Soft ice cream machines - Performance and evaluation of energy consumption

EESTI STANDARDIKESKUS
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NATIONAL FOREWORD

See Eesti standard EVS-EN 16764:2016 sisaldab Euroopa standardi EN 16764:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 16764:2016 consists of the English text of the European standard EN 16764:2016.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 20.01.2016.	Date of Availability of the European standard is 20.01.2016.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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Soft ice cream machines - Performance and evaluation of energy consumption

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Automaten für Eiskrem - Bestimmung von Leistungsmerkmalen und Energieverbrauch

This European Standard was approved by CEN on 21 November 2015.

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

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European foreword

This document (EN 16764:2016) 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of an identical text or by endorsement, at the latest by July 2016, and conflicting national standards shall be withdrawn at the latest by July 2016.

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1 Scope

This European Standard specifies requirements and test conditions of soft ice cream machines for processing ice cream and similar frozen desserts.

It defines machines performance characteristics and energy consumption, measured under specified conditions and test methods, using a reference test mix.

This European Standard applies to the following types of soft ice cream machines: commercial ice cream, soft serve and shake freezers, which freeze and dispense frozen product (e.g. dairy, yogurt), included are conventional operation and pasteurization phase. The equipment may include separate refrigeration systems for the frozen product and fresh mix and may be either air-cooled or water-cooled.

The soft ice cream machines are evaluated for the following performance:

— maximum energy input rate, or maximum current draw,

— production capacity,

— overrun,

— initial freeze-down energy consumption and duration,

— production energy consumption,

— idle energy consumption,

— stand-by energy consumption,

— pasteurization energy consumption (if applicable).

2 Normative references

Not applicable.

3 Terms and definitions

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

3.1
compression type machines
machines where the cooling is performed by means of a refrigerant liquid at low pressure in a heat exchanger (evaporator), the steam thus formed becomes a liquid by a mechanical compression higher pressure and cooling in another heat exchanger (condenser)

3.2
condenser
heat exchanger in which after compression, the vaporized refrigerant is liquefied, giving off heat to external cooling system

3.3
evaporator
heat exchanger in which, after the reduction of pressure, the refrigerant is vaporized by absorbing heat from the medium which is cooled