TRANE

Integrated TVR 6G Air Conditioning System

a smart solution for every building

R410a 50Hz

Ingersoll Rand

Contents

Key Technologies

The World's largest single outdoor unit capacity of 32HP.

Compact combination achieving up to 96HP, the largest in the VRF industry.

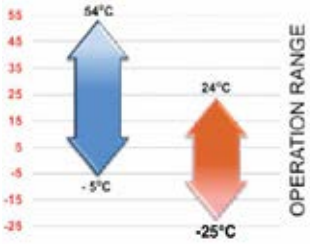
32HP x 3
MAX COMBINATION CAPACITY
96HP / 270Kw / 78 TR
THE LARGEST IN HVAC INDUSTRY

Powerful wider range of 13 single module meeting any application design.

8 - 12 HP (Single fan) | 14 - 16 HP (Single fan) | 18 - 22 HP (Dual fan) | 24 - 32 HP (Dingle fan)

Compact product footprint, savings overall installation cost.

Operate in a wide ambient temperature range.

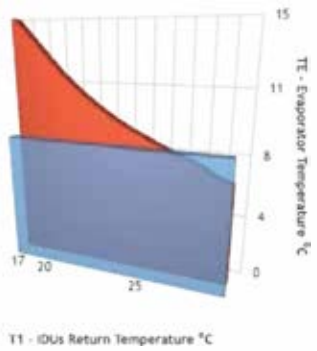


Highest number of indoor units connected to a single module

Key Technologies

Energy Management System

- Increase system efficiency without compromising comfort.
- Rapid cooling or heating automatic adjustments meeting load requirements.
- Enable capacity set up in the event of a power shortage.

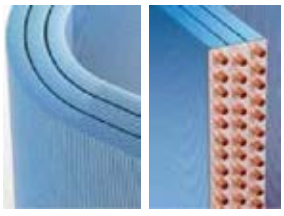


Secondary Sub- Cooling loop

Plate Heat exchanger plays a major role in boosting compression during mid-season and/or part load

Optimized Heat Exchanger

Innovative outdoor heat exchanger by U & G design



High Efficient Compressor

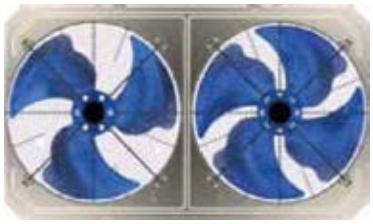
Increase part load efficiency in all operation range with wider inverter frequency.

Enhanced Vapor Injection Compressor

Improves compressor efficiency by maintaining suction temperature In cold weather (below 7º) condition, EVI will improve heating performance up to 20%

Efficient Fan design with pressure control

Optimizing building load by modulating outdoor fan speed



Key Technologies

Duty Cycling

Duty cycling equalizes the running time of the outdoor units in a multiple-unit system and of the compressors in each unit, significantly extending compressor lifespan.

1st cycle

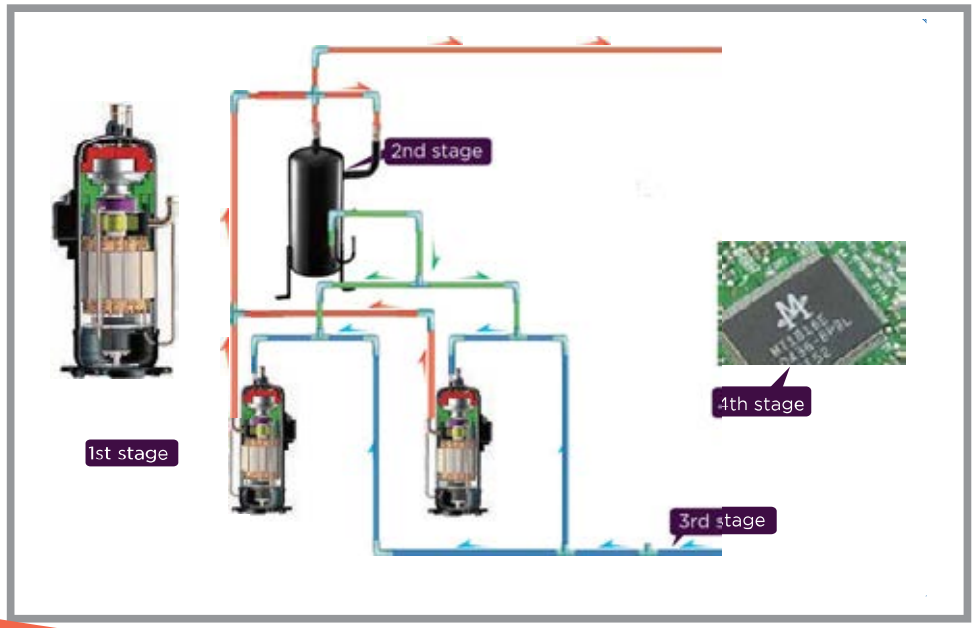
2nd cycle

3rd cycle

Precise Oil Control Technology

Four stages of oil control technology ensure all outdoor compressor oil is always kept at a safe level, eliminating any compressor oil shortage problems.

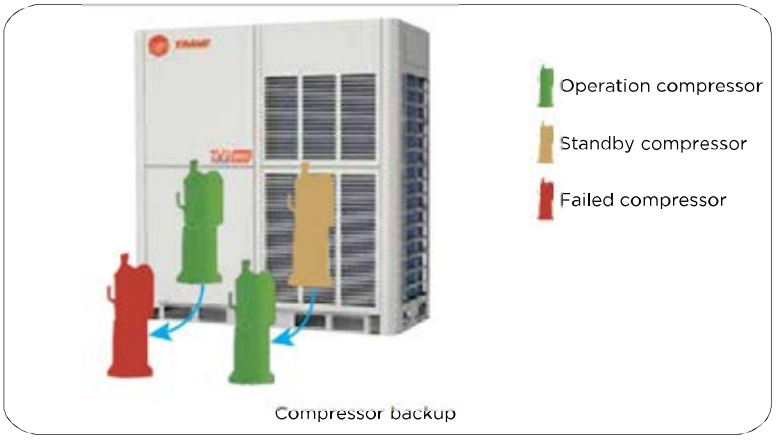
- Compressor internal oil separation.
- High-efficiency centrifugal oil separator (with separation efficiency of up to 99%) ensures that oil is separated from the discharge gas and returned to the compressors in a timely fashion.
- Oil balance pipes between compressors ensure even oil distribution to keep compressors running normally.
- Auto oil return program monitors the running time and system status to ensure reliable oil return.



Key Technologies

Backup Operation

In units with two compressors, if one compressor fails, the other compressor can run on its own for up to 4 days, allowing time for maintenance or repair whilst maintaining comfort.



Compressor backup

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 subjecting major components and parts to salt mist testing, moisture and heating testing and light aging testing.

Fan motor

Standard products:
72h of neutral salt mist

Heavy anti-corrosion products:
240h of neutral salt mist

Painted sheet metal

Standard products:
500h of neutral salt mist
1000h of moisture and heating test
500h of light aging test

Heavy anti-corrosion products:
1000h of neutral salt mist
2000h of moisture and heating test
720h of light aging test

Heat exchanger aluminum foil

Standard products:
72h of neutral salt mist

Heavy anti-corrosion products:
1000h of neutral salt mist
140h of acid salt mis

Heat exchanger copper pipe

Standard products:
24h of neutral salt mist

Heavy anti-corrosion products:
120h of neutral salt mist

Screws / bolts / gaskets

Standard products:
300h of neutral salt mist

Heavy anti-corrosion products:
720h of neutral salt mist

Electric control box case

Standard products:
96h of neutral salt mist

Heavy anti-corrosion products:
240h of neutral salt mist

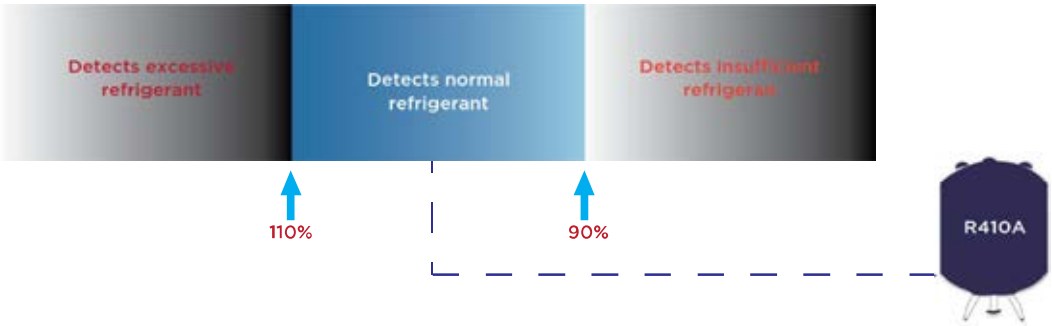
Key Technologies

Refrigerant Cooling PCB

The 6G VRF uses refrigerant cooling technology to cool the electric control box. It decreases the average temperature of electrical control components by about 8 degrees, guaranteeing the stable and safe running of the control system.

Real-time Refrigerant Amount Monitoring

The temperature and pressure of refrigerant can be real-time monitored by the outdoor unit. When the level of refrigerant is too low or too high, this can cause damage to the unit and poor performance. 6G outdoor unit can detect excessive or insufficient amounts of refrigerant, to ensure consistent performance.



Auto Snow-blowing Function*

The innovatively designed auto snow-blowing function enables the outdoor unit to prevent the accumulation of snow by itself.

*This function is available as a customization option.

Dust-clean function*

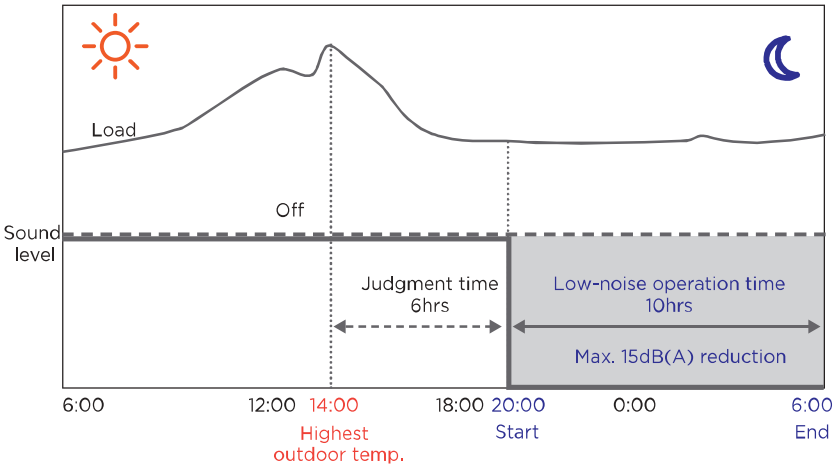
The innovatively designed dust-clean function enables the outdoor unit to prevent the dust by itself.

*This function is available as a customization option.

Key Technologies

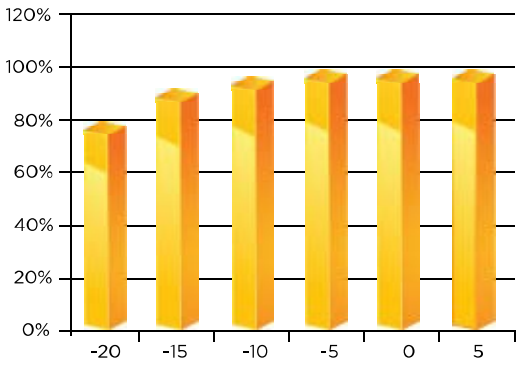
Night Silent Mode

The night silent mode feature, which is easily configured on the outdoor unit's PCB, includes various scheduling options that can be used to reduce noise levels at times when low noise operation is required.



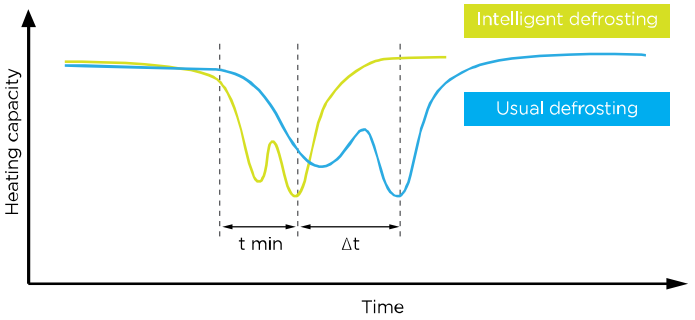
Enhanced Heating Capacity

Heating capacity is 100% of rated capacity at ambient temperatures as low as -5°C and 90% of rated capacity at -15°C.



Intelligent Defrosting Technology

The intelligent defrosting program calculates the time required for defrosting according to the actual system status, eliminating heat losses from unnecessary defrosting. A specialized defrosting valve reduces time required for defrosting to as little at four minutes.



Key Technologies

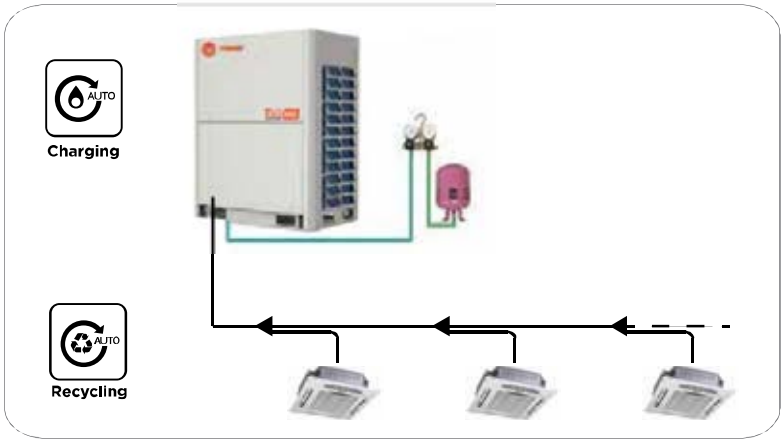
Auto Addressing

Outdoor units can distribute addresses to indoor units automatically. Remote and wired controllers can be used to query or modify each indoor unit's address.

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.

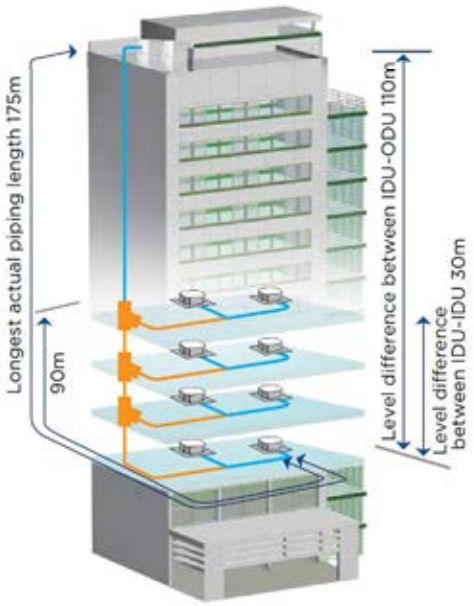


Key Technologies

Long Piping Capability

- Total piping length: 1000m
- Longest piping length – actual (equivalent): 175m (200m)
- Longest piping length after first branch: 40/90*m
- Level difference between IDUs and ODU – ODU above (below): 90m (110m)
- Level difference between IDUs: 30m

*The longest length after first branch is 40m as standard but can be extended to up to 90m under certain conditions. Please contact your local Trane dealer for further information.



Outdoor Unit Lineup

HP	8	10	12	14	16	18	20	22	24	26	28	30	32
Appearance	 (with single fan)			 (with single fan)		 (with dual fans)			 (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										● ●			

● Modular

● Individual

Outdoor Unit Lineup

HP	8	10	12	14	16	18	20	22	24	26	28	30	32
Appearance	 (with single fan)			 (with single fan)		 (with dual fans)			 (with dual fans)				
54										●	●		
56											●●		
58											●	●	
60											●		●
62												●	●
64													●●
66			●					●					●
68				●				●					●
70					●			●					●
72			●								●		●
74							●	●					●
76								●●					●
78								●	●				●
80								●		●			●
82								●			●		●
84										●●			●
86										●	●		●
88											●●		●
90											●	●	●
92											●		●●
94												●	●●
96													● ●

Indoor Unit Lineup

kW		1.8	2.2	2.8	3.6	4.5	5.6	7.1
Btu/h		5k	7k	9k	12k	15k	19k	24k
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			●	●	●	●	●	●

Indoor Unit Lineup

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
27k	30k	34k	38k	42k	48k	55k	68k	85k	96k	136k	154k	191k
●	●	●	●		●							
●	●		●		●							
●	●		●		●	●	●	●	●	●	●	●
				●	●		●	●	●		●	●
●	●											
●	●		●		●							
●												

Outdoor Units-Modular

1 Specifications

8-14HP

Table 2-1.1: 8-14HP specifications

HP			8HP	10HP	12HP	14HP
Model name			**4TVVT086BD060AA**	**4TVVT096BD060AA**	**4TVVT115BD060AA**	**4TVVT140BD060AA**
Power supply		V/Ph/Hz	380-415/3/50			
Cooling - 35°C[1]	Capacity	kW	25.2	28.2	33.6	41.0
		Btu/h	86000	96000	115000	140000
	Power input	kW	6.7	7.7	9.3	11.1
	EER / **QCC**	(Btu/h) / W	14.6	13.7	13.4	13.5
Cooling - Eurovent[2]	Capacity	kW	25.2	28.0	33.5	40.0
		Btu/h	86000	95000	115000	137000
	Power input	kW	5.3	6.3	8.7	9.9
	EER	(Btu/h) / W	16.21	15.10	13.22	13.87
		W / W	4.75	4.45	3.85	4.05
Cooling - 46°C[3]	Capacity	kW	22.2	24.6	28.2	33.6
		Btu/h	76000	84000	96000	115000
	Power input	kW	6.6	7.8	9.0	10.5
	EER / **ESMA**	(Btu/h) / W	11.0	10.7	10.5	11.0
Heating[4]	Capacity	kW	25.2	28.0	33.5	40.0
		Btu/h	86000	95000	115000	137000
	Power input	kW	4.6	5.2	6.6	8.5
	COP	(Btu/h) / W	18.77	18.32	17.51	16.10
		W / W	5.50	5.40	5.10	4.70
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity			
	Maximum quantity		13	16	20	23
Compressor	Type		DC inverter			
	Quantity		1			
	Oil type		FV68H			
	Start-up method		Soft start			
Fan	Type		Propeller			
	Motor type		DC			
	Quantity		1			
	Motor output	kW	0.56			0.92
	Static pressure	Pa	0-20 (default); 20-60 (customized)			
	Airflow rate	m^3/h	11000			13000
	Drive type		Direct			
Refrigerant	Type		R410A			
	Factory charge	kg	11			13
Pipe connections[5]	Liquid pipe	mm	Φ12.7		Φ15.9	Φ15.9
	Gas pipe	mm	Φ25.4		Φ28.6	Φ31.8
Sound pressure level[6]		dB(A)	58		60	
Net dimensions (W×H×D)		mm	990×1635×790			1340×1635×850
Packed dimensions (W×H×D)		mm	1090×1805×860			1405×1805×910
Net weight		kg	227			277
Gross weight		kg	242			304
Ambient temp. operation range		°C	-5 to 54 (cooling); -25to 24 (heating)			

Notes:
(1) Indoor temperature: 26.7°CDB, 19.4°CWB; outdoor temperature: 35°CDB; AHRI 1230:2010 / ISO 15042:2011; power input indoor units (duct type) included.
(2) Indoor temperature: 27°CDB, 19°CWB; outdoor temperature: 35°CDB; based on Eurovent testing; power input indoor units not included.
(3) Indoor temperature: 29°CDB, 19°CWB; outdoor temperature: 46°CDB; ISO 15042:2011; power input indoor units (duct type) included. As per ESMA.
(4) Indoor temperature: 20°CDB; outdoor temperature: 7°CDB, 6°CWB; based on Eurovent testing; power input indoor units not included.
(5) Diameters given are those of the unit's stop valves.
(6) 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.

16-22HP

Table 2-1.2: 16-22HP specifications

HP			16HP	18HP	20HP	22HP
Model name			**4TVVT155BD060AA**	**4TVVT172BD060AA**	**4TVVT192BD060AA**	**4TVVT211BD060AA**
Power supply		V/Ph/Hz	380-415/3/50			
Cooling - 35°C(1)	Capacity	kW	45.0	50.0	56.5	62.0
		Btu/h	155000	172000	192000	211000
	Power input	kW	13.1	14.8	17.2	19.0
	EER / QCC	(But/h) / W	13.2	12.6	12.4	12.2
Cooling - Eurovent(2)	Capacity	kW	45.0	50.0	56.0	61.5
		Btu/h	154000	170000	190000	210000
	Power input	kW	12.0	12.5	15.1	18.4
	EER	(Btu/h) / W	12.83	13.60	12.55	11.44
		W / W	3.75	4.00	3.70	3.35
Cooling - 46°C(3)	Capacity	kW	37.2	41.5	44.0	46.0
		Btu/h	127000	142000	150000	156000
	Power input	kW	11.8	14.0	15.6	17.1
	EER / ESMA	(But/h) / W	10.8	10.0	9.3	8.8
Heating(4)	Capacity	kW	45.0	50.0	56.0	61.5
		Btu/h	154000	170000	190000	210000
	Power input	kW	9.8	10.6	12.7	15.0
	COP	(Btu/h) / W	15.74	15.98	14.93	14.00
		W / W	4.60	4.70	4.40	4.10
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity			
	Maximum quantity		26	29	33	36
Compressor	Type		DC inverter			
	Quantity		1	2		
	Oil type		FV68H			
	Start-up method		Soft start			
Fan	Type		Propeller			
	Motor type		DC			
	Quantity		1	2		
	Motor output	kW	0.92	0.56×2		
	Static pressure	Pa	0-20 (default); 20-60 (customized)			
	Airflow rate	m^3/h	13000	17000		
	Drive type		Direct			
Refrigerant	Type		R410A			
	Factory charge	kg	13	17		
Pipe connections(5)	Liquid pipe	mm	Φ15.9	Φ19.1		
	Gas pipe	mm	Φ31.8			
Sound pressure level(6)		dB(A)	61	62	63	
Net dimensions (W×H×D)		mm	1340×1635×850	1340×1635×825		
Packed dimensions (W×H×D)		mm	1405×1805×910	1405×1805×910		
Net weight		kg	277	348		
Gross weight		kg	304	368		
Ambient temp. operation range		°C	-5 to 54 (cooling); -25 to 24 (heating)			

Notes:
(1) Indoor temperature: 26.7°CDB, 19.4°CWB; outdoor temperature: 35°CDB; AHRI 1230:2010 / ISO 15042:2011; power input indoor units (duct type) included.
(2) Indoor temperature: 27°CDB, 19°CWB; outdoor temperature: 35°CDB; based on Eurovent testing; power input indoor units not included.
(3) Indoor temperature: 29°CDB, 19°CWB; outdoor temperature: 46°CDB; ISO 15042:2011; power input indoor units (duct type) included. As per ESMA.
(4) Indoor temperature: 20°CDB; outdoor temperature: 7°CDB, 6°CWB; based on Eurovent testing; power input indoor units not included.
(5) Diameters given are those of the unit's stop valves.
(6) 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.

