

TCL



Worldwide Olympic Partner

R290 

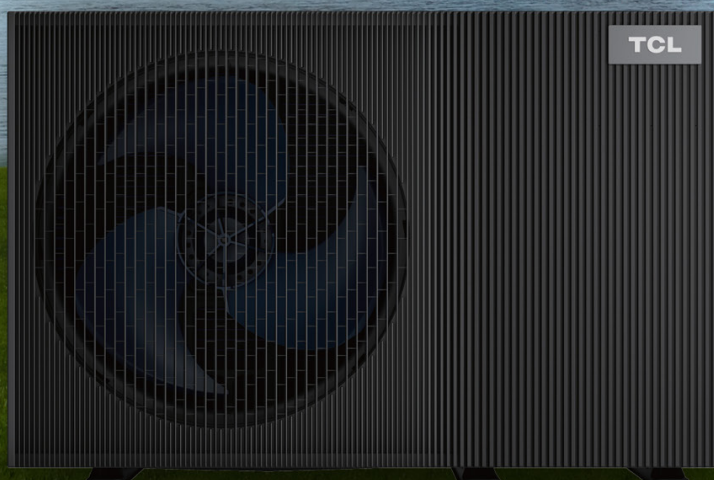
Tri-thermal ATW Heat Pump



DESIGN
AWARD
2025



reddot winner 2025



platmech[®]

Exclusive TCL Heat Pump
Distribution Partner for Ireland

The award winning TCL Tri Thermal R290 Heat Pump is one of the highest performing heat pumps available today.

- Superb SCOP performance at up to 5.33
- Up to A+++ at 35°C and A+++ at 55°C operating water temperatures
- R290 Refrigerant enables leaving water temperatures up to 80°C, ideal for new-build projects and easy replacement of fossil fuel systems
- Built-in 3-zone temperature control
- Supports over-the-air (OTA) online updates to receive the latest features automatically
- Remote monitoring and commissioning via TCL IOT platform.

COMFORT

3-Zone Temp. Control

Enables three individual spaces to operate at different temperatures, meeting the needs of everyone in your household.



Comfort Temp. for
Living room



Comfort Temp. for
Children's room



Comfort Temp. for
Study

Max.LWT 80°C

Covers more than 98% European heating scenarios, especially for older buildings.



Poor insulation



Low-efficient radiator



Boiler replacement

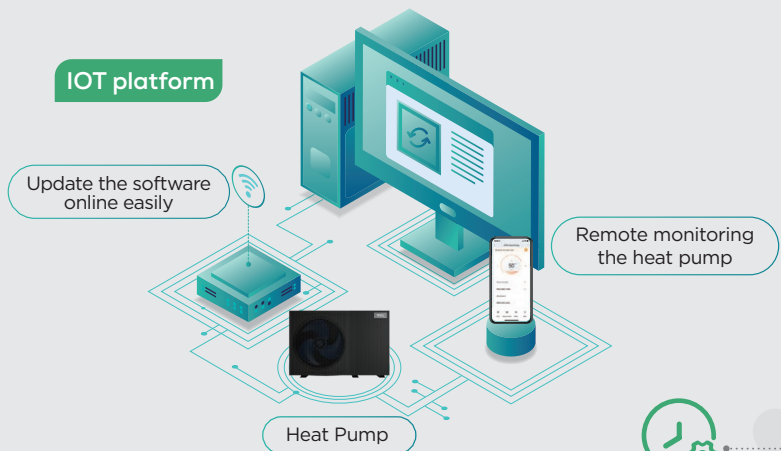
ONE-STOP
GREEN ENERGY SOLUTION



SILENT OPERATION



INTELLIGENT



TCL HOME



R290

An Environmentally-Friendly Refrigerant

- Ultra low charge R290 with a minimal environmental impact - Global Warming Potential (GWP) of just 3 and zero Ozone Depletion Potential making the TCL heat pump a climate-friendly choice
- As a natural refrigerant R290 is exempt from F-Gas Regulations
- Complies with all EU standards, CE Certified & Ecodesign regulations (EU 811/813/2013).



