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Standards

Irish Standard
I.S. EN 62927:2017

Voltage sourced converter (VSC) valves for static synchronous compensator (STATCOM) - Electrical Testing

I.S. EN 62927:2017

Incorporating amendments/corrigenda/National Annexes issued since publication:

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This document is based on:

EN 62927:2017

Published:

2017-10-20

*This document was published
under the authority of the NSAI
and comes into effect on:*

2017-11-07

ICS number:

NOTE: If blank see CEN/CENELEC cover page

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National Foreword

I.S. EN 62927:2017 is the adopted Irish version of the European Document EN 62927:2017, Voltage sourced converter (VSC) valves for static synchronous compensator (STATCOM) - Electrical Testing

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EUROPEAN STANDARD

EN 62927

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2017

ICS 29.200; 29.240.99

English Version

**Voltage sourced converter (VSC) valves for static synchronous
compensator (STATCOM) - Electrical Testing
(IEC 62927:2017)**

Valves de convertisseur source de tension (VSC) pour
compensateur synchrone statique (STATCOM) - Essais
électriques
(IEC 62927:2017)

Ventile von Spannungszwischenkreis-Stromrichtern (VSC)
für STATCOM - Elektrische Prüfungen
(IEC 62927:2017)

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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

EN 62927:2017**European foreword**

The text of document 22F/412/CDV, future edition 1 of IEC 62927, prepared by SC 22F "Power electronics for electrical transmission and distribution systems", of IEC/TC 22 "Power electronic systems and equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62927:2017.

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)	2018-05-16
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latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2020-08-16
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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

ISO/IEC 17025	NOTE	Harmonized as EN ISO/IEC 17025.
IEC 61954	NOTE	Harmonized as EN 61954.
IEC 62747	NOTE	Harmonized as EN 62747.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. 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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60060	series	High-voltage test techniques -- Part 1: General definitions and test requirements	EN 60060	series
IEC 60060-1	-	High-voltage test techniques -- Part 1: General definitions and test requirements	EN 60060-1	-
IEC 60071-1	2006	Insulation co-ordination -- Part 1: Definitions, principles and rules	EN 60071-1	2006
IEC 60700-1	2015	Thyristor valves for high voltage direct current (HVDC) power transmission -- Part 1: Electrical testing	EN 60700-1	2015
IEC 62501	-	Voltage sourced converter (VSC) valves for high-voltage direct current (HVDC) power transmission - Electrical testing	EN 62501	-

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IEC 62927

Edition 1.0 2017-07

INTERNATIONAL STANDARD



Voltage sourced converter (VSC) valves for static synchronous compensator (STATCOM) – Electrical testing



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IEC 62927

Edition 1.0 2017-07

INTERNATIONAL STANDARD



Voltage sourced converter (VSC) valves for static synchronous compensator (STATCOM) – Electrical testing

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 29.200; 29.240.99

ISBN 978-2-8322-4521-7

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

VOLTAGE SOURCED CONVERTER (VSC) VALVES FOR STATIC SYNCHRONOUS COMPENSATOR (STATCOM) – ELECTRICAL TESTING

FOREWORD

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International Standard IEC 62927 has been prepared by subcommittee 22F: Power electronics for electrical transmission and distribution systems, of IEC technical committee 22: Power electronic systems and equipment.

The text of this International Standard is based on the following documents:

CDV	Report on voting
22F/412/CDV	22F/431A/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

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

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
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VOLTAGE SOURCED CONVERTER (VSC) VALVES FOR STATIC SYNCHRONOUS COMPENSATOR (STATCOM) – ELECTRICAL TESTING

1 Scope

This document applies to self-commutated valves, for use in voltage sourced converter (VSC) for static synchronous compensator (STATCOM). It is restricted to electrical type and production tests.

The tests specified in this document are based on air insulated valves. For other types of valves, the test requirements and acceptance criteria are agreed between the purchaser and the supplier.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60060 (all parts), *High-voltage test techniques*

IEC 60060-1, *High-voltage test techniques – Part 1: General definitions and test requirements*

IEC 60071-1:2006, *Insulation co-ordination – Part 1: Definitions, principles and rules*

IEC 60700-1:2015, *Thyristor valves for high voltage direct current (HVDC) power transmission – Part 1: Electrical testing*

IEC 62501, *Voltage sourced converter (VSC) valves for high-voltage direct current (HVDC) power transmission – Electrical testing*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1 Insulation co-ordination terms

3.1.1

test withstand voltage

value of a test voltage of standard waveshape at which a new valve, with unimpaired integrity, does not show any disruptive discharge and meets all other acceptance criteria specified for the particular test, when subjected to a specified number of applications or a specified duration of the test voltage, under specified conditions

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