

Irish Standard I.S. EN 60669-2-6:2012

Switches for household and similar fixed electrical installations -- Part 2-6: Particular requirements - Fireman's switches for exterior and interior signs and luminaires (IEC 60669-2-6:2012 (MOD))

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

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Údarás um Chaighdeáin Náisiúnta na hÉireann			

## EUROPEAN STANDARD

## EN 60669-2-6

## NORME EUROPÉENNE EUROPÄISCHE NORM

March 2012

ICS 29.120.40

Supersedes EN 50425:2008

English version

## Switches for household and similar fixed electrical installations -Part 2-6: Particular requirements -Fireman's switches for exterior and interior signs and luminaires (IEC 60669-2-6:2012, modified)

Interrupteurs pour installations électriques fixes domestiques et analogues -Partie 2-6: Prescriptions particulières -Interrupteurs pompiers pour enseignes lumineuses et luminaires extérieurs et intérieurs (CEI 60669-2-6:2012, modifiée) Schalter für Haushalt und ähnliche ortsfeste elektrische Installationen -Teil 2-6: Besondere Anforderungen -Feuerwehrschalter für äußere und innere Anzeigen und Leuchten (IEC 60669-2-6:2012, modifiziert)

This European Standard was approved by CENELEC on 2012-02-22. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre 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

#### Management Centre: Avenue Marnix 17, B - 1000 Brussels

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Ref. No. EN 60669-2-6:2012 E

## Foreword

The text of document 23B/990/CDV, future edition 1 of IEC 60669-2-6, prepared by SC 23B, "Plugs, socket-outlets and switches", of IEC TC 23, "Electrical accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60669-2-6:2012.

A draft amendment, which covers common modifications to IEC 60669-2-6, was prepared by CLC/TC 23BX, "D.C. plugs and socket-outlets and switches for household and similar fixed electrical installations" and approved by CENELEC.

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement
  latest date by which the national (dow) 2015-02-22
- standards conflicting with this document have to be withdrawn

This document supersedes EN 50425:2008.

EN 60669-2-6:2012 is to be used in conjunction with EN 60669-1:1999 + A1:2002 + A2:2008. It lists the changes necessary to convert that standard into a specific standard for fireman's switches.

In this publication, the following print types are used:

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

Subclauses, figures, tables or notes which are additional to those in part 1 are numbered starting from 101.

Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 60669-2-6:2012 are prefixed "Z".

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

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

### **Endorsement notice**

The text of the International Standard IEC 60669-2-6:2012 was approved by CENELEC as a European Standard with agreed common modifications.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60669-2-4	NOTE	Harmonized as EN 60669-2-4.

IEC 60364-5-51 NOTE Harmonized as HD 60364-5-51.

COMMON MODIFICATIONS

### 1 Scope

### **Replace** the text of NOTE 101 by:

NOTE 101 The working voltage for the signs and luminous-discharge-tube installations is higher than 1 kV but lower than 10 kV and these should be in accordance with EN 50107.

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I.S. EN 60669-2-6:2012

## Annex ZA (normative)

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

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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.

#### Addition to Annex ZA of EN 60669-1:1999:

Publication	Year	<u>Title</u>	EN/HD	Year
IEC 60669-1 (mod) + A1 (mod) + A2 (mod)	1998 1999 2006	Switches for household and similar fixed- electrical installations - Part 1: General requirements	EN 60669-1 + A1 + A2	1999 2002 2008
IEC 62262	-	Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)	EN 62262	-

## **Annex ZB** (normative)

## 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 / Harmonization Document.

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

<u>Clause</u> <u>Special national condition</u>

#### Foreword United Kingdom

Add an additional paragraph:

"Fireman's switches which cover applications suited to light industrial units, retail units and petrol station forecourts fall under the scope of EN 60947-3."

since the scope of EN 60669-1 only covers household and similar fixed electrical installations.

#### 13.108 France

The enclosure of the fireman's switch and of the actuating handle could be of an other colour than red if it is equipped with an red illuminated indicator according to 13.107.

The colours yellow, green and blue are not allowed (according to NF X 08-003-1).

#### 13.108 Portugal

Fireman's switches may have colours different from red for the enclosure and different from black for the actuating handle, if they are equipped with a red illuminated indicator, according to 13.107.

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## Annex ZC (informative)

## A-deviations

**A-deviation**: National deviation due to regulations, the alteration of which is for the time being outside the competence of the CENELEC national member.

This European Standard falls under Directive 2006/95/EC.

