



SLOVENSKI STANDARD
oSIST prEN IEC 60730-2-7:2024
01-november-2024

Avtomatske električne krmilne naprave - 2-7. del: Posebne zahteve za stikalne ure in časovna stikala

Automatic electrical controls - Part 2-7: Particular requirements for timers and time switches

Automatische elektrische Regel- und Steuergeräte - Teil 2-7: Besondere Anforderungen an Zeitsteuergeräte und Schaltuhren

Dispositifs de commande électrique automatiques - Partie 2-7: Exigences particulières pour les minuteriers et les minuteriers cycliques

Ta slovenski standard je istoveten z: prEN IEC 60730-2-7:2024

[oSIST prEN IEC 60730-2-7:2024](http://standards.sist.si/catalogue/standards/sist-pr-en-iec-60730-2-7-2024)

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ICS:

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97.120	Avtomatske krmilne naprave za dom	Automatic controls for household use

oSIST prEN IEC 60730-2-7:2024 **en**



72/1452/CDV

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IEC TC 72 : AUTOMATIC ELECTRICAL CONTROLS	
SECRETARIAT: United States of America	SECRETARY: Ms Grace Roh
OF INTEREST TO THE FOLLOWING COMMITTEES:	HORIZONTAL FUNCTION(S):
ASPECTS CONCERNED: Electromagnetic Compatibility, Safety	
<input checked="" type="checkbox"/> SUBMITTED FOR CENELEC PARALLEL VOTING	<input type="checkbox"/> NOT SUBMITTED FOR CENELEC PARALLEL VOTING
<p>Attention IEC-CENELEC parallel voting</p> <p>The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting.</p> <p>The CENELEC members are invited to vote through the CENELEC online voting system.</p>	

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Recipients of this document are invited to submit, with their comments, notification of any relevant "In Some Countries" clauses to be included should this proposal proceed. Recipients are reminded that the CDV stage is the final stage for submitting ISC clauses. (SEE [AC/22/2007](#) OR [NEW GUIDANCE DOC](#)).

TITLE:

Automatic electrical controls - Part 2-7: Particular requirements for timers and time switches

PROPOSED STABILITY DATE: 2028

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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AUTOMATIC ELECTRICAL CONTROLS –

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Part 2-7: Particular requirements for timers and time switches

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FOREWORD

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109 indispensable for the correct application of this publication.

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112 IEC 60730-2-7 has been prepared by IEC technical committee 72: AUTOMATIC ELECTRICAL
113 CONTROLS. It is an International Standard.

114 This 4.0 edition cancels and replaces the 3.0 edition published in 2015. This edition constitutes
115 a technical revision.

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

118 a) adoption to IEC 60730-1 Ed.6.0 with all of its significant changes to IEC 60730-1 Ed.4.

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

Draft	Report on voting
XX/XX/FDIS	XX/XX/RVD

120

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

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

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

128 A list of all parts of the IEC 60730 series, under the general title: AUTOMATIC ELECTRICAL
129 CONTROL, can be found on the IEC website.

130 This part 2-7 is intended to be used in conjunction with IEC 60730-1. It was established on the
131 basis of the sixth edition of that standard 2022. Consideration may be given to future editions
132 of, or amendments to, IEC 60730-1.

133 This part 2-7 supplements or modifies the corresponding clauses in IEC 60730-1, so as to
134 convert that publication into the IEC standard: Particular requirements for timers and time
135 switches.

136 Where this part 2-7 states "addition", "modification" or "replacement", the relevant requirement,
137 test specification or explanatory matter in part 1 should be adapted accordingly.

138 Where no change is necessary part 2-7 indicates that the relevant clause or subclause applies.

139 In the development of a fully international standard it has been necessary to take into
140 consideration the differing requirements resulting from practical experience in various parts of
141 the world and to recognize the variation in national electrical systems and wiring rules.

142 The reader's attention is drawn to the fact that Annex Q, Annex R, Annex S and Annex T list all
143 of the "in-some-country" clauses on differing practices of a less permanent nature relating to
144 the subject of this document.

145 In this publication:

146 1) The following print types are used:

- 147 – requirements proper: in roman type;
- 148 – *test specifications: in italic type;*
- 149 – explanatory matter: in smaller roman type.
- 150 – Defined terms: **bold type**.

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

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

- 159 • reconfirmed,
- 160 • withdrawn,
- 161 • replaced by a revised edition, or
- 162 • amended.

163

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

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AUTOMATIC ELECTRICAL CONTROLS –

Part 2-7: Particular requirements for timer and time switches

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This clause of Part 1 is replaced by the following:

1 Scope

This document applies to timer and time switches

- 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 „timer or time switches “.

NOTE 2 Throughout this document, the word “timers” means timers and time switches, unless the type is specifically mentioned.

- for building automation within the scope of ISO 16484 series and IEC 63044 series (HBES/BACS);
- 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;
- that are **smart enabled controls**;
- that are AC or DC powered controls with a rated voltage not exceeding 690 V AC or 600 V DC;
- utilized as part of a control system or controls which are mechanically integral with multifunctional controls having non-electrical outputs;
- as well as manual controls when such are electrically and/or mechanically integral with automatic controls.

NOTE 3 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 timers and timeswitches, and
- functional safety of timers and timeswitches and safety related systems,
- timers and timeswitches 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.
- timers for appliances within the scope of IEC 60335 series.
- manual controls when such are electrically and/or mechanically integral with timers.

This document specifies the requirements for construction, operation and testing of timers and timeswitches used in, on, or in association with an equipment.

This document does not

- apply to time-delay switches (TDS) within the scope of IEC 60669-2-3.
- include devices which only indicate time or passage of time.
- apply to multi-functional controls having an integrated timing function which is not capable of being tested as a separate timing device.

207

208 **2 Normative references**

209 This clause of Part 1 applies except as follows:

210 Addition:

211 IEC 60669-1:2017, Switches for household and similar fixed-electrical installations - Part 1:
212 General requirements

213 IEC 60669-2-3:2006, Switches for household and similar fixed electrical installations - Part 2-
214 3: Particular requirements - Time-delay switches (TDS)

215

216 **3 Terms and definitions**

217 This clause of Part 1 is applicable except as follows:

218 **3.3 Definitions relating to the function of controls**

219 *Add the following definition*

220 **3.3.101**

221 **timing cycle**

222 program including all the switching activities involved in a start-to-finish operation of a controlled
223 appliance

224 **3.3.102**

225 **permanent operation**

226 continuous monitoring of the protective function during the operation of the appliance or system
227 for longer than 24 h

228 **3.3.103**

229 **non-permanent operation**

230 continuous monitoring of the protective function during the operation of the appliance or system
231 for less than 24 h

232 **3.5 Definitions of types of control according to construction**

233 *Add the following definitions*

234 **3.5.101**

235 **plug-in timer**

236 timer or time switch designed for direct plug-in to a socket-outlet

237 Note 1 to entry: The plug-in timer is equipped with conductor blades, pins or other means, protruding from the
238 enclosure of the control or the control body itself, to match the dimensional parameters of the socket-outlet to which
239 the control will be connected.

240 **3.5.102**

241 **synchronous timer**

242 timer or a time switch in which the transmission is effected by a device that is time-based on
243 the frequency of the power supply for the prime mover or the load