
Automatic electrical controls for household and similar use - Part 2: Particular requirements for electrically operated water valves, including mechanical requirements (IEC 730-2-8:1992, modified)

Automatic electrical controls for household and similar use -- Part 2: Particular requirements for electrically operated water valves, including mechanical requirements

Automatische elektrische Regel- und Steuergeräte für den Hausgebrauch und ähnliche Anwendungen -- Teil 2: Besondere Anforderungen an elektrisch betriebene Wasserventile, einschließlich mechanischer Anforderungen

Dispositifs de commande électrique automatiques à usage domestique et analogue -- Partie 2: Règles particulières pour les électrovannes hydrauliques, y compris les prescriptions mécaniques

Ta slovenski standard je istoveten z: EN 60730-2-8:1995

ICS:

97.120	Avtomatske krmilne naprave za dom	Automatic controls for household use
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SIST EN 60730-2-8:1997**en**

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60730-2-8

February 1995

ICS 97.120

Descriptors: Control equipment, automatic control, household electrical appliances, solenoid valves, hydraulic equipment, detail specifications, safety requirements, equipment protection, accident prevention, protection against electric shocks, classifications

English version

**Automatic electrical controls for household and similar use
Part 2: Particular requirements for electrically operated water valves,
including mechanical requirements
(IEC 730-2-8:1992, modified)**

Dispositifs de commande électrique
automatiques à usage domestique et
analogue
Partie 2: Règles particulières pour les
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This European Standard was approved by CENELEC on 1994-09-01. 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

This European Standard has been prepared by the CENELEC Technical Committee TC 72: Automatic controls for household use.

It consists of the text of IEC 730-2-8:1992 and a number of common modifications which were submitted to the formal vote and approved by CENELEC as EN 60730-2-8 on 1994-10-04.

The following dates were fixed:

- latest date of publication of an identical national standard (dop) 1995-07-01
- latest date of withdrawal of conflicting standards (dow) 1998-07-01

For products which have complied with the relevant national standard before 1998-07-01 as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2003-07-01.

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, A11 : 1991 and A12 : 1993. 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;
- instructions for modification of the reference document: **in bold type.**

Endorsement notice

The text of the International Standard IEC 730-2-8:1992 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

Foreword **Delete.**

1 **Scope**

- 1.1 **Replace** the second paragraph by:
 EN 60730-2-1 does not apply to water valves.
- 1.1.4 **Delete** the explanation paragraph.

7 **Information**

Add the following item to the table:

113	For valves intended to be connected to the water supply mains	18.101.1	D
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10 **Terminals and terminations**

- 10.1.1.101 **Delete** all four explanation paragraphs.
- 10.2 **Delete** the third explanation paragraph.

12 **Moisture and dust resistance**

Replace the text of this clause by:

This clause of Part 1 is applicable.

14 **Heating**

- 14.7.4 In the addition to the notes of table 14.1, **delete** "(120°C in some countries)".

16 **Environmental stress**

- 16.2.1 **Delete** the explanation paragraph.

18 Mechanical strength

18.101.1 Add:

For valves declared to be connected to the water supply mains the test shall be performed at 1.5 times the declared maximum working pressure or 1,6 MPa (16 bar) whichever is greater.

Appendices

Appendix CC Delete "This test is under consideration".

Delete the explanation paragraph.

Appendix DD

DD.1.2.1 Delete the note and the annotation in the table.

DD.6 Delete the note and the annotation in the table.

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Annex ZB (normative)**Other international publications quoted in this standard
with the references of the relevant European publications****Additions/modifications to EN 60730-1:1991 Annex ZB**

Add under ISO publication:

ISO 7/1	1982	Pipe threads where pressure tight joints are made on the threads Part 1: Designations, dimensions and tolerances
ISO 65	1981	Carbon steel tubes suitable for screwing in accordance with ISO 7/1
ISO 228/1	1982	Pipe threads where pressure tight joints are not made on the threads Part 1: Designations, dimensions and tolerances
ISO 630	1980	Structural steels
ISO 1179	1981	Pipe connections threaded to ISO 228/1 for plain end steel and other metal tubes in industrial applications
ISO 4144	1979	Stainless steel fittings threaded to ISO 7/1
ISO 4400	1985	Fluid power systems and components - Three-pin electrical plug connector Characteristics and requirements
ISO 6952	1989	Fluid power systems and components - Two-pin electrical plug connector with earth contact - Characteristics and requirements

