



The Energy Saving Air Conditioning System

- DC Inverter

TDVI - Innovation Beyond Comfort

Energy Saving

Compact Size

Wide Combination

Simplifies Installation

Ultimate Reliability

Bigger airflow volume and lower noise

Adopt double turbo fans, which make bigger airflow volume with lower noise.

High efficiency fan motor

Adopt dual speed fan motor, operate in varies fan speed to suit the changes of the outdoor ambient temperature,

New type high efficient heat-exchanger

Adopt 3 rows inner groove copper heat-exchanger, which creates high heat transfer efficiency and powerful heating capacity especially in low ambient temperature.

Creative design and precisely refrigerant control

Double electrical expansion valve, which achieves up to 960 steps refrigerant adjusting precision to get the best refrigerant distribution effect.

Patent design and running reliable

Oil balance: ensure sufficient refrigerant lubricant supply.
Gas balance: balancing the refrigerant suction volume among different compressors.

Reserving special-designed transportation position for forklift

Making easy installation for the sling movement

Smaller pressure loss and lower noise

The grille of fan air inlet and fan air outlet have airflow direction adjusting function, which leads to lower pressure loss.

Elegant appearance and longevity of usage

Achieving advanced technical process, which gets elegant appearance with longevity of usage.

Digital modular electric control

All the outdoor units adopt standardization design, any outdoor units can be the main units,

Powerful refrigerant system configuration

Adopt high efficiency Inverter Scroll Compressor with middle frequency operation range (40-90 Hz), combination with multi constant speed compressors can be parallel connected, the corresponding capacity range can achieve 15% - 130%.



TDVI - Air Conditioning Selection



Modular Outdoor Combination 8 to 64 HP

Up to 64 Indoor Units in One System

TDVI System



**Up to 64
Indoor Units in
One System**

**Individual
Capacity with
Minimum
Level of
8,000 BTU/Hr**



Flexible System Planning and Design

Four-way Cassette (Compact)



Four-way Cassette



Ceiling & Floor



Wall-mounted



Ceiling Ducted



**High Static Pressure
Ceiling Ducted**



TDVI - Installation

● Residential Application



● Commercial Application



Intelligent Built-in Management System

Intelligent management is an integrated building management system (BMS) that uses our independent, high-speed multi-transmission method. It has a centralized controller function that can perform high-speed centralized control of our commercial A/C for buildings.



TDVI System Has Various Control Solutions

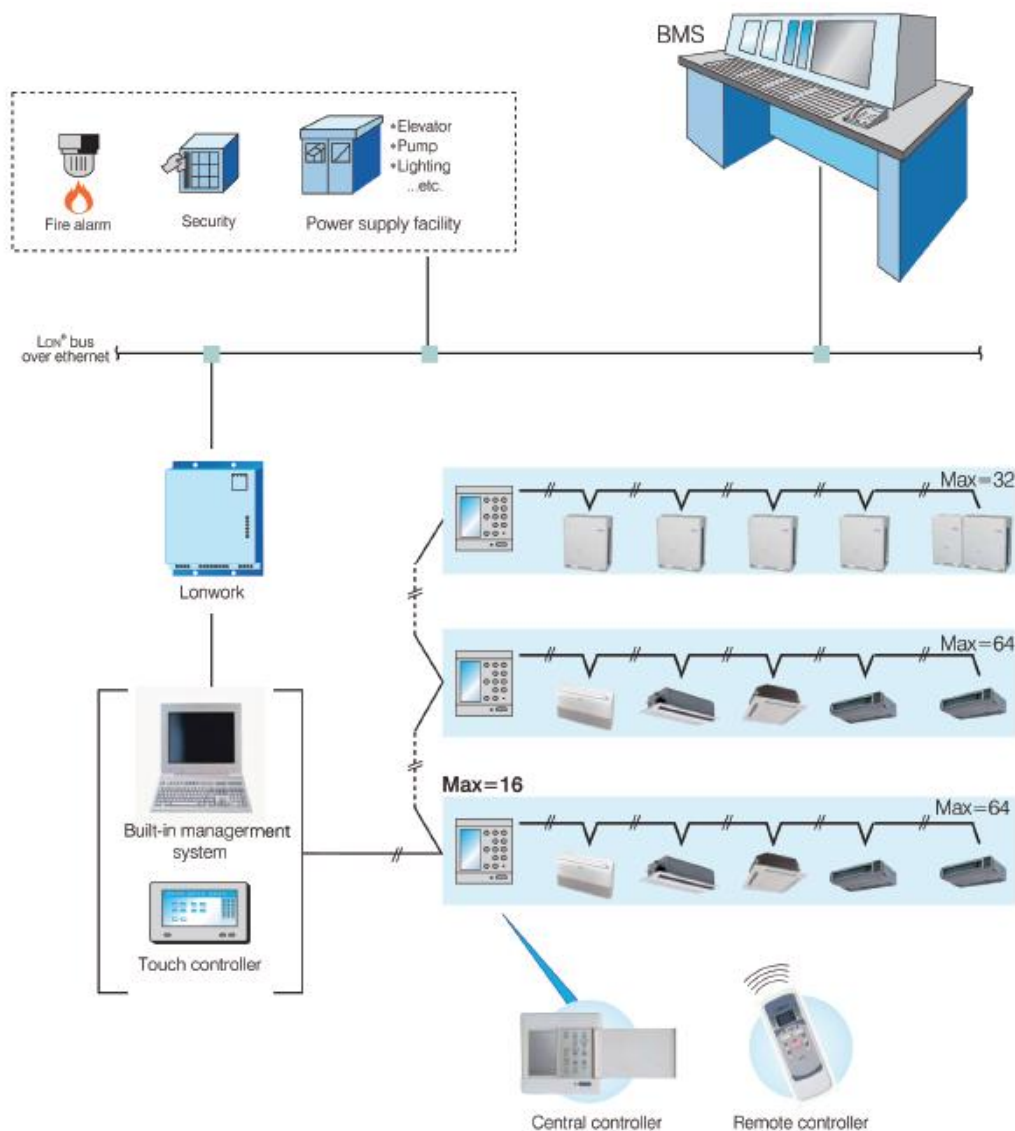
Individual control, Group control, Network, ect.

1 computer can control max 16 indoor central controllers and max 16 outdoor central controllers.

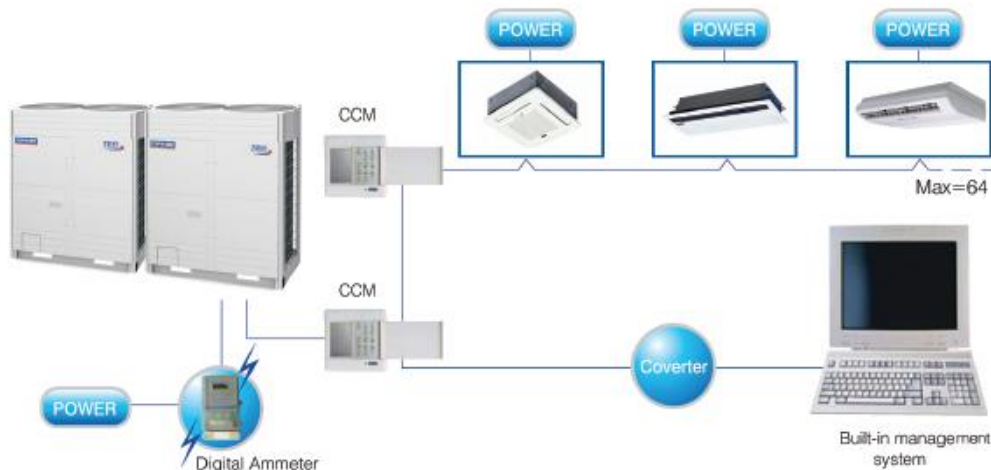
1 indoor central controller can control max 64 indoor units,

1 outdoor central controller can control max 32 outdoor units.

1 computer can control max 1024 indoor units and max 512 outdoor units.

