A/C Regulatory Changes

• Improved energy rating label

• Portable products
  – Lower cost appliances
  – No installation required
Energy Rating Label

• Zoned Energy Rating Label (ZERL)
  – Provide consumers, retailers and installers with improved performance information
  – Map-based label
  – Incorporate results from Seasonal Energy Efficiency Ratio (SEER) standard
  – Use regionally-specific climate zones files
  – Enables selection of appliance better suited to consumer’s specific climate type
Fudaison
KRC5500

The more stars, the more energy efficient

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Energy Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOT</td>
<td>929 kWh</td>
</tr>
<tr>
<td>Average</td>
<td>311 kWh</td>
</tr>
<tr>
<td>Cold</td>
<td>202 kWh</td>
</tr>
</tbody>
</table>

Location changes the efficiency of this appliance

Noise (dB(A))

35°C 4.00 kW

7°C 5.51 kW

35°C 5.51 kW

8.85 kW

2°C
Online tool

– Consumers/advisers enter region to use location-specific climate data
– Data available for 69 zones in Australia
– Electricity tariffs and location optimised operating hours pre-filled or user entered
– Tailored results enable better product selection
Portable Products

• Limited options for renters if landlord does not install split system

• Low income households may not be able to afford purchase & installation cost for split system

• Portable appliances may be affordable alternatives
Portable Products: Types

Cooling Scenario

Single Duct

Double Duct
Portable Products: Issues

- **Double Duct**
  - MEPS levels were too strict
  - Limited supply

- **Single Duct**
  - Existing air enthalpy test standards were not fit for purpose
  - Not regulated for energy efficiency
  - Energy rating label not required

1. Few efficient portable appliances available
2. Unable to determine relative performance between single ducts and double ducts/splits
Portable Products: Policy Response

• Double Duct
  – Reduce (relax) MEPS levels → Increase supply
  – Apply ZERL

• Single Duct
  – Develop and adopt test standard (AS/NZS 3823.1.5)
  – Apply MEPS
  – Apply ZERL
Portable Products: Policy Response

• ZERL on all portables

• Consumers able to compare relative efficiency of single vs double duct

• Price difference is small

• Consumers easily able to determine they are much better off with double duct
Possible Improvements

Test Points for AS/NZS 3823.4 (ISO 16358)

- Currently 29°C and 35°C test points for SEER
- Add 42°C or 43°C test point

MEPS

- Currently: EER and COP-based MEPS
- Need to understand performance data based on SEER
- In the future: Consider SEER-based MEPS
News Item: 1 April 2019 - Air Conditioner Regulations Published


Greenhouse and Energy Minimum Standards (Air Conditioners up to 65kW) Determination 2019


Decision Regulation Impact Statement - Air Conditioners