



SLOVENSKI STANDARD
SIST EN 60730-1:2001/A2:2009
01-januar-2009

5 j lca Urg_YYY_f] bY_fa]bY'bUdfUj Y'nUi dcfUvc`j`[cgdcX]b'ghj i `]b'nUdcXcVbc
i dcfUvc`!'%'XY.'Gd`cybY'nU hYj Y'f197`* \$+' \$!%% -- #5 & &\$+\$žgdfYa Yb^YbŁ

Automatic electrical controls for household and similar use -- Part 1: General requirements

Automatische elektrische Regel- und Steuergeräte für den Hausgebrauch und ähnliche Anwendungen -- Teil 1: Allgemeine Anforderungen

Dispositifs de commande électrique automatiques à usage domestique et analogue -- Partie 1: Règles générales

ITIH STANDARD PREVIEW
(standards.iteh.ai)
<https://standards.iteh.ai/catalog/standards/sist/2af9a315-eed7-4873-8313-c6bfe07392d/sist-en-60730-1-2001-a2-2009>

Ta slovenski standard je istoveten z: EN 60730-1:2000/A2:2008

ICS:

97.120 Avtomatske krmilne naprave Automatic controls for
za dom household use

SIST EN 60730-1:2001/A2:2009 en,fr,de

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 60730-1:2001/A2:2009](https://standards.iteh.ai/catalog/standards/sist/2af9a315-eed7-4873-8313-c6bfe07392d/sist-en-60730-1-2001-a2-2009)

<https://standards.iteh.ai/catalog/standards/sist/2af9a315-eed7-4873-8313-c6bfe07392d/sist-en-60730-1-2001-a2-2009>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60730-1/A2

July 2008

ICS 97.120

Supersedes EN 60730-1:2000/A15:2007

English version

**Automatic electrical controls for household and similar use -
Part 1: General requirements**
(IEC 60730-1:1999/A2:2007, modified)

Dispositifs de commande électrique
automatiques à usage domestique
et analogue -
Partie 1: Règles générales
(CEI 60730-1:1999/A2:2007, modifié)

Automatische elektrische Regel- und
Steuergeräte für den Hausgebrauch und
ähnliche Anwendungen -
Teil 1: Allgemeine Anforderungen
(IEC 60730-1:1999/A2:2007, modifiziert)

iTeh STANDARD PREVIEW

This amendment A2 modifies the European Standard EN 60730-1:2000; it was approved by CENELEC on 2008-06-01. 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, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the 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 amendment 2:2007 to the International Standard IEC 60730-1:1999, prepared by IEC TC 72, Automatic controls for household use, together with the common modifications prepared by the Technical Committee CENELEC TC 72, Automatic controls for household use, was submitted to the formal vote and was approved by CENELEC as amendment A2 to EN 60730-1:2000 on 2008-06-01.

This document supersedes EN 60730-1:1999/A15:2007.

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) 2009-06-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2011-06-01

Annex ZA has been added by CENELEC.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 60730-1:2001/A2:2009](https://standards.iteh.ai/catalog/standards/sist/2af9a315-eed7-4873-8313-c6bfl e07392d/sist-en-60730-1-2001-a2-2009)

<https://standards.iteh.ai/catalog/standards/sist/2af9a315-eed7-4873-8313-c6bfl e07392d/sist-en-60730-1-2001-a2-2009>

Endorsement notice

The text of amendment 2:2007 to the International Standard IEC 60730-1:1999 was approved by CENELEC as an amendment to the European Standard with agreed common modifications as given below

COMMON MODIFICATIONS

2.1.5

safety extra-low voltage (SELV)

Delete the note relating to Canada and USA.

2.1.15

(conductive) screen

Delete “(conductive) shield (US)”.

2.1.16

(electrically) protective screen

Delete “(electrically) protective shield (US)”

2.1.17

(electrically) protective screening

Delete “(electrically) protective shielding (US)”

8.1.1

Delete the note relating to Canada and USA.

17.2.2

Delete the final sentence relating to Canada, China and USA.

17.2.3

Delete the text and replace with “void”.

17.2.3.1

Delete the text and replace with “void”.

27.2.3.1

Delete the note relating to Canada and USA

Annex D - Heat, fire and tracking

Delete the title.

D.1.1

Delete the replacement.

Table D - Requirements for suitability of insulating material for direct and indirect support of live parts

Delete the replacement.

