

EUROPEAN COMMUNITIES (ENERGY EFFICIENCY REQUIREMENTS FOR HOUSEHOLD ELECTRIC REFRIGERATORS, FREEZERS AND COMBINATIONS THEREOF) REGULATIONS, 1997

I, Mary O' Rouke, Minister for Public Enterprise, in exercise of the powers conferred on me by section of the European Communities Act, 1972 (No. 27 of 1972), and for the purpose of giving effect to Directive 96/57/EC of the European Parliament and of the Council of 3 September, 1996, hereby make the following regulations:

1 O.J. No. L236,18.9.96, p.36

Citation and Commencement

1. (1) These Regulations may be cited as the European Communities (Energy Efficiency Requirements for Household Electric Refrigerators, Freezers and combinations thereof) Regulations, 1997.
- (2) These Regulations shall come into operation on the 3rd September, 1999.

Interpretation

2. (1) In these Regulations—

"authorised officer" means a person appointed as an authorised officer under regulation 8.

"the Directive" means Directive 96/57/EC of the European Parliament and of the Council of 3 September, 1996 on energy efficiency requirements for household electric refrigerators, freezers and combinations thereof;

European Standards EN 153" means European Standard EN 153 of July, 1995 laid down by the European Committee for Standardisation;

"manufacturer" in relation to a refrigeration appliance, means the manufacturer of the appliance or the authorised representative of the manufacturer established within the Community, the person who places the refrigeration appliance on the Community market shall undertake the obligations of the manufacturer of the appliance imposed under these Regulations;

"the Minister" means the Minister for Public Enterprise;

"refrigeration appliance" means an electric mains-operated household refrigerator, a frozen storage cabinet, a food freezer and a combination of these as defined in the First Schedule, but does not include -

- (a) an appliance that can also use other energy sources, particularly accumulators,
- (b) a second-hand appliance,
- (c) an appliance manufactured on a one-off basis.

(2) A word or expression that is used in the Directive and is also used in these Regulations shall, unless the contrary intention appears, have in these Regulations the meaning that it has in the Directive.

(3) In these Regulation, unless otherwise indicated—

- (a) a reference to a Regulation is a reference to a Regulation of these Regulations,
- (b) a reference to a paragraph or a subparagraph is a reference to a paragraph or a subparagraph of the provision in which the reference occurs,
- (c) a reference to a Schedule is a reference to a Schedule to these Regulations.

Application

3. These Regulations apply to new refrigeration appliances.

Duties of manufacturers

4. (1) A manufacturer of a refrigeration appliance shall—
- (a) ensure that the electrical consumption of the appliance, when placed on the market, is less than or equal to the maximum allowable electricity consumption for its category as calculated according to the procedures set out in the First Schedule,
 - (b) ensure that the appliance, when placed on the market—
 - (i) bears the 'CE' marking consisting of the initials 'CE' in the form set out in the Second Schedule,
 - (ii) that such marking is affixed visibly, legibly and indelibly to the appliance, and where appropriate, to its packaging,
 - (c) establish the technical documentation as set out in the Third Schedule,
 - (d) take all measures necessary to ensure that the manufacturing process of the appliance complies with that documentation and these Regulations,
 - (e) make a declaration in writing that the manufacturing process of the appliance complies with that documentation and these Regulations,
 - (f) establish the electricity consumption of the appliance according to the procedures specified in European Standard EN 153, as well as in the First Schedule.
- (2) A manufacturer of a refrigeration appliance shall keep the documentation referred to in paragraph (1)(c) and the declaration made under paragraph (1)(e) or a copy thereof for a period of not less than 3 years from the date of manufacture of the appliance.
- (3) A manufacturer who fails to comply with these Regulations shall be guilty of an offence.

Prohibition on persons obscuring 'CE' marking

5. (1) Subject to paragraph (2), a person shall not affix to a refrigeration appliance
- (a) any markings which are likely to mislead third parties as to the meaning and form of the 'CE' marking, or
 - (b) anything which reduces the visibility or legibility of that marking.
- (2) A person may affix to a refrigeration appliance or its packaging the instruction sheet or other documents, provided that the 'CE' marking remains visible and legible.
- (3) A person who contravenes this Regulation shall be guilty of an offence.

