

Irish Standard I.S. EN 61010-2-202:2017

Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-202: Particular requirements for electrically operated valve actuators

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#### I.S. EN 61010-2-202:2017

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#### National Foreword

I.S. EN 61010-2-202:2017 is the adopted Irish version of the European Document EN 61010-2-202:2017, Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-202: Particular requirements for electrically operated valve actuators

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EN 61010-2-202

NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

April 2017

ICS 13.110; 17.020; 19.020; 25.040.40

#### **English Version**

Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-202: Particular requirements for electrically operated valve actuators

(IEC 61010-2-202:2016)

Règles de sécurité pour appareils électriques de mesurage, de régulation et de laboratoire -Partie 2-202: Exigences particulières pour les actionneurs à vanne à commande électrique (IEC 61010-2-202:2016) Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte -Teil 2-202: Besondere Anforderungen für elektrisch betriebene Ventile und Stellantriebe (IEC 61010-2-202:2016)

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#### EN 61010-2-202:2017

#### **European foreword**

The text of document 65/627/FDIS, future edition 1 of IEC 61010-2-202, prepared by IEC/TC 65 "Industrial-process measurement, control and automation" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61010-2-202:2017.

The following dates are fixed:

- latest date by which the document has to be implemented at (dop) 2017-10-21 national level by publication of an identical national standard or by endorsement
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EN 61010-2-202:2017

### Annex ZA

(normative)

## Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Annex ZA of Part 1 is applicable.

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IEC 61010-2-202

Edition 1.0 2016-07

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# NORME INTERNATIONALE

#### **GROUP SAFETY PUBLICATION**

PUBLICATION GROUPÉE DE SÉCURITÉ

Safety requirements for electrical equipment for measurement, control and laboratory use –

Part 2-202: Particular requirements for electrically operated valve actuators

Règles de sécurité pour appareils électriques de mesurage, de régulation et de laboratoire –

Partie 2-202: Exigences particulières pour les actionneurs à vanne à commande électrique





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IEC 61010-2-202

Edition 1.0 2016-07

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

**GROUP SAFETY PUBLICATION** 

PUBLICATION GROUPÉE DE SÉCURITÉ

Safety requirements for electrical equipment for measurement, control and laboratory use –

Part 2-202: Particular requirements for electrically operated valve actuators

Règles de sécurité pour appareils électriques de mesurage, de régulation et de laboratoire –

Partie 2-202: Exigences particulières pour les actionneurs à vanne à commande électrique

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

SAFETY REQUIREMENTS FOR ELECTRICAL EQUIPMENT FOR MEASUREMENT, CONTROL AND LABORATORY USE -

## Part 2-202: Particular requirements for electrically operated valve actuators

#### **FOREWORD**

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International Standard IEC 61020-2-202 has been prepared by committee TC 65: Industrial-process measurement, control and automation.

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

FDIS	Report on voting	
65/627/FDIS	65/631/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.

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This Part 2-202 is intended to be used in conjunction with IEC 61010-1. It was established on the basis of the third edition (2010). Consideration may be given to future editions of, or amendments to, IEC 61010-1.

This Part 2-202 supplements or modifies the corresponding clauses in IEC 61010-1 so as to convert that publication into the IEC standard: *Particular requirements for electrically operated valve actuators*.

Where a particular subclause of Part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. Where this part states "addition", "modification", "replacement", or "deletion", the relevant requirement, test specification or note in Part 1 should be adapted accordingly.

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

It has the status of a group safety publication in accordance with IEC Guide 104.

A list of all parts in the IEC 61010 series, published under the general title Safety requirements for electrical equipment for measurement, control and laboratory use, can be found on the IEC website.

In this standard:

- 1) the following print types are used:
  - requirements: in roman type;
  - NOTES: in smaller roman type;
  - conformity and test: in italic type;
  - terms used throughout this standard which have been defined in clause 3: SMALL ROMAN CAPITALS;
- 2) subclauses, figures, tables and notes which are additional to those in part 1 are numbered starting from 101. Additional annexes are lettered starting from AA.

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.

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#### INTRODUCTION

This IEC 61010-2-202 document constitutes Part 2-202 of a planned series of standards on industrial-process measurement, control and automation equipment.

Safety terms of general use are defined in IEC 61010-1. More specific terms are defined in each part.

This part incorporates the safety related requirements of electrically operated valve actuators.

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## SAFETY REQUIREMENTS FOR ELECTRICAL EQUIPMENT FOR MEASUREMENT, CONTROL AND LABORATORY USE -

## Part 2-202: Particular requirements for electrically operated valve actuators

#### 1 Scope and object

This clause of Part 1 is applicable, except as follows.

#### 1.1 Scope

#### 1.1.1 Equipment included in scope

Replacement:

Replace the text by the following paragraphs:

This part of IEC 61010 specifies the safety requirements for electric ACTUATORS and SOLENOIDS, as applied to valves, intended to be installed in an industrial process or discrete control environment.

This part of IEC 61010 specifies:

- particular safety requirements for general purpose electrically operated valve ACTUATORS and SOLENOIDS.
- related verification tests.

The general purpose electrically operated valve ACTUATORS and SOLENOIDS, covered by this part of IEC 61010 are limited to:

- those rated 600 V alternative current/ 840 V direct current or less,

Service personnel interface to equipment included in the scope of this document.

#### 1.1.2 Equipment excluded from scope

Addition at the end of the list:

This standard excludes

- electric ACTUATORS and SOLENOIDS for use in explosive atmospheres, as covered by the IEC 60079 series of standards;
- mechanical parts/aspects of valves;
- ACTUATORS and SOLENOIDS performing a safety function as covered by the IEC 61508 series of standards;
- POSITIONERS.

NOTE A positioner is defined as a "physical unit delivering an additional, often mechanical, feedback to a mechanical final controlling element that improves its velocity and precision" in IEC 60050-351:2013, 351-56-17.



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