24-32HP

Table 2-1.3: 24-32HP specifications

HP			24HP	26HP	28HP	30HP	32HP
Model name			4TVVT228BD060AA	4TVVT251BD060AA	4TVVT270BD060AA	4TVVT288BD060AA	4TVVT305BD060AA
Power supply		V/Ph/Hz	380-415/3/50				
Cooling - 35°C(1)	Capacity	kW	67.0	73.5	78.5	84.5	89.5
		Btu/h	228000	251000	270000	288000	305000
	Power input	kW	20.7	24.2	26.2	28.5	30.5
	EER / QCC	(But/h) / W	12.0	11.1	11.0	11.0	10.3
Cooling - Eurovent(2)	Capacity	kW	67.0	73.0	78.5	85.0	90.0
		Btu/h	228000	250000	268000	290000	308000
	Power input	kW	18.1	20.9	24.2	27.4	31.0
	EER	(Btu/h) / W	12.59	11.96	11.10	10.58	9.92
		W / W	3.70	3.49	3.25	3.10	2.90
Cooling - 46°C(3)	Capacity	kW	55.7	60.0	63.0	63.0	66.0
		Btu/h	190000	205000	215000	216000	225000
	Power input	kW	19.3	21.9	23.9	24.7	25.4
	EER / ESMA	(But/h) / W	9.2	8.8	8.7	9.4	9.0
Heating(4)	Capacity	kW	67.0	73.0	78.5	85.0	90.0
		Btu/h	228000	250000	268000	290000	308000
	Power input	kW	14.9	17.6	20.7	23.0	25.7
	COP	(Btu/h) / W	15.31	14.20	12.97	12.62	11.98
		W / W	4.50	4.15	3.80	3.70	3.50
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity				
	Maximum quantity		39	43	46	50	53
Compressor	Type		DC inverter				
	Quantity		2				
	Oil type		FV68H				
	Start-up method		Soft start				
Fan	Type		Propeller				
	Motor type		DC				
	Quantity		2				
	Motor output	kW	0.92×2				
	Static pressure	Pa	0-20 (default); 20-60 (customized)				
	Airflow rate	m^3/h	25000			24000	
	Drive type		Direct				
Refrigerant	Type		R410A				
	Factory charge	kg	22			25	
Pipe connections(5)	Liquid pipe	mm	Φ19.1	Φ22.2			
	Gas pipe	mm	Φ31.8			Φ38.1	
Sound pressure level(6)		dB(A)	64				
Net dimensions (W×H×D)		mm	1730 × 1830 × 850				
Packed dimensions (W×H×D)		mm	1800×2000×910				
Net weight		kg	430			475	
Gross weight		kg	453			507	
Ambient temp. operation range		°C	-5 to 54 (cooling); -25 to 24 (heating)				

Notes:
(1) Indoor temperature: 26.7°CDB, 19.4°CWB; outdoor temperature: 35°CDB; AHRI 1230:2010 / ISO 15042:2011; power input indoor units (duct type) included.
(2) Indoor temperature: 27°CDB, 19°CWB; outdoor temperature: 35°CDB; based on Eurovent testing; power input indoor units not included.
(3) Indoor temperature: 29°CDB, 19°CWB; outdoor temperature: 46°CDB; ISO 15042:2011; power input indoor units (duct type) included. As per ESMA.
(4) Indoor temperature: 20°CDB; outdoor temperature: 7°CDB, 6°CWB; based on Eurovent testing; power input indoor units not included.
(5) Diameters given are those of the unit's stop valves.
(6) 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.

34-40HP

Table 2-1.4: 34-40HP specifications

HP			34	36	38	40
Model name			**4TVVT326BD060AA**	**4TVVT351BD060AA**	**4TVVT366BD060AA**	**4TVVT385BD060AA**
Combination type			**12HP+22HP**	**14HP+22HP**	**16HP+22HP**	**12HP+28HP**
Power supply		V/Ph/Hz	380-415/3/50			
Cooling - 35°C[1]	Capacity	kW	95.6	102.0	107.0	112.1
		Btu/h	326000	351000	366000	385000
	Power input	kW	28.3	30.1	32.1	35.5
	EER	(Btu/h) / W	11.52	11.66	11.40	10.85
Cooling - Eurovent[2]	Capacity	kW	95.0	101.5	106.5	112.0
		Btu/h	325000	347000	364000	383000
	Power input	kW	27.1	28.2	30.4	32.9
	EER	(Btu/h) / W	12.01	12.29	11.99	11.66
		W / W	3.51	3.59	3.51	3.41
Cooling - 46°C[3]	Capacity	kW	74.2	79.6	83.2	91.2
		Btu/h	252000	271000	283000	311000
	Power input	kW	26.1	27.6	28.9	32.9
	EER	(Btu/h) / W	9.655	9.819	9.792	9.453
Heating[4]	Capacity	kW	95.0	101.5	106.5	112.0
		Btu/h	325000	347000	364000	383000
	Power input	kW	21.6	23.5	24.8	27.2
	COP	(Btu/h) / W	15.07	14.76	14.69	14.07
		W / W	4.40	4.32	4.30	4.11
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity			
	Maximum quantity		56	59	63	64
Compressor	Type		DC inverter			
	Quantity		3			
	Oil type		FV68H			
	Start-up method		Soft start			
Fan	Type		Propeller			
	Motor type		DC			
	Quantity		3			
	Motor output	kW	0.56×3	0.92+0.56×2	0.92+0.56×2	0.56+0.92×2
	Static pressure	Pa	0-20 (default); 20-60 (customized)			
	Airflow rate	m^3/h	28000	30000	30000	36000
	Drive type		Direct			
Refrigerant	Type		R410A			
	Factory charge	kg	11+17	13+17	13+17	11+22
Pipe connections[5]	Liquid pipe	mm	Φ19.1	Φ19.1		
	Gas pipe	mm	Φ31.8	Φ38.1		
Sound pressure level[6]		dB(A)	65			
Net dimensions (W×H×D)		mm	(990×1635×790)+ (1340×1635×825)	(1340×1635×850)+ (1340×1635×825)		(990×1635×790)+ (1730×1830×850)
Packed dimensions (W×H×D)		mm	(1090×1805×860)+ (1405×1805×910)	(1405×1805×910)×2		(1090×1805×860)+ (1800×2000×910)
Net weight		kg	227+348	277+348		227+430
Gross weight		kg	242+368	304+368		242+453
Ambient temp. operation range		°C	-5 to 54 (cooling); -25 to 24 (heating)			

Notes:
(1) Indoor temperature: 26.7°CDB, 19.4°CWB; outdoor temperature: 35°CDB; AHRI 1230:2010 / ISO 15042:2011; power input indoor units (duct type) included.
(2) Indoor temperature: 27°CDB, 19°CWB; outdoor temperature: 35°CDB; based on Eurovent testing; power input indoor units not included.
(3) Indoor temperature: 29°CDB, 19°CWB; outdoor temperature: 46°CDB; ISO 15042:2011; power input indoor units (duct type) included. As per ESMA.
(4) Indoor temperature: 20°CDB; outdoor temperature: 7°CDB, 6°CWB; based on Eurovent testing; power input indoor units not included.
(5) Diameters given are those of the unit's stop valves.
(6) 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.

42-48HP

Table 2-1.5: 42-48HP specifications

HP			42	44	46	48
Model name			**4TVVT403BD060AA**	**4TVVT422BD060AA**	**4TVVT439BD060AA**	**4TVVT462BD060AA**
Combination type			**20HP+22HP**	**22HP+22HP**	**22HP+24HP**	**22HP+26HP**
Power supply		V/Ph/Hz	380-415/3/50			
Cooling - 35°C(1)	Capacity	kW	118.5	124.0	129.0	135.5
		Btu/h	403000	422000	439000	462000
	Power input	kW	36.2	38.0	39.7	43.2
	EER	(Btu/h) / W	11.13	11.11	11.06	10.69
Cooling - Eurovent(2)	Capacity	kW	117.5	123.0	128.5	134.5
		Btu/h	400000	420000	438000	460000
	Power input	kW	33.5	36.7	36.5	39.3
	EER	(Btu/h) / W	11.94	11.44	12.01	11.72
		W / W	3.51	3.35	3.52	3.43
Cooling - 46°C(3)	Capacity	kW	90.0	92.0	101.7	106.0
		Btu/h	306000	312000	346000	361000
	Power input	kW	32.7	34.2	36.4	39.0
	EER	(Btu/h) / W	9.358	9.123	9.505	9.256
Heating(4)	Capacity	kW	117.5	123.0	128.5	134.5
		Btu/h	400000	420000	438000	460000
	Power input	kW	27.7	30.0	29.9	32.6
	COP	(Btu/h) / W	14.43	14.00	14.65	14.11
		W / W	4.24	4.10	4.30	4.13
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity			
	Maximum quantity		64			
Compressor	Type		DC inverter			
	Quantity		4			
	Oil type		FV68H			
	Start-up method		Soft start			
Fan	Type		Propeller			
	Motor type		DC			
	Quantity		4			
	Motor output	kW	0.56×4	0.56×4	0.56×2+0.92×2	0.56×2+0.92×2
	Static pressure	Pa	0-20 (default); 20-60 (customized)			
	Airflow rate	m^3/h	34000	34000	42000	42000
	Drive type		Direct			
Refrigerant	Type		R410A			
	Factory charge	kg	17×2	17×2	17+22	17+22
Pipe connections(5)	Liquid pipe	mm	Φ19.1			
	Gas pipe	mm	Φ38.1			
Sound pressure level(6)		dB(A)	66			
Net dimensions (W×H×D)		mm	(1340×1635×825)×2		(1340×1635×825)+(1730×1830×850)	
Packed dimensions (W×H×D)		mm	(1405×1805×910)×2		(1405×1805×910)+(1800×2000×910)	
Net weight		kg	348×2		348+430	
Gross weight		kg	368×2		368+453	
Ambient temp. operation range		°C	-5 to 54 (cooling); -25 to 24 (heating)			

Notes:
(1) Indoor temperature: 26.7°CDB, 19.4°CWB; outdoor temperature: 35°CDB; AHRI 1230:2010 / ISO 15042:2011; power input indoor units (duct type) included.
(2) Indoor temperature: 27°CDB, 19°CWB; outdoor temperature: 35°CDB; based on Eurovent testing; power input indoor units not included.
(3) Indoor temperature: 29°CDB, 19°CWB; outdoor temperature: 46°CDB; ISO 15042:2011; power input indoor units (duct type) included. As per ESMA.
(4) Indoor temperature: 20°CDB; outdoor temperature: 7°CDB, 6°CWB; based on Eurovent testing; power input indoor units not included.
(5) Diameters given are those of the unit's stop valves.
(6) 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.

50-56HP

Table 2-1.6: 50-56HP specifications

HP			50	52	54	56
Model name			**4TVVT481BD060AA**	**4TVVT502BD060AA**	**4TVVT521BD060AA**	**4TVVT540BD060AA**
Combination type			**22HP+28HP**	**26HP+26HP**	**26HP+28HP**	**28HP+28HP**
Power supply		V/Ph/Hz	380-415/3/50			
Cooling - 35°C(1)	Capacity	kW	140.5	147.0	152.0	157.0
		Btu/h	481000	502000	521000	540000
	Power input	kW	45.2	48.4	50.4	52.4
	EER	(Btu/h) / W	10.64	10.37	10.34	10.31
Cooling - Eurovent(2)	Capacity	kW	140.0	146.0	151.5	157.0
		Btu/h	478000	500000	518000	536000
	Power input	kW	42.5	41.8	45.1	48.3
	EER	(Btu/h) / W	11.24	11.96	11.50	11.10
		W / W	3.29	3.49	3.36	3.25
Cooling - 46°C(3)	Capacity	kW	109.0	120.0	123.0	126.0
		Btu/h	371000	410000	420000	430000
	Power input	kW	41	43.8	45.8	47.8
	EER	(Btu/h) / W	9.049	9.361	9.170	8.996
Heating(4)	Capacity	kW	140.0	146.0	151.5	157.0
		Btu/h	478000	500000	518000	536000
	Power input	kW	35.7	35.2	38.3	41.3
	COP	(Btu/h) / W	13.41	14.20	13.54	12.97
		W / W	3.93	4.15	3.96	3.80
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity			
	Maximum quantity		64			
Compressor	Type		DC inverter			
	Quantity		4			
	Oil type		FV68H			
	Start-up method		Soft start			
Fan	Type		Propeller			
	Motor type		DC			
	Quantity		4			
	Motor output	kW	0.56×2+0.92×2	0.92×4	0.92×4	0.92×4
	Static pressure	Pa	0-20 (default); 20-60 (customized)			
	Airflow rate	m^3/h	42000	50000	50000	50000
	Drive type		Direct			
Refrigerant	Type		R410A			
	Factory charge	kg	17+22	22×2	22×2	22×2
Pipe connections(5)	Liquid pipe	mm	Φ19.1			Φ19.1
	Gas pipe	mm	Φ38.1			Φ41.3
Sound pressure level(6)		dB(A)	66			
Net dimensions (W×H×D)		mm	(1340×1635×825)+ (1730×1830×850)	(1730×1830×850)×2		
Packed dimensions (W×H×D)		mm	(1405×1805×910)+ (1800×2000×910)	(1800×2000×910)×2		
Net weight		kg	348+430	430×2		
Gross weight		kg	368+453	453×2		
Ambient temp. operation range		°C	-5 to 54 (cooling); -25 to 24 (heating)			

Notes:
(1) Indoor temperature: 26.7°CDB, 19.4°CWB; outdoor temperature: 35°CDB; AHRI 1230:2010 / ISO 15042:2011; power input indoor units (duct type) included.
(2) Indoor temperature: 27°CDB, 19°CWB; outdoor temperature: 35°CDB; based on Eurovent testing; power input indoor units not included.
(3) Indoor temperature: 29°CDB, 19°CWB; outdoor temperature: 46°CDB; ISO 15042:2011; power input indoor units (duct type) included. As per ESMA.
(4) Indoor temperature: 20°CDB; outdoor temperature: 7°CDB, 6°CWB; based on Eurovent testing; power input indoor units not included.
(5) Diameters given are those of the unit's stop valves.
(6) 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.

58-64HP

Table 2-1.7: 58-64HP specifications

HP			58	60	62	64
Model name			**4TVVT558BD060AA**	**4TVVT575BD060AA**	**4TVVT593BD060AA**	**4TVVT610BD060AA**
Combination type			**28HP+30HP**	**28HP+32HP**	**30HP+32HP**	**32HP+32HP**
Power supply		V/Ph/Hz	380-415/3/50			
Cooling - 35°C(1)	Capacity	kW	163.0	168.0	174.0	179.0
		Btu/h	558000	575000	593000	610000
	Power input	kW	54.7	56.7	59.0	61.0
	EER	(Btu/h) / W	10.20	10.14	10.05	10.00
Cooling - Eurovent(2)	Capacity	kW	163.5	168.5	175.0	180.0
		Btu/h	558000	576000	598000	616000
	Power input	kW	51.6	55.2	58.5	62.1
	EER	(Btu/h) / W	10.82	10.44	10.23	9.92
		W / W	3.17	3.05	2.99	2.90
Cooling - 46°C(3)	Capacity	kW	126.0	129.0	129.0	132.0
		Btu/h	431000	440000	441000	450000
	Power input	kW	48.6	49.3	50.1	50.8
	EER	(Btu/h) / W	8.868	8.925	8.802	8.858
Heating(4)	Capacity	kW	163.5	168.5	175.0	180.0
		Btu/h	558000	576000	598000	616000
	Power input	kW	43.6	46.4	48.7	51.4
	COP	(Btu/h) / W	12.79	12.42	12.28	11.98
		W / W	3.75	3.63	3.59	3.50
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity			
	Maximum quantity		64			
Compressor	Type		DC inverter			
	Quantity		4			
	Oil type		FV68H			
	Start-up method		Soft start			
Fan	Type		Propeller			
	Motor type		DC			
	Quantity		4			
	Motor output	kW	0.92×4	0.92×4	0.92×4	0.92×4
	Static pressure	Pa	0-20 (default); 20-60 (customized)			
	Airflow rate	m^3/h	49000	49000	48000	48000
	Drive type		Direct			
Refrigerant	Type		R410A			
	Factory charge	kg	22+25	22+25	25+25	25×2
Pipe connections(5)	Liquid pipe	mm	Φ19.1			
	Gas pipe	mm	Φ41.3			
Sound pressure level(6)		dB(A)	66			
Net dimensions (W×H×D)		mm	(1730×1830×850)×2			
Packed dimensions (W×H×D)		mm	(1800×2000×910)×2			
Net weight		kg	430+475		475×2	
Gross weight		kg	453+507		507×2	
Ambient temp. operation range		°C	-5 to 54 (cooling); -25 to 24 (heating)			

Notes:
(1) Indoor temperature: 26.7°CDB, 19.4°CWB; outdoor temperature: 35°CDB; AHRI 1230:2010 / ISO 15042:2011; power input indoor units (duct type) included.
(2) Indoor temperature: 27°CDB, 19°CWB; outdoor temperature: 35°CDB; based on Eurovent testing; power input indoor units not included.
(3) Indoor temperature: 29°CDB, 19°CWB; outdoor temperature: 46°CDB; ISO 15042:2011; power input indoor units (duct type) included. As per ESMA.
(4) Indoor temperature: 20°CDB; outdoor temperature: 7°CDB, 6°CWB; based on Eurovent testing; power input indoor units not included.
(5) Diameters given are those of the unit's stop valves.
(6) 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.

66-72HP

Table 2-1.8: 66-72HP specifications

HP			66	68	70	72
Model name			**4TVVT631BD060AA**	**4TVVT656BD060AA**	**4TVVT671BD060AA**	**4TVVT690BD060AA**
Combination type			**12HP+22HP+32HP**	**14HP+22HP+32HP**	**16HP+22HP+32HP**	**12HP+28HP+32HP**
Power supply		V/Ph/Hz	380-415/3/50			
Cooling - 35°C(1)	Capacity	kW	185.1	191.5	196.5	201.6
		Btu/h	631000	656000	671000	690000
	Power input	kW	58.8	60.6	62.6	66.0
	EER	(Btu/h) / W	10.73	10.83	10.72	10.45
Cooling - Eurovent(2)	Capacity	kW	185.0	191.5	196.5	202.0
		Btu/h	633000	655000	672000	691000
	Power input	kW	58.1	59.3	61.4	63.9
	EER	(Btu/h) / W	10.90	11.05	10.95	10.82
		W / W	3.18	3.23	3.20	3.16
Cooling - 46°C(3)	Capacity	kW	140.2	145.6	149.2	157.2
		Btu/h	477000	496000	508000	536000
	Power input	kW	51.5	53.0	54.3	58.3
	EER	(Btu/h) / W	9.262	9.358	9.355	9.194
Heating(4)	Capacity	kW	185.0	191.5	196.5	202.0
		Btu/h	633000	655000	672000	691000
	Power input	kW	47.3	49.2	50.5	52.9
	COP	(Btu/h) / W	13.39	13.31	13.31	13.05
		W / W	3.91	3.89	3.89	3.82
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity			
	Maximum quantity		64			
Compressor	Type		DC inverter			
	Quantity		5			
	Oil type		FV68H			
	Start-up method		Soft start			
Fan	Type		Propeller			
	Motor type		DC			
	Quantity		5			
	Motor output	kW	0.56×3+0.92×2	0.56×2+0.92×3	0.56×2+0.92×3	0.56+0.92×4
	Static pressure	Pa	0-20 (default); 20-60 (customized)			
	Airflow rate	m^3/h	52000	54000	54000	60000
	Drive type		Direct			
Refrigerant	Type		R410A			
	Factory charge	kg	11+17+25	13+17+25	13+17+25	11+22+25
Pipe connections(5)	Liquid pipe	mm	Φ19.1	Φ22.2		
	Gas pipe	mm	Φ41.3	Φ44.5		
Sound pressure level(6)		dB(A)	67			
Net dimensions (W×H×D)		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 (W×H×D)		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
Ambient temp. operation range		°C	-5 to 54 (cooling); -25 to 24 (heating)			

Notes:
(1) Indoor temperature: 26.7°CDB, 19.4°CWB; outdoor temperature: 35°CDB; AHRI 1230:2010 / ISO 15042:2011; power input indoor units (duct type) included.
(2) Indoor temperature: 27°CDB, 19°CWB; outdoor temperature: 35°CDB; based on Eurovent testing; power input indoor units not included.
(3) Indoor temperature: 29°CDB, 19°CWB; outdoor temperature: 46°CDB; ISO 15042:2011; power input indoor units (duct type) included. As per ESMA.
(4) Indoor temperature: 20°CDB; outdoor temperature: 7°CDB, 6°CWB; based on Eurovent testing; power input indoor units not included.
(5) Diameters given are those of the unit's stop valves.
(6) 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.

