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**Splošne zahteve za obločne detektorje - Dopolnilo A1 (IEC 62606:2013/A1:2017)**

General requirements for arc fault detection devices (IEC 62606:2013/A1:2017)

Allgemeine Anforderungen an Fehlerlichtbogen-Schutzeinrichtungen (IEC 62606:2013/A1:2017)

Exigences générales des dispositifs pour la détection de défaut d'arcs (IEC 62606:2013/A1:2017)

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**Ta slovenski standard je istoveten z: EN 62606:2013/A1:2017**

SIST EN 62606:2014/A1:2018  
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**ICS:**

|           |                                       |  |
|-----------|---------------------------------------|--|
| 29.120.50 | Varovalke in druga medtokovna zaščita | Fuses and other overcurrent protection devices |
|-----------|---------------------------------------|--|

**SIST EN 62606:2014/A1:2018**

**en,fr,de**

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EUROPEAN STANDARD

**EN 62606:2013/A1**

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2017

ICS 29.120; 29.120.50

English Version

**General requirements for arc fault detection devices  
(IEC 62606:2013/A1:2017)**

Exigences générales des dispositifs pour la détection de  
défaut d'arcs  
(IEC 62606:2013/A1:2017)

Allgemeine Anforderungen an Fehlerlichtbogen-  
Schutzeinrichtungen  
(IEC 62606:2013/A1:2017)

This amendment A1 modifies the European Standard EN 62606:2013; it was approved by CENELEC on 2017-03-16. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre 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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

EN 62606:2013/A1:2017 (E)

## European foreword

The text of document 23E/993/FDIS, future edition 1 of IEC 62606:2013/A1:2017, prepared by IEC/SC 23E "Circuit-breakers and similar equipment for household use", of IEC/TC 23, "Electrical accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62606:2013/A1:2017.

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 (dop) 2018-09-01
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2020-12-01

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

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directives see informative Annex ZZA and ZZB, which are integral parts of this document.

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**Endorsement notice**

The text of the International Standard IEC 62606:2013/A1:2017 was approved by CENELEC as a European Standard without any modification.

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

|               |      |  |
|---------------|------|--|
| IEC 60038     | NOTE | Harmonized as EN 60038 (modified).         |
| IEC 61000-3-2 | NOTE | Harmonized as EN 61000-3-2 (not modified). |

## Annex ZA (normative)

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

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

**Add the following references to the Annex ZA of EN 62606:2013:**

| <u>Publication</u> | <u>Year</u> | <u>Title</u>  | <u>EN/HD</u>       | <u>Year</u> |
|--------------------|-------------|---|--------------------|-------------|
| IEC 60228          | 2004        | Conductors of insulated cables  | EN 60228           | 2005        |
| IEC 61000-3-2      | 2014        | Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase) | EN 61000-3-2       | 2014        |
| IEC 61543          | 1995        | Residual current-operated protective devices (RCDs) for household and similar use - Electromagnetic compatibility                         | EN 61543           | 1995        |
| -                  | -           |   | + corrigendum Dec. | 1997        |
| -                  | -           |   | + A11              | 2003        |
| -                  | -           |   | + A12              | 2005        |
| + A1               | 2004        |   | + A1               | 2004        |
| + A2               | 2005        |   | + A2               | 2006        |

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## Annex ZZA (informative)

### Relationship between this European standard and the essential requirements of Directive 2014/30/EU [2014 OJ L96] aimed to be covered

This European standard has been prepared under the European Commission standardisation request C(2016) 7641 final of 30.11.2016<sup>1</sup>, ('M/552'), as regards harmonised standards in support of Directive 2014/30/EU relating to electromagnetic compatibility, to provide one voluntary means of conforming to essential requirements of Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility [2014 OJ L96].

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

**Table ZZA.1 – Correspondence between this European standard and the Essential Requirements set out in Directive 2014/30/EU [2014 OJ L96]**

| Essential requirements of Directive 2014/30/EU | Clause(s) / sub-clause(s) of this EN | Remarks / Notes  |
|--|--------------------------------------|--|
| Annex I. 1(a) (electromagnetic disturbances)   | 9.21                                 | In accordance with EN 61543:1995 Clause 4.   |
| Annex I. 1(b) (electromagnetic immunity)       | 8.15<br>9.21                         | All immunity requirements are covered by complying with clauses 8.15 and 9.21 of the standard. |

**WARNING 1:** Presumption of conformity stays valid only as long as a reference to this European standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

**WARNING 2:** Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

<sup>1</sup> COMMISSION IMPLEMENTING DECISION C(2016) 7641 final of 30.11.2016 on a standardisation request to the European Committee for Standardisation, to the European Committee for Electrotechnical Standardisation and to the European Telecommunications Standards Institute as regards harmonised standards in support of Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility.

**Annex ZZB**  
(informative)  
**Relationship between this European standard and the safety objectives of Directive 2014/35/EU [2014 OJ L96] aimed to be covered**

This European Standard has been prepared under a Commission's standardization request relating to harmonized standards in the field of the Low Voltage Directive, M/511, to provide one voluntary means of conforming to safety objectives of Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits [2014 OJ L96].

