TCL

Worldwide Air Conditioner Partner

TCL HEAT PUMP

TECHNICAL SUPPORT, GLOBAL SALES COMPANY
GD TCL INTELLIGENT HEATING & VENTILATING EQUIPMENT CO.,LTD.

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TCL Heat Pump

TCL

Worldwide Air Conditioner Partner

R290 Tri-thermal All In One

- Save 9.5H Installation*
- Up to 76% Space Reduced*
- Duplex Stainless Steel Anti-Corrosion
- AI Smart System
- 100% heating at-10°C
- 80°C LWT at-10℃
- 4-stage safety protection
- 7-inch touch color screen

*For reference



TCL AIO Solution



TCL AIO Option1



1. Buffer tank
2. Zone 1 pump
3. Zone 2 pump*
4. Zone 2 mixing valve*
5. Zone 3 piping connection*
6. Water Pressure Sensor*
7. Electronic Anode*/Magnesium Rod*
8. Pressure Relief Valve*(Accessory)
9. Auto Air Vent*(Accessory)
10. Instant Hot Water Connection*
11. Circuit Breaker*(Inside e-box)
12. Tank Electric Heater*
13. Y-type filter/Magnetic*

1

TCL AIO Option2



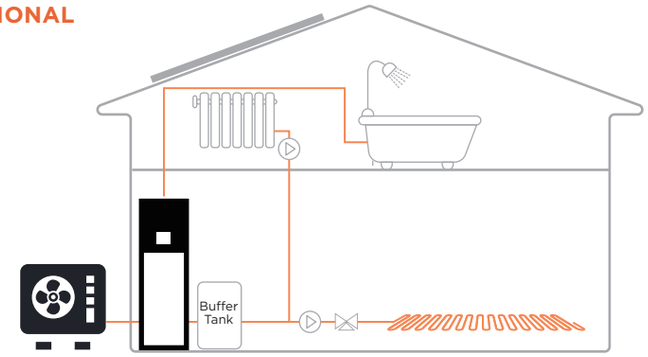
1. Water Pressure Sensor*
2. Electronic Anode*/Magnesium Rod*
3. Pressure Relief Valve*(Accessory)
4. Auto Air Vent*(Accessory)
5. Circuit Breaker*(Inside e-box)
6. Instant Hot Water Connection*
7. Tank Electric Heater*
8. Y-type filter/Magnetic*

2

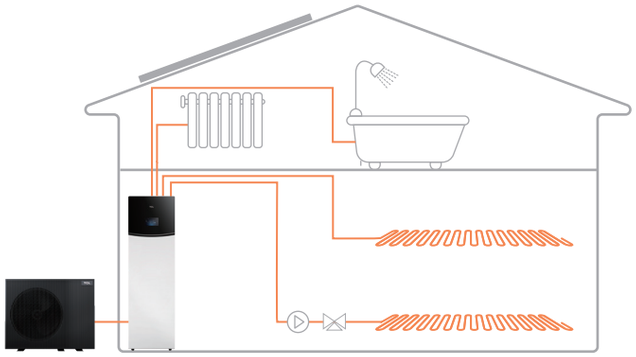
*Optional

Easily Setup & Maintenance

TRADITIONAL



TCL



9.5
hours Installation time saved*

79%
saved System footprint*

76%
saved System space*

0.5-1
Day Finish installation quicker & take on more projects*

56% ↓
Installation cost lower than monoblock*

66% ↓
Installation cost lower than split*

* For reference only

Triple Anti-corrosion Protection

Triple corrosion defense for extended tank lifespan & reliable performance.

Drastically reduce after-sales repairs and replacement costs.