74-80HP

Table 2-1.9: 74-80HP specifications

HP			74	76	78	80
Model name			**4TVVT708BD060AA**	**4TVVT727BD060AA**	**4TVVT744BD060AA**	**4TVVT767BD060AA**
Combination type			**20HP+22HP+32HP**	**22HP+22HP+32HP**	**22HP+24HP+32HP**	**22HP+26HP+32HP**
Power supply		V/Ph/Hz	380-415/3/50			
Cooling - 35°C[1]	Capacity	kW	208.0	213.5	218.5	225.0
		Btu/h	708000	727000	744000	767000
	Power input	kW	66.7	68.5	70.2	73.7
	EER	(Btu/h) / W	10.61	10.61	10.60	10.41
Cooling - Eurovent[2]	Capacity	kW	207.5	213.0	218.5	224.5
		Btu/h	708000	728000	746000	768000
	Power input	kW	64.5	67.8	67.5	70.3
	EER	(Btu/h) / W	10.97	10.75	11.05	10.93
		W / W	3.22	3.14	3.24	3.19
Cooling - 46°C[3]	Capacity	kW	156.0	158.0	167.7	172.0
		Btu/h	531000	537000	571000	586000
	Power input	kW	58.1	59.6	61.8	64.4
	EER	(Btu/h) / W	9.139	9.010	9.239	9.099
Heating[4]	Capacity	kW	207.5	213.0	218.5	224.5
		Btu/h	708000	728000	746000	768000
	Power input	kW	53.4	55.7	55.6	58.3
	COP	(Btu/h) / W	13.25	13.07	13.42	13.17
		W / W	3.88	3.82	3.93	3.85
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity			
	Maximum quantity		64			
Compressor	Type		DC inverter			
	Quantity		6			
	Oil type		FV68H			
	Start-up method		Soft start			
Fan	Type		Propeller			
	Motor type		DC			
	Quantity		6			
	Motor output	kW	0.56×4+0.92×2	0.56×4+0.92×2	0.56×2+0.92×4	0.56×2+0.92×4
	Static pressure	Pa	0-20 (default); 20-60 (customized)			
	Airflow rate	m^3/h	58000	58000	66000	66000
	Drive type		Direct			
Refrigerant	Type		R410A			
	Factory charge	kg	17×2+25	17×2+25	17+22+25	17+22+25
Pipe connections[5]	Liquid pipe	mm	Φ22.2			
	Gas pipe	mm	Φ44.5			
Sound pressure level[6]		dB(A)	68			
Net dimensions (W×H×D)		mm	(1340×1635×825)×2+(1730×1830×850)		(1340×1635×825)+(1730×1830×850)×2	
Packed dimensions (W×H×D)		mm	(1405×1805×910)×2+(1800×2000×910)		(1405×1805×910)+(1800×2000×910)×2	
Net weight		kg	348×2+475		348+430+475	
Gross weight		kg	368×2+507		368+453+507	
Ambient temp. operation range		°C	-5 to 54 (cooling); -25 to 24 (heating)			

Notes:
(1) Indoor temperature: 26.7°CDB, 19.4°CWB; outdoor temperature: 35°CDB; AHRI 1230:2010 / ISO 15042:2011; power input indoor units (duct type) included.
(2) Indoor temperature: 27°CDB, 19°CWB; outdoor temperature: 35°CDB; based on Eurovent testing; power input indoor units not included.
(3) Indoor temperature: 29°CDB, 19°CWB; outdoor temperature: 46°CDB; ISO 15042:2011; power input indoor units (duct type) included. As per ESMA.
(4) Indoor temperature: 20°CDB; outdoor temperature: 7°CDB, 6°CWB; based on Eurovent testing; power input indoor units not included.
(5) Diameters given are those of the unit's stop valves.
(6) 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.

82-88HP

Table 2-1.10: 82-88HP specifications

HP			82	84	86	88
4TVVT811BD060AA			4TVVT786BD060AA	4TVVT807BD060AA	4TVVT826BD060AA	4TVVT845BD060AA
Combination type			22HP+28HP+32HP	26HP+26HP+32HP	26HP+28HP+32HP	28HP+28HP+32HP
Power supply		V/Ph/Hz	380-415/3/50			
Cooling - 35°C(1)	Capacity	kW	230.0	236.5	241.5	246.5
		Btu/h	786000	807000	826000	845000
	Power input	kW	75.7	78.9	80.9	82.9
	EER	(Btu/h) / W	10.38	10.23	10.21	10.19
Cooling - Eurovent(2)	Capacity	kW	230.0	236.0	241.5	247.0
		Btu/h	786000	808000	826000	844000
	Power input	kW	73.5	72.8	76.1	79.3
	EER	(Btu/h) / W	10.69	11.09	10.86	10.64
		W / W	3.13	3.24	3.17	3.11
Cooling - 46°C(3)	Capacity	kW	175.0	186.0	189.0	192.0
		Btu/h	596000	635000	645000	655000
	Power input	kW	66.4	69.2	71.2	73.2
	EER	(Btu/h) / W	8.976	9.176	9.059	8.948
Heating(4)	Capacity	kW	230.0	236.0	241.5	247.0
		Btu/h	786000	808000	826000	844000
	Power input	kW	61.4	60.9	64.0	67.0
	COP	(Btu/h) / W	12.81	13.26	12.91	12.59
		W / W	3.75	3.87	3.78	3.68
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity			
	Maximum quantity		64			
Compressor	Type		DC inverter			
	Quantity		6			
	Oil type		FV68H			
	Start-up method		Soft start			
Fan	Type		Propeller			
	Motor type		DC			
	Quantity		6			
	Motor output	kW	0.56×2+0.92×4	0.92×6	0.92×6	0.92×6
	Static pressure	Pa	0-20 (default); 20-60 (customized)			
	Airflow rate	m^3/h	66000	74000	74000	74000
	Drive type		Direct			
Refrigerant	Type		R410A			
	Factory charge	kg	17+22+25	22×2+25	22×2+25	22×2+25
Pipe connections(5)	Liquid pipe	mm	Φ22.2	Φ25.4		
	Gas pipe	mm	Φ44.5	Φ50.8		
Sound pressure level(6)		dB(A)	68			
Net dimensions (W×H×D)		mm	(1340×1635×825)+ (1730×1830×850)×2	(1730×1830×850)×3		
Packed dimensions (W×H×D)		mm	(1405×1805×910)+ (1800×2000×910)×2	(1800×2000×910)×3		
Net weight		kg	348+430+475	430×2+475		
Gross weight		kg	368+453+507	453×2+507		
Ambient temp. operation range		°C	-5 to 54 (cooling); -25 to 24 (heating)			

Notes:
(1) Indoor temperature: 26.7°CDB, 19.4°CWB; outdoor temperature: 35°CDB; AHRI 1230:2010 / ISO 15042:2011; power input indoor units (duct type) included.
(2) Indoor temperature: 27°CDB, 19°CWB; outdoor temperature: 35°CDB; based on Eurovent testing; power input indoor units not included.
(3) Indoor temperature: 29°CDB, 19°CWB; outdoor temperature: 46°CDB; ISO 15042:2011; power input indoor units (duct type) included. As per ESMA.
(4) Indoor temperature: 20°CDB; outdoor temperature: 7°CDB, 6°CWB; based on Eurovent testing; power input indoor units not included.
(5) Diameters given are those of the unit's stop valves.
(6) 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.

90-96HP

Table 2-1.11: 90-96HP specifications

HP			90	92	94	96
Model name			**4TVVT863BD060AA**	**4TVVT880BD060AA**	**4TVVT898BD060AA**	**4TVVT915BD060AA**
Combination type			**28HP+30HP+32HP**	**28HP+32HP+32HP**	**30HP+32HP+32HP**	**32HP+32HP+32HP**
Power supply		V/Ph/Hz	380-415/3/50			
Cooling - 35°C(1)	Capacity	kW	252.5	257.5	263.5	268.5
		Btu/h	863000	880000	898000	915000
	Power input	kW	85.2	87.2	89.5	91.5
	EER	(Btu/h) / W	10.13	10.09	10.03	10.00
Cooling - Eurovent(2)	Capacity	kW	253.5	258.5	265.0	270.0
		Btu/h	866000	884000	906000	924000
	Power input	kW	82.6	86.2	89.5	93.1
	EER	(Btu/h) / W	10.48	10.25	10.12	9.92
		W / W	3.07	3.00	2.96	2.90
Cooling - 46°C(3)	Capacity	kW	192.0	195.0	195.0	198.5
		Btu/h	656000	665000	666000	675000
	Power input	kW	74.0	74.7	75.5	76.2
	EER	(Btu/h) / W	8.865	8.902	8.821	8.858
Heating(4)	Capacity	kW	253.5	258.5	265.0	270.0
		Btu/h	866000	884000	906000	924000
	Power input	kW	69.3	72.1	74.4	77.1
	COP	(Btu/h) / W	12.49	12.26	12.18	11.98
		W / W	3.66	3.59	3.56	3.50
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity			
	Maximum quantity		64			
Compressor	Type		DC inverter			
	Quantity		6			
	Oil type		FV68H			
	Start-up method		Soft start			
Fan	Type		Propeller			
	Motor type		DC			
	Quantity		6			
	Motor output	kW	0.92×6	0.92×6	0.92×6	0.92×6
	Static pressure	Pa	0-20 (default); 20-60 (customized)			
	Airflow rate	m^3/h	73000	73000	72000	72000
	Drive type		Direct			
Refrigerant	Type		R410A			
	Factory charge	kg	22+25×2	22+25×2	25+25×2	25×3
Pipe connections(5)	Liquid pipe	mm	Φ25.4			
	Gas pipe	mm	Φ50.8			
Sound pressure level(6)		dB(A)	68			
Net dimensions (W×H×D)		mm	(1730×1830×850)×3			
Packed dimensions (W×H×D)		mm	(1800×2000×910)×3			
Net weight		kg	430+475×2		475×3	
Gross weight		kg	453+507×2		507×3	
Ambient temp. operation range		°C	-5 to 54 (cooling); -25 to 24 (heating)			

Notes:
(1) Indoor temperature: 26.7°CDB, 19.4°CWB; outdoor temperature: 35°CDB; AHRI 1230:2010 / ISO 15042:2011; power input indoor units (duct type) included.
(2) Indoor temperature: 27°CDB, 19°CWB; outdoor temperature: 35°CDB; based on Eurovent testing; power input indoor units not included.
(3) Indoor temperature: 29°CDB, 19°CWB; outdoor temperature: 46°CDB; ISO 15042:2011; power input indoor units (duct type) included. As per ESMA.
(4) Indoor temperature: 20°CDB; outdoor temperature: 7°CDB, 6°CWB; based on Eurovent testing; power input indoor units not included.
(5) Diameters given are those of the unit's stop valves.
(6) 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-Individual

1 Specifications

8-14HP *Table 2-1.1: 8-14HP specifications*

HP			8	10	12	14
Model name			4TVVT086CD060AA	4TVVT096CD060AA	4TVVT115CD060AA	4TVVT140CD060AA
Power supply		V/Ph/Hz	380-415/3/50			
Cooling[1]	Capacity	kW	25.2	28.0	33.5	40.0
		kBtu/h	86.0	95.5	114.3	136.5
	Power input	kW	5.5	6.7	8.9	11.0
	EER		4.55	4.20	3.75	3.65
Cooling[2]	Capacity	kW	22.2	24.6	28.2	33.6
		kBtu/h	76.0	84.0	96.0	115.0
	Power input	kW	6.6	7.66	8.95	10.53
	EER		10.0	9.70	9.65	9.80
Heating[3]	Capacity	kW	25.2	28.0	33.5	40.0
		kBtu/h	86.0	95.5	114.3	136.5
	Power input	kW	4.8	5.5	7.6	9.3
	COP		5.20	5.10	4.40	4.30
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity			
	Maximum quantity		13	16	20	23
Compressor	Type		DC inverter			
	Quantity		1			
	Oil type		FV68H			
	Start-up method		Soft start			
Fan	Type		Propeller			
	Motor type		DC			
	Quantity		1			
	Motor output	kW	0.56	0.56	0.56	0.92
	Airflow rate	m^3/h	11000	11000	11000	13000
	Drive type		Direct			
Refrigerant	Type		R410A			
	Factory charge	kg	11	11	11	13
Pipe connections[3]	Liquid pipe	mm	Φ12.7		Φ15.9	Φ15.9
	Gas pipe	mm	Φ25.4		Φ28.6	Φ31.8
Sound pressure level[4]		dB(A)	58		60	
Net dimensions (W×H×D)		mm	990×1635×790			1340×1635×850
Packed dimensions (W×H×D)		mm	1090×1805×860			1405×1805×910
Net weight		kg	227			277
Gross weight		kg	242			304
Ambient temp. operation range	Cooling	°C	-5 ~ 54			
	Heating	°C	-25 ~ 24			

Notes: 1. Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature: 29°CDB, 19°CWB; outdoor temperature: 46°CDB; ISO 15042:2011;.
3. Indoor air temperature 20°C DB; outdoor air temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
4. Diameters given are those of the unit's stop valve.
5. 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.

16-22HP

Table 2-1.2: 16-22HP specifications

HP			16	18	20	22
Model name			4TVVT155CD060AA	4TVVT172CD060AA	4TVVT192CD060AA	4TVVT211CD060AA
Power supply		V/Ph/Hz	380-415/3/50			
Cooling1	Capacity	kW	45.0	50.0	56.0	61.5
		kBtu/h	153.5	170.6	191.1	209.8
	Power input	kW	12.9	14.7	16.0	20.2
	EER		3.50	3.40	3.50	3.05
Cooling[2]	Capacity	kW	37.2	41.5	44.0	46.0
		kBtu/h	127.0	142.0	150.0	156.0
	Power input	kW	11.87	14.10	15.64	17.07
	EER/ESMA		9.50	9.10	8.75	8.40
Heating[3]	Capacity	kW	45.0	50.0	56.0	61.5
		kBtu/h	153.5	170.6	191.1	209.8
	Power input	kW	10.7	12.2	13.8	17.6
	COP		4.20	4.10	4.05	3.50
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity			
	Maximum quantity		26	29	33	36
Compressor	Type		DC inverter			
	Quantity		1		2	
	Oil type		FV68H			
	Start-up method		Soft start			
Fan	Type		Propeller			
	Motor type		DC			
	Quantity		1		2	
	Motor output	kW	0.92	0.92	0.56×2	0.56×2
	Airflow rate	m^3/h	13000	13000	17000	17000
	Drive type		Direct			
Refrigerant	Type		R410A			
	Factory charge	kg	13	13	17	17
Pipe connections[3]	Liquid pipe	mm	Φ15.9	Φ19.1		
	Gas pipe	mm	Φ31.8	Φ31.8		
Sound pressure level[4]		dB(A)	61	62	63	
Net dimensions (W×H×D)		mm	1340×1635×850		1340×1635×825	
Packed dimensions (W×H×D)		mm	1405×1805×910			
Net weight		kg	277	295	344	344
Gross weight		kg	304	322	364	364
Ambient temp. operation range	Cooling	°C	-5 ~ 54			
	Heating	°C	-25 ~ 24			

Notes: 1. Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature: 29°CDB, 19°CWB; outdoor temperature: 46°CDB; ISO 15042:2011;.
3. Indoor air temperature 20°C DB; outdoor air temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
4. Diameters given are those of the unit's stop valve.
5. 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.

24-32HP

Table 2-1.3: 24-32HP specifications

HP			24	26	28	30	32
Model name			4TVVT228CD060AA	4TVVT251CD060AA	4TVVT270CD060AA	4TVVT288CD060AA	4TVVT305CD060AA
Power supply		V/Ph/Hz	380-415/3/50				
Cooling[1]	Capacity	kW	67.0	73.0	78.5	85.0	90.0
		kBtu/h	228.6	249.1	267.8	290.0	307.1
	Power input	kW	21.6	21.6	24.9	28.3	32.1
	EER		3.10	3.40	3.15	3.00	2.80
Cooling[2]	Capacity	kW	52.0	57.0	61.0	62.5	63.5
		kBtu/h	178.0	194.0	208.0	214.0	216.0
	Power input	kW	18.96	22.4	23.52	23.48	23.81
	EER		8.70	8.65	8.25	8.50	8.40
Heating[3]	Capacity	kW	67.0	73.0	78.5	85.0	90.0
		kBtu/h	228.6	249.1	267.8	290.0	307.1
	Power input	kW	16.8	18.1	21.8	24.3	26.5
	COP		4.00	4.05	3.60	3.50	3.40
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity				
	Maximum quantity		39	43	46	50	53
Compressor	Type		DC inverter				
	Quantity		2				
	Oil type		FV68H				
	Start-up method		Soft start				
Fan	Type		Propeller				
	Motor type		DC				
	Quantity		2				
	Motor output	kW	0.92×2	0.92×2	0.92×2	0.92×2	0.92×2
	Airflow rate	m^3/h	25000	25000	25000	24000	24000
	Drive type		Direct				
Refrigerant	Type		R410A				
	Factory charge	kg	22	22	22	25	25
Pipe connections[3]	Liquid pipe	mm	Φ19.1	Φ22.2		Φ22.2	
	Gas pipe	mm	Φ31.8	Φ31.8		Φ38.1	
Sound pressure level[4]		dB(A)	64				
Net dimensions (W×H×D)		mm	1730 × 1830 × 850				
Packed dimensions (W×H×D)		mm	1800×2000×910				
Net weight		kg	407	429		475	
Gross weight		kg	430	452		507	
Ambient temp. operation range	Cooling	°C	-5 ~ 54				
	Heating	°C	-25 ~ 24				

Notes: 1. Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature: 29°CDB, 19°CWB; outdoor temperature: 46°CDB; ISO 15042:2011;.
3. Indoor air temperature 20°C DB; outdoor air temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
4. Diameters given are those of the unit's stop valve.
5. 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

Cooling only
50hz, R410a

4TVVT086BD06CAA	4TVVT192BD06CAA
4TVVT096BD06CAA	4TVVT211BD06CAA
4TVVT115BD06CAA	4TVVT228BD06CAA
4TVVT140BD06CAA	4TVVT251BD06CAA
4TVVT155BD06CAA	4TVVT270BD06CAA
4TVVT172BD06CAA	4TVVT288BD06CAA

1 Specifications

8-12HP

Table 2-1.1: 8-12HP specifications

HP			8	10	12
Model name			4TVVT086BD06CAA	4TVVT096BD06CAA	4TVVT115BD06CAA
Power supply		V/Ph/Hz	380-415V 3N~50HZ		
Cooling[1]	Capacity	kW	22.4	28.0	33.5
		kBtu/h	76.5	95.6	114.4
	Power input	kW	5.17	6.81	9.13
	EER		4.33	4.11	3.67
Connected indoor unit	Total capacity		50-130%		
	Maximum quantity		13	16	20
Compressor	Type		DC inverter		
	Quantity		1		
	Oil type		FV 50s		
	Start-up method		Soft start		
Fan	Type		DC		
	Quantity		1		
	Motor output	kW	0.56		
	ESP	Pa	20 default;60 customization option		
	Airflow rate	m^3/h	10400		10800
	Drive type		Direct		
Refrigerant	Type		R410A		
	Factory charge	kg	8		
Pipe connections[2]	Liquid pipe	mm	Φ12.7		Φ15.9
	Gas pipe	mm	Φ25.4		Φ28.6
Sound pressure level[3]		dB(A)	57	58	60
Net dimensions (W×H×D)		mm	960×1615×765		
Packed dimensions (W×H×D)		mm	1025×1790×830		
Net weight		kg	188		
Gross weight		kg	204		
Ambient temp.	Cooling	°C	-5 to 55		

Notes:

1. Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those of the unit's accessories.
3. 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.

14-20HP

Table 2-1.2: 14-20HP specifications

HP			14	16	18	20
Model name			4TVVT140BD06CAA	4TVVT155BD06CA	4TVVT172BD06CA	4TVVT192BD06CA
Power supply		V/Ph/Hz	380-415V 3N~50/60HZ			
Cooling[1]	Capacity	kW	40.0	45.0	50.0	56.0
		kBtu/h	136.6	153.7	170.8	191.3
	Power input	kW	10.58	12.26	14.88	17.66
	EER		3.78	3.67	3.36	3.17
Connected indoor unit	Total capacity		50-130%			
	Maximum quantity		23	26	29	33
Compressor	Type		DC inverter			
	Quantity		1		2	
	Oil type		FV 50s			
	Start-up method		Soft start			
Fan	Type		DC			
	Quantity		1		2	
	Motor output	kW	0.75		0.56×2	
	ESP	Pa	20 default;60 customization option			
	Airflow rate	m^3/h	11600		12000	12200
	Drive type		Direct			
Refrigerant	Type		R410A			
	Factory	kg	11		13	
Pipe connections[2]	Liquid pipe	mm	Φ15.9			Φ19.1
	Gas pipe	mm	Φ31.8			Φ31.8
Sound pressure level[3]		dB(A)	60	61	62	63
Net dimensions (W×H×D)		mm	960×1615×765		1250×1615×765	
Packed dimensions (W×H×D)		mm	1025×1790×830		1305×1790×820	
Net weight		kg	197		278	
Gross weight		kg	213		297	
Ambient temp.	Cooling	°C	-5 to 55			

Notes:

1. Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those of the unit's accessories.
3. 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.

22-26HP

Table 2-1.3: 22-26HP specifications

HP			22	24	26
Model name			4TVVT211BD06CAA	4TVVT228BD06CAA	4TVVT251BD06CAA
Power supply		V/Ph/Hz	380-415V 3N~50HZ		
Cooling[1]	Capacity	kW	61.5	67.0	73.0
		kBtu/h	210.0	228.8	249.3
	Power input	kW	20.23	20.68	23.40
	EER		3.04	3.24	3.12
Connected indoor unit	Total capacity		50-130%		
	Maximum quantity		36	39	43
Compressor	Type		DC inverter		
	Quantity		2		
	Oil type		FV 50s		
	Start-up method		Soft start		
Fan	Type		DC		
	Quantity		2		
	Motor output	kW	0.56×2		
	ESP	Pa	20 default;60 customization option		
	Airflow rate	m^3/h	12200	19600	
	Drive type		Direct		
Refrigerant	Type		R410A		
	Factory charge	kg	13	19	
Pipe connections[2]	Liquid pipe	mm	Φ19.1		Φ22.2
	Gas pipe	mm	Φ31.8		Φ31.8
Sound pressure level[3]		dB(A)	63	64	
Net dimensions (W×H×D)		mm	1250×1615×765	1585×1615×765	
Packed dimensions (W×H×D)		mm	1305×1790×820	1650×1810×840	
Net weight		kg	278	338	
Gross weight		kg	297	362	
Ambient temp.	Cooling	°C	-5 to 55		

Notes:

1. Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those of the unit's accessories.
3. 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.

