SVENSK STANDARD SS-EN 62552-1

Fastställd	Utgåva	Sida	Ansvarig kommitté
2020-10-21	1	1 (1+113)	SEK TK 59

Kylar och frysar för hushållsbruk – Egenskaper och provningsmetoder – Del 1: Allmänna fordringar

Household refrigerating appliances – Characteristics and test methods – Part 1: General requirements

Som svensk standard gäller europastandarden EN 62552-1:2020. Den svenska standarden innehåller den officiella engelska språkversionen av EN 62552-1:2020.

Nationellt förord

Europastandarden EN 62552-1:2020

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **IEC 62552-1, First edition, 2015 - Household refrigerating appliances - Characteristics and test methods - Part 1: General requirements**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden ska användas tillsammans med SS-EN 62552-2, utgåva 1, 2020 och SS-EN 62552-3, utgåva 1, 2020.

Standarden ersätter, tillsammans med SS-EN 62552-2 och SS-EN 62552-3, tidigare fastställd svensk standard SS-EN 62552, utgåva 1, 2013, som ej gäller fr o m 2023-02-24.

ICS 97.030.00

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Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62552-1

April 2020

ICS 97.030

Supersedes EN 62552:2013 (partially) and all of its amendments and corrigenda (if any)

English Version

Household refrigerating appliances - Characteristics and test methods - Part 1: General requirements (IEC 62552-1:2015 , modified)

Appareils de réfrigération à usage ménager - Caractéristiques et méthodes d'essai - Partie 1: Exigences générales (IEC 62552-1:2015 , modifiée)

Haushaltskühlgeräte - Eigenschaften und Prüfverfahren - Teil 1: Allgemeine Anforderungen (IEC 62552-1:2015 , modifiziert)

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN 62552-1:2020 E

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European foreword

This document (EN 62552-1:2020) consists of the text of IEC 62552-1:2015 prepared by IEC/TC 59 "Performance of household and similar electrical appliances", together with the common modifications prepared by CLC/TC 59X "Performance of household and similar electrical appliances".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2021-02-24
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2023-02-24

This standard in combination with standards EN 62552-2:2020 and EN 62552-3:2020 supersedes EN 62552:2013.

This standard shall be read in combination with standards EN 62552-2:2020 and EN 62552-3:2020.

EN 62552-1:2020 includes the following significant technical changes:

a) Chapter D.2. Location of sensor has been modified completely

b) Annex F Test report has been modified completely

c) New Annex ZA Final test report was added

Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 62552-1:2015 are prefixed “Z”.

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

This document has been prepared under Standardization Request M/459 given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

Endorsement notice

The text of IEC 62552-1:2015 was approved by CENELEC as a European Standard with agreed common modifications.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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HOUSEHOLD REFRIGERATING APPLIANCES – CHARACTERISTICS AND TEST METHODS –

Part 1: General requirements

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 62552-1 has been prepared by subcommittee 59M: Performance of electrical household and similar cooling and freezing appliances, of IEC technical committee 59: Performance of household and similar electrical appliances.

IEC 62552-1, -2 and -3 cancel and replace the first edition of IEC 62552 published in 2007. IEC 62552-1, -2 and -3 constitute a technical revision and includes the following significant technical changes with respect to IEC 62552:2007:

a) All parts of the standard have been largely rewritten and updated to cope with new testing requirements, new product configurations, the advent of electronic product controls and computer based test-room data collection and processing equipment.
b) In Part 1 (this part) there are some changes to test room equipment specifications and the setup for testing to provide additional flexibility especially when testing multiple appliances in a single test room.
c) For more efficient analysis and to better characterise the key product characteristics under different operating conditions, the test data from many of the energy tests in Part 3 is now

split into components (such as steady state operation and defrost and recovery). The approach to determination of energy consumption has been completely revised, with many internal checks now included to ensure that data complying with the requirements of the standard is as accurate as possible and of high quality.

d) Part 3 now provides a method to quantify each of the relevant energy components and approaches on how these can be combined to estimate energy under different conditions on the expectation that different regions will select components and weightings that are most applicable when setting both their local performance and energy efficiency criteria while using a single set of global test measurements.

e) For energy consumption measurements in Part 3, no thermal mass (test packages) is included in any compartment and compartment temperatures are based on the average of air temperature sensors (compared to the temperature in the warmest test package). There are also significant differences in the position of temperature sensors in unfrozen compartments.

f) The energy consumption test in Part 3 now has two specified ambient temperatures (16°C and 32°C).

g) While, in Part 2 test packages are still used for the storage test to confirm performance in different operating conditions, in Part 1 they have been standardised to one size (100 mm × 100 mm × 50 mm) to simply loading and reduce test variability. A clearance of at least 15 mm is now specified between test packages and the compartment liner.

h) A load processing energy efficiency test has been added in Part 3.

i) A tank-type ice making energy efficiency test has been added in Part 3.

j) A cooling capacity test has been added in Part 2.

k) A pull-down test has been added in Part 2.

l) Shelf area and storage volume measurement methods are no longer included. In Part 3 the volume measurement has been revised to be the total internal volume with only components necessary for the satisfactory operation of the refrigeration system considered as being in place.

m) Tests (both performance (Part 2) and energy (Part 3)) have been added for wine storage appliances.

The following print types are used in this international standard:

– requirements: in roman type;

– test variables: in *italic type*;

– notes: in small roman type.

– words in **bold** are defined in Clause 3.

The text of this standard is based on the following documents:

FDIS	Report on voting
59M/61/FDIS	59M/64/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 62252 series, published under the general title *Household refrigerating appliances – characteristics and test methods*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

IEC 62552 is split into 3 parts as follows:

- Part 1: Scope, definitions, instrumentation, test room and set up of refrigerating products (this part);
- Part 2: General performance requirements for **refrigerating appliances** and methods for testing them;
- Part 3: **Energy consumption** and **volume** determination.

NOTE For the safety requirements applicable to household **refrigerating appliances**, see IEC 60335-2-24; for noise requirements applicable to household **refrigerators** and **freezers**, see IEC 60704-2-14.

HOUSEHOLD REFRIGERATING APPLIANCES – CHARACTERISTICS AND TEST METHODS –

Part 1: General requirements

1 Scope

This part of IEC 62552 specifies the essential characteristics of household **refrigerating appliances**, cooled by internal natural convection or forced air circulation, and establishes test methods for checking the characteristics.

For the purposes of declaration, the tests defined in this part of IEC 62552 are considered to be type tests to assess the fundamental design and operation of a **refrigerating appliance**. This part of IEC 62552 does not define requirements for production sampling or conformity assessment or certification.

This part of IEC 62552 does not define a regime for verification testing as this varies by region and country. When verification of the performance of a **refrigerating appliance** of a given type in relation to this standard is necessary, it is preferable, wherever practicable, that all the tests specified be applied to a single unit. The tests can also be made individually for the study of a particular characteristic.

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.

IEC 62552-2:2015, *Household refrigerating appliances – Characteristics and test methods – Part 2: Performance requirements*

IEC 62552-3:2015, *Household refrigerating appliances – Characteristics and test methods – Part 3: Energy consumption and volume*