R410A

DBV-6Pro

Full DC Inverter VRF System

DUNHAM-BUSH PRODUCT

Outdoor Unit Lineup

DBV-HTVC Series Cooling & Heating

	8-18HP	20-26HP	28-36HP
Single Unit			

	38-72HP	74-108HP
Combined Unit		

Note: Four unit combinations are possible for 8-24 HP models. For four unit combinations please contact Dunham-Bush.

DBV-CTVC Series Cooling Only

	8-20HP	22-32HP
Single Unit		

	34-60HP	62-96HP
Combined Unit		

OUTDOOR UNIT
PRODUCT FEATURES



	Functions		DBV-HTVC	DBV-CTVC
Innovative Technologies	ShieldBox	IP55 fully sealed electric control box realizes resisting all protects against intrusion and damage to the electric control box	●	●
	SuperSense	19 (DBV-HTVC) / 17 (DBV-CTVC) sensors monitor the state of each part of the refrigerant pipeline throughout the whole process	●	●
	DB ETA 2.0	Triple variable control maximizes comfort and energy efficiency	●	●
	Zen Air 2.0	Provides s comfort and healthy air supply	●	●
	Doctor M 2.0	Intelligent diagnostic technology makes maintenance easier and more efficient	●	●
High Efficiency	Full DC inverter technology	All electrical components of outdoor and indoor units use DC power supply, improving electrical efficiency and saving energy	●	●
	Enhanced Vapor Injection(EVI) compressor	Increases refrigerant circulation and improves cooling capacity	●	●
	Micro-channel refrigerant-subcooling	The refrigerant system can achieve 15°C refrigerant subcooling, which can further improve the refrigerant heat transfer efficiency while reducing noise	●	●
	Low standby power consumption	The standby power consumption is as low as 3.5W	●	●
	G-type heat exchanger	Large capacity outdoor unit with G-type heat exchanger, which can increase the heat exchanger area and saves floor space	●	X
	60-step energy management	The system can be set from 40% to 100% capacity output in 1% increments	●	●
High Reliability	Duty cycling (unit)	Equalizes the running time of the outdoor units in a multiple-unit system, significantly extending unit lifespan (available for combined units)	●	●
	Duty cycling (compressor)	Equalizes the running time of the compressor in each unit, significantly extending compressor lifespan (available for units with two compressors)	●	●
	Backup operation (unit)	If one unit fails, the other units provide backup so that the system can continue operating (available for combined units)	●	●
	Backup operation (compressor)	If one compressor fails, the other compressor provides backup so that the system can continue operating (available for units with two compressors)	●	●
	Backup operation (fanmotor)	If one fan motor fails, the other fan motor provides backup so that the system can continue operating (available for unit units two fan motors)	●	●
	Backup operation (sensor)	If one sensor fails, the virtual sensor provides backup so that the system can continue operating	●	●
	Precise oil control	Ensures all outdoor compressor oil is at a safe level, eliminating compressor oil shortages	●	●
	Heavy anti-corrosion protection	Can be customized with heavy anti-corrosion treatment for surface protection against corrosive air, acid rain and saline air (for installations in coastal regions) to extend overall useful life	o	o

●: equipped as standard; o: customization option



OUTDOOR UNIT
PRODUCT FEATURES

	Functions		DBV-HTVC	DBV-CTVC
High Reliability	UL anti-corrosion certificate	It has been certified by UL that our VRF outdoor unit can withstand 27 years of simulated severe corrosion under a salt contaminated traffic environment	o	o
	Micro-channel refrigerant cooling PCB	10 times higher than ordinary refrigerant pipe cooling efficiency	o	o
	Chassis electrical heater	Prevents condensation on the chassis from freezing in winter	o	x
	Anti-snow shield	Prevents snow from accumulating on the outdoor unit, guaranteeing stable unit operations on snowy days	o	x
	Auto snow-blowing function	Blows away accumulated snow on the outdoor unit, guaranteeing stable unit operations on snowy days	•	x
	Auto dust-clean function	Blows away accumulated dust on the outdoor unit, guaranteeing stable unit operations in a dusty environment	•	•
	Resistant to magnitude 8 earthquakes	A reinforced frame footprint to prevent tipping and deformation damage in magnitude 8 earthquakes	o	x
	Resistant to violenttyphoon	A reinforced trusses and double fastening for stable operation even under violent typhoon	o	x
	Alarm output	In the event of system malfunction, remotely output error information and remind maintenance personnel to conduct maintenance	o	o
	Fire alarm input	In the event of fire, receive fire information in time and stop the system immediately to avoid serious problems	•	•
Enhanced Comfort	Silent mode	15-step silent mode selections provide more freedom and convenience to match the needs of customers	•	•
	Intelligent defrosting technology	Calculates the time required for defrosting according to the actual system status, eliminating heat losses from unnecessary defrosting	•	x
	Auto cooling-heating change over	Automatically selects cooling or heating mode to achieve the set temperature (available in changeover priority mode)	•	x
	Additional ambienttempera-ture sensor	The additional external ambient temperature sensor can detect the true outdoor ambient temperature, correctly judge whether the system is running in cooling or heating in auto priority mode, ensuring indoor comfort	o	x
	0.1 °C control precision	Control precision of the sensor can reach 0.1°C, ensuring less fluctuations in room temperature	•	•
	Multiple priority modes	10 priority modes meet the requirements of all scenarios	•	x
Wide Application Range	Wide capacity range	Meets all customer requirements from small to large buildings	8-36HP (single) 38-108HP combined)	8-30HP (single) 32-90HP combined)
	Wide range of indoor units	Provides 12 types and more than 100 models of VRF indoor units to meet the needs of different application scenarios	•	•

•: equipped as standard; o: customization option

OUTDOOR UNIT
PRODUCT FEATURES



	Functions		DBV-HTVC	DBV-CTVC
Wide Application Range	Wide operation range	Operates stably under extreme conditions	-15-55°C (C) -30-30°C (H)	-15-55°C (C)
	Long piping capability	Benefits for the system design, installation flexibility, as well as the less installation cost	●	●
Easy Installation And Service	Auto addressing(ODU~IDU)	Distributes addresses to indoor units automatically, simplifying the installation	●	●
	Auto addressing (ODU~ODU)	Distributes addresses to slave outdoor units automatically, further simplifying the installation (available for combined units)	●	●
	Automatic refrigerant charging	Makes installation and service easier and more efficient	○	○
	Automatic refrigerant recycling	Refrigerant can be recycled to ODUs or IDUs and normal ODUs, making the maintenance easier and more efficient	●	●
	Bluetooth module	It can be used for fault information storage, operation parameter enquiry, system parameter setting, quick after-sales PCB replacement, programme upgrade for indoor and outdoor units, etc., simplifying installation and maintenance.	○	○
	Digit display	4 digit 7-segment display can be intuitive for parameter setting, parameter checks and error checks	●	●
	High external static pressure	Up to 120Pa ESP allows easy handling in a variety of installation environments	0-20Pa ● 20-120Pa ○	0-20Pa ● 20-120Pa ○
	Arbitrary topology ofcommunication wire	Supports any communication topology, greatly simplifies installation and reduces installation cost	●	●
	2-core non-polarity communication wiring between the indoor and outdoor units	Simplifies installation and reduces wiring failures	●	●
	Long communication wiring	Communication wiring up to 2000m makes installation more flexible	●	●
	Wide combination ratio	Combination ration can be extended to 50%-200% under certain conditions which can meet different project requirements	50-130% ● 50-200% ○ (for single unit system)	50-130% ● 50-200% ○
	Supports manual and automatic oil return	Improves maintenance efficiency	●	X
	Easy software program upgrade *	The software program can be upgraded via on-site USB and burning, or remotely via the web	●	●
	Flexible controller connection	Central controller and BMS gateway can connect to the ODU at the same time, and the central controller can connect to the ODU or IDU	●	●
	Refrigerant amount diagnosis	The unit can diagnose excessive or insufficient amounts of refrigerant, and prompt maintenance personnel to check the system in time to avoid serious malfunction	●	●
	Easy system commissioning and checking*	System commissioning and checking can easily be completed on-site or remotely via the web	●	●
	Intelligent maintenance tool	Intelligent bluetooth after-sales kit can simplify maintenance and improve maintenance efficiency	○	○

●: equipped as standard; ○: customization option

*Note: The web function needs to be realized through the data cloud gateway, and the data cloud gateway needs to be purchased separately.



OUTDOOR UNIT
PRODUCT FEATURES

HyperLink

Dunham-Bush's original communication bus chip greatly simplifies installation and saves installation costs.

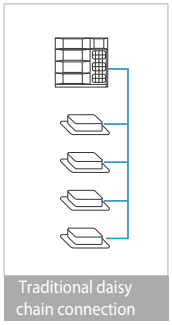
Benefits

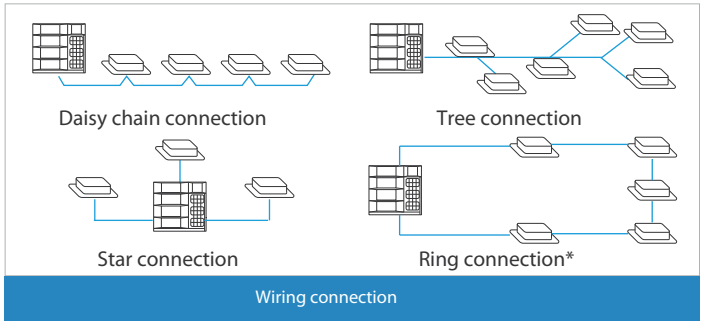
- Flexible installation
- Low installation cost
- High reliability
- Stable operation

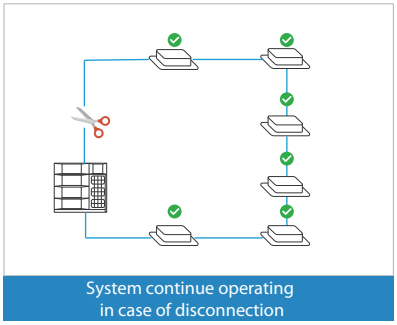
HyperLink communication technology supports any wiring pattern rather than just daisy chain connection, reducing installation costs and the possibility of an incorrect connection. It has stronger anti-interference ability, achieving a communication distance of up to 2000m.

Arbitrary Topology Communication

In addition to the traditional daisy chain connection, the communication wire supports tree connection, star connection, ring connection and so on. The wring is flexible, which greatly reduces installation costs and has no possibility of wrong connection on site.



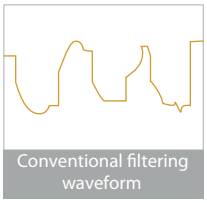


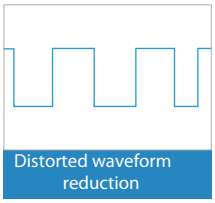


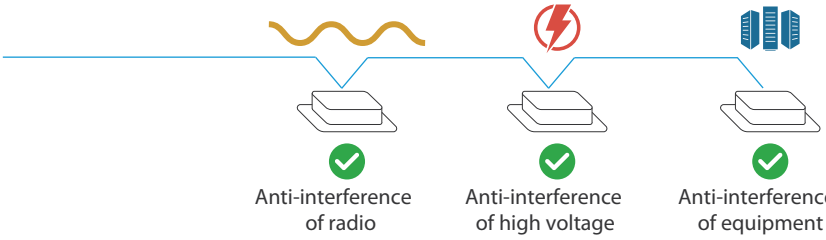
*In ring connection, the communication wire must be connected polarized (M1 port to M1 port and M2 port to M2 port).

Super Anti-interference Capability

Special waveform restoration technology enhances anti-interference performance for more stable communication.

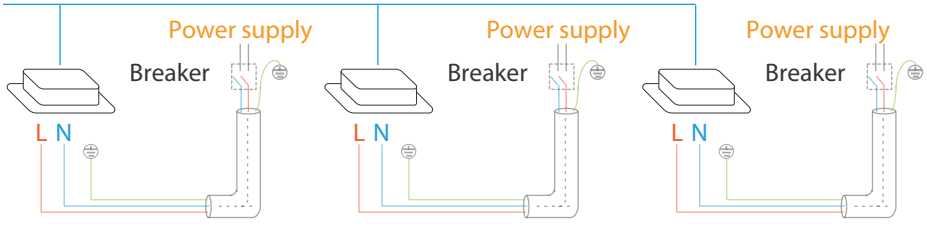






Flexible Power Supply for Indoor Units

HyerLink 's unique communication method allows the indoor units to be powered not only by a uniform power supply, but also by individual and zone power supplies, making it particularly suitable for each shop in a large complex building, which can independently power on and off its own indoor units.



OUTDOOR UNIT
PRODUCT FEATURES



ShieldBox

IP55 fully enclosed electric control box provides all-round protection for internal electronic components, greatly improving system RELIABILITY.


Anti-corrosion


Dustproof


Rain & snow proof


Insect proof

Benefits

High reliability

Stable operation

IP (INGRESS PROTECTION)

IP 55

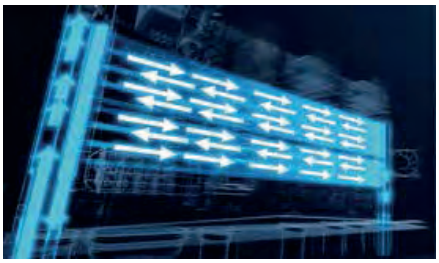
Dustproof grade code
Prevent entry foreign objects and dust

Waterproof grade code
Prevent water spray in all directions

Fully enclosed electronic components are isolated from the external environment to protect against corrosion, sand, humidity, snowstorms and other harsh conditions, and prevent small animals and insects from entering the chamber. This protects internal electronic devices and improves the overall environmental tolerance.

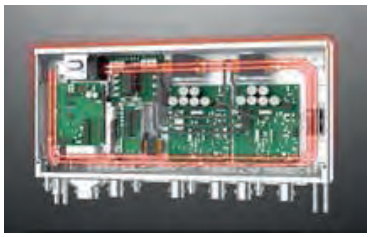
All Microchannel Refrigerant Cooling

All electronic components including inverter module, filter module and power module are cooled by specially designed microchannel refrigerant to ensure that the electronic components work in the best temperature range.



PTC Heater (DBV-HTVC Series)

The unique PTC heater, with precise temperature control sensor, can still ensure that the temperature inside the chamber remains within the normal operating temperature range of electronic devices even in the low-temperature environment of -30°C.

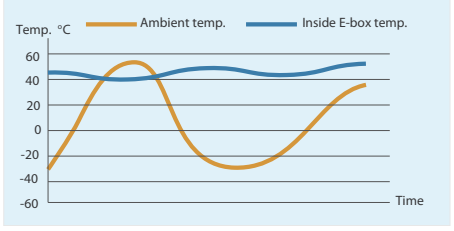


Built-in Circulating Fan

The built-in circulating fan accelerates the air flow inside the chamber, and the heat exchange is more sufficient to ensure the consistent ambient temperature inside the chamber.

5 High Precision Temperature Sensors

5 high precision temperature sensors are used to accurately monitor the operation state of electronic control under various conditions to ensure that the internal temperature of the chamber is always kept within a stable range.





SuperSense

The status of the refrigerant can be determined throughout the process, ensuring high RELIABILITY and COMFORT.

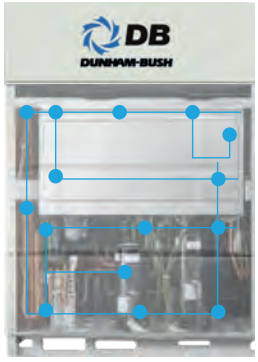
Benefits

- High reliability
- Stable operation
- Enhanced comfort

Up to 17 (CTVC) / 19 (HTVC) sensors are distributed throughout the refrigerant system, and the status of the refrigerant can be determined throughout the process, ensuring stable operation. At the same time, combined with the digital twin technology of the refrigerant system, a virtual sensor can be created in the event of a physical sensor failure, so that the system does not shut down in the event of a sensor failure, ensuring comfort.

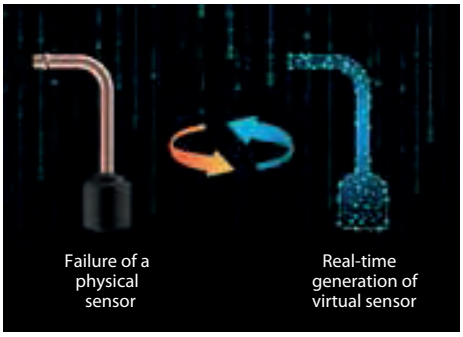
Complete Sensors

The DBV-6Pro VRF is equipped with up to 17 condition monitoring sensors, combined with built-in data models of compressors, heat exchangers and throttling components, which can analyze the operation data in real time and monitor the refrigerant condition of the system.



Virtual Sensor Backup

In the event of a sensor failure, other sensors can automatically simulate a virtual backup sensor, so that the VRF system can continue to operate without stopping.



Refrigerant Amount Diagnosis

Thanks to the complete sensors, the refrigerant running state is clearly visible, so as to accurately diagnose the amount of refrigerant.

OUTDOOR UNIT
PRODUCT FEATURES



DB ETA (ETA) 2.0

ETA is the abbreviation of Dunham-Bush Evaporating Temperature Alteration. Further upgraded the technology to maximize ENERGY SAVING

Benefits

- Energy saving
- Enhanced comfort
- Fast cooling

Built-in professional operation and maintenance algorithm, so that the annual operation energy efficiency of each set of systems is increased by more than 28%.

Variable Refrigerant Flow

STEP 1:
Architectural space feature recognition

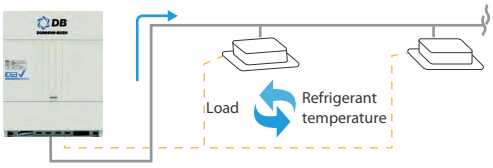
The indoor unit automatically recognizes the size of the building space and the effectiveness of the insulation according to the rate of temperature drop.

Automatic calculation of the building load and therequired refrigerant quantity based on the sensorparameters.

Variable Refrigerant Temperature

STEP 2:
System refrigerant temperature determination

The system automatically matches the evaporating temperature to the room load to maximize comfort and energy efficiency.

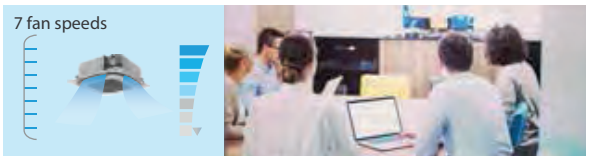


Automatic matching of the corresponding refrigerant temperature to the load.

Variable Indoor Airflow

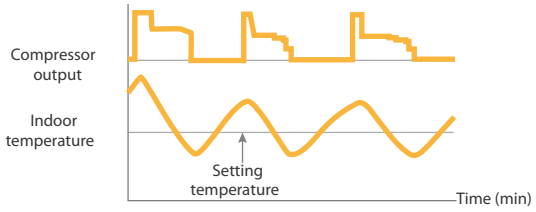
STEP 3:
Adaptive indoor airflow and refrigerant flow

Each indoor unit automatically adjusts the corresponding indoor airflow and refrigerant flow according to the evaporating temperature, enabling precise temperature control.

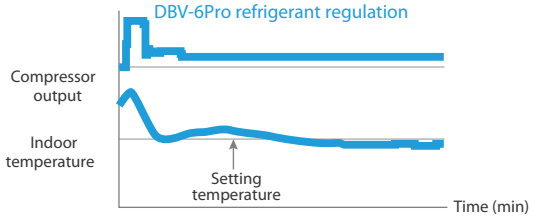


Automatic matching of the corresponding indoorairflow to the load and refrigerant temperature.

Conventional refrigerant regulation



DBV-6Pro refrigerant regulation





Zen Air 2.0

Further upgraded ZEN AIR technology to maximize COMFORT.

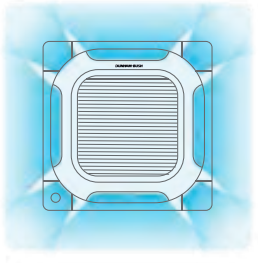
Benefits

Quiet | Healthy | Enhanced comfort

0.5°C temperature adjustment, 7 fan speeds selection, sleep mode, silent mode, windless technology, high efficiency filter, a variety of sterilization devices and other advanced technologies used in DBV-6pro Series VRF are dedicated to creating a quiet, comfortable and healthy indoor environment.

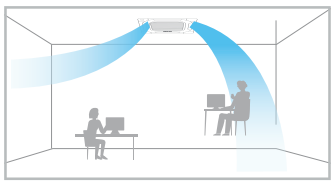
360° Airflow

New design, round air flow path ensures uniform air flow and temperature distribution.



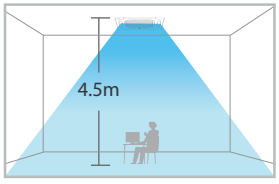

Individual Louver Control

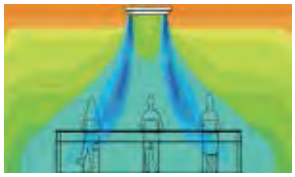
The Individual louver control can control the motors separately, making it possible to control all four louvers independently.



Long Distance Air Delivery*

The Four-Way Cassette has an additional 50Pa of static pressure for long airflow delivery and can be used in spaces of up to 4.5m in floor height.

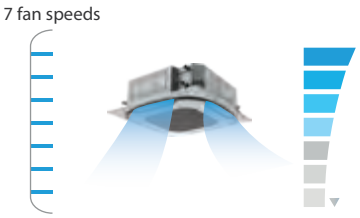




*This function is available as a customization option.

7 Fan Speeds

7 indoor fan speed options to meet the needs of different indoor conditions.



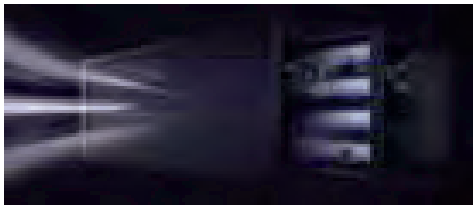
Sleep Mode

The smart sleep mode provides a comfortable sleep periodand a refreshing wake up time.

*The above temperatures are for reference only.

Innovative Puro-air Kit

Protectors of health and safety



From Germany -
OSRAM quality UV light source

Ozone –Free
UV leakage-Free

*The indoor unit needs to be customized in order to use the Puro-air Kit.



Doctor M 2.0

Further upgraded DOCTOR M technology to maximize EASY SERVICE.

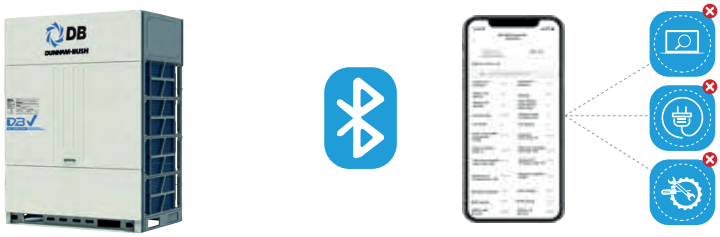
Benefits

- Easy maintenance
- Fast maintenance
- Low maintenance cost

Based on a cloud-based platform of big data and artificial intelligence, the DBV-6pro Series VRF can monitor the operation status of each unit in real time, predict system faults in advance and provide data analysis for system maintenance. The intelligent Bluetooth module and special Bluetooth after-sales kit can further simplify maintenance and improve maintenance efficiency.

Intelligent Maintenance Tool

With the intelligent Bluetooth module or special Bluetooth after-sales kit, the data of the outdoor unit can be directly read and written on your smart phone without connecting a PC or opening the cabinet.



*The Bluetooth module is available as a customization option.

Real-time Monitoring of Operating Parameters

The DBV-6Pro Series VRF synchronizes and stores all the unit parameters to the cloud through the data cloud gateway, including the running status, locking status, dirty blocking rate, all spot inspection parameters and so on. Users can query real-time and historical parameters on computers, tablets and mobile phones at any time.

Cloud-based Big Data Analytics

Dunham-Bush DBV-6Pro Series VRF transmits the system operation data to the cloud in real time through the data cloud gateway, and timely reminds the system of abnormal conditions through big data analysis, helping users to proactively avoid the risk of failure that has not yet occurred and minimize hidden problems.

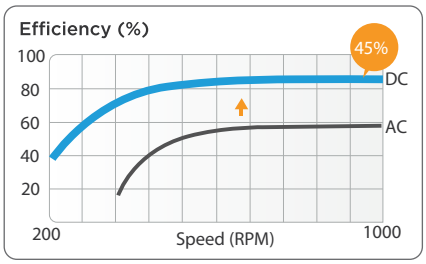
*The data cloud gateway needs to be purchased separately.

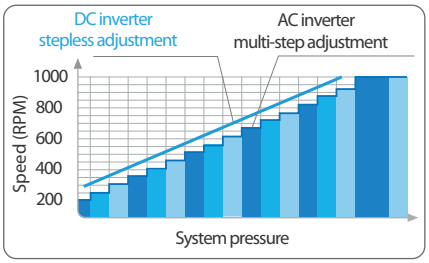
HIGH EFFICIENCY

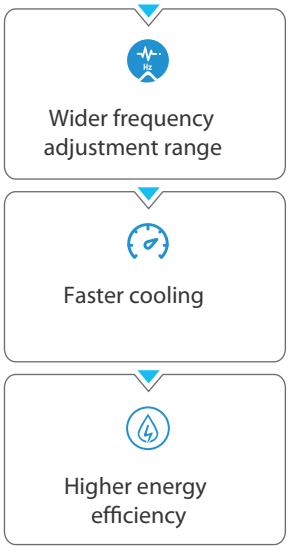
Full DC Inverter Technology

Full DC Inverter for Outdoor Components

The DBV-6Pro Series VRF uses full DC inverter compressor and fan motor to achieve high precision stepless speed adjustment according to system operation, and ensures that the system is always in optimum condition, operating more efficiently, more consistently and with less noise.