28-30HP

Table 2-1.4: 28-30HP specifications

HP			28	30
Model name			4TVVT270BD06CAA	4TVVT288BD06CAA
Power supply		V/Ph/Hz	380-415V 3N~50HZ	
Cooling[1]	Capacity	kW	78.5	85.0
		kBtu/h	268.1	290.3
	Power input	kW	26.08	29.51
	EER		3.01	2.88
Connected indoor unit	Total capacity		50-130%	
	Maximum quantity		46	50
Compressor	Type		DC inverter	
	Quantity		2	
	Oil type		FV 50s	
	Start-up method		Soft start	
Fan	Type		DC	
	Quantity		2	
	Motor output	kW	0.56×2	
	ESP	Pa	20 default;60 customization option	
	Airflow rate	m^3/h	20600	
	Drive type		Direct	
Refrigerant	Type		R410A	
	Factory charge	kg	19	
Pipe connections[2]	Liquid pipe	mm	Φ22.2	Φ22.2
	Gas pipe	mm	Φ31.8	Φ38.1
Sound pressure level[3]		dB(A)	64	
Net dimensions (W×H×D)		mm	1585×1615×765	
Packed dimensions (W×H×D)		mm	1650×1810×840	
Net weight		kg	338	
Gross weight		kg	362	
Ambient temp.	Cooling	°C	-5 to 55	

Notes:

1. Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those of the unit's accessories.
3. 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.

32-38HP

Table 2-1.5: 32-38HP specifications

HP			32	34	36	38
Model name			4TVVT310BD06CAA	4TVVT326BD06CAA	4TVVT347BD06CAA	4TVVT366BD06CAA
Combination type			16HP+16HP	22HP+12HP	20HP+16HP	22HP+16HP
Power supply		V/Ph/Hz	380-415V 3N~50HZ			
Cooling[1]	Capacity	kW	90.0	95.0	101.0	106.5
		kBtu/h	307.4	324.4	345.0	363.7
	Power input	kW	24.52	29.36	29.71	32.49
	EER		3.67	3.24	3.40	3.28
Connected indoor unit	Total capacity		50-130%			
	Maximum quantity		53	56	59	63
Compressor	Type		DC inverter			
	Quantity		2	3		
	Oil type		FV 50s			
	Start-up method		Soft start			
Fan	Type		DC			
	Quantity		2	3		
	Motor output	kW	0.75×2	0.56×3	0.56×2+0.75	
	ESP	Pa	20 default;60 customization option			
	Airflow rate	m3/h	23200	23000	23800	
	Drive type		Direct			
Refrigerant	Type		R410A			
	Factory charge	kg	11×2	13+8	13+11	
Pipe connections[2]	Liquid pipe	mm	19.1	19.1	19.1	
	Gas pipe	mm	31.8	31.8	38.1	
Sound pressure level[3]		dB(A)	64	65		
Net dimensions (W×H×D)		mm	(960×1615×765)×2	(1250×1615×765)+(960×1615×765)		
Packed dimensions (W×H×D)		mm	(1025×1790×830)×2	(1305×1790×820)+(1025×1790×830)		
Net weight		kg	188×2	278+188		
Gross weight		kg	204×2	297+204		
Ambient temp.	Cooling	°C	-5 to 55			

Notes:

1. Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those of the unit's accessories.
3. 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.

40-44HP

Table 2-1.6: 40-44HP specifications

HP			40	42	44
Model name			4TVVT383BD06CAA	4TVVT406BD06CAA	4TVVT425BD06CAA
Combination type			24HP+16HP	26HP+16HP	28HP+16HP
Power supply		V/Ph/Hz	380-415V 3N~50HZ		
Cooling[1]	Capacity	kW	112.0	118.0	123.5
		kBtu/h	382.5	403.0	421.8
	Power input	kW	32.94	35.66	38.34
	EER		3.40	3.31	3.22
Connected indoor unit	Total capacity		50-130%		
	Maximum quantity		64		
Compressor	Type		DC inverter		
	Quantity		3		
	Oil type		FV 50s		
	Start-up method		Soft start		
Fan	Type		DC		
	Quantity		3		
	Motor output	kW	0.56×2+0.75		
	ESP	Pa	20 default;60 customization option		
	Airflow rate	m3/h	31200		32200
	Drive type		Direct		
Refrigerant	Type		R410A		
	Factory charge	kg	19+11		
Pipe connections[2]	Liquid pipe	mm	19.1		
	Gas pipe	mm	38.1		
Sound pressure level[3]		dB(A)	65		66
Net dimensions (W×H×D)		mm	(1585×1615×765)+(960×1615×765)		
Packed dimensions (W×H×D)		mm	(1650×1810×840)+(1025×1790×830)		
Net weight		kg	338+188		
Gross weight		kg	362+204		
Ambient temp.	Cooling	°C	-5 to 55		

Notes:

1. Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those of the unit's accessories.
3. 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.

46-52HP

Table 2-1.7: 46-52HP specifications

HP			46	48	50	52
Model name			4TVVT443BD06CA	4TVVT462BD06CA	4TVVT481BD06CA	4TVVT499BD06CA
Combination type			30HP+16HP	26HP+22HP	28HP+22HP	30HP+22HP
Power supply		V/Ph/H	380-415V 3N~50HZ			
Cooling[1]	Capacity	kW	130.0	134.5	140.0	146.5
		kBtu/h	444.0	459.3	478.1	500.3
	Power input	kW	41.77	43.63	46.31	49.74
	EER		3.11	3.08	3.02	2.95
Connected indoor unit	Total capacity		50-130%			
	Maximum quantity		64			
Compressor	Type		DC inverter			
	Quantity		3	4		
	Oil type		FV 50s			
	Start-up method		Soft start			
Fan	Type		DC			
	Quantity		3	4		
	Motor output	kW	0.56×2+0.75	0.56×4		
	ESP	Pa	20 default;60 customization option			
	Airflow rate	m3/h	32200	31800	32800	
	Drive type		20 default;60 customization option			
Refrigerant	Type		R410A			
	Factory	kg	19+11	19+13		
Pipe connections[2]	Liquid pipe	mm	19.1			
	Gas pipe	mm	38.1			
Sound pressure level[3]		dB(A)	66			
Net dimensions (W×H×D)		mm	(1585×1615×765)+ (960×1615×765)	(1585×1615×765)+(1250×1615×765)		
Packed dimensions (W×H×D)		mm	(1650×1810×840)+ (1025×1790×830)	(1650×1810×840)+(1305×1790×820)		
Net weight		kg	338+188			
Gross weight		kg	362+204			
Ambient temp.	Cooling	°C	-5 to 55			

Notes:

1. Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those of the unit's accessories.
3. 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.

54-58HP

Table 2-1.8: 54-58HP specifications

HP			54	56	58
Model name			4TVVT521BD06CAA	4TVVT540BD06CAA	4TVVT558BD06CAA
Combination type			28HP+26HP	28HP+28HP	30HP+28HP
Power supply		V/Ph/Hz	380-415V 3N~50HZ		
Cooling[1]	Capacity	kW	151.5	157.0	163.5
		kBtu/h	517.4	536.2	558.4
	Power input	kW	49.48	52.16	55.59
	EER		3.06	3.01	2.94
Connected indoor unit	Total capacity		50-130%		
	Maximum quantity		64		
Compressor	Type		DC inverter		
	Quantity		4		
	Oil type		FV 50s		
	Start-up method		Soft start		
Fan	Type		DC		
	Quantity		4		
	Motor output	kW	0.56×4		
	ESP	Pa	20 default;60 customization option		
	Airflow rate	m3/h	40200	41200	
	Drive type		20 default;60 customization option		
Refrigerant	Type		R410A		
	Factory charge	kg	19×2		
Pipe connections[2]	Liquid pipe	mm	19.1		
	Gas pipe	mm	38.1	41.2	
Sound pressure level[3]		dB(A)	66	66	
Net dimensions (W×H×D)		mm	(1585×1615×765)×2		
Packed dimensions (W×H×D)		mm	(1650×1810×840)×2		
Net weight		kg	338×2		
Gross weight		kg	362×2		
Ambient	Cooling	℃	-5 to 55		

Notes:

1. Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those of the unit's accessories.
3. 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.

60-66HP

Table 2-1.9: 60-66HP specifications

HP			60	62	64	66
Model name			4TVVT576BD06C	4TVVT598BD06C	4TVVT617BD06C	4TVVT636BD06C
Combination type			30HP+30HP	30HP+16HP+16H	26HP+22HP+16H	28HP+22HP+16H
Power supply		V/Ph/H	380-415V 3N~50HZ			
Cooling[1]	Capacity	kW	170.0	175.0	179.5	185.0
		kBtu/h	580.6	597.8	613.0	631.8
	Power input	kW	59.02	54.03	55.89	58.57
	EER		2.88	3.24	3.21	3.16
Connected indoor unit	Total capacity		50-130%			
	Maximum quantity		64			
Compressor	Type		DC inverter			
	Quantity		4		5	
	Oil type		FV 50s			
	Start-up method		Soft start			
Fan	Type		DC			
	Quantity		4		5	
	Motor output	kW	0.56×4	0.56×2+0.75×2	0.56×4+0.75	
	Static pressure	Pa	20 default;60 customization option			
	Airflow rate	m3/h	41200	43800	43400	44400
	Drive type		20 default;60 customization option			
Refrigerant	Type		R410A			
	Factory charge	kg	19×2	19+11×2	19+13+11	
Pipe connections[2]	Liquid pipe	mm	19.1			
	Gas pipe	mm	41.2			
Sound pressure level[3]		dB(A)	66			
Net dimensions (W×H×D)		mm	(1585×1615×765) ×2	(1585×1615×765) +	(1585×1615×765)+(1250×1615×765)+(960×1615×765)	
Packed dimensions (W×H×D)		mm	(1650×1810×840) ×2	(1650×1810×840) +	(1650×1810×840)+(1305×1790×820)+(1025×1790×830)	
Net weight		kg	338×2	338+188×2	338+278+197	
Gross weight		kg	362×2	362+204×2	362+297+213	
Ambient temp.	Cooling	ºC	-5 to 55			

Notes:

1. Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those of the unit's accessories.
3. 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.

68-74HP

Table 2-1.10: 68-74HP specifications

HP			68	70	72	74
Model name			4TVVT654BD06C	4TVVT676BD06C	4TVVT695BD06C	4TVVT713BD06C
Combination type			30HP+22HP+16H	28HP+26HP+16H	28HP+28HP+16H	30HP+28HP+16H
Power supply		V/Ph/H	380-415V 3N~50HZ			
Cooling[1]	Capacity	kW	191.5	196.5	202.0	208.5
		kBtu/h	654.1	671.1	689.9	712.2
	Power input	kW	62.00	61.74	64.42	67.85
	EER		3.09	3.18	3.14	3.07
Connected indoor unit	Total capacity		50-130%			
	Maximum quantity		64			
Compressor	Type		DC inverter			
	Quantity		5			
	Oil type		FV 50s			
	Start-up method		Soft start			
Fan	Type		DC			
	Quantity		5			
	Motor output	kW	0.56×4+0.75			
	Static pressure	Pa	20 default;60 customization option			
	Airflow rate	m3/h	44400	51800	52800	
	Drive type		20 default;60 customization option			
Refrigerant	Type		R410A			
	Factory charge	kg	19+13+11	19×2+11		
Pipe connections[2]	Liquid pipe	mm	22.2			
	Gas pipe	mm	44.5			
Sound pressure level[3]		dB(A)	67			68
Net dimensions (W×H×D)		mm	(1585×1615×765) + (1250×1615×765)	(1585×1615×765)×2+(960×1615×765)		
Packed dimensions (W×H×D)		mm	(1650×1810×840) + (1305×1790×820)	(1650×1810×840)×2+(1025×1790×830)		
Net weight		kg	338+278+197	338×2+188		
Gross weight		kg	362+297+213	362×2+204		
Ambient temp.	Cooling	°C	-5 to 55			

Notes:

1. Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those of the unit's accessories.
3. 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.

76-82HP

Table 2-1.11: 76-82HP specifications

HP			76	78	80	82
Model name			4TVVT731BD06C	4TVVT751BD06C	4TVVT769BD06C	4TVVT787BD06C
Combination type			30HP+30HP+16H	28HP+28HP+22H	30HP+28HP+22H	30HP+30HP+22H
Power supply		V/Ph/H	380-415V 3N~50HZ			
Cooling[1]	Capacity	kW	215.0	218.5	225.0	231.5
		kBtu/h	734.4	746.2	768.4	790.6
	Power input	kW	71.28	72.39	75.82	79.25
	EER		3.02	3.02	2.97	2.92
Connected indoor unit	Total capacity		50-130%			
	Maximum quantity		64			
Compressor	Type		DC inverter			
	Quantity		5	6		
	Oil type		FV 50s			
	Start-up method		Soft start			
Fan	Type		DC			
	Quantity		5	6		
	Motor output	kW	0.56×4+0.75	0.56×6		
	Static pressure	Pa	20 default;60 customization option			
	Airflow rate	m3/h	52800	53400		
	Drive type		20 default;60 customization option			
Refrigerant	Type		R410A			
	Factory charge	kg	19×2+11	19×2+13		
Pipe connections[2]	Liquid pipe	mm	22.2			
	Gas pipe	mm	44.5			
Sound pressure level[3]		dB(A)	68			
Net dimensions (W×H×D)		mm	(1585×1615×765) ×2+(960×1615×76	(1585×1615×765)×2+(1250×1615×765)		
Packed dimensions (W×H×D)		mm	(1650×1810×840) ×2+(1025×1790×8	(1650×1810×840)×2+(1305×1790×820)		
Net weight		kg	338×2+188			
Gross weight		kg	362×2+204			
Ambient temp.	Cooling	°C	-5 to 55			

Notes:

1. Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those of the unit's accessories.
3. 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.

84-90HP

Table 2-1.12: 84-90HP specifications

HP			84	86	88	90
Model name			4TVVT810BD06CA	4TVVT828BD06CA	4TVVT846BD06CA	4TVVT864BD06CA
Combination type			28HP+28HP+28HP	30HP+28HP+28HP	30HP+30HP+28HP	30HP+30HP+30HP
Power supply		V/Ph/H	380-415V 3N~50HZ			
Cooling[1]	Capacity	kW	235.5	242.0	248.5	255.0
		kBtu/h	804.3	826.5	848.7	870.9
	Power input	kW	78.24	81.67	85.10	88.53
	EER		3.01	2.96	2.92	2.88
Connected indoor unit	Total capacity		50-130%			
	Maximum quantity		64			
Compressor	Type		DC inverter			
	Quantity		6			
	Oil type		FV 50s			
	Start-up method		Soft start			
Fan	Type		DC			
	Quantity		6			
	Motor output	kW	0.56×6			
	Static	Pa	20 default;60 customization option			
	Airflow rate	m3/h	61800			
	Drive type		20 default;60 customization option			
Refrigerant	Type		R410A			
	Factory	kg	19×3			
Pipe connections[2]	Liquid pipe	mm	25.4			
	Gas pipe	mm	50.8			
Sound pressure level[3]		dB(A)	68			
Net dimensions (W×H×D)		mm	(1585×1615×765)×3			
Packed dimensions (W×H×D)		mm	(1650×1810×840)×3			
Net weight		kg	338×3			
Gross weight		kg	362×3			
Ambient	Cooling	ºC	-5 to 55			

Notes:

1. Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those of the unit's accessories.
3. 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.

6G Indoor Units

Wide Application Range

Wide Range of Indoor Units

With 11 types and more than 100 models, Trane TVR 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

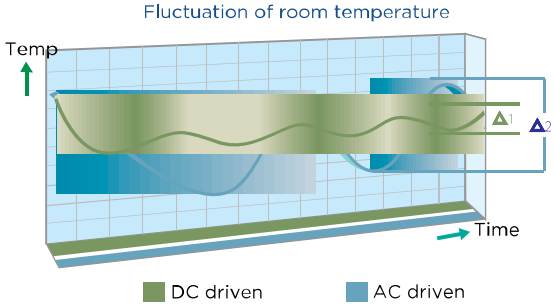
The power consumption of DC fan motor can be reduced greatly in comparison to corresponding type.

Quiet Operation

The low sound operation DC fan motor and optimized fan blades guarantees the air discharge smoothly and provides a quiet living environment.

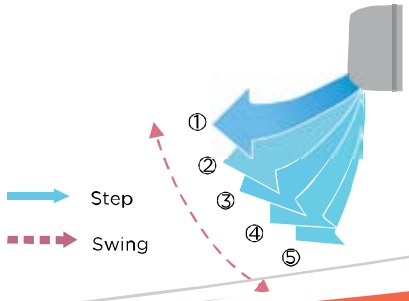
Constant Level of Indoor Air Temperature

The DC Inverter fan motor adjusts of air flow based on thermal load instantly providing less temperature fluctuation and an improved living environment.



5-step Swing Louver

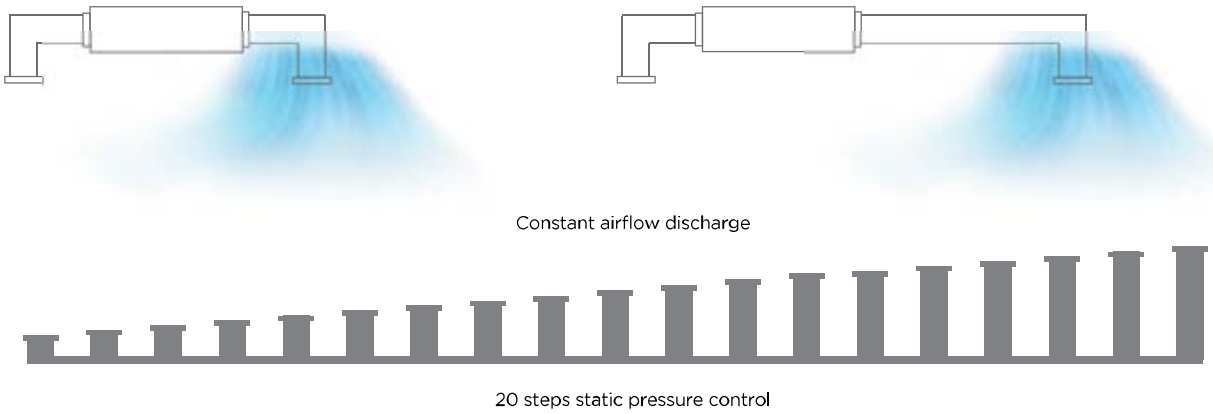
The air is comfortably spread upwards and downwards thanks to the 5-step swing louver that can be programmed via the controller.



Comfort and Efficiency

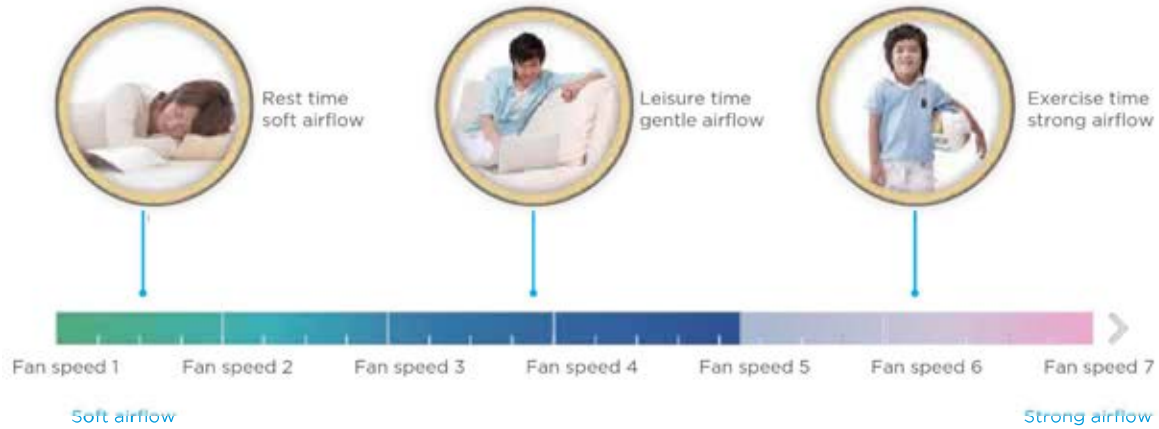
Static Pressure 20 Steps Control (Duct Unit)

Depending on the installation environment, medium static pressure duct is controlled the static pressure up to 10 steps and high static pressure duct is controlled the static pressure up to 20 steps via wired remote controller, for providing comfortable environment suitable for any environment.



7-Speed Fan Control

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



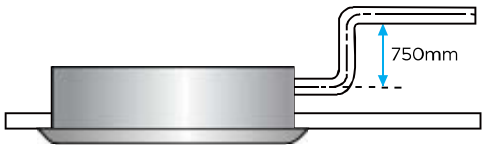
Fresh Air Intake

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

Convenience

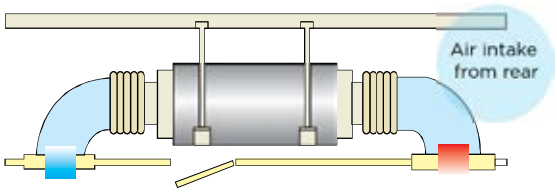
High-lift Drain Pump

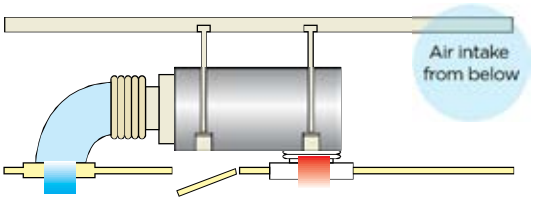
A drain pump with a 750mm or 500mm pump head is fitted as standard or optional, simplifying installation of the drain piping.



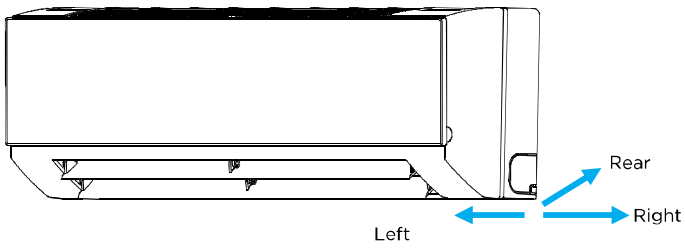
Flexible Installation

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

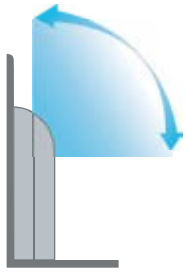




For Wall Mounted Units, the refrigerant outlet direction can be left, right or rear as the installation situation requires. A new fixing plate design speeds installation and provides extra stability.



