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**Električni rotacijski stroji - 12. del: Zagonska zmogljivost enohitrostnih trifaznih asinhronskih motorjev s kletko (IEC 60034-12:2024)**

Rotating electrical machines - Part 12: Starting performance of single-speed three-phase cage induction motors (IEC 60034-12:2024)

Drehende elektrische Maschinen - Teil 12: Anlaufverhalten von Drehstrommotoren mit Käfigläufer ausgenommen polumschaltbare Motoren (IEC 60034-12:2024)

Machines électriques tournantes - Partie 12: Caractéristiques de démarrage des moteurs triphasés à induction à cage à une seule vitesse (IEC 60034-12:2024)

**Ta slovenski standard je istoveten z: EN IEC 60034-12:2024**

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NORME EUROPÉENNE

EUROPÄISCHE NORM

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## Rotating electrical machines - Part 12: Starting performance of single-speed three-phase cage induction motors (IEC 60034-12:2024)

Machines électriques tournantes - Partie 12:  
Caractéristiques de démarrage des moteurs triphasés à  
induction à cage à une seule vitesse  
(IEC 60034-12:2024)

Drehende elektrische Maschinen - Teil 12: Anlaufverhalten  
von Drehstrommotoren mit Käfigläufer ausgenommen  
polumschaltbare Motoren  
(IEC 60034-12:2024)

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European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

## EN IEC 60034-12:2024 (E)

### European foreword

The text of document 2/2132/CDV, future edition 4 of IEC 60034-12, prepared by TC 2 "Rotating machinery" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60034-12:2024.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2025-11-30 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2027-11-30 document have to be withdrawn

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In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 60034-2-1:2014 NOTE Approved as EN 60034-2-1:2014 (not modified)

## Annex A (normative)

### Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cencenelec.eu](http://www.cencenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60034-1	2022	Rotating electrical machines - Part 1: Rating and performance	-	-
IEC 60034-5	2020	Rotating electrical machines - Part 5: Degrees of protection provided by the integral design of rotating electrical machines (IP code) - Classification	EN IEC 60034-5	2020
IEC 60034-30-1	2014	Rotating electrical machines - Part 30-1: Efficiency classes of line operated AC motors (IE code)	EN 60034-30-1	2014
IEC 60079-7	2015	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"	EN 60079-7	2015
+ A1	2017		+ A1	2018
-	-		+ A11	2024
ISO 80000-4	2019	Quantities and units - Part 4: Mechanics	EN ISO 80000-4	2019

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IEC 60034-12

Edition 4.0 2024-05

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



**Rotating electrical machines –  
Part 12: Starting performance of single-speed three-phase cage induction  
motors**

**Machines électriques tournantes –  
Partie 12: Caractéristiques de démarrage des moteurs triphasés à induction à  
cage à une seule vitesse**

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## ROTATING ELECTRICAL MACHINES –

**Part 12: Starting performance of single-speed  
three-phase cage induction motors**

## FOREWORD

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IEC 60034-12 has been prepared by IEC technical committee 2: Rotating machinery. It is an International Standard.

This fourth edition cancels and replaces the third edition published in 2016. This edition constitutes a technical revision.

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

Clause or subclause	Change
Table 6	Aligned with the requirements for explosion protected motors from TC31 WG27
12	New clause on methods for measuring locked-rotor current and torque
Annex A	New informative annex on the general current and torque characteristics with locked rotor
Annex B	New informative annex on correction of voltage and frequency

The text of this International Standard is based on the following documents:

Draft	Report on voting
2/2132/CDV	2/2150A/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

A list of all parts of the IEC 60034 series, published under the general title *Rotating electrical machines*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under [webstore.iec.ch](http://webstore.iec.ch) in the data related to the specific document. At this date, the document will be

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- withdrawn, or
- revised.

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