**IS/IEC 60071-11: 2022**

***भारतीय मानक Indian Standards***

इन्सुलेशन समन्वय

भाग 11 एचवीडीसी प्रणाली के लिए परिभाषाएँ, सिद्धांत और नियम

Insulation Co-Ordination

Part 11 Definitions, Principles and Rules for HVDC System

ICS 29.080.30

© BIS 2024

© IEC 2022

A blue square with white text

Description automatically generated



भारतीय मानक ब्यूरो

BUREAU OF INDIAN STANDARDS

**मानक भवन, 9 बहादुर शाह जफर मार्ग, नई दिल्ली — 110002**

MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG

NEW DELHI — 110002

www.bis.gov.in[www.standardsbis.in](http://www.standardsbis.in)

**November 2024 Price Group**

HVDC Power Systems Sectional Committee, ETD 40

NATIONAL FOREWORD

This Indian Standard which is identical with [IEC 60071-11: 2022](javascript:doHTTPGetLayer('PrintDetail','43846');) ‘Insulation co-ordination - Part 11：Definitions, principles and rules for HVDC system’ Issued by the International Electrotechnical Commission (IEC) was adopted by the Bureau of Indian Standards on the recommendation of the HVDC Power Systems Sectional Committee and approval of the Electrotechnical Division Council. This standard supersedes IS/IEC 60071-5: 2014 - Insulation co-ordination Part 5 Procedures for high-voltage direct current ( HVDC ) converter stations.

This standard is published in various parts. Other parts in this series are:

|  |  |
| --- | --- |
| Part 1 | Insulation coordination Part 1 Definition principles and rules |
| Part 2 | Insulation coordination Part 2 Application guide |
| Part 4 | Insulation coordination Part 4 Computational guide to insulation co-ordination and modeling of electrical networks |

The text of the IEC Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

1. Wherever the words ‘International Standard’ appears referring to this standard, they should be read as ‘Indian Standard’.
2. Comma (,) has been used as a decimal marker, while in Indian Standards the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to International Standards for which Indian Standards also exists. The corresponding Indian Standards, which are to be substituted, are listed below along with their degree of equivalence for the editions indicated:

|  |  |  |
| --- | --- | --- |
| *International Standard* | *Corresponding Indian Standard* | *Degree of Equivalence* |
| IEC 60060-1, High-voltage test techniques – Part 1: General definitions and test requirements | IS 2071 (Part 1) : 2016/ IEC 60060-1 : 2010 High - Voltage test techniques: Part 1 General definitions and test requirements (*third revision*) | Identical |
| IEC 60071-1:2019, Insulation co-ordination – Part 1: Definitions, principles and rules | IS/IEC 60071-1:2019 Insulation co - Ordination: Part 1 Phase to earth insulation co - Ordination, principles and rules (*second revision*) | Identical |
| IEC 60071-2:2018, Insulation co-ordination – Part 2: Application guidelines | IS/IEC 60071-2 : 2018 Insulation Coordination Part 2: Application Guide | Identical |
| IEC 60099-4:2014, Surge arresters – Part 4: Metal-oxide surge arresters without gaps for a.c. systems | IS 15086 (Part 4) : 2017/ IEC 60099-4 : 2014 Surge arresters – Part 4 Metal-oxide surge arresters without gaps for a.c. systems | Identical |
| IEC TS 60815-1:2008, Selection and dimensioning of high-voltage insulators intended for use in polluted conditions – Part 1: Definitions, information and general principles | IS 16683 (Part 1) : 2018/ IEC TS 60815-1 : 2008 Selection and dimensioning of high - Voltage insulators intended for use in polluted conditions: Part 1 definitions, information and general principles | Identical |
| IEC TS 60815-2:2008, Selection and dimensioning of high-voltage insulators intended for use in polluted conditions – Part 2: Ceramic and glass insulators for a.c. systems | IS 16683 (Part 2) : 2018/ IEC TS 60815-2 : 2008 Selection and dimensioning of high - Voltage insulators intended for use in polluted conditions: Part 2 Ceramic and glass insulators for a.c. systems | Identical |
| IEC TS 60815-3:2008, Selection and dimensioning of high-voltage insulators intended for use in polluted conditions – Part 3: Polymer insulators for a.c. systems | IS 16683 (Part 3) : 2018/ IEC TS 60815-3 : 2008 Selection and dimensioning of high - Voltage insulators intended for use in polluted conditions: Part 3 Polymer insulators for a.c. systems | Identical |

Only English language text has been retained while adopting it in this Indian Standard, and as such the page numbers given here are not the same as in the International Standard.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test, shall be rounded off in accordance with IS 2: 2022 ‘Rules for rounding off numerical values (*second revision*)’. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.