



SLOVENSKI STANDARD
oSIST prEN IEC 60335-2-40:2023/oprAA:2023
01-junij-2023

Gospodinjski in podobni električni aparati - Varnost - 2-40. del: Posebne zahteve za električne toplotne črpalke, klimatske naprave in razvlažilnike zraka - Dopolnilo AA

Household and similar electrical appliances - Safety - Part 2-40: Particular requirements for electrical heat pumps, air-conditioners and dehumidifiers

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke - Teil 2-40: Besondere Anforderungen für elektrisch betriebene Wärmepumpen, Klimageräte und Raumluft-Entfeuchter

Appareils électrodomestiques et analogues - Sécurité - Partie 2-40: Règles particulières pour les pompes à chaleur électriques, les climatiseurs et les déshumidificateurs

Ta slovenski standard je istoveten z: prEN IEC 60335-2-40:2023/prAA:2023

ICS:

23.120	Zračniki. Vetrniki. Klimatske naprave	Ventilators. Fans. Air-conditioners
27.080	Toplotne črpalke	Heat pumps

oSIST prEN IEC 60335-2-40:2023/oprAA:2023 en

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN IEC 60335-2-40:2023

prAA

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ICS 23.120

English Version

**Household and similar electrical appliances - Safety - Part 2-40:
Particular requirements for electrical heat pumps, air-
conditioners and dehumidifiers**

Appareils électrodomestiques et analogues - Sécurité -
Partie 2-40: Règles particulières pour les pompes à chaleur
électriques, les climatiseurs et les déshumidificateurs

Sicherheit elektrischer Geräte für den Hausgebrauch und
ähnliche Zwecke - Teil 2-40: Besondere Anforderungen für
elektrisch betriebene Wärmepumpen, Klimageräte und
Raumluft-Entfeuchter

This draft amendment prAA, if approved, will modify the European Standard prEN IEC 60335-2-40:2023; it is submitted to CENELEC members for enquiry.

Deadline for CENELEC: 2023-07-07.

It has been drawn up by CLC/TC 61.

If this draft becomes an amendment, CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

This draft amendment was established by CENELEC 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

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prEN IEC 60335-2-40:2023/prAA:2023 (E)**21 European foreword**

22 This document (prEN IEC 60335-2-40:2023/prAA:2023) has been prepared by CLC/TC 61 “Safety
23 of household and similar electrical appliances”.

24 The following dates are proposed:

- latest date by which the existence of this document has to be announced at national level (doa) dor + 6 months
- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) dor + 12 months
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) dor + 36 months (to be confirmed or modified when voting)

25 The numbering system for European clauses, subclauses, notes, tables, figures and annexes that
26 are additional to those in the IEC standard are prefixed with the letter “Z”.

27 This document is read in conjunction with prEN IEC 60335-2-40:2023.

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

31 For relationship with EU Directive(s) / Regulation(s), see informative Annexes ZZA and ZZB, which
32 are an integral part of this document.

<https://standards.iteh.ai/catalog/standards/sist/40a92663-86ae-4f3b-89de-4bb8b2f2585a/osist-pren-iec-60335-2-40-2023-opraa-2023>

prEN IEC 60335-2-40:2023/prAA:2023 (E)33 **1 Modification to the Introduction**34 *Addition:*

35 With this European amendment A11, the EN IEC 60335-2-40:2023+A11:2023 is superseded.

36 This European amendment A11, supplements or modifies the corresponding clauses of the
37 standards below:38 — EN 60335-1:2012+A11:2014+A13:2017+A1:2019+A14:2019+A2:2019+A15:2021+A16:2023
39 (Part 1)

40 — EN IEC 60335-2-40:2024 (Part 2)

Secretary Note :

The standards EN IEC 60335-2-40:2023+A11:2023 are the endorsement of IEC 60335-2-40 ed.6 and its Common modifications that are under publication in 2023.

This document is the AM11 that contains the common modifications connected with IEC 60335-2-40 ed 7.0 (in this document called EN IEC 60335-2-40:2024 for distinguishing the ed 6.0 from the 7.0

41 **2 Modification to Clause 1 “Scope”**42 *Replace the third paragraph, beginning with “Appliances not intended...”, by the following:*

43 These appliances are used for the household environment and commercial purposes.

44 NOTE Z101 Examples of appliance for household environment are appliances for typical housekeeping
45 functions used in the household environment that can also be used by non-expert users for typical
46 housekeeping functions:

47 — in shops, offices and other similar working environments;

48 — in farmhouses;

49 — by clients in hotels, motels and other residential type environments;

50 — in bed and breakfast type environments.

