

Minimum  
-25°C  
Outdoor



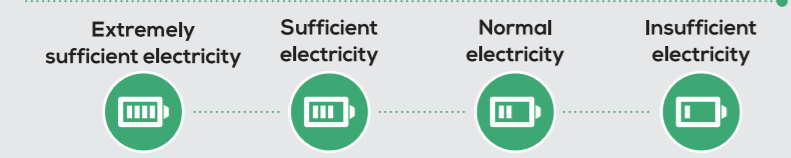
**Smart switching based on economical efficiency**

Users can set electricity and gas price by themselves, the heat pump unit automatically calculates energy usage cost, and intelligently switches to the most efficient energy mode.

SG Ready



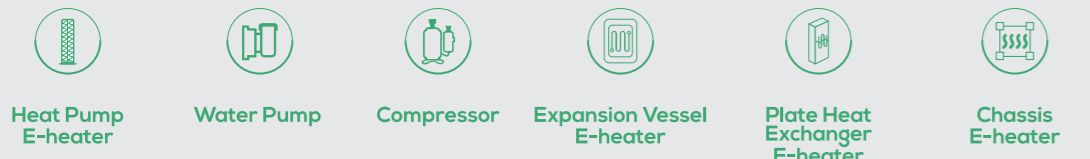
Tri-thermal is equipped with Smart Grid control logic, smartly using the fluctuation of electricity price signal from the grid and automatically optimizes the operation strategy to maximize the economy of system operation and achieves the perfect balance between cost efficiency and energy utilization.



**RELIABLE**

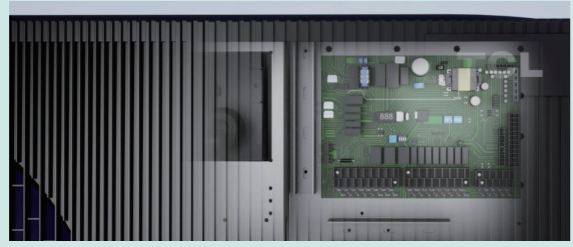
**Six-stage anti-freeze protection**

Heat pumps automatically perform heating actions of different anti-freeze levels according to ambient and water temperatures to ensure the safety of the water system.



**Component explosion-proof design**

Fuse, capacitor, varistor adopt an explosion-proof design to prevent fire hazards from the root, ensuring the safe and reliable operation of heat pumps.



**PARAMETERS**

Heat pump		04	06	08	10	12	14	16	12	14	16
Power supply	V/Ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	380-415/3/50	380-415/3/50	380-415/3/50
Heating A7W35	Capacity	kW	4.20	6.20	8.00	9.50	12.00	14.00	15.00	12.00	14.00
	Rated input	kW	0.83	1.27	1.60	2.07	2.50	3.05	3.40	2.50	3.05
	COP		5.09	4.90	5.00	4.60	4.80	4.59	4.41	4.80	4.59
Heating A7W45	Capacity	kW	4.30	6.20	8.00	9.50	12.00	14.00	15.00	12.00	14.00
	Rated input	kW	1.10	1.63	2.13	2.59	3.00	3.60	4.30	3.00	3.60
	COP		3.90	3.80	3.76	3.68	4.00	3.89	3.49	4.00	3.89
Heating A7W55	Capacity	kW	4.40	6.00	8.00	9.50	12.00	14.00	15.00	12.00	14.00
	Rated input	kW	1.40	1.94	2.50	3.06	3.76	4.52	5.20	3.76	4.52
	COP		3.15	3.10	3.20	3.10	3.19	3.10	2.88	3.19	3.10
Cooling A3SW8	Capacity	kW	4.50	6.00	8.30	10.00	12.00	14.00	16.00	12.00	14.00
	Rated input	kW	0.90	1.34	1.66	2.17	2.65	3.30	4.20	2.65	3.30
	EER		5.00	4.49	5.00	4.60	4.53	4.24	3.81	4.53	4.24
Cooling A3SW7	Capacity	kW	4.50	6.00	7.20	8.80	11.60	12.95	14.00	11.60	12.95
	Rated input	kW	1.32	2.00	2.18	2.84	3.85	4.55	5.20	3.85	4.55
	EER		3.40	3.00	3.30	3.10	3.01	2.85	2.69	3.01	2.85
Seasonal space heating energy efficiency class <sup>2</sup>	LWT at 35°C		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
	LWT at 55°C		A++	A++	A+++	A+++	A++	A++	A++	A++	A++
	Type		R290	R290	R290	R290	R290	R290	R290	R290	R290
Refrigerant	Factory charge <sup>3</sup>	kg	0.74	0.74	1.10	1.10	1.25	1.25	1.25	1.25	1.25
	Sound pressure level(3m)	dB	35	35	35	35	35	35	35	35	35
Sound power Level <sup>4</sup>	dB	56	59	60	61	64	66	68	64	66	
Sound pressure level <sup>5</sup>	dB	44	46	48	49	51	53	55	51	53	
Net dimensions (W*H*D)	mm	1220-709-390	1220-709-390	1293-860-523	1293-860-523	1293-860-523	1293-860-523	1293-860-523	1293-860-523	1293-860-523	1293-860-523
	Packing dimension (W*H*D)	mm	1315-840-430	1315-840-430	1395-996-550	1395-996-550	1395-996-550	1395-996-550	1395-996-550	1395-996-550	1395-996-550
Piping connections		R 1 1/4"	R 1 1/4"	R 1 1/4"	R 1 1/4"	R 1 1/4"	R 1 1/4"	R 1 1/4"	R 1 1/4"	R 1 1/4"	R 1 1/4"
	Cooling	°C	-5~46	-5~46	-5~46	-5~46	-5~46	-5~46	-5~46	-5~46	-5~46
Ambient temperature	Heating	°C	-25~35	-25~35	-25~35	-25~35	-25~35	-25~35	-25~35	-25~35	-25~35
	DHW	°C	-25~43	-25~43	-25~43	-25~43	-25~43	-25~43	-25~43	-25~43	-25~43
Water setting temperature	Cooling	°C	5~20	5~20	5~20	5~20	5~20	5~20	5~20	5~20	5~20
	Heating	°C	25~80	25~80	25~80	25~80	25~80	25~80	25~80	25~80	25~80
DHW	°C	20~70	20~70	20~70	20~70	20~70	20~70	20~70	20~70	20~70	

