SLOVENSKI STANDARD
SIST EN 60730-1:2016/A1:2019

01-junij-2019

Avtomatske električne krmilne naprave - 1. del: Splošne zahteve

Automatic electrical controls - Part 1: General requirements

Automatische elektrische Regel- und Steuergeräte - Teil 1: Allgemeine Anforderungen

Dispositifs de commande électrique automatiques - Partie 1: Exigences générales

Ta slovenski standard je istoveten z: **EN 60730-1:2016/A1:2019**

ICS:

97.120	Avtomatske krmilne naprave za dom	Automatic controls for household use

SIST EN 60730-1:2016/A1:2019 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60730-1:2016/A1

April 2019

ICS 97.120

English Version

Automatic electrical controls - Part 1: General requirements (IEC 60730-1:2013/A1:2015)

Dispositifs de commande électrique automatiques - Partie 1: Exigences générales (IEC 60730-1:2013/A1:2015)

Automatische elektrische Regel- und Steuergeräte - Teil 1: Allgemeine Anforderungen (IEC 60730-1:2013/A1:2015)

This amendment A1 modifies the European Standard EN 60730-1:2016; it was approved by CENELEC on 2016-01-22. 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

European foreword

The text of document 72/1017/FDIS, future IEC 60730-1:2013/A1, prepared by IEC/TC 72 "Automatic electrical controls" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60730-1:2016/A1:2019.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2019-10-12
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-04-12

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.

Endorsement notice

The text of the International Standard IEC 60730-1:2013/A1:2015 was approved by CENELEC as a European Standard without any modification.

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 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.

Publication	Year	Title	EN/HD	Year
IEC 62151	-	Safety of equipment electrically connected to a telecommunication network	-	-
IEC 62368-1	-	Audio/video, information and communication technology equipment - Part 1: Safety requirements	EN 62368-1	-

IEC 60730-1

Edition 5.0 2015-12

INTERNATIONAL STANDARD

NORME INTERNATIONALE

AMENDMENT 1
AMENDEMENT 1

Automatic electrical controls – Part 1: General requirements

Dispositifs de commande électrique automatiques – Partie 1: Exigences générales

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

ICS 97.120

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FOREWORD

This amendment has been prepared by subcommittee IEC technical committee 72: Automatic electrical controls.

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

FDIS	Report on voting
72/1017/FDIS	72/1026/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 website 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.

1 Scope and normative references

1.1 Scope

Add the following new text:

This standard applies to **controls** powered by primary or secondary batteries, requirements for which are contained within the standard, including Annex V.

Add the following new subclauses:

1.1.9 This standard applies to the electrical and **functional safety** of **controls** capable of receiving and responding to communications signals, including signals for power billing rate and demand response.

The signals may be transmitted to or received from external units being part of the **control** (wired), or to and from external units which are not part of the **control** (wireless) under test.

1.1.10 This standard does not address the integrity of the output signal to the network devices, such as interoperability with other devices unless it has been evaluated as part of the **control system**.

1.2 Normative references

Add the following references:

IEC 62151, *Safety of equipment electrically connected to a telecommunication network*

IEC 62368-1, *Audio/video, information and communication technology equipment – Part 1: Safety requirements*

2 Terms and definitions

2.13 Miscellaneous definitions

Add the following new definitions:

2.13.10
smart grid
intelligent grid
electric power **system** that utilizes information exchange and **control** technologies, distributed computing and associated sensors and actuators, for purposes such as:

– to integrate the behaviour and actions of the network **users** and other stakeholders,

– to efficiently deliver sustainable, economic and secure electricity supplies

[SOURCE: IEC 60050-617:2011-10, 617-04-13]

2.13.11
smart enabled control
control that is intended to interact with the **smart grid** and allows certain functions related to power billing rate or power demand response to be remotely controlled or enabled generally by communication with the power utility or by **user** remote interface

Note 1 to entry: For example, remote interface includes computer or smart phone.

7 Information

7.2.1

Replace Note 2 by the following:

NOTE 2 Information provided by marking (C) can also be included in documentation (D, E).

