INTERNATIONAL STANDARD

ISO 23953-1

Second edition 2015-10-15

Refrigerated display cabinets —

Part 1: **Vocabulary**

Meubles frigorifiques de vente — Partie 1: Vocabulaire

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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.

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 documents 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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

ISO 23953-1 was prepared by European Committee for Standardization (CEN) in collaboration with 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). Standards itch ai/catalog/standards/sist/8b490702-a918-41f2-ad5a-aa2cfa5344b9/iso-23953-1-2015

This second edition cancels and replaces the first edition (ISO 23953-1:2005 and ISO 23953-1:2005/Amd 1:2012), which has been technically revised. ISO 23953-1 reports new terms and definitions also taking into account Directive 2009/125/EC "establishing a framework for the setting of ecodesign requirements for energy-related products", oriented to an energy rating management. Moreover, new terms and definitions were added on test environment. Some existing terms were updated consistently to the modifications of ISO 23953-2.

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

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

Refrigerated display cabinets —

Part 1:

Vocabulary

1 Scope

This part of ISO 23953 establishes a vocabulary of terms and definitions relative to refrigerated display cabinets used for the sale and display of foodstuffs. It is not applicable to refrigerated vending machines or cabinets intended for use in catering or similar non-retail applications.

NOTE In addition to terms in English and French, two of the three official ISO languages, this part of ISO 23953 gives the equivalent terms in German, Italian, and Spanish; these are published under the responsibility of the member bodies for Germany (DIN), Italy (UNI), and Spain (AENOR). However, only the terms and definitions given in the official languages can be considered as ISO terms and definitions.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 23953-2:2015, Refrigerated display cabinets — Part 2: Classification, requirements and test conditions ISO 23953-1:2015

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3.1 Cabinet families and types

See Annex A.

3.1.1

refrigerated display cabinet

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

3.1.2

vertical refrigerated display cabinet

refrigerated display cabinet, either semi-vertical multi-deck, roll-in, or glass door

3.1.3

semi-vertical refrigerated display cabinet

vertical refrigerated display cabinet whose overall height does not exceed 1,5 m and having either a vertical or inclined display opening

3.1.4

horizontal refrigerated display cabinet (counter)

refrigerated display cabinet (counter) with horizontal display opening on its top and accessible from above

3.1.5

closed refrigerated display cabinet

refrigerated display cabinet where access to the foodstuffs is gained by opening a door or lid

3.1.6

assisted service refrigerated display cabinet

serve-over counter

horizontal refrigerated display cabinet which requires that a person serve the consumer with fresh-cut or packed foodstuffs

3.1.7

self-service refrigerated display cabinet

self-service counter

horizontal refrigerated display cabinet from which the consumer selects the prepacked foodstuffs

3.1.8

serve-over counter with integrated storage

refrigerated display cabinet for assisted service, including refrigerated storage which is normally placed in its base

3.1.9

combined refrigerated display cabinet with glass door top

refrigerated display cabinet consisting of a refrigerated bottom, open or with glass lid, and a glass-door, refrigerated top

3.1.10

combined refrigerated display cabinet with open top

refrigerated display cabinet consisting of a refrigerated bottom, open or with glass lid, and an open refrigerated top

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3.1.11

multi temperature combined refrigerated display cabinets hail

refrigerated display cabinet with different temperatures for chilled or frozen foodstuffs in the top and the bottom

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3.1.12

movable front cabinet

roll-in cabinet

cabinet which enables goods to be displayed directly on their pallets or rolls which can be placed inside by lifting, swinging, or removing the lower front part, where fitted

3.1.13

back-wall service cabinet

refrigerated cabinet in assisted service, placed behind the serving personnel, with or without an added back storage

Note 1 to entry: See Figure 1.

3.2 Refrigerated display cabinet shapes

3.2.1

island run

shop-around line of multiplexed cabinets (horizontal, vertical, or combined), possibly provided with an end cabinet so that the consumer has access to all sides

Note 1 to entry: See Figure 1.

3.2.2

internal angle

cabinet that ensures the geometrical continuity between two cabinets whose extremities form an angle of between 0° and 90°

Note 1 to entry: See Figure 1.

3.2.3

external angle

cabinet that ensures the geometrical continuity between two cabinets whose extremities form an angle of between 0° and 90°

Note 1 to entry: See Figure 1.

3.2.4

end wall

panel closing a cabinet or a line-up or the side of a line-up

Note 1 to entry: See Figure 1.

3.2.5

line-up

run

line consisting of multiplexed modular refrigerated cabinets even if not in a straight segment

Note 1 to entry: See Figure 1.

3.2.6

technical line-up

zone

line made up of multiplexed modular refrigerated cabinets even if not in a straight segment but with shared safety and temperature control devices

Note 1 to entry: See Figure 1eh STANDARD PREVIEW

3.2.7

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wall cabinet

cabinet (horizontal, vertical, or combine d) intended to be located with its back to a wall or back to back with another cabinet be located with its back to a wall or back to back with another cabinet be back itch ai/catalog/standards/sist/8b490702-a918-41f2-ad5a-

Note 1 to entry: See <u>Figure 1</u>.

3.2.8

island cabinet

shop-around or other cabinet intended to be multiplexed as a part of island run

Note 1 to entry: See Figure 1.

