
Gospodinjski in podobni električni aparati - Varnost - 2-104. del: Posebne zahteve za aparate za zbiranje in/ali recikliranje hladilnega sredstva iz klimatskih naprav in hladilne opreme (IEC 60335-2-104:2021)

Household and similar electrical appliances - Safety - Part 2-104: Particular requirements for appliances to recover and/or recycle refrigerant from air conditioning and refrigeration equipment (IEC 60335-2-104:2021)

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke - Teil 2-104: Besondere Anforderungen für Geräte zur Rückgewinnung und/oder zum Recycling von Kältemittel aus Klimaanlage und Kühlgeräten (IEC 60335-2-104:2021)

Appareils électrodomestiques et analogues - Sécurité - Partie 2-104: Exigences particulières pour les appareils de récupération et/ou de recyclage des fluides frigorigènes des climatiseurs et des appareils de réfrigération (IEC 60335-2-104:2021)

<https://standards.iteh.ai/catalog/standards/sist/e1ed2a83-695c-4e55-8ff4-3f15447cc8d1/sist-en-iec-60335-2-104-2025>

Ta slovenski standard je istoveten z: EN IEC 60335-2-104:2025

ICS:

27.200	Hladilna tehnologija	Refrigerating technology
71.100.45	Hladiva in antifrizi	Refrigerants and antifreezes

SIST EN IEC 60335-2-104:2025 **en**

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN IEC 60335-2-104

May 2025

ICS 27.200; 71.100.45

English Version

**Household and similar electrical appliances - Safety - Part 2-104:
Particular requirements for appliances to recover and/or recycle
refrigerant from air conditioning and refrigeration equipment
(IEC 60335-2-104:2021)**

Appareils électrodomestiques et analogues - Sécurité -
Partie 2-104: Exigences particulières pour les appareils de
récupération et/ou de recyclage des fluides frigorigènes des
climatiseurs et des appareils de réfrigération
(IEC 60335-2-104:2021)

Sicherheit elektrischer Geräte für den Hausgebrauch und
ähnliche Zwecke - Teil 2-104: Besondere Anforderungen für
Geräte zur Rückgewinnung und/oder zum Recycling von
Kältemittel aus Klimaanlage und Kühlgeräten
(IEC 60335-2-104:2021)

This European Standard was approved by CENELEC on 2024-09-25. CENELEC 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 CENELEC 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 CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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



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

EN IEC 60335-2-104:2025 (E)**European foreword**

This document (EN IEC 60335-2-104:2025) consists of the text of IEC 60335-2-104:2021 prepared by IEC/TC 61 "Safety of household and similar electrical appliances".

The following dates are fixed:

- latest date by which this document has to be (dop) 2026-05-31 implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards (dow) 2028-05-31 conflicting with this document have to be withdrawn

This document is read in conjunction with EN IEC 60335-2-104:2025/A11:2025.

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.

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

ITeH Standards
(<https://standards.iteh.ai>)
Endorsement notice
Document Preview

The text of the International Standard IEC 60335-2-104:2021 was approved by CENELEC as a European Standard without any modification.

<https://standards.iteh.ai/catalog/standards/sist/e1cd2a83-695c-4e55-8ff4-3f15447cc8d1/sist-en-iec-60335-2-104-2025>



IEC 60335-2-104

Edition 2.0 2021-05

INTERNATIONAL STANDARD



**Household and similar electrical appliances – Safety –
Part 2-104: Particular requirements for appliances to recover and/or recycle
refrigerant from air conditioning and refrigeration equipment**

Document Preview

[SIST EN IEC 60335-2-104:2025](https://standards.iteh.ai/catalog/standards/sist/e1cd2a83-695c-4e55-8ff4-3f15447cc8d1/sist-en-iec-60335-2-104-2025)

<https://standards.iteh.ai/catalog/standards/sist/e1cd2a83-695c-4e55-8ff4-3f15447cc8d1/sist-en-iec-60335-2-104-2025>

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 27.200; 71.100.45

ISBN 978-2-8322-9784-1

Warning! Make sure that you obtained this publication from an authorized distributor.

CONTENTS

FOREWORD.....	4
INTRODUCTION.....	7
1 Scope	8
2 Normative references	8
3 Terms and definitions	9
4 General requirement.....	10
5 General conditions for the tests	10
6 Classification.....	10
7 Marking and instructions.....	11
8 Protection against access to live parts.....	12
9 Starting of motor-operated appliances	13
10 Power input and current.....	13
11 Heating.....	13
12 Void.....	17
13 Leakage current and electric strength at operating temperature.....	17
14 Transient overvoltages	17
15 Moisture resistance	17
16 Leakage current and electric strength.....	18
17 Overload protection of transformers and associated circuits	18
18 Endurance.....	18
19 Abnormal operation	18
20 Stability and mechanical hazards.....	23
21 Mechanical strength	23
22 Construction	26
23 Internal wiring.....	32
24 Components	33
25 Supply connection and external flexible cords	33
26 Terminals for external conductors.....	33
27 Provision for earthing	33
28 Screws and connections	34
29 Clearances, creepage distances and solid insulation	34
30 Resistance to heat and fire	34
31 Resistance to rusting	34
32 Radiation, toxicity and similar hazards.....	34
Annexes	36
Annex AA (normative) Temperature and pressure test	37
Annex BB (normative) Compatibility requirements.....	39
Annex CC (normative) Pressure tests	40
CC.1 General.....	40
CC.2 Pressure test value determined under testing carried out in Clause 11.....	40
CC.3 Pressure test value determined under testing carried out in Clause 19.....	40

CC.4 Pressure test value determined under testing carried out under standstill conditions	40
CC.5 Fatigue test option for Clause CC.2 and CC.4.....	41
Annex DD (normative) Leak simulation tests	43
DD.1 General.....	43
DD.2 Test methods	43
Annex EE (normative) Manual – Installation and operating instructions.....	45
Bibliography.....	47
Figure 101 – Supply circuit for locked-rotor test of a motor of the single-phase type	35
Table 1 – Temperature limits	14
Table 2 – Maximum winding temperature	19
Table 3 – Maximum abnormal temperature	22
Table 4 – High side pressure for strength tests	30
Table 5 – Low side pressure for strength tests	30
Table BB.1 – Alternate values of time and temperature for the compatibility test.....	39

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[SIST EN IEC 60335-2-104:2025](https://standards.iteh.ai/catalog/standards/sist/e1cd2a83-695c-4e55-8ff4-3f15447cc8d1/sist-en-iec-60335-2-104-2025)

<https://standards.iteh.ai/catalog/standards/sist/e1cd2a83-695c-4e55-8ff4-3f15447cc8d1/sist-en-iec-60335-2-104-2025>