



NSAI
Standards

Irish Standard
I.S. EN 60700-2:2016

Thyristor valves for high voltage direct current (HVDC) power transmission - Part 2: Terminology

I.S. EN 60700-2:2016

Incorporating amendments/corrigenda/National Annexes issued since publication:

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This document is based on:

EN 60700-2:2016

Published:

2016-11-25

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

2016-12-13

ICS number:

NOTE: If blank see CEN/CENELEC cover page

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

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National Foreword

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EUROPEAN STANDARD

EN 60700-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2016

ICS 29.200

English Version

**Thyristor valves for high voltage direct current (HVDC) power
transmission - Part 2: Terminology
(IEC 60700-2:2016)**

Valves à thyristors pour le transport d'énergie en courant
continu à haute tension (CCHT) - Partie 2: Terminologie
(IEC 60700-2:2016)

Thyristorventile für Hochspannungsgleichstrom-
Energieübertragung (HGÜ) - Teil 2: Terminologie
(IEC 60700-2:2016)

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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 60700-2:2016

European foreword

The text of document 22F/373/CDV, future edition 1 of IEC 60700-2, 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 60700-2:2016.

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IEC 60700-1 NOTE Harmonized as EN 60700-1.

Annex ZA

(normative)

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60027	Series	Letter symbols to be used in electrical technology	-	-
IEC 60633	-	Terminology for high-voltage direct current (HVDC) transmission	EN 60633	-

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IEC 60700-2

Edition 1.0 2016-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Thyristor valves for high voltage direct current (HVDC) power transmission –
Part 2: Terminology**

**Valves à thyristors pour le transport d'énergie en courant continu à haute
tension (CCHT) –
Partie 2: Terminologie**



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IEC Central Office
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

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IEC 60700-2

Edition 1.0 2016-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Thyristor valves for high voltage direct current (HVDC) power transmission –
Part 2: Terminology**

**Valves à thyristors pour le transport d'énergie en courant continu à haute
tension (CCHT) –
Partie 2: Terminologie**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 29.200

ISBN 978-2-8322-3474-7

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

THYRISTOR VALVES FOR HIGH VOLTAGE DIRECT CURRENT (HVDC) POWER TRANSMISSION –

Part 2: Terminology

FOREWORD

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International Standard IEC 60700-2 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 standard is based on the following documents:

CDV	Report on voting
22F/373/CDV	22F/395A/RVC

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

A list of all parts in the IEC 60700 series, published under the general title *Thyristor valves for high voltage direct current (HVDC) power transmission*, can be found on the IEC website.

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THYRISTOR VALVES FOR HIGH VOLTAGE DIRECT CURRENT (HVDC) POWER TRANSMISSION –

Part 2: Terminology

1 Scope

This part of IEC 60700 defines terms for thyristor valves for high-voltage direct current (HVDC) power transmission with line commutated converters most commonly based on three-phase bridge connections for the conversion from AC to DC and vice versa.

2 Normative references

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.

IEC 60027(all parts), *Letter symbols to be used in electrical technology*

IEC 60633, *Terminology for high-voltage direct current (HVDC) transmission*

3 Symbols and abbreviations

3.1 General

The lists in 3.2 and 3.3 cover only the most frequently used symbols. The lists of symbols of the IEC 60027 series and IEC 60633 apply.

3.2 List of letter symbols

- α (trigger/firing) delay angle
- β (trigger/firing) advance angle
- μ commutation overlap angle
- γ extinction angle

3.3 List of abbreviations

The following abbreviations are always in capital letters and without dots:

- ETT electrically triggered thyristor
- LTT light triggered thyristor
- TCU thyristor control unit
- HVDC high-voltage direct current
- VBE valve base electronics
- MVU multiple valve (unit)
- BOD breakover diode

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