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Standards

Irish Standard  
I.S. EN 61058-2-1:2011

# Switches for appliances -- Part 2-1: Particular requirements for cord switches (IEC 61058-2-1:2010 (EQV))

## I.S. EN 61058-2-1:2011

*Incorporating amendments/corrigenda issued since publication:*

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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I.S. EN 61058-2-1:2011

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 61058-2-1**

January 2011

ICS 29.120.40

Supersedes EN 61058-2-1:1993 + A1:1996 + A11:2002

English version

**Switches for appliances -  
Part 2-1: Particular requirements for cord switches  
(IEC 61058-2-1:2010)**

Interrupteurs pour appareils -  
Partie 2-1: Règles particulières pour les  
interrupteurs pour câbles souples  
(CEI 61058-2-1:2010)

Geräteschalter -  
Teil 2-1: Besondere Anforderungen an  
Schnurschalter  
(IEC 61058-2-1:2010)

This European Standard was approved by CENELEC on 2011-01-01. 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, Bulgaria, Croatia, 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

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## Foreword

The text of document 23J/326/CDV, future edition 2 of IEC 61058-2-1, prepared by SC 23J, Switches for appliances, of IEC TC 23, Electrical accessories, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61058-2-1 on 2011-01-01.

This European Standard supersedes EN 61058-2-1:1993 + A1:1996 + A11:2002.

The main changes from EN 61058-2-1:1993 + A1:1996 + A11:2002 are as follows:

Scope, Definitions; Protection against electric shock; Provision for earthing; Construction; Fire hazard; Abnormal operation and fault conditions for electronic switches; Components for electronic switches; EMC requirements.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

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) 2011-10-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2014-01-01

This standard is to be read in conjunction with the EN 61058-1:2002, *Switches for appliances – Part 1: General requirements*, and its amendment 2 (2008).

This Part 2-1 supplements or modifies the corresponding clauses in EN 61058-1, so as to convert that publication into the European Standard: *Particular requirements for cord switches*.

When a particular subclause of Part 1 is not mentioned in this Part 2-1, that subclause applies as far as reasonable. Where this standard states “addition”, “modification” or “replacement”, the relevant text of Part 1 is to be adapted accordingly.

In this standard:

a) the following print types are used:

- 1) requirements proper: in roman type;
- 2) *test specifications: in italic type*;
- 3) notes/explanatory matters: in small roman type.

b) subclauses, notes, figures and tables which are additional to those in Part 1 are numbered starting from 101. Annexes which are additional to those in Part 1 are lettered AA, BB, etc.

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 61058-2-1:2010 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

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.

This annex of Part 1 is applicable except as follows:

*Addition:*

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60227	Series	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V	-	-
IEC 60227-5	1997	Polyvinyl chloride insulated cables of rated	-	-
+ A1	1997	voltages up to and including 450/750 V -	-	-
+ A2	2003	Part 5: Flexible cables (cords)	-	-
IEC 60245	Series	Rubber insulated cables - Rated voltages up to and including 450/750 V	-	-
IEC 60335-2-17	2002	Household and similar electrical appliances -	EN 60335-2-17	2002
+ A1	2006	Safety -	+ A1	2006
+ A2 (mod)	2008	Part 2-17: Particular requirements for blankets, pads and similar flexible heating appliances	+ A2	2009

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## CONTENTS

FOREWORD .....	3
1 Scope .....	5
2 Normative references .....	5
3 Definitions .....	6
4 General requirement .....	7
5 General notes on tests .....	7
6 Rating .....	7
7 Classification .....	7
8 Marking and documentation .....	8
9 Protection against electric shock .....	8
10 Provision for earthing .....	9
11 Terminals and terminations .....	9
12 Construction .....	10
13 Mechanism .....	15
14 Protection against solid objects, ingress of water and humid conditions .....	15
15 Insulation resistance and dielectric strength .....	15
16 Heating .....	15
17 Endurance .....	15
18 Mechanical strength .....	16
19 Screws, current-carrying parts and connections .....	17
20 Clearances, creepage distances and distances through insulation and coatings of rigid printed board assemblies .....	17
21 Fire hazard .....	17
22 Resistance to rusting .....	17
23 Abnormal operation and fault conditions for electronic switches .....	17
24 Components for electronic switches .....	17
25 EMC requirements .....	18
Annexes .....	23
Figure 101 – Pull apparatus for testing the cord anchorage .....	18
Figure 102 – Apparatus for flexing test .....	19
Figure 103 – Tumbling barrel .....	20
Figure 104 – Torque apparatus for testing the cord anchorage .....	21
Figure 105 – Example for the insulation system .....	22
Table 3 – Switch information .....	8
Table 4 – Resistive current carried by the terminal and related cross-sectional areas of terminals for unprepared conductors .....	9
Table 101 – Rated currents for resistor loads and related type of cords .....	11
Table 102 – Size of conductor .....	14
Table 103 – Torque values for insulating material screws .....	17