Presumption

6. (1) It shall be presumed until the contrary is shown that a refrigeration appliance which bears the 'CE' marking complies with these Regulations.
- (2) Where a refrigeration appliance is subject to another Community directive covering other aspects which also provide for affixing of the 'CE' marking, such marking shall indicate that the appliance in question is presumed, until the contrary is shown, to comply with that directive.
- (3) Where the directive referred to in paragraph (2) allows a manufacturer during a transitional period to choose which rules to apply, the 'CE' marking shall indicate conformity solely with that directive applied by the manufacturer. In that case, the reference number of the directive applied, as published in the Official Journal of the European Communities, shall be given in any documentation accompanying the appliance.

Directions and forfeiture

7. Where the Minister is of the opinion that the 'CE' marking has been affixed improperly to a refrigeration appliance contrary to Regulation 5(1), the Minister may apply to the High Court for an order to direct the manufacturer to bring the product into conformity with these Regulations and to end the infringement in accordance with such conditions as may be contained in the order or for the forfeiture to the Minister of the product concerned, or both.

Authorised Officers

8. (1) The Minister may appoint such and so many persons as the Minister may determine to be authorised officers for the purposes of these Regulations.
- (2) An authorised officer may, at all reasonable times, on production, if so requested by any person affected, of his or her warrant of appointment—
- (a) enter any premises or other place or any vehicles if he or she reasonably believes that a refrigeration appliance is kept therein or thereon for the purpose of being placed on the market;
 - (b) inspect the premises or other place or the vehicle;
 - (c) carry out or have carried out such examinations, tests, inspections and checks of any refrigeration appliances found there as he or she reasonably considers to be necessary for the purposes of his or her functions and, if he or she so thinks fit, remove or have removed from there any refrigeration appliance and retain the appliance for a reasonable period to facilitate such testing;
 - (d) require any person on or at the premises or other place or the vehicle to give to the officer any information in the person's power or control that the officer may reasonably require and to produce to him or her any records (in whatever form kept) or books or documents (including labels and fiches) that are in the person's power or control;
 - (e) inspect and copy or extract information from any data (within the meaning of the Data Protection Act, 1988) found by or produced to the officer under this Regulation;
 - (f) inspect and take copies of, or extracts from, any records (in whatever form kept), books or documents (including labels and fiches) found by or produced to the officer under this Regulation.
- (3) If an authorised officer has reason to suspect that the information is inaccurate, he or she may require the supplier concerned to furnish evidence (including technical documentation referred to in Regulation 4(1)) concerning its accuracy.
- (4) A person who obstructs or impedes an authorised officer in the exercise of a power or, without reasonable excuse, does not comply with a requirement of an authorised officer under these Regulations or who, in purported compliance with such a requirement, gives information to any authorised officer that he or she knows to be false or misleading in a material respect shall be guilty of an offence.

Penalties and offences

9. (1) A person guilty of an offence under these Regulations shall be liable on summary conviction to a fine not exceeding £1,500.
- (2) Where an offence under these Regulations is committed by a body corporate and is proved to have been so committed with the consent or connivance of, or to be attributable to any neglect on the part of, any person, being a director, manager, secretary or other officer, of such a body, or a person who was purporting to act in any such capacity, that person, as well as the body corporate, shall be guilty of an offence and shall be liable to be proceeded against and punished as if he or she were guilty of the first-mentioned offence.
- (3) Proceedings for an offence under these Regulations may be brought by the Minister.

