

**REFRIGERATING SYSTEMS AND HEAT** 

**REQUIREMENTS - PART 2: DESIGN,** 

DOCUMENTATION

**PUMPS - SAFETY AND ENVIRONMENTAL** 

CONSTRUCTION, TESTING, MARKING AND

### **IRISH STANDARD**

I.S. EN 378-2:2008

ICS 27.200 27.080

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#### I.S. EN 378-2:2008

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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**English Version** 

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

Systèmes de réfrigération 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

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

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## Foreword

This document (EN 378-2:2008) 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of an identical text or by endorsement, at the latest by August 2008, and conflicting national standards shall be withdrawn at the latest by August 2008.

This document supersedes EN 378-2:2000.

This European Standard has been prepared under a mandate given to CEN by the European commission and the European free trade association and supports essential requirements of the EU Directives 97/23/EC and 98/37/EC.

For relationship with the EU Directives, see the informative Annexes ZA (Directive 97/23/EC) and ZB (Directive 98/37/EC), 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

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 United Kingdom.

## Introduction

The introduction of EN 378-1:2008 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.

### 1 Scope

This European Standard is applicable to the design, construction and installing of refrigerating systems including piping, components and materials and including ancillary equipment directly associated with such systems. It also specifies requirements for testing, commissioning, marking and documentation. In case the heat transfer fluid is not gaseous at atmospheric pressure, the requirements for circuits for heat transfer fluids are excluded except for any safety devices associated with the refrigerating system. It is not applicable to refrigerating systems with air or water as refrigerant and does not cover the requirements for equipment to be used in a potentially explosive atmosphere.

The following ancillary equipment includes:

- fan and fan motor;
- electrical motor and transmission for open compressor systems.

This European Standard specifies the requirements relating to stationary and mobile refrigerating systems of all sizes, including heat pumps.

Systems using refrigerants other than those listed in Annex E of EN 378-1:2008 are not covered by this standard as long as a safety class is not assigned.

Basic safety requirements for refrigerating systems as defined in EN 378-1 are applicable for this standard.

Basic requirements for the installation site as defined in EN 378-3 apply.

This European Standard is not applicable to refrigeration systems and heat pumps which are manufactured before the date of its publication as EN.



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