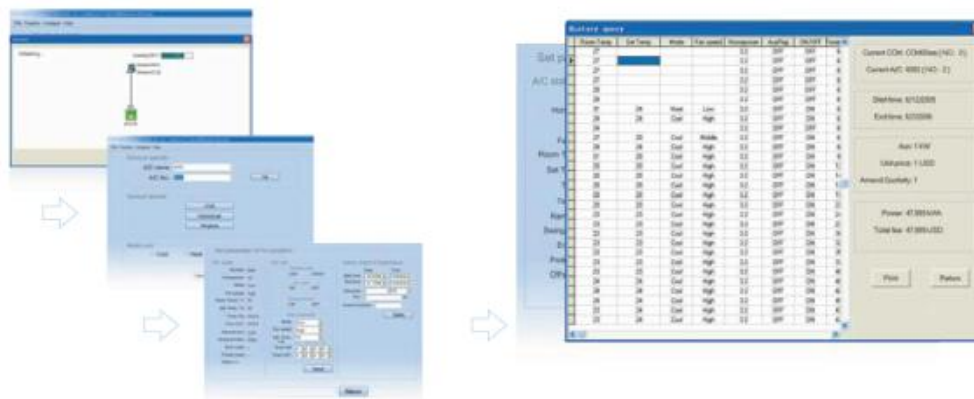


Power Consumption Calculating System



Calculating Report Output

Easy to know the charge of the A/C.



Group Setting, Simple and Efficient.

One group consists of on-line A/Cs in different Central controllers, maximum 1024 units.

One system can be set by 16 groups to manage a huge A/C system.

The group setting can control each on-line unit, unionize them to be On/Off or change the parameters. It's so convenient and easy.



Schedule Management

With the advanced Schedule setting mode, the PC can easily manage the daily work of A/C. The system can set the weekly plan of A/C and operate automatically in cycle.



Brief Introduction

- The TDVI Modulation System is a perfect application of DC Inverter Scroll Technology, contributes to high energy savings, which greatly reduces your running costs.

The air conditioning system provides outdoor units with extended capacity up to 64 hp, RoHs directive compliant and designed for quiet operation.



What Is TDVI DC Inverter Scroll System

DC Inverter A/C System is a multi system with DC Inverter Scroll Combine with constant speed Scroll Compressor. Digital Scroll Compressors refrigerant output is adjusted and controlled by the variable volume mode. This technology is the most advanced in the industry.



Basic modules

5 basic modules, 8HP, 10HP, 12HP, 14HP, 16HP.



Free combination, wide range

5 basic modules, which can be freely combined.

Maximum capacity up to 64HP, which meets customers needs accurately.



Features

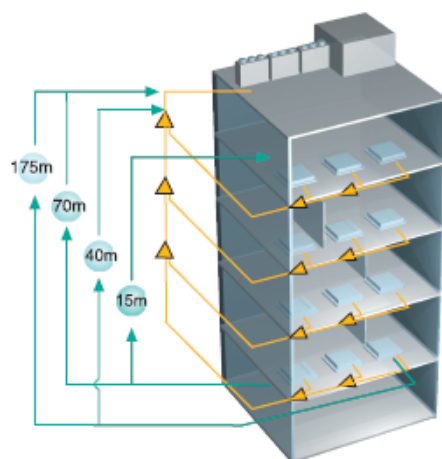
Environment friendly

Environmental-friendly refrigerant R410A will not destroy the ozonosphere.
Full compliance with Europe ROHS direction.

Designer can be benefited

- The outdoor unit is modular design, there are five basic modules which has capacity of 8HP, 10HP, 12HP, 14HP, 16HP. The capacity can be easily extended by modular combination. There can be 4 outdoor modules in one combination at most, so the full capacity range is from 8HP to 64HP. Any module in one combination can be set as main unit.
- Many kinds of indoor unit are available, including vertical installation type and horizontal installation type. exposed type and concealed type.
- A big range of controller is available including wireless remote controller, wired controller, weekly timer, central controller, network controller.
- The pipe and communication wire of the Air conditioner system can be much longer, give more flexibility during installation.
The pipe length between indoor unit and outdoor unit can be 175m at most.
The height difference between indoor unit and outdoor unit can be 70m at most.
The communication wire can be 1200m at most.

Long Pipe ,Wide Height Difference



- The refrigerant piping length between the indoor unit and outdoor unit in one system can extend up to 175 meters and the difference in height can be as great as 70 meters. These generous allowances make it possible to put all the outdoor units on the rooftop in a 15-story building. The difference in height between indoor units in the same system can be as much as 15 meters, thus making it possible to cover four or five stories with a single system.

- 175m the max. pipe length between indoor unit and outdoor unit.
- 70m the max. height difference between indoor unit and outdoor unit.
- 40m the max. distance between the first branch to the farthest indoor unit.
- 15m the max. height difference between indoor units.

Installer can be benefited

Flexible installation

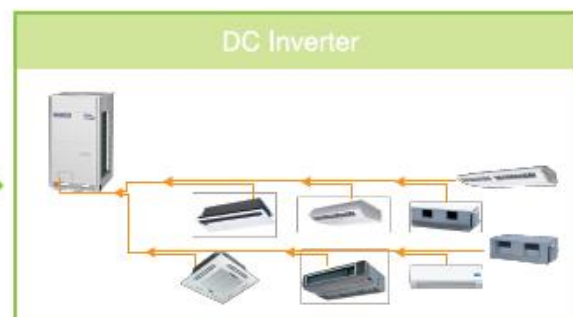
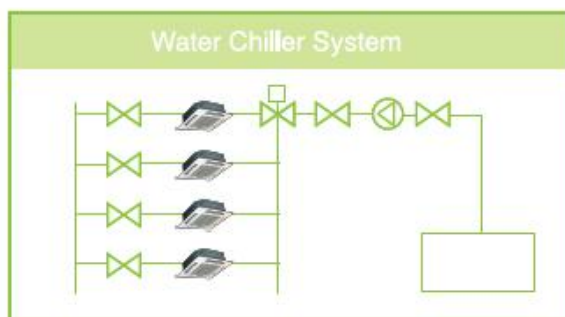
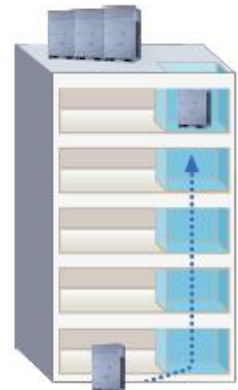
No need special room for the outdoor units.

Easy transportation: all the outdoor module can be transported by elevator.

This makes installation dramatically easy, and effectively reduces time and labor.

Reduced piping and cost

Simple refrigerant circuit, only two main refrigerant lines are required in one system compare with traditional chilled water system, which require more services need such as strainers, stop valve, two or three way valves etc.



Easy maintenance

Forced cooling button makes outdoor unit run in cooling mode at any condition, so it is very easy for you to charge refrigerant to the system when it need to be done.

The self-diagnosis function detects malfunctions in major locations in the system and displays the type of malfunction and location. This allows service and maintenance to be performed more efficiently.



End user can be benefited

Energy saving

Adopts high performance, low noise DC Inverter Scroll Compressor operates at a faster response for start up.

