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BS EN 16901:2016



BSI Standards Publication

Ice-cream freezers — Classification, requirements and test conditions

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This British Standard is the UK implementation of EN 16901:2016.

The UK participation in its preparation was entrusted to Technical Committee RHE/19, Commercial refrigerated food cabinets (cold room and display cases).

A list of organizations represented on this committee can be obtained on request to its secretary.

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Ice-cream freezers - Classification, requirements and test conditions

Congélateurs pour crèmes glacées - Classification,
exigences et conditions d'essai

Speiseeis-Gefriermaschinen - Klassifikation,
Anforderungen und Prüfbedingungen

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European foreword

This document (EN 16901:2016) has been prepared by Technical Committee CEN/TC 44 "Commercial and Professional Refrigerating Appliances and Systems, Performance and Energy Consumption", the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by June 2017, and conflicting national standards shall be withdrawn at the latest by June 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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 2009/125/EC.

For relationship with EU Directive, see informative Annex ZA, which is an integral part of this document.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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.

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1 Scope

The scope of this European Standard is to define the classification for horizontal closed ice-cream freezer with access of the product from the top and to specify their requirements and test methods. These appliances are different to supermarket segment freezers, as they work with static air cooling, with a skin evaporator (no evaporator fan) and are used specifically for the storage and display of pre-packed ice-cream. This standard is only applicable to integral type refrigeration systems. This standard is not applicable to remote and secondary system type cabinets. Ice-cream freezers within this standard should have a net volume ≤ 600 l and only for transparent lid ice cream freezers they should have a net volume/TDA $\geq 0,35$ m.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 60335-1, *Household and similar electrical appliances — Safety — Part 1: General requirements (IEC 60335-1)*

EN 60335-2-89, *Household and similar electrical appliances - Safety - Part 2-89: Particular requirements for commercial refrigerating appliances with an incorporated or remote refrigerant condensing unit or compressor (IEC 60335-2-89)*

ISO 817, *Refrigerants — Designation and safety classification*

ISO 5149-2, *Refrigerating systems and heat pumps — Safety and environmental requirements — Part 2: Design, construction, testing, marking and documentation*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1 General

3.1.1

ice cream freezer

horizontal closed refrigerated cabinets intended to store and/or display and sell pre-packed ice cream where access by the consumer to the pre-packed ice cream is gained by opening a lid (solid or transparent) from the top

Note 1 to entry: See Annex A for the designation of the ice cream freezer family.

3.2 Parts of ice-cream freezers

3.2.1

condensing unit

combination of one or more compressors, condensers and liquid receivers (when required) and the regularly furnished accessories

3.2.2

night cover

top cover permanently integrated into the ice-cream freezer used to reduce the heat ingress (e.g. by infrared radiation or convection) during the period when there are no sales