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Draft Indian Standard

Low-voltage switchgear and controlgear assemblies –
Part 3: Distribution boards intended to be operated by ordinary persons (DBO)
(First Revision)

ICS 29.130.20

Low Voltage Switchgear and Controlgear
Sectional Committee, ETD 07

Last date of receipt of comments:
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NATIONAL FOREWORD

This draft Indian Standard (First Revision) which is identical with IEC 61439-3: 2024 “Low-voltage switchgear and controlgear assemblies – Part 3: Distribution boards intended to be operated by ordinary persons (DBO)” 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 61439-3: 2012. 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:

- alignment with the structure of IS/IEC 61439-1:2020;
- inclusion in the scope of more examples of the type of protection and control devices;
- deletion of type A and Type B DBOs;
- addition of a new Annex BB related to DBOs used in a prosumer’s electrical installation (PEI);
- addition of a new Annex CC related to rated current of a DBO with additional source of supply in parallel/simultaneously with another source that is connected to the DBO e.g. PV.

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:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
IEC 60068-2-75, Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests	IS 9000 (Part 7/Sec 7): 2020 / IEC 60068-2-75: 2014 Environmental Testing Part 7 Tests Section 7 Test Eh: Hammer tests (First Revision)	Identical with IEC 60068-2-75 : 2014
IEC 60269-3, Low-voltage fuses – Part 3: Supplementary requirements for fuses for use by unskilled persons (fuses mainly for household and similar applications) – Examples of standardized systems of fuses A to F	IS/IEC 60269-3: 2010 Low-Voltage Fuses Part 3 Supplementary Requirements for Fuses for Use by Unskilled Persons (Fuses Mainly for Household and Similar Applications) – Examples of Standardized Systems of Fuses A to F	Identical with IEC 60269-3: 2010
IEC 60898-1, Electrical accessories – Circuit-breakers for overcurrent protection for household and similar installations – Part 1: Circuit-breakers for a.c. operation	IS/IEC 60898-1: 2015 Electrical accessories - Circuit - Breakers for overcurrent protection for household and similar installations: Part 1 circuit - Breakers for a.c. operation (First Revision)	Identical with IEC 60898-1: 2015
IEC 60947-3, Low-voltage switchgear and controlgear – Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units	IS/IEC 60947-3: 2020 Low - Voltage switchgear and controlgear: Part 3 switches, disconnectors, switch disconnectors and fuse - Combination units (First Revision)	Identical with IEC 60947-3: 2020
IEC 61008-1 Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) - Part 1: General rules	IS 12640 (Part 1) : 2016/ IEC 61008-1: 1990 Residual current operated circuitBreakers without integral overcurrent protection for household and similar uses (Rccbs): Part 1 general rules (Second Revision)	Identical with IEC 61008-1: 1990
IEC 61008-2-1 Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCB's). Part 2-1: Applicability of the general rules to RCCB's functionally independent of line voltage	IS 12640 (Part 3) : 2018/ IEC 61008-2-1: 1990 Residual Current Operated Circuit - Breakers Without Integral Overcurrent Protection for Household and Similar Uses (RCCB's) Part 3 Applicability of the General Rule to RCCB 's Functionally Independent of Line Voltage	Identical with IEC 61008-2-1: 1990
IEC 61008-2-2 Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCB's). Part 2-2: Applicability of the general rules to RCCB's functionally dependent on line voltage	IS 12640 (Part 4) : 2018/ IEC 61008-2-2: 1990 Residual Current Operated Circuit Breakers Without Integral Overcurrent Protection for Household and Similar Uses (RCCB's) Part 4 Applicability of the General Rules to RCCB's Functionally Dependent on Line Voltage	Identical with IEC 61008-2-2: 1990

IEC 61009-1 Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBOs) - Part 1: General rules	IS 12640 (Part 2) : 20186/ IEC 61009-1: 2012 Residual current operated circuit - Breakers with integral overcurrent protection for household and similar uses (Rcbos): Part 2 general rules	Identical with IEC 61009-1: 2012
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)
IEC 62606, General requirements for arc fault detection devices	IS 17121: 2019 IEC 62606: 2017 General requirements for arc fault detection devices	Identical with IEC 62606: 2017

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.

<i>International Standard</i>	<i>Title</i>
IEC 60364-8-82	Low-voltage electrical installations – Part 8-82: Functional aspects – Prosumer's low-voltage electrical installations
IEC 60669-2-4	Switches for household and similar fixed electrical installations – Part 2-4: Particular requirements – Isolating switches
IEC 62423	Type F and type B residual current operated circuit-breakers with and without integral overcurrent protection for household and similar uses
IEC 61009-2-1	Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBO's) - Part 2-1: Applicability of the general rules to RCBO's functionally independent of line voltage
IEC 61009-2-2	Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBO's) - Part 2-2: Applicability of the general rules to RCBO's functionally dependent on line voltage

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 61439-3: 2024 or kindly contact:

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