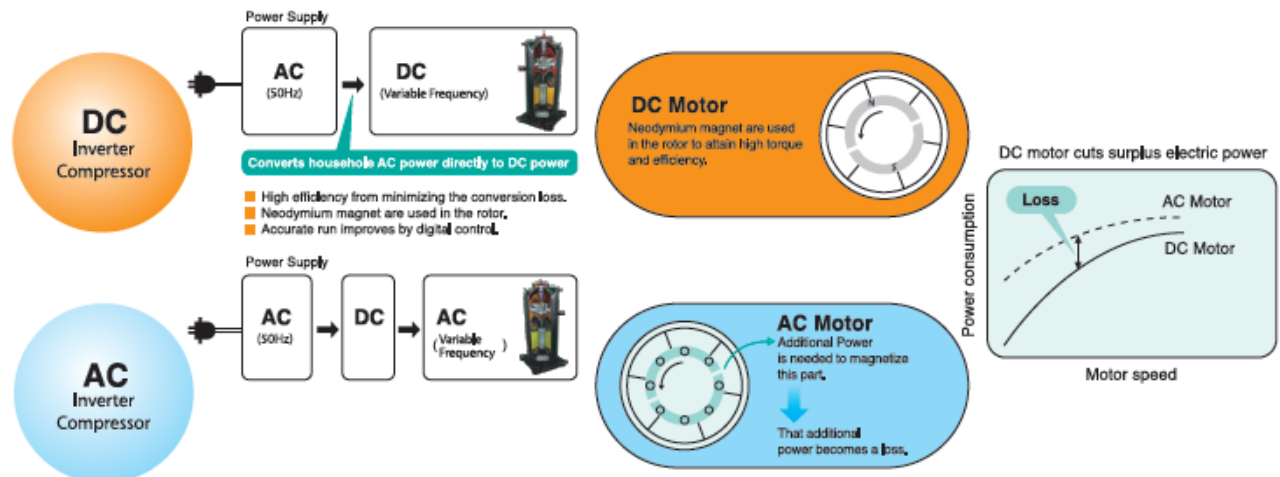
DC Inverter compressor and constant speed compressor are parallel connection in the outdoor unit.



DC Inverter Commercial Air Conditioner

DC Compressor Adopted for Improving Efficiency (COP)

- High COP and less energy consumption to save your electricity charges.
- Low noise scroll compressor operates at a faster response for start up.



Accurate Temperature Control

Precise room temperature control

Electronic expansion valves respond to changes in load in indoor units and continually control the flow rate of refrigerant. In this way, the Inverter air conditioner system maintains a nearly constant room temperature without the typical temperature changes that occur with a traditional ON/OFF control system. The inverter air conditioner system can maintain the room temperature within 0.5°C. of the set temperature. Non-inverter type A/C must be switched on and off repeatedly, causing large fluctuations of the room temperature.

- In part load mode only the Inverter compressor runs; in full load mode, all the compressors run. So the Inverter compressor will mostly run at the middle frequency range (40-90Hz). Because at the middle frequency range the Inverter compressor has highest efficiency and lowest noise and vibration than the A/C has only one Inverter compressor. Also it has wide capacity adjusted range (15-130%) than the A/C has only one.

- Inverter compressor, so it has higher EER.

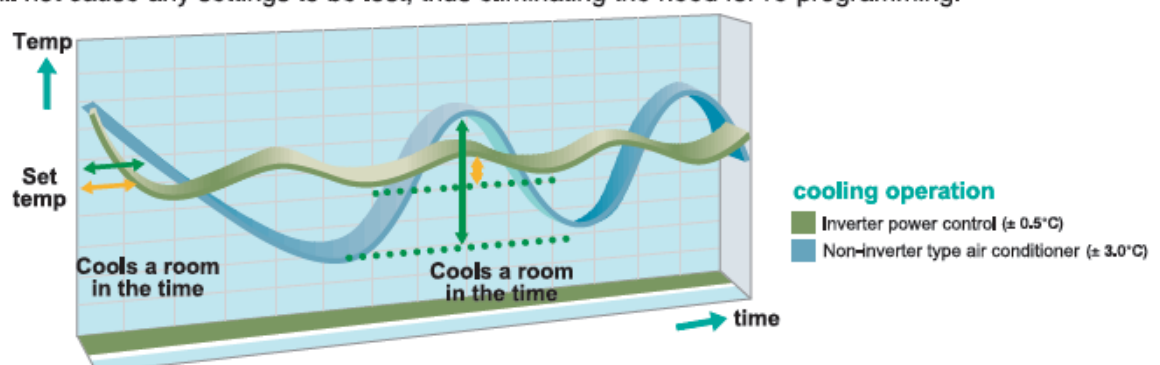
The constant compressor can output to 100% capacity in a short time when the unit start to work. So it can realize fast cooling.

Neat appearance

The outdoor units are installed together on the roof, so it has no any bad influence for the outlook of the building; All the outdoor module has same height and the installation place is neat though there are many outdoor modules.

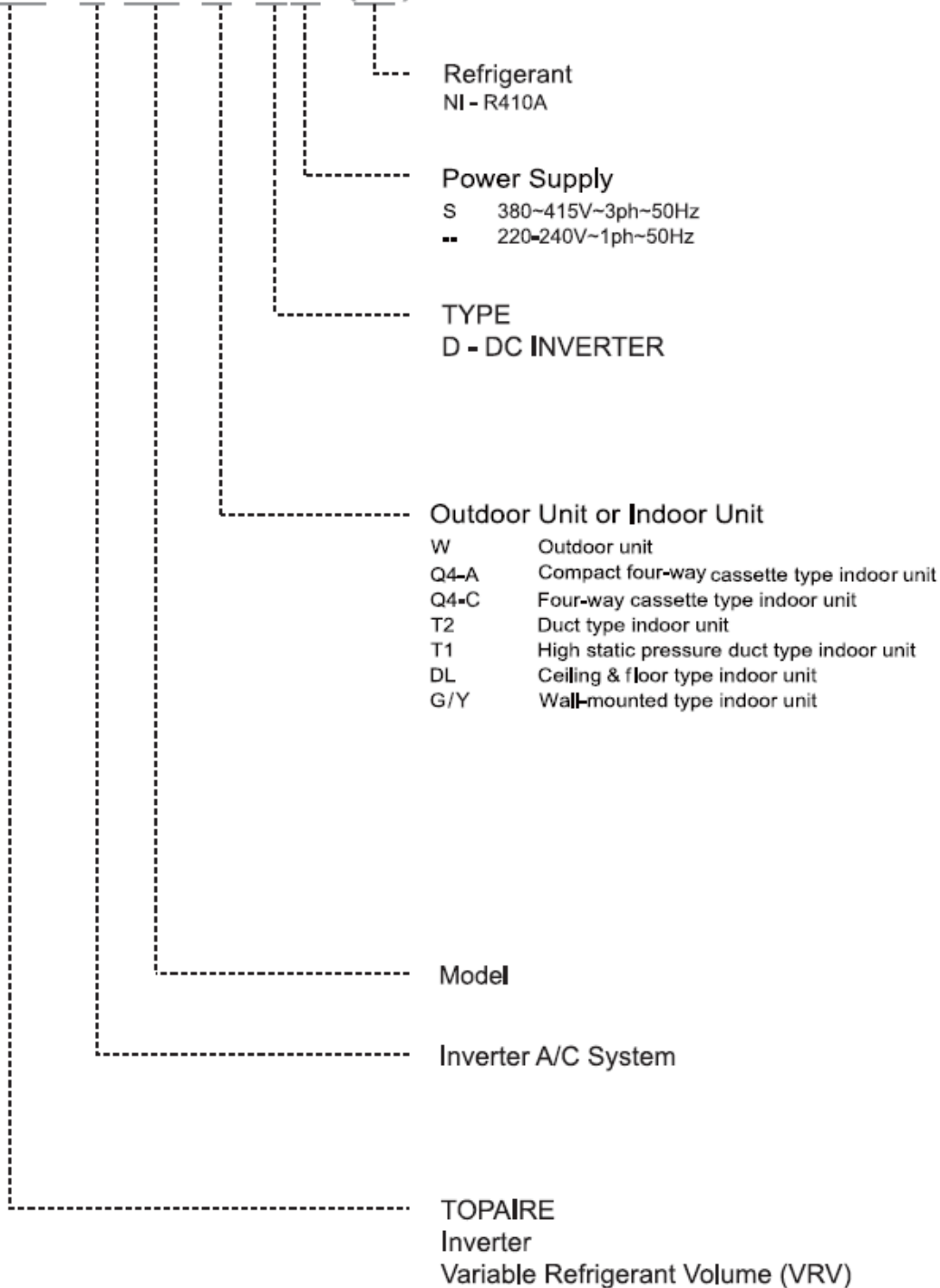
Autorestart function

Even if there is an extended power failure, the A/C system will automatically restart operation. A power failure will not cause any settings to be lost, thus eliminating the need for re-programming.



