BELIZE:

STANDARDS (BELIZE STANDARD SPECIFICATION FOR ENERGY LABELLING AND REQUIREMENTS FOR REFRIGERATING APPLIANCES) (DECLARATION AS A COMPULSORY STANDARD) ORDER, 2025

ARRANGEMENT OF PARAGRAPHS

BELIZE:

STATUTORY INSTRUMENT

No. 130 of 2025

ORDER made by the Minister responsible for the Bureau of Standards, on the recommendation of the Belize Bureau of Standards, in exercise of powers conferred upon him by section 9(2) of the Standards Act, Chapter 295 of the Substantive Laws of Belize, Revised Edition 2020, and all other powers thereunto him enabling.

(Gazetted 29th September, 2025).

WHEREAS, section 9(3) of the Standards Act, Chapter 295 of the Laws of Belize, provides that the Minister shall, by publication in the Gazette, give at least thirty days' notice of his intention to make an Order declaring a compulsory standard and shall thereby indicate the date on which it is intended that the compulsory standard shall come into force;

AND WHEREAS, aa notice of intention to declare the BELIZE STANDARD SPECIFICATION FOR ENERGY LABELLING AND REQUIREMENTS FOR REFRIGERATING APPLIANCES (BZS 34: 2025) to be a compulsory standard was published in the Belize Gazette dated 21st July 2025;

AND WHEREAS, no objections have been received to the making of the said Order;

NOW, THEREFORE, IT IS ORDERED as follows:–

1. This Order may be cited as the **Citation.**

STANDARDS (BELIZE STANDARD SPECIFICATION FOR ENERGY LABELLING AND REQUIREMENTS FOR REFRIGERATING APPLIANCES) (DECLARATION AS A COMPULSORY STANDARD) ORDER, 2025

Declaration of Compulsory Standard. Schedule.

2. The BELIZE STANDARD SPECIFICATION FOR ENERGY LABELLING AND REQUIREMENTS FOR REFRIGERATING APPLIANCES (BZS 34: 2025), the full text of which appears in the Schedule hereto, is hereby declared to be a compulsory standard.

Purpose of Compulsory Standard.

3. The standard referred to in paragraph 2 is intended primarily to–

(a) protect the consumer or user against danger to health or safety;

(b) ensure quality in goods produced for home use or for export;

(c) prevent fraud or deception arising from misleading advertising or labelling;

(d) require adequate information to be given to the consumer or user; and

(e) ensure quality in any case where there is restriction in choice of source of supply.

Commencement.

4. This Order shall come into effect on the 1st day of October 2025

SCHEDULE
[paragraph 2]

BELIZE STANDARD
SPECIFICATION FOR ENERGY LABELLING AND REQUIREMENTS FOR REFRIGERATING APPLIANCES

0 FOREWORD

0.1 This standard is an adoption of the CARICOM Regional Standard CRS 57: 2018, *Energy labelling - Refrigerating appliances - Requirements* which has been developed under the authority of the CARICOM Regional Organisation for Standards and Quality (CROSQ). It was approved as a CARICOM Regional Standard by the CARICOM Council for Trade and Economic Development (COTED) at its 47th Meeting in November 2018.

0.2 This standard is intended to improve the energy performance for refrigerators. The application of the standard is expected to improve energy efficiency in Belize through the availability, selection and usage of more energy efficient refrigerators. The information given on the energy label provides consumers with information for consideration when making a purchasing decision.

0.3 The requirements of this standard are expected to drive manufacturers, importers and retailers to provide more energy efficient refrigerator options to consumers as they compete to offer better value for money and accelerate the marketplace transition to more energy efficient refrigerators.

0.4 This standard is aligned with Belize's Growth and Sustainable Development Strategy (GSDS) with Energy Efficiency (EE) one of several critical success factors in achieving the government's overall Sustainable Development Goals (SDGs). By extension the establishment

and enforcement of standards and labelling for the importation of electrical appliances to improve energy efficiency and conservation in Belize is within the Ministry of Energy's National Energy Policy Framework and its National Sustainable Energy Strategy (NSES).

1 SCOPE

1.1 This standard establishes the Minimum Energy Performance Standards (MEPS) for refrigerators and freezers operated by hermetic motor compressors.

1.2 This standard also establishes test methods to determine energy consumption, calculation of the total refrigerated volume and specifies the energy label requirements.

1.3 This standard applies to household refrigerators and refrigerator-freezers of a maximum volume of 1,104 L and household freezers of a maximum volume of 850 L operated by hermetic motor compressors.

