

● IDU lineup

Series	Type	Fan motor	Model	Capacity range(x100w)																										
				18	22	25	28	32	36	40	45	50	56	63	71	80	90	100	112	125	140	160	220	280	450	560				
 360° Q8 cassette	Cooling & Heating	DC	TMV-V(**) Q8/NIDY(E)				●		●		●	●	●	●	●	●	●	●	●	●										
 compact cassette	Cooling & Heating	DC	TMV-V(**) Q4R/NIDY(E)	●	●	●	●	●	●	●	●	●	●																	
 Slim duct	Cooling & Heating	DC	TMV-V(**) F5/NIDY(E)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●									
 Free static pressure duct	Cooling & Heating	DC	TMV-V(**) F2/NIDY(E)									●	●	●	●	●	●	●	●	●	●									
 Wall-mounted (External EXV)	Cooling & Heating	DC	TMV-V(**)G/ NIDY-B(E)		●		●		●		●	●	●		●	●	●	●												
 Wall-mounted (Built-in EXV)	Cooling & Heating	AC	TMV-V(**)G/ NIY-B(E)		●		●		●		●	●	●		●	●														
 Wall-mounted (Built-in EXV)	Cooling & Heating	AC (60Hz)	TMV-V(**)G/ NIY-B(E)		●		●		●		●	●	●	●	●	●														
 High static pressure duct	Cooling & Heating	AC	TMV-V(**) F1/NIY(E)																							●	●	●	●	
 Fresh air duct	Cooling & Heating	AC	TMV-V(**) F1/XFN1Y(E)																		●					●	●	●		
 Ceiling & Floor	Cooling & Heating	AC	TMV-V(**) ZD/NIY(E)									●	●	●	●	●	●	●	●	●	●	●	●	●	●					
 One-way cassette (Developing)	Cooling & Heating	DC	TMV-V(**) Q1/NIDY(E)		●		●		●		●	●	●	●	●															
 Two-way cassette	Cooling & Heating	AC	TMV-V(**) Q2/NIY€		●		●		●		●	●	●	●	●															

● Mini VRF Parameters



Model:TMV-Vd(**)W/NI-D(E)			80	100	120	140	160
			3HP	3.5HP	4HP	5HP	6HP
Power supply			220-240V~50/60Hz				
Cooling capacity	Capacity	kW	8.0	10.0	12.0	14.5	16.0
	EER	W/W	3.14	3.64	3.93	3.54	3.33
Heating capacity	Capacity	kW	10.0	12.0	14.0	16.0	18.0
	COP	W/W	3.51	3.93	4.18	4.21	3.83
Net dimensions (W x D x H)	Outdoor	mm	910×359×803	910×359×803	910×359×803	1010×410×850	1010×410×850
Net weight	Outdoor	kg	52	52	52	75	75
Cooling operating range	Outdoor side	°C	-20-55				
Heating operating range	Outdoor side	°C	-20-24				

Model:TMV-Vd(**)W/NI-C(E)			180	224	252	280
			7HP	8HP	9HP	10HP
Power supply			220-240V-50/60Hz	380-415V 3N-50/60Hz		
Cooling capacity	Capacity	kW	18.0	2204	25.2	28.0
	EER	W/W	3.43	3.11	3.05	3.08
Heating capacity	Capacity	kW	20.0	24.5	27.0	30.8
	COP	W/W	3.85	3.45	3.38	3.62
Net dimensions	Outdoor (W x D x H)	mm	950×340×1330	1120×400×1560		
Net weight	Outdoor	kg	99	130	130	140
Cooling operating range	Outdoor side	°C	-20-55			
Heating operating range	Outdoor side	°C	-20-24			

Notes: 1. Specifications are based on the following conditions:
2. Cooling: Indoor temperature 27°C DB/19°C WB.and outdoor temperature 35°C DB/24°C WB.
3. Heating: Indoor temperature 20°C DB/15°C WB.and outdoor temperature 7°C DB/6°C WB.
4. Equivalent piping length:5m; Level difference:0m; Voltage:230V.
5. Sound Level: Indoor unit sound pressure level,measured at a point 1.5m downward from the unit center.
6. Outdoor unit sound pressure level,measured at a point 1.0m in front of the unit.
7. Optional simple wired controller; Universal remote controller; auto-restart(optional); Timer;only one circle.
8. Due to ongoing product development, specifications are subject to change without notice.

