

## **Introduction to Sundeze EVI heat pump**

With innovative EVI (Enhanced Vapour Injection) technology, Sundeze EVI heat pump is designed for house heating. It is able to work stable at ambient temperature as low as -25 Deg C, so that to cut down the power bill during heating season.

It is the best eco-friendly solutions to replace the traditional gas or electric boiler for house heating.

Horizontal blower design enables the quiet running and prolongs the life span of the heat pump.

Outdoor unit and indoor unit connected with hidden connector makes good looking installation.

## **Standard features**

With advanced EVI (Enhanced Vapour Injection) scroll compressor technology and EEV (Electronic Expansion Valve), the heat pump performs best efficiency in cold area.

Eco-friendly R410a refrigerant system is extremely high in efficiency and low noise.

2-speed blower with wide blade enables large air flow volume but low noise.

Split system avoids the water piping freezing risk, with all refrigerant piping and power cables hidden at the back.

It's very easy and convenient to control the heat pump with controller on indoor unit.

## **Casing features**

Hot galvanized casing coated with powder painting performs very well in anti-rusting.

Grey casing looks elegant and dirt-proof.

Acoustic absorption measures, including compressor vibration reduction device, plenty of sound deaden material and so on, are taken to efficiently cut down the noise impact.

## **Control Features**

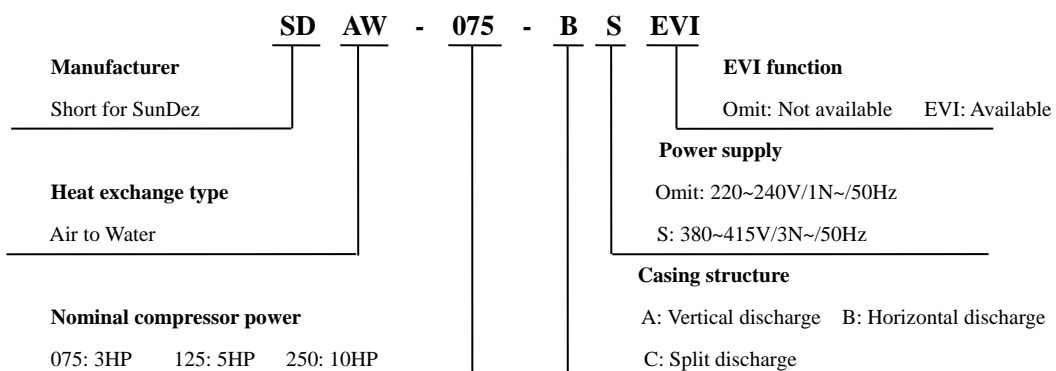
Reliable interactive control system provides with LED indoor backlight controller.

It is easy to understand and convenient to operate on the controller.

Timer function enables customized time to start or shut down automatically in order to avoid the electricity peak hours.

Auto-defrosting function is realized by the controller.

