

INTERNATIONAL STANDARD

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

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

FOREWORD

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IEC 60730-2-7 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 2015. This edition constitutes a technical revision.

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

- a) adoption of IEC 60730-1:2022 (Ed.6.0) with all of its significant changes to IEC 60730-1:2010 (Ed.4).

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

| | |
|--------------|------------------|
| Draft | Report on voting |
| 72/1526/FDIS | 72/1537/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.

This part 2-7 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 can be given to future editions of, or amendments to, IEC 60730-1.

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

Where this part 2-7 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, part 2-7 indicates that the relevant clause or 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, 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**.

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

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

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.

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1 Scope

This clause of Part 1 is replaced by the following:

This part of IEC 60730 applies to **timers** 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 **time switches**, and
- **functional safety** of **timers** and **time switches** and safety related **systems**,
- **timers** and **time switches** 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 **time switches** 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.