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No. S 199

ENERGY CONSERVATION ACT (CHAPTER 92C)

ENERGY CONSERVATION (REGULATED GOODS AND REGISTERED SUPPLIERS) (AMENDMENT) REGULATIONS 2021

In exercise of the powers conferred by section 78 of the Energy Conservation Act, the Minister for Sustainability and the Environment makes the following Regulations:

Citation and commencement

1. These Regulations are the Energy Conservation (Regulated Goods and Registered Suppliers) (Amendment) Regulations 2021 and come into operation on 1 April 2021.

Amendment of First Schedule

- **2.** The First Schedule to the Energy Conservation (Regulated Goods and Registered Suppliers) Regulations 2017 (G.N. No. S 748/2017) is amended
 - (a) by inserting, immediately after the definition of "IEEE" in paragraph 1, the following definition:
 - ""Integrated Energy Efficiency Ratio" or "IEER" means the number determined in accordance with the following formula:

$$(0.020 \times A) + (0.617 \times B) + (0.238 \times C) + (0.125 \times D),$$

where —

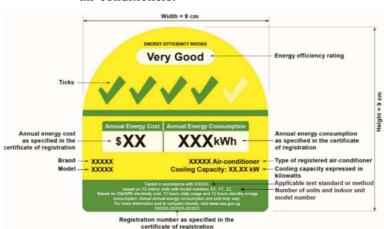
- (a) A is COP at full load cooling capacity;
- (b) B is COP at 75% part load cooling capacity;
- (c) C is COP at 50% part load cooling capacity; and
- (d) D is COP at 25% part load cooling capacity;";

- (b) by inserting, immediately after the definition of "standby power" in paragraph 1, the following definition:
 - ""three-phase variable refrigerant flow (VRF) air-conditioner" has the meaning given by Part 2 of the First Schedule to the Energy Conservation (Prescribed Regulated Goods) Order 2017;";
- (c) by inserting, immediately after item 5 of paragraph 2, the following item:
 - "5A. Three-phase variable refrigerant IEER \geq 4.35"; flow (VRF) air-conditioner
- (d) by inserting, immediately after sub-paragraph (e) of paragraph 3, the following sub-paragraph:

"(ea) for three-phase variable refrigerant flow (VRF) air-conditioners —

Ticks	Energy efficiency rating	Integrated Energy Efficiency Ratio (IEER)
1	Low	$4.80 > IEER \ge 4.35$
2	Fair	$5.25 > IEER \ge 4.80$
3	Good	$5.70 > IEER \ge 5.25$
4	Very Good	$6.15 > IEER \ge 5.70$
5	Excellent	IEER ≥ 6.15

- (e) by inserting, immediately after the word "air-conditioners" in paragraph 4(a), the words "(other than three-phase variable refrigerant flow (VRF) air-conditioners)";
- (f) by inserting, immediately after sub-paragraph (a) of paragraph 4, the following sub-paragraph:



"(aa) three-phase variable refrigerant flow (VRF) air-conditioners:

",

- (g) by deleting "(2010)" in paragraph 5(a)(i), (iii) and (v) and substituting in each case "(2017)";
- (h) by deleting "(2011)" in paragraph 5(a)(ii) and (iv) and substituting in each case "(2017)"; and
- (i) by inserting, immediately after sub-paragraph (v) of paragraph 5(a), the following sub-paragraph:
 - "(va) Three-phase variable refrigerant flow (VRF) air-conditioner
- ISO 15042 (2017)

The cooling tests must be conducted at 4 points, namely, the full-load cooling capacity and part-load cooling capacity at 75%, 50% and 25%. The tests must include a single outdoor unit that services the network of indoor units".

Amendment of Second Schedule

- **3.** The Second Schedule to the Energy Conservation (Regulated Goods and Registered Suppliers) Regulations 2017 is amended
 - (a) by inserting, immediately after the word "air-conditioner" in item 1(a), the words "(other than three-phase variable refrigerant flow (VRF) air-conditioner)";

- (b) by inserting, immediately after paragraph (a) of item 1, the following paragraph:
 - "(aa) three-phase variable refrigerant flow \$85"; (VRF) air-conditioner
- (c) by inserting, immediately after the word "air-conditioner" in item 2(a), the words "(other than three-phase variable refrigerant flow (VRF) air-conditioner)"; and
- (d) by inserting, immediately after paragraph (a) of item 2, the following paragraph:
 - "(aa) three-phase variable refrigerant flow \$55". (VRF) air-conditioner

[G.N. Nos. S 603/2018; S 730/2019]

Made on 26 March 2021.

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