# Nomenclature



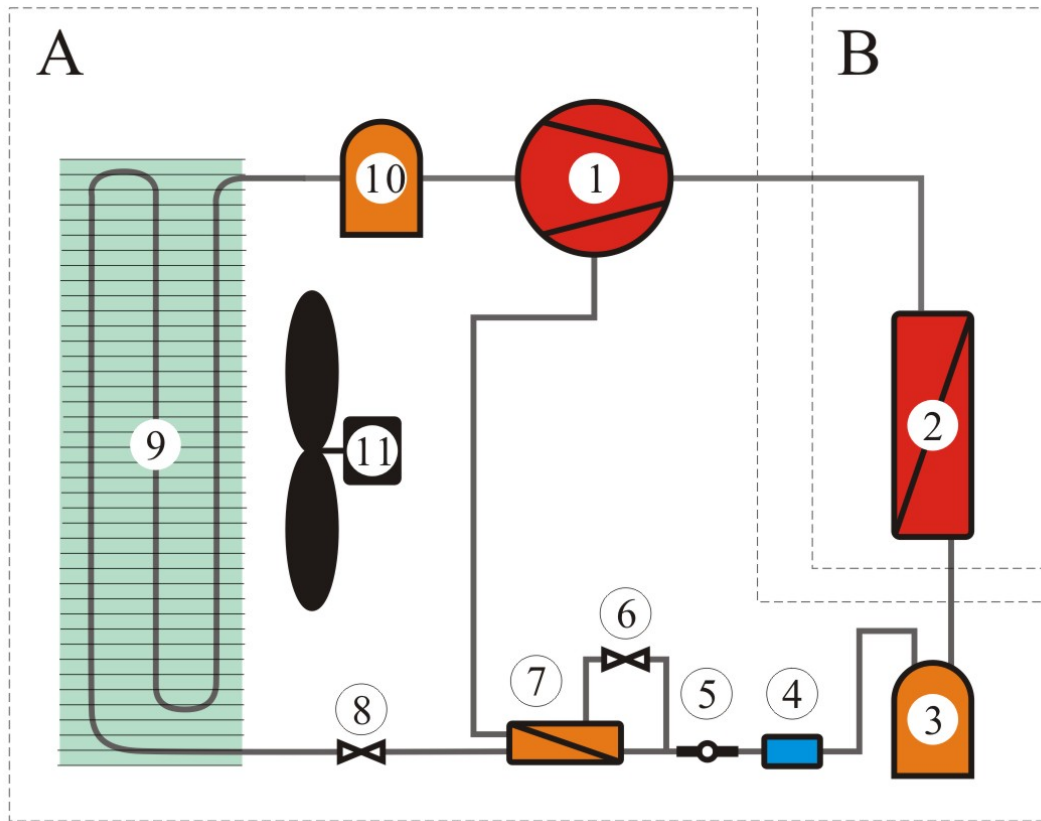
## Technical parameters



Model			SDAW-075BEVI	SDAW-125BSEVI	SDAW-250BSEVI
Refrigerant			R407c	R407c	R407c
Refrigerant System Type			Split	Split	Monobloc
Power Supply			230V/1N~/50Hz	230V/1N~/50Hz	380V/3N~/50Hz
Rated Output Water Temperature		°C	55	55	55
Test Condition A7°C/W35°C	Output Power	kW	<b>11.8</b>	<b>17</b>	<b>34</b>
	Input Power	kW	3.1	3.7	7.4
	COP		3.8	4.5	4.5
Test Condition A7°C/W45°C	Output Power	kW	<b>11.7</b>	<b>16.5</b>	<b>33</b>
	Input Power	kW	3.3	4.15	8.3
	COP		3.5	3.9	3.9
Test Condition A-15°C/W35°C	Output Power	kW	<b>7.3</b>	<b>11</b>	<b>22</b>
	Input Power	kW	3.0	4.38	8.8
	COP		2.4	2.5	2.5
Test Condition A-15°C/W45°C	Output Power	kW	<b>7.6</b>	<b>11.5</b>	<b>23</b>
	Input Power	kW	3.4	4.79	9.58
	COP		2.24	2.4	2.4
Compressor			Sanyo EVI	Sanyo EVI	Sanyo EVI
Heat Exchanger			316# Stainless Steel Plate Type	316# Stainless Steel Plate Type	316# Stainless Steel Plate Type
Operation Ambient Temperature		°C	-25 to +35	-25 to +35	-25 to +35

Sundez reserves the right to modify or change its products without prior notice.

