

Automatic electrical controls for household and similar use —

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

The European Standard EN 60730-2-7:1991, with the incorporation of amendments A12:1993, A11:1994, A1:1997, A13:2003 and A14:2003 has the status of a British Standard

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Cooperating organizations

The European Committee for Electrotechnical Standardization (CENELEC), under whose supervision this European Standard was prepared, comprises the National Committees of the following countries.

Austria	Italy
Belgium	Luxembourg
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Finland	Norway
France	Portugal
Germany	Spain
Greece	Sweden
Iceland	Switzerland
Ireland	United Kingdom

This British Standard, having been prepared under the direction of the Light Electrical Engineering Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 15 September 1992

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National foreword

This British Standard has been prepared by Technical Committee CPL/72 (formerly LEL/96) and is the English language version of EN 60730-2-7:1995 *Automatic electric controls for household and similar use — Part 2-7: Particular requirements for timers and time switches* including its amendments A12:1993, A11:1994, A1:1997, A13:2003 and A14:2003, including its corrigenda dated July 1997 and March 2001, published by the European Committee for Electrotechnical Standardization (CENELEC). It was derived from IEC 60730-2-7:1990, first edition, including amendment 1:1994, published by the International Electrotechnical Commission (IEC).

CENELEC corrigendum March 2001 replaces the latest date of withdrawal of conflicting national standards in the forewords to amendments A11, A12 and A1.

The CENELEC common modifications have been implemented at the appropriate places in the text of IEC Publication 60730-2-7 (1990) first edition, and are indicated by a vertical line in the margin. The foreword and preface of IEC Publication 60730-2-7 (1990) first edition and the deleted parts of the original IEC text which do not form part of the text of EN 60730-2-7 have been quoted in National appendix NA. Annexes designated “normative” are part of the body of the standard. Annexes designated “informative” are given for information only. National appendices are designated “informative”.

The foreword of EN 60730-2-7 makes reference to “date of withdrawal”, dow, of the relevant national standard. In this case the relevant national standard is BS 3955 which will cease to be applicable to electrical controls within the scope of BS EN 60730-2-7 on 1 January 2000.

CENELEC corrigendum March 2001 harmonized the latest date of withdrawal of conflicting national standards in the forewords to amendments A11, A12 and A1 by changing them to 2004-01-01. In this case the conflicting national standard is BS EN 60730-2-7:1992 but the “dow” relates only to those parts of the British Standard subject to amendment A12, A11 and A1.

The many references to Part 1 should be read as references to BS EN 60730-1. BS EN 60730-2-7 was originally to be read in conjunction with BS EN 60730-1:1992 *General requirements*, which it supplemented and modified. Amendment No. 3 to this British Standard allows it to be used in conjunction with BS EN 60730-1:1995, which was derived from IEC 60730-1:1993, second edition.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the *BSI Catalogue* under the section entitled “International Standards Correspondence Index”, or by using the “Search” facility of the *BSI Electronic Catalogue* or of British Standards Online.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 25 and a back cover.

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Automatic electrical controls for household and similar use — Part 2-7: Particular requirements for timers and time switches

(includes amendments A12:1993, A11:1994, A1:1997, A13:2003 and A14:2003)
(IEC 60730-2-7:1990 + A1:1994)

Dispositifs de commande électrique
automatiques à usage domestique et analogue
Partie 2-7: Règles particulières pour les
minuteries et les minuteries cycliques
(inclut les amendements A12:1993, A11:1994,
A1:1997, A13:2003 et A14:2003)
(CEI 60730-2-7:1990 + A1:1994, modifiée)

Automatische elektrische Regel- und
Steuergeräte für den Hausgebrauch und
ähnliche Anwendungen
Teil 2-7: Besondere Anforderungen für
Zeitsteuergeräte, Schaltuhren
(enthält Änderungen A12:1993, A11:1994,
A1:1997, A13:2003 und A14:2003)
(IEC 60730-2-7:1990 + A1:1994, modifiziert)

This European Standard was approved by CENELEC on 1991-09-23. Amendment A13 was approved by CENELEC on 2003-03-01, amendment A14 was approved by CENELEC on 2003-06-01. 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.

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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and 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

Foreword

The International Standard IEC 730-2-7:1990, together with the common modifications prepared by the CENELEC Technical Committee TC 72: Automatic controls for household use, was submitted to the CENELEC members for formal vote in February 1991.

The text of the draft was approved by CENELEC on 23 September 1991.

The following dates were fixed:

- latest date of publication of an identical national standard (dop) 1994-01-01
- latest date of withdrawal of conflicting national standards (dow) 2000-01-01

This document supplements or modifies the corresponding clauses of IEC 730-2-7:1990, so as to convert it into the European Standard EN 60730-2-7.

This Part 2 has to be used in conjunction with EN 60730-1:1991, Automatic electrical controls for household and similar use — Part 1: General requirements, and its amendments A1:1991 and A11:1991. Consideration may be given to future editions of, or amendments to, EN 60730-1.

Where a particular subclause of Part 1 is not mentioned in this Part 2, that subclause applies as far as is reasonable. Where this standard states “addition”, “modification” or “replacement”, the relevant text of Part 1 is to be adapted accordingly.

Subclauses which are in addition to those in IEC 730-1 are numbered 101, 102, etc. Additional appendices are labelled AA, BB, etc. CENELEC annexes are numbered ZA, ZB, etc.

