# SLOVENSKI STANDARD

# SIST EN 60730-2-5:1996/A2:1999

prva izdaja
julij 1999

Automatic electrical controls for household and similar use -- Part 2: Particular requirements for automatic electrical burner control systems - Amendment A2 (IEC 60730-2-5:1993 /A2:1997)



ICS 97.120

Referenčna številka
SIST EN 60730-2-5:1996/A2:1999(en)

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

# EN 60730-2-5/A2

January 1998

ICS 97.120

Descriptors: Electrical household appliance, control, automatic control, burner, operating safety, rating, requirement, test

English version

# Automatic electrical controls for household and similar use Part 2: Particular requirements for automatic electrical burner control systems (IEC 60730-2-5:1993/A2:1997)

Dispositifs de commande électrique automatiques à usage domestique et analogue
Partie 2: Règles particulières pour les systèmes de commande électrique automatiques des brûleurs
(CEI 60730-2-5:1993/A2:1997)

Automatische elektrische Regel- und Steuergeräte für den Hausgebrauch und ähnliche Anwendungen
Teil 2: Besondere Anforderungen an automatische elektrische Brenner-Steuerungs- und Überwachungssysteme
(IEC 60730-2-5:1993/A2:1997)



This amendment A2 modifies the European Standard EN 60730-2-5:1995; it was approved by CENELEC on 1998-01-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## Foreword

The text of document 72/391/FDIS, future amendment 2 to IEC 60730-2-5:1993, prepared by IEC TC 72, Automatic controls for household use, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A2 to EN 60730-2-5:1995 on 1998-01-01.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1998-10-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2000-12-15

Annexes designated "normative" are part of the body of the standard.
In this standard, annexes H, K and ZA are normative.
Annex ZA has been added by CENELEC.

---

## Endorsement notice

The text of amendment 2:1997 to the International Standard IEC 60730-2-5:1993 was approved by CENELEC as an amendment to the European Standard without any modification.

---

## Annex ZA (normative)

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

Addition:

| Publication | Year | Title | EN/HD | Year |
|---|---|---|---|---|
| IEC 60384-16 | 1982 | Fixed capacitors for use in electronic equipment<br>Part 16: Sectional specification: Fixed metallized polypropylene film dielectric d.c capacitors | - | - |

CENELEC

Corrigendum to EN 60730-2-5:1995/A2:1998

English version

---

In the English text of IEC 60730-2-5:1993/A2:1997

Annex K

**Replace** "Wire-wound inductors" by "Wire- wound inductors, single layer".

---

January 1998

# NORME INTERNATIONALE

# INTERNATIONAL STANDARD

**CEI**
**IEC**
**60730-2-5**

1993

AMENDEMENT 2
AMENDMENT 2

1997-11

Amendement 2

## Dispositifs de commande électrique automatiques à usage domestique et analogue

## Partie 2-5: Règles particulières pour les systèmes de commande électrique automatiques des brûleurs



Amendment 2

## Automatic electrical controls for household and similar use

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



International Electrotechnical Commission 3, rue de Varembé Geneva, Switzerland
Telefax: +41 22 919 0300 e-mail: inmail@iec.ch IEC web site http: //www.iec.ch

Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE E

*Pour prix, voir catalogue en vigueur*
*For price, see current catalogue*

FOREWORD

This amendment has been prepared by IEC technical committee 72: Automatic controls for household use.

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

| FDIS | Report on voting |
|---|---|
| 72/391/FDIS | 72/400/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.

---

Page 11

**1.5 Normative references**

*Add the following IEC standard:*



IEC 60384-16: 1982, *Fixed capacitors for use in electronic equipment – Part 16: Sectional specification: Fixed metallized polypropylene film dielectric d.c. capacitors*



Page 63

**Annex H**
(normative)

**Requirements for electronic controls**

*Amend annex H as follows:*

**H.2 Definitions**

**H.2.5 Definitions of type of control according to construction**

*Additional definition:*

**H.2.5.101**
**hybrid circuit:**
A circuit produced on ceramic substrate by means of thick film, thin film or surface mounted devices (SMD) technology, without accessible electrical connections except for I/O points, and with all internal connections constructed as part of a lead frame or other integral construction.

## H.27 Abnormal operation

*Replace subclause H.27.1.3 by the following:*

**H.27.1.3** With each fault described in annex K, simulated or applied to one circuit component at a time, the burner control system shall comply with

– items a) to g) inclusive,

– the applicable subclauses of H.27.1.3.102 to H.27.1.3.104, inclusive, and

– the following requirements of software class C (if applicable):

a) The burner control system shall not emit flames, hot metal or hot plastics, and no explosion shall result. For burner control systems with enclosures, compliance is determined by the following test;

The enclosure is wrapped in tissue wrapping paper. The burner control system is operated to steady state or for one hour, whichever occurs first. There shall be no burning of the wrapped tissue paper. Inside the enclosure some parts may temporarily glow, and there may be a temporary emission of smoke or flame.

In the USA, cheesecloth is used instead of tissue wrapping paper.

b) The temperature for supplementary insulation and reinforced insulation shall not exceed 1,5 times the relevant values specified in clause 14, except in the case of thermoplastic material.

There is no specific temperature limit for supplementary insulation and reinforced insulation of thermoplastic material, the temperature of which shall, however, be recorded for the purpose of clause 21.

c) Void

d) The burner control system shall comply with the requirements of clause 8 and of 13.2 for basic insulation.

e) There shall be no deterioration of the various parts of the burner control system that would result in non-compliance with the requirements of clause 20.

f) A fuse in the supply, external to the burner control system under test and as described in item d) of H.27.1.2, shall not rupture unless an internal protective device also operates that is accessible only after the use of a tool.

An internal protective device is deemed not to be required if the sample still complies with the following requirements after replacement of the fuse of the supply:

– items a), b) and d) of H.27.1.3

– the requirements of clause 20 for the clearances and creepage distances from active parts to the surfaces of the burner control system that are accessible when the burner control system is mounted as for its intended use.

g) The output waveform shall be as declared in table 7.2, requirement 56.

*Replace, on page 79, subclause H.27.1.4 by the following:*

### H.27.1.4 Electronic circuit fault conditions

For the purpose of clause H.27, the applicable failure modes are given in annex K.