# harmony monoblock heat pump



# Eco-Friendly Technology High Efficiency







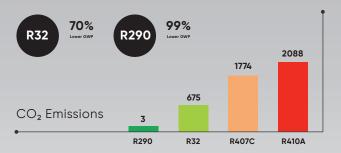






### Refrigerant

Harmony heat pump uses the R290 eco-friendly refrigerant whose GWP is lower than 3 and helps curb global warming. The heat pump with R290 reaches higher efficiency than those with other refrigerants.



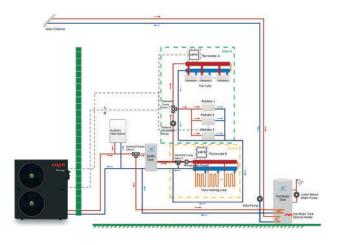
# **High Quality Colored Wire Controller**

Harmony R290 Heat pumps utilize an intelligent color LCD display with high definition interface and powerful functions, which is very friendly and helpful for users to view and control.



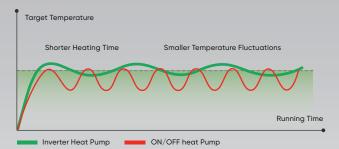
# **Whole-house Installation Sketch**

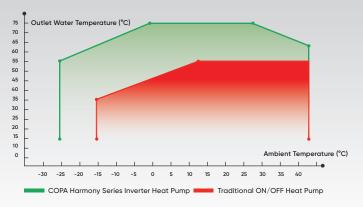
Harmony heat pump allows the interlock with auxiliary heat sources to provide hating, cooling, and hot water for the house. With the Smart Grid control function, the unit can automatically switch states to make full use of idle power, further saving electricty, according to the power storage of photovoltaics and the power status of the grid. Additionally, users can access a room thermostat to control the switch of the host unit and realize precise zone control.



### **Full DC Inverter Technology**

Harmony Series adopts full DC inverter technology, which can automatically adjust the frequency according to the ambient temperature to achieve a more constant temperature and bring users a quite comfortable experience at home.





Stable running at -25  $^{\circ}\mathrm{C}$  ambient temperature and the max water outlet temperature is up to 75  $^{\circ}\mathrm{C}$ 

#### **Low Noise**

Harmony devotes to creating a pretty quiet running environment for the user through multiple noise reduction measures.



#### **IoT Function**

Connect the TuyaOS App to check the realtime running status, historical records and controll the heat pump remotely.



# **Key Components**



#### **DC Inverter Compressor**

Famous brand compressor ensures the stable heating capacity and reduces noise.



#### **DC Fan Motor**

DC fan motor is equipped to improve higher work efficiency and lower noise.



#### **Plate Heat Exchanger**

Plate heat exchanger with well-known brand is selected to increase heat Exchange area for higher COP.



# **DC Inverter Circulation Pump**

Famous silent circulation pump is installed inside the unit to realize more comfortable experience.



#### **Expansion Tank**

Built-in expansion tank to keep stable water system and convenient installation.



# **COPA Harmony Heat Pump Technical Specifications**

Model		8kW	11kW	15kW
Refrigerant Type		R290	R290	R290
ErP Level (35°C)		A+++	A+++	A+++
ErP Level (55°C)		A++	A++	A++
Power Supply		220~240/1N~/ 50Hz	220~240/1N~/ 50Hz	220~240/1N~/ 50Hz
Heating Capacity 1	kW	8,25	11,35	15,12
Power Input <sub>1</sub>	kW	1,82	2,51	3,34
Heating Current Input Range 1	А	8,27	12,2	15,18
COP 1		4,53	4,52	4,52
Heating Capacity 2	kW	7,98	11,25	15,01
Power Input <sub>2</sub>	kW	2,55	3,66	5,03
Heating Current Input Range 2	А	11	15,85	22,86
COP 2		3,13	3,07	2,98
Cooling Capacity 3	kW	5,96	7,8	10,25
Power Input <sub>3</sub>	kW	2,11	2,86	3,58
Cooling Current Input Range 3	А	9,13	13	16,27
EER 3		2,82	2,72	2,86
Heating Capacity 4	kW	9,05	12,36	16,98
Power Input 4	kW	1,95	2,74	3,66
Hot Water Current Input Range 4	А	8,86	12,45	16,63
COP 4		4,64	4,51	4,64
General Info				
Max. Power Input	kW	4	5,5	7,5
Max. Running Current	А	18,2	25	34,1
Rated Water Flow	m³/h	1,38	1,89	2,58
Water Pressure Drop	kPa	37	41	41
Expansion Tank	L	3	3	5
CO₂ Equivalent	Ton	0,0023	0,0029	0,0049
GWP		3	3	3
Wi-Fi Function		YES	YES	YES
Refrigerant weight	Kg	1,05	1,2	1,5
Sound Pressure Level dB(A) at 1m	dB(A)	40~55	40~56	41~56
Sound power Level dB(A) at 1m	dB(A)	51~67	52~68	53~68
Net Dimensions (L×W×H)	mm	1159×479×875	1159×479×875	1339x529x1480
Package Dimensions (L×W×H)	mm	1260x590x1070	1260x590x1070	1370x590x1650

 $<sup>\</sup>label{eq:continuity} \textbf{1.} \ [\ Space heating \ ] \ Ambient \ Temp. \ (DB/WB): \ 7°C/6°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 30°C/35°C \ \textbf{2.} \ [\ Space heating \ ] \ Ambient \ Temp. \ (DB/WB): \ 7°C/6°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Temp. \ (Inlet/Outlet): \ 50°C/55°C \ , \ Water \ Mater \$ 

 $<sup>\</sup>begin{tabular}{ll} \bf 3. & [Space Cooling] Ambient Temp. (DB/WB): 35°C/- , Water Temp. (Inlet/Outlet): 12°C/7°C. \\ \bf 4. & [Hot Water] Ambient Temp. (DB/WB): 20°C/15°C , Water Temp. from 15°C to 55°C. \\ \end{tabular}$