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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 d'essai

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CONTENTS

FOREWORD 3
1 Scope 5
2 Normative references 5
3 Terms, definitions, abbreviated terms and units 6
3.1 Terms and definitions 6
3.2 Abbreviated terms and units 6
4 Operating conditions during testing 6
5 Emission requirements 7
5.1 General 7
5.2 Conducted emissions 7
5.3 Radiated emissions 7
5.3.1 General 7
5.3.2 Measurement system 9
5.3.3 Data recording 9
5.3.4 Requirements for the wind turbine 10
5.3.5 Requirements for the measurement site 10
5.3.6 Weather conditions 10
5.3.7 Measurement setup 10
5.3.8 Description of the operating modes 14
5.3.9 Limit values 15
5.3.10 Measurement uncertainty 15
5.4 Flicker 16
6 Immunity requirements 16
6.1 General 16
6.2 Electrostatic discharge 16
6.3 Immunity to radiated electromagnetic fields 16
6.4 Immunity to burst EFT 16
6.5 Surge tests 16
6.6 Conducted immunity 16
6.7 Immunity to power frequency magnetic field 16
6.8 Voltage dips, short interruptions and voltage variations 17
7 Test reports 17
7.1 Test report requirements for emission tests of the wind turbine 17
7.1.1 General 17
7.1.2 Wind turbine 17
7.1.3 Antenna orientation for each measurement point 17
7.1.4 Site description 18
7.1.5 Description of the test setup 18
7.1.6 Test report annex 18
7.2 Test report requirements for immunity tests 18
Annex A (informative) Variations with effect on EMC behaviour of a wind turbine 19
Annex B (normative) Main converter of wind turbines 20
Annex C (normative) Limit values CISPR 11:2024, Table 20 21
Annex D (informative) Deviation from CISPR standards 22

Annex E (informative) Recommendation of a possible procedure to detect buried cables 23
Bibliography 24

Figure 1 – Recommended flow chart of EMI measurement 8
Figure 2 – Example of a test configuration for an EMC measurement on a wind turbine – Reference points relative to the wind turbine hub 12
Figure 3 – Example of a test configuration with a transformer 13
Figure 4 – Example of a test setup of a magnetic field strength measurement 13
Figure 5 – Example of a test setup of an electric field strength measurement 14
Figure 6 – Overview of operating modes of a wind turbine 15

Table 1 – Summary of measurements for each reference point of the antenna 9
Table C.1 – CISPR 11:2024 limits for 30 m measurement distance 21

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

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The text of this International Standard is based on the following documents:

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.

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.

2 Normative references

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.

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*

IEC 61000-4-3, *Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test*

IEC 61000-4-4, *Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test*

IEC 61000-4-5, *Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test*

IEC 61000-4-6, *Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields*

IEC 61000-4-8, *Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test*

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*

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*

IEC 61000-6-2, *Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity standard for industrial environments*