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



Floor installation

Ceiling installation

One-way Cassette

- Fresh air intake (45~71 models)
- One-way air discharge, ideal for corner locations
- Drain pump with 750mm pump head fitted as standard

Optional wireless remote controller

TCONTRM12D

Optional wired controller

TCONTWDC86EKD

TCONTWDC120GWK

Model				4TVAD006DB0REAA	4TVAD007DB0REAA	4TVAD009DB0REAA	4TVAD012DB0REAA
Power supply				1-phase, 220-240V, 50Hz			
Cooling[1]	Capacity		kW	1.8	2.2	2.8	3.6
			kBtu/h	6.1	7.5	9.6	12.3
	Power input		W	25	25	30	30
Heating[2]	Capacity		kW	2.2	2.6	3.2	4.0
			kBtu/h	7.5	8.9	10.9	13.6
	Power input		W	25	25	30	30
Air flow rate[3]			m^3/h	523/482/448/404/360/312/275		573/531/492/456/420/364/315	
Sound pressure level[4]			dB(A)	37/36/35/34/32/31/30		39/38/37/36/35/35/34	
Main body	Net dimensions[5] (W×H×D)		mm	1054×153×425			
	Packed dimensions (W×H×D)		mm	1155×245×490			
	Net/Gross weight		kg	11.8/15.3		12.3/15.8	
Panel	Net dimensions (W×H×D)		mm	1180×25×465			
	Packed dimensions (W×H×D)		mm	1232×107×517			
	Net/Gross weight		kg	3.5/5.2			
Pipe connections	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.Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.

4.Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

5.Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

One-way Cassette

Model			4TVAD015DB0REAA	4TVAD019DB0REAA	4TVAD024DB0REAA
Power supply			1-phase, 220-240V, 50Hz		
Cooling[1]	Capacity	kW	4.5	5.6	7.1
		kBtu/h	15.4	19.1	24.2
	Power input	W	40	48	60
Heating[2]	Capacity	kW	5.0	6.3	8.0
		kBtu/h	17.1	21.5	27.3
	Power input	W	40	48	60
Air flow rate[3]		m^3/h	693/662/638/600/556 /510/476	792/763/728/688/643 /589/549	933/873/815/749/689 /637/592
Sound pressure level[4]		dB(A)	41/40/39/38/37/36/35	42/41/40/39/38/37/36	44/43/42/41/39/38/37
Main body	Net dimensions[5] (W×H×D)	mm	1275×189×450		
	Packed dimensions (W×H×D)	mm	1370×295×505		
	Net/Gross weight	kg	16.1/20.4	16.4/20.7	17.6/22.4
Panel	Net dimensions (W×H×D)	mm	1350×25×505		
	Packed dimensions (W×H×D)	mm	1410×95×560		
	Net/Gross weight	kg	4/5.4		
Pipe connections	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.Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.

4.Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

5.Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

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

TCONTRM12D

Optional wired controller

TCONTWDC86EKD

TCONTWDC120GW

Model name			4TVED007DB0REAA	4TVED009DB0REAA	4TVED012DB0REAA
Power supply			1-phase, 220-240V, 50Hz		
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	2.6	3.2	4
		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 (W×H×D)	mm	1430×53×680		
	Packed dimensions (W×H×D)	mm	1525×130×765		
	Net/Gross weight	kg	10/5/15		
Pipe connections	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.Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.

4.Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

5.Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Two-way Cassette

Model name			4TVED007DB0REAA	4TVED009DB0REAA	4TVED012DB0REAA
Power supply			1-phase, 220-240V, 50Hz		
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	2.6	3.2	4
		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 (W×H×D)	mm	1430×53×680		
	Packed dimensions (W×H×D)	mm	1525×130×765		
	Net/Gross weight	kg	10/5/15		
Pipe connections	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.Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.

4.Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

5.Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

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

TCONTRM12D

Optional wired controller

TCONTWDC86EKD

TCONTWDC120GWK

Model			4TVBD007DB0REAA	4TVBD009DB0REAA	4TVBD012DB0REAA	4TVBD015DB0REAA
Power supply			1-phase, 220-240V, 50Hz			
Cooling[1]	Capacity	kW	2.2	2.8	3.6	4.5
		kBtu/h	7.5	9.6	12.3	15.4
	Power input	W	35	35	40	50
Heating[2]	Capacity	kW	2.4	3.2	4.0	5.0
		kBtu/h	8.2	10.9	13.6	17.1
	Power input	W	35	35	40	50
Air flow rate[3]		m^3/h	576/552/524/503/462/441/405		604/573/541/516/478/434/400	
Sound pressure level[4]		dB(A)	35/34/33/29/26/23/22		41/38/35/32/30/29/28	
Main body	Net dimensions[5] (W×H×D)	mm	630×260×570			
	Packed dimensions (W×H×D)	mm	700×345×660			
	Net/Gross weight	kg	18/23.5		19.2/24.7	
Panel	Net dimensions (W×H×D)	mm	647×50×647			
	Packed dimensions (W×H×D)	mm	715×123×715			
	Net/Gross weight	kg	2.5/4.5			
Pipe connections	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.Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.

4.Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

5.Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

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

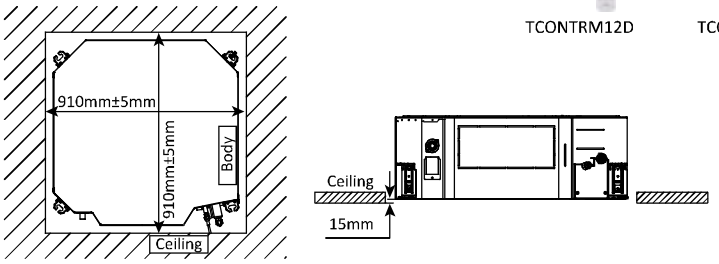
Optional wireless remote controller

Optional wired controller

TCONTRM12D

TCONTWDC86EKD

TCONTWDC120GWK



New panel installation dimensions

Model			4TVCD009DB0REAA	4TVCD012DB0REAA	4TVCD015DB0REAA
Power supply			1 phase, 220-240V, 50Hz		
Cooling[1]	Capacity	kW	2.8	3.6	4.5
		kBtu/h	9.6	12.3	15.4
	Power input	W	25	25	31
Heating[2]	Capacity	kW	3.2	4.0	5.0
		kBtu/h	10.9	13.6	17.1
	Power input	W	25	25	31
Air flow rate[3]		m^3/h	801/751/711/658/637/611/542		893/866/804/744/714/698/635
Sound pressure level[4]		dB(A)	32/31/30/28/28/26/23		35/34/31/31/30/28/26
Main body	Net dimensions[5] (W×H×D)	mm	840×230×840		
	Packed dimensions (W×H×D)	mm	955×260×955		
	Net/Gross weight	kg	21.3/25.8		23.2/27.6
Panel	Net dimensions (W×H×D)	mm	950×54.5×950		
	Packed dimensions (W×H×D)	mm	1035×90×1035		
	Net/Gross weight	kg	5/8		
Pipe connections	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.Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.

4.Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

5.Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Four-way Cassette

Model			4TVCD019DB0REAA	4TVCD024DB0REAA	4TVCD027DB0REAA
Power supply			1 phase, 220-240V, 50Hz		
Cooling[1]	Capacity	kW	5.6	7.1	8.0
		kBtu/h	19.1	24.2	27.3
	Power input	W	31	46	48
Heating[2]	Capacity	kW	6.3	8.0	9.0
		kBtu/h	21.5	27.3	30.7
	Power input	W	31	46	48
Air flow rate[3]		m^3/h	893/866/804/744/714 /698/635	977/937/864/800/778 /738/671	1203/1131/1064/977 /912/840/774
Sound pressure level[4]		dB(A)	35/34/31/31/30/28/26	35/35/34/31/30/28/27	36/35/34/31/31/29/28
Main body	Net dimensions[5] (W×H×D)	mm	840×230×840		
	Packed dimensions (W×H×D)	mm	955×260×955		
	Net/Gross weight	kg	23.2/27.6		
Panel	Net dimensions (W×H×D)	mm	950×54.5×950		
	Packed dimensions (W×H×D)	mm	1035×90×1035		
	Net/Gross weight	kg	5/8		
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.Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.

4.Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

5.Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

4TVCD030DB0REAA / 4TVCD034DB0REAA

Table 1.3:

Model			4TVCD030DB0REAA	4TVCD034DB0REAA
Power supply			1 phase, 220-240V, 50Hz	
Cooling[1]	Capacity	kW	9.0	10.0
		kBtu/h	30.7	34.1
	Power input	W	75	75
Heating[2]	Capacity	kW	10.0	11.0
		kBtu/h	34.1	37.5
	Power input	W	75	75
Fan motor	Model		ZKSP-170-8-6	
	Type		DC motor	
	Brand		Nidec/Welling /Yongan	
	Speed[3]	r/min	490/470/450/440/410/380/360	590/560/520/480/450/435/420
Indoor coil	Number of rows		2	2
	Tube pitch × row pitch	mm	21×13.37	
	Fin spacing	mm	1.5	
	Fin type		Hydrophilic aluminum	
	Tube OD and type	mm	Φ7 Inner-groove	
	Dimensions (L×H×W)	mm	1955×252	
	Number of circuits		8	
Air flow rate[3]		m^3/h	1349/1294/1230/1201/1111/1029 /970	1641/1544/1431/1309/1225/1198 /1143
Sound pressure level[4]		dB(A)	37/35/34/31/31/30/28	38/36/35/34/31/31/30
Sound power level		dB(A)	53/49/48/46/46/44/43	55/52/49/48/46/46/44
Main body	Net dimensions[5] (W×H×D)	mm	840×300×840	
	Packed dimensions (W×H×D)	mm	955×330×955	
	Net/Gross weight	kg	28.4/33.8	
Panel	Net dimensions (W×H×D)	mm	950×54.5×950	
	Packed dimensions (W×H×D)	mm	1035×90×1035	
	Net/Gross weight	kg	5/8	
Refrigerant type			R410A	
Throttle		Type	Electronic expansion valve	
		Model	D20MISZ-1R(L)	
Design pressure (H/L)		MPa	4.4/2.6	
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. Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
4. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

4TVCD038DB0REAA / 4TVCD048DB0REAA

Table 1.4: MI2-112(140)Q4DN1 specifications

Model			4TVCD038DB0REAA	4TVCD048DB0REAA
Power supply			1 phase, 220-240V, 50Hz	
Cooling[1]	Capacity	kW	11.2	14.0
		kBtu/h	38.2	47.8
	Power input	W	75	94
Heating[2]	Capacity	kW	12.5	16.0
		kBtu/h	42.7	54.6
	Power input	W	75	94
Fan motor	Model		ZKSP-170-8-6	
	Type		DC motor	
	Brand		Nidec/Welling /Yongan	
	Speed[3]	r/min	590/560/520/480/450/435/420	620/590/550/510/480/465/450
Indoor coil	Number of rows		2	3
	Tube pitch × row pitch	mm	21×13.37	
	Fin spacing	mm	1.5	
	Fin type		Hydrophilic aluminum	
	Tube OD and type	mm	Φ7 Inner-groove	
	Dimensions (L×H×W)	mm	1955×252	
	Number of circuits		8	
Air flow rate[3]		m^3/h	1641/1544/1431/1309/1225/1198/1143	1662/1574/1448/1348/1253/1219/1170
Sound pressure level[4]		dB(A)	38/36/35/34/31/31/30	39/37/36/35/34/31/31
Sound power level		dB(A)	55/52/49/48/46/46/44	56/55/52/49/48/46/46
Main body	Net dimensions[5] (W×H×D)	mm	840×300×840	
	Packed dimensions (W×H×D)	mm	955×330×955	
	Net/Gross weight	kg	28.4/33.8	30.7/35.8
Panel	Net dimensions (W×H×D)	mm	950×54.5×950	
	Packed dimensions (W×H×D)	mm	1035×90×1035	
	Net/Gross weight	kg	5/8	
Refrigerant type			R410A	
Throttle		Type	Electronic expansion valve	
		Model	D20MISZ-1R(L)	BD24FKS(L)
Design pressure (H/L)		MPa	4.4/2.6	
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. Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
4. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

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

Optional wireless remote controller

TCONTRM12D

Optional wired controller

TCONTWDC86EKD

TCONTWDC120GWK

Model name			4TVDD027DB0WEAA	4TVDD030DB0WEAA	4TVDD038DB0WEAA	4TVDD048DB0WEAA
Power supply			1-phase, 220-240V, 50Hz		1-phase, 220-240V, 50Hz	
Cooling[1]	Capacity	kW	8	9	11.2	14
		kBut/h	27.3	30.7	38.2	47.8
	Input	W	110	120	200	250
Heating[2]	Capacity	kW	9	10	12.5	15.5
		kBut/h	30.7	34.1	42.7	52.9
	Input	W	110	120	200	250
Airflow rate[3]		m^3/h	1260/1180/1100/1020/940/860/780	1260/1180/1100/1020/940/860/780	1500/1430/1360/1290/1210/1140/1080	1960/1860/1760/1660/1560/1460/1360
External static pressure[4]		Pa	20 (10~100)		20 (10~100)	40 (30~150)
Sound pressure level[5]		dB(A)	37/35/34/33/31/29/28	37/35/34/33/31/29/28	39/38/38/37/35/34/33	41/39/38/37/36/35/33
Unit	Net dimensions[6] (W×H×D)	mm	1230×270×775		1230×270×775	1290x300x865
	Packed dimensions (W×H×D)	mm	1355×350×795		1355×350×795	1400x375x925
	Net/Gross weight	kg	36.5/44.5	37/45	37/45	46.5/55.5
Pipe connections	Liquid/Gas pipe	mm	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ25		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.Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.

4.Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

5.Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

1 Specifications

4TVDD007DB0WEAA / 4TVDD009DB0WEAA / 4TVDD012DB0WEAA

Table 1.1:

Model name			4TVDD007DB0WEAA	4TVDD009DB0WEAA	4TVDD012DB0WEAA
Power supply			1-phase, 220-240V, 50Hz		
Cooling[1]	Capacity	kW	2.2	2.8	3.6
		kBut/h	7.5	9.6	12.3
	Input	W	40	40	45
Heating[2]	Capacity	kW	2.6	3.2	4.0
		kBut/h	8.2	10.9	13.6
	Input	W	40	40	45
Fan motor	Model		ZKSP-30-8-3L	ZKSP-30-8-3L	ZKSP-30-8-3L
	Type		DC		
	Brand		Nidec/Welling/Yongan		
	Speed (H/M/L)	r/min	1010/936/863/790/740/690/640		1070/1004/937/870/830/7
Coil	Number of rows		2	2	2
	Tube pitch × row pitch	mm	21×13.37	21×13.37	21×13.37
	Fin spacing	mm	1.5	1.5	1.5
	Fin type		Hydrophilic aluminum		
	Tube OD and type	mm	Φ7 Inner groove		
	Dimensions (L×H ×W)	mm	515×147×26.74	515×147×26.74	515×147×26.74
	Number of circuits		3	4	4
Airflow rate[3]		m^3/h	520/480/440/400/360/330/300		580/540/500/460/430/400/
External static pressure[4]		Pa	10 (0~50)		
Sound pressure level[5]		dB(A)	32/31/29/28/26/25/23		33/32/31/30/28/27/25
Sound power level		dB(A)	50/49/47/46/44/43/41		51/50/49/48/46/45/43
Unit	Net dimensions[6] (W×H×D)	mm	780x210x500		
	Packed dimensions (W×H×D)	mm	870×285×525		
	Net/Gross weight	kg	18/21		
Refrigerant type			R410A		
Throttle		Type	Electronic expansion valve		
		Model	D20MISZ-1R(L)		
Design pressure (H/L)		MPa	4.4/2.6		
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7		
	Drain pipe	mm	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. Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
4. Stable operation external static pressure range. (Note: setting external static pressure outside the unit's optimal static pressure range may lead to higher noise levels and lower airflow rate. For the optimal external static pressure range refer to the unit's installation manual.)
5. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
6. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

4TVDD015DB0WEAA / 4TVDD019DB0WEAA / 4TVDD024DB0WEAA

Table 1.2:

Model name			4TVDD015DB0WEAA	4TVDD019DB0WEAA	4TVDD024DB0WEAA
Power supply			1-phase, 220-240V, 50Hz		
Cooling[1]	Capacity	kW	4.5	5.6	7.1
		kBut/h	15.4	19.1	24.2
	Input	W	92	92	98
Heating[2]	Capacity	kW	5	6.3	8
		kBut/h	17.1	21.5	27.3
	Input	W	92	92	98
Fan motor	Model		ZKSP-30-8-3L	ZKSP-30-8-3L	ZKSP-60-8-2
	Type		DC		
	Brand		Nidec/Welling/Yongan		
	Speed (H/M/L)	r/min	1080/1027/974/920/ 827/734/640	1090/1044/997/950/ 900/850/800	1070/1024/977/930/ 877/824/770
Coil	Number of rows		2	2	2
	Tube pitch × row pitch	mm	21×13.37	21×13.37	21×13.37
	Fin spacing	mm	1.3	1.3	1.3
	Fin type		Hydrophilic aluminum		
	Tube OD and type	mm	Φ7 Inner groove		
	Dimensions (L×H ×W)	mm	735×147×26.74	735×147×26.74	952×147×26.74
	Number of circuits		6	6	6
Airflow rate[3]		m^3/h	800/740/680/620/ 540/480/400	830/760/720/680/ 640/600/560	1000/960/900/840/ 780/720/680
External static pressure[4]		Pa	10 (0~50)		
Sound pressure level[5]		dB(A)	36/34/32/31/29/27/25	36/34/33/32/30/29/28	37/35/33/32/30/29/28
Sound power level		dB(A)	54/52/50/49/47/45/43	54/52/51/50/48/47/46	55/53/51/50/48/47/46
Unit	Net dimensions[6] (W×H×D)	mm	1000x210x500		1220x210x500
	Packed dimensions (W×H×D)	mm	1115x285x525		1335x285x525
	Net/Gross weight	kg	21.5/25		27.5/31.5
Refrigerant type			R410A		
Throttle		Type	Electronic expansion valve		
		Model	D20MISZ-1R(L)		
Design pressure (H/L)		MPa	4.4/2.6		
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/ Φ12.7	Φ9.53/Φ15.9	
	Drain pipe	mm	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. Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
4. Stable operation external static pressure range. (Note: setting external static pressure outside the unit's optimal static pressure range may lead to higher noise levels and lower airflow rate. For the optimal external static pressure range refer to the unit's installation manual.)
5. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

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 71 to 160)
- Water pump box is available as a customization option

Optional wireless remote controller

TCONTRM12D

Optional wired controller

TCONTWDC86EKD

TCONTWDC120GWK

Model name			4TVHD024DB0WEAA	4TVHD027DB0WEAA	4TVHD030DB0WEAA
Power supply			1-phase, 220-240V, 50Hz		
Cooling[1]	Capacity	kW	7.1	8	9
		kBut/h	24.2	27.3	30.7
	Input	W	180	180	220
Heating[2]	Capacity	kW	8	9	10
		kBut/h	27.3	30.7	34.1
	Input	W	180	180	220
Airflow rate[3]		m^3/h	1360/1327/1293/1260/1227/1193/1160		1420/1373/1327/1280/ 1233/1187/1140
External static pressure[4]		Pa	100 (30~ 200)		
Sound pressure level[5]		dB(A)	46/46/45/45/44/43/42	46/46/45/45/44/43/42	50/49/48/48/47/46/45
Unit	Net dimensions[6]	mm	965c423c690		
	(WcHcD) Packed dimensions (WcHcD)	mm	1090c440c768		
	Net/Gross weight	kg	41/47	41/47	51/57
Pipe connections	Liquid/Gas pipe	mm	Φ9.53/Φ15.9		
	Drain pipe	mm	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.Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.

4.Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

5.Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

4TVHD038DB0WEAA / 4TVHD048DB0WEAA / 4TVHD055DB0WEAA

Table 1.2:

Model name			4TVHD038DB0WEAA	4TVHD048DB0WEAA	4TVHD055DB0WEAA
Power supply			1-phase, 220-240V, 50Hz		
Cooling[1]	Capacity	kW	11.2	14	16
		kBut/h	38.2	47.8	54.6
	Input	W	380	420	700
Heating[2]	Capacity	kW	12.5	16	17
		kBut/h	42.7	54.6	58
	Input	W	380	420	700
Fan motor	Model		WZDK750-38G-W	WZDK750-38GS-W	WZDK750-38GS-W
	Type		DC		
	Brand		Panasonic/ Welling		
	Speed (H/M/L)	r/min	1110/1070/1010/970/920/870/840	1015/975/935/905/845/805/765	1080/1050/1000/960/920/870/830
Coil	Number of rows		3	4	4
	Tube pitch × row pitch	mm	25.4×22	25.4×22	25.4×22
	Fin spacing	mm	1.6	1.6	1.6
	Fin type		Hydrophilic aluminum		
	Tube OD and type	mm	Φ9.53 Inner groove		
	Dimensions (L×H ×W)	mm	700×356×66	996×356×88	996×356×88
	Number of circuits		7	7	7
Airflow 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
External static pressure[4]		Pa	100 (30~ 200)		
Sound pressure level[5]		dB(A)	50/50/49/48/47/46/45	53/52/51/51/50/49/48	54/54/53/52/51/50/50
Unit	Net dimensions[6] (W×H×D)	mm	965×423×690	1322×423×691	1322×423×691
	Packed dimensions (W×H×D)	mm	1090×440×768	1436×450×768	1436×450×768
	Net/Gross weight	kg	51/57	63/70	63/70
Refrigerant type			R410A		
Throttle		Type	Electronic expansion valve		
		Model	BD20FKS(L)		
Design pressure (H/L)		MPa	4.4/2.6		
Pipe connections	Liquid/Gas pipe	mm	Φ9.53/Φ15.9		
	Drain pipe	mm	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. Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
4. Stable operation external static pressure range. (Note: setting external static pressure outside the unit's optimal static pressure range may lead to higher noise levels and lower airflow rate. For the optimal external static pressure range refer to the unit's installation manual.)
5. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
6. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

High Static Pressure Duct

Model name			4TVHD070DB0WEAA	4TVHD085DB0WEAA	4TVHD096DB0WEAA
Power supply			1-phase, 220-240V, 50Hz		
Cooling[1]	Capacity	kW	20	25	28
		kBut/h	68.2	85.3	95.5
	Input	W	990	1200	1200
Heating[2]	Capacity	kW	22.5	26	31.5
		kBut/h	76.8	88.7	107.5
	Input	W	990	1200	1200
Airflow rate[3]		m^3/h	4330/4230/4130/4030/3930/3830/3730		
External static pressure[4]		Pa	170 (20~250)		
Sound pressure level[5]		dB(A)	57/56/55/54/53/52/50		
Unit	Net dimensions[6] (WcHcD)	mm	1454×515×931		
	Packed dimensions (WcHcD)	mm	1509×550×990		
	Net/Gross weight	kg	130/142		
Pipe connections	Liquid/Gas pipe	mm	Φ12.7/Φ22.2		
	Drain pipe	mm	OD Φ32		

Model name			4TVHD140DB0WEAA	4TVHD155DB0WEAA	4TVHD190DB0WEAA
Power supply			1-phase, 220-240V, 50Hz		
Cooling[1]	Capacity	kW	40	45	56
		kBut/h	136.5	153.6	191.1
	Input	W	1800	1800	2272
Heating[2]	Capacity	kW	45.0	56	63.0
		kBut/h	153.6	191.1	215.0
	Input	W	1800	1800	2272
Airflow rate[3]		m^3/h	6500/6150/5800/5450/5100/4750/4400		7400/7000/6600/6200 /5800/5400/5000
External static pressure[4]		Pa	300 (100~400)		
Sound pressure level[5]		dB(A)	60/59/58/57/55/54/52		59/58/57/56/55/53/51
Unit	Net dimensions[6] (WcHcD)	mm	2005×929×670		
	Packed dimensions (WcHcD)	mm	2095×964×800		
	Net/Gross weight	kg	210/235		
Pipe connections	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.Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.

