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COMMISSION DIRECTIVE 94/2/EC

of 21 January 1994

implementing Council Directive 92/75/EEC with regard to energy labelling of household electric refrigerators, freezers and their combinations

(OJ L 045, 17.2.1994, p.1)

Amended by:

		Official Journal		
		No	page	date
► M1	Commission Directive 2003/66/EC Text with EEA relevance of 3 July 2003	L 170	10	9.7.2003
M2	Commission Directive 2006/80/EC of 23 October 2006	L 362	67	20.12.2006

Amended by:

A1		L 236	33	23.9.2003
	Act concerning the conditions of accession of the Czech Republic, the Republic of Estonia, the Republic of Cyprus, the Republic of Latvia, the Republic of Lithuania, the Republic of Hungary, the Republic of Malta, the Republic of Poland, the Republic of Slovenia and the Slovak Republic and the adjustments to the Treaties on which the European Union is founded			

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implementing Council Directive 92/75/EEC with regard to energy labelling of household electric refrigerators, freezers and their combinations

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Council Directive 92/75/EEC of 22 September 1992 on the indication by labelling and standard product information of the consumption of energy and other resources of household appliances (1), and in particular Articles 9 and 12 thereof,

Whereas under Directive 92/75/EEC the Commission is to adopt an implementing directive in respect of household appliances including refrigerators, freezers and their combinations;

Whereas electricity use by refrigerators and freezers accounts for a significant part of total Community electricity demand; whereas the scope for reduced energy use by these appliances is substantial;

Whereas CEN (European Committee for Standardization) standard EN 153 provides a method for measuring the consumption of energy of refrigerators, freezers and their combinations;

Whereas the Community, confirming its interest in an international standardization system capable of producing standards that are actually used by all partners in international trade and of meeting the requirements of Community policy, invites the European standards organizations to continue their cooperation with international standards organizations;

Whereas the European Committee for Standardization and the European Committee for Electrotechnical Standardization (Cenelec) are the bodies recognized as competent to adopt harmonized standards in accordance with the general guidelines for cooperation between the Commission and these two bodies signed on 13 November 1984; whereas, within the meaning of this Directive, a harmonized standard is a technical specification (European standard or harmonization document) adopted by CEN or Cenelec on the basis of a remit (mandate) from the Commission in accordance with the provisions of Council Directive 83/189/EEC of 28 March 1983 laying down a procedure for the provision of information in the field of technical standards and regulations (2), as last amended by Commission Decision 92/400/EEC (3), and on the basis of those general guidelines;

Whereas the measures set out in this Directive are in accordance with the opinion of the committee set up under Article 10 of Directive 92/75/EEC,

HAS ADOPTED THIS DIRECTIVE:

Article 1

1. This Directive shall apply to electric mains operated household refrigerators, frozen food storage cabinets, food freezers and their combinations. Appliances that may also use other energy sources, such as batteries, are excluded.

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2. The information required by this Directive shall be obtained by measurements made in accordance with harmonised standards adopted by the European Standardisation Bodies (CEN, CENELEC, ETSI) under mandate from the Commission in accordance with Directive 98/34/EC of the European Parliament and of the Council (4), the reference numbers of which have been published in the Official Journal of the European Union and for which Member States have published the reference numbers of the national standards transposing those harmonised standards.

3. The provisions in Annexes I, II and III requiring the giving of information relating to noise shall apply only where that information is required by Member States under Article 3 of Directive 86/594/EEC. This information shall be measured in accordance with that Directive.

4. In this Directive the definitions set out in Article 1(4) of Directive 92/75/EEC shall apply.

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Article 2

1. The technical documentation referred to in Article 2 (3) of Directive 92/75/EEC shall include:

- the name and address of the supplier,
- a general description of the appliance, sufficient for it to be identified,
- information, including drawings as relevant, on the main design features of the model and in particular items which appreciably affect its energy consumption,
- reports of relevant measurement tests carried out under the standards referred to in Article 1 (2) of this Directive,
- operating instructions, if any.

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Where the information relating to a particular model combination has been obtained by calculation on the basis of design, and/or extrapolation from other combinations, the documentation should include details of such calculations and/or extrapolations, and of tests undertaken to verify the

accuracy of the calculations undertaken (details of mathematical model for calculating performance and of measurements taken to verify this model).

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2. The appliances covered by this Directive shall be divided into the 'categories' set out in Annex IV.
3. The label referred to in Article 2 (1) of Directive 92/75/EEC shall be as specified in Annex I to this Directive. It shall be placed on the outside of the front or top of the appliance, in such a way as to be clearly visible, and not obscured.
4. The content and format of the fiche referred to in the third indent of Article 2 (1) of Directive 92/75/EEC shall be as specified in Annex II to this Directive.