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**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC
730-2-8**

Première édition
First edition
1992-02

**Dispositifs de commande électrique
automatiques à usage domestique et analogue**

Partie 2:

Règles particulières pour les électrovannes
hydrauliques, y compris les prescriptions mécaniques

**Automatic electrical controls for household
and similar use**

Part 2:

Particular requirements for electrically operated water
valves, including mechanical requirements

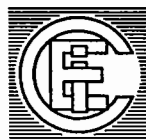
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**AUTOMATIC ELECTRICAL CONTROLS FOR HOUSEHOLD
AND SIMILAR USE**
**Part 2: Particular requirements for electrically operated water valves,
including mechanical requirements**

FOREWORD

- 1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
- 3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

This part of International Standard IEC 730 has been prepared by IEC Technical Committee No. 72: Automatic controls for household use.

It forms the first edition of IEC 730-2-8.

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

Six Months' Rule	Reports on Voting	Two Months' Procedure	Reports on Voting
72(CO)34 72(CO)68	72(CO)47 72(CO)78	72(CO)54 72(CO)64	72(CO)62 72(CO)67

Full information on the voting for the approval of this part can be found in the Voting Reports indicated in the above table.

This Part 2 is intended to be used in conjunction with IEC Publication 730-1. It was established on the basis of the first edition (1986) of that publication, as modified by its Amendments No. 1 (1990) and No. 2 (1991). Consideration may be given to future editions of, or amendments to, IEC 730-1.

This Part 2 supplements or modifies the corresponding clauses in IEC 730-1 so as to convert that publication into the IEC standard: Safety requirements for electrically operated water valves, including mechanical requirements.

Where the first edition 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 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.

In this Part 2, the "in some countries" notes regarding differing national practices are contained in the Appendix DD, in the subclauses 10.1.101, 12.1.6, 16.2.1, in the tables DD.1.2.1 and DD.6 and in the note 3 to the table 14.1.

In this publication:

1) The following print types are used:

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

2) Subclauses, notes, items and figures which are additional to those in Part 1 are numbered starting from 101.

Add the following to the list of Other Publications quoted:

ISO 7/1: 1982, *Pipe thread where pressure tight joints are made on the threads - Part 1: Designations, dimensions and tolerances.*

ISO 65: 1981, *Carbon steel tubes suitable for screwing in accordance with ISO 7/1.*

ISO 228/1: 1982, *Pipe threads where pressure - tight joints are not made on the threads - Part 1: Designations, dimensions and tolerances.*

ISO 630: 1980, *Structural steels.*

ISO 1179: 1981, *Pipe connections threaded to ISO 228/1 for plain end steel and other metal tubes in industrial applications.*

ISO 4144: 1979, *Stainless steel fittings threaded to ISO 7/1.*

ISO 4400: 1985, *Fluid power systems and components - Three-pin electrical plug connector - Characteristics and requirements.*

ISO 6952: 1989, *Fluid power systems and components - Two-pin electrical plug connector with earth contact - Characteristics and requirements.*

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AUTOMATIC ELECTRICAL CONTROLS FOR HOUSEHOLD AND SIMILAR USE

Part 2: Particular requirements for electrically operated water valves, including mechanical requirements

1 Scope

This clause of Part 1 is replaced by the following:

1.1 This Part 2 applies to electrically operated water valves for use in, on or in association with equipment 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.

This Part 2 is also applicable to electrically operated water valves for appliances within the scope of IEC 335.

1.1.1 This Part 2 contains requirements for electrical features of water valves and requirements for mechanical features of valves that affect their intended operation.

1.1.2 This Part 2 applies to the inherent safety, to the operating values, operating sequences where such are associated with equipment protection, and to the testing of automatic electrical controls used in, on or in association with household and similar equipment.

Electrically operated valves for equipment not intended for normal household use but which may nevertheless be used by the public, such as equipment intended to be used by laymen in shops, in light industry and on farms, are within the scope of this Part 2.

This Part 2 does not apply to electrically operated water valves designed exclusively for industrial applications.

This Part 2 does not apply to: **(standards.iteh.ai)**

- electrically operated water valves of nominal connection size above DN 50;
- electrically operated water valves for admissible nominal pressure rating above 1,6 MPa;
- food dispensers;
- detergent dispensers;
- steam valves.

Hereinafter, the term "valve" is used to denote an electrically operated water valve (including actuator and valve body assembly).