ICS 17.140.20 SLOVENSKÁ TECHNICKÁ NORMA December 2020

STN	**Akustika** **Určenie hladín akustického výkonu hluku koncových prvkov, koncových jednotiek a regulačných a uzatváracích súčastí vzduchotechnických zariadení na základe meraní v dozvukovej miestnosti (ISO 5135: 2020)**	**STN** **EN ISO 5135** 01 1669

Acoustics - Determination of sound power levels of noise from air-terminal devices, air-terminal units, dampers and valves by measurement in a reverberation test room (ISO 5135:2020)

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. 11/20

Obsahuje: EN ISO 5135:2020, ISO 5135:2020

Oznámením tejto normy sa ruší
STN EN ISO 5135 (01 1669) z augusta 2001

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 5135

September 2020

ICS 17.140.20

Supersedes EN ISO 5135:1998

English Version

Acoustics - Determination of sound power levels of noise from air-terminal devices, air-terminal units, dampers and valves by measurement in a reverberation test room (ISO 5135:2020)

Acoustique - Détermination des niveaux de puissance acoustique du bruit émis par les bouches d'air, les unités terminales, les registres et clapets au moyen de mesurages en salle réverbérante (ISO 5135:2020)

Akustik - Bestimmung des Schallleistungspegels von Geräuschen von Luftdurchlässen, Volumendurchflussreglern, Drossel- und Absperrelementen durch Messungen im Hallraum (ISO 5135:2020)

This European Standard was approved by CEN on 7 August 2020.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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

Ref. No. EN ISO 5135:2020 E

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European foreword

This document (EN ISO 5135:2020) has been prepared by Technical Committee ISO/TC 43 "Acoustics" in collaboration with Technical Committee CEN/TC 211 “Acoustics” the secretariat of which is held by DIN.

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 March 2021, and conflicting national standards shall be withdrawn at the latest by March 2021.

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 ISO 5135:1998.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 5135:2020 has been approved by CEN as EN ISO 5135:2020 without any modification.

INTERNATIONAL STANDARD

ISO 5135

Third edition
2020-08

Acoustics — Determination of sound power levels of noise from air-terminal devices, air-terminal units, dampers and valves by measurement in a reverberation test room

Acoustique — Détermination des niveaux de puissance acoustique du bruit émis par les bouches d'air, les unités terminales, les registres et clapets au moyen de mesurages en salle réverbérante

Reference number
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by ISO/TC 43, *Acoustics*, Subcommittee SC 1, *Noise*.

This third edition cancels and replaces the second edition (ISO 5135:1997), which has been technically revised. The main changes compared to the previous edition are as follows:

— replacement of rescinded and unavailable reference standards (ISO 5219:1984[1)] and ISO 5220:1981[2)]) with currently available and up to date standards (ANSI/ASHRAE 70 and ANSI/ASHRAE 130 or EN 12238, EN 12239 and EN 1751);

— a reference to a companion document (ISO 7235) was added to deal with transmission elements and physical elements used in the test setup;

— a clause on uncertainty was added.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

1) Withdrawn.

2) Withdrawn.

Introduction

This document defines requirements for acoustic testing of air-terminal devices, air-terminal units, dampers and valves used in air diffusion and air distribution systems in reverberation test rooms. It is based on the use of ISO 3741, which describes the acoustic test facilities, instrumentation and procedures to be used for precision grade determination of sound power levels in octave or one-third-octave bands of a noise source.

INTERNATIONAL STANDARD **ISO 5135:2020(E)**

Acoustics — Determination of sound power levels of noise from air-terminal devices, air-terminal units, dampers and valves by measurement in a reverberation test room

1 Scope

This document establishes general rules for the acoustic testing of air-terminal devices, air-terminal units, dampers and valves used in air diffusion and air distribution systems in order to determine sound power levels as defined in ISO 3741.

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.

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 5167 (all parts), *Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full*

ISO 7235, *Acoustics — Laboratory measurement procedures for ducted silencers and air-terminal units — Insertion loss, flow noise and total pressure loss*

ANSI/ASHRAE 70, *Method of Testing the Performance of Air Outlets and Air Inlets*

ANSI/ASHRAE 130, *Laboratory Methods of Testing Air Terminal Units*

EN 1751, *Ventilation for buildings — Air terminal devices — Aerodynamic testing of damper and valves*

EN 12238, *Ventilation for buildings — Air terminal devices — Aerodynamic testing and rating for mixed flow application*

EN 12239, *Ventilation for buildings — Air terminal devices — Aerodynamic testing and rating for displacement flow applications*

