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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*



Reference number  
ISO 23953-2:2023(E)

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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](http://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 23953-2:2015), which has been technically revised.

The main changes are as follows:

- revision of:
  - the scope has been revised as this document not applicable to commercial beverage coolers covered by ISO 22044 and ice cream freezers covered by ISO 22043;
  - mass flow with EEV only, to adapt standard to technological improvement;
  - $E_{CPEC,24h}$  also for brine / indirect cooling;
  - testing repeatability;
  - requirements for refrigerant with glide;
- addition of:
  - extrapolation methods for liquid cooled condensing units, depth, height, length and plug-in alternative components;
  - liquid cooled condensing unit (semi plug-in) type;

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- $S_{TDA}$  for new types of cabinets;
- standard rating conditions and configurations;
- marking, load limits, multiple loading line for different M-package temperature.

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

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).