

## ECLA EUROPEAN CLASSIFICATION

### F25D

#### REFRIGERATORS; COLD ROOMS; ICE-BOXES; COOLING OR FREEZING APPARATUS NOT COVERED BY ANY OTHER SUBCLASS

(refrigerated show cases [A47F3/04](#); thermally-insulated vessels for domestic use [A47J41/00](#); refrigerated vehicles, see the appropriate subclasses of classes [B60](#) to [B64](#); containers with thermal insulation in general [B65D81/38](#); heat-transfer, heat-exchange or heat-storage materials, e.g. refrigerants, or materials for the production of heat or cold by chemical reactions other than by combustion [C09K5/00](#); thermally-insulated vessels for liquefied or solidified gases [F17C](#); air-conditioning or air-humidification [F24F](#); refrigeration machines, plants or systems [F25B](#); cooling of instruments and comparable apparatus without refrigeration [G12B](#); cooling of engines or pumps, see the relevant classes)

#### Notes

1. In this subclass, the following term is used with the meaning indicated:

- "device" means an enclosed space to be cooled; such devices being associated either with refrigerating machinery, e.g. in a refrigerator, or with other cold sources, e.g. in an ice-box.

2. Attention is drawn to Note (2) following the title of subclass [F24F](#).

**Guide heading:** Devices not associated with refrigerating machinery

**F25D1/00** Devices using naturally cold air or cold water

F25D1/02 . using naturally cold water, e.g. household tap water

**F25D3/00** Devices using other cold materials; Devices using cold-storage bodies

F25D3/00A . [N: combined with heat exchangers]

F25D3/02 . using ice, e.g. ice-boxes

F25D3/04 . . Stationary cabinets

F25D3/04A . . . [N: Details]

F25D3/06 . . Movable containers

F25D3/08 . . . portable, i.e. adapted to be carried personally

F25D3/10 . using liquefied gases, e.g. liquid air [N: (for cooling semiconductor devices [H01L23/44C](#))]

F25D3/10A . . [N: Stationary cabinets]

F25D3/10B . . [N: Movable containers]

F25D3/10C . . [N: portable, i.e. adapted to be carried personally]

F25D3/11 . . with conveyers carrying articles to be cooled through the cooling space

- F25D3/12 . using solidified gases, e.g. carbon-dioxide snow
- F25D3/12A . . [N: Stationary cabinets]
- F25D3/12B . . [N: Movable containers]
- F25D3/12D . . [N: Stationary devices with conveyers carrying articles to be cooled through the cooling space]
- F25D3/14 . . portable, i.e. adapted to be carried personally
  
- F25D5/00                    Devices using endothermic chemical reactions, e.g. using frigorific mixtures**
  
- F25D5/02 . portable, i.e. adapted to be carried personally
  
- F25D7/00                    Devices using evaporation effects without recovery of the vapour (butter or cheese dishes with cooling devices [A47G19/26](#))**
  
- F25D9/00                    Devices not covered by groups [F25D1/00](#) to [F25D7/00](#); Combinations of devices covered by two or more of the groups [F25D1/00](#) to [F25D7/00](#)**
  
- F25D9/00B . [N: using fluorinated halogenous hydrocarbons]
  
- Guide heading:            Devices associated with refrigerating machinery**
  
- F25D11/00                  Self-contained movable devices, e.g. domestic refrigerator**
  
- F25D11/00B . [N: Transport containers]
- F25D11/00D . [N: with cold storage accumulators]
- F25D11/02 . with cooling compartments at different temperatures
- F25D11/02B . . [N: with two or more evaporators]
- F25D11/02C . . [N: using primary and secondary refrigeration systems]
- F25D11/02D . . [N: of the sorption cycle type]
- F25D11/04 . specially adapted for storing deep-frozen articles ([F25D11/02](#) takes precedence)
  
- F25D13/00                  Stationary devices, e.g. cold-rooms**
  
- F25D13/02 . with several cooling compartments, e.g. refrigerated locker systems
- F25D13/04 . . the compartments being at different temperatures
  
- F25D13/06 . with conveyers carrying articles to be cooled through the cooling space
- F25D13/06A . . [N: with refrigerated conveyers]
- F25D13/06B . . [N: Articles being submerged in liquid coolant]
- F25D13/06C . . [N: with circulation of gaseous cooling fluid]
  
- F25D15/00                  Devices not covered by group [F25D11/00](#) or [F25D13/00](#), e.g. non-self-contained**