D.2.4.2 Apparatus and gas supply

Delete the replacement.

D.2.6.1

Delete the replacement.

H.2.21.2

In the note **delete** “and door locks for laundry equipment”.

H.7 Information

In note 17, Class B, paragraph 2, **delete** “and door locks for laundry equipment”.

T.3.2

Delete the note relating to Canada and USA.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 60730-1:2001/A2:2009](https://standards.iteh.ai/catalog/standards/sist/2af9a315-eed7-4873-8313-c6b1e07392d/sist-en-60730-1-2001-a2-2009)

<https://standards.iteh.ai/catalog/standards/sist/2af9a315-eed7-4873-8313-c6b1e07392d/sist-en-60730-1-2001-a2-2009>

Replace Annex ZA of EN 60730-1:2000 + A1:2004 by:

Annex ZA
(normative)

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

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60038	1983	IEC standard voltages ¹⁾	HD 472 S1 + corr. February A1	1989 2002 1995
+ A1	1994			
+ A2	1997			
IEC 60050-604	1987	International Electrotechnical Vocabulary (IEV) - Chapter 604: Generation, transmission and distribution of electricity - Operation	-	-
IEC 60065 (mod)	2001	Audio, video and similar electronic apparatus - Safety requirements	EN 60065 + corr. August	2002 2007
IEC 60068-2-75	1997	Environmental testing - Part 2-75: Tests - Test Eh: Hammer tests	EN 60068-2-75	1997
IEC 60085	1984	Thermal evaluation and classification of electrical insulation	HD 566 S1 ²⁾	1990
IEC 60099-1 (mod)	1991	Surge arresters -	EN 60099-1	1994
A1	1999	Part 1: Non-linear resistor type gapped surge arresters for a.c. systems	A1	1999
IEC 60112	2003	Method for the determination of the proof and the comparative tracking indices of solid insulating materials	EN 60112	2003
IEC 60127	Series	Miniature fuses	EN 60127	Series
IEC 60216-1	2001	Electrical insulating materials - Properties of thermal endurance - Part 1: Ageing procedures and evaluation of test results	EN 60216-1	2001
IEC 60227	Series	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V - Part 1: General requirements	- ³⁾	-
IEC 60245-1	2003	Rubber insulated cables - Rated voltages up to and including 450/750 V - Part 1: General requirements	- ⁴⁾	-
IEC 60249	Series	Base materials for printed circuits	EN 60249	Series

1) The title of HD 472 S1 is: Nominal voltages for low voltage public electricity supply systems.

2) HD 566 S1 is superseded by EN 60085:2004, which is based on IEC 60085:2004.

3) The HD 21 series, which is related to, but not directly equivalent with the IEC 60227 series, applies instead.

4) HD 22.1 S4:2002, Cables of rated voltages up to and including 450/750 V and having cross-linked insulation - Part 1: General requirements, which is related to, but not directly equivalent with, IEC 60245-1, applies instead.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60269	Series	Low-voltage fuses	EN 60269	Series
IEC 60326	Series	Printed boards	-	-
IEC 60326-3	1991	Printed boards - Part 3: Design and use of printed boards	-	-
IEC 60335-1 (mod) A1	2001 2004	Household and similar electrical appliances - Safety - Part 1: General requirements	- EN 60335-1 A1 + corr. January	2002 2004 2007
A2	2006		A2 + A11 + A12 + corr. February	2006 2004 2006 2007
IEC 60364 (mod)	Series	Low-voltage electrical installations	HD 60364/HD 384	Series
IEC 60384-14	2005	Fixed capacitors for use in electronic equipment - Part 14: Sectional specification - Fixed capacitors for electromagnetic interference suppression and connection to the supply mains	EN 60384-14	2005
IEC 60384-16	2005	Fixed capacitors for use in electronic equipment - Part 16: Sectional specification: Fixed metallized polypropylene film dielectric d.c. capacitors	-	-
IEC 60384-17	2005	Fixed capacitors for use in electronic equipment - Part 17: Sectional specification: Fixed metallized polypropylene film dielectric a.c. and pulse capacitors	EN 60384-17	2005
IEC 60417	Data- base	Graphical symbols for use on equipment	-	-
IEC 60423 (mod)	1993	Conduits for electrical purposes - Outside diameters of conduits for electrical installations and threads for conduits and fittings	EN 60423 ⁵⁾	1994
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991 1993
A1	1999		A1	2000
IEC 60539	1976	Directly heated negative temperature coefficient thermistors	-	-
IEC 60555-2 (mod) + A1 (mod)	1982 1985	Disturbances in supply systems caused by household appliances and similar electrical equipment - Part 2: Harmonics	EN 60555-2 ⁶⁾	1987
IEC 60555-3	1982	Disturbances in supply systems caused by household appliances and similar electrical equipment - Part 3: Voltage fluctuations	EN 60555-3 ⁷⁾	1987

