# **ELECTRICITY ACT 1945—REGULATION**

(Electricity (Energy Labelling of Electrical Articles) Regulation 1995)

**NEW SOUTH WALES** 



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HIS Excellency the Governor, with the advice of the Executive Council, and in pursuance of the Electricity Act 1945, has been pleased to make the Regulation set forth hereunder.

MICHAEL EGAN, M.L.C., Minister for Energy.

# PART 1-PRELIMINARY

#### Citation

**1.** This Regulation may be cited as the Electricity (Energy Labelling of Electrical Articles) Regulation 1995.

#### Commencement

**2.** This Regulation commences on 1 September 1995.

# **Application**

- **3.** (1) This Regulation applies to the following electrical articles:
- (a) dishwashers;
- (b) refrigerators, freezers and refrigerator/freezers;
- (c) air conditioners,

as defined in the relevant Part of Schedule 1.

(2) This Regulation applies to the sale of new articles, whether by wholesale or retail, but does not apply to the sale of second-hand articles.

### **Definitions**

- **4.** In this Regulation:
- "approved energy efficiency label" for an electrical article means an energy efficiency label:
  - (a) that has been approved by the Corporation under this Regulation in respect of the article; or
  - (b) that has been approved or registered by a corresponding authority in respect of the article,

being an energy efficiency label whose approval or registration is in force;

- "comparative energy consumption" of an electrical article means the comparative energy consumption of the article calculated in accordance with the relevant Part of Schedule 1;
- "corresponding authority" means any of the following:
  - (a) the Department of Minerals and Energy of Queensland;
  - (b) Mines and Energy of South Australia;
  - (c) the Office of the Chief Electrical Inspector of Victoria;
  - (d) the Office of Energy of Western Australia;
- "display front" for an electrical article means an assembly supplied by a manufacturer or importer of the article to wholesale or retail outlets, being an assembly that is intended to represent the front of the article;
- "energy efficiency rating" of an electrical article means the energy efficiency rating of the article calculated in accordance with the relevant Part of Schedule 1;
- "Register" means the Register of Electrical Articles kept by the Corporation in accordance with clause 14;
- "registered" means registered in the Register;
- "registered person", in relation to an electrical article, means the person who is registered as the registered person for that article;
- "sell" includes:
  - (a) auction or exchange; and
  - (b) offer, agree or attempt to sell; and
  - (c) cause or permit to be offered for sale; and
  - (d) display for sale.

"star rating" of an electrical article means the number of stars to be used to indicate the energy efficiency rating of the electrical article, as set out in clause 13;

"the Act" means the Electricity Act 1945.

#### PART 2—LABELLING OF ELECTRICAL ARTICLES

# Electrical articles to be appropriately labelled when sold

- **5.** (1) A person must not sell an electrical article to which this Regulation applies unless:
  - (a) the article is registered; and
  - (b) the approved energy efficiency label is prominently displayed on the article.

Maximum penalty: 20 penalty units.

(2) In the case of an air conditioner that is sold in a package, the approved energy efficiency label may instead be displayed on the package.

# Use of display fronts

**6.** A person must not, in connection with the sale of an electrical article, exhibit a display front for the article unless the approved energy efficiency label for the article is prominently displayed on the display front.

Maximum penalty: 20 penalty units.

# Applications for registration

- **7.** (1) An application for registration of an electrical article:
- (a) must be in the form approved by the Corporation; and
- (b) must specify the name, address and signature of a person who has agreed to be the registered person for the article;
- (c) must be accompanied by an application fee of \$50; and
- (d) must be accompanied by the documents referred to in subclause (2); and
- (e) must be lodged at the offices of the Corporation.

- (2) The documents required to accompany an application for registration of an electrical article are as follows:
  - (a) a report, in the form approved by the Corporation, prepared by the person responsible for conducting tests on the article:
    - (i) stating that the article has been tested in accordance with the provisions of the relevant Part of Schedule 1; and
    - (ii) setting out the measurements obtained from those tests for the purpose of calculating the article's comparative energy consumption and energy efficiency rating; and
    - (iii) setting out the article's comparative energy consumption and energy efficiency rating as so calculated; and
    - (iv) setting out the article's star rating;
  - (b) a sample of the proposed energy efficiency label for the article.
- (3) The Corporation may require the applicant for registration of an electrical article to furnish such further information as the Corporation considers necessary to enable it to determine the application.

