

STN P	Veterné turbíny Časť 14: Deklarovanie hodnôt zdanlivej hladiny akustického výkonu a tonality	STN P CLC/TS 61400-14 33 3160
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Wind turbines - Part 14: Declaration of apparent sound power level and tonality values

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. 12/17

Obsahuje: CLC/TS 61400-14:2017, IEC/TS 61400-14:2005

125806

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2018
Podľa zákona č. 264/1999 Z. z. o technických požiadavkách na výrobky a o posudzovaní zhody a o zmene a doplnení niektorých zákonov v znení neskorších predpisov sa slovenská technická norma a časti slovenskej technickej normy môžu rozmnožovať alebo rozširovať len so súhlasom slovenského národného normalizačného orgánu.

ICS 27.180

English Version

Wind turbines -
Part 14: Declaration of apparent sound power level
and tonality values
(IEC/TS 61400-14:2005)

Éoliennes -
Partie 14: Déclaration des valeurs du niveau
de puissance acoustique apparent et de la tonalité
(IEC/TS 61400-14:2005)

Windenergieanlagen -
Teil 14: Angabe von immissionsrelevanten
Schalleistungspegel- und Tonhaltigkeitswerten
(IEC/TS 61400-14:2005)

This Technical Specification was approved by CENELEC on 2017-07-17.

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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

European foreword

This document (CLC/TS 61400-14:2017) consists of the text of IEC/TS 61400-14:2005 prepared by IEC/TC 88 "Wind energy generation systems".

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Endorsement notice

The text of the International Standard IEC/TS 61400-14:2005 was approved by CENELEC as a Technical Specification without any modification.

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 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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61400-11	2002	Wind turbine generator systems - Part 11: Acoustic noise measurement techniques	EN 61400-11	2003 ¹⁾
ISO 4871	1996	Acoustics - Declaration and verification of noise emission values of machinery and equipment	EN ISO 4871	2009
ISO 7574	series	Acoustics - Statistical methods for determining and verifying stated noise emission values of machinery and equipment	EN 27574	series

1) EN 61400-11:2003 is superseded by EN 61400-11:2013, which is based on IEC 61400-11:2012.

TECHNICAL SPECIFICATION IEC TS 61400-14

First edition
2005-03

Wind turbines –

**Part 14:
Declaration of apparent sound
power level and tonality values**



Reference number
IEC/TS 61400-14:2005(E)

Publication numbering

As from 1 January 1997 all IEC publications are issued with a designation in the 60000 series. For example, IEC 34-1 is now referred to as IEC 60034-1.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

WIND TURBINES –**Part 14: Declaration of apparent sound power level
and tonality values**

FOREWORD

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Technical specifications are subject to review within three years of publication to decide whether they can be transformed into International Standards.

IEC 61400-14, which is a technical specification, has been prepared by IEC technical committee 88: Wind turbines.

The text of this technical specification is based on the following documents:

Enquiry draft	Report on voting
88/193/DTS	88/222/RVC

Full information on the voting for the approval of this technical specification 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.

IEC 61400 consists of the following parts, under the general title *Wind turbines*:

- Part 1: Design requirements
- Part 2: Safety of small wind turbines
- Part 11: Acoustic noise measurement techniques
- Part 12: Wind turbine power performance testing
- Part 13: Measurement of mechanical loads
- Part 14: Declaration of apparent sound power level and tonality values
- Part 21: Measurement and assessment of power quality characteristics of grid connected wind turbines
- Part 23: Full-scale structural testing of rotor blades
- Part 24: Lightning protection

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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

- transformed into an International standard,
- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

INTRODUCTION

Information on the apparent sound power level and tonality of wind turbines is needed by planners, manufacturers and authorities. At present, wind turbine noise specifications tend to be based on measurement results from a single turbine of a particular make and model, and these are then taken to be representative of these turbines as a whole. Clearly, this is unlikely to be the case, as there will be individual variation between different turbines. The intention of this technical specification is to determine declared noise emission values from a sample of turbines of the same type. The declaration will increase the reliability of wind farm planning and facilitate the comparison of apparent sound power levels and tonality values of different types of wind turbines.

WIND TURBINES –

Part 14: Declaration of apparent sound power level and tonality values

1 Scope

This part of IEC 61400 gives guidelines for declaring the apparent sound power level and tonality of a batch of wind turbines. The measurement procedures for apparent sound power level and tonality are defined in IEC 61400-11.

2 Normative references

The following referenced documents are indispensable for the application 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 61400-11:2002, *Wind turbines – Part 11: Acoustic noise measurement techniques*

ISO 4871:1996, *Acoustics – Declaration and verification of noise emission values of machinery and equipment*

ISO 7574 (all parts), *Acoustics – Statistical methods for determining and verifying stated noise emission values of machinery and equipment*

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