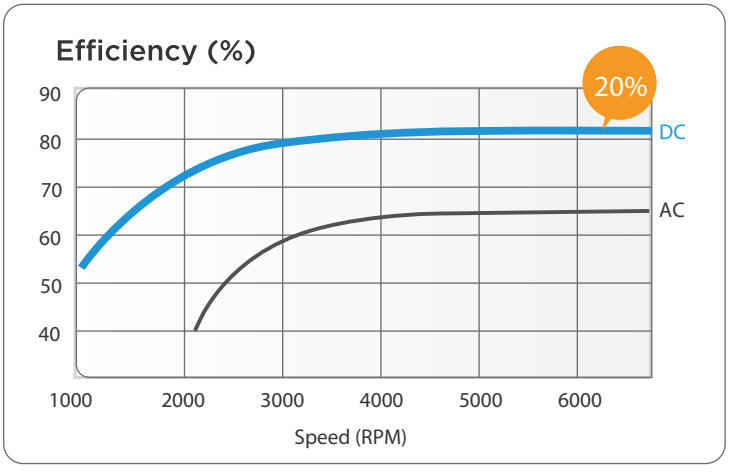






Full DC Inverter for Indoor Components

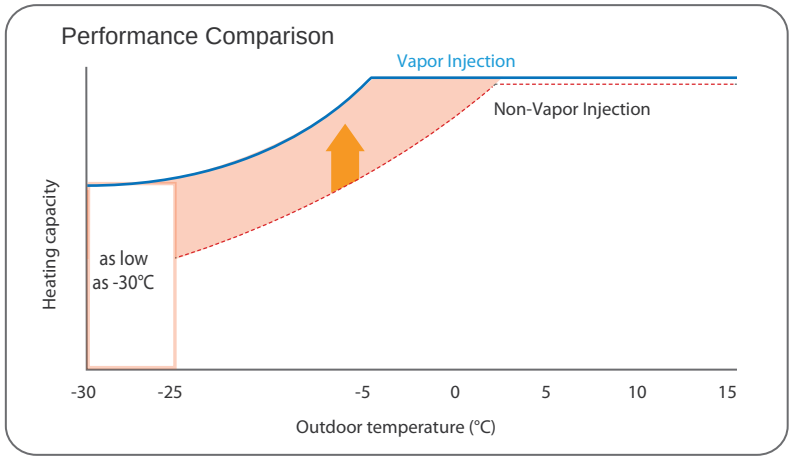
All power devices such as indoor fan motor, drain pump and electric control board are fully DC, which increases electrical efficiency by 20% and results in more accurate temperature control, a more constant indoor temperature and higher energy efficiency.





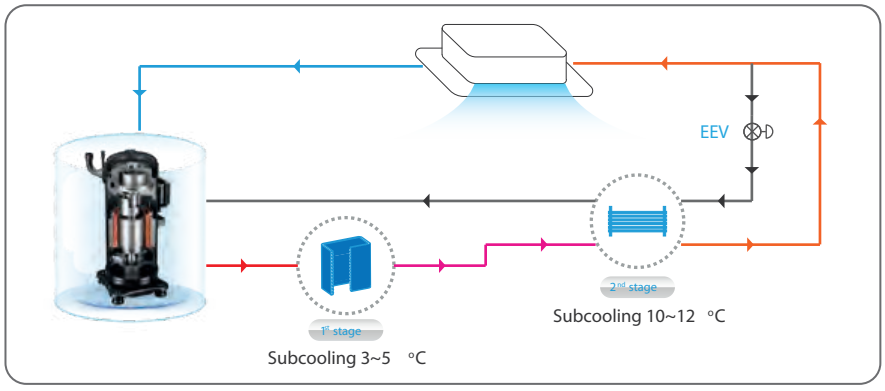
Enhanced Vapor Injection (EVI) Compressor

The enhanced vapor injection DC inverter compressor increases refrigerant circulation and improves cooling capacity.



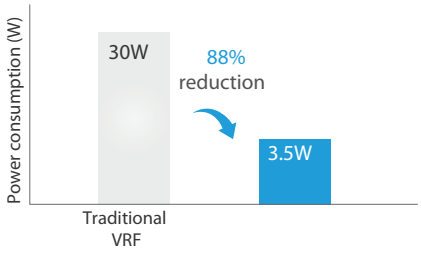
Advanced Subcooling Technology

The DBV-6Pro Series VRF uses a micro-channel heat exchanger to further cool the refrigerant and the refrigerant system can achieve 15°C refrigerant subcooling, which can further improve the refrigerant heat transfer efficiency while reducing the sound of refrigerant flow.



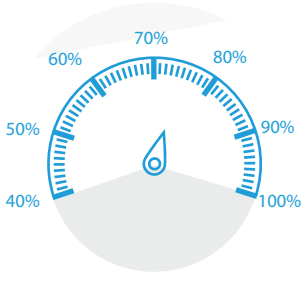
Low Standby Power Consumption

Compared to the standby power consumption of traditional VRF of about 30W, the DBV-6Pro Series VRF uses optimized control scheme to further reduce standby power consumption to as low as 3.5W.



60-step Energy Management

For projects with temporary electricity supply restrictions, the outdoor unit supports 60-step energy management which can be set to output 40-100% capacity in 1% increments. It prevents tripping during conditions of restricted electricity supply and allows the system to continue to operate.



High Reliability

Quadruple Backup

In two fans, two compressors and multiple units, one can run in backup for another. Additionally, the DBV-6Pro series VRF generates a corresponding virtual sensor for each physical sensor by means of a digital algorithm, which serves as a backup for each other, ensuring no shutdown in the event of a fault, and further guaranteeing comfort.

1 Unit Backup

In a multi-unit system, the different units act as a backup to each other, ensuring that the system can continue to operate if one unit fails.

Intelligent load-bearing between units during normal operation

Continue operating in case of failure of one unit

Operation compressor Failed compressor

2 Fan Backup

In unit with two fans, the two fans act as abackup to each other, ensuring that the systemcan continue to operate if one fan fails.

In normal operation, each fan runs on demand

Automatic backup operation of another fan in case of failure of one fan

Operation fan Failed fan

3 Compressor Backup

In unit with two compressors, the two compressors act as a backup to each other, ensuring that the system can continue to operate if one compressor fails.

Intelligent load-bearing between compressors during normal operation

Continue operating in case of failure of one compressor

4 Sensor Backup

Through digital algorithms, each physical sensor generates a corresponding virtual sensor that acts as a backup to each other, ensuring that the failure of one sensor does not affect the normal operation of the system.

Automatic backup operation of the corresponding virtual sensor in case of failure of one physical sensor



Double Duty Cycling

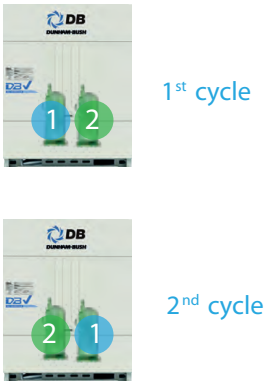
1 Unit Duty Cycling

In a multi-unit system, duty cycling equalizes the running time of each outdoor unit, significantly extending unit lifespan.

Note: The duty cycling sequence shown in the figure is only a schematic reference. The actual duty cycling sequence is not a fixed sequence. Please refer to the technical manual for specific rotation rules.

2 Compressor Duty Cycling

In units with two compressors, duty cycling equalizes the running time of each compressor, significantly extending compressor lifespan.



Compressor start-up sequence

ShieldBox

IP55 fully enclosed electric control box provides all-round protection for internal electronic components, greatly improving system reliability.


Anti-corrosion


Dustproof


Rain & snow proof


Insect proof



OUTDOOR UNIT
PRODUCT FEATURES

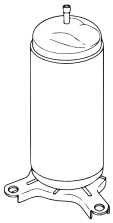
SuperSense

The DBV-6Pro Series VRF uses up to 17 sensors for each outdoor unit and 4 sensors for each indoor unit. The operating status of the system refrigerant is clearly visible, which can achieve intelligent analysis of operation parameters, intelligent error diagnosis and forecasting, and

Precise Oil Control

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

1

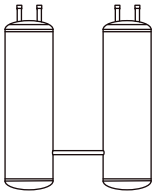


Compressor internal oilseparation.

2

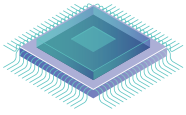
High-efficiency centrifugal oil separator (with separation efficiency of up to 99%) ensures that oil is separated from the discharge gas and returned to the compressors in a timely fashion.

3



Oil balance pipes between gas-liquid separator ensure even oil distribution to keep compressors running normally.

4



The automatic oil return program determines the oil return through the running time and the oil discharge amount, enabling precise oil return.

Heavy Anti-corrosion Protection*

Standard outdoor units are given anti-corrosion treatment for non-extreme conditions 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.

*Heavy anti-corrosion treatment is available as a customization option.

UL Anti-Corrosion Certificate*

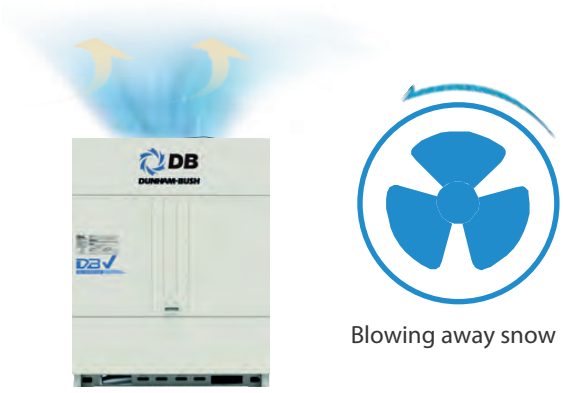
It has been certified by UL that our VRF outdoor unit can withstand 27 years of simulated severe corrosion under a salt contaminated traffic environment.

Outdoor Unit canresist 27 years ofsimulated severecorrosion under asalt contaminatedtraffic environment

*UL anti-corrosion certificate is available for heavy anti-corrosion treatment units.

Auto Snow-blowing Function

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



Blowing away snow

Auto Dust-clean Function

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

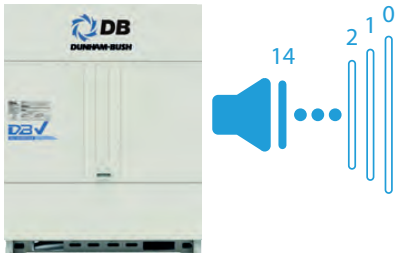
Self-cleaning



ENHANCED COMFORT

Advanced Silent Technology

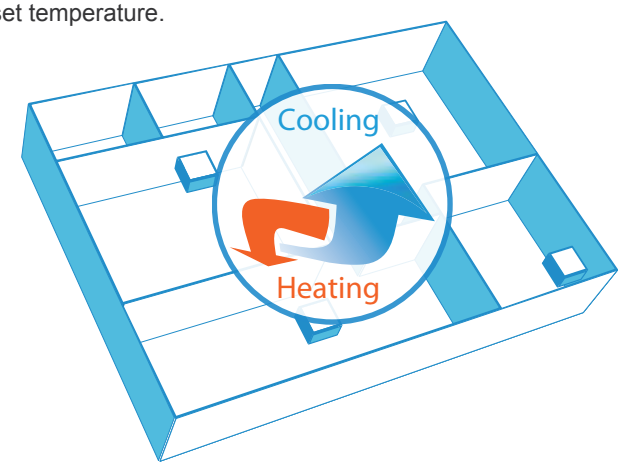
15-step silent mode provide more freedom and convenience to match the customer needs.



15 silent options

Auto Cooling-heating Changeover

Automatically selects cooling or heating mode to achieve the set temperature.



10 Priority Modes

10 priority mode options provide more freedom and convenience to match the customer needs.


Auto priority


Changeover


Cooling priority


Heating priority


Cooling only


Heating only

VIP priority

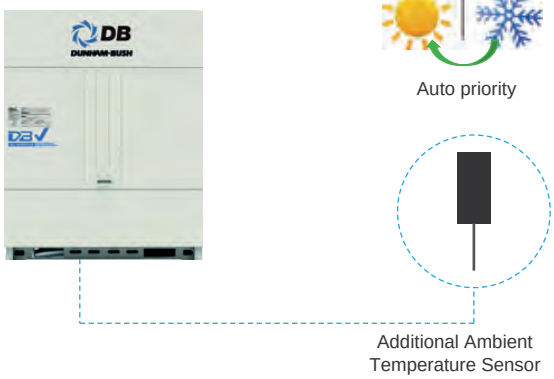

First priority


Quantity
vote priority


Capacity
vote priority

Additional Ambient Temperature Sensor*

The DBV-6Pro Series VRF can be equipped with an additional external ambient temperature sensor to determine whether the system is operating in cooling or heating in auto priority mode. For some installations, the ambient temperature sensor fixed on the unit cannot detect the true ambient temperature, resulting in the system operating in an inappropriate mode and affecting indoor comfort. The external ambient temperature sensor can detect the true outdoor ambient temperature, and correctly judge whether the system is running in cooling or heating mode, ensuring indoor comfort.



*This function is available as a customization option.

WIDE APPLICATION RANGE

Wide Range Of Indoor Units

The DBV-6Pro Series VRF offers 12 types of over 100 models of indoor units to meet different scenarios of applications such as offices, shopping malls, hotels, airports, schools, hospitals, etc.

Wide Operation Range

Thanks to the refrigerant cooling technology, the DBV-6Pro Series VRF can operate stably in a temperature range as low as -15°C and as high as 55°C.

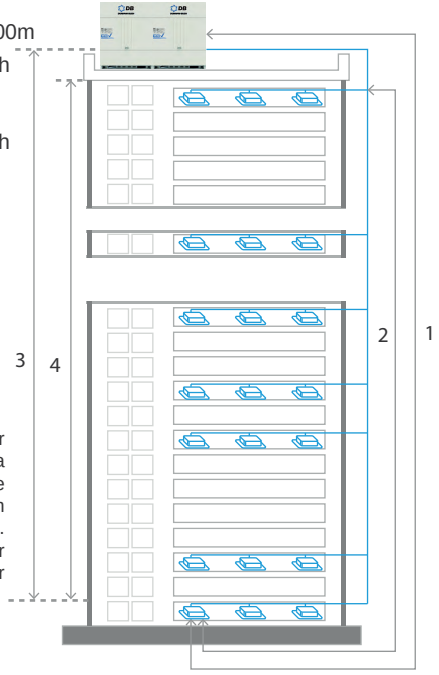
Long Piping Capability

The DBV system can support a total piping length of up to 1100m, an installation height difference of up to 110m between indoor and outdoor units, and up to 40m between indoor units, making the DBV-6Pro Series VRF adaptable to a wide range of building designs.

Total piping length: 1100m

1. Longest piping length - actual (equivalent): 220(260)m
2. Longest piping length after first branch: 40/120*m
3. Level difference between IDUs and ODU - ODU above (below): 110(110)m
4. Level difference between IDUs: 40m

*The longest length after first branch is 40m as a standard but can be extended to up to 120m under certain conditions. Please contact your local dealer for further information.





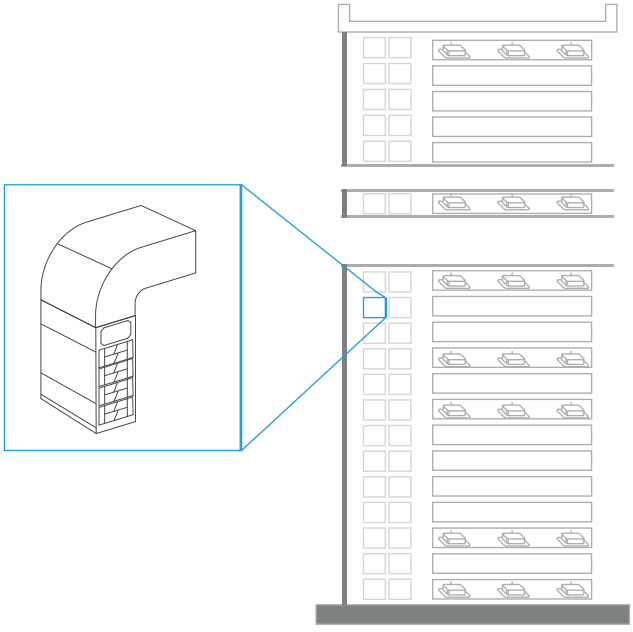
EASY INSTALLATION AND SERVICE

Free Wiring

Latest communication technology supports any wiring pattern rather than just daisy chain connection, reducing the installation cost and the possibility of incorrect connection. It has stronger anti-interference ability, achieving a communication distance of up to 2000m.

External Static Pressure Up To 120Pa*

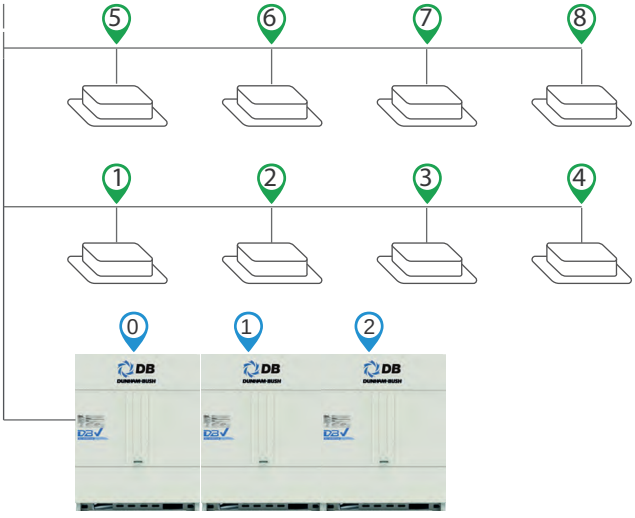
The static pressure of the outdoor unit can be up to 120Pa which facilitates installation of the unit on each floor of high-rise buildings or on balconies.



*External static pressure above 20Pa is available as a customization option.

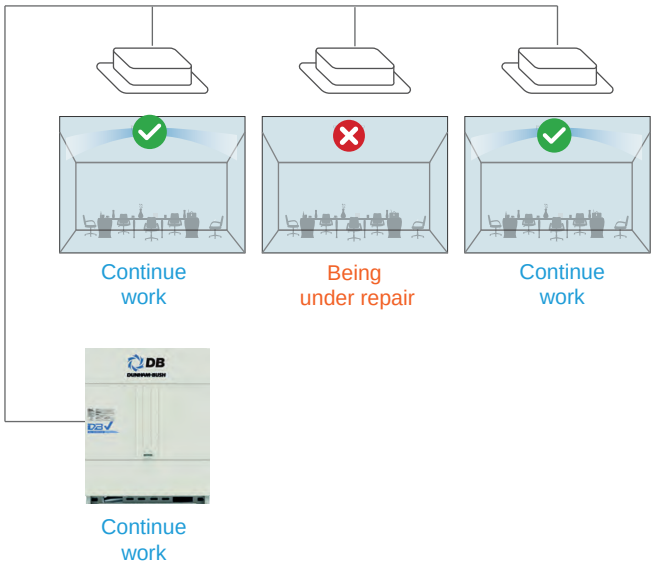
Auto Addressing

Addresses for all indoor units and combined outdoor units can be assigned automatically by the DBV-6Pro system, further simplifying installation.



Maintenance Mode

The maintenance mode allows the shutdown of some indoor units without shutting down the whole VRF system, and it can be activated on site during the maintenance period as the remaining indoor units continue to operate.



Automatic Refrigerant Charging*

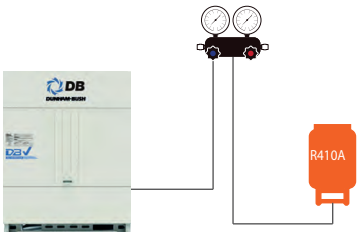
Compared to manual refrigerant charging, automatic refrigerant charging greatly simplifies the process, making installation and maintenance easier and more efficient.

Manual refrigerant charging

1. Calculate additional refrigerant quantity
2. Connect refrigerant tank to the outdoor unit & start the filling process
3. Observe the weight scale to check the refrigerant charge
4. Close the shut-off valve manually & finish the filling process

Automatic refrigerant charging

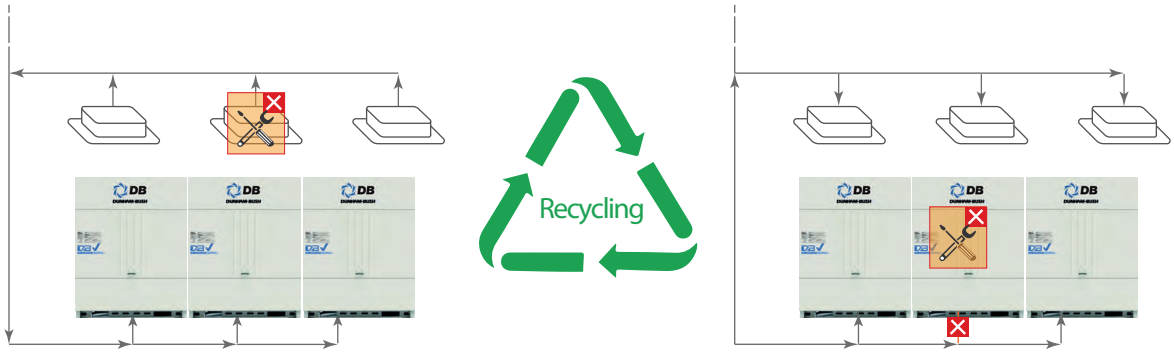
1. Connect refrigerant tank to the outdoor unit & activate automatic charging function
2. Close the shut-off valve automatically & finish the filling process



*This function is available as a customization option.

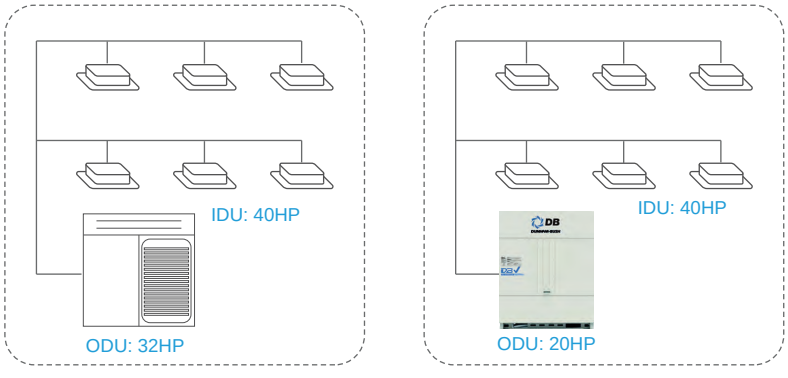
Automatic Refrigerant Recycling

When an indoor unit fails, the refrigerant can be recycled into the outdoor units. When part of the outdoor unit fails, the refrigerant can be recycled into the indoor units and the normal outdoor unit. Two types of refrigerant recycling make the maintenance process easier and more efficient.



Wide Combination Ratio*

Compared to traditional VRF with combination ratio of 50-130%, the DBV-6Pro Series VRF can be extended to 50-200%, and the wider combination ratio allows for more flexible system configuration. The larger combination ratio can be applied to long-term part-load operation scenarios, allowing for further reduction in installation costs.



*Combination ratio over 130% is available as a customization option.



Easy Software Program Upgrade

In addition to upgrading the program of outdoor and indoor units through USB and burner, the new product can also remotely upgrade all the programs of indoor and outdoor units through the data cloud gateway, making system upgrades very convenient and ensuring that the system program is always up to date.

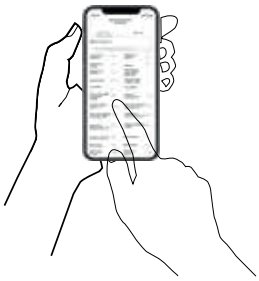
*The data cloud gateway needs to be purchased separately.

Smart Commissioning/ Maintenance Tool

With the newly developed smart tool (Bluetooth module and special Bluetooth after-sales kit), system settings, operating parameter queries, trial runs and programme upgrades are all possible without opening the cabinet.

