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Automatic electrical controls - Part 2-14: Particular requirements for electric actuators

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 05/19

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EUROPÄISCHE NORM

February 2019

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Supersedes EN 60730-2-14:1997

English Version

**Automatic electrical controls - Part 2-14: Particular requirements
for electric actuators
(IEC 60730-2-14:2017)**

Dispositifs de commande électrique automatiques - Partie
2-14: Exigences particulières pour les actionneurs
électriques
(IEC 60730-2-14:2017)

Automatische elektrische Regel- und Steuergeräte für den
Hausgebrauch und ähnliche Anwendungen - Teil 2-14:
Besondere Anforderungen an elektrische Stellantriebe
(IEC 60730-2-14:2017)

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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 72/1079/FDIS, future edition 2 of IEC 60730-2-14, prepared by IEC/TC 72 "Automatic electrical controls" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60730-2-14:2019.

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) 2019-10-16
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-01-16

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

IEC 60034 (series)	NOTE	Harmonized in EN 60034 series.
IEC 60730-2-8:2000 + A1:2002	NOTE	Harmonized in EN 60730-2-8:2002 (modified) + A1:2003 (modified).



IEC 60730-2-14

Edition 2.0 2017-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Automatic electrical controls –
Part 2-14: Particular requirements for electric actuators**

**Dispositifs de commande électrique automatiques –
Partie 2-14: Exigences particulières pour les actionneurs électriques**



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IEC 60730-2-14

Edition 2.0 2017-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Automatic electrical controls –
Part 2-14: Particular requirements for electric actuators**

**Dispositifs de commande électrique automatiques –
Partie 2-14: Exigences particulières pour les actionneurs électriques**

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ELECTROTECHNICAL
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

AUTOMATIC ELECTRICAL CONTROLS –

Part 2-14: Particular requirements for electric actuators

FOREWORD

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International Standard IEC 60730-2-14 has been prepared by IEC technical committee 72: Automatic electrical controls.

This second edition cancels and replaces the first edition, published in 1995, its Amendment 1 (2001) and its Amendment 2 (2007). This edition constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition:

- adapting it to the 5th Ed of IEC 60730-1,
- addition of checking electric actuators with action 1.AB or 2AB, and
- modification of tests under abnormal condition.

This Part 2-14 is intended to be used in conjunction with IEC 60730-1. It was established on the basis of the 5th edition of that standard (2013). Consideration may be given to future editions of, or amendments to, IEC 60730-1.

This part 2-14 supplements or modifies the corresponding clauses in IEC 60730-1, so as to convert that publication into the IEC standard: Particular requirements for electric actuators.

Where this part 2-14 states "addition", "modification" or "replacement", the relevant requirement, test specification or explanatory matter in part 1 should be adapted accordingly.

Where no change is necessary part 2-14 indicates that the relevant clause or subclause applies.

In the development of a fully international standard it has been necessary to take into consideration the differing requirements resulting from practical experience in various parts of the world and to recognize the variation in national electrical systems and wiring rules.

The "in some countries" notes regarding differing national practice are contained in the following subclauses:

- Table 1,
- 27.2.3.1.

In this publication:

- 1) The following print types are used:
 - requirements proper: in roman type;
 - *test specifications: in italic type;*
 - explanatory matter: in smaller roman type.
 - Defined terms: **bold type.**
- 2) Subclauses, notes or items which are additional to those in Part 1 are numbered starting from 101, additional annexes are lettered AA, BB, etc.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
72/1079/FDIS	72/1100/RVD

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

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

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

AUTOMATIC ELECTRICAL CONTROLS –

Part 2-14: Particular requirements for electric actuators

1 Scope and normative references

This clause of Part 1 is applicable except as follows:

1.1 Replacement:

This part 2-14 applies to **electric actuators** for use in, on, or in association with equipment for household and similar use. The equipment may use electricity, gas, oil, solid fuel, solar thermal energy, etc., or a combination thereof.

NOTE Throughout this standard the word "equipment" means "appliance and equipment."

EXAMPLE 1 **Electric actuators** for appliances within the scope of IEC 60335.

This International Standard is applicable to **controls** for building automation within the scope of ISO 16484.

This part 2-14 also applies to automatic **electrical controls** for equipment that may be used by the public, such as equipment intended to be used in shops, offices, hospitals, farms and commercial and industrial applications.

EXAMPLE 2 **Controls** for commercial catering, heating and air-conditioning equipment.

This part 2-14 is also applicable to individual **electric actuators** utilized as part of a **control system** or **controls**, which are mechanically integral with **multifunctional controls** having non-electrical outputs.

EXAMPLE 3 Independently mounted water valves, **controls** in smart grid **systems** and **controls** for building automation systems within the scope of ISO 16484-2.

This part 2-14 does not apply to automatic **electric actuators** intended exclusively for industrial process applications unless explicitly mentioned in the relevant part 2 or the equipment standard.

1.1.1 This part 2-14 applies to the inherent safety, to the **operating values**, **operating times** and **operating sequences** where such are associated with equipment safety and to the testing of **electric actuators** used in or in association with equipment.

NOTE Requirements for specific **operating values**, **operating times** and **operating sequences** may be given in the standards for appliances and equipment.

This standard is also applicable to the **functional safety** of **low complexity safety related systems** and **controls**.

This part 2-14 does not apply to **electric actuators** which are mechanically integrated with valves covered by a separate part 2, e.g. IEC 60730-2-8.

This part 2-14 does not apply to electric motors, requirements for which are contained in IEC 60034.

1.1.2 Requirements for manual switches not integral with an **electric actuator** are contained in IEC 61058-1.

1.1.3 *Replacement*

This part 2-14 applies to a.c. or d.c. powered **electric actuators** with a rated voltage not exceeding 690 V a.c. or 600 V d.c.

1.1.4 *Replacement*

This part 2-14 does not take into account the **response value** of an **automatic action** of an **electric actuator**, if such a **response value** is dependent upon the method of mounting the **electric actuator** in the equipment. Where a **response value** is of significant purpose for the protection of the **user**, or surroundings, the value defined in the appropriate household equipment or as determined by the manufacturer shall apply.

koniec náhľadu – text ďalej pokračuje v platenej verzii STN