

Külmutussüsteemid ja soojuspumbad
Ohutus- ja keskkonnanõuded
Osa 4: Talitus, korrashoid, remont ja utiliseerimine

Refrigerating systems and heat pumps
Safety and environmental requirements
Part 4: Operation, maintenance, repair and recovery

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 378-4:2008+A1:2012 sisaldab Euroopa standardi EN 378-4:2008+A1:2012 ingliskeelset teksti.	This Estonian standard EVS-EN 378-4:2008+A1:2012 consists of the English text of the European standard EN 378-4:2008+A1:2012.
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English Version

**Refrigerating systems and heat pumps - Safety and
environmental requirements - Part 4: Operation, maintenance,
repair and recovery**

Systèmes de réfrigération et pompes à chaleur - Exigences
de sécurité et d'environnement - Partie 4: Fonctionnement,
maintenance, réparation et récupération

Kälteanlagen und Wärmepumpen - Sicherheitstechnische
und umweltrelevante Anforderungen - Teil 4: Betrieb,
Instandhaltung, Instandsetzung und Rückgewinnung

This European Standard was approved by CEN on 13 October 2007 and includes Amendment 1 approved by CEN on 23 January 2012.

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Contents

Page

Foreword	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 General requirements	5
4.1 Operational instructions	5
4.2 Instruction of operating personnel	5
4.3 Documentation	5
5 Maintenance and repair	6
5.1 General	6
5.2 Maintenance	6
5.3 Repair	7
5.4 Change of refrigerant type	8
6 Requirements for recovery, reuse and disposal	9
6.1 General requirements	9
6.2 Requirements for recovery and reuse of refrigerant	10
6.3 Requirements for refrigerant transfer, transport and storage	13
6.4 Requirements for recovery equipment	14
6.5 Requirements for disposal	15
6.6 Requirements for documentation	15
Annex A (normative) Draining the oil from a refrigerating system	16
Annex B (informative) Guide specification (parameters) for recycled refrigerant	17
Annex C (informative) Handling and storage of refrigerants	18
Annex D (informative) In-service inspection	20
Annex E (informative) Guidelines for repairs of equipment using flammable refrigerants	22
Bibliography	25

Foreword

This document (EN 378-4:2008+A1:2012) has been prepared by Technical Committee CEN /TC 182, "Refrigeration 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 November 2012, and conflicting national standards shall be withdrawn at the latest by November 2012.

This document includes Amendment 1, approved by CEN on 2012-01-23.

This document supersedes A1 EN 378-4:2008 A1.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

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.

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, testing, marking and documentation*
- *Part 3: Installation site and personal protection*
- *Part 4: Operation, maintenance, repair and recovery*

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

1 Scope

The scope of **EN 378-1:2008+A2:2012** is applicable.

This European Standard specifies requirements for safety and environmental aspects in relation to operation, maintenance, and repair of refrigerating systems and the recovery, reuse and disposal of all types of refrigerant, refrigerant oil, heat transfer medium, refrigerating system and part thereof.

These requirements are intended to minimise risks of injury to persons and damage to property and the environment resulting from improper handling of the refrigerants or from contaminants leading to system breakdown and resultant emission of the refrigerant.

Certain clauses and subclauses of this European Standard are not applicable to unit systems self contained systems and systems built on site which operate with charges of refrigerant up to 3 kg of refrigerant.

These subclauses are 4.1.1, 4.1.2, 4.2, 4.3, 5.1.1 to 5.1.4, 5.2, 5.3.1, 5.3.3 and 6.6.

For these systems, the necessary maintenance has to be described in the instruction manual and should repairs be necessary, contact the nearest authorised repair service centre.

2 Normative references

The following referenced documents are indispensable for the application 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 378-1:2008+A2:2012, *Refrigerating systems and heat pumps — Safety and environmental requirements — Part 1: Basic requirements, definitions, classification and selection criteria*

EN 378-2:2008+A2:2012, *Refrigerating systems and heat pumps — Safety and environmental requirements — Part 2: Design, construction, testing, marking and documentation*

EN 378-3:2008+A1:2012, *Refrigerating systems and heat pumps — Safety and environmental requirements — Part 3: Installation site and personal protection*

ISO 11650, *Performance of refrigerant recovery and/or recycling equipment*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in **EN 378-1:2008+A2:2012** apply.