

## BEGIN YOUR SMART TRANSITION

Your Trusted Global Heat Pump Solution Partner.



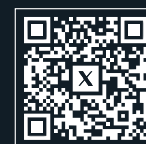
LinkedIn



Facebook



Instagram



Twitter

Guangdong Tongyi Heat Pump Science and Technology Corp.

Website: [tongyiheatpump.com](http://tongyiheatpump.com)

E-mail: [info@tongyiheatpump.com](mailto:info@tongyiheatpump.com)

The contents are for reference only, may contain errors, and subject to change without prior notice.  
Please refer to the nameplates and the manuals of the products for updated information. TY202601

 **TONGYI**

Since 1999

# R290 SMART HEAT PUMP

## The Intelligent Thermal Core of HEMS

HEMS Optimized | Grid Responsive | Carbon Neutral Ready



YOUR TRUSTED GLOBAL HEAT PUMP SOLUTION PARTNER SINCE 1999

# THE CROSSROADS OF HEATING

From selling boxes to delivering intelligent energy assets

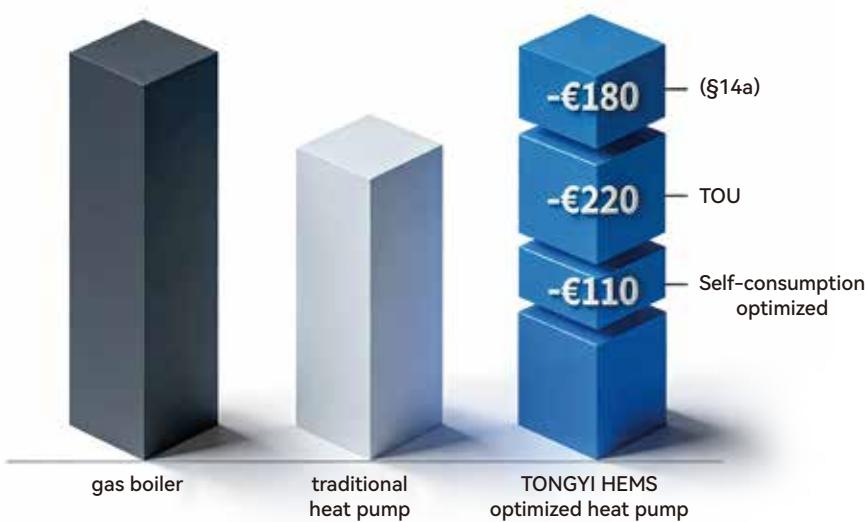
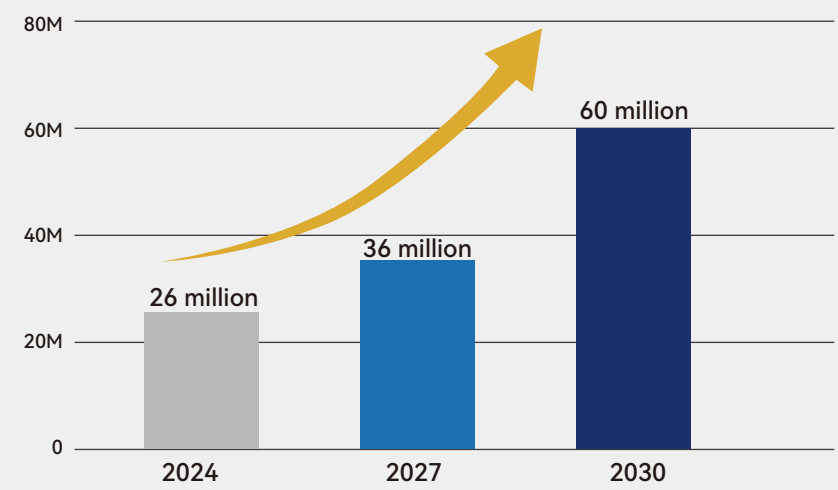