- Duplex stainless steel
- Electric anode(Option)
- Magnesium rod(Option)



AI Hot Water Management

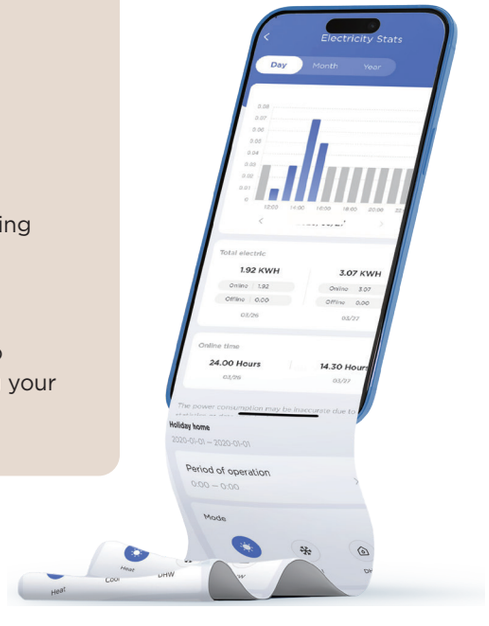
- **Smart Schedule**
  Intelligently learns user habits in just 3 days.
- **Eco-Schedule**
  Intelligently monitoring real-time daily weather and ambient temperature and automatically start the water heating with higher efficiency.



Customized Comfort:
Enjoy hot water tailored to your preferred temperature.

Ready Before You Need It:
Pre-heated to match your routine—zero waiting time before showers.

Intelligent Energy Savings:
Capitalizes on peak outdoor temperatures to minimize power usage, significantly lowering your energy bills.





7-Inch Smart Touch Display



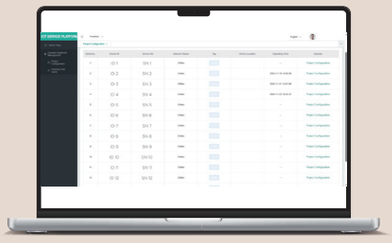
- **Intuitive control**
  Upgrade user experience with user-friendly design.
- **Built-in wifi module**
  Easy to connect with APP, without any other kit installation.
- **Intelligent commissioning**
  Step-by-step guidance, without complex setup progress and long setup times.

TCL IOT Platform for quick after-service

Remote monitoring and debugging:
keep an eye on your devices in real-time.

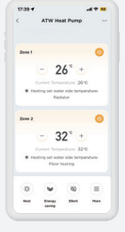
Device information query:
get all the details and historical data you need.

Check the faults in advance:
No need to make multiple trips for repairs.



Always in control at your fingers

Control



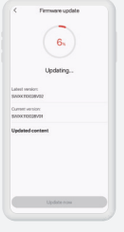
- On/off opration and change modes
- Change room and hot water temperatures

Monitor



- System status
- Power consumption data

OTA Update



- Update online
- Update aotomatically

R290 Tri-thermal Ultra AI

- 100% heating capacity at -10°C
- 80°C LWT at -10°C
- operation range down to -25°C

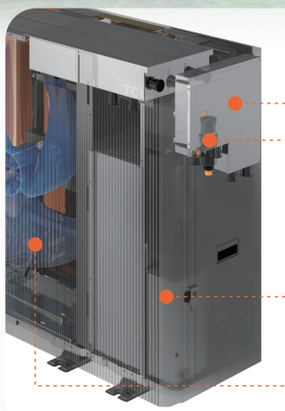
A+++

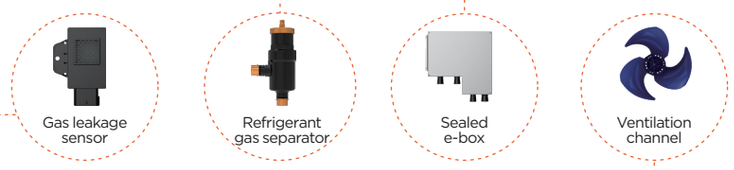


R290 Tri-thermal Pro



Safe R290 refrigerant





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**

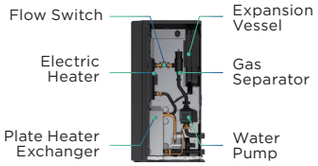


Comfort Temp. for **Study**

Easily Setup & Maintenance:







Easy Disassembly Design

- 4 Screws to access the wiring & installation

Rotated E-Box

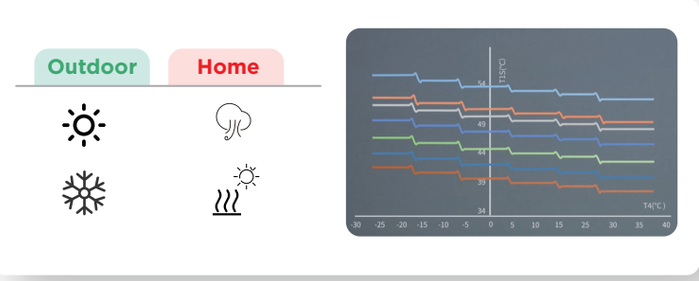
- No need to disassemble E-Box,more easy for maintenance

Accessible Design

- All water parts are at the side,
- Installation & maintenance are easier.

