



TVR™ Ultra & TVR™ Pro

A cutting-edge solution for different applications



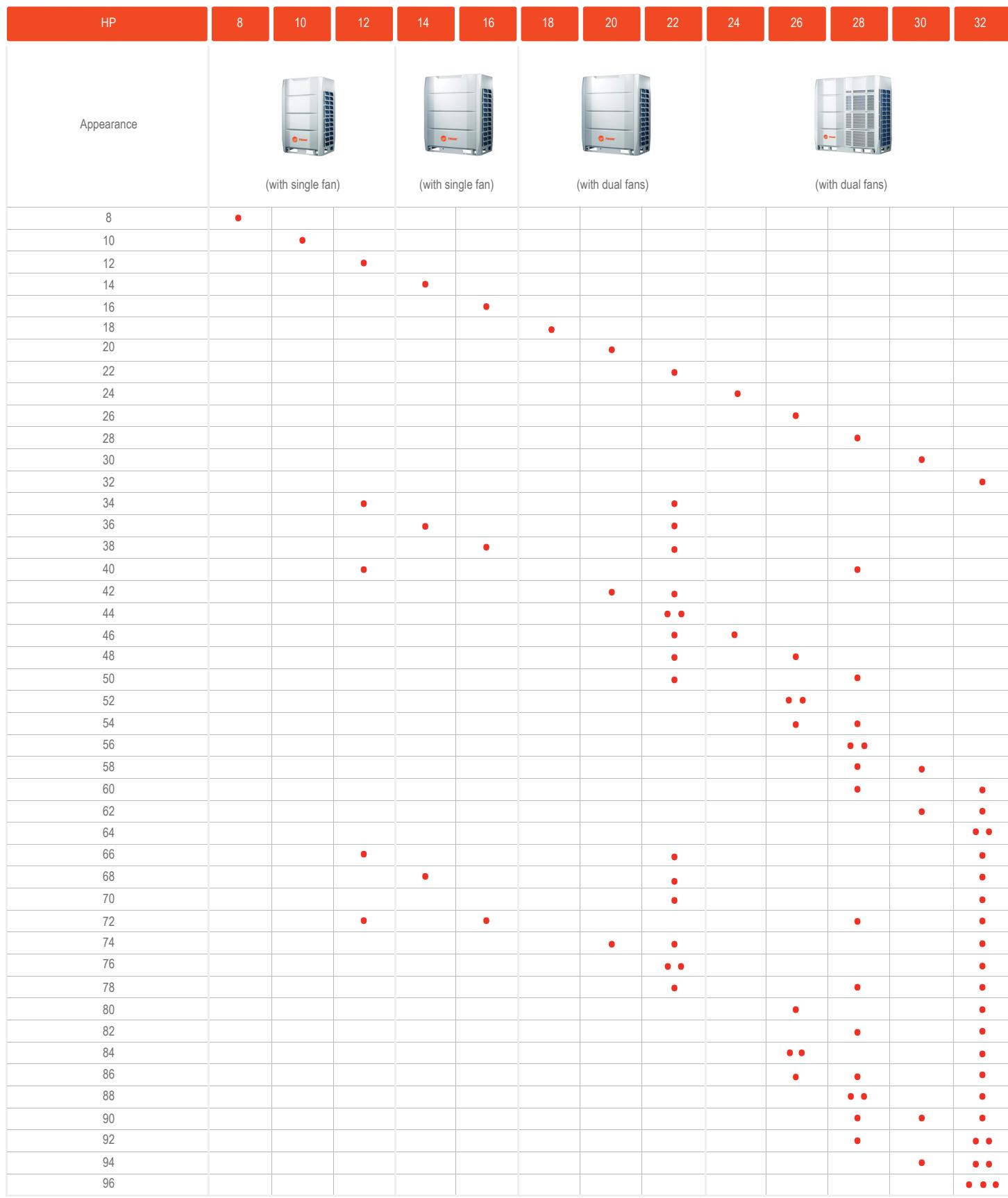


Index

Outdoor Unit Lineup 380v	.....	4 Controller Lineup	.....	50
Outdoor Unit Lineup 220v	.....	5 BACnet® Gateway	.....	64
Indoor Unit Lineup 220/380v	.....	6 LonWorks® Gateway	.....	65
Indoor Unit Lineup 220/380v	.....	7 Modbus® Gateway	.....	66
Wide Application Range	.....	8 Hotel Key Card Interface Modules	.....	67
High Efficiency	.....	10 Diagnosis Software	.....	68
High Reliability	.....	10 VRF AHU Control Box	.....	69
Easy Installation and Service	.....	13 Heat Recovery Ventilator	.....	70
Specifications 220v- TVR Ultra	.....	15 Specifications DC Series	.....	71
Specifications 380v-TVR Ultra	.....	21 Branch Joints	.....	72
Specifications 220v- TVR Pro	.....	30 Outdoor Branch Joints	.....	73
Specifications 380v- TVR Pro	.....	31 Indoor Branch Joints	.....	74
Comfort and Efficiency	.....	35		

TVR Ultra Outdoor Unit Lineup 380V

Outdoor Unit Lineup



TVR Ultra Outdoor Unit Lineup 220V

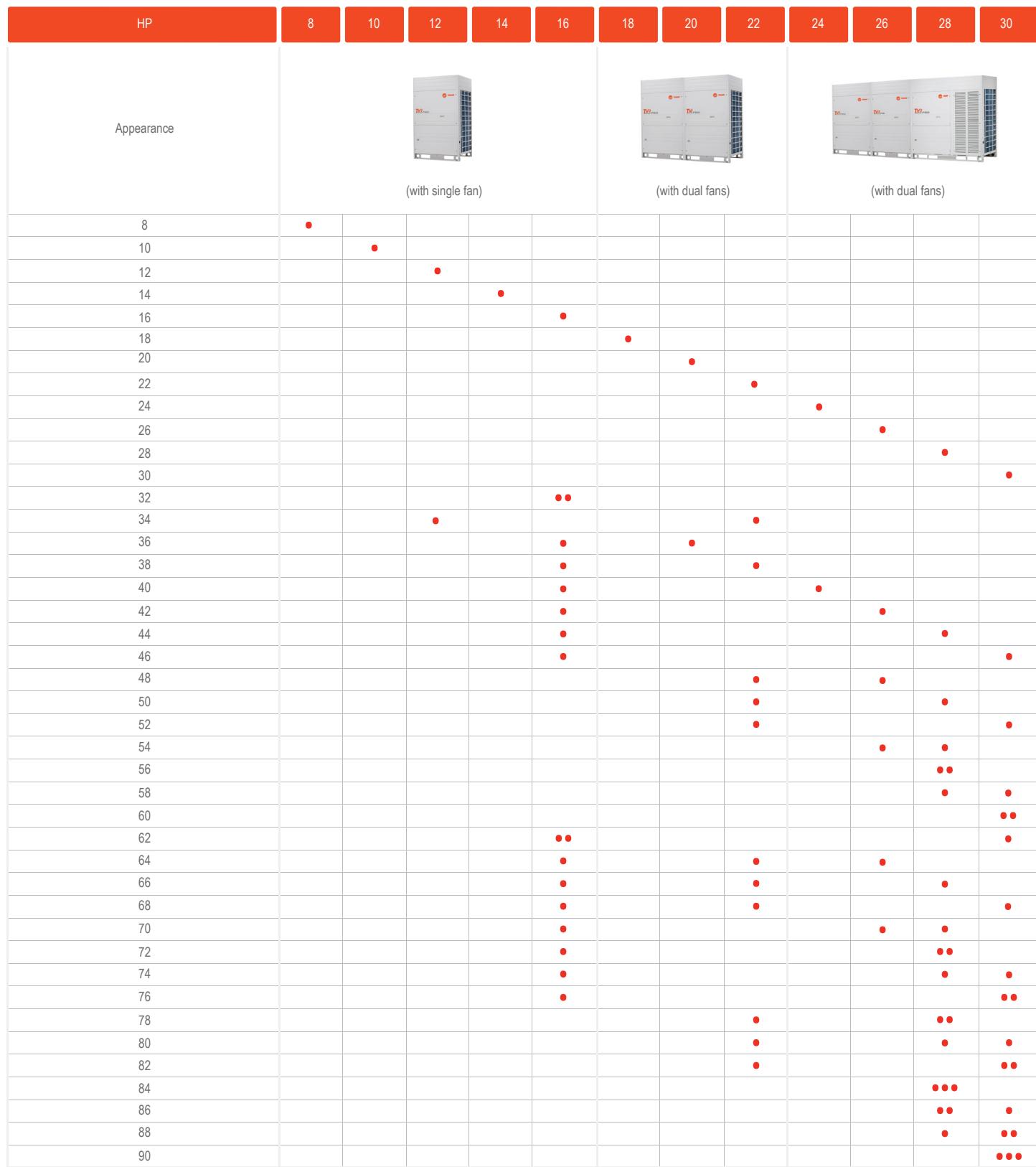
HP	8	10	12	14	16	18	20	22	24	26	28
Appearance											
(with single fan)	●										
(with dual fans)				●	●	●	●	●	●	●	●
8	●										
10		●									
12			●								
14				●							
16					●						
18						●					
20							●				
22								●			
24									●		
26										●	
28											●
30				●	●						
32					●	●					
34			●					●			
36				●					●		
38					●				●		
40			●								●
42				●							●
44					●						●
46							●		●		
48								●		●	
50								●			●
52									●	●	
54									●		●
56										●	●
58				●	●						●
60			●		●	●					●
62				●				●			●
64				●					●		●
66					●				●		●
68			●							●	●
70				●						●	●
72					●					●	●
74							●		●		●
76								●		●	●
78								●			●
80									●	●	●
82									●	●	●
84									●	●	●
86								●	●	●	
88								●	●	●	
96									●	●	●

TVR Pro

Outdoor Unit Lineup

220V / 380V

Outdoor Unit Lineup



Indoor Unit Lineup

	kW	1.8	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	10.0	11.2	12.5	14.0	16.0	20.0	25.0	28.0	40.0*	45.0*	56.0*
	Btu/h x 1000	5	7	9	12	15	18	24	27	30	34	38	42	48	55	68	85	96	136	154	192
One-way Cassette														
Two-way Cassette													
Compact Four-way Cassette																
Four-way Cassette			
Medium Static Pressure Duct						
High Static Pressure Duct								
Fresh Air Processing Unit												
Wall Mounted Unit											
Ceiling / Floor Unit								
Floor Standing Unit												
Console																	

Wide Application Range

Wide Capacity Range

Starting at 8HP, capacity increases in 2HP increments up to 96HP, which is the world's largest single-system VRF capacity.

TVR Ultra, 380V, 50-60 Hz

8/10/12 HP (single fan)	14/16 HP (single fan)	18/20/22 HP (dual fan)	24/26/28/30/32 HP (dual fan)
16-64 HP		66-96 HP	

TVR Ultra, 220V, 50-60 Hz

8/10/12 HP (single fan)	14/16/18/20/22 HP (dual fan)	24/26/28/30/32 HP (dual fan)
16-56 HP	58-64 HP	86-96 HP

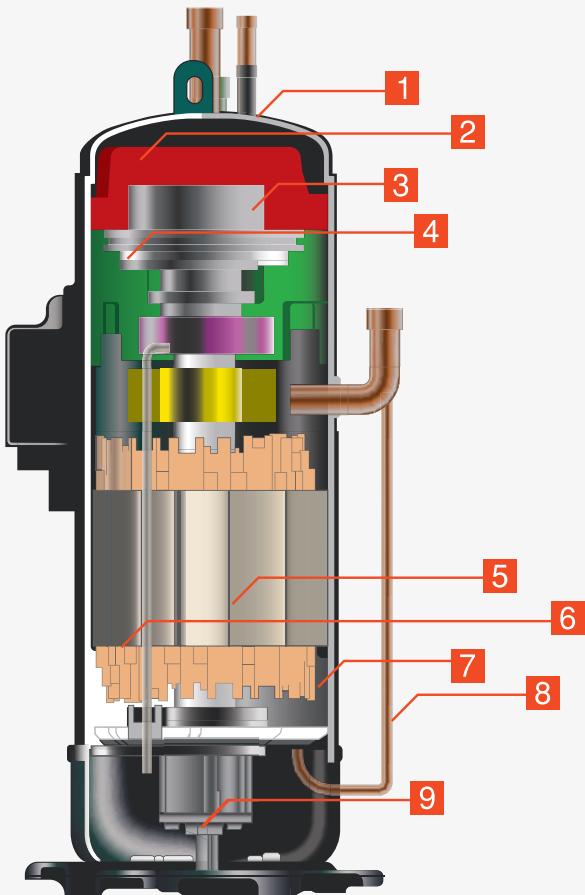
TVR Pro, 220V-380V, 50-60 Hz

8/10/12/14/16 HP	18/20/22 HP	24/26/28/30 HP
16-60 HP		24/90 HP

High Efficiency

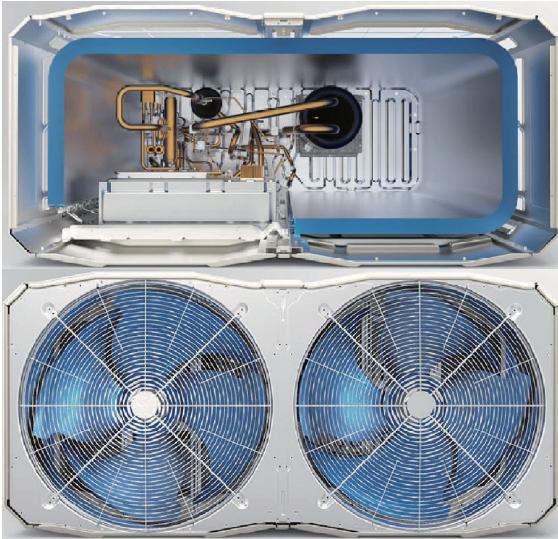
Extended compressor speed from 15rpm to 140rpm

- 1 **Vapor injection technology**
Improves heating.
- 2 **Improved compressor design**
Better overall.
- 3 **Release Valve improvement**
Noise reduction & better performance.
- 4 **Non-contact oil membrane**
Reduces friction and improves reliability.
- 5 **Advanced bearing design for high speed running**
Broader frequency range
- 6 **Improved compressor design**
Better overall performance.
- 7 **New BLDC motor**
Better efficiency, especially at part load.
- 8 **High pressure chamber structure**
Better lubrication, lower noise level and higher stability.
- 9 **Better oil management**
New oil circulation, positive displacement gear oil pump and dynamic oil balance



Optimized Heat Exchanger

- 24-32HP units use a high efficiency 3-row G-shape heat exchanger with a heat exchange area 1.5 compared to the 22HP unit.
- A super-sized 750mm diameter fan is used for a higher heat exchange.



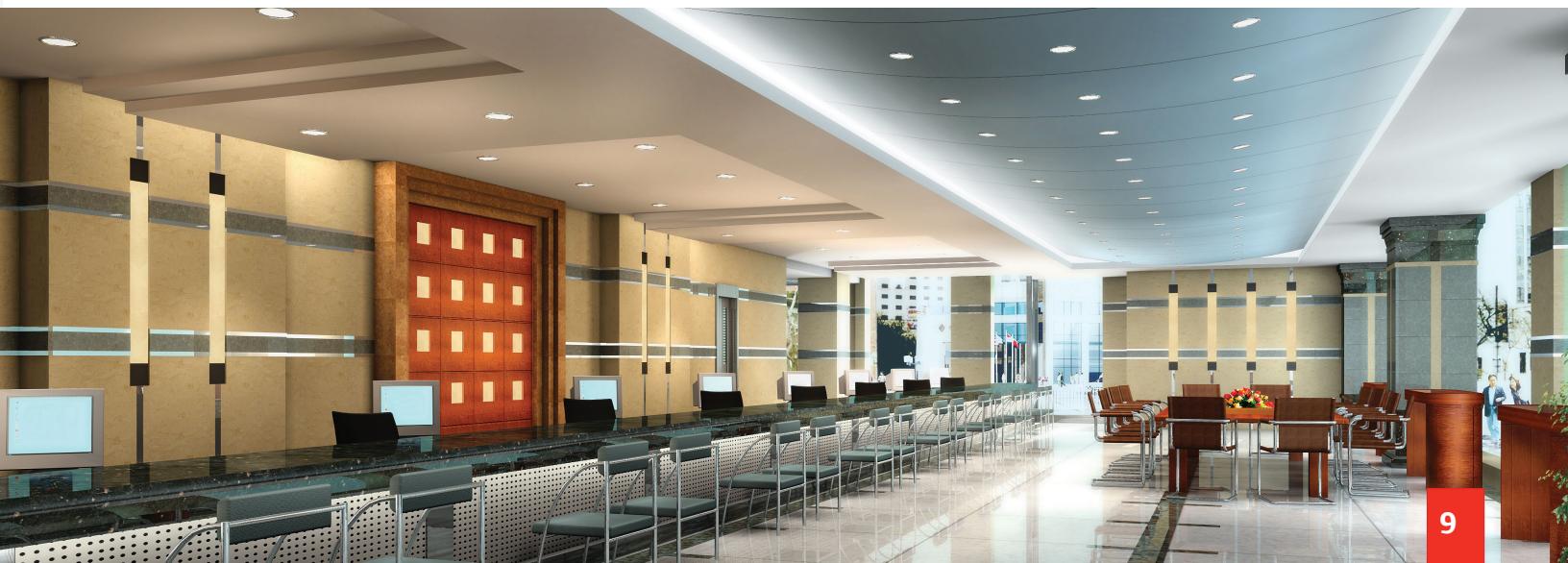
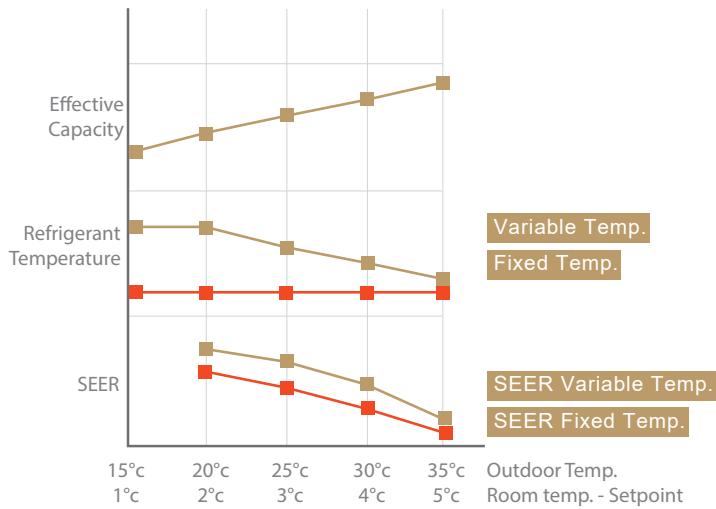
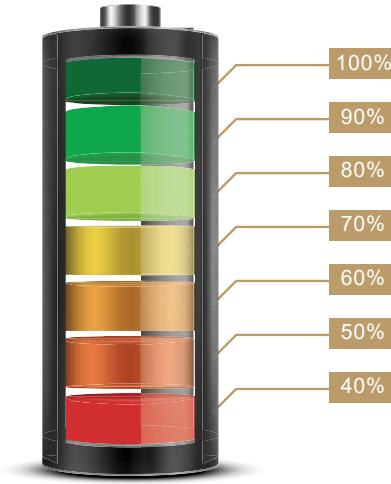
Energy Management System (EMS)

Refrigerant temperature management

- Refrigerant temperature is automatically adjusted according to both outdoor temperature and room demand to maximize space comfort and energy efficiency.
- Capacity is controlled by the inverter compressor and variable refrigerant temperature in order to achieve the highest seasonal efficiency.
- Seasonal energy efficiency can be increased by 30%.

Electricity Demand Setting

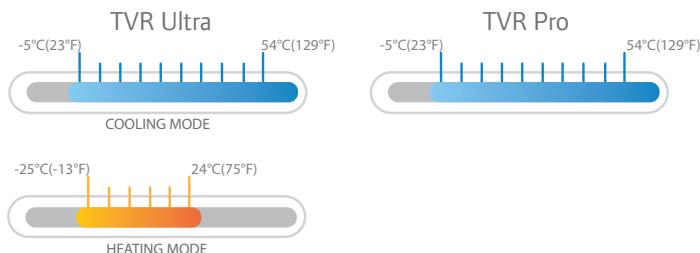
Through the integration of EMS, for projects with temporary electrical supply restrictions, TVR Ultra can be adjusted to work between 40-100% of its capacity.



Extended Operational Range

During summer, with temperatures of up to 54°C, the TVR Ultra series unit will continue in the cooling mode.

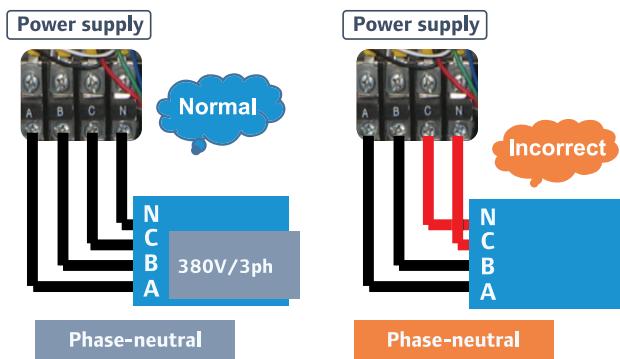
During winter, with temperatures as low as -23°C, the TVR Ultra series unit will continue in the heating mode.



High Reliability

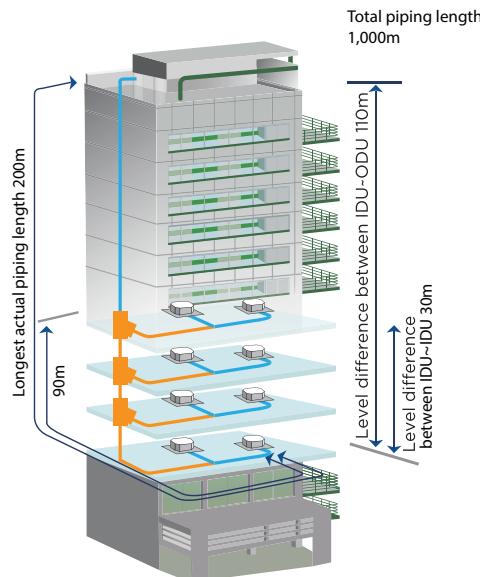
Electrical connections protection

Special internal protection circuitry is designed to protect the system from any wrong connection between live and neutral wiring.



Extended piping length

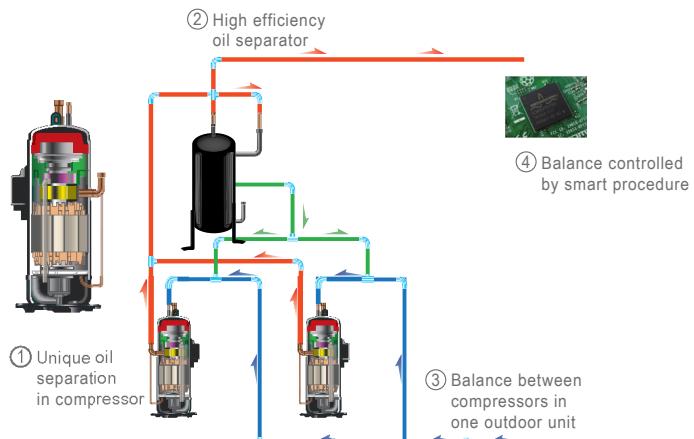
Extended piping length capability offers the designer or the installer additional flexibility for design and Installation.



*The most extended length after the 1st piping branch is 40m as standard, same which may be extended to 90m under certain conditions.

Advanced Oil Control

Four stages of oil control technology ensures that all the compressor oil is constantly maintained at a safe level.



Refrigerant Cooling PCB (Printed Circuit Board)

- Double U-shape refrigerant piping decreases PCB's temperature and enhances reliability.
- Compared to a single U-shaped refrigerant pipe, the PCB temperature is 5°C lower.
- Compared to an air cooling method, the PCB temperature is 10°C lower.



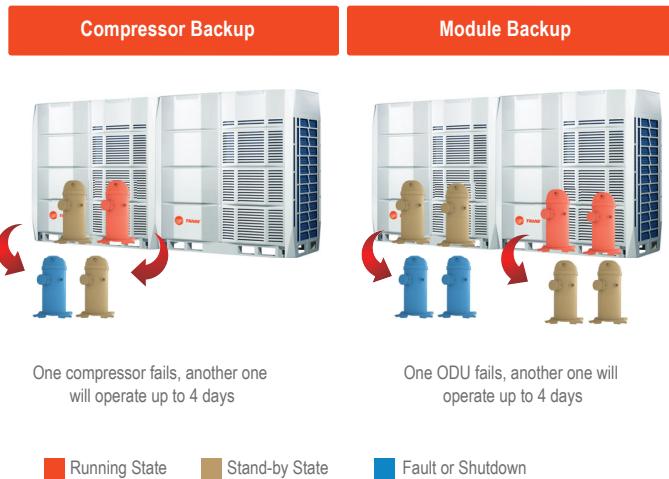
Automatic Duty Cycling

Duty cycling regulates the operating time of the outdoor units in a multiple-unit system, as well as that of the compressors in each unit, which action significantly extends all compressor unit lifespan.



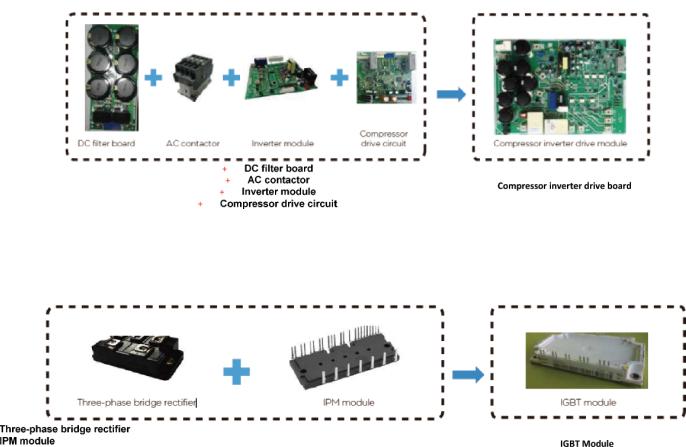
Double Backup

Compressor backup and Unit backup.
Allows time for maintenance or repair duties while comfort remains warranted.