# HEMS optimized heat pump advantages

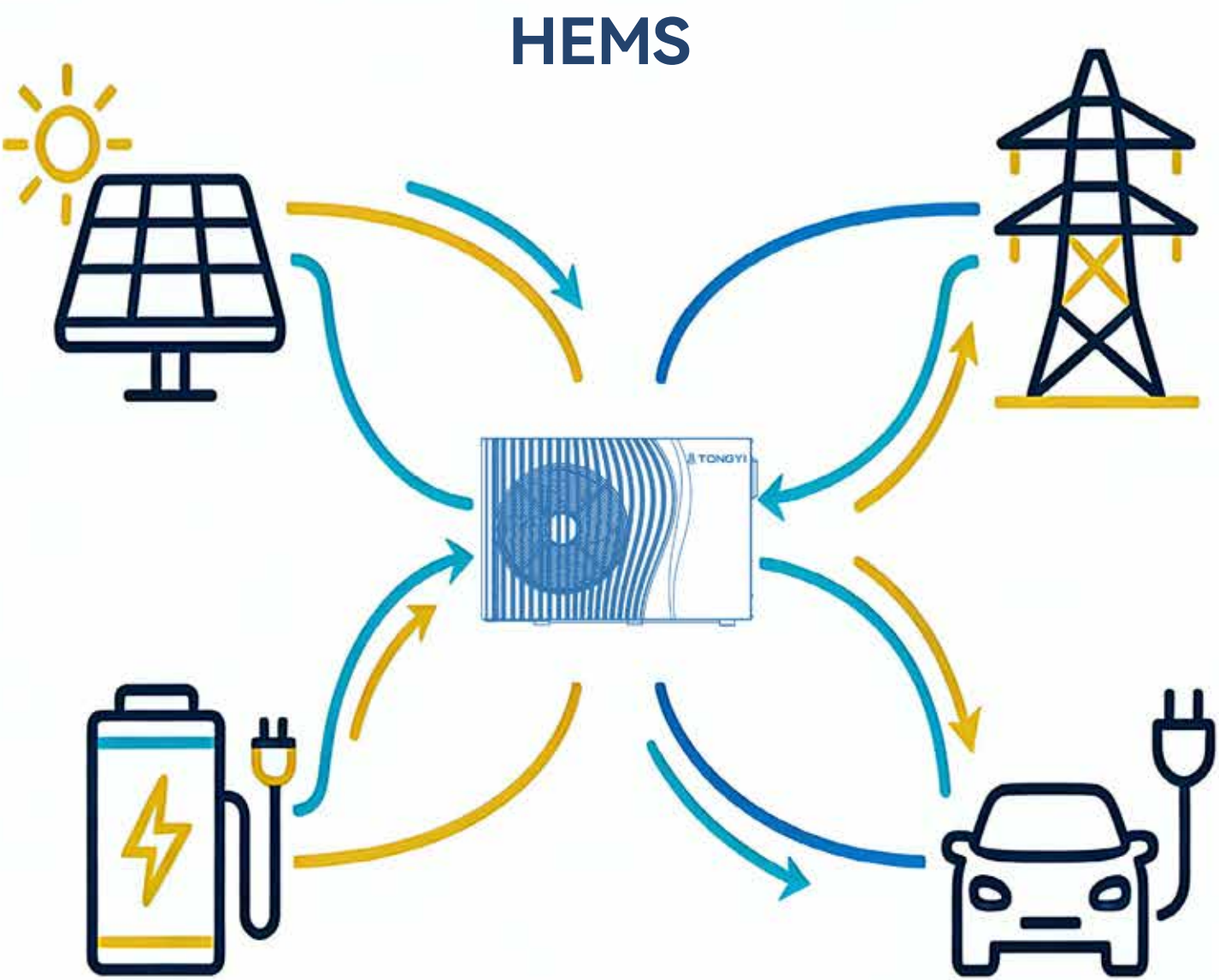
Compared with fuel heating, heat pump heating has a comprehensive energy saving of 30% -50% and a cost reduction of 50% -70%. HEMS can further save energy by 10% -40% and reduce costs by 26% -41% on the basis of heat pumps, while improving system stability and user comfort.

REPowerEU Target



# Beyond Heating: Your Thermal Core

Transforming a household appliance into the intelligent, beating heart of your home's energy ecosystem.



