

STN	Veterné elektrárne Časť 40: Elektromagnetická kompatibilita (EMC) Požiadavky a skúšobné metódy	STN EN IEC 61400-40 33 3160
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Wind energy generation systems - Part 40: Electromagnetic compatibility (EMC) - Requirements and test methods

Táto norma obsahuje anglickú verziu európskej normy.

This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 06/26

Obsahuje: EN IEC 61400-40:2026, IEC 61400-40:2026

142647

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2026

Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii v znení neskorších predpisov.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN IEC 61400-40

April 2026

ICS 27.180

Supersedes EN 61400-4:2013

English Version

**Wind energy generation systems - Part 40: Electromagnetic
compatibility (EMC) - Requirements and test methods
(IEC 61400-40:2026)**

Systèmes de génération d'énergie éolienne - Partie 40:
Compatibilité électromagnétique (CEM) - Exigences et
méthodes d'essai
(IEC 61400-40:2026)

Windenergieanlagen - Teil 40: Elektromagnetische
Verträglichkeit (EMV) - Anforderungen und Prüfverfahren
(IEC 61400-40:2026)

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EN IEC 61400-40:2026 (E)**European foreword**

The text of document 88/1131/FDIS, future edition 1 of IEC 61400-40, prepared by TC 88 "Wind energy generation systems" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61400-40:2026.

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) 2027-04-30
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IEC 61400-21-1 NOTE Approved as EN IEC 61400-21-1

Annex ZA (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.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC/TR 61000-2-5	-	Electromagnetic compatibility (EMC) - Part 2-5: Environment - Description and classification of electromagnetic environments	-	-
IEC 61000-4-2	-	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN IEC 61000-4-2	-
IEC 61000-4-3	-	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	EN IEC 61000-4-3	-
IEC 61000-4-4	-	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	-
IEC 61000-4-5	-	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	-
IEC 61000-4-6	-	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	EN IEC 61000-4-6	-
IEC 61000-4-8	-	Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test	EN 61000-4-8	-
IEC 61000-4-11	-	Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests for equipment with input current up to 16 A per phase	EN IEC 61000-4-11	-

EN IEC 61400-40:2026 (E)

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	-
IEC 61000-6-2	-	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity standard for industrial environments	EN IEC 61000-6-2	-
IEC 61400-1	-	Wind energy generation systems - Part 1: Design requirements	EN IEC 61400-1	-
IEC 61400-2	-	Wind turbines - Part 2: Small wind turbines	EN 61400-2	-
CISPR 11	2024	Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement	EN IEC 55011	2025
CISPR 16-1-1	2019	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-1: Radio disturbance and immunity measuring apparatus - Measuring apparatus	EN IEC 55016-1-1	2019
CISPR 16-1-4	-	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-4: Radio disturbance and immunity measuring apparatus - Antennas and test sites for radiated disturbance measurements	EN IEC 55016-1-4	-
CISPR 16-1-6	-	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-6: Radio disturbance and immunity measuring apparatus - EMC antenna calibration	EN 55016-1-6	-
CISPR 16-2-3	2016	Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements	EN 55016-2-3	2017
+ A1	2019		+ A1	2019
+ A2	2023		+ A2	2023
CISPR 16-4-2	-	Specification for radio disturbance and immunity measuring apparatus and methods - Part 4-2: Uncertainties, statistics and limit modelling - Measurement instrumentation uncertainty	EN 55016-4-2	-



IEC 61400-40

Edition 1.0 2026-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Wind energy generation systems -
Part 40: Electromagnetic compatibility (EMC) - Requirements and test methods**

**Systèmes de génération d'énergie éolienne -
Partie 40: Compatibilité électromagnétique (CEM) - Exigences et méthodes
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**Wind energy generation systems -
Part 40: Electromagnetic compatibility (EMC) -
Requirements and test methods**

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Draft	Report on voting
88/1131/FDIS	88/1144/RVD

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.

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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. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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1 Scope

This part of IEC 61400 provides the EMC requirements and test methods that apply to the individual wind turbine and all the sub systems which are part of the wind turbine.

The current document applies to measurements on individual wind turbines and not multiple wind turbines.

This document defines the requirements and test methods for the verification of the wind turbine performance against radiated emissions and the immunity of their components against conducted and radiated phenomena.

This document is applicable to onshore and offshore wind turbines.

Safety considerations are not covered by this standard.

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CISPR 16-1-4, *Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-4: Radio disturbance and immunity measuring apparatus - Antennas and test sites for radiated disturbance measurements*

CISPR 16-1-6, *Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-6: Radio disturbance and immunity measuring apparatus - EMC antenna calibration*

CISPR 16-2-3:2016, *Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements*

CISPR 16-2-3:2016/AMD1:2019

CISPR 16-2-3:2016/AMD2:2023

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