51 NOTE Z102 Household environment includes the dwelling and its associated buildings, the garden, etc.

52 *Add the following after the NOTE 102:*53 Appliances and machines intended to be used by expert or trained users in shops, in light industry
54 and on farms, and appliances and machines which are declared to be for commercial use by lay
55 persons are within the scope of this document.

56 NOTE Z103 Additional requirements for such appliances are given in Annex ZE.

57 NOTE Z104 Guidance for appliances in the scope of Pressure Equipment Directive are given in Annex ZAA

58 This document deals with the reasonably foreseeable hazards presented by appliances and
59 machines that are encountered by all persons.

60 However, in general, it does not take into account:

61 — children playing with the appliance;

62 — the use of the appliance by **very young children**;

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63 — the use of the appliance by **young children** without supervision.

64 It is recognized that very vulnerable people may have needs beyond the level addressed in this
65 document.

66 **3 Modification to Clause 7 “Marking and instructions”**

67 **7.12.1 Addition:**

68 *Add the following paragraphs in the end of clause:*

69 The installation instructions for appliances that are intended to be permanently connected to fixed
70 wiring, and have a leakage current not exceeding 10 mA, shall state that the installation of a
71 residual current device (RCD) having a rated residual operating current not exceeding 30 mA is
72 advisable.

73 For **appliances not accessible to the public** and which are intended to be permanently connected
74 to fixed wiring and which may have a leakage current exceeding 10 mA, the installation instructions
75 shall specify the rating of the residual current device (RCD) to be installed.

76 For **appliances not accessible to the general public** the restrictions for the installation location
77 shall be described in the installation instructions.

78 **4 Modification to Clause 8 “Protection against access to live parts”**

79 **8.1.1 Addition**

80 *Add, at the end of the paragraph starting with* “Test probe B and probe 18...”, the following:

81 Test probe 18 of EN 61032:1998 is not applied to **appliances not accessible to the general**
82 **public**.

83 **5 Modification to Clause 20 “Stability and mechanical hazards”**

84 *Modify the sentence as follows:*

85 This clause of Part 1 is applicable except as follows:

86 **20.2 Addition:**

87 *Add, after the second dashed item in the compliance criteria, the following sentence:*

88 Test probe 18 of EN 61032:1998 is not applied to **appliances not accessible to the general**
89 **public**.

90 **6 Modification to the annexes**

91 *The annexes of part 1 are applicable with following modifications:*

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96**Annex ZC**
(normative)**Normative references to international publications with their corresponding European publications**97 *The Annex ZC of part 1 is applicable with following addition:*

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-52	2017	Environmental testing – Part 2: Tests – Test Kb: Salt mist, cyclic (sodium, chloride solution)	EN IEC 60068-2-52	2018
IEC 60079-0 +Cor1	2017 2020	Explosive atmospheres – Part 0: Equipment – General requirements	EN IEC 60079-0 + AC	2018 2020
IEC 60079-7 +A1	2015+ 2017	Explosive atmospheres – Part 7: Equipment protection by increased safety “e”	EN IEC 60079-7 +A1	2015 2018
IEC 60079-14	2013	Explosive atmospheres – Part 14: Electrical installations design, selection and erection	EN 60079-14 +AC	2014 2016
IEC 60079-15	2017	Explosive atmospheres – Part 15: Equipment protection by type of protection “n”	EN IEC 60079–15	2019
IEC 60335-2-34	2021	Household and similar electrical appliances – Safety – Part 2–34: Particular requirements for motor-compressors	FprEN IEC 60335-2-34 +FprAA	2022 2022
IEC 60335-2-51	2019	Household and similar electrical appliances – Safety – Part 2–51: Particular requirements for stationary circulation pumps for heating and service water installations	EN 60335-2-51 +A1 +A2	2003 2008 2012
IEC 60695-1-10	2016	Fire hazard testing – Part 1–10: Guidance for assessing the fire hazard of electrotechnical products – General guidelines	EN 60695-1-10	2017
IEC 60695-10-2	2014	Fire hazard testing – Part 10–2: Abnormal heat – Ball pressure test method	EN 60695-10-2	2014
IEC 60730-2-6 +A1	2015 2019	Automatic electrical controls – Part 2–6: Particular requirements for automatic electrical pressure sensing controls including mechanical requirements	EN 60730-2-6 +A1	2016 2020
IEC 61032	1997	Protection of persons and equipment by enclosures – Probes for verification	EN 61032	1998
IEC 62471	2006	Photobiological safety of lamps and lamp systems	EN 62471	2008