1.4 This standard is not applicable to the following:

a) Household fridge-freezers with a volume greater than 1,104 L;

b) Refrigerators intended for commercial/industrial uses;

c) Refrigerators intended for pharmaceutical uses;

d) Non-compression refrigerators (semiconductor or absorption refrigerators);

e) Water coolers, wine cellars, and water dispensers; and

f) DC Refrigerators (for integrated solar refrigerators).

2 NORMATIVE REFERENCES

The following documents are referred to in the text in such a way that some or all of the contents constitute requirements of this document. For dated references, only the edition cited applies. For

undated references, the latest edition of the referenced document (including any amendments) applies.

a) AHAM HRF-1-2019, Energy and internal volume of refrigerating appliances

3 TERMS AND DEFINITIONS

For the purposes of this document, the following terms and definitions apply.

3.1 **Energy consumption** means energy used by a refrigerating appliance over a specified period of time, or for a specified operation in kilowatt per hour.

3.2 **Energy efficiency** means a measure, usually expressed as a percentage or a ratio, of the energy performance of a model.

3.3 **Estimated yearly operating cost** means cost determined by multiplying the annual energy consumption by the specified rate for that energy.

3.4 **Manufacturer** means a person or organisation who manufactures, produces, assembles, prepares or reassembles any good for sale, or any other use or the person who sells any goods under a trade name controlled by them.

NOTE: It also includes the importer of the goods.

3.5 **Features** means functions and characteristics which determine the performance of a refrigerating appliance and are used as selection options for purchase.

EXAMPLE: Water and ice dispenser, lateral freezer, manual or digital settings.

3.6 **Refrigerating appliance** means insulated cabinet with one or more compartments controlled at specific temperatures and are of suitable size and equipped for household use, cooled by natural convection or a forced convection system whereby the cooling is obtained by one or more energy-consuming means.

NOTE: From the point of view of insulation, there are various types of household refrigerating appliances (free-standing, portable, wall-mounted, built-in, etc.).

4 GENERAL REQUIREMENTS

4.1 The energy label declared on refrigerating appliances shall be affixed to each unit adjacent to the purchase price, clearly visible and easily read at point-of-sale.

EXAMPLE: The energy label can be affixed on the upper right corner of the appliance door.

4.2 The information on the energy label shall be printed, legible, permanent and in the English language.

4.3 The energy label shall include a statement that the energy label shall not be removed except by the consumer.

4.4 Refrigerating appliances shall operate appropriately with the rated voltage with surge protection +/- 10%.

5 SPECIFIC LABEL REQUIREMENTS

5.1 The following information shall be required on the energy label:

a) the programme name;
EXAMPLE: CARICOM Energy Label or Belize Energy Efficiency Label

b) the type of refrigerating appliance;
EXAMPLE: Refrigerator, wine cooler.

c) the measured capacity, or size in SI units or a combination of SI and imperial units;

d) special features which will categorize it in a product type;

e) the measured energy consumption;

f) the brand name of the refrigerating appliance;

g) the model identification number;

h) the name of the manufacturer; and

i) the country of origin.

5.2 The following information should be placed on each energy label:

a) estimated yearly operating cost in Belize's currency;

NOTE: Estimated yearly operating cost should be displayed where the purchase price or financing terms are also quoted.

b) the current energy rate used to calculate the estimated yearly operating cost in kWh;

c) a validity period for the information on the energy label; and

d) a statement indicating "Your cost will vary with electricity rates and use".

6 TEST METHODS

6.1 Energy consumption shall be determined in accordance with AHAM HRF-1-2019.

6.2 The refrigerated appliances shall be tested at the supply voltage, frequency and other factors as per Annex 1 - Table 1.

7 MINIMUM ENERGY PERFORMANCE STANDARDS (MEPS)

Refrigerating appliances shall meet the maximum energy consumption limits as defined in Annex 1 - Table 2 for the particular refrigerating appliance.

8 ANNUAL ENERGY CONSUMPTION

The Annual Energy Consumption (AEC) shall be calculated in kWh per year and rounded to two decimal places. The AEC formula is given as:

$AEC = E \times 365$

Where

E is the total per-cycle energy consumption in kWh/day in accordance with AHAM HRF-1-2019.

9 ENERGY EFFICIENCY CLASSIFICATION

The energy efficiency class, as given in Annex 1 - Table 3, is determined by the applicable Energy Efficiency Index to which the refrigerating appliance conforms. The Energy Efficiency Index is calculated as follows:

$EEI = [(AEC \div Emax) \times 100]\%$.

Where

EEI = Energy Efficiency Index

AEC = Annual Energy Consumption

Emax = Maximum energy consumption per year, in kWh/year

NOTE: The Energy Efficiency Index (EEI) is a ratio that compares the measured energy consumption of a model to a standardized energy consumption that factors in the storage volume of the refrigerator and freezer compartments.

