## **BUREAU OF INDIAN STANDARDS DRAFT FOR COMMENTS ONLY**

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## Draft Indian Standard

Adjustable speed electrical power drive systems – Part 9-1: Ecodesign for power drive systems, motor starters, power electronics and their driven applications – General requirements for setting energy efficiency standards for power driven equipment using the extended product approach (EPA) and semi analytic model (SAM)

(ICS 29.130.01; 29.160.30; 29.200)

Power Electronics Sectional	Last date for comments-06/09/2024
Committee, ETD 31	

## NATIONAL FOREWORD

This Draft Indian Standard which is identical with IEC 61800-9-1:2017 'Adjustable speed electrical power drive systems – Part 9-1: Ecodesign for power drive systems, motor starters, power electronics and their driven applications – General requirements for setting energy efficiency standards for power driven equipment using the extended product approach (EPA) and semi analytic model (SAM)' Issued By The International Electrotechnical Commission (IEC) is proposed to be adopted by the Bureau of Indian Standards on the recommendation of the Power Electronics 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:

International Standard	Corresponding Indian Standard	Degree of Equivalence
	IS 1885 (Part 85) : 2003/ IEC	
Electrotechnical Vocabulary (IEV) -	60050-161: 1990 Electrotechnical	
Part 161: Electromagnetic	vocabulary: Part 85 electromagnetic	
compatibility	compatibility	
IEC 60034-2-1:2014, Rotating	IS 15999 (Part 2/Sec 1) : 2023/ IEC	Identical

electrical machines - Part 2-1:	60034-2-1 : 2014 Rotating Electrical	
Standard methods for determining	Machines Part 2-1: Standard	
losses and efficiency from tests	Methods for Determining Losses	
(excluding machines for traction	and Efficiency from Tests	
vehicles)	Excluding Machines for Traction	
	Vehicles	

The technical committee has reviewed the provision of the following International Standard referred in this adopted standard and has decided that it is acceptable for use in conjunction with this standard:

International Standard	Title
IEC TS 60034-2-3	Rotating electrical machines – Part 2-3: Specific test methods for
	determining losses and efficiency of converter-fed AC induction motors
IEC 61800-9-2:2016	Adjustable speed electrical power drive systems – Part 9-2: Ecodesign for power drive systems, motor starters, power electronics and their driven applications – Energy efficiency indicators for power drive systems and motor starters

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 61800-9-1:2017 'or kindly contact:

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