ELEKTRILISED AUTOMAATJUHTIMISSEADMED MAJAPIDAMIS- JA MUUKS TAOLISEKS KASUTUSEKS. OSA 2-12: ERINÕUDED ELEKTRIGA KÄITATAVATELE UKSELUKKUDELE

Automatic electrical controls - Part 2-12: Particular requirements for electrically operated door locks

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 60730-2-12:2019 sisaldab Euroopa standardi EN IEC 60730-2-12:2019 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 60730-2-12:2019 consists of the English text of the European standard EN IEC 60730-2-12:2019.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 05.04.2019.	Date of Availability of the European standard is 05.04.2019.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 97.120

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60730-2-12

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English Version

Automatic electrical controls - Part 2-12: Particular requirements for electrically operated door locks (IEC 60730-2-12:2015)

Dispositifs de commande électrique automatiques - Partie 2-12: Règles particulières pour les serrures électriques de portes
(IEC 60730-2-12:2015)

Automatische elektrische Regel- und Steuergeräte - Teil 2-12: Besondere Anforderungen an elektrisch betriebene Türverriegelungen
(IEC 60730-2-12:2015)

This European Standard was approved by CENELEC on 2018-10-23. 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.

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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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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 72/981/FDIS, future edition 3 of IEC 60730-2-12, prepared by IEC/TC 72 "Automatic electrical controls" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60730-2-12:2019.

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) 2019-10-05
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-04-05

This document supersedes EN 60730-2-12:2006.

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 60730-2-12:2015 was approved by CENELEC as a European Standard without any modification.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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AUTOMATIC ELECTRICAL CONTROLS –

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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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International Standard IEC 60730-2-12 has been prepared by technical committee 72: Automatic electrical controls.

This third edition cancels and replaces the second edition published in 2005. This edition constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition:

a) aligns the text with IEC 60730-1, Edition 5;
b) modifies requirements for Class B control function (H.27.1.2.2);
c) modifies requirements for Class C control function (H.27.1.2.3);
d) modifies requirements for faults during safety shut-down.

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

FDIS	Report on voting
72/981/FDIS	72/993/RVD

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 part 2 is intended to be used in conjunction with IEC 60730-1. It was established on the basis of the fifth edition (2013) of that publication. Consideration may be given to future editions of, or amendments to, IEC 60730-1.

This part 2 supplements or modifies the corresponding clauses in IEC 60730-1 so as to convert that publication into the IEC standard: Particular requirements for electrically operated door locks.

Where this part 2 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, this part 2 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 practices are contained in the following subclauses:

17.1.3.1

17.7.1

17.7.7

17.10.4

27.2.3.1

In this publication:

1) The following print types are used:
   - Requirements proper: in roman type;
   - *Test specifications: in italic type;*
   - Notes; in small roman type;
   - Words defined in Clause 2: **bold**.
2) Subclauses, notes, tables and figures which are additional to those in part 1 are numbered starting from 101; additional annexes are lettered AA, BB, etc.

A list of all parts of the IEC 60730 series, published under the title *Automatic electrical controls* 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 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.

A bilingual version of this publication may be issued at a later date.

AUTOMATIC ELECTRICAL CONTROLS –

Part 2-12: Particular requirements for electrically operated door locks

1 Scope and normative references

This clause of Part 1 is applicable except as follows:

1.1 Scope

Replacement:

This part of IEC 60730 applies to **electrically operated door locks** for use in, on or in association with equipment, including equipment for heating, air-conditioning and similar applications. The equipment may use electricity, gas, oil, solid fuel, solar thermal energy, etc., or a combination thereof.

NOTE 1 Throughout this standard, the word "equipment" includes "appliance" and "control system".

This standard also applies to **electrically operated door locks** 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.

This standard does not apply to **electrically operated door locks** intended exclusively for industrial process applications unless explicitly mentioned in the equipment standard.

This standard does not apply to **electrically operated door locks** intended for security access applications.

NOTE 2 Standards that cover these applications are under IEC Technical Committee 79.

1.1.1 *Replacement:*

This standard applies to the inherent safety, to the **operating values**, **operating sequences** where such are associated with equipment protection, and to the testing of door locks used in, or in association with equipment.

This standard is also applicable to door locks for appliances within the scope of IEC 60335-1.

NOTE Throughout this standard, the word “door” means “door, cover or lid”. The words “door lock” mean “electrically operated door lock”.

This standard is also applicable to individual door locks utilized as part of a **control system** or door locks which are mechanically integral with multi-functional **controls** having non-electrical outputs or employing motors.

Door locks for equipment not intended for normal household use, but which nevertheless may be used by the public, such as equipment intended to be used by laymen in shops, in light industry and on farms, are within the scope of this standard.

This standard is also applicable to the **functional safety** of **low complexity safety related systems** and **controls** employing door locks as the actuating element.

1.1.2 *Replacement:*

This standard applies to door locks with electrical circuits and **control** circuits which are, for example, operated by bimetals, magnet coils, memory metals, pressure elements, temperature-sensitive expansion elements or electronic elements.

1.1.3 Not applicable.

1.1.4 *Replacement:*

This standard applies to **manual controls** when such are electrically and/or mechanically integral with door locks.

NOTE Requirements for manual switches not forming part of a door lock are contained in IEC 61058-1.

1.1.5 *Replacement:*

This standard applies to a.c. or d.c. powered door locks with a rated voltage not exceeding 690 V a.c. or 600 V d.c.

1.1.6 *Replacement:*

This standard does not take into account the **response value** of an **automatic action** of a door lock, if such a **response value** is dependent upon the method of mounting the **control** 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 equipment standard or as determined by the manufacturer shall apply.

1.1.7 *Replacement:*

This standard applies also to door locks incorporating **electronic devices**, requirements for which are contained in Annex H and door locks using **thermistors**, requirements for which are contained in Annex J.

2 Terms and definitions

This clause of Part 1 is applicable except as follows:

2.2 Definitions of types of control according to purpose

Additional definition:

2.2.101
electrically operated door lock
incorporated or integrated **electrically operated mechanism** intended to control the door **locking** in equipment by means of a mechanical output mechanism which physically secures a door, **cover** or lid

2.3 Definitions relating to the function of controls

Additional definitions:

2.3.101
drop-out value
operating value at which the **locking** means is disengaged