

Irish Standard I.S. EN 14511-4:2018

Air conditioners, liquid chilling packages and heat pumps for space heating and cooling and process chillers, with electrically driven compressors - Part 4: Requirements

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#### I.S. EN 14511-4:2018

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#### National Foreword

I.S. EN 14511-4:2018 is the adopted Irish version of the European Document EN 14511-4:2018, Air conditioners, liquid chilling packages and heat pumps for space heating and cooling and process chillers, with electrically driven compressors - Part 4: Requirements

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# **EUROPEAN STANDARD**

EN 14511-4

# NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

March 2018

ICS 27.080; 91.140.30

Supersedes EN 14511-4:2013

## **English Version**

# Air conditioners, liquid chilling packages and heat pumps for space heating and cooling and process chillers, with electrically driven compressors - Part 4: Requirements

Climatiseurs, groupes refroidisseurs de liquide et pompes à chaleur pour le chauffage et le refroidissement des locaux et refroidisseurs industriels avec compresseur entraîné par moteur électrique -Partie 4: Exigences Luftkonditionierer, Flüssigkeitskühlsätze und Wärmepumpen für die Raumbeheizung und -kühlung und Prozess-Kühler mit elektrisch angetriebenen Verdichtern - Teil 4: Anforderungen

This European Standard was approved by CEN on 31 December 2017.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

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

# EN 14511-4:2018 (E)

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# **European foreword**

This document (EN 14511-4:2018) has been prepared by Technical Committee CEN/TC 113 "Heat pumps and air conditioning units", the secretariat of which is held by UNE.

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 September 2018, 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 not be held responsible for identifying any or all such patent rights.

This document supersedes EN 14511-4:2013.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

The main change with respect to the previous edition is the revision and simplification of the tests.

EN 14511, *Air conditioners, liquid chilling packages and heat pumps for space heating and cooling and process chillers, with electrically driven compressors* currently comprises the following parts:

- Part 1: Terms and definitions
- Part 2: Test conditions
- Part 3: Test methods
- Part 4: Requirements

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## EN 14511-4:2018 (E)

# 1 Scope

- **1.1** The scope of EN 14511-1 is applicable, with the exception of process chillers.
- **1.2** This European Standard specifies minimum operating requirements which ensure that air conditioners, heat pumps and liquid chilling packages using either air, water or brine as heat transfer media, with electrical driven compressors are fit for the use designated by the manufacturer when used for space heating and/or cooling.

### 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.

EN 12102, Air conditioners, liquid chilling packages, heat pumps and dehumidifiers with electrically driven compressors for space heating and cooling — Measurement of airborne noise — Determination of the sound power level

EN 14511-1:2018, Air conditioners, liquid chilling packages and heat pumps for space heating and cooling and process chillers, with electrically driven compressors — Part 1: Terms and definitions

EN 14511-2:2018, Air conditioners, liquid chilling packages and heat pumps with electrically driven compressors for space heating and cooling and process chillers, with electrically driven compressors — Part 2: Test conditions

EN 14511-3:2018, Air conditioners, liquid chilling packages and heat pumps for space heating and cooling and process chillers, with electrically driven compressors — Part 3: Test methods

EN 60204-1, Safety of machinery — Electrical equipment of machines — Part 1: General requirements (IEC 60204-1)

EN 60335-2-40, Household and similar electrical appliances — Safety — Part 2-40: Particular requirements for electrical heat pumps, air-conditioners and dehumidifiers (IEC 60335-2-40)

EN 61000-3-11, Electromagnetic compatibility (EMC) — Part 3-11: Limits — Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems — Equipment with rated current  $\leftarrow$  75 A and subject to conditional connection (IEC 61000-3-11)

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 14511-1:2018 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>
- ISO Online browsing platform: available at <a href="http://www.iso.org/obp">http://www.iso.org/obp</a>

# 4 Operating requirements

### 4.1 General

Except where otherwise stated, tests shall be conducted as described in EN 14511-2 and EN 14511-3.



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