

SLOVENSKI STANDARD SIST EN 60730-2-6:2009

01-januar-2009

BUXca Yý U.

SIST EN 60730-2-6:1997

SIST EN 60730-2-6:1997/A1:1998 SIST EN 60730-2-6:1997/A2:1998

5 j lca Urg_Y`Y`Y_lf] bY`_fa]`bY`bUdfUj Y`nU`i dcfUVc`j`[cgdcX]b^ghj i `]b`nU`dcXcVbc i dcfUVc`!`&!* "XY`.`DcgYVbY`nU\ hYj Y`nU`Uj lca Urg_Y`Y`Y_lf] bYžbU`h`U_`cV i h`^]j Y bUdfUj Yžj_`\1 bc`n`a Y\ Ubg_]a]`nU\ hYj Ua]`f\197`*\$+' \$!&!*.&\\$\$+L

Automatic electrical controls for household and similar use - Part 2-6: Particular requirements for automatic electrical pressure sensing controls including mechanical requirements

SIST EN 60730-2-6:2009

Automatische elektrische Regeleund Steuergeräte für den Hausgebrauch und ähnliche Anwendungen -- Teil 2-6: Besondere Anforderungen an automatische elektrische Druckregel- und Steuergeräte einschließlich mechanischer Anforderungen

Dispositifs de commande électrique automatiques à usage domestique et analogue --Partie 2-6: Règles particulières pour les dispositifs de commande électrique automatiques sensibles à la pression y compris les exigences mécaniques

Ta slovenski standard je istoveten z: EN 60730-2-6:2008

ICS:

97.120 Avtomatske krmilne naprave Automatic controls for

za dom household use

SIST EN 60730-2-6:2009 en,fr,de

SIST EN 60730-2-6:2009

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60730-2-6:2009</u> https://standards.iteh.ai/catalog/standards/sist/e2e6095d-7493-4901-bb68-2ede96141f99/sist-en-60730-2-6-2009 **EUROPEAN STANDARD**

EN 60730-2-6

NORME EUROPÉENNE EUROPÄISCHE NORM

September 2008

ICS 97.120

Supersedes EN 60730-2-6:1995 + A1:1997 + A2:1998

English version

Automatic electrical controls for household and similar use -Part 2-6: Particular requirements for automatic electrical pressure sensing controls including mechanical requirements

(IEC 60730-2-6:2007, modified)

Dispositifs de commande électrique automatiques à usage domestique et analogue -

Partie 2-6: Règles particulières pour les dispositifs de commande électrique automatiques sensibles à la pression y compris les exigences mécaniques

y compris les exigences mécaniques (CEI 60730-2-6:2007, modifiée)

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

Teil 2-6: Besondere Anforderungen an automatische elektrische Druckregel- und Steuergeräte einschließlich mechanischer

Anforderungen

(IEC 60730-2-6:2007, modifiziert)

(standards.iteh.ai)

SIST EN 60730-2-6:2009

https://standards.iteh.ai/catalog/standards/sist/e2e6095d-7493-4901-bb68-

This European Standard was approved by CENELEC on 2008-07-01. 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 60730-2-6:2007, 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 CENELEC formal vote and was approved by CENELEC as EN 60730-2-6 on 2008-07-01.

This European Standard supersedes EN 60730-2-6:1995 (+ corr. March 2001) + A1:1997 (+ corr. March 2001) + A2:1998 (+ corr. March 2001).

It incorporates amended requirements for electronic controls in Annex H.

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) 2009-07-01

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2011-07-01

This Part 2-6 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 2-6 supplements or modifies the corresponding clauses in EN 60730-1 so as to convert that publication into the European Standard. Particular requirements for automatic electrical pressure sensing controls including mechanical requirements.

SIST EN 60730-2-6:2009

Where this Part 2-6 states and dition and modification or replacement, the specification or explanatory matter in Part 9 should be adapted accordingly.

Where no change is necessary, this Part 2-6 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, tables or figures which are additional to those in Part 1 are numbered starting from 101.