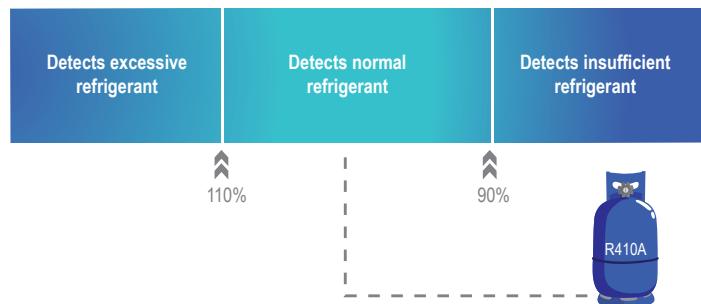
Integrated design of electrical components

The integrated design will simplify all electrical wiring and make it much more reliable.



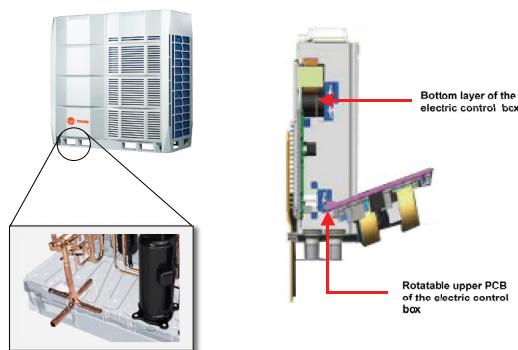
Real-time refrigerant amount monitoring

The temperature and pressure of refrigerant can be real-time monitored by the outdoor unit. TVR Ultra outdoor unit can detect excessive or insufficient amounts of refrigerant to ensure consistent performance.



Flexible Pipe Connection and Rotatory PCB

360° pipe / power wire / communication wire connection for the ODU. The bottom layer can be easily reached through the rotatory upper PCB, for easier maintenance.



Simple Triple Configurations

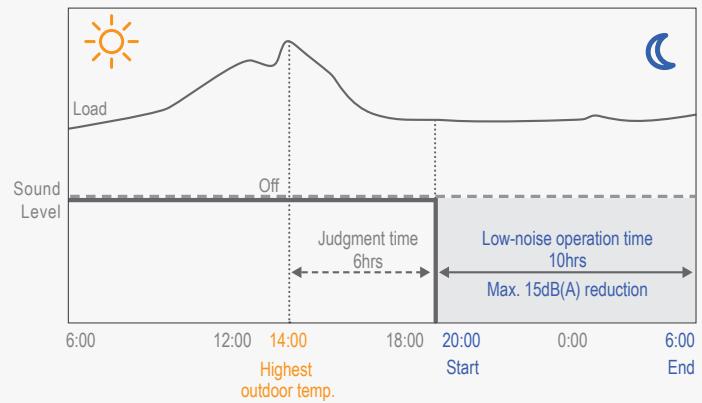
- Triple (local/remote/network) configuration for simplified installation, commissioning and servicing.
- Field local configuration achieves quick and easy on-site settings, simplifies installation and commissioning.





Advanced "silent" technology

4 night silent modes, 3 silent modes and 4 super silent modes selections, provide more freedom and convenience to match the customer needs.



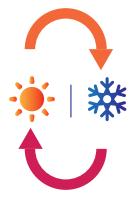
Night Silent Mode and
Silent Mode
Fan Speed is Limited



Super Silent Mode
Fan Speed and Compressor
Frequency are Limited

Five Priority Mode Settings

Five (5) priority mode settings, provide more freedom and convenience to match the customer needs.



Auto Priority



Cooling Priority



VIP/Vote Priority



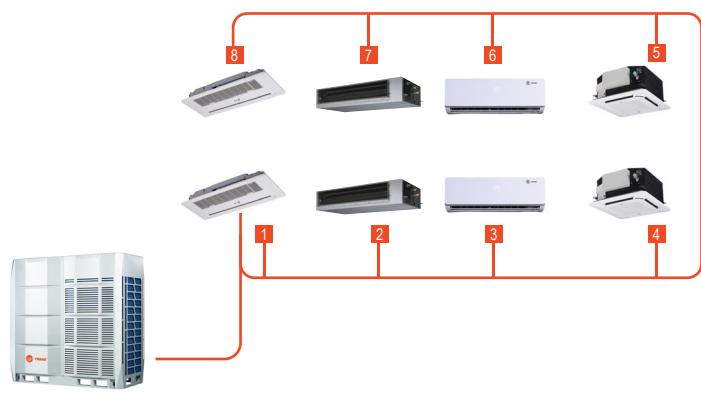
Heating Only



Cooling Only

Auto Addressing

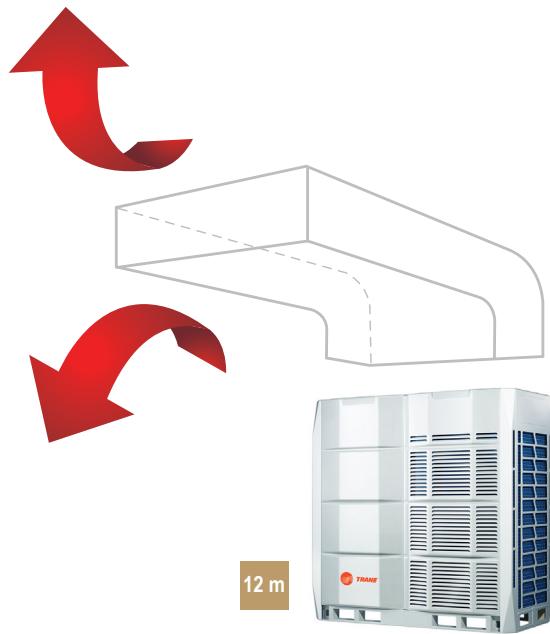
New TVR Ultra saves installation time with outdoor units automatically addressing up to 64 indoor units.



Easy Installation and Service

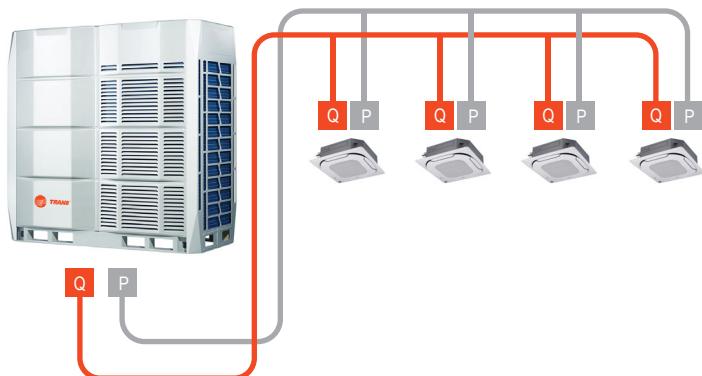
High External Static Pressure

External static pressure (ESP) reaches 60Pa.



Non-polarized Communication Wiring*

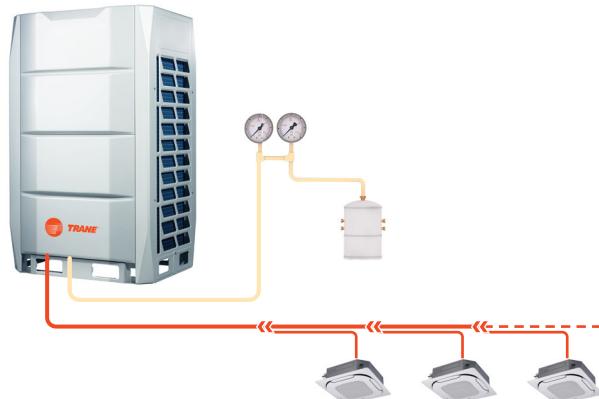
Only one chain of 2-core non-polarized shielded communication wiring is required for indoor and outdoor unit communication.



*In installations where relatively strong electromagnetic fields are present, 3-core shielded wiring should be used in order to prevent interference.

Automatic Refrigerant Charging/Recycling Function*

Automatic refrigerant charging and recycling make installation and service easier and more efficient.



*This function is available as a customization option

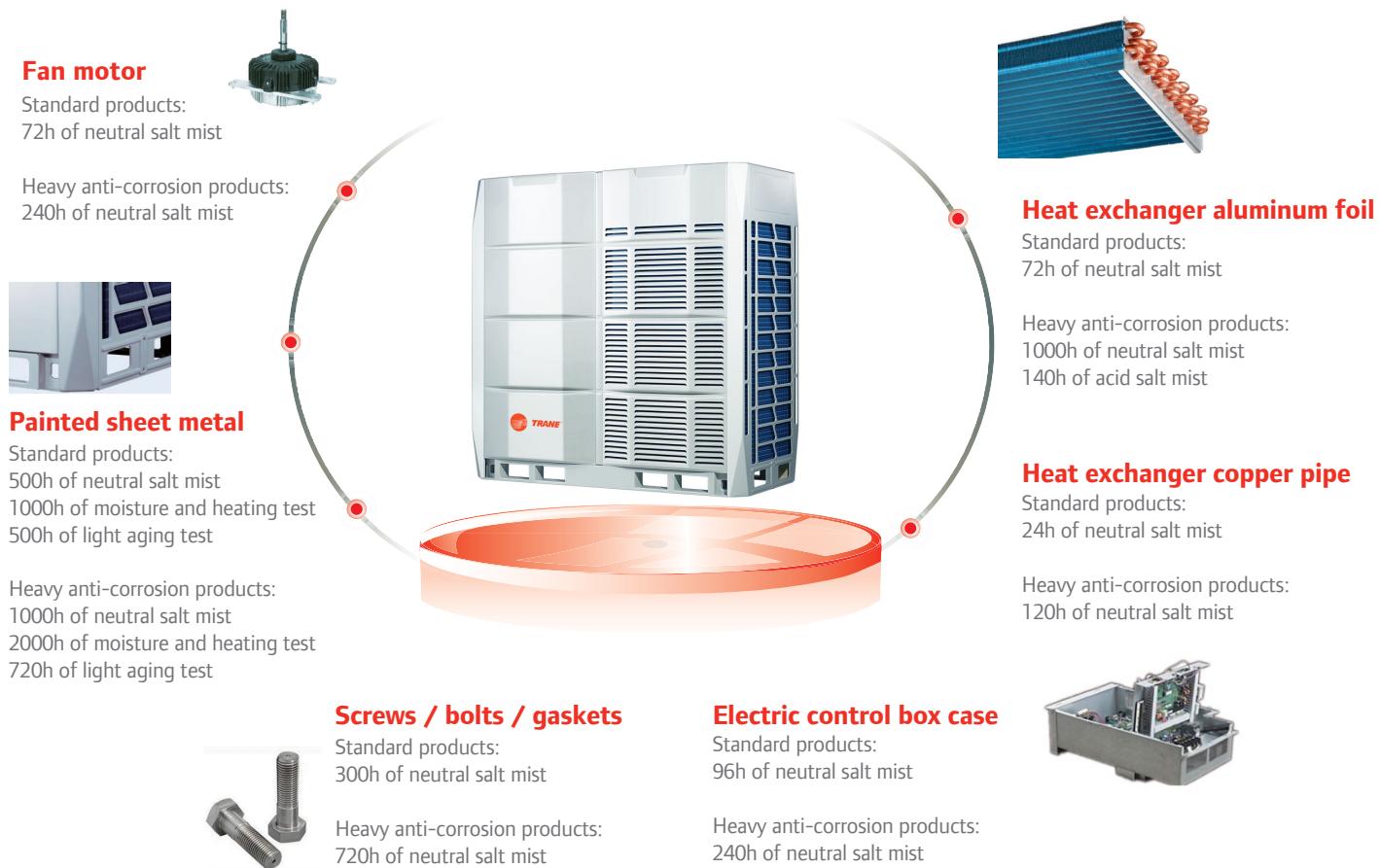
Optional Multifunctional Small PCB (Option for TVR Ultra)

An optional multifunctional small PCB can be installed on the unit's side columns, enabling installation and service engineers to activate Auto-commissioning or check the operating status without removing the front panel. It can also perform automatic data backup of the last 30 minutes' operating record.



Anti-corrosion Protection

Outdoor units are given anti-corrosion treatment for non-extreme conditions as standard and can also be customized with heavy anti-corrosion treatment on main components for surface protection against corrosive air, acid rain and saline air (for installations in coastal regions) to extend overall useful life. The integrity of the anti-corrosion treatment is ensured by exposing major components and parts to salt spray testing, moisture and heating testing and light aging testing.



Outdoor Unit - TVR Ultra

Specifications 220V



Capacity	HP	8	10	12	14	16	
Model		4TVH0086E8000AA	4TVH0096E8000AA	4TVH0115E8000AA	4TVH0140E8000AA	4TVH0155E8000AA	
Electrical Characteristics	V/Ph/Hz		220V, three phase, 50 / 60Hz				
Cooling ¹	Capacity	kW	25.2	28.0	33.5	40.0	45.0
		kBtu/h	86.0	95.5	114.3	136.5	153.5
	Power Input	kW	4.80	5.70	7.08	8.70	10.27
	EER	kW/kW	5.25	4.91	4.73	4.60	4.38
	IEER	kW/kW	9.70	9.09	8.75	8.51	8.12
Heating ²	Capacity	kW	25.2	28.0	33.5	40.0	45.0
		kBtu/h	86.0	95.5	114.3	136.5	153.5
	Power Input	kW	4.56	5.12	6.65	8.47	9.62
	COP	kW/kW	5.53	5.47	5.04	4.72	4.68
Connectable Indoor Unit	Max.Quantity		13	16	20	23	26
Compressors	Quantity				1		
Refrigerant (R-410a)	Factory Charge	kg		11		13	
Pipe Connections ³	Liquid Pipe	mm	φ12.7		φ15.9		
	Gas Pipe	mm	φ25.4		φ28.6	φ31.8	
Airflow Rate	m ³ /h		11000			14000	
Sound Pressure Level ⁴	dB(A)		58		60		61
Net Dimensions (WxHxD)	mm		990×1635×790			1340×1635×825	
Packed Dimensions (WxHxD)	mm		1090×1805×860			1405×1805×910	
Net Weight	kg		227			284	
Gross Weight	kg		248			311	

Capacity	HP	18	20	22	24	26	28				
Model		4TVH0170E8000AA	4TVH0192E8000AA	4TVH0210E8000AA	4TVH0229E8000AA	4TVH0249E8000AA	4TVH0268E8000AA				
Electrical Characteristics	V/Ph/Hz		220V, three phase, 50 / 60Hz								
Cooling ¹	Capacity	kW	50.0	56.0	61.5	67.0	73.0	78.5			
		kBtu/h	170.6	191.1	209.8	228.6	249.1	267.8			
	Power Input	kW	11.57	13.66	15.19	16.58	19.11	23.43			
	EER	kW/kW	4.32	4.10	4.05	4.04	3.82	3.35			
	IEER	kW/kW	8.01	7.60	7.51	7.49	7.09	6.21			
Heating ²	Capacity	kW	50.0	56.0	61.5	67.0	73.0	78.5			
		kBtu/h	170.6	191.1	209.8	228.6	249.1	267.8			
	Power Input	kW	10.53	12.56	14.61	15.12	17.38	20.23			
	COP	kW/kW	4.75	4.46	4.21	4.43	4.20	3.88			
Connectable Indoor Unit	Max.Quantity		29	33	36	39	43	46			
Compressors	Quantity				2						
Refrigerant (R-410a)	Factory Charge	kg		17		21					
Pipe Connections ³	Liquid Pipe	mm	φ19.1			φ22.2					
	Gas Pipe	mm				φ31.8					
Airflow Rate	m ³ /h		17000			25000					
Sound Pressure Level ⁴	dB(A)	62	63		64						
Net Dimensions (WxHxD)	mm	1340×1635×825			1730×1830×850						
Packed Dimensions (WxHxD)	mm	1405×1805×910			1800×2000×910						
Net Weight	kg	366			438						
Gross Weight	kg	386			461						

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Diameters given are those of the unit's stop valves.

4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Outdoor Unit - TVR Ultra

Specifications 220V

Capacity	HP	30	32	34
Model		4TVH0290E8000AA	4TVH0307E8000AA	4TVH0324E8000AA
Combination		14HP+16HP	16HP+16HP	12HP+22HP
Electrical Characteristics		220V, three phase, 50 / 60Hz		
Cooling ¹	Capacity	kW	85.0	90.0
		kBtu/h	290.0	307.1
	Power Input	kW	18.97	20.55
		kW/kW	4.48	4.38
Heating ²	Capacity	kW/kW	85.0	90.0
		kW	290.0	307.1
	Power Input	kBtu/h	18.09	19.23
		kW	4.70	6.48
Connectable Indoor Unit	Max.Quantity		50	53
Compressors	Quantity		2	3
Refrigerant (R-410a)	Factory Charge	kg	26	28
Pipe Connections ³	Liquid Pipe	mm	Φ19.1	
	Gas Pipe	mm	Φ31.8	
Airflow Rate	m ³ /h		28000	
Sound Pressure Level ⁴	dB(A)		64	65
Net Dimensions (WxHxD)	mm		(1340×1635×825)×2	(990×1635×790)+(1340×1635×825)
Packed Dimensions (WxHxD)	mm		(1405×1805×910)×2	(1090×1805×860)+(1405×1805×910)
Net Weight	kg		284x2	227+366
Gross Weight	kg		311x2	248+386

Capacity	HP	36	38	40
Model		4TVH0346E8000AA	4TVH0363E8000AA	4TVH0382E8000AA
Combination		14HP+22HP	16HP+22HP	12HP+28HP
Electrical Characteristics		220V, three phase, 50 / 60Hz		
Cooling ¹	Capacity	kW	101.5	106.5
		kBtu/h	346.3	363.4
	Power Input	kW	23.88	25.46
		kW/kW	4.25	4.18
Heating ²	Capacity	kW/kW	101.5	106.5
		kW	346.3	363.4
	Power Input	kBtu/h	23.08	24.22
		kW	4.40	4.40
Connectable Indoor Unit	Max.Quantity		59	63
Compressors	Quantity		4	3
Refrigerant (R-410a)	Factory Charge	kg	30	32
Pipe Connections ³	Liquid Pipe	mm	Φ19.1	
	Gas Pipe	mm	Φ31.8	
Airflow Rate	m ³ /h		31000	28000
Sound Pressure Level ⁴	dB(A)		30	64
Net Dimensions (WxHxD)	mm		(1340×1635×825)×2	(990×1635×790)+(1730×1830×850)
Packed Dimensions (WxHxD)	mm		(1405×1805×910)×2	(1090×1805×860)+(1800×2000×910)
Net Weight	kg		284x366	227+438
Gross Weight	kg		311+386	248+461

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Diameters given are those of the unit's stop valves.

4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Outdoor Unit - TVR Ultra

Specifications 220V

Capacity	HP	42	44	46	48	50	
Model		4TVH0401E8000AA	4TVH0420E8000AA	4TVH0438E8000AA	4TVH0459E8000AA	4TVH0478E8000AA	
Combination		14HP+28HP	16HP+28HP	22HP+24HP	22HP+26HP	22HP+28HP	
Electrical Characteristics		V/Ph/Hz	220V, three phase, 50 / 60Hz				
Cooling ¹	Capacity	kW	118.5	123.5	128.5	134.5	140.0
		kBtu/h	404.3	421.4	438.4	458.9	477.7
	Power Input	kW	32.13	33.71	31.77	34.30	38.62
		kW/kW	3.69	3.66	4.04	3.92	3.63
Heating ²	Capacity	kW/kW	118.5	123.5	128.5	134.5	140.0
		kBtu/h	404.3	421.4	438.4	458.9	477.7
	Power Input	kW	28.71	29.85	29.73	31.99	34.84
		COP	4.13	4.14	4.32	4.20	4.02
Connectable Indoor Unit	Max.Quantity			64			
Compressors	Quantity		3		4		
Refrigerant (R-410a)	Factory Charge	kg	39000		42000		
Pipe Connections ³	Liquid Pipe	mm	34		38		
	Gas Pipe	mm		Φ19.1			
Airflow Rate	m³/h			Φ38.1			
Sound Pressure Level ⁴	dB(A)			66			
Net Dimensions (WxHxD)	mm		(1340×1635×825)+(1730×1830×850)				
Packed Dimensions (WxHxD)	mm		(1405×1805×910)+(1800×2000×910)				
Net Weight	kg		284+438		366+438		
Gross Weight	kg		311+461		386+461		

Capacity	HP	52	54	56
Model		4TVH0498E8000AA	4TVH0517E8000AA	4TVH0535E8000AA
Combination		26HP+26HP	26HP+28HP	28HP+28HP
Electrical Characteristics		220V, three phase, 50 / 60Hz		
Cooling ¹	Capacity	kW	146.0	151.5
		kBtu/h	498.2	516.9
	Power Input	kW	38.22	42.54
		kW/kW	3.82	3.56
Heating ²	Capacity	kW/kW	146.0	151.5
		kBtu/h	498.2	516.9
	Power Input	kW	34.76	37.61
		COP	4.20	4.03
Connectable Indoor Unit	Max.Quantity		64	
Compressors	Quantity		50000	
Refrigerant (R-410a)	Factory Charge	kg		4
Pipe Connections ³	Liquid Pipe	mm		42
	Gas Pipe	mm	Φ19.1	
Airflow Rate	m³/h		Φ31.8	Φ41.3
Sound Pressure Level ⁴	dB(A)		66	
Net Dimensions (WxHxD)	mm		(1730×1830×850)×2	
Packed Dimensions (WxHxD)	mm		(1800×2000×910)×2	
Net Weight	kg		438×2	
Gross Weight	kg		461×2	

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Diameters given are those of the unit's stop valves.

4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Outdoor Unit - TVR Ultra

Specifications 220V

Capacity	HP	58	60	62
Model		4TVH0558E8000AA		4TVH0592E8000AA
Combination		14HP+16HP+28HP	16HP+16HP+28HP	12HP+22HP+28HP
Electrical Characteristics		220V, three phase, 50 / 60Hz		
Cooling ¹	Capacity	kW	163.5	168.5
		kBtu/h	557.9	574.9
	Power Input	kW	42.40	43.98
		kW/kW	3.86	3.83
Heating ²	Capacity	kW/kW	163.5	168.5
		kW	557.9	574.9
	Power Input	kBtu/h	38.32	39.46
		kW	4.27	
Connectable Indoor Unit	Max.Quantity		64	
Compressors	Quantity		4	5
Refrigerant (R-410a)	Factory Charge	kg	47	49
Pipe Connections ³	Liquid Pipe	mm	Φ19.1	
	Gas Pipe	mm	Φ41.3	
Airflow Rate	m ³ /h		53000	
Sound Pressure Level ⁴	dB(A)		66	
Net Dimensions (WxHxD)	mm		(1340×1635×825)×2+(1730×1830×850)	(990×1635×790)+(1340×1635×825)
Packed Dimensions (WxHxD)	mm		(1405×1805×910)×2+(1800×2000×910)	(1090×1805×860)+(1405×1805×910)+(1800×2000×910)
Net Weight	kg		284×2+438	227+366+438
Gross Weight	kg		311×2+461	248+386+461

Capacity	HP	64	66	68
Model		4TVH0614E8000AA	4TVH0631E8000AA	4TVH0650E8000AA
Combination		14HP+22HP+28HP	16HP+22HP+28HP	12HP+28HP+28HP
Electrical Characteristics		220V, three phase, 50 / 60Hz		
Cooling ¹	Capacity	kW	180.0	185.0
		kBtu/h	614.2	631.2
	Power Input	kW	47.31	48.89
		kW/kW	3.80	3.78
Heating ²	Capacity	kW/kW	180.0	185.0
		kW	614.2	631.2
	Power Input	kBtu/h	43.31	44.46
		kW	4.16	4.16
Connectable Indoor Unit	Max.Quantity		64	
Compressors	Quantity		5	
Refrigerant (R-410a)	Factory Charge	kg	51	53
Pipe Connections ³	Liquid Pipe	mm	Φ19.1	
	Gas Pipe	mm	Φ41.3	
Airflow Rate	m ³ /h		56000	61000
Sound Pressure Level ⁴	dB(A)		66	67
Net Dimensions (WxHxD)	mm		(1340×1635×825)×2+(1730×1830×850)	(990×1635×790)+(1730×1830×850)×2
Packed Dimensions (WxHxD)	mm		(1405×1805×910)×2+(1800×2000×910)	(1090×1805×860)+(1800×2000×910)×2
Net Weight	kg		284+366+438	227+438×2
Gross Weight	kg		311+386+461	248+461×2

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Diameters given are those of the unit's stop valves.