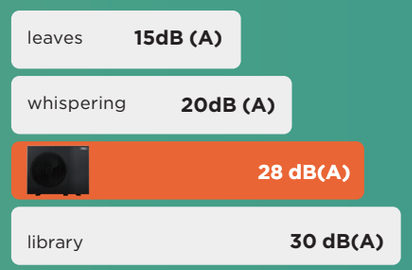
Climate curves

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



Ultra quiet by design

- The five-layer noise reduction technology ensures smooth bass performance.
- It produces a sound pressure of 28 dB(A) at 3 metres, industry-leading standard, quieter than a library.



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.

- Heat Pump E-heater
- Water Pump
- Expansion Vessel
- Plate Heat
- Chassis E-heater
- Compressor

Specifications(Ultra AI)

Combination(ODU+IDU)			THM4D F3dB + AIO	THM6D F3dB + AIO	THM8D F3dC + AIO	THM10 DF3dC + AIO	THM12 DF3dC + AIO	THM14 DF3dC + AIO	THM16 DF3dC + AIO	THM8S F9dC + AIO	THM10 SF9dC + AIO	THM12 SF9dC + AIO	THM14 SF9dC + AIO	THM16 SF9dC + AIO
Heating A7W35[1]	Capacity	kW	4.50	6.20	8.00	9.50	12.00	14.00	16.00	8.00	9.50	12.00	14.00	16.00
	Power input	kW	0.82	1.15	1.51	1.84	2.33	2.80	3.27	1.51	1.84	2.33	2.80	3.27
	COP		5.50	5.40	5.30	5.15	5.15	5.00	4.90	5.30	5.15	5.15	5.00	4.90
Heating A7W45[1]	Capacity	kW	4.30	6.40	8.10	9.50	12.00	14.00	16.00	8.10	9.50	12.00	14.00	16.00
	Power input	kW	0.98	1.60	2.03	2.44	2.93	3.50	4.21	2.03	2.44	2.93	3.50	4.21
	COP		4.40	4.00	4.00	3.90	4.10	4.00	3.80	4.00	3.90	4.10	4.00	3.80
Heating A7W55[1]	Capacity	kW	4.20	6.10	8.00	9.50	12.00	14.00	16.00	8.00	9.50	12.00	14.00	16.00
	Power input	kW	1.20	1.77	2.39	2.93	3.64	4.38	5.19	2.39	2.93	3.64	4.38	5.19
	COP		3.50	3.45	3.35	3.24	3.30	3.20	3.08	3.35	3.24	3.30	3.20	3.08
Cooling A35W18[1]	Capacity	kW	5.00	6.50	8.30	10.00	12.00	14.00	16.00	8.30	10.00	12.00	14.00	16.00
	Power input	kW	0.96	1.27	1.58	2.17	2.31	2.92	3.64	1.58	2.17	2.31	2.92	3.64
	EER		5.20	5.10	5.25	4.60	5.20	4.80	4.40	5.25	4.60	5.20	4.80	4.40
Cooling A35W7[1]	Capacity	kW	4.70	6.80	7.45	8.10	12.00	13.00	14.00	7.45	8.10	12.00	13.00	14.00
	Power input	kW	1.27	2.09	2.22	2.61	3.39	3.76	4.22	2.22	2.61	3.39	3.76	4.22
	EER		3.70	3.25	3.35	3.10	3.54	3.46	3.32	3.35	3.10	3.54	3.46	3.32
SCOP[2]	LWT at 35°C		5.80	5.65	5.84	5.49	5.04	4.93	4.84	5.84	5.49	5.04	4.93	4.84
	LWT at 55°C		4.36	4.31	4.37	4.22	3.90	3.86	3.84	4.37	4.22	3.90	3.86	3.84
SEER	LWT at 18°C		7.94	7.99	7.78	7.39	9.69	9.49	9.08	7.78	7.39	9.69	9.49	9.08
	LWT at 7°C		5.42	5.45	5.54	5.47	6.08	6.02	5.96	5.54	5.47	6.08	6.02	5.96
Seasonal space heating energy efficiency class[2]	LWT at 35°C		A+++											
	LWT at 55°C		A+++											
Average climate (7℃) (EN16147)	Domestic hot water tank volur		200											
	Load profile	-	L											
	Energy efficiency class	-	A+											
Operation range	Cooling	°C	-5~46											
	Heating	°C	-25~35											
	DHW	°C	-25~43											
Water outlet	Cooling	°C	5~20											
	Heating	°C	25~80											
	DHW	°C	20~70											

