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Refrigerated display cabinets - Part 2: Classification, requirements and test conditions (ISO 23953-2:2023)

Verkaufskühlmöbel - Teil 2: Klassifizierung, Anforderungen und Prüfbedingungen (ISO 23953-2:2023)

Meubles frigorifiques de vente - Partie 2: Classification, exigences et méthodes d'essai (ISO 23953-2:2023)

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Refrigerated display cabinets - Part 2: Classification, requirements and test conditions (ISO 23953-2:2023)

Meubles frigorifiques de vente - Partie 2: Classification, exigences et méthodes d'essai (ISO 23953-2:2023)

Verkaufskühlmöbel - Teil 2: Klassifizierung, Anforderungen und Prüfbedingungen (ISO 23953-2:2023)

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European foreword

This document (EN ISO 23953-2:2023) has been prepared by Technical Committee ISO/TC 86 "Refrigeration and air-conditioning" in collaboration with Technical Committee CEN/TC 44 "Commercial and Professional Refrigerating Appliances and Systems, Performance and Energy Consumption" the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by June 2024, and conflicting national standards shall be withdrawn at the latest by June 2024.

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 ISO 23953-2:2015.

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

For the relationship with EU Directive(s) / Regulation(s), see informative Annex ZA and ZB, which is an integral part of this document.

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

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Endorsement notice

The text of ISO 23953-2:2023 has been approved by CEN as EN ISO 23953-2:2023 without any modification.

Annex ZA (informative)

Relationship between this European Standard and the ecodesign requirements of Commission Regulation (EU) No 2019/2024 OJEU L 315/313 aimed to be covered

This European Standard has been prepared under a Commission's standardization request M/582 C(2022) 2764 final to provide one voluntary means of conforming to the ecodesign requirements of Commission Regulation (EU) No 2019/2024 of 1st October 2019 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for refrigerating appliances with a direct sales function OJEU L 315/313 keeping into account the amending Commission Regulation (EU) 2021/341 of 23 February 2021 OJEU L 68/108.

Once this standard is cited in the Official Journal of the European Union under that Regulation, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding ecodesign requirements of that Regulation and associated EFTA regulations.

Table ZA.1 — Correspondence between this European Standard and Commission Regulation (EU) No 2019/2024 of 01 October 2019 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for refrigerating appliances with a direct sales function OJEU L 315/313 and Commission's standardisation request M/582 C(2022) 2764 final

Ecodesign Requirements of Regulation (EU) No 2019/2024 OJEU L 315/313 5 th December 2019	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
Article 4.3. (b)	Annex D.3, D.4, D.5, D.6, D.7, D.8	Calculation methods
Annex III 1	Annex D.2	General condition for the test . See below for loading height references
	5.3.3.3.2 a); b); c)	
	5.3.3.3.2 (d) i.	Loading of vertical closed freezer shall be half loading
	5.3.3.3.2 (d) ii.	Loading of vertical closed chilled cabinet shall be full loading
Annex III 2	5.1, 5.2.1, 5.2.3, 5.3.1, 5.3.2, 5.3.3, 5.3.4, 5.3.6, 5.3.7, Annex A and Annex D	Energy consumption and Annex A for S_{TDA} calculation. E_{daily} is equivalent to E_{TEC} ; TDA is equivalent to S_{TDA} .
Annex III Table 4	Table E.1	M and N coefficients

WARNING 1 — Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2 — Other Union legislation may be applicable to the products falling within the scope of this standard.

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Annex ZB (informative)

Relationship between this European Standard and the energy labelling requirements of Commission Delegated Regulation (EU) No 2019/2018 OJEU L 315/155 aimed to be covered

This European Standard has been prepared under a Commission's standardization request M/582 C(2022) 2764 final to provide one voluntary means of conforming to the energy labelling requirements of Commission Delegated Regulation (EU) No 2019/2018 of 1st October 2019 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of refrigerating appliances with a direct sales function OJEU L 315/155 keeping into account the amending Commission Regulation (EU) 2021/340 of 17 December 2020 OJEU L 68/108.

Once this standard is cited in the Official Journal of the European Union under that Regulation, compliance with the normative clauses of this standard given in Table ZB.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding energy labelling requirements of that Regulation and associated EFTA regulations.

Table ZB.1 — Correspondence between this European Standard and Commission Delegated Regulation (EU) No 2019/2018 of 1st October 2019 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of refrigerating appliances with a direct sales function OJEU L 315/155 and Commission's standardisation request M/582 C(2022) 2764 final

Energy labelling requirements of Regulation (EU) No 2019/2018 OJEU L 315/155 5 th December 2019	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
Annex III 1.2 item ,vi	5.1, 5.2.1, 5.2.3, 5.3.1, 5.3.2, 5.3.3, 5.3.4, 5.3.6, 5.3.7 and Annex D	Testing methods , efficiency calculation E _{daily} is equivalent to E _{TEC} , see line below for Annex IV 2 b.
Annex III 1.2 items vii and ix	Annex A	S _{TDA} calculation TDA is equivalent to S _{TDA} . See line below for AnnexIV 2.c).4.d) (TDA)
Annex III 1.2 items viii and x	5.3.4	Classification according to temperature
Annex IV 1	Annex D.2	General condition for the test
Annex IV 2	5.1, 5.2.1, 5.2.3, 5.3.1, 5.3.2, 5.3.3, 5.3.4, 5.3.6, 5.3.7, Annex A and Annex D	Energy consumption and Annex A for S _{TDA} calculation

	5.3.3.3.2 a); b); c)	
	5.3.3.3.2 (d) i.	Loading of vertical closed freezer shall be half loading
	5.3.3.3.2 (d) ii.	Loading of vertical closed chilled cabinet shall be full loading
Annex IV 2 b	5.1, 5.2.1, 5.2.3, 5.3.1, 5.3.2, 5.3.3, 5.3.4, 5.3.6, 5.3.7 and Annex D	E_{daily} is equivalent to E_{TEC} .
Annex IV 2.c).4.d) (TDA)	Annex A	S_{TDA} calculation TDA is equivalent to S_{TDA} .
Annex IV Table 3	Table E.1	M and N coefficients

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INTERNATIONAL STANDARD

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Refrigerated display cabinets — Part 2: Classification, requirements and test conditions

Meubles frigorifiques de vente —

Partie 2: Classification, exigences et méthodes d'essai

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