Smart Power Ducted and Cassette Inverter Air Conditioning Systems
The Internet era is a diverse and unconventional time, where “one size fits all” products and solutions simply aren’t enough. Customers want to be treated as individuals and respected for who they are. Everyone wants their unique lifestyle acknowledged. That is why Haier listens closely to you in order to gain a genuine understanding of what is going on in your life and what is on your mind, so each of you can get the smart home experience you deserve: be it simple, sophisticated, organised or enjoyable.

As a worldwide industry leader, Haier innovates beyond products and solutions and turns the organisation into a wholly connected platform. In doing so, internal and external resources are connected quickly and easily. We believe only by doing so can we best meet our consumers’ expectations in this rapidly evolving world.

Be part of the Haier Network, and create new possibilities.
## ENERGY

- **Demand Response Enabling Device.** Compatibility to connect to the power supply company device which will reduce peak demand to the power supply network at critical peak load times.
- **DC inverter A-PAM inverter 180° sine wave inverter technology** will reduce vibration and noise at low compressor frequency when compared to a standard inverter system.
- **Latest technology DC motor** is adopted instead of traditional AC motor. DC motor consumes less power to operate versus a typical AC motor and has a built-in microprocessor for programmability and better control.
- **On/Off control card** can be managed by a simple on/off device such as a hotel card system.

## TECHNOLOGY

- **Connection of more than one indoor unit so they can operate as a group.**
- **Connection to an accessory central control device** to allow independent operation of more than one device at a central location.
- **Built in timer**
- **Prevent unauthorised operation**

## COMFORT

- **Built-in microprocessor automatically detects room temperature and determines operation mode either heating or cooling.**
- **Control via smart phone or tablet which can connect to the Internet**
- **Adoption of DC fan motor permits 4 fan speed control by the user.**
- **Temperature requirement shift during sleep as we remain inactive. The system will adjust temperature and noise for a more comfort during sleep.**
- **Dry Mode.** Concentrates on RH% humidity reduction and less on temperature.
- **4 way independent airflow. Each side can be controlled separately to customise to your space.**
- **Round way airflow, Specially designed facia grille that allows airflow out of the corners as well as the sides to attempt to distribute air in a 360 degree pattern.**
- **Fresh air duct connection.**

## RELIABILITY

- **Outdoor unit designed for cooling up to 50 °C**
- **Outdoor unit designed for heating operation down to -20 °C**
- **Outdoor Unit designed for cooling operation down to -15 °C**
- **The heat exchanger aluminium fin stock has a Hydrophilic coating for its anti-corrosion properties and its low surface tension which enables water droplets to flow off the surface better than standard Aluminium Fin.**
- **Designed for both 50 and 60Hz power supply.**
- **Allows the system pressures to balance before attempting start of the compressor to prevent damage and excessive power consumption.**
- **Auto restart after power failure in the event of a power outage.**
- **Self diagnosis function; In the event of failure an error code will be displayed.**

## CONVENIENCE

- **Compact design.** The design was optimised to be compact in height.
- **Condensate water pump.** The product has a inbuilt condensate water pump that will pump the condensate water up and allowing it to drain away in areas where gravity drain is unavailable.
- **Adjustable ESP (External static pressure)** With the adoption of DC fan motor the ESP can be set via the remote controller saving installation time.
- **Pipe connection inside cabinet for a smooth exterior**
- **Condensate connection (gravity drain) on either ends of the cabinet**
- **Condensate connection (gravity drain) has two connections. A safety pan is supplied fitted to the indoor unit**
Haier group was founded in Qingdao, China in 1984.

- **1984**: Haier group was founded in Qingdao, China.
- **1985**: Qingdao Qingkong air conditioner factory established. Haier manufactures China's 1st split air conditioner.
- **1986**: Haier introduces full range light commercial air conditioning solution.
- **1987**: Haier receives ISO 9001 certification.
- **1989**: Haier exports its first air conditioners to Europe.
- **1993**: Haier introduces China’s first inverter air conditioner.
- **1994**: Haier introduces the first DC inverter air conditioner in China.
- **1996**: Haier introduces full range light commercial air conditioning solution.
- **1998**: Haier introduces the first DC inverter air conditioner in China.
- **1999**: Haier begins export of air conditioners to the United States and reaches #1 brand status for Room and Portable Air Conditioners in 2005.
- **2001**: Haier builds up industry park in Pakistan and catches No.1 market share in 2005.
- **2002**: Haier releases centrifugal chiller with maglev technology.
- **2003**: Haier releases R410a DC inverter VRF system.
- **2006**: Haier builds up the world’s most advanced intelligent factory.
- **2007**: Haier introduces full range of Super match solution covering on-off and inverter models as well as mono and multi system.
- **2011**: Haier establishes AC R&D center to enhance the R&D ability with more focus on user’s experience.
- **2014**: Haier launches Smart Power high efficiency air conditioning system.
- **2015**: Haier builds up the world's most advanced intelligent factory.
- **2016**: Haier launches Smart Power high efficiency air conditioning system.