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5. Where the appliances are offered for sale, hire or hire purchase by means of a printed or written communication, or by other means which imply that the potential customer cannot be expected to see the appliance displayed, such as a written offer, a mail order catalogue, advertisements on the Internet or on other electronic media, that communication shall include all the information specified in Annex III.

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6. The energy efficiency class of an appliance shall be as specified in Annex V.

Article 3

Member States shall take all necessary measures to ensure that all suppliers and dealers established in their territory fulfil their obligations under this Directive.

Article 4

1. Member States shall adopt and publish the provisions necessary to comply with this Directive by 31 December 1994. They shall immediately inform the Commission thereof. They shall apply those provisions from 1 January 1995.

When Member States adopt these provisions, these shall contain a reference to this Directive or shall be accompanied by such reference at the time of their official publication. The procedure for such reference shall be adopted by Member States.

2. Member States shall communicate to the Commission the text of the provisions of national law which they adopt in the field covered by this Directive.

Article 5

This Directive shall enter into force on the 20th day following its publication in the Official Journal of the European Communities.

Article 6

This Directive is addressed to the Member States.

ANNEX I

THE LABEL

Label design

1. The label shall be in accordance with the following illustrations:

PICTURES

Notes on label

2. The following notes define the information to be included:

Note:

I. Supplier's name or trade mark.

II. Suppliers model identifier.

III. The energy efficiency class of an appliance shall be determined in accordance with Annex V. The appropriate letter shall be placed at the same level as the relevant arrow.

IV. Without prejudice to any requirements under the Community Eco-label award scheme, where an appliance has been granted a 'Community Eco-label award' pursuant to Council Regulation (EEC) No 880/92 (5) a copy of the Eco-award mark (the flower) may be added here. The 'refrigerator/freezer label design guide' referred to below, explains how the Eco-award mark, may be included in the label.

V. Energy consumption in accordance with standards referred to in Article 1 (2) but expressed in kWh per year (i.e. per 24 hours×365).

VI. Sum of net storage volume of all compartments that do not merit a star rating (i.e. operating temperature > - 6 °C).

VII. Sum of net storage volume of all frozen food storage compartments which merit a star rating (i.e. operating temperature ≤ - 6 °C).

VIII. Star rating of frozen food storage compartment, in accordance with standards referred to in Article 1 (2). Where this compartment does not merit any stars, this position shall be left blank.

IX. Where applicable noise measured in accordance with Directive 86/594/EEC.

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Printing

3. The following defines certain aspects of the label:

PICTURE

The indicator letter for A+ and A++ appliances shall be in accordance with the following illustrations, and shall be placed in the same position as the A indicator for A class appliances

PICTURE

Colours used:

CMYK: cyan, magenta, yellow, black.

Example: 07X0: 0 % cyan, 70 % magenta, 100 % yellow, 0 % black.

Arrows:

— A: X0X0,

— B: 70X0,

— C: 30X0,

— D: 00X0,

— E: 03X0,

— F: 07X0,

— G: 0XX0.

Outline colour X070.

All text is in black. The background is white.

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ANNEX II

THE FICHE

The fiche shall contain the following information. The information may be given in the form of a table covering a number of appliances supplied by the same supplier, in which case it shall be given in the order specified, or given in the description of the appliance:

1. Supplier's name or trade mark.
2. Supplier's model identifier.
3. Type of appliance as follows:

Category	Description in fiche
1	Larder fridge
2	Refrigerator/chiller
3	Refrigerator
4	Refrigerator
5	Refrigerator
6	Refrigerator
7	Fridge/freezer
8	Upright freezer
9	Chest freezer
	For category 10 appliances, the supplier may choose its description of the type of appliance.

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4. The energy efficiency class of the model as defined in Annex V, expressed as 'Energy efficiency class ... on a scale of A++ (most efficient) to G (least efficient)'. Where this information is provided in a table this may be expressed by other means provided it is clear that the scale is from A++ (most efficient) to G (least efficient).

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5. Where the information is provided in a table, and where some of the appliances listed in the table have been granted a 'Community Eco-label award' under Regulation (EEC) No 880/92, this information may be included here. In this case the row heading shall state 'Community Eco-label award', and the entry shall consist of a copy of the Eco-award mark (the flower). This provision is without prejudice to any requirements under the Community Eco-label award scheme.

6. Energy consumption in accordance with standards referred to in Article 1 (2) but expressed in kWh per year (i.e. per 24 hours×365), described as: 'energy consumption XYZ kWh per year, based on standard test results for 24 h. Actual energy consumption will depend on how the appliance is used and where it is located.'

