



SLOVENSKI STANDARD

SIST EN 60730-2-2:1995

01-avgust-1995

Automatic electrical controls for household and similar use - Part 2: Particular requirements for thermal motor protectors (IEC 730-2-2:1990, modified)

Automatic electrical controls for household and similar use -- Part 2: Particular requirements for thermal motor protectors

Automatische elektrische Regel- und Steuergeräte für den Hausgebrauch und ähnliche Anwendungen -- Teil 2: Besondere Anforderungen an thermisch wirkende Motorschutzeinrichtungen

(standards.iteh.ai)

Dispositifs de commande électrique automatiques à usage domestique et analogue -- Partie 2: Règles particulières pour les dispositifs thermiques de protection des moteurs

Ta slovenski standard je istoveten z: EN 60730-2-2:1991

ICS:

97.120	Avtomatske krmilne naprave za dom	Automatic controls for household use
--------	-----------------------------------	--------------------------------------

SIST EN 60730-2-2:1995

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60730-2-2:1995

<https://standards.iteh.ai/catalog/standards/sist/5b95e4a6-6c5c-4efe-9eda-80ba205bcec5/sist-en-60730-2-2-1995>

EUROPEAN STANDARD
 NORME EUROPÉENNE
 EUROPÄISCHE NORM

EN 60730-2-2

October 1991

UDC 681.521.7:621.313.13:621.316.9:64.06-83

Descriptors: Electrical household appliance, control, automatic control, motor, protector, rating, requirement, test

English version

**Automatic electrical controls for household
 and similar use**
**Part 2: Particular requirements for thermal
 motor protectors**
 (IEC 730-2-2:1990, modified)

Dispositifs de commande électrique
 automatiques à usage domestique et
 analogue

Deuxième partie: Règles particulières
 pour les dispositifs thermiques de
 protection des moteurs
 (CEI 730-2-2:1990, modifiée)

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

Teil 2: Besondere Anforderungen
 für thermisch wirkende Motorschutz-
 einrichtungen
 (IEC 730-2-2:1990, modifiziert)

[SIST EN 60730-2-2:1995](https://standards.iteh.ai/catalog/standards/sist/5b95e4a6-6c5c-4efe-9eda-80ba205bcec5/sist-en-60730-2-2-1995)

<https://standards.iteh.ai/catalog/standards/sist/5b95e4a6-6c5c-4efe-9eda-80ba205bcec5/sist-en-60730-2-2-1995>

This European Standard was approved by CENELEC on 1 May 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 730-2-2:1990, 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 September 1990.

The text of the draft was approved by CENELEC on 1 May 1991 (confirmed by 68 BT).

The following dates were fixed:

- latest date of publication of
an identical national standard (dop) 1993-01-01
- latest date of withdrawal of
conflicting standards (dow) 1996-01-01

For products which have complied with the relevant national standard before 1996-01-01 as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2000-01-01.

This document supplements or modifies the corresponding clauses of IEC 730-2-2:1990, so as to convert it into the European Standard EN 60730-2-2.

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 730-2-2:1990 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 In the first paragraph **replace** "IEC Publication 730-1" by "EN 60730-1".

Delete "IEC" in the second explanation paragraph.

1.1.1 **Replace** "IEC Publication 335" by "EN 60335".

12 Moisture resistance

Delete the explanation.

17 Endurance

Replace "IEC Publications" by "standards"
[SIST EN 60730-2-2:1995
 https://standards.iteh.ai/SIST/60730-2-2:1995/5e4a6-6c5c-4efe-9eda-80ba205bcec5/sist-en-60730-2-2-1995](https://standards.iteh.ai/SIST/60730-2-2:1995/5e4a6-6c5c-4efe-9eda-80ba205bcec5/sist-en-60730-2-2-1995)

20 Creepage distances, clearances, and distances through insulation

20.3 **Delete** the replacement including table 20.3.101(subclause 20.3 is deleted in EN 60730-1).

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).

Appendix AA **Replace** "IEC Publication 34-11" by "IEC 34-11:1978."

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.

<https://standards.iteh.ai/catalog/standards/sist/5b95e4a6-6c5c-4efe-9eda-80ba205bceec5/sist-en-60730-2-2-1995>

<u>IEC Publication</u>	<u>Date</u>	<u>Title</u>	<u>EN/HD</u>	<u>Date</u>
34-11	1978	Rotating electrical machines Part 11: Built-in thermal protection	—	—

NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

CEI
IEC
730-2-2

Première édition
First edition
1990-03

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

Deuxième partie:

**Règles particulières pour les dispositifs
thermiques de protection des moteurs**

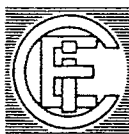
STANDARD PREVIEW
(standards.iteh.ai)

