

STN	Automatické elektrické riadiace zariadenia Časť 2-11: Osobitné požiadavky na regulátory energie	STN EN IEC 60730-2-11 36 1950
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Automatic electrical controls - Part 2-11: Particular requirements for energy regulators

Táto norma obsahuje anglickú verziu európskej normy.

This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/25

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN IEC 60730-2-11

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Supersedes EN IEC 60730-2-11:2020

English Version

**Automatic electrical controls - Part 2-11: Particular requirements
for energy regulators
(IEC 60730-2-11:2025)**

Dispositifs de commande électrique automatiques - Partie
2-11: Exigences particulières pour les régulateurs d'énergie
(IEC 60730-2-11:2025)

Automatische elektrische Regel- und Steuergeräte - Teil 2-
11: Besondere Anforderungen an Energieregler
(IEC 60730-2-11:2025)

This European Standard was approved by CENELEC on 2025-09-11. 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 CEN-CENELEC Management Centre or to any CENELEC member.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 60730-2-11:2025 (E)**European foreword**

The text of document 72/1485/FDIS, future edition 4 of IEC 60730-2-11, prepared by TC 72 "Automatic electrical controls" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60730-2-11:2025.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2026-10-31 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2028-10-31 document have to be withdrawn

This document supersedes EN IEC 60730-2-11:2020 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document is read in conjunction with EN IEC 60730-1.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 60730-2-11:2025 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cencenelec.eu.

Annex ZA of EN IEC 60730-1 applies.



IEC 60730-2-11

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INTERNATIONAL STANDARD

**Automatic electrical controls –
Part 2-11: Particular requirements for energy regulators**

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**Automatic electrical controls -
Part 2-11: Particular requirements for energy regulators****FOREWORD**

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IEC 60730-2-11 has been prepared by IEC technical committee 72: Automatic electrical controls. It is an International Standard.

This fourth edition cancels and replaces the third edition published in 2019. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) adoption to IEC 60730-1:2022 with all of its significant changes to IEC 60730-1:2013 IEC 60730-1:2013/AMD1:2015 and IEC 60730-1:2013/AMD2:2020.

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The text of this International Standard is based on the following documents:

Draft	Report on voting
72/1485/FDIS	72/1501/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts of the IEC 60730 series, under the general title: *Automatic electrical controls*, can be found on the IEC website.

This part 2-11 is intended to be used in conjunction with IEC 60730-1. It was established on the basis of the sixth edition of that standard (2022). 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.

When a particular subclause of Part 1 is not mentioned in this Part 2, that 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 reader's attention is drawn to the fact that Annex Q, Annex R, Annex S and Annex T list all of the "in-some-country" clauses on differing practices of a less permanent nature relating to the subject of this document.

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;
 - Defined terms: **bold type**.
- 2) Subclauses, notes or items which are additional to those in Part 1 are numbered starting from 101, additional annexes are lettered AA, BB, etc.

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The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

1 Scope

This clause of Part 1 is replaced by the following:

This document applies to **energy regulators**

- for use in, on, or in association with equipment for household appliance and similar use;

NOTE 1 Throughout this document, the word "equipment" means "appliance and equipment" and "controls" means "energy regulators".

- for equipment that is used by the public, such as equipment intended to be used in shops, offices, hospitals, farms and commercial and industrial applications;

EXAMPLE 1 **Energy regulators** for commercial catering, heating and air-conditioning equipment.

- that are **smart enabled energy regulators**;

EXAMPLE 2 Smart grid control, remote interfaces/control of energy-consuming equipment including computer or smart phone.

- that are AC or DC powered controls with a rated voltage not exceeding 690 V AC or 600 V DC;
- used in, on, or in association with equipment that use electricity, gas, oil, solid fuel, solar thermal energy, etc., or a combination thereof;
- utilized as part of a control system or controls which are mechanically integral with multifunctional controls having non-electrical outputs;
- using NTC or **PTC thermistors** and to discrete **thermistors**, requirements for which are contained in Annex J;
- that are mechanically or electrically operated, responsive to or controlling such characteristics as temperature, pressure, passage of time, humidity, light, electrostatic effects, flow, or liquid level, current, voltage, acceleration, or combinations thereof;
- as well as manual controls when such are electrically and/or mechanically integral with automatic controls.

NOTE 2 Requirements for manually actuated mechanical switches not forming part of an automatic control are contained in IEC 61058-1-1.

This document applies to

- the inherent safety of **energy regulators**, and
- **functional safety** of **energy regulators** of low complexity safety related systems and controls,
- controls where the performance (for example the effect of EMC phenomena) of the product can impair the overall safety and performance of the controlled system,
- the operating values, operating times, and operating sequences where such are associated with equipment safety.
- manual energy regulators which are electrically and/or mechanically integral with automatic controls.
- energy regulators incorporating electronic devices, requirements for which are contained in Annex H.
- the electrical and **functional safety** of controls capable of receiving and responding to communications signals, including signals for power billing rate and demand response.

The signals can be transmitted to or received from external units being part of the **control** (wired), or to and from external units which are not part of the **control** (wireless) under test.

This document specifies the requirements for construction, operation and testing of automatic **energy regulators** used in, on, or in association with an equipment.

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This document does not

- apply to automatic **energy regulators** intended exclusively for industrial process applications unless explicitly mentioned in the relevant part 2 or the equipment standard. However, this document can be applied to evaluate automatic **energy regulators** intended specifically for industrial applications in cases where no relevant safety standard exists.
- take into account the **response value** of an **automatic action** of an **energy regulator**, if such a **response value** is dependent upon the method of mounting the **energy regulator** 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 equipment standard or as determined by the manufacturer will apply.
- address the integrity of the output signal to the network devices, such as interoperability with other devices unless it has been evaluated as part of the control system.

2 Normative references

This clause of Part 1 is applicable.

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