

**Soojusvahetid. Vedelikke kasutavad
toaventilaatoriga spiraalseadmed.
Talitusandmete kindlaksmääramise
toimingud**

Heat exchangers - Hydronic room fan coil units -
Test procedures for establishing the performance

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1397:1999 sisaldab Euroopa standardi EN 1397:1998 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1397:1999 consists of the English text of the European standard EN 1397:1998.</p> <p>This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: See standard kehtib toaventilaatoriga spiraalseadmete kohta, kus kasutatakse kuuma või jahutatud vett või veesegusid. Spiraalid on ette nähtud õhuvoolule mitte üle 0,7 m³/s ning staatilisele välissurvele kanali takistuse tõttu maksimaalselt 65 Pa.</p>	<p>Scope:</p>
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Võtmesõnad: hindamistestid, kliimaseadmed, konvektiivsoojendi, soojusvahetid, ventilaator-konvektorid, ventilaator-spiraalseadmed

English version

Heat exchangers

Hydronic room fan coil units

Test procedures for establishing the performance

Echangeurs thermiques – Ventilo-
convecteurs à eau – Procédures
d'essai pour la détermination des
performances

Wärmeaustauscher – Wasser-Luft-
Ventilator-konvektoren – Prüfverfahren
zur Leistungsfeststellung

This European Standard was approved by CEN on 1998-11-28.

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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

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

CEN

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

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Contents

	Page
Foreword	2
1 Scope	3
2 Normative references	3
3 Definitions	4
4 Symbols	6
5 Standard capacity	7
6 Manufacturer's data	8
7 Measurements	9
8 Testing methods and equipment	11
9 Test procedures	13
10 Capacity calculations	16
Annex A (informative) Bibliography	17

Foreword

This European Standard has been prepared by Technical Committee CEN/TC 110 "Heat exchangers", the secretariat of which is held by BSI.

This European Standard replaces ENV 1397:1994.

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 1999, and conflicting national standards shall be withdrawn at the latest by June 1999.

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 Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard applies to room fan-coil units using hot or chilled water or water mixtures.

It applies to units designed for an air flow of not more than $0,7 \text{ m}^3/\text{s}$ and an external static pressure due to duct resistance of 65 Pa max.

Air heating may be achieved by means of electrical resistance heaters.

This standard specifies uniform methods of testing under non frosting conditions, conducted on test samples to test and ascertain the following at the specified standard conditions:

- product identification;
- performance on condensation on the casing;
- capacity;
- performance on condensate disposal;
- liquid side pressure drop;
- air volume flow rate;
- sound power level.

This standard does not cover technical safety aspects.

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

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.

EN 45001	General criteria for the operation of testing laboratories
EN 23741	Acoustics - Determination of sound power levels of noise sources - Precision methods for broad-band sources in reverberation room (ISO 3741:1988)
ISO 5801	Industrial fans - Performance testing using standardized airways
ISO 5221	Air distribution and air diffusion - Rules to methods of measuring air flow rate in an air handling duct

3 Definitions

For the purposes of this standard, the following definitions apply:

3.1 room fan-coil unit: A factory-made assembly which provides one or more of the functions of forced circulation of air, heating, cooling, dehumidification and filtering of air, but which does not include the source of cooling or heating. This device is normally designed for free intake of air from a room and delivery of air into the same room, but may be applied with minimal ductwork. This device may be designed for built in application, or with an enclosure for application within the conditioned space.

In the following, the term “fan coil unit” is used.

The principal components are:

- one or more heat exchangers;
- one or more fans with drive mechanism;
- a common casing;
- an air filtering device.