

STN	Veterné elektrárne Časť 12-1: Meranie výkonu veterných elektrární Oprava AC	STN EN IEC 61400-12-1/AC 33 3160
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Wind energy generation systems - Part 12-1: Power performance measurements of electricity producing wind turbines

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. 08/25

Obsahuje: EN IEC 61400-12-1:2022/AC:2025, IEC 61400-12-1:2022/COR1:2025

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Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2025

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

**EN IEC 61400-12-
1:2022/AC:2025-06**

June 2025

ICS 27.180

English Version

Wind energy generation systems - Part 12-1: Power
performance measurements of electricity producing wind
turbines
(IEC 61400-12-1:2022/COR1:2025)

Systèmes de génération d'énergie éolienne - Partie 12-1:
Mesures de performance de puissance des éoliennes de
production d'électricité
(IEC 61400-12-1:2022/COR1:2025)

Windenergieanlagen - Teil 12-1: Messung des
Leistungsverhaltens von Windenergieanlagen
(IEC 61400-12-1:2022/COR1:2025)

This corrigendum becomes effective on 6 June 2025 for incorporation in the English language version of the EN.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Endorsement notice

The text of the corrigendum IEC 61400-12-1:2022/COR1:2025 was approved by CENELEC as EN IEC 61400-12-1:2022/AC:2025-06 without any modification.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION
COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

IEC 61400-12-1
Edition 3.0 2022-09

IEC 61400-12-1
Édition 3.0 2022-09

WIND ENERGY GENERATION SYSTEMS
Part 12-1: Power performance measurements
of electricity producing wind turbines

SYSTÈMES DE GÉNÉRATION D'ÉNERGIE
ÉOLIENNE
Partie 12-1: Mesurages de performance de
puissance des éoliennes de production
d'électricité

CORRIGENDUM 1

Corrections to the French version appear after the English text.

Les corrections à la version française sont données après le texte anglais.

4 Symbols, units and abbreviated terms

Replace the lines

$c_{RH,i}$ sensitivity factor for relative humidity in bin i

T_i average temperature in bin i

ρ_i average air density in bin i

Φ relative humidity (range 0 % to 100 %)

Φ_i average relative humidity (range 0 % to 100 %) in bin i

with

$c_{RH,i}$ sensitivity factor for relative humidity in bin i [W / %RH]

T_i average temperature in bin i [K]

ρ_i average air density in bin i [kg/m³]

Φ relative humidity (range 0 % to 100 % or 0 to 1)

Φ_i average relative humidity (range 0 % to 100 % or 0 to 1) in bin i

Annex D – Evaluation of uncertainty in measurement

In Table D.1, under "Wind speed (cup and sonic anemometer)", add "Lightning finial" in the second column and "B" in the last column.

Annex E – Theoretical basis for determining the uncertainty of measurement using the method of bins

E.5 Category B uncertainties: Power output

E.5.1 General

Replace the fourth paragraph starting with "Further, an uncertainty component due to the dynamic behaviour"

with

"Finally the uncertainty related to the data acquisition of the power signal shall be added.".

E.9 Category B uncertainties: Wind speed – Terrain

E.9.1 General

Replace the sixth paragraph

In this case this uncertainty component related to the terrain has nine sub-components

with

In this case this uncertainty component related to the terrain has ten sub-components.

Add the following new item to the list:

j) uncertainty related to the lightning finial.

E.10.2 Category B uncertainties: Air density – Temperature – Introduction

After Equation (E.17), replace

v_i is the average wind speed in bin i ;

with

v_i is the average wind speed in bin i , site-calibrated and normalized for air density, shear, veer, and/or turbulence, as the case may be;

Add, after the definition of terms for Equation (E.17), the following new note:

NOTE 1 Units are defined in Clause 4.

After Equation (E.18), replace

P_i is the sensitivity factor for wind speed in bin i ;

with

P_i is the normalized and averaged power output in bin i ;

Add, after the definition of terms for Equation (E.18), the following new note:

NOTE 2 Units are defined in Clause 4.

E.10.7 Category B uncertainties: Air density – Pressure – Introduction

After Equation (E.19), replace

v_i is the average wind speed in bin i ;

with

v_i is the average wind speed in bin i , site-calibrated and normalized for air density, shear, veer, and/or turbulence, as the case may be;

Add, after the definition of terms for Equation (E.19), the following new note:

NOTE 1 Units are defined in Clause 4.

Add, after the definition of terms for Equation (E.20), the following new note:

NOTE 2 Units are defined in Clause 4.

E.10.11 Category B uncertainties: Air density – Relative humidity – Introduction

After Equation (E.21), replace

v_i is the average wind speed in bin i ;

with

v_i is the average wind speed in bin i , site-calibrated and normalized for air density, shear, veer, and/or turbulence, as the case may be;

Add, after the definition of terms for Equation (E.21), the following new note:

NOTE 1 Units are defined in Clause 4.

Add, after the definition of terms for Equation (E.22), the following new note:

NOTE 2 Units are defined in Clause 4.

E.13.2 Combining Category B uncertainties in electric power ($u_{P,i}$)

In first paragraph, replace

"....the current and voltage transformers, the dynamic behaviour and the data acquisition system:"

with

"....the current and voltage transformers, and the data acquisition system:".

Annex R – Uncertainty considerations for tests on multiple turbines

In Table R.1, delete the fourth row for "Dynamic power measurement".