# **Determination of applications**

- **8.** (1) After considering an application for registration of an electrical article, together with the results of any tests conducted by the Corporation on the article, the Corporation must determine the application:
  - (a) by registering the article; or
  - (b) by refusing to register the article.
- (2) The Corporation may refuse to register an electrical article if in doubt as to:
  - (a) the accuracy or reliability of the report accompanying the application; or
- (b) the accuracy or reliability of the tests to which the report relates, and, in that event, must give written notice of its refusal to the applicant within 21 days of its determination.

# Registration

- **9.** (1) The Corporation registers an article by recording the following particulars in the Register:
  - (a) the brand name and model name or number under which the article is sold;
  - (b) the article's comparative energy consumption, energy efficiency rating and star rating;

- (c) the name and address of the person nominated in the application for registration as the proposed registered person;
- (d) the date on which the article was registered;
- (e) such other particulars as the Corporation considers appropriate to include in the Register.
- (2) Registration of an electrical article has effect in relation to all electrical articles having the same brand name, same model name or number and same relevant physical characteristics, comparative energy consumption, energy efficiency rating and performance characteristics.

# Approval of energy efficiency label

- **10.** (1) The Corporation must approve an energy efficiency label for each electrical article that it registers.
- (2) The approved form of energy efficiency label must be in the relevant form set out in Schedule 2 and must contain the following registered particulars for the article:
  - (a) the brand name and model name or number under which the article is sold;
  - (b) the article's comparative energy consumption, energy efficiency rating and star rating;
  - (c) such other particulars as are required by the relevant Part of Schedule 1 to be included on the label.

# Variation of particulars relating to registered person

- 11. The Corporation may amend the Register so as to vary the particulars relating to a registered person as a consequence of:
  - (a) a person other than the current registered person having agreed to become the registered person for the article in place of the current registered person; or
  - (b) a change in the name or address of the current registered person.

# Cancellation of registration

- **12. (1)** The Corporation may cancel the registration of an electrical article:
  - (a) if the registered person so requests; or
  - (b) if the registered person for the article fails to comply with a request by the Corporation to furnish a sample of the article to the Corporation for testing; or

- (c) if, after testing a sample of the article, the Corporation is satisfied that the registered particulars for the article are incorrect or misleading.
- (2) Before taking action under this clause, the Corporation:
- (a) must cause written notice of the proposed action to be given to the registered person; and
- (b) must allow the registered person a reasonable opportunity to make submissions to the Corporation in relation to the proposed action; and
- (c) must take any such submissions into consideration.
- (3) The Corporation is not entitled to request the registered person for an electrical article to furnish more than 3 samples of the article during any 12 month period.
- (4) Cancellation of the registration of an electrical article does not take effect until notice of the cancellation is published in a newspaper circulating generally throughout New South Wales.

# **PART 3—MISCELLANEOUS**

## Calculation of star rating

**13.** The star rating for an electrical article is to be calculated as follows:

Energy efficiency rating	Star rating
less than 2.00	1
2.00–2.99	2
3.00–3.99	3
4.00–4.99	4
5.00-5.99	5
6.00 or more	6

### **Register of Electrical Articles**

- **14.** (1) The Corporation must maintain a Register of Electrical Articles.
- (2) The Register must be kept available during normal working hours for inspection at the offices of the Corporation by any person.

(3) On payment of an application fee of \$10, a person is entitled to be provided by the Corporation with a certified copy of the registered particulars for any single specified electrical article.

# Publication of false or misleading information

- **15.** A person must not:
- (a) place an advertisement for the sale of an electrical article in any newspaper, brochure or other promotional or sales literature; or
- (b) affix or attach any tag or label to an electrical article that is offered for sale; or
- (c) display on or near an electrical article that is offered for sale any sign or notice,

if the person knows, or ought reasonably to be aware, that it is false or misleading as to the articles's comparative energy consumption, energy efficiency rating or star rating.

Maximum penalty: 20 penalty units.

## False or misleading applications

**16.** A person must not, in or in connection with any application or test report under this Regulation, make any statement that the person knows to be, or ought reasonably to be aware is, false or misleading.

Maximum penalty: 20 penalty units.

