

SOOJUSVAHETID. VEEPÕHISED RUUMI
PUHURKONVEKTORID. HELIVÕIMSUSE TASEME
MÄÄRAMINE

Heat exchangers - Hydronic room fan coils units -
Determination of the sound power level

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 16583:2022 sisaldab Euroopa standardi EN 16583:2022 ingliskeelset teksti.	This Estonian standard EVS-EN 16583:2022 consists of the English text of the European standard EN 16583:2022.
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EUROPEAN STANDARD

EN 16583

NORME EUROPÉENNE

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English Version

Heat exchangers - Hydronic room fan coils units - Determination of the sound power level

Échangeurs thermiques - Ventilconvecteurs à eau -
Détermination du niveau de puissance acoustique

Wärmeübertrager - Wasser-Luft-
Ventilatorconvektoren - Bestimmung des
Schalleistungspegels

This European Standard was approved by CEN on 22 May 2022.

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

Contents	Page
European foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms, definitions and symbols	5
3.1 Terms and definitions	5
3.2 Symbols	5
4 Measuring instruments	6
5 Operation of the unit	7
6 Installation	8
6.1 General	8
6.2 Non ducted units	8
6.2.1 General	8
6.2.2 Floor mounted unit	8
6.2.3 Wall mounted unit	9
6.2.4 High wall mounted unit	10
6.2.5 Cassette and under ceiling mounted units	11
6.2.6 Under floor mounted	11
6.3 Ducted units	11
6.3.1 General	11
6.3.2 Discharge or inlet sides	12
6.3.3 Sound level radiated by the casing	18
7 Acoustic measurement	19
7.1 Frequency range	19
7.2 Acoustic standard	19
7.3 Diffuse field	20
7.4 Free field	20
7.5 In-duct measurement	20
8 Uncertainty	21
9 Test report	21
9.1 General information	21
9.2 Additional information	21
9.3 Test results	21
10 Data to be recorded	22
11 Manufacturer's data	22
Annex ZA (informative) Relationship between this European Standard and the ecodesign requirements of Commission Regulation (EU) No 2016/2281 [OJEU L346/1-50, 20.12.2016] aimed to be covered	23
Bibliography	24

European foreword

This document (EN 16583:2022) has been prepared by Technical Committee CEN/TC 113 “Heat pumps and air conditioning units”, the secretariat of which is held by UNE.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2023, and conflicting national standards shall be withdrawn at the latest by January 2023.

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

This document supersedes EN 16583:2015.

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

For relationship with EU Directive(s) / Regulation(s), see informative Annex ZA, which is an integral part of this document.

This document was prepared in the framework of the Commission Regulation (EU) 2016/2281 of 30 November 2016 implementing Directive 2009/125/EC of the European Parliament and of the Council establishing a framework for the setting of ecodesign requirements for energy-related products, with regard to ecodesign requirements for air heating products, cooling products, high temperature process chillers and fan coil units.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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1 Scope

This document is applicable to hydronic fan coil units (FCU) as factory-made single assemblies which provide the functions of cooling and/or heating but do not include the source of cooling or heating.

This document is applicable to both air free delivery and air ducted units with a maximum external static pressure due to duct resistance of 300 Pa max.

This document specifies methods for the determination of the acoustical performance of fan coil units, defining standard working condition and installation.

It is not the purpose of this document to specify the tests used for production or field testing.

NOTE For the purpose of remaining clauses, the term “unit” is used to mean “fan coil unit”.

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.

EN ISO 3741:2010, *Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Precision methods for reverberation test rooms (ISO 3741:2010)*

EN ISO 3743-1:2010, *Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Engineering methods for small movable sources in reverberant fields - Part 1: Comparison method for a hard-walled test room (ISO 3743-1:2010)*

EN ISO 3743-2:2019, *Acoustics - Determination of sound power levels of noise sources using sound pressure - Engineering methods for small, movable sources in reverberant fields - Part 2: Methods for special reverberation test rooms (ISO 3743-2:2018)*

EN ISO 3744:2010, *Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Engineering methods for an essentially free field over a reflecting plane (ISO 3744:2010)*

EN ISO 3745:2012¹⁾, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Precision methods for anechoic rooms and hemi-anechoic rooms (ISO 3745:2012)*

EN ISO 9614-1:2009, *Acoustics - Determination of sound power levels of noise sources using sound intensity - Part 1: Measurement at discrete points (ISO 9614-1:1993)*

EN ISO 9614-2:1996, *Acoustics - Determination of sound power levels of noise sources using sound intensity - Part 2: Measurement by scanning (ISO 9614-2:1996)*

EN ISO 9614-3:2009, *Acoustics - Determination of sound power levels of noise sources using sound intensity - Part 3: Precision method for measurement by scanning (ISO 9614-3:2002)*

EN ISO 80000-8:2020, *Quantities and units - Part 8: Acoustics (ISO 80000-8:2020)*

¹⁾ Document impacted by A1:2017.