7. Net storage volume of fresh food storage compartment (5 °C) in accordance with standards referred to in Article 1 (2) — omit for classes 8 and 9.

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8. Net storage volume of frozen food storage compartment, and of chill compartment when available, in accordance with standards referred to in Article 1(2) — omit for classes 1, 2 and 3. For class 3 appliances the net volume of the 'ice box'.

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7 and 8. For classes 2 and 10 the net volume of each compartment should be listed, in accordance with standards referred to in Article 1 (2).

9. Star rating of frozen food storage compartment, if any, in accordance with standards referred to in Article 1 (2).

10. The mention 'no frost' may be included here when in accordance with the definitions given in the standards referred to in Article 1 (2).
11. 'Power cut safe Z h' defined as 'temperature rise time' in accordance with standards referred to in Article 1 (2).
12. 'Freezing capacity' in kg/24 h in accordance with standards referred to in Article 1 (2).
13. 'Climate class' in accordance with the standards referred to in Article 1 (2). Where appliance is of 'temperate' climate class this may be omitted.
14. 'Noise', where applicable, measured in accordance with Directive 86/594/EEC.

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15. If the model is produced in order to be built-in, this should be stated.

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Where an appliance contains compartments other than a single fresh food compartment and a single frozen food compartment, extra lines may be added at 7, 8, 9, 10, 11, 12 and 13 to include the information in respect of these compartments. In this case the naming and order of listing of the compartments shall be consistent. Where the design temperature of a compartment does not conform to the star rating system, or the standard fresh food compartment temperature (5 °C), this design temperature shall be given.

The information contained in the label may be given in the form of a copy of the label, either in colour or in black and white. In this case the further information given only in the fiche must still be included.

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ANNEX III

MAIL ORDER AND OTHER DISTANCE SELLING

Mail order catalogues and other printed communications referred to by Article 2 (5) of this Directive shall contain the following information, given in the order specified:

1. Energy efficiency class (Annex II, point 4)
2. Energy consumption (Annex II, point 6)
3. Net volume of fresh food compartment (Annex II, point 7)
4. Net volume of frozen food compartment (Annex II, point 8)
5. Star rating (Annex II, point 9)
6. Noise (Annex II, point 14)

Where other information contained in the product information fiche is provided, it shall be in the form defined in Annex II and shall be included in the above list in the order specified for the fiche. The size and font, in which all the information referred to above is printed, shall be legible.

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ANNEX IV

CATEGORIES

The appliances covered by this Directive shall be divided into the following 'categories':

1. Household refrigerators, without low temperature compartments.
2. Household refrigerator/chillers, with compartments at 5 °C and/or 10 °C.
3. Household refrigerators, with no-star low temperature compartments.
4. Household refrigerators, with low temperature compartments *.

5. Household refrigerators, with low temperature compartments **.
6. Household refrigerators, with low temperature compartments ***.
7. Household refrigerator/freezers, with low temperature compartments *(**).
8. Household food freezers, upright.
9. Household food freezers, chest.
10. Household refrigerators and freezers with more than two doors, or other appliances not covered above.

ANNEX V

ENERGY EFFICIENCY CLASS

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PART 1: Definitions of Classes A+ and A++

An appliance shall be classified as A+ or A++, where the energy efficiency index alpha (I_α) is within the ranges specified in Table 1.

Table 1

Energy efficiency index α (I_α)	'Energy efficiency class'
$30 > I_\alpha$	A++
$42 > I_\alpha \geq 30$	A+
$I_\alpha \geq 42$	A to G (see below)

In Table 1

$$I_\alpha = \frac{AC}{SC_\alpha} \times 100$$

where:

AC = annual energy consumption of appliance (in accordance with Annex I, note V)

SC_α = standard annual energy consumption α of appliance

SC_α is calculated as

$$M_\alpha X_{Compartments} \left(V_c \times (25 - T_c) \frac{25 - T_c}{20} \times FF \times CC \times BI \right) + N_\alpha + CH$$

where:

V_c is the net volume (in litres) of the compartment (in accordance with standards referred to in Article 1(2)).

T_c is the design temperature (in °C) of the compartment.

