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INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

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

IEC 60700-2:2016+AMD1:2021-08 CSV(en-fr)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 2: Terminology

FOREWORD

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IEC 60700-2 edition 1.1 contains the first edition (2016-06) [documents 22F/373/CDV and 22F/395A/RVC], its corrigendum 1 (2017-06) and its amendment 1 (2021-08) [documents 22F/607/CDV and 22F/629/RVC].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

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.

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.

The committee has decided that the contents of the base publication and its amendment will remain unchanged until the stability date indicated on the IEC web site under webstore.iec.ch in the data related to the specific publication. At this date, the publication will be

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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