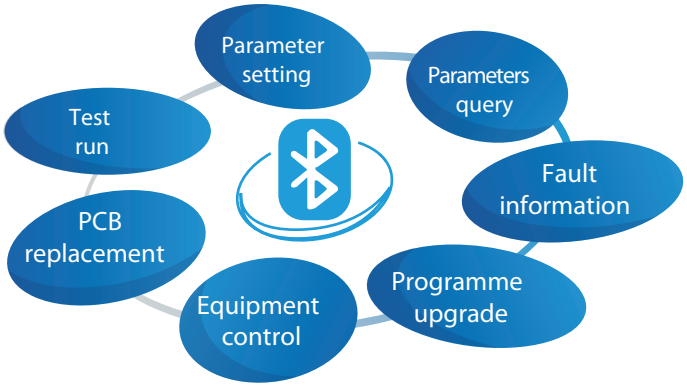
Useful in the following situations

- Installation
- Service maintenance



Main functions :

- Fault information storage
- Operating parameters query
- Start commissioning test run
- System parameter setting
- Quick after-sales PCB replacement
- Equipment control
- Indoor and outdoor units programme upgrade





OUTDOOR UNIT
TECHNICAL SPECIFICATIONS

DBVP-HTVC Series - Cooling & Heating

HP			8	10	12	14
Model			DBVP-HTVC8EG	DBVP-HTVC10EG	DBVP-HTVC12EG	DBVP-HTVC14EG
Power supply		V/Ph/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling [1]	Capacity	kW	25.2	28	33.5	40
		kBtu/h	86.0	95.5	114.3	136.5
	Power input	kW	5.3	6.8	8.3	9.9
	EER		4.76	4.14	4.06	4.05
Heating [2]	Capacity	kW	27	31.5	37.5	45
		kBtu/h	92.1	107.5	128.0	153.5
	Power input	kW	5.4	6.6	8.5	10.2
	COP		5.03	4.76	4.43	4.40
Connected indoor unit	Total capacity		50-130%	50-130%	50-130%	50-130%
	Maximum quantity		13	16	19	22
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		1	1	1	1
Fan	Type		DC	DC	DC	DC
	Quantity		1	1	1	1
	Static pressure	Pa	0-20 (standard)20-120 (customized)			
	Airflow rate	m^3/h	12600	12600	13500	15600
Refrigerant	Type		R410A	R410A	R410A	R410A
	Factory charge	kg	7	7	7	8
Pipe connections [3]	Liquid pipe	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.9
	Gas pipe	mm	Φ25.4	Φ25.4	Φ25.4	Φ28.6
Sound pressure level [4]		dB(A)	56	57	59	59
Net dimensions (W×H×D)		mm	940 ×1760 ×825	940 ×1760 ×825	940 ×1760 ×825	940 ×1760 ×825
Packed dimensions (W×H×D)		mm	1005 ×1945 ×890	1005 ×1945 ×890	1005 ×1945 ×890	1005 ×1945 ×890
Net weight		kg	195	195	195	213
Gross weight		kg	213	213	213	230
Ambient temp. operation range	Cooling	℃	-15 to 55	-15 to 55	-15 to 55	-15 to 55
	Heating	℃	-30 to 30	-30 to 30	-30 to 30	-30 to 30

HP			16	18	20	22
Model			DBVP-HTVC16EG	DBVP-HTVC18EG	DBVP-HTVC20EG	DBVP-HTVC22EG
Power supply		V/Ph/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling [1]	Capacity	kW	45	50	56	61.5
		kBtu/h	153.5	170.6	191.1	209.8
	Power input	kW	11.7	12.8	15.1	17.9
	EER		3.83	3.91	3.71	3.43
Heating [2]	Capacity	kW	50	56	63	69
		kBtu/h	170.6	191.1	215.0	235.4
	Power input	kW	11.7	13.5	15.3	17.6
	COP		4.27	4.15	4.13	3.91
Connected indoor unit	Total capacity		50-130%	50-130%	50-130%	50-130%
	Maximum quantity		26	29	32	35
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		1	1	2	2
Fan	Type		DC	DC	DC	DC
	Quantity		1	1	2	2
	Static pressure	Pa	0-20 (standard)20-120 (customized)			
	Airflow rate	m^3/h	15600	16500	22000	22000
Refrigerant	Type		R410A	R410A	R410A	R410A
	Factory charge	kg	8	8.4	9.3	9.3
Pipe connections [3]	Liquid pipe	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9
	Gas pipe	mm	Φ28.6	Φ28.6	Φ28.6	Φ28.6
Sound pressure level [4]		dB(A)	60	61	62	62
Net dimensions (W×H×D)		mm	940 ×1760 ×825	940 ×1760 ×825	1340 ×1760 ×825	1340 ×1760 ×825
Packed dimensions (W×H×D)		mm	1005 ×1945 ×890	1005 ×1945 ×890	1405 ×1945 ×890	1405 ×1945 ×890
Net weight		kg	213	215	295	295
Gross weight		kg	230	232	315	315
Ambient temp. operation range	Cooling	℃	-15 to 55	-15 to 55	-15 to 55	-15 to 55
	Heating	℃	-30 to 30	-30 to 30	-30 to 30	-30 to 30

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. Diameters given are those of the unit's stop valves.
4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

OUTDOOR UNIT
TECHNICAL SPECIFICATIONS



DBVP-HTVC Series - Cooling & Heating

HP			24	26	28	30
Model			DBVP-HTVC24EG	DBVP-HTVC26EG	DBVP-HTVC28EG	DBVP-HTVC30EG
Power supply		V/Ph/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling [1]	Capacity	kW	67	73	78.5	85
		kBtu/h	228.6	249.1	267.9	290.0
	Power input	kW	19.0	21.0	24.0	27.2
	EER		3.52	3.47	3.27	3.12
Heating [2]	Capacity	kW	75	81.5	87.5	95
		kBtu/h	255.9	278.1	298.6	324.2
	Power input	kW	19.0	21.0	24.2	27.6
	COP		3.95	3.88	3.62	3.44
Connected indoor unit	Total capacity		50-130%	50-130%	50-130%	50-130%
	Maximum quantity		39	42	45	48
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		2	2	2	2
Fan	Type		DC	DC	DC	DC
	Quantity		2	2	2	2
	Static pressure	Pa	0-20 (standard)20-120 (customized)			
	Airflow rate	m^3/h	21500	21500	29000	28000
Refrigerant	Type		R410A	R410A	R410A	R410A
	Factory charge	kg	12	12	19	21
Pipe connections [3]	Liquid pipe	mm	Φ15.9	Φ15.9	Φ22.2	Φ22.2
	Gas pipe	mm	Φ28.6	Φ28.6	Φ31.8	Φ34.9
Sound pressure level [4]		dB(A)	62	62	63	64
Net dimensions (W×H×D)		mm	1340 ×1760 ×825	1340 ×1760 ×825	1880 ×1760 ×825	1880 ×1760 ×825
Packed dimensions (W×H×D)		mm	1405 ×1945 ×890	1405 ×1945 ×890	1945 ×1945 ×890	1945 ×1945 ×890
Net weight		kg	315	315	373	405
Gross weight		kg	335	335	403	435
Ambient temp. operation range	Cooling	°C	-15 to 55	-15 to 55	-15 to 55	-15 to 55
	Heating	°C	-30 to 30	-30 to 30	-30 to 30	-30 to 30

HP			32	34	36
Model			DBVP-HTVC32EG	DBVP-HTVC34EG	DBVP-HTVC36EG
Power supply		V/Ph/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling [1]	Capacity	kW	90	95.2	101
		kBtu/h	307.1	324.2	344.6
	Power input	kW	30.2	32.5	35.4
	EER		2.98	2.93	2.85
Heating [2]	Capacity	kW	100	106	112
		kBtu/h	341.2	361.7	382.2
	Power input	kW	30.2	32.2	34.7
	COP		3.31	3.29	3.23
Connected indoor unit	Total capacity		50-130%	50-130%	50-130%
	Maximum quantity		52	55	58
Compressor	Type		DC inverter	DC inverter	DC inverter
	Quantity		2	2	2
Fan	Type		DC	DC	DC
	Quantity		2	2	2
	Static pressure	Pa	0-20 (standard)20-120 (customized)		
	Airflow rate	m^3/h	28000	29000	29000
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	21	21	21
Pipe connections [3]	Liquid pipe	mm	Φ22.2	Φ22.2	Φ22.2
	Gas pipe	mm	Φ34.9	Φ34.9	Φ34.9
Sound pressure level [4]		dB(A)	64	66	66
Net dimensions (W×H×D)		mm	1880 ×1760 ×825	1880 ×1760 ×825	1880 ×1760 ×825
Packed dimensions (W×H×D)		mm	1945 ×1945 ×890	1945 ×1945 ×890	1945 ×1945 ×890
Net weight		kg	405	406	406
Gross weight		kg	435	436	436
Ambient temp. operation range	Cooling	°C	-15 to 55	-15 to 55	-15 to 55
	Heating	°C	-30 to 30	-30 to 30	-30 to 30

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. Diameters given are those of the unit's stop valves.
4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.



OUTDOOR UNIT
TECHNICAL SPECIFICATIONS

DBVP-HTVC Series - Cooling & Heating

HP			38	40	42	44
Model (Combination unit)			DBVP-HTVC38EG	DBVP-HTVC40EG	DBVP-HTVC42EG	DBVP-HTVC44EG
Combination type			16HP+22HP	16HP+24HP	16HP+26HP	16HP+28HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling [1]	Capacity	kW	106.5	112.0	118.0	123.5
		kBtu/h	363.3	382.1	402.6	421.4
	Power input	kW	29.6	30.7	32.7	35.7
	EER		3.60	3.65	3.61	3.46
Heating [2]	Capacity	kW	119.0	125.0	131.5	137.5
		kBtu/h	406.0	426.5	448.7	469.2
	Power input	kW	29.3	30.7	32.7	35.9
	COP		4.06	4.07	4.02	3.83
Connected indoor unit	Total capacity		50-130%	50-130%	50-130%	50-130%
	Maximum quantity		64	64	64	64
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		3	3	3	3
Fan	Type		DC	DC	DC	DC
	Quantity		3	3	3	3
	Static pressure	Pa	0-20 (standard)20-120 (customized)			
	Airflow rate	m^3/h	37600	37100	37100	44600
Refrigerant	Type		R410A	R410A	R410A	R410A
	Factory charge	kg	8+9.3	8+12	8+12	8+19
Pipe connections [3]	Liquid pipe	mm	Φ19.1	Φ19.1	Φ19.1	Φ19.1
	Gas pipe	mm	Φ38.1	Φ38.1	Φ38.1	Φ38.1
Sound pressure level [4]		dB(A)	64	64	64	65
Net dimensions (W×H×D)		mm	(940 ×1760 ×825)+ (1340 ×1760 ×825)	(940 ×1760 ×825)+ (1340 ×1760 ×825)	(940 ×1760 ×825)+ (1340 ×1760 ×825)	(940 ×1760 ×825)+ (1880 ×1760 ×825)
Packed dimensions (W×H×D)		mm	(1005 ×1945 ×890)+ (1405 ×1945 ×890)	(1005 ×1945 ×890)+ (1405 ×1945 ×890)	(1005 ×1945 ×890)+ (1405 ×1945 ×890)	(1005 ×1945 ×890)+ (1945 ×1945 ×890)
Net weight		kg	213+295	213+315	213+315	213+373
Gross weight		kg	230+315	230+335	230+335	230+403
Ambient temp. operation range	Cooling	℃	-15 to 55	-15 to 55	-15 to 55	-15 to 55
	Heating	℃	-30 to 30	-30 to 30	-30 to 30	-30 to 30

HP			46	48	50	52
Model (Combination unit)			DBVP-HTVC46EG	DBVP-HTVC48EG	DBVP-HTVC50EG	DBVP-HTVC52EG
Combination type			22HP+24HP	22HP+26HP	24HP+26HP	26HP+26HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling [1]	Capacity	kW	128.5	134.5	140.0	146.0
		kBtu/h	438.4	458.9	477.7	498.2
	Power input	kW	36.9	38.9	40.0	42.0
	EER		3.48	3.46	3.50	3.48
Heating [2]	Capacity	kW	144.0	150.5	156.5	163.0
		kBtu/h	491.3	513.5	534.0	556.2
	Power input	kW	36.6	38.6	40.0	42.0
	COP		3.93	3.90	3.91	3.88
Connected indoor unit	Total capacity		50-130%	50-130%	50-130%	50-130%
	Maximum quantity		64	64	64	64
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		4	4	4	4
Fan	Type		DC	DC	DC	DC
	Quantity		4	4	4	4
	Static pressure	Pa	0-20 (standard)20-120 (customized)			
	Airflow rate	m^3/h	43500	43500	43000	43000
Refrigerant	Type		R410A	R410A	R410A	R410A
	Factory charge	kg	9.3+12	9.3+12	12×2	12×2
Pipe connections [3]	Liquid pipe	mm	Φ19.1	Φ19.1	Φ19.1	Φ19.1
	Gas pipe	mm	Φ38.1	Φ38.1	Φ38.1	Φ38.1
Sound pressure level [4]		dB(A)	65	65	65	65
Net dimensions (W×H×D)		mm	(1340 ×1760 ×825) ×2	(1340 ×1760 ×825) ×2	(1340 ×1760 ×825) ×2	(1340 ×1760 ×825) ×2
Packed dimensions (W×H×D)		mm	(1405 ×1945 ×890) ×2	(1405 ×1945 ×890) ×2	(1405 ×1945 ×890) ×2	(1405 ×1945 ×890) ×2
Net weight		kg	295+315	295+315	315×2	315×2
Gross weight		kg	315+335	315+335	335 ×2	335 ×2
Ambient temp. operation range	Cooling	℃	-15 to 55	-15 to 55	-15 to 55	-15 to 55
	Heating	℃	-30 to 30	-30 to 30	-30 to 30	-30 to 30

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. Diameters given are those of the unit's stop valves.
4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

OUTDOOR UNIT
TECHNICAL SPECIFICATIONS



DBVP-HTVC Series - Cooling & Heating

HP			54	56	58	60
Model (Combination unit)			DBVP-HTVC54EG	DBVP-HTVC56EG	DBVP-HTVC58EG	DBVP-HTVC60EG
Combination type			18HP+36HP	20HP+36HP	22HP+36HP	24HP+36HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling [1]	Capacity	kW	151.0	157.0	162.5	168.0
		kBtu/h	515.2	535.7	554.4	573.2
	Power input	kW	48.2	50.5	53.3	54.4
	EER		3.13	3.11	3.05	3.09
Heating [2]	Capacity	kW	168.0	175.0	181.0	187.0
		kBtu/h	573.3	597.2	617.6	638.1
	Power input	kW	48.2	50.0	52.3	53.7
	COP		3.49	3.50	3.46	3.48
Connected indoor unit	Total capacity		50-130%	50-130%	50-130%	50-130%
	Maximum quantity		64	64	64	64
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		3	4	4	4
Fan	Type		DC	DC	DC	DC
	Quantity		3	4	4	4
	Static pressure	Pa	0-20 (standard)20-120 (customized)			
	Airflow rate	m^3/h	45500	51000	51000	50500
Refrigerant	Type		R410A	R410A	R410A	R410A
	Factory charge	kg	8.4+21	9.3+21	9.3+21	12+21
Pipe connections [3]	Liquid pipe	mm	Φ19.1	Φ19.1	Φ19.1	Φ19.1
	Gas pipe	mm	Φ38.1	Φ41.3	Φ41.3	Φ41.3
Sound pressure level [4]		dB(A)	67	67	67	67
Net dimensions (W×H×D)		mm	(940 ×1760 ×825)+ (1880 ×1760 ×825)	(1340 ×1760 ×825)+ (1880 ×1760 ×825)	(1340 ×1760 ×825)+ (1880 ×1760 ×825)	(1340 ×1760 ×825)+ (1880 ×1760 ×825)
Packed dimensions (W×H×D)		mm	(1005 ×1945 ×890)+ (1945 ×1945 ×890)	(1405 ×1945 ×890)+ (1945 ×1945 ×890)	(1405 ×1945 ×890)+ (1945 ×1945 ×890)	(1405 ×1945 ×890)+ (1945 ×1945 ×890)
Net weight		kg	215+406	295+406	295+406	315+406
Gross weight		kg	232+436	315+436	315+436	335+436
Ambient temp. operation range	Cooling	℃	-15 to 55	-15 to 55	-15 to 55	-15 to 55
	Heating	℃	-30 to 30	-30 to 30	-30 to 30	-30 to 30

HP			62	64	66	68
Model (Combination unit)			DBVP-HTVC62EG	DBVP-HTVC64EG	DBVP-HTVC66EG	DBVP-HTVC68EG
Combination type			26HP+36HP	28HP+36HP	30HP+36HP	32HP+36HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling [1]	Capacity	kW	174.0	179.5	186.0	191.0
		kBtu/h	593.7	612.5	634.6	651.7
	Power input	kW	56.4	59.4	62.6	65.6
	EER		3.09	3.02	2.97	2.91
Heating [2]	Capacity	kW	193.5	199.5	207.0	212.0
		kBtu/h	660.3	680.8	706.4	723.4
	Power input	kW	55.7	58.9	62.3	64.9
	COP		3.47	3.39	3.32	3.27
Connected indoor unit	Total capacity		50-130%	50-130%	50-130%	50-130%
	Maximum quantity		64	64	64	64
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		4	4	4	4
Fan	Type		DC	DC	DC	DC
	Quantity		4	4	4	4
	Static pressure	Pa	0-20 (standard)20-120 (customized)			
	Airflow rate	m^3/h	50500	58000	57000	57000
Refrigerant	Type		R410A	R410A	R410A	R410A
	Factory charge	kg	12+21	19+21	21×2	21×2
Pipe connections [3]	Liquid pipe	mm	Φ19.1	Φ19.1	Φ19.1	Φ22.2
	Gas pipe	mm	Φ41.3	Φ41.3	Φ41.3	Φ44.5
Sound pressure level [4]		dB(A)	67	68	68	68
Net dimensions (W×H×D)		mm	(1340 ×1760 ×825)+ (1880 ×1760 ×825)	(1880 ×1760 ×825) ×2	(1880 ×1760 ×825) ×2	(1880 ×1760 ×825) ×2
Packed dimensions (W×H×D)		mm	(1405 ×1945 ×890)+ (1945 ×1945 ×890)	(1945 ×1945 ×890) ×2	(1945 ×1945 ×890) ×2	(1945 ×1945 ×890) ×2
Net weight		kg	315+406	373+406	405+406	405+406
Gross weight		kg	335+436	403+436	435+436	435+436
Ambient temp. operation range	Cooling	℃	-15 to 55	-15 to 55	-15 to 55	-15 to 55
	Heating	℃	-30 to 30	-30 to 30	-30 to 30	-30 to 30

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. Diameters given are those of the unit's stop valves.
4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.



OUTDOOR UNIT
TECHNICAL SPECIFICATIONS

DBVP-HTVC Series - Cooling & Heating

HP			70	72	74	76
Model (Combination unit)			DBVP-HTVC70EG	DBVP-HTVC72EG	DBVP-HTVC74EG	DBVP-HTVC76EG
Combination type			34HP+36HP	36HP+36HP	14HP+24HP+36HP	14HP+26HP+36HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling [1]	Capacity	kW	196.2	202.0	208.0	214.0
		kBtu/h	668.8	689.2	709.7	730.2
	Power input	kW	67.9	70.8	64.3	66.3
	EER		2.89	2.85	3.23	3.23
Heating [2]	Capacity	kW	218.0	224.0	232.0	238.5
		kBtu/h	743.9	764.4	791.6	813.8
	Power input	kW	66.9	69.4	63.9	65.9
	COP		3.26	3.23	3.63	3.62
Connected indoor unit	Total capacity		50-130%	50-130%	50-130%	50-130%
	Maximum quantity		64	64	64	64
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		4	4	5	5
Fan	Type		DC	DC	DC	DC
	Quantity		4	4	5	5
	Static pressure	Pa	0-20 (standard)20-120 (customized)			
	Airflow rate	m^3/h	58000	58000	66100	66100
Refrigerant	Type		R410A	R410A	R410A	R410A
	Factory charge	kg	21×2	21×2	8+12+21	8+12+21
Pipe connections [3]	Liquid pipe	mm	Φ22.2	Φ22.2	Φ22.2	Φ22.2
	Gas pipe	mm	Φ44.5	Φ44.5	Φ44.5	Φ44.5
Sound pressure level [4]		dB(A)	69	69	68	68
Net dimensions (W×H×D)		mm	(1880 ×1760 ×825) ×2	(1880 ×1760 ×825) ×2	(940 ×1760 ×825)+ (1340 ×1760 ×825)+ (1880 ×1760 ×825)	(940 ×1760 ×825)+ (1340 ×1760 ×825)+ (1880 ×1760 ×825)
Packed dimensions (W×H×D)		mm	(1945 ×1945 ×890) ×2	(1945 ×1945 ×890) ×2	(1005 ×1945 ×890)+ (1405 ×1945 ×890)+ (1945 ×1945 ×890)	(1005 ×1945 ×890)+ (1405 ×1945 ×890)+ (1945 ×1945 ×890)
Net weight		kg	406 ×2	406 ×2	213+315+406	213+315+406
Gross weight		kg	436 ×2	436 ×2	230+335+436	230+335+436
Ambient temp. operation range	Cooling	℃	-15 to 55	-15 to 55	-15 to 55	-15 to 55
	Heating	℃	-30 to 30	-30 to 30	-30 to 30	-30 to 30

HP			78	80	82	84
Model (Combination unit)			DBVP-HTVC78EG	DBVP-HTVC80EG	DBVP-HTVC82EG	DBVP-HTVC84EG
Combination type			16HP+26HP+36HP	16HP+28HP+36HP	20HP+26HP+36HP	22HP+26HP+36HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling [1]	Capacity	kW	219.0	224.5	230.0	235.5
		kBtu/h	747.2	766.0	784.8	803.5
	Power input	kW	68.1	71.1	71.5	74.3
	EER		3.22	3.16	3.22	3.17
Heating [2]	Capacity	kW	243.5	249.5	256.5	262.5
		kBtu/h	830.9	851.4	875.3	895.7
	Power input	kW	67.4	70.6	71.0	73.3
	COP		3.61	3.53	3.61	3.58
Connected indoor unit	Total capacity		50-130%	50-130%	50-130%	50-130%
	Maximum quantity		64	64	64	64
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		5	5	6	6
Fan	Type		DC	DC	DC	DC
	Quantity		5	5	6	6
	Static pressure	Pa	0-20 (standard)20-120 (customized)			
	Airflow rate	m^3/h	66100	73600	72500	72500
Refrigerant	Type		R410A	R410A	R410A	R410A
	Factory charge	kg	8+12+21	8+19+21	9.3+12+21	9.3+12+21
Pipe connections [3]	Liquid pipe	mm	Φ22.2	Φ22.2	Φ22.2	Φ25.4
	Gas pipe	mm	Φ44.5	Φ44.5	Φ44.5	Φ50.8
Sound pressure level [4]		dB(A)	68	68	69	69
Net dimensions (W×H×D)		mm	(940 ×1760 ×825)+ (1340 ×1760 ×825)+ (1880 ×1760 ×825)	(940 ×1760 ×825)+ (1880 ×1760 ×825) ×2	(1340 ×1760 ×825) ×2+ (1880 ×1760 ×825)	(1340 ×1760 ×825) ×2+ (1880 ×1760 ×825)
Packed dimensions (W×H×D)		mm	(1005 ×1945 ×890)+ (1405 ×1945 ×890)+ (1945 ×1945 ×890)	(1005 ×1945 ×890)+ (1945 ×1945 ×890) ×2	(1405 ×1945 ×890) ×2+ (1945 ×1945 ×890)	(1405 ×1945 ×890) ×2+ (1945 ×1945 ×890)
Net weight		kg	213+315+406	213+373+406	295+315+406	295+315+406
Gross weight		kg	230+335+436	230+403+436	315+335+436	315+335+436
Ambient temp. operation range	Cooling	℃	-15 to 55	-15 to 55	-15 to 55	-15 to 55
	Heating	℃	-30 to 30	-30 to 30	-30 to 30	-30 to 30

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. Diameters given are those of the unit's stop valves.
4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

OUTDOOR UNIT
TECHNICAL SPECIFICATIONS



DBVP-HTVC Series - Cooling & Heating

HP			86	88	90	92
Model (Combination unit)			DBVP-HTVC86EG	DBVP-HTVC88EG	DBVP-HTVC90EG	DBVP-HTVC92EG
Combination type			24HP+26HP+36HP	26HP+26HP+36HP	18HP+36HP+36HP	20HP+36HP+36HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling [1]	Capacity	kW	241.0	247.0	252.0	258.0
		kBtu/h	822.3	842.8	859.8	880.3
	Power input	kW	75.4	77.4	83.6	85.9
	EER		3.20	3.19	3.01	3.00
Heating [2]	Capacity	kW	268.5	275.0	280.0	287.0
		kBtu/h	916.2	938.4	955.5	979.4
	Power input	kW	74.7	76.7	82.9	84.7
	COP		3.59	3.59	3.38	3.39
Connected indoor unit	Total capacity		50-130%	50-130%	50-130%	50-130%
	Maximum quantity		64	64	64	64
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		6	6	5	6
Fan	Type		DC	DC	DC	DC
	Quantity		6	6	5	6
	Static pressure	Pa	0-20 (standard)20-120 (customized)			
	Airflow rate	m^3/h	72000	72000	74500	80000
Refrigerant	Type		R410A	R410A	R410A	R410A
	Factory charge	kg	12×2+21	12×2+21	8.4+21 ×2	9.3+21 ×2
Pipe connections [3]	Liquid pipe	mm	Φ25.4	Φ25.4	Φ25.4	Φ25.4
	Gas pipe	mm	Φ50.8	Φ50.8	Φ50.8	Φ50.8
Sound pressure level [4]		dB(A)	69	69	70	70
Net dimensions (W×H×D)		mm	(1340 ×1760 ×825) ×2+ (1880 ×1760 ×825)	(1340 ×1760 ×825) ×2+ (1880 ×1760 ×825)	(940 ×1760 ×825)+ (1880 ×1760 ×825) ×2	(1340 ×1760 ×825)+ (1880 ×1760 ×825) ×2
Packed dimensions (W×H×D)		mm	(1405 ×1945 ×890) ×2+ (1945 ×1945 ×890)	(1405 ×1945 ×890) ×2+ (1945 ×1945 ×890)	(1005 ×1945 ×890)+ (1945 ×1945 ×890) ×2	(1405 ×1945 ×890)+ (1945 ×1945 ×890) ×2
Net weight		kg	315×2+406	315×2+406	215+406 ×2	295+406 ×2
Gross weight		kg	335 ×2+436	335 ×2+436	232+436 ×2	315+436 ×2
Ambient temp. operation range	Cooling	℃	-15 to 55	-15 to 55	-15 to 55	-15 to 55
	Heating	℃	-30 to 30	-30 to 30	-30 to 30	-30 to 30