5) EN 60423 is superseded by EN 60423:2007, which is based on IEC 60423:2007.

6) EN 60555-2 is superseded by EN 61000-3-2:1995, which is based on IEC 61000-3-2:1995.

7) EN 60555-3 is superseded by EN 61000-3-3:1995, which is based on IEC 61000-3-3:1994.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60664-1 + A1 + A2	1992 2000 2002	Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests	EN 60664-1 ⁸⁾	2003
IEC 60664-3	2003	Insulation coordination for equipment within low-voltage systems - Part 3: Use of coating, potting or moulding for protection against pollution	EN 60664-3	2003
IEC 60695-2-11	2000	Fire hazard testing - Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products	EN 60695-2-11	2001
IEC 60695-11-10 A1	1999 2003	Fire hazard testing - Part 11-10: Test flames - 50 W horizontal and vertical flame test methods	EN 60695-11-10 A1	1999 2003
IEC 60738-1	1998	Thermistors - Directly heated positive step-function temperature coefficient - Part 1: Generic specification	EN 60738-1 ⁹⁾	1999
IEC 60738-1-1	1998	Thermistors - Directly heated positive step-function temperature coefficient - Part 1-1: Blank detail specification - Current limiting application - Assessment level EZ	EN 60738-1-1 ¹⁰⁾	1999
IEC 60998-2-2 (mod)	2002	Connecting devices for low-voltage circuits for household and similar purposes - Part 2-2: Particular requirements for connecting devices as separate entities with screwless-type clamping units	EN 60998-2-2	2004
IEC 61000	Series	Electromagnetic compatibility (EMC)	EN 61000	Series
IEC 61000-3-2	2005	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)	EN 61000-3-2	2006
IEC 61000-3-3	1994	Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection	EN 61000-3-3 + corr. July	1995 1997
IEC 61000-4-2 A1 A2	1995 1998 2000	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2 A1 A2	1995 1998 2001
IEC 61000-4-3	2006	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	EN 61000-4-3	2006
IEC 61000-4-4	2004	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	2004

8) EN 60664-1 is superseded by EN 60664-1:2007, which is based on IEC 60664-1:2007.

9) EN 60738-1 is superseded by EN 60738-1:2006, which is based on IEC 60738-1:2006.

10) EN 60738-1-1 is superseded by EN 60738-1-1:2008, which is based on IEC 60738-1-1:2008.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61000-4-5	2005	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	2006
IEC 61000-4-6	2003	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	EN 61000-4-6 ¹¹⁾ + corr. August	2007 2007
IEC 61000-4-8 A1	1993 2000	Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test	EN 61000-4-8 A1	1993 2001
IEC 61000-4-11	2004	Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests	EN 61000-4-11	2004
IEC 61000-4-28 A1	1999 2001	Electromagnetic compatibility (EMC) - Part 4-28: Testing and measurement techniques - Variation of power frequency, immunity test	EN 61000-4-28 A1	2000 2004
IEC 61058-1 (mod)	2000	Switches for appliances - Part 1: General requirements	EN 61058-1 ¹²⁾	2002
IEC 61140	2001	Protection against electric shock - Common aspects for installation and equipment	EN 61140	2002
IEC 61210 (mod)	1993	Connecting devices - Flat quick-connect terminations for electrical copper conductors - Safety requirements	EN 61210	1995
IEC 61558-2-6	1997	Safety of power transformers, power supply units and similar - Part 2-6: Particular requirements for safety isolating transformers for general use	EN 61558-2-6	1997
IEC 61558-2-17	1997	Safety of power transformers, power supply units and similar - Part 2-17: Particular requirements for transformers for switch mode power supplies	EN 61558-2-17	1997
CISPR 14-1	2005	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission	EN 55014-1	2006
CISPR 16-1	1993	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1: Radio disturbance and immunity measuring apparatus	- ¹³⁾	-
CISPR 22 (mod)	1997	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement	EN 55022 ¹⁴⁾ + corr. March	1998 2005

11) EN 61000-4-6:2007 includes A1:2004 + A2:2006 to IEC 61000-4-6:2003.