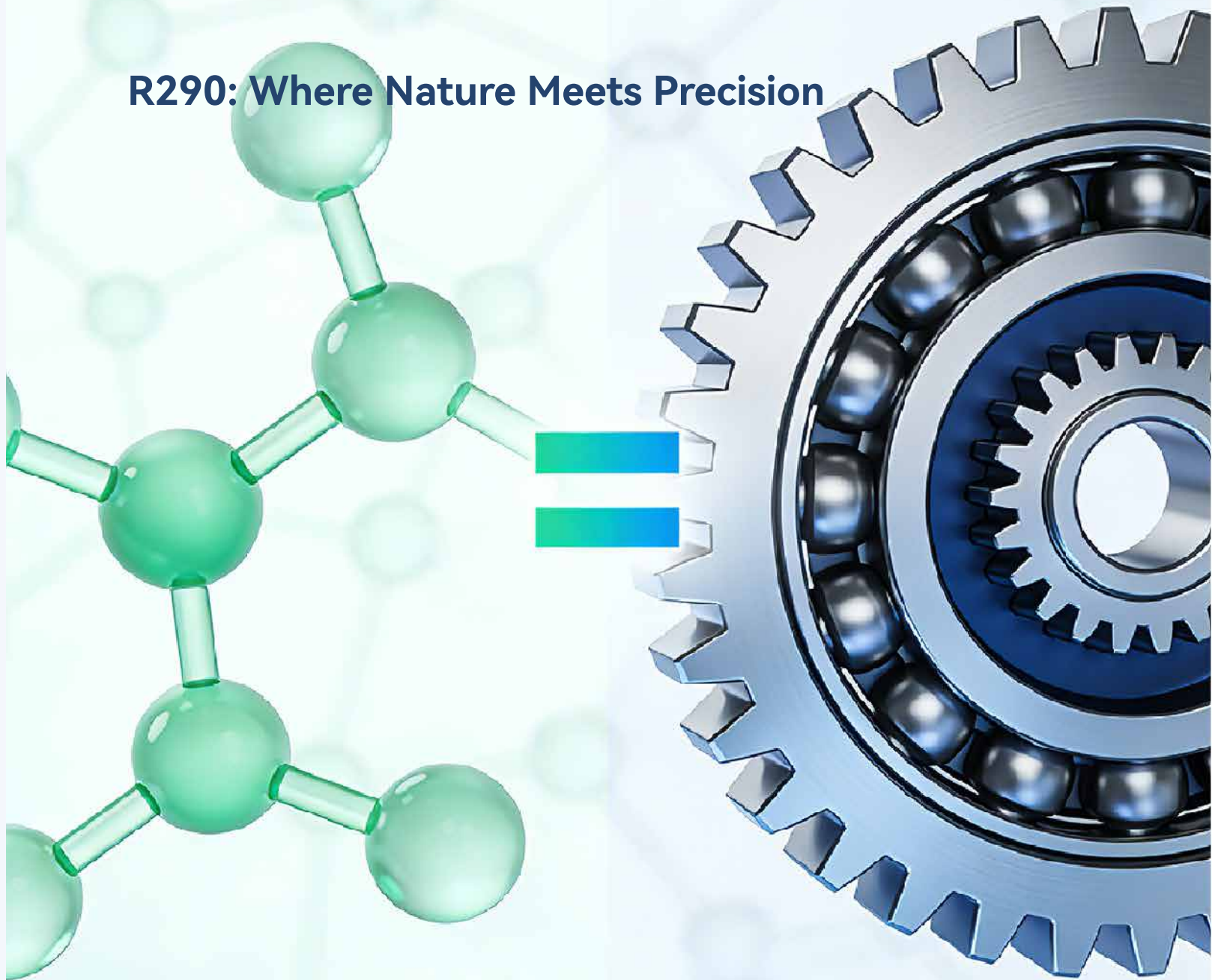


# The Three Pillars of Ability

The Communicator: SG Ready / EEBUS / MODBUS / Full Protocol Openness.  
The Strategist: Tariff AI / PV-Follow / Demand response / Adaptive Learning.  
The Guardian: Whisper Mode (<35dB) / All-Climate Reliability (-25°C to 46°C).