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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### **SWITCHES FOR APPLIANCES –**

#### **Part 2-1: Particular requirements for cord switches**

### 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 61058-2-1 has been prepared by subcommittee 23J: Switches for appliances, of IEC technical committee 23: Electrical accessories.

This second edition cancels and replaces the first edition published in 1992 and its amendment 1 (1995) and constitutes a technical revision.

The main changes from the first edition are as follows:

Scope, Definitions; Protection against electric shock; Provision for earthing; Construction; Fire hazard; Abnormal operation and fault conditions for electronic switches; Components for electronic switches; EMC requirements.



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

CDV	Report on voting
23J/326/CDV	23J/337/RVC

Full information on the voting for the approval of this standard 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 is to be read in conjunction with the IEC 61058-1:2000, *Switches for appliances – Part 1: General requirements*, and its amendments 1 (2001) and 2 (2007).

This Part 2-1 supplements or modifies the corresponding clauses in IEC 61058-1, so as to convert that publication into the IEC standard: *Particular requirements for cord switches*.

When a particular subclause of Part 1 is not mentioned in this Part 2-1, that subclause applies as far as reasonable. Where this standard states “addition”, “modification” or “replacement”, the relevant text of Part 1 is to be adapted accordingly.

In this standard:

1) the following print types are used:

- requirements proper: in roman type;
- *test specifications: in italic type*;
- notes/explanatory matters: in small roman type.

2) subclauses, notes, figures and tables which are additional to those in Part 1 are numbered starting from 101. Annexes which are additional to those in Part 1 are lettered AA, BB, etc.

A list of all the parts in the IEC 61058 series, under the general title *Switches for appliances*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability 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.

## SWITCHES FOR APPLIANCES –

### Part 2-1: Particular requirements for cord switches

#### 1 Scope

This clause of Part 1 is applicable except as follows:

##### 1.1 *Replacement:*

**1.1** This International Standard applies to cord switches (mechanical or electronic) for appliances actuated by hand, by foot or by other human activity, to operate or control electrical appliances and other equipment for household or similar purposes with a rated voltage not exceeding 250 V and a rated current not exceeding 16 A.

These switches are intended to be operated by a person, via an actuating member or by actuating a sensing unit. The actuating member or sensing unit can be integral or arranged separately from the switch. The transmission of a signal between the actuating member or sensing unit and the switch may be made either physically or electrically (for example electrical, optical, acoustic or thermal).

Switches which incorporate additional control functions governed by the switch function are within the scope of this standard.

This standard also covers the indirect actuation of the switch when the operation of the actuating member or sensing unit is provided by a remote control or a part of an appliance or equipment such as a door.

NOTE 1 Electronic switches may be combined with mechanical switches giving full disconnection or micro-disconnection.

NOTE 2 Electronic switches without a mechanical switch in the supply circuit provide only electronic disconnection. Therefore, the circuit on the load side is always considered to be live.

NOTE 3 For switches used in tropical climates, additional requirements may be necessary.

NOTE 4 Attention is drawn to the fact that the standards for appliances may contain additional or alternative requirements for switches.

NOTE 5 Throughout this standard, the word "appliance" means "appliance or equipment".

##### 1.2 *Replacement:*

**1.2** This standard applies to switches intended to be connected to a flexible cable."

NOTE In this document, the word "cable" means "cable or cord".

**1.3** This subclause applies.

**1.4** This subclause does not apply.

#### 2 Normative references

This clause of Part 1 is applicable except as follows:

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