HP			94	96	98	100
Model (Combination unit)			DBVP-HTVC94EG	DBVP-HTVC96EG	DBVP-HTVC98EG	DBVP-HTVC100EG
Combination type			22HP+36HP+36HP	24HP+36HP+36HP	26HP+36HP+36HP	28HP+36HP+36HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling [1]	Capacity	kW	263.5	269.0	275.0	280.5
		kBtu/h	899.0	917.8	938.3	957.1
	Power input	kW	88.7	89.8	91.8	94.8
	EER		2.97	3.00	3.00	2.96
Heating [2]	Capacity	kW	293.0	299.0	305.5	311.5
		kBtu/h	999.8	1020.3	1042.5	1063.0
	Power input	kW	87.0	88.4	90.4	93.6
	COP		3.37	3.38	3.38	3.33
Connected indoor unit	Total capacity		50-130%	50-130%	50-130%	50-130%
	Maximum quantity		64	64	64	64
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		6	6	6	6
Fan	Type		DC	DC	DC	DC
	Quantity		6	6	6	6
	Static pressure	Pa	0-20 (standard)20-120 (customized)			
	Airflow rate	m^3/h	80000	79500	79500	87000
Refrigerant	Type		R410A	R410A	R410A	R410A
	Factory charge	kg	9.3+21 ×2	12+21×2	12+21×2	19+21×2
Pipe connections [3]	Liquid pipe	mm	Φ25.4	Φ25.4	Φ25.4	Φ25.4
	Gas pipe	mm	Φ50.8	Φ50.8	Φ50.8	Φ50.8
Sound pressure level [4]		dB(A)	70	70	70	70
Net dimensions (W×H×D)		mm	(1340 ×1760 ×825)+ (1880 ×1760 ×825) ×2	(1340 ×1760 ×825)+ (1880 ×1760 ×825) ×2	(1340 ×1760 ×825)+ (1880 ×1760 ×825) ×2	(1880 ×1760 ×825) ×3
Packed dimensions (W×H×D)		mm	(1405 ×1945 ×890)+ (1945 ×1945 ×890) ×2	(1405 ×1945 ×890)+ (1945 ×1945 ×890) ×2	(1405 ×1945 ×890)+ (1945 ×1945 ×890) ×2	(1945 ×1945 ×890) ×3
Net weight		kg	295+406 ×2	315+406 ×2	315+406 ×2	373+406 ×2
Gross weight		kg	315+436 ×2	335+436 ×2	335+436 ×2	403+436 ×2
Ambient temp. operation range	Cooling	℃	-15 to 55	-15 to 55	-15 to 55	-15 to 55
	Heating	℃	-30 to 30	-30 to 30	-30 to 30	-30 to 30

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. Diameters given are those of the unit's stop valves.
4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.



DBVP-HTVC Series - Cooling & Heating

HP			102	104
Model (Combination unit)			DBVP-HTVC102EG	DBVP-HTVC104EG
Combination type			32HP+34HP+36HP	32HP+36HP+36HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)
Cooling [1]	Capacity	kW	286.2	292.0
		kBtu/h	975.9	996.3
	Power input	kW	98.1	101.0
	EER		2.92	2.89
Heating [2]	Capacity	kW	318.0	324.0
		kBtu/h	1085.1	1105.6
	Power input	kW	97.1	99.6
	COP		3.27	3.25
Connected indoor unit	Total capacity		50-130%	50-130%
	Maximum quantity		64	64
Compressor	Type		DC inverter	DC inverter
	Quantity		6	6
Fan	Type		DC	DC
	Quantity		6	6
	Static pressure	Pa	0-20 (standard)20-120 (customized)	
	Airflow rate	m^3/h	86000	86000
Refrigerant	Type		R410A	R410A
	Factory charge	kg	21×3	21×3
Pipe connections [3]	Liquid pipe	mm	Φ25.4	Φ25.4
	Gas pipe	mm	Φ50.8	Φ50.8
Sound pressure level [4]		dB(A)	70	70
Net dimensions (W×H×D)		mm	(1880 ×1760 ×825) ×3	(1880 ×1760 ×825) ×3
Packed dimensions (W×H×D)		mm	(1945 ×1945 ×890) ×3	(1945 ×1945 ×890) ×3
Net weight		kg	405+406 ×2	405+406 ×2
Gross weight		kg	435+436 ×2	435+436 ×2
Ambient temp. Operation range	Cooling	°C	-15 to 55	-15 to 55
	Heating	°C	-30 to 30	-30 to 30

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. Diameters given are those of the unit's stop valves.
4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

OUTDOOR UNIT
TECHNICAL SPECIFICATIONS



DBVP-HTVC Series - Cooling & Heating

HP				106	108
Model (Combination unit)				DBVP-HTVC106EG	DBVP-HTVC108EG
Combination type				34HP+36HP+36HP	36HP+36HP+36HP
Power supply			V/N/Hz	380-415/3/50(60)	380-415/3/50(60)
Cooling [1]	Capacity		kW	297.2	303.0
			kBtu/h	1013.4	1033.8
	Power input		kW	103.3	106.2
	EER			2.88	2.85
Heating [2]	Capacity		kW	330.0	336.0
			kBtu/h	1126.1	1146.6
	Power input		kW	101.6	104.1
	COP			3.25	3.23
Connected indoor unit	Total capacity			50-130%	50-130%
	Maximum quantity			64	64
Compressor	Type			DC inverter	DC inverter
	Quantity			6	6
Fan	Type			DC	DC
	Quantity			6	6
	Static pressure		Pa	0-20 (standard)20-120 (customized)	
	Airflow rate		m^3/h	87000	87000
Refrigerant	Type			R410A	R410A
	Factory charge		kg	21×3	21×3
Pipe connections [3]	Liquid pipe		mm	Φ25.4	Φ25.4
	Gas pipe		mm	Φ50.8	Φ50.8
Sound pressure level [4]			dB(A)	71	71
Net dimensions (W×H×D)			mm	(1880 ×1760 ×825) ×3	(1880 ×1760 ×825) ×3
Packed dimensions (W×H×D)			mm	(1945 ×1945 ×890) ×3	(1945 ×1945 ×890) ×3
Net weight			kg	406 ×3	406 ×3
Gross weight			kg	436 ×3	436 ×3
Ambient temp. Operation range	Cooling		℃	-15 to 55	-15 to 55
	Heating		℃	-30 to 30	-30 to 30

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. Diameters given are those of the unit's stop valves.
4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.



OUTDOOR UNIT
TECHNICAL SPECIFICATIONS

DBVP-CTVC Series - Cooling Only

HP			8	10	12
Model			DBVP-CTVC8EG	DBVP-CTVC10EG	DBVP-CTVC12EG
Power supply		V/N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Cooling[1]	Capacity	kW	22.4	28	33.5
		kBtu/h	76.4	95.5	114.2
	Power input	kW	4.8	6.8	8.8
	EER		4.65	4.14	3.81
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		13	16	19
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		1	1	1
Fan	Type		DC	DC	DC
	Quantity		1	1	1
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	12600	12600	13500
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	7.4	7.4	7.4
Pipe connections[2]	Liquid pipe	mm	Φ12.7	Φ12.7	Φ12.7
	Gas pipe	mm	Φ25.4	Φ25.4	Φ25.4
Sound pressure level[3]		dB(A)	57	58	60
Net dimensions (W×H×D)		mm	940×1760×825	940×1760×825	940×1760×825
Packed dimensions (W×H×D)		mm	1010×1945×890	1010×1945×890	1010×1945×890
Net weight		kg	185	185	185
Gross weight		kg	200	200	200
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

HP		:	14	16	18
Model			DBVP-CTVC14EG	DBVP-CTVC16EG	DBVP-CTVC18EG
Power supply		V/N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Cooling[1]	Capacity	kW	40	45	50
		kBtu/h	136.4	153.5	170.5
	Power input	kW	9.7	12.3	13.4
	EER		4.12	3.67	3.74
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		23	26	29
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		1	1	1
Fan	Type		DC	DC	DC
	Quantity		1	1	1
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	15600	15600	16500
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	8.4	8.4	10
Pipe connections[2]	Liquid pipe	mm	Φ15.9	Φ15.9	Φ15.9
	Gas pipe	mm	Φ28.6	Φ28.6	Φ28.6
Sound pressure level[3]		dB(A)	60	61	62
Net dimensions (W×H×D)		mm	940×1760×825	940×1760×825	940×1760×825
Packed dimensions (W×H×D)		mm	1010×1945×890	1010×1945×890	1010×1945×890
Net weight		kg	200	200	212
Gross weight		kg	215	215	232
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

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

OUTDOOR UNIT
TECHNICAL SPECIFICATIONS



DBVP-CTVC Series - Cooling Only

HP			20	22	24
Model			DBVP-CTVC20EG	DBVP-CTVC22EG	DBVP-CTVC24EG
Power supply		V/N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Cooling[1]	Capacity	kW	56	61.5	67
		kBtu/h	191.0	209.7	228.5
	Power input	kW	17.4	17.3	19.0
	EER		3.21	3.55	3.52
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		33	36	39
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		1	1	1
Fan	Type		DC	DC	DC
	Quantity		1	2	2
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	16500	21500	21500
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	10	12.8	12.8
Pipe connections[2]	Liquid pipe	mm	Φ15.9	Φ19.1	Φ19.1
	Gas pipe	mm	Φ28.6	Φ31.8	Φ31.8
Sound pressure level[3]		dB(A)	63	63	64
Net dimensions (W×H×D)		mm	940×1760×825	1340×1760×825	1340×1760×825
Packed dimensions (W×H×D)		mm	1010×1945×890	1410×1945×890	1410×1945×890
Net weight		kg	225	260	260
Gross weight		kg	245	285	285
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

HP			26	28	30
Model			DBVP-CTVC26EG	DBVP-CTVC28EG	DBVP-CTVC30EG
Power supply		V/N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Cooling[1]	Capacity	kW	73	78.5	85
		kBtu/h	248.9	267.7	289.9
	Power input	kW	19.4	22.3	26.4
	EER		3.76	3.52	3.22
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		43	46	50
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		2	2	2
Fan	Type		DC	DC	DC
	Quantity		2	2	2
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	22000	22000	22000
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	15.4	15.4	15.4
Pipe connections[2]	Liquid pipe	mm	Φ22.2	Φ22.2	Φ22.2
	Gas pipe	mm	Φ31.8	Φ31.8	Φ31.8
Sound pressure level[3]		dB(A)	64	64	64
Net dimensions (W×H×D)		mm	1340×1760×825	1340×1760×825	1340×1760×825
Packed dimensions (W×H×D)		mm	1410×1945×890	1410×1945×890	1410×1945×890
Net weight		kg	325	325	325
Gross weight		kg	350	350	350
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

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



OUTDOOR UNIT
TECHNICAL SPECIFICATIONS

DBVP-CTVC Series - Cooling Only

HP			32	34	36
Model (Combination Unit)			DBVP-CTVC32EG	DBVP-CTVC34EG	DBVP-CTVC36EG
Combination type			-	14HP+20HP	16HP+20HP
Power supply		V/N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Cooling[1]	Capacity	kW	90.0	96.0	101.0
		kBtu/h	306.9	327.4	344.5
	Power input	kW	30.4	27.1	29.7
	EER		2.96	3.54	3.40
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		53	56	59
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		2	2	2
Fan	Type		DC	DC	DC
	Quantity		2	2	2
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	22000	32100	32100
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	15.4	8.4+10	8.4+10
Pipe connections[2]	Liquid pipe	mm	Φ22.2	Φ19.1	Φ19.1
	Gas pipe	mm	Φ31.8	Φ31.8	Φ38.1
Sound pressure level[3]		dB(A)	64	65	65
Net dimensions (W×H×D)		mm	1340×1760×825	(940×1760×825)×2	(940×1760×825)×2
Packed dimensions (W×H×D)		mm	1410×1945×890	(1010×1945×890)×2	(1010×1945×890)×2
Net weight		kg	325	200+225	200+225
Gross weight		kg	350	215+245	215+245
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

HP			38	40	42
Model (Combination Unit)			DBVP-CTVC38EG	DBVP-CTVC40EG	DBVP-CTVC42EG
Combination type			18HP+20HP	16HP+24HP	18HP+24HP
Power supply		V/N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Cooling[1]	Capacity	kW	106.0	112.0	117.0
		kBtu/h	361.5	382.0	399.0
	Power input	kW	30.8	31.3	32.4
	EER		3.44	3.58	3.61
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		62	64	64
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		2	2	2
Fan	Type		DC	DC	DC
	Quantity		2	3	3
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	33000	37100	38000
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	10×2	8.4+12.8	10+12.8
Pipe connections[2]	Liquid pipe	mm	Φ19.1	Φ19.1	Φ19.1
	Gas pipe	mm	Φ38.1	Φ38.1	Φ38.1
Sound pressure level[3]		dB(A)	66	66	66
Net dimensions (W×H×D)		mm	(940×1760×825)×2	(940×1760×825)+(1340×1760×825)	(940×1760×825)+(1340×1760×825)
Packed dimensions (W×H×D)		mm	(1010×1945×890)×2	(1010×1945×890)+(1410×1945×890)	(1010×1945×890)+(1410×1945×890)
Net weight		kg	212+225	200+260	212+260
Gross weight		kg	232+245	215+285	232+285
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

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. Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of less than 90m. For systems with total equivalent liquid piping lengths of 90m or longer, please refer to the Engineering Data Book for connection piping diameters.
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.

OUTDOOR UNIT
TECHNICAL SPECIFICATIONS



DBVP-CTVC Series - Cooling Only

HP			44	46	48
Model (Combination Unit)			DBVP-CTVC44EG	DBVP-CTVC46EG	DBVP-CTVC48EG
Combination type			20HP+24HP	16HP+30HP	18HP+30HP
Power supply		V/N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Cooling[1]	Capacity	kW	123.0	130.0	135.0
		kBtu/h	419.5	443.4	460.4
	Power input	kW	36.4	38.7	39.8
	EER		3.38	3.36	3.39
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		64	64	64
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		2	3	3
Fan	Type		DC	DC	DC
	Quantity		3	3	3
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	38000	37600	38500
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	10+12.8	8.4+15.4	10+15.4
Pipe connections[2]	Liquid pipe	mm	Φ19.1	Φ19.1	Φ19.1
	Gas pipe	mm	Φ38.1	Φ38.1	Φ38.1
Sound pressure level[3]		dB(A)	67	66	66
Net dimensions (W×H×D)		mm	(940×1760×825)+(1340×1760×825)	(940×1760×825)+(1340×1760×825)	(940×1760×825)+(1340×1760×825)
Packed dimensions (W×H×D)		mm	(1010×1945×890)+(1410×1945×890)	(1010×1945×890)+(1410×1945×890)	(1010×1945×890)+(1410×1945×890)
Net weight		kg	225+260	200+325	212+325
Gross weight		kg	245+285	215+350	232+350
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

HP			50	52	54
Model (Combination Unit)			DBVP-CTVC50EG	DBVP-CTVC52EG	DBVP-CTVC54EG
Combination type			20HP+30HP	22HP+30HP	24HP+30HP
Power supply		V/N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Cooling[1]	Capacity	kW	141.0	146.5	152.0
		kBtu/h	480.9	499.6	518.4
	Power input	kW	43.8	43.7	45.4
	EER		3.22	3.35	3.35
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		64	64	64
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		3	3	3
Fan	Type		DC	DC	DC
	Quantity		3	4	4
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	38500	43500	43500
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	10+15.4	12.8+15.4	12.8+15.4
Pipe connections[2]	Liquid pipe	mm	Φ19.1	Φ19.1	Φ19.1
	Gas pipe	mm	Φ38.1	Φ38.1	Φ38.1
Sound pressure level[3]		dB(A)	67	67	67
Net dimensions (W×H×D)		mm	(940×1760×825)+(1340×1760×825)	(1340×1760×825)×2	(1340×1760×825)×2
Packed dimensions (W×H×D)		mm	(1010×1945×890)+(1410×1945×890)	(1410×1945×890)×2	(1410×1945×890)×2
Net weight		kg	225+325	260+325	260+325
Gross weight		kg	245+350	285+350	285+350
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

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. Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of less than 90m. For systems with total equivalent liquid piping lengths of 90m or longer, please refer to the Engineering Data Book for connection piping diameters.
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.



OUTDOOR UNIT
TECHNICAL SPECIFICATIONS

DBVP-CTVC Series - Cooling Only

HP			56	58	60
Model (Combination Unit)			DBVP-CTVC56EG	DBVP-CTVC58EG	DBVP-CTVC60EG
Combination type			26HP+30 HP	28HP+30 HP	30 HP+30 HP
Power supply		V/N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Cooling[1]	Capacity	kW	158.0	163.5	170.0
		kBtu/h	538.8	557.6	579.8
	Power input	kW	45.8	48.7	52.8
	EER		3.45	3.36	3.22
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		64	64	64
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		4	4	4
Fan	Type		DC	DC	DC
	Quantity		4	4	4
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	44000	44000	44000
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	15.4×2	15.4×2	15.4×2
Pipe connections[2]	Liquid pipe	mm	Φ19.1	Φ19.1	Φ19.1
	Gas pipe	mm	Φ41.3	Φ41.3	Φ41.3
Sound pressure level[3]		dB(A)	67	67	67
Net dimensions (W×H×D)		mm	(1340×1760×825)×2	(1340×1760×825)×2	(1340×1760×825)×2
Packed dimensions (W×H×D)		mm	(1410×1945×890)×2	(1410×1945×890)×2	(1410×1945×890)×2
Net weight		kg	325×2	325×2	325×2
Gross weight		kg	350×2	350×2	350×2
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

HP			62	64	66
Model (Combination Unit)			DBVP-CTVC62EG	DBVP-CTVC64EG	DBVP-CTVC66EG
Combination type			16HP+16HP+30 HP	14HP+20 HP+30 HP	16HP+20 HP+30 HP
Power supply		V/N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Cooling[1]	Capacity	kW	175.0	181.0	186.0
		kBtu/h	596.9	617.3	634.4
	Power input	kW	51.0	53.5	56.1
	EER		3.43	3.38	3.32
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		64	64	64
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		4	4	4
Fan	Type		DC	DC	DC
	Quantity		4	4	4
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	53200	54100	54100
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	8.4×2+15.4	8.4+10+15.4	8.4+10+15.4
Pipe connections[2]	Liquid pipe	mm	Φ19.1	Φ19.1	Φ19.1
	Gas pipe	mm	Φ41.3	Φ41.3	Φ41.3
Sound pressure level[3]		dB(A)	67	67	68
Net dimensions (W×H×D)		mm	(940×1760×825)×2+(1340×1760×825)	(940×1760×825)×2+(1340×1760×825)	(940×1760×825)×2+(1340×1760×825)
Packed dimensions (W×H×D)		mm	(1010×1945×890)×2+(1410×1945×890)	(1010×1945×890)×2+(1410×1945×890)	(1010×1945×890)×2+(1410×1945×890)
Net weight		kg	200×2+325	200+225+325	200+225+325
Gross weight		kg	215×2+350	215+245+350	215+245+350
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

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. Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of less than 90m. For systems with total equivalent liquid piping lengths of 90m or longer, please refer to the Engineering Data Book for connection piping diameters.
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.

OUTDOOR UNIT
TECHNICAL SPECIFICATIONS



DBVP-CTVC Series - Cooling Only

HP			68	70	72
Model (Combination Unit)			DBVP-CTVC68EG	DBVP-CTVC70EG	DBVP-CTVC72EG
Combination type			18HP+20HP+30HP	16HP+24HP+30HP	18HP+24HP+30HP
Power supply		V/N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Cooling[1]	Capacity	kW	191.0	197.0	202.0
		kBtu/h	651.4	671.9	688.9
	Power input	kW	57.2	57.7	58.8
	EER		3.34	3.41	3.44
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		64	64	64
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		4	4	4
Fan	Type		DC	DC	DC
	Quantity		4	5	5
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	55000	59100	60000
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	10×2+15.4	8.4+12.8+15.4	10+12.8+15.4
Pipe connections[2]	Liquid pipe	mm	Φ22.2	Φ22.2	Φ22.2
	Gas pipe	mm	Φ44.5	Φ44.5	Φ44.5
Sound pressure level[3]		dB(A)	68	68	68
Net dimensions (W×H×D)		mm	(940×1760×825)×2+(1340×1760×825)	(940×1760×825)+(1340×1760×825)×2	(940×1760×825)+(1340×1760×825)×2
Packed dimensions (W×H×D)		mm	(1010×1945×890)×2+(1410×1945×890)	(1010×1945×890)+(1410×1945×890)×2	(1010×1945×890)+(1410×1945×890)×2
Net weight		kg	212+225+325	200+260+325	212+260+325
Gross weight		kg	232+245+350	215+285+350	232+285+350
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

HP			74	76	78
Model (Combination Unit)			DBVP-CTVC74EG	DBVP-CTVC76EG	DBVP-CTVC78EG
Combination type			20HP+24HP+30HP	16HP+30HP+30HP	18HP+30HP+30HP
Power supply		V/N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Cooling[1]	Capacity	kW	208.0	215.0	220.0
		kBtu/h	709.4	733.3	750.3
	Power input	kW	62.8	65.1	66.2
	EER		3.31	3.30	3.32
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		64	64	64
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		4	5	5
Fan	Type		DC	DC	DC
	Quantity		5	5	5
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	60000	59600	60500
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	10+12.8+15.4	8.4+15.4×2	10+15.4×2
Pipe connections[2]	Liquid pipe	mm	Φ22.2	Φ22.2	Φ22.2
	Gas pipe	mm	Φ44.5	Φ44.5	Φ44.5
Sound pressure level[3]		dB(A)	69	68	68
Net dimensions (W×H×D)		mm	(940×1760×825)+(1340×1760×825)×2	(940×1760×825)+(1340×1760×825)×2	(940×1760×825)+(1340×1760×825)×2
Packed dimensions (W×H×D)		mm	(1010×1945×890)+(1410×1945×890)×2	(1010×1945×890)+(1410×1945×890)×2	(1010×1945×890)+(1410×1945×890)×2
Net weight		kg	225+260+325	200+325×2	212+325×2
Gross weight		kg	245+285+350	215+350×2	232+350×2
Ambient temp. operation range (Cooling)		°C	-15 to 55	-15 to 55	-15 to 55

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. Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of less than 90m. For systems with total equivalent liquid piping lengths of 90m or longer, please refer to the Engineering Data Book for connection piping diameters.
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.



OUTDOOR UNIT
TECHNICAL SPECIFICATIONS

DBVP-CTVC Series - Cooling Only

HP			80	82	84
Model (Combination Unit)			DBVP-CTVC80EG	DBVP-CTVC82EG	DBVP-CTVC84EG
Combination type			20HP+30HP+30HP	22HP+30HP+30HP	24HP+30HP+30HP
Power supply		V/N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Cooling[1]	Capacity	kW	226.0	231.5	237.0
		kBtu/h	770.8	789.5	808.3
	Power input	kW	70.2	70.1	71.8
	EER		3.22	3.30	3.30
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		64	64	64
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		5	5	5
Fan	Type		DC	DC	DC
	Quantity		5	6	6
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	60500	65500	65500
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	10+15.4×2	12.8+15.4×2	12.8+15.4×2
Pipe connections[2]	Liquid pipe	mm	Φ22.2	Φ22.2	Φ25.4
	Gas pipe	mm	Φ44.5	Φ44.5	Φ50.8
Sound pressure level[3]		dB(A)	69	69	69
Net dimensions (W×H×D)		mm	(940×1760×825)+(1340×1760×825)×2	(1340×1760×825)×3	(1340×1760×825)×3
Packed dimensions (W×H×D)		mm	(1010×1945×890)+(1410×1945×890)×2	(1410×1945×890)×3	(1410×1945×890)×3
Net weight		kg	225+325×2	260+325×2	260+325×2
Gross weight		kg	245+350×2	285+350×2	285+350×2
Ambient temp. operation range (Cooling)		℃	-15 to 55	-15 to 55	-15 to 55

HP			86	88	90
Model (Combination Unit)			DBVP-CTVC86EG	DBVP-CTVC88EG	DBVP-CTVC90EG
Combination type			26HP+30HP+30HP	28HP+30HP+30HP	30HP+30HP+30HP
Power supply		V/N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Cooling[1]	Capacity	kW	243.0	248.5	255.0
		kBtu/h	828.7	847.5	869.7
	Power input	kW	72.2	75.1	79.2
	EER		3.37	3.31	3.22
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		64	64	64
Compressor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
	Quantity		6	6	6
Fan	Type		DC	DC	DC
	Quantity		6	6	6
	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m^3/h	66000	66000	66000
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	15.4×3	15.4×3	15.4×3
Pipe connections[2]	Liquid pipe	mm	Φ25.4	Φ25.4	Φ25.4
	Gas pipe	mm	Φ50.8	Φ50.8	Φ50.8
Sound pressure level[3]		dB(A)	69	69	69
Net dimensions (W×H×D)		mm	(1340×1760×825)×3	(1340×1760×825)×3	(1340×1760×825)×3
Packed dimensions (W×H×D)		mm	(1410×1945×890)×3	(1410×1945×890)×3	(1410×1945×890)×3
Net weight		kg	325×3	325×3	325×3
Gross weight		kg	350×3	350×3	350×3
Ambient temp. operation range (Cooling)		℃	-15 to 55	-15 to 55	-15 to 55

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. Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of less than 90m. For systems with total equivalent liquid piping lengths of 90m or longer, please refer to the Engineering Data Book for connection piping diameters.
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.

