

**Soojusvahetid. Paigaldus-, kasutus- ja hooldusjuhendite koostamise juhised, mis on vajalikud soojusvahetite kõigi tüüpide töökorras hoidmiseks**

Heat exchangers - Guidelines to prepare installation, operating and maintenance instructions required to maintain the performance of each type of heat exchanger

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 307:1999 sisaldab Euroopa standardi EN 307:1998 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 307:1999 consists of the English text of the European standard EN 307:1998.</p> <p>This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> Standard sisaldab juhiseid tootjale, kuidas koostada soojusvahetite paigaldus-, kasutus- ja hooldusjuhendeid. Juhised on ainult nõuandvad ja ei vabasta tootjat/elektrimontööri vastutusest esitada kogu vajalik eriinfo seadme ohutu ja efektiivse töö tagamiseks.</p>	<p><b>Scope:</b></p>
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**Võtmesõnad:** ettevalmistus, hooldus, juhendid, määratlused, paigaldus, soojusvahetid, soojusülekanne, tehnilised märkused, termodünaamilised omadused

**English version**

**Heat exchangers**

Guidelines to prepare installation, operating and maintenance instructions required to maintain the performance of any type of heat exchangers

Echangeurs thermiques – Guide de préparation des notices d’installation, de fonctionnement et de maintenance nécessaires au maintien des performances de tous les types d’échangeurs thermiques

Wärmeaustauscher – Anleitung für die Anfertigung von Einbau- und Betriebsanleitungen und Wartungsanweisungen zum Erhalt der Leistung von Wärmeaustauschern jeglicher Bauart

This European Standard was approved by CEN on 1998-09-03.

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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

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## Foreword

This European Standard has been prepared by Technical Committee CEN/TC 110 "Heat exchangers", the secretariat of which is held by BSI.

This European Standard supersedes ENV 307:1990.

This European Standard is one of a series of European Standards dedicated to heat exchangers.

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 March 1999, and conflicting national standards shall be withdrawn at the latest by March 1999.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## **Introduction**

Certain operating conditions can result in the degradation of a heat exchanger's performance.

The user can find out from the supplier the necessary information to enable him to operate and maintain the heat exchanger in question.

However, not all heat exchangers should require the same degree of detailed information, this depends on the exchanger type and/or its operating conditions.

This European Standard is applicable to heat exchanger installations where instructions can be for the installation only, or for both the installation and its maintenance. Where appropriate, they should include the exchanger's working environment, its auxiliary equipment and the necessary conditions for satisfactory energy conservation.

In certain cases of mass produced units, where relevant instructions are contained in the manufacturer's instructions, additional installation and operational instructions may not be required.

## 1 Scope

This European Standard gives guidance on the preparation of manufacturers' instructions for the installation, operation and maintenance of heat exchangers. Meeting the recommendations in this standard does not remove the installers' responsibility to provide all necessary specific information to ensure the safe and efficient working of their equipment.

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed below. For dated references, any subsequent amendments or revisions to these publications only apply to this European Standard when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 247: 1997	Heat exchangers - Terminology
EN 305: 1997	Heat exchangers - Definitions of performance of heat exchangers and the general test procedure for establishing performance of all heat exchangers

## 3 Definitions

For the purposes of this standard, the following definitions apply

### 3.1 Maintenance

**3.1.1 maintenance:** Measures for restoring and retaining a heat exchanger to a correctly functioning state.

**3.1.2 preventive maintenance:** Maintenance which is scheduled regularly.

Examples of preventive maintenance include supervisory inspection, lubrication, cleaning, functional checks and replacement of worn parts.

**3.1.3 remedial maintenance:** Maintenance activity, of a type which cannot be planned, for remedying faults.

**3.1.4 maintenance routines:** maintenance routine is a job order system in which the maintenance measures are specified