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and covers essential requirements of EC Directive EMC (2004/108/EC). See Annex ZZ.

Annex ZZ has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60730-2-6:2007 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

- 10 Terminals and terminations
- 10.1 Terminals and terminations for external copper conductors

Delete Subclause "10.1.4 Addition:".

- 18 Mechanical strength
- 18.101 Medium leakage

Delete "Under consideration."

In paragraph 4 **delete** the text of a) and b) and **replace** with "the leakage rate is 70 l/h;" in both cases.

iTeh STANDARD PREVIEW

(standards.iteh.ai)

H.26 Electromagnetic compatibility (EMC) requirements - immunity

SIST EN 60730-2-6:2009

H.26.10.5.101

https://standards.iteh.ai/catalog/standards/sist/e2e6095d-7493-4901-bb68-2ede96141f99/sist-en-60730-2-6-2009

Delete this additional subclause and replace by "Void".

Annex ZZ (informative)

Coverage of Essential Requirements of EC Directives

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and within its scope the standard covers all relevant essential requirements as given in Article 1 of Annex I of the EC Directive EMC (2004/108/EC).

Compliance with this standard provides one means of conformity with the specified essential requirements of the Directive concerned.

WARNING: Other requirements and other EC Directives may be applicable to the products falling within the scope of this standard.

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 60730-2-6:2009 https://standards.iteh.ai/catalog/standards/sist/e2e6095d-7493-4901-bb68-2ede96141f99/sist-en-60730-2-6-2009

NORME INTERNATIONALE INTERNATIONAL STANDARD

CEI IEC 60730-2-6

> Deuxième édition Second edition 2007-02

Dispositifs de commande électrique automatiques à usage domestique et analogue –

Partie 2-6:

Règles particulières pour les dispositifs de rommande électrique automatiques sensibles à la pression y compris les exigences mécaniques (standards.iteh.ai)

Automatic electrical controls

ttps://standards.iteh.arcatalogstandards/sist/e.26095d-7493-4901-bb68
for household;and similar use —

Part 2-6:

Particular requirements for automatic electrical pressure sensing controls including mechanical requirements

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

Aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'éditeur.

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

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



CODE PRIX PRICE CODE

INTERNATIONAL ELECTROTECHNICAL COMMISSION

AUTOMATIC ELECTRICAL CONTROLS FOR HOUSEHOLD AND SIMILAR USE –

Part 2-6: Particular requirements for automatic electrical pressure sensing controls including mechanical requirements

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 cooperation 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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user. (standards.iteh.al)
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national publication shall be clearly indicated in the latter.
- 5) IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with an IEC Publicationst-en-60730-2-6-2009
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60730-2-6 has been prepared by IEC technical committee 72: Automatic controls for household use.

This second edition cancels and replaces the first edition published in 1991, Amendment 1 (1994) and amendment 2 (1997). This second edition constitutes a technical revision, which incorporates amended requirements for electronic controls in Annex H.

60730-2-6 © IEC:2007

- 5 -

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

FDIS	Report on voting
72/729/FDIS	72/737/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 2-6 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 2-6 supplements or modifies the corresponding clauses in IEC 60730-1 so as to convert that publication into the IEC standard: Particular requirements for automatic electrical pressure sensing controls including mechanical requirements.

Where this Part 2-6 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, this Part 2-6 indicates that the relevant clause or subclause applies.

iTeh STANDARD PREVIEW

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 subclauses: 10.1.4 and 18.101. https://standards.iteh.ai/catalog/standards/sist/e2e6095d-7493-4901-bb68-

2ede96141f99/sist-en-60730-2-6-2009

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, tables or figures which are additional to those in Part 1 are numbered starting from 101.

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.

-7 -

AUTOMATIC ELECTRICAL CONTROLS FOR HOUSEHOLD AND SIMILAR USE –

Part 2-6: Particular requirements for automatic electrical pressure sensing controls including mechanical requirements

1 Scope and normative references

This clause of Part 1 is applicable except as follows:

1.1 Replacement:

This part of IEC 60730 applies to automatic electrical pressure sensing controls with a minimum gauge pressure rating of –60 kPa and a maximum gauge pressure rating of 4,2 MPa, for use in, on or in association with, equipment for household and similar use that may use electricity, gas, oil, solid fuel, solar thermal energy, etc. or a combination thereof, including heating, air-conditioning and similar applications.