4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Outdoor Unit - TVR Ultra

Specifications 220V

Capacity	HP	70	72	74	76	78	
Model		4TVH0672E8000AA	4TVH0689E8000AA	4TVH0706E8000AA	4TVH0727E8000AA	4TVH0746E8000AA	
Combination		14HP+28HP+28HP	16HP+28HP+28HP	22HP+24HP+28HP	22HP+26HP+28HP	22HP+28HP+28HP	
Electrical Characteristics		V/Ph/Hz	220V, three phase, 50 / 60Hz				
Cooling ¹	Capacity	kW	197.0	202.0	207.0	213.0	218.5
		kBtu/h	672.2	689.2	706.3	726.8	745.5
	Power Input	kW	55.56	57.14	55.20	57.73	62.05
		kW/kW	3.55	3.54	3.75	3.69	3.52
Heating ²	Capacity	kW/kW	197.0	202.0	207.0	213.0	218.5
		kBtu/h	672.2	689.2	706.3	726.8	745.5
	Power Input	kW	48.94	50.08	49.96	52.22	55.07
		COP	4.03		4.14	4.08	3.97
Connectable Indoor Unit	Max.Quantity			64			
Compressors	Quantity		5		6		
Refrigerant (R-410a)	Factory Charge	kg	64000		67000		
Pipe Connections ³	Liquid Pipe	mm	55		59		
	Gas Pipe	mm		Φ22.2			
Airflow Rate	m ³ /h			Φ44.5			
Sound Pressure Level ⁴	dB(A)		67		68		
Net Dimensions (WxHxD)	mm			(1340×1635×825)+(1730×1830×850)×2			
Packed Dimensions (WxHxD)	mm			(1405×1805×910)+(1800×2000×910)×2			
Net Weight	kg		284+438×2		366+438×2		
Gross Weight	kg		311+461×2		311+461×2		

Capacity	HP	80	82	84
Model		4TVH0766E8000AA	4TVH0785E8000AA	4TVH0804E8000AA
Combination		26HP+26HP+28HP	26HP+28HP+28HP	28HP+28HP+28HP
Electrical Characteristics		V/Ph/Hz	220V, three phase, 50 / 60Hz	
Cooling ¹	Capacity	kW	224.5	320.0
		kBtu/h	766.0	784.8
	Power Input	kW	61.65	65.98
		kW/kW	3.64	3.49
Heating ²	Capacity	kW/kW	224.5	230.0
		kBtu/h	776.0	784.8
	Power Input	kW	54.99	57.84
		COP	4.08	3.98
Connectable Indoor Unit	Max.Quantity		64	
Compressors	Quantity		6	
Refrigerant (R-410a)	Factory Charge	kg		63
Pipe Connzctions ³	Liquid Pipe	mm		42
	Gas Pipe	mm	Φ22.2	Φ25.4
Airflow Rate	m ³ /h		Φ44.5	Φ50.8
Sound Pressure Level ⁴	dB(A)		68	
Net Dimensions (WxHxD)	mm		(1730×1830×850)×3	
Packed Dimensions (WxHxD)	mm		(1800×2000×910)×3	
Net Weight	kg		438×3	
Gross Weight	kg		461×3	

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Diameters given are those of the unit's stop valves.

4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Outdoor Unit - TVR Ultra

Specifications 220V

Capacity	HP	86	88	96
Model		4TVH0824E8000AA	4TVH0843E8000AA	4TVH0921E8000AA
Combination		20HP+22HP+22HP+22HP	22HP+22HP+22HP+22HP	24HP+24HP+24HP+24HP
Electrical Characteristics		220V, three phase, 50 / 60Hz		
Cooling ¹	Capacity	kW	240.5	246
		kBtu/h	820.8	307.1
	Power Input	kW	59.23	60.76
		kW/kW	4.06	4.05
Heating ²	Capacity	kW/kW	85.0	90.0
		kW	240.5	246
	Power Input	kBtu/h	820.8	839.6
		kW	4.26	4.21
Connectable Indoor Unit	Max.Quantity		64	53
Compressors	Quantity			8
Refrigerant (R-410a)	Factory Charge	kg	68	84
Pipe Connections ³	Liquid Pipe	mm		Φ19.1
	Gas Pipe	mm		Φ31.8
Airflow Rate	m ³ /h		28000	
Sound Pressure Level ⁴	dB(A)		64	65
Net Dimensions (WxHxD)	mm		(1340×1635×825)×4	(1730×1830×850)×4
Packed Dimensions (WxHxD)	mm		(1405×1805×910)×4	(1800×2000×910)×4
Net Weight	kg		366x4	438x4
Gross Weight	kg		386x4	461x4

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Diameters given are those of the unit's stop valves.

4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Outdoor Unit - TVR Ultra

Specifications 380V

Capacity	HP	8	10	12	14
Model		4TVH0086EE000AA	4TVH0096EE000AA	4TVH0115EE000AA	4TVH0140EE000AA
Electrical Characteristics	V/Ph/Hz		380V, three phase, 50 / 60Hz		
Cooling ¹	Capacity	kW	25.2	28.0	33.5
		kBtu/h	86.0	95.5	114.3
	Power Input	kW	4.80	5.70	7.08
	EER	kW/kW	5.25	4.91	4.73
Heating ²	Capacity	kW	25.2	28.0	33.5
		kBtu/h	86.0	95.5	114.3
	Power Input	kW	4.56	5.12	6.65
	COP	kW/kW	5.53	5.47	5.04
Connectable Indoor Unit	Max.Quantity		13	16	20
Compressors	Quantity			1	
Refrigerant (R-410a)	Factory Charge	kg		11	13
Pipe Connections ³	Liquid Pipe	mm	Φ12.7	Φ15.9	Φ15.9
	Gas Pipe	mm	Φ25.4	Φ28.6	Φ31.8
Airflow Rate	m ³ /h		11000		13000
Sound Pressure Level ⁴	dB(A)		58		60
Net Dimensions (WxHxD)	mm		990×1635×790		1340×1635×850
Packed Dimensions (WxHxD)	mm		1090×1805×860		1405×1805×910
Net Weight	kg		227		277
Gross Weight	kg		242		304

Capacity	HP	16	18	20	22
Model		4TVH0155EE000AA	4TVH0170EE000AA	4TVH0192EE000AA	4TVH0210EE000AA
Electrical Characteristics	V/Ph/Hz		380V, three phase, 50 / 60Hz		
Cooling ¹	Capacity	kW	45.0	50.0	56.0
		kBtu/h	153.5	170.6	191.1
	Power Input	kW	10.27	11.57	13.66
	EER	kW/kW	4.38	4.32	4.10
Heating ²	Capacity	kW	45.0	50.0	56.0
		kBtu/h	153.5	170.6	191.1
	Power Input	kW	9.6	10.5	12.6
	COP	kW/kW	4.68	4.75	4.46
Connectable Indoor Unit	Max.Quantity		26	29	33
Compressors	Quantity		1		2
Refrigerant (R-410a)	Factory Charge	kg	13		17
Pipe Connections ³	Liquid Pipe	mm	Φ15.9	Φ19.1	
	Gas Pipe	mm		Φ31.8	
Airflow Rate	m ³ /h	13000		17000	
Sound Pressure Level ⁴	dB(A)	61	62		63
Net Dimensions (WxHxD)	mm	1340×1635×850		1340×1635×825	
Packed Dimensions (WxHxD)	mm			1405×1805×910	
Net Weight	kg	227		348	
Gross Weight	kg	304		368	

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Diameters given are those of the unit's stop valves.

4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Outdoor Unit - TVR Ultra

Specifications 380V

Capacity	HP	24	26	28
Model		4TVH0229EE000AA	4TVH0249EE000AA	4TVH0268EE000AA
Electrical Characteristics	V/Ph/Hz		380V, three phase, 50 / 60Hz	
Cooling ¹	Capacity	kW	67.0	73.0
		kBtu/h	228.6	249.1
	Power Input	kW	16.58	19.11
	EER	kW/kW	4.04	3.82
Heating ²	Capacity	kW	67.0	73.0
		kBtu/h	228.6	249.1
	Power Input	kW	15.12	17.38
	COP	kW/kW	4.43	4.20
Connectable Indoor Unit	Max.Quantity		39	43
Compressors	Quantity			2
Refrigerant (R-410a)	Factory Charge	kg		22
Pipe Connections ³	Liquid Pipe	mm	Φ19.1	Φ22.2
	Gas Pipe	mm	Φ31.8	Φ31.8
Airflow Rate	m ³ /h			25000
Sound Pressure Level ⁴	dB(A)			64
Net Dimensions (WxHxD)	mm			1730×1830×850
Packed Dimensions (WxHxD)	mm			1800×2000×910
Net Weight	kg			430
Gross Weight	kg			453

Capacity	HP	30	32
Model		4TVH0290EE000AA	4TVH0307EE000AA
Electrical Characteristics	V/Ph/Hz		380V, three phase, 50 / 60Hz
Cooling ¹	Capacity	kW	85.0
		kBtu/h	290.0
	Power Input	kW	25.68
	EER	kW/kW	3.31
Heating ²	Capacity	kW	85.0
		kBtu/h	290.0
	Power Input	kW	22.55
	COP	kW/kW	3.77
Connectable Indoor Unit	Max.Quantity		50
Compressors	Quantity		2
Refrigerant (R-410a)	Factory Charge	kg	25
Pipe Connections ³	Liquid Pipe	mm	Φ22.2
	Gas Pipe	mm	Φ38.1
Airflow Rate	m ³ /h		24000
Sound Pressure Level ⁴	dB(A)		64
Net Dimensions (WxHxD)	mm		1730×1830×850
Packed Dimensions (WxHxD)	mm		1800×2000×910
Net Weight	kg		475
Gross Weight	kg		507

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Diameters given are those of the unit's stop valves.

4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Outdoor Unit - TVR Ultra

Specifications 380V

Capacity	HP	34	36	38	40	
Model		4TVH0324EE000AA	4TVH0346EE000AA	4TVH0363EE000AA	4TVH0382EE000AA	
Combination Type		12HP+22HP	14HP+22HP	16HP+22HP	12HP+28HP	
Electrical Characteristics	V/Ph/Hz		380V, three phase, 50 / 60Hz			
Cooling ¹	Capacity	kW	95.0	101.5	106.5	112.0
		kBtu/h	324.1	346.3	363.4	382.1
	Power Input	kW	22.3	23.9	25.5	30.5
	EER	kW/kW	4.27	4.25	4.18	3.67
Heating ²	Capacity	kW	95.0	101.5	106.5	112.0
		kBtu/h	324.1	346.3	363.4	382.1
	Power Input	kW	21.3	23.1	24.2	26.9
	COP	kW/kW	4.47	4.40	4.40	4.17
Connectable Indoor Unit	Max.Quantity	56	59	63	64	
Compressors	Quantity			3		
Refrigerant (R-410a)	Factory Charge	kg	11+17	13+17	11+22	
Pipe Connections ³	Liquid Pipe	mm		Φ19.1		
	Gas Pipe	mm	Φ31.8		Φ38.1	
Airflow Rate	m ³ /h	28000		30000	36000	
Sound Pressure Level ⁴	dB(A)			65		
Net Dimensions (WxHxD)	mm	(990×1635×790)+(1340×1635×825)		(1340×1635×850)+(1340×1635×825)	(990×1635×790)+(1730×1830×850)	
Packed Dimensions (WxHxD)	mm	(1090×1805×860)+(1405×1805×		(1405×1805×910)×2	(1090×1805×860)+(1800×2000×	
Net Weight	kg	227+348		277+348	277	
Gross Weight	kg	242+368		304+368	304	

Outdoor Unit

Capacity	HP	42	44	46	48	
Model		4TVH0401EE000AA	4TVH0420EE000AA	4TVH0438EE000AA	4TVH0459EE000AA	
Combination Type		20HP+22HP	22HP+22HP	22HP+24HP	22HP+26HP	
Electrical Characteristics	V/Ph/Hz		380V, three phase, 50 / 60Hz			
Cooling ¹	Capacity	kW	117.5	123.0	128.5	134.5
		kBtu/h	400.9	419.7	438.4	458.9
	Power Input	kW	28.8	30.4	31.8	34.3
	EER	kW/kW	4.07	4.05	4.04	3.92
Heating ²	Capacity	kW	117.5	128.5	128.5	134.5
		kBtu/h	400.9	438.4	438.4	458.9
	Power Input	kW	27.2	29.2	29.7	32.0
	COP	kW/kW	4.33	4.21	4.32	4.20
Connectable Indoor Unit	Max.Quantity			64		
Compressors	Quantity			4		
Refrigerant (R-410a)	Factory Charge	kg	17x2		17+22	
Pipe Connections ³	Liquid Pipe	mm		Φ19.1		
	Gas Pipe	mm		Φ38.1		
Airflow Rate	m ³ /h	34000			42000	
Sound Pressure Level ⁴	dB(A)			66		
Net Dimensions (WxHxD)	mm	(1340×1635×825)×2		(1340×1635×825)+(1730×1830×850)		
Packed Dimensions (WxHxD)	mm	(1405×1805×910)×2		(1405×1805×910)+(1800×2000×910)		
Net Weight	kg	348x2			348+430	
Gross Weight	kg	348x2			368+453	

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Diameters given are those of the unit's stop valves.

4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Outdoor Unit - TVR Ultra

Specifications 380V

Capacity	HP	50	52	54	56	
Model		4TVH0478EE000AA	4TVH0498EE000AA	4TVH0517EE000AA	4TVH0535EE000AA	
Combination Type		22HP+28HP	26HP+26HP	26HP+28HP	28HP+28HP	
Electrical Characteristics	V/Ph/Hz		380V, three phase, 50 / 60Hz			
Cooling ¹	Capacity	kW	140.0	146.0	151.5	157.0
		kBtu/h	477.7	498.2	516.9	535.7
Heating ²	Power Input	kW	38.6	38.2	42.5	46.9
	EER	kW/kW	3.36	3.82	3.56	3.35
	Capacity	kW	140.0	146.0	151.5	157.0
Heating ²		kBtu/h	477.7	498.2	516.9	535.7
	Power Input	kW	34.8	35.8	37.6	40.5
	COP	kW/kW	4.02	4.20	4.03	3.88
Connectable Indoor Unit	Max.Quantity		64			
Compressors	Quantity		4			
Refrigerant (R-410a)	Factory Charge	kg	17+22		22x2	
Pipe Connections ³	Liquid Pipe	mm		Φ19.1		
	Gas Pipe	mm		Φ38.1		Φ41.3
Airflow Rate	m ³ /h	42000		50000		
Sound Pressure Level ⁴	dB(A)		66			
Net Dimensions (WxHxD)	mm	(1340×1635×825)+ (1730×1830×850)		(1730×1830×850)×2		
Packed Dimensions (WxHxD)	mm	(1405×1805×910)+ (1800×2000×910)		(1800×2000×910)×2		
Net Weight	kg	348+430		430x2		
Gross Weight	kg	368+453		453x2		

Capacity	HP	58	60	62	64	
Model		4TVH0558EE000AA	4TVH0575EE000AA	4TVH0592EE000AA	4TVH0614EE000AA	
Combination Type		28HP+30HP	28HP+32HP	30HP+32HP	32HP+32HP	
Electrical Characteristics	V/Ph/Hz		380V, three phase, 50 / 60Hz			
Cooling ¹	Capacity	kW	163.5	168.5	175.0	180.0
		kBtu/h	557.9	574.9	597.1	614.2
Heating ²	Power Input	kW	49.1	51.7	54.0	56.6
	EER	kW/kW	3.33	3.26	3.24	3.18
	Capacity	kW	163.5	168.5	175.0	180.0
Heating ²		kBtu/h	557.9	574.9	597.1	614.2
	Power Input	kW	42.8	45.5	47.8	50.6
	COP	kW/kW	3.82	3.70	3.66	3.56
Connectable Indoor Unit	Max.Quantity		64			
Compressors	Quantity		4			
Refrigerant (R-410a)	Factory Charge	kg	22+25		25x2	
Pipe Connections ³	Liquid Pipe	mm		Φ19.1		
	Gas Pipe	mm		Φ38.1		
Airflow Rate	m ³ /h	34000		42000		
Sound Pressure Level ⁴	dB(A)		66			
Net Dimensions (WxHxD)	mm		(1730×1830×850)×2			
Packed Dimensions (WxHxD)	mm		(1800×2000×910)×2			
Net Weight	kg	430+475		475x2		
Gross Weight	kg	453+507		507x2		

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Diameters given are those of the unit's stop valves.

4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Outdoor Unit - TVR Ultra

Specifications 380V

Capacity	HP	66	68	70	72
Model		4TVH0631EE000AA	4TVH0650EE000AA	4TVH0672EE000AA	4TVH0689EE000AA
Combination Type		12HP+22HP+32HP	14HP+22HP+32HP	16HP+22HP+32HP	12HP+28HP+32HP
Electrical Characteristics					
Cooling ¹	Capacity	V/Ph/Hz	380V, three phase, 50 / 60Hz		
	kW	185.0	191.5	196.5	202.0
	kBtu/h	631.2	653.4	670.5	689.2
	Power Input	kW	22.3	23.9	25.5
Heating ²	EER	kW/kW	4.27	4.25	4.18
	Capacity	kW	185.0	191.5	196.5
	kBtu/h	631.2	653.4	670.5	689.2
	Power Input	kW	21.3	23.1	24.2
COP		kW/kW	4.47	4.40	4.40
Connectable Indoor Unit	Max.Quantity		64		
Compressors	Quantity		5		
Refrigerant (R-410a)	Factory Charge	kg	11+17+25	13+17+25	11+22+25
Pipe Connections ³	Liquid Pipe	mm	Φ19.1	Φ22.2	
	Gas Pipe	mm	Φ41.3	Φ44.5	
Airflow Rate	m ³ /h		52000	54000	60000
Sound Pressure Level ⁴	dB(A)		67		
Net Dimensions (WxHxD)	mm	(990×1635×790)+ (1340×1635×825)+ (1730×1830×850)	(1340×1635×850)+(1340×1635×825) +(1730×1830×850)	(990×1635×790)+ (1730×1830×850) ×2	
Packed Dimensions (WxHxD)	mm	(1090×1805×860)+ (1405×1805×910)+ (1800×2000×910)	(1405×1805×910)×2+(1800×2000×910)	(1090×1805×860)+ (1800×2000×910)×2	
Net Weight	kg	227+348+475	277+348+475	227+430+475	
Gross Weight	kg	242+368+507	304+368+507	242+453+507	

Capacity	HP	74	76	78	80
Model		4TVH0706EE000AA	4TVH0727EE000AA	4TVH0746EE000AA	4TVH0766EE000AA
Combination Type		20HP+22HP+32HP	22HP+22HP+32HP	22HP+24HP+32HP	22HP+26HP+32HP
Electrical Characteristics					
Cooling ¹	Capacity	V/Ph/Hz	380V, three phase, 50 / 60Hz		
	kW	207.5	213.0	218.5	224.5
	kBtu/h	708.0	726.8	745.5	766.0
	Power Input	kW	28.8	30.4	31.8
Heating ²	EER	kW/kW	4.07	4.05	4.04
	Capacity	kW	207.5	213.0	218.5
	kBtu/h	708.0	726.8	745.5	766.0
	Power Input	kW	27.2	29.2	29.7
COP		kW/kW	4.33	4.21	4.32
Connectable Indoor Unit	Max.Quantity		64		
Compressors	Quantity		6		
Refrigerant (R-410a)	Factory Charge	kg	7x2+25	17+22+25	
Pipe Connections ³	Liquid Pipe	mm		Φ22.2	
	Gas Pipe	mm		Φ44.5	
Airflow Rate	m ³ /h		58000		66000
Sound Pressure Level ⁴	dB(A)		68		
Net Dimensions (WxHxD)	mm	(1340×1635×825)×2+(1730×1830×850)	(1340×1635×825)+(1730×1830×850)×2		
Packed Dimensions (WxHxD)	mm	(1405×1805×910)×2+(1800×2000×910)	(1405×1805×910)+(1800×2000×910)×2		
Net Weight	kg	348x2+475		348+430+475	
Gross Weight	kg	368x2+507		368+453+507	

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Diameters given are those of the unit's stop valves.

4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Outdoor Unit - TVR Ultra

Specifications 380V

Capacity	HP	82	84	86	88	
Model		4TVH0785EE000AA	4TVH0804EE000AA	4TVH0824EE000AA	4TVH0843EE000AA	
Combination Type		22HP+28HP+32HP	26HP+26HP+32HP	26HP+28HP+32HP	28HP+28HP+32HP	
Electrical Characteristics		V/Ph/Hz	380V, three phase, 50 / 60Hz			
Cooling ¹	Capacity	kW	230.0	236.0	241.5	247.0
		kBtu/h	784.8	805.2	824.0	842.8
	Power Input	kW	38.6	38.2	42.5	46.9
	EER	kW/kW	3.63	3.82	3.56	3.35
Heating ²	Capacity	kW	230.0	236.0	241.5	247.0
		kBtu/h	784.8	805.2	824.0	842.8
	Power Input	kW	34.8	34.8	37.6	40.5
	COP	kW/kW	4.02	4.20	4.03	3.88
Connectable Indoor Unit	Max.Quantity			64		
Compressors	Quantity			6		
Refrigerant (R-410a)	Factory Charge	kg	17+22+25		22x2+25	
Pipe Connections ³	Liquid Pipe	mm	Φ22.2		Φ25.4	
	Gas Pipe	mm	Φ44.5		Φ50.8	
Airflow Rate	m ³ /h		66000		74000	
Sound Pressure Level ⁴	dB(A)			68		
Net Dimensions (WxHxD)	mm	(1340×1635×825)+ (1730×1830×850)×2			(1730×1830×850)×3	
Packed Dimensions (WxHxD)	mm	(1405×1805×910)+ (1800×2000×910)×2			(1800×2000×910)×3	
Net Weight	kg	348+430+475			430x2+475	
Gross Weight	kg	368+453+507			453x2+507	

Capacity	HP	90	92	94	96	
Model		4TVH0865EE000AA	4TVH0882EE000AA	4TVH0904EE000AA	4TVH0921EE000AA	
Combination Type		28HP+30HP+32HP	28HP+32HP+32HP	30HP+32HP+32HP	32HP+32HP+32HP	
Electrical Characteristics		V/Ph/Hz	380V, three phase, 50 / 60Hz			
Cooling ¹	Capacity	kW	253.5	258.5	265.0	270.0
		kBtu/h	864.9	882.0	904.2	921.2
	Power Input	kW	49.1	51.7	54.0	56.6
	EER	kW/kW	3.33	3.26	3.24	3.18
Heating ²	Capacity	kW	253.5	258.5	265.0	270.0
		kBtu/h	864.9	882.0	904.2	921.2
	Power Input	kW	42.8	45.5	47.8	50.6
	COP	kW/kW	3.82	3.70	3.66	3.56
Connectable Indoor Unit	Max.Quantity			64		
Compressors	Quantity			6		
Refrigerant (R-410a)	Factory Charge	kg	22+25x2		25+25x2	
Pipe Connections ³	Liquid Pipe	mm		Φ25.4		
	Gas Pipe	mm		Φ50.8		
Airflow Rate	m ³ /h		73000		72000	
Sound Pressure Level ⁴	dB(A)			68		
Net Dimensions (WxHxD)	mm			(1730×1830×850)×3		
Packed Dimensions (WxHxD)	mm			(1800×2000×910)×3		
Net Weight	kg	348x2			348+430	
Gross Weight	kg	348x2			368+453	

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Diameters given are those of the unit's stop valves.

4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Outdoor Units TVR PRO

Specifications 220V



Capacity	HP	8	10	12	14	16
Model		4TVY0077H8000AA	4TVY0096H8000AA	4TVY0115H8000AA	4TVY0140H8000AA	4TVY0155H8000AA
Combination Type						
Electrical Characteristics	V/F/Hz					
Cooling ¹	Capacity	kW	22.4	28	33.5	40
		kBtu/h	76.5	95.6	114.4	136.6
	Power Input	kW	5.08	6.68	8.85	10.30
	EER	kW/kW	4.41	4.19	3.79	3.88
Connectable Indoor Unit	Max.Quantity		13	16	20	23
Compressors	Quantity				1	
Refrigerant (R-410a)	Factory Charge	kg		8(17.6)		11(24.3)
Pipe Connections ³	Liquid Pipe	mm		Φ12.7(1/2)		Φ15.9(5/8)
	Gas Pipe	mm		Φ25.4(1)	Φ28.6(1-1/8)	Φ31.8(1-1/4)
Sound Pressure Level ⁴	dB(A)		57	58	60	61
Net Dimensions (WxHxD)		mm			960×1615×765	
Packed Dimensions (WxHxD)		mm			1025×1790×830	
Net Weight	kg			193		200
Gross Weight	kg			209		216

Capacity	HP	18	20	22	24	26
Model		4TVY0170H8000AA	4TVY0192H8000AA	4TVY0210H8000AA	4TVY0229H8000AA	4TVY0249H8000AA
Combination Type						
Electrical Characteristics	V/F/Hz					
Cooling ¹	Capacity	kW	50	56	61.5	67
		kBtu/h	170.8	191.3	210	228.8
	Power Input	kW	13.70	15.80	19.65	20.10
	EER	kW/kW	3.65	3.54	3.13	3.33
Connectable Indoor Unit	Max.Quantity		29	33	36	39
Compressors	Quantity				2	
Refrigerant (R-410a)	Factory Charge	kg		13(28.7)		19(41.9)
Pipe Connections ³	Liquid Pipe	mm		Φ15.9(5/8)		Φ19.1(3/4)
	Gas Pipe	mm		Φ31.8(1-1/4)		Φ34.9(1-3/8)
Sound Pressure Level ⁴	dB(A)		62	63		64
Net Dimensions (WxHxD)		mm		1250×1615×765		1585×1615×765
Packed Dimensions (WxHxD)		mm		1305×1790×820		1650×1810×840
Net Weight	kg			296		352
Gross Weight	kg			313		376

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Diameters given are those of the unit's stop valves.

