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IS/IEC 61439-5: 2023

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Draft Indian Standard

Low-voltage switchgear and controlgear assemblies Part 5 Assemblies for power distribution in public networks

(*First Revision*)

ICS 29.130.20

Low Voltage Switchgear and Controlgear Sectional Committee, ETD 07	Last date of receipt of comments**:** 27-January-2025

NATIONAL FOREWORD

This draft Indian Standard (First Revision) which is identical with IEC 61439-5: 2023 "Low-voltage switchgear and controlgear assemblies – Part 5: Assemblies for power distribution in public networks" issued by the International Electrotechnical Commission (IEC) will be adopted by the Bureau of Indian Standards on the recommendation of the Low Voltage Switchgear and Controlgear Sectional Committee and approval of the Electrotechnical Division Council.

This standard was first published in 2019 and was identical with IEC 61439-5: 2014. This revision has now been undertaken to align this standard with the latest international practices. This edition includes the following significant technical changes with respect to the previous edition:

- omission of the requirement to conduct mechanical tests at -25 °C when enclosures are made of a metallic material;
- addition of assumed loading factors generation supplies and electric vehicle charging applications;
- additional dielectric tests when a PENDA is used in a distribution substation with separate HV and LV earths;
- further clarification of representative samples for design verification.

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 60695-11-10:2013, Fire hazard testing – Part 11-10: Test flames – 50 W horizontal and vertical flame test methods	IS/IEC 60695-11-10: 2013 Fire hazard testing: Part 11 test flames Sec 10 50 w horizontal and vertical flame test methods	Identical With IEC 60695-11-10: 2013
IEC 61439-1:2020, Low-voltage switchgear and controlgear assemblies – Part 1: General rules	IS/IEC 61439-1: 2020 Low-voltage switchgear and controlgear assemblies Part 1: General rules (*First Revision*)	Identical With IEC 61439-1:2020
IEC 62262, Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)	IS 17050 : 2023 / IEC 62262: 2021 (Ed 1.1) Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts IK Code	Identical With IEC 62262: 2021 (Ed 1.1)

The technical committee has reviewed the provisions of the following international standards referred in this adopted standard and decided that they are acceptable for use in conjunction with this standard.

International Standard	*Title*
ISO 9223:2012	Corrosion of metals and alloys – Corrosivity of atmospheres – Classification, determination and estimation
ISO 6506-1:2014	Metallic materials – Brinell hardness test – Part 1: Test method

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 61439-5: 2023 or kindly contact:

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