There are no special national conditions (snc) causing a deviation from this European Standard other than those listed in Annex ZA of EN 60730-1.

Where reference is made to other international or harmonized standards, the edition of that standard quoted in Annex ZB (normative) is applicable.

NOTE In this document, the following print types are used:

- requirements proper: in roman type;
- *test specifications: in italic type;*
- explanatory matter: in smaller roman type.

Foreword to amendment A12

This amendment to EN 60730-2-7:1991 has been prepared by the CENELEC Technical Committee TC 72: Automatic controls for household use.

The text of this amendment to the European Standard was agreed for submission to the CENELEC formal vote at the meeting of CLC/TC 72 in Brussels on 24 and 25 November 1992.

At the meeting it was agreed that there were some editorial errors in both IEC 730-2-7 and EN 60730-2-7, which were causing some confusion. This amendment is intended to rectify these errors.

This document modifies the corresponding clauses of EN 60730-2-7:1991.

It was approved by CENELEC as amendment A12 to EN 60730-2-7 on 8 December 1993.

The following dates are applicable:

- latest date of publication of an identical national standard (dop) 1995-01-01
- latest date of withdrawal of conflicting national standards (dow) 2004-01-01

Foreword to amendment A11

This amendment to EN 60730-2-7:1991 has been prepared by the CENELEC Technical Committee TC 72: Automatic controls for household use.

The text of this amendment to the European Standard was agreed for submission to the CENELEC Unique Acceptance Procedure (UAP) at the meeting of CLC/TC 72 in Brussels on 26 and 27 November 1991.

At that meeting it was considered that National Committees should be given the opportunity to vote on the relaxation of the requirements for distance through insulation for certain types of timers and time switches.

This document modifies the corresponding clause of EN 60703-2-7.

It was approved by CENELEC as amendment A11 to EN 60730-2-7 on 8 March 1994.

The following dates are applicable:

- latest date of publication of an identical national standard (dop) 1995-01-01
- latest date of withdrawal of conflicting national standards (dow) 2004-01-01

Foreword to amendment A1

The text of amendment 1:1994 to the International Standard IEC 730-2-7:1990, prepared by IEC TC 72, Automatic controls for household use, together with common modifications prepared by the Technical Committee CENELEC TC 72, was submitted to the formal vote and was approved by CENELEC as amendment A1 to EN 60730-2-7:1991 on 1996-10-01.

The following dates were fixed:

- latest date by which the amendment EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1997-06-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dop) 2004-01-01

This document supplements or modifies the corresponding clauses of amendment 1:1994 to IEC 730-2-7:1990 so as to convert it into amendment A1 to EN 60730-2-7:1991.

NOTE EN 60730-2-7 originally referred to EN 60730-1:1991 and its amendments A1:1991 and A11:1991. This amendment enables EN 60730-2-7, including its amendments A11:1994 and A12:1993, to be used with EN 60730-1:1995. Consideration may be given to future editions of, or amendments to, EN 60730-1.

Foreword to amendment A13

This amendment to EN 60730-2-7:1991 has been prepared by the Technical Committee CENELEC TC 72, Automatic controls for household use.

The text, based on document CLC/TC 72(GB)86, was agreed for submission to the CENELEC Unique Acceptance Procedure (UAP) at the meeting of CLC/TC 72 in Brussels on 2001-11-15/16.

The draft was circulated in May 2002 and was approved by CENELEC as amendment A13 to EN 60730-2-7:1991 on 2003-03-01.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2004-03-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dop) 2006-03-01

Foreword to amendment A14

This amendment to the European Standard EN 60730-2-7:1991 was prepared by the Technical Committee CENELEC TC 72, Automatic controls for household use.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as amendment A14 to EN 60730-2-7:1991 on 2003-06-01.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2004-06-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dop) 2010-06-01

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1 Scope

This clause of Part 1 is replaced as follows:

1.1 In general, this standard applies to timers and time switches for household and similar use that may use electricity, gas, oil, solid fuel, solar thermal energy, etc. or a combination thereof, including heating, air conditioning and similar applications.

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

Devices which only indicate time or passage of time are not included.

This standard does not apply to multi-functional controls having an integrated timing function which is not capable of being tested as a separate timing device.

This standard does not apply to time-delay switches (T.D.S.) within the scope of IEC 669-2-3.

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

1.1.1 This standard applies to the inherent safety, to the operating values, operating sequences where such are associated with equipment protection, and to the testing of timers used in, on or in association with household and similar equipment.

This standard is also applicable to timers for appliances within the scope of IEC 335.

1.1.2 This standard applies to manual controls when such are electrically and/or mechanically integral with timers.

Manual switches not forming part of an automatic control shall comply with IEC 1058-1.

1.2 This standard applies to controls with a rated voltage not exceeding 660 V and a rated current not exceeding 63 A.

1.3 This standard does not take into account the response value of an automatic action of a control, if such a response value is dependent upon the method of mounting the control in the equipment. If a response value is of significant purpose for the safety of the user or surroundings, the value defined in the appropriate household equipment standard or as determined by the manufacturer shall apply.

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

1.5 Normative references

This subclause of part 1 applies except as follows:

Add the following IEC standard.

IEC 669-2-3:1984, *Switches for household and similar fixed electrical installations —Part 2: Particular requirements for time-delay switches (T.D.S.).*