

Automatic electrical controls for household and similar use - Part 2: Particular requirements for thermal protectors for ballasts for tubular fluorescent lamps (IEC 730-2-3:1990, modified)

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UDC 621.327:621.316.9:614.8:620.1

Descriptors: Electrical household appliance, control, automatic control, tubular fluorescent lamp, ballast, thermal protector, rating, requirement, test

English version

Automatic electrical controls for household and similar use
Part 2: Particular requirements for thermal protectors
for ballasts for tubular fluorescent lamps
(IEC 730-2-3:1990, modified)

Dispositifs de commande électrique
automatiques à usage domestique et
analogue

Deuxième partie: Règles particulières
pour les protecteurs thermiques des
ballasts pour lampes tubulaires à
fluorescence

(CEI 730-2-3:1990, modifiée)

Automatische elektrische Regel- und
Steuergeräte für den Hausgebrauch
und ähnliche Anwendungen

Teil 2: Besondere Anforderungen
für thermische Schutzrichtungen
für Vorschaltgeräte für Leuchtstoff-
lampen

(IEC 730-2-3:1990, modifiziert)

SIST EN 60730-2-3:1996

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This European Standard was approved by CENELEC on 10 December 1991. 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

The International Standard IEC 730-2-3:1990, together with the common modifications prepared by the CENELEC Technical Committee TC 72: Automatic controls for household use, was submitted to the CENELEC Unique Acceptance Procedure (UAP) in February 1991.

The text of the draft was approved by CENELEC on 10 December 1991.

The following dates were fixed:

- latest date of publication of
an identical national standard (dop) 1994-01-01
- latest date of withdrawal of
conflicting standards (dow) 1997-01-01

For products which have complied with the relevant national standard before 1997-01-01 as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2001-01-01.

This Part 2 has to be used in conjunction with EN 60730-1:1991, Automatic electrical controls for household and similar use - Part 1: General requirements, and its amendments A1:1991 and A11:1991. Consideration may be given to future editions of, or amendments to, EN 60730-1.

Where a particular subclause of Part 1 is not mentioned in this Part 2, that subclause applies as far as is reasonable. Where this standard states "addition", "modification" or "replacement", the relevant text of Part 1 is to be adapted accordingly.

Subclauses which are in addition to those in IEC 730-1 are numbered 101, 102, etc, additional appendices are labelled AA, BB, etc. CENELEC annexes are numbered ZA, ZB, etc.

There are no special national conditions (snc) causing a deviation from this European Standard other than those listed in annex ZA of EN 60730-1.

Where reference is made to other international or harmonized standards, the edition of that standard quoted in annex ZB (normative) 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 the International Standard IEC 730-2-3:1990 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

Foreword **Delete.**

Preface **Delete.**

1 Scope

1.1 **Replace** "IEC 920" by "EN 60920".

1.1.1 **Replace** "IEC 920" by "EN 60920".

12 Moisture and dust resistance

12.2 **Delete** the addition.

17 Endurance

17.1.1.1 **Replace** "... overload, endurance and limited short-circuit tests" by "... tests of subclauses 17.1.2, 17.1.3 and 17.4".

17.1.2 **Replace** "*Overload test*" by "*Endurance Test 1 (to simulate the effect of short-circuited windings of the ballast)*".

17.1.2.1 **Replace** "40 % to 50 % power factor" by "power factor between 0,4 and 0,5".

17.1.3 **Replace** "*Endurance test*" by "*Endurance Test 2 (to simulate the effect of starter failure)*".

17.1.3.1 **Replace** "40 % to 50 % power factor" by "power factor between 0,4 and 0,5".

17.4 **Replace** the entire subclause by:

17.4. *Limited short-circuit* (Requirements and Test are under consideration)

Appendix C **Delete** (Appendix C is deleted by A1 to EN 60730-1).

Appendix D **Delete** (Appendix D is deleted by A1 to EN 60730-1).

Annex ZA (normative)

Special national conditions (snc)

There are no special national conditions (snc) causing a deviation from this European Standard other than those listed in annex ZA to EN 60730-1.

Annex ZB (normative)

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

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

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

<u>IEC Publication</u>	<u>Date</u>	<u>Title</u>	<u>EN/HD</u>	<u>Date</u>
920	1990	Ballasts for tubular fluorescent lamps General and safety requirements	EN 60920	1991

NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

CEI
IEC
730-2-3

Première édition
First edition
1990-10

Dispositifs de commande électrique auto-
matiques à usage domestique et analogue

Deuxième partie:

Règles particulières pour les protecteurs thermiques
des ballasts pour lampes tubulaires à fluorescence

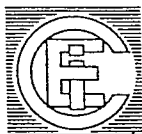
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Part 2:

Particular requirements for thermal protectors for
ballasts for tubular fluorescent lamps



Numéro de référence
Reference number
CEI/IEC 730-2-3: 1990

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

AUTOMATIC ELECTRICAL CONTROLS FOR
HOUSEHOLD AND SIMILAR USEPart 2: Particular requirements for thermal protectors for
ballasts for tubular fluorescent lamps

FOREWORD

- 1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
- 3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

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This publication has been prepared by IEC Technical Committee 72: Automatic controls for household use.

It forms the first edition of IEC Publication 730-2-3.

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

Six Months' Rule	Report on Voting
72(C0)37	72(C0)48

Full information on the voting for the approval of this publication can be found in the Voting Report indicated in the above table.

This Part 2 is intended to be used in conjunction with IEC Publication 730-1. It was established on the basis of the First edition (1986) of that publication, as modified by its Amendments No. 1 (1990) and No. 2 (1990). Consideration may be given to future editions of, or amendments to, IEC Publication 730-1.

This Part 2 supplements or modifies the corresponding clauses in IEC Publication 730-1 so as to convert that publication into the IEC standard: Safety requirements for thermal protectors for ballasts for tubular fluorescent lamps (First edition).

Where the first edition 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 the 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 following differences existing in some countries regarding differing national practices are contained in the following subclauses:

Subclause 12.2
Subclause 17.4

In this publication:

1) The following print types are used:

- Requirements proper: in roman type.
- *Test specifications*: in italic type.
- Explanatory matter: in smaller roman type.

2) Subclauses or figures which are additional to those in Part 1 are numbered starting from 101.

The following IEC publication is quoted in this standard:

Publication No. 920 (1990): Ballasts for tubular fluorescent lamps.
General and safety requirements.

AUTOMATIC ELECTRICAL CONTROLS FOR HOUSEHOLD AND SIMILAR USE

Part 2: Particular requirements for thermal protectors for ballasts for tubular fluorescent lamps

1 Scope

This clause of Part 1 is replaced as follows:

1.1 This standard applies to the evaluation of thermal protectors for ballasts for tubular fluorescent lamps.

Requirements concerning the testing of the combination of ballast and thermal protector are given in IEC 920.

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 thermal protectors used to protect ballasts for tubular lamps from overheating.

This standard applies to thermal protectors for ballasts within the scope of IEC 920.

Thermal protectors covered by this standard may be suitable for ballasts for other discharge lamps.

Throughout this standard the word "protector" means "self-resetting thermal ballast protector".

1.1.2 This standard is not applicable to other means used to protect ballasts.

1.1.3 This standard does not apply to a manual device for opening the circuit.

1.2 This standard applies to protectors for use with ballasts for use on a.c. supplies up to 600 V at 50 Hz or 60 Hz.

Requirements relating to use on supplies up to 1 000 V a.c. are under consideration.

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.