## Refrigerant system diagram



A: Outdoor unit

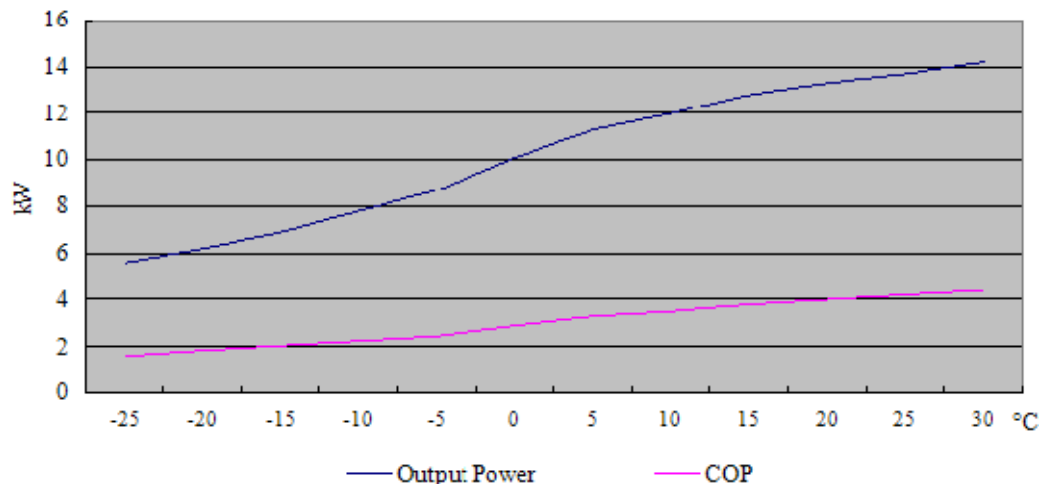
B: Indoor unit

### Components list

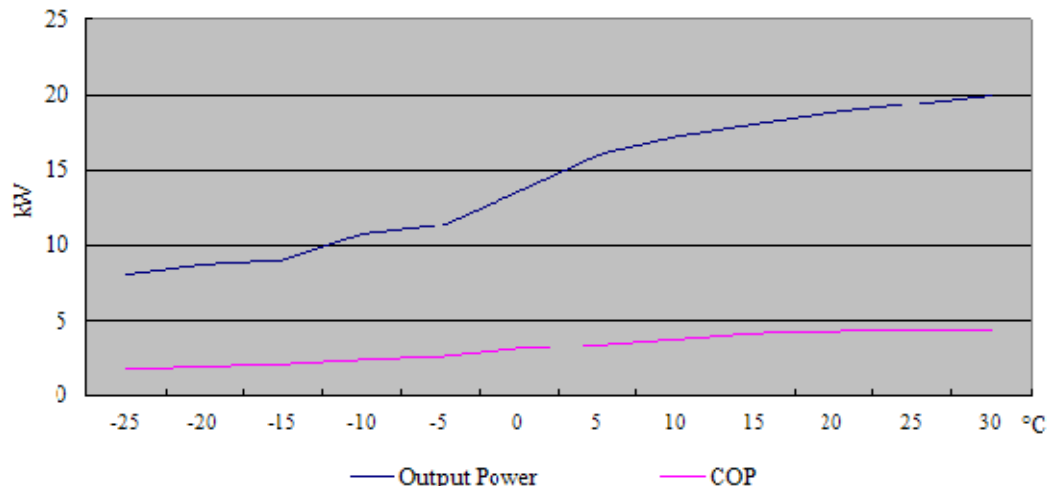
- |                               |                             |
|-------------------------------|-----------------------------|
| 1. EVI Compressor             | 7. Assistant heat exchanger |
| 2. Water heat exchanger       | 8. Thermal expansion valve  |
| 3. Accumulator                | 9. Air heat exchanger       |
| 4. Drier-filter               | 10. Gas-liquid separator    |
| 5. Sight glass                | 11. Ventilator              |
| 6. Electronic expansion valve |                             |

