



SLOVENSKI STANDARD
oSIST prEN IEC 60730-1:2020
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Avtomatske električne krmilne naprave - 1. del: Splošne zahteve

Automatic electrical controls - Part 1: General requirements

Automatische elektrische Regel- und Steuergeräte - Teil 1: Allgemeine Anforderungen

Dispositifs de commande électrique automatiques - Partie 1: Exigences générales

Ta slovenski standard je istoveten z: prEN IEC 60730-1:2020

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TITLE:

Automatic electrical controls - Part 1: General requirements

PROPOSED STABILITY DATE: 2023

NOTE FROM TC/SC OFFICERS:

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

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DISCLAIMER

This Consolidated version is not an official IEC Standard and has been prepared for user convenience. Only the current versions of the standard and its amendment(s) are to be considered the official documents.

This Consolidated version of IEC 60730-1 bears the edition number 6.0. It consists of the [documents 72/xxxx/FDIS and 72/xxxx/RVD].

This Final version does not show where the technical content is modified by amendment 1. A separate Redline version with all changes highlighted is available in this publication.

It is intended that this version will be published as Ed.6.0 including A2 of Ed.5.0 as soon as the A2 is published. This inclusion will happen before the Ed.6.0 will be circulated as CDV.

419

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

422 This edition constitutes a technical revision. The major changes with respect to the previous edition are
423 as follows.

Title	Changes
Structure of the main clauses	<p>The clauses of the standard are grouped into two sections of requirements, where</p> <ul style="list-style-type: none"> • the first section consists of the clauses 5 – 13 that, in general address the construction of the product. It is noted that certain construction requirements may have verification requirements integrated within the clause to facilitate usage of the standard, and • the second section of clauses 14 – 26 address the verification requirements.
Scope	Relocated and deleted clauses to be more reflective of products covered under the part 1 and for easier reading
Normative references	Updated references
Terms and definitions	Revised text in certain clauses and relocated relevant H.3 clauses into this clause.
General requirements	General structure of the standard explained along with a figure to depict the intent.
General notes on tests	Reduced sample size from 3 to 1, yet requiring analysis; order of tests more flexible; relocation of battery requirements from annex V
Rating	Deleted – covered under the scope
Classification	Deleted – covered under information
Information	Updated table 1 to reflect entries from the classification clause, and all cross-references
Protection against electric shock	Revised clause 8 to include H.8 and V.8 clauses, revised clauses as appropriate to distinguish between a live part and a hazardous live part
Provision for protective earthing	Revised clauses - relocation
Construction requirements	One Y1 capacitor allowed; relocated relevant requirements of H.11 and V.11 into the clause
Moisture and dust	Relocated IP table from classification to this clause; updated references;

Manufacturing deviation and drift	All clauses moved to Annex H since the requirements pertain to functional safety of controls.
EMC-Emissions	Moved H.23 into the main clause
EMC-Immunity	New EMC requirements (performance) for all controls except incorporated / integrated controls with Class A control functions. Products intended for HBES/BACS are also subjected to these requirements.
Abnormal operation	Fault assessment moved from annex H to this clause; deleted test abnormal voltage for electronic disconnection.
Annex H	Relocated all relevant requirements for electronics to the respective clauses within the body of the standard and retained requirements related to functional safety in this annex.
Annex T	Revised clauses for clarity
Annex U	Removed, the necessity of the Annex was not seen anymore
Annex V	Included in the main part of the standard

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

426 In the development of a fully international standard to cover automatic electrical controls, it has been
427 necessary to take into consideration the differing requirements resulting from practical experience in
428 various parts of the world and to recognize the variation in national electrical systems and wiring rules.

429 The “in some countries” clauses have been moved to the National Deviation Annex ND1, ND2 and ND3.

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

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

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

437 *Addition:* the part 1 text applies with the additional requirement indicated in a part 2;

438 *Modification:* the part 1 text applies with a minor change as indicated in a part 2;

439 *Replacement:* the part 2 text contains a change which replaces the part 1 text in its entirety.

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

441 NOTE In this standard the following print types are used:

- 442 – Requirements proper: in roman type;
- 443 – *Test specifications: in italic type;*
- 444 – Explanatory matter: in smaller roman type;
- 445 – Defined terms: **bold type.**