



Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
des produits et services

ILNAS-EN 16430-3:2014

**Fan assisted radiators, convectors and
trench convectors - Part 3: Test
method and rating for cooling capacity**

Radiateurs assistés par ventilateur,
convecteurs et convecteurs de caniveaux
- Partie 3: Méthode d'essais et
d'évaluation de la puissance thermique

Gebläseunterstützte Radiatoren,
Konvektoren und Unterflurkonvektoren -
Teil 3: Prüfverfahren und Bewertung der
Kühlleistung

12/2014



National Foreword

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English Version

Fan assisted radiators, convectors and trench convectors - Part 3: Test method and rating for cooling capacity

Radiateurs assistés par ventilateur, convecteurs et
convecteurs de caniveaux - Partie 3: Méthode d'essais et
d'évaluation de la puissance thermique en mode
rafraîchissement

Gebläseunterstützte Radiatoren, Konvektoren und
Unterflurkonvektoren - Teil 3: Prüfverfahren und Bewertung
der Kühlleistung

This European Standard was approved by CEN on 9 November 2014.

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Foreword

This document (EN 16430-3:2014) 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of an identical text or by endorsement, at the latest by June 2015 and conflicting national standards shall be withdrawn at the latest by June 2015.

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

The European Standard "Fan assisted radiators, convectors and trench convectors" consists of the following parts:

- Part 1: Technical specifications and requirements
- Part 2: Test method and rating for thermal output
- Part 3: Test method and rating for cooling capacity

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard applies to the testing of the dry cooling capacity with no condensation of fan assisted radiators, convectors and trench convectors which are factory assembled or kits, i.e.

- fan assisted radiators and convectors, provided the cooler has a dedicated fan or fans;
- radiators and convectors without dedicated fan(s);
- trench convectors with and without fan(s), provided the cooler and the fan(s) are dedicated.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 442-2, *Radiators and convectors - Part 2: Test methods and rating*

EN 16430-2, *Fan assisted radiators, convectors and trench convectors — Part 2: Test method and rating for thermal output*

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 442-2 and the following apply.

3.1

trench convectors

convectors installed in a trench (in the floor) mostly in front of glass facades, including the covering of the trench

3.2

fan assisted radiators and convectors

radiators and convectors according to EN 442-2 and trench convectors according to 3.1 equipped with fans to increase the convective thermal output/ dry cooling capacity of the radiator, convector or trench convector

3.3

basic units

regularly repeated sections of the radiator/convector equipped with fans

3.4

extension units

parts of the fan assisted radiator/convector in addition to the basic units which are not equipped with a fan

3.5

dry cooling capacity

thermal performance of the appliance in dry cooling operation.

3.6

standard dry cooling capacity

dry cooling capacity defined at an under temperature of 10 K