Aerospace series - ECO efficiency of catering equipment - Part 04: Beverage makers

EESTI STANDARDIMIS- JA AKREDITEERIMISKESKUS
ESTONIAN CENTRE FOR STANDARDISATION AND ACCREDITATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 4855-04:2025 sisaldab Euroopa standardi EN 4855-04:2025 ingliskeelset teksti.	This Estonian standard EVS-EN 4855-04:2025 consists of the English text of the European standard EN 4855-04:2025.
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 and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 29.10.2025.	Date of Availability of the European standard is 29.10.2025.
Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

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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English Version

Aerospace series - ECO efficiency of catering equipment - Part 04: Beverage makers

Série aérospatiale - Écoefficacité du matériel de restauration - Partie 04 : Appareils de préparation de boissons

Luft- und Raumfahrt - ECO Effizienz von Cateringgeräten - Teil 04: Heißgetränkeautomaten

This European Standard was approved by CEN on 18 August 2025.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.

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

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Contents

Page

European foreword

This document (EN 4855-04:2025) has been prepared by ASD-STAN.

After enquiries and votes carried out in accordance with the rules of this Association, this document has received the approval of the National Associations and the Official Services of the member countries of ASD-STAN, 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 April 2026, and conflicting national standards shall be withdrawn at the latest by April 2026.

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 supersedes EN 4855-04:2020.

This document includes the following significant technical changes with respect to EN 4855-04:2020:

— change of test medium water temperature in 5.6 from 10 °C to 15 °C to allow easier setup and continuity of water temperature;

— changes and clarification of coffee maker and water heater operation and measurements;

— clarification of water tapping for water heater in 6.2.3 b) in case of temperature drop below 80 °C;

— updated values for scaled reference kerosene consumption for beverage maker and for water heater in 7.2;

— updated values for reference cycle time for beverage maker and for water heater in 7.3.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Introduction

During aircraft operations the preparation of drinks in the cabin is mandatory to maintain the catering on board during flight. There exist different equipment types to prepare different kinds of drinks. While beverage makers are used as equipment to prepare coffee and tea, water heaters are used to tap hot water for other use. To meet the target to determine an energy consumption index for aircraft beverage maker products the purpose of this document is to standardize the test procedure and efficiency calculations for this equipment type.

1 Scope

This document specifies a test procedure to identify performance characteristics and a weight rating of beverage maker products used on aircraft. Furthermore, it specifies the calculation procedure to determine an energy consumption index and a performance index. The effect of the beverage makers on beverage quality is not addressed in this document.

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 4855-01:2025, *Aerospace series — ECO efficiency of catering equipment — Part 01: General conditions*

3 Terms and definitions

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

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

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

— IEC Electropedia: available at https://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, chilling equipment, trash compactors and espresso makers.

[SOURCE: EN 4855-01:2025, 3.1]

3.2
beverage maker products
overall designation for coffee and tea makers (beverage makers) and water boilers (water heaters)

3.2.1
beverage maker
equipment used in commercial aircraft to prepare coffee and tea

Note 1 to entry: Some beverage makers are equipped with an extra function of tapping hot water.

3.2.2
water heater
equipment used to boil and tap hot water