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BUREAU OF INDIAN STANDARDS
DRAFT FOR COMMENTS ONLY

Draft Indian Standard

HYBRID INSULATORS FOR a.c. AND d.c. FOR HIGH-VOLTAGE APPLICATIONS GREATER THAN 1 000 V a.c. AND 1 500 V d.c. – DEFINITIONS, TEST METHODS AND ACCEPTANCE CRITERIA

(*First Revision of IS/IEC TS 62896*)

ICS 29.080.10

Electrical Insulators And Accessories Sectional Committee, ETD 06	**Last date of receipt of comment: 13 September 2025**

NATIONAL FOREWORD

This draft Indian Standard which is identical with IEC 62896: 2024 "Hybrid insulators for AC and DC for high-voltage applications greater than 1 000 V AC and 1 500 V DC – Definitions, test methods and acceptance criteria" issued by the International Electrotechnical Commission (IEC) will be adopted by the Bureau of Indian Standards on the recommendation of the Electrical Insulators and Accessories Sectional Committee and approval of the Electrotechnical Division Council.

This Indian standard was first published in 2023. This revision has been undertaken to align with the latest version of IEC 62896: 2024 (Ed. 1.0).

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

a) modifications of terms and definitions;
b) modifications of tests procedures included in IEC TR 62039 and IS 16684 (Hydrophobicity transfer test);
c) harmonization of Table 1 (Tests to be carried out after design and type changes) with other product standards and IS 16684.

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

a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.
b) 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 60050-471:2007, International Electrotechnical Vocabulary (IEV) – Part 471: Insulators	IS 1885 (Part 54) : 2021, Electrotechnical Vocabulary: Part 54 Insulators	Identical with IEC 60050-471 : 2007
IEC 60168, Tests on indoor and outdoor post insulators of ceramic material or glass for systems with nominal voltages greater than 1000 V	IS/IEC 60168:2000, Tests on indoor and outdoor post insulators of ceramic material or glass for systems with nominal voltages greater than 1 000 V	Identical
IEC 60383-1: 2023, Insulators for overhead lines with a nominal voltage above 1000 V – Part 1: Ceramic or glass insulator units for AC systems – Definitions, test methods and acceptance criteria	IS/IEC 60383-1:2023, Insulators for Overhead Lines with a Nominal Voltage above 1 000 V Part 1 Ceramic or Glass Insulator Units for a.c Systems - Definitions, Test Methods and Acceptance Criteria (First Revision)	Identical
IEC 60383-2, Insulators for overhead lines with a nominal voltage above 1 000 V – Part 2: Insulator strings and insulator sets for AC systems – Definitions, test methods and acceptance criteria	IS/IEC 60383-2:1993, Insulators for Overhead Lines with a Nominal Voltage Above 1 000 V: Part 2 Insulator Strings and Insulator Sets for a.c. Systems - Definitions, Test Methods and Acceptance Criteria	Identical
IEC 62155, Hollow pressurized and unpressurized ceramic and glass insulators for use in electrical equipment with rated voltages greater than 1 000 V	IS/IEC 62155:2003, Hollow Pressurized and Unpressurized Ceramic and Glass Insulators for Use in Electrical Equipment with Rated Voltages Greater Than 1 000 V	Identical
IEC 62217, Polymeric HV insulators for indoor and outdoor use – General definitions, test methods and acceptance criteria	IS 16684:2018, Polymeric HV Insulators for Indoor and Outdoor Use-General Definitions, Test Methods and Acceptance Criteria	Identical with IEC 62217: 2012
IEC 61211, Insulators of ceramic material or glass for overhead lines with a nominal voltage greater than 1 000 V – Impulse puncture testing in air	IS/IEC 61211:2004, Insulators of ceramic material or glass for overhead lines with a nominal voltage greater than 1 000 V - Impulse puncture testing in air	Identical
IEC 61325, Insulators for overhead lines with a nominal	IS/IEC 61325:1995, Insulators for overhead lines with a nominal voltage	Identical

voltage above 1000 V – Ceramic or glass insulator units for d.c. systems – Definitions, test methods and acceptance criteria	above 1 000 V - Ceramic or glass insulator units for dc systems - Definitions test methods and acceptance criteria	

Only the 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 IEC Publication.

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 or analysis shall be rounded off in accordance with IS 2: 2022 'Rules for rounding of 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.

Note: The technical content of the document is not available on website. For details, please refer the corresponding IEC 62896: 2024 (Ed. 1.0) or kindly contact:

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