● ODU Parameters(8-36HP)



Loading Capacity		8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP
Model:TMV-Vd(**)W/NIS-C(E)		252	280	335	400	450	504	560	615
Cooling capacity	Capacity	kW	25.2	28	33.5	40	45	50.4	56
	EER	W/W	4.68	4.13	4.14	3.92	3.73	3.74	3.48
Heating capacity	Capacity	kW	27	31.5	37.5	45	50	56	63
	COP	W/W	4.93	4.72	4.57	4.37	4.24	4.15	4.08
Power supply		380-415V 3N ~ 50/60Hz							
Net dimensions(W x H x D)	mm	925×1780×845			1340×1780×845				
Net weight	Outdoor	kg	215	215	215	270	270	280	315
Cooling operating range	Outdoor side	°C	-15-56						
Heating operating range	Outdoor side	°C	-25-28						

Loading Capacity			24HP	26HP	28HP	30HP	32HP	34HP	36HP
Model:TMV-Vd+***W/NIS-C(E)			680	730	785	850	900	950	1000
Cooling capacity	Capacity	kW	68	73	78.5	85	90	95	100
	EER	W/W	3.68	3.95	3.82	3.73	3.67	3.70	3.61
Heating capacity	Capacity	kW	75	81.5	87.5	95	100	106	112
	COP	W/W	4.27	4.25	4.21	4.15	4.20	4.19	4.12
Power supply			380~415V 3N ~ 50/60Hz						
Net dimensions(W x H x D)		mm	1340×1780×845	1760×1780×845				1900×1780×845	
Net weight	Outdoor	kg	330	380	380	420	420	480	480
Cooling operating range	Outdoor side	℃	-15~56						
Heating operating range	Outdoor side	℃	-25~28						

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2. Cooling: Indoor temperature 27°C DB/19°C WB.and outdoor temperature 35°C DB/24°C WB.
3. Heating: Indoor temperature 20°C DB/15°C WB.and outdoor temperature 7°C DB/6°C WB.
4. Due to ongoing product development, specifications are subject to change without notice.



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TMV6 Pro Series Intelligent VRF

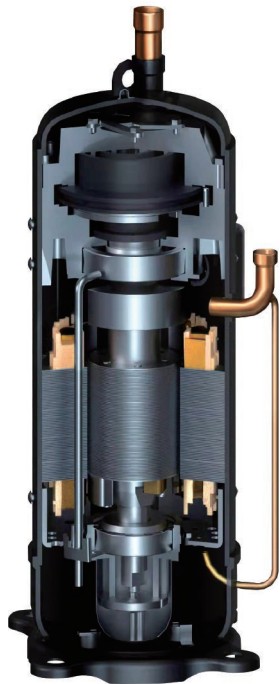
Enhance Vapor Injection DC Inverter Air Conditioning System



High Efficiency

DC Inverter Scroll Compressor

The DC variable frequency compressor adopts an asymmetric scroll structure to effectively reduce the leakage loss of refrigerant gas during suction and inside the compression chamber, to improve the efficiency and reliability of compressor operation.



Optimized asymmetric vortex line

Using new type of asymmetric scroll profile can reduce leakage loss and ineffective suction overheating.

Suction directly

Small suction preheating, high volume efficiency.

Concentrated winding motor

The coil height of the concentrated winding motor is reduced, the copper loss is less the efficiency is higher in the middle and low speed areas.

Intermediate pressure servo mechanism

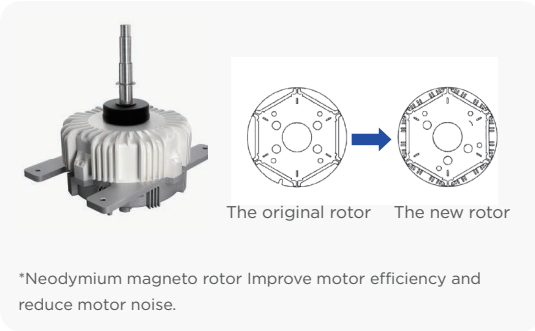
The intermediate pressure is dynamically adjusted according to the operating pressure to achieve axial flexibility, optimize the orbiting and fixed scroll teeth, and improve product performance.

High Voltage (Concentrated Coil) DC Motor

The outdoor unit fan motor adopts a high-voltage centralized winding DC motor, which has a more stable and reliable output, effectively reduces losses and improves operating efficiency.

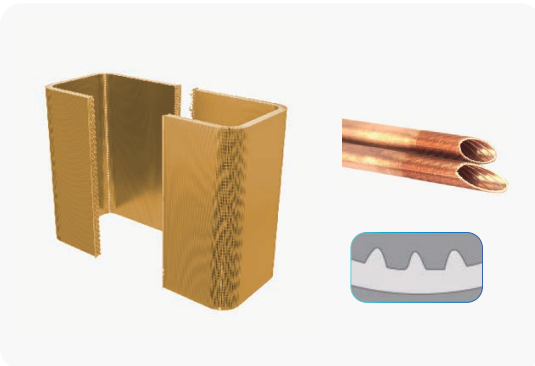
Fan motor backup operation

Reduced coil height, reduced copper loss, higher efficiency in low and medium speed zones.