Annex 1: Reference Tables for Refrigerating Appliances (Test Conditions, MEPS and EEI)

Table 1: Laboratory Testing Conditions for Belize

#	Parameter	Test Control
1	Supply Voltage	120 V ± 3.5%
2	Frequency	60 Hz

3	Test Temperature (Ambient)	32.2 º C ± 0.6ºC
4	Climate	Tropical
5	Power Supply Plugs (Household Appliances)	Type A and Type B

Table 2: Maximum energy consumption limits for refrigerators and freezers

Product Type Number	Electrical household appliance description	E_{max}
1	Refrigerator-freezer and refrigerators other than appliances that are only refrigerators with manual defrost	0.282 AV + 225.0
1A	Refrigerators only with manual defrost	0.240 AV + 193.6
2	Refrigerator-freezer with partially automatic defrosting	0.282 AV + 225.0
3	Refrigerator-freezer with auto-defrosting and top-mounted freezer, without ice dispenser, and refrigerator only with auto-defrosting	0.285 AV + 233.7
3-BI	Built-in refrigerator-freezer with automatic defrost, with top-mounted freezer without automatic ice maker	0.323 AV + 264.9
3I	Refrigerator-freezer with automatic defrost, with top-mounted freezer with automatic ice maker without ice delivery through the outside door	0.285 AV + 317.7
3I-BI	Built-in refrigerator-freezer, with automatic defrost with top-mounted freezer with automatic ice maker without ice delivery from exterior door	0.323 AV + 348.9
3A	Refrigerators only with automatic defrost	0.250 AV + 201.6

Product Type Number	Electrical household appliance description	E_{max}
3A-BI	Built-in refrigerator only with automatic defrost	0.283 AV + 228.5
4	Refrigerator-freezer with auto-defrosting and side-mounted freezer, without ice dispenser	0.301 AV + 297.8
4-BI	Built-in refrigerator-freezers with automatic defrost, with the freezer mounted on the side without an automatic ice maker	0.361 AV + 357.4
4I	Refrigerator-freezer with automatic defrost, with side-mounted freezer with automatic ice maker without ice delivery through the outside door	0.301 AV + 381.8
4I-BI	Built-in refrigerator-freezer with automatic defrost with side-mounted freezer with automatic ice maker without ice delivery through door	0.361 AV + 441.4
5	Refrigerator-freezer with auto-defrosting and bottom-mounted freezer, without ice dispenser	0.312 AV + 317.0
5-BI	Built-in refrigerator-freezers with automatic defrost with the freezer mounted on the bottom without an automatic ice maker	0.332 AV + 336.9
5I	Refrigerator-freezer with automatic defrost, with bottom-mounted freezer with automatic ice maker without ice delivery through the door	0.312 AV + 401.0
5I-BI	Built-in refrigerator freezer with auto defrost with bottom mounted freezer with automatic ice maker, ice delivery through the door	0.332 AV + 420.9

Product Type Number	**Electrical household appliance description**	**E_{max}**
5A	Refrigerator-freezer with auto-defrosting and bottom-mounted freezer, with door ice dispenser	0.327 AV + 475.4
5A-BI	Built-in refrigerator-freezer with automatic defrost, with the freezer mounted on the bottom with ice delivery through the door	0.347 AV + 499.9
6	Refrigerator-freezer with auto-defrosting and top-mounted freezer, with ice dispenser	0.297 AV + 385.4
7	Refrigerator-freezer with auto-defrosting and side-mounted freezer, with ice dispenser	0.302 AV + 432.8
7-BI	Built-in refrigerator-freezer with automatic defrost with side-mounted freezer with ice delivery through the door	0.362 AV + 502.6
8	Vertical freezer with manual defrosting	0.197 AV + 193.7
9	Vertical freezer with auto-defrosting without automatic ice maker.	0.305 AV + 228.3
9I	Vertical freezer with automatic defrost with automatic ice maker	0.305 AV + 312.3
9-BI	Built-in vertical freezer with automatic defrost without automatic ice maker.	0.348 AV + 260.9
9I-BI	Built-in vertical freezer with automatic defrost with automatic ice maker	0.348 AV + 344.9
10	Horizontal freezer and all other freezers, except compact freezers	0.257 AV + 107.8