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 527-3	2018	Plastics – Determination of the tensile properties – Part 3: Test conditions for films and sheets	EN ISO 527-3	2018
ISO 817	2014	Refrigerants – Designation and safety classification	-	-
+A1	2017			
+A2	2021			
ISO 1302	2002	Geometrical Product Specifications (GPS) – Indication of surface texture in technical product documentation	-	-
ISO 2578	1993	Plastics – Determination of time-temperature limits after prolonged exposure to heat	EN ISO 2578	1998
ISO 5149-1	2014	Refrigerating systems and heat pumps – Safety and environmental requirements – Part 1: Definitions, classification and selection criteria	-	-
+A1	2015			
+A2	2021			
ISO 5149-2	2014	Refrigerating systems and heat pumps – Safety and environmental requirements – Part 2: Design, construction, testing, marking and documentation	-	-
+A1	2020			
ISO 5149-3	2014	Refrigerating systems and heat pumps – Safety and environmental requirements – Part 3: Installation site	-	-
+A1	021			
ISO 5151	2017	Non-ducted air conditioners and heat pumps – Testing and rating for performance	-	-
+A1	2020			
ISO 7010	2019	Graphic symbols – Safety colours and safety signs – Registered safety signs	EN ISO 7010	2020
+A1	2020			
+A2	2020			
+A3	2021			
+A4	2021			
+A5	2022			
+A6	2022			
ISO 13253	2017	Ducted air-conditioners and air-to-air heat pumps – Testing and rating for performance	-	-
+A1	2020			
ISO 13256-1	2021	Water-source heat pumps – Testing and rating for performance – Part 1: Water-to-air and brine-to-air heat pumps	-	-
ISO 13256-2	2021	Water-source heat pumps – Testing and rating for performance – Part 2: Water-to-water and brine-to-water heat pumps	-	-
ISO 13355	2016	Packaging – Complete, filled transport packages and unit loads – Vertical random vibration test	EN ISO 13355	2016

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 14903	2017	Refrigerating systems and heat pumps – Qualification of tightness of components and joints	EN ISO 14903	2017
ISO 15042 +A1	2017 2020	Multiple split-system air-conditioners and air-to-air heat pumps – Testing and rating for performance	-	-

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<https://standards.itih.ai/catalog/standards/sist/40a92663-86ae-4f3b-89de-4bb8b2f2585a/osist-pren-iec-60335-2-40-2023-opraa-2023>

Annex ZE (normative)

Specific additional requirements for appliances and machines intended for commercial use

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103 *This annex of Part 1 is applicable with the following modifications:*

104 **1 Introduction**

105 *Add at the beginning:*

106 For the verification of compliance of appliances or machines intended for commercial use with the
107 Essential Health and Safety Requirements (EHSR) of the Directive 2006/42/EC, the requirements
108 in this Annex ZE shall apply.

109 Delete the last paragraph beginning with “An appliance employing materials”

110 **2 Normative references**

111 *Add the following standards:*

112 EN ISO 4871:2009, *Acoustics - Declaration and verification of noise emission values of machinery*
113 *and equipment (ISO 4871:1996)*

114 EN ISO 11201:2010, *Acoustics - Noise emitted by machinery and equipment - Determination of*
115 *emission sound pressure levels at a work station and at other specified positions in an essentially*
116 *free field over a reflecting plane with negligible environmental corrections (ISO 11201:2010)*

117 EN ISO 11202:2010+A1:2021, *Acoustics - Noise emitted by machinery and equipment -*
118 *Determination of emission sound pressure levels at a work station and at other specified positions*
119 *applying approximate environmental corrections (ISO 11202:2010 +A1:2020)*

120 EN ISO 11203:2009, *Acoustics - Noise emitted by machinery and equipment - Determination of*
121 *emission sound pressure levels at a work station and at other specified positions from the sound*
122 *power level (ISO 11203:1995)*

123 EN ISO 11688-1:2009, *Acoustics - Recommended practice for the design of low-noise machinery*
124 *and equipment - Part 1: Planning (ISO/TR 11688-1:1995)*

125 EN 12102-1:2022, *Air conditioners, liquid chilling packages, heat pumps, process chillers and*
126 *dehumidifiers with electrically driven compressors - Determination of the sound power level - Part*
127 *1: Air conditioners, liquid chilling packages, heat pumps for space heating and cooling,*
128 *dehumidifiers and process chillers*

129 EN 12102-2:2019, *Air conditioners, liquid chilling packages, heat pumps, process chillers and*
130 *dehumidifiers with electrically driven compressors - Determination of the sound power level - Part*
131 *2: Heat pump water heaters*

132 **5 General conditions for the tests**

133 **5.7** *Replace the replacement of Part 2 by the following:*

134 *The tests are carried out in a draught-free location at an ambient temperature of 20 °C ± 5 °C.*