELEC.

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### Endorsement notice

The text of the International Standard IEC 60320-1:2001 was approved by CENELEC as a European Standard without any modification.

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## Annex ZA (normative)

### Normative references to international publications with their corresponding 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 (including amendments).

NOTE When 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>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-151	1978	International Electrotechnical Vocabulary (IEV) Chapter 151: Electrical and magnetic devices	-	-
IEC 60068-2-32	1975	Basic environmental testing procedures Part 2: Tests - Test Ed: Free fall	EN 60068-2-32 <sup>1)</sup>	1993
IEC 60083	1997	Plugs and socket-outlets for domestic and similar general use standardized in member countries of IEC	-	-
IEC 60112	1979	Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions	HD 214 S2	1980
IEC 60227 <sup>2)</sup>	Series	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V	-	-
IEC 60245 <sup>3)</sup>	Series	Rubber insulated cables of rated voltages up to and including 450/750 V	-	-
IEC 60695-2-10	2000	Fire hazard testing Part 2-10: Glowing/hot-wire based test methods - Glow-wire apparatus and common test procedure	EN 60695-2-10	2001
IEC 60695-2-11	2000	Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products	EN 60695-2-11	2001

<sup>1)</sup> EN 60068-2-32 includes amendment 2:1990 to IEC 60068-2-32.

<sup>2)</sup> The HD 21 series, which is related to, but not directly equivalent with the IEC 60227 series, applies instead.

<sup>3)</sup> The HD 22 series, which is related to, but not directly equivalent with the IEC 60245 series, applies instead.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60695-2-12	2000	Part 2-12: Glowing/hot-wire based test methods - Glow-wire flammability test method for materials	EN 60695-2-12	2001
IEC 60695-2-13	2000	Part 2-13: Glowing/hot-wire based test methods - Glow-wire ignitability test method for materials	EN 60695-2-13	2001
IEC 60730 (mod)	Series	Automatic electrical controls for household and similar use	EN 60730	Series
IEC 61058	Series	Switches for appliances	EN 61058	Series
IEC 61140	1997	Protection against electric shock - Common aspects for installation and equipment	EN 61140	2001
ISO 286-1	1988	ISO system of limits and fits Part 1: Bases of tolerances, deviations and fit	EN 20286-1	1993
ISO 1101	1983	Technical drawings - Geometrical tolerancing - Tolerancing of form, orientation, location and run-out - Generalities, definitions, symbols, indications on drawings	-	-
ISO 1456	1988	Metallic coatings - Electrodeposited 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	-	-

# INTERNATIONAL STANDARD

**IEC**  
**60320-1**

Second edition  
2001-06

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## Appliance couplers for household and similar general purposes –

### Part 1: General requirements

*This **English-language** version is derived from the original **bilingual** publication by leaving out all French-language pages. Missing page numbers correspond to the French-language pages.*



Reference number  
IEC 60320-1:2001(E)

## Publication numbering

As from 1 January 1997 all IEC publications are issued with a designation in the 60000 series. For example, IEC 34-1 is now referred to as IEC 60034-1.

## Consolidated editions

The IEC is now publishing consolidated versions of its publications. For example, edition numbers 1.0, 1.1 and 1.2 refer, respectively, to the base publication, the base publication incorporating amendment 1 and the base publication incorporating amendments 1 and 2.

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The technical content of IEC publications is kept under constant review by the IEC, thus ensuring that the content reflects current technology. Information relating to this publication, including its validity, is available in the IEC Catalogue of publications (see below) in addition to new editions, amendments and corrigenda. Information on the subjects under consideration and work in progress undertaken by the technical committee which has prepared this publication, as well as the list of publications issued, is also available from the following:

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# INTERNATIONAL STANDARD

**IEC**  
**60320-1**

Second edition  
2001-06

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## **Appliance couplers for household and similar general purposes –**

### **Part 1: General requirements**

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International Electrotechnical Commission, 3, rue de Varembe, 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](mailto:inmail@iec.ch) Web: [www.iec.ch](http://www.iec.ch)



Commission Electrotechnique Internationale  
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## CONTENTS

FOREWORD.....	9
1 Scope.....	13
2 Normative references.....	13
3 Definitions.....	15
4 General requirements.....	21
5 General notes on tests.....	21
6 Standard ratings.....	23
7 Classification.....	25
8 Marking.....	25
9 Dimensions and compatibility.....	29
10 Protection against electric shock.....	35
11 Provision for earthing.....	37
12 Terminals and terminations.....	37
13 Construction.....	45
14 Moisture resistance.....	53
15 Insulation resistance and electric strength.....	53
16 Forces necessary to insert and to withdraw the connector.....	57
17 Operation of contacts.....	59
18 Resistance to heating of appliance couplers for hot conditions or very hot conditions.....	61
19 Breaking capacity.....	63
20 Normal operation.....	65
21 Temperature rise.....	67
22 Cords and their connection.....	67
23 Mechanical strength.....	77
24 Resistance to heat and ageing.....	83
25 Screws, current-carrying parts and connections.....	87
26 Creepage distances, clearances and distances through insulation.....	93
27 Resistance of insulating material to heat, fire and tracking.....	95
28 Resistance to rusting.....	101
29 Electromagnetic compatibility (EMC) requirements.....	101
Annex A (normative) Routine tests for factory wired appliance couplers related to safety (protection against electric shock and correct polarity).....	233

