INTERNATIONAL STANDARD



Third edition 2023-11

Refrigerated display cabinets —

Refrigerate Part 1: Vocabulary

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Page

Contents

Fore	ord	iv
1	Scope	1
2	Normative references	1
3	Terms and definitions	
5	3.1 Cabinet families and types	
	3.2 Shapes of refrigerated display cabinets	
	3.3 Parts of refrigerated display cabinets	5
	3.4 Dimensional characteristics	
	3.5 Operating characteristics	
	 3.6 Test environment 3.7 General 	
	3.8 Energy and coefficient	
	3.9 Standard rating conditions and configuration	
Ann	A (normative) Designation of refrigerated display cabinet families	
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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 86, *Refrigeration and air-conditioning*, Subcommittee SC 7, *Testing and rating of commercial refrigerated display cabinets*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 44, *Commercial and Professional Refrigerating Appliances and Systems*, *Performance and Energy Consumption*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 23953-1:2015), which has been technically revised.

The main changes are as follows:

- the following terms have been significantly revised: "semi-vertical refrigerated display cabinet", "horizontal refrigerated display cabinet", "combined refrigerated display cabinet with glass-door top", "combined refrigerated display cabinet with open top", "multi-temperature refrigerated display cabinet", "front panel", "display opening area", "product temperature", "product family", "total revised daily electrical energy consumption", "published standard rating and standard configuration";
- the following terms have been added: "multi-use refrigerated display cabinet", "assisted-service door", "assisted-service lid", "self-service door", "self-service lid", "door for loading food", "sneeze guard", "compartment", "cabinet with incorporated liquid-cooled condensing unit", "cabinet with incorporated air-cooled condensing unit", "full loading", "half loading", "sensitive foodstuff loading", "coefficient of performance for liquid-cooled condensing unit", "cooling system energy consumption", "heat extracted condenser", "revised heat removal energy consumption", "heat load extracted daily", "heat removal energy consumption", "refrigeration electrical energy consumption compression-type", "refrigeration electrical energy consumption indirect", "additional refrigeration daily electrical energy consumption", "standard configuration";

- the following term has been deleted: "visibility of products by arc method";
- relevant symbols have been added.

A list of all parts in the ISO 23953 series can be found on the ISO website.

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Refrigerated display cabinets —

Part 1: Vocabulary

1 Scope

This document defines terms related to refrigerated display cabinets used for the sale and display of foodstuffs.

It does not apply to refrigerated vending machines or cabinets intended for use in catering or similar non-retail applications.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 23953-2:2023, Refrigerated display cabinets — Part 2: Classifications, requirements and test conditions

3 Terms and definitions

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at https://www.iso.org/obp
- IEC Electropedia: available at <u>https://www.electropedia.org/</u>

3.1 Cabinet families and types

3.1.1

refrigerated display cabinet

cabinet cooled by a refrigerating system which enables chilled and frozen *foodstuffs* (3.7.4) placed therein for a *display* (3.4.4) to be maintained within prescribed temperature limits

3.1.2

vertical refrigerated display cabinet

refrigerated display cabinet (3.1.1) that is semi-vertical multi-deck, roll-in or glass door

3.1.3

semi-vertical refrigerated display cabinet

vertical refrigerated display cabinet (3.1.2) whose overall height does not exceed 1,5 m, with a vertical or inclined display opening, where the total vertical display height ($V_g + V_o$) is greater than 45 % of the total horizontal display depth ($H_g + H_o$)

Note 1 to entry: The meaning of V_{g} , V_{o} , H_{g} and H_{o} shall be in accordance with ISO 23953-2:2023, Annex A.