
Izgubne moči v napetostnih pretvorniških ventilih za visokonapetostne enosmerne sisteme - 2. del: Modularni večnivojski pretvorniki - Dopolnilo A2 (IEC 62751-2:2014/AMD2:2023)

Power losses in voltage sourced converter (VSC) valves for high-voltage direct current (HVDC) systems - Part 2: Modular multilevel converters (IEC 62751-2:2014/AMD2:2023)

Bestimmung der Leistungsverluste in Spannungszwischenkreis-Stromrichtern (VSC) für Hochspannungsgleichstrom(HGÜ)-Systeme - Teil 2: Modulare Mehrpunkt-Stromrichter (IEC 62751-2:2014/AMD2:2023)

Pertes de puissance dans les valves à convertisseur de source de tension (VSC) des systèmes en courant continu à haute tension (CCHT) - Partie 2: Convertisseurs multiniveaux modulaires (IEC 62751-2:2014/AMD2:2023)

<https://standards.iteh.ai/catalog/standards/sist/41b31e45-93fe-4624-91c6-8532570c33b3/sist-en-62751-2-2014-a2-2024>

Ta slovenski standard je istoveten z: EN 62751-2:2014/A2:2023

ICS:

29.200	Usmerniki. Pretvorniki. Stabilizirano električno napajanje	Rectifiers. Convertors. Stabilized power supply
29.240.01	Omrežja za prenos in distribucijo električne energije na splošno	Power transmission and distribution networks in general

SIST EN 62751-2:2014/A2:2024**en,fr,de**

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 62751-2:2014/A2

October 2023

ICS 29.200; 29.240.99

English Version

**Power losses in voltage sourced converter (VSC) valves for
high-voltage direct current (HVDC) systems - Part 2: Modular
multilevel converters
(IEC 62751-2:2014/AMD2:2023)**

Pertes de puissance dans les valves à convertisseur de
source de tension (VSC) des systèmes en courant continu
à haute tension (CCHT) - Partie 2: Convertisseurs
multiniveaux modulaires
(IEC 62751-2:2014/AMD2:2023)

Bestimmung der Leistungsverluste in
Spannungszwischenkreis-Stromrichtern (VSC) für
Hochspannungsgleichstrom(HGÜ)-Systeme - Teil 2:
Modulare Mehrpunkt-Stromrichter
(IEC 62751-2:2014/AMD2:2023)

This amendment A2 modifies the European Standard EN 62751-2:2014; it was approved by CENELEC on 2023-10-02. 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, Türkiye 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

EN 62751-2:2014/A2:2023 (E)

European foreword

The text of document 22F/712/CDV, future IEC 62751-2/AMD2, 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 62751-2:2014/A2:2023.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2024-07-02 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2026-10-02 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 62751-2:2014/AMD2:2023 was approved by CENELEC as a European Standard without any modification.

[SIST EN 62751-2:2014/A2:2024](https://standards.iteh.ai/standards/sist/41b31e45-93fe-4624-91c8-8532570c33b3/sist-en-62751-2-2014-a2-2024)

<https://standards.iteh.ai/catalog/standards/sist/41b31e45-93fe-4624-91c8-8532570c33b3/sist-en-62751-2-2014-a2-2024>



IEC 62751-2

Edition 1.0 2023-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE

AMENDMENT 2
AMENDEMENT 2

**Power losses in voltage sourced converter (VSC) valves for high-voltage direct current (HVDC) systems –
Part 2: Modular multilevel converters**

**Pertes de puissance dans les valves à convertisseur de source de tension (VSC) des systèmes en courant continu à haute tension (CCHT) –
Partie 2: Convertisseurs multiniveaux modulaires**

[SIST EN 62751-2:2014/A2:2024](https://standards.iteh.ai/catalog/standards/sist/41b31e45-93fe-4624-91c8-8532570c33b3/sist-en-62751-2-2014-a2-2024)

<https://standards.iteh.ai/catalog/standards/sist/41b31e45-93fe-4624-91c8-8532570c33b3/sist-en-62751-2-2014-a2-2024>

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 29.200, 29.240.99

ISBN 978-2-8322-7446-0

**Warning! Make sure that you obtained this publication from an authorized distributor.
Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.**

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**POWER LOSSES IN VOLTAGE SOURCED
CONVERTER (VSC) VALVES FOR HIGH-VOLTAGE
DIRECT CURRENT (HVDC) SYSTEMS –****Part 2: Modular multilevel converters****AMENDMENT 2****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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

Amendment 2 to IEC 62751-2:2014 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 Amendment is based on the following documents:

Draft	Report on voting
22F/712/CDV	22F/726/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this Amendment is English.