

Energy efficient air conditioners

There are various types of air conditioners on the market. By choosing the right sized, energy efficient air conditioner you can save money on its operating costs.

Energy star rating labels

There are two different energy rating labels used for air conditioners. One label is for air conditioners that provide cooling only and the other label is for air conditioners that provide heating as well as cooling.

The stars in the blue band show how efficient the air conditioner is when cooling and the stars in the red show its efficiency when heating. The red and blue boxes on the energy rating label for a reverse cycle air conditioner show the cooling and heating capacity in terms of output power and the associated instantaneous input power.

The amount of energy consumed will depend on the operating condition of the air conditioner, the age of the unit and where it's placed among other factors.

The figure in the blue box shows how much electricity (kWh) the air conditioner will use for 500 hours of cooling. The figure in the red box will tell you how much electricity (kWh) the air conditioner will use for 500 hours of heating.

To calculate the running costs, multiply the consumption figure (kWh) by the current domestic electricity tariff.

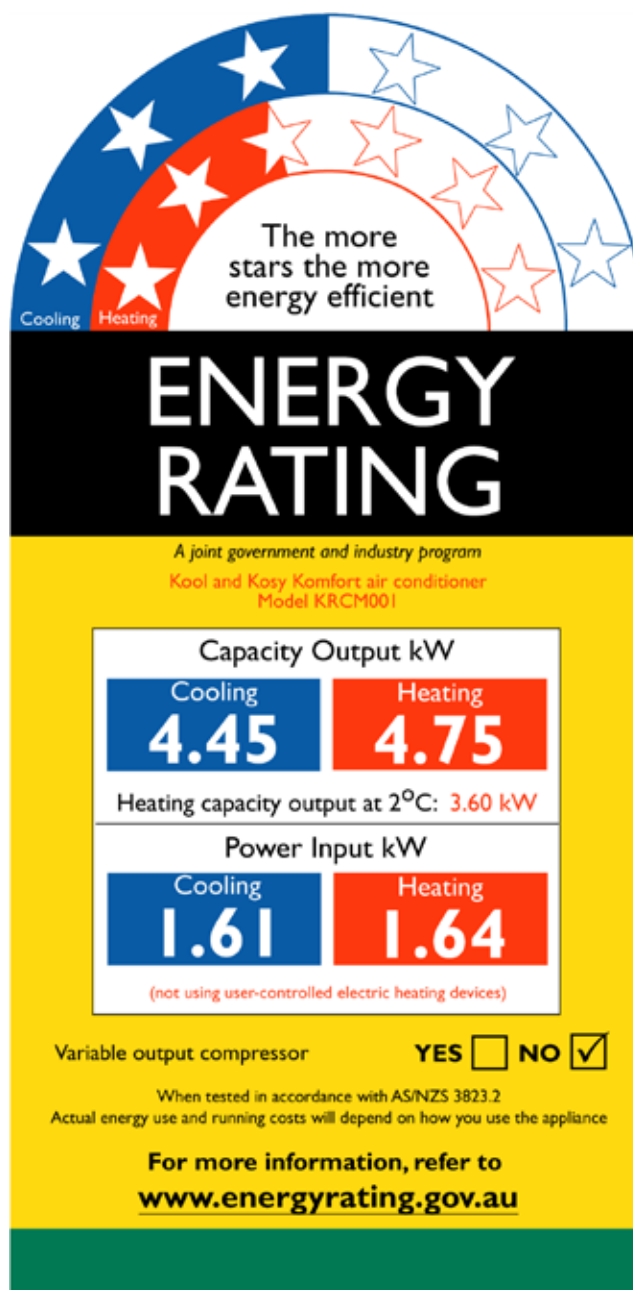
Which air conditioner suits your climate?

Refrigerative air conditioners

Refrigerative air conditioners cool the air by a method of heat extraction called refrigeration. This type of air conditioning is effective in tropical climates where high humidity is present.

Evaporative air conditioners

Evaporative air conditioners cool by extracting humidity from the air. This method of cooling is only effective in dry climates such as found in Central Australia. Evaporative units are much cheaper to run than refrigerative.



What types of air conditioners are available?

Air conditioners (refrigerative and evaporative) are packaged in the following forms:

Room air conditioner

This type of air conditioner can be mounted either through the wall or in a window. They are quieter if installed through the wall.

Split unit

These air conditioners are split so that the compressor and condenser are located outside and the fan coil unit inside. One advantage of split system air conditioners is they are usually very quiet.

Ducted air conditioner

A ducted air conditioner can cool a whole house. A split ducted system has the fan coil unit located in the ceiling and usually has a large capacity for larger homes.

More information

For different types of air conditioners available, go to:

http://www.energyrating.gov.au/appsearch//air_srch.asp

Handy hints

- Follow the manufacturer's instructions for filter cleaning and motor maintenance.
- If the air conditioner has adjustable louvres they should be directed between horizontal and up when cooling.

- Use a plug in timer to turn room air conditioners off in the early hours of the morning. With doors and windows closed, and the fan on for circulation, the room should easily retain the cold air. This way you will save on a couple of hours consumption a night.
- Ensure your air conditioner is the correct capacity for the size room it is cooling. Allow 130 watts (refrigerative) per square metre of floor space for daytime cooling and 80 watts (refrigerative) per square metre of floor space for night time cooling.
- Ensure cool air can't escape from the room being cooled. Make sure the windows and doors are closed. Once the air conditioner is on try not to open and close the door too often as this allows valuable cool air to escape.
- Close all curtains and drapes while cooling or heating.
- Where possible insulate the air-conditioned room – particularly the ceiling, walls and window dressings – to reduce heat transfer into or out of the house.
- Place the air conditioner on the shady side of the building where possible.

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