Regulation 4(1)(a)

FIRST SCHEDULE

METHOD FOR CALCULATING THE MAXIMUM ALLOWABLE ELECTRICITY CONSUMPTION OF A REFRIGERATION APPLIANCE AND PROCEDURE FOR CHECKING CONFORMITY

The electricity consumption of a refrigeration appliance (which may be expressed in kWh per 24 hours) is a function of the category of appliance to which it belongs (e.g. 1-star refrigerator, chest freezer, etc.) its volume and the energy efficiency of its construction, (thickness of insulation, compressor efficiency, etc.) and the difference between ambient temperature and the temperature inside the appliance. In setting energy efficiency standards therefore, allowance must be made for the main endogenous factors which influence energy consumption (i.e. the category of the appliance and its volume). For this reason the maximum allowable electricity consumption of a refrigeration appliance is defined by a linear equation which is a function of the volume of the appliance, with different equations laid down for each category of appliance.

To calculate the maximum allowable electricity consumption of a given appliance, it must therefore first be allocated to the appropriate category from the following list:

Category	Description
1	Refrigeration, without low temperature compartment (1)
2	Refrigeration/chiller, with compartment at 5°C and/or 12°C
3	Refrigerator, with no-star low temperature compartment
4	Refrigerator, with low temperature compartment (*)
5	Refrigerator, with low temperature compartment (**)
6	Refrigerator, with low temperature compartment (***)
7	Refrigerator/freezer, with freezer compartment (****)
8	Food freezer, upright
9	Food freezer, chest
10	Refrigerator/freezer with more than two doors, or other appliances not covered above.

(1) Any compartment with a temperature at or below 6°C.

Because refrigeration appliances contain different compartments maintained at different temperatures (which will significantly influence electricity consumption), maximum allowable electricity consumption is defined in practice as a function of the adjusted volume, which is the weighted sum of the volumes of the different compartments.

Thus, for the purposes of this Regulation, the adjusted volume (Vadj) of a refrigeration appliance is defined as:

$$V_{adj} = \sum V_c \times W_c \times F_c \times C_c$$

$$W_c = (25 - T_c) / 20$$

where T_c is the design temperature in each compartment (in °C),

where V_c is the net volume of a given type of compartment in the appliance and F_c is a factor which equals 1.2 for no frost compartments and 1 for other compartments.

$C_c = 1$ for refrigeration appliances belonging to the normal (N) and subnormal (SN) climate classes.

$C_c = X_c$ for refrigeration appliances belonging to the subtropical (ST) climate class.

$C_c = Y_c$ for refrigeration appliances belonging to the tropical (T) climate class. The weighting coefficients X_c and Y_c for the different types of compartment are:

Table of weighting coefficients Xc and Yc according to the temperature of the compartment.

	Xc	Yc
Cellar compartment	1.25	1.35
Fresh food compartment	1.20	1.30
0°C compartment	1.15	1.25
No-star compartment	1.15	1.25
1-star (*) compartment	1.12	1.20
2-star (**) compartment	1.08	1.15
3 (***) and 4-star (****) compartments	1.05	1.10

Both the adjusted volume and the net volume are expressed in litres.

The maximum allowable electricity consumption (E_{max} expressed in kWh per 24 hours calculated to two decimal places), for an appliance type with adjusted volume V_{adj} is defined by the following equations for each category:

Category	Description	E_{max} (kWh/24h)
1	Refrigeration, without low temperature compartment	$(0.207 \times V_{adj} + 218) / 365$
2	Refrigerator/chiller, with compartment at 5°C and/or 12°C	$(0.207 \times V_{adj} + 218) / 365$
3	Refrigerator, with no-star temperature compartment	$(0.207 \times V_{adj} + 218) / 365$
4	Refrigerator, with low temperature compartment (*)	$(0.557 \times V_{adj} + 166) / 365$
5	Refrigerator, with low temperature compartment (**)	$(0.402 \times V_{adj} + 219) / 365$
6	Refrigerator, with low temperature compartment (***)	$(0.573 \times V_{adj} + 206) / 365$
7	Refrigerator/freezer, with freezer compartment (****)	$(0.697 \times V_{adj} + 272) / 365$
8	Food freezer, upright	$(0.434 \times V_{adj} + 262) / 365$
9	Food freezer, chest	$(0.480 \times V_{adj} + 195) / 365$

