SLOVENSKI STANDARD
oSIST prEN IEC 61803:2025

01-julij-2025

Ugotavljanje močnostnih izgub v visokonapetostnih enosmernih (HVDC) pretvorniških postajah

Determination of power losses in high-voltage direct current (HVDC) converter stations

Détermination des pertes en puissance dans les postes de conversion en courant continu à haute tension (CCHT)

Ta slovenski standard je istoveten z: **prEN IEC 61803:2025**

ICS:

29.200	Usmerniki. Pretvorniki. Stabilizirano električno napajanje	Rectifiers. Convertors. Stabilized power supply

oSIST prEN IEC 61803:2025 **en,fr,de**

22F/821/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER: **IEC 61803 ED3**	
DATE OF CIRCULATION: **2025-06-06**	CLOSING DATE FOR VOTING: **2025-08-29**
SUPERSEDES DOCUMENTS: **22F/778/CD, 22F/800A/CC**	

IEC SC 22F : POWER ELECTRONICS FOR ELECTRICAL TRANSMISSION AND DISTRIBUTION SYSTEMS	
SECRETARIAT: IEC Secretariat	SECRETARY: Ms Suzanne Yap
OF INTEREST TO THE FOLLOWING COMMITTEES: TC 115	HORIZONTAL FUNCTION(S):
ASPECTS CONCERNED:	
☒ SUBMITTED FOR CENELEC PARALLEL VOTING	☐ NOT SUBMITTED FOR CENELEC PARALLEL VOTING

Attention IEC-CENELEC parallel voting

The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting.

The CENELEC members are invited to vote through the CENELEC online voting system.

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Recipients of this document are invited to submit, with their comments, notification of any relevant "In Some Countries" clauses to be included should this proposal proceed. Recipients are reminded that the CDV stage is the final stage for submitting ISC clauses. (SEE AC/22/2007 OR NEW GUIDANCE DOC).

TITLE:

Determination of power losses in high-voltage direct current (HVDC) converter stations

PROPOSED STABILITY DATE: 2029

NOTE FROM TC/SC OFFICERS:

This CDV is prepared based on 22F/778/CD and the agreed NC comments in 22F/800A/CC by SC 22F/MT 14 (Convenor: Mr. Sanjay Mukoo).

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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DETERMINATION OF POWER LOSSES IN HIGH-VOLTAGE DIRECT CURRENT (HVDC) CONVERTER STATIONS

FOREWORD

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International Standard IEC 61803 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 third edition cancels and replaces the second edition published in 2020. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) HVDC stations with Voltage-Sourced Converters (VSC) technology have been included:
b) to facilitate the application of this document and to ensure its quality remains consistent, 5.1.8 and 5.8 have been reviewed, taking into consideration that the present thyristor production technology provides considerably less thyristor parameters dispersion comparing with the situation in 1999 when the first edition of IEC 61803 was developed, and therefore the production records of thyristors can be used for the power losses calculation;
c) the calculation of the total station load losses (cases D1 and D2 in Annex C) has been corrected.

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