



SLOVENSKI STANDARD
SIST EN IEC 60730-2-9:2019/A2:2020

01-oktober-2020

Avtomatske električne krmilne naprave - 2-9. del: Posebne zahteve za temperaturne regulatorje - Dopolnilo A2

Automatic electrical controls - Part 2-9: Particular requirements for temperature sensing control

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Ta slovenski standard je istoveten z: EN IEC 60730-2-9:2019/A2:2020

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ICS:

97.120	Avtomatske krmilne naprave za dom	Automatic controls for household use
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SIST EN IEC 60730-2-9:2019/A2:2020 **en**

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EUROPEAN STANDARD

EN IEC 60730-2-9:2019/A2

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2020

ICS 97.120

English Version

**Automatic electrical controls - Part 2-9: Particular requirements
for temperature sensing controls
(IEC 60730-2-9:2015/A2:2020)**

Dispositifs de commande électrique automatiques - Partie
2-9: Exigences particulières pour les dispositifs de
commande thermosensibles
(IEC 60730-2-9:2015/A2:2020)

Automatische elektrische Regel- und Steuergeräte - Teil 2-
9: Besondere Anforderungen an temperaturabhängige
Regel- und Steuergeräte
(IEC 60730-2-9:2015/A2:2020)

This amendment A2 modifies the European Standard EN IEC 60730-2-9:2019; it was approved by CENELEC on 2020-05-14. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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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This amendment 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 CEN-CENELEC Management Centre has the same status as the official versions.

[SIST EN IEC 60730-2-9:2019/A2:2020](https://standards.iteh.ai/catalog/standards/sist/5ce3168c-9469-40eb-b6e0-2020-05-14/iec-60730-2-9:2015/a2:2020)

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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 60730-2-9:2019/A2:2020 (E)**European foreword**

The text of document 72/1225/FDIS, future IEC 60730-2-9/A2, prepared by IEC/TC 72 "Automatic electrical controls" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60730-2-9:2019/A2:2020.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2021-02-14
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-05-14

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Endorsement notice

SIST EN IEC 60730-2-9:2019/A2:2020

The text of the International Standard IEC 60730-2-9:2015/A2:2020 was approved by CENELEC as a European Standard without any modification.



IEC 60730-2-9

Edition 4.0 2020-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE

AMENDMENT 2
AMENDEMENT 2

**Automatic electrical controls –
Part 2-9: Particular requirements for temperature sensing controls**

**Dispositifs de commande électrique automatiques –
Partie 2-9: Exigences particulières pour les dispositifs de commande
thermosensibles**

INTERNATIONAL
ELECTROTECHNICAL
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INTERNATIONALE

ICS 97.120

ISBN 978-2-8322-8066-9

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FOREWORD

This amendment has been prepared by IEC technical committee 72: Automatic electrical controls.

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

FDIS	Report on voting
72/1225/FDIS	72/1236/RVD

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

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the stability date indicated on the IEC website 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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11.4 Actions

<https://standards.iteh.ai/catalog/standards/sist/5ce3168c-9469-40eb-b6e0-d2265904cede/sist-en-iec-60730-2-9-2019-a2-2020>

Add the following new subclauses:

11.4.11 Type 1.H or 2.H action

Additional subclauses:

11.4.11.101 For this test, the reset mechanism of the **control** will be held in the reset position for the duration of the test from 11.4.11.102 to 11.4.11.104. The verification of the automatic non-resetting above -35 °C will be carried out by 11.4.11.105 to 11.4.11.106. For **SOD**, the verification of the automatic non-resetting above either $+0\text{ °C}$ or -35 °C will be carried out by 11.4.11.105 to 11.4.11.106, as declared in item 103 of Table 1.