## **Defence to certain proceedings**

- 17. A person is not guilty of an offence arising from the fact that an electrical article has ceased to be registered or that an electrical article's registered particulars have changed, so long as:
  - (a) an energy efficiency label was attached to the article when the person acquired the article; and
  - (b) the energy efficiency label so attached was, at the time the person acquired the article, the approved energy efficiency label; and
  - (c) the person is unaware, and could not reasonably be expected to be aware, that the article has ceased to be registered or that the article's registered particulars have changed.

# Repeal

**18.** (1) The Energy Labelling and Standards (Refrigerators, Freezers and Refrigerator-Freezers) Regulation 1986 is repealed.

- "supplementary Comparative energy consumption" of a dishwasher means the comparative energy consumption of the dishwasher, calculated on the basis that the supplementary water supply connection is used (if it is appropriate for such a connection to be used in relation to that dishwasher);
- "supplementary water supply connection", in relation to a dishwasher, means:
  - (a) a hot connection only, where a single cold connection or a dual hot and cold connection is used to determine the comparative energy consumption for the dishwasher; or
  - (b) a cold connection only, where a single hot connection or a dual hot and cold connection is used to determine the comparative energy consumption for the dishwasher; or
  - (c) a dual hot and cold connection, where a single hot connection or a single cold connection is used to determine the comparative energy consumption for the dishwasher;
- "washing index", in relation to a dishwasher, means the measurement of washing performance of the dishwasher, when calculated in accordance with the relevant test contained in AS 2007:
- **"water supply connection"**, in relation to a dishwasher, means the water supply connected to the dishwasher (whether single hot, single cold, or dual hot and cold) for the purpose of carrying out a test contained in AS 2007.

#### Additional information to be included on energy efficiency label

- 2. An energy efficiency label for a dishwasher must include:
  - (a) the capacity of the dishwasher; and
  - (b) the program on the basis of which the comparative energy consumption has been calculated; and
  - (c) the nature of the water supply connection (hot, cold or dual hot and cold) used to determine the comparative energy consumption for the dishwasher; and
  - (d) the supplementary comparative energy consumption for the dishwasher (if appropriate to the dishwasher) and the nature of the supplementary water supply connection (hot, cold or dual hot and cold) used to determine the supplementary comparative energy consumption.

# **Test requirements**

**3.** A dishwasher is not suitable for registration unless it satisfies the washing index and drying index requirements described in AS 2007 when operated under the operating conditions set out for the determination of the comparative energy consumption of the dishwasher in AS 2007.

## Comparative energy consumption

**4.** (1) The comparative energy consumption and supplementary comparative energy consumption of a dishwasher must be expressed as the quantity of electricity consumed by it over a sequence of 365 complete programs when tested in accordance with AS 2007.

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(2) The quantity SO expressed is to be an average calculated on the basis of tests carried out on at least 3 dishwashers.

#### Energy efficiency rating of dishwashers

5. The energy efficiency rating of a dishwasher must be calculated in accordance with the following formula:

$$EER = \frac{CEC \times (-0.1) + 8}{N}$$

Where:

EER represents the energy efficiency rating of the dishwasher;

CEC represents the comparative energy consumption of the dishwasher, expressed as kilowatt hours per 365 programs;

N represents the capacity of the dishwasher.

#### PART 2—REFRIGERATORS AND FREEZERS

#### **Definitions**

- 1. In this Part:
- "AS 1430" means Australian Standard 1430—1986 "Household Refrigerators and Freezers", published by the Standards Association of Australia, as in force from time to time.
- "AS 2575" means Australian Standard 2575.2—1989 "Energy Labelling of Appliances, Part 2, Refrigerators, Refigerator/Freezers and Freezers—Determination of Energy Consumption and Efficiency Rating", published by the Standards Association of Australia, as in force from time to time;
- "freezer" means a self-contained assembly (designed primarily for domestic use) consisting of
  - (a) a thermally insulated cabinet designed for the storage and preservation of foodstuffs at a temperature below 0 degrees Celsius; and
  - (b) an electrical refrigerating unit which operates on the vapour-compression principle arranged to extract heat from within the cabinet;
- "refrigerator" means a self-contained assembly (designed primarily for domestic use) consisting of
  - (a) a thermally insulated cabinet designed for the storage and preservation of foodstuffs at a temperature above 0 degrees Celsius; and
  - (b) an electrical refrigerating unit which operates on the vapour-compression principle arranged to extract heat from within the cabinet,

and which may contain a separate zone or compartment within the cabinet intended for ice-making or for the storage and preservation of foodstuffs at a temperature below 0 degrees Celsius;

"refrigerator-freezer" means a self-contained assembly (designed primarily for domestic use) consisting of separate thermally insulated cabinets:

- (a) some of which are designed for the storage and preservation of foodstuffs at a temperature above 0 degrees Celsius; and
- (b) others of which are designed for the storage and preservation of foodstuffs at a temperature below 0 degrees Celsius,

and one or more electrical refrigerating units which operate on the vapour-compression principle arranged to extract heat from within both cabinets.

