STANDARDISERINGEN I SVERIGE
SWEDISH STANDARDS INSTITUTION

SVENSK STANDARD SS-EN 60 730-1

SVENSKA ELEKTROTEKNISKA NORMER, SEN

Handläggande organ	Fastställd	Utgåva	Ingår i
Svenska Elektriska Kommissionen, SEK	1995-04-28	2	SEK Översikt 72

Registrering
Reg 433 08 53

Automatiska elektriska styr- och reglerdon för hushållsbruk – Del 1: Allmänna fordringar

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

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Som svensk standard gäller europastandarden EN 60 730-1: 1995. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60 730-1: 1995.

Nationellt förord

Europastandarden EN 60 730-1: 1995

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 730-1, Second edition, 1993 – Automatic electrical controls for household and similar use – Part 1: General requirements**

  utarbetad inom International Electrotechnical Commission, IEC.

I bilaga ZB redovisas en svensk avvikelse, vilken inom CENELEC accepterats till följd av speciella nationella förhållanden.

I Bilaga ZC redovisas en svensk avvikelse, vilken inom CENELEC noterats vara föranledd av svenska myndigheters föreskrifter.

SS-EN 60 730-1, utgåva 1, 1991, fortsätter att gälla tillsammans med de svenska standarder för olika styr- och reglerdon som utgör Del 2 till denna standard och som hänvisar till denna.

SS-EN 60 730-1, utgåva 2, 1995, gäller endast i det fall det finns en Del 2 för en särskild typ av styr- och reglerdon eller för styr- och reglerdon för särskilda användningsområden. Där så befinns rimligt kan dock Del 1 tillämpas på styr- och reglerdon som ej omfattas av någon Del 2, i vilket fall ytterligare fordringar kan bli nödvändiga.

ICS 97.120

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Tryckt i juni 1995

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60730-1

February 1995

ICS 97.120

Supersedes EN 60730-1:1991 and its amendments

Descriptors: Control, definition, requirement, classification, construction, test

English version

Automatic electrical controls for household and similar use
Part 1: General requirements
(IEC 730-1:1993, modified)

Dispositifs de commande électrique automatiques à usage domestique et analogue
Partie 1: Règles générales
(CEI 730-1:1993, modifiée)

Automatische elektrische Regel- und Steuergeräte für den Hausgebrauch und ähnliche Anwendungen
Teil 1: Allgemeine Anforderungen
(IEC 730-1:1993, modifiziert)

This European Standard was approved by CENELEC on 1994-07-05. 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.

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 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, 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

This European Standard has been prepared by the CENELEC Technical Committee TC 72 : Automatic controls for household use.

It is the endorsement of IEC 730-1:1993 with the necessary common modifications and is the editorial result of the combined texts of EN 60730-1:1991 and its amendments A1:1991, A11:1991, A12:1993 and A2, ratified at 75 BT, together with the corrigendum which was published in November 1993. It also includes the texts of prA3 and prA4 to EN 60730-1 which were proposed for ratification at 80 BT.

The text of the draft was approved by CENELEC as EN 60730-1 on 1994-07-05.

The following dates were fixed:

- latest date of publication of an identical national standard (dop) 1995-07-15

This European Standard replaces EN 60730-1:1991 and its amendments. However, EN 60730-1:1991 remains valid until all the part 2's which are used in conjunction with it have been withdrawn. No date of withdrawal of conflicting national standards (dow) has therefore been fixed.

This Part 1 is to be used in conjunction with the appropriate Part 2 for a particular type of control, or for controls for particular applications. This Part 1 may also be applied, so far as reasonable, to controls not mentioned in a Part 2, and to controls designed on new principles, in which case additional requirements may be necessary.

Sub-clauses which are in addition to those in the IEC 730-1 are numbered 101, 102 etc. New annexes are numbered ZA, ZB etc.

Special national conditions (snc) causing a deviation from this European Standard are listed in annex ZB (normative) which forms part of this standard.

Where reference is made to other international or harmonized standards, the edition of that standard quoted in Annex ZA is applicable.

NOTE: In this document the following print types are used:
- requirements proper: in roman type;
- *test specifications: in italic type;*
- explanatory matter: in smaller roman type;
- instructions for modification of the reference document: **in bold type.**

Endorsement notice

The text of IEC 730-1:1993 was approved by CENELEC as a European Standard with agreed common modifications as given below:

Annex ZA (normative)

Other international publications quoted in this standard with the references of the relevant European publications

