

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Automatic electrical controls for household and similar use –
Part 1: General requirements**

**Dispositifs de commande électrique automatiques à usage domestique et
analogue –
Partie 1: Exigences générales**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**AUTOMATIC ELECTRICAL CONTROLS
FOR HOUSEHOLD AND SIMILAR USE –****Part 1: General requirements**

FOREWORD

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International Standard IEC 60730-1 has been prepared by IEC technical committee 72: Automatic controls for household use.

This fourth edition cancels and replaces the third edition published in 1999, Amendment 1 (2003), and Amendment 2 (2007).

The main technical modifications of this standard since this previous publication are listed below:

- changes to the low temperature test requirements for in-line cords;
- revision to the pollution degree for the environment surrounding contacts;
- addition of the use of screwless terminals on printed circuit boards and revisions to creepage distances;
- additions of CISPR 11 EMC requirements;

- incorporation of EMC test levels from IEC 60335 series;
- additional testing for flexible cords;
- revisions to the requirements for resistance to heat, fire and tracking including replacement of Clause 21 and Annexes F and G;
- new Annex T for additional requirements for non-SELV supplied sensor cable or cord;
- new requirements in H.27.1 for first and second fault approach to ensure functional safety;
- incorporation of software techniques from IEC 61508-3 in H.11.12;
- replacement of Annex D (Canada and USA) with a reference to UL 746C;
- updates to the references and bibliography;
- the keyword index was deleted as unnecessary due to the availability of search functions for electronic editions of the standard.

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

FDIS	Report on voting
72/789/FDIS	72/790/RVD

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

A list of all parts of the IEC 60730 series, under the general title: *Automatic controls for household and similar use*, can be found on the IEC website.

In the development of a fully international standard to cover automatic controls for household and similar use, 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 “in some countries” notes regarding differing national practices are contained in the following subclauses:

2.1.5	12.1.6	18.1.6.2
2.7.2	12.3	18.1.6.3
2.7.3	Table 12 (13.2.1), Note 14	18.4
2.14.2	13.3.4	19.2.4.1
4.2.1	14.1.1	19.2.5.1
6.6.1	Table 13 (14.7.4), Notes 1, 7	20
Table 1 (7.2), Note 9	14.4	21.1
7.4.3	15.1	21.4
7.4.3.2	16.2.1	27.2.3.1
8.1.1	17.1.3.1	Annex C
8.4	Table 14 (17.2.5)	Annex D
9.3.2	17.2.2	
9.3.4	Table 15 (17.2.5)	H.26.10
9.5.2	17.2.3	Table H.16 (H.26.10.4)
Table 3 (10.1.4), Note 1	17.2.3.1	
10.1.4.2	Table 16 (17.2.5)	
10.1.4.3	17.5.1	Table H.21 (H.27.1), Note 7
10.1.14	17.6.2	Table K.1
10.1.16	17.7.7	Table K.2

10.1.16.1	17.8.4.1	R.1
Table 6 (10.2.1), Note 1	17.10	T.3.2
11.5	17.10.4	
Table 10 (11.8.2), Note 1	17.12.5	
11.11.1.2	17.14	
11.11.1.3	18.1.6	
11.11.1.4	18.1.6.1	

It is envisaged that in the next edition of this standard it will be found possible to remove those differences that are covered by new IEC standards now being prepared by other technical committees.

This part 1 is to be used in conjunction with the appropriate part 2 for a particular type of control, or for controls for particular applications. This part 1 may also be applied, so far as reasonable, to controls not mentioned in a part 2, and to controls designed on new principles, in which cases additional requirements may be considered to be necessary.

See also 4.3.5.2 and 4.3.5.3.

Where, for a particular clause or subclause, the text of part 2 indicates:

Addition:	the part 1 text applies with the additional requirement indicated in a part 2;
Modification:	the part 1 text applies with a minor change as indicated in a part 2;
Replacement:	the part 2 text contains a change which replaces the part 1 text in its entirety.

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

NOTE In this standard the following print types are used:

- Requirements proper: in roman type.
- *Test specifications: in italic type.*
- Explanatory matter: in smaller roman type.

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