1.1.1 Replacement:

iTeh STANDARD PREVIEW

This standard applies to inherent safety, operating values, operating sequences where such are associated with equipment protection, and to the testing of automatic electrical pressure sensing controls used in, on or in association with, household and similar equipment.

Throughout this standard, the word "equipment" means "appliance and equipment". https://standards.iteh.avcatalog/standards/sis/e2e6095d-7493-4901-bb68-

This standard does not apply to pressure sensing controls intended exclusively for industrial applications.

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

Automatic electrical pressure sensing 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.

This standard is also applicable to controls for appliances within the scope of IEC 60335-1.

See also Annex J.

1.1.2 Replacement:

This standard applies to automatic electrical controls, mechanically or electrically operated, responsive to or controlling a pressure or vacuum.

1.1.3 Not applicable.

-9-

1.1.4 Replacement:

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

Requirements for manual switches not forming part of an automatic control are contained in IEC 61058-1.

Addition:

1.1.101 This standard contains requirements for electrical features of pressure sensing controls and requirements for mechanical features that affect their intended operation.

NOTE Subclause 18.101, as it pertains to gas and/or oil controls, is under consideration pending review or revision by ISO/TC 109 and ISO/TC 161.

1.1.102 In general, these pressure sensing controls are integrated or incorporated with the equipment or are intended to be integrated in, or on the equipment. This standard also covers these controls when they are independently mounted. In-line cord controls are not covered by this standard.

1.4 Replacement:

This standard applies also to pressure sensing controls incorporating electronic devices, requirements for which are contained in Annex H.

This standard applies also to pressure sensing controls using NTC or PTC thermistors, requirements for which are contained in Annex d.s.iteh.ai)

2 Definitions

SIST EN 60730-2-6:2009

https://standards.iteh.ai/catalog/standards/sist/e2e6095d-7493-4901-bb68-

This clause of Part 1 is applicable except as follows:

2.2 Definitions of types of control according to purpose

2.2.19 Add the following explanatory note:

See 2.2.102.

2.2.20 Add the following explanatory note:

See 2.2.103.

Additional definitions:

2.2.101

pressure limiter

pressure sensing control which is intended to keep a pressure below or above a predetermined value during normal operating conditions and which may have provision for setting by the user

A pressure limiter may be of the automatic or of the manual reset type. It does not make the reverse operation during the normal duty cycle of the equipment.

- 11 -

2.2.102

pressure operating control

pressure sensing control set at a high or low pressure, or both, between which limits the equipment is normally intended to operate

2.2.103

pressure cut-out

pressure sensing control intended to keep a pressure below or above one particular value during abnormal operating conditions of the equipment and which has no provisions for setting by the user

A pressure cut-out may be of the automatic or of the manual reset type.

Normally a pressure cut-out will provide a Type 2 action.

A pressure cut-out may have an adjustable stop intended to be set by the control manufacturer, the equipment manufacturer or the installer.

2.3 Definitions relating to the function of controls

Additional definitions:

2.3.101

pressure medium

the medium used to transmit the pressure to the pressure sensing element

Pressure medium as used in this standard refers to either gases or liquids.

2.3.102

(standards.iteh.ai)

differential pressure

the difference in a pressure between any two points in a system, between two systems or between a system and a reference pressure such as atmospheric pressure

https://standards.iteh.ai/catalog/standards/sist/e2e6095d-7493-4901-bb68-

An example is the difference in static pressure between the upstream side of an orifice and the downstream side.

2.8 Definitions relating to component parts of controls

Additional definitions:

2.8.101

vent limiting means

a means which limits the flow of air from or to the atmospheric side of the diaphragm chamber

2.8.102

vent

that opening from the atmospheric side of a diaphragm to the atmosphere through which air is discharged or drawn in when the control is functioning

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: