

# R290

# HYUNDAI

## Air to Water Heat Pump



## Big Mono R290 All Inverter Air To Water Heat Pump





## Efficiency & Versatility

- **Flexible Power Options:** Choose from **26 / 30 / 35 / 40 kW** models to perfectly match your requirements.
- **All-Weather Performance:** Reliable operation even in extreme conditions, down to **-25°C**.
- **High-Temperature Capability:** Delivers outlet water up to **85°C** and domestic hot water up to **70°C**.
- **Exceptional Energy Efficiency:**  
**A+++** rating at 35°C outlet water temperature.  
**A++** rating at 55°C outlet water temperature.  
 Designed to combine power, adaptability, and eco-friendly performance, this system ensures comfort and efficiency in every season.



## Eco-friendly, maximum efficiency.

**GWP=3**

**ODP=0**

Natural Refrigerant R290



- **Ultra-Low GWP:** Supports EU carbon neutrality targets.
- **Zero Ozone Depletion:** Safe for the environment and the atmosphere.
- **Outstanding Performance:** Excellent thermodynamic properties for reliable operation.
- **High Thermal Efficiency:** Delivers strong efficiency across a wide range of conditions



## Intuitive

Intelligent touch controller

- **Precision at Your Fingertips:** Temperature display accurate to 0.1°C with high resolution.
- **Versatile Operation:** Multiple modes including heating, cooling, and domestic hot water.
- **Smart Scheduling:** Daily and weekly timing options to suit every lifestyle and need.



Daily timer



Silent mode



Holiday mode



Disinfection



Water pump



Weekly timer



Defrost



Anti-freezing function



## Advanced configurations

### inverter water pump

- **Adaptive Comfort:** Automatically adjusts to the optimal target temperature difference.
- **Efficiency Meets Comfort:** Balances energy savings with user comfort.
- **Energy Savings:** Reduces power consumption of water pump transmission and distribution by up to 70%.

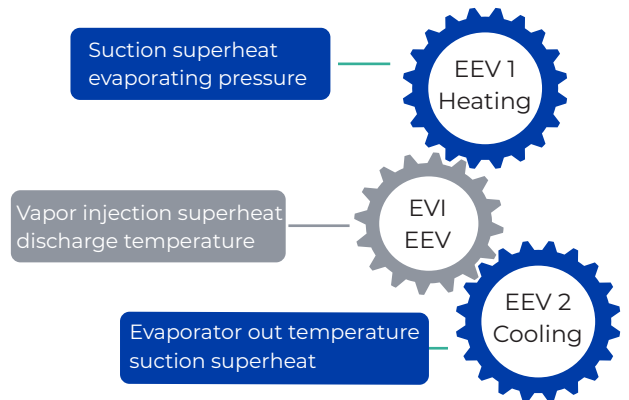
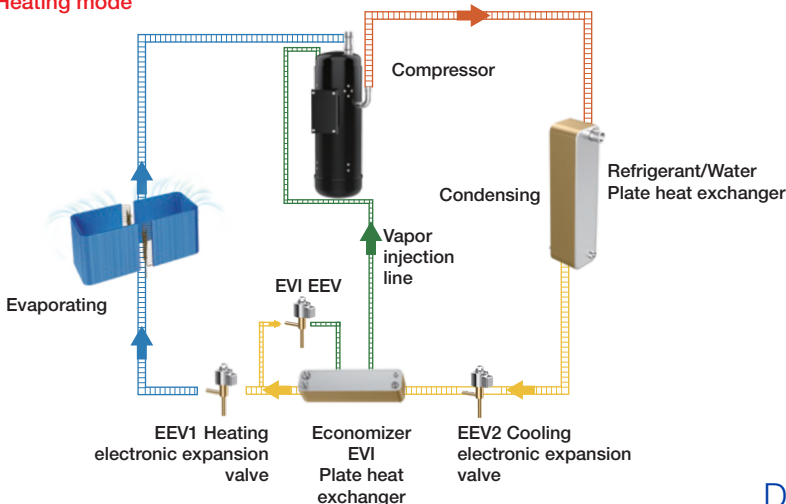
### R290 dedicated inverter EVI scroll compressor

- **Enhanced Low-Temperature Heating:** Performance improved by 20%.
- **Higher Outlet Temperature:** Condensation temperature up to 85°C for superior heating with a higher outlet water temperature.

### Inverter Fan and Compressor

- **Precision Control:** Water temperature accurate to 0.1°C.
- **Adaptive Efficiency:** Optimized operation across the entire performance range.

Heating mode



## EVI (Enhanced Vapor Injection) Technology

- **Boosted Low-Temperature Performance:** Increases refrigerant circulation for reliable heating even in extreme cold.
- **Improved Efficiency:** Enhances low-temperature heating capacity while reducing energy consumption.

## Discharge Temperature Control Technology

Precision heating with gas-liquid mixture injection for stable and efficient operation.

- **Precise Temperature Management:** Liquid injection proportion controlled to maintain exhaust temperature below 110°C.
- **High-Performance Heating in Extreme Cold:**
  - at -15°C ambient, outlet temperature up to 85°C.
  - at -25°C ambient, outlet temperature up to 75°C

# Specifications

Model name			HYHC-V26WD2RN7	HYHC-V30WD2RN7	HYHC-V35WD2RN7	HYHC-V40WD2RN7
Heating (A7/W35)	Capacity	kW	26.0	30.0	35.0	39.0
	Rated input	kW	5.45	6.67	8.40	9.75
	COP			4.77	4.50	4.17
Cooling (A35/W18)	Capacity	kW	26.0	30.0	35.0	39.0
	Rated input	kW	5.60	6.80	8.50	9.85
	EER			4.64	4.41	4.12
Seasonal space heating energy efficiency class	Water outlet at 35°C	ηs	194.9%	193.8%	176.3%	169.7%
		class	A+++	A+++	A+++	A++
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	10500			
Air side heat exchanger	Type		Finned tube			
Water side heat exchanger	Type		Plate heat exchanger			
Connection of water side	Dimension	mm	DN32			
	Method		Threaded connection			
Water pump	Type		Canned-motor pump			
	Max. pump head	m	12			
Expansion vessel	Volume	L	5			
	Charge pressure	MPa	0.8			
Safety valve		MPa	0.3			
Water flow range		m³/h	1.2-5.4	1.2-6.2	1.2-7.2	
Refrigerant	Type		R290			
	Charged volume	kg	2.9			
Throttle type			EEV			
Unit dimension (W×H×D)		mm	1384x1816x523			
Packing dimension (W×H×D)		mm	1480x2000x570			
Net/Gross weight		kg	260/285			
Outdoor air temperature range	Cooling	°C	-15~48			
	Heating	°C	-25~43			
	DHW	°C	-25~43			
Water outlet temperature setting range	Cooling <sup>2</sup>	°C	0~25			
	Heating	°C	25~85			
	DHW	°C	20~75			

**Note:**

- Parameters may change with product updates, based on the machine nameplate.
- Antifreeze liquid is needed when water outlet temperature reaches 5°C.
- The specifications of 40kW unit under test.

HY-BM202509V1EN

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