NOTE (from CEN/CENELEC IR Part 2:2011, 2.17) Where standards fall under EU Directives, it is the view of the Commission of the European Communities (OJ No C 59, 1982-03-09) that the effect of the decision of the Court of Justice in case 815/79 Cremonini/Vrankovich (European Court Reports 1980, p. 3583) is that compliance with A-deviations is no longer mandatory and that the free movement of products complying with such a standard should not be restricted except under the safeguard procedure provided for in the relevant Directive.

In the relevant CENELEC countries these A-deviations are valid instead of the provisions of the European Standard/Harmonization Document until they have been removed.

#### <u>Clause</u> <u>Deviation</u>

#### 1 Italy (Installation Rules)

The Italian installation rules may require different protection switching devices in order to comply with the function given in the scope of this standard. The installation practice shall be in accordance with the requirements of the following Italian legislative decrees, applicable to the various types of installations.

Decree	Title
DPR 27/04/55 No. 547	Norme per la prevenzione degli infortuni sul lavoro
DPR 09/04/59 No. 128	Norme di polizia delle miniere e delle cave
DM 12/01/71 No. 208	Norme di sicurezza per gli impianti di distribuzione stradale di gas di petrolio liquefatto per autotrazione
DM 08/03/85	Direttive sulle misure più urgenti ed essenziali di prevenzione incendi ai fini del rilascio del nullaosta provvisorio di cui alla legge 7 dicembre 1984, n. 818
DM 11/01/88	Norme prevenzioni incendi nelle metropolitane
DM 20/05/92 No. 569	Regolamento contenente norme di sicurezza antincendio per gli edifici storici e artistici destinati a musei, gallerie, esposizioni e mostre
DM 26/08/92	Norme di prevenzione incendi per l'edilizia scolastica
DM 09/04/94	Approvazione della regola tecnica di prevenzione incendi per la costruzione e l'esercizio delle attività ricettive turistico-alberghiere.
DPR 30/06/95 No. 418	Regolamento concernente norme di sicurezza antincendio per gli edifici di interesse storico- artistico destinati a biblioteche ed archivi
DM 12/04/96	Approvazione della regola tecnica di prevenzione incendi per la progettazione, la costruzione e l'esercizio degli impianti termici alimentati da combustibili gassosi
DM 19/08/96	Approvazione della regola tecnica di prevenzione incendi per la progettazione, costruzione ed esercizio dei locali di intrattenimento e di pubblico spettacolo
DM 18/09/02	Approvazione della regola tecnica di prevenzione incendi per la progettazione, la costruzione e l'esercizio delle strutture sanitarie pubbliche e private
DM 28/04/05	Approvazione della regola tecnica di prevenzione incendi per la progettazione, la costruzione e l'esercizio degli impianti termici alimentati da combustibili liquidi
DM 18/03/96 DM 16/05/05	Norme di sicurezza per la costruzione e l'esercizio degli impianti sportivi
DM 22/02/06	Approvazione della regola tecnica di prevenzione incendi per la progettazione, la costruzione e l'esercizio di edifici e/o locali destinati ad uffici
DM 31/08/06	Approvazione della regola tecnica di prevenzione incendi per la progettazione, costruzione ed esercizio degli impianti di distribuzione di idrogeno per autototrazione

#### 1 Portugal

(Installation Rules and Safety Code on Fire in Buildings)

The Portuguese Electrical Installation Rules and the Safety Code on Fire in Buildings also cover fireman's switches, for which the applicable requirements must follow the Portuguese legislation.

Decree	Title
Decreto-Lei Nº 226/2005 Portaria Nº 949-A/2006	Regras Técnicas das Instalações Eléctricas de Baixa Tensão
	Clauses: 64- Exploração das instalações 536.4 -Dispositivos de corte de emergência 802- Instalações de alta tensão alimentadas a partir de instalações de baixa tensão
Decreto-Lei Nº 220/2008 Portaria Nº1532/2008	Regulamento Técnico de Segurança contra Incêndio em Edifícios (SCIE)

#### 8.3 United kingdom

(UK wiring rules) Building and Buildings, England and Wales - The Building (Amendment) Regulations 2003 {Statutory Instrument 2003 No. 2692} which require compliance with UK Wiring Rules BS 7671:2001 (incl. Amendment 2), Clause 537-04-06.

