

**SLOVENSKI STANDARD**  
**SIST EN 60034-16-1:2011**

**01-september-2011**

**Nadomešča:**

**SIST EN 60034-16-1:1999**

**Električni rotacijski stroji - 16-1. del: Vzbujalni sistemi za sinhronne stroje - Definicije (IEC 60034-16-1:2011)**

Rotating electrical machines - Part 16-1: Excitation systems for synchronous machines - Definitions (IEC 60034-16-1:2011)

Drehende elektrische Maschinen - Teil 16-1: Erregersysteme für Synchronmaschinen - Begriffe (IEC 60034-16-1:2011)

Machines électriques tournantes - Partie 16-1: Systèmes d'excitation pour machines synchrones - Définitions (IEC 60034-16-1:2011)

**Ta slovenski standard je istoveten z: EN 60034-16-1:2011**

**ICS:**

29.160.01      Rotacijski stroji na splošno      Rotating machinery in general

**SIST EN 60034-16-1:2011**

**en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 60034-16-1**

July 2011

ICS 29.160

Supersedes EN 60034-16-1:1995

English version

**Rotating electrical machines -  
Part 16-1: Excitation systems for synchronous machines -  
Definitions**  
(IEC 60034-16-1:2011)

Machines électriques tournantes -  
Partie 16-1: Systèmes d'excitation pour  
machines synchrones -  
Définitions  
(CEI 60034-16-1:2011)

Drehende elektrische Maschinen -  
Teil 16-1: Erregersysteme für  
Synchronmaschinen -  
Begriffe  
(IEC 60034-16-1:2011)

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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

The text of document 2/1598/CDV, future edition 2 of IEC 60034-16-1, prepared by IEC TC 2, Rotating machinery, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60034-16-1 on 2011-06-29.

This European Standard supersedes EN 60034-16-1:1995.

The major technical changes with regard to EN 60034-16-1:1995 are as follows:

Clause or subclause	Change
2.1.1	Additional definition for digital excitation system
2.1.2	Additional definition for reversible excitation system
2.3	Edited definition of excitation control
2.4	Additional definition for excitation control system. Added block diagram of excitation control system
2.17	Additional definition for excitation system negative ceiling voltage $U_n$
2.19	Edited definition of excitation system on-load ceiling voltage $U_{pL}$
2.20	Additional definition for excitation system on-load negative ceiling voltage $U_{nL}$
2.22	Additional definition for excitation system voltage response time
2.23	Additional definition for high initial response excitation system
3.1	Edited definition of rotating exciter
3.1.2	Edited definition of AC exciter
3.2.3	Additional definition for auxiliary winding source static exciter
3.3	Additional definition for pilot exciter
4.1 to 4.7	Edited definitions of control functions

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were 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) | 2012-03-29 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn   | (dow) | 2014-06-29 |

**Endorsement notice**

The text of the International Standard IEC 60034-16-1:2011 was approved by CENELEC as a European Standard without any modification.

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IEC 60034-16-1

Edition 2.0 2011-05

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

Rotating electrical machines –  
Part 16-1: Excitation systems for synchronous machines – Definitions

Machines électriques tournantes –  
Partie 16-1: Systèmes d'excitation pour machines synchrones – Définitions

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## ROTATING ELECTRICAL MACHINES –

Part 16-1: Excitation systems for synchronous machines –  
Definitions

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International Standard IEC 60034-16-1 has been prepared by IEC technical committee 2: Rotating machinery.

This second edition cancels and replaces the first edition, issued in 1991, and constitutes a technical revision.

The major technical changes with regard to the previous edition are as follows:

Clause or subclause	Change
2.1.1	Additional definition for digital excitation system
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