

**SLOVENSKI STANDARD****SIST EN 60034-12:1999****01-april-1999**

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**Rotating electrical machines - Part 12: Starting performance of single-speed three-phase cage induction motors for voltages up to and including 690 V, 50 Hz (IEC 60034-12:1980 + A1:1992 (Modified))**

Rotating electrical machines -- Part 12: Starting performance of single-speed three-phase cage induction motors for voltages up to and including 690 V, 50 Hz

Drehende elektrische Maschinen -- Teil 12: Anlaufverhalten von Drehstrommotoren mit Käfigläufer, ausgenommen polumschaltbare Maschinen, für Spannungen bis einschließlich 690 V, 50 Hz

Machines électriques tournantes -- Partie 12: Caractéristiques de démarrage des moteurs triphasés à induction à cage à une seule vitesse pour des tensions d'alimentation inférieures ou égales à 690 V, 50 Hz

**Ta slovenski standard je istoveten z: EN 60034-12:1995**

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**ICS:**

29.160.30      Motorji      Motors

**SIST EN 60034-12:1999**      en

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**EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM**

**EN 60034-12**

August 1995

UDC 621.313.333.2.016.37.027.466.004.12  
ICS 29.160.30

Supersedes HD 53.12 S1:1986 and its amendment

Descriptors: Rotating electrical machines, cage induction motors, starting performances

English version

**Rotating electrical machines**

**Part 12: Starting performance of single-speed three-phase cage induction motors for voltages up to and including 660 V, 50 Hz**  
(IEC 34-12:1980 + A1:1992, modified)

Machines électriques tournantes  
Partie 12: Caractéristiques de démarrage des moteurs triphasés à induction à cage à une seule vitesse pour des tensions d'alimentation inférieures ou égales à 660 V, 50 Hz (CEI 34-12:1980 + A1:1992, modifiée)

Drehende elektrische Maschinen  
Teil 12: Anlaufverhalten von Drehstrommotoren mit Käfigläufer, ausgenommen polumschaltbare Maschinen, für Spannungen bis einschließlich 660 V, 50 Hz (IEC 34-12:1980 + A1:1992, modifiziert)

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CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

**CENELEC**

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

## Foreword

The text of the International Standard IEC 34-12:1980, prepared by IEC TC 2, Rotating machinery, together with common modifications prepared by the Technical Committee CENELEC TC 2, was approved by CENELEC as HD 53.12 S1 on 1985-03-07.

The text of documents 2(CO)563 and 563A, restricted to the motors of design N and NY, 50 Hz, was approved by CENELEC as amendment A1 to HD 53.12 S1 on 1992-09-15.

This Harmonization Document and its amendment A1 were submitted to the formal vote for conversion into a European Standard and were approved by CENELEC as EN 60034-12 on 1995-07-04.

The following date was fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement

(dop) 1996-07-01

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**Endorsement notice**

The text of the International Standard IEC 34-12:1980 and its amendment 1:1992 was approved by CENELEC as a European Standard with agreed common modifications as given below.

**COMMON MODIFICATIONS****Title**

Add ", 50 Hz" at the end.

**2 Object**

In the first paragraph, replace "four designs" by two designs" and add ", 50 Hz" after "660 V".

In notes 1 and 2, replace "four designs" by "two designs".

**3 Designation** **ITeh STANDARD PREVIEW**

3.1 Replace "at frequencies of 50 Hz or 60 Hz" by "at a frequency of 50 Hz".

3.3 Delete. [SIST EN 60034-12:1999](#)

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Delete clauses 8, 9, 10 and 11.

**Table III**

Replace, in the title and in the formula, letter "I" by letter "J".

**Table IV**

Delete.

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**COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE**  
**NORME DE LA CEI**

**INTERNATIONAL ELECTROTECHNICAL COMMISSION**  
**IEC STANDARD**

**Publication 34-12**

Première édition — First edition

1980

**Machines électriques tournantes**

Douzième partie: Caractéristiques de démarrage des moteurs triphasés à induction à cage à une seule vitesse pour des tensions d'alimentation inférieures ou égales à 660 V

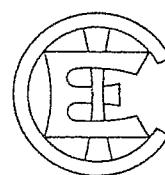
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**Rotating electrical machines**

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**Part 12: Starting performance of single-speed three-phase cage induction motors for voltages up to and including 660 V**

**Mots clés:** moteurs à induction à cage; démarrage; 660 V; propriétés.

**Key words:** cage induction motors; starting; 660 V; properties.



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## ROTATING ELECTRICAL MACHINES

**Part 12: Starting performance of single-speed three-phase cage induction motors for voltages up to and including 660 V**

## FOREWORD

- 1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
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## SIST EN 60034-12:1999

PREFACE  
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This standard has been prepared by IEC Technical Committee No. 2, Rotating Machinery.

It constitutes part of a series of publications dealing with rotating electrical machinery, the other parts being:

- Part 1: Rating and Performance, issued as IEC Publication 34-1.
- Part 2: Methods for Determining Losses and Efficiency of Rotating Electrical Machinery from Tests (Excluding Machines for Traction Vehicles), issued as IEC Publication 34-2.
- Part 3: Ratings and Characteristics of Three-phase, 50-Hz Turbine-type Machines, issued as IEC Publication 34-3.
- Part 4: Methods for Determining Synchronous Machine Quantities from Tests, issued as IEC Publication 34-4.
- Part 5: Degrees of Protection by Enclosures for Rotating Machinery, issued as IEC Publication 34-5.
- Part 6: Methods of Cooling Rotating Machinery, issued as IEC Publication 34-6.
- Part 7: Symbols for Types of Construction and Mounting Arrangements of Rotating Electrical Machinery, issued as IEC Publication 34-7.
- Part 8: Terminal Markings and Direction of Rotation of Rotating Machines, issued as IEC Publication 34-8.
- Part 9: Noise Limits, issued as IEC Publication 34-9.
- Part 10: Conventions for Description of Synchronous Machines, issued as IEC Publication 34-10.
- Part 11: Built-in Thermal Protection. Chapter 1: Rules for Protection of Rotating Electrical Machines, issued as IEC Publication 34-11.
- Part 13: Specification for Mill Auxiliary Motors, issued as IEC Publication 34-13.