

**ELEKTRILISED AUTOMAATJUHTIMISSEADMED.
OSA 2-5: ERINÕUDED AUTOMAATSETELE
ELEKTRILISTELE PÕLETIJUHTIMISSÜSTEEMIDELE**

**Automatic electrical controls - Part 2-5: Particular
requirements for automatic electrical burner control
systems (IEC 60730-2-5:2013 , modified)**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 60730-2-5:2015 sisaldab Euroopa standardi EN 60730-2-5:2015 ja selle paranduse AC:2023 ingliskeelset teksti.	This Estonian standard EVS-EN 60730-2-5:2015 consists of the English text of the European standard EN 60730-2-5:2015 and its corrigendum AC:2023.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas. Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 27.02.2015.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation. Date of Availability of the European standard is 27.02.2015.
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English Version

Automatic electrical controls -
Part 2-5: Particular requirements for automatic electrical burner
control systems
(IEC 60730-2-5:2013 , modified)

Dispositifs de commande électrique automatiques -
Partie 2-5: Exigences particulières pour les systèmes de
commande électrique automatiques des brûleurs
(IEC 60730-2-5:2013 , modifiée)

Automatische elektrische Regel- und Steuergeräte für den
Hausgebrauch und ähnliche Anwendungen -
Teil 2-5: Besondere Anforderungen an automatische
elektrische Brenner-Steuerungs- und
Überwachungssysteme
(IEC 60730-2-5:2013 , modifiziert)

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Foreword

This document (EN 60730-2-5:2015) consists of the text of IEC 60730-2-5:2013 prepared by IEC/TC 72 "Automatic electrical controls", together with the common modifications prepared by CLC/TC 72 "Automatic controls for household use".

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) 2015-08-27
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-11-17

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For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

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 60730-2-5:2013 was approved by CENELEC as a European Standard with agreed common modifications.

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Automatic electrical controls –
Part 2-5: Particular requirements for automatic electrical burner control systems**

**Dispositifs de commande électrique automatiques –
Partie 2-5: Exigences particulières pour les systèmes de commande électrique
automatiques des brûleurs**



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INTERNATIONAL STANDARD

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AUTOMATIC ELECTRICAL CONTROLS –**Part 2-5: Particular requirements for automatic
electrical burner control systems**

FOREWORD

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International Standard IEC 60730-2-5 has been prepared by IEC technical committee 72: Automatic electrical controls.

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

FDIS	Report on voting
72/922/FDIS	72/929/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 2-5 is intended to be used in conjunction with IEC 60730-1. It was established on the basis of the fourth edition (2010) of that publication. Consideration may be given to future editions of, or amendments to, IEC 60730-1.

The title of IEC 60730-2-5 Ed. 4 has been updated to the title of IEC 60730-1 Ed. 5.0. However, IEC 60730-2-5 Ed. 4.0 has not been updated in accordance with the technical requirements in IEC 60730-1 Ed. 5.0.

This part 2-5 supplements or modifies the corresponding clauses in IEC 60730-1 so as to convert that publication into the IEC standard: Safety requirements for automatic electrical burner control systems.

Where this part 2-5 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 2-5 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:

- 2.3.127
- 6.11
- 15.7
- 17.16.102.1
- H.26.11.103
- Table H.21, Note 7

In this publication:

- 1) The following print types are used:
 - Requirements proper: in roman type;
 - *Test specifications: in italic type;*
 - Explanatory matter; 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, under the general 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 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.

AUTOMATIC ELECTRICAL CONTROLS –

Part 2-5: Particular requirements for automatic electrical burner control systems

1 Scope and normative references

This clause of Part 1 is applicable except as follows:

1.1 Replacement:

This part of IEC 60730 applies to automatic electrical burner control systems for the **automatic control** of burners for oil, gas, coal or other combustibles for household and similar use including heating, air conditioning and similar use.

This part 2-5 is applicable to a complete burner control system and to a separate **programming unit**. This part 2-5 is also applicable to a separate electronic high-voltage **ignition source** and to a separate **flame detector**.

NOTE Separate **ignition devices** (electrodes, **pilot** burners, etc.) are not covered by this part 2-5 unless they are submitted as part of a burner control system. Requirements for separate ignition transformers are contained in IEC 60989.

Throughout this part 2-5, where it can be used unambiguously, the word "system" means "burner control system" and "systems" means "burner control systems".

Systems utilizing thermoelectric flame supervision are not covered by this part 2-5.

1.1.1 This part 2-5 applies to the inherent safety, to the manufacturer's declared **operating values**, **operating times** and **operating sequences** where such are associated with burner safety and to the testing of automatic electrical burner control systems used in, on, or in association with, burners.

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

Systems 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 part 2-5.

This part 2-5 applies to systems using NTC or PTC thermistors, additional requirements for which are contained in Annex J.

This part 2-5 does not apply to systems designed exclusively for industrial applications.

1.1.2 This part 2-5 applies to **manual controls** when such are electrically and/or mechanically integral with **automatic controls**.

NOTE Requirements for manual switches not forming part of an **automatic control** are contained in IEC 61058-1.

Throughout this part 2-5, the word "equipment" means "appliance and equipment".

1.2 Replacement:

This part 2-5 applies to systems with a rated voltage not exceeding 660 V and with a rated current not exceeding 63 A.

1.3 Replacement:

This part 2-5 does not take into account the **response value** of an **automatic action** of a control, 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 household equipment standard or as determined by the manufacturer applies.

NOTE This part 2-5 includes systems responsive to flame properties.

1.4 Replacement:

This part 2-5 applies also to systems incorporating **electronic devices**, requirements for which are contained in Annex H.

1.5 Normative references

This clause of Part 1 is applicable except as follows:

Addition:

IEC 60068-2-6, *Environmental testing – Part 2: Tests – Test Fc: Vibration (sinusoidal)*

IEC 61643-11, *Low-voltage surge protective devices – Part 11: Surge protective devices connected to low-voltage power systems – Requirements and test methods*

2 Definitions

This clause of Part 1 is applicable except as follows:

2.2 Definitions of types of control according to purpose

Additional definitions:

2.2.101

burner control system

system which includes a **programming unit**, a **flame detector** and may include an **ignition source** and/or **ignition device** and which monitors the **operation** of fuel burners

Note 1 to entry: The various functions of the system may be in one or more housings.

2.2.102

flame detector

device which provides the **programming unit** with a signal indicating the presence or absence of flame

Note 1 to entry: It includes the **flame sensor** and may include an amplifier and a relay for signal **transmission**. The amplifier and relay may be in its own housing or combined with the **programming unit**.

2.2.103

flame sensor

device which senses the flame and provides the input signal to the **flame detector** amplifier