4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Outdoor Units TVR PRO

Specifications 220V

Capacity	HP	28	30	32	34	36
Model		4TVY0268H8000AA	4TVY0290H8000AA	4TVY0307H8000AA	4TVY0324H8000AA	4TVY0345H8000AA
Combination Type				16HP+16HP	22HP+12HP	20HP+16HP
Electrical Characteristics						
Cooling ¹	V/F/Hz	220V, trifásico, 50/60 Hz				
	Capacity	kW	78.5	85	90	95
		kBtu/h	268.1	290.3	307.4	324.4
	Power Input	kW	24.06	27.30	24.00	28.50
Connectable Indoor Unit	EER	kW/kW	3.26	3.11	3.75	3.33
	Max.Quantity		46	50	53	56
	Compressors	Quantity		2		3
	Refrigerant (R-410a)	Factory Charge	kg	19(41.9)	11×2(24×2)	13+8(28.7+17.6)
Pipe Connections ³	Liquid Pipe	mm		Φ19.1(3/4)		
	Gas Pipe	mm	Φ34.9(1-3/8)	Φ31.8(1-1/4)		Φ38.1(1-1/2)
Sound Pressure Level ⁴		dB(A)		64		65
Net Dimensions (WxHxD)		mm	1585×1615×765	(960×1615×765)×2	(1250×1615×765)+(960×1615×765)	
Packed Dimensions (WxHxD)		mm	1650×1810×840	(1025×1790×830)×2	(1305×1790×820)+(1025×1790×830)	
Net Weight		kg	352	193×2	296+193	
Gross Weight		kg	376	209×2	313+209	

Capacity	HP	38	40	42	44	46		
Model		4TVY0364H8000AA	4TVY0383H8000AA	4TVY0403H8000AA	4TVY0422H8000AA	4TVY0444H8000AA		
Combination Type		22HP+16HP	24HP+16HP	26HP+16HP	28HP+16HP	30HP+16HP		
Electrical Characteristics								
Cooling ¹	V/F/Hz	220V, trifásico, 50/60 Hz						
	Capacity	kW	106.5	112	118	123.5		
		kBtu/h	363.7	382.5	403	421.8		
	Power Input	kW	31.65	32.10	34.05	36.06		
Connectable Indoor Unit	EER	kW/kW	3.36	3.49	3.47	3.42		
	Max.Quantity		63		64			
	Compressors	Quantity			3			
	Refrigerant (R-410a)	Factory Charge	kg	13+11(28.7+24.3)	19+11(41.9+24.3)			
Pipe Connections ³	Liquid Pipe	mm		Φ19.1(3/4)				
	Gas Pipe	mm	Φ38.1	Φ38.1(1-1/2)				
Sound Pressure Level ⁴		dB(A)		65		66		
Net Dimensions (WxHxD)		mm	(1250×1615×765)+(960×1615×765)	(1585×1615×765)+(960×1615×765)		(1585×1615×765)+(960×1615×765)		
Packed Dimensions (WxHxD)		mm	(1305×1790×820)+(1025×1790×830)	(1650×1810×840)+(1025×1790×830)		(1650×1810×840)+(1025×1790×830)		
Net Weight		kg	296+193	352+193				
Gross Weight		kg	313+209	376+209				

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Diameters given are those of the unit's stop valves.

4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Outdoor Units TVR PRO

Specifications 220V

Capacity	HP	48	50	52	54	56
Model		4TVY0459H8000AA	4TVY0478H8000AA	4TVY0500H8000AA	4TVY0517H8000AA	4TVY0536H8000AA
Combination Type		26HP+22HP	28HP+22HP	30HP+22HP	28HP+26HP	28HP+28HP
Electrical Characteristics	V/F/Hz		220V, trifásico, 50/60 Hz			
Cooling ¹	Capacity	kW	134.5	140	146.5	151.5
		kBtu/h	459.3	478.1	500.3	517.4
	Power Input	kW	41.70	43.71	46.95	46.11
	EER	kW/kW	3.23	3.20	3.12	3.29
Connectable Indoor Unit	Max.Quantity		64			
Compressors	Quantity		4			
Refrigerant (R-410a)	Factory Charge	kg	19+13(41.9+28.7)		19×2(41.9×2)	
Pipe Connections ³	Liquid Pipe	mm		Φ19.1(3/4)		
	Gas Pipe	mm	Φ38.1(1-1/2)			Φ41.2(1-5/8)
Sound Pressure Level ⁴	dB(A)		66			
Net Dimensions (WxHxD)	mm	(1585×1615×765)+(1250×1615×765)		(1585×1615×765)×2		
Packed Dimensions (WxHxD)	mm	(1650×1810×840)+(1305×1790×820)		(1650×1810×840)×2		
Net Weight	kg	352+193			352×2	
Gross Weight	kg	376+209			376×2	

Capacity	HP	58	60	62	64	66
Model		4TVY0558H8000AA	4TVY0581H8000AA	4TVY0598H8000AA	4TVY0613H8000AA	4TVY0632H8000AA
Combination Type		30HP+28HP	30HP+30HP	30HP+16HP+16HP	26HP+22HP+16HP	28HP+22HP+16HP
Electrical Characteristics	V/F/Hz		380V, trifásico, 50/60 Hz			
Cooling ¹	Capacity	kW	163.5	170	175	179.5
		kBtu/h	558.4	580.6	597.8	613
	Power Input	kW	51.36	54.60	51.30	53.70
	EER	kW/kW	3.18	3.11	3.41	3.34
Connectable Indoor Unit	Max.Quantity		64			
Compressors	Quantity		4		5	
Refrigerant (R-410a)	Factory Charge	kg	19×2(41.9×2)	19+11×2(41.9+24.3×2)	19+13+11(41.9+28.7+24.3)	
Pipe Connections ³	Liquid Pipe	mm		Φ19.1(3/4)		
	Gas Pipe	mm		Φ41.2(1-5/8)		
Sound Pressure Level ⁴	dB(A)		66			
Net Dimensions (WxHxD)	mm	(1585×1615×765)×2		(1585×1615×765)+(960×1615×765)×2	(1585×1615×765)+(1250×1615×765)+(960×1615×765)	
Packed Dimensions (WxHxD)	mm	(1650×1810×840)×2		(1650×1810×840)+(1025×1790×830)×2	(1650×1810×840)+(1305×1790×820)+(1025×1790×830)	
Net Weight	kg	338×2		352+193×2	352+296+193	
Gross Weight	kg	362×2		376+209×2	376+313+209	

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Diameters given are those of the unit's stop valves.

4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Outdoor Units TVR PRO

Specifications 220V

Capacity	HP	68	70	72	74	76	78			
Model		4TVY0654H8000AA	4TVY0671H8000AA	4TVY0690H8000AA	4TVY0712H8000AA	4TVY0734H8000AA	4TVY0746H8000AA			
Combination Type		30HP+22HP+16HP	28HP+26HP+16HP	28HP+28HP+16HP	30HP+28HP+16HP	30HP+30HP+16HP	28HP+28HP+22HP			
Electrical Characteristics		220V, trifásico, 50/60 Hz								
Cooling ¹	Capacity	kW	191.5	196.5	202	208.5	215			
		kBtu/h	654.1	671.1	689.9	712.2	734.4			
	Power Input	kW	58.95	58.11	60.12	63.36	66.60			
	EER	kW/kW	3.25	3.38	3.36	3.29	3.23			
Connectable Indoor Unit	Max.Quantity		64							
Compressors	Quantity		5							
Refrigerant (R-410a)	Factory Charge	kg	19+13+11 (41.9+28.7+24.3)	19x2+11(41.9x2+24.3)			19x2+11 (41.9x2+24.3)			
Pipe Connections ³	Liquid Pipe	mm	Φ22.2(7/8)							
	Gas Pipe	mm	Φ44.5(1-3/4)							
Sound Pressure Level ⁴		dB(A)	67	68						
Net Dimensions (WxHxD)		mm	(1585x1615x765)+ (1250x1615x765)+ (960x1615x765)	(1585x1615x765)x2+(960x1615x765)			(1585x1615x765)x2 +(960x1615x76) +(1250x1615x765)			
Packed Dimensions (WxHxD)		mm	(1650x1810x840)+ (1305x1790x820)+ (1025x1790x830)	(1650x1810x840)x2+(1025x1790x830)			(1650x1810x840)x2 +(1025x1790x830) (1650x1810x840)x2 +(1305x1790x820)			
Net Weight	kg	352+296+193		352x2+193						
Gross Weight	kg	376+313+209		376x2+209						

Capacity	HP	80	82	84	86	88	90		
Model		4TVY0768H8000AA	4TVY0791H8000AA	4TVY0804H8000AA	4TVY0827H8000AA	4TVY0849H8000AA	4TVY0871H8000AA		
Combination Type		30HP+28HP+22HP	30HP+30HP+22HP	28HP+28HP+28HP	30HP+28HP+28HP	30HP+30HP+28HP	30HP+30HP+30HP		
Electrical Characteristics		220V, trifásico, 50/60 Hz							
Cooling ¹	Capacity	kW	225	231.5	235.5	242	248.5		
		kBtu/h	768.4	790.6	804.3	826.5	848.7		
	Power Input	kW	71.01	74.25	72.18	75.42	78.66		
	EER	kW/kW	3.17	3.12	3.26	3.21	3.16		
Connectable Indoor Unit	Max.Quantity		64						
Compressors	Quantity		6						
Refrigerant (R-410a)	Factory Charge	kg	19x2+13(41.9x2+28.7)			19x3(41.9x3)			
Pipe Connections ³	Liquid Pipe	mm	Φ22.2(7/8)						
	Gas Pipe	mm	Φ44.5(1-3/4)						
Sound Pressure Level ⁴		dB(A)	68						
Net Dimensions (WxHxD)		mm	(1585x1615x765)x2+(1250x1615x765)			(1585x1615x765)x3			
Packed Dimensions (WxHxD)		mm	(1650x1810x840)x2+(1305x1790x820)			(1650x1810x840)x3			
Net Weight	kg	352x2+193		352x3					
Gross Weight	kg	376x2+209		376x3					

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Diameters given are those of the unit's stop valves.

4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Outdoor Units TVR PRO

Specifications 380V

Capacity	HP	8	10	12	14	16
Model		4TVY0077HE000AA	4TVY0096HE000AA	4TVY0115HE000AA	4TVY0140HE000AA	4TVY0155HE000AA
Combination Type						
Electrical Characteristics	V/F/Hz			380V, trifásico, 50/60 Hz		
Cooling ¹	Capacity	kW	22.4	28	33.5	40
		kBtu/h	76.5	95.6	114.4	136.6
	Power Input	kW	5.13	6.75	9.03	10.42
	EER	kW/kW	4.37	4.15	3.71	3.84
Connectable Indoor Unit	Max.Quantity		13	16	20	23
Compressors	Quantity				1	
Refrigerant (R-410a)	Factory Charge	kg		8		11
Pipe Connections ³	Liquid Pipe	mm	Φ12.7		Φ15.9	
	Gas Pipe	mm	Φ25.4	Φ28.6		Φ31.8
Sound Pressure Level ⁴	dB(A)		57	58	60	61
Net Dimensions (WxHxD)	mm			960×1615×765		
Packed Dimensions (WxHxD)	mm			1025×1790×830		
Net Weight	kg			188		197
Gross Weight	kg			204		213

Capacity	HP	18	20	22	24	26
Model		4TVY0170HE000AA	4TVY0192HE000AA	4TVY0210HE000AA	4TVY0229HE000AA	4TVY0249HE000AA
Combination Type						
Electrical Characteristics	V/F/Hz			380V, trifásico, 50/60 Hz		
Cooling ¹	Capacity	kW	50	56	61.5	67
		kBtu/h	170.8	191.3	210	228.8
	Power Input	kW	14.68	17.41	19.95	20.65
	EER	kW/kW	3.41	3.22	3.08	3.24
Connectable Indoor Unit	Max.Quantity		29	33	36	39
Compressors	Quantity			2		
Refrigerant (R-410a)	Factory Charge	kg		13		19
Pipe Connections ³	Liquid Pipe	mm	Φ15.9	Φ19.1		Φ22.2
	Gas Pipe	mm	Φ31.8	Φ31.8		Φ31.8
Sound Pressure Level ⁴	dB(A)		62	63		64
Net Dimensions (WxHxD)	mm		1250×1615×765		1585×1615×765	
Packed Dimensions (WxHxD)	mm		1305×1790×820		1650×1810×840	
Net Weight	kg		278		338	
Gross Weight	kg		297		362	

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Diameters given are those of the unit's stop valves.

4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Outdoor Units TVR PRO

Specifications 380V

Capacity	HP	28	30	32	34	36
Model		4TVY0268HE000AA	4TVY0290HE000AA	4TVY0307HE000AA	4TVY0324HE000AA	4TVY0345HE000AA
Combination Type				16HP+16HP	22HP+12HP	20HP+16HP
Electrical Characteristics	V/F/Hz		380V, trifásico, 50/60 Hz			
Cooling ¹	Capacity	kW	78.5	85	90	95
		kBtu/h	268.1	290.3	307.4	324.4
	Power Input	kW	25.48	28.90	24.30	28.98
	EER	kW/kW	3.08	2.94	3.70	3.28
Connectable Indoor Unit	Max.Quantity		46	50	53	56
Compressors	Quantity			2		3
Refrigerant (R-410a)	Factory Charge	kg		19	11×2	13+8
Pipe Connections ³	Liquid Pipe	mm			Φ19.1	
	Gas Pipe	mm	Φ31.8	Φ38.1	Φ31.8	Φ38.1
Sound Pressure Level ⁴	dB(A)			64		65
Net Dimensions (WxHxD)	mm		1585×1615×765	(960×1615×765)×2	(1250×1615×765)+(960×1615×765)	
Packed Dimensions (WxHxD)	mm		1650×1810×840	(1025×1790×830)×2	(1305×1790×820)+(1025×1790×830)	
Net Weight	kg		338	188×2		278+188
Gross Weight	kg		362	204×2		297+204

Capacity	HP	38	40	42	44	46
Model		4TVY0364HE000AA	4TVY0383HE000AA	4TVY0403HE000AA	4TVY0422HE000AA	4TVY0444HE000AA
Combination Type		22HP+16HP	24HP+16HP	26HP+16HP	28HP+16HP	30HP+16HP
Electrical Characteristics	V/F/Hz		380V, trifásico, 50/60 Hz			
Cooling ¹	Capacity	kW	106.5	112	118	123.5
		kBtu/h	363.7	382.5	403	421.8
	Power Input	kW	32.10	32.80	34.95	37.63
	EER	kW/kW	3.32	3.41	3.38	3.28
Connectable Indoor Unit	Max.Quantity		63		64	
Compressors	Quantity				3	
Refrigerant (R-410a)	Factory Charge	kg	13+11		19+11	
Pipe Connections ³	Liquid Pipe	mm			Φ19.1	
	Gas Pipe	mm	Φ38.1		Φ38.1	
Sound Pressure Level ⁴	dB(A)			65		66
Net Dimensions (WxHxD)	mm	(1250×1615×765)+(960×1615×765)		(1585×1615×765)+(960×1615×765)		(1585×1615×765)+(960×1615×765)
Packed Dimensions (WxHxD)	mm	(1305×1790×820)+(1025×1790×830)		(1650×1810×840)+(1025×1790×830)		(1650×1810×840)+(1025×1790×830)
Net Weight	kg	278+188		338+188		
Gross Weight	kg	297+204		362+204		

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Diameters given are those of the unit's stop valves.

4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Outdoor Units TVR PRO

Specifications 380V

Capacity	HP	48	50	52	54	56	
Model		4TVY0459HE000AA	4TVY0478HE000AA	4TVY0500HE000AA	4TVY0517HE000AA	4TVY0536HE000AA	
Combination Type		26HP+22HP	28HP+22HP	30HP+22HP	28HP+26HP	28HP+28HP	
Electrical Characteristics	V/F/Hz		380V, trifásico, 50/60 Hz				
Cooling ¹	Capacity	kW	134.5	140	146.5	151.5	157
		kBtu/h	459.3	478.1	500.3	517.4	536.2
	Power Input	kW	42.75	45.43	48.85	48.28	50.96
	EER	kW/kW	3.15	3.08	3.00	3.14	3.08
Connectable Indoor Unit	Max.Quantity		64				
Compressors	Quantity		4				
Refrigerant (R-410a)	Factory Charge	kg	19+13			19×2	
Pipe Connections ³	Liquid Pipe	mm	Φ19.1				
	Gas Pipe	mm	Φ38.1				
Sound Pressure Level ⁴	dB(A)		66				
Net Dimensions (WxHxD)	mm		(1585×1615×765)+(1250×1615×765)			(1585×1615×765)×2	
Packed Dimensions (WxHxD)	mm		(1650×1810×840)+(1305×1790×820)			(1650×1810×840)×2	
Net Weight	kg		338+188			338×2	
Gross Weight	kg		362+204			362×2	

Capacity	HP	58	60	62	64	66			
Model		4TVY0558HE000AA	4TVY0581HE000AA	4TVY0598HE000AA	4TVY0613HE000AA	4TVY0632HE000AA			
Combination Type		30HP+28HP	30HP+30HP	30HP+16HP+16HP	26HP+22HP+16HP	28HP+22HP+16HP			
Electrical Characteristics	V/F/Hz		380V, trifásico, 50/60 Hz						
Cooling ¹	Capacity	kW	163.5	170	175	179.5	101		
		kBtu/h	558.4	580.6	597.8	613	345		
	Power Input	kW	54.38	57.80	53.20	54.90	29.56		
	EER	kW/kW	3.01	2.94	3.29	3.27	3.42		
Connectable Indoor Unit	Max.Quantity		64						
Compressors	Quantity		4			5			
Refrigerant (R-410a)	Factory Charge	kg	19×2			19+13+11			
Pipe Connections ³	Liquid Pipe	mm	Φ19.1						
	Gas Pipe	mm	Φ41.2						
Sound Pressure Level ⁴	dB(A)		66						
Net Dimensions (WxHxD)	mm		(1585×1615×765)×2			(1585×1615×765)+(1250×1615×765)+(960×1615×765)×2			
Packed Dimensions (WxHxD)	mm		(1650×1810×840)×2			(1650×1810×840)+(1305×1790×820)+(1025×1790×830)×2			
Net Weight	kg		338×2			338+278+197			
Gross Weight	kg		362×2			362+297+213			

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Diameters given are those of the unit's stop valves.

4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Outdoor Units TVR PRO

Specifications 380V

Capacity	HP	68	70	72	74	76	78					
Model		4TVY0654HE000AA	4TVY0671HE000AA	4TVY0690HE000AA	4TVY0712HE000AA	4TVY0734HE000AA	4TVY0746HE000AA					
Combination Type		30HP+22HP+16HP	28HP+26HP+16HP	28HP+28HP+16HP	30HP+28HP+16HP	30HP+30HP+16HP	28HP+28HP+22HP					
Electrical Characteristics		V/F/Hz	380V, trifásico, 50/60 Hz									
Cooling ¹	Capacity	kW	191.5	196.5	202	208.5	215	218.5				
		kBtu/h	654.1	671.1	689.9	712.2	734.4	746.2				
	Power Input	kW	61.00	60.43	63.11	66.53	69.95	70.91				
	EER	kW/kW	3.14	3.25	3.20	3.13	3.07	3.08				
Connectable Indoor Unit	Max.Quantity		64									
Compressors	Quantity		5									
Refrigerant (R-410a)	Factory Charge	kg	19+13+11	19x2+11				19x2+13				
Pipe Connections ³	Liquid Pipe	mm	Φ22.2									
	Gas Pipe	mm	Φ44.5									
Sound Pressure Level ⁴	dB(A)		67		68							
Net Dimensions (WxHxD)	mm	(1585×1615×765)+ (1250×1615×765)+ (960×1615×765)	(1585×1615×765)×2+(960×1615×765)				(1585×1615×765)×2 +(960×1615×765)	(1585×1615×765)×2 +(1250×1615×765)				
Packed Dimensions (WxHxD)	mm	(1585×1615×765)+ (1250×1615×765)+ (960×1615×765)	(1650×1810×840)×2+(1025×1790×830)				(1650×1810×840)×2 +(1025×1790×830)	(1650×1810×840)×2 +(1305×1790×820)				
Net Weight	kg	338+278+197	338x2+188									
Gross Weight	kg	362+297+213	362x2+204									

Capacity	HP	80	82	84	86	88	90					
Model		4TVY0768HE000AA	4TVY0791HE000AA	4TVY0804HE000AA	4TVY0827HE000AA	4TVY0849HE000AA	4TVY0871HE000AA					
Combination Type		30HP+28HP+22HP	30HP+30HP+22HP	28HP+28HP+28HP	30HP+28HP+28HP	30HP+30HP+28HP	30HP+30HP+30HP					
Electrical Characteristics		V/F/Hz	380V, trifásico, 50/60 Hz									
Cooling ¹	Capacity	kW	225	231.5	235.5	242	248.5	255				
		kBtu/h	768.4	790.5	804.3	826.5	848.7	870.9				
	Power Input	kW	74.33	77.75	76.44	79.86	83.28	86.70				
	EER	kW/kW	3.03	2.98	3.08	3.03	2.98	2.94				
Connectable Indoor Unit	Max.Quantity		64									
Compressors	Quantity		6									
Refrigerant (R-410a)	Factory Charge	kg	19x2+13		19x3							
Pipe Connections ³	Liquid Pipe	mm	Φ22.2									
	Gas Pipe	mm	Φ44.5									
Sound Pressure Level ⁴	dB(A)		68									
Net Dimensions (WxHxD)	mm	(1585×1615×765)×2+(1250×1615×765)		(1585×1615×765)×3								
Packed Dimensions (WxHxD)	mm	(1650×1810×840)×2+(1305×1790×820)		(1650×1810×840)×3								
Net Weight	kg	338x2+188		338x3								
Gross Weight	kg	362x2+204		362x3								

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Diameters given are those of the unit's stop valves.

4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

Indoor Units

Wide Application Range

Wide Range of Indoor Units

With 11 types and more than 100 models, TVR Ultra indoor units meet varied customer requirements in a wide range of locations including shopping malls, hospitals, office buildings, hotels and airports.



Comfort and Efficiency

High Efficiency DC Fan Motor

The power consumption of DC fan motor can be reduced greatly in comparison to the corresponding AC type.



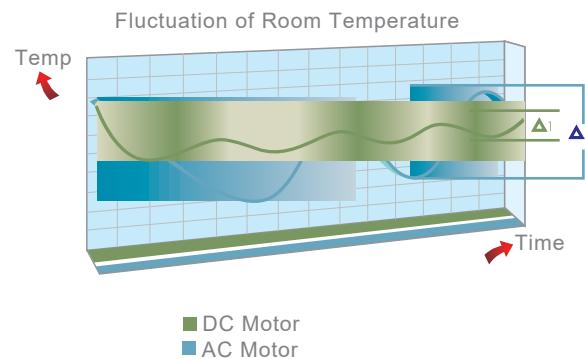
Quiet Operation

The low sound operation of the DC fan motor and optimized fan blades guarantees smooth air discharge while providing a quiet living environment.



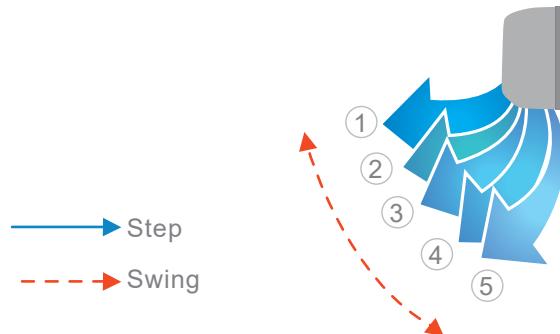
Constant Level of Indoor Air Temperature

Based on thermal load, the DC Inverter fan motor adjusts the air flow to create less temperature fluctuation, and provide the desired space comfort.



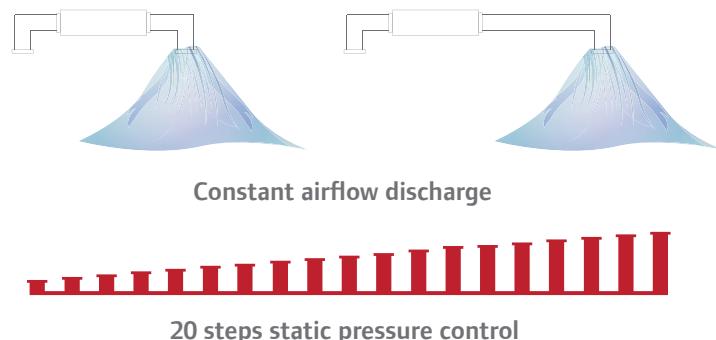
5-step Swing Louver

The 5-step swing louver directs the airflow to the desired airflow angle. This function is available through the unit controller.



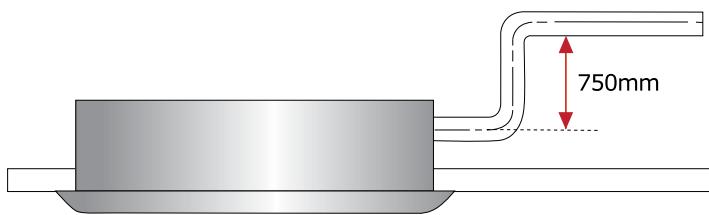
Static Pressure 20 Steps Control (Ducted Unit)

Depending on the installation, the medium static pressure and high static pressure ducted units can control the static pressure using up to 10 steps and 20 steps respectively, providing suitable comfort for any environment.



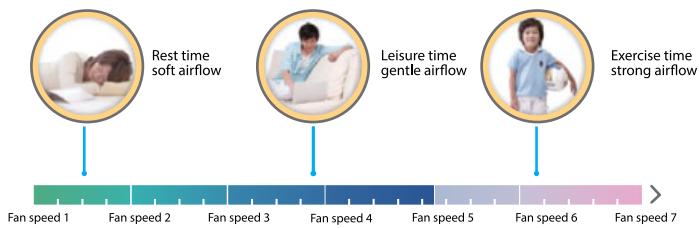
High-lift Drain Pump

A drain pump with a 750mm or 500mm pump head is fitted as standard or optional, simplifying installation of the drain piping.



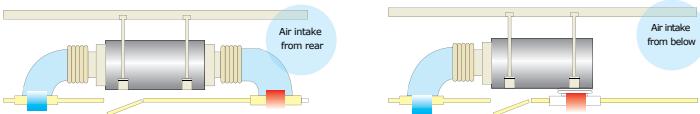
7-Speed Fan Control

7 indoor fan speeds provide control flexibility to meet the needs of different indoor conditions.