## Performance

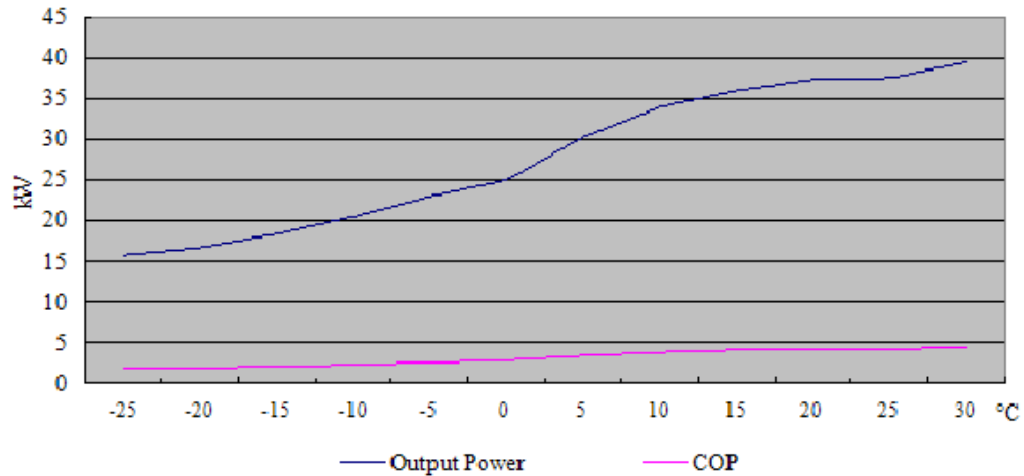
### COP and Output Power Curve (SDAW-075BEVI)



### COP and Output Power Curve (SDAW-125BEVI)

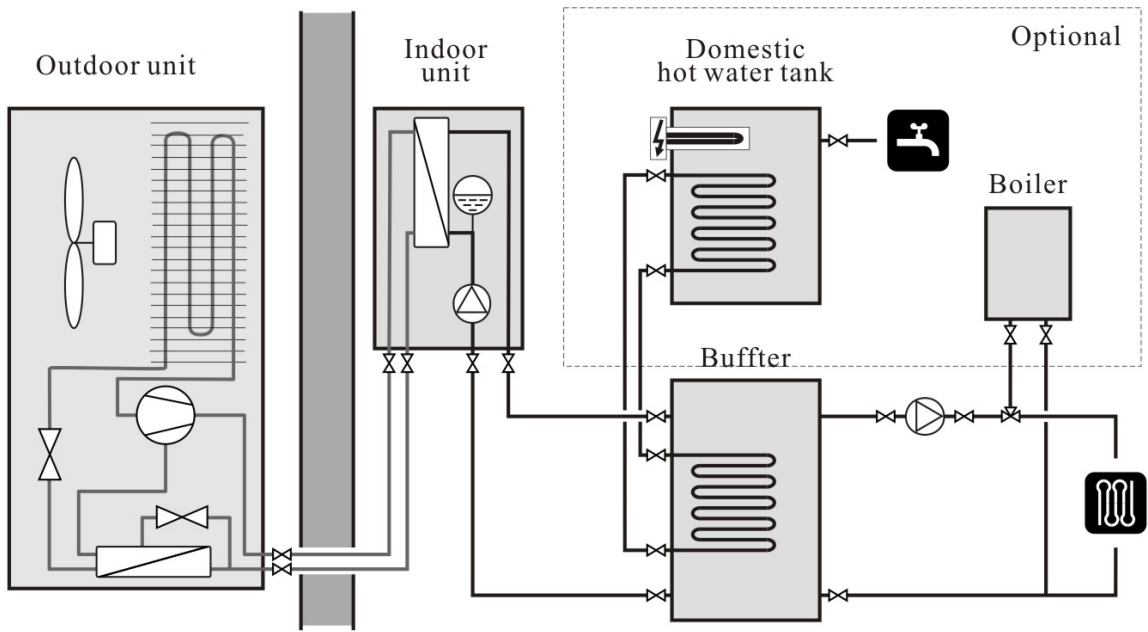


### COP and Output Power Curve (SDAW-250BEVI)



Remarks: 1) Outlet water temperature: 35°C 2) Above data for reference only.

# Installation diagram



# Controller



# Why the heat pump outputs only max. 60 deg C hot water?

Suction Gas Superheat: 11.1K  
Refrigerant: R407C