Gold Fin Double C Heat Exchanger

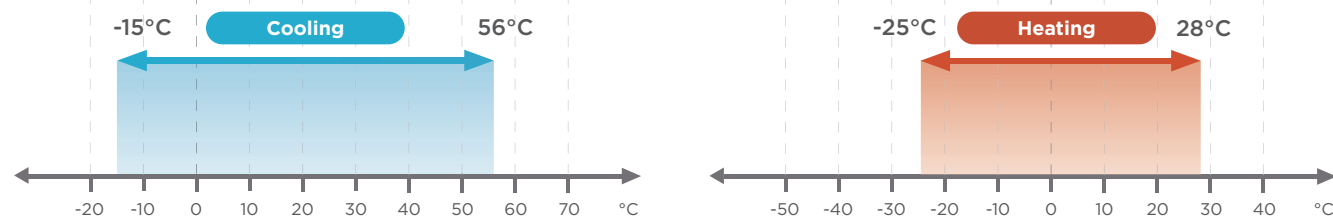
With double C type heat exchanger and inner threaded copper tube design, the condenser area increased by 6% and efficiency increased by 10% compared with old model. Standard gold fin heat exchanger to achieve anti-corrosion.



High Reliability

Wide Operation Temperature Range -25°C ~ 56°C

Wide operation range, cooling:-15°C-56°C heating: -25°C-28°C.



Wide Voltage Range

The unit can operate in the range of voltage 290V-460V (International standard voltage 380V±10%), satisfy all kinds of voltage conditions.



Auto-dust Removal Function

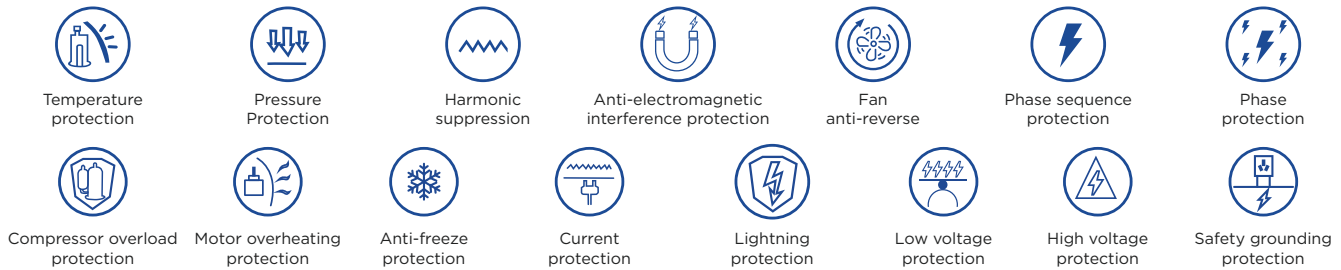
Auto-dust removal function, which features the outdoor fan can rotate in opposite direction to remove the dust on heat exchanger to ensure the heat exchange performance, and the system can operate steadily in severe environment without manual cleaning frequently.

*Note: Auto-dust removal function is optional.



Multiple Protection Functions

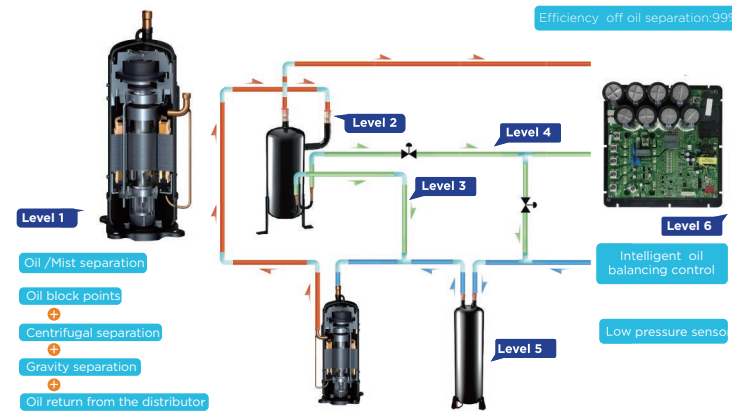
Multiple protection functions to ensure the safe operation of the system.



Multistage Oil Control Technology

The VRF system have sufficient and balanced oil in working condition to ensure safety and avoid potential oil shortages.

