

Indian Standard

VOLTAGE SOURCED CONVERTER (VSC) VALVES FOR HIGH-VOLTAGE DIRECT CURRENT (HVDC) POWER TRANSMISSION — ELECTRICAL TESTING

1 Scope

This International Standard applies to self-commutated converter valves, for use in a three-phase bridge voltage sourced converter (VSC) for high voltage d.c. power transmission or as part of a back-to-back link. It is restricted to electrical type and production tests.

The tests specified in this standard are based on air insulated valves. For other types of valves, the test requirements and acceptance criteria must be agreed.

2 Normative references

The following referenced documents are indispensable for the application 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 60060 (all parts), *High-voltage test techniques*

IEC 60060-1:1989, *High-voltage test techniques – Part 1: General definitions and test requirements*

IEC 60071-1 :2006, *Insulation co-ordination – Part 1: Definitions, principles and rules*

IEC 60700-1 :1998, *Thyristor valves for high voltage direct current (HVDC) power transmission – Part 1: Electrical testing* .¹⁾

¹⁾ There exists a consolidated edition 1.2 (2008) that comprises IEC 60700-1, Amendment 1 and Amendment 2.