**30 Years Providing Better Air Solution**

A history of bringing valued products to market around the world.
SMART POWER
Key features
Low Profile Ducted
High Static Ducted
Cassette
Drawings
Control systems
It is simple to make the Haier Smart Power System Wi-Fi compatible. Purchase the additional accessory KZW-W001 and connect it to the indoor unit. Then control your Haier System wherever you are by smart phone or tablet.

The Wi-Fi module (KZW-W001) will connect to the internet via your Wi-Fi router (WiFi router not supplied).

Download the Haier smart Air 2 APP free from apple or android stores.
FEATURES

**Corrosion protection**
Haier evaporator adopts new generation blue aluminium fin which specializes in strong corrosion resistance and super hydrophilic performance.

**“888” digital test panel**
All running parameters and error code can be checked from the “888” digital display. Simpler operation to reduce diagnosis time.

**Low Sound Level**
Lower sound level can be achieved by an industry leading 550 mm fan and unique outlet grille. The new grille design offers less resistance to airflow and less noise.

**Handles for easier transporting**
Four handles are designed into each outdoor unit to allow for two people to carry.
**DC fan Motor**

In most cases a DC motor uses less energy than a standard AC motor. The greater qty of fan speed in a DC motor allows for better airflow fine tuning, for easier commissioning.

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**Adjustable Static Pressure**

The wired controller has special menu’s to make simple adjustments to the external static pressure in order to maintain airflow as required. Static can be changed on the wired RC from 30 to 120 Pa (model dependant).

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**Consistent airflow**

The indoor units contain up to 3 fans which can provide consistent airflow in different ductwork installations. Haier test has proven no loss in airflow at increased static pressure installations.
Super slim design, the height of the medium static ducted indoor unit is 250mm only. Designed to fit into spaces where a normal ducted system is not suitable.

Left or right drain outlet
Gravity drain connection are provided on the left or right. Additionally there is a drain pump outlet next to the electrical panel side.

High lift drain pump
Condensate water lift up to 1000mm which will allow for a flexible installation.

Return air choices
Friendly design: Rear air return or bottom air return is available. The indoor unit is supplied as rear return air design, but with a simple panel change the unit can be field converted to a bottom return air.

Low profile duct
Condensate water lift up to 1000mm which will allow for a flexible installation.
# LOW PROFILE DUCTED

**ADH071M1ERG**  |  **ADH090M1ERG**  |  **ADH105M1ERG**

## Nominal performance data

<table>
<thead>
<tr>
<th></th>
<th>Indoor unit</th>
<th>Outdoor unit</th>
<th>Outdoor unit</th>
<th>Outdoor unit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capacity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cooling</strong></td>
<td>kW Nom (min-max)</td>
<td>7.1 (2.0~9.0)</td>
<td>8.5 (2.5~10)</td>
<td>10.0 (2.5~11)</td>
</tr>
<tr>
<td><strong>Heating</strong></td>
<td>kW Nom (min-max)</td>
<td>8.0 (2.0~10.0)</td>
<td>9.5 (2.5~11)</td>
<td>10.4 (2.5~12)</td>
</tr>
<tr>
<td><strong>Rated power input</strong></td>
<td>kW Nom (min-max)</td>
<td>2.0 (0.4~4.0)</td>
<td>2.5 (0.5~4.4)</td>
<td>2.9 (0.5~4.5)</td>
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<tr>
<td><strong>EER</strong></td>
<td></td>
<td>3.5</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td><strong>COP</strong></td>
<td></td>
<td>4.0</td>
<td>3.8</td>
<td>3.8</td>
</tr>
</tbody>
</table>

## Indoor Unit

**Electrical**

- Power supply: Ph/V/Hz 1/220-240/50/60

**Performance**

- Air flow (H/M/L): m³/h 1050/840/630
- External Static Pressure: Pa 290/230/175
- Sound power level: dB(A) 58
- Sound pressure level: dB(A) 38/35/32

**Installation**

- External dimensions (WxHxD): mm 957x655x250
- Shipping dimensions (WxHxD): mm 1170x880x340
- Net/Shipping weight: kg 31.2/36.8

## Outdoor Unit

**Electrical**

- Power supply: Ph/V/Hz 1/220-240/50/60
- Rated Current: Cooling Amps 8.7, Heating Amps 9.1
- Maximum Current: Cooling Amps 31.2, Heating Amps 30.0

**Performance**

- Air flow (H): m³/h 1050
- Sound power level: dB(A) 64
- Sound pressure level: dB(A) 47

**Installation**

- External dimensions (HxWxD): mm 965x950x370
- Shipping dimensions (HxWxD): mm 1095x1000x450
- Net/Shipping weight: kg 92/92

- Compressor type: Twin rotary
- Refrigerant type: R410A
- Refrigerant liquid pipe: mm 9.52
- Refrigerant gas pipe: mm 11.88
- Max pipe length: m 30
- Max height between I.U.&O.U.: m 20
- Refrigerant pre-charged: kg 2.5
- Pre-charged line length: m 45

**Working temp.**

- Cooling (Min-Max): °C 18 to 40
- Heating (Min-Max): °C 0 to 35
<table>
<thead>
<tr>
<th>Model</th>
<th>Indoor unit</th>
<th>ADH125M1ERG</th>
<th>ADH140M1ERG</th>
<th>ADH125M1ERG</th>
<th>ADH140M1ERG</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td>1UH125P1ERG</td>
<td>1UH140P1ERG</td>
<td>1UH125P1ERK</td>
<td>1UH140P1ERK</td>
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<tr>
<td>Capacity</td>
<td>Cooling KW Nom (min-max)</td>
<td>12.5 (3.5~15.0)</td>
<td>13.4 (3.5~10.0)</td>
<td>12.5 (3.5~15.0)</td>
<td>13.4 (3.5~15.0)</td>
</tr>
<tr>
<td></td>
<td>Heating KW Nom (min-max)</td>
<td>15.0 (4.0~19.0)</td>
<td>15.0 (4.0~19.0)</td>
<td>15.0 (4.0~19.0)</td>
<td>15.0 (4.0~19.0)</td>
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<tr>
<td>Rated power input</td>
<td>Cooling KW Nom (min-max)</td>
<td>3.67 (1.0~6.5)</td>
<td>4.05 (1.0~6.5)</td>
<td>3.67 (1.0~6.5)</td>
<td>4.05 (1.0~6.5)</td>
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<tr>
<td></td>
<td>Heating KW Nom (min-max)</td>
<td>3.91 (1.0~6.5)</td>
<td>4.29 (1.0~6.5)</td>
<td>3.91 (1.0~6.5)</td>
<td>4.29 (1.0~6.5)</td>
</tr>
<tr>
<td>EER</td>
<td></td>
<td>3.4</td>
<td>3.3</td>
<td>3.4</td>
<td>3.3</td>
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<tr>
<td>COP</td>
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<td>3.5</td>
<td>3.5</td>
<td>3.5</td>
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<tr>
<td>Indoor Unit</td>
<td>Electrical</td>
<td>Ph/V/Hz</td>
<td>1/220-240/50/60</td>
<td>1/220-240/50/60</td>
<td>1/220-240/50/60</td>
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<tr>
<td>Performance</td>
<td>Air flow (H/M/L) m³/h</td>
<td>2250/1960/1680/1500</td>
<td>2500/2160/1780/1500</td>
<td>2250/1960/1680/1500</td>
<td>2500/2160/1780/1500</td>
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<tr>
<td>External Static Pressure</td>
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<td>30 to 120</td>
<td>30 to 120</td>
<td>30 to 120</td>
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<td>Sound power level (H/M/L) dB(A)</td>
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<td>62</td>
<td>64</td>
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<td>62</td>
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<tr>
<td>Sound pressure level (H/M/L) dB(A)</td>
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<td>39/36/33/31</td>
<td>41/36/33/31</td>
<td>39/36/33/31</td>
<td>41/36/33/31</td>
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<tr>
<td>Outdoor Unit</td>
<td>Electrical</td>
<td>Power supply</td>
<td>Ph/V/Hz</td>
<td>1/220-240/50/60</td>
<td>3/380-415/50/60</td>
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<tr>
<td>Rated Current</td>
<td>Cooling Amps</td>
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<td>13.5</td>
<td>6.1</td>
<td>7.0</td>
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<tr>
<td>Maximum Current</td>
<td>Heating Amps</td>
<td>17.5</td>
<td>19.0</td>
<td>6.5</td>
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<td>6500</td>
<td>7000</td>
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<td>70</td>
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<td>52</td>
<td>53</td>
<td>52</td>
<td>53</td>
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</tbody>
</table>

**Working temp.**
- Cooling (Min-Max) °C: -15 to +50
- Heating (Min-Max) °C: -20 to +24
**DC Fan Motor**

In most cases a DC motor uses less energy than a standard AC motor. A DC motor allows for better airflow fine tuning by having more speed options which allows for easier commissioning.

<table>
<thead>
<tr>
<th>Torque(kgfcm)</th>
<th>AC motor efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>25%</td>
</tr>
<tr>
<td>60</td>
<td>35%</td>
</tr>
<tr>
<td>40</td>
<td>40%</td>
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</table>

<table>
<thead>
<tr>
<th>Torque(kgfcm)</th>
<th>DC motor efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>85%</td>
</tr>
<tr>
<td>60</td>
<td>67.5%</td>
</tr>
<tr>
<td>40</td>
<td>90%</td>
</tr>
</tbody>
</table>

**Safety Drain Tray Built In**

The 10.5 to 16 kW indoor unit is designed to incorporate two drain trays for condensate removal. The secondary tray is a backup in case the first one overflows due to a blockage.

Design

The 10.5-16kW indoor unit design was optimised to ensure the compact indoor unit was kept to a maximum of only 550mm. Ideal for 600mm truss spacing of a normal house.
The Wi-Fi module (KZW-W001 purchased separately) can connect to the internet via your Wi-Fi router. The Haier smart Air 2 APP is available free for apple or android devices.

Top, bottom or side panels are removable for servicing and installation (10.5 - 16 kW)

ESP can be adjusted by wired controller YR-E17/YR-E16. The installer has no need to open the electrical box and adjust the ESP by switch or plug, reducing installation time.
# HIGH STATIC DUCTED

**Model:** ADH071M3ERG

<table>
<thead>
<tr>
<th>Nominal performance data</th>
<th>Indoor unit</th>
<th>Outdoor unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>Cooling</td>
<td>kW Nom (min-max)</td>
</tr>
<tr>
<td></td>
<td>Heating</td>
<td>kW Nom (min-max)</td>
</tr>
<tr>
<td>Rated power input</td>
<td>Cooling</td>
<td>kW Nom (min-max)</td>
</tr>
<tr>
<td></td>
<td>Heating</td>
<td>kW Nom (min-max)</td>
</tr>
<tr>
<td>EER</td>
<td></td>
<td>3.5</td>
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<tr>
<td>COP</td>
<td></td>
<td>4.0</td>
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</table>

**Indoor Unit**

<table>
<thead>
<tr>
<th>Electrical</th>
<th>Power supply</th>
<th>Ph/V/Hz</th>
<th>1/220-240/50/60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>Air flow (H/M/L)</td>
<td>m³/h</td>
<td>1450/1200/950/700</td>
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<td></td>
<td>External Static Pressure</td>
<td>Pa</td>
<td>25~150</td>
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<tr>
<td></td>
<td>Sound power level (H/M/L)</td>
<td>dB(A)</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Sound pressure level (H/M/L)</td>
<td>dB(A)</td>
<td>38/35/32/29</td>
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<tr>
<td>Installation</td>
<td>External dimensions (WxHxD)</td>
<td>mm</td>
<td>95x765x250</td>
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<tr>
<td></td>
<td>Shipping dimensions (WxHxD)</td>
<td>mm</td>
<td>1170x860x340</td>
</tr>
<tr>
<td></td>
<td>Net/Shipping weight</td>
<td>kg</td>
<td>11.2/15.8</td>
</tr>
<tr>
<td></td>
<td>Supply Air Flange</td>
<td>mm</td>
<td>145x800</td>
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<tr>
<td></td>
<td>Return Air Flange</td>
<td>mm</td>
<td>235x851</td>
</tr>
<tr>
<td></td>
<td>Wired Controller</td>
<td>Standard</td>
<td>YR-E17</td>
</tr>
<tr>
<td></td>
<td>Optional</td>
<td>YR-E16A (7 day time clock)</td>
<td></td>
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</table>

**Outdoor Unit**

<table>
<thead>
<tr>
<th>Electrical Parameters</th>
<th>Power supply</th>
<th>Ph/V/Hz</th>
<th>1/220-240/50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Amps</td>
<td>Cooling Amp</td>
<td>8.8</td>
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</tr>
<tr>
<td>Maximum Amps</td>
<td>Heating Amp</td>
<td>9.2</td>
<td></td>
</tr>
<tr>
<td>Performance</td>
<td>Air flow (H)</td>
<td>m³/h</td>
<td>3200</td>
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<td></td>
<td>Sound power level</td>
<td>dB(A)</td>
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<td>Sound pressure level</td>
<td>dB(A)</td>
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<tr>
<td>Installation</td>
<td>External dimensions (HxWxD)</td>
<td>mm</td>
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<td></td>
<td>Shipping dimensions (HxWxD)</td>
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<td>1095x1095x450</td>
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<td></td>
<td>Net/Shipping weight</td>
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<tr>
<td></td>
<td>Compressor type</td>
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<td></td>
<td>Refrigerant type</td>
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</tr>
<tr>
<td></td>
<td>Refrigerant liquid pipe</td>
<td>mm</td>
<td>9.52</td>
</tr>
<tr>
<td></td>
<td>Refrigerant gas pipe</td>
<td>mm</td>
<td>15.88</td>
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<td></td>
<td>Max pipe length</td>
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<td></td>
<td>Max height between IU &amp; OU</td>
<td>m</td>
<td>30</td>
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<tr>
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<td>Refrigerant pre-charged</td>
<td>kg</td>
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<tr>
<td></td>
<td>Pre-charged line length</td>
<td>m</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Additional gas charge</td>
<td>g/m</td>
<td>45</td>
</tr>
</tbody>
</table>

**Working temp.**

| Cooling (Min-Max) | °C | -15 to +60 |
| Heating (Min-Max) | °C | -20 to +24 |
### Indoor Unit

#### Electrical Parameters

- **Power supply**
  - Ph/V/Hz: 1/230/50/60

- **Power Input**
  - Cooling: 540 / 660 / 700 / 700 Watt
  - Heating: 530 / 650 / 700 / 700 Watt

- **Air flow (H/M/L/LL)**
  - m³/h: 2880 / 2380 / 1880 / 1380
  - l/s: 800 / 660 / 520 / 380

- **ESP**
  - Pa: 37 / 210

#### Performance

- **Sound pressure level (H/M/L)**
  - dB (A): 45 / 41 / 37 / 33

- **Supply Air Flange**
  - mm: 306 x 1046

- **Return Air Flange**
  - mm: 353 x 1166

- **Wired Controller**
  - Standard: YR-E17
  - Optional: Wireless Controller

- **Wireless Controller**
  - Standard: YR-HBS01/RE-02

- **Group control**
  - Central control

- **BMS**
  - Built-in valve

- **Wi-Fi Control Compatible**
  - Blue B

- **Adjustable ESP**
  - 3 minutes protection

- **Sleep mode**
  - Auto restart

- **24 hours timer**
  - Child lock

- **Auto mode**
  - Double 8 display

- **Auto mode**
  - Self-diagnosis function

- **Built-in valve**
  - Central control

#### Installation

- **External dimensions (HxWxD)**
  - 965x450x370 mm

- **Shipping dimensions (HxWxD)**
  - 1095x1050x450 mm

- **Net/Shipment weight**
  - kg: 82 / 94

- **Compressor type**
  - Twin rotary

- **Refrigerant type**
  - R410A

- **Refrigerant liquid pipe**
  - mm: 9.52

- **Refrigerant gas pipe**
  - mm: 15.88

- **Max pipe length**
  - m: 50

- **Max drop between I.U.&O.U**
  - m: 30

- **Pre Charge of refrigerant**
  - kg: 2.5

- **Pre-charged line length**
  - m: 45

- **Additional gas charge**
  - g/m: 45

- **Working Temperature**
  - Cooling (Min-Max): -15°C ~ +50°C
  - Heating (Min-Max): -20°C ~ +24°C

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### Outdoor Unit

#### Electrical Parameters

- **Power supply**
  - Ph/V/Hz: 1/230/50/60

- **Rated Amps**
  - Cooling: 13.3 / 16.5 / 18.5 / 21.0 Amp
  - Heating: 13.7 / 17.5 / 19.8 / 21.5 Amp

- **Maximum Amps**
  - Cooling: 22.2 Amp
  - Heating: 30 Amp

- **Air Flow (HI)**
  - m³/h: 4000 / 6500 / 7000 / 7500

- **Sound Power level**
  - dB (A): 68 / 69 / 70 / 73

- **Sound pressure level**
  - dB (A): 52 / 52 / 53 / 54

- **External dimensions (HxWxD)**
  - 965x450x370 mm

- **Shipping dimensions (HxWxD)**
  - 1095x1050x450 mm

- **Net/Shipment weight**
  - kg: 82 / 94 / 105 / 118

- **Compressor type**
  - Twin rotary

- **Refrigerant type**
  - R410A

- **Refrigerant liquid pipe**
  - mm: 9.52

- **Refrigerant gas pipe**
  - mm: 15.88

- **Max pipe length**
  - m: 50

- **Max drop between I.U.&O.U**
  - m: 30

- **Pre Charge of refrigerant**
  - kg: 2.5

- **Pre-charged line length**
  - m: 45

- **Additional gas charge**
  - g/m: 45

- **Working Temperature**
  - Cooling (Min-Max): -15°C ~ +50°C
  - Heating (Min-Max): -20°C ~ +24°C

---

### Nominal Performance Data

#### Rated capacity

- **Cooling**
  - kW (min~max): 10.5 (2.5~11.0)
  - EER: 3.5
  - COP: 3.7

- **Heating**
  - kW (min~max): 11.5 (2.5~12.0)
  - EER: 3.5
  - COP: 3.7

#### Rated power input

- **Cooling**
  - kW (min~max): 3.0 (0.5~5.3)
  - EER: 3.5
  - COP: 3.7

- **Heating**
  - kW (min~max): 3.1 (0.5~5.3)
  - EER: 3.5
  - COP: 3.7

### Static Ducted
Individual flap control
The four outlet louvers can be controlled individually by the controller, providing maximum comfort throughout the room.

Round flow air supply
Air supply in all directions to improve air distribution

Hidden LCD Display
Hidden LCD display design. Green display for cooling, red display for heating.

ABS Panel plastics
The round flow cassette panel is manufactured from high grade ABS plastic designed to resist yellowing over time.
High lift drain pump
Pump can lift up to 1000mm.

Moving eye intelligent panel (optional)
Panel PB-9500MB has an eye that can detect movement in the room.

Fresh Air Inlet
Pre-set fresh air inlet can introduce the outside fresh air into the room to improve the indoor air quality.

Mode of operation.
1. Follow or Evade: The airflow can be set to “follow or evade” to reduce or increase draft to improve comfort level.
2. Absence: Temperature set-point will be adjusted up or down 1 degree every 30 minutes if no movement is detected.

High Ceiling Mode
Indoor unit can be installed 4.5 meters high.
Wired controller YR-E16A required

Installer friendly
The electrical panel can be removed with one screw.

Absence
- Nobody in the room
- 15 minutes normal operation
- 3 hours
- OFF

With sensor
## CASSETTE MODELS

<table>
<thead>
<tr>
<th>Model</th>
<th>Indoor unit ABH071H1ERG</th>
<th>Indoor unit ABH090H1ERG</th>
<th>Indoor unit ABH105H1ERG</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nominal performance data</strong></td>
<td><strong>Outdoor unit 1UH071N1ERG</strong></td>
<td><strong>Outdoor unit 1UH090N1ERG</strong></td>
<td><strong>Outdoor unit 1UH105N1ERG</strong></td>
</tr>
<tr>
<td>Nominal capacity</td>
<td>Cooling kW (min-max)</td>
<td>7.1 (2.0-8.0)</td>
<td>9.0 (2.5-11)</td>
</tr>
<tr>
<td>Heating kW (min-max)</td>
<td>7.8 (2.0-9.0)</td>
<td>10.1 (2.5-11)</td>
<td>10.6 (2.5-11.3)</td>
</tr>
<tr>
<td><strong>Rated power input</strong></td>
<td>Cooling kW (min-max)</td>
<td>1.89 (0.4-3.2)</td>
<td>2.56 (0.5-3.5)</td>
</tr>
<tr>
<td>Heating kW (min-max)</td>
<td>2.0 (0.4-3.2)</td>
<td>2.69 (0.5-3.5)</td>
<td>2.86 (0.5-4.0)</td>
</tr>
<tr>
<td>EER</td>
<td>WW</td>
<td>3.75</td>
<td>3.5</td>
</tr>
<tr>
<td>COP</td>
<td>WW</td>
<td>3.9</td>
<td>3.7</td>
</tr>
<tr>
<td>Energy class (Cooling/Heating)</td>
<td>2.5 star / 3 star</td>
<td>2 star / 2.5 star</td>
<td>1.5 star / 2.5 star</td>
</tr>
</tbody>
</table>

### Indoor Unit

#### Electrical

<table>
<thead>
<tr>
<th>Power supply</th>
<th>Ph/V/Hz</th>
<th>1/220-240/50/60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air flow (H/M/L)</td>
<td>m³/h</td>
<td>1260/1070/820/680</td>
</tr>
<tr>
<td>L/S</td>
<td>350/295/25/215/185</td>
<td></td>
</tr>
<tr>
<td>Sound power level (H/M/L)</td>
<td>dB(A)</td>
<td>52</td>
</tr>
<tr>
<td>57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External dimensions (W/D/H)</td>
<td>mm</td>
<td>36/133/29/26</td>
</tr>
<tr>
<td>Shipping dimensions (W/D/H)</td>
<td>mm</td>
<td>840/800/246</td>
</tr>
<tr>
<td>Weight Net/Shipping</td>
<td>kg</td>
<td>10/13</td>
</tr>
</tbody>
</table>

#### Panel

<table>
<thead>
<tr>
<th>Panel Model</th>
<th>Standard</th>
<th>YR-HBS-01</th>
</tr>
</thead>
<tbody>
<tr>
<td>External dimensions (W/D/H)</td>
<td>mm</td>
<td>950x950x50</td>
</tr>
<tr>
<td>Shipping dimensions (W/D/H)</td>
<td>mm</td>
<td>1000x1000x110</td>
</tr>
<tr>
<td>Weight Net/Shipping</td>
<td>kg</td>
<td>6.5/9</td>
</tr>
</tbody>
</table>

