
Sistemi visokonapetostnega enosmernega omrežja in priključene pretvorniške postaje - Smernice in seznam parametrov za funkcijsko specifikacijo - 1. del: Smernice

High voltage direct current (HVDC) grid systems and connected converter stations - Guideline and parameter lists for functional specifications - Part 1: Guideline

Hochspannungsgleichstrom-Netzsysteme und angeschlossene Umrichterstationen - Leitfaden und Parameterlisten für funktionale Spezifikationen - Teil 1: Leitfaden

Réseaux en courant continu à haute tension (CCHT) et postes de conversion connectés - Lignes directrices et listes de paramètres pour les spécifications fonctionnelles - Partie 1: Lignes directrices

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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-TS CLC IEC/TS 63291-1:2025 **en**

TECHNICAL SPECIFICATION
SPÉCIFICATION TECHNIQUE
TECHNISCHE SPEZIFIKATION

CLC IEC/TS 63291-1

September 2025

ICS 29.200; 29.240.01

Supersedes CLC/TS 50654-1:2020

English Version

**High voltage direct current (HVDC) grid systems and connected
converter stations - Guideline and parameter lists for functional
specifications - Part 1: Guideline
(IEC/TS 63291-1:2023)**

Réseaux en courant continu à haute tension (CCHT) et
postes de conversion connectés - Lignes directrices et
listes de paramètres pour les spécifications fonctionnelles -
Partie 1: Lignes directrices
(IEC/TS 63291-1:2023)

Hochspannungsgleichstrom-Netzsysteme und
angeschlossene Stromrichterstationen - Leitfaden und
Parameter-Listen für funktionale Spezifikationen - Teil 1:
Leitfaden
(IEC/TS 63291-1:2023)

This Technical Specification was approved by CENELEC on 2025-08-26.

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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

CLC IEC/TS 63291-1:2025 (E)**European foreword**

This document (CLC IEC/TS 63291-1:2025) consists of the text of document IEC/TS 63291-1:2023, prepared by IEC/TC 115 "High Voltage Direct Current (HVDC) transmission for DC voltages above 100 kV".

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This document is read in conjunction with CLC IEC/TS 63291-2:2025.

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 Technical Specification IEC/TS 63291-1:2023 was approved by CENELEC as a European Technical Specification without any modification.

In the official version, for Bibliography, the following notes have to be added for the standard indicated:

IEC 60633:2019	NOTE	Approved as EN IEC 60633:2019 (not modified)
IEC 61660-1:1997	NOTE	Approved as EN 61660-1:1997 (not modified)
IEC 61000-1-2	NOTE	Approved as EN 61000-1-2
IEC 61000-4-7	NOTE	Approved as EN 61000-4-7
IEC 61850 (series)	NOTE	Approved as EN 61850 (series)

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60909	series	Short-circuit currents in three-phase AC systems	EN 60909	series
IEC 61975	2010	High-voltage direct current (HVDC) installations - System tests	EN 61975	2010
+ A1	2016		+ A1	2017
+ A2	2022		+ A2	2022
IEC 62271-100	-	High-voltage switchgear and controlgear - Part 100: Alternating-current circuit-breakers	EN IEC 62271-100	-
IEC 62271-102	-	High-voltage switchgear and controlgear - Part 102: Alternating current disconnectors and earthing switches	EN IEC 62271-102	-
IEC 62747	2014	Terminology for voltage-sourced converters (VSC) for high-voltage direct current (HVDC) systems	EN 62747	2014
+ A1	2019		+ A1	2019
IEC/TS 63014-1	-	High voltage direct current (HVDC) power transmission - System requirements for DC-side equipment - Part 1: Using line-commutated converters	-	-
IEC/TS 63291-2	2023	High voltage direct current (HVDC) grid systems and connected converter stations - Guideline and parameter lists for functional specifications - Part 2: Parameter lists	CLC IEC/TS 63291-2	2025
ISO/IEC 25010	2011	Systems and software engineering - Systems and software Quality Requirements and Evaluation (SQuaRE) - System and software quality models	-	-



IEC TS 63291-1

Edition 1.0 2023-09

TECHNICAL SPECIFICATION



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stations – Guideline and parameter lists for functional specifications –
Part 1: Guideline

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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 29.200; 29.240.01

ISBN 978-2-8322-7571-9

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