HOW TO READ THE MODELS

TDV - I 280 W/DS (N1)



TDVI DC Inverter Outdoor Units Line Up



89,000 / 100,500 BTU/Hr



120,200 / 143,600 / 161,500 BTU/Hr

TDVI DC Inverter Outdoor Units Combination

Design	Power supply	Capacity	Model	Recommend	Max. connection
	V~, Ph, Hz	BTU/Hr		combination	indoor units
	380~415V-3-50	89,000	TDV-I 252W/DS(NI)	8	13
	380~415V-3-50	100,500	TDV-I 280W/DS(NI)	10	16
	380~415V-3-50	120,200	TDV-I 335W/DS(NI)	12	16
	380~415V-3-50	143,600	TDV-I 400W/DS(NI)	14	16
	380~415V-3-50	161,500	TDV-I 450W/DS(NI)	16	20
	380~415V-3-50	189,500	TDV-I 532W/DS(NI)	8 + 10	20
	380~415V-3-50	201,000	TDV-I 560W/DS(NI)	10+10	20
	380~415V-3-50	220,700	TDV-I 615W/DS(NI)	10+12	20
	380~415V-3-50	244,100	TDV-I 680W/DS(NI)	10+14	20
	380~415V-3-50	262,000	TDV-I 730W/DS(NI)	10+16	20
	380~415V-3-50	281,700	TDV-I 785W/DS(NI)	12+16	20
	380~415V-3-50	305,100	TDV-I 850W/DS(NI)	14+16	32
	380~415V-3-50	323,000	TDV-I 900W/DS(NI)	16+16	32
	380~415V-3-50	344,600	TDV-I 960W/DS(NI)	10x2+14	32
	380~415V-3-50	362,500	TDV-I 1010W/DS(NI)	10x2+16	32
	380~415V-3-50	382,200	TDV-I 1065W/DS(NI)	10+12+16	32
	380~415V-3-50	405,600	TDV-I 1130W/DS(NI)	10+14+16	40
	380~415V-3-50	423,500	TDV-I 1180W/DS(NI)	10+16x2	40
	380~415V-3-50	443,200	TDV-I 1235W/DS(NI)	12+16x2	40
	380~415V-3-50	466,600	TDV-I 1300W/DS(NI)	14+16 x2	40
	380~415V-3-50	484,500	TDV-I 1350W/DS(NI)	16x3	40
	380~415V-3-50	504,200	TDV-I 1405W/DS(NI)	12 x3+14	50
	380~415V-3-50	522,100	TDV-I 1455W/DS(NI)	12x3+16	50
	380~415V-3-50	545,500	TDV-I 1520W/DS(NI)	12x2+14+16	50
	380~415V-3-50	563,400	TDV-I 1570W/DS(NI)	12x2+16x2	50
	380~415V-3-50	585,000	TDV-I 1630W/DS(NI)	10+16x3	50
	380~415V-3-50	604,700	TDV-I 1685W/DS(NI)	12+16x3	64
	380~415V-3-50	628,100	TDV-I 1750W/DS(NI)	14+16x3	64
	380~415V-3-50	646,000	TDV-I 1800W/DS(NI)	16 x4	64

All specifications are subject to change by manufacturer without prior notice.

Note : The nominal cooling capacity is based on condenser outdoor air entering temp. 35 °C (DB); indoor on coil temp. 27/19 °C (DB / WB)

TDVI DC Inverter Outdoor Units

Specifications - Single Modules

Model			TDV-I 252W/DS (N1)	TDV-I 280W/DS (N1)	TDV-I 335W/DS (N1)	TDV-I 400W/DS (N1)	TDV-I 450W/DS (N1)
Cooling Capacity	BTU/Hr		89,000	100,500	120,200	143,600	161,500
Power supply	V/Ph/Hz		380~415 - 3 - 50				
Nominal Operating	RLA (each)	Amp	10,3	13,0	16,7	20,7	23,7
	Rated power	kW	6,07	7,67	9,1	11,3	13,04
Performance	Air flow volume	m ³ /h	12,500	12,500	14,000	14,000	14,000
		CFM	7,360	7,360	8,240	8,240	8,240
	Noise level	dB(A)	57	57	58	60	60
Refrigerant	Type		R 410 A	R 410 A	R 410 A	R 410 A	R 410 A
	Charged volume	kg	11	11	13	16	16
Max.input consumption	kW		14,5	14,5	14,5	20,7	20,7
Max.current	Amp		24,5	24,5	24,5	33,0	33,0
Net dimension	WxHxD	mm	980x1615x800	980 x 1615 x 800	1380 x 1615 x 800	1380 x 1615 x 800	1380 x 1615 x 800
Net weight	kg		320	320	350	420	420
Pipe Diameter	Liquid side	mm(inch)	Ø12,7 (1/2)	Ø12,7 (1/2)	Ø12,7 (1/2)	Ø15,9 (5/8)	Ø15,9 (5/8)
	Suction side	mm(inch)	Ø25,4 (1)	Ø25,4 (1)	Ø25,4 (1)	Ø34,9 (1 3/8)	Ø34,9 (1 3/8)
	Oil balance pipe	mm(inch)	Ø6,4 (1/4)	Ø6,4 (1/4)	Ø6,4 (1/4)	Ø6,4 (1/4)	Ø6,4 (1/4)
	Gas balance pipe	mm(inch)	Ø19,0 (3/4)	Ø19,0 (3/4)	Ø19,0 (3/4)	Ø19,0 (3/4)	Ø19,0 (3/4)
	Max. pipe length	m	175	175	175	175	175
Piping connection	Max. height difference between indoor and outdoor	m	70	70	70	70	70
Max. indoor unit nos	Pieces		20	20	20	20	20

