



Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
des produits et services

ILNAS-EN 60700-1:2015/A1:2021

**Thyristor valves for high voltage direct
current (HVDC) power transmission -
Part 1: Electrical testing**

Valves à thyristors pour le transport
d'énergie en courant continu à haute
tension (CCHT) - Partie 1: Essais
électriques

Thyristorventile für
Hochspannungsgleichstrom-
Energieübertragung (HGÜ) - Teil 1:
Elektrische Prüfung

10/2021



National Foreword

This European Standard EN 60700-1:2015/A1:2021 was adopted as Luxembourgish Standard ILNAS-EN 60700-1:2015/A1:2021.

Every interested party, which is member of an organization based in Luxembourg, can participate for FREE in the development of Luxembourgish (ILNAS), European (CEN, CENELEC) and International (ISO, IEC) standards:

- Participate in the design of standards
- Foresee future developments
- Participate in technical committee meetings

<https://portail-qualite.public.lu/fr/normes-normalisation/participer-normalisation.html>

THIS PUBLICATION IS COPYRIGHT PROTECTED

Nothing from this publication may be reproduced or utilized in any form or by any mean - electronic, mechanical, photocopying or any other data carries without prior permission!

EUROPEAN STANDARD

ILNAS-EN 60700-1:2015/A1:2021

EN 60700-1:2015/A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2021

ICS 29.200

English Version

Thyristor valves for high voltage direct current (HVDC) power transmission - Part 1: Electrical testing (IEC 60700-1:2015/AMD1:2021)

Valves à thyristors pour le transport d'énergie en courant continu à haute tension (CCHT) - Partie 1: Essais électriques
(IEC 60700-1:2015/AMD1:2021)

Thyristorventile für Hochspannungsgleichstrom-Energieübertragung (HGÜ) - Teil 1: Elektrische Prüfung
(IEC 60700-1:2015/AMD1:2021)

This amendment A1 modifies the European Standard EN 60700-1:2015; it was approved by CENELEC on 2021-10-20. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 amendment 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 22F/604/CDV, future IEC 60700-1/AMD1, 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 60700-1:2015/A1:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2022-07-20 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2024-10-20 document have to be withdrawn

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 60700-1:2015/AMD1:2021 was approved by CENELEC as a European Standard without any modification.

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 Where 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.

The Annex ZA of EN 60700-1:2015 applies with the following changes:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
<i>Replace the following references:</i>				
IEC 61803	1999	Determination of power losses in high-voltage direct current (HVDC) converter stations with line-commutated converters	EN 61803	1999
+A1	2010		+A1	2010

With the following new reference:

IEC 61803	2020	Determination of power losses in high-voltage direct current (HVDC) converter stations with line-commutated converters	EN IEC 61803	2020
-----------	------	--	--------------	------

Replace the following reference, as well as the associated footnote:

ISO/IEC Guide 25		General requirements for the technical competence of testing laboratories
------------------	--	---

With the following new reference:

ISO/IEC 17025	-	General requirements for the competence of testing and calibration laboratories	EN ISO/IEC 17025	-
---------------	---	---	------------------	---



INTERNATIONAL STANDARD

NORME INTERNATIONALE

AMENDMENT 1 AMENDEMENT 1

Thyristor valves for high voltage direct current (HVDC) power transmission – Part 1: Electrical testing

Valves à thyristors pour le transport d'énergie en courant continu à haute tension (CCHT) – Partie 1: Essais électriques