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Automatic electrical controls for household and similar use - Part 2-4: Particular requirements for thermal motor protectors for motor-compressors of hermetic and semi-hermetic type

Automatische elektrische Regel- und Steuergeräte für den Hausgebrauch und ähnliche Anwendungen - Teil 2-4: Besondere Anforderungen für thermische Motorschutzeinrichtungen für hermetisch und halbhermetisch gekapselte Motorverdichter

Dispositifs de commande électrique automatiques a usage domestique et analogue - Partie 2-4: Regles particulieres pour les dispositifs thermiques de protection de moteurs pour motocompresseurs de type hermétique et semi hermétique

**Ta slovenski standard je istoveten z: EN 60730-2-4:2007**

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## **iTeh STANDARD PREVIEW (standards.iteh.ai)**

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**Automatic electrical controls for household and similar use -  
Part 2-4: Particular requirements for thermal motor protectors  
for motor-compressors of hermetic and semi-hermetic type  
(IEC 60730-2-4:2006, modified)**

Dispositifs de commande électrique  
automatiques à usage domestique  
et analogue -  
Partie 2-4: Règles particulières  
pour les dispositifs thermiques  
de protection de moteurs  
pour motocompresseurs de type  
hermétique et semi hermétique  
(CEI 60730-2-4:2006, modifiée)

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This European Standard was approved by CENELEC on 2007-09-01. 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, 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 the International Standard IEC 60730-2-4:2006, 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 EN 60730-2-4 on 2007-09-01.

This European Standard supersedes EN 60730-2-4:1993 + corrigendum March 2001 + A1:1998 + corrigendum March 2001 + A2:2002.

The following dates were fixed:

- latest date by which the EN has to be implemented  
at national level by publication of an identical  
national standard or by endorsement (dop) 2008-09-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2010-09-01

This Part 2-4 is to be used in conjunction with EN 60730-1:2000 + A1:2004, Automatic electrical controls for household and similar use – Part 1: General requirements, and any subsequent amendments.

This Part 2-4 supplements or modifies the corresponding clauses in EN 60730-1 so as to convert that publication into the European Standard: Particular requirements for thermal motor protectors for motor-compressors or hermetic and semi-hermetic type.

Where this Part 2-4 states "addition", "modification" or "replacement", the relevant requirement, test specification or explanatory matter in Part 1 shall be adapted accordingly.

Where no change is necessary, this Part 2-4 indicates that the relevant clause or subclause applies.

In this publication, the following print types are used:

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

Subclauses, notes, items or figures which are additional to those in Part 1 are numbered starting from 101, additional annexes are lettered AA, BB, etc.

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## Endorsement notice

The text of the International Standard IEC 60730-2-4:2006 was approved by CENELEC as a European Standard with agreed common modifications as given below.

### COMMON MODIFICATIONS

#### **6.101 According to limited short-circuit capability** (applicable in Canada and the USA)

**Delete** the text and **replace** with "Void".

#### **7 Information**

In Table 7.2 **delete** item 101 and its note and **replace** both with "Void".

#### **12 Moisture and dust resistance**

**Replace** the text with "This clause of Part 1 is applicable".

#### **12.2 Protection against humid conditions**

**Delete** this subclause.

#### **17 Endurance**

#### **17.2 Limited short-circuit capability for thermal protectors classified under 6.101** (applicable in Canada and USA)

**Delete** this subclause (including Table 7.2) and **replace** with "Void".

#### **18 Mechanical strength**

#### **18.1.3.101.2**

**Delete** the last sentence "In Canada and the USA, higher or lower test pressures than the values specified in 18.1.3.101.1 and 18.1.3.101.2 are required."

#### **20 Creepage distances, clearances and distances through solid insulation**

**Delete** Subclauses 20.1, 20.2, 20.3, 20.3.1 and Table 20.3.101 and **replace** with "Void".

#### **Annex C Cotton used for mercury switch test**

**Delete** this annex.

## 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.

**Addition to Annex ZA of EN 60730-1:**

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60269-1	- <sup>1)</sup>	Low-voltage fuses - Part 1: General requirements	EN 60269-1	2007 <sup>2)</sup>
IEC 60269-3 (mod)	- <sup>1)</sup>	Low-voltage fuses - Part 3: Supplementary requirements for fuses for use by unskilled persons (fuses mainly for household or similar applications) - Examples of standardized systems of fuses A to F	HD 60269-3	2007 <sup>2)</sup>
IEC 60335-2-34	2002	Household and similar electrical appliances - Safety - Part 2-34: Particular requirements for motor-compressors	EN 60335-2-34 + A11	2002 2004

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<sup>1)</sup> Undated reference.

<sup>2)</sup> Valid edition at date of issue.

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INTERNATIONALE  
INTERNATIONAL  
STANDARD**

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IEC**

**60730-2-4**

Deuxième édition  
Second edition  
2006-10

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

**Partie 2-4:  
Règles particulières pour les dispositifs  
thermiques de protection de moteur pour  
motocompresseurs de type hermétique et  
semi hermétique**

<https://standards.iteh.ai/catalog/standards/sist/4a00e8f3-a5f2-4dc7-a26b-1e1a7a049907/sist-en-60730-2-4-2008>  
**Automatic electrical controls  
for household and similar use –**

**Part 2-4:  
Particular requirements for thermal motor  
protectors for motor-compressors of hermetic  
and semi-hermetic type**

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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

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For price, see current catalogue

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**AUTOMATIC ELECTRICAL CONTROLS FOR  
HOUSEHOLD AND SIMILAR USE –****Part 2-4: Particular requirements for thermal motor protectors  
for motor-compressors of hermetic and semi-hermetic type**

## FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60730-2-4 has been prepared by IEC technical committee 72: Automatic controls for household use.

This second edition cancels and replaces the first edition published in 1990, Amendment 1 (1994) and Amendment 2 (2001). This second edition constitutes a technical revision and updates the standard to current practices as well as to the applicable horizontal standards.

The text of this standard is based upon the following documents:

FDIS	Report on voting
72/710/FDIS	72/723/RVD

Full information on the voting for the approval of this part can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with ISO/IEC Directives, Part 2.

This Part 2-4 is intended to be used in conjunction with IEC 60730-1. It was established on the basis of the third edition of that standard (1999) and its Amendment 1 (2003). Consideration may be given to future editions of, or amendments to, IEC 60730-1.

This Part 2-4 supplements or modifies the corresponding clauses in IEC 60730-1 so as to convert that publication into the IEC standard: Particular requirements for thermal motor protectors for motor-compressors or hermetic and semi-hermetic type.

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Where no change is necessary, this Part 2-4 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 "in some countries" notes regarding differing national practice are contained in the following clauses and subclauses:

- 6.101
- Table 7.2, item 101
- 12.2
- 17.2
- Table 17.2
- 17.2.1
- 17.2.2
- 18.1.3.101.2
- 20.1
- 20.2
- 20.3
- 20.3.1
- Table 20.3.101
- Annex D

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A list of all parts of the IEC 60730 series, under the general title *Automatic electrical controls for household and similar use*, can be found on the IEC website.

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.

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