For refrigerators/freezers with more than two doors, or other appliances not covered above, the maximum allowable electricity consumption (E_{max}) is determined by the temperature and the star rating of the compartment with the lowest temperature, as follows:

Temperature of the coldest compartment	Category	E_{max} (kWh/24 hours)
<= - 6°C	1/2/3	$(0.207 \times V_{adj} + 218) / 365$
<= - 6°C (*)	4	$(0.557 \times V_{adj} + 166) / 365$
<= - 12°C (**)	5	$(0.402 \times V_{adj} + 219) / 365$
<= - 18°C (***)	6	$(0.573 \times V_{adj} + 206) / 365$
<= - 18°C (****)	7	$(0.697 \times V_{adj} + 272) / 365$

Test procedures for checking whether an appliance complies with the electricity consumption requirements of these Regulations.

If the electricity consumption of a refrigeration appliance submitted for verification is less than or equal to Emax (the maximum allowable electricity consumption value for its category, as defined above), plus 15%, the appliance is certified as conforming to the electricity consumption requirements of these Regulations. If the electricity consumption of the appliance is greater than Emax Plus 15% electricity consumption of a further three appliances must be measured. If the arithmetic mean of the electricity consumption of these three appliances is less than or equal to Emax Plus 10%, the appliance is certified as conforming to the electricity consumption requirements of these Regulations. If the arithmetic mean exceeds Emax Plus 15% the appliance must be judged not to conform to the electricity consumption requirements of these Regulations.

Definitions

The terms used in this Schedule correspond to the definitions in European Standard EN 153.

Regulation 4(1)(b)

SECOND SCHEDULE

'CE' CONFORMITY MARKING

1. The conformity marking shall consist of the initials 'CE' taking the following form:
2. if the 'CE' marking is reduced or enlarged the proportions given in the graduated drawing must be respected.
3. The various components of the 'CE' marking must have substantially the same vertical dimension, which may not be less than 5mm.

Regulation 4(1)(c) and (d)

THIRD SCHEDULE

TECHNICAL DOCUMENTATION

1. Technical documentation must enable the conformity of the refrigeration appliance with the requirements of these Regulations to be assessed. It must, as far as relevant for such assessment, cover the design, manufacture and operation of the refrigeration appliance and comprise:

- (a) the name and address of the manufacturer;
- (b) a general description of the model sufficient for unambiguous identification;
 - (c) information, including drawings as relevant, on the main design features of the model and in particular on items which appreciably affect its electricity consumption, such as dimensions, volume(s), compressor characteristics, special features, etc.;
 - (d) the operating instructions, if any;
 - (e) the results of electricity consumption measurements carried out as required by Regulation 4(f);
 - (f) details of the conformity of these measurements as compared to the energy consumption requirement set out in the first Schedule.

2. Technical documentation established for other Community legislation may be used in so far as it meets the requirements of this Schedule.

GIVEN under my Official Seal, this 4 th day of December, 1997

Mary O' Rourke,

Minister for Public Enterprise.

EXPLANATORY NOTE

The purpose of the Regulations is to implement Council Directive 96/57/EC of 3 September, 1996 on energy efficiency requirements for household electric refrigerators, freezers and combinations thereof.

These Regulations apply to household electric refrigerators, freezers and combinations thereof as defined. Appliances that may also use other energy sources particularly accumulators, a second-hand appliance, appliances working on the absorption principle and appliances manufactured on a one off basis are excluded.

The Regulations prohibit the placing on the market of a new appliance unless it satisfies the efficiency requirements applicable to it as set out in the Directive. The obligations on suppliers and the conditions under which they may issue a declaration of conformity and attach the CE mark are defined.

The Regulations empower the Minister to apply to the High Court for an order to withdraw an appliance from the market which does not comply with these Regulations. Provision is made for the appointment and powers of authorised officers and penalties for offences under the Regulations.

These Regulations may be purchased from the Government Publications Sales Office, Molesworth Street, Dublin 2.

Source: Irish Statute Book Database