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- 1 **შემუშავებულია** საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს სტანდარტების დეპარტამენტის მიერ
- 2 დამტკიცებულია და შემოღებულია სამოქმედოდ საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს 2019 წლის 20 დეკემბრის № 102 განკარგულებით
- **3 მიღებულია გარეკანის თარგმნის მეთოდით** სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი ენ 378-2:2016 "გაცივების სისტემები და სითბური ტუმბოები უსაფრთხოებისა და გარემოს დაცვის მოთხოვნები- ნაწილი 2: დიზაინი, კონსტრუქცია, გამოცდა, მარკირება და დოკუმენტაცია"

4 პირველად

5 რეგისტრირებულია საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2019 წლის 20 დეკემბერი №268-1.3-016637

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

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

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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-CENELEC Management Centre has the same status as the official versions.

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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of an identical text or by endorsement, at the latest by May 2017, and conflicting national standards shall be withdrawn at the latest by May 2017.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;

- 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.