



**SLOVENSKI STANDARD**  
**SIST EN 61000-6-5:2016**  
**01-januar-2016**

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**Elektromagnetna združljivost (EMC) - 6-5. del: Osnovni standardi - Odpornost opreme, ki se uporablja v okoljih elektrarn in postaj**

Electromagnetic compatibility (EMC) - Part 6-5: Generic standards - Immunity for equipment used in power station and substation environments

**iTeh STANDARD PREVIEW**

Compatibilité électromagnétique (CEM) - Partie 6-5: Normes génériques - Immunité pour les environnements de centrales électriques et de postes

SIST EN 61000-6-5:2016

Ta slovenski standard je istoveten z: **EN 61000-6-5:2015**

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**ICS:**

27.100	Elektrarne na splošno	Power stations in general
33.100.20	Imunost	Immunity

**SIST EN 61000-6-5:2016**

**en**

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EUROPEAN STANDARD

**EN 61000-6-5**

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2015

ICS 33.100.20

English Version

Electromagnetic compatibility (EMC) -  
Part 6-5: Generic standards - Immunity for equipment used in  
power station and substation environment  
(IEC 61000-6-5:2015)

Compatibilité électromagnétique (CEM) -  
Partie 6-5: Normes génériques - Immunité pour les  
équipements utilisés dans les environnements de centrales  
électriques et de postes  
(IEC 61000-6-5:2015)

Elektromagnetische Verträglichkeit (EMV) -  
Teil 6-5: Fachgrundnormen - Störfestigkeit von  
Betriebsmitteln, Geräten und Einrichtungen, die im Bereich  
von Kraftwerken und Schaltstationen verwendet werden  
(IEC 61000-6-5:2015)

This European Standard was approved by CENELEC on 2015-09-25. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

**EN 61000-6-5:2015****European foreword**

The text of document 77/484/FDIS, future edition 1 of IEC 61000-6-5, prepared by IEC/TC 77 "Electromagnetic compatibility" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61000-6-5:2015.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2016-06-25
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-09-25

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

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see Informative Annex ZZ, which is an integral part of this document.

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**Endorsement notice**

The text of the International Standard IEC 61000-6-5:2015 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61000-2	NOTE	Harmonized in EN 61000-2 series.
IEC 61000-6-4	NOTE	Harmonized as EN 61000-6-4.
IEC 60255-1:2009	NOTE	Harmonized as EN 60255-1:2010 (not modified).
IEC 60255-26:2013	NOTE	Harmonized as EN 60255-26:2013 (not modified).
IEC 61439-1:2011	NOTE	Harmonized as EN 61439-1:2011 (not modified).
IEC 62271-1:2007	NOTE	Harmonized as EN 62271-1:2008 (not modified).
IEC 60870-2-1:1995	NOTE	Harmonized as EN 60870-2-1:1996 (not modified).
IEC 61000-6-2:2005	NOTE	Harmonized as EN 61000-6-2:2005 (not modified).
IEC 61326-1:2012	NOTE	Harmonized as EN 61326-1:2013 (not modified).
IEC 61812-1:2011	NOTE	Harmonized as EN 61812-1:2011 (not modified).

IEC 61000-4-1	NOTE	Harmonized as EN 61000-4-1.
IEC 61000-4-12:2006	NOTE	Harmonized as EN 61000-4-12:2006 (not modified).
IEC 61000-4-19:2014	NOTE	Harmonized as EN 61000-4-19:2014 (not modified).

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## Annex ZA

(normative)

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

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When 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.cenelec.eu](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61000-4-2	-	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	2009
IEC 61000-4-3	-	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	EN 61000-4-3 + A1 + A2	2006 2008 2010
IEC 61000-4-4	-	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	2012
IEC 61000-4-5	-	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	2014
IEC 61000-4-6	-	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	EN 61000-4-6	2014
IEC 61000-4-8	-	Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test	EN 61000-4-8	2010
IEC 61000-4-11	-	Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests	EN 61000-4-11	2004

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61000-4-16	-	Electromagnetic compatibility (EMC) - Part 4-16: Testing and measurement techniques - Test for immunity to conducted, common mode disturbances in the frequency range 0 Hz to 150 kHz	EN 61000-4-16 + A1 + A2	1998 2004 2011
IEC 61000-4-17	-	Electromagnetic compatibility (EMC) - Part 4-17: Testing and measurement techniques - Ripple on d.c. input power port immunity test	EN 61000-4-17 + A1 + A2	1999 2004 2009
IEC 61000-4-18	-	Electromagnetic compatibility (EMC) - Part 4-18: Testing and measurement techniques - Damped oscillatory wave immunity test	EN 61000-4-18 + corrigendum Sep. + A1	2007 2007 2010
IEC 61000-4-29	-	Electromagnetic compatibility (EMC) - Part 4-29: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations on d.c. input power port immunity tests	EN 61000-4-29	2000
IEC 61000-4-34	-	Electromagnetic compatibility (EMC) - Part 4-34: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests for equipment with input current more than 16 A per phase	EN 61000-4-34 + A1	2007 2009
IEC 61000-6-1	-	Electromagnetic compatibility (EMC) - Part 6-1: Generic standards - Immunity for residential, commercial and light-industrial environments	EN 61000-6-1	2007

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**Annex ZZ**  
(informative)

**Coverage of Essential Requirements of EU Directives**

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and within its scope the standard covers essential requirements as given in Annex I Article 1(b) of the EU Directive 2004/108/EC.

Compliance with this standard provides one means of conformity with the specified essential requirements of the Directives concerned.

**WARNING:** Other requirements and other EU Directives may be applicable to the products falling within the scope of this standard.

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IEC 61000-6-5

Edition 1.0 2015-08

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



**Electromagnetic compatibility (EMC) –**  
**Part 6-5: Generic standards – Immunity for equipment used in power station and**  
**substation environment**

**Compatibilité électromagnétique (CEM) –**  
**Partie 6-5: Normes génériques – Immunité pour les équipements utilisés dans**  
**les environnements de centrales électriques et de postes**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTROMAGNETIC COMPATIBILITY (EMC) –****Part 6-5: Generic standards – Immunity for equipment used  
in power station and substation environment**

## FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as “IEC Publication(s)”). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61000-6-5 has been prepared by committee 77: Electromagnetic compatibility (EMC).

This first edition cancels and replaces the first edition of IEC TS 61000-6-5 published in 2001. This edition constitutes a technical revision.

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

- a) the scope is extended in order to cover also power generating systems in industrial facilities;
- b) the locations under consideration, i.e. power stations and substations are described in more detail;
- c) performance criteria and the EUT functions they apply to are reviewed;

- d) immunity requirements are reviewed and more specifically related to the relevant locations;
- e) informative annexes for guidance and on protected zones are added.

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

FDIS	Report on voting
77/484/FDIS	77/500/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 61000 series, published under the general title *Electromagnetic compatibility (EMC)*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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