**movable devices**

- F25D16/00**      **Devices using a combination of a cooling mode associated with refrigerating machinery with a cooling mode not associated with refrigerating machinery**
- Guide heading:**      **Details or features of the devices covered by groups [F25D1/00](#) to [F25D16/00](#)**
- F25D17/00**      **Arrangements for circulating cooling fluids; Arrangements for circulating gas, e.g. air, within refrigerated spaces**
- F25D17/00B      .    [\[N: in cold rooms\]](#)
- F25D17/02      .    for circulating liquids, e.g. brine
- F25D17/04      .    for circulating air, e.g. by convection
- F25D17/04A      .    .    [\[N: Air treating means within refrigerated spaces \(air conditioning in general \[F24F\]\(#\)\)\]](#)
- F25D17/04A2      .    .    .    [\[N: Air flow control arrangements\]](#)
- F25D17/04A4      .    .    .    [\[N: Pressure equalising devices\]](#)
- F25D17/06      .    .    by forced circulation
- F25D17/06A      .    .    .    [\[N: in household refrigerators\]](#)
- F25D17/06A1      .    .    .    .    [\[N: with compartments at different temperatures\]](#)
- F25D17/06B      .    .    .    [\[N: Evaporator fan units\]](#)
- F25D17/08      .    .    .    using ducts
- F25D19/00**      **Arrangement or mounting of refrigeration units with respect to devices [\[N: or objects to be refrigerated, e.g. infra-red detectors\]](#)**
- F25D19/00B      .    [\[N: with respect to movable containers\]](#)
- F25D19/00C      .    [\[N: Thermal coupling structure or interface\]](#)
- F25D19/02      .    plug-in type
- F25D19/04      .    with more than one refrigeration unit
- F25D21/00**      **Defrosting; Preventing frosting; Removing condensed or defrost water (removing ice or water from heat-exchange apparatus in general [F28F17/00](#); heating arrangements specially adapted for transparent or reflecting areas [H05B3/84](#))**
- F25D21/00A      .    [\[N: Defroster control\]](#)
- F25D21/00A1      .    .    [\[N: Control mechanisms \(\[F25D21/00A2\]\(#\) takes precedence\)\]](#)
- F25D21/00A2      .    .    [\[N: with electronic control circuits\]](#)
- F25D21/00A4      .    .    [\[N: by timer\]](#)
- F25D21/02      .    Detecting the presence of frost or condensate

- F25D21/02A . . [N: using air pressure differential detectors]
- F25D21/04 . Preventing the formation of frost or condensate
- F25D21/06 . Removing frost ([defrosting cycles F25B47/02](#))
- F25D21/06A . . [N: by mechanical means]
- F25D21/08 . . by electric heating
- F25D21/10 . . by spraying with fluid
- F25D21/12 . . by hot-fluid circulating system separate from the refrigerant system
- F25D21/12B . . . [N: the hot fluid being ambient air]
- F25D21/14 . Collecting or removing condensed and defrost water; Drip trays
- F25D23/00** **General constructional features ([F25D21/00](#) takes precedence)**
- F25D23/00B . [N: for cooling refrigerating machinery]
- F25D23/00C . [N: for mounting refrigerating machinery components]
- F25D23/02 . Doors; Covers ([F25D23/08](#) takes precedence) [N: locks or fastenings [E05B65/00M](#)]
- F25D23/02A . . [N: Sliding doors]
- F25D23/02B . . [N: Air curtain closures]
- F25D23/02C . . [N: Secondary closures]
- F25D23/02D . . [N: for open-top cabinets]
- F25D23/02E . . [N: Details]
- F25D23/04 . . with special compartments, e.g. butter conditioners
- F25D23/06 . Walls ([F25D23/08](#) takes precedence; containers with thermal insulation [B65D81/38](#))
- F25D23/06A . . [N: with conduit means]
- F25D23/06B . . [N: defining a cabinet]
- F25D23/06B1 . . . [N: formed by an assembly of panels]
- F25D23/06B2 . . . [N: formed by moulding, e.g. moulding in situ]
- F25D23/06C . . [N: Details]
- F25D23/06C1 . . . [N: Liners]
- F25D23/06C2 . . . [N: Supporting elements]
- F25D23/06C3 . . . [N: Arrangements for circulating fluids through the insulating material]
- F25D23/06D . . [N: Cooling space dividing partitions]
- F25D23/08 . Parts formed wholly or mainly of plastics materials
- F25D23/08B . . [N: Strips]
- Note**  
[N0003]When a document describes both breaking and sealing strips it is classified in group [F25D23/08B](#) only.
- F25D23/08B1 . . . [N: Breaking strips]
- F25D23/08B2 . . . [N: Sealing strips]

- F25D23/10 . Arrangements for mounting in particular locations, e.g. for built-in type, for corner type
- F25D23/12 . Arrangements of compartments additional to cooling compartments; Combinations of refrigerators with other equipment, e.g. stove
- F25D23/12A . . [N: Butter compartment]
- F25D23/12B . . [N: Water cooler]
- F25D25/00**            **Charging, supporting, and discharging the articles to be cooled**
- F25D25/00A . [N: using containers]
- F25D25/02 . by shelves
- F25D25/02A . . [N: combined with trays]
- F25D25/02B . . [N: Baskets]
- F25D25/02C . . [N: Slidable shelves]
- F25D25/02C2 . . . [N: Drawers]
- F25D25/02D . . [N: Rotatable shelves]
- F25D25/02E . . [N: Cooled supporting means]
- F25D25/04 . by conveyers (in general [B65G](#))
- F25D27/00**            **Lighting arrangements** (in general [F21](#))
- F25D27/00B . [N: combined with control means]
- F25D29/00**            **Arrangement or mounting of control or safety devices**
- F25D29/00B . [N: for cryogenic fluid systems]
- F25D29/00C . [N: for movable devices]
- F25D29/00D . [N: Mounting of control devices]
- F25D29/00E . [N: Safety devices]
- F25D29/00F . [N: Alarm devices]
- F25D31/00**            **Other cooling or freezing apparatus**
- F25D31/00B . [N: Plate freezers]
- F25D31/00C . [N: Liquid coolers, e.g. beverage cooler (**receptacle coolers** [F25D31/00H](#))]
- F25D31/00C2 . . [N: with immersed cooling element]
- F25D31/00G . [N: Combined cooling and heating devices]
- F25D31/00H . [N: specially adapted for cooling receptacles, e.g. tanks] [C0001]

- F25D31/00H2 . . [N: Bottles or cans] [N0001]
- F25D31/00H3 . . [N: Drinking glasses] [N0001]