ODU													
Power supply	V/Ph/Hz		220-240/1/50							380-415/3/50				
Electric heater power input		kW	3	3	3	3	3	3	3	9	9	9	9	9
Compressor	Type		Twin rotary DC inverter											
Outdoor fan	Motor type		Brushless DC motor											
Refrigerant	Type		R290											
	Factory charge	kg	0.8		1.20		1.35			1.2		1.35		
Sound power Level[3]		dB	51	53	53	54	55	57	59	53	54	55	57	59
Sound pressure level[4]		dB	38	40	40	41	43	46	49	40	41	43	46	49
Net dimensions (W×H×D)		mm	1293×860×523		1336×1061×552									
Packing dimension (W×H×D)		mm	1395×996×550		1410×1230×570									
Net/Gross weight		kg	109/124		147/165		165/183			161/179		176/194		
Piping connections	Inlet		R 1 1/4"											
	Outlet		R 1 1/4"											

Indoor unit				
Power supply	V/Ph/Hz		220-240/1/50	
Domestic hot water tank	Material	-	Duplex stainless steel	
	Volume	L	200	
	Cathodic protection(Option	-	Mg rod/Electronic anode	
	Electric heater power	kW	2	
Buffer tank	Material	L	304 stainless steel	-
	Volume	-	50	-
Piping connectio	AIO main outlet		G 1"	G 1"
	AIO main inlet		G 1"	G 1"
	Zone 1 outlet		G 1"	-
	Zone 1 inlet		G 1"	-
	Zone 2 outlet(Option)		G 1"	-
	Zone 2 inlet(Option)		G 1"	-
	Zone 3 outlet(Option)		G 1"	-
	Zone 3 inlet(Option)		G 1"	-
	Hot water outlet		G 3/4"	G 3/4"
	Cold water Inlet		G 3/4"	G 3/4"
	DHW recirculation(Option)		G 3/4"	G 3/4"
Net/gross weight		kg	110/130	90/110
Net dimension (W×D×H)		mm	598*598*2000	598*598*1626
Loading quantity	40HQ	Pcs	48	

Notes:

1. Relevant EU standards and legislation: EN14511; EN14825; EN12102; EN16147; (EU) No 811; (EU) No 813.
2. Test under 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 A35W18.
5. All parameters are drafts.

Specifications(Pro)