Standard sheets C1 – C27 .....	52
Figure 1 – Survey of appliance couplers .....	159
Figure 2 – "GO" gauge for connectors to standard sheet C1 (see 9.1).....	163
Figure 4 – "GO" gauge for connectors to standard sheet C5 (see 9.1).....	165
Figure 5 – "GO" gauge for connectors to standard sheet C7 (see 9.1).....	167
Figure 5A – "GO" gauge for side-entry connectors to standard sheet C7 (see 9.1) .....	169
Figure 6 – "NOT GO" gauge for connectors to standard sheet C1 (see 9.4).....	171
Figure 7 – "NOT-GO" gauge for connectors to standard sheets C1, C5 and C7 (see 9.4) .....	173
Figure 8 – "NOT-GO" gauge for connectors to standard sheets C1 and C7 (see 9.4).....	175
Figure 9 – "NOT-GO" gauge for appliance inlets to standard sheets C8, C8A and C8B (see 9.4) .....	177
Figure 9A – "GO" gauge for connectors to standard sheet C9 (see 9.1) .....	179
Figure 9B – "NOT-GO" gauge for connectors to standard sheet C9 (see 9.4) .....	181
Figure 9C – "GO" gauge for appliance inlets to standard sheets C10 (see 9.1).....	183
Figure 9F – "GO" gauge for connectors to standard sheet C13 (see 9.1).....	185
Figure 9G – "NOT-GO" gauge for connectors to standard sheets C13 and C17 (see 9.4) .....	187
Figure 9H – "GO" gauge for appliance inlets to standard sheets C14, C16 and C18 (see 9.1) 189	
Figure 9J – "GO" gauge for connectors to standard sheet C15 (see 9.1) .....	191
Figure 9K – "GO" gauge for connectors to standard sheet C17 (see 9.1).....	193
Figure 9L – "GO" gauge for connectors to standard sheet C19 (see 9.1).....	195
Figure 9M – "GO" gauge for appliance inlets to standard sheets C20 and C24 (see 9.1) .....	197
Figure 9N – "GO" gauge for connectors to standard sheet C21 (see 9.1) .....	199
Figure 9P – "GO" gauge for appliance inlets to standard sheet C22 (see 9.1).....	201
Figure 9Q – "GO" gauge for connectors to standard sheet C23 (see 9.1) .....	203
Figure 9R – "NOT-GO" gauge for connectors to standard sheets C13, C15 and C17 (see 9.4) .....	205
Figure 9S – "GO" gauge for connectors to standard sheet C15A (see 9.1) .....	207
Figure 9T – "GO" gauge for appliance inlets to standard sheet C16A (see 9.1) .....	209
Figure 10 – Standard test finger (see 10.1).....	211
Figure 11 – Device for testing non-solid pins (see 13.4).....	213
Figure 12 – Apparatus for checking the withdrawal force (see 16.2).....	213
Figure 13 – Example of apparatus for heating test (see 18.2) .....	215

Figure 14 – VOID .....	215
Figure 15 – Circuit diagram for breaking capacity and normal operation tests (see clauses 19 and 20) .....	217
Figure 16 – Apparatus for testing the cord anchorage (see 22.3) .....	217
Figure 17 – Apparatus for the flexing test (see 22.4) .....	219
Figure 18 – VOID .....	219
Figure 19 – Example of apparatus for pulling test (see 23.3) .....	221
Figure 20 – Example of apparatus for pressure test on shrouds (see 23.4) .....	221
Figure 21 – Impact-test apparatus (see 23.5) .....	223
Figure 22 – Blades for checking the resistance against deformation of the front part of the connector to standard sheet C7 (see 23.6) .....	223
Figure 23 – Ball-pressure apparatus (see 24.1.2) .....	225
Figure 24 – Apparatus for pressure test on connectors (see 24.1.3) .....	227
Figure 27 – Gauges for checking the distance from the engagement face of connectors to the point of first contact (see 9.1) .....	229
Figure 28 – Thread-forming tapping screw (see 3.19) .....	231
Figure 29 – Thread-cutting tapping screw (see 3.20) .....	231
Figure 30 – Gauge for the verification of the minimum withdrawal force .....	231
Table 1 – Composition of conductors .....	41
Table 2 – Maximum diameters of the cords .....	55
Table 3 – Maximum and minimum withdrawal forces .....	57
Table 4 – Type and minimum nominal cross-sectional area of cords .....	69
Table 5 – Types of cord for the rewirable connector test .....	71
Table 6 – Type of cord and nominal cross-sectional area for rewirable connectors .....	73
Table 7 – Values for the lateral pulls applied .....	79
Table 8 – Torque applied for the tightening and loosening test .....	89
Table 9 – Minimum creepage distances and clearances through insulation .....	95

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**APPLIANCE COUPLERS FOR HOUSEHOLD  
AND SIMILAR GENERAL PURPOSES –****Part 1: General requirements**

## 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.
- 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 indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard 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 60320-1 has been prepared by subcommittee 23G: Appliance couplers, of IEC technical committee 23: Electrical accessories.