OUTDOOR UNIT
TECHNICAL SPECIFICATIONS



DBVP-CTVC Series - Cooling Only

HP			92	94	96
Model name (Combination unit)			DBVP-CTVC92EG	DBVP-CTVC94EG	DBVP-CTVC96EG
Combination type			28HP+32HP+32HP	30HP+32HP+32HP	32HP+32HP+32HP
Power supply		V/N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Cooling [1]	Capacity	kW	258.5	265.0	270.0
		kBtu/h	881.5	903.7	920.7
	Power input	kW	83.1	87.2	91.2
	EER		3.11	3.04	2.96
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		64	64	64
Compressor	Type		DC scroll inverter	DC scroll inverter	DC scroll inverter
	Quantity		6	6	6
Fan motor	Type		DC	DC	DC
	Quantity		6	6	6
	Static pressure	Pa	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)
	Airflow rate	m^3/h	66000	66000	66000
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	15.4×3	15.4×3	15.4×3
Pipe connections [2]	Liquid pipe	mm	Φ25.4	Φ25.4	Φ25.4
	Gas pipe	mm	Φ50.8	Φ50.8	Φ50.8
Sound pressure level [3]		dB(A)	69	69	69
Net dimensions (W×H×D)		mm	(1340 ×1760 ×825) ×3	(1340 ×1760 ×825) ×3	(1340 ×1760 ×825) ×3
Packed dimensions (W×H×D)		mm	(1410×1945 ×890) ×3	(1410×1945 ×890) ×3	(1410×1945 ×890) ×3
Net weight		kg	325 ×3	325 ×3	325 ×3
Gross weight		kg	350 ×3	350 ×3	350 ×3
Ambient temp. operation range (cooling)		°C	-15 to 55	-15 to 55	-15 to 55

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. Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of less than 90m. For systems with total equivalent liquid piping lengths of 90m or longer, please refer to the Engineering Data Book for connection piping diameters.
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.



DBV-HTVC Series (Side Dischange)

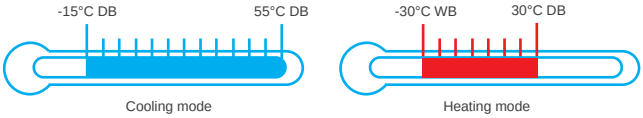
Wide Capacity Range

The capacity of DBV-HTVC is from 8HP to 24HP, perfectly suitable for all kinds of small and medium-sized buildings.

8~16 HP	18~24 HP
	

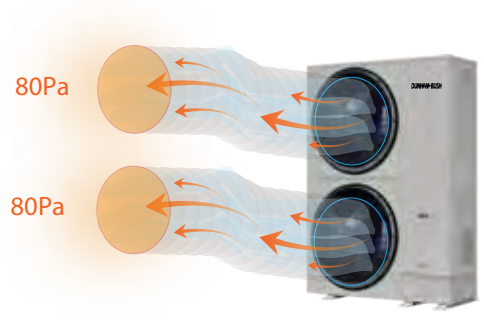
Wide Operation Range

It can operate cooling mode from -15°C to as high as 55°C and heating mode from -15°C to 27°C.



External Static Pressure up to 80Pa*

The static pressure of the outdoor unit can be up to 80Pa which facilitates installation of the unit on each floor of high-rise buildings or on balconies.

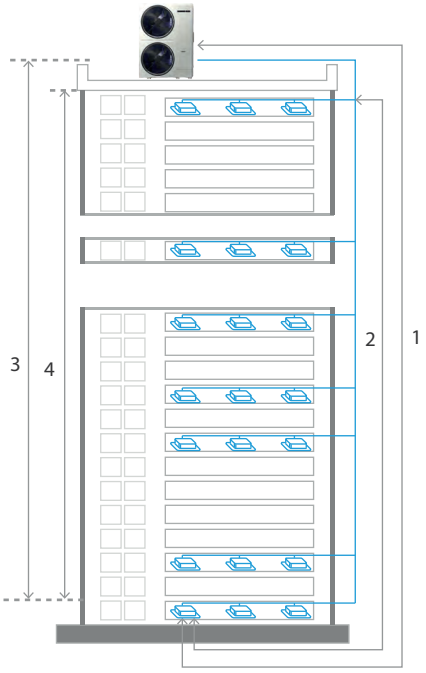


*External static pressure above 35Pa is available as a customization option.

Long Piping Capability

The EasyFit system can support a total piping length of up to 560m, an installation height difference of up to 50m between indoor and outdoor units, and up to 30m between indoor units, making the EasyFit Series VRF adaptable to a wide range of building designs.

Total piping length: 560m
1 Longest piping length - actual (equivalent): 150(175)m
2 Longest piping length after first branch: 40/90*m
3 Level difference between IDUs and ODU - ODU above (below): 50(40)m
4 Level difference between IDUs: 30m



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

OUTDOOR UNIT
TECHNICAL SPECIFICATIONS



DBV-HTVC Series (Side Dischange) - Cooling & Heating

HP			8	10
Model			DBV-HTVC8EG	DBV-HTVC10EG
Power supply		V/Ph/Hz	380-415/3/50(60)	380-415/3/50(60)
Cooling[1]	Capacity	kW	25.2	28
		kBtu/h	86.0	95.5
	Power input	kW	5.8	7.5
	EER		4.38	3.73
Heating[2]	Capacity	kW	27	31.5
		kBtu/h	92.1	107.5
	Power input	kW	5.7	6.8
	COP		4.78	4.67
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		13	16
Compressor	Type		DC inverter	DC inverter
	Quantity		1	1
Fan motors	Type		Propeller	Propeller
	Motor type		DC	DC
	Static pressure	Pa	0-35 (standard) 35-80 (customized)	0-35 (standard) 35-80 (customized)
	Airflow rate	m^3/h	11800	12500
Refrigerant	Type		R410A	R410A
	Factory charge	kg	6.1	6.1
Pipe connections [3]	Liquid pipe	mm	Φ12.7	Φ12.7
	Gas pipe	mm	Φ25.4	Φ25.4
Sound pressure level [4]		dB(A)	56	57
Net dimensions (W×H×D)		mm	1130×1760×580	1130×1760×580
Packed dimensions (W×H×D)		mm	1210×1916×597	1210×1916×597
Net weight		kg	182	182
Gross weight		kg	196	196
Ambient temp. operation range	Cooling	°C (DB)	-15 to 55	-15 to 55
	Heating	°C (DB)	-30 to 30	-30 to 30

HP			12	14
Model			DBV-HTVC12EG	DBV-HTVC14EG
Power supply		V/Ph/Hz	380-415/3/50(60)	380-415/3/50(60)
Cooling[1]	Capacity	kW	33.5	40
		kBtu/h	114.3	136.5
	Power input	kW	8.0	11.2
	EER		4.21	3.57
Heating[2]	Capacity	kW	37.5	45
		kBtu/h	128.0	153.5
	Power input	kW	7.9	10.7
	COP		4.78	4.21
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		19	23
Compressor	Type		DC inverter	DC inverter
	Quantity		1	1
Fan motors	Type		Propeller	Propeller
	Motor type		DC	DC
	Static pressure	Pa	0-35 (standard) 35-80 (customized)	0-35 (standard) 35-80 (customized)
	Airflow rate	m^3/h	12500	12500
Refrigerant	Type		R410A	R410A
	Factory charge	kg	6.4	7.4
Pipe connections [3]	Liquid pipe	mm	Φ12.7	Φ12.7
	Gas pipe	mm	Φ25.4	Φ25.4
Sound pressure level [4]		dB(A)	58	59
Net dimensions (W×H×D)		mm	1130×1760×580	1130×1760×580
Packed dimensions (W×H×D)		mm	1210×1916×597	1210×1916×597
Net weight		kg	185	185
Gross weight		kg	199	199
Ambient temp. operation range	Cooling	°C (DB)	-15 to 55	-15 to 55
	Heating	°C (DB)	-30 to 30	-30 to 30

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. Diameters given are those of the unit's stop valves.
4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.



DBV-HTVC Series (Side Dischange) - Cooling & Heating

HP			16	18
Model			DBV-HTVC16EG	DBV-HTVC18EG
Power supply		V/Ph/Hz	380-415/3/50(60)	380-415/3/50(60)
Cooling[1]	Capacity	kW	45	50
		kBtu/h	153.5	170.6
	Power input	kW	12.0	12.8
	EER		3.75	3.91
Heating[2]	Capacity	kW	50	56.5
		kBtu/h	170.6	192.8
	Power input	kW	11.1	13.8
	COP		4.50	4.11
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		26	29
Compressor	Type		DC inverter	DC inverter
	Quantity		1	1
Fan motors	Type		Propeller	Propeller
	Motor type		DC	DC
	Static pressure	Pa	0-35 (standard) 35-80 (customized)	0-35 (standard) 35-80 (customized)
	Airflow rate	m^3/h	12500	20000
Refrigerant	Type		R410A	R410A
	Factory charge	kg	8	8
Pipe connections [3]	Liquid pipe	mm	Φ15.9	Φ15.9
	Gas pipe	mm	Φ28.6	Φ28.6
Sound pressure level [4]		dB(A)	60	61
Net dimensions (W×H×D)		mm	1130×1760×580	1250×1760×580
Packed dimensions (W×H×D)		mm	1210×1916×597	1330×1916×597
Net weight		kg	192	213
Gross weight		kg	206	228
Ambient temp. operation range	Cooling	°C (DB)	-15 to 55	-15 to 55
	Heating	°C (DB)	-30 to 30	-30 to 30

HP			20	22	24
Model			DBV-HTVC20EG	DBV-HTVC22EG	DBV-HTVC24EG
Power supply		V/Ph/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling[1]	Capacity	kW	56	61.5	67
		kBtu/h	191.1	209.8	228.6
	Power input	kW	16.3	18.1	19.7
	EER		3.44	3.40	3.41
Heating[2]	Capacity	kW	63	69	75
		kBtu/h	215.0	235.4	255.9
	Power input	kW	15.3	16.9	17.5
	COP		4.12	4.08	4.29
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quantity		33	36	39
Compressor	Type		DC inverter	DC inverter	DC inverter
	Quantity		1	1	1
Fan motors	Type		Propeller	Propeller	Propeller
	Motor type		DC	DC	DC
	Static pressure	Pa	0-35 (standard) 35-80 (customized)	0-35 (standard) 35-80 (customized)	0-35 (standard) 35-80 (customized)
	Airflow rate	m^3/h	18500	19000	19000
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	8.5	8.5	9.7
Pipe connections [3]	Liquid pipe	mm	Φ15.9	Φ15.9	Φ15.9
	Gas pipe	mm	Φ28.6	Φ28.6	Φ28.6
Sound pressure level [4]		dB(A)	61	62	64
Net dimensions (W×H×D)		mm	1250×1760×580	1250×1760×580	1250×1760×580
Packed dimensions (W×H×D)		mm	1330×1916×597	1330×1916×597	1330×1916×597
Net weight		kg	223	233	238
Gross weight		kg	238	248	253
Ambient temp. operation range	Cooling	°C (DB)	-15 to 55	-15 to 55	-15 to 55
	Heating	°C (DB)	-30 to 30	-30 to 30	-30 to 30

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. Diameters given are those of the unit's stop valves.
4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.



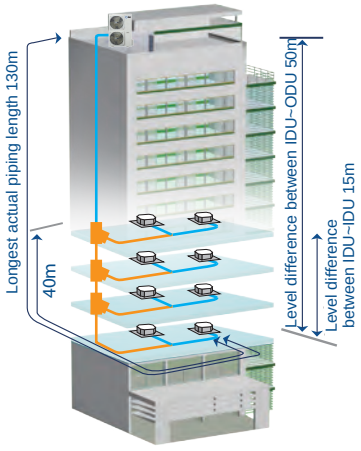
DBV-CTVC Series (Side Dischange)

Optimized Design For Small & Medium Buildings

- Capacity Up to 10HP
- Connectable Indoor Units Quantity up to 16
- Refrigerant Cooling PCB
- Precise Oil Control Technology
- Advanced Silence Technology

Long Piping Capability

Piping length	Capability (m)
Total piping length	150
Longest length - actual (equivalent)	120 (130)
Longest length after first branch	40
Longest length after nearest branch	15
Largest level difference between IDUs and ODU-ODU up (down)	50 (40)
Largest level difference between IDUs	15



DBV-CTVC Series (Side Discharge) – Cooling Only

380~415V / 3Ph / 50Hz

HP			7	8	9	10
Model			DBV-CTVC7EG	DBV-CTVC8EG	DBV-CTVC9EG	DBV-CTVC10EG
Power supply		V/N/Hz	380-415/3/50			
Cooling[1]	Capacity	kW	20.0	22.4	26.0	28.0
		kBtu/h	68.2	76.4	88.7	95.5
	Power Input	kW	5.13	5.93	7.43	8.24
	EER		3.9	3.78	3.5	3.4
Connected indoor unit	Total Capacity		50-130% of outdoor unit capacity			
	Maximum Quantity		10	13	15	16
Compressor	Type		DC inverter			
	Quantity		1			
Fan	Type		AC			
	Quantity		2			
Refrigerant	Type		R410A			
	Factory charging	kg	3.9			
Pipe connections	Liquid pipe	mm	Φ9.53			
	Gas pipe	mm	Φ19.1			
Airflow rate		m^3/h	7150			
Sound pressure level[2]		dB(A)	57	57	58	59
Net dimensions (W×H×D)		mm	902×1327×370			
Packed dimensions (W×H×D)		mm	1030×1456×435			
Net weight		kg	115			
Gross weight		kg	125			
Operating temperature range		°C	-5 ~ 55			

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



INDOOR UNIT
LINE UP

kW			1.5	1.8	2.2	2.8	3.6	4.5	5.6	6.3	7.1	8.0	9.0	10.0	11.2	12.5	14.0	16.0	18.0	20.0	22.4	25.2	28.0	33.5	40.0	45.0	56.0
Btu/h			5.1k	6.1k	7.5k	9.6k	12.3k	15.4k	19.1k	21.5k	24.2k	27.3k	30.7k	34.1k	38.2k	42.7k	47.8k	54.6k	61.4k	68.3k	76.5k	86k	95.6k	114.3k	136.5k	153.6k	191.1k
Cassette	One-way cassette			■	■	■	■	■	■		■																	
	Two-way cassette				■	■	■	■	■		■																	
	Compact four-way cassette		■		■	■	■	■	■	■																		
	Four-way cassette					■	■	■	■		■	■	■	■	■		■											
	Four-way cassette																	■	■									
Duct	Fresh air processing unit		■		■	■	■	■	■		■	■	■		■													
	Medium static pressure								■		■	■	■		■	■	■		■	■	■	■	■	■	■	■	■	
	High static pressure		■		■	■	■	■	■		■	■	■		■		■	■										
Wall mounted			■		■	■	■	■	■		■	■																
Floor standing -concealed					■	■	■	■	■		■	■																
Floor standing - exposed					■	■	■	■	■		■	■																
Flesh Air																			■	■	■	■	■	■	■			
Ceiling & Floor							■	■	■		■	■	■	■	■	■	■											



One-way Cassette


Standard wireless remote controller


Optional wired controller

COMFORT

Quiet Operation

By optimizing the design of fan motor, air duct and heat exchanger, the new duct operates with noise as low as 22dB(A), creating a quieter and more comfortable environment

Digital Display On/ Off

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


Digital display

Buzzer Sound On/ Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.

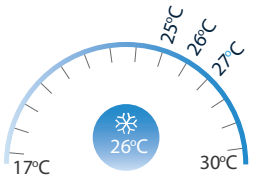
HEALTH

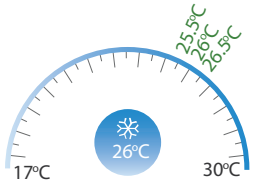
Automatic anti-condensation

The One-way Cassette can automatically enter and exit the anti-condensation mode by detecting its own operation data;In the anti-condensation mode, the machine can change the outlet angle of the guide vane intermittently to prevent the local temperature difference of the guide panel from being too large and avoid the occurrence of condensation.


0.5°C/1°C Setting Temperature Adjustment

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



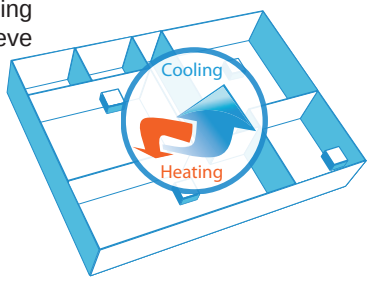




WIDER APPLICATION

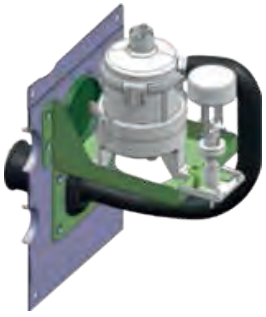
Auto Cooling-heating Changeover

Automatically selects cooling or heating mode to achieve the set temperature.



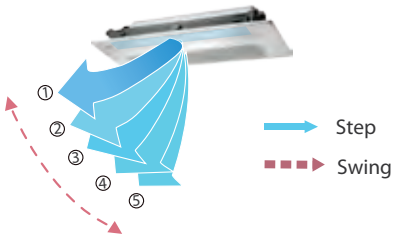
Only 153mm High

Digital feedback DC water pump: actively sense the pump speed and water flow to determine whether there is jamming attenuation or damage, and give early warning to avoid water leakage.



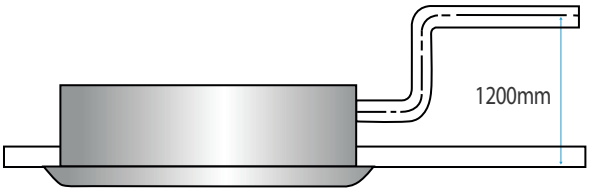
Multiple Steps Vertical Swing

There are 5-steps louver control makes the air flow direction more precisely. In addition, the auto swing mode can better meet different customer needs.



High-lift Drain Pump

A drain pump with a 1200mm raise height is fitted as standard, simplifying installation of the drain piping.



One-way Cassette

Model			DBV-18Q1AG6	DBV-22Q1AG6	DBV-28Q1AG6	DBV-36Q1AG6	DBV-45Q1AG6	DBV-56Q1AG6	DBV-71Q1AG6
Power supply			1-phase, 220-240V, 50/60Hz						
Cooling[1]	Capacity	kW	1.8	2.2	2.8	3.6	4.5	5.6	7.1
		kBut/h	6.1	7.5	9.6	12.3	15.4	19.1	24.2
	Input	W	25	25	30	30	40	48	60
Heating[2]	Capacity	kW	2.2	2.6	3.2	4.0	5.0	6.3	8.0
		kBut/h	7.5	8.9	10.9	13.6	17.1	21.5	27.3
	Input	W	25	25	30	30	40	48	60
Airflow rate[3]		m^3/h	380/355/330/300/286/263/240		460/440/410/380/355/330/300		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)	30/28/27/26/25/24/22		37/36/35/34/32/31/30	38/37/35/34/32/31/30	39/37/36/35/34/32/31	41/39/38/37/36/35/33	43/41/40/39/37/36/35
indoor unit	Net dimensions[5] (W×H×D)	mm	1054×153×428				1275×189×452		
	Net dimensions(no water tray) (W×H×D)	mm	1054×141×428				1275×176×452		
	Packed dimensions (W×H×D)	mm	1155×245×490				1370×295×505		
	Net/Gross weight	kg	11.5/14.5		11.8/14.8		15.8/20.2		16.9/21.4
Panel	Net dimensions (W×H×D)	mm	1180×25×465				1350×25×505		
	Packed dimensions (W×H×D)	mm	1232×107×517				1410×95×560		
	Net/Gross weight	kg	3.5/4.7				4/5.6		
Refrigerant type			R410A/R32	R410A/R32	R410A/R32	R410A/R32	R410A/R32	R410A/R32	R410A/R32
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7						Φ9.52/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. Each model's 7 airflow rate options are listed in order, from highest to lowest.
4. Each model's 7 sound pressure levels are listed in order from highest to lowest and correspond to the model's 7 airflow rate options (see Note 3). Sound pressure level is measured 1.4m below the unit in a anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.
6. These products are under development and the specifications are always subject to change.



Two-way Cassette


Standard wireless remote controller


Optional wired controller

COMFORT

Quiet Operation

The fan motor and water pump are DC power supply, which is more energy-saving and silent than AC power supply, creating a more quiet and comfortable environment.


Fan Motor


Drain Pump

Digital Display On/ Off

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


Digital display

Buzzer Sound On/ Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.

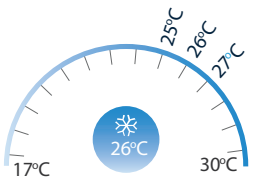
HEALTH

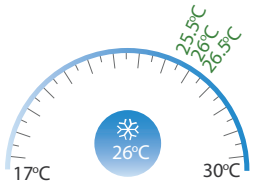
Automatic anti-condensation

The Two-way Cassette can automatically enter and exit the anti-condensation mode by detecting its own operation data;In the anti-condensation mode, the machine can change the outlet angle of the guide vane intermittently to prevent the local temperature difference of the guide panel from being too large and avoid the occurrence of condensation.

0.5°C/1°C Setting Temperature Adjustment

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



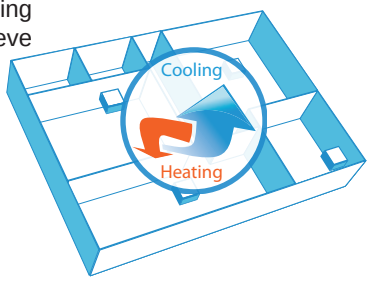




WIDER APPLICATION

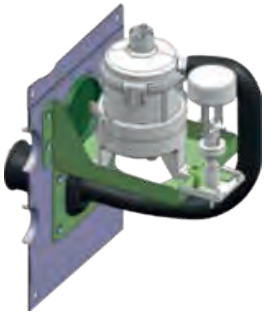
Auto Cooling-heating Changeover

Automatically selects cooling or heating mode to achieve the set temperature.



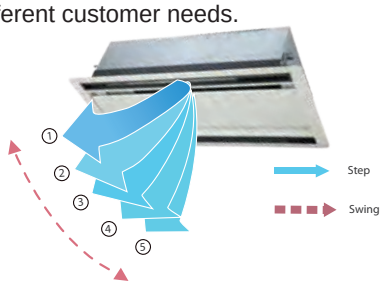
Only 153mm High

Digital feedback DC water pump: actively sense the pump speed and water flow to determine whether there is jamming attenuation or damage, and give early warning to avoid water leakage.



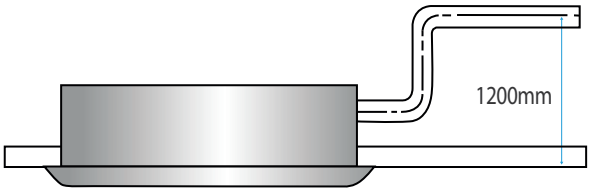
Multiple Steps Vertical Swing

There are 5-steps louver control makes the air flow direction more precisely. In addition, the auto swing mode can better meet different customer needs.



High-lift Drain Pump

A drain pump with a 1200mm raise height is fitted as standard, simplifying installation of the drain piping.