Replace the first sentence of the second dashed item by the following:

By documentation on hard copy (D) – this information shall be provided for the **user** or **installer** of the **control**, and shall consist of legible instructions.

Add, after second dashed item, the following new dash:

– By documentation on electronic media on internal or external memory (E) – this information is as alternative to (D).

7.2.2

Replace the existing text by the following:

Information which is indicated as being required by marking (C) or by documentation (D,E) shall also be provided for the testing authority in an agreed manner if so requested by the testing authority.

7.2.3

Replace the existing text by the following:

For **controls** submitted in, on or with an equipment, the requirement for documentation (D,E) is replaced by declaration (X).

7.2.5

Replace the existing text by the following:

The requirement for documentation (D,E) is considered to be met if such information has been provided by marking (C).

7.2.5.1

Replace the existing text by the following:

The requirement for declaration (X) is considered to be met if such information has been provided by either documentation (D,E) or by marking (C).

7.2.6

Replace the second and third sentences by the following:

Unless otherwise indicated in a part 2, for **incorporated controls**, the only marking required is the manufacturer's name or trade mark and the **unique type reference**, if other required marking is provided by documentation (D,E). For **incorporated controls** declared under requirement 50, see the explanation of documentation (D,E) contained in 7.2.1.

7.2.7

Replace the last sentence by the following:

The other marking required shall be included in documentation (D,E).

Table 1 – (7.2 of edition 3) – Required information and methods of providing information

Replace the following requirements:

	Information	Clause or subclause	Method
6	Purpose of **control**	2.2, 4.2.4, 4.3.5, 6.3, 17.16	D or E
6a	Construction of **control** and whether the **control** is electronic	6.15, Annex H, H.2.5.7	X
18	Which of the terminals for **external conductors** are for a wider range of conductor sizes than those indicated in Table 3	10.1	D or E
19	For **screwless terminals**, the method of connection and disconnection [d], if not readily identifiable	10	D
20	Details of any special conductors which are intended to be connected to the terminals for **internal conductors**	10.2.1	D or E
32	Method of attachment for **non-detachable cords** [f]	10.1, 11.7	D or E
34	Details of any limitation of **operating time** [h]	14, 17	D or E
39	**Type 1 action** or **type 2 action**	6.4	D or E
40	Additional features of **type 1 action** or **type 2 actions**	6.4.3, 11.4	D or E
43	Reset characteristics for cut-out action [j]	6.4	D or E
45	Any limitation to the number or distribution of flat push-on **receptacles** which can be fitted	10.2.4.4	D or E
46	Any **type 2 action** shall be so designed that the **manufacturing deviation** and **drift** of its **operating value**, **operating time** or **operating sequence** is within the limit declared in requirements 41, 42, and 46 of Table 1	11.4.3	D or E
47	Extent of any **sensing element**	2.8.1	X
49	**Control pollution degree**	6.5.3	D or E
75	**Rated impulse voltage**	2.1.12, 20.1	D or E
77	Temperature for the ball pressure test	21.2.1, 21.2.2, 21.2.3 and 21.2.4	X
78	Maximum declared torque on single bush mounting using thermoplastic material	Table 20, Footnote a	D or E
79	**Pollution degree** in the **micro-environment** of the **creepage distance** or **clearance** if cleaner than that of the **control**, and how this is designed	Table H.24	X
80	**Rated impulse voltage** for the **creepage distance** or **clearance** if different from that of the **control**, and how this is ensured	Table H.24	D or E
81	The values designed for tolerances of distances for which the exclusion from **fault** mode "short" is claimed	Table H.24	X
86	For **SELV** or PELV circuits, the **ELV** limits realized	2.1.5, T.3.2	X
87	Value of accessible voltage of **SELV**/PELV circuit, if different from 8.1.1, product standard referred to for the application of the **control**, in which standard(s) the accessible **SELV**/PELV level(s) is (are) given	2.1.4, 6.8.4.1, 6.8.4.2, 8.1.1.1	X
95	Maximum short circuit current as declared	11.3.5.2.1 b)	X