#### Test requirements

2. A refrigerator, freezer or refrigerator/freezer is not suitable for registration unless it complies with the pull-down and temperature performance requirements contained in section 4 of AS 1430.

## Comparative energy consumption

- 3. (1) The comparative energy consumption of a refrigerator, freezer or refrigerator/ freezer must be expressed as the quantity of electricity consumed by it over a continuous period of 365 days when tested in accordance with Appendix B of AS 2575.
- (2) The quantity so expressed is to be an average calculated on the basis of tests carried out on at least 3 refrigerators, freezers or refrigerator/freezers.

#### **Energy efficiency rating**

4. The energy efficiency rating of a refrigerator, freezer or refrigerator/freezer is to be calculated in accordance with the following formula:

EER = [ ( 
$$\frac{W + (Vf \times a) + (Vff \times b)}{Vff + (Vf \times d)}$$
 ) x ( - 0.6667) ] + 7.6667

Where:

EER represents the energy efficiency rating;

- W represents total electricity, consumption, as determined in accordance with Appendix B of AS 2575 in Watt hours per 24 hours (Wh/24 hrs);
- Vf represents the frozen food compartment rated gross volume (in litres), as determined in accordance with AS 1430;
- Vff represents the fresh food compartment rated gross volume (in litres), as determined in accordance with AS 1430:
  - a represents the freezer defrost energy adjustment factor, as specified in Column 2 of the Table to this clause opposite the class of refrigerating article determined in accordance with AS 1430 and specified in Column 1 of that Table;
  - b represents the fresh food compartment energy adjustment factor, as specified in Column 3 of the Table to this clause opposite the class of refrigerating article determined in accordance with AS 1430 and specified in Column 1 of that Table:

d represents the freezer volume adjustment factor, as specified in Column 4 of the Table to this clause opposite the class of refrigerating article determined in accordance with AS 1430 and specified in Column 1 of that Table.

**TABLE** 

Column 1	Column 2	Column 3	Column 4
Class of electrical article determined in accordance with AS 1430	<b>a</b> (Wh/1/24hr)	<b>b</b> (Wh/1/24hr)	d
1 2 3 4 5 6 7	0 0 0 0.2 0 0.2 0	0 0.1 0.15 0 0 0	0 1.2 1.4 1.6 1.6 1.6 1.6

### **PART 3—AIR CONDITIONERS**

#### **Definitions**

- 1. In this Part:
- "air conditioner" means an assembly (designed primarily for domestic use) that:
  - (a) operates off a single phase power supply and has an output capacity, as determined in accordance with AS 1861, not greater than 7.5 kW for cooling or, if applicable, for heating; and
  - (b) is designed to provide delivery of cooled or, if applicable, heated air to any enclosed space, room, zone or zones through the operation of an electro-mechanical mechanism which operates on the vapourcompression principle;
- "AS 1861" means Australian Standard 1861.1—1988, "Air-conditioning Units—Methods of Assessing and Rating Performance", published by the Standards Association of Australia, as in force from time to time;
- "output capacity", in relation to an air conditioner, means the total cooling or, if applicable, the sensible heating effect of the air conditioner calculated in accordance with AS 1861.

#### Additional information to be included on energy efficiency label

2. An energy efficiency label for an air conditioner must include the cooling output capacity (and, if applicable, the heating output capacity) of the air conditioner.

#### Test requirements

3. An air conditioner is not suitable for registration unless it satisfies the test requirements for the test described as the "maximum operating test" in AS 1861 when operated at an operating condition set out for that test in Section 3 of AS 1861.

