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Standards

Irish Standard  
I.S. EN 60320-2-4:2006

# Appliance couplers for household and similar general purposes -- Part 2-4: Couplers dependent on appliance weight for engagement (IEC 60320-2-4:2005 (EQV))

## I.S. EN 60320-2-4:2006

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 60320-2-4/A1**

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English version

**Appliance couplers for household and similar general purposes -  
Part 2-4: Appliance couplers dependent  
on appliance weight for engagement  
(IEC 60320-2-4:2005/A1:2009)**

Connecteurs pour usages domestiques  
et usages généraux analogues -  
Partie 2-4: Connecteurs à connexion  
par gravité  
(CEI 60320-2-4:2005/A1:2009)

Gerätesteckvorrichtungen  
für den Hausgebrauch  
und ähnliche allgemeine Zwecke -  
Teil 2-4: Gerätesteckvorrichtungen  
mit vom Gerätegewicht  
abhängiger Kupplung  
(IEC 60320-2-4:2005/A1:2009)

This amendment A1 modifies the European Standard EN 60320-2-4:2006; it was approved by CENELEC on 2009-11-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 amendment 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, Bulgaria, 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: Avenue Marnix 17, B - 1000 Brussels**

## **Foreword**

The text of document 23G/290/CDV, future amendment 1 to IEC 60320-2-4:2005, 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 amendment A1 to EN 60320-2-4:2006 on 2009-11-01.

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) 2010-08-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2012-11-01

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## **Endorsement notice**

The text of amendment 1:2009 to the International Standard IEC 60320-2-4:2005 was approved by CENELEC as an amendment to the European Standard without any modification.

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Add the following Annex ZA to EN 60320-2-4:2006:

## 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 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/TR 60083	- <sup>1)</sup>	Plugs and socket-outlets for domestic and similar general use standardized in member countries of IEC	-	-
IEC 60112	- <sup>1)</sup>	Method for the determination of the proof and the comparative tracking indices of solid insulating materials	EN 60112	2003 <sup>2)</sup>
IEC 60320-1	- <sup>1)</sup>	Appliance couplers for household and similar general purposes - Part 1: General requirements	EN 60320-1	2001 <sup>2)</sup>
IEC 60320-2-2	- <sup>1)</sup>	Appliance couplers for household and similar general purposes - Part 2-2: Interconnection couplers for household and similar equipment	EN 60320-2-2	1998 <sup>2)</sup>
IEC 60320-2-3	- <sup>1)</sup>	Appliance couplers for household and similar general purposes - Part 2-3: Appliance coupler with a degree of protection higher than IPX0	EN 60320-2-3	1998 <sup>2)</sup>
IEC 60335-1 (mod)	- <sup>1)</sup>	Household and similar electrical appliances - Safety - Part 1: General requirements	EN 60335-1 + corr. July + A11 + A12 + corr. February + A13	2002 <sup>2)</sup> 2009 2004 2006 2007 2008
IEC 60664-1	- <sup>1)</sup>	Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests	EN 60664-1	2007 <sup>2)</sup>
IEC 60695-11-5	- <sup>1)</sup>	Fire hazard testing - Part 11-5: Test flames - Needle-flame test method - Apparatus, confirmatory test arrangement and guidance	EN 60695-11-5	2005 <sup>2)</sup>
IEC 60695-11-10	- <sup>1)</sup>	Fire hazard testing - Part 11-10: Test flames - 50 W horizontal and vertical flame test methods	EN 60695-11-10	1999 <sup>2)</sup>

<sup>1)</sup> Undated reference.

<sup>2)</sup> Valid edition at date of issue.

**I.S. EN 60320-2-4:2009**

EN 60320-2-4:2006/A1:2009

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60730 (mod)	series	Automatic electrical controls for household and similar use - Part 1: General requirements	EN 60730	series
IEC 61032	- <sup>1)</sup>	Protection of persons and equipment by enclosures - Probes for verification	EN 61032	1998 <sup>2)</sup>
IEC 61058-1 (mod)	- <sup>1)</sup>	Switches for appliances - Part 1: General requirements	EN 61058-1	2002 <sup>2)</sup>
ISO 9772	- <sup>1)</sup>	Cellular plastics - Determination of horizontal - burning characteristics of small specimens subjected to a small flame	-	-

EUROPEAN STANDARD  
NORME EUROPÉENNE  
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**EN 60320-2-4**

January 2006

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**Appliance couplers for household and similar general purposes  
Part 2-4: Couplers dependent on appliance weight for engagement  
(IEC 60320-2-4:2005)**

Connecteurs pour usages domestiques  
et usages généraux analogues  
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par gravité  
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Gerätesteckvorrichtungen  
für den Hausgebrauch  
und ähnliche allgemeine Zwecke  
Teil 2-4: Gerätesteckvorrichtungen  
mit vom Gerätegewicht abhängiger  
Kupplung  
(IEC 60320-2-4:2005)

This European Standard was approved by CENELEC on 2005-12-01. 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, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

# CENELEC

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

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**I.S. EN 60320-2-4:2009**

EN 60320-2-4:2006

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## **Foreword**

The text of document 23G/251/FDIS, future edition 1 of IEC 60320-2-4, 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 60320-2-4 on 2005-12-01.

