



Criteria for Air Conditioner / Heat Pumps

Following are the product criteria for ENERGY STAR qualified room air conditioner / heat pumps. A product must be manufactured or distributed by a New Zealand ENERGY STAR partner and meet all of the identified programme requirements to be registered with the New Zealand ENERGY STAR programme.

1) Definitions:

Non-ducted reverse-cycle air conditioner: An encased assembly or assemblies designed as a unit, primarily for mounting through a wall, or as a console. It is designed primarily to provide free delivery of conditioned air to an enclosed space, room or zone (conditioned space). It includes a prime source of refrigeration for cooling, dehumidification and heating from a heat source. It may also include means for the circulation and the cleaning of air. Where such equipment is provided in more than one assembly, the separated assemblies (split-systems) are to be designed to be used together, and the requirements of rating outlined in the AS/NZS 3823 Standard are based on the use of matched assemblies.

EER (Energy Efficiency Ratio): The ratio of the power input to an air conditioner to the heat energy removed.

COP (Coefficient of Performance): The ratio of the power input to a reverse cycle air conditioner (heat pump) to the heat energy supplied by the air conditioner.

Annualised rates (AEER and ACOP) incorporate any additional energy use, including that used in stand-by.

2) Qualifying Products:

All single phase Non-ducted Single-Split systems are eligible for ENERGY STAR endorsement provided they meet the criteria below.

3) ENERGY STAR Criteria:

The energy performance must meet or exceed the levels outlined below. Only those products listed in section 2 that meet the criteria may qualify as ENERGY STAR.

Rated Cooling Capacity band (kW)	Cooling (AEER)	Heating (ACOP at H1)	Heating (COP at H2)
Less than 4	3.50	3.75	2.88
4 to 7.5	3.00	3.30	2.76
7.5 to less than 10	3.00	3.28	2.56
10 to less than 18.9	3.15	3.35	2.68

4) Test Criteria:

From 1 April 2011

To qualify, products must be:

- tested for AEER performance under T1 conditions in accordance with AS/NZS 3823.1.1:1998 or 2012
- tested for ACOP performance under H1 conditions in accordance with AS/NZS 3823.1.1:1998 or 2012
- tested under H2 conditions in accordance with AS/NZS 3823.1.1:1998 or 2012, and supporting test reports must be supplied.

5) Effective Date:

The effective date of this criterion is 1 April 2013.

6) Valid Countries:

This specification applies to products listed in section 2 that are sold in New Zealand only.

7) Future Revisions:

EECA reserves the right to change the criteria should regulatory, technological and/or market changes affect its usefulness to consumers, industry or the environment.