### Outdoor Unit

#### Electrical

<table>
<thead>
<tr>
<th>Power supply</th>
<th>Ph/V/Hz</th>
<th>1/220-240/50/60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air flow (H)</td>
<td>m³/h</td>
<td>3200</td>
</tr>
<tr>
<td>L/S</td>
<td>885</td>
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</tr>
<tr>
<td>Sound power level</td>
<td>dB(A)</td>
<td>64</td>
</tr>
<tr>
<td>Sound pressure level</td>
<td>dB(A)</td>
<td>47</td>
</tr>
<tr>
<td>External dimensions (H/WD)</td>
<td>mm</td>
<td>965x950x370</td>
</tr>
<tr>
<td>Shipping dimensions (H/WD)</td>
<td>mm</td>
<td>1095x1050x450</td>
</tr>
<tr>
<td>Weight Net/Shipping</td>
<td>kg</td>
<td>80/92</td>
</tr>
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#### Installation

<table>
<thead>
<tr>
<th>Compressor type</th>
<th>Rotary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refrigerant type</td>
<td>R410A</td>
</tr>
<tr>
<td>Refrigerant liquid pipe</td>
<td>mm</td>
</tr>
<tr>
<td>Refrigerant gas pipe</td>
<td>mm</td>
</tr>
<tr>
<td>Max tube length</td>
<td>m</td>
</tr>
<tr>
<td>Max drop between U/G/OU</td>
<td>m</td>
</tr>
<tr>
<td>Refrigerant pre-charged</td>
<td>kg</td>
</tr>
<tr>
<td>Pre-charge line length</td>
<td>m</td>
</tr>
<tr>
<td>Additional gas charge</td>
<td>g/m</td>
</tr>
</tbody>
</table>

#### Working temp.

| Cooling Min-Max | °C | -15 to +50 |
| Heating Min-Max | °C | -20 to +24 |
## CASSETTE MODELS

**ABH125K1ERG**  **ABH140K1ERG**

### Round Way Airflow
- 4 Way Independent Airflow
- Moving Eye Panel (PB-950MB) optional

### ABH125K1ERG Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Indoor Unit</th>
<th>Outdoor Unit 1UH125P1ERG</th>
<th>Outdoor Unit 1UH125P1ERK</th>
<th>Outdoor Unit 1UH140P1ERK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooling kW nom (min~max)</td>
<td>12.5 (3.5~14.5)</td>
<td>12.5 (3.5~14.5)</td>
<td>13.4 (3.5~15.5)</td>
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</tr>
<tr>
<td>Heating kW nom (min~max)</td>
<td>13.1 (4~17)</td>
<td>13.1 (4~17)</td>
<td>14.5 (4.0~18.0)</td>
<td></td>
</tr>
<tr>
<td>Rated Power Input</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooling kW nom (min~max)</td>
<td>3.67 (1.0~6.0)</td>
<td>3.67 (1.0~6.0)</td>
<td>4.05 (1.0~6.5)</td>
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</tr>
<tr>
<td>Heating kW nom (min~max)</td>
<td>3.71 (1.0~6.0)</td>
<td>3.71 (1.0~6.0)</td>
<td>4.11 (1.2~6.8)</td>
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</tr>
<tr>
<td>EER</td>
<td>3.41</td>
<td>3.41</td>
<td>3.31</td>
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<tr>
<td>COP</td>
<td>3.53</td>
<td>3.53</td>
<td>3.53</td>
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</tr>
<tr>
<td>Energy class (Cooling/Heating)</td>
<td>2 star x 2 star</td>
<td>2 star x 2 star</td>
<td>2 star x 2 star</td>
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</tr>
</tbody>
</table>

### Indoor Unit

<table>
<thead>
<tr>
<th>Performance</th>
<th>Electrical</th>
<th>Power supply</th>
<th>Ph/V/Hz</th>
<th>1/220-240/50/60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airflow (H/M/L)</td>
<td>m³/h</td>
<td>1950/1600/1440/1200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L/S</td>
<td>540/440/400/330</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sound power level (H/M/L)</td>
<td>dB(A)</td>
<td>64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External dimensions (WxDxH)</td>
<td>mm</td>
<td>840/840/288</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shipping dimensions (WxDxH)</td>
<td>mm</td>
<td>990/990/380</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight Net/Shipping</td>
<td>kg</td>
<td>32/38</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Outdoor Unit

<table>
<thead>
<tr>
<th>Performance</th>
<th>Electrical</th>
<th>Power supply</th>
<th>Ph/V/Hz</th>
<th>1/220-240/50/60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airflow (H)</td>
<td>m³/h</td>
<td>1805</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sound power level</td>
<td>dB(A)</td>
<td>69</td>
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<td></td>
</tr>
<tr>
<td>External dimensions (HxWxD)</td>
<td>mm</td>
<td>1350x950x370</td>
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<tr>
<td>Weight Net/Shipping</td>
<td>kg</td>
<td>102/118</td>
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</table>