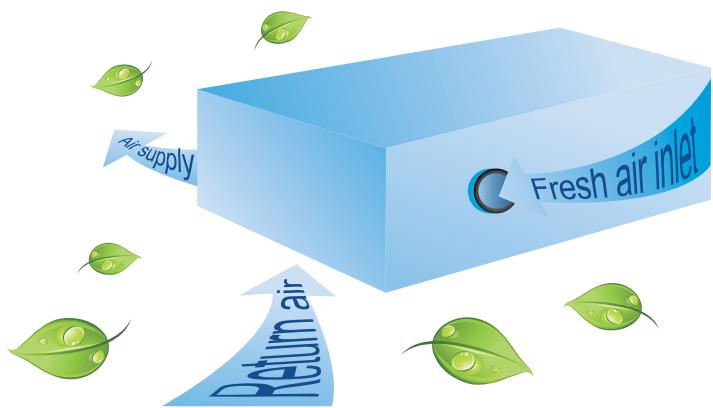
Flexible Installation

For Medium Static Pressure Duct Units, to provide the flexibility to adapt to different installation situations, the air inlet may be positioned either on the underside or the rear of the unit.



Fresh Air Intake

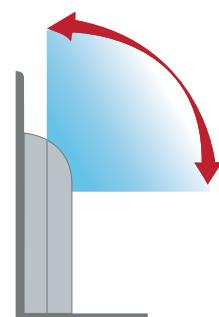
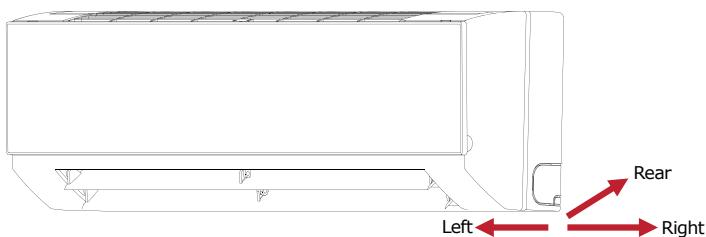
On selected models, a reserved outside air intake port allows outdoor air to be introduced directly into the unit, avoiding the need for a separate ventilation system.



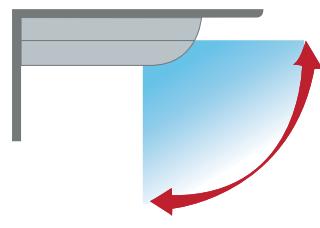
Floor or Ceiling

Floor Units can be installed either on the ceiling or on the floor, providing flexibility to accommodate a wide range of room designs.

For Wall Mounted Units, the refrigerant outlet direction can be left, right or rear as the installation situation requires. A new fixing plate design accelerates installation and provides extra stability.



Floor installation



Ceiling installation

One-way Cassette

- Fresh air intake (4.5-7.1kW models).
- One-way air discharge, ideal for corner locations.
- Drain pump with 750mm pump head fitted as standard.



	Model	4TVE0005EF000AA	4TVE0007EF000AA	4TVE0009EF000AA	4TVE0012EF000AA
Cooling ¹	Capacity	kW	1.8	2.2	2.8
		kBtu/h	6.1	7.5	9.6
Heating ²	Power Input	W	25	25	30
	Capacity	kW/kW	2.2	2.6	3.2
		kBtu/h	7.5	8.9	10.9
	Power Input	W	25	25	30
Air Flow Rate ³		m³/h	380/355/330/300/286/263/240		460/440/410/380/355/330/300
Sound Pressure Level ⁴		dB(A)	30/28/27/26/25/24/22	37/36/35/34/32/31/30	38/37/35/34/32/31/30
Main Body	Net dimensions ⁵ (WxHxD)	mm		1054×153×425	
	Packed dimensions (WxHxD)	mm		1155×245×490	
Panel	Net/Gross weight	kg	11.8/15.3		12.3/15.8
	Net dimensions (WxHxD)	mm		1180×25×465	
Pipe connections	Packed dimensions (WxHxD)	mm		1232×107×517	
	Net/Gross weight	kg		3.5/5.2	
Liquid/Gas pipe	mm			Φ6.35/Φ12.7	
Drain pipe	mm			OD Φ32	

	Model	4TVE0015EF000AA	4TVE0018EF000AA	4TVE0024EF000AA
Cooling ¹	Capacity	kW	4.5	5.6
		kBtu/h	15.4	19.1
Heating ²	Power Input	W	40	48
	Capacity	kW/kW	5.0	6.3
		kBtu/h	17.1	21.5
	Power Input	W	40	48
Air Flow Rate ³		m³/h	693/662/638/600/556/510/476	792/763/728/688/643/589/549
Sound Pressure Level ⁴		dB(A)	39/37/36/35/34/32/31	41/39/38/37/36/35/33
Main Body	Net dimensions ⁵ (WxHxD)	mm		1275×189×450
	Packed dimensions (WxHxD)	mm		1370×295×505
Panel	Net/Gross weight	kg	16.1/20.4	16.4/20.7
	Net dimensions (WxHxD)	mm		1350×25×505
Pipe connections	Packed dimensions (WxHxD)	mm		1410×95×560
	Net/Gross weight	kg		4/5.4
Liquid/Gas pipe	mm	Φ6.35/Φ12.7		Φ9.53/Φ15.9
Drain pipe	mm			OD Φ32

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

Two-way Cassette

- Fresh air intake.
- Two-way air discharge, perfect for limited ceiling space applications.
- Drain pump with 750mm pump head fitted as standard.



optional wireless remote controller



TCONTRMUT12D TCONTRMUT05B

cold control for TVR Pro



TCONTRM03WA

optional wired controller



TCONTKJRUT86ED TCONTKJRUT120G

Model			4TVG0007EF000AA	4TVG0009EF000AA	4TVG0012EF000AA
Cooling ¹	Capacity	kW	2.2	2.8	3.6
		kBtu/h	7.5	9.6	12.3
	Power Input	W	35	40	40
Heating ²	Capacity	kW/kW	2.6	3.2	4.0
		kBtu/h	8.9	10.9	13.6
	Power Input	W	35	40	40
Air Flow Rate ³		m ³ /h	654/612/571/530/488/449/410		725/679/641/591/554/509/458
Sound Pressure Level ⁴		dB(A)	33/31/30/29/27/25/24		35/33/32/30/29/27/25
Main Body	Net dimensions ⁵ (WxHxD)	mm		1172×299×591	
	Packed dimensions (WxHxD)	mm		1355×400×675	
	Net/Gross weight	kg		33.5/42.0	
Panel	Net dimensions (WxHxD)	mm		1430×53×680	
	Packed dimensions (WxHxD)	mm		1525×130×765	
	Net/Gross weight	kg		10.5/15	
Pipe connections	Modelo			RAYTWOPLN01	
	Liquid/Gas pipe	mm		Φ6.35/Φ12.7	
	Drain pipe	mm		OD Φ32	

Model			4TVG0015EF000AA	4TVG0018EF000AA	4TVG0024EF000AA
Cooling ¹	Capacity	kW	4.5	5.6	7.1
		kBtu/h	15.4	19.1	24.2
	Power Input	W	50	69	98
Heating ²	Capacity	kW/kW	5.0	6.3	8.0
		kBtu/h	17.1	21.5	27.3
	Power Input	W	50	69	98
Air Flow Rate ³		m ³ /h	850/792/731/670/631/592/550	980/925/855/800/755/702/670	1200/1115/1068/1000/921/808/770
Sound Pressure Level ⁴		dB(A)	37/36/35/34/32/31/30	39/37/36/35/33/31/30	44/42/41/40/38/36/34
Main Body	Net dimensions ⁵ (WxHxD)	mm		1172×299×591	
	Packed dimensions (WxHxD)	mm		1355×400×675	
	Net/Gross weight	kg		35/43.5	
Panel	Net dimensions (WxHxD)	mm		1430×53×680	
	Packed dimensions (WxHxD)	mm		1525×130×765	
	Net/Gross weight	kg		10.5/15	
Pipe connections	Modelo			RAYTWOPLN01	
	Liquid/Gas pipe	mm	Φ6.35/Φ12.7		Φ9.53/Φ15.9
	Drain pipe	mm		OD Φ32	

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

Compact Four-way Cassette

- 360° airflow allows for even, wide-range cooling and heating.
- Drain pump with 500mm pump head fitted as standard.



optional wireless remote controller



TCONTRMUT12D

cold control for TVR Pro



TCONTRM03WA

optional wired controller



TCONTJRUT86ED



TCONTJRUT120G

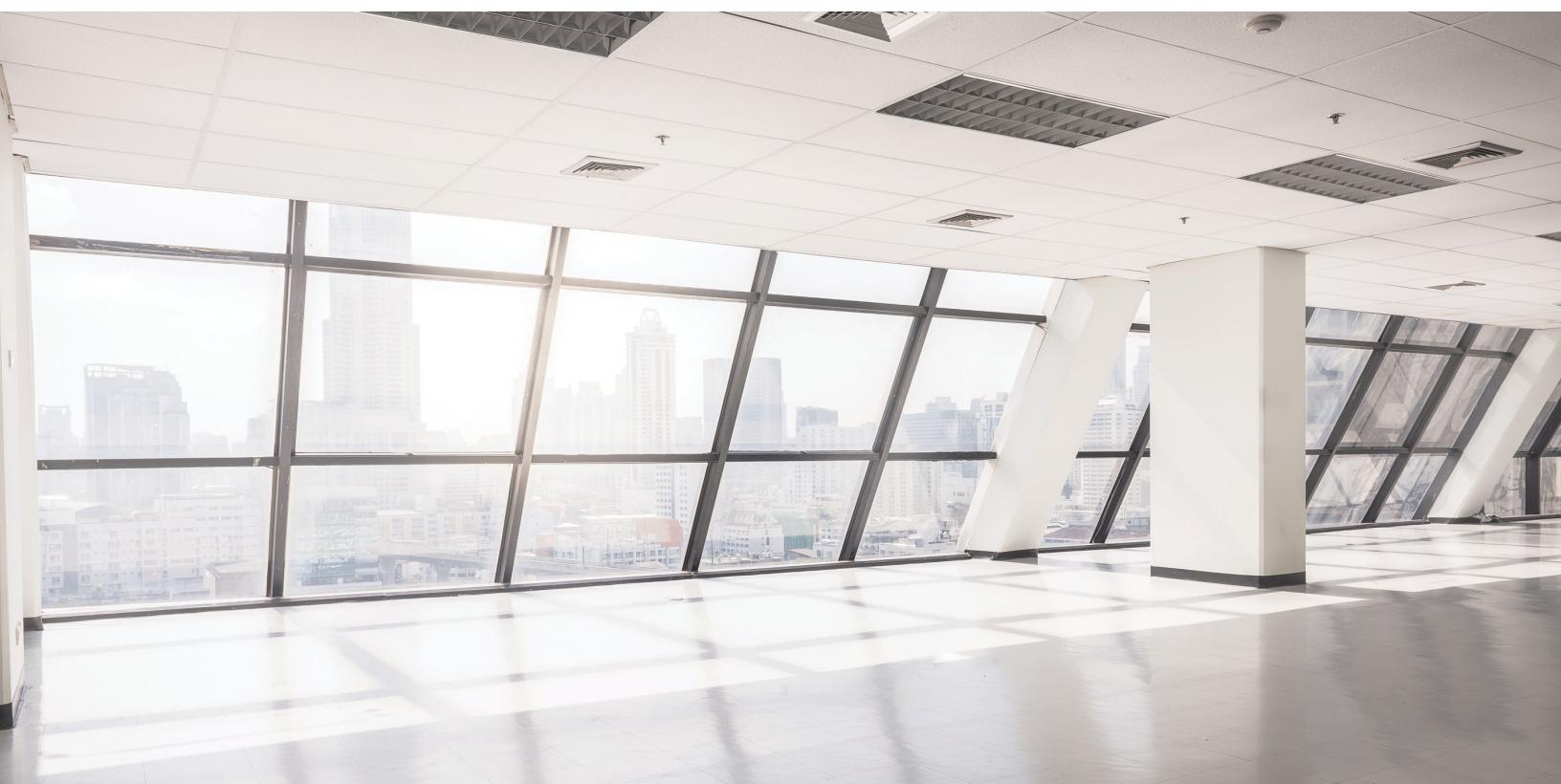
	Model	4TVB0007EF000AA	4TVB0009EF000AA	4TVB0012EF000AA	4TVB0015EF000AA		
Cooling ¹	Capacity	kW	2.2	2.8	3.6		
		kBtu/h	7.5	9.6	12.3		
Heating ²	Power Input	kW	35	35	40		
		kW/kW	2.4	3.2	4.0		
Air Flow Rate ³	Capacity	kBtu/h	8.2	10.9	13.6		
		W	35	35	40		
Sound Pressure Level ⁴		m³/h	414/380/345/313/288/268/238	521/485/450/409/380/350/314			
		dB(A)	35/34/34/33/28/27/26	41/39/37/35/32/31/29			
Main Body	Net dimensions ⁵ (WxHxD)	mm	630×260×570				
	Packed dimensions (WxHxD)	mm	700×330×660				
Panel	Net/Gross weight	kg	18/23.8	19.2/25.0			
	Net dimensions (WxHxD)	mm	647×50×647				
Pipe connections	Packed dimensions (WxHxD)	mm	715×123×715				
	Net/Gross weight	kg	2.5/4.5				
Modelo		RAYFOURPNL01					
Liquid/Gas pipe	Liquid/Gas pipe	mm	Φ6.35/Φ12.7				
	Drain pipe	mm	OD Φ32				

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.



Four-way Cassette

- Fresh air intake
- Four-way airflow, allows wide-angle, equal distribution of cooling and heating.
- Drain pump with 750mm pump head fitted as standard.
- Brand-new, elegant panel with four independently controlled louvers.



TCONTRMUT12D TCONTRMUT05B TCONRM03WA TCONTKJRT86ED TCONTKJRT120G

Model		4TVC0009EF000AA	4TVC0012EF000AA	4TVC0015EF000AA	4TVC0018EF000AA	4TVC0024EF000AA
Cooling ¹	Capacity	kW	2.8	3.6	4.5	5.6
		kBtu/h	9.6	12.3	15.4	19.1
	Power Input	W	40	45	50	60
Heating ²	Capacity	kW/kW	3.2	4.0	5.0	6.3
		kBtu/h	10.9	13.6	17.1	21.5
	Power Input	W	40	45	50	60
Air Flow Rate ³		m³/h	801/751/711/658/637/611/542		893/866/804/744/714/698/635	977/937/864/800/ 778/738/671
Sound Pressure Level ⁴		dB(A)	32/31/30/28/26/23		35/34/31/31/30/28/26	35/35/34/31/30/28/27
Main Body	Net dimensions ⁵ (WxHxD)	mm			840×230×840	
	Packed dimensions (WxHxD)	mm			955×260×955	
	Net/Gross weight	kg	21.3/25.8			23.2/27.6
Panel	Net dimensions (WxHxD)	mm			950×54.5×950	
	Packed dimensions (WxHxD)	mm			1035×90×1035	
	Net/Gross weight	kg			5.5/8.2	
Modelo				RAYFOURPNL02		
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7			Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ32			

Model		4TVC0027EF000AA	4TVC0030EF000AA	4TVC0034EF000AA	4TVC0038EF000AA	4TVC0048EF000AA	4TVC0055EF000AA
Cooling ¹	Capacity	kW	8.0	9.0	10.0	11.2	14.0
		kBtu/h	27.3	30.7	34.1	38.2	47.8
	Power Input	W	96	100	150	160	170
Heating ²	Capacity	kW/kW	9.0	10.0	11.0	12.5	16.0
		kBtu/h	30.7	34.1	37.5	42.7	54.6
	Power Input	W	96	100	150	160	170
Air Flow Rate ³		m³/h	1203/1131/1064/ 977/ 912/840/774	1349/1294/1230/ 1201/1111/1029/ 970	1700/1600/1440/1250/1200/1150/ 1100	1800/1650/1500/ 1300/1250/1200/ 1150	2100/1950/1800/ 1750/1600/1450/ 1350
Sound Pressure Level ⁴		dB(A)	36/35/34/31/31/29/28	37/35/34/31/31/30/28	43/42/40/38/37/35/34	45/44/42/41/40/39/37	46/44/42/41/39/38/37
Main Body	Net dimensions ⁵ (WxHxD)	mm	840×230×840			840×300×840	
	Packed dimensions (WxHxD)	mm	955×260×955			955×330×955	
	Net/Gross weight	kg	23.2/27.6			28.4/33.8	30.7/35.8
Panel	Net dimensions (WxHxD)	mm				950×54.5×950	
	Packed dimensions (WxHxD)	mm				1035×90×1035	
	Net/Gross weight	kg				5.5/8.2	
Modelo			RAYFOURPNL02			RAYFOURPNL03	
Pipe connections	Liquid/Gas pipe	mm	Φ9.53/Φ15.9				
	Drain pipe	mm	OD Φ32				

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

Medium Static Pressure Duct

■ Fresh air intake.

■ 6-step static pressure control on 2.2kW to 7.1kW models and 10-step static pressure control on 8kW to 14kW units (requires latest generation wired controllers).

■ Drain pump with 750mm pump head fitted as standard.

■ Flexible installation for the air inlet may be positioned either on the underside or the rear of the unit.



TCONTRMUT12D



cold control for
TVR Pro



optional wired
controller

TCONTRMUT05B

TCONTRM03WA

TCONTJKRUT86ED

TCONTJKRUT120G

Model		4TVD0007EF000AA		4TVD0009EF000AA		4TVD0012EF000AA	
Cooling ¹	Capacity	kW	2.2		2.8		3.6
		kBtu/h	7.5		9.6		12.3
Heating ²	Power Input	W	40		40		45
		kW	2.6		3.2		4.0
Air Flow Rate ³	Capacity	kBtu/h	8.2		10.9		13.6
		W	40		40		45
Sound Pressure Level ⁴		m³/h	520/480/440/400/360/330/300			580/540/500/460/430/400/370	
		dB(A)	32/31/29/28/26/25/23			33/32/31/30/28/27/25	
Unit	Net dimensions ⁵ (WxHxD)	mm	780×210×500				
	Packed dimensions (WxHxD)	mm	870×285×525				
Pipe connections	Net/Gross weight	kg	18/21				
	Liquid/Gas pipe	mm	Φ6.35/ Φ12.7				
		Drain pipe	OD Φ25				

Model		4TVD0015EF000AA		4TVD0018EF000AA		4TVD0024EF000AA	
Cooling ¹	Capacity	kW	4.5		5.6		7.1
		kBtu/h	15.4		19.1		24.2
Heating ²	Power Input	W	92		92		98
		kW	5.0		6.3		8.0
Air Flow Rate ³	Capacity	kBtu/h	17.1		21.5		27.3
		W	92		92		98
Sound Pressure Level ⁴		m³/h	800/740/680/620/540/480/400			830/760/720/680/640/600/560	
		dB(A)	36/34/32/31/29/27/25			36/34/33/32/30/29/28	
Unit	Net dimensions ⁵ (WxHxD)	mm	1000×210×500				1220×210×500
	Packed dimensions (WxHxD)	mm	1090×285×525				1335×285×525
Pipe connections	Net/Gross weight	kg	21.5/25				27.5/30.2
	Liquid/Gas pipe	mm	Φ6.35/ Φ12.7				Φ9.53/Φ15.9
		Drain pipe	OD Φ25				

Model		4TVD0027EF000AA		4TVD0030EF000AA		4TVD0038EF000AA		4TVD0048EF000AA		
Cooling ¹	Capacity	kW	8.0		9.0		11.2		14.0	
		kBtu/h	27.3		30.7		38.2		47.8	
Heating ²	Power Input	W	110		120		200		250	
		kW	9.0		10.0		12.5		15.5	
Air Flow Rate ³	Capacity	kBtu/h	30.7		34.1		42.7		52.9	
		W	110		120		200		250	
Sound Pressure Level ⁴		m³/h	1260/1180/1100/1020/940/860/780				1500/1430/1360/1290/ 1210/1140/1080		1960/1860/1760/1660/ 1560/1460/1360	
		dB(A)	37/35/34/33/31/29/28				39/38/37/35/34/33		41/39/38/37/36/35/33	
Unit	Net dimensions ⁵ (WxHxD)	mm	1230×270×775				1290×300×865			
	Packed dimensions (WxHxD)	mm	1355×350×795				1400×375×925			
Pipe connections	Net/Gross weight	kg	36.5/44.5		37/45		46.5/55.5			
	Liquid/Gas pipe	mm	Φ9.53/Φ15.9				OD Φ25			
		Drain pipe	OD Φ25							

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

4. All specifications are measured at standard external static pressure.

High Static Pressure Duct

- External static pressure up to 400Pa facilitates extensive duct and grille network.
- 20-step static pressure control on all models (requires latest generation wired controllers).
- A double-skin drainage pan provides double protection for ceilings (models 7.1 to 16.0 kW).



optional wireless remote controller



cold control for TVR Pro



optional wired controller



TCONTRMUT12D TCONTRMUT05B TCONTRM03WA TCONTKJRT86ED TCONTKJRT120G

Model		4TVA0024EF000AA		4TVA0027EF000AA		4TVA0030EF000AA				
Cooling ¹	Capacity	kW	7.1		8.0		9.0			
		kBtu/h	24.2		27.3		30.7			
	Power Input	W	180		180		220			
Heating ²	Capacity	kW	8.0		9.0		10.0			
		kBtu/h	27.3		30.7		34.1			
	Power Input	W	180		180		220			
Air Flow Rate ³	m ³ /h	1360/1327/1293/1260/1227/1193/1160	1360/1327/1293/1260/1227/1193/1160	1420/1373/1327/1280/1233/1187/1140						
Sound Pressure Level ⁴	dB(A)	42/41/40/40/39/39/38			45/44/43/42/41/40/39					
Unit	Net dimensions ⁵ (WxHxD)	mm	965x423x690							
	Packed dimensions (WxHxD)	mm	1090x440x768							
Pipe connections	Net/Gross weight	kg	41/47			51/57				
	Liquid/Gas pipe	mm	Φ9.53/Φ15.9							
	Drain pipe	mm	OD Φ25							

Model		4TVA0038EF000AA		4TVA0048EF000AA		4TVA0055EF000AA					
Cooling ¹	Capacity	kW	11.2		14.0		16.0				
		kBtu/h	38.2		47.8		54.6				
	Power Input	W	380		420		700				
Heating ²	Capacity	kW	12.5		16.0		17.0				
		kBtu/h	42.7		54.6		58.0				
	Power Input	W	380		420		700				
Air Flow Rate ³	m ³ /h	1870/1783/1697/1610/1523/1437/1350	2240/2133/2027/1920/1813/1707/1600	2660/2530/2400/2270/2140/2010/1880							
Sound Pressure Level ⁴	dB(A)	48/47/46/45/43/42/41		45/44/43/42/41/40/40		46/45/44/43/42/41/40					
Unit	Net dimensions ⁵ (WxHxD)	mm	965x423x690	1322x423x691							
	Packed dimensions (WxHxD)	mm	1090x440x768	1436x450x768							
Pipe connections	Net/Gross weight	kg	48/55	68/76							
	Liquid/Gas pipe	mm	Φ9.53/Φ15.9								
	Drain pipe	mm	OD Φ25								

Model		4TVA0068EF000AA	4TVA0085EF000AA	4TVA0095EF000AA	4TVA0136EF000AA	4TVA0154EF000AA	4TVA0192EF000AA
Cooling ¹	Capacity	kW	20.0	25.0	28.0	40.0	45.0
		kBtu/h	68.2	85.3	95.5	136.5	153.6
	Power Input	W	990	1200	1200	1800	1800
Heating ²	Capacity	kW	22.5	26.0	31.5	45.0	56.0
		kBtu/h	76.8	88.7	107.5	153.6	191.1
	Power Input	W	990	1200	1200	1800	1800
Air Flow Rate ³	m ³ /h	4330/4230/4130/4030/3930/3830/3730			6500/6150/5800/5450/5100/4750/4400		
Sound Pressure Level ⁴	dB(A)	7400/7000/6600/6200/5800/5400/5000					
Unit	Net dimensions ⁵ (WxHxD)	mm	51/50/50/49/49/48/47				59/58/57/56/55/53/51
	Packed dimensions (WxHxD)	mm					
Pipe connections	Net/Gross weight	kg	1454x515x931				2005x929x670
	Liquid/Gas pipe	mm	1509x550x990				2095x800x964
	Drain pipe	mm	130/142				220/245
				Φ12.7/Φ22.2		Φ15.9 /Φ28.6	
				OD Φ32		OD Φ32	

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

4. All specifications are measured at standard external static pressure.

Fresh Air Processing Unit

100% fresh air processing unit, both fresh air filtration and

■ heating/cooling can be achieved in a single system.

External static pressure up to 400Pa facilitates extensive duct and

■ grille network.

20-step static pressure control on all models (requires latest
■ generation wired controllers).

