

# Specifications



Model name			MHC-V35WD2RN7	MHC-V30WD2RN7
Heating (A7/W35)	Capacity	kW	35.0	30.0
	Rated input	kW	8.4	6.9
	COP		4.17	4.35
Cooling (A35/W18)	Capacity	kW	35.0	30.0
	Rated input	kW	8.8	7.0
	EER		3.98	4.29
Seasonal space heating energy efficiency class	Water outlet at 35°C	ηs	176.1	183.0
		class	A+++	A+++
		SCOP	4.48	4.65
Power supply		V/Ph/Hz	380-415/3/50	
Compressor	Type		Scroll Type	
Outdoor fan	Motor type		DC brushless motor	
	Number of fans		2	
	Air flow	m³/h	11000	
Air side heat exchanger	Type		Finned tube	
Water side heat exchanger	Type		Plate heat exchanger	
Connection of water side	Dimension	mm	DN25	
	Method		Threaded connection	
Water pump	Type		Canned-motor pump	
	Max. pump head	m	12	
Expansion vessel	Volume	L	8	
	Charge pressure	MPa	8	
Safety valve		MPa	6	
Water flow range		m³/h	0.87-7.20	
Refrigerant	Type		R290	
	Charged volume	kg	2.9	
Throttle type			EEV	
sound power Level	Heating A7/W35	dB(A)	76.4	
	Cooling A35/W18	dB(A)	76.3	
Unit dimension (W×H×D)		mm	1384*1816*523	
Packing dimension (W×H×D)		mm	1465*1986*560	
Net/Gross weight		kg	245/265	
Outdoor air temperature range	Cooling	°C	-15 ~ 48	
	Heating	°C	-25 ~ 35	
	DHW	°C	-25 ~ 46	
Water outlet temperature setting range	Cooling	°C	0 ~ 25	
	Heating	°C	25 ~ 85	
	DHW	°C	20 ~ 70	

Note: Parameters may change with product updates, based on the machine nameplate.



## Mars Series R290 All Inverter Air Source Heat Pump



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HM-M202310V1

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GD MIDEA Heating & Ventilating Equipment Co. Ltd participates in the ECP programme for LCP-HP. Check ongoing validity of certificate: [www.eurovent-certification.com](http://www.eurovent-certification.com)





## Efficient and Versatile

- Product capability: 30/35kW
- Minimum operating ambient temperature: -25°C
- Maximum outlet water temperature: 85°C
- Maximum DHW (domestic hot water) temperature : 70°C
- Energy efficiency ratings of A+++ (at 35°C water outlet temperature)
- Energy efficiency ratings of A++ (at 55°C water outlet temperature)



## Environmentally friendly

Natural Refrigerant R290



- Much lower GWP value to meet EU carbon neutrality
- No ozone depletion potential
- Excellent thermodynamic performance
- Great thermal efficiency for most conditions

**GWP=3**

Lower impact on global warming

**ODP=0**

Neutral for the ozone layer

## Easy to use

Color-screen Smart Controller

- A temperature display that is accurate to  $\pm 0.1^\circ\text{C}$  and has a high resolution
- Multiple operating modes including heating, cooling, and DWH (domestic hot water)
- Timing options for daily and weekly schedules to meet different needs



Daily timer



Silent mode



Holiday mode



Disinfection



Water pump



Weekly timer



Defrost



Anti-freezing function



Advanced configurations

### Inverter Water Pump

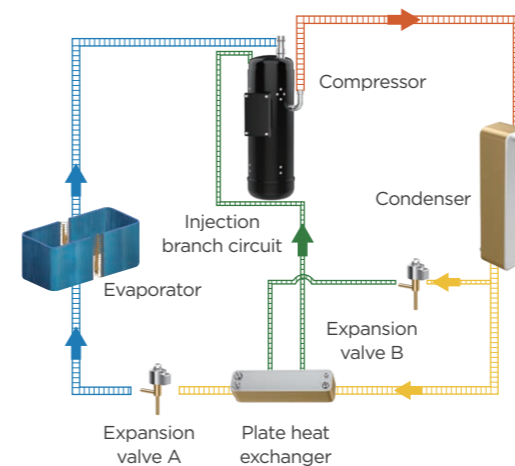
- Adaptive adjustment to the optimal target temperature difference
- Combine efficiency with user comfort
- The power consumption of water pump transmission and distribution can be reduced by 70%

### Inverter Fan and Compressor

- Precise water temperature control ( $\pm 0.1^\circ\text{C}$ )
- Adaptive and efficient operation throughout the operating range

### R290 Dedicated Inverter EVI Scroll Compressor

- Low temperature heating performance improved by 20%
- Condensation temperature is up to 85°C, and the unit has a higher outlet water temperature



## EVI(Enhanced vapor injection) technology

- Increase refrigerant circulation of heat pump at low ambient temperature
- Improve low temperature heating capacity and energy efficiency

Discharge superheat degree  
Suction superheat degree



Main valve

Discharge temperature  
Injection pressure



Auxiliary valve

## Discharge Temperature Control Technology through Gas-Liquid Mixture Injection

- Control the proportion of liquid injection to ensure that the exhaust temperature is controlled within 110°C
- When the unit runs at -15°C ambient temperature, the outlet temperature can reach 85°C
- When the unit runs at -25°C ambient temperature, the outlet temperature can reach 75°C