



# TECHNICAL SPECIFICATION

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## Commissioning of VSC HVDC systems

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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### COMMISSIONING OF VSC HVDC SYSTEMS

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This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

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- reconfirmed,
- withdrawn, or
- revised.

## COMMISSIONING OF VSC HVDC SYSTEMS

### 1 Scope

This document, which is a technical specification, applies to the commissioning of voltage-sourced converter (VSC) high voltage direct current (HVDC) systems which consist of two converter stations and the connecting HVDC transmission line.

The tests are generally applied to all HVDC configurations and could require addition or deletion to match the given solution.

This document provides guidance on the planning of commissioning activities. The commissioning described in this document is implemented through on-site testing on the whole system functionality, including testing on the subsystem and system. This document provides the scope, procedures and acceptance criteria of the tests.

Factory system tests, on-site equipment tests, electrode tests, and trial operation are not included in this document.

### 2 Normative references

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.

IEC 60633:2019, *High-voltage direct current (HVDC) transmission – Vocabulary*

IEC 62747:2014, *Terminology for voltage-sourced converters (VSC) for high-voltage direct current (HVDC) systems*

IEC 62747:2014/AMD1:2019