

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Automatic electrical controls –
Part 1: General requirements**

**Dispositifs de commande électrique automatiques –
Partie 1: Exigences générales**



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CONTENTS

CONTENTS	2
FOREWORD	7
1 Scope and normative references	10
2 Terms and definitions	14
3 General requirements	36
4 General notes on tests	37
5 Rating.....	40
6 Classification.....	40
7 Information	48
8 Protection against electric shock	56
9 Provision for protective earthing	59
10 Terminals and terminations.....	62
11 Constructional requirements	70
12 Moisture and dust resistance	88
13 Electric strength and insulation resistance	90
14 Heating.....	93
15 Manufacturing deviation and drift.....	99
16 Environmental stress	100
17 Endurance.....	101
18 Mechanical strength	110
19 Threaded parts and connections.....	117
20 Creepage distances, clearances and distances through solid insulation.....	120
21 Resistance to heat, fire and tracking.....	129
22 Resistance to corrosion	131
23 Electromagnetic compatibility (EMC) requirements – Emission	132
24 Components.....	133
25 Normal operation.....	135
26 Electromagnetic compatibility (EMC) requirements – Immunity	135
27 Abnormal operation	135
28 Guidance on the use of electronic disconnection	138
Annex A (normative) Indelibility of markings.....	158
Annex B (normative) Measurement of creepage distances and clearances in air	160
Annex C (normative) Cotton used for mercury switch test (not applicable in the countries members of CENELEC)	165
Annex D (informative) Heat, fire and tracking	166
Annex E (normative) Circuit for measuring leakage current	167
Annex F (informative) Fire hazard testing.....	168
Annex G (normative) Heat and fire resistance tests.....	169
Annex H (normative) Requirements for electronic controls	171
Annex J (normative) Requirements for thermistor elements and controls using thermistors.....	236

Annex K (informative) Nominal voltages of supply systems for different modes of overvoltage control	254
Annex L (normative) Overvoltage categories	256
Annex M (informative) Typical usage	257
Annex N (normative) Pollution degrees	258
Annex P (normative) Printed circuit board coating performance test.....	259
Annex Q (normative) Printed circuit board coating performance test	261
Annex R (informative) Explanatory notes for surge immunity test	264
Annex S (informative) Guidance for applying Clause 20	269
Annex T (normative) Requirements for SELV and PELV.....	271
Annex U (normative) Requirements for relays when used as controls in IEC 60335 appliances	274
Annex V (normative) Requirements for controls powered by secondary batteries (rechargeable)	277
Bibliography.....	279
Figure 1 – Test pin.....	138
Figure 2 – Standard test finger.....	139
Figure 3 – Test nail.....	140
Figure 4 – Impact test for free-standing controls	141
Figure 5 – Tumbling barrel.....	141
Figure 6 – Ball-pressure apparatus	142
Figure 7 – Void	142
Figure 8 – Apparatus for testing durability of markings on rating labels	142
Figure 9 – Apparatus for flexing test	143
Figure 10 – Screw terminals and stud terminals (1 of 2).....	144
Figure 11 – Pillar terminals.....	146
Figure 12 – Mantle terminals.....	147
Figure 13 – Saddle and lug terminals	148
Figure 14 – Tabs.....	149
Figure 15 – Tabs for non-reversible connectors	150
Figure 16 – Receptacles	151
Figure 17 – Measurement of creepage distance and clearance	152
Figures 18 to 24 Void.....	153
Figure 25 – Diagram for leakage current measurement at operating temperature for single-phase connection of class II controls	153
Figure 26 – Diagram for leakage current measurement at operating temperature for single-phase connection of controls other than class II	154
Figure 27 – Diagram for leakage current measurement at operating temperature for three-phase connection of class II controls	155
Figure 28 – Diagram for leakage current measurement at operating temperature for three-phase connection of controls other than class II.....	156
Figure 29 – Diagram for leakage current measurement at operating temperature for single-phase connection of controls other than class II	156