Two-way Cassette

Model			DBV-22Q2AG6	DBV-28Q2AG6	DBV-36Q2AG6	DBV-45Q2AG6	DBV-56Q2AG6	DBV-71Q2AG6
Power supply			1-phase, 220-240V, 50/60Hz					
Cooling[1]	Capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1
		kBut/h	7.5	9.6	12.3	15.4	19.1	24.2
	Input	W	35	40	40	50	69	98
Heating[2]	Capacity	kW	2.6	3.2	4	5	6.3	8
		kBut/h	8.9	10.9	13.6	17.1	21.5	27.3
	Input	W	35	40	40	50	69	98
Airflow rate[3]		m^3/h	654/612/571/530/488/449/410	654/612/571/530/488/449/410	725/679/641/591/554/509/458	850/792/731/670/631/592/550	980/925/855/800/755/702/670	1200/1115/1068/1000/921/808/770
Sound pressure level[4]		dB(A)	33/31/30/29/27/25/24	33/31/30/29/27/25/24	35/33/32/30/29/27/25	37/36/35/34/32/31/30	39/37/36/35/33/31/30	44/42/41/40/38/36/34
indoor unit	Net dimensions[5] (W×H×D)	mm	1259×299×591					
	Packed dimensions (W×H×D)	mm	1355×400×675					
	Net/Gross weight	kg	29.7/36.3			31.6/38.2		
Panel	Net dimensions (W×H×D)	mm	1430×53×680					
	Packed dimensions (W×H×D)	mm	1525×130×765					
	Net/Gross weight	kg	11/15			11/15		
Refrigerant type			R410A/R32	R410A/R32	R410A/R32	R410A/R32	R410A/R32	R410A/R32
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7					Φ9.52/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. 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 anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



Four-way Cassette

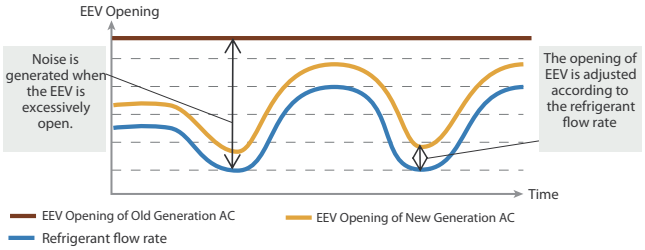

Standard wireless remote controller


Optional wired controller

COMFORT

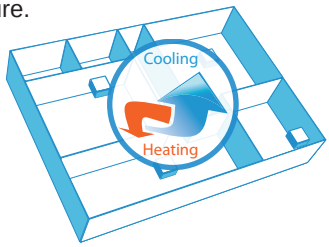
EEV Automatic Adjustment

When in heating standby mode, the indoor unit automatically adjusts the EEV opening according to the load to eliminate noise of refrigerant flowing.



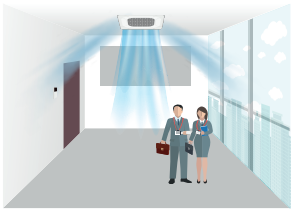
Auto Cooling-heating Changeover

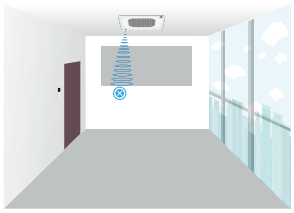
Automatically selects cooling or heating mode to achieve the set temperature.



Human Detect Sensor*

Using millimeter-wave radar sensor controller automatically turns indoor units on or off upon detecting that the room is occupied or unoccupied, ensuring climate control whilst minimizing energy consumption.

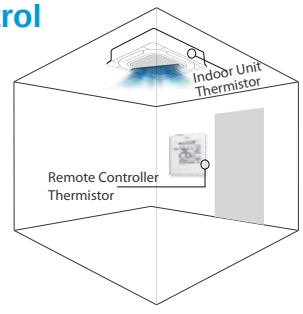

The indoor unit automatically runs when detecting human body


The indoor unit automatically stops when detecting absence

*This function is available as a customization option for DBV Four Way Cassette.

Two Thermistors Control

The indoor temperature can be checked using the thermistor in the remote controller as well as from the indoor unit.



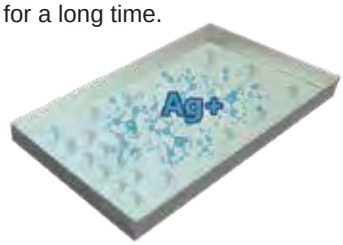
HEALTH

Mildew Proof Of Heat Exchanger

When the indoor unit is turned off in cooling mode, the fan is still on, and dry the heat exchanger to avoid mold on the heat exchanger.

Silver Ions Drain Pan (Optional)

Slow-released nano-silver ions can keep the drain pan free of mold for a long time.





AIR FLOW

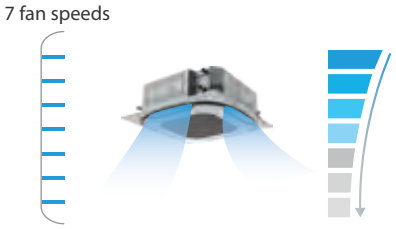
360° Air Flow

New design, round airflow path ensures uniform airflow and temperature distribution.

The continuous air supply port air supply area increases by 20%

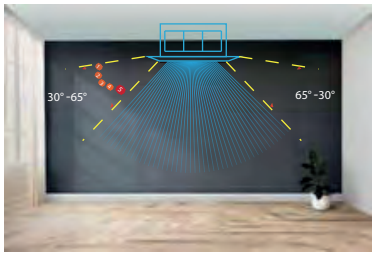
7 Fan Speeds

7 indoor fan speed options to meet the needs of different indoor conditions.



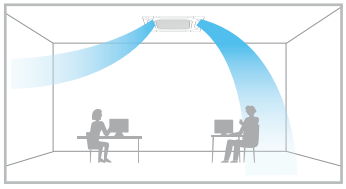
Multiple Steps Vertical Swing

The Four-way Cassette unit has a wide range of airflow angles from 30° to 65° and is equipped with a 5-step louver control and auto swing mode to better meet the needs of different customers.



Individual Louver Control

The Individual louver control can control the motors separately, making it possible to control all four louvers independently.



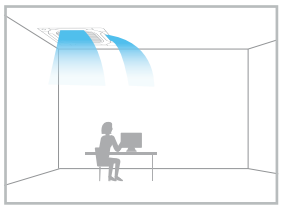
Soft Wind Mode

Supplies air against the ceiling to create windless environment.

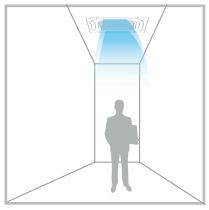
EASY INSTALLATION

Air Baffle Fittings For Irregular Rooms

Some air discharge ports can be blocked with air baffle to optimize air distribution in irregular shaped rooms. Air outlets can be blocked with accessories, which can be found in the packing material.



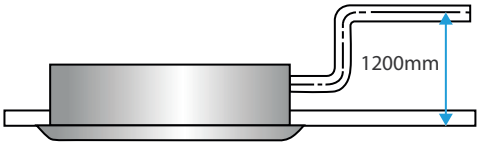
At the corner



In the narrow room

High-lift Drain Pump

A drain pump with a 1200mm raise height is fitted as standard, simplifying installation of the drain piping.



Water Level Switch

When the drain pipe is blocked or the drain pipe is poor, the water level switch is turned off, and there is no need to worry about overflowing the ceiling.

INDOOR UNIT
TECHNICAL SPECIFICATIONS



Four-way Cassette

Model			DBV-28Q4AG6	DBV-36Q4AG6
Power supply			1-phase, 220-240V, 50/60Hz	
Cooling[1]	Capacity	kW	2.8	3.6
		kBtu/h	9.6	12.3
	Power input	W	17.0	17.0
Heating[2]	Capacity	kW	3.2	4.0
		kBtu/h	10.9	13.7
	Power input	W	17.0	17.0
Air flow rate[3]		m^3/h	790/740/691/641/591/542/492	790/740/691/641/591/542/492
Sound pressure level[4]		dB(A)	30/29/28/27.5/27/26/25	30/29/28/27.5/27/26/25
Main body	Net dimensions[5] (W×H×D)	mm	840×204×840	840×204×840
	Packed dimensions (W×H×D)	mm	940×250×940	940×250×940
	Net/Gross weight	kg	18/20.5	18/20.5
Panel	Net dimensions (W×H×D)	mm	950×50×950	950×50×950
	Packed dimensions (W×H×D)	mm	1020×90×1020	1020×90×1020
	Net/Gross weight	kg	5.8/7.6	5.8/7.6
Refrigerant type			R410A/R32	
Pipe connections	Liquid/Gas pipe	mm	Ø6.35/Ø12.7	Ø6.35/Ø12.7
	Drain pipe	mm	OD Ø25	

Model			DBV-45Q4AG6	DBV-56Q4AG6	DBV-71Q4AG6
Power supply			1-phase, 220-240V, 50/60Hz		
Cooling[1]	Capacity	kW	4.5	5.6	7.1
		kBtu/h	15.4	19.1	24.2
	Power input	W	36.0	23.0	32.0
Heating[2]	Capacity	kW	5.0	6.3	8.0
		kBtu/h	17.1	21.5	27.3
	Power input	W	36.0	23.0	32.0
Air flow rate[3]		m^3/h	910/840/770/701/631/561/491	840/791/741/692/642/593/543	1000/943/886/829/772/715/658
Sound pressure level[4]		dB(A)	37/35/34/32/30/29/27	33/32/31/30/29/28/27	37/36/34/33/31/30/28
Main body	Net dimensions[5] (W×H×D)	mm	840×204×840	840×204×840	840×204×840
	Packed dimensions (W×H×D)	mm	940×250×940	940×250×940	940×250×940
	Net/Gross weight	kg	18/20.5	19.5/22	19.5/22
Panel	Net dimensions (W×H×D)	mm	950×50×950	950×50×950	950×50×950
	Packed dimensions (W×H×D)	mm	1020×90×1020	1020×90×1020	1020×90×1020
	Net/Gross weight	kg	5.8/7.6	5.8/7.6	5.8/7.6
Refrigerant type			R410A/R32		
Pipe connections	Liquid/Gas pipe	mm	Ø6.35/Ø12.7	Ø6.35/Ø12.7	Ø9.52/Ø15.9
	Drain pipe	mm	OD Ø25		

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. 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 1.5m below the unit in an anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



INDOOR UNIT
TECHNICAL SPECIFICATIONS

Four-way Cassette

Model			DBV-80Q4AG6	DBV-90Q4AG6	DBV-100Q4AG6
Power supply			1-phase, 220-240V, 50/60Hz		
Cooling[1]	Capacity	kW	8.0	9.0	10.0
		kBtu/h	27.3	30.7	34.1
	Power input	W	41.0	43.0	74.0
Heating[2]	Capacity	kW	9.0	10.0	11.2
		kBtu/h	30.7	34.1	38.2
	Power input	W	41.0	43.0	74.0
Air flow rate[3]		m^3/h	1100/1019/939/858/777/697/616	1330/1239/1148/1057/965/874/783	1470/1360/1250/1141/1031/921/811
Sound pressure level[4]		dB(A)	42.5/40/38/36/34/32/30	38/37/35/34/32/31/29	43/41/40/38/36/35/33
Main body	Net dimensions[5] (W×H×D)	mm	840×204×840	840×246×840	840×246×840
	Packed dimensions (W×H×D)	mm	940×250×940	940×295×940	940×295×940
	Net/Gross weight	kg	19.5/22	21.5/24	21.5/24
Panel	Net dimensions (W×H×D)	mm	950×50×950	950×50×950	950×50×950
	Packed dimensions (W×H×D)	mm	1020×90×1020	1020×90×1020	1020×90×1020
	Net/Gross weight	kg	5.8/7.6	5.8/7.6	5.8/7.6
Refrigerant type			R410A/R32		
Pipe connections	Liquid/Gas pipe	mm	Ø9.52/Ø15.9	Ø9.52/Ø15.9	Ø9.52/Ø15.9
	Drain pipe	mm	OD Ø25		

Model			DBV-112Q4AG6	DBV-140Q4AG6	DBV-160Q4AG6	DBV-180Q4AG6
Power supply			1-phase, 220-240V, 50/60Hz			
Cooling[1]	Capacity	kW	11.2	14.0	16.0	18.0
		kBtu/h	38.2	47.8	54.6	61.4
	Power input	W	61.0	118.0	110.0	145.0
Heating[2]	Capacity	kW	12.5	16.0	18.0	20.0
		kBtu/h	42.7	54.6	61.4	68.2
	Power input	W	61.0	118.0	110.0	145.0
Air flow rate[3]		m^3/h	1600/1497/1393/1290/ 1186/1083/979	1900/1787/1673/1560/ 1446/1333/1219	2100/1900/1760/1630/ 1500/1380/1270	2300/2140/1960/1770/ 1600/1430/1270
Sound pressure level[4]		dB(A)	41/40/38/37/36/34/33	47.5/46/44/42/40/38/36.5	48/46/44/43/41/39/37	52/49/47/45/42/39/38
Main body	Net dimensions[5] (W×H×D)	mm	840×288×840	840×288×840	950×300×950	950×300×950
	Packed dimensions (W×H×D)	mm	940×335×940	940×335×940	1050×335×1050	1050×335×1050
	Net/Gross weight	kg	24/26.5	24/26.5	32.6/37.2	32.7/37.3
Panel	Net dimensions (W×H×D)	mm	950×50×950	950×50×950	1050×65×1050	1050×65×1050
	Packed dimensions (W×H×D)	mm	1020×90×1020	1020×90×1020	1115×100×1115	1115×100×1115
	Net/Gross weight	kg	5.8/7.6	5.8/7.6	7.4/9.7	7.4/9.7
Refrigerant type			R410A/R32			
Pipe connections	Liquid/Gas pipe	mm	Ø9.52/Ø15.9	Ø9.52/Ø15.9	Ø9.52/Ø15.9	Ø9.52/Ø19.1
	Drain pipe	mm	OD Ø25			

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. 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 1.5m below the unit in an anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Compact Four-way Cassette

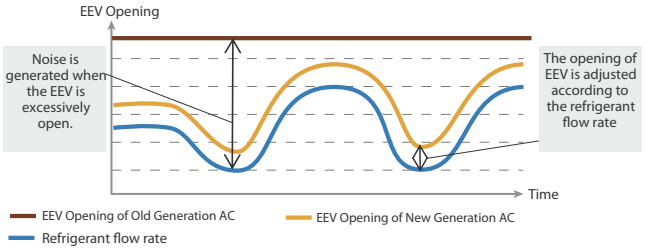
Standard wireless remote controller

Optional wired controller

COMFORT

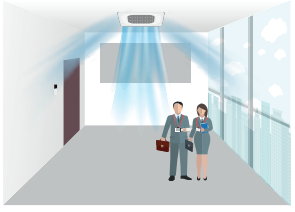
EEV Automatic Adjustment

When in heating standby mode, the indoor unit automatically adjusts the EEV opening according to the load to eliminate noise of refrigerant flowing.

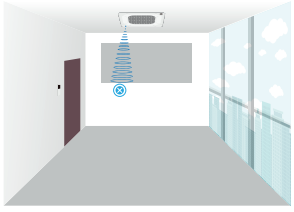


Human Detect Sensor*

Using millimeter-wave radar sensor controller automatically turns indoor units on or off upon detecting that the room is occupied or unoccupied, ensuring climate control whilst minimizing energy consumption.



The indoor unit automatically runs when detecting human body

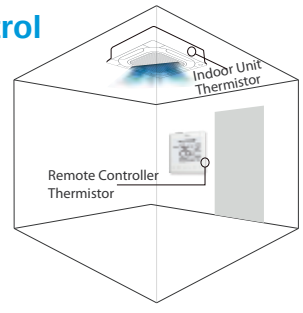


The indoor unit automatically stops when detecting absence

*This function is available as a customization option for DBV Four Way Cassette.

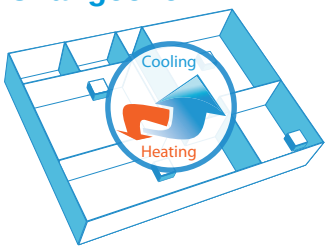
Two Thermistors Control

The indoor temperature can be checked using the thermistor in the remote controller as well as from the indoor unit.



Auto Cooling-heating Changeover

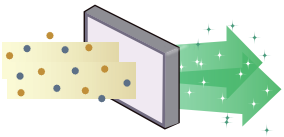
Automatically selects cooling or heating mode to achieve the set temperature.



HEALTH

Optional F6-class Air Filter

The Compact Four-way Cassette supports 30Pa external static pressure for the F6-class filter installation. Filtering effect of the F6-class filter reaches up to 80% against particles (particle size > 1μm), creating a cleaner living environment.

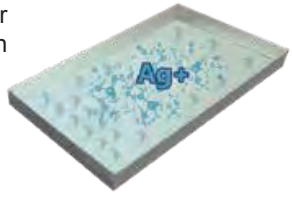


Mildew Proof Of Heat Exchanger

When the indoor unit is turned off in cooling mode, the fan is still on, and dry the heat exchanger to avoid mold on the heat exchanger.

Silver Ions Drain Pan (Optional)

Slow-released nano-silver ions can keep the drain pan free of mold for a long time.

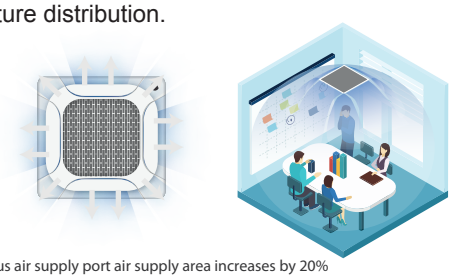




AIR FLOW

360° Air Flow

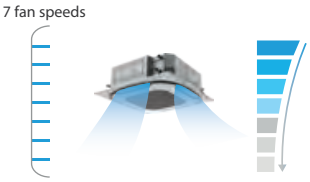
New design, round airflow path ensures uniform airflow and temperature distribution.



The continuous air supply port air supply area increases by 20%

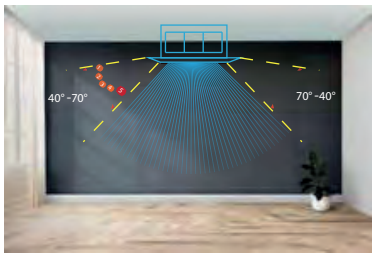
7 Fan Speeds

7 indoor fan speed options to meet the needs of different indoor conditions.



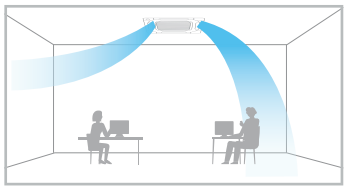
Multiple Steps Vertical Swing

The Four-way Cassette unit has a wide range of airflow angles from 40° to 70° and is equipped with a 5-step louver control and auto swing mode to better meet the needs of different customers.



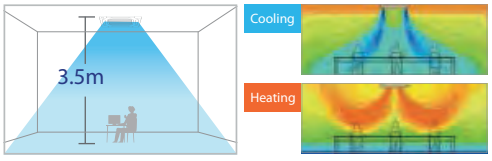
Individual Louver Control

The Individual louver control can control the motors separately, making it possible to control all four louvers independently.



Long Distance Air Delivery

The Compact Four-way Cassette has an additional 30Pa static pressure for long airflow delivery and is capable of being used in spaces up to 3.5m in floor height.



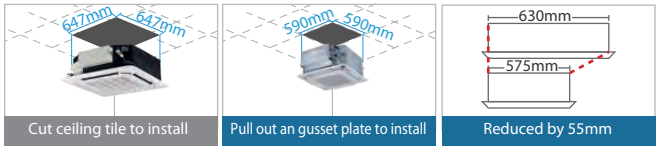
Soft Wind Mode

Supplies air against the ceiling to create windless environment.

EASY INSTALLATION

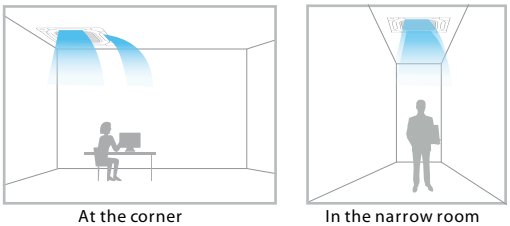
Compact and stylish design

New Compact Four-way Cassette panel size is fit into the ceiling tile(620x620mm), making installation easier.



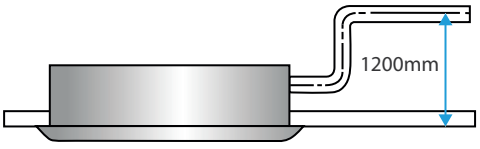
Air Baffle Fittings For Irregular Rooms

Some air discharge ports can be blocked with air baffle to optimize air distribution in irregular shaped rooms. Air outlets can be blocked with accessories, which can be found in the packing material.



High-lift Drain Pump

A drain pump with a 1200mm raise height is fitted as standard, simplifying installation of the drain piping.



Water Level Switch

When the drain pipe is blocked or the drain pipe is poor, the water level switch is turned off, and there is no need to worry about overflowing the ceiling.

INDOOR UNIT
TECHNICAL SPECIFICATIONS



Compact Four-way Cassette

Model			DBV-15Q4CAG6	DBV-22Q4CAG6	DBV-28Q4CAG6	DBV-36Q4CAG6
Power supply			1-phase, 220-240V, 50/60Hz			
Cooling[1]	Capacity	kW	1.5	2.2	2.8	3.6
		kBtu/h	5.1	7.5	9.6	12.3
	Power input	W	14	14	16	18
Heating[2]	Capacity	kW	1.8	2.4	3.2	4.0
		kBtu/h	6.1	8.2	10.9	13.7
	Power input	W	14	14	16	18
Air flow rate[3]		m^3/h	450/425/400/370/345/320/295		510/480/455/425/395/370/340	530/500/470/440/405/375/345
Sound pressure level[4]		dB(A)	29/28/27/27/26/26/25		30/29/28/27/26/26/25	31/30/29/28/27/26/25.5
Sound power level		dB(A)	40/39/39/39/38/38/38		42/41/40/39/39/38/38	42/40/39/38/38/38/38
Main body	Net dimensions[5] (W×H×D)	mm	575×235×638			
	Packed dimensions (W×H×D)	mm	690×285×690			
	Net/Gross weight	kg	13.0/15.0			14.0/16.0
Panel	Net dimensions (W×H×D)	mm	620×65×620			
	Packed dimensions (W×H×D)	mm	680×80×665			
	Net/Gross weight	kg	2.4/3.2			
Refrigerant type			R410A/R32			
Pipe connections	Liquid/Gas pipe	mm	Ø6.35/Ø12.7			
	Drain pipe	mm	OD Ø25			

Model			DBV-45Q4CAG6	DBV-56Q4CAG6	DBV-63Q4CAG6
Power supply			1-phase, 220-240V, 50/60Hz		
Cooling[1]	Capacity	kW	4.5	5.6	6.3
		kBtu/h	15.4	19.1	21.5
	Power input	W	25	35	50
Heating[2]	Capacity	kW	5.0	6.3	7.1
		kBtu/h	17.1	21.5	24.2
	Power input	W	25	35	50
Air flow rate[3]		m^3/h	640/605/570/530/495/460/425	810/765/720/670/625/580/535	905/855/805/755/705/655/605
Sound pressure level[4]		dB(A)	36.5/35/33/31/29/28/26.5	39/38/37/36/35/34/32	43/42/40/38/36/35/33.5
Sound power level		dB(A)	44/44/43/42/41/41/41	48/46/45/43/42/42/41	51/50/48/46/45/44/42
Main body	Net dimensions[5] (W×H×D)	mm	575×235×638		
	Packed dimensions (W×H×D)	mm	690×285×690		
	Net/Gross weight	kg	14.0/16.0	15.0/17.0	
Panel	Net dimensions (W×H×D)	mm	620×65×620		
	Packed dimensions (W×H×D)	mm	680×80×665		
	Net/Gross weight	kg	2.4/3.2		
Refrigerant type			R410A/R32		
Pipe connections	Liquid/Gas pipe	mm	Ø6.35/Ø12.7		Ø9.52/Ø15.9
	Drain pipe	mm	OD Ø25		

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. 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 1.5m below the unit in an anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



Low Static Pressure Duct

Optional wired controller

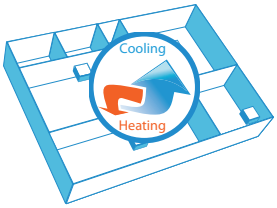
COMFORT

Quiet Operation

By optimizing the design of fan motor, air duct and heat exchanger, the new duct operates with noise as low as 22dB(A), creating a quieter and more comfortable environment.

- Fan motor noise reduction
- Air duct noise reduction
- Heat exchanger noise reduction

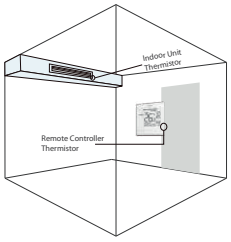
Auto Cooling-heating Changeover



Automatically selects cooling or heating mode to achieve the set temperature.

Two thermistors control

The indoor temperature can be checked using the thermistor in the remote controller as well as from the indoor unit



HEALTH

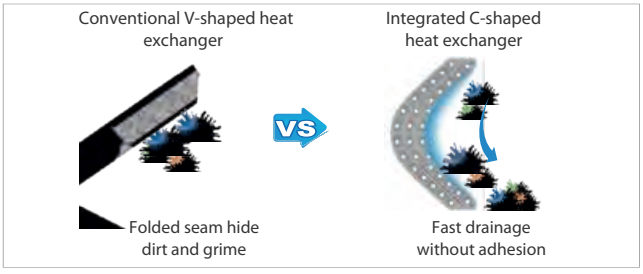
Healthy Air Supply

The Low Static Pressure Duct unit adopts an integrated C-shaped heat exchanger that allows for fast drainage and no dust or ash accumulation. The optional long-life filter, medium-life filter and plasma sterilization module further enhance the air quality of the air supply and create a healthy environment.