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) 2006-09-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2008-12-01

This European Standard makes reference to International Standards. Where the International Standard referred to has been endorsed as a European Standard or a home-grown European Standard exists, this European Standard shall be applied instead. Pertinent information can be found on the CENELEC web site.

This Part 2-4 is to be used in conjunction with EN 60320-1:2001, *Appliance couplers for household and similar general purposes, Part 1: General requirements*.

The clauses of this Part 2-4 supplement or modify the corresponding clauses of EN 60320-1. Where a subclause of Part 1 is not mentioned in this Part 2-4, that subclause of EN 60320-1 applies as far as is reasonable. Where this Part 2-4 states "addition", "modification" or "replacement", the relevant text of Part 1 is to be adapted accordingly.

Subclauses, figures or tables which are additional to those in Part 1 are numbered starting from 101. Additional annexes are lettered AA, BB, etc.

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## **Endorsement notice**

The text of the International Standard IEC 60320-2-4:2005 was approved by CENELEC as a European Standard without any modification.

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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### **APPLIANCE COUPLERS FOR HOUSEHOLD AND SIMILAR GENERAL PURPOSES –**

#### **Part 2-4: Couplers dependent on appliance weight for engagement**

### FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60320-2-4 has been prepared by subcommittee 23G: Appliance couplers, of IEC technical committee 23: Electrical accessories

This consolidated version of IEC 60320-2-4 consists of the first edition (2005) [documents 23G/251/FDIS and 23G/252/RVD] and its amendment 1 (2009) [documents 23G/290/CDV and 23G/291/RVC].

The technical content is therefore identical to the base edition and its amendment and has been prepared for user convenience.

It bears the edition number 1.1.

A vertical line in the margin shows where the base publication has been modified by amendment 1.

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

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

Part 1: General requirements

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

Part 2-4: Couplers dependent on appliance weight for engagement

This part 2 is to be used in conjunction with IEC 60320-1: *Appliance couplers for household and similar general purposes – Part 1: General requirements*. It was established on the basis of the second edition of that standard (2001).

The clauses of this standard supplement or modify the corresponding clauses of IEC 60320-1. When a particular subclause of Part 1 is not mentioned in this part 2, the subclause of IEC 60320-1 applies without modification as far as is reasonable. Where this standard states “addition”, “modification” or “replacement”, the relevant requirement, test specification or explanatory matter in IEC 60320-1 should be adapted accordingly.

Subclauses, figures or tables which are additional to those in Part 1 are numbered starting from 101. Additional annexes are lettered AA, BB etc.

The committee has decided that the contents of the base publication and its amendments will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. 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 2-4: Couplers dependent on appliance weight for engagement

#### 1 Scope

This clause of IEC 60320-1 is replaced as follows:

This standard 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 incorporation or integration within electric appliances or other electric equipment of multi-part construction for 50 Hz or 60 Hz supply which depend on the weight of the appliance to ensure correct engagement.

NOTE 1 Appliance couplers complying with this standard are suitable for use in appliances which are used in an ambient temperature not normally exceeding 25 °C but occasionally reaching 35 °C. However the ambient temperature surrounding the appliance coupler may exceed these figures and is to be declared by the manufacturer. It is possible that the maximum working ambient temperature for the appliance inlet and for the connector may be different.

NOTE 2 Appliance couplers dependent on appliance weight for engagement may be subject to spillage of liquid in normal use. They are classified according to whether protection against liquid spillage is provided, when installed in accordance with the manufacturer's installation instructions.

NOTE 3 If appliance inlets according to this standard are used with appliances or other equipment which may be subject to spillage of liquid affecting the appliance inlet when the functioning part of the appliance or equipment is seated on its power base, then protection against moisture is to be provided by the equipment.

NOTE 4 References to standard sheets within IEC 60320-1 do not apply to appliance couplers dependent on appliance weight for engagement.

NOTE 5 Special constructions may be required:

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

#### 2 Normative references

This clause of IEC 60320-1 applies with the following additions:

IEC 60112, *Method for the determination of the proof and the comparative tracking indices of solid insulating materials*

IEC 60320-1, *Appliance couplers for household and similar general purposes – Part 1: General requirements*

IEC 60320-2-2, *Appliance couplers for household and similar general purposes – Part 2-2: Interconnection couplers for household and similar equipment*

IEC 60320-2-3, *Appliance couplers for household and similar general purposes – Part 2-3: Appliance couplers with a degree of protection higher than IPX0*

IEC 60335-1, *Household and similar electrical appliances – Safety – Part 1: General requirements*

IEC 60664-1, *Insulation coordination for equipment within low voltage systems – Part 1: Principles, requirements and tests*

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