Figure 30 – Diagram for leakage current measurement at operating temperature for two-phase connection of controls to three-wire, ground neutral supply other than class II	157
Figure B.1 – Narrow groove	161
Figure B.2 – Wide groove	161
Figure B.3 – V-shaped groove.....	161
Figure B.4 – Rib.....	162
Figure B.5 – Uncemented joint with narrow groove	162
Figure B.6 – Uncemented joint with wide groove	162
Figure B.7 – Uncemented joint with narrow and wide grooves	163
Figure B.8 – Diverging side walls	163
Figure B.9 – Narrow recess.....	164
Figure B.10 – Wide recess	164
Figure B.11 – Conductive floating part	164
Figure E.1 – Circuit for measuring leakage currents	167
Figure H.1 – V-Model for the software life cycle	197
Figure H.2 – Voltage variation test	213
Figure H.3 – Ring wave characteristics (open-circuit voltage)	217
Figure H.4 – Schematic of a ring wave generator 0,5 μ s /100 kHz.....	218
Figure H.5 – Example of an electronic circuit with low power points	224
Figure J.1 – Test circuit for inrush-current limiting thermistor endurance test	252
Figure P.1 – Test sample	260
Figure Q.1 – Test sample.....	262
Figure Q.2 – Examples of land configurations (see also Figure Q.1)	263
Figure R.1 – Example of surge protection by shielding in buildings with common earth reference systems.....	267
Figure R.2 – Example of secondary surge protection in buildings with separate common earth reference systems	267
Figure R.3 – Example of primary and secondary surge protection of indoor/outdoor equipment.....	268
Figure S.1 – Guidance flowchart for application of requirements of Clause 20	269
Table 1 (7.2 of edition 3) – Required information and methods of providing information (1 of 4).....	50
Table 2 (9.3.2 of edition 3) – Quick connect terminal dimensions (Canada and USA).....	61
Table 3 (10.1.4 of edition 3) – Minimum cross-sectional area of conductors	63
Table 4 (10.1.8 of edition 3) – Terminal conductors.....	65
Table 5 (10.1.9 of edition 3) – Conductor pull test values.....	66
Table 6 (10.2.1 of edition 3) – Nominal cross-sectional areas of conductors	68
Table 7 (10.2.4.2 of edition 3) – Material and plating for tabs	69
Table 8 (10.2.4.3 of edition 3) – Axial force values for tab insertion and withdrawal	69
Table 9 (11.7.2 of edition 3) – Pull and torque values	80
Table 10 (11.8.2 of edition 3) – Minimum cord conductor sizes	81
Table 11 (13.1 of edition 3) – Minimum insulation resistance	91
Table 12 (13.2 of edition 3) – Insulation or disconnection test voltages ^a (1 of 2).....	91

Table 13 (14.1 of edition 3) – Maximum heating temperatures (1 of 3)	96
Table 14 (17.2.1 of edition 3) – Electrical conditions for the overvoltage test (this table applies in all countries except Canada, and the USA)	103
Table 15 (17.2.2 of edition 3) – Electrical conditions for the overload tests of 17.7 and 17.10 (this table applies in Canada, USA, and all countries which use an overload test)	104
Table 16 (17.2.3 of edition 3) – Electrical conditions for the overload tests of 17.8, 17.9, 17.11, 17.12 and 17.13 (this table applies in Canada, USA, and all countries which use an overload test)	105
Table 17 (18.4.1 of edition 3) – Minimum thickness of sheet metal for enclosures made of carbon steel or stainless steel	113
Table 18 (18.4.2 of edition 3) – Minimum thickness of sheet metal for enclosures of aluminium, copper or brass	114
Table 19 (18.7 of edition 3) – Pull-cord force test values	116
Table 20 (19.1 of edition 3) – Threaded parts torque test values	118
Table 21 (20.1 of edition 3) – Rated impulse voltage for equipment energized directly from the supply mains (from IEC 60664-1:2007, Table F.1)	121
Table 22 (20.2 of edition 3) – Clearances for insulation co-ordination (from IEC 60664-1:2007, Table F.2)	122
Table 23 (20.3 of edition 3) – Minimum creepage distances for basic insulation	126
Table 24 (20.4 of edition 3) – Minimum creepage distances for functional insulation	127
Table 25 (21.4 of edition 3) – Mercury switch short-circuit conditions	131
Table 26 (27.2.3 of edition 3) – Maximum winding temperature (for test of mechanical blocked output conditions)	136
Table B.1 – Value of X	160
Table H.1 (H.11.12.7 of edition 3) – Acceptable measures to address fault/errors ^a (1 of 6)	190
Table H.2 – Semi-formal methods	197
Table H.3 – Software architecture specification	198
Table H.4 – Module design specification	199
Table H.5 – Design and coding standards	199
Table H.6 – Software module testing	200
Table H.7 – Software integration testing	201
Table H.8 – Software safety validation	201
Table H.9 (H.11.12.6 of edition 3) – Combinations of analytical measures during hardware development	202
Table H.10 – Data exchange	203
Table H.11 – Examples of defences against unauthorised access and transmission failure modes	204
Table H.12 (H.23 of edition 3) – Emission	209
Table H.13 (H.26.2.1 of edition 3) – Applicable test levels	210
Table H.14 – Voltage dips, short interruptions and voltage variations	212
Table H.15 (H.26.5.4.2 of edition 3) – Test values for voltage variations	213
Table H.16 (H.26.8.2 of edition 3) – Test voltages for test level 2 (depending on the installation class conditions)	215
Table H.17 – Test level for electrical fast transient burst test	216
Table H.18 (H.26.10.4 of edition 3) – Peak voltages	217