This second edition cancels and replaces the first edition published in 1994 and its amendments 1 (1995) and 2 (1996). This second edition constitutes a technical revision.

The text of this standard is based on the first edition, amendments 1 and 2, and the following documents:

FDIS	Report on voting
23G/215/FDIS	23G/218/RVD

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

Annex A forms an integral part of this standard.

IEC 60320 consists of the following parts, under the general title: *Appliance couplers for household and similar general purposes*:

- Part 2-1: Sewing machine couplers
- Part 2-2: Interconnection couplers for household and similar equipment
- Part 2-3: Appliance couplers with a degree of protection higher than IPX0

This publication has been drafted in accordance with the ISO/IEC Directives, Part 3.

The committee has decided that the contents of this publication will remain unchanged until 2003. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

# APPLIANCE COUPLERS FOR HOUSEHOLD AND SIMILAR GENERAL PURPOSES –

## Part 1: General requirements

### 1 Scope

This part of IEC 60320 is applicable to two-pole appliance couplers for a.c. only, with or without earthing contact, with a rated voltage not exceeding 250 V and a rated current not exceeding 16 A, for household and similar general purposes and intended for the connection of a supply cord to electrical appliances or other electrical equipment for 50 Hz or 60 Hz supply.

NOTE 1 Appliance inlets integrated or incorporated in appliances or other equipment are within the scope of this standard. The dimensional and general requirements of this standard apply to such inlets, but certain tests may not be relevant.

NOTE 2 The requirements for connectors are based on the assumption that the temperature of the pins of the corresponding appliance inlets does not exceed

- 70 °C for connectors for cold conditions;
- 120 °C for connectors for hot conditions;
- 155 °C for connectors for very hot conditions.

NOTE 3 Appliance couplers complying with this standard are suitable for use at ambient temperatures not normally exceeding 25 °C, but occasionally reaching 35 °C.

NOTE 4 Appliance couplers complying with the standard sheets in this standard are intended for the connection of equipment having no special protection against moisture. If appliance couplers are used with equipment which may be subject to spillage of liquid in normal use then protection against moisture is to be provided by the equipment.

NOTE 5 Special constructions may be required

- in locations where special conditions prevail, for example, as in ships, vehicles and the like;
- in hazardous locations, for example, where explosions are liable to occur.

### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60320. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 60320 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60050(151):1978, *International Electrotechnical Vocabulary (IEV) – Chapter 151: Electrical and magnetic devices*

IEC 60068-2-32:1975, *Environmental testing – Part 2: Tests – Test Ed: Free fall*

IEC/TR 60083:1997, *Plugs and socket-outlets for domestic and similar general use standardized in member countries of IEC*

IEC 60112:1979, *Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions*

IEC 60227 (all parts), *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V*

IEC 60245 (all parts), *Rubber insulated cables – Rated voltages up to and including 450/750 V*

IEC 60695-2-10:2000, *Fire hazard testing – Part 2-10: Glowing/hot-wire based test methods – Glow-wire apparatus and common test procedure*

IEC 60695-2-11:2000, *Fire hazard testing – Part 2-11: Glowing/hot-wire based test methods – Glow-wire flammability test method for end-products*

IEC 60695-2-12:2000, *Fire hazard testing – Part 2-12: Glowing/hot-wire based test methods – Glow-wire flammability test method for materials*

IEC 60695-2-13:2000, *Fire hazard testing – Part 2-13: Glowing/hot-wire based test methods – Glow-wire ignitability test method for materials*

IEC 60730 (all parts), *Automatic electrical controls for household and similar use*

IEC 61058 (all parts), *Switches for appliances*

IEC 61140:1997, *Protection against electric shock – Common aspects for installation and equipment*

ISO 286-1:1988, *ISO system of limits and fits – Part 1: Bases of tolerances, deviations and fits*

ISO 1101:1983, *Technical drawings – Geometrical tolerancing – Tolerancing of form, orientation, location and run-out – Generalities, definitions, symbols, indications on drawings*

ISO 1456:1988, *Metallic coatings – Electrodeposited 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*

### 3 Definitions

Where the terms "voltage" and "current" are used, they imply the r.m.s. values, unless otherwise specified.

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

The term "**accessory**" is used as a general term covering connectors and/or appliance inlets (and, in some cases, plugs as well).

#### 3.1

##### **appliance coupler**

means enabling the connection and disconnection at will, of a cord to an appliance or other equipment. It consists of two parts: a connector and an appliance inlet

#### 3.2

##### **connector**

part of the appliance coupler integral with, or intended to be attached to, the cord connected to the supply

NOTE Only one cord is connected to the connector.