Long-life filter (optional)
Long-life, washable

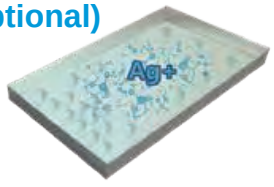
Medium efficiency filter (optional)
Class F6 filter, filters 1~5μm suspended particles, effectively blocking PM2.5

Integrated C-shaped heat exchanger (standard)
Quick discharge of dirt, no accumulation of dust or ash.



Silver Ions drain pan (optional)

Slow-released nano-silver ions can keep the drain pan free of mold for a long time.

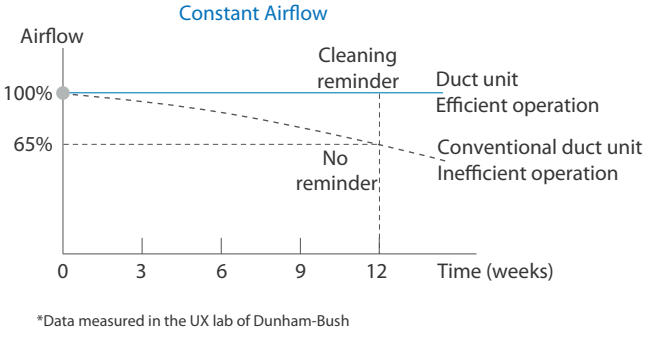




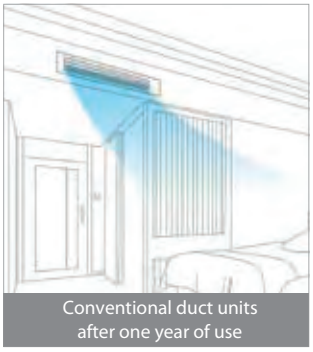
AIR FLOW

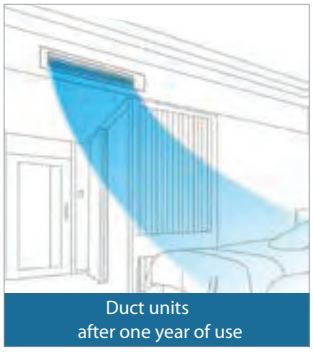
Constant Air Flow

Constant airflow technology can realize the airflow output is not affected by installation conditions and use conditions, ensuring the constant airflow supply.



*Data measured in the UX lab of Dunham-Bush

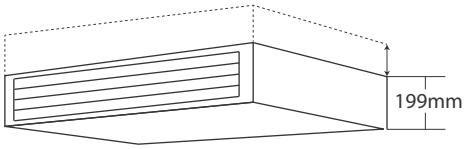

Conventional duct units after one year of use


Duct units after one year of use

EASY INSTALLATION

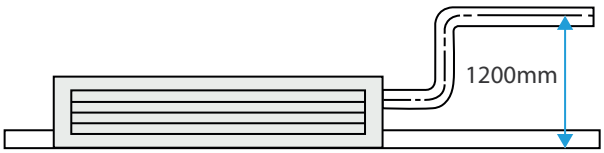
Ultra-thin Body

Ultra-thin body design, the body height of the whole series is only 199mm, greatly saving space and more flexible installation.



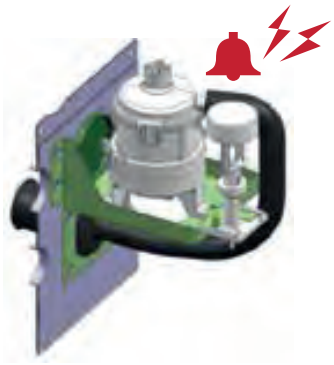
High-lift drain pump

A drain pump with a 1200mm raise height is fitted as standard, simplifying installation of the drain piping.



Fault Feedback

Early warning of drain pump fault.





Low Static Pressure Duct

Model			DBV-15T3AG6	DBV-22T3AG6
Power supply			1-phase, 220-240V, 50/60Hz	
Cooling[1]	Capacity	kW	1.5	2.2
		kBtu/h	5.1	7.5
	Power input	W	21	22
Heating[2]	Capacity	kW	1.8	2.5
		kBtu/h	6.1	8.5
	Power input	W	21	22
Air flow rate[3]		m^3/h	340/335/329/320/307/298/290	370/347/339/322/314/ 306/295
External static pressure[4]		Pa	10 (10-50)	
Sound pressure level[5]		dB(A)	27/26/25.5/24.5/23.5/ 22.5/22	28/27.5/26.5/25.5/24.5/23.5/22.0
Sound power level		dB(A)	43.5/43/42.5/42/41.5/41/40	46/45/44/43/42/41/40
Unit	Net dimensions (W×H×D)	mm	653×199×470	
	Packed dimensions (W×H×D)	mm	715×275×525	
	Net/Gross weight	kg	11.5/13.5	
Refrigerant type			R410A/R32	
Pipe connections	Liquid/Gas pipe	mm	Ø6.35/Ø12.7	
	Drain pipe	mm	OD Ø25	

Model			DBV-28T3AG6	DBV-36T3AG6	DBV-45T3AG6
Power supply			1-phase, 220-240V, 50/60Hz		
Cooling[1]	Capacity	kW	2.8	3.6	4.5
		kBtu/h	9.6	12.3	15.4
	Power input	W	28	31	43
Heating[2]	Capacity	kW	3.2	4	5
		kBtu/h	10.9	13.7	17.1
	Power input	W	28	31	43
Air flow rate[3]		m^3/h	460/431/413/380/351/ 323/300	605/557/508/453/414/ 365/320	800/770/701/629/557/ 506/435
External static pressure[4]		Pa	10 (10-50)		
Sound pressure level[5]		dB(A)	30/29.5/28.5/27.5/26/24.5/22	30/29.5/28.5/27.5/ 26.5/25.5/25	33/32.5/32/30.5/29/ 27.5/26
Sound power level		dB(A)	50.5/49/47/45.5/43.5/42/40	50.5/49.5/48/47/45.5/42.5/43	52/50.5/49/47.5/46/44.5/43
Unit	Net dimensions (W×H×D)	mm	653×199×470	803×199×470	1003×199×470
	Packed dimensions (W×H×D)	mm	715×275×525	865×275×525	1065×275×525
	Net/Gross weight	kg	11.5/13.5	13.0/15.5	16.5/19.5
Refrigerant type			R410A/R32		
Pipe connections	Liquid/Gas pipe	mm	Ø6.35/Ø12.7		
	Drain pipe	mm	OD Ø25		

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 1.5m below the unit in an anechoic chamber.
6. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments

INDOOR UNIT
TECHNICAL SPECIFICATIONS



Low Static Pressure Duct

Model			DBV-56T3AG6	DBV-71T3AG6	DBV-80T3AG6
Power supply			1-phase, 220-240V, 50/60Hz		
Cooling[1]	Capacity	kW	5.6	7.1	8
		kBtu/h	19.1	24.2	27.3
	Power input	W	58	65	108
Heating[2]	Capacity	kW	6.3	8	9
		kBtu/h	21.5	27.3	30.7
	Power input	W	58	65	108
Air flow rate[3]		m^3/h	900/800/761/682/603/ 549/470	1145/1033/957/860/763/671/580	1400/1327/1249/1175/1095/1026/960
External static pressure[4]		Pa	10 (10-50)	10 (10-50)	20Pa(10-80)
Sound pressure level[5]		dB(A)	36/34.5/33.5/32.5/ 31/29/27	37/35/34/32.5/31/30/29	36.5/35.5/34.5/33/ 32/31.5/30.5
Sound power level		dB(A)	56/54/52/50/48/46/44	57/55.5/54/52/50.5/49/47	57/56/54.5/53.5/52/51/49.5
Unit	Net dimensions (W×H×D)	mm	1003×199×470	1203×199×470	1703×199×470
	Packed dimensions (W×H×D)	mm	1065×275×525	1265×275×525	1755×255×525
	Net/Gross weight	kg	16.5/19.5	20/23.5	28/32.5
Refrigerant type			R410A/R32		
Pipe connections	Liquid/Gas pipe	mm	Ø6.35/Ø12.7	Ø9.52/Ø15.9	Ø9.52/Ø15.9
	Drain pipe	mm	OD Ø25		

Model			DBV-90T3AG6	DBV-112T3AG6
Power supply			1-phase, 220-240V, 50/60Hz	
Cooling[1]	Capacity	kW	9	11.2
		kBtu/h	30.7	38.2
	Power input	W	108	128
Heating[2]	Capacity	kW	10	12.5
		kBtu/h	34.1	42.7
	Power input	W	108	128
Air flow rate[3]		m^3/h	1400/1327/1249/1175/1095/1026/960	1620/1522/1433/1343/1254/1170/1080
External static pressure[4]		Pa	20Pa(10-80)	
Sound pressure level[5]		dB(A)	36.5/35.5/34.5/33/ 32/31.5/30.5	39.5/38/36.5/35/34/ 32.5/31.5
Sound power level		dB(A)	57/56/54.5/53.5/52/51/49.5	60.5/59/57.5/55.5/54/52.5/50.5
Unit	Net dimensions (W×H×D)	mm	1703×199×470	1703×199×470
	Packed dimensions (W×H×D)	mm	1755×255×525	1755×255×525
	Net/Gross weight	kg	28/32.5	
Refrigerant type			R410A/R32	
Pipe connections	Liquid/Gas pipe	mm	Ø9.52/Ø15.9	
	Drain pipe	mm	OD Ø25	

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 1.5m below the unit in an anechoic chamber.
6. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



Medium Static Pressure Duct


Standard wired controller

COMFORT

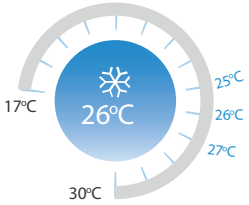
Quiet Operation

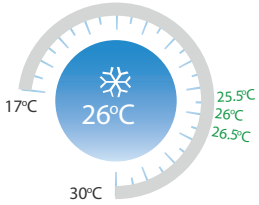
By optimizing the design of fan motor, air duct and heat exchanger, the new duct operates with noise as low as 22dB(A), creating a quieter and more comfortable environment.


22dB(A)

0.5°C/1°C Setting Temperature Adjustment

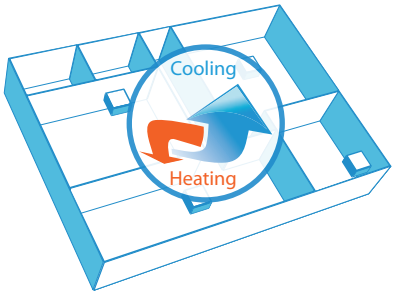
Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.





Auto Cooling-heating Changeover

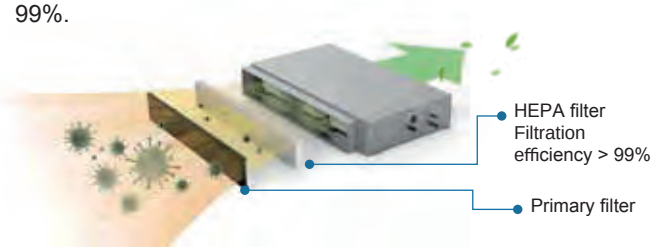
Automatically selects cooling or heating mode to achieve the set temperature.



HEALTH

Optional High Efficiency HEPA Filter*

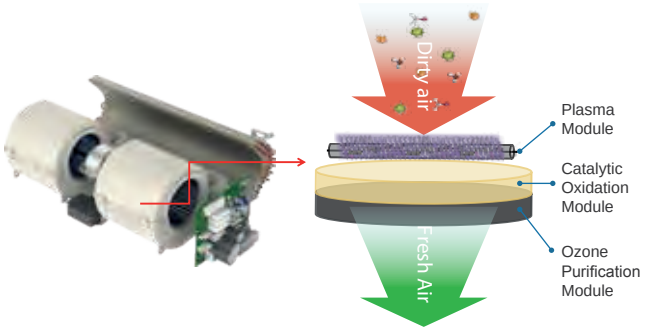
A static pressure of up to 160 Pa enables the application of medical-grade HEPA filters, and even small capacity models can be equipped with high-efficiency filters, efficiently filtering fine particles of 0.5 microns with an efficiency of over 99%.



* This function is available as a customization option.

Plasma Sterilization*

The Sterilization module can effectively kill bacteria, viruses and odors of indoor air.



*This function is available as a customization option for Medium Static Pressure Duct

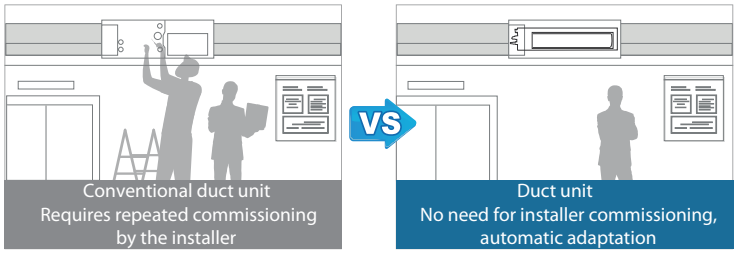
INDOOR UNIT
PRODUCT FEATURES



AIR FLOW

Adaptive Duct Length and Filter Resistance

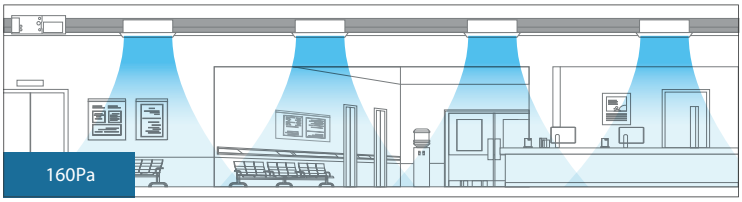
By digital fan motor and a specially designed independent drive chip enables precise control and output on demand. It can automatically adapt to duct lengths from 10 to 160 Pa equivalent static pressure without intervention from the installer.

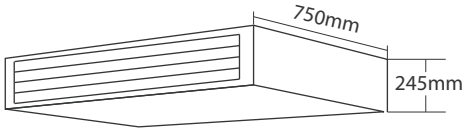


EASY INSTALLATION

Thin Body with High ESP

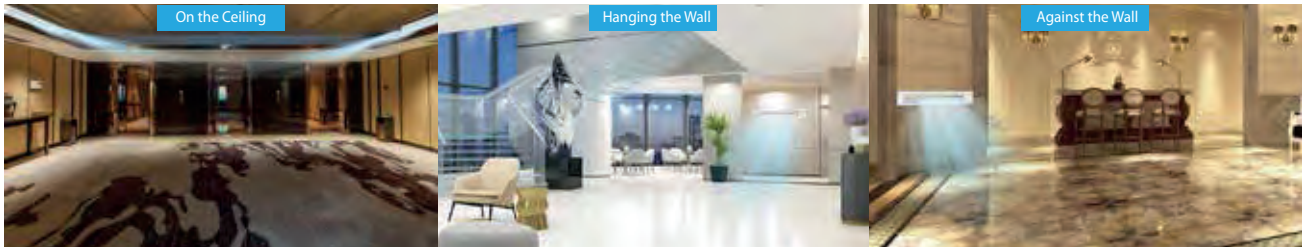
All models have a static pressure of 160 Pa and a thickness of only 245 mm. The high static pressure allows air to be delivered over longer distances without loss of cooling and heating effect. Especially suitable for long and narrow spaces.





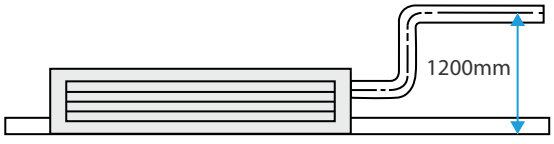
3 Way Flexible Installation

It is possible to install and connect the outdoor unit in 3 different ways for Duct, providing flexibility to accommodate a wide range of room designs.



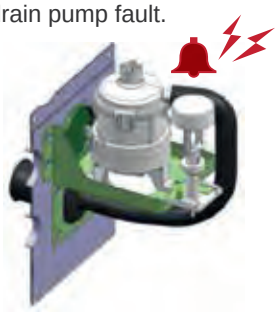
High-lift Drain Pump

A drain pump with a 1200mm raise height is fitted as standard, simplifying installation of the drain piping.



Fault Feedback

Early warning of drain pump fault.





Medium Static Pressure Duct

Model			DBV-15T2AG6	DBV-22T2AG6	DBV-28T2AG6
Power supply			1-phase, 220-240V, 50/60Hz		
Cooling[1]	Capacity	kW	1.5	2.2	2.8
		kBtu/h	5.1	7.5	9.6
	Power input	W	33	36	40
Heating[2]	Capacity	kW	1.8	2.5	3.2
		kBtu/h	6.1	8.5	10.9
	Power input	W	33	36	40
Air flow rate[3]		m^3/h	470/438/407/375/343/312/280	500/467/433/400/367/333/300	540/503/467/430/393/357/320
External static pressure[4]		Pa	30 (10~160)		
Sound pressure level[5]		dB(A)	26.5/26/25/24/23/22.5/22	26.5/26/25/24/23/22.5/22	26.5/26/25/24/23/22.5/22
Sound power level		dB(A)	46/44.5/43/41.5/40/38.5/37	47/45.5/44/42.5/41/39.5/38	47/45.5/44/42.5/41/39.5/38
Unit	Net dimensions (W×H×D)	mm	710×245×770		
	Packed dimensions (W×H×D)	mm	765×305×890		
	Net/Gross weight	kg	18.5/21	18.5/21	18.5/21
Refrigerant type			R410A/R32		
Pipe connections	Liquid/Gas pipe	mm	Ø6.35/Ø12.7		
	Drain pipe	mm	OD Ø25		

Model			DBV-36T2AG6	DBV-45T2AG6	DBV-56T2AG6
Power supply			1-phase, 220-240V, 50/60Hz		
Cooling[1]	Capacity	kW	3.6	4.5	5.6
		kBtu/h	12.3	15.4	19.1
	Power input	W	50	70	70
Heating[2]	Capacity	kW	4	5	6.3
		kBtu/h	13.7	17.1	21.5
	Power input	W	50	70	70
Air flow rate[3]		m^3/h	575/535/495/455/415/375/335	665/623/580/538/495/453/410	970/904/838/773/707/641/575
External static pressure[4]		Pa	30 (10~160)		
Sound pressure level[5]		dB(A)	29/28/27/26/25/23/22	33/32/29.5/28/26.5/25/24	33/32/31/30/27.5/26/25
Sound power level		dB(A)	50/48.5/47/45/43/41/39	53/51/49/47/45/43/41	55/53/51/49/47/45/43
Unit	Net dimensions (W×H×D)	mm	710×245×770		910×245×770
	Packed dimensions (W×H×D)	mm	765×305×890		965×305×890
	Net/Gross weight	kg	18.5/21	19.5/22	24/27.5
Refrigerant type			R410A/R32		
Pipe connections	Liquid/Gas pipe	mm	Ø6.35/Ø12.7		
	Drain pipe	mm	OD Ø25		

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 1.5m below the unit in a semi-anechoic chamber.
6. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

INDOOR UNIT
TECHNICAL SPECIFICATIONS



Medium Static Pressure Duct

Model			DBV-71T2AG6	DBV-80T2AG6	DBV-90T2AG6
Power supply			1-phase, 220-240V, 50/60Hz		
Cooling[1]	Capacity	kW	7.1	8	9
		kBtu/h	24.2	27.3	30.7
	Power input	W	96	102	110
Heating[2]	Capacity	kW	8	9	10
		kBtu/h	27.3	30.7	34.1
	Power input	W	96	102	110
Air flow rate[3]		m^3/h	1150/1068/986/904/822/740/660	1355/1263/1172/1080/988/897/805	1420/1323/1225/1128/1030/933/835
External static pressure[4]		Pa	30 (10~160)	40 (10~160)	40(10~160)
Sound pressure level[5]		dB(A)	35/33.5/32/30.5/29/27.5/26	37/35.5/34/32.5/31/29.5/28	37/35.5/34/32.5/31/29.5/28
Sound power level		dB(A)	58/56/54/51.5/48/47/45	59/57/55/53/51/49/47	59/57/55/53/50.5/48/46
Unit	Net dimensions (W×H×D)	mm	910×245×770	1160×245×770	
	Packed dimensions (W×H×D)	mm	965×305×890	1215×305×890	
	Net/Gross weight	kg	25/28.5	30/33.5	31/34.5
Refrigerant type			R410A/R32		
Pipe connections	Liquid/Gas pipe	mm	Ø9.52/Ø15.9		
	Drain pipe	mm	OD Ø25		

Model			DBV-112T2AG6	DBV-140T2AG6	DBV-160T2AG6
Power supply			1-phase, 220-240V, 50/60Hz		
Cooling[1]	Capacity	kW	11.2	14	16
		kBtu/h	38.2	47.8	54.6
	Power input	W	138	172	210
Heating[2]	Capacity	kW	12.5	16	18
		kBtu/h	42.7	54.6	61.4
	Power input	W	138	172	210
Air flow rate[3]		m^3/h	1950/1817/1683/1550/1417/1283/1150	2105/1971/1837/1703/1568/1434/1300	2350/2160/2015/1871/1776/1533/1400
External static pressure[4]		Pa	40 (10~160)	50 (10~160)	
Sound pressure level[5]		dB(A)	39/37/35/33/31/29/28	40/38/36/34/32/30/29	42/40/38/36/34/33/31
Sound power level		dB(A)	60/58/56.5/55/53.5/52/50	64/62/61.5/59.5/57.5/55/53	65/63/61/58.5/56.5/54/52
Unit	Net dimensions (W×H×D)	mm	1510×245×770		
	Packed dimensions (W×H×D)	mm	1565×305×890		
	Net/Gross weight	kg	37/41.5	39/43.5	39/43.5
Refrigerant type			R410A/R32		
Pipe connections	Liquid/Gas pipe	mm	Ø9.52/Ø15.9		
	Drain pipe	mm	OD Ø25		

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 1.5m 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

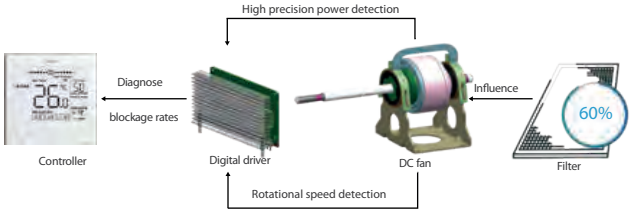

Standard wireless remote controller


Optional wired controller

HEALTH

Visualization Of Dirty Blockage Rate

Built-in self-learning model can detect the real-time resistance of the filter screen and restore the true state of the filter screen.10 levels blockage rates can be accurately identified and displayed on the controller, reminding the user to clean the filter in time.



Innovative Puro-air Kit

Protectors of health and safety

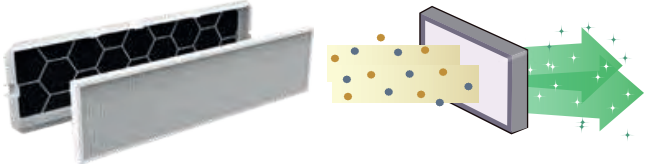
From Germany -OSRAM quality UV light source

Ozone –Free
UV leakage-Free

*The indoor unit needs to be customized in order to use the Puro-air Kit.

Efficiency Filter Screen

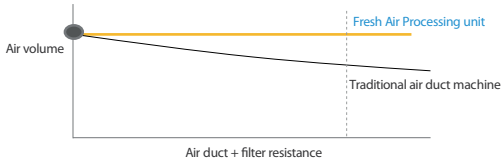
Optional F7 or H13-class air filter, Equipped with H13 HEPA high-efficiency filter screen, it can filter 0.5 micron extremely fine particles, and the primary filtration efficiency is more than 99.95%.



AIR FLOW

Constant Airflow Technology

Through the independent constant air volume digital fan technology, the air volume is independently detected and adjusted to realize constant air volume and no attenuation in the whole life.



Ultra-high static pressure

The static pressure can reach 250Pa(5.6-16kW) or 400Pa(20-56kW), so the air supply distance is longer. Espe-cially in long and narrow spaces such as corridors, it can reduce the number of units used and save investment costs..



WIDER APPLICATION

Multi-functional Expansion Board

A wide range of accessories can be connected via Switch module and expansion board for even more functionality.

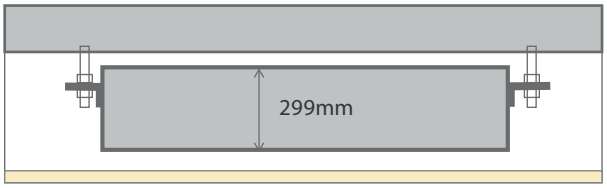
Switch module
(Customized)

1#/2# Expansion Board
(Customized)

- Third-party humidifier and dehumidifier
- Electric heater connection
- Refrigerant leak sensor connection
- Third-party controller connection
- Long-distance on/off function
- Long-distance alarm function
- Long-distance Linkage with third-party equipment such as air valve

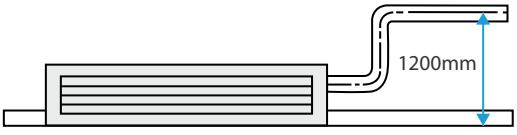
Ultra-thin Fuselage

For small Airflow Rate Fresh Air Processing Unit, the fuselage thickness is only 299mm,the height required for ceiling installa-tion is greatly reduced which leads to be able to cope with more installation situations.



