



SLOVENSKI STANDARD
SIST EN 60034-3:1999

01-april-1999

Rotating electrical machines - Part 3: Specific requirements for turbine-type synchronous machines (IEC 60034-3:1988)

Rotating electrical machines -- Part 3: Specific requirements for turbine-type synchronous machines

Drehende elektrische Maschinen -- Teil 3: Besondere Anforderungen an Dreiphasen-Turbogeneratoren

Machines électriques tournantes -- Partie 3: Règles spécifiques pour les turbomachines synchrones

Ta slovenski standard je istoveten z: EN 60034-3:1995

ICS:

29.160.20 Generatorji Generators

SIST EN 60034-3:1999 **en**

EUROPEAN STANDARD

EN 60034-3

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 1995

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English version

Rotating electrical machines
Part 3: Specific requirements for turbine-type synchronous machines
(IEC 34-3:1988)

Machines électriques tournantes
Partie 3: Règles spécifiques pour les
turbomachines synchrones
(CEI 34-3:1988)

Drehende elektrische Maschinen
Teil 3: Besondere Anforderungen an
Dreiphasen-Turbogeneratoren
(IEC 34-3:1988)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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 34-3:1988, prepared by SC 2A, Turbine-type generators, of IEC TC 2, Rotating machinery, was approved by CENELEC as HD 53.3 S1 on 1990-12-10.

This Harmonization Document was submitted to the formal vote for conversion into a European Standard and was approved by CENELEC as EN 60034-3 on 1995-09-20.

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) 1996-10-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.
Annex ZA has been added by CENELEC.

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Endorsement notice

The text of the International Standard IEC 34-3:1988 was approved by CENELEC as a European Standard without any modification.

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Editorial corrections to IEC 34-3

14 Overcurrent requirements

In the fourth paragraph, replace the formula by:

$$(I^2 - 1)t = 37,5 \text{ s}$$

16.1 Short-circuit ratio

Replace "clauses 18 and 26" by "clauses 19 and 26".

35.2.3 Peak capability

Amend the first line as follows:

The peak capability (see figure 3) is the range of continuous outputs ...

Annex ZA (normative)**Normative references to international publications
with their corresponding European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 45	1970	Specification for steam turbines	-	-

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**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC
34-3**

Quatrième édition
Fourth edition
1988

Machines électriques tournantes

Troisième partie:
Règles spécifiques pour les turbomachines
synchrones

Rotating electrical machines

Part 3:
Specific requirements for turbine-type
synchronous machines

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International Electrotechnical Commission
Международная Электротехническая Комиссия

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For price, see current catalogue

Publication 60034-3 de la CEI
(Quatrième édition)

**Machines électriques tournantes –
Troisième partie: Règles spécifiques pour les
turbomachines synchrones**

IEC Publication 60034-3
(Fourth edition)

**Rotating electrical machines –
Part 3: Specific requirements for turbine-type
synchronous machines**

CORRIGENDUM 1

Page 18

Article 14:

Au lieu de

$$(I^2 - I)t = 37,5 \text{ s}$$

lire

$$(I^2 - 1)t = 37,5 \text{ s}$$

Page 20

Article 16.1:

Dans la première ligne, au lieu de

...dans les articles 18...

lire

...dans les articles 19...

Page 19

Clause 14:

Instead of

$$(I^2 - I)t = 37,5 \text{ s}$$

read

$$(I^2 - 1)t = 37,5 \text{ s}$$

Page 21

Clause 16.1

In the first line, instead of

...in clauses 18...

read

...in clauses 19...

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ROTATING ELECTRICAL MACHINESPart 3: Specific requirements for turbine-type
synchronous machines

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.
- 3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.
- 4) The IEC has not laid down any procedure concerning marking as an indication of approval and has no responsibility when an item of equipment is declared to comply with one of its recommendations.

PREFACE

This standard has been prepared by Sub-Committee 2A: Turbine-type generators, of IEC Technical Committee No. 2: Rotating machinery.

This fourth edition of IEC Publication 34-3 supersedes the third edition published in 1968.

The text of this standard is based on the following documents:

Six Months' Rule	Reports on voting	Two Months' Procedure	Report on Voting
2A(CO)17	2A(CO)18	2A(CO)20	2A(CO)26
2A(CO)22	2A(CO)31		
2A(CO)23	2A(CO)27		
2A(CO)24	2A(CO)32		
2A(CO)25	2A(CO)28		
2A(CO)30	2A(CO)35		

Full information on the voting for the approval of this standard can be found in the Voting Reports indicated in the above table.

This standard 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 4: Methods for Determining Synchronous Machine Quantities from Tests, issued as IEC Publication 34-4.
- Part 5: Classification of Degrees of Protection provided by Enclosures for Rotating Machines, 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 12: Starting Performance of Single-speed Three-phase Cage Induction Motors for Voltages up to and Including 600 V, issued as IEC Publication 34-12.
- Part 13: Specification for Mill Auxiliary Motors, issued as IEC Publication 34-13.
- Part 14: Mechanical Vibration of Certain Machines with Shaft Heights 56 mm and Higher - Measurement, Evaluation and Limits of the Vibration Severity, issued as IEC Publication 34-14.

The following IEC publications are quoted in this standard:

Publication No. 45 (1970): Specification for Steam Turbines.

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