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Automatic electrical controls for household and similar use - Part 2-11: Particular requirements for energy regulators

# (standards.iteh.ai)

Automatische elektrische Regel- und Steuergeräte für den Hausgebrauch und ähnliche Anwendungen - Teil 2-11: Besondere Anforderungen an Energieregler https://standards.isten.avcatalog/standards/sist/12ce4ed9-ba50-4910-81e5-

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Dispositifs de commande électrique automatiques à usage domestique et analogue -Partie 2-11: Règles particulières pour les régulateurs d'énergie

Ta slovenski standard je istoveten z: EN 60730-2-11:2008

ICS:

97.120

SIST EN 60730-2-11:2008

en,fr,de

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# EUROPEAN STANDARD NORME FUROPÉENNE **EUROPÄISCHE NORM**

# EN 60730-2-11

February 2008

ICS 97.120

Supersedes EN 60730-2-11:1993 + A1:1997 + A2:1998 + A11:2005

English version

# Automatic electrical controls for household and similar use -Part 2-11: Particular requirements for energy regulators (IEC 60730-2-11:2006)

Dispositifs de commande électrique automatiques à usage domestique et analogue -Partie 2-11: Règles particulières pour les régulateurs d'énergie (CEI 60730-2-11:2006)

Automatische elektrische Regel- und Steuergeräte für den Hausgebrauch und ähnliche Anwendungen -Teil 2-11: Besondere Anforderungen an Energieregler (IEC 60730-2-11:2006)

# iTeh STANDARD PREVIEW

This European Standard was approved by CENELEC on 2007-10-01. 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 2-11:2008

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

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# Foreword

The text of the International Standard IEC 60730-2-11:2006, prepared by IEC TC 72, Automatic controls for household use, was submitted to the formal vote and was approved by CENELEC as EN 60730-2-11 on 2007-10-01 without any modification.

This European Standard supersedes EN 60730-2-11:1993 (+ corr. July 1997) + A1:1997 (+ corr. July 1997) + A2:1998 + A11:2005.

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)	2008-10-01
_	latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2010-10-01

This Part 2-11 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 2-11 supplements or modifies the corresponding clauses in EN 60730-1 so as to convert that publication into the European Standard: Particular requirements for energy regulators.

Where this Part 2-11 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 2-11 indicates that the relevant clause or subclause applies. <u>SIST EN 60730-2-11:2008</u>

In this publication, the following printitypes are used ds/sist/12ce4cd9-ba50-4910-81e5faebcc5b2b97/sist-en-60730-2-11-2008

- Requirements proper: in roman type.

- Test specifications: in italic type.

- Explanatory matter: in smaller roman type.

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

# **Endorsement notice**

The text of the International Standard IEC 60730-2-11:2006 was approved by CENELEC as a European Standard without any modification.

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# NORME INTERNATIONALE INTERNATIONAL STANDARD

# CEI IEC 60730-2-11

Deuxième édition Second edition 2006-10

Dispositifs de commande électrique automatiques à usage domestique et analogue –

Partie 2-11: Règles particulières pour les régulateurs d'énergie iTeh STANDARD PREVIEW

Automatic electrical controls for household and similar use – SIST EN 60730-2-11:2008 https://parts2el11/catalog/standards/sist/12ce4cd9-ba50-4910-81e5taebcc5b2b97/sist-en-60730-2-11-2008 Particular requirements for energy regulators

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# INTERNATIONAL ELECTROTECHNICAL COMMISSION

# AUTOMATIC ELECTRICAL CONTROLS FOR HOUSEHOLD AND SIMILAR USE –

## Part 2-11: Particular requirements for energy regulators

# 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 60730-2-11 has been prepared by IEC technical committee 72: Automatic controls for household use.

This second edition cancels and replaces the first edition published in 1993, Amendment 1 (1994) and Amendment 2 (1997). This second edition constitutes a technical revision, which incorporates amended requirements for electronic controls in Annex H.

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

FDIS	Report on voting
72/712/FDIS	72/725/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 the ISO/IEC Directives, Part 2.

This Part 2-11 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 2-11 supplements or modifies the corresponding clauses in IEC 60730-1 so as to convert that publication into the IEC standard: Particular requirements for energy regulators.

Where this Part 2-11 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 2-11 indicates that the relevant clause or subclause applies. iTeh STANDARD PREVIEW

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- Explanatory matter: in smaller roman type 2b97/sist-en-60730-2-11-2008

Subclauses 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.

# AUTOMATIC ELECTRICAL CONTROLS FOR HOUSEHOLD AND SIMILAR USE –

# Part 2-11: Particular requirements for energy regulators

# **1** Scope and normative references

This clause of Part 1 is applicable except as follows:

## **1.1** *Replacement:*

In general, this part of IEC 60730 applies to energy regulators for use in, on, or in association with equipment for household and similar use, including energy regulators for heating, air conditioning and similar applications. The equipment may use electricity, gas, oil, solid fuel, solar thermal energy, etc. or a combination thereof.

These energy regulators may be thermally, mechanically or electrically operated.

## **1.1.1** *Replacement:*

This standard applies to the inherent safety, to the operating values, operating times and operating sequence where such are associated with equipment safety, and to the testing of automatic electrical energy regulator devices used in, or in association with, household or similar equipment.

This standard is also applicable to energy regulators for appliances within the scope of https://standards.iteh.avcatalog/standards/sist/12ce4cd9-ba50-4910-81e5faebcc5b2b97/sist-en-60730-2-11-2008

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

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

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

Energy regulators 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** Not applicable.
- **1.1.3** Not applicable.

## **1.1.4** *Replacement:*

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

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

## **1.2** *Replacement:*

This standard applies to energy regulators with a rated voltage not exceeding 690 V and with a rated current not exceeding 63A.

## **1.3** Not applicable.

## **1.4** *Replacement:*

This standard applies also to energy regulators incorporating electronic devices, requirements for which are contained in Annex H.

This standard applies also to energy regulators using NTC or PTC thermistors, additional requirements for which are contained in Annex J.

# <sup>2</sup> Definitions iTeh STANDARD PREVIEW

This clause of Part 1 is applicable except as followsten.ai)

## 2.2 Definitions of types of controls according to purpose

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Addition: faebcc5b2b97/sist-en-60730-2-11-2008

In general, an energy regulator is an operating control.

## 2.2.20 Addition:

In general, energy regulators using software have functions classified as software class A.

## 2.5 Definitions of type of control according to construction

Addition:

2.2.19

# 2.5.101 Push-and-turn actuation

Push-and-turn actuation denotes a two-step actuation accomplished by first pushing, and then rotating, the actuating member of the control.

# 2.5.102 Pull-and-turn actuation

Pull-and-turn actuation denotes a two-step actuation accomplished by first pulling, and then rotating, the actuating member of the control.