
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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Contents

Page

Foreword.....	v
1 Scope	1
2 Normative references	1
3 Terms, definitions, symbols and abbreviated terms.....	1
3.1 General.....	2
3.2 Compression-type refrigeration systems.....	3
3.3 Indirect refrigeration-type systems.....	3
4 Requirements	4
4.1 Construction.....	4
4.1.1 General.....	4
4.1.2 Materials	5
4.1.3 Thermal insulation	6
4.1.4 Refrigerating system	6
4.1.5 Electrical components.....	7
4.1.6 Temperature display.....	7
4.2 Operating characteristics	9
4.2.1 Absence of odour and taste	9
4.2.2 Classification according to temperature	9
4.2.3 Defrosting	9
4.2.4 Water vapour condensation	10
4.2.5 Energy consumption	10
5 Tests.....	10
5.1 General.....	10
5.2 Tests outside test room	10
5.2.1 Seal test for doors and lids.....	10
5.2.2 Linear dimensions, areas and volumes.....	11
5.3 Tests inside test room.....	11
5.3.1 General conditions	11
5.3.2 Preparation of test cabinet and general test procedures.....	20
5.3.3 Temperature test.....	41
5.3.4 Water vapour condensation test.....	44
5.3.5 Electrical energy consumption test.....	45
5.3.6 Heat extraction rate measurement when condensing unit is remote from cabinet.....	45
6 Test report	54
6.1 General.....	54
6.2 Tests outside test room	54
6.2.1 Seal test of doors and lids	54
6.2.2 Linear dimensions, areas and volumes.....	55
6.2.3 Test for absence of odour and taste (if applicable)	55
6.3 Tests inside test room.....	55
6.3.1 General test conditions	55
6.3.2 Cabinet preparation	56
6.3.3 Temperature test.....	56
6.3.4 Water vapour condensation test.....	57
6.3.5 Electrical energy consumption test.....	57
6.3.6 Heat extraction rate measurement when the condensing unit is remote from the cabinet.....	58
7 Marking	59
7.1 Load limit.....	59
7.2 Marking plate.....	60

7.3 Information to be supplied by the manufacturer 60

Annex A (normative) Total display area (TDA) 62

Annex B (normative) Visibility of products by Arc method (VPA) 69

Annex C (informative) Comparison between laboratory and in-store conditions 76

Annex D (informative) Test for absence of odour and taste 77

Bibliography 79

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 23953-2 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 44, *Household refrigerating appliances and commercial refrigeration equipment*, in collaboration with Technical Committee ISO/TC 86, *Refrigeration and air-conditioning*, Subcommittee SC 7, *Testing and rating of commercial refrigerated display cabinets*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This first edition of ISO 23953-2, together with the first edition of ISO 23953-1, cancels and replaces ISO 1992-1:1974, ISO 1992-4:1974, ISO 1992-5:1974, ISO 1992-6:1974, ISO 5160-1:1979 and ISO 5160-2:1980, of which it constitutes a technical revision.

ISO 23953 consists of the following parts, under the general title *Refrigerated display cabinets*:

- *Part 1: Vocabulary*
- *Part 2: Classification, requirements and test conditions*

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Refrigerated display cabinets —

Part 2:

Classification, requirements and test conditions

1 Scope

This part of ISO 23953 specifies requirements for the construction, characteristics and performance of refrigerated display cabinets used in the sale and display of foodstuffs. It specifies test conditions and methods for checking that the requirements have been satisfied, as well as classification of the cabinets, their marking and the list of their characteristics to be declared by the manufacturer. It is not applicable to refrigerated vending machines or cabinets intended for use in catering or similar non-retail applications; nor does it cover the choice of the types of foodstuffs chosen to be displayed in the cabinets.

2 Normative references

The following referenced documents are indispensable for the application 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.

ISO 817, *Refrigerants — Designation system*

ISO 9050, *Glass in building — Determination of light transmittance, solar direct transmittance, total solar energy transmittance and ultraviolet transmittance, and related glazing factors*

ISO 23953-1:2005, *Refrigerated display cabinets — Part 1: Vocabulary*

IEC 60335-2:89, *Safety of household and similar electrical appliances — Part 2: Particular requirements for commercial refrigerating appliances with an incorporated or remote refrigerant condensing unit*

EN 378-2, *Refrigerating systems and heat pumps — Safety and environmental requirements — Part 2: Design, construction, testing, marking and documentation*

EN 60335-1, *Safety of household and similar electrical appliances — Part 1: General requirements*

3 Terms, definitions, symbols and abbreviated terms

For the purposes of this document, the terms and definitions given in ISO 23953-1 and the following symbols and abbreviated terms apply.