4.Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

5.Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

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)
- Water pump box is available as a customization option

Optional wireless remote controller

TCONTRM12D

Optional wired controller

TCONTWDC86EKDT

CONTWDC120GWK

Model name			4TVFD042DB0WEAA	4TVFD048DB0WEAA
Power supply			1-phase, 220-240V, 50Hz	
Cooling[1]	Capacity	kW	12.5	14.0
	Input	W	480	480
Heating[2]	Capacity	kW	10.5	12.0
	Input	W	480	480
Airflow rate (H/M/L)		m^3/h	2000/1917/1833/1750/1667/1583/1500	
External static pressure[3]		Pa	180 (30~200)	
Sound pressure level[4]		dB(A)	48/47/46/45/44/43/42	
Unit	Net dimensions (W×H×D)	mm	1322×423×691	
	Packed dimensions (W×H×D)	mm	1436×450×768	
	Net/Gross weight	kg	68/76	
Refrigerant piping	Liquid/Gas side	mm	Φ9.53/Φ15.9	
Drain piping		mm	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.Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.

4.Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

5.Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Fresh Air Processing Unit

Model name			4TVFD070DB0WEAA	4TVFD085DB0WEAA	4TVFD096DB0WEAA
Power supply			1-phase, 220-240V, 50Hz		
Cooling[1]	Capacity	kW	20.0	25.0	28.0
	Input	W	850	850	850
Heating[2]	Capacity	kW	12.8	16.0	18.0
	Input	W	850	850	850
Airflow rate (H/M/L)		m^3/h	3000/2833/2667/2500/2333/2167/2000		
External static pressure[3]		Pa	200 (30~250)		
Sound pressure level[4]		dB(A)	50/49/48/47/46/44/43		
Unit	Net dimensions (W×H×D)	mm	1454×515×931		
	Packed dimensions (W×H×D)	mm	1509×550×990		
	Net/Gross weight	kg	130/142		
Refrigerant piping	Liquid/Gas side	mm	Φ12.7/Φ22.2		

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.Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.

4.Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

5.Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

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

Optional wireless remote controller

TCONTRM12D

Optional wired controller

TCONTWDC86EKD

TCONTWDC120GWK

Model			4TVWD007DB0R EAA	4TVWD009DB0R EAA	4TVWD012DB0R EAA	4TVWD015DB0R EAA
Power supply			1 phase, 220-240V, 50Hz			
Cooling[1]	Capacity	kW	2.2	2.8	3.6	4.5
		kBtu/h	7.5	9.6	12.3	15.4
	Power input	W	28	28	30	40
Heating[2]	Capacity	kW	2.4	3.2	4.0	5.0
		kBtu/h	8.2	10.9	13.6	17.1
	Power input	W	28	28	30	40
Air flow rate[3]		m^3/h	422/411/402/393/380/368/356	417/402/386/370/353/338/316	656/628/591/573/544/515/488	594/563/535/507/478/450/424
Sound pressure level[4]		dB(A)	31/30/30/30/29/29/29	31/30/30/30/29/29/29	33/32/32/31/31/30/30	35/34/33/33/32/31/31
Unit	Net dimensions[5] (WxHxD)	mm	835×280×203		990×315×223	
	Packed dimensions (WxHxD)	mm	935×385×320		1085×420×335	
	Net/Gross weight	kg	8.4/12.1	9.5/13.1	11.4/15.5	12.8/16.9
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.Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.

4.Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

5.Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Wall Mounted Unit

Model			4TVWD019DB0R EAA	4TVWD024DB0R EAA	4TVWD027DB0R EAA	4TVWD031DB0R EAA
Power supply			1 phase, 220-240V, 50Hz			
Cooling[1]	Capacity	kW	5.6	7.1	8.0	9.0
		kBtu/h	19.1	24.2	27.3	30.7
	Power input	W	45	55	55	82
Heating[2]	Capacity	kW	6.3	8.0	9.0	10.0
		kBtu/h	21.5	27.3	30.7	34.1
	Power input	W	45	55	55	82
Air flow rate[3]		m^3/h	747/713/685/648/613/578/547	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)	38/37/36/36/35/34/34	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	990×315×223	1194×343×262		
	Packed dimensions (WxHxD)	mm	1085×420×335	1290×375×460		
	Net/Gross weight	kg	12.8/16.9	17.0/22.4		
Pipe connections	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. Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
4. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured in a semi-anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Ceiling & Floor

- Can be installed either on the ceiling or floor

Optional wireless remote controller

TCONTRM12D

Optional wired controller

TCONTWDC86EKD

TCONTWDC120GWK

Model			4TVXD012DB0REAA	4TVXD015DB0REAA	4TVXD019DB0REAA	4TVXD024DB0REAA
Power supply			1 phase, 220-240V, 50Hz			
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	550/525/500/480/460/440/420	930/895/860/830/792/755/720		
Sound pressure level[4]		dB(A)	40/39/38/38/37/36/36	43/42/41/41/39/38/38		
Unit	Net dimensions[5] (WxHxD)	mm	990×660×203			
	Packed dimensions (WxHxD)	mm	1089×744×296			
	Net/Gross weight	kg	27/33	28/34		
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7		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. Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
4. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured in a semi-anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Ceiling & Floor

Model			4TVXD027DB0REAA	4TVXD030DB0REAA	4TVXD038DB0REAA	4TVXD048DB0REAA
Power supply			1 phase, 220-240V, 50Hz			
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	1280/1245/1210/1170/1130/1085/1050		1890/1830/1765/1700/1660/1620/1580	
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		1670×680×244	
	Packed dimensions (WxHxD)	mm	1379×744×296		1915×760×330	
	Net/Gross weight	kg	35/41		48/58	
Pipe connections	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. Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
4. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured in a semi-anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Floor Standing Unit (Concealed)

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

Optional wireless remote controller

TCONTRM12D

Optional wired controller

TCONTWDC86EKD

TCONTWDC120GWK

Model			4TVKD007DB0REAA	4TVKD009DB0REAA	4TVKD012DB0REAA	4TVKD015DB0REAA
Power supply			1 phase, 220-240V, 50Hz			
Cooling[1]	Capacity	kW	2.2	2.8	3.6	4.5
		kBtu/h	7.5	9.6	12.3	15.4
	Power input	W	40	45	55	60
Heating[2]	Capacity	kW	2.4	3.2	4.0	5.0
		kBtu/h	8.2	10.9	13.6	17.1
	Power input	W	40	45	55	60
Air flow rate[3]		m³/h	530/504/478/456/439/418/400	569/540/515/485/462/443/421	624/591/557/522/473/420/375	660/625/583/542/501/475/440
Sound pressure level[4]		dB(A)	36/35/34/33/31/30/29		37/36/35/34/32/31/30	
Unit	Net dimensions[5] (W×H×D)	mm	840×545×212		1036×639×305	
	Packed dimensions (W×H×D)	mm	925×639×305		1125×639×305	
	Net/Gross weight	kg	21/25.5		25.5/30.5	
Refrigerant piping	Liquid/Gas side	mm	Φ6.35/Φ12.7			
Drain piping		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. Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
4. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured in a semi-anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Floor Standing Unit (Concealed)

Model			4TVKD019DB0REAA	4TVKD024DB0REAA	4TVKD027DB0REAA
Power supply			1 phase, 220-240V, 50Hz		
Cooling[1]	Capacity	kW	5.6	7.1	8.0
		kBtu/h	19.1	24.2	27.3
	Power input	W	88	110	130
Heating[2]	Capacity	kW	6.3	8.0	9.0
		kBtu/h	21.5	27.3	30.7
	Power input	W	88	110	130
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] (W×H×D)	mm	1340×545×212		
	Packed dimensions (W×H×D)	mm	1425×639×305		
	Net/Gross weight	kg	30.5/35.5	30.5/35.5	32/37
Refrigerant piping	Liquid/Gas side	mm	Φ9.53/Φ15.9		
Drain piping		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. Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
4. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured in a semi-anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Floor Standing Unit (Exposed)

- The F4 (front air intake) and F5 (underside air intake) offer a choice of air intake options

F4 (front air intake)

Optional wireless remote controller

TCONTRM12D

Optional wired controller

TCONTWDC86EKD

TCONTWDC120GWK

Model			4TVJD007DB0REAA	4TVJD009DB0REAA	4TVJD012DB0REAA	4TVJD015DB0REAA
Power supply			1 phase, 220-240V, 50Hz			
Cooling[1]	Capacity	kW	2.2	2.8	3.6	4.5
		kBtu/h	7.5	9.6	12.3	15.4
	Power input	W	40	45	55	60
Heating[2]	Capacity	kW	2.4	3.2	4.0	5.0
		kBtu/h	8.2	10.9	13.6	17.1
	Power input	W	40	45	55	60
Air flow rate[3]		m3/h	530/504/478/456/439/418/400	569/540/515/485/462/443/421	624/591/557/522/473/420/375	660/625/583/542/501/475/440
Sound pressure level[4]		dB(A)	36/35/34/33/31/30/29		37/36/35/34/32/31/30	
Unit	Net dimensions[5] (W×H×D)	mm	1000×596×225		1200×596×225	
	Packed dimensions (W×H×D)	mm	1089×683×312		1289×683×312	
	Net/Gross weight	kg	28/33		33/38.6	
Refrigerant piping	Liquid/Gas side	mm	Φ6.35/Φ12.7			
Drain piping		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. Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
4. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured in a semi-anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

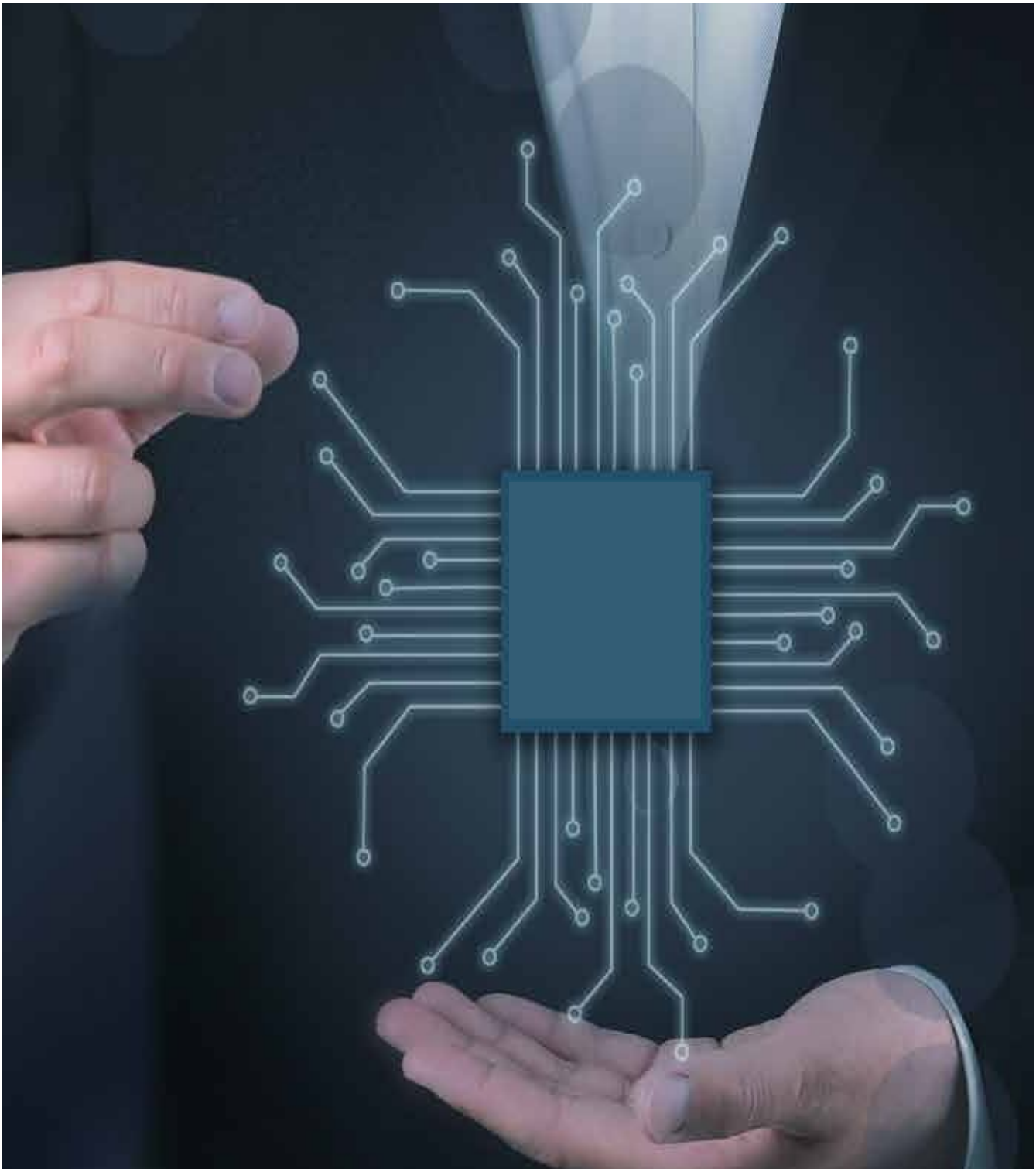
Floor Standing Unit (Exposed)

Model			4TVJD019DB0REAA	4TVJD024DB0REAA	4TVJD027DB0REAA
Power supply			1 phase, 220-240V, 50Hz		
Cooling[1]	Capacity	kW	5.6	7.1	8.0
		kBtu/h	19.1	24.2	27.3
	Power input	W	88	110	130
Heating[2]	Capacity	kW	6.3	8.0	9.0
		kBtu/h	21.5	27.3	30.7
	Power input	W	88	110	130
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] (W×H×D)	mm	1500×596×225		
	Packed dimensions (W×H×D)	mm	1589×683×312		
	Net/Gross weight	kg	40/46	40/46	41.5/47.5
Refrigerant piping	Liquid/Gas side	mm	Φ9.53/Φ15.9		
Drain piping		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. Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
4. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured in a semi-anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Control Solutions



Controller Lineup

Wireless Remote/ Wired Controllers	Centralized Controllers	Data converter
TCONTRM12D 	TCONTCCM180A 	TCONTCCM15A 
TCONTWDC86EK 	TCONTCCM270A 	
TCONTWDC86EKD  TCONTWDC120GWK 		

Controller Lineup

Network Control System	BMS Gateways	Accessories
TCONTGWV6PROMA  + TIMSWV6PROMA 	TCONTCCM08EGW 	Hotel Key Card Interface Module  TCONTNAM05A  TCONTNAM05A
TCONTWEBBAC01  + TIMSWV6PROMA 	TCONTCCM20AGW 	Infrared Sensor Controller  TCONTCCM30A
TCONTCCM270A  + TIMSWV6PROMA 	TCONTCCM18EGW 	Diagnosis software  TCONTDIAGBMCAC

Wireless Remote Controllers

Wireless Remote Controllers

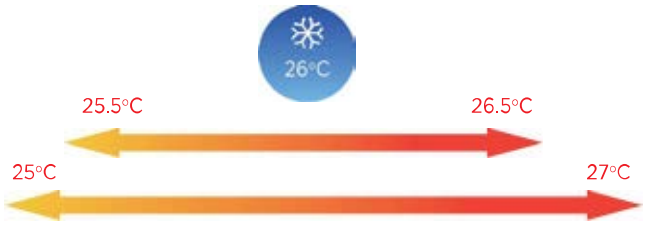
Features

Model	 TCONTRM12D
On / Off	●
Mode selection	●
Temperature setting	● (0.5°C or 1°C steps)
7-speed fan control	●
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)	170×48×20
Batteries	1.5V (LR03/AAA) × 2

Wireless Remote Controllers

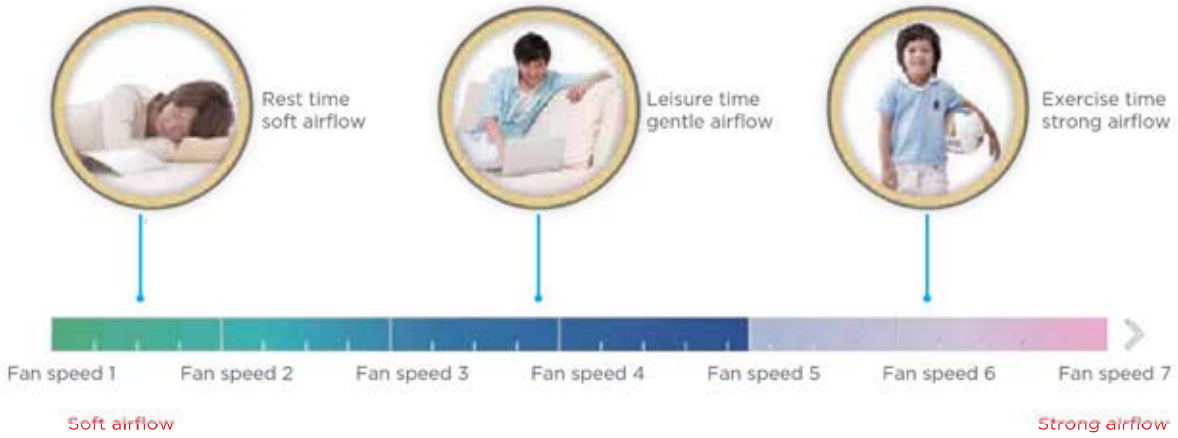
Temperature Setting

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.



7-Speed Fan Control

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



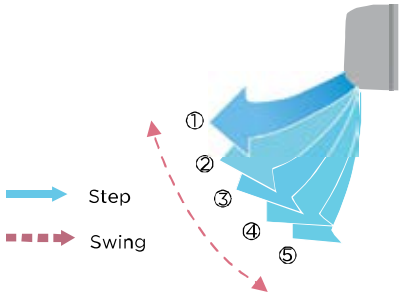
Dispaly Shut-off

Indoor unit displays can be shut off at night, creating a better environment for rest.

Wireless Remote Controllers

5-step Swing Louver

The air is comfortably spread upwards and downwards thanks to the 5-step swing louver that can be programmed via the controller.



Follow Me

With the follow me function, the indoor unit responds to the temperature measured by the temperature sensor built-in to the wireless remote controller, rather than the temperature sensor in the indoor unit itself, enabling more precise control of the temperature in the user's immediate environment.

Eco Mode

Eco mode saves energy whilst retaining a comfortable indoor environment.

Wired Controllers

Wired Controllers

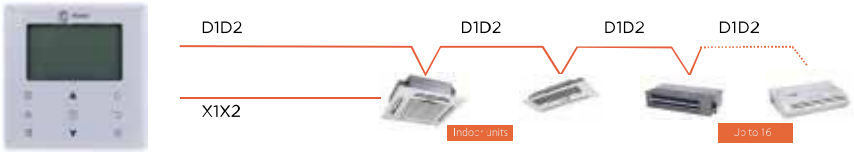
Features

Model	 TCONTWDC86EKD	 TCONTWDC86EK	 TCONTWDC120GWK
On / Off	●	●	●
Mode selection	●	●	●
Temperature setting	● (0.5°C or 1°C steps)	● (0.5°C or 1°C steps)	● (0.5°C or 1°C steps)
Dual temperature set points	●	—	●
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	●	●	●
Extension function	—	—	●
Daylight saving time	—	—	●
Clock display	—	—	●
Dot matrix display	—	—	●
Error check function	●	—	●
System parameter querying	●	—	●
System setting control	●	—	●
Dimensions (WxHxD) (mm)	86x86x18	86x86x18	120x120x20
Power supply	18V DC	5V DC	18V DC

Wired Controllers

Group Control

One controller can be used to unify the settings across up to 16 indoor units.



Main or Secondary Controller Setting

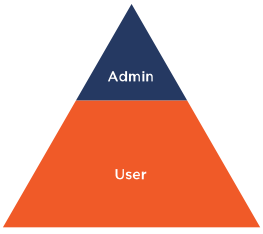
Two controllers can be used together, with the indoor units' operating mode and settings being set according to the most recent instruction received. The controller display screens are synchronized so that both displays update when a setting is adjusted.

One indoor unit

Two or more indoor units

2 Permission Levels

2 permission levels ensure users can easily access control functions and allow administrators convenient access to operating parameters.



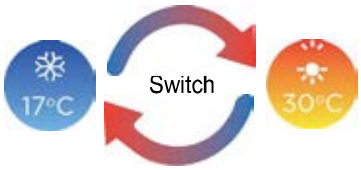
Wired Controllers

Extension Function

The extension function is specifically designed for users working overtime. Pressing the delay button postpones system shutdown by 1 or 2 hours.

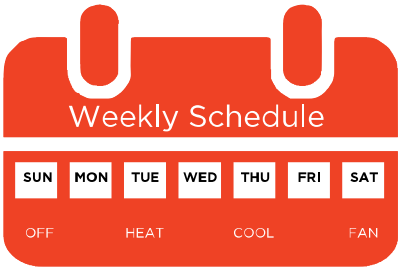
Dual Temperature Set Points

With dual temperature set point control, the set temperature changes automatically when the operating mode is changed.



Weekly Schedule Timer

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 on the wired controller.

