

BUREAU OF INDIAN STANDARDS
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Draft Indian Standard
Rotating electrical machines – Part 23: Repair, overhaul and reclamation

(ICS 29.160.01)

Rotating Machinery Sectional
Committee, ETD 15

Last date for comments-09/08/2024

NATIONAL FOREWORD

This Draft Indian Standard which is identical with IEC 60034-23: 2019 ‘Rotating electrical machines – Part 23: Repair, overhaul and reclamation’ Issued by the International Electrotechnical Commission (IEC) is proposed to be adopted by the Bureau of Indian Standards on the recommendation of the Rotating Machinery Sectional Committee and approval of the Electrotechnical Division Council.

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:

- a) Wherever the words ‘International Standard’ appears 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 60034-1: 2022, Rotating electrical machines – Part 1: Rating and performance	IS 15999 (Part 1) : 2021/ IEC 60034-1: 2017 Rotating electrical machines - Part 1 : Rating and performance (Under Revision with Identical IEC)	Identical
IEC 60034-6, Rotating electrical machines – Part 6: Methods of cooling (IC Code)	IS 6362 : 1995/ IEC 60034-6: 1991 Designation of methods of cooling of rotating electrical machines (<i>First Revision</i>)	Identical
IEC 60034-11, Rotating electrical machines – Part 11: Thermal protection	IS 14122 : 1994/ IEC 60034-11: 1978 Built - In thermal protection for electric motors rated up to 660 V AC - Specification	Technically Equivalent

IEC 60034-30-1, Rotating electrical machines – Part 30-1: Efficiency classes of line operated AC motors (IE code)	IS 12615 : 2018/ IEC 60034-30-1 : 2014 Line operated three phase AC motors (IE Code) "Efficiency classes and performance specification" (Third Revision)	Technically Equivalent
IEC 60034-4-1:2018, Rotating electrical machines – Part 4-1: Methods for determining electrically excited synchronous machine quantities from tests	IS 15999 (Part 4/Sec 1) : 2023 60034-4-1: 2018 Rotating electrical machines Part 4 Electrically excited synchronous machine quantities Section 1 Test methods (<i>First Revision</i>)	Identical
IEC 60034-30-1, Rotating electrical machines – Part 30-1: Efficiency classes of line operated AC motors (IE code)	IS 12615 : 2018/ IEC 60034-30-1 : 2014 Line operated three phase AC motors (IE Code) "Efficiency classes and performance specification" (<i>Third Revision</i>)	Technically Equivalent
IEC 60050-411:1996, International Electrotechnical Vocabulary – Chapter 411: Rotating machines	IS 1885 : 2021/IEC 60050: 411 Electrotechnical Vocabulary: Part 35 Rotating Machinery (<i>Second Revision</i>)	Identical
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 (<i>Third Revision</i>)	Identical
IEC 60072-2, Dimensions and output series for rotating electrical machines – Part 2: Frame numbers 355 to 1000 and flange numbers 1180 to 2360	IS 8223 : 1999/ IEC 60072 -2: 1990 Dimensions and output series for rotating electrical machines (First Revision)	Identical
IEC 60079-19, Explosive atmospheres – Part 19: Equipment repair, overhaul, and reclamation	IS/IEC 60079-19 : 2019 Explosive atmospheres - Part 19: Equipment repair overhaul and reclamation (<i>Second Revision</i>)	Identical
IEC 60136:1986, Dimensions of brushes and brush-holders for electrical machinery	IS 13466 : 1992/ IEC 60136: 1986 Brushes for electrical machines - Specification	Technically Equivalent
ISO 21940-11, Mechanical vibration – Rotor balancing – Part 11:Procedures and tolerances for rotors with rigid behaviour	IS/ISO 21940-11 : 2016 Mechanical vibration - Rotor balancing: Part 11 procedures and tolerances for rotors with rigid behaviour	Identical

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 60034 (all parts)	Rotating electrical machines
IEC TS 60034-30-2	Rotating electrical machines – Part 30-2: Efficiency classes of variable

	speed AC motors (IE-code)
IEC 60034-19	Rotating electrical machines – Part 19: Specific test methods for DC machines on conventional and rectifier-fed supplies
IEC 60034-29	Rotating electrical machines – Part 29: Equivalent loading and superposition techniques – Indirect testing to determine temperature rise

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.

NOTE - The technical content of their document has not been enclosed as there are identical with the corresponding IEC standards for details, please refer the corresponding IEC 60034-23:2019 or kindly contact:

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