# R290: Where Nature Meets Precision



**GWP = 3 | ODP = 0**

The future-proof, planet-friendly refrigerant.

**COP: 5.03 | A+++**

Engineered to extract maximum heat from every watt.



Advanced multi-layer safety system with active monitoring and control.



# Orchestrating Energy, Delivering Value



# Smart Control



## Multiple languages

An interface that speaks your language, literally and figuratively.

- |  |  |   |  |   |   |   |
|--|--|---|--|---|---|---|
| <br>čeština | <br>Deutsch | <br>English    | <br>Español | <br>Français | <br>Italiano | <br>Nederlands |
| <br>Polski  | <br>Svenska | <br>Slovenčina |  |   |   |   |



## A Suite of Intelligence



## Qualification & Certificates



# BAFA

German customers can now adhere to government subsidies when acquiring a Tongyi Heat Pump. As an experienced heat pump manufacturer, Tongyi provides high-quality and efficient units, BAFA listed, under the air-to-water heat pump list.



# SEAI

ESB Networks operates to cater to the needs of every Irish electricity customer, offering universal access to the electricity system at an affordable price. Tongyi heat pumps have participated in this initiative, delivering energy-saving and efficient experiences for customers.



# Smart Grid Ready

Smart Grid Ready (SG Ready) certifies that the heat pump unit can work smartly according to a defined interface for load management to serve the grid. TONGYI HEAT PUMP is ready and designed for this purpose.



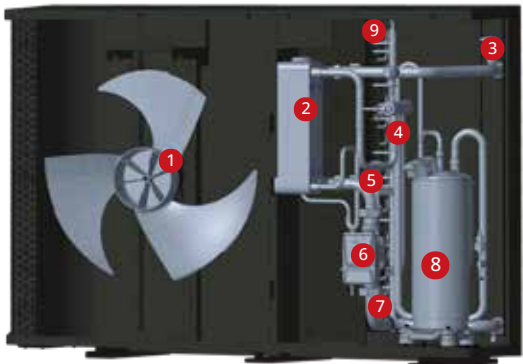
# Save at Home

Save at Home provides incentives for residential energy-saving and enhances energy autonomy to cut energy needs and conventional fuel use in "Smart Home" transition. customers can get subsidies for Tongyi heat pumps through it.

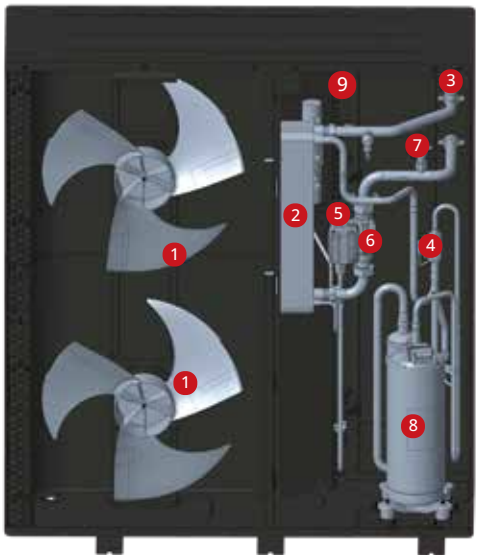


# Easy Installation & Maintenance

TONGYI HEAT PUMP comes in a monobloc, integrating the hydro components. No refrigeration piping is necessary, making the installation easier and quicker.