Table H.19 (H.26.12.2.1 of edition 3) – Test levels for conducted disturbances on mains and I/O lines	219
Table H.20 (H.26.12.3.1 of edition 3) – Test level for immunity to radiated electromagnetic fields	220
Table H.21 – Increased test level for radiated immunity (ISM, GSM, DECT bands)	220
Table H.22 (H.26.13.2 of edition 3) – Test level for supply frequency variations	221
Table H.23 (H.26.14.2 of edition 3) – Test level for continuous fields	222
Table H.24 (H.27.1 of edition 3) – Electrical/electronic component fault modes table (1 of 3)	227
Table J.1 – Maximum current	238
Table J.2 (J.7, 7.2 of edition 3) – Normal operating conditions	239
Table J.3 – Samples for the test (clause reference)	240
Table J.4 – Electrical and thermal ratings of a thermistor	241
Table J.5 – Additional items to Table 1	243
Table J.6 – Sequence of calibration and conditioning tests for PTC thermistors	245
Table J.7 – Classes for PTC sensing thermistors	246
Table J.8 – Sequence of calibration and conditioning tests for NTC thermistors	247
Table J.9 – Classes for NTC sensing thermistors	247
Table J.10 – Number of cycles for endurance test	250
Table J.11 – Ageing test temperature	251
Table J.12 – Number of cycles for endurance test	252
Table K.1 – Inherent control or equivalent protective control	254
Table K.2 – Cases where protective control is necessary and control is provided by surge arresters having a ratio of clamping voltage to rated voltage not smaller than that specified by IEC 60099-1	255
Table M.1 – Typical usage	257
Table P.1 – Environmental cycling conditions	259
Table Q.1 – IEC 60664-3 test levels or conditions	261
Table S.1 – Example A – Using Annex S guidance for applying Clause 20	270
Table S.2 – Example B – Using Annex S guidance for applying Clause 20	270

INTERNATIONAL ELECTROTECHNICAL COMMISSION

AUTOMATIC ELECTRICAL CONTROLS –**Part 1: General requirements**

FOREWORD

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

This fifth edition cancels and replaces the fourth edition published in 2010. It constitutes a technical revision. The major changes with respect to the previous edition are as follows.

- modification of the title and scope;
- revisions to Clause H.26 based on changes in technology, applications, and to improve consistency and layout;
- modification to Table H.12 to align with CISPR 22;
- revisions to Annex J to correlate the fault modes of thermistors and to exempt thermistors used in conjunction with type 1 controls in SELV low power circuits from the tests specified in Annex J;
- new requirements covering battery-powered controls, and the use of batteries in controls;
- revision addressing the exclusion of relay faults;
- new/updated requirements in Clause 24, for switch mode power supplies;

- revisions covering the allowance of screwless-type clamping units complying with IEC 60999-1;
- new requirements addressing remotely actuated control functions;
- addition of a new/updated leakage current diagram to align the Annex E diagram with the diagram in IEC 60990;
- updated requirements for temperature sensing controls.

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

FDIS	Report on voting
72/899/FDIS	72/928/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 electrical controls*, 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	11.11.1.2	17.10.4
2.7.2	11.11.1.3	17.12.5
2.7.3	11.11.1.4	18.1.6
2.14.2	12.1.6	18.1.6.1
4.2.1	12.3	18.1.6.2
6.6.1	Table 12 (13.2.1), footnote a	18.1.6.3
Table 1 (7.2), footnote d	13.3.4	18.4
7.4.3	14.4	19.2.4.1
7.4.3.2	Table 13 (14.7.4), footnote f	19.2.5.1
8.1.1.1	15.1	21.1
8.4	16.2.1	21.4
9.3.2	17.1.3.1	27.2.3.1
9.3.4	17.2.2	Annex C
9.5.2	17.2.3	Annex D
Table 3 (10.1.4), footnote b	17.2.3.1	H.26.10
10.1.4.1	Table 14 (17.2.5)	Table H.18 (H.26.10.4)
10.1.14	Table 15 (17.2.5)	H.27.1.1.3
10.1.16	Table 16 (17.2.5)	Table K.1, footnote b
10.1.16.1	17.5.1	Table K.2, footnote b
Table 6 (10.2.1), footnote b	17.7.7	T.3.2
11.5	17.8.4.1	
Table 10 (11.8.2), footnote b	17.10	

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.

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;
- Defined terms: **bold type**.

Some table titles contain reference in brackets to table numbers in IEC 60730-1, edition 3 for ease of correlation between parts 2 and the Part 1.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site 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.

The contents of the corrigendum of September 2014 have been included in this copy.

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