



SLOVENSKI STANDARD
SIST EN 442-2:1997/A2:2004
01-januar-2004

**Ogrevala in konvektorji - 2. del: Preskusne metode in vrednotenje rezultatov -
Dopolnilo A2**

Radiators and convectors - Part 2: Test Methods and rating

Radiatoren und Konvektoren - Teil 2: Prüfverfahren und Leistungsangabe

Radiateurs et convecteurs - Partie 2: Méthodes d'essai et d'évaluation

STANDARD PREVIEW
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Ta slovenski standard je istoveten z: EN 442-2:1996/A2:2003

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ICS:

91.140.10	Sistemi centralnega ogrevanja	Central heating systems
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SIST EN 442-2:1997/A2:2004 **en,fr,de**

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 442-2:1996/A2

August 2003

ICS 91.140.10

English version

Radiators and convectors - Part 2: Test Methods and rating

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Radiatoren und Konvektoren - Teil 2: Prüfverfahren und Leistungsangabe

This amendment A2 modifies the European Standard EN 442-2:1996; it was approved by CEN on 20 June 2003.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant 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 amendment 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.

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

EN 442-2:1996/A2:2003 (E)**Foreword**

This document (EN 442-2:1996/A2:2003) has been prepared by Technical Committee CEN/TC 130 "Space heating appliances without integral heat sources", the secretariat of which is held by UNI.

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 February 2004, and conflicting national standards shall be withdrawn at the latest by February 2004.

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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

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Insert the following sentence in the foreword immediately after the first paragraph :

“This European Standard comes from an output of the project SMT4 – CT97 – 2127 funded by the European Commission DGXII-RDT.”

At the end of this European Standard add the following new Annex J:

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Annex J (normative)

Traceability of the thermal output measurement of radiators and convectors

Foreword

The annex H contains the Φ_M reference values of a primary set of master radiators complying with this European Standard. As specified in 6.2.3, these reference values have been determined in a circuit formed by a group of laboratories¹⁾ having completed a test installation complying with requirements of this standard as detailed in 6.2.4.2.1. Laboratories shall be considered working to the specific requirements of this standard when they demonstrate their conformity to this standard and the traceability of the outputs achieved using their master radiators in comparison with the reference standard output Φ_M of each radiator of the primary master radiator, detailed within annex H.

J.1 Scope

This annex specifies the procedure with which the reference and approved test installations shall both verify and demonstrate their conformity to this standard and the calibration of the system. The procedure specified in this European Standard concerns the initial assessment as well as the maintenance of the traceability of the measurements for reference and approved test installations.

J.2 Thermal output traceability

[SIST EN 442-2:1997/A2:2004](https://standards.iteh.ai/catalog/standards/sist/5ea91a89-c64e-4596-b49f-06da7f84a4f8/sist-en-442-2-1997-a2-2004)

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J.2.1 Reference test installations

All reference test installations shall produce repeatability and reproducibility data in accordance with 6.2.4.2.1. Verification to the primary set of master radiators shall be undertaken within a maximum period of 24 months. All the test data which is obtained shall be made available for inspection by any of the national standards or accreditation bodies.

All reference test installations shall be nominated by their national standards body. These laboratories shall fulfil all the requirements of this European Standard specifically those construction requirements contained in 6.2.2 and the verification of test installation repeatability and reproducibility requirements contained in 6.2.4.2.1. Failure to comply with any of the requirements contained in the standards precludes recognition as a reference test installation.

It is the duty of all reference test installations to maintain and circulate the primary set of master radiators.

J.2.2 Approved test installations

The traceability of thermal output measurements for approved test installations is maintained through the verification of the repeatability and reproducibility tolerances as described in 6.2.4.3.2 and 6.2.4.3.3. using master radiators **or other radiators**.

¹⁾ The laboratories that have determined the reference values of Φ_M stated in annex H are:

BSRIA (UK)	Reference Laboratory	United Kingdom
CETIAT (FR)	Reference Laboratory	France
LHR/FGHLK (D)	Reference Laboratory	Germany
MRT (I)	Reference Laboratory	Italy

Additionally within the project SMT - CT97-2127, LGAI (E) Reference Laboratory Spain confirmed the determined values.

The verification of the repeatability tolerance shall be made within a maximum period of 24 months using radiators from a reference test installation. All reproducibility tests shall be undersigned by the reference laboratory.

All approved test installations which apply for third party accreditation for testing according to this European Standard shall demonstrate traceability of measurements through a reference test installation.

J.3 Handling of the Master radiator sets

All master radiators shall be securely packaged to prevent damage, and shall be stored in a dry location.

In the event of damage to any master this shall be segregated to prevent use.

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