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

<https://standards.iteh.ai/catalog/standards/sist/5b95e4a6-6c5c-4efe-9eda-80ba205bcec5/sist-en-60730-2-2-1995>

Part 2:

**Particular requirements for thermal motor
protectors**



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

CONTENTS

	Page
FOREWORD	5
PREFACE	5
Clause	
1. Scope	9
2. Definitions	11
3. General requirements	11
4. General notes on tests	11
5. Rating	11
6. Classification	11
7. Information	13
8. Protection against electric shock	15
9. Provision for protective earthing	17
10. Terminals and terminations	17
11. Constructional requirements	17
12. Moisture resistance	19
13. Electric strength and insulation resistance	19
14. Heating	19
15. Manufacturing deviation and drift	19
16. Environmental stress	19
17. Endurance	19
18. Mechanical strength	19
19. Threaded parts and connections	19
20. Creepage distances, clearances and distances through insulation	21
21. Resistance to heat, fire and tracking	23
22. Resistance to corrosion	23
23. Radio interference suppression	23
24. Components	23
25. Normal operation	23
26. Operation with mains-borne perturbations	23
27. Abnormal operation	23
APPENDICES	25

INTERNATIONAL ELECTROTECHNICAL COMMISSION

AUTOMATIC ELECTRICAL CONTROLS FOR HOUSEHOLD
AND SIMILAR USEPart 2: Particular requirements for
thermal motor protectors

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.

(standards.iteh.ai)

SIST EN 60730-2-2:1995

PREFACE

[https://standards.iteh.ai/catalog/standards/sist/5b95e4a6-6c5c-4efe-9eda-](https://standards.iteh.ai/catalog/standards/sist/5b95e4a6-6c5c-4efe-9eda-80ba205bceec/sist-en-60730-2-2-1995)

This publication has been prepared by IEC Technical Committee No. 72: Automatic controls for household use.

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

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

Six Months' Rule	Report on Voting
72(C0)27	72(C0)45

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 motor protectors.

AUTOMATIC ELECTRICAL CONTROLS FOR HOUSEHOLD AND SIMILAR USE

Part 2: Particular requirements for thermal motor protectors

1. Scope

This clause of Part 1 is replaced by the following:

- 1.1 This standard applies to the partial evaluation of thermal motor protectors as defined in Publication 730-1 for household and similar use including heating, air conditioning and similar applications.

A thermal motor protector is an integrated control which is dependent on its correct mounting and fixing in or on a motor and which can only be fully tested in combination with the relevant motor.

Requirements concerning the testing of the combination of motor and thermal motor protector are given in Appendix AA for information and include requirements taken from other IEC standards.

- 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 motor protectors used in or on household or similar equipment.

This standard is also applicable to thermal motor protectors for appliances within the scope of IEC Publication 335.

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

Throughout the mandatory text of this standard, the words "not applicable" mean that the test is not applicable to the evaluation of the thermal motor protector submitted separately. However, the test may be applicable to the evaluation of the thermal motor protector in combination with the motor.

- 1.1.2 This standard does not apply to other means of motor protection.
- 1.1.3 This standard does not apply to a manual device for opening the circuit.
- 1.1.4 This standard does not apply to thermal motor protectors for hermetic or semi-hermetic motor compressors.

1.2 This standard applies to thermal motor protectors for use with electric motors with a rated voltage equal to or less than 660 V and a rated output of 11 kW or less.

2. Definitions

This clause of Part 1 is applicable, except as follows:

2.6 Addition:

2.6.101 Type 3 action

Type 3 action denotes an automatic action for which reliability of the operating characteristics can only be evaluated in terms of measurements made on the protected motor.

3. General requirements

This clause of Part 1 is applicable.

4. General notes on tests

This clause of Part 1 is applicable, except as follows:

[SIST EN 60730-2-2:1995](https://standards.iteh.ai/catalog/standards/sist/5b95e4a6-6c5c-4efe-9eda-11d1-4060-sist-en-60730-2-2-1995)

[https://standards.iteh.ai/catalog/standards/sist/5b95e4a6-6c5c-4efe-9eda-](https://standards.iteh.ai/catalog/standards/sist/5b95e4a6-6c5c-4efe-9eda-11d1-4060-sist-en-60730-2-2-1995)

4.3.1.1 and 4.3.1.2 Not applicable. [sist-en-60730-2-2-1995](https://standards.iteh.ai/catalog/standards/sist/5b95e4a6-6c5c-4efe-9eda-11d1-4060-sist-en-60730-2-2-1995)

4.3.2 Not applicable.

5. Rating

This clause of Part 1 is not applicable.

6. Classification

This clause of Part 1 is applicable, except as follows:

6.4 According to features of automatic action

6.4.1 Not applicable.

6.4.2 Replacement:

- Type 3 action.