Belgian Standard

EN 4855-03:2020

NBN EN 4855-03:2020

NBN

Aerospace series - ECO efficiency of catering equipment - Part 03: Chilling equipment

Valid from 18-03-2020

ICS: 49.020, 67.250

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 4855-03

February 2020

ICS 49.020; 67.250

English Version

Aerospace series - ECO efficiency of catering equipment - Part 03: Chilling equipment

Série aérospatiale - Éco efficacité du matériel de restauration - Partie 03 : Matériel réfrigérant

Luft- und Raumfahrt - ECO-Effizienz von Cateringgeräten - Teil 03: Kühlgeräte

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

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Ref. No. EN 4855-03:2020 E

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European foreword

This document (EN 4855-03:2020) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

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of an identical text or by endorsement, at the latest by August 2020, and conflicting national standards shall be withdrawn at the latest by August 2020.

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Introduction

During aircraft operations the food storage in the cabin is mandatory to maintain the catering on board. There exist different equipment types to cool, freeze or chill any foods or drinks. To meet the target to determine an energy efficiency index for galley chilling equipment (freezer, refrigerators and beverage chillers) the purpose of this document is to standardize the test procedure and efficiency calculations for this equipment.

1 Scope

This European standard describes a test procedure to identify performance characteristics and a weight rating of a galley chilling equipment used on aircraft. Furthermore it describes the calculation procedure to determine an energy consumption index and a performance index. Only galley chilling equipment with a freeze function will be considered. The effect of the chilling equipment on food quality is not addressed in this standard.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 4855-01, *Aerospace series — ECO efficiency of catering equipment — Part 1: General conditions*[1]

EN 62552, *Household refrigerating appliances — Characteristics and test methods*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at http://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
catering equipment
equipment installed in an aircraft to provide or support food or beverage service

Note 1 to entry: Includes ovens, beverage makers, water heaters and chilling equipment.

3.2
galley chilling equipment
equipment installed in the galley in order to cool beverage or food and/or provide internal temperatures below 0 °C for freezing purposes

Note 1 to entry: The three functionalities freeze, refrigerate and beverage chill can be realized separately or as different functions in one single unit. For this energy consumption index, only equipment with a freeze function will be considered.

3.2.1
freezer
equipment with a cavity held at or below 0 °C for preserving and long-term storing of perishable food

Note 1 to entry: Standard temperature for freezers is −18 °C.

1 Published as ASD-STAN Prestandard at the date of publication of this standard by AeroSpace and Defence Industries Association of Europe – Standardization (ASD-STAN) (www.asd-stan.org).