

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

AMENDMENT 1  
AMENDEMENT 1

**Automatic electrical controls –  
Part 2-8: Particular requirements for electrically operated water valves,  
including mechanical requirements**

**Dispositifs de commande électrique automatiques –  
Partie 2-8: Exigences particulières pour les électrovannes hydrauliques,  
y compris les exigences mécaniques**





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**including mechanical requirements**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**AUTOMATIC ELECTRICAL CONTROLS –**

**Part 2-8:  
Particular requirements for electrically operated  
water valves, including mechanical requirements**

**AMENDMENT 1**

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Amendment 1 to IEC 60730-2-8:2018 has been prepared by IEC technical committee 72: Automatic electrical controls.

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

Draft	Report on voting
72/1257/CDV	72/1280/RVC

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

The language used for the development of this Amendment is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications/](http://www.iec.ch/standardsdev/publications/).

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- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

## FOREWORD

*Replace the paragraph, beginning with "This Part 2-8 is intended to be used" with the following:*

This Part 2-8 is intended to be used in conjunction with IEC 60730-1. It was established on the basis of the fifth edition of that standard (2013) including its Amendment 1 (2015) and Amendment 2 (2020). Consideration may be given to future editions of, or amendments to, IEC 60730-1.

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## 1 Scope and normative references

IEC 60730-2-8:2018/AMD1:2021  
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### 1.2 Normative references

*Replace "ISO 630, <sup>1</sup> Structural steels – Plates..."*

*with the following:*

ISO 630-2:2011, *Structural steels – Part 2: Technical delivery conditions for structural steels for general purposes*

*Delete footnote <sup>1</sup> reading "ISO 630 has been withdrawn."*

## 10 Terminals and terminations

### 10.2 Terminals and terminations for internal conductors

*Delete "Additional notes:"*

*Add the following:*

*Addition:*

*Replace NOTES 101, 102 and 103, with the following three paragraphs:*

The requirements of 10.2 also apply to terminals and terminations of water valves which are intended to be used for internal wiring which is external to the equipment.

The requirements of 10.2 apply to terminals and terminations deliberately designed to accept special connectors such as the plug connectors described in ISO 4400 and ISO 6952.

The requirements of 10.2 apply to terminals and terminations deliberately designed for connection of pilot duty loads.

## 14 Heating

### 14.5

#### 14.5.105

*Replace the NOTE with the following paragraph:*

This test does not apply to valves identified under requirement 113 of Table 1.

#### 14.5.106

*Replace the NOTE with the following paragraph:*

This test does not apply to valves identified under requirement 113 of Table 1.

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## 27 Abnormal operation

### 27.2 Burnout test

#### 27.2.3 Blocked mechanical output test (abnormal temperature test)

*Replace the text with the following:*

*Replacement:*

Valves with motorized electrical actuators where the motor employs insulation for the protection against electric shock shall withstand the effects of blocked output without exceeding the temperatures indicated in Table 104. Temperatures are measured by the method specified in 14.7.1.

Valves with motorized electrical actuators where the motor employs only **functional insulation** shall withstand the effects of a blocked output. During the test the exceeding of temperature in Table 104 is allowed provided that, after the test, the valve complies with items a) to g) of H.27.1.1.3, where applicable.

This test is not conducted on valves which meet the requirements of 14.4.101.

#### 27.2.3.1

*Replace NOTE 1 with NOTE.*

*Replace NOTE 2 with the following paragraph:*

This test is not applicable to valves identified under requirement 113 of Table 1.

## **27.102 Running overload**

### **27.102.3**

*Replace the text with the following:*

**27.102.3** During the test, the winding temperature of motors employing insulation for the protection against electric shock shall not exceed

- 140 °C, for class 105 (A) winding insulation;
- 155 °C, for class 120 (E) winding insulation;
- 165 °C, for class 130 (B) winding insulation;
- 180 °C, for class 155 (F) winding insulation;
- 200 °C, for class 180 (H) winding insulation;
- 220 °C, for class 200 (N) winding insulation;
- 240 °C, for class 220 (R) winding insulation;
- 270 °C, for class 250 winding insulation.

Valves with motorized electrical actuators where the motor employs only **functional insulation** shall comply with items a) to g) of H.27.1.1.3, where applicable.

NOTE If the load cannot be increased in appropriate steps, the motor can be removed from the appliance and tested separately.

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## **Annex DD** (normative)

### **Torque**

#### **DD.1 Torque test for valves with internally threaded end-connections according to ISO 7-1**

##### **DD.1.1 General**

##### **DD.1.1.1**

*Replace the text with the following:*

The steel pipes used for testing purposes shall comply with the "medium series" according to ISO 65 and be of a material equivalent to grade "S235" quality "B" according to ISO 630-2:2011.

#### **Table DD.1 – Required torque for test**

*Replace the title of the third column with the following:*

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Torque in Nm for ISO 7-1 threads<sup>a</sup>  
**(standards.iteh.ai)**

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**Partie 2-8:  
Exigences particulières pour les électrovannes  
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L'amendement 1 de l'IEC 60730-2-8:2018 a été établi par le comité d'études 72 de l'IEC: Commandes électriques automatiques.