The following information shall be distinctly and durably marked on the fireman's switch in a position where it can be clearly seen from a person standing on the ground at the intended site, without opening the enclosure and when the switch is installed:

- "ON" and "OFF" positions, in letters not less than 10 mm high;
- letters reading "FIREMAN'S SWITCH" or "FIRE SWITCH" in letters not less than 10 mm high.

#### 13.101 United kingdom

(UK wiring rules) Building and Buildings, England and Wales - The Building (Amendment) Regulations 2003 {Statutory Instrument 2003 No. 2692} which require compliance with UK Wiring Rules BS 7671:2001 (incl. Amendment 2), Clause 537-04-06.

Once installed, the handle off position shall be up.

NOTE The on position means powered and the off position means unpowered.

Compliance is checked by inspection.

#### 13.107 United kingdom

(UK wiring rules) Building and Buildings, England and Wales - The Building (Amendment) Regulations 2003 {Statutory Instrument 2003 No. 2692} which require compliance with UK Wiring Rules BS 7671:2001 (incl. Amendment 2), Clause 537-04-06.

This subclause does not apply.

In the UK, indication must be 'clearly indicated' as required by BS 7671 which means that use of an illuminated indicator is considered unsafe since a false indication will occur if there is a failure of the illumination indicator or circuit.

### 24 France

France (Regulation of 1980 the  $25^{th}$  of June modified by the Regulation of 2001 the  $19^{th}$  of November)

All the tests shall be carried out at a temperature of 850  $^\circ\text{C}.$ 

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### INTERNATIONAL ELECTROTECHNICAL COMMISSION

## SWITCHES FOR HOUSEHOLD AND SIMILAR FIXED ELECTRICAL INSTALLATIONS –

## Part 2-6: Particular requirements – Fireman's switches for exterior and interior signs and luminaires

## 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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- 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 60669-2-6 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:

CDV	Report on voting
23B/990/CDV	23B/1032/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.

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This part of IEC 60669 is to be used in conjunction with IEC 60669-1:1998, Amendment 1:1999 and Amendment 2:2006. It lists the changes necessary to convert that standard into a specific standard for fireman's switches.

In this publication, the following print types are used:

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

Subclauses, figures tables or notes which are additional to those in part 1 are numbered starting from 101.

A list of all the parts in the IEC 60669 series, published under the general title *Switches for household and similar fixed electrical installations*, can be found on the IEC website.

The following differing practices exist in the countries indicated below.

- Clause 1: in all CENELEC countries, the rated voltage for the signs and luminousdischarge-tube installations is higher than 1 kV but lower than 10 kV and these should be in accordance with EN 50107 series.
- Clause 1: in Italy, installation rules and/or laws may require different protection switching devices in order to comply with the function given in the scope of this standard.
- Subclause 13.108: in France, the enclosure of the fireman's switch and of the actuating handle could be of another colour than red if the fireman's switch is equipped with a red illuminated indicator according to 13.107. The colours yellow, green and blue are not allowed (according to ISO 3864-1:2002).

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.

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## SWITCHES FOR HOUSEHOLD AND SIMILAR FIXED ELECTRICAL INSTALLATIONS –

## Part 2-6: Particular requirements – Fireman's switches for exterior and interior signs and luminaires

### 1 Scope

This clause of Part 1 is applicable except as follows:

Replacement of the first paragraph by:

This part of IEC 60669 is applicable to fireman's switches used for the breaking of the low-voltage circuits for exterior and interior signs and luminaires e.g. neon signs for a.c. only with a rated voltage not exceeding 440 V and a rated current not exceeding 125 A.

NOTE 101 In the following countries, the rated voltage for the signs and luminous-discharge-tube installations is higher than 1 kV but lower than 10 kV and these should be in accordance with EN 50107 series: all CENELEC countries.

Replacement of the 6<sup>th</sup> paragraph and Note 6 by the following paragraph and new notes:

Fireman's switches complying with this standard are suitable for use between -25 °C and +70 °C.

NOTE 102 Fireman's switches are designed for overvoltage category III and used in environment of pollution degree 2 according to IEC 60664-1.

NOTE 103 In the following country installation rules and/or laws may require different protection switching devices in order to comply with the function given in the scope of this standard: IT.

## 2 Normative references

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

IEC 60669-1:1998, Switches for household and similar fixed electrical installations – Part 1: General requirements Amendment 1:1999 Amendment 2:2006

NOTE Any reference to IEC 60669-1 given in this text includes any changes to the base edition (1998) introduced by Amendment 1:1999 and Amendment 2:2006.

IEC 62262, Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)

## 3 Terms and definitions

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

Addition:



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