Combination(ODU+IDU)			THMLd-4D/3FBp-A+AIO	THMLd-6D/3FBp-A+AIO	THMLd-8D/3FBp-A+AIO	THMLd-10D/3FBp-A+AIO	THMLd-12D/3FBp-A+AIO	THMLd-14D/3FBp-A+AIO	THMLd-16D/3FBp-A+AIO	THMLd-12S/3FBp-A+AIO	THMLd-14S/3FBp-A+AIO	THMLd-16S/3FBp-A+AIO
Heating A7W35[1]	Capacity	kW	4.20	6.20	8.00	9.50	12.00	14.00	15.00	12.00	14.00	15.00
	Power input	kW	0.82	1.26	1.60	2.07	2.50	3.05	3.40	2.50	3.05	3.40
	COP		5.09	4.90	5.00	4.60	4.80	4.59	4.41	4.80	4.59	4.41
Heating A7W45[1]	Capacity	kW	4.30	6.20	8.00	9.50	12.00	14.00	15.00	12.00	14.00	15.00
	Power input	kW	1.10	1.63	2.12	2.58	3.00	3.60	4.30	3.00	3.60	4.30
	COP		3.90	3.80	3.76	3.68	4.00	3.89	3.49	4.00	3.89	3.49
Heating A7W55[1]	Capacity	kW	4.40	6.00	8.00	9.50	12.00	14.00	15.00	12.00	14.00	15.00
	Power input	kW	1.40	1.94	2.50	3.06	3.76	4.52	5.20	3.76	4.52	5.20
	COP		3.15	3.10	3.20	3.10	3.19	3.10	2.88	3.19	3.10	2.88
Cooling A35W18[1]	Capacity	kW	4.50	6.00	8.30	10.00	12.00	14.00	16.00	12.00	14.00	16.00
	Power input	kW	0.90	1.33	1.66	2.17	2.65	3.30	4.20	2.65	3.30	4.20
	EER		5.00	4.49	5.00	4.60	4.53	4.24	3.81	4.53	4.24	3.81
Cooling A35W7[1]	Capacity	kW	4.50	6.00	7.20	8.80	11.60	12.95	14.00	11.60	12.95	14.00
	Power input	kW	1.32	2.00	2.18	2.84	3.85	4.55	5.20	3.85	4.55	5.20
	EER		3.40	3.00	3.30	3.10	3.01	2.85	2.69	3.01	2.85	2.69
SCOP[2]	LWT at 35°C		5.03	4.85	5.33	4.83	4.75	4.63	4.53	4.78	4.65	4.52
	LWT at 55°C		3.81	3.77	3.88	3.85	3.77	3.73	3.67	3.78	3.73	3.66
SEER	LWT at 18°C		8.61	8.50	8.33	8.01	7.28	7.08	6.30	7.28	7.08	6.30
	LWT at 7°C		5.52	5.46	5.83	5.55	5.17	5.08	4.80	5.17	5.08	4.80
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	LWT at 55°C		A++		A+++		A++					
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	Load profile	-	L									
	Energy efficiency class	-	A+									
Operation range	Cooling	°C	-5~46									
	Heating	°C	-25~35									
	DHW	°C	-25~43									
Water outlet	Cooling	°C	5~20									
	Heating	°C	25~80									
	DHW	°C	20~70									

ODU											
Power supply	V/Ph/Hz		220-240/1/50							380-415/3/50		
Electric heater power input		kW	3	3	3	3	3	3	3	9	9	9
Compressor	Type		Twin rotary DC inverter									
Outdoor fan	Motor type		Brushless DC motor									
Refrigerant	Type		R290									
	Factory charge	kg	0.74		1.10		1.25			1.25		
Sound power Level[3]		dB	56	59	60	61	64	66	68	64	66	68
Sound pressure level[4]		dB	44	46	48	49	51	53	55	51	53	55
Net dimensions (W×H×D)		mm	1220×709×390		1293×860×523							
Packing dimension (W×H×D)		mm	1315×840×430		1395×996×550							
Net/Gross weight		kg	76/87		104/125		117/138			129/150		
Piping connections	Inlet		R 1 1/4"									
	Outlet		R 1 1/4"									

Indoor unit				
Power supply	V/Ph/Hz		220-240/1/50	
Domestic hot water tank	Material	-	Duplex stainless steel	
	Volume	L	200	
	Cathodic protection(Option	-	Mg rod/Electronic anode	
	Electric heater power	kW	2	
Buffer tank	Material	L	304 stainless steel	
	Volume	-	50	-
Piping connectic	AIO main outlet		G 1"	G 1"
	AIO main inlet		G 1"	G 1"
	Zone 1 outlet		G 1"	-
	Zone 1 inlet		G 1"	-
	Zone 2 outlet(Option)		G 1"	-
	Zone 2 inlet(Option)		G 1"	-
	Zone 3 outlet(Option)		G 1"	-
	Zone 3 inlet(Option)		G 1"	-
	Hot water outlet		G 3/4"	G 3/4"
	Cold water Inlet		G 3/4"	G 3/4"
	DHW recirculation(Option)		G 3/4"	G 3/4"
Net/gross weight		kg	110/130	90/110
Net dimension (W×D×H)		mm	598*598*2000	598*598*1626
Loading quantity	40HQ	Pcs	48	

Notes:

1. Relevant EU standards and legislation: EN14511; EN14825; EN12102; EN16147; (EU) No 811; (EU) No 813.
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