**Notes:**

1. Relevant EU standards and legislation: EN14511; EN14825; EN50564; EN12102; (EU) No 811/2013; (EU) No 813/2013
2. Seasonal space heating energy efficiency class tests in average climate conditions.
3. Sound power test condition: EN12102-1
4. Sound pressure level is the maximum value tested under the two conditions of A7W35 and A3SW18.



**R290**

**Tri-thermal ATW Heat Pump**



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## VERSATILITY

### Professional one-stop green energy solution

Tri-thermal is an integrated system that provides space heating and cooling as well as domestic hot water, offering a complete, all-year-round solution which can replace the need for traditional gas or oil boilers, or work together with them.



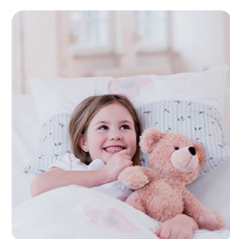
## COMFORT

### 3-Zone Temp. Control

Ensure different space working at perfect temp. Meet the needs of different age groups. Always hits the mark for comfort of your family.



Comfort Temp. for Living room



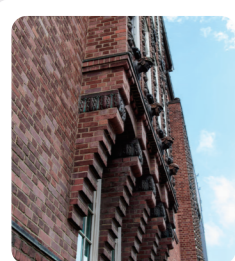
Comfort Temp. for Children's room



Comfort Temp. for Study

### Max.LWT 80°C

Cover more than 98% European heating scenarios, especially for old building heating.



Poor insulation



Low-efficient radiator



Boiler replacement

### Climate curves

8 pre-set +1 self-defined temperature curves, flexible adaptation to operating conditions in different climate.



## ONE-STOP GREEN ENERGY SOLUTION



## SILENT OPERATION



## INTELLIGENT



## HIGH-EFFICIENT AND ENERGY SAVING

### R290

DC inverter system

Tri-thermal adopts all DC inverter components and integrates high-efficient R290 environmental refrigerant, which not only ensures efficient and stable operation of the heat pump but also perfectly meets the dynamic load demand of various buildings through precise control of the output, and achieves maximum energy utilization.

### Eco-friendly R290 refrigerant

R290, natural composition derived from propane, which meets the latest EU standards. It boasts an exceptional thermodynamic performance, enabling heat pump to operate with remarkable energy savings. Its low GWP and zero ODP make it a sustainable choice for a greener future.



SCOP up to 5.33

HIGHEST ENERGY LEVEL A+++

With all DC inverter components and integrates high-efficient R290 environmental refrigerant, TCL heat pump amplifies energy and provide longer heating and stable indoor warmth.