### Panel

<table>
<thead>
<tr>
<th>Panel Model</th>
<th>PB-950KB (standard panel)</th>
<th>PB-950MB (Movement sensor panel)</th>
</tr>
</thead>
<tbody>
<tr>
<td>External dimensions (WxDxH)</td>
<td>mm</td>
<td>950x950x50</td>
</tr>
<tr>
<td>Weight Net/Shipping</td>
<td>kg</td>
<td>6.5/9</td>
</tr>
</tbody>
</table>

### Outdoor Unit

<table>
<thead>
<tr>
<th>Performance</th>
<th>Electrical</th>
<th>Power supply</th>
<th>Ph/V/Hz</th>
<th>3/400/50/60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airflow (H)</td>
<td>m³/h</td>
<td>1805</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sound power level</td>
<td>dB(A)</td>
<td>70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External dimensions (HxWxD)</td>
<td>mm</td>
<td>1500x480x1090</td>
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<td></td>
</tr>
<tr>
<td>Weight Net/Shipping</td>
<td>kg</td>
<td>108/121</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Additional Information

- **Group Control**
- **Central Control**
- **BMS**
- **WiFi Control**
- **Built-in Valve**
- **Group Control**
- **Central Control**
- **BMS**
- **WiFi Control**
- **Built-in Valve**
- **Group Control**
- **Central Control**
- **BMS**
- **WiFi Control**
- **Built-in Valve**
- **Group Control**
- **Central Control**
- **BMS**
- **WiFi Control**
- **Built-in Valve**
- **Group Control**
- **Central Control**
- **BMS**
- **WiFi Control**
- **Built-in Valve**
- **Group Control**
- **Central Control**
- **BMS**
- **WiFi Control**
- **Built-in Valve**
- **Group Control**
- **Central Control**
- **BMS**
- **WiFi Control**
- **Built-in Valve**
- **Group Control**
- **Central Control**
- **BMS**
- **WiFi Control**
- **Built-in Valve**
OUTDOOR UNITS

1UH071N1ERG  1UH090N1ERG  1UH105N1ERG

1UH125P1ERG  1UH140P1ERG  1UH160P1ERG  1UH140P1ERG  1UH140P1ERK

1UH125P1ERG  1UH140P1ERG  1UH160P1ERG  1UH140P1ERG  1UH140P1ERK
DRAWINGS

INDOOR UNITS

LOW PROFILE DUCTED

ADH071M1ERG ADH090M1ERG ADH071M3ERG

ADH105M1ERG ADH125M1ERG ADH140M1ERG
DRAWINGS

INDOOR UNITS

CASSETTE

ABH071H1ERG ABH090H1ERG ABH105H1ERG

ABH125K1ERG ABH140K1ERG
CONTROL SYSTEM

YR-E17

- Supplied with Ducted unit.
- 24 Hr Timer / Clock
- Small, Simple and Smart design, 86x86x13mm
- Touch screen with back-light
- On/Off, Mode, Fan speed, Temperature setting, Swing.
- Individual control & Group control (Max 16 indoor units)
- Fahrenheit / Celsius selectable; Sensitivity ±0.5°C
- Static pressure setting.

YR-E16A

- Optional purchase (upgrade)
- 7 Day Timer / Clock
- Large touch button with colour LCD, with back-light.
- Error display in listed in Year/Month/Date format.
- On/Off, Mode, Fan speed, Temperature setting, Swing
- Individual control & Group control (Max 16 indoor units)
- Fahrenheit / Celsius selectable; Sensitivity ±0.5°C
- Static pressure setting

Wireless control for Ducted system

- RE-02 Infrared receiver control for duct type indoor unit.
- Requires one YR-HD

YR-HBS-01

- Supplied with Cassette
- Oversized display with oversized buttons for easy use.
- Temperature setting of 0.5 degree increments
- Individual cassette louver control for round way cassette
- Follow and eade function for use with PB-950MB panel.

KZW-W001

- Wi-Fi control
- APP available for Apple and Android
- Weekly timer
- Connect multiple units one APP
CENTRAL CONTROL SYSTEM

YCZ-G001

- Central control (Max 32 indoor units)
- Individual control, Group control
- Large touch keys
- 7 day timer.
- Unit name & Group name free setting. Four background available (mall, hotel, office, home)

YCZ-A004

- Central control (Max 256 indoor units)
- Individual control, Group control
- 7-inch Touch colour screen, with back-light
- Schedule control
- Indoor units information.

YR-E17 pictured. Screen icons subject to change as the controller will self adapt to the indoor unit connected.

Summary of features
- Touch Screen
- Backlit display for easier viewing.

Summary of buttons
1. On/Off: turn system on and off
2. Mode: Change mode of operation from Intelligent - Cooling - Heating - Fan - Dry
3. Fan: Alter airflow High-Medium-Low
4. Temperature up/down. Adjust the set-point temperature is 0.5 degree increments
5. Timer: Select Timer ON, Timer OFF, Timer ON/OFF.
6. Set: To enter special functions like swing, four (4) way louvre adjustment (cassette model).