

Install an Efficient New Reverse Cycle Air Conditioner (Non-Ducted) ; Residential Only

Activity No.

HC2A

1. Activity Specific Definitions

Reverse cycle air conditioner (non-ducted) means a single phase non-ducted air conditioner with both heating and cooling functions that is registered for energy labelling and MEPS under standard AS/NZS 3823.2.

ACOP means the annual coefficient of performance as defined in AS/NZS 3823.2

AEER means the annual energy efficiency ratio as defined in AS/NZS 3823.2

SRI means Star Rating Index

2. Activity Description (Summary)

Install an efficient new reverse cycle air conditioner (non-ducted)

3. Activity Eligibility Requirements

Any residential household in South Australia where the installed product requirements and minimum installation requirements can be met. This can include new or replacement systems.

4. Installed Product Requirements

1. The reverse cycle air conditioner (non-ducted) must achieve an SRI of ≥ 2.5 stars for both heating and cooling under AS/NZS 3823.2 (2013). If it does not have an SRI, then it must meet these efficiency levels, ACOP and AEER at rated capacity of ≥ 3.5 .
2. The reverse cycle air conditioner (non-ducted) shall be single phase and have a rated cooling output not exceeding 13kW.
3. Multi-split systems or water source heat pumps are not eligible.

5. Minimum Installation Requirements

Any reverse cycle air conditioner (non-ducted) installed must comply with AS 60335.2.40.

6. Activity energy savings

The normalised energy saved per appliance from undertaking this activity is equal to:

$$\text{Normalised Energy Savings (GJ) (BCA climate 6)} = \left[57.8 - \frac{193.1}{MH} - \frac{8.4}{MC} \right]$$

$$\text{Normalised Energy Savings (GJ) (Other places in SA)} = \left[37.9 - \frac{84.8}{MH} - \frac{44.6}{MC} \right]$$

MH is the registered value for rated heating ACOP at rated capacity in accordance with AS/NZS 3823.2

MC is the registered value for rated cooling AEER at rated capacity in accordance with AS/NZS 3823.2

7. Guidance Notes (Informative only – not mandatory)

Persons installing heating/cooling systems should have regard to the "Air Conditioning Residential Best Practice Guideline" (2003) published by the Australian Institute of Refrigeration, Air Conditioning and Heating (AIRAH). All reasonable endeavours should be used to recycle removed systems.

For the ACOP and AEER, refer to the Air Conditioner CSV file available from http://reg.energyrating.gov.au/comparator/product_types/64/search/. Use the data from the AnnualOutputCOP and AnnualOutputEER columns.