3.2.9

island cabinet with air discharge in the middle

island with air discharge positioned in the middle of the cabinet so that the product storage room consists of two separate volumes

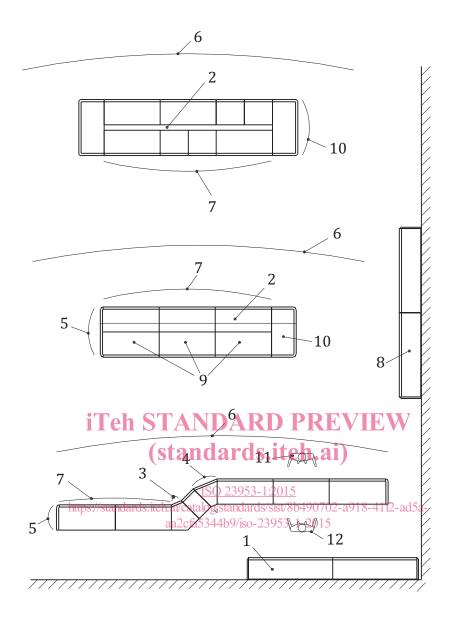
Note 1 to entry: Two open wall cabinets mounted back to back are not considered to be an "island cabinet with air discharge in the middle".

3.2.10

end cabinet

cabinet intended to be located at the end of an island run

Note 1 to entry: See Figure 1.



Key

- 1 back wall service cabinet
- 2 island run
- 3 internal angle
- 4 external angle
- 5 end wall
- 6 line-up/run
- 7 technical line-up/zone
- 8 wall cabinet
- 9 island cabinet
- 10 end cabinet
- 11 consumer
- 12 serving personnel

Figure 1 — Refrigerated display cabinet shapes

3.3 Parts of refrigerated display cabinets

3.3.1

air discharge

opening at which the air curtain comes out

Note 1 to entry: See Figure 2.

3.3.2

air return

opening at which the air curtain flows back inside the cabinet air ducts

Note 1 to entry: See Figure 2.

3.3.3

shelf

surface, excluding the base deck, on which the goods are displayed

Note 1 to entry: See Figure 2.

3.3.4

price marking rail

ticket holder

profile fitted along the cabinet shelves which enables different types of labels for consumer information to be displayed

Note 1 to entry: See Figure 2eh STANDARD PREVIEW

3.3.5

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kickplate

vertical plate or plinth that covers the gap between the floor and base of the cabinet

Note 1 to entry: See Figure 2. https://standards.iteh.ai/catalog/standards/sist/8b490702-a918-41f2-ad5a-aa2cfa5344b9/iso-23953-1-2015

3.3.6

night cover

lid, blind, or other cover used to reduce the heat ingress (e.g. by infrared radiation or convection) into an open refrigerated display cabinet

Note 1 to entry: See Figure 2.

3.3.7

night blind

type of night cover, curtain to be pulled on the cabinet display opening in order to close it and which can be moved automatically

Note 1 to entry: See Figure 2.

3.3.8

canopy

upper front part of a vertical cabinet

Note 1 to entry: See Figure 2.

3.3.9

front panel(s)

group of aesthetic pieces of the cabinet front, visible to the consumer

Note 1 to entry: See Figure 2.

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3.3.10

front

side of the cabinet facing the consumer or in the case of an island cabinet, the side on which the manufacturer affixes his identification plate

Note 1 to entry: See Figure 2.

3.3.11

front riser

device for retaining the goods within the display surface

Note 1 to entry: See Figure 2.

3.3.12

handrail

upper front profile covering the edge that is normally touched by the consumer

Note 1 to entry: See Figure 2.

3.3.13

condensing unit

combination of one or more compressors, condensers, and liquid receivers (when required) and the regularly furnished accessories

Note 1 to entry: See Figure 2.

3.3.14

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base deck

lowest display surface of a cabinet

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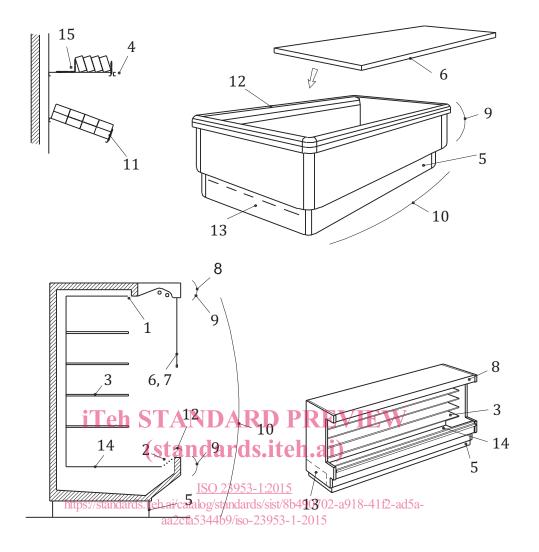
Note 1 to entry: See Figure 2.

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3.3.15

shelf sham aa2cfa5344b9/iso-23953-1-2015 device intended to limit the loading of a display surface

Note 1 to entry: See Figure 2.



Key

- 1 air discharge
- 2 air return
- 3 shelf
- 4 price marking rail/ticket holder
- 5 kickplate
- 6 night cover
- 7 night blind
- 8 canopy
- 9 front panel(s)
- 10 front
- 11 front riser
- 12 handrail
- 13 possible location of condensing unit
- 14 base deck
- 15 shelf sham

Figure 2 — Parts of refrigerated display cabinets