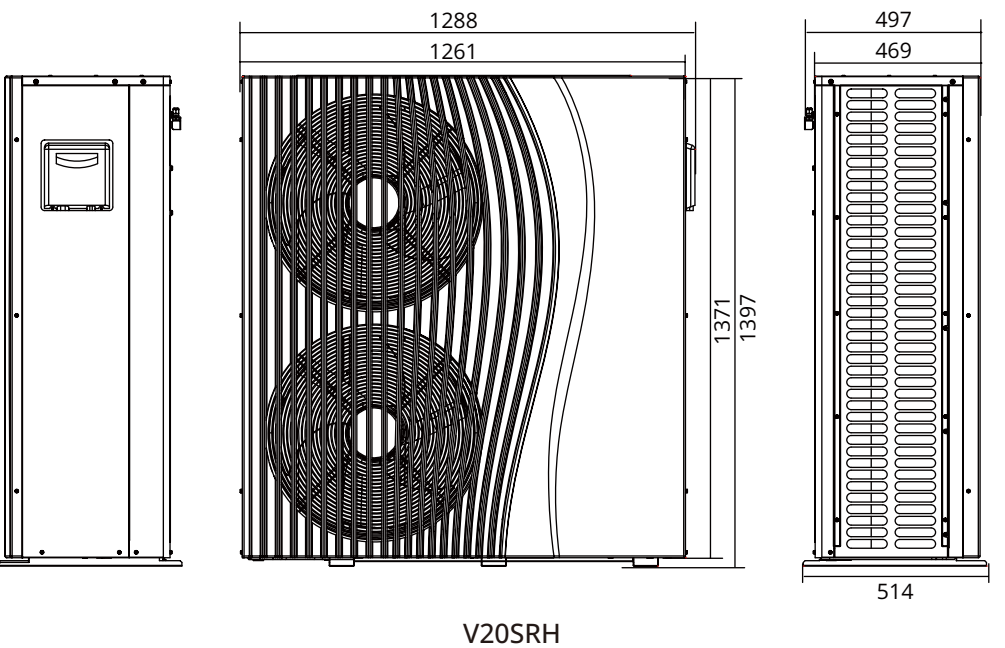
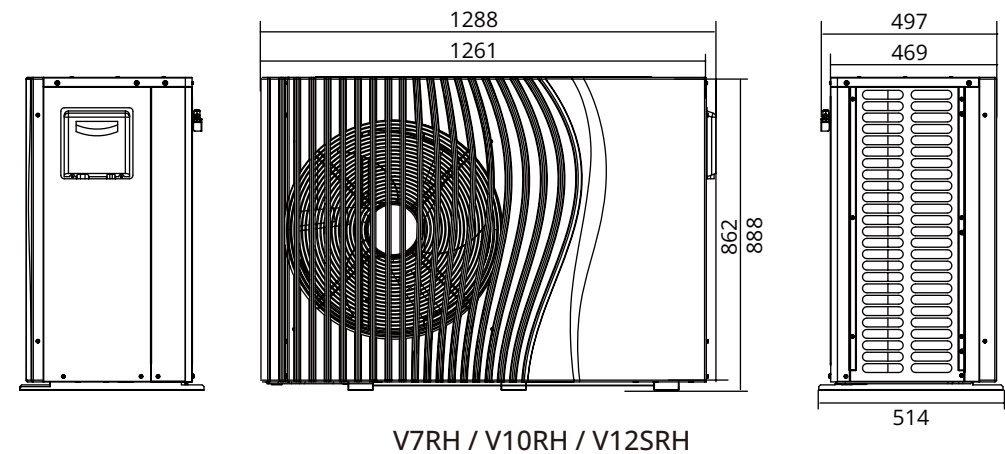


- 1 Fan
- 2 Plate heat exchanger
- 3 Exhaust valve (optional)
- 4 4-way valve
- 5 Electronic expansion valve
- 6 DC water pump
- 7 Water flow switch
- 8 DC inverter compressor
- 9 Evaporator



- 1 Fan
- 2 Plate heat exchanger
- 3 Exhaust valve (optional)
- 4 4-way valve
- 5 Electronic expansion valve
- 6 DC water pump
- 7 Water flow switch
- 8 DC inverter compressor
- 9 Evaporator