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZB.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

**Table ZZB.1 – Correspondence between this European standard and Article 3 of Directive 2014/35/EU [2014 OJ L153]**

| Safety Objectives of Directive 2014/35/EU | Clause(s) / sub-clause(s) of this EN  | Remarks / Notes |
|---|---|-----------------|
| (1)(a)                                    | 1, 2, 3, 4, 5, 6 – 9.3  |                 |
| (1)(b)                                    | 8.1 and 8.2, 9.4 and 9.5, Annex D, Annex J, Annex K, Annex L                            |                 |
| (1)(c)                                    | 7 – 9.1 and 9.2, 8.6 – 9.9, 8.18 – 9.23, 9.22, 8.21 – 9.21, Annex E                     |                 |
| (2) (a)                                   | 8.3 – 9.6, 8.7 – 9.10, 8.17 – 9.17, 8.12 – 9.17, 8.13 – 9.18                            |                 |
| (2) (b)                                   | 8.5 – 9.8, 8.7 – 9.10, 8.8 – 9.11 and Annex C, 8.6 – 9.9, 8.14 – 9.19 and 9.20, Annex A |                 |
| (2) (c)                                   | 8.2.2 – 9.15  |                 |
| (2) (d)                                   | 8.2.3 – 9.7, Annex B, 8.4 – 9.7   |                 |
| (3) (a)                                   | 8.9 – 9.12, 8.2.4 – 9.16  |                 |
| (3) (b)                                   | 8.10 – 9.13, 8.11 – 9.14, 8.16 – 9.9.4, 8.15 – 9.21                                     |                 |
| (3) (c)                                   | 8.12 – 9.17, 8.8 – 9.11 and Annex C   |                 |

**WARNING 1** — Presumption of conformity stays valid only as long as a reference to this European standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

**WARNING 2** — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

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IEC 62606

Edition 1.0 2017-02

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

AMENDMENT 1  
AMENDEMENT 1

General requirements for arc fault detection devices

Exigences générales des dispositifs pour la détection de défaut d'arcs

[SIST EN 62606:2014/A1:2018](https://standards.iteh.ai/catalog/standards/sist/b5ae1a10-30af-4003-b25c-6f1829b763fc/sist-en-62606-2014-a1-2018)

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## FOREWORD

This amendment has been prepared by subcommittee 23E: Circuit-breakers and similar equipment for household use, of IEC technical committee 23: Electrical accessories.

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

|              |                  |
|--------------|------------------|
| FDIS         | Report on voting |
| 23E/993/FDIS | 23E/1003/RVD     |

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

The committee has decided that the contents of this amendment and the base 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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## 1 Scope

*Replace the existing first paragraph by the following new first paragraph:*

This International Standard applies to arc fault detection devices (AFDDs) for household and similar uses, intended to be used in a.c. circuits, for rated voltages not exceeding 440 V a.c., with rated frequencies of 50 Hz, 60 Hz or 50/60 Hz and rated currents not exceeding 63 A.

*Replace, in the fourth paragraph, the words "final circuits" by "a final circuit".*

*Delete the eighth and ninth paragraphs.*

*Add, at the end of this clause, the following new note:*

NOTE 5 AFDD for d.c. applications are under consideration.

## 2 Normative references

*Add the following new references:*

IEC 60228, *Conductors of insulated cables*

IEC 61000-3-2:2014, *Electromagnetic compatibility (EMC) – Part 3-2: Limits – Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)*

IEC 62606:2013/AMD1:2017  
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– 3 –

IEC 61543:1995, *Residual current-operated protective devices (RCDs) for household and similar use – Electromagnetic compatibility*  
IEC 61543:1995/AMD1:2004  
IEC 61543:1995/AMD2:2005

### 3 Terms and definitions

#### 3.2

**arc fault**  
**arcing fault**

*Replace the existing definition by the following new definition:*

dangerous unintentional arc

#### 3.4

**arc fault detection unit**  
**AFD unit**

*Replace, at the end of the note, the reference “see (4.1.3)” by “(see 4.1.3)”.*

### 4.1 According to the method of construction

4.1.1 *Replace the existing text by the following new text:*

4.1.1 AFDD as one single device, comprising an AFD unit and opening means not providing overcurrent or residual current protection.

<https://standards.iteh.ai/catalog/standards/sist/b5ae1a10-30af-4003-b25c-6f1829b763fc/sist-en-62606-2014-a1-2018>

### 4.3 According to the number of poles and current paths

*Add to the existing list the following two new dashes:*

- Three-pole AFDD;
- Four-pole AFDD.

*Delete NOTE 1 and renumber “NOTE 2” as “NOTE”.*

#### 5.3.1 Preferred values of rated voltage ( $U_n$ )

*Replace the existing text by the following new text:*

Preferred values of rated voltage are as indicated in Table 22.