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

IEC Publication	Date	Title	EN/HD	Date
IEC 65(mod)	1976	Safety requirements for mains operated electronic and related apparatus for household and similar general use	HD 195 S6	1989
IEC 85	1984	Thermal evaluation and classification of electrical insulation	HD 566 S1	1990
IEC 112	1979	Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions	HD 214 S2	1980
IEC 127	series	Miniature fuses	EN 60127	series
IEC 227(mod)	series	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V	HD 21	series
IEC 245(mod)	series	Rubber insulated cables of rated voltages up to and including 450/750 V	HD 22	series
IEC 269-1	1986	Low-voltage fuses Part 1: General requirements	EN 60269-1	1989
IEC 335-1(mod)	1976	Safety of household and similar electrical appliances Part 1: General requirements	EN 60335-1*)	1988
IEC 384-14	1981	Sectional specification: Fixed capacitors for radio interference suppression. Selection of methods of test and general requirements	-----	----
IEC 423	1993	Outside diameters of conduits for electrical installations and threads of conduits and fittings	EN 60423	1994
IEC 529	1976	Classification of degrees of protection provided by enclosures	HD 365 S3	1985
IEC 536	1976	Classification of electrical and electronic equipment with regard to protection against electric shock	HD 366 S1	1977
IEC 539	1976	Directly heated negative temperature coefficient thermistors	-----	----
IEC 555-1	1982	Disturbances in supply systems caused by household appliances and similar electrical equipment	EN 60555-1	1987
IEC 664	1980	Insulation co-ordination within low-voltage systems including clearances and creepage distances for equipment	-----	----
IEC 664A	1981	First supplement to Publication 664	-----	----
IEC 695-2-1	1980	Fire hazard testing Part 2: Test methods Section 1: Glow-wire test and guidance	HD 444.2.1 S1	1983
IEC 695-2-2	1980	Fire hazard testing Part 2: Test methods Section 2: Needle-flame test	HD 444.2.2 S1	1983

*) Consideration should be given to EN 60335-1 : 1994 which endorses IEC 335-1 : 1991.

Annex ZA (normative)
Continued-

IEC Publication	Date	Title	EN/HD	Date
IEC 707	1981	Methods of test for the determination of the flammability of solid electrical insulating materials when exposed to an igniting source	HD 441 S1	1983
IEC 738-1	1982	Directly heated positive step-function temperature coefficient thermistors - Part 1: Generic specification	-----	----
IEC 738-1-1	1982	Part 1: Blank detail specification, Assessment level E	-----	----
IEC 742(mod)	1983	Isolating transformers and safety isolating transformers. Requirements	EN 60742	1989
IEC 801-2	1991	Electromagnetic compatibility for industrial-process measurement and control equipment Part 2: Electrostatic discharge requirements	EN 60801-2	1993
IEC 801-3	1984	Electromagnetic compatibility for industrial-process measurement and control equipment Part 3: Radiated electromagnetic field requirements	HD 481.3 S1	1987
IEC 801-4	1988	Electromagnetic compatibility for industrial-process measurement and control equipment Part 4: Electrical fast transient/burst requirements	-----	----
IEC 817	1984	Spring-operated impact test apparatus and its calibration	HD 495 S1	1987
IEC 998-2-2	1991	Connecting devices (junction and/or tapping) for household and similar fixed electrical installations - Part 2: Particular requirements for screwless terminals for connecting copper conductors without special preparation	EN 60998-2-2	1993
IEC 1058-1	1990	Switches for appliances - Part 1: General requirements	EN 61058-1	1992

ISO Publication	Date	Title	EN/HD	Date
ISO 4046	1978	Paper, board, pulp and related terms	-----	----

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CONTENTS

AUTOMATIC ELECTRICAL CONTROLS FOR HOUSEHOLD AND SIMILAR USE

Part 1: General requirements

1 Scope and normative references

1.1 In general, this standard applies to automatic electrical controls for use in, on, or in association with equipment for household and similar use, including controls for heating, air-conditioning and similar applications. The equipment may use electricity, gas, oil, solid fuel, solar thermal energy, etc., or a combination thereof.

This standard applies to automatic electric controls using NTC or PTC thermistors, additional requirements for which are contained in annex J.

1.1.1 This standard 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 automatic electrical control devices used in, or in association with, household or similar equipment.

This standard is also applicable to controls for appliances within the scope of IEC 335-1.

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

This standard does not apply to automatic electrical controls designed exclusively for industrial applications.

This standard is also applicable to individual controls utilized as part of a control system or controls which are mechanically integral with multifunctional controls having non-electrical outputs.

Automatic electrical controls 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.

See also annex J.

1.1.2 This standard applies to automatic electrical controls, mechanically or electrically operated, responsive to or controlling such characteristics as temperature, pressure, passage of time, humidity, light, electrostatic effects, flow, or liquid level, current, voltage or acceleration. It also applies to controls incorporating electronic parts.

1.1.3 This standard applies to starting relays, which are a specific type of automatic electrical control, designed to switch the starting winding of a motor. Such controls may be built into, or be separate from, the motor.

1.1.4 This standard applies to manual controls when such are electrically and/or mechanically integral with automatic controls.

Requirements for manual switches not forming part of an automatic control are contained in IEC 1058-1.

1.2 This standard applies to controls with a rated voltage not exceeding 660 V and with a rated current not exceeding 63 A.

1.3 This standard 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 shall apply.

1.4 This standard applies also to controls incorporating electronic devices, requirements for which are contained in annex H.

1.5 *Normative references*

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 65: 1976, *Safety requirements for mains operated electronic and related apparatus for household and similar general use*

IEC 85: 1984, *Thermal evaluation and classification of electrical insulation*

IEC 112: 1979, *Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions*

IEC 127, 1974, *Cartridge fuse-links for miniature fuses*

IEC 129: 1984, *Alternating current disconnectors (isolators) and earthing switches*

IEC 212: 1971, *Standard conditions for use prior to and during the testing of solid electrical insulating materials*

IEC 216-1: 1981, *part 1: General procedures for the determination of thermal endurance properties, temperature indices and thermal endurance profiles*