# Elektrilise ajamiga kompressoriga kliimaseadmed,vedelikjahutusega üksused ja soojuspumbad ruumi soojendamiseks ja jahutamiseks. Osa 1: Terminid ja määratlused

Air conditioners, liquid chilling packages and heat pumps with electrically driven compressors for space heating and cooling - Part 1: Terms and definitions



## **EESTI STANDARDI EESSÕNA**

## **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 14511-1:2007 sisaldab Euroopa standardi EN 14511-1:2007 ingliskeelset teksti.

Käesolev dokument on jõustatud 18.12.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 14511-1:2007 consists of the English text of the European standard EN 14511-1:2007.

This document is endorsed on 18.12.2007 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 part of EN 14511 specifies the terms and definitions for the rating and performance of air and water cooled air conditioners, liquid chilling packages, air-to-air, water-to-air, airto-water and water-to-water heat pumps with electrically driven compressors when used for space heating and/or cooling. This European Standard does not specifically apply to heat pumps for sanitary hot water, although certain definitions can be applied to these. This European Standard applies to factory-made units that can be ducted. This standard applies to factory-made liquid chilling packages with integral condensers or for use with remote condensers. This standard applies to factory-made units of either fixed capacity or variable capacity by any means. Packaged units, single split and multisplit systems are covered by this standard. Single duct and double duct units are covered by the standard. In the case of units consisting of several parts, this standard applies only to those designed and supplied as a complete package, except for liquid chilling packages with remote condenser. This standard is primarily intended for water and brine chilling packages but can be used for other liquid subject to agreement. This standard applies to air-to-air air conditioners which evaporate the condensate on the condenser side. The units having their condenser cooled by air and by the evaporation of external additional water are not covered by this standard.

#### Scope:

This part of EN 14511 specifies the terms and definitions for the rating and performance of air and water cooled air conditioners, liquid chilling packages, air-to-air, water-to-air, airto-water and water-to-water heat pumps with electrically driven compressors when used for space heating and/or cooling. This European Standard does not specifically apply to heat pumps for sanitary hot water, although certain definitions can be applied to these. This European Standard applies to factory-made units that can be ducted. This standard applies to factory-made liquid chilling packages with integral condensers or for use with remote condensers. This standard applies to factory-made units of either fixed capacity or variable capacity by any means. Packaged units, single split and multisplit systems are covered by this standard. Single duct and double duct units are covered by the standard. In the case of units consisting of several parts, this standard applies only to those designed and supplied as a complete package, except for liquid chilling packages with remote condenser. This standard is primarily intended for water and brine chilling packages but can be used for other liquid subject to agreement. This standard applies to air-to-air air conditioners which evaporate the condensate on the condenser side. The units having their condenser cooled by air and by the evaporation of external additional water are not covered by this standard.

ICS 01.040.23, 23.120

Võtmesõnad:

## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 14511-1

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ICS 23.120: 01.040.23

Supersedes EN 14511-1:2004

#### **English Version**

Air conditioners, liquid chilling packages and heat pumps with electrically driven compressors for space heating and cooling - Part 1: Terms and definitions

Climatiseurs, groupes refroidisseurs de liquide et pompes à chaleur avec compresseur entraîné par moteur électrique pour le chauffage et la réfrigération des locaux - Partie 1:

Termes et définitions

Luftkonditionierer, Flüssigkeitskühlsätze und Wärmepumpen mit elektrisch angetriebenen Verdichtern für die Raumbeheizung und Kühlung - Teil 1: Begriffe

This European Standard was approved by CEN on 13 October 2007.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, 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 14511-1:2007) has been prepared by Technical Committee CEN/TC 113 "Heat pumps and air conditioning units", the secretariat of which is held by AENOR.

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 May 2008, and conflicting national standards shall be withdrawn at the latest by May 2008.

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

This document supersedes EN 14511-1:2004.

The revised standard takes into account double duct units and multisplit systems.

EN 14511 comprises the following parts under the general title "Air conditioners, liquid chilling packages and heat pumps with electrically driven compressors for space heating and cooling":

- 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This part of EN 14511 specifies the terms and definitions for the rating and performance of air and water cooled air conditioners, liquid chilling packages, air-to-air, water-to-air, air-to-water and water-to-water heat pumps with electrically driven compressors when used for space heating and/or cooling. This European Standard does not specifically apply to heat pumps for sanitary hot water, although certain definitions can be applied to these.

This European Standard applies to factory-made units that can be ducted.

This standard applies to factory-made liquid chilling packages with integral condensers or for use with remote condensers.

This standard applies to factory-made units of either fixed capacity or variable capacity by any means.

Packaged units, single split and multisplit systems are covered by this standard. Single duct and double duct units are covered by the standard.

In the case of units consisting of several parts, this standard applies only to those designed and supplied as a complete package, except for liquid chilling packages with remote condenser.

This standard is primarily intended for water and brine chilling packages but can be used for other liquid subject to agreement.

This standard applies to air-to-air air conditioners which evaporate the condensate on the condenser side.

The units having their condenser cooled by air and by the evaporation of external additional water are not covered by this standard.

This standard does not apply to units using transcritical cycles, e.g. with CO<sub>2</sub> as refrigerant.

Installations used for heating and/or cooling of industrial processes are not within the scope of this standard.

- NOTE 1 Part load testing of units is dealt with in CEN/TS 14825.
- NOTE 2 All the symbols given in this text should be used regardless of the language used.

#### 2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

## 2.1

#### air conditioner

encased assembly or assemblies designed as a unit to provide delivery of conditioned air to an enclosed space (room for instance) or zone. It includes an electrically operated refrigeration system for cooling and possibly dehumidifying the air.

It can have means for heating, circulating, cleaning and humidifying the air. If the unit provides heating by reversing the refrigerating cycle then it is a heat pump

### 2.2

#### heat pump

encased assembly or assemblies designed as a unit to provide delivery of heat. It includes an electrically operated refrigeration system for heating.

It can have means for cooling, circulating, cleaning and dehumidifying the air. The cooling is by means of reversing the refrigerating cycle