The values of M_α and N_α are given in Table 2 and the values of FF, CC, BI and CH are given in Table 3

Table 2

Type of appliance	Temperature of coldest	M_α	N_α
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	compartment		
1 Larder Fridge	> – 6 °C	0,233	245
2 Refrigerator/chiller	> – 6 °C	0,233	245
3 Refrigerator no star	> – 6 °C	0,233	245
4 Refrigerator *	≤ – 6 °C *	0,643	191
5 Refrigerator **	≤ – 12 °C **	0,450	245
6 Refrigerator ***/	≤ – 18 °C ***/*(***)	0,777	303
7 Fridge-freezer *(***)	≤ – 18 °C ***/*(***)	0,777	303
8 Upright freezer	≤ – 18 °C *(***)	0,539	315
9 Chest freezer	≤ – 18 °C *(***)	0,472	286
10 Multi-door or other appliance		(1)	(1)
(1) For these appliances, the temperature and star rating of the compartment with the lowest temperature will determine the values of M and N. Appliances with – 18 °C *(***) compartments shall be considered as fridge-freezers *(***)			

Table 3

Correction factor	Value	Condition
FF (frost-free)	1,2	For ‘frost-free’ (ventilated) frozen food compartments
	1	Otherwise
CC (climate class)	1,2	For ‘tropical’ appliances
	1,1	For ‘subtropical’ appliances
	1	Otherwise
BI (built-in)	1,2	For built-in appliances (1) of under 58 cm in

		width.
	1	Otherwise
CH (chill compartment)	50 Kwh/y	For appliances with a chill compartment of at least 15 litres
	0	Otherwise
(1) An appliance is 'built-in' only if it is designed exclusively for installation within a kitchen cavity with a need of furniture finishing, and tested as such.		

If an appliance is not A+ or A++, it shall be classified in accordance with Part 2.

PART 2: Definitions of Classes A to G

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The energy efficiency class of an appliance shall be determined in accordance with the following Table 1:

TABLE 1

Energy efficiency index: I	Energy efficiency class
$I < 55$	A
$55 \leq I < 75$	B
$75 \leq I < 90$	C
$90 \leq I < 100$	D
$100 \leq I < 110$	E
$110 \leq I < 125$	F
$125 \leq I$	G

Where:

'energy efficiency index' (expressed as a percentage) = annual energy consumption of appliance (6) / standard annual energy consumption of appliance

'standard annual energy consumption of appliance' (expressed in kWh/year) = $M \times$ adjusted net volume + N

and

adjusted net volume (expressed in litres) = net volume of fresh food compartment + $\Omega \times$ net volume of frozen food compartment.

The values of M, N and Ω are taken from Table 2.

TABLE 2

Class of appliance	Ω	M	N
1Larder fridge	—	0,233	245

2Refrigerator/chiller	0,75 (1)	0,233	245
3Refrigerator no star	1,25	0,233	245
4Refrigerator *	1,55	0,643	191
5Refrigerator **	1,85	0,450	245
6Refrigerator ***	2,15	0,657	235
7Fridge/freezer *(***)	(3)	0,777	303
8Upright freezer	2,15 (2)	0,472	286
9Chest freezer	2,15 (2)	0,446	181
10Multi-door or other appliances	(3)	(4)	(4)

(1) For refrigerator/chillers the adjusted volume = net volume of fresh food compartment + $\Omega \times$ net volume of chiller (10 °C) compartment (expressed in litres).

(2) For ‘no frost’ appliances as defined in Annex II point 10, this index is increased by a provisional factor of 1,2, giving a value of 2,58. (This allows for the possible bias of the measurement method, which does not allow for the lack of ice build up on ‘no frost’ appliances. In practical use ice build up will somewhat increase the consumption of ‘conventional’ appliances.)

(3) Adjusted net volume AV is calculated by the formula: $AV = 25 - TC_{20} \times VC \times FC$
all compartments
Where TC is design temperature (in °C) of each compartment, VC is the net volume (in litres) of each compartment, and FC is a factor which equals 1,2 for ‘no frost’ compartments and 1 for other compartments.

(4) For these appliances the values of M and N will be determined by the temperature and star rating of the compartment with the lowest temperature, as follows:

TABLE 3

Temperature	Equivalent class	M	N
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of coldest compartment			
> - 6 °C	1/2/3 Larder fridge/ no-star refrigerator/refrigerator chiller	0,233	245
≤ - 6 °C *	4Refrigerator (*)	0,643	191
≤ - 12 °C **	5Refrigerator (**)	0,450	245
≤ - 18 °C ***	6Refrigerator (***)	0,657	235
≤ - 18 °C *(***) with freezing capacity	7Fridge/freezer *(***)	0,777	303

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- (1) OJ No L 297, 13. 10. 1992, p. 16.
(2) OJ No L 109, 26. 4. 1983, p. 8.
(3) OJ No L 221, 6. 8. 1992, p. 55.
(4) OJ L 204, 21.7.1998, p. 37.
(5) OJ No L 99, 11. 4. 1992, p. 1.
(6) In accordance with Annex I, note V.