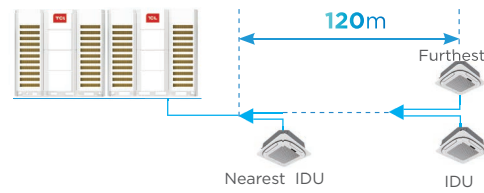
Level 1: Compressor internal oil separate
Level 2: Compressor external oil separate
Level 3: High-efficiency centrifugal oil separator to ensure compressors running normally
Level 4: Oil balance pipes between compressors to ensure compressors running normally
Level 5: Automatic oil balance system improves the compressor reliability
Level 6: Smart oil return program to ensure the oil return completely



Flexible Installation, Commissioning and Maintenance

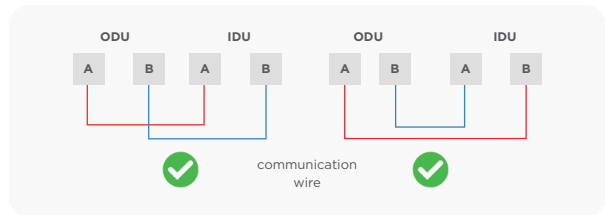
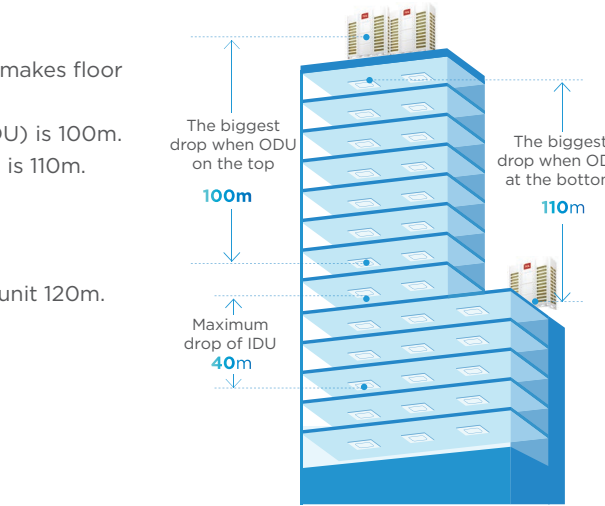
1100m Super Long Piping Design

- The industry-leading piping length, with a total length of 1100m, makes floor design more flexible.
- The max distance between the IDU and the ODU (the higher ODU) is 100m. The max distance between the IDU and the ODU (the lower ODU) is 110m.
- The maximum distance between indoor units is 40m.
- The maximum actual single pipe length is 220m.
- The maximum equivalent single tube length is 240m.
- The equivalent length from first indoor distributor to last indoor unit 120m.



Non-polarity Communication Connection

CAN bus communication mode is applied between indoor and outdoor unit, no need to distinguish between positive and negative poles, and the installation is simpler and more efficient.



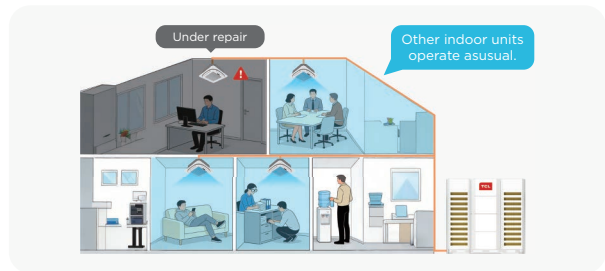
One-button Commissioning Function

You can choose to debug on the outdoor unit side or remotely through the monitoring software to realize the cooling and heating trial operation, no need opening the indoor units one by one, which is convenient for on-site debugging and improves the quality of construction at the project site.



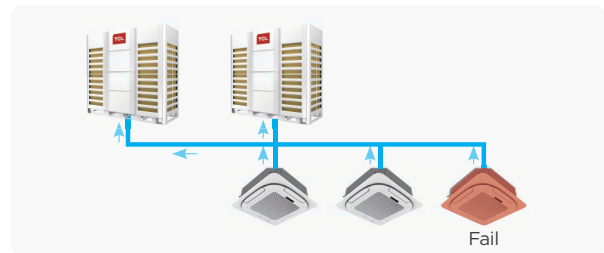
Emergency Power-off Function for IDU Maintenance

If an indoor unit requires power outage for maintenance due to a malfunction, it can be independently powered off for repair without affecting the operation of the entire system. Other indoor units within the system can continue to operate normally.



Auto Address Function

Auto address function, avoid manual address setting of IDU&ODU, simplify installation.



Refrigerant Recycle Function (Pump Down)

Pump down most of refrigerant back to outdoor unit when the indoor unit need to be added, removed or maintenance, which save the refrigerant and cost.



Completed Intelligent Control Solution

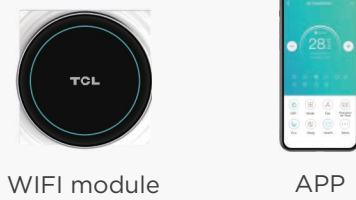
IDU Wireless Controller



IDU Wired Controller



WIFI APP Control



System Centralized Controller



System Cloud Control and Management



System BMS Control