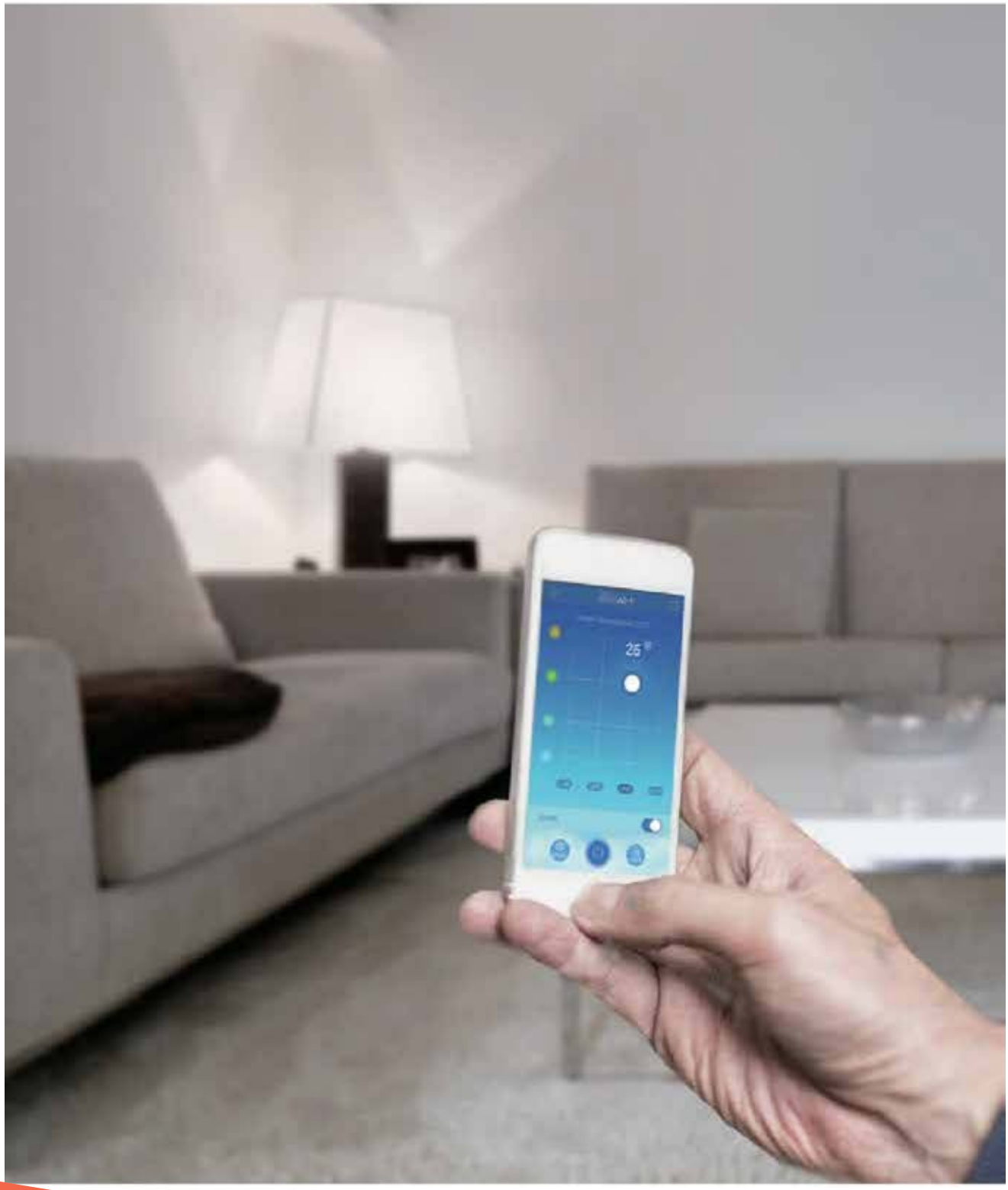
Centralized Controllers

Centralized Controllers

Features

Model	 TCONTCCM180A	 TCONTCCM270A
Max. number of indoor units	64	384
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	●	●
Schdule management	●	●
Clock display	●	●
2 permission levels	●	●
Extension function	●	—
Daylight saving time	●	—
Unit model recognition	●	●
Electricity charge distribution	—	●
Visual schematic	—	●
Energy management	●	●
Group management	●	●
Error check function	●	●
System parameter querying	●	●
USB output	Error report	Error report, operation record and electricity consumption report
Report display		
Email output	—	●
Operation log	—	●
LAN access	—	●
languages supported	English	English
Dimensions (W×H×D) (mm)	181x124x30	270×183×27
Power supply	12V DC	24V AC

Data Converter



Data Converter

Features

Hardware model	 TCONTCCM15A	
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)	187×115×28	
Power supply	1 phase, 100-240V, 50/60Hz	

Network Control System

Network Control System

Features

Software model	 TIMSWV6PROMA	
Hardware model	 or  TCONTGWV6PROMA TCONTCCM08EGW	 TCONTCCM270A
Max. number per IMMPRO system	10	10
Max. number of indoor units	2560	3840
Max. number of refrigerant systems	320	480
Temperature setting	● (0.5°C steps)	● (0.5°C steps)
Dual temperature set points	●	●
7-speed fan control	●	●
Auto swing	●	●
5-step swing louver	●	●
Outdoor unit Eco mode setting	●	●
Holiday setting	●	●
Schedule management	●	●
Clock display	●	●
2 permission levels	●	●
Unit model recognition	●	●
Electricity charge distribution	●	●
Visual schematic	●	●
Energy management	●	●
Group management	●	●
Error check function	●	●
System parameter querying	●	●
Report output	●	●
Operation log	●	●
LAN access	●	●
Data backup	●	●
Remote VPN access	●	●
Languages supported	English	English
Dimensions (W×H×D) (mm)	251×319×66	270×183×27
Power supply	1 phase, 100-240V, 50/60Hz	24V AC

Note: the IMMP-BAC gateway has integrated the fucntions of IMMP-M gateway and GW-BAC gateway.

BMS Gateway

Monitoring and control of Trane's TVR air conditioners can be integrated into building management systems, enabling air conditioning to be monitored alongside lighting, power, fire, access and security systems. Trane's gateway devices provide full compatibility with the leading BMS protocols: BACnet, LonWorks and Modbus.

BACnet Gateway

TCONTCCM08EGW

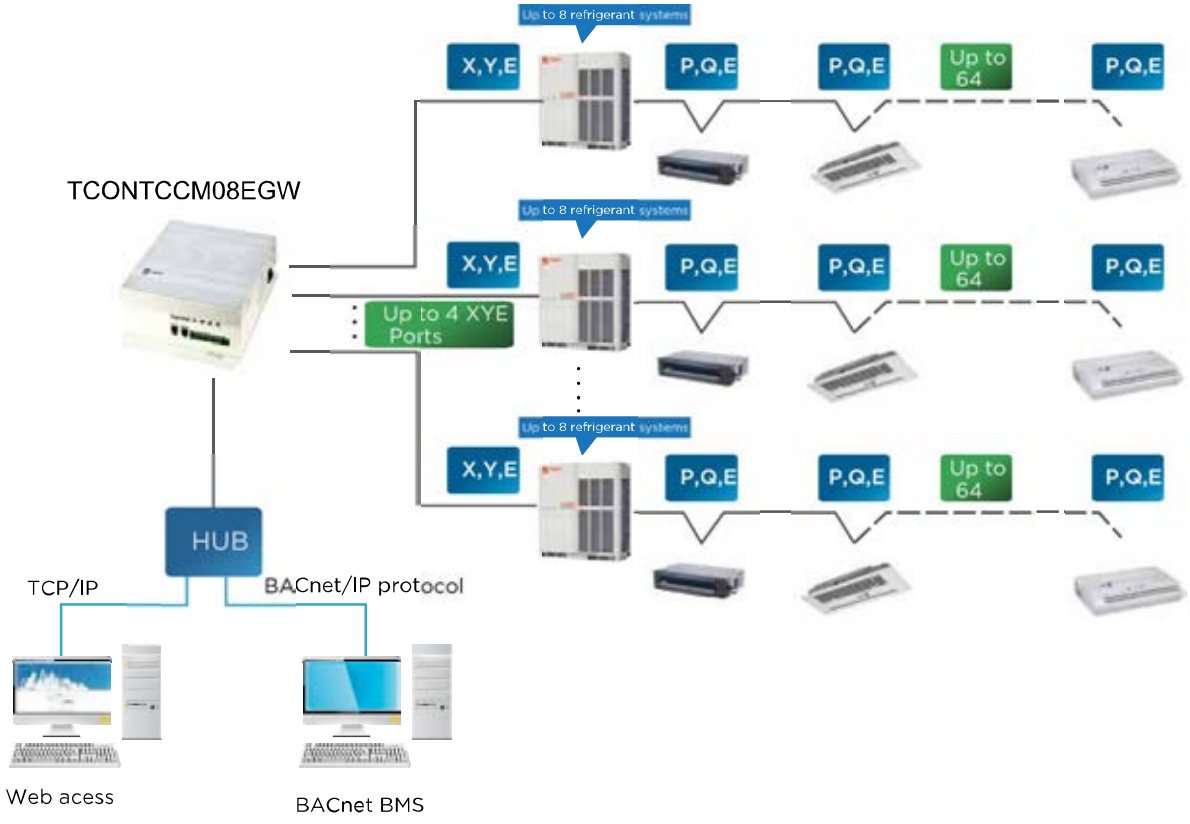
BACnet Gateway

Full Integration

The GW-BAC or IMMP-BAC Gateway allows Trane VRF 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

The gateway can be connected to master outdoor units' XYE ports directly.



BACnet Gateway

Features

Model		TCONTCCM08EGW
Max. number of devices (include indoor and outdoor units)		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	●
Outdoor unit monitoring	Operating mode	●
	Outdoor ambient temperature	●
	Fan speed	●
	Compressor operating frequency	●
	Discharge temperature	●
	System pressure	●
	Error status	●
	Error alarms	●
LAN access		●
BTL certification		●
Compatibility	Siemens	APOGEE
	Trane	TRACER
	Honeywell	ALERTON
	Schneider	Andover Continuum
	Johnson Controls	METASYS
Dimensions (HxWxD)(mm)		319×251×61
Power supply		1 phase, 100-240V, 50/60Hz

Note: the TCONTCCM08EGW gateway has integrated the fucntions of IMMP-M gateway and GW-BAC gateway.

LonWorks Gateway

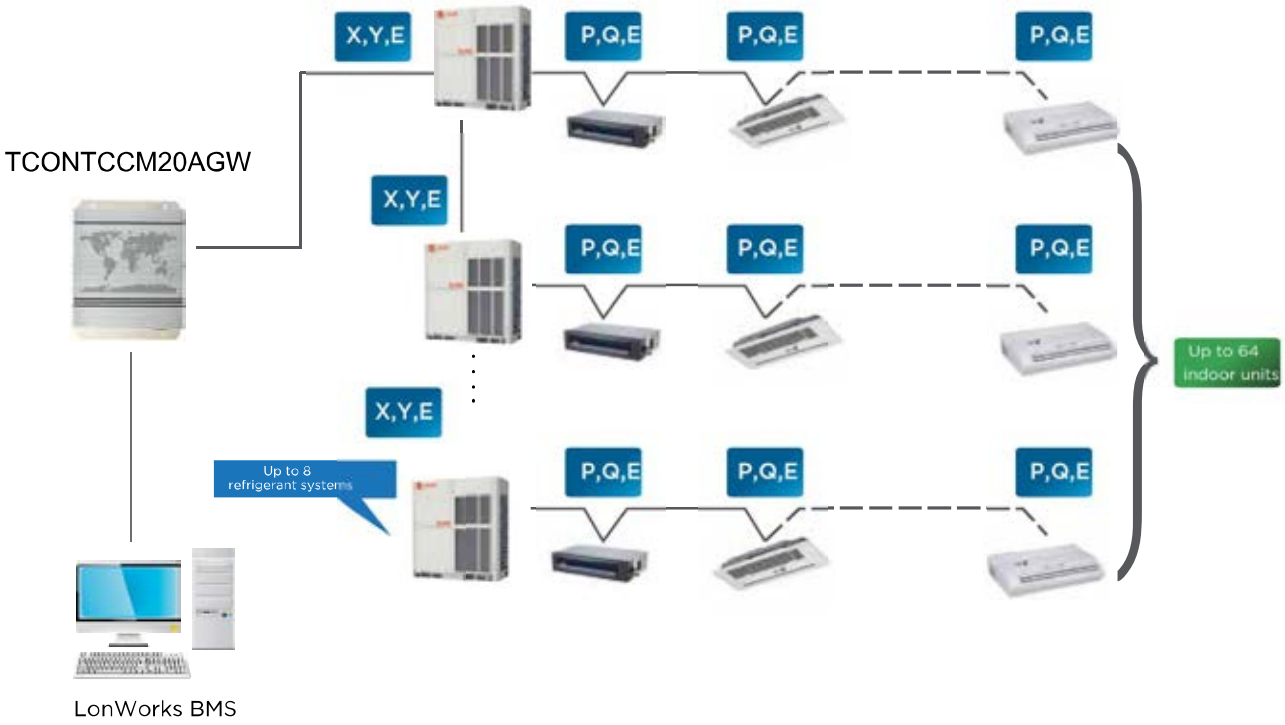
TCONTCCM20AGW

LonWorks Gateway

Full Integration

The GW-LON Gateway allows Trane VRF 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



LonWorks Gateway

Features

Model		TCONTCCM20AGW
Max. number of indoor units		64
Max. number of refrigerant systems		8
Control	Mode selection	●
	Temperature setting	●
	Fan speed	●
	Group shut down	●
	On / Off	●
Indoor unit monitoring	Operating mode	●
	Set temperature	●
	Fan speed	●
	Online status	●
	Operating status	●
	Room temperature	●
	Error status	●
Outdoor unit monitoring	Error status	●
Dimensions (HxWxD)(mm)		319×251×61
Power supply		1 phase, 100-240V, 50/60Hz

Modbus Gateway

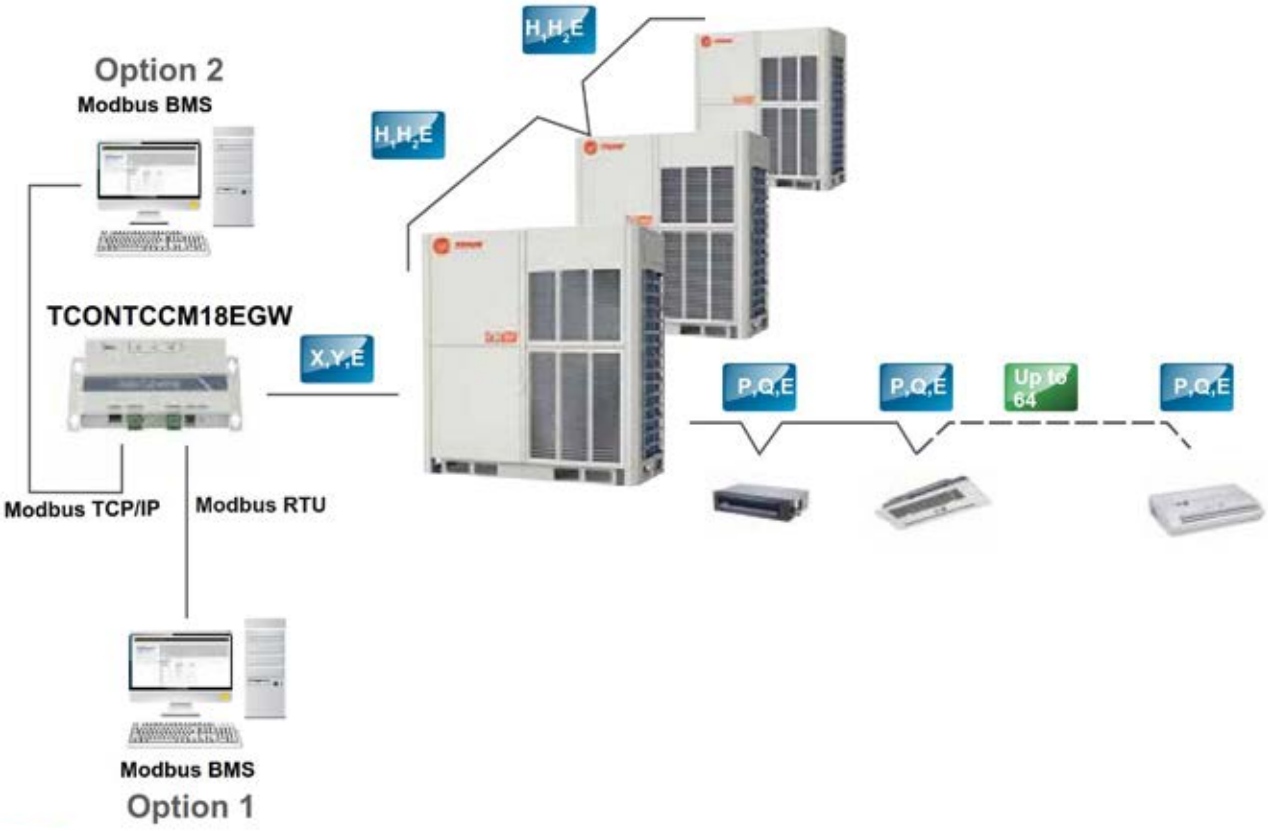
TCONTCCM18EGW

Modbus Gateway

Full Integration

The GW-MOD Gateway enables seamless connection of Trane VRF systems with building management systems built on the Modbus communication protocol.

Network Flexibility



Modbus Gateway

Features

Model		TCONTCCM18EGW
Max. number of indoor units		64
Max. number of refrigerant systems		1
Control	On / Off	●
	Mode selection	●
	Temperature setting	●
	Fan speed	●
	Group on/off	●
Indoor unit monitoring	Online status	●
	Room temperature	●
	Error status	●
	Operating mode	●
Outdoor unit monitoring	Operating mode	●
	Lock status	●
	Fan speed	●
	Set temperature	●
	Outdoor ambient temperature	●
	Error status	●
LAN access		●
Dimensions (HxWxD)(mm)		187×115×28
Power supply		1 phase, 100-240V, 50/60Hz

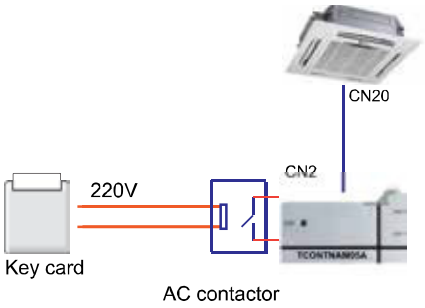
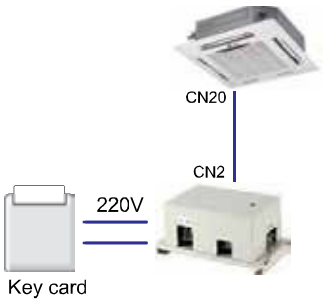
Hotel Key Card Interface Modules

Hotel Key Card Interface Modules

Full Integration

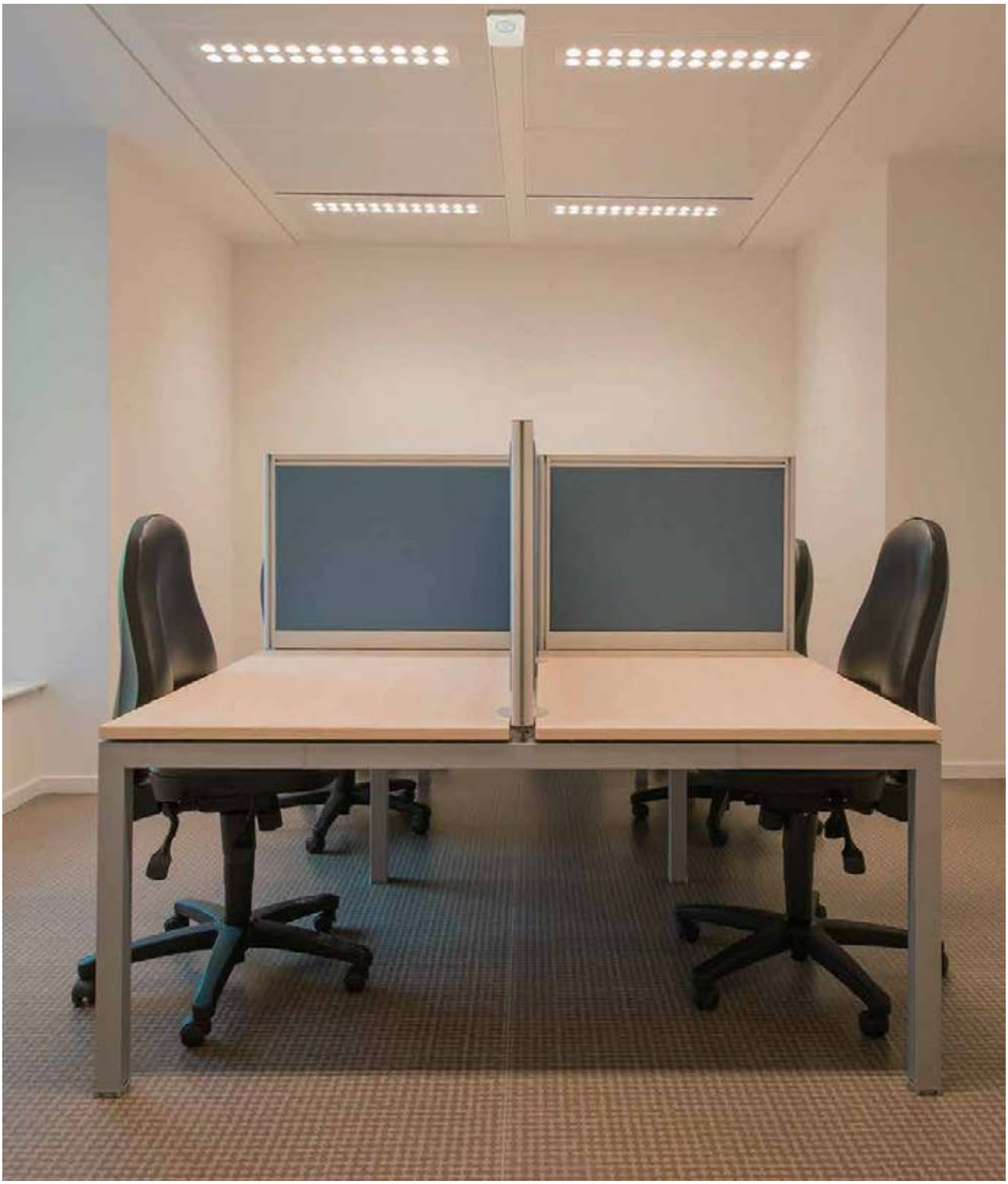
The Hotel Key Card Interface Modules enable power supply to indoor units to be integrated with hotel key card power supply management systems, which are designed to save energy by only running appliances whilst guests are present in their room.