11.4.11.102 *With the reset mechanism held in the reset position at room temperature, continuity across contacts is observed by a low-energy circuit, 0,05 A maximum.*

11.4.11.103 *The **control's sensing element** is then installed in an air circulating chamber or an oil bath and the **control's switch head** is installed as in 14.5.1. When the whole **control** is declared as the **sensing element**, the whole **control** is placed in an air-circulating chamber. The **control** or the **control's sensing element** is adjusted for the maximum set point temperature. The chamber or oil bath temperature shall be determined by positioning a thermocouple wire adjacent to the **control** under test. The chamber or oil bath temperature is then raised from room temperature and held at approximately 10 K below the set point until temperatures stabilize. The chamber or oil bath temperature is then raised at a rate of not more than 0,5 K per minute until the contact operates. Indication of contact separation is observed by applying the method of 11.4.11.102.*

11.4.11.104 After the **control** has operated and with the reset mechanism still held in the reset position, the temperature of the chamber or oil bath is then reduced to determine if the **control** automatically resets. Verification of contact closure is done by applying the method in 11.4.11.102.

11.4.11.105 The whole **control** or the **control's sensing element** is then installed in an air circulating chamber or oil bath again and the **control's switch head** (if applicable) is installed as in 14.5.1 with the reset mechanism in its normal condition. The chamber or oil bath temperature shall be determined by positioning a thermocouple wire adjacent to the control under test. The chamber or oil bath temperature is raised from room temperature and held at approximately 10 K below the set point until temperatures stabilize. The chamber or oil bath temperature is then raised at a rate of not more than 0,5 K per minute until the contact operates. Indication of contact separation is observed by applying the method of 11.4.11.102.

11.4.11.106 After the **control** has operated, the temperature of the chamber is allowed to cool down to either +0 °C or –35 °C. Indication of contact separation is observed by applying the method of 11.4.11.102.

11.4.12 Type 1.J or 2.J action

Additional subclauses:

11.4.12.101 For this test, the reset mechanism of the **control** will be held in the reset position for the duration of the test from 11.4.12.102 to 11.4.12.104. The verification of the automatic non-resetting above –35 °C will be carried out by 11.4.12.105 to 11.4.12.106. For **SOD**, the verification of the automatic non-resetting above either +0 °C or –35 °C will be carried out by 11.4.12.105 to 11.4.12.106, as declared in item 103 of Table 1.

11.4.12.102 With the reset mechanism held in the reset position at room temperature, contact separation is observed by a low-energy circuit, 0,05 A maximum.

11.4.12.103 The **control's sensing element** is then installed in an air circulating chamber or oil bath and the **control's switch head** is installed as in 14.5.1. When the whole **control** is declared as the **sensing element**, the whole **control** is placed in an air-circulating chamber. The control or the **control's sensing element** is adjusted for the maximum set point temperature. The chamber or oil bath temperature shall be determined by positioning a thermocouple wire adjacent to the **control** under test. The chamber or oil bath temperature is raised from room temperature and held at approximately 10 K below the set point until temperatures stabilize. The chamber or oil bath temperature is then raised at a rate of not more than 0,5 K per minute until 10 K over the operation temperature. Indication of contact separation is still observed by applying the method of 11.4.11.102.

11.4.12.104 After the **control** has operated and with the reset mechanism still held in the reset position, the temperature of the chamber or oil bath is then reduced to determine if the **control** automatically resets. Verification of contact closure is done by applying the method in 11.4.11.102.

11.4.12.105 The whole **control** or the **control's sensing element** is then installed in an air circulating chamber or oil bath again and the **control's switch head** (if applicable) is installed as in 14.5.1. with the reset mechanism in its normal condition. The chamber or oil bath temperature shall be determined by positioning a thermocouple wire adjacent to the **control** under test. The chamber or oil bath temperature is raised from room temperature and held at approximately 10 K below the set point until temperatures stabilize. The chamber or oil bath temperature is then raised at a rate of not more than 0,5 K per minute until the contact operates. Indication of contact separation is observed by applying the method of 11.4.11.102.

11.4.12.106 *After the **control** has operated, the temperature of the chamber or oil bath is allowed to cool down to either +0 °C or –35 °C. Indication of contact separation is observed by applying the method of 11.4.11.102.*

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