Product Type Number	Electrical household appliance description	E_{max}
10A	Horizontal freezer with auto-defrosting	0.362 AV + 148.1
11	Refrigerator and compact refrigerator-freezer with manual defrosting	0.319 AV + 252.3
11A	Compact refrigerator only with manual defrost	0.277 AV + 219.1
12	Compact refrigerator-freezer with partially automatic defrosting	0.209 AV + 335.8
13	Compact refrigerator-freezer with automatic defrost with top-mounted freezer	0.417 AV + 339.2
13I	Compact refrigerator-freezer with auto-defrosting and top-mounted freezer and compact refrigerator only with auto-defrosting	0.417 AV + 423.2
13A	Compact refrigerator only with automatic defrost	0.324 AV + 259.3
14	Compact refrigerator-freezer with auto-defrosting and side-mounted freezer	0.241 AV + 456.9
14I	Compact refrigerator-freezer with auto defrost with side-mounted freezer with automatic ice maker	0.241 AV + 540.9
15	Compact refrigerator-freezer with auto-defrosting and bottom-mounted freezer	0.46 AV + 367.0
15I	Compact refrigerator-freezer with auto defrost with bottom mounted freezer with an automatic ice maker	0.417 AV + 423.2

Product Type Number	**Electrical household appliance description**	**E_{max}**
16	Compact vertical freezer with manual defrosting	0.306 AV + 225.7
17	Compact vertical freezer with auto-defrosting	0.359 AV + 351.9
18	Compact horizontal freezer	0.327 AV + 136.8

Where,

AV is Adjusted volume, in liter (L) or cubic decimeter (dm^3)

Adjusted Volume (AV) = $V_{fresh\ food}$ + ($V_{freezer}$ x Adjustment Factor)

$V_{fresh\ food}$ = volume of fresh food compartment of refrigerators

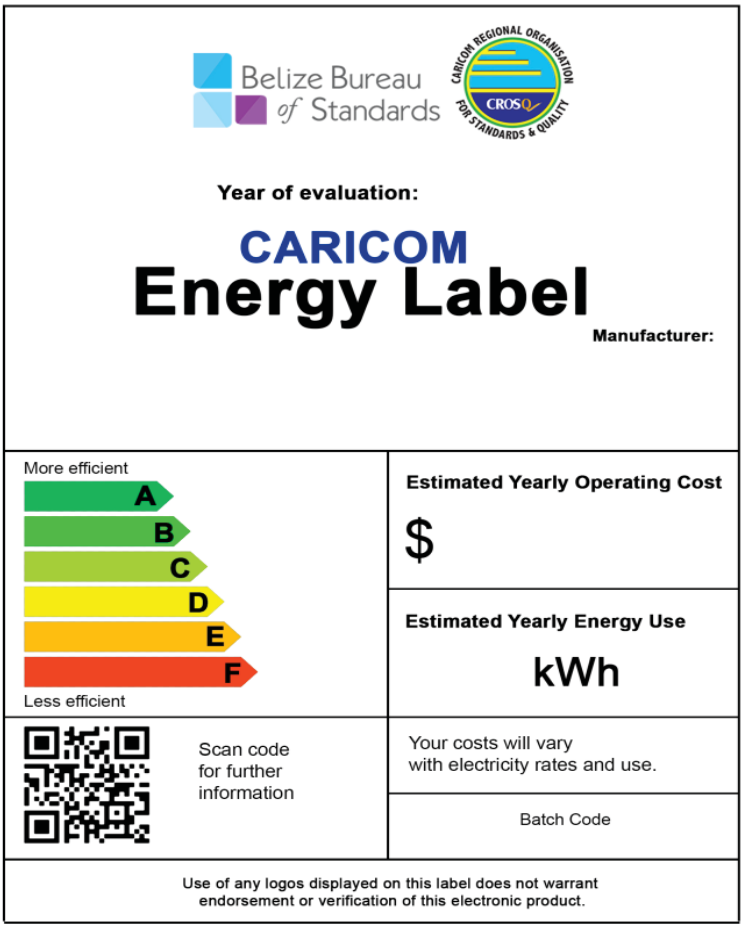
$V_{freezer}$ = volume of freezer compartment of refrigerators

E_{max} is Maximum energy consumption per year, in kWh/year

Table 3: Energy Efficiency Index and Classification

Energy Efficiency Index (EEI)	**Energy Efficiency Class**
≤ 60	A
$60 < EEI \leq 70$	B
$70 < EEI \leq 80$	C
$80 < EEI \leq 90$	D
$90 < EEI \leq 100$	E
> 100	F

Annex 2 (Normative): Label Format for Household Refrigerating Appliances



END OF DOCUMENT

MADE by the Minister responsible for the Bureau of Standards this 29th day of September, 2025.

(HON. JOSE ABELARDO MAI)
Minister of Agriculture, Food Security and Enterprise
(Minister responsible for the Bureau of Standards)

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