Specifications - Multi Modules

Dual Modules

Model	Constituent Units		TDV-I 332W/DS (N1)	TDV-I 360W/DS (N1)	TDV-I 615W/DS (N1)	TDV-I 680W/DS (N1)	TDV-I 730W/DS (N1)	TDV-I 785W/DS (N1)	TDV-I 850W/DS (N1)	TDV-I 900W/DS (N1)
			TDV-I 252W/DS (N1)	TDV-I 280W/DS (N1)	TDV-I 280W/DS (N1)	TDV-I 280W/DS (N1)	TDV-I 280W/DS (N1)	TDV-I 335W/DS (N1)	TDV-I 400W/DS (N1)	TDV-I 450W/DS (N1)
			TDV-I 280W/DS (N1)	TDV-I 280W/DS (N1)	TDV-I 335W/DS (N1)	TDV-I 400W/DS (N1)	TDV-I 450W/DS (N1)	TDV-I 450W/DS (N1)	TDV-I 450W/DS (N1)	TDV-I 450W/DS (N1)
Cooling Capacity	BTU/Hr		188,500	201,000	220,700	244,100	262,000	281,700	305,100	323,000
Power supply	V/Ph/Hz		380~415 - 3 - 50							
Nominal Operating	RLA (each)	Amp	10,3 / 13,0	13,0 / 13,0	13,0 / 16,7	13,0 / 20,7	13,0 / 23,7	16,7 / 23,7	20,7 / 23,7	23,7 / 23,7
	Rated power	kW	13,74	15,34	16,77	18,97	20,71	22,14	22,6	26,06
Performance	Air flow volume	m ³ /h	25,000	25,000	26,500	26,500	26,500	28,000	28,000	28,000
		CFM	14,700	14,700	15,800	15,800	15,800	16,480	16,480	16,480
	Noise level	dB(A)	62	62	62	62	62	62	62	62
Refrigerant	Type		R 410 A	R 410 A	R 410 A	R 410 A	R 410 A	R 410 A	R 410 A	R 410 A
	Charged volume	kg	11 + 11	11 + 11	11+13	11+16	11+16	13+16	16+16	16+16
Net dimension	WxHxD	mm	980 x 1615 x 800 + 980 x 1615 x 800		980 x 1615 x 800 + 1380 x 1615 x 800			1380 x 1615 x 800 + 1380 x 1615 x 800		
Net weight	kg		640	640	670	740	740	770	840	840
Pipe Diameter	Liquid side (< 90M)	mm(inch)	Ø15,9 (5/8)	Ø15,9 (5/8)	Ø15,9 (5/8)	Ø15,9 (5/8)	Ø19 (3/4)	Ø19 (3/4)	Ø19 (3/4)	Ø19 (3/4)
	Suction side (< 90M)	mm(inch)	Ø28,6 (1 1/8)	Ø28,6 (1 1/8)	Ø28,6 (1 1/8)	Ø34,9 (1 3/8)	Ø34,9 (1 3/8)	Ø34,9 (1 3/8)	Ø34,9 (1 3/8)	Ø34,9 (1 3/8)
	Liquid side (> 90M)	mm(inch)	Ø19 (3/4)	Ø19 (3/4)	Ø19 (3/4)	Ø19 (3/4)	Ø22 (7/8)	Ø22 (7/8)	Ø22 (7/8)	Ø22 (7/8)
	Suction side (> 90M)	mm(inch)	Ø34,9 (1 3/8)	Ø34,9 (1 3/8)	Ø34,9 (1 3/8)	Ø34,9 (1 3/8)	Ø41,3 (1 5/8)	Ø41,3 (1 5/8)	Ø41,3 (1 5/8)	Ø41,3 (1 5/8)
	Oil balance pipe	mm(inch)	Ø6,35 (1/4)	Ø6,35 (1/4)	Ø6,35 (1/4)	Ø6,35 (1/4)	Ø6,35 (1/4)	Ø6,35 (1/4)	Ø6,35 (1/4)	Ø6,35 (1/4)
	Gas balance pipe	mm(inch)	Ø19,0 (3/4)	Ø19,0 (3/4)	Ø19,0 (3/4)	Ø19,0 (3/4)	Ø19,0 (3/4)	Ø19,0 (3/4)	Ø19,0 (3/4)	Ø19,0 (3/4)
Piping connection	Max. pipe length	m	175	175	175	175	175	175	175	175
	Max. height difference between indoor and outdoor	m	70	70	70	70	70	70	70	70
Max. indoor unit nos	Pieces		20	20	20	20	20	20	32	32

All specifications are subject to change by manufacturer without prior notice.

12 Note : The nominal cooling capacity is based on condenser outdoor air entering temp. 35 °C (DB); indoor on coil temp. 27/19 °C (DB /WB)

TDVI DC Inverter Outdoor Units

Specifications - Multi Modules

Tri Modules

Model	Constituent Units	TDV4 960WIDS (N1)		TDV4 1010WIDS (N1)		TDV4 1065WIDS (N1)		TDV4 1130WIDS (N1)		TDV4 1180WIDS (N1)		TDV4 1235WIDS (N1)		TDV4 1300WIDS (N1)		TDV4 1360WIDS (N1)		
		TDV4 280WIDS (N1)		TDV4 280WIDS (N1)		TDV4 280WIDS (N1)		TDV4 280WIDS (N1)		TDV4 280WIDS (N1)		TDV4 335WIDS (N1)		TDV4 400WIDS (N1)		TDV4 450WIDS (N1)		
		TDV4 280WIDS (N1)		TDV4 280WIDS (N1)		TDV4 335WIDS (N1)		TDV4 400WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		
		TDV4 400WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		
Cooling Capacity		BTU/Hr	344,600		362,500		382,200		405,900		423,500		443,200		466,600		484,500	
Power supply		V/Ph/Hz	380~415V / 3PH / 50Hz															
Nominal Operating	RLA (each)	Amp	13,0 / 13,0 / 20,7		13,0 / 13,0 / 23,7		13,0 / 16,7 / 23,7		13,0 / 20,7 / 23,7		14,9 / 23,1 / 23,1		16,7 / 23,7 / 23,7		20,7 / 23,7 / 23,7		23,7 / 23,7 / 23,7	
	Rated power	kW	26,64		28,38		29,81		32,01		33,75		35,01		37,38		39,12	
Performance	Air flow volume	m ³ /h	39,000		39,000		40,500		40,500		40,500		42,000		42,000		42,000	
	CFM		23,000		23,000		23,840		23,840		23,840		24,720		24,720		24,720	
	Noise level	dB(A)	63		63		63		63		63		63		63		63	
Refrigerant	Type		R 410 A		R 410 A		R 410 A		R 410 A		R 410 A		R 410 A		R 410 A		R 410 A	
	Charged volume	kg	11+11+16		11+11+16		11+11+16		11+16+16		11+16+16		11+16+16		16+16+16		16+16+16	
Dimension	Width	mm	(980 x 1615 x 800) x 2 + 1380 x 1615 x 800		980 x 1615 x 800 + (1380 x 1615 x 800) x 2										(1380 x 1615 x 800) x 3			
	Net weight	kg	1060		1060		1060		1160		1160		1190		1260		1260	
Piping Diameter	Liquid side (< 90M)	mm(inch)	Ø19,1 (3/4)		Ø19,1 (3/4)		Ø19,1 (3/4)		Ø19,1 (3/4)		Ø19,1 (3/4)		Ø19,1 (3/4)		Ø19,1 (3/4)		Ø19,1 (3/4)	
	Suction side (< 90M)	mm(inch)	Ø34,9 (1 3/8)		Ø41,3 (1 5/8)		Ø41,3 (1 5/8)		Ø41,3 (1 5/8)		Ø41,3 (1 5/8)		Ø41,3 (1 5/8)		Ø41,3 (1 5/8)		Ø41,3 (1 5/8)	
	Liquid side (> 90M)	mm(inch)	Ø22,2 (7/8)		Ø22,2 (7/8)		Ø22,2 (7/8)		Ø22,2 (7/8)		Ø22,2 (7/8)		Ø22,2 (7/8)		Ø22,2 (7/8)		Ø22,2 (7/8)	
	Suction side (> 90M)	mm(inch)	Ø41,3 (1 5/8)		Ø41,3 (1 5/8)		Ø41,3 (1 5/8)		Ø41,3 (1 5/8)		Ø41,3 (1 5/8)		Ø41,3 (1 5/8)		Ø41,3 (1 5/8)		Ø41,3 (1 5/8)	
	Oil balance pipe	mm(inch)	Ø6,35 (1/4)		Ø6,35 (1/4)		Ø6,35 (1/4)		Ø6,35 (1/4)		Ø6,35 (1/4)		Ø6,35 (1/4)		Ø6,35 (1/4)		Ø6,35 (1/4)	
	Gas balance pipe	mm(inch)	Ø19,0 (3/4)		Ø19,0 (3/4)		Ø19,0 (3/4)		Ø19,0 (3/4)		Ø19,0 (3/4)		Ø19,0 (3/4)		Ø19,0 (3/4)		Ø19,0 (3/4)	
Piping connection	Max. pipe length	m	175		175		175		175		175		175		175		175	
	Max. height difference between indoor and outdoor	m	70		70		70		70		70		70		70		70	
Max. indoor unit nos		Pieces	32		32		32		40		40		40		40		40	

