

SVENSK STANDARD

SS-EN 378-2:2016



Fastställt/Approved: 2016-12-07
Publicerad/Published: 2016-12-12
Utgåva/Edition: 3
Språk/Language: engelska/English
ICS: 01.040.27; 14.230; 27.080; 27.200

Kyl- och värmepumpsanläggningar – Säkerhets- och miljökrav – Del 2: Utformning, konstruktion, provning, märkning och dokumentation

Refrigerating systems and heat pumps – Safety and environmental requirements – Part 2: Design, construction, testing, marking and documentation

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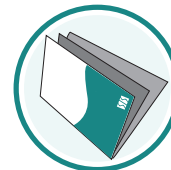
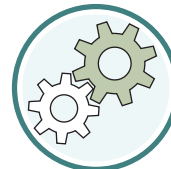
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Denna standard ersätter SS-EN 378-2:2008+A2:2012, utgåva 1.

The European Standard EN 378-2:2016 has the status of a Swedish Standard. This document contains the official English version of EN 378-2:2016.

This standard supersedes the Swedish Standard SS-EN 378-2:2008+A2:2012, edition 1.

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Denna standard är framtagen av kommittén för Kyl- och värmepumpsanläggningar – Säkerhet, SIS/TK 243.

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EUROPEAN STANDARD

EN 378-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2016

ICS 27.080; 27.200

Supersedes EN 378-2:2008+A2:2012

English Version

Refrigerating systems and heat pumps - Safety and environmental requirements - Part 2: Design, construction, testing, marking and documentation

Systèmes frigorifiques et pompes à chaleur - Exigences de sécurité et d'environnement - Partie 2: Conception, construction, essais, marquage et documentation

Kälteanlagen und Wärmepumpen - Sicherheitstechnische und umweltrelevante Anforderungen - Teil 2: Konstruktion, Herstellung, Prüfung, Kennzeichnung und Dokumentation

This European Standard was approved by CEN on 3 September 2016.

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.

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN 378-2:2016) has been prepared by Technical Committee CEN/TC 182 “Refrigerating systems, safety and environmental requirements”, the secretariat of which is held by DIN.

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 2017, and conflicting national standards shall be withdrawn at the latest by May 2017.

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.

This document supersedes EN 378-2:2008+A2:2012.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document.

EN 378 consists of the following parts under the general title “*Refrigerating systems and heat pumps — Safety and environmental requirements*”:

- *Part 1: Basic requirements, definitions, classification and selection criteria;*
- *Part 2: Design, construction, installing, testing, marking and documentation;*
- *Part 3: Installation site and personal protection;*
- *Part 4: Operation, maintenance, repair and recovery.*

The main changes in part 2 with respect to the previous edition are listed below:

- *Harmonization as far as possible with ISO 5149:2014 and ISO 817:2014;*
- *Harmonizing requirements with DIRECTIVE 2014/68/EU (PED), related to pressure and DIRECTIVE 2006/42/EC (MD).*

Following detailed changes are worth noting:

- *In 5.2.1, the application of harmonized standard for components has been clarified, by making the note normative;*
- *The content of the former Table 3 has been integrated in 6.2.6.2, with necessary modifications of the flow chart in Figure 1;*
- *Replacement of 6.2.2.3 with requirements related to pressure rise in case of external fire;*
- *Improvement 6.2.5.2.2, regarding electronic safety switching devices for limiting the pressure;*
- *Rearrangement of the transport and vibration tests formerly 6.2.12 and now 6.2.12 and 6.2.13;*

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- *Modification of the explosion hazard requirements in 6.2.14 (formerly 6.2.13);*
- *Addition of Annex H on stress corrosion cracking, Annex I on leak simulation test, Annex J on commissioning procedure, Annex K on ignition sources;*
- *Modification of Annex ZA for harmonization with DIRECTIVE 2014/68/EU (PED);*
- *Deletion of Annex ZB and the update of Annex ZC (now new Annex ZB).*

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.

Introduction

The introduction of EN 378-1 is applicable.

This standard is a type C standard as stated in EN ISO 12100.

The machinery concerned and the extent to which hazards, hazardous situations and hazardous events are covered are indicated in the scope of this standard.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for machines that have been designed and built according to the provisions of this type C standard.