12) EN 61058-1:2002 includes A1:2001 to IEC 61058-1:2000 (mod).

13) CISPR 16-1:1993 is superseded by the series CISPR 16-1-X, which is harmonized as EN 55016-1-X.

14) EN 55022 is superseded by EN 55022:2006, which is based on CISPR 22:2005.

NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

CEI
IEC

60730-1

1999

AMENDEMENT 2
AMENDMENT 2
2007-01

Amendement 2

**Dispositifs de commande électrique automatiques
à usage domestique et analogue –**

Partie 1:
Règles générales
(standards.iteh.ai)

Amendment 2
<https://standards.iteh.ai/catalog/standards/sist/2af9a315-ecd7-4873-8313-c6bf1e07392d/sist-en-60730-1-2001-a2-2009>

**Automatic electrical controls
for household and similar use –**

Part 1:
General requirements

© IEC 2007 Droits de reproduction réservés — Copyright - all rights reserved

International Electrotechnical Commission, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland
Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE

U

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
72/721/FDIS	72/732/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.

This amendment is based on IEC 60730-1, Edition 3 (1999) and its amendment 1 (2003).

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 60730-1:2001/A2:2009](https://standards.iteh.ai/catalog/standards/sist/2af9a315-eed7-4873-8313-c6b1e07392d/sist-en-60730-1-2001-a2-2009)

Page 3

<https://standards.iteh.ai/catalog/standards/sist/2af9a315-eed7-4873-8313-c6b1e07392d/sist-en-60730-1-2001-a2-2009>

CONTENTS

Replace the existing title of Clause 21 by the following new title:

21 Fire hazard testing

Add, on page 5, the title of the new Annex T as follows:

T (normative) Requirements for SELV and PELV

Add the title of the new Annex U as follows:

U (Normative) Requirements for relays when used as controls in IEC 60335 appliances

Page 7

FOREWORD

Amend, on page 9, the sentence beginning “Annexes A, B, C...” to read as follows:

Annexes A, B, C, E, G, H, J, L, N, P, Q, T and U form an integral part of this standard.

Add the following items to the list of subclauses given in the note relative to differing national practice:

- 27.2.3.1
- T.3.2

Page 13

1.1.1

Add the following new paragraph:

This standard is also applicable to relays when used as controls for IEC 60335 appliances. Additional requirements for the safety and operating values of relays when used as controls for IEC 60335 appliances are contained in Annex U.

NOTE 1 These requirements are referred to by IEC 61810-1, Scope.¹⁾

NOTE 2 This standard is intended to be used for the testing of any stand-alone relay which is intended to be used as a control of an appliance according to IEC 60335-1. It is not intended to be used for any other stand-alone relay, or to replace the IEC 61810 series of standards.

Page 15

1.5 Normative references

Delete, from the existing list, the following references:

IEC 60536:1976, *Classification of electrical and electronic equipment with regard to protection against electric shock*

IEC 60695-2-1/1:1994, *Fire hazard testing – Part 2: Test methods – Section 1/Sheet 1: Glow-wire end-product test and guidance*

IEC 60695-2-2:1991, *Fire hazard testing – Part 2: Test methods – Section 2: Needle-flame test*

IEC 60707:1981, *Methods of test for the determination of the flammability of solid electrical insulating materials when exposed to an igniting source*

Add, to the existing list, the following references:

IEC 60364 (all parts), *Low-voltage electrical installations*

IEC 60417, *Graphical symbols for use on equipment*

IEC 60695-2-11:2000, *Fire hazard testing – Part 2-11: Glowing/hot-wire based test methods – Glow-wire flammability test method for end-products*

IEC 60695-11-10:1999, *Fire hazard testing – Part 11-10: Test flames – 50 W horizontal and vertical flame test methods²⁾*
Amendment 1 (2003)

¹⁾ IEC 61810-1, *Electromechanical elementary relays – Part 1: General and safety requirements*.

²⁾ There exists a consolidated edition 1.1 including IEC 60695-11-10:1999 and its Amendment 1 (2003).