High-lift Drain Pump

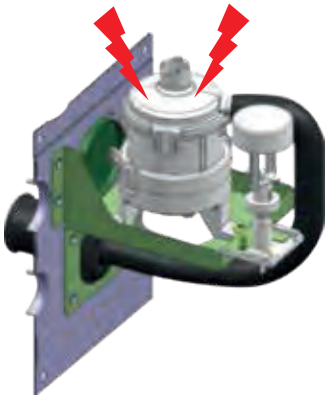
A drain pump with a 1200mm raise height is fitted as standard, simplifying installation of the drain piping.



Intelligent Leak Feedback

Digital feedback DC water pump, Take the initiative to sense the pump speed and water flow, judge whether there is jamming attenuation or damage, and give early warning to avoid water leakage.

Integrated drainage pipe design reduces the sealing points of traditional design from 6 to 2, reduces breakpoints and reduces leakage risks.





INDOOR UNIT
TECHNICAL SPECIFICATIONS

High Static Pressure Duct

Model			DBV-56T1AG6	DBV-71T1AG6	DBV-80T1AG6	DBV-90T1AG6
Power supply			1-phase, 220-240V, 50/60Hz			
Cooling[1]	Capacity	kW	5.6	7.1	8	9
		kBut/h	19.1	24.2	27.3	30.7
	Input	W	159	159	159	196
Heating[2]	Capacity	kW	6.3	8	9	10
		kBut/h	21.5	27.3	30.7	34.1
	Input	W	159	159	159	196
Airflow rate[3]		m³/h	1360/1281/1201/1122/1043/963/884	1360/1281/1201/1122/1043/963/884	1360/1281/1201/1122/1043/963/884	1500/1413/1325/1238/1150/1063/975
External static pressure[4]		Pa	80(0~250)			
Sound pressure level[5]		dB(A)	39/37.5/36/34.5/33/31.5/30	39/37.5/36/34.5/33/31.5/30	39/37.5/36/34.5/33/31.5/30	40/38.5/37/35.5/34/32.5/31
Unit	Net dimensions[6] (W×H×D)	mm	1135×299×770			
	Packed dimensions (W×H×D)	mm	1215×359×890			
	Net/Gross weight	kg	35/38.5	35/38.5	35/38.5	35/38.5
Refrigerant type			R410A/R32	R410A/R32	R410A/R32	R410A/R32
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7	Φ9.52/Φ15.9		
	Drain pipe	mm	OD Φ25			

Model			DBV-112T1AG6	DBV-125T1AG6	DBV-140T1AG6	DBV-160T1AG6
Power supply			1-phase, 220-240V, 50/60Hz			
Cooling[1]	Capacity	kW	11.2	12.5	14	16
		kBut/h	38.2	42.7	47.8	54.6
	Input	W	248	252	284	339
Heating[2]	Capacity	kW	12.5	14	16	18
		kBut/h	42.7	47.8	54.6	61.4
	Input	W	248	252	284	339
Airflow rate[3]		m³/h	2140/2015/1890/1766/1641/1516/1391	2150/2025/1899/1774/1649/1523/1398	2400/2260/2120/1980/1840/1700/1560	2600/2448/2297/2145/1993/1842/1690
External static pressure[4]		Pa	80(0~250)	100(0~250)		
Sound pressure level[5]		dB(A)	41/39.5/38/36.5/35/33.5/32	41/39.7/38.3/37/35.7/34.3/33	43/41.5/40/38.5/37/35.5/34	44/42.5/41/39.5/38/36.5/35
Unit	Net dimensions[6] (W×H×D)	mm	1485×299×770			
	Packed dimensions (W×H×D)	mm	1565×359×890			
	Net/Gross weight	kg	44.5/48.5	46.5/50.5	46.5/50.5	46.5/50.5
Refrigerant type			R410A/R32	R410A/R32	R410A/R32	R410A/R32
Pipe connections	Liquid/Gas pipe	mm	Φ9.52/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 anechoic chamber.
6.Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.
7.All specifications are measured at standard external static pressure.

INDOOR UNIT
TECHNICAL SPECIFICATIONS



High Static Pressure Duct

Model			DBV-200T1AG6	DBV-224T1AG6	DBV-252T1AG6	DBV-280T1AG6
Power supply			1-phase, 220-240V, 50/60Hz			
Cooling[1]	Capacity	kW	20	22.4	25.2	28
		kBut/h	68.3	76.5	86.0	95.6
	Input	W	780	780	780	780
Heating[2]	Capacity	kW	22.5	25	26	31.5
		kBut/h	76.8	85.3	88.7	107.5
	Input	W	780	780	780	780
Airflow rate[3]		m^3/h	4700/4387/4073/3760/3447/3133/2820	4700/4387/4073/3760/3447/3133/2820	4700/4387/4073/3760/3447/3133/2820	4700/4387/4073/3760/3447/3133/2820
External static pressure[4]		Pa	200(0-400)			
Sound pressure level[5]		dB(A)	51/50/48/46/44/43/42	51/50/48/46/44/43/42	51/50/48/46/44/43/42	51/50/48/46/44/43/42
Unit	Net dimensions[6] (W×H×D)	mm	1310×580×1050			
	Packed dimensions (W×H×D)	mm	1530×730×1060			
	Net/Gross weight	kg	125/150	125/150	125/150	125/150
Refrigerant type			R410A/R32	R410A/R32	R410A/R32	R410A/R32
Pipe connections	Liquid/Gas pipe	mm	Φ9.52/Φ19		Φ12.7/Φ22.2	
	Drain pipe	mm	OD Φ32			

Model			DBV-335T1AG6	DBV-400T1AG6	DBV-450T1AG6	DBV-560T1AG6
Power supply			1-phase, 220-240V, 50/60Hz			
Cooling[1]	Capacity	kW	33.5	40	45	56
		kBut/h	114.3	136.5	153.6	191.1
	Input	W	810	1850	1850	2030
Heating[2]	Capacity	kW	38	45	56	63
		kBut/h	129.7	153.6	191.1	215.0
	Input	W	810	1850	1850	2030
Airflow rate[3]		m^3/h	4700/4387/4073/3760/3447/3133/2820	7500/7000/6500/6000/5500/5000/4500	7500/7000/6500/6000/5500/5000/4500	8400/7840/7280/6720/6160/5600/5040
External static pressure[4]		Pa	200(0-400)	300(0-400)		
Sound pressure level[5]		dB(A)	52/51/49/48/46/44/43	58/56/54/52/50/49/48	58/56/54/52/50/49/48	59/58/56/54/53/51/49
Unit	Net dimensions[6] (W×H×D)	mm	1310×580×1050	1860×580×1050		
	Packed dimensions (W×H×D)	mm	1530×730×1060	2080×730×1060		
	Net/Gross weight	kg	128/153	166/204	166/204	170/208
Refrigerant type			R410A/R32	R410A/R32	R410A/R32	R410A/R32
Pipe connections	Liquid/Gas pipe	mm	Φ12.7/Φ22.2	Φ12.7/Φ25.4	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. 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 anechoic chamber.
6. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.
7. All specifications are measured at standard external static pressure.



Wall Mounted


Standard wireless remote controller


Optional wired controller

COMFORT

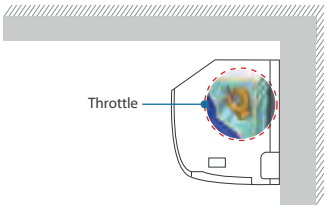
Quiet Operation

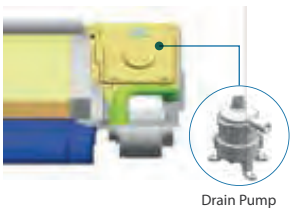
The minimum noise level of Wall Mounted is as low as 27dB(A), idea for hotels and other noise-sensitive locations.


27dB(A)

Enclosed Design

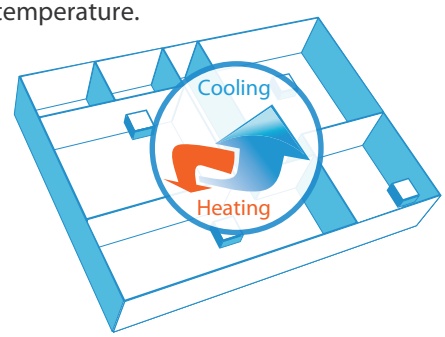
For Wall Mounted throttling parts and drain pumps adopt closed design, reducing noise.




Drain Pump

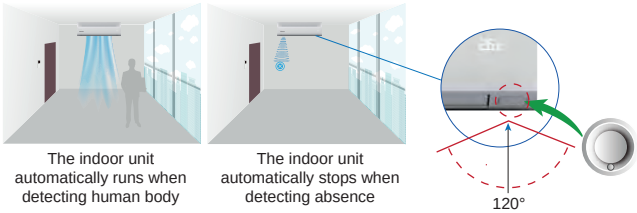
Auto Cooling-heating Changeover

Automatically selects cooling or heating mode to achieve the set temperature.



Human Detect Sensor*

Using millimeter-wave radar sensor controller automatically turns indoor units on or off upon detecting that the room is occupied or unoccupied, ensuring climate control whilst minimizing energy consumption.


The indoor unit automatically runs when detecting human body

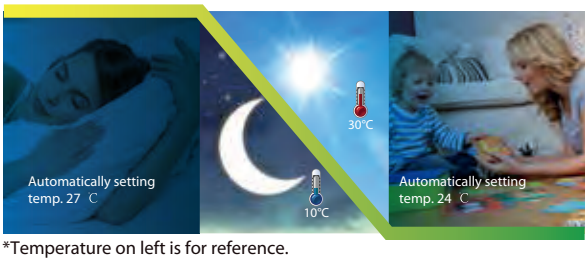
The indoor unit automatically stops when detecting absence

120°

*This function is available as a customization option for Wall Mounted.

Sleep Mode

The smart sleep mode provides a comfortable sleep period and a refreshing wake up time.



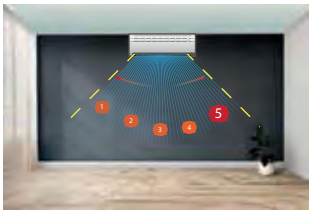
*Temperature on left is for reference.

AIR FLOW

3D Air Flow*

Possibility to select automatic vertical and horizontal moving of the air discharge louvre, for uniform air flow and temperaturedistribution.


Up & Down


Right & Left

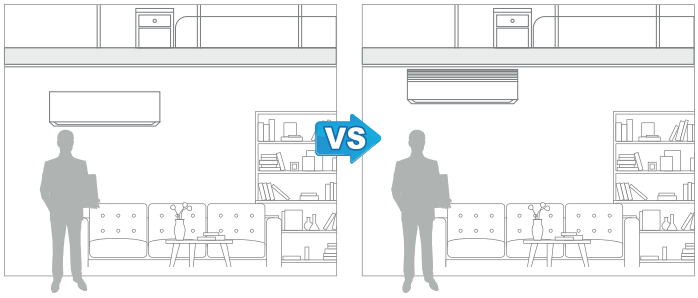
*Horizontal Swing function is available as a customization option for Wall Mounted.



EASY INSTALLATION

Ceiling Mounting

The Wall Mounted new heat exchanger is designed to meet the installation requirements close to the ceiling, and the minimum distance from the ceiling is 3cm.

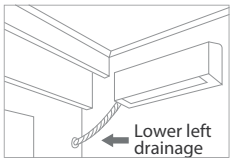


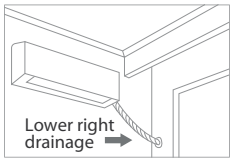
There is some distance from ceiling

The distance from the ceiling is 3cm

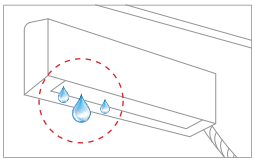
Free Drainage without Space Restrictions

The Wall Mounted can realize horizontal drainage, downward drainage, upward drainage, making installation more flexible.





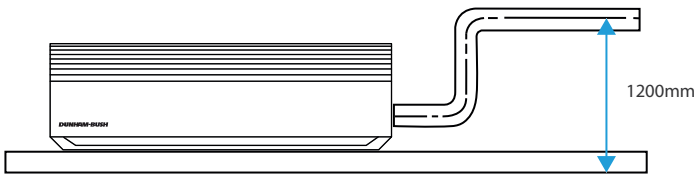
Most conventional Wall Mounted unit does not have a drain pump and the condensate pipe can only be installed underneath the unit, relying on gravity to drain the condensate to the nearest window.



When the condensate pipe is blocked, condensate can drip down onto the floor and damage it.

High-lift drain pump*

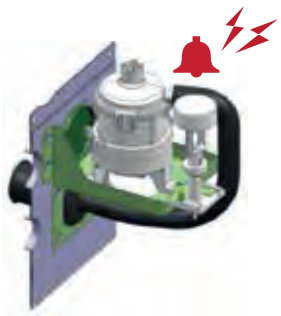
A drain pump with a 1200mm raise height is fitted as standard, simplifying installation of the drain piping.



*The drain pump is available as a customization option.

Fault Feedback

Early warning of drain pump fault.





INDOOR UNIT
PRODUCT FEATURES

Wall Mounted

Model			DBV-15GAG6	DBV-22GAG6	DBV-28GAG6	DBV-36GAG6
Power supply			1-phase, 220-240V, 50/60Hz			
Cooling[1]	Capacity	kW	1.5	2.2	2.8	3.6
		kBtu/h	5.1	7.5	9.6	12.3
	Power input	W	18	21	24	27
Heating[2]	Capacity	kW	1.7	2.4	3.2	4
		kBtu/h	5.8	8.2	10.9	13.6
	Power input	W	18	21	24	27
Air flow rate[3]		m^3/h	460/440/420/400/380/360/340	500/470/440/410/390/370/340	540/510/470/430/400/370/340	580/540/500/460/420/380/340
Sound pressure level[4]		dB(A)	32/31/30/30/29/28/27	33/32/31/30/29/28/27	35/34/33/32/31/30/28	37/36/34/33/31/30/28
Sound power level		dB(A)	45/44/43/43/42/41/40	46/45/44/43/42/41/40	50/49/48/47/46/44/42	54/53/51/50/48/46/44
Unit	Net dimensions (W×H×D)	mm	750×295×265	750×295×265	750×295×265	750×295×265
	Packed dimensions (W×H×D)	mm	875×390×360	875×390×360	875×390×360	875×390×360
	Net/Gross weight	kg	9/11.5	9/11.5	10/12.5	10/12.5
Refrigerant type			R410A/R32			
Pipe connections	Liquid/Gas pipe	mm	Ø6.35/Ø12.7	Ø6.35/Ø12.7	Ø6.35/Ø12.7	Ø6.35/Ø12.7
	Drain pipe	mm	OD Ø16	OD Ø16	OD Ø16	OD Ø16

Model			DBV-45GAG6	DBV-56GAG6	DBV-71GAG6	DBV-80GAG6
Power supply			1-phase, 220-240V, 50/60Hz			
Cooling[1]	Capacity	kW	4.5	5.6	7.1	8
		kBtu/h	15.4	19.1	24.2	27.3
	Power input	W	30	40	50	65
Heating[2]	Capacity	kW	5	6.3	8	9
		kBtu/h	17.1	21.5	27.3	30.7
	Power input	W	30	40	50	65
Air flow rate[3]		m^3/h	720/670/620/560/510/460/410	860/780/700/620/550/480/410	1220/1120/1030/940/850/750/660	1380/1260/1140/1020/900/780/660
Sound pressure level[4]		dB(A)	37/35/33/32/31/30/29	41/39/37/35/33/31/29	44/42/40/38/36/34/32	45/43/41/39/37/35/32
Sound power level		dB(A)	54/52/50/49/48/46/44	56/54/52/50/48/46/44	58/56/54/52/50/48/46	60/57/55/53/50/48/46
Unit	Net dimensions (W×H×D)	mm	950×295×265	950×295×265	1200×295×265	1200×295×265
	Packed dimensions (W×H×D)	mm	1075×390×360	1075×390×360	1315×385×360	1315×385×360
	Net/Gross weight	kg	11.5/14	11.5/14	15/18	15/18
Refrigerant type			R410A/R32			
Pipe connections	Liquid/Gas pipe	mm	Ø6.35/Ø12.7	Ø6.35/Ø12.7	Φ9.52/Φ15.9	Φ9.52/Φ15.9
	Drain pipe	mm	OD Ø16	OD Ø16	OD Ø16	OD Ø16

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. 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 0.8m below the unit in an anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



Floor Standing




Standard wireless remote controller


Optional wired controller

COMFORT

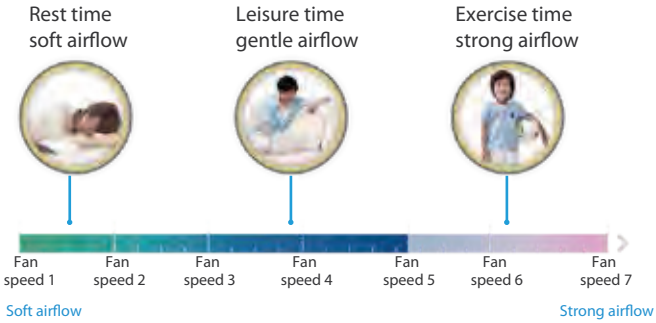
Digital Display On/Off

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


Digital display

Multiple Fan Speeds

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



Quiet Operation

The fan motor is DC power supply, which is more energy-saving and silent than AC power supply, creating a more quiet and comfortable environment


Fan Motor

Buzzer Sound On/Off

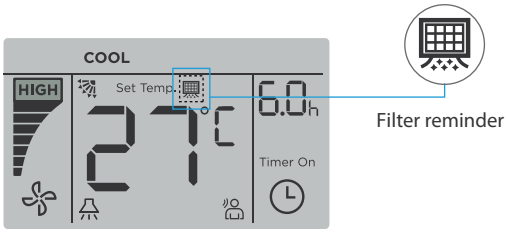
Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.



HEALTH

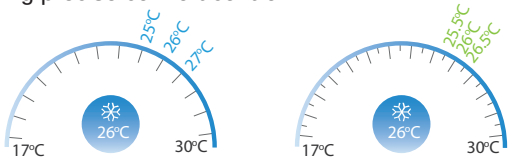
Dirty Filters Indicator Signal

The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.



0.5°C/1°C Setting Temperature Adjustment

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



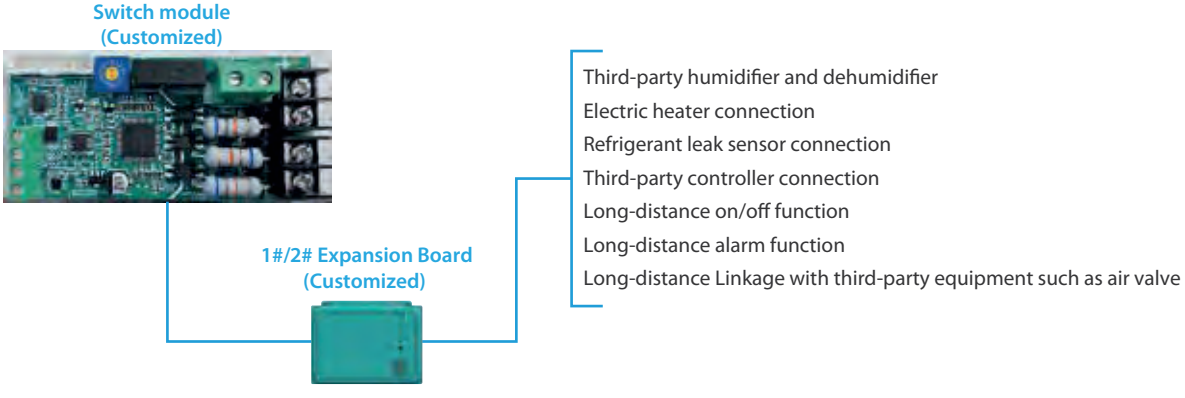
Digital Display On/Off

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

WIDER APPLICATION

Multi-functional Expansion Board

A wide range of accessories can be connected via Switch module and Expansion Board for even more functionality.



Multiple Appearance Options

The Floor Standing Unit has three appearance options to meet different installation requirement, the F3B (concealed) unit is designed to be concealed in walls while the F4 (front air intake) and F5 (underside air intake) offer a choice of air intake options.

F3B (concealed)

F4 (front air intake)

F5 (underside air intake)

INDOOR UNIT
PRODUCT FEATURES



Floor Standing F3 (Concealed)

Model (F3)				DBV-22F3AG6	DBV-28F3AG6	DBV-36F3AG6	DBV-45F3AG6	DBV-56F3AG6	DBV-71F3AG6	DBV-80F3AG6
Power supply				1-phase, 220-240V, 50/60Hz						
Cooling[1]	Capacity		kW	2.2	2.8	3.6	4.5	5.6	7.1	8
			kBut/h	7.5	9.6	12.3	15.4	19.1	24.2	27.3
	Input		W	35	35	40	44	45	53	62
Heating[2]	Capacity		kW	2.4	3.2	4.0	5.0	6.3	8.0	9.0
			kBut/h	8.2	10.9	13.7	17.1	21.5	27.3	30.7
	Input		W	35	35	41	46	47	57	64
External static pressure[3]			Pa	0-60						
Airflow rate[3]			m³/h	473/464/454/449/439/431/426		524/503/488/471/450/427/408	636/611/584/557/533/507/483	781/756/738/717/683/651/624	928/893/865/834/803/770/739	
Sound pressure level[4]			dB(A)	34.5/34/33.5/32.5/32/31/30.5		36.5/35.5/34.5/34/33/32/31	37/36/35/34/33/32/30	36.5/36/35/34/33.5/32.5/31.5	40.5/39.5/38.5/37.5/36.5/36/34.5	
Unit	Net dimensions[5] (W×H×D)		mm	915×470×200			1133×470×200	1253×566×200		
	Packed dimensions (W×H×D)		mm	985×555×255			1205×555×255	1325×650×255		
	Net/Gross weight		kg	16.3/20.0		16.9/20.7	20.0/24.4	24.3/30.0	26.1/31.8	
Refrigerant type				R410A/R32						
Pipe connections	Liquid/Gas pipe		mm	Φ6.35/Φ12.7					Φ9.52/Φ15.9	
	Drain piping		mm	OD Φ18.5						

Floor Standing F4/F5 (Exposed)

Model (F4)			DBV-22F4AG6	DBV-28F4AG6	DBV-36F4AG6	DBV-45F4AG6	DBV-56F4AG6	DBV-71F4AG6	DBV-80F4AG6
Model (F5)			DBV-22F5AG6	DBV-28F5AG6	DBV-36F5AG6	DBV-45F5AG6	DBV-56F5AG6	DBV-71F5AG6	DBV-80F5AG6
Power supply			1-phase, 220-240V, 50/60Hz						
Cooling[1]	Capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1	8
		kBut/h	7.5	9.6	12.3	15.4	19.1	24.2	27.3
	Input	W	35	35	40	44	45	53	62
Heating[2]	Capacity	kW	2.4	3.2	4	5	6.3	8	9
		kBut/h	8.2	10.9	13.7	17.1	21.5	27.3	30.7
	Input	W	35	35	41	46	47	57	64
External static pressure[3]		Pa(F4)	0-10						
		Pa(F5)	0-10						
Airflow rate[3]		m³/h(F4)	507/490/482/466/449/450/435		532/512/501/483/466/435/414	689/663/639/608/575/560/526	934/904/888/860/821/786/764	1054/1011/992/955/924/889/841	
		m³/h(F5)	498/486/475/464/453/441/430		508/491/474/458/441/424/407	692/665/637/610/582/555/528	811/785/759/732/706/680/653	930/895/860/825/790/755/721	
Sound pressure level[4]		dB(A)(F4)	36/35/34.5/34/33/32.5/32		38/37/36/35/34/33/32	43/42/41/40/39/38/37	41.5/41/40/39/38/37/36	46/45.5/45/44/43/42/41	
		dB(A)(F5)	32.5/32/31.5/31/30.5/30/29		35/34/33/32/31/30/29	38/37/36/35/34/32.5/31.5	35/34.5/34/33/32.5/32/31	39.5/39/38/37/36/35/34	
Unit	Net dimensions[5] (W×H×D)	mm(F4)	1020×495×200		1020×495×200	1240×495×200	1360×591×200		
		mm(F5)	1020×495×200		1020×495×200	1240×495×200	1360×591×200		
	Packed dimensions (W×H×D)	mm(F4)	1125×595×285		1125×595×285	1345×595×285	1465×695×285		
		mm(F5)	1125×595×285		1125×595×285	1345×595×285	1465×695×285		
	Net/Gross weight	kg(F4)	21.1/26.8		21.9/27.6	26.3/32.4	32.1/39.4	33.3/41.1	33.3/41.1
		kg(F5)	21.1/26.8		21.9/27.6	26.3/32.4	32.1/39.4	33.3/41.1	33.3/41.1
Refrigerant type			R410A/R32						
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7					Φ9.52/Φ15.9	
	Drain piping	mm	OD Φ18.5						