■ 750mm Optional Condensate Pump



optional wireless remote controller



TCONTRMUT12D

cold control for
TVR Pro



TCONTRM03WA

optional wired controller



TCONTKJRT86ED



TCONTKJRT120G

Model		4TVF0042EF000AA		4TVF0048EF000AA	
Cooling ¹	Capacity	kW	12.5		14.0
		kBtu/h	42.6		47.8
	Power Input	W	480		480
Heating ²	Capacity	kW	10.5		12.0
		kBtu/h	36.0		41.1
	Power Input	W	480		480
Air Flow Rate ³		m³/h	2000/1917/1833/1750/1667/1583/1500		
Sound Pressure Level ⁴		dB(A)	48/47/46/45/44/43/42		
Unit	Net dimensions ⁵ (WxHxD)	mm	1322x423x691		
	Packed dimensions (WxHxD)	mm	1436x450x768		
	Net/Gross weight	kg	68/76		
Pipe connections	Liquid/Gas pipe	mm	Φ9.53/ Φ15.9		
	Drain pipe	mm	OD Φ25		

Model		4TVF0068EF000AA		4TVF0085EF000AA		4TVF0095EF000AA	
Cooling ¹	Capacity	kW	20.0	25.0	28.0		
		kBtu/h	68.2	85.3	95.5		
	Power Input	W	850	850	850		
Heating ²	Capacity	kW	12.8	16.0	31.5		
		kBtu/h	43.7	54.6	107.5		
	Power Input	W	850	850	850		
Air Flow Rate ³		m³/h	3000/2833/2667/2500/2333/2167/2000				
Sound Pressure Level ⁴		dB(A)	50/49/48/47/46/44/43				
Unit	Net dimensions ⁵ (WxHxD)	mm	1454x515x931				
	Packed dimensions (WxHxD)	mm	1509x550x990				
	Net/Gross weight	kg	130/142				
Pipe connections	Liquid/Gas pipe	mm	Φ12.7/Φ22.2				
	Drain pipe	mm	OD Φ32				

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

4. All specifications are measured at standard external static pressure.

5. The Fresh Air Processing Unit can be used either independently or in conjunction with other types of indoor unit. If used independently, the total capacity of the Fresh Air Processing Units must be between 50% and 100% of that of the outdoor units. If used in conjunction with other types of indoor unit, the total capacity of the indoor units and Fresh Air Processing Units must be between 50% and 100% of that of the outdoor units and the total capacity of the Fresh Air Processing Units must not exceed 30% of that of the outdoor units.

Fresh Air Processing Unit

- 100% fresh air unit
- High efficiency DC fan motor
- Quiet operation
- 7 fan speeds
- 20 steps external static pressure control
- 0.5C or 1C setpoint adjustment



optional wireless remote controller



cold control for TVR Pro

optional wired controller



TCONTRMUT12D TCONTRMUT05B TCONRM03WA TCONTKJRT86ED TCONTKJRT120G

Model		4TVF0154EF000AA		4TVF0192EF000AA			
Power supply		1 phase,220 240V,50/60Hz			1 phase,220 240V,50/60Hz		
Cooling ¹	Capacity	kW	45		56		
		kBtu/h	153.6		191.1		
Heating ²	Power Input	W	1080		2272		
		kW	28		39		
	Capacity	kW	95.6		133.1		
		kBtu/h	95.6		133.1		
Air Flow Rate ³		m ³ /h	4200/3967/3733/3500/3267/3033/2800	6000/5665/5330/5000/4665/4330/4000			
Sound Pressure Level ⁴		dB(A)	58/56/55/53/51/49/48	59/57/56/55/53/51/50			
Unit	Net dimensions ⁵ (WxHxD)	mm	2010x680x905				
	Packed dimensions (WxHxD)	mm	2095x800x964				
Pipe connections	Net/Gross weight	kg	195/215	218/248			
	Liquid/Gas pipe	mm	Φ15.9/Φ28.6				
	Drain pipe	mm	OD Φ32				

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

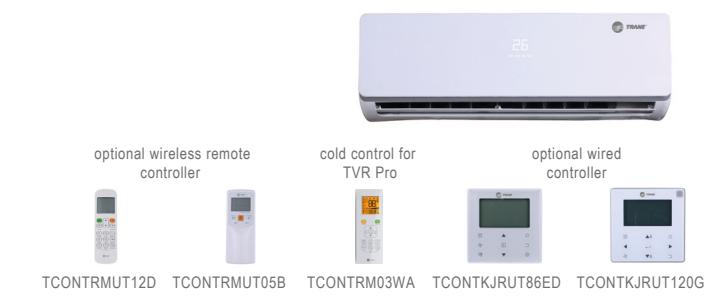
2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

4. All specifications are measured at standard external static pressure.

Wall Mounted Unit

- Three interchangeable panels allow units to blend easily with any interior decoration, perfect for rooms with no false ceilings or free floor space.
- Refrigerant outlet direction can be left, right or rear as the installation situation requires.



Model		4TVW0007EF000AA		4TVW0009EF000AA	
Cooling ¹	Capacity	kW	2.2		2.8
		kBtu/h	7.5		9.6
	Power Input	W	28		28
Heating ²	Capacity	kW	2.4		3.2
		kBtu/h	8.2		10.9
	Power Input	W	28		28
Air Flow Rate ³	m ³ /h	422/411/402/393/380/368/356		417/402/386/370/353/338/316	
Sound Pressure Level ⁴	dB(A)	31/30/30/30/29/29/29		31/30/30/30/29/29/29	
Unit	Net dimensions ⁵ (WxHxD)	mm		835×280×203	
	Packed dimensions (WxHxD)	mm		935×385×320	
	Net/Gross weight	kg	8.4/12.1		9.5/13.1
Pipe connections	Liquid/Gas pipe	mm		Φ6.35/Φ12.7	
	Drain pipe	mm		OD Φ16	

Model		4TVW0012EF000AA		4TVW0015EF000AA		4TVW0018EF000AA	
Cooling ¹	Capacity	kW	3.6		4.5		5.6
		kBtu/h	12.3		15.4		19.1
	Power Input	W	30		40		45
Heating ²	Capacity	kW	4.0		5.0		6.3
		kBtu/h	13.6		17.1		21.5
	Power Input	W	30		40		45
Air Flow Rate ³	m ³ /h	656/628/591/573/544/515/488		594/563/535/507/478/450/424		747/713/685/648/613/578/547	
Sound Pressure Level ⁴	dB(A)	33/32/32/31/31/30/30		35/34/33/33/32/31/31		38/37/36/36/35/34/34	
Unit	Net dimensions ⁵ (WxHxD)	mm		990×315×223			
	Packed dimensions (WxHxD)	mm		1085×420×335			
	Net/Gross weight	kg	11.4/15.5			12.8/16.9	
Pipe connections	Liquid/Gas pipe	mm		Φ6.35/Φ12.7			Φ9.53/Φ15.9
	Drain pipe	mm			OD Φ16		

Model		4TVW0024EF000AA		4TVW0027EF000AA		4TVW0030EF000AA	
Cooling ¹	Capacity	kW	7.1		8.0		9.0
		kBtu/h	24.2		27.3		30.7
	Power Input	W	55		55		82
Heating ²	Capacity	kW	8.0		9.0		10.0
		kBtu/h	27.3		30.7		34.1
	Power Input	W	55		55		82
Air Flow Rate ³	m ³ /h	1195/1130/1065/1005/940/875/809		1195/1130/1065/1005/940/875/809		1421/1300/1125/1067/1005/934/867	
Sound Pressure Level ⁴	dB(A)	44/43/42/39/38/37/36		44/43/42/39/38/37/36		48/46/45/43/41/40/38	
Unit	Net dimensions ⁵ (WxHxD)	mm		1194×343×262			
	Packed dimensions (WxHxD)	mm		1290×375×460			
	Net/Gross weight	kg		17.0/22.4			
Pipe connections	Liquid/Gas pipe	mm		Φ9.53/Φ15.9			
	Drain pipe	mm		OD Φ16			

Notes:

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

Ceiling / Floor

- Can be installed either on the ceiling or floor.
- Compact and clean design
- Low noise level



TCONTRMUT12D TCONTRMUT05B TCONTRM03WA TCONTKJRUT86ED TCONTKJRUT120G



TCONTRMUT12D TCONTRMUT05B TCONTRM03WA TCONTKJRUT86ED TCONTKJRUT120G



TCONTRMUT12D TCONTRMUT05B TCONTRM03WA TCONTKJRUT86ED TCONTKJRUT120G

Model			4TVX0012EF000AA	4TVX0015EF000AA	4TVX0018EF000AA	4TVX0024EF000AA			
Cooling ¹	Capacity	kW	3.6	4.5	5.6	7.1			
		kBtu/h	12.3	15.4	19.1	24.2			
	Power Input	W	49	115	115	115			
Heating ²	Capacity	kW	4.0	5.0	6.3	8.0			
		kBtu/h	13.6	17.1	21.5	27.3			
	Power Input	W	49	115	115	115			
Air Flow Rate ³		m ³ /h	650/620/595/570/ 550/525/500	800/750/700/650/600/550/500					
Sound Pressure Level ⁴		dB(A)	36/35/34/33/32/31/30	43/42/41/41/39/38/38					
Unit	Net dimensions ⁵ (WxHxD)	mm	990×660×203						
	Packed dimensions (WxHxD)	mm	1089×744×296						
Pipe connections	Net/Gross weight	kg	27/33	28/34					
	Liquid/Gas pipe	mm	Φ6.35/Φ12.7			Φ9.53/Φ15.9			
	Drain pipe	mm	OD Φ16						

Model			4TVX0027EF000AA	4TVX0030EF000AA	4TVX0038EF000AA	4TVX0048EF000AA			
Cooling ¹	Capacity	kW	8.0	9.0	11.2	14.0			
		kBtu/h	27.2	30.7	38.2	47.8			
	Power Input	W	130	130	180	180			
Heating ²	Capacity	kW	9.0	10.0	12.5	15.0			
		kBtu/h	30.7	34.1	42.7	51.2			
	Power Input	W	130	130	180	180			
Air Flow Rate ³		m ³ /h	1200/1100/1000/900/840/780/700	1980/1940/1900/1860/1810/1770/1730					
Sound Pressure Level ⁴		dB(A)	45/44/43/43/42/41/40	47/46/45/45/44/43/42					
Unit	Net dimensions ⁵ (WxHxD)	mm	1280×660×203						
	Packed dimensions (WxHxD)	mm	1379×744×296						
Pipe connections	Net/Gross weight	kg	35/41						
	Liquid/Gas pipe	mm	Φ9.53/Φ15.9						
	Drain pipe	mm	OD Φ16						

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

Floor Standing Unit (Concealed)

Designed to be concealed in walls with only the suction and discharge grills visible.



optional wireless remote controller



TCONTRMUT12D TCONTRMUT05B

cold control for TVR Pro



TCONTRM03WA

optional wired controller



TCONTKJRT86ED TCONTKJRT120G

Model		4TVS0007EF000AA		4TVS0009EF000AA	
Cooling ¹	Capacity	kW	2.2	2.8	
		kBtu/h	7.5	9.6	
Heating ²	Power Input	W	40	45	
		kW	2.4	3.2	
	Capacity	kBtu/h	8.2	10.9	
		W	40	45	
Air Flow Rate ³		m ³ /h	530/504/478/456/439/418/400	569/540/515/485/462/443/421	
Sound Pressure Level ⁴		dB(A)	36/35/34/33/31/30/29	36/35/34/33/31/30/29	
Unit	Net dimensions ⁵ (WxHxD)	mm	840×545×212		
	Packed dimensions (WxHxD)	mm	925×639×305		
	Net/Gross weight	kg	21/25.5		
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7		
	Drain pipe	mm	Φ16		

Model		4TVS0012EF000AA		4TVS0015EF000AA	
Cooling ¹	Capacity	kW	3.6	4.5	
		kBtu/h	12.3	15.4	
Heating ²	Power Input	W	55	60	
		kW	4.0	5.0	
	Capacity	kBtu/h	13.6	17.1	
		W	55	60	
Air Flow Rate ³		m ³ /h	624/591/557/522/473/420/375	660/625/583/542/501/475/440	
Sound Pressure Level ⁴		dB(A)	37/36/35/34/32/31/30	37/36/35/34/32/31/30	
Unit	Net dimensions ⁵ (WxHxD)	mm	1036×639×305		
	Packed dimensions (WxHxD)	mm	1125×639×305		
	Net/Gross weight	kg	25.5/30.5		
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7		
	Drain pipe	mm	Φ16		

Model		4TVS0018EF000AA		4TVS0024EF000AA		4TVS0027EF000AA			
Cooling ¹	Capacity	kW	5.6	7.1	8.0				
		kBtu/h	19.1	24.2	27.3				
Heating ²	Power Input	W	88	110	130				
		kW	6.3	8.0	9.0				
	Capacity	kBtu/h	21.5	27.3	30.7				
		W	88	110	130				
Air Flow Rate ³		m ³ /h	1150/1094/1028/970/925/886/830	1380/1290/1205/1100/1033/955/870	1380/1290/1205/1100/1033/955/870				
Sound Pressure Level ⁴		dB(A)	41/39/37/35/33/32/31	44/42/40/39/37/35/33	44/42/40/39/37/35/33				
Unit	Net dimensions ⁵ (WxHxD)	mm	1340×545×212						
	Packed dimensions (WxHxD)	mm	1425×639×305						
	Net/Gross weight	kg	30.5/35.5			32/37			
Pipe connections	Liquid/Gas pipe	mm	Φ9.53/Φ15.9						
	Drain pipe	mm	Φ16						

Notes:

1.Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2.Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3.Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

4.All specifications are measured at 10Pa external static pressure.

Floor Standing Unit (Exposed)

- The front air intake and underside air intake offer an alternative depending on the application.



TCONTRMUT12D TCONTRMUT05B TCONRM03WA TCONTJKRUT86ED TCONTJKRUT120G

Model		4TVN0007EF000AA	4TVN0009EF000AA
		4TVU0007EF000AA	4TVU0009EF000AA
Cooling ¹	Capacity	kW	2.2
		kBtu/h	7.5
Heating ²	Power Input	W	40
		kW	2.4
	Capacity	kBtu/h	8.2
		W	40
Air Flow Rate ³	m³/h	530/504/478/456/439/418/400	
Sound Pressure Level ⁴	dB(A)	36/35/34/33/31/30/29	
Unit	Net dimensions ⁵ (WxHxD)	mm(F4)	1000×596×225
		mm(F5)	1000×677×220
	Packed dimensions (WxHxD)	mm(F4)	1089×683×312
		mm(F5)	1182×683×312
Pipe connections	Net/Gross weight	kg(F4)	28/33
		kg(F5)	28/35
	Liquid/Gas pipe	mm	Φ6.35/Φ12.7
	Drain pipe	mm	Φ16
Model		4TVN0012EF000AA	4TVN0015EF000AA
		4TVU0012EF000AA	4TVU0015EF000AA
Cooling ¹	Capacity	kW	3.6
		kBtu/h	12.3
Heating ²	Power Input	W	55
		kW	4.0
	Capacity	kBtu/h	13.6
		W	55
Air Flow Rate ³	m³/h	624/591/557/522/473/420/375	
Sound Pressure Level ⁴	dB(A)	37/36/35/34/32/31/30	
Unit	Net dimensions ⁵ (WxHxD)	mm(F4)	1200×596×225
		mm(F5)	1200×677×220
	Packed dimensions (WxHxD)	mm(F4)	1289×683×312
		mm(F5)	1382×683×312
Pipe connections	Net/Gross weight	kg(F4)	33/38.6
		kg(F5)	33/40.7
	Liquid/Gas pipe	mm	Φ6.35/Φ12.7
	Drain pipe	mm	Φ16
Model		4TVN0018EF000AA	4TVN0024EF000AA
		4TVU0018EF000AA	4TVU0024EF000AA
Cooling ¹	Capacity	kW	5.6
		kBtu/h	19.1
Heating ²	Power Input	W	88
		kW	6.3
	Capacity	kBtu/h	21.5
		W	88
Air Flow Rate ³	m³/h	1150/1094/1028/970/925/886/830	1380/1290/1205/1100/1033/955/870
Sound Pressure Level ⁴	dB(A)	41/39/37/35/33/32/31	44/42/40/39/37/35/33
Unit	Net dimensions ⁵ (WxHxD)	mm(F4)	1500×596×225
		mm(F5)	1500×677×220
	Packed dimensions (WxHxD)	mm(F4)	1589×683×312
		mm(F5)	1682×683×312
Pipe connections	Net/Gross weight	kg(F4)	40.0/48.6
		kg(F5)	40/46
	Liquid/Gas pipe	mm	Φ9.53/Φ15.9
	Drain pipe	mm	Φ16

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

Console

- Combination of four air inlets and two air outlets ensures that cooling and heating are distributed in all directions.



optional wireless remote controller



TCONTRMUT12D TCONTRMUT05B

cold control for TVR Pro



TCONRM03WA

optional wired controller



TCONTKJRT86ED TCONTKJRT120G

Model			4TVJ0007EF000AA	4TVJ0009EF000AA	4TVJ0012EF000AA	4TVJ0015EF000AA
Cooling ¹	Capacity	kW	2.2	2.8	3.6	4.5
		kBtu/h	7.5	9.6	12.3	15.4
Heating ²	Power Input	W	20	25	25	35
		kW/kW	2.6	3.2	4.0	5.0
	Capacity	kBtu/h	8.9	10.9	13.4	17.1
	Power Input	W	20	25	25	35
Air Flow Rate ³		m³/h	430/401/374/345/ 302/268/229	510/482/456/430/355/286/229	660/614/561/512/ 478/436/400	
Sound Pressure Level ⁴		dB(A)	38/36/34/32/28/27/26	39/37/35/33/31/29/27	42/41/40/39/37/36/36	
Unit	Net dimensions ⁵ (WxHxD)	mm		700×600×210		
	Packed dimensions (WxHxD)	mm		810×710×305		
	Net/Gross weight	kg	14/19		15/20	
Pipe connections	Liquid/Gas pipe	mm		Φ6.35/Φ12.7		
	Drain pipe	mm		OD Φ16		

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

Controller Lineup

Indoor Unit

Wireless Remote Wired Controllers	Centralized Controllers	Data converter	Network Control System	BMS Gateways	Accessories
 <p>TCONTRMUT05B TCONTRMUT12D</p>	<p>TCONTCCM180A</p> 	<p>TCONTCCM15B</p> 		<p>TCONTWEBBAC01</p> 	<p>Hotel Key Card Interface Module</p>  <p>TCONTNAM05A</p>
	<p>TCONTCCM270A</p> 		<p>TCONTWEBBAC01</p>  <p>+ TCONTCTSUT</p>	<p>TCONTCCM20</p> 	<p>Infrared Sensor Controller</p>  <p>TCONTNAM09A</p>
<p>TCONTKJRT86ED</p>  <p>TCONTKJRT120G</p> 			<p>TCONTCCM270A</p>  <p>+ TCONTCTSUT</p> 	<p>TCONTCCM18E</p> 	<p>Diagnosis software</p>  <p>TCONTDIAGS</p>

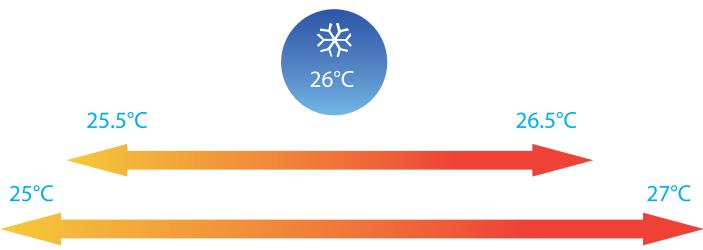
Wireless Remote Controllers

	TCONTRMUT05B	TCONTRMUT12D
MODEL		
On / Off	●	●
Mode selection	●	●
Temperature setting	●	●
7-speed fan control	● (0.5°C or 1°C steps)	● (0.5°C or 1°C steps)
Auto swing	●	●
5-step swing louver	●	●
Address setting	●	●
Follow me	—	●
Eco mode	●	●
Night silent mode	●	●
Display shut-off	●	●
Daily timer	●	●
Keyboard lock	●	●
Background light	●	●
Dimensions (H×W×D) (mm)	150x65x20	170x48x20
Batteries	1.5V (LR03/AAA) × 2	



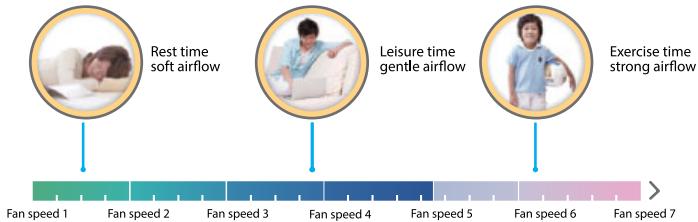
Temperature Setting

The temperature setpoint can be adjusted in 0.5°C or 1.0°C steps. This feature allows for a precise control, resulting in a comfortable environment.



7-Speed Fan Control

The indoor unit's DC fan is equipped with a 7-speed motor, providing the flexibility to meet the airflow requirement for any condition.



Display Shut-off

The indoor unit display can be turned off at night creating a cozier environment.



Follow Me

The follow me function works in the following way when it is active. The indoor unit responds to the temperature sensor built-in into the wireless remote controller instead of using the indoor unit's sensor. In this way, the temperature measurement is more accurate and precise.



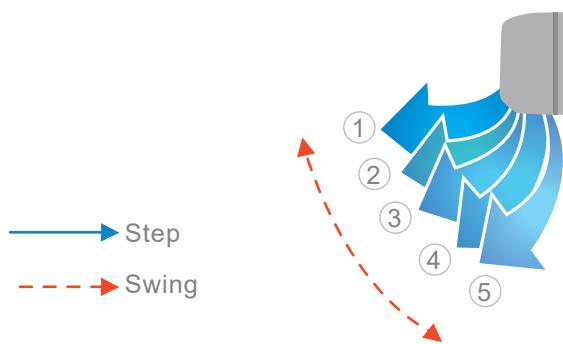
Eco Mode

In Eco mode the system will attempt to reduce the energy consumption, while keeping a comfortable indoor environment.



5-step Swing Louver

The 5-step swing louver directs the airflow to the desired airflow angle. This function is available through the unit controller.



Wired Controllers

	TCONTKJRUT86ED	TCONTKJRUT12DG
MODEL		
On / Off	●	●
Mode selection	●	●
Temperature setting	● (0.5°C or 1°C steps)	● (0.5°C or 1°C steps)
Dual temperature setpoints	●	●
7-speed fan control	●	●
Auto swing	●	●
5-step swing louver	●	●
Address setting	●	●
Follow me	●	●
Eco mode	●	●
Room temperature display	●	●
°F/°C display	●	●
Keyboard lock	■	●
Background light	●	●
Daily timer	●	●
Weekly schedule timer	■	●
Auto restart	●	●
2 permission levels	■	●
Bi-directional communication	●	●
Group control	■	●
Main or secondary controller setting	●	●
Display shut-off	●	●
Night silent mode	●	●
Remote signal receiver	●	●
Clean filter reminder	●	●
Override function	■	●
Daylight time saving	■	●
Clock display	■	●
Dot matrix display	■	●
Error check function	●	●
System query	●	●
System setup	●	●
Dimensions (WxHxD) (mm)	86x86x18	86x86x18
Power supply	18V DC	18V DC

Group Control

The wired controllers are capable of controlling up to 16 indoor units using the same setpoint.



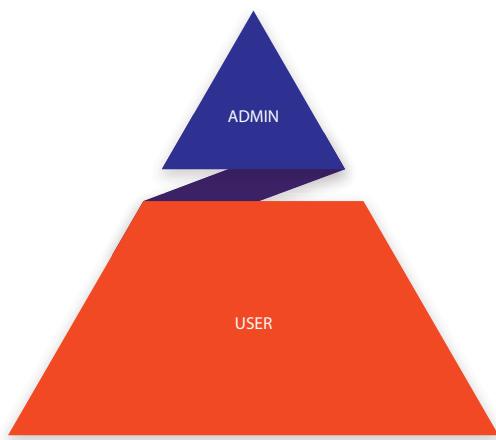
Main or Secondary Controller Setting

A single indoor unit could receive operating instructions by 2 different controllers. The indoor unit will respond to the latest command received. When a command is sent by one of the controllers, the other controller is automatically adjusted showing the same information in the display.



Two Permission Levels

Having two levels of permission ensures that only the administrator has access to advanced functions and the users are only allowed to control basic functions avoiding a possible operating system misuse.



Override Function

When the override function is enabled, it postpones a system scheduled shutdown by 1 or 2 hours.



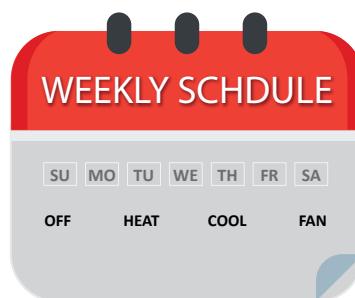
Dual Temperature Set Points

One setpoint for cooling and another for heating mode can be set up using the dual setpoint function. When the unit mode is changed, the setpoint has been already defined for the user's convenience.



Weekly Schedule

The weekly schedule timer allows users to set multiple schedules each with its own operating mode, temperature settings and fan speeds.



Bi-directional Communication

The wired controller can query the system operating parameters thanks to the new bi-directional communication functionality. In addition, settings including static pressure, cold draft prevention and temperature compensation can be configured in the wired controller.



Centralized Controllers

MODEL	TCONTCCM180A	TCONTCCM270A
Max. number of indoor units		
Max. number of refrigerant systems	8	48
Touch screen	(6.2-inch)	(10.1-inch)
On / Off	●	●
Mode selection	●	●
Temperature setting	● (0.5°C or 1°C steps)	● (0.5°C steps)
7-speed fan control	●	●
Auto swing	●	●
5-step swing louver	●	●
Room temperature display	■	●
Outdoor unit Eco mode setting	●	●
Holiday setting	●	●
°C/°F display	●	●
Schedule management	●	●
Clock display	●	●
Two permission levels	●	●
Override function	●	■
Daylight time saving	●	■
Unit model recognition	●	●
Energy consumption calculation	■	●
Visual schematic	■	●
Energy management	●	●
Group management	●	●
Error check function	●	●
System query	●	■
USB access	Error report	Error report, operation record and electricity consumption report
Report display		
Email capability	■	●
Operation log	■	●
LAN access	■	●
Dimensions (W×H×D) (mm)	181x124x30	270x183x27
Power supply	12V DC	24V AC

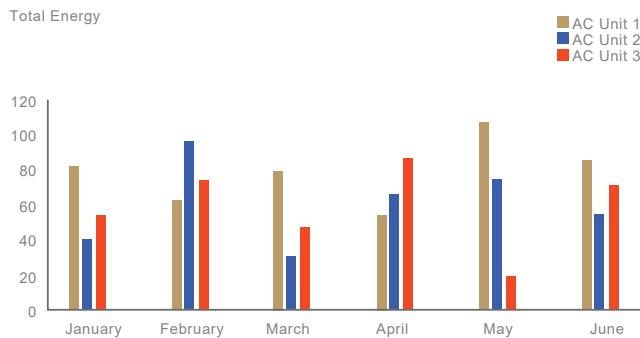
Touch Screen

The centralized controllers are designed with a touch screen vivid display making the operation more convenient and user friendly.