## Comparative energy consumption

- 4. (1) The comparative energy consumption of an air conditioner (for cooling and, if applicable, for heating) must be expressed as the quantity of electricity consumed by it over a continuous period of 500 hours when tested using Thermal Capacity Rating Type Test Condition A, as contained in Section 3 of AS 1861.
- (2) The quantity so approved is to be an average calculated on the basis of tests carried out on at least 3 air conditioners.

## Energy efficiency rating

5. (1) The energy efficiency rating of an air conditioner (in its cooling cycle) is to be calculated in accordance with the following formula:

$$EER = (CCOP \times 5) - 8.5$$

Where:

EER represents the energy efficiency rating of the air conditioner;

- CCOP represents the cooling coefficient of performance, being the total cooling effect in kilowatts divided by the power input in kilowatts when both are calculated in accordance with the relevant test contained in Section 3 of AS 1861.
- (2) The energy efficiency rating of an air conditioner (in its heating cycle) is to be calculated in accordance with the following formula:

$$EER = (HCOP \times 5) - 9.5$$

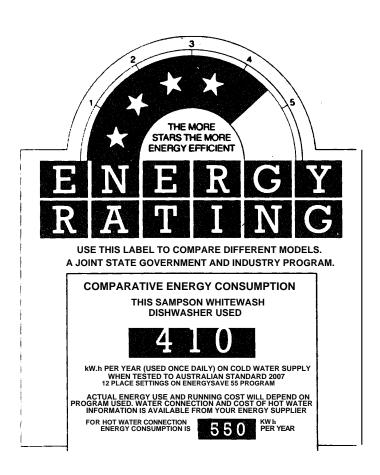
Where:

EER represents the energy efficiency rating of the air conditioner;

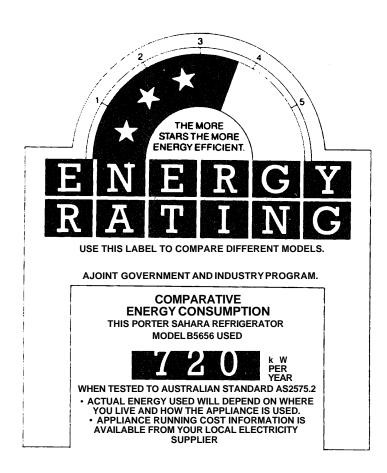
HCOP represents the heating coefficient of performance, being the sensible heating effect in kilowatts divided by the power input in kilowatts when both are calculated in accordance with the relevant test contained in Section 3 of AS 1861.

# SCHEDULE 2—FORMS

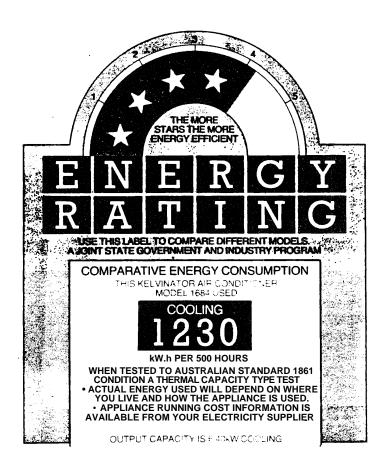
# PART 1—DISHWASHERS



# PART 2-REFRIGERATORS AND FREEZERS



# PART 3—AIR CONDITIONERS





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#### **EXPLANATORY NOTE**

The objects of this Regulation are to repeal the Energy Labelling (Refrigerators, Freezers and Refrigerator-Freezers) Regulation 1986 and to remake the provisions of that Regulation and of two other regulations relating to the labelling of dishwashers and air conditioners. The new Regulation deals with the following matters:

- (a) requiring certain electrical articles to be labelled with information concerning their energy consumption and energy efficiency (clause 5), those articles being:
  - (i) dishwashers (Schedule 1, Part 1); and
  - (ii) refrigerators, freezers and refrigerator/freezers (Schedule 1, Part 2); and
  - (iii) air conditioners (Schedule 1, Part 3);

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- (b) requiring display fronts for electrical articles to be labelled in the same way as electrical articles (clause 6);
- (c) providing for the registration of electrical articles and the approval of energy efficiency labels for them (clauses 7-12);
- (d) other minor, consequential and ancillary matters (Parts 1 and 3).

This Regulation is made under the Electricity Act 1845, including section 37 (the general regulation making power).

This Regulation is made in connection with the staged repeal of subordinate legislation under the Subordinate Legislation Act 1989.