



NSAI
Standards

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

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

Incorporating amendments/corrigenda/National Annexes issued since publication:

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I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

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This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

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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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In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

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EUROPEAN STANDARD

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)

This European Standard was approved by CENELEC on 2016-08-16. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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 national level by publication of an identical national standard or by endorsement (dop) 2017-10-21
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2020-04-21

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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

INTERNATIONAL STANDARD

NORME INTERNATIONALE

GROUP SAFETY PUBLICATION
PUBLICATION GROUPEE 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 GROUPEE DE SÉCURITÉ

**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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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

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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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.

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.

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.

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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