
STATUTORY INSTRUMENTS

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The Ecodesign for Energy-Related Products
and Energy Information Regulations 2021

PART 2

Ecodesign for Energy-Related Products

CHAPTER 5

REFRIGERATING APPLIANCES

Application and interpretation

27.—(1) Subject to paragraph (2), this Chapter applies to electric mains-operated refrigerating appliances with a total volume of—

- (a) more than 10 litres; and
- (b) less than or equal to 1,500 litres.

(2) This Chapter does not apply to—

- (a) professional refrigerated storage cabinets and blast cabinets, other than professional chest freezers;
- (b) any appliance to which Chapter 2 of this Part applies (refrigerating appliances with a direct sales function);
- (c) mobile refrigerating appliances;
- (d) refrigerating appliances whose primary function is not the storage of foodstuffs.

(3) In this Chapter and Schedules 13 to 15—

“0-star compartment” and “ice-making compartment” means a frozen compartment with a target temperature and storage conditions of 0 °C, as set out in Table 17 in Schedule 14;

“1-star compartment” means a frozen compartment with a target temperature and storage conditions of -6 °C, as set out in Table 17 in Schedule 14;

“2-star compartment” means a frozen compartment with a target temperature and storage conditions of -12 °C, as set out in Table 17 in Schedule 14;

“3-star compartment” means a frozen compartment with a target temperature and storage conditions of -18 °C, as set out in Table 17 in Schedule 14;

“blast cabinet” means a refrigerating appliance primarily intended to rapidly cool hot foodstuffs to below—

- (a) 10 °C in the case of chilling, and
- (b) -18 °C in the case of freezing;

“compartment”—

(a) means an enclosed space within a refrigerating appliance, separated from other compartments by a partition, container, or similar construction, which is directly accessible through one or more external doors and which may be divided into sub-compartments, and

(b) unless otherwise specified, includes sub-compartments;

“compartment type” means the declared compartment type in accordance with the refrigerating performance parameters T_{\min} , T_{\max} , T_c and others set out in Table 17 in Schedule 14;

“compartment volume” or “ V_c ” means the volume of the space within the inside liner of the compartment, expressed in cubic decimetres (dm^3) or litres (L);

“external door” is the part of a cabinet that can be moved or removed to allow the load to be moved from the exterior to the interior or from the interior to the exterior of the cabinet;

“foodstuffs” means food, ingredients, beverages, including wine, and other items primarily used for human consumption which require refrigeration at specified temperatures;

“freezer” means a refrigerating appliance with only 4-star compartments;

“freezer compartment” or “4-star compartment” means a frozen compartment with a target temperature and storage conditions of $-18\text{ }^\circ\text{C}$ and which fulfils the requirements for freezing capacity in paragraph 3(7) of Schedule 13;

“freezing capacity” means the amount of fresh foodstuffs that can be frozen in a freezer compartment in 24 hours;

“frozen compartment” means a compartment type with a target temperature equal to or below $0\text{ }^\circ\text{C}$ (being a 0-star, 1-star, 2-star, 3-star or 4-star compartment), as set out in Table 17 in Schedule 14;

“mains” or “electric mains” means the electricity supply from the electricity grid of 230 (± 10 per cent) volt of alternating current at 50 Hz;

“mobile refrigerating appliance”—

(a) means a refrigerating appliance—

(i) which can be used where there is no access to the mains electricity grid; and

(ii) which uses extra low-voltage electricity ($< 120\text{ VDC}$) or fuel, or both, as the energy source for the refrigeration;

(b) includes a refrigerating appliance which can be electric mains operated via a separately purchased external AC/DC converter in addition to extra low voltage electricity or fuel;

(c) does not include an appliance placed on the market with an AC/DC converter;

“professional chest freezer” means a freezer used for the storage of foodstuffs in non-household environments—

(a) in which the compartment is accessible from the top of the appliance; or

(b) which has both top-opening type and upright type compartments but where the gross volume of the top-opening type compartment exceeds 75 per cent of the total gross volume of the appliance;

“professional refrigerated storage cabinet” means a refrigerating appliance—

(a) integrating one or more compartments accessible via one or more doors or drawers;

(b) capable of continuously maintaining the temperature of foodstuffs within prescribed limits at chilled or frozen operating temperatures, using a vapour compression cycle; and

(c) used for the storage of foodstuffs in non-household environments but not for display to or access by customers;

“refrigerating appliance” means an insulated cabinet with one or more compartments that are controlled at specific temperatures, and cooled by natural or forced convection whereby the cooling is obtained by one or more energy consuming means;

“sub-compartment” means an enclosed space in a compartment having a different operating temperature range from the compartment in which it is located;

“target temperature” or “ T_c ” means the reference temperature inside a compartment during testing, as set out in Table 17 in Schedule 14, over a set of sensors;

“total volume” (“V”) means the volume of the space within the inside liner of the refrigerating appliance, equal to the sum of the compartment volumes, expressed in dm^3 or L.

Ecodesign requirements

28.—(1) A refrigerating appliance must conform to the ecodesign requirements set out in Schedule 13 when it is placed on the market or put into service.

(2) Manufacturers, authorised representatives and importers of refrigerating appliances must comply with paragraphs 4 and 5 of Schedule 13 (resource efficiency and information requirements).

Conformity assessment

29.—(1) For the purposes of the conformity assessment procedure referred to in Schedule 1A to the 2010 Regulations, a manufacturer assessing whether a product conforms with these Regulations must use either—

- (a) the internal design control procedure set out in Part 1 of that Schedule; or
- (b) the management system procedure set out in Part 2 of that Schedule.

(2) The technical documentation file required for the conformity assessment of a product must contain—

- (a) a copy of the product information provided in accordance with paragraph 5 of Schedule 13;
- (b) the information specified in paragraph 6 of Schedule 13; and
- (c) the details and results of any measurements or calculations carried out in accordance with regulation 31 or Schedule 14.

Verification procedure for market surveillance purposes

30. The market surveillance authority must use the verification procedure set out in Schedule 15 when verifying the compliance of a product with the requirements of these Regulations.

Measurements and calculations

31.—(1) The measurements and calculations required by this Chapter, or necessary for demonstrating or measuring conformity with this Chapter, must be made in accordance with designated standards, where available.

(2) Where designated standards are not available, the measurements and calculations referred to in paragraph (1) must be made in accordance with methods which—

- (a) can be demonstrated to be reliable, accurate, and reproducible by the person deploying them; and
- (b) take into account the generally recognised state of the art.

Circumvention and software updates

32.—(1) The manufacturer, importer or authorised representative must not place on the market products designed to be able to detect they are being tested (for example by recognising the test conditions or test cycle) and to react specifically by automatically altering their performance during the test with the aim of reaching a more favourable level for any of the parameters in the technical documentation or included in any documentation provided.

(2) The energy consumption of the product and any of the other declared parameters must not deteriorate after a software or firmware update when measured with the same test standard originally used for the declaration of conformity, except with the explicit consent of the end-user prior to the update.

(3) The performance of a product must not change as a result of rejecting a software update.

(4) A software update must not have the effect of changing the product's performance in a way that makes it non-compliant with the ecodesign requirements applicable for the declaration of conformity.