Heat exchangers - Forced convection air cooled refrigerant condensers and dry coolers - Sound measurement

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 13487:2004 sisaldab Euroopa standardi EN 13487:2003 ingliskeelset teksti.

Käesolev dokument on jõustatud 18.06.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 13487:2004 consists of the English text of the European standard EN 13487:2003.

This document is endorsed on 18.06.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

Käsitlusala:

This standard specifies methods for uniform assessment and the recording of:
- the A-weighted sound power level; - the sound power spectrum; - a calculation method for an overall average sound pressure level at a given distance. Among these data, the sound power level is the only unambiguous characteristic.

Scope:

This standard specifies methods for uniform assessment and the recording of:
- the A-weighted sound power level; - the sound power spectrum; - a calculation method for an overall average sound pressure level at a given distance. Among these data, the sound power level is the only unambiguous characteristic.

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Heat exchangers - Forced convection air cooled refrigerant condensers and dry coolers - Sound measurement

Echangeurs thermiques - Aérocondenseurs à convection forcée et batterie froide - Mesurage du bruit

Wärmeaustauscher - Ventilatorbelüftete Kältemittelverflüssiger und Trockenkühltürme -Schallmessung

This European Standard was approved by CEN on 1 October 2003.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



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

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Foreword

This document EN 13487:2003 has been prepared by Technical Committee CEN/TC 110, "Heat exchangers", the secretariat of which is held by BSI.

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 June 2004, and conflicting national standards shall be withdrawn at the latest by June 2004.

Annexes A, B, C and D are normative. Annex E is informative.

This document contains a bibliography.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard : Austria, Belgium, Czech al, Sic Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

This European Standard is one of a series of European Standards dedicated to heat exchangers.

This standard provides information for assessing and presenting the acoustic characteristics of heat exchangers in operation.

Jes in urchaser. This standard also provides information necessary for specifying and selecting the product which best suits the needs of the purchaser.

1 Scope

This standard specifies methods for uniform assessment and the recording of:

- the A-weighted sound power level;
- the sound power spectrum;
- a calculation method for an overall average sound pressure level at a given distance.

Among these data, the sound power level is the only unambiguous characteristic.

This standard is applicable to:

- forced convection air cooled refrigerant condensers as specified in EN 327;
- air cooled liquid coolers "dry coolers" as specified in EN 1048.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 327, Heat exchangers - Forced convection air cooled refrigerant condensors - Test procedure for establishing performance.

EN 1048, Heat exchangers — Air-cooled liquid coolers "dry coolers" — Test procedure for establishing the performance.

EN ISO 3741, Acoustics - Determination of sound power levels of noise sources using sound pressure - Precision methods for reverberation rooms (ISO 3741:1999).

EN ISO 3744, Acoustics - Determination of sound power levels of noise sources using sound pressure - Engineering method in an essentially free field over a reflecting plane (ISO 3744:1994).

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

EN ISO 12001, Acoustics - Noise emitted by machinery and equipment - Rules for the drafting and presentation of a noise test code (ISO 12001:1996).

EN ISO/IEC 17025, General requirements for the competence of testing and calibration laboratories (ISO/IEC 17025:1999).

EN 61672-1, Electroacoustics - Sound level meters - Part 1: Specifications (IEC 61672-1:2002).

EN 61672-2, Electroacoustics - Sound level meters - Part 2: Pattern evaluation tests (IEC 61672-2:2003).