Product Appearance Size



Product Specification

R290

5.0  
COP

3.8  
EER

35dB(A)  
Noise

1

PV Connect

5 years  
warranty

8

Cascade System



Model		V7RH	V10RH	V12SRH	V20SRH
ErP Level(35°C)	/	A+++	A+++	A+++	A+++
ErP Level(55°C)	/	A++	A++	A++	A++
POWER SUPPLY					
Power Supply, Volts/Ph/Hz		230/1/50	230/1/50	380/3/50	380/3/50
Power Supply Range	Volts	195~265	195~265	340~460	340~460
Max. Input Power	kW	2.6	4	5.1	6.5
Max. Input Current	A	12	18	8.5	13.4
A7W35					
Capacity Range	kW	2.88~8.29	4.43~11.81	5.43~15.65	8.24~22.28
Input Power Range	kW	0.57~1.85	0.84~3.04	1.02~4.00	1.55~5.48
COP Range	/	4.47~5.07	3.88~5.29	3.92~5.3	4.06~5.33
A7W55					
Capacity Range	kW	2.298~6.33	3.18~11.10	4.82~13.37	7.39~18.81
Input Power Range	kW	0.88~1.31	1.22~4.00	1.51~4.63	2.23~6.19
COP Range	/	2.74~2.96	2.62~2.77	2.88~3.20	3.04~3.31
A35W7					
Capacity Range	kW	1.92~4.89	3.14~7.04	3.99~9.19	3.67~12.88
Input Power Range	kW	0.65~1.86	1.02~2.75	1.24~4.02	1.74~4.79
EER	/	2.63~2.95	2.56~3.07	2.28~3.26	2.10~2.68
A35W18					
Rated Capacity	kW	2.88~6.57	4.76~9.33	5.70~11.08	7.74~15.83
Rated Input Power	kW	0.62~1.97	1.03~2.98	1.28~3.93	1.69~5.48
EER Range	/	3.33~4.66	3.13~4.62	2.82~4.46	3.53~4.53
A20W15-55					
Capacity Range	kW	2.50~6.50	4.00~10.00	6.00~16.00	8.00~20.00
Input Power Range	kW	0.57~1.67	0.90~2.60	1.35~4.16	1.85~5.25
COP Range	/	3.85~4.44	3.85~4.44	3.85~4.44	3.81~4.32
NOISE LEVEL					
Sound Pressure(1m)	dB(A)	38	38	39	46
Sound Pressure(10m)	dB(A)	18	18	20	26
Sound Power	dB(A)	52.1	51.7	53.6	61.1
OPERATION RANGE					
Operation Temperature Range	°C	-25~46	-25~46	-25~46	-25~46
Water Outlet Temperature Range	°C	5~75	5~75	5~75	5~75
HYDRONIC					
Rated Water Flow Rate	m3/hr	1.2	1.72	2.06	3.44
PIPING CONNECTIONS					
Piping Connections Inlet/Outlet		DN25	DN25	DN25	DN25
REFRIGERANT					
Type	/	R290	R290	R290	R290
GWP	/	3	3	3	3
Charge	kg	0.75	0.90	1.10	1.50
PACKING					
Dimensions (Lx Wx H)	mm	1288x514x888	1288x514x888	1288x514x888	1288x514x1397
Packing Dimensions (Lx Wx H)	mm	1373x569x1036	1373x569x1036	1373x569x1036	1373x569x1546
Net Wt.	kg	121	124	145	185
Approx. Shipping Wt.	kg	151	157	196	246

The above data are subject to modification based on continuous improvement without advance notice. Please refer to those on real unit, and thanks for your attention to the latest version.



## Proven in the Field, Designed for Ease.

From landmark projects to everyday homes, our R290 heat pump is trusted for its performance and straightforward installation.



**Finland**  
Reliable heating partner for Nordic winter



**Czech**  
installation in a family home.



**Switzerland**  
Withstand the freezing winter in Alps



**Daxing Airport Auxiliary Heating**  
Cascade system for high-demand projects.



# 26 Years of Dedication

Guangdong Tongyi Air Energy Technology Co., Ltd. was established in 1999 and is a national high-tech enterprise specializing in the research and development of air energy technology and equipment manufacturing. The company upholds the core values of "Quality Builds the Brand, Service Achieves the Future," and is committed to the mission of "Making Air Energy Benefit Society," earning the reputation of the "Creator of Air Energy."



# Our Growth is Measured in Forests.

Since 1999, the CO<sub>2</sub> reduction achieved by TONGYI heat pumps is equivalent to planting over 100 million trees.



We are committed to being a carbon-neutral enterprise by 2028. When you choose TONGYI, you're investing in a greener future for all.