Features

Model	TCONTNAM05A	MD-NIM05B/E
Appearance		
Network flexibility		
Auto restart	●	●
Compatiblity	Remote and wired controller	Remote and wired controller
Dimensions (H×W×D) (mm)	15.5×86×72.8	87×150×70
Power supply	5V DC (Supplied by indoor unit)	1 phase, 100-240V, 50/60Hz

Note : The Hotel Key Card Interface Modules only compatible while using the infrared communication ports of wired Controllers.

Infrared Sensor Controller

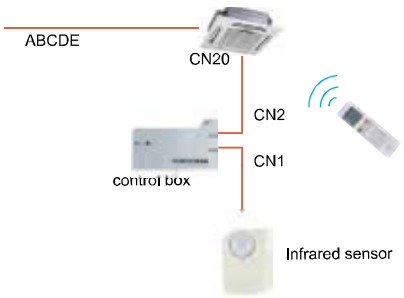


Infrared Sensor Controller

Full Integration

Using infrared sensors to detect movement, the MD-NIM09 Infrared Sensor Controller automatically turns indoor units on or off upon sensing that the room is occupied or unoccupied. Suitable for the hotels, offices, conferences rooms and residences, the Infrared Sensor Controller ensures climate control whilst minimising energy consumption.

Features

Model	TCONTCCM30A
Appearance	 
Network flexibility	 Wired controller 
Dimensions (H×W×D)(mm)	Sensor 46×30×25.6, Control box 86×72.8×15.5
Power supply	5V DC (Supplied by indoor unit)

Note : The Hotel Key Card Interface Modules only compatible while using the infrared communication ports of wired Controllers.

Diagnosis Software

Diagnosis Software

Monitor and Diagnose

Trane's TVR Diagnosis Software tool is used to monitor TVR systems and diagnose system errors. System settings and operating parameters can be accessed easily and data logs can be reviewed for fault prevention purposes.

Features

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

Notes:

1. Heat exchanger temperature, outdoor ambient temperature, discharge temperature.
2. Oil return valve, defrosting valve, EXV bypass valve, four-way valve.
3. Indoor ambient temperature, indoor heat exchanger mid-point temperature, indoor heat exchanger outlet temperature, set temperature.

VRF AHU Control Box

High Efficiency

AHU Control Box facilitates raising the EER/COP of the complete AHU system.

Wide Capacity Range

Four Control Box can be used in parallel, giving an overall capacity range of 3.2HP to 80HP.

TCONTAHUKIT4

3.2-6HP

TCONTAHUKIT5

8-12HP

TCONTAHUKIT6

14-20HP

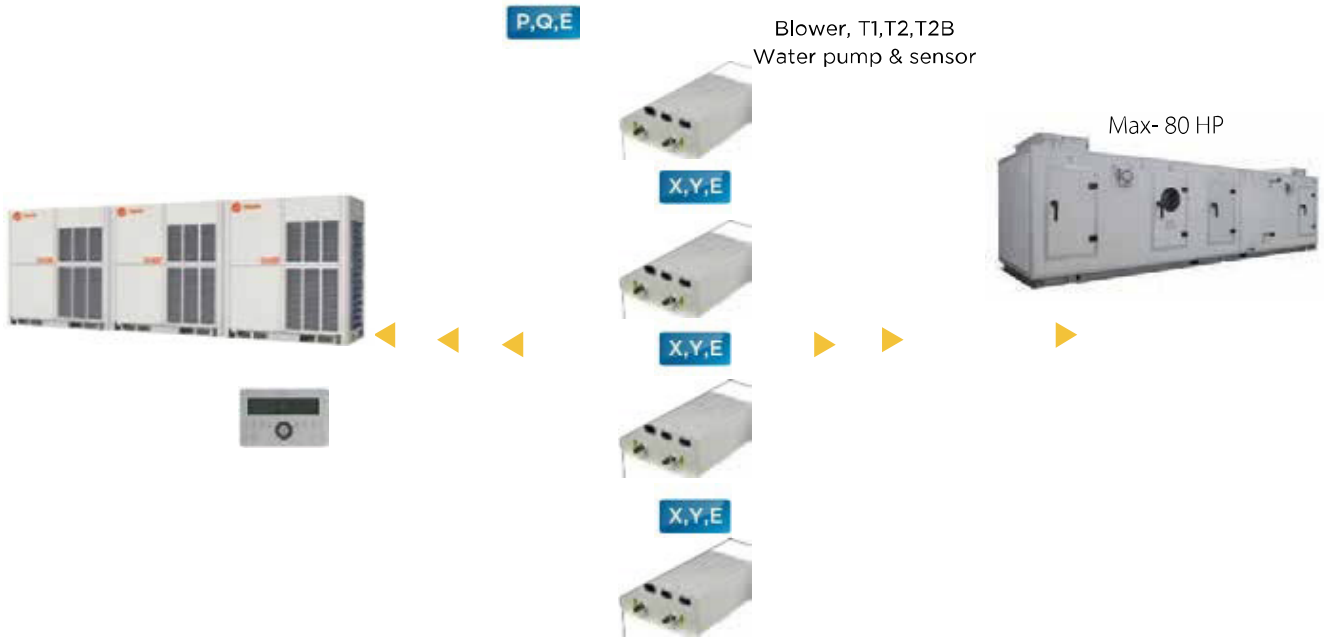
Compatible with All VRF Systems

AHU Control Box are compatible with all Trane VRF outdoor units and can be used together with all types of Trane VRF indoor units.

VRF AHU Control Box

Single AHU Control Box Connection

Multi AHU Control Boxes Connection



Specifications

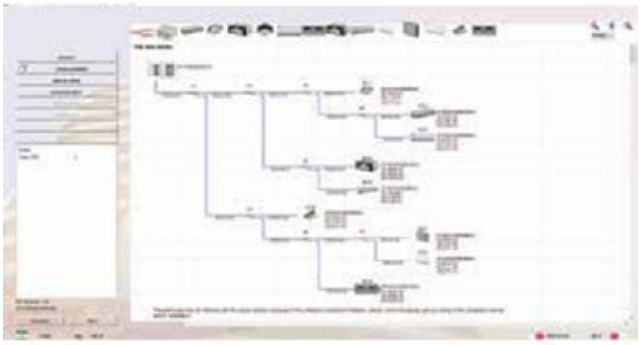
Model		TCONTAHUKIT4	TCONTAHUKIT5	TCONTAHUKIT6
Capacity	HP	3.2-6	8-12	14-20
Power supply			1 phase, 220-240V, 50Hz; 1 phase, 208-230V, 60Hz	
Refrigerant			R410A	
Pipe connections (inlet and outlet)	mm	Φ8	Φ12.7	Φ15.9
Net dimensions (W×H×D)	mm		350×150×375	
Packed dimensions (W×H×D)	mm		420×240×490	
Net 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	

Selection Software

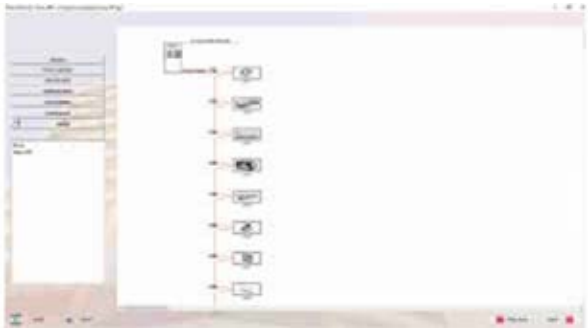
High Efficiency

Trane's advanced design automation tool can be used by designers, consultants and distributors to greatly reduce the time and effort that must be devoted to the selection process. The software provides quick and convenient selectable options for users, supports multiple languages, and greatly improves the selection process.

The Selection Software provides distributors' sales team with a comprehensive selection of system design reports and calculations. Based on the indoor units, outdoor units and controllers selected, the software produces detailed system layout diagrams and piping requirement calculations.



Piping diagram



Wiring diagram

Controller selection

Report

Heat Recovery Ventilator

Fan Motor Options

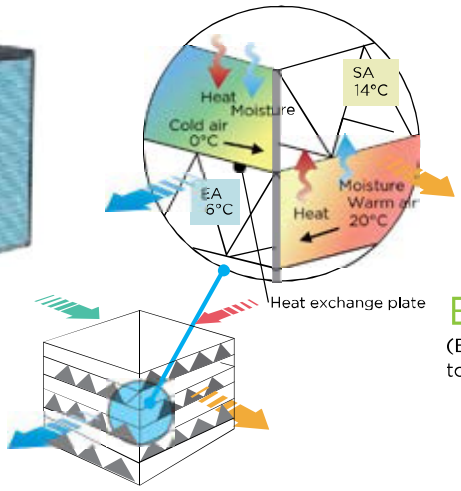
AC and DC fan versions available.

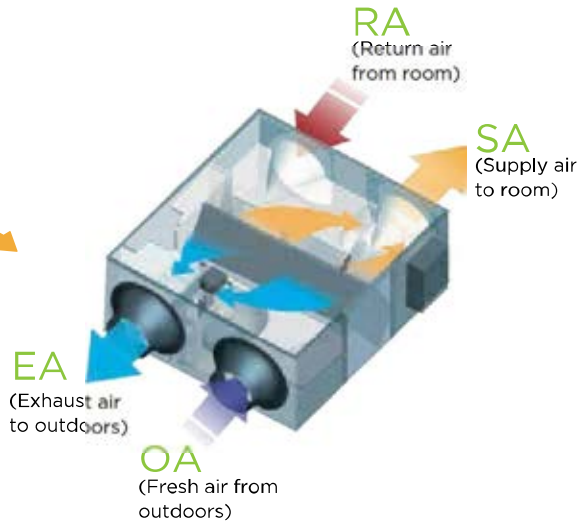
Enhanced Efficiency

The Trane heat recovery ventilator (HRV) can greatly reduce energy losses and room temperature fluctuations caused by the ventilation process. The Trane HRV's strong performance is a result of the advanced technology incorporated into its design. The heat exchanger core is made of specially treated paper which gives enhanced temperature and humidity control. Temperature exchange efficiency is over 65% and enthalpy exchange efficiency is 50-65%.

TERV0120AB0AA TERV0300AB0AA
TERV0120AB0AA TERV0470AB0AA
HRV-400 TERV0600AB0AA

TERV0900AC0AA
TERV1200AC0AA



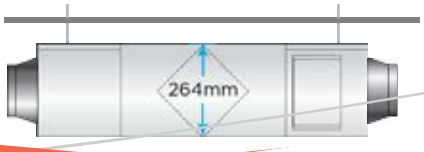


Low Noise

Soundproofing is used to guarantee quiet operation.

Flexibility

Heights starting from as little as 264mm and weights from as little as 23kg mean that the Trane HRV can be easily installed even where space is limited.



Heat Recovery Ventilator

Multiple Modes

Heat exchange mode

The flows of incoming and outgoing air pass close to each other, allowing heat transfer between the two channels. During summer, incoming air is cooled by the indoor air being exhausted and in winter, incoming air is warmed.

Bypass mode

In mild climates or seasons, where temperature and humidity differences between indoors and outdoors are small, the HRV can work as a conventional ventilation fan. In standard bypass mode the supply and exhaust fans run at the same speed.

Air supply mode

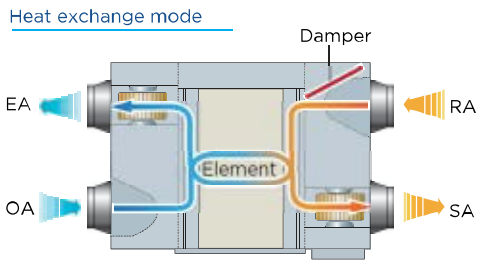
Air supply mode is a form of bypass mode where the supply fan is set to run faster than the exhaust fan, which is useful in mild climate installations with high fresh air ventilation requirements.

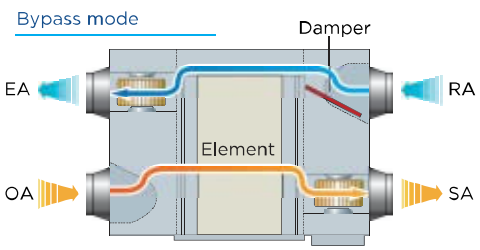
Exhaust mode

Exhaust mode is a form of bypass mode where the exhaust fan is set to run faster than the supply fan, which is useful in mild climate installations with large amounts of exhaust air to be expelled.

Auto mode

The controller chooses heat exchange mode or bypass mode according to the temperature difference between outdoors and indoors. Both fans are set to run at low speed.





Heat Recovery Ventilator

Specifications

AC Series

Model		TERV0120AB0AA	TERV0175AB0AA	HRV-400	TERV0300AB0AA
Power supply	V/Ph/Hz	220-240/1/50		220-240/1/50 & 220/1/60	
Cooling temp. exchange efficiency (H/M/L)	%	55/55/60	55/55/60	55/55/60	55/55/60
Cooling enthalpy exchange efficiency (H/M/L)	%	50/50/55	50/50/55	50/50/55	50/50/55
Heating temp. exchange efficiency (H/M/L)	%	60/60/65	60/60/65	60/60/65	65/65/70
Heating enthalpy exchange efficiency (H/M/L)	%	55/55/60	55/55/60	60/60/65	60/60/65
Sound pressure level in heat exchange mode (H/M/L)	dB(A)	27/26/20	30/29/23	32/31/25	35/34/28
Sound pressure level in bypass mode (H/M/L)	dB(A)	28/27/22	31/30/25	33/32/27	36/35/30
Airflow rate (H/M/L)	m^3/h	200/200/150	300/300/225	400/400/300	500/500/375
External static pressure (H/M/L)	Pa	75/58/35	75/60/40	80/65/43	80/68/45
Motor type		AC			
Duct diameter	mm	Φ144	Φ144	Φ144	Φ194
Net dimensions (WxDxH)	mm	866×655×264	944×722×270	944×927×270	1038×1026×270
Packed dimensions (WxDxH)	mm	960×770×445	1020×810×452	1020×1020×452	1120×1120×452
Net weight	kg	23	26	31	41
Gross weight	kg	40	44	52	64
Operating temperature range	°C	-7 to 43 DB, RH 80% or lower			

Model		TERV0470AB0AA	TERV0600AB0AA	TERV0900AC0AA	TERV1200AC0AA
Power supply	V/Ph/Hz	220-240/1/50 & 220/1/60		380-415/3/50 & 220/3/60	
Cooling temp. exchange efficiency (H/M/L)	%	55/55/60	55/55/60	55	55
Cooling enthalpy exchange efficiency (H/M/L)	%	50/50/55	50/50/55	50	50
Heating temp. exchange efficiency (H/M/L)	%	65/65/70	65/65/70	65	65
Heating enthalpy exchange efficiency (H/M/L)	%	60/60/65	60/60/65	60	60
Sound pressure level in heat exchange mode (H/M/L)	dB(A)	39/38/32	40/39/33	51	53
Sound pressure level in bypass mode (H/M/L)	dB(A)	40/39/34	41/40/35	52	54
Airflow rate (H/M/L)	m^3/h	800/800/600	1000/1000/750	1500	2000
External static pressure (H/M/L)	Pa	100/82/54	100/85/58	160	170
Motor type		AC			
Duct dimensions	mm	Φ242	Φ242	346×326	346×326
Net dimensions (WxDxH)	mm	1286×1006×388	1286×1256×388	1600×1270×540	1650×1470×540
Packed dimensions (WxDxH)	mm	1380×1100×573	1400×1370×573	1710×1410×720	1760×1610×720
Net weight	kg	62	79	163	182
Gross weight	kg	88	110	224	247
Operating temperature range	°C	-7 to 43 DB, RH 80% or lower			

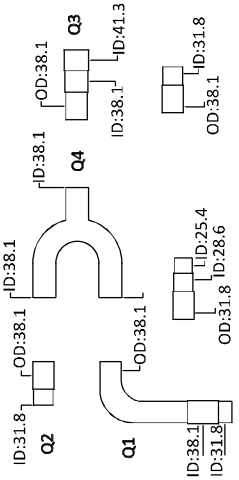
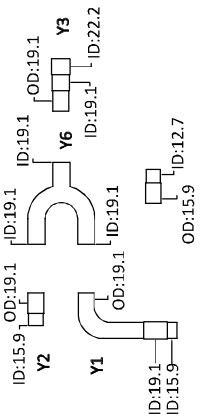
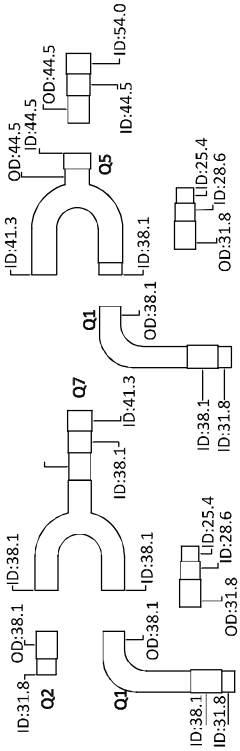
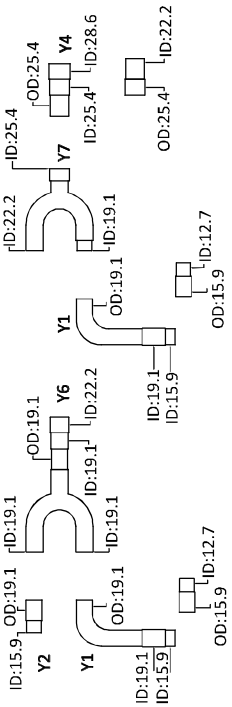
Note:
1. Models HRV-200 to HRV-1000 each have have 3 airflow settings; the airflow rates of the HRV-1500 and HRV-2000 are not adjustable.
2. Sound level is measured 1.4m below the center of the unit in an semi-anechoic chamber.
3. Efficiency is measured under the following conditions:
   Cooling: exhaust air temp 27°C DB, 19.5°C WB; fresh air temp. 35°C DB, 28°C WB.
   Heating: exhaust air temp 21°C DB, 13°C WB; fresh air temp. 5°C DB, 2°C WB.

Branch Joints

Type	Appearance	Model	Packed Dimensions mm	Gross Weight kg	Note
Branch joints for outdoor units		4TODZ02C	255×150×185	2.0	Connecting two outdoor units
		4TODZ03C	345×160×285	4.3	Connecting three outdoor units
Branch joints for indoor units		4TRDK01C	290×105×100	0.4	/
		4TRDK02C	290×105×100	0.6	/
		4TRDK03C	310×130×125	0.9	/
		4TRDK04C	350×180×170	1.5	/
		4TRDK05C	365×195×215	1.9	/
		4TRDK06C	390×230×255	3.1	/
		4TRDK07C	390×230×255	3.4	/

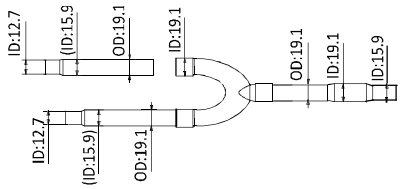
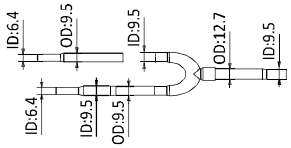
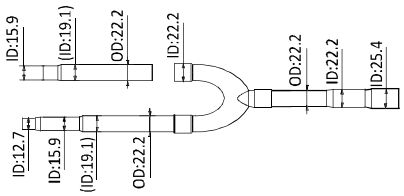
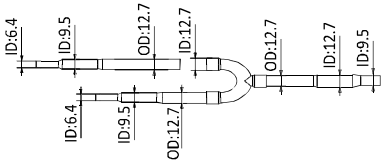
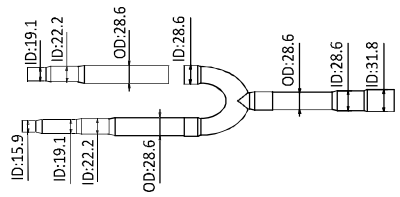
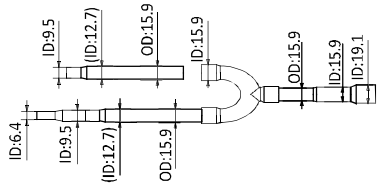
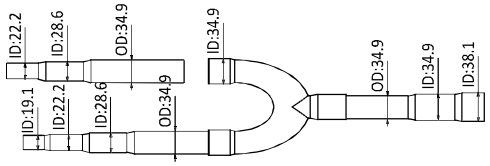
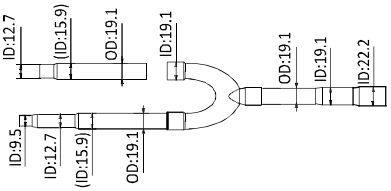
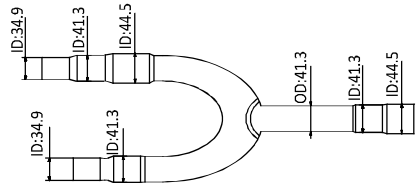
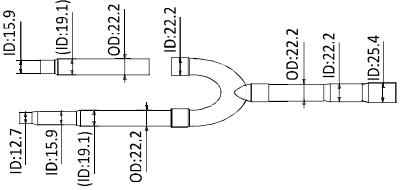
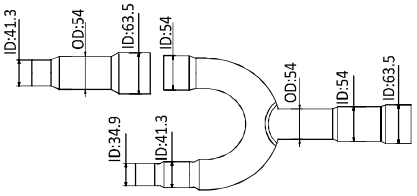
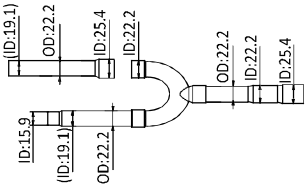
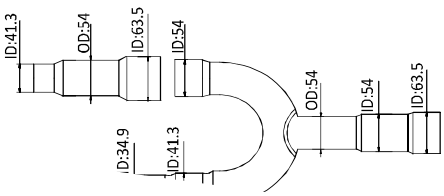
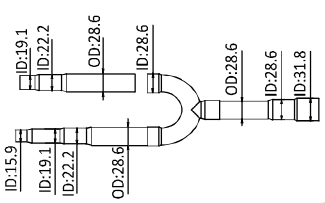
Dimensions

Outdoor Branch Joints

Model	Gas side joints	Liquid side joints
4TODZ02C		
4TODZ03C		

Dimensions

Indoor Branch Joints

Model	Gas side joints	Liquid side joints
4TRDK01C		
4TRDK02C		
4TRDK03C		
4TRDK04C		
4TRDK05C		
4TRDK06C		
4TRDK07C		

Literature Order Number	TVR6G-50HZ-PC-T001-EN
Date	Oct 2019
Supersedes	NEW

PFT0001/11/2019