Energy consumption calculation

The TCONTCCM270A centralized controller uses a patented algorithm to estimate the energy system consumption. The outdoor unit power consumption is assigned among the indoor units based on their usage demand. This feature allows a building's owner to determine each tenant's energy electricity charge.



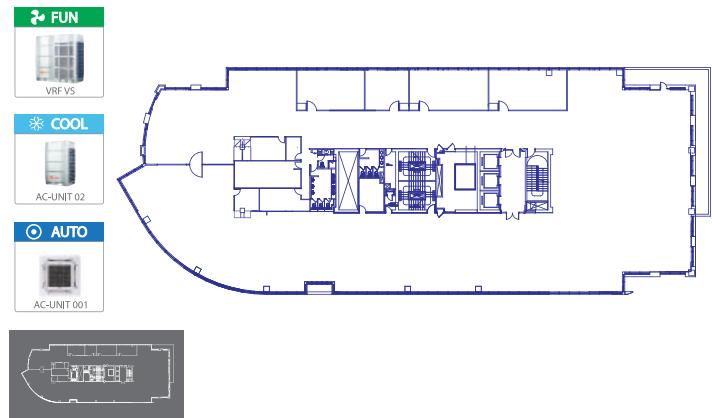
Energy Management

Multiple locking functions and set point limitations can be established using the centralized controllers that ultimately translate into additional energy savings. The functions available are: minimum cooling setpoint, maximum heating setpoint, fan speed lock, operation mode lock, swing lock, remote and wired controller lock.



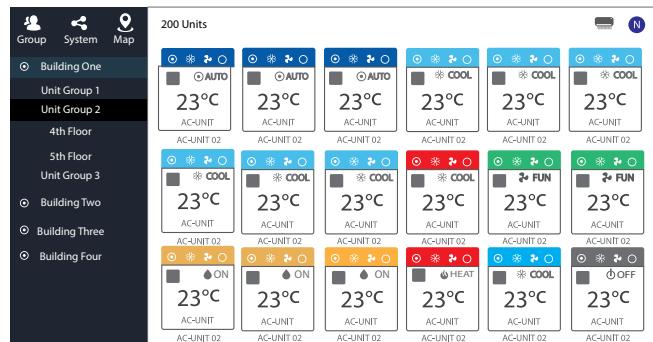
Visual Schematic

Users can create a tailored system schematic enabling monitoring and control of the indoor units through a clear visual representation of the system layout. This is achieved by importing floor plans and then dragging and dropping the indoor units to their actual positions.



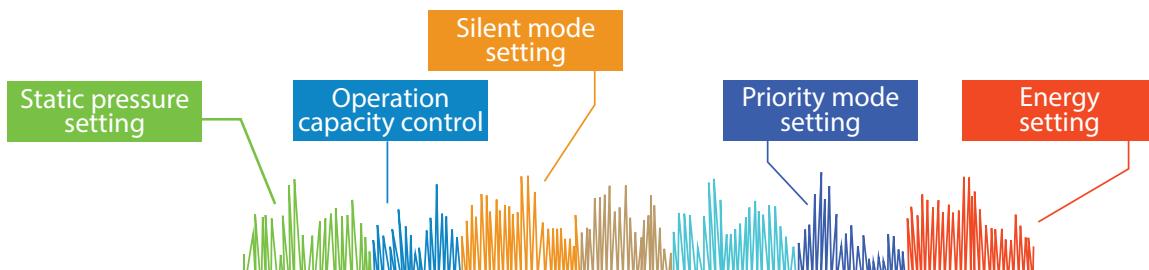
Group Management

The indoor units can be visualized in groups, systems or location making the unit management easier and more convenient.



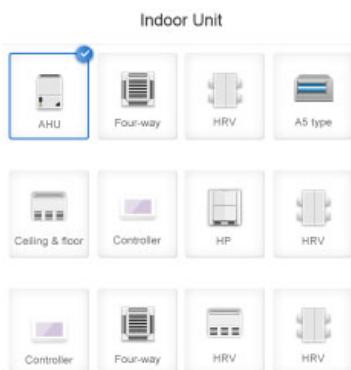
Outdoor Unit Configuration

Using the centralized controllers it is possible to monitor and control different outdoor unit configurations and settings, without having to access it on site.



Unit Model Recognition

The type of indoor and outdoor units are recognized by the centralized controller assigning the correct unit icon for easy identification.



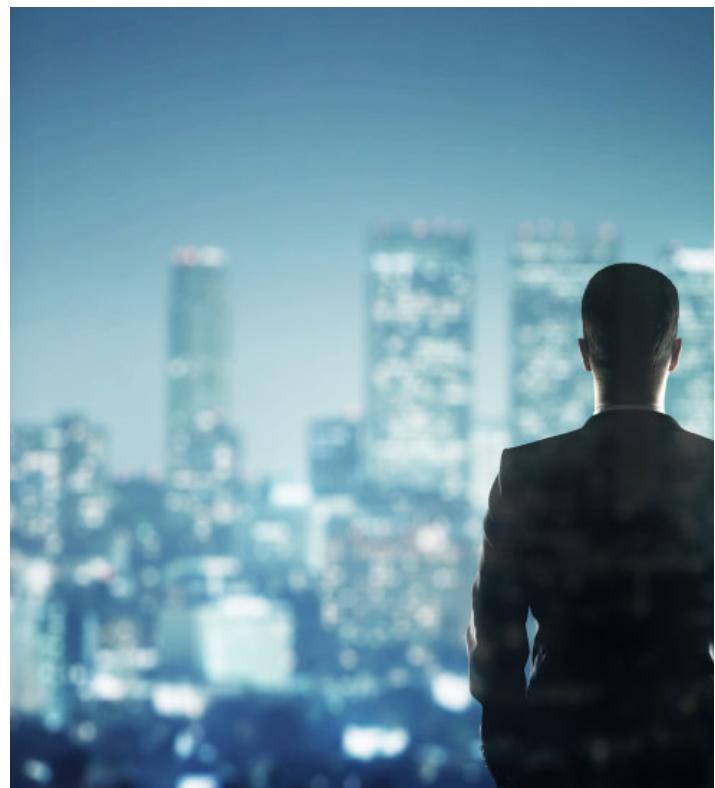
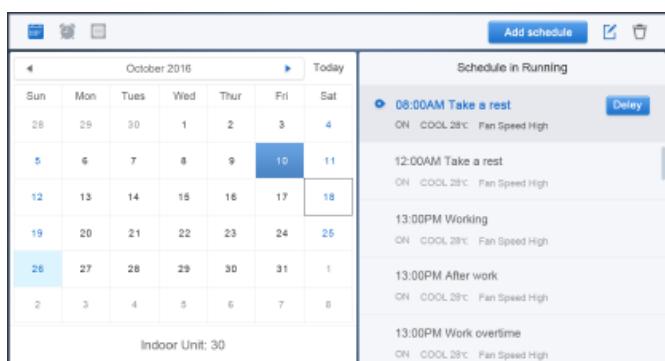
LAN Access

Using the centralized controller LAN connection it is possible to visualize and operate the system using a PC that could be installed locally or remotely (VPN required).



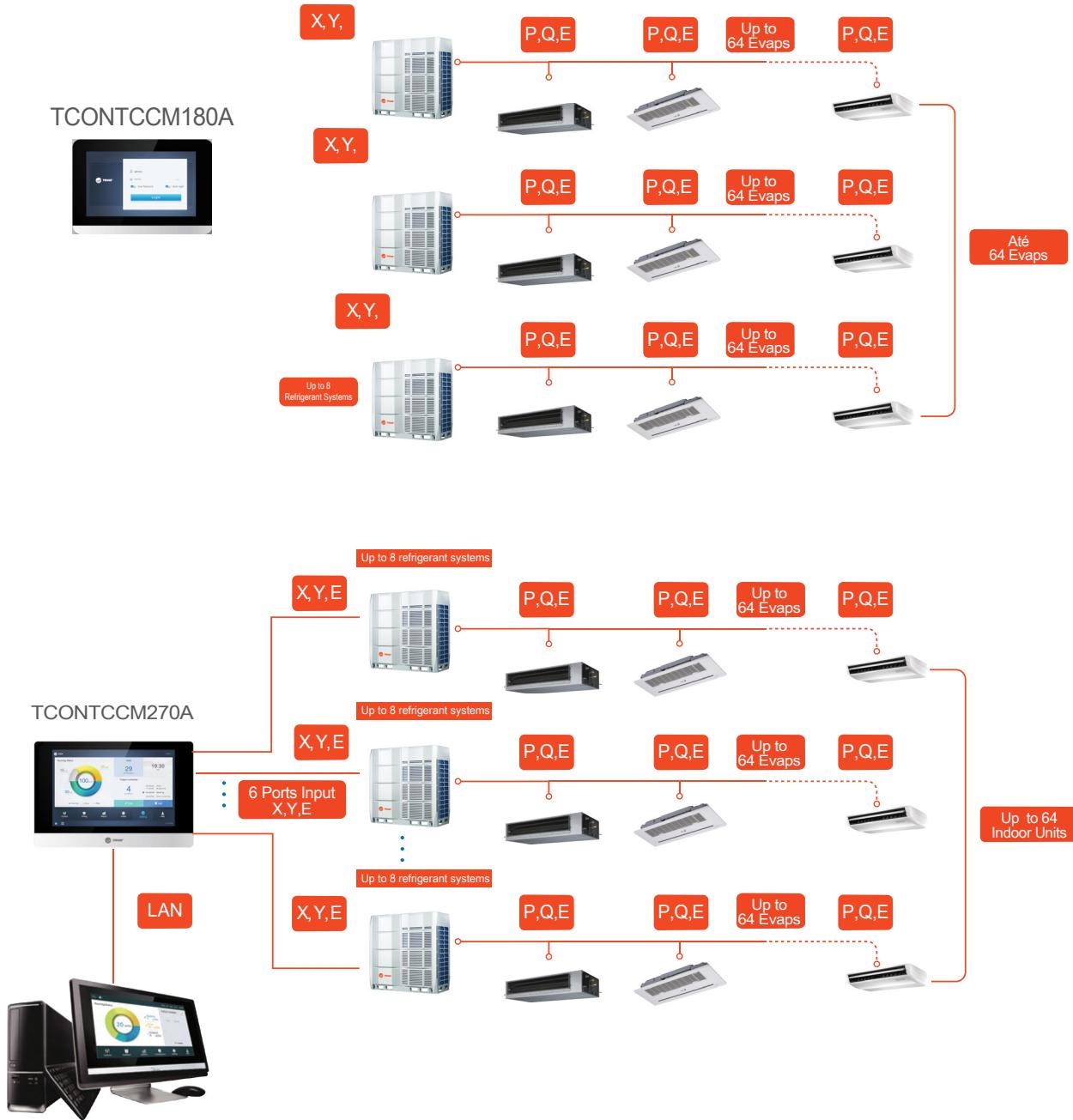
Schedule Management

The schedule function can be used to create daily, weekly or annual schedules. It is possible to define units setting such as on/off, operating modes, setpoint temperatures, fan speed and indoor unit swing.



Wiring Flexibility

For easy installation, the controllers can be connected to the master outdoor unit directly.



Network Control System

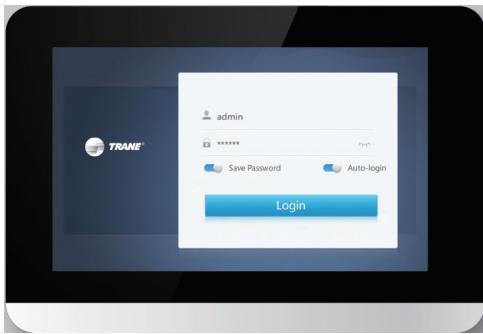
Software model	TCONTNTSUT	TCONTCCM270A
Software model		
Hardware model		
Max. number per network system	10	10
Max. number of indoor units	2560	3040
Max. number of refrigerant systems	320	480
Temperature setting	• (0.5°C steps)	• (0.5°C steps)
Dual temperature setpoints	•	•
7-speed fan control	•	•
Auto swing	•	•
5-step swing louver	•	•
Outdoor unit Eco mode setting	•	•
Holiday setting	•	•
Schedule management	•	•
Clock display	•	•
Two permission levels	•	•
Unit model recognition	•	•
Energy consumption calculation	•	•
Visual schematic	•	•
Energy management	•	•
Group management	•	•
Error check function	•	•
System query	•	•
Report output	•	•
Operation log	•	•
LAN access	•	•
Data backup	•	•
Remote VPN access	•	•
Dimensions (W×H×D) (mm)	251x319x66	270x183x27
Power supply	1 phase, 100-240V, 50/60Hz	24V AC

Data Converter

 TCONTCCM15B		
Hardware model	Application scenarios	
	 Mobile Phone Application	 Cloud Server Website
Max. number of CCM-15 for one mobile APP	10	10
Max. number of indoor units	640	640
Max. number of refrigerant systems	80	80
On/Off	●	●
Mode selection	●	●
Temperature setting	● (1°C steps)	● (1°C steps)
7-speed fan control	■	■
Auto swing	●	●
5-step swing louver	■	■
Room temperature display	●	●
°C/F display	●	●
Weekly timer	●	●
Indoor unit type recognition	■	■
Energy management	●	●
Group management	●	●
User group management	●	●
Operation log	●	●
Device log	●	●
Login record	●	●
Error log	■	●
Configuration	●	■
Account registration	●	■
Virtual	●	■
Mode display	●	●
Languages supported	English, French, Spanish	English, French, Spanish
Dimensions (W×H×D) (mm)	187x115x28	
Power supply	1 phase, 100-240V, 50/60Hz	

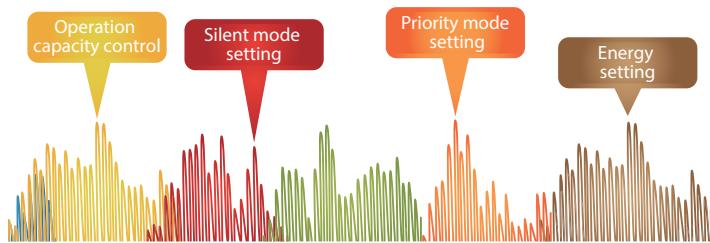
User-friendly Interface

The simple and practical user interface creates a user-friendly experience even for first timers.



Outdoor Unit Configuration

Using the centralized controllers it is possible to monitor and control different outdoor unit configurations and settings, without having to access it on site.



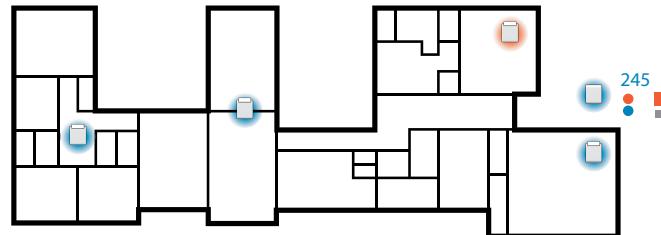
Energy Consumption Calculation

The TCONTCCM270A centralized controller uses a patented algorithm to estimate the energy system consumption. The outdoor unit power consumption is assigned among the indoor units based on their usage demand. This feature allows a building's owner to determine each tenant's energy electricity charge.



Visual Schematic

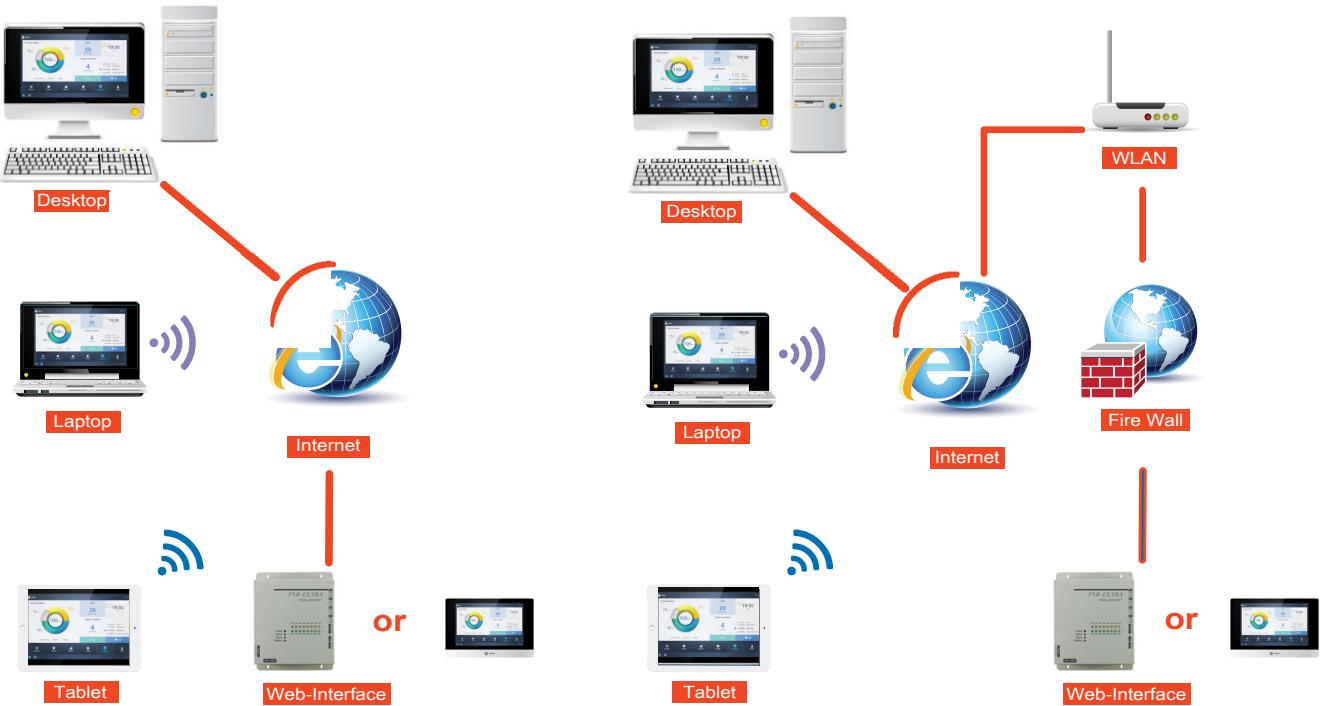
Users can create a tailored system schematic enabling monitoring and control of the indoor units through a clear visual representation of the system layout. This is achieved by importing floor plans and then dragging and dropping the indoor units to their actual positions.



Schedule Management

The schedule function can be used to create daily, weekly or annual schedules. It is possible to define unit settings such as on/off, operating modes, setpoint temperatures, fan speed and indoor unit swing.

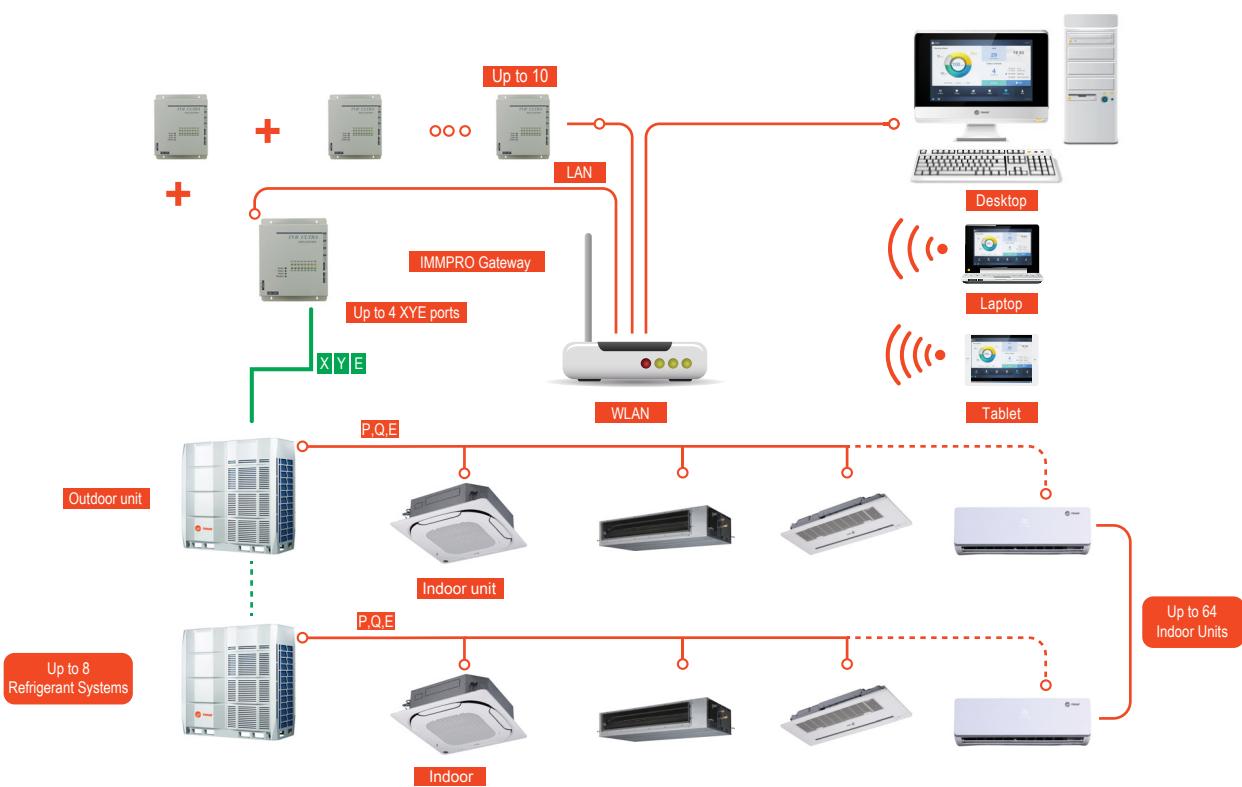
Network Flexibility



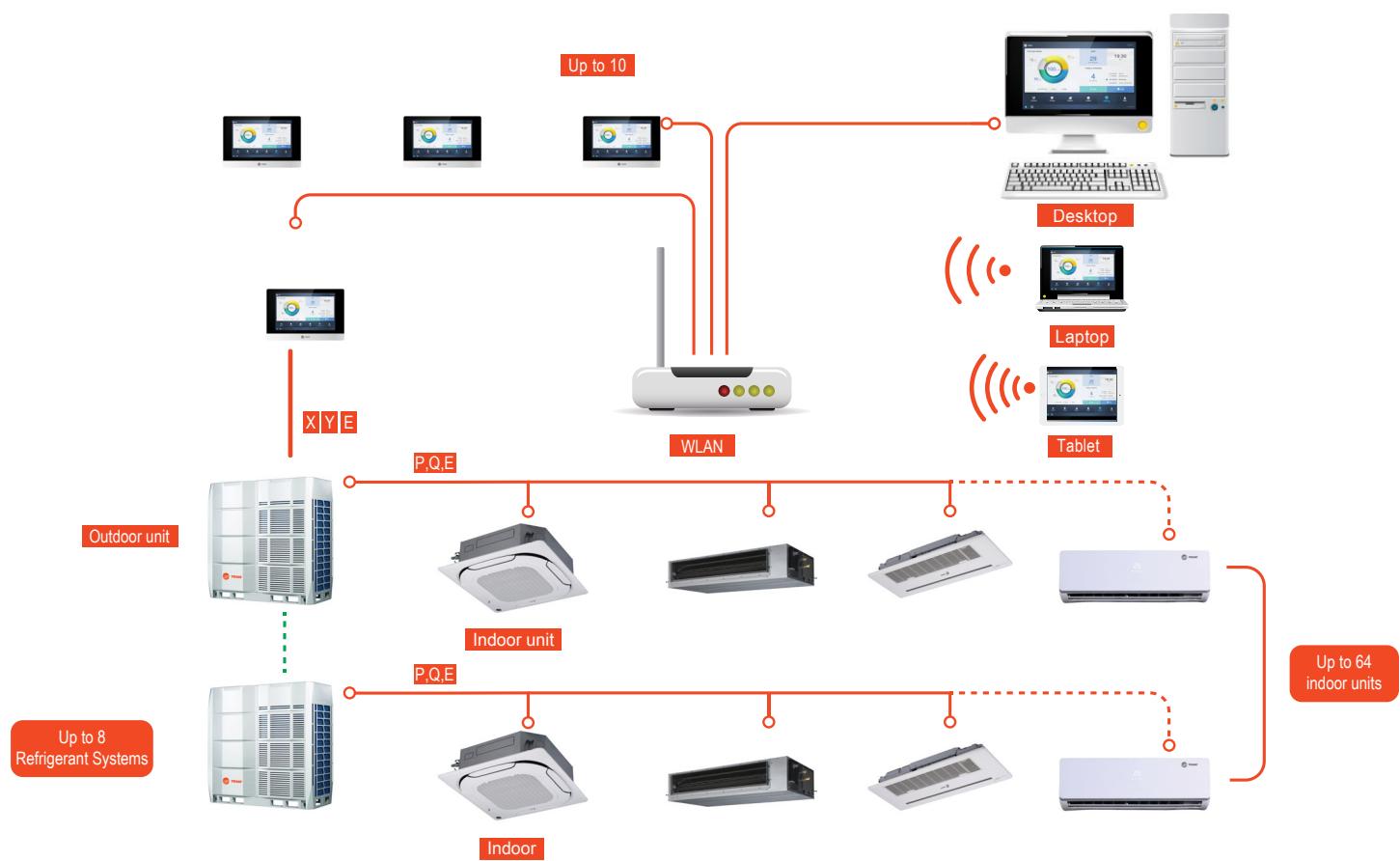
LAN access

Remote VPN access

Network Control



TCONTCCM270A



BACnet® Gateway

TCONTWEBBAC01



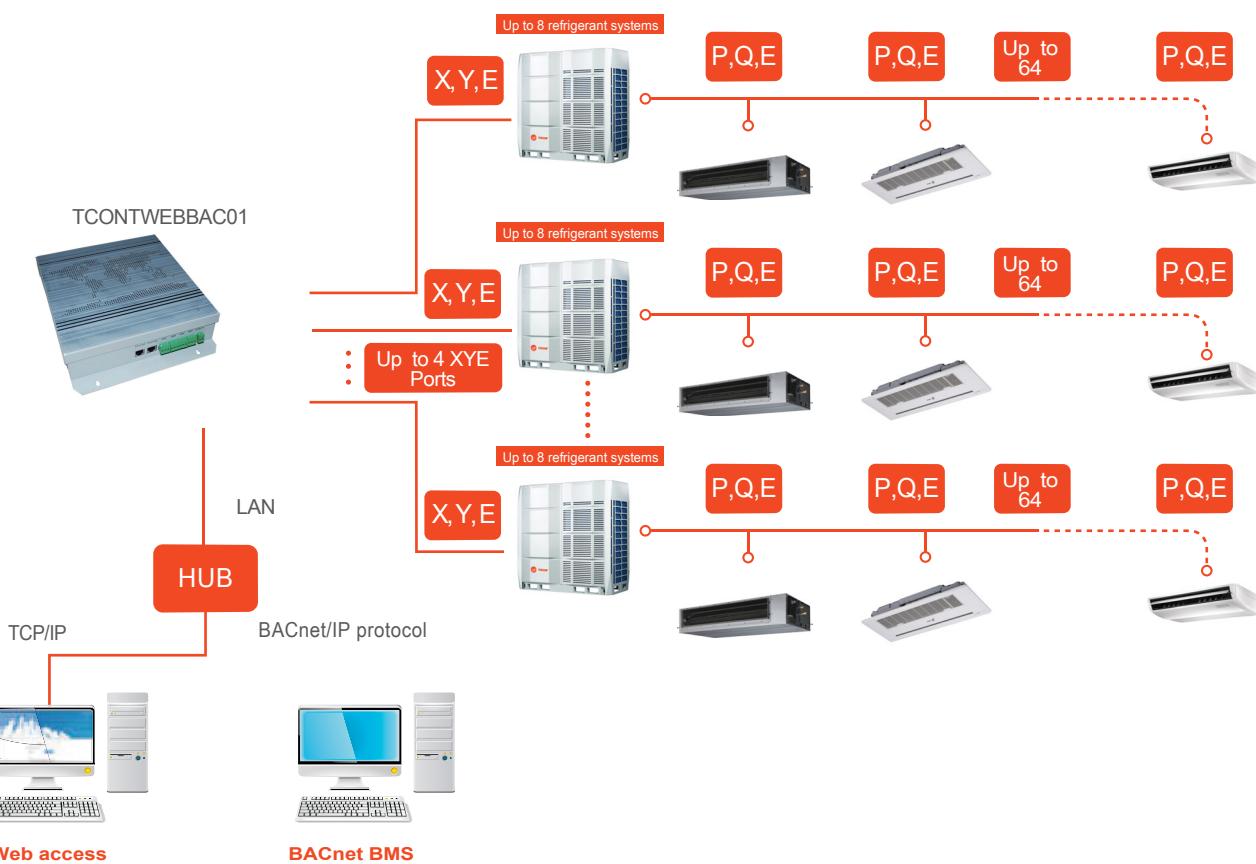
Full Integration

The BACnet Gateway allows Trane TVR systems to be monitored and controlled alongside other building management technology that use the BACnet protocol such as access control, fire detection and lighting systems.