Quad Modules

Model	Constituent Units	TDV4 1405WIDS (N1)		TDV4 1465WIDS (N1)		TDV4 1520WIDS (N1)		TDV4 1570WIDS (N1)		TDV4 1630WIDS (N1)		TDV4 1685WIDS (N1)		TDV4 1750WIDS (N1)		TDV4 1800WIDS (N1)		
		TDV4 335WIDS (N1)		TDV4 335WIDS (N1)		TDV4 335WIDS (N1)		TDV4 335WIDS (N1)		TDV4 280WIDS (N1)		TDV4 335WIDS (N1)		TDV4 400WIDS (N1)		TDV4 450WIDS (N1)		
		TDV4 335WIDS (N1)		TDV4 335WIDS (N1)		TDV4 335WIDS (N1)		TDV4 335WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		
		TDV4 335WIDS (N1)		TDV4 335WIDS (N1)		TDV4 400WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		
		TDV4 400WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		TDV4 450WIDS (N1)		
Cooling Capacity		BTU/Hr	504,200		522,100		545,500		563,400		585,000		604,700		626,100		646,000	
Power supply		V/Ph/Hz	380~415V / 3PH / 50Hz															
Nominal Operating	RLA (each)	Amp	16,7 x 3 / 20,7		16,7 x 3 / 23,7		16,7 x 2 / 20,7 / 23,7		16,7 x 2 / 23,7 x 2		13,0 / 23,7 x 3		16,7 / 23,7 x 3		20,7 / 23,7 x 3		23,7 x 4	
	Rated power	kW	38,6		40,34		42,54		44,28		46,97		48,22		50,42		52,16	
Performance	Air flow volume	m ³ /h	56,000		56,000		56,000		56,000		54,500		56,000		56,000		56,000	
		CFM	33,000		33,000		33,000		33,000		32,000		33,000		33,000		33,000	
	Noise level	dB(A)	64		64		64		64		64		64		64		64	
Refrigerant	Type		R 410 A		R 410 A		R 410 A		R 410 A		R 410 A		R 410 A		R 410 A		R 410 A	
	Charged volume	kg	13x3+16		13x3+16		13x2+16x2		13x2+16x2		11+16x3		13+16x3		16x4		16x4	
Dimension	WxHxD	mm	(1380x1615 x 800) x 4															
	Net weight	kg	1470		1470		1540		1540		1580		1610		1680		1680	
Piping Diameter	Liquid side (< 90M)	mm(inch)	Ø22,2 (7/8)		Ø22,2 (7/8)		Ø22,2 (7/8)		Ø22,2 (7/8)		Ø22,2 (7/8)		Ø22,2 (7/8)		Ø22,2 (7/8)		Ø22,2 (7/8)	
	Suction side (< 90M)	mm(inch)	Ø54,1 (2 1/8)		Ø54,1 (2 1/8)		Ø54,1 (2 1/8)		Ø54,1 (2 1/8)		Ø54,1 (2 1/8)		Ø54,1 (2 1/8)		Ø54,1 (2 1/8)		Ø54,1 (2 1/8)	
	Liquid side (> 90M)	mm(inch)	Ø25,4 (1)		Ø25,4 (1)		Ø25,4 (1)		Ø25,4 (1)		Ø25,4 (1)		Ø25,4 (1)		Ø25,4 (1)		Ø25,4 (1)	
	Suction side (> 90M)	mm(inch)	Ø54,1 (2 1/8)		Ø54,1 (2 1/8)		Ø54,1 (2 1/8)		Ø54,1 (2 1/8)		Ø54,1 (2 1/8)		Ø54,1 (2 1/8)		Ø54,1 (2 1/8)		Ø54,1 (2 1/8)	
	Oil balance pipe	mm(inch)	Ø6,35 (1/4)		Ø6,35 (1/4)		Ø6,35 (1/4)		Ø6,35 (1/4)		Ø6,35 (1/4)		Ø6,35 (1/4)		Ø6,35 (1/4)		Ø6,35 (1/4)	
	Gas balance pipe	mm(inch)	Ø19,0 (3/4)		Ø19,0 (3/4)		Ø19,0 (3/4)		Ø19,0 (3/4)		Ø19,0 (3/4)		Ø19,0 (3/4)		Ø19,0 (3/4)		Ø19,0 (3/4)	
Piping connection	Max. pipe length	m	175		175		175		175		175		175		175		175	
	Max. height difference between indoor and outdoor	m	70		70		70		70		70		70		70		70	
Max. indoor unit nos		Pieces	50		50		50		50		50		54		54		54	

All specifications are subject to change by manufacturer without prior notice.

Note : The nominal cooling capacity is based on condenser outdoor air entering temp. 35 °C (DB); indoor on coil temp. 27/19 °C (DB / WB)

TDVI DC Inverter Indoor Units Line Up

BTU / Hr		8,000	10,000	13,000	18,000	20,000	25,000	30,000	36,000	40,000	50,000	60,000	99,000
	Four-way Cassette (Compact)		●	●	●								
	Four-way Cassette		●	●	●	●	●	●	●	●	●		
	Ceiling & Floor			●	●	●	●	●	●	●	●	●	
	Wall-mounted	●	●	●	●	●	●						
	Ceiling Ducted	●	●	●	●	●	●	●	●	●	●		
	High Static Pressure Ceiling Ducted						●	●	●	●	●	●	●

All specifications are subject to change by manufacturer without prior notice.

Note : The nominal cooling capacity is based on condenser outdoor air entering temp. 35 °C (DB); indoor on coil temp. 27/19 °C (DB / WB)

Four-way Cassette (Compact)

Indoor Unit

Specification



MODEL		TDV-I 28 Q4-A	TDV-I 36 Q4-A	TDV-I 45 Q4-A
COOLING CAPACITY	BTU/Hr	10,000	13,000	18,000
POWER SUPPLY	V/Ph/Hz	220 - 240 / 1 / 50		
RATED POWER	W	65	65	75
AIR FLOW	CFM	300	350	500
RATED AMPERE	AMP	0.22	0.24	0.25
SOUND LEVEL	dBA	36	36	38
REFRIGERANT	TYPE	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22
PIPE CONNECTION MM (INCH)	LIQUID	Ø 6.4 (1/4)	Ø 6.4 (1/4)	Ø 6.4 (1/4)
	SUCTION	Ø 12.7 (1/2)	Ø 12.7 (1/2)	Ø 12.7 (1/2)
DRAIN PIPE	MM (INCH)	Ø 25 (1.0)	Ø 25 (1.0)	Ø 25 (1.0)
DIMENSION (MM)	UNIT (WxDxH)	580 X 580 X 254	580 X 580 X 254	580 X 580 X 254
	PANEL (WxDxH)	650 X 650 X 30	650 X 650 X 30	650 X 650 X 30
NET WEIGHT	KG	22	24	24

Four-way Cassette

Indoor Unit

Specification



MODEL		TDV-I 28 Q4-C	TDV-I 36 Q4-C	TDV-I 45 Q4-C	TDV-I 56 Q4-C
COOLING CAPACITY	BTU/Hr	10,000	13,000	18,000	20,000
POWER SUPPLY	V/Ph/Hz	220 - 240 / 1 / 50			
RATED POWER	W	90	90	90	100
AIR FLOW	CFM	510	510	560	600
RATED AMPERE	AMP	0.40	0.40	0.40	0.50
SOUND LEVEL	dBA	36	36	38	38
REFRIGERANT	TYPE	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22
PIPE CONNECTION MM (INCH)	LIQUID	Ø 6.4 (1/4)	Ø 6.4 (1/4)	Ø 6.4 (1/4)	Ø 9.53 (3/8)
	SUCTION	Ø 12.7 (1/2)	Ø 12.7 (1/2)	Ø 12.7 (1/2)	Ø 16 (5/8)
DRAIN PIPE	MM (INCH)	Ø 25 (1.0)	Ø 25 (1.0)	Ø 25 (1.0)	Ø 25 (1.0)
DIMENSION (MM)	UNIT (WxDxH)	840 X 840 X 240	840 X 840 X 240	840 X 840 X 240	840 X 840 X 240
	PANEL (WxDxH)	950 X 950 X 40	950 X 950 X 40	950 X 950 X 40	950 X 950 X 40
NET WEIGHT	KG	29	29	29	29