Eco-friendly

R290 
refrigerant



**Environmental
Protection**



**Energy
Efficiency**



GWP=3
Minimal impact on
global warming



ODP=0
Neutral for the
ozone layer

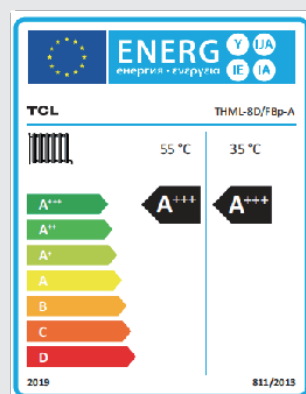
SCOP up to

5.33

HIGHEST ENERGY LEVEL

A+++

With all DC inverter components the TCL heat pump integrates high-efficient R290 environmental refrigerant, amplifying energy and providing greater heating and stable indoor warmth.





Minimum
-25°C
Outdoor

**Designed for
operation in very low
ambient temps – as
low as -25°C**

**SG
Ready**



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

**Extremely
sufficient electricity**



**Sufficient
electricity**



**Normal
electricity**



**Insufficient
electricity**



RELIABLE & SCALABLE

Heat exchangers
and other key
components
manufactured
in-house by TCL

Smart-rich
controller
technology
designed and
developed in-house

Available in multiple
capacities: 4–16
kW, and modules
can be cascaded to
reach 128 kW
systems

Can be combined
with radiators,
underfloor heating
or fan coils and also
supports solar
thermal integration
for hot water

GLOBAL ACCREDITATION & AWARDS



Rijksdienst voor Ondernemend
Nederland



**DESIGN
AWARD
2025**



Reach✓



reddot winner 2025

SPECIFICATIONS



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	15.00
	Rated input	kW	0.83	1.27	1.60	2.07	2.50	3.05	3.40	2.50	3.40
	COP		5.09	4.90	5.00	4.60	4.80	4.59	4.41	4.80	4.41
Heating A7W45	Capacity	kW	4.30	6.20	8.00	9.50	12.00	14.00	15.00	12.00	15.00
	Rated input	kW	1.10	1.63	2.13	2.59	3.00	3.60	4.30	3.00	4.30
	COP		3.90	3.80	3.76	3.68	4.00	3.89	3.49	4.00	3.49
Heating A7W55	Capacity	kW	4.40	6.00	8.00	9.50	12.00	14.00	15.00	12.00	15.00
	Rated input	kW	1.40	1.94	2.50	3.06	3.76	4.52	5.20	3.76	5.20
	COP		3.15	3.10	3.20	3.10	3.19	3.10	2.88	3.19	2.88
Cooling A35W18	Capacity	kW	4.50	6.00	8.30	10.00	12.00	14.00	16.00	12.00	16.00
	Rated input	kW	0.90	1.34	1.66	2.17	2.65	3.30	4.20	2.65	4.20
	EER		5.00	4.49	5.00	4.60	4.53	4.24	3.81	4.53	3.81
Cooling A35W7	Capacity	kW	4.50	6.00	7.20	8.80	11.60	12.95	14.00	11.60	14.00
	Rated input	kW	1.32	2.00	2.18	2.84	3.85	4.55	5.20	3.85	5.20
	EER		3.40	3.00	3.30	3.10	3.01	2.85	2.69	3.01	2.69
Seasonal space heating energy efficiency class ²	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 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 ³	dB		56	59	60	61	64	66	68	64	68
Sound pressure level ⁴	dB		44	46	48	49	51	53	55	51	55
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	1395×996×550
Piping connections		R11/4"	R11/4"	R11/4"	R11/4"	R11/4"	R11/4"	R11/4"	R11/4"	R11/4"	R11/4"
Ambient temperature	Cooling	°C	-5~46	-5~46	-5~46	-5~46	-5~46	-5~46	-5~46	-5~46	-5~46
	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 A35W18.



Worldwide Olympic Partner

TCL is a global technology innovator with over 130,000 employees, \$45 billion in annual revenue and operations spanning 160+ countries. With deep expertise across display technology, smart appliances, HVAC, and clean energy, TCL operates 33 vertically integrated manufacturing facilities and 43 advanced R&D centres worldwide.

A recognised market leader in heat pump technology, TCL has developed the Tri-Thermal Air-to-Water Heat Pump—an award-winning system engineered for European climates. This high-efficiency unit, which earned both the Red Dot and IF 2025 Design Awards, offers advanced multi-zone control, ultra-quiet operation, and a flow temperature of up to 80°C.

Backed by thousands of patents and rigorous quality assurance, TCL's European expansion reflects its long-term commitment to sustainable, high-performance HVAC solutions built for reliability, scalability, and energy transformation.

Platmech are proud to be the Exclusive Heat Pump Distribution partner for TCL in Ireland.

platmech[®]

www.platmech.ie



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