Network Flexibility

For easy installation, the BACnet gateway can be connected to the master outdoor unit's XYE ports directly.

MODEL	BACnet Gateway
Max. number of indoor uznits	256
Max. number of refrigerant systems	32
Control	On / Off Mode selection Temperature setting Fan speed Energy management
Indoor unit monitoring	Room temperature display Error status Error alarms Operating mode Outdoor ambient temperature Fan speed
Outdoor unit monitoring	Compressor operating frequency Discharge temperature System pressure Error status Error alarms
LAN access	
BTL certification	



LonWorks® Gateway

TCONTCCM20

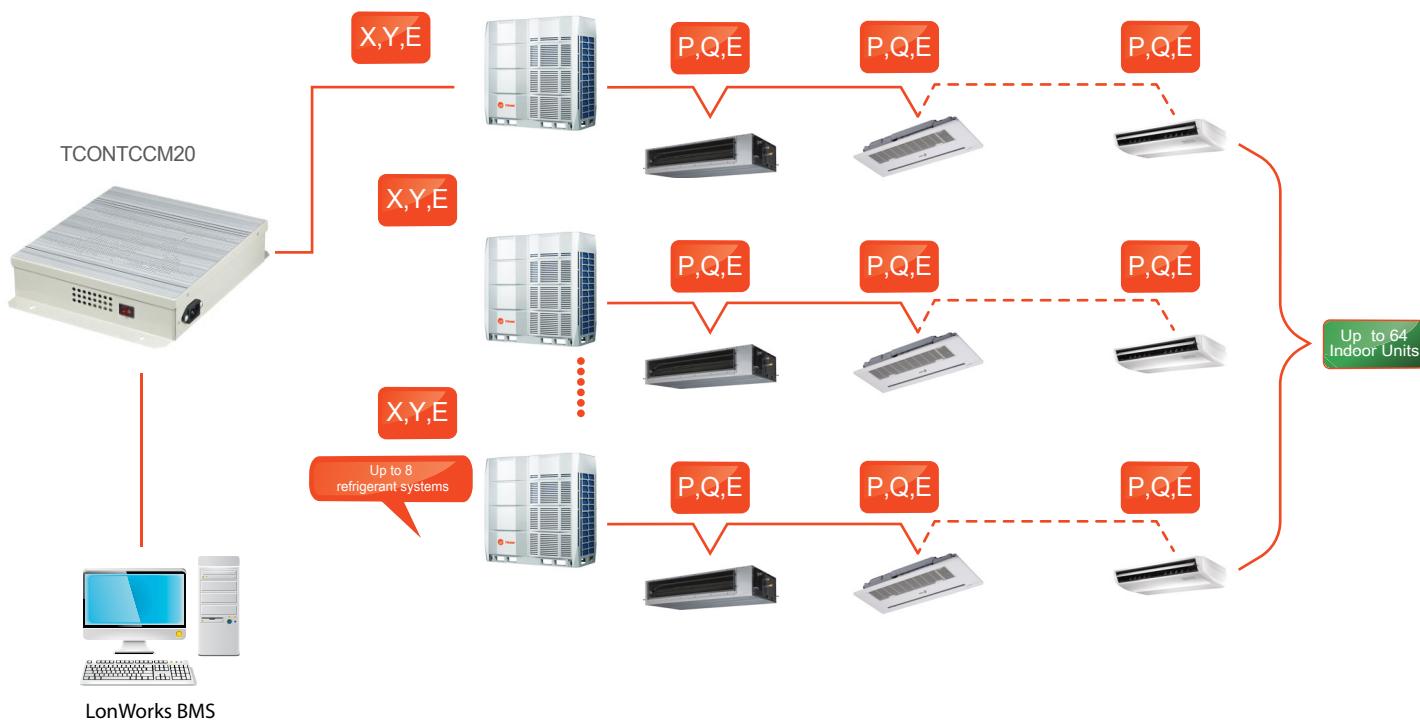


Full Integration

The LonWorks Gateway allows Trane TVR systems to be monitored and controlled alongside other building management technology on the LonWorks platform such as security, fire safety and lighting systems.

Network Flexibility

MODEL	LonWorks Gateway
Max. number of indoor units	64
Max. number of refrigerant systems	8
Control	Mode selection Temperature setting Fan speed Group shut down On / Off Operating mode Set temperature
Indoor unit monitoring	Fan speed Online status Operating status Room temperature Error status
Outdoor unit monitoring	Error status
Dimensions (HxWxD)(mm)	319x251x61
Power supply	1 phase, 100-240V, 50/60Hz



Modbus® Gateway

TCONTCCM18E

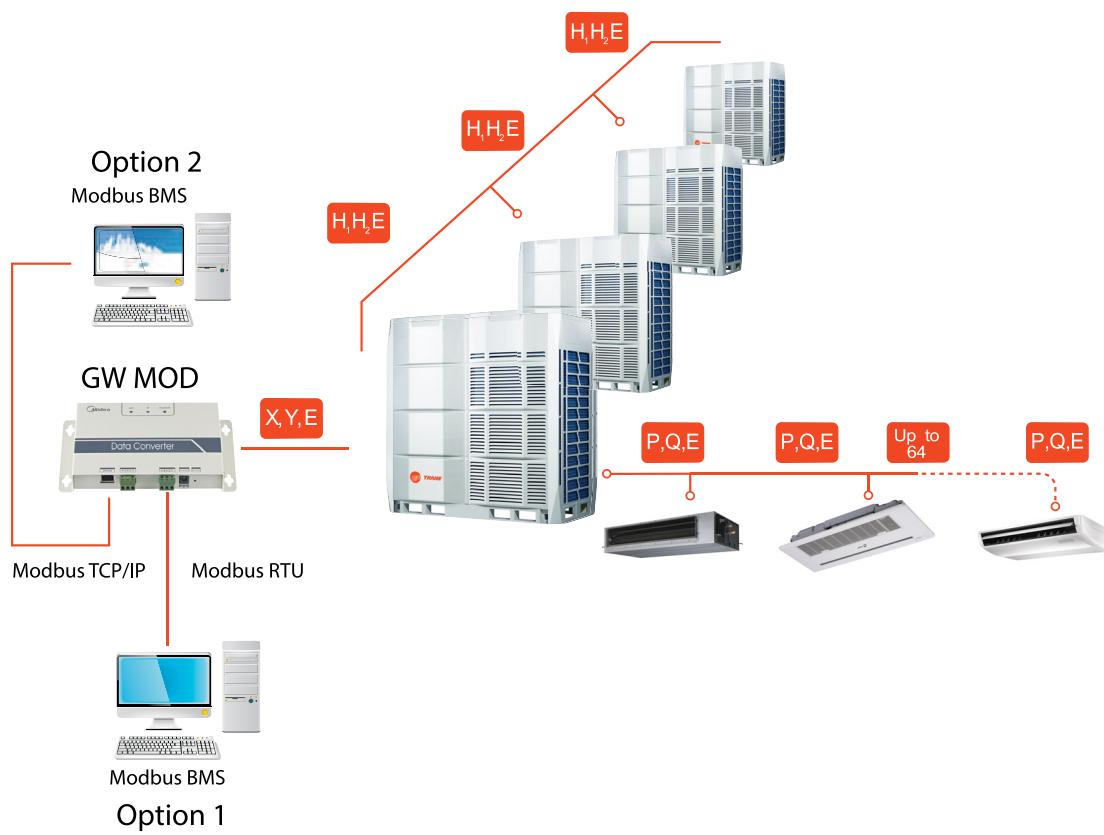


Full Integration

The Modbus Gateway allows the Trane TVR system to communicate with other BMS configured over the Modbus communication protocol.

Network Flexibility

MODEL	Modbus Gateway
Max. number of indoor units	64
Max. number of refrigerant systems	1
Control	On / Off Mode selection Temperature setting Fan speed Group on/off Online status Room temperature Error status Operating mode
Indoor unit monitoring	Operating mode Lock status Fan speed Set temperature Outdoor ambient temperature Error status
Outdoor unit monitoring	Operating mode Lock status Fan speed Set temperature
LAN access	●
BTL certification	187x115x28
Power Supply	1 phase, 100-240V, 50/60Hz



Hotel Key Card Interface Modules

Full Integration

Hotel Key Card interface modules are designed to energize the indoor units, only when the card is inserted into the card slot. In this manner, indoor units operate only when necessary, and consequently saving energy.

Model	TCONTNAM05A	TCONTNAM05B
Appearance		
Network Flexibility		
Auto restart	•	•
Compatibility	Remote and wired controller	Remote and wired controller
Dimensions (HxWxD) (mm)	15.5x86x72.8	87x150x70
Power supply	5V DC (supplied by indoor unit)	1phase, 100-240V, 50/60Hz

Infrared Sensor Controller

Full Integration

Infrared sensors are designed to detect movement. Once the sensor detects movement in the area, it automatically turns on the units; if the area is found to be unoccupied, it turns off the units. This accessory is suitable for hotels, offices, conference rooms and residences. It helps in the reduction of energy waste.

Model	TCONTNAM09A
Appearance	
Network flexibility	
Dimensions (HxWxD)(mm)	Sensor 46x30x25.6, Control box 86x72.8x15.5
Power supply	5V DC (Supplied by indoor Unit)

Diagnosis Software

Monitor and Diagnose

The Trane TVR Diagnosis Software tool is used to monitor and diagnose alarms and errors of the VRF system. System settings and operating parameters can be easily accessed. This tool can also review data logs for fault prevention purposes.

Additionally, a system schematic, a refrigerant flow diagram and a parameter chart could be generated to provide a graphical interpretation of the system status.

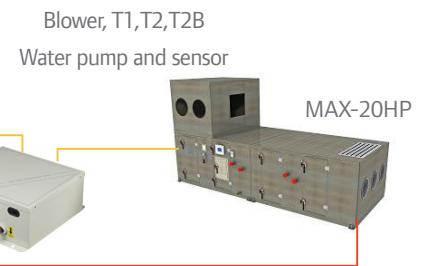
MODEL	TCONTDIAGS
Max. number per network system	64
Max. number of refrigerant systems	1
Control	Mode selection Temperature setting Fan speed Operating mode Capacity Compressor operating frequency Operating current Error status
Outdoor unit monitoring	Temperatures Valve status EXV position Operating mode Capacity Fan speed Address Temperatures EXV position
Indoor unit monitoring	T3, T4, Tp (See note 1) SV4, SV5, SV6, ST1 (See note 2) Operating mode Capacity Fan speed Address T1, T2, T2B, TS (See note 3)
Error codes	•
Troubleshooting	•
Data logs	•
Diagrams	System schematic, refrigerant flow diagram, parameter chart
Languages supported	English

VRF AHU Control Box

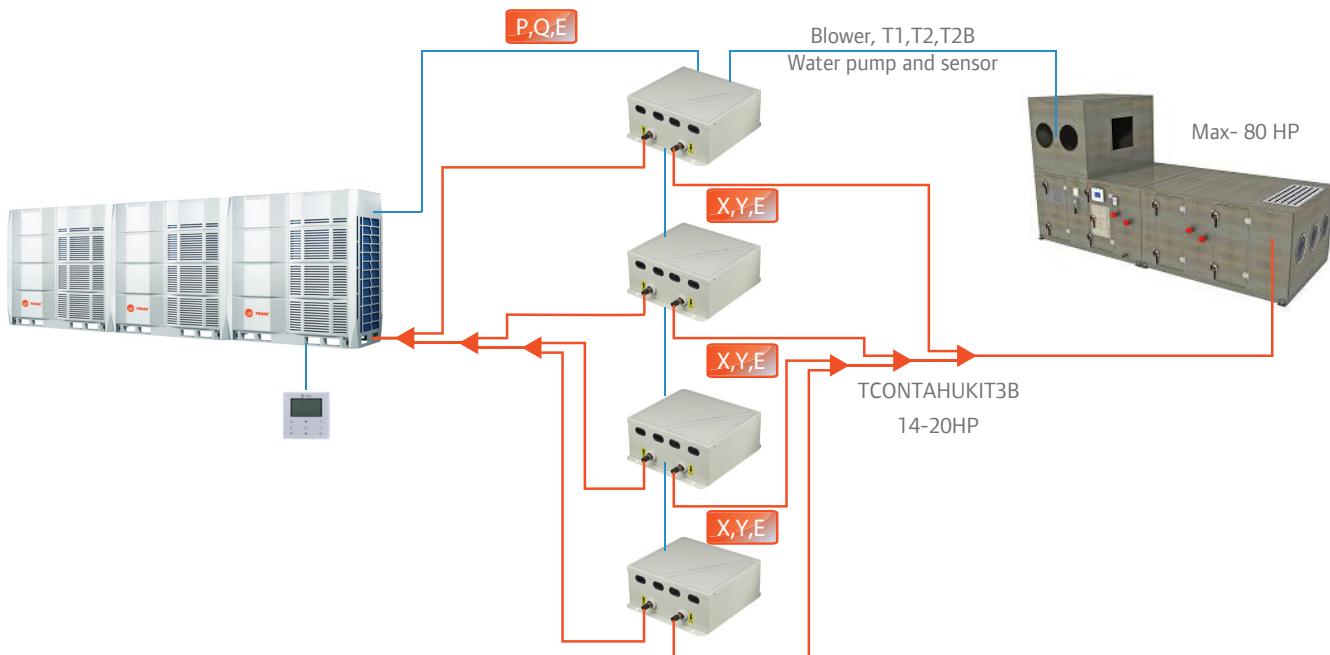
Single AHU Control Box Connection

Wide Capacity Range

Four Control Boxes can be used in parallel setting, thus providing an overall capacity range of 3.2HP to 80HP.



Multi AHU Control Boxes Connection



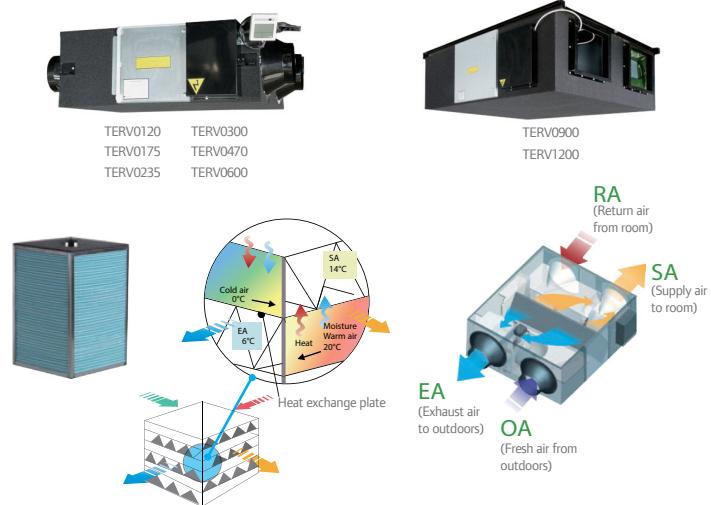
Model	TCONTAHUKIT1B	TCONTAHUKIT2B	TCONTAHUKIT3B
Capacity	3.2-6	8-12	14-20
Refrigerant	R410A		
Pipe connections (inlet and outlet)	mm Φ8	Φ12.7	Φ15.9
Net dimensions (W×H×D)	mm 350×150×375		
Packed dimensions (W×H×D)	mm 420×240×490		
Net weight	kg 8.4	8.7	8.9
Gross weight	kg 11.4	11.7	11.9
Operating modes	Cooling, heating and fan only		
Standard controller	Wired controller		
Optional controller	Wireless remote controller; SIEMENS controller		

Heat Recovery Ventilator

Enhanced Efficiency

The Trane TVR heat recovery ventilators can greatly reduce energy losses and room temperature fluctuations caused by the ventilation process.

The strong performance exercised by these units is a result of the advanced technology incorporated into their design. The heat exchanger core made of especially treated paper provides enhanced temperature and humidity control. The temperature exchange efficiency is over 65% and the enthalpy exchange efficiency is between 50% and 65%.

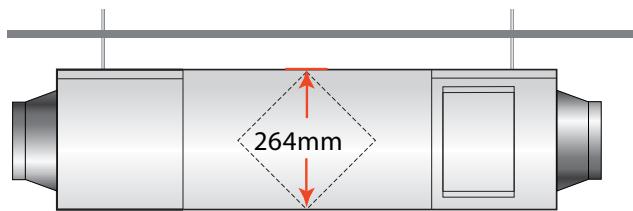


Low Noise

Sound attenuators are used to provide a quiet operation.

Flexibility

The height of the units can start as low as 264mm and could weigh as low as 23kg. These characteristics allow for easy installation even within space limitations.



Specifications DC Series

Model		HRV-D200	HRV-D300	HRV-D400	HRV-D500
Power supply	V/Ph/Hz	220-240/1/50(60)			
Cooling temp. exchange efficiency	%	76.1	74.8	76.2	76.1
Cooling enthalpy exchange efficiency	%	77.3	76.1	78.7	78.2
Heating temp. exchange efficiency	%	76.1	74.8	76.2	76.1
Heating enthalpy exchange efficiency	%	82.6	79.8	83.6	80.4
Sound pressure level	dB(A)	27	30	32	35
Airflow rate	m³/h	200	300	400	500
External static pressure	Pa	75	75	80	80
Motor type		DC			
Duct diameter	mm	Φ144	Φ144	Φ144	Φ194
Net dimensions (WxDxH)	mm	852×665×264	928×734×270	928×940×270	1020×1036×270
Packed dimensions (WxDxH)	mm	910×710×430	980×774×435	1010×1010×440	1120×1120×452
Net weight	kg	25	27	32	35
Gross weight	kg	37	40	46	51
Operating temperature range	°C	-7 to 43 DB, RH 80% or lower			

Model		HRV-D800	HRV-D1000	HRV-D1500	HRV-D2000
Power supply	V/Ph/Hz	220-240/1/50(60)			
Cooling temp. exchange efficiency	%	76.9	75.8	77.8	77.2
Cooling enthalpy exchange efficiency	%	78.1	76.9	79.2	78.7
Heating temp. exchange efficiency	%	76.9	75.8	77.8	77.2
Heating enthalpy exchange efficiency	%	80.1	78.6	80.5	80.3
Sound pressure level	dB(A)	39	40	51	53
Airflow rate	m³/h	800	1000	1500	2000
External static pressure	Pa	100	100	160	170
Motor type		DC			
Duct dimensions	mm	Φ242	Φ242	346×326	346×326
Net dimensions (WxDxH)	mm	1276×1020×388	1276×1269×388	1600×1270×540	1650×1470×540
Packed dimensions (WxDxH)	mm	1355×1045×560	1400×1370×573	1710×1410×720	1760×1610×720
Net weight	kg	58	69	151	165
Gross weight	kg	77	90	184	198
Operating temperature range	°C	-7 to 43 DB, RH 80% or lower			

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
 2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
 3. Diameters given are those of the unit's stop valves.
 4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

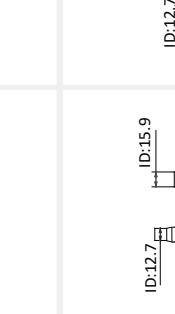
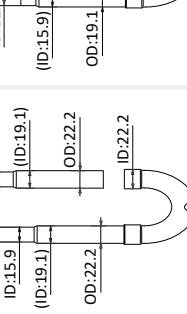
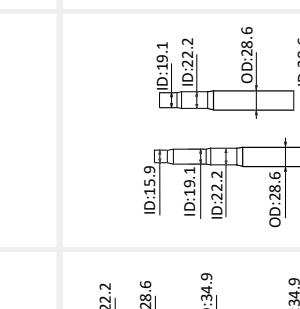
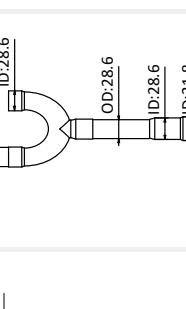
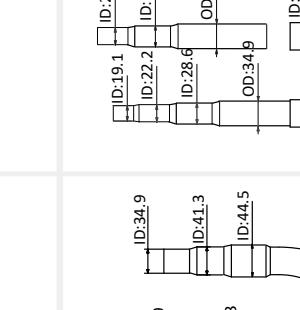
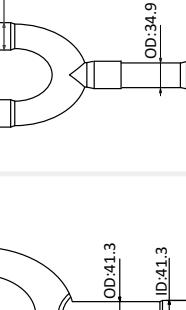
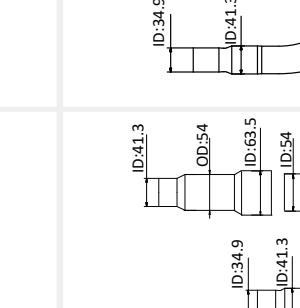
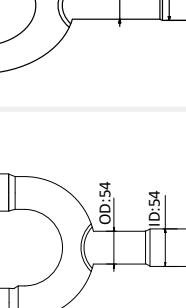
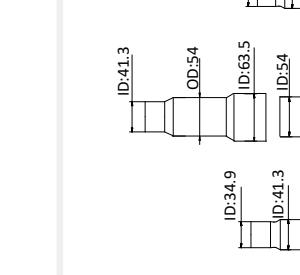
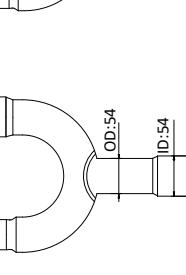
Branch Joints

Type	Appearance	Model	Packed Dimensions mm	Gross Weight kg	Note
Branch joints for outdoor units		TODK02UTHP	255×150×185	2.0	Connecting two outdoor units
		TODK03UTHP	345×160×285	4.3	Connecting three outdoor units
		TRDK056HP	290×105×100	0.4	/
		TRDK112HP	290×105×100	0.6	/
Branch joints for indoor units		TRDK225HP	310×130×125	0.9	/
		TRDK314HP	04350×180×170	1.5	/
		TRDK768HP	365×195×215	1.9	/
		TRDK840HP	390×230×255	3.1	/
		TRDK918HP	390×230×255	3.4	/

Outdoor Branch Joints

Model	Gas side joints	Liquid side joints
TODK02UTHP		
TODK03UTHP		

Indoor Branch Joints

Model	Gas side joints	Liquid side joints
TRDK056HP		
TRDK112HP		
TRDK225HP		
TRDK314HP		
TRDK768HP		
TRDK840HP		
TRDK918HP		

To learn more about how TVR™ Ultra and
TVR™ Ultra Pro can help your building, visit trane.com
or contact your Trane account manager



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit trane.com or tranetechnologies.com.