MODEL		TDV-I 71 Q4-C	TDV-I 80 Q4-C	TDV-I 90 Q4-C	TDV-I 112 Q4-C	TDV-I 140 Q4-C
COOLING CAPACITY	BTU/Hr	25,000	30,000	36,000	40,000	50,000
POWER SUPPLY	V/Ph/Hz	220 - 240 / 1 / 50				
RATED POWER	W	100	130	145	145	145
AIR FLOW	CFM	750	900	1050	1050	1130
RATED AMPERE	AMP	0.50	0.60	0.68	0.68	0.68
SOUND LEVEL	dBA	42	42	44	44	46
REFRIGERANT	TYPE	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22
PIPE CONNECTION MM (INCH)	LIQUID	Ø 9.53 (3/8)	Ø 9.53 (3/8)	Ø 9.53 (3/8)	Ø 9.53 (3/8)	Ø 9.53 (3/8)
	SUCTION	Ø 16 (5/8)	Ø 16 (5/8)	Ø 16 (5/8)	Ø 19.0 (3/4)	Ø 19.0 (3/4)
DRAIN PIPE	MM (INCH)	Ø 25 (1.0)	Ø 25 (1.0)	Ø 25 (1.0)	Ø 25 (1.0)	Ø 25 (1.0)
DIMENSION (MM)	UNIT (WxDxH)	840 X 840 X 240	840 X 840 X 240	840 X 840 X 240	840 X 840 X 240	840 X 840 X 240
	PANEL (WxDxH)	950 X 950 X 40	950 X 950 X 40	950 X 950 X 40	950 X 950 X 40	950 X 950 X 40
NET WEIGHT	KG	30	31	35	35	36

All specifications are subject to change by manufacturer without prior notice.

Note : The nominal cooling capacity is based on condenser outdoor air entering temp. 35 °C (DB); indoor on coil temp. 27/19 °C (DB / WB)

Ceiling and Floor Type

Indoor Unit



TDV-I 36 - 90 DL/B



TDV-I 112 - 180 DL/B

Specifications

MODEL		TDV-I 36 DL/B	TDV-I 45 DL/B	TDV-I 56 DL/B	TDV-I 71 DL/B
COOLING CAPACITY	BTU/Hr	13,000	18,000	20,000	25,000
POWER SUPPLY	V/Ph/Hz	220 - 240 / 1 / 50			
RATED POWER	W	110	110	110	110
AIR FLOW	CFM	470	500	600	800
RATED AMPERE	AMP	0.40	0.50	0.50	0.50
SOUND LEVEL	dBA	36	38	38	42
REFRIGERANT	TYPE	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22
PIPE CONNECTION MM (INCH)	LIQUID	Ø 6.4 (1/4)	Ø 6.4 (1/4)	Ø 9.53 (3/8)	Ø 9.53 (3/8)
	SUCTION	Ø 12.7 (1/2)	Ø 12.7 (1/2)	Ø 16 (5/8)	Ø 16 (5/8)
DRAIN PIPE	MM (INCH)	Ø 25 (1.0)	Ø 25 (1.0)	Ø 25 (1.0)	Ø 25 (1.0)
DIMENSION (MM)	UNIT (WxDxH)	990 X 660 X 200	990 X 660 X 200	990 X 660 X 200	990 X 660 X 200
NET WEIGHT	KG	29	29	29	30

MODEL		TDV-I 80 DL/B	TDV-I 90 DL/B	TDV-I 112 DL/B	TDV-I 140 DL/B	TDV-I 180 DL/B
COOLING CAPACITY	BTU/Hr	30,000	36,000	40,000	50,000	60,000
POWER SUPPLY	V/Ph/Hz	220 - 240 / 1 / 50				
RATED POWER	W	131	131	210	210	210
AIR FLOW	CFM	960	1100	1300	1400	1500
RATED AMPERE	AMP	0.60	0.60	0.95	0.95	0.95
SOUND LEVEL	dBA	42	44	44	46	47
REFRIGERANT	TYPE	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22
PIPE CONNECTION MM (INCH)	LIQUID	Ø 9.53 (3/8)	Ø 9.53 (3/8)	Ø 9.53 (3/8)	Ø 9.53 (3/8)	Ø 9.53 (3/8)
	SUCTION	Ø 16 (5/8)	Ø 16 (5/8)	Ø 19.0 (3/4)	Ø 19.0 (3/4)	Ø 19.0 (3/4)
DRAIN PIPE	MM (INCH)	Ø 25 (1.0)	Ø 25 (1.0)	Ø 25 (1.0)	Ø 25 (1.0)	Ø 25 (1.0)
DIMENSION (MM)	UNIT (WxDxH)	1285 X 660 X 200	1285 X 660 X 200	1670 X 680 X 240	1670 X 680 X 240	1670 X 680 X 240
NET WEIGHT	KG	37	37	52	54	56

All specifications are subject to change by manufacturer without prior notice.

16 Note : The nominal cooling capacity is based on condenser outdoor air entering temp. 35 °C (DB); indoor on coil temp. 27/19 °C (DB / WB)

Wall Mounted Type

Indoor Unit



Colour Panel : Snow White (Standard)



Colour Panel : Mirror (Optional)

Specifications

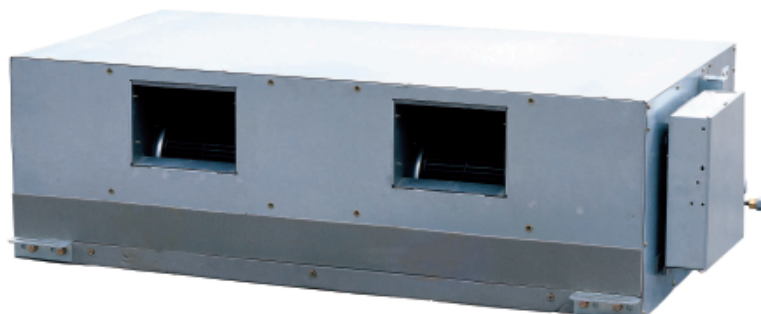
MODEL		TDV-I 22 G/Y	TDV-I 28 G/Y	TDV-I 36 G/Y	TDV-I 45 G/Y	TDV-I 56 G/Y	TDV-I 71 G/Y
COOLING CAPACITY	BTU/Hr	8,000	10,000	13,000	18,000	20,000	25,000
POWER SUPPLY	V/Ph/Hz	220 - 240 / 1 / 50					
RATED POWER	W	30	30	30	45	45	70
AIR FLOW	CFM	280	300	320	450	500	530
RATED AMPERE	AMP	0,12	0,12	0,14	0,20	0,20	0,27
SOUND LEVEL	dBA	34	35	36	40	42	44
REFRIGERANT	TYPE	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22
PIPE CONNECTION MM (INCH)	LIQUID	Ø 6,4 (1/4)	Ø 6,4 (1/4)	Ø 6,4 (1/4)	Ø 6,4 (1/4)	Ø 9,53 (3/8)	Ø 9,53 (3/8)
	SUCTION	Ø 12,7 (1/2)	Ø 12,7 (1/2)	Ø 12,7 (1/2)	Ø 12,7 (1/2)	Ø 16,0 (5/8)	Ø 16,0 (5/8)
DRAIN PIPE	MM (INCH)	Ø 19,0 (3/4)	Ø 19,0 (3/4)	Ø 19,0 (3/4)	Ø 19,0 (3/4)	Ø 19,0 (3/4)	Ø 19,0 (3/4)
DIMENSION (MM)	UNIT (WxDxH)	1020 X 385 X 300	1020 X 385 X 300	1020 X 385 X 300	1180 X 410 X 300	1180 X 410 X 300	1180 X 410 X 300
NET WEIGHT	KG	12	12	12	15	15	16

All specifications are subject to change by manufacturer without prior notice.

Note : The nominal cooling capacity is based on condenser outdoor air entering temp. 35 °C (DB); indoor on coil temp. 27/19 °C (DB / WB)

High Static Pressure Ceiling Ducted

Indoor Unit



Specifications

MODEL		TDV-I 71 T1	TDV-I 80 T1	TDV-I 90 T1
COOLING CAPACITY	BTU/Hr	25,000	30,000	36,000
POWER SUPPLY	V/Ph/Hz	220 - 240 / 1 / 50		
RATED POWER	W	400	400	430
AIR FLOW	CFM	900	970	1,200
EXTERNAL STATIC PRESSURE	INWG	0.5	0.5	0.5
RATED AMPERE	AMP	1.40	1.40	1.47
SOUND LEVEL	dBA	42	42	44
REFRIGERANT	TYPE	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22
PIPE CONNECTION MM (INCH)	LIQUID	Ø 9.53 (3/8)	Ø 9.53 (3/8)	Ø 9.53 (3/8)
	SUCTION	Ø 16 (5/8)	Ø 16 (5/8)	Ø 16 (5/8)
DRAIN PIPE	MM (INCH)	Ø 32.0 (1 1/2)	Ø 32.0 (1 1/2)	Ø 32.0 (1 1/2)
DIMENSION (MM)	UNIT (WxDxH)	850 X 660 X 380	850 X 660 X 380	1200 X 660 X 380
NET WEIGHT	KG	49	49	62

MODEL		TDV-I 112 T1	TDV-I 140 T1	TDV-I 180 T1	TDV-I 280 T1-C
COOLING CAPACITY	BTU/Hr	40,000	50,000	60,000	99,000
POWER SUPPLY	V/Ph/Hz	220 - 240 / 1 / 50			
RATED POWER	W	430	500	600	1,540
AIR FLOW	CFM	1,300	1,500	1,700	2,800
EXTERNAL STATIC PRESSURE	INWG	0.5	0.5	0.8	0.8
RATED AMPERE	AMP	1.47	1.50	1.50	5.0
SOUND LEVEL	dBA	44	45	46	60
REFRIGERANT	TYPE	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22
PIPE CONNECTION MM (INCH)	LIQUID	Ø 9.53 (3/8)	Ø 9.53 (3/8)	Ø 9.53 (3/8)	Ø 9.53 (3/8)
	SUCTION	Ø 19.0 (3/4)	Ø 19.0 (3/4)	Ø 19.0 (3/4)	Ø 19.0 (3/4)
DRAIN PIPE	MM (INCH)	Ø 32.0 (1 1/2)	Ø 32.0 (1 1/2)	Ø 32.0 (1 1/2)	Ø 32.0 (1 1/2)
DIMENSION (MM)	UNIT (WxDxH)	1200 X 660 X 380	1200 X 660 X 380	1200 X 660 X 380	1350 X 760 X 450
NET WEIGHT	KG	65	66	67	105

All specifications are subject to change by manufacturer without prior notice.

Note : The nominal cooling capacity is based on condenser outdoor air entering temp. 35 °C (DB); indoor on coil temp. 27/19 °C (DB / WB)

Ceiling Ducted

Indoor Unit



Specifications

MODEL		TDV-I 22 T2-B	TDV-I 28 T2-B	TDV-I 36 T2-B	TDV-I 45 T2-B	TDV-I 56 T2-B
COOLING CAPACITY	BTU/Hr	8,000	10,000	13,000	18,000	20,000
POWER SUPPLY	V/Ph/Hz	220 - 240 / 1 / 50				
RATED POWER	W	125	125	125	200	200
AIR FLOW	CFM	300	300	350	550	600
EXTERNAL STATIC PRESSURE	INWG	0.2	0.2	0.2	0.2	0.2
RATED AMPERE	AMP	0.85	0.85	0.85	1.50	1.50
SOUND LEVEL	dBA	34	35	35	37	38
REFRIGERANT	TYPE	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22
PIPE CONNECTION MM (INCH)	LIQUID	Ø 6.4 (1/4)	Ø 6.4 (1/4)	Ø 6.4 (1/4)	Ø 6.4 (1/4)	Ø 9.53 (3/8)
	SUCTION	Ø 12.7 (1/2)	Ø 12.7 (1/2)	Ø 12.7 (1/2)	Ø 12.7 (1/2)	Ø 16 (5/8)
DRAIN PIPE	MM (INCH)	Ø 19.0 (3/4)	Ø 19.0 (3/4)	Ø 19.0 (3/4)	Ø 19.0 (3/4)	Ø 19.0 (3/4)
DIMENSION (MM)	UNIT (WxDxH)	800 X 550 X 320	800 X 550 X 320	800 X 550 X 320	1000 X 800 X 320	1000 X 800 X 320
NET WEIGHT	KG	26	26	27	46	46

MODEL		TDV-I 71 T2-B	TDV-I 80 T2-B	TDV-I 90 T2-B	TDV-I 112 T2-B	TDV-I 140 T2-B
COOLING CAPACITY	BTU/Hr	25,000	30,000	36,000	40,000	50,000
POWER SUPPLY	V/Ph/Hz	220 - 240 / 1 / 50				
RATED POWER	W	200	200	280	300	310
AIR FLOW	CFM	800	800	1,000	1,200	1,500
EXTERNAL STATIC PRESSURE	INWG	0.2	0.2	0.3	0.3	0.3
RATED AMPERE	AMP	1.70	1.70	1.83	1.83	1.83
SOUND LEVEL	dBA	42	42	44	44	45
REFRIGERANT	TYPE	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22	R 410 A / R 22
PIPE CONNECTION MM (INCH)	LIQUID	Ø 9.53 (3/8)	Ø 9.53 (3/8)	Ø 9.53 (3/8)	Ø 9.53 (3/8)	Ø 9.53 (3/8)
	SUCTION	Ø 16 (5/8)	Ø 16 (5/8)	Ø 16 (5/8)	Ø 19.0 (3/4)	Ø 19.0 (3/4)
DRAIN PIPE	MM (INCH)	Ø 32.0 (1 1/2)	Ø 32.0 (1 1/2)	Ø 32.0 (1 1/2)	Ø 32.0 (1 1/2)	Ø 32.0 (1 1/2)
DIMENSION (MM)	UNIT (WxDxH)	1000 X 800 X 320	1000 X 800 X 320	1350 X 800 X 320	1350 X 800 X 320	1350 X 800 X 320
NET WEIGHT	KG	47	47	57	57	58

All specifications are subject to change by manufacturer without prior notice.

Note : The nominal cooling capacity is based on condenser outdoor air entering temp. 35 °C (DB); indoor on coil temp. 27/19 °C (DB / WB)

Controllers

Remote Controllers



R05 remote controller

Light background, LCD display screen, clock function, ON/OFF/Temperature setting/ Mode setting /Fan speed setting/horizontal swing/vertical swing setting functions, but need match functions with corresponding indoor units.

Wired Controllers



KJR-01B wired controller

ON/OFF/Mode setting/Temp. setting/Fan speed setting/Time setting/Swing, etc..



KJR-10B wired controller

ON/OFF/Mode setting/Temp. setting/Fan speed/Time setting/Swing, etc..



KJR-12B wired controller(with follow me function)

The basic function is the same as KJR-10B, Temp sensor built-in.
Note:Special order for indoor PCB.

Central Control Monitor



MD-CCM01 indoor CCM

Max. 64 indoor units control.



MD-CCM03 indoor CCM

Max. 64 indoor units control; New mode lock function.



MD-CCM02 outdoor CCM

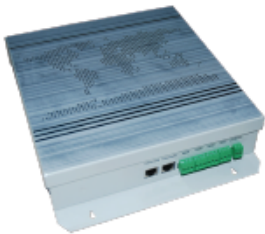
Max. 32 outdoor units control.
Note: Special order for outdoor PCB.

BMS Accessories



MDV-WLJKXT(V3.0) 3rd network central control system kit

Network control software (V3.0).



MD-CCM08 BMS CCM

BACNET LONWORK /ETHERNET optional, Max connecting 4 group air-conditions (each group can connect Max. 64 indoor units or 32 outdoor units).

Weekly Timer



MD-CCM04 weekly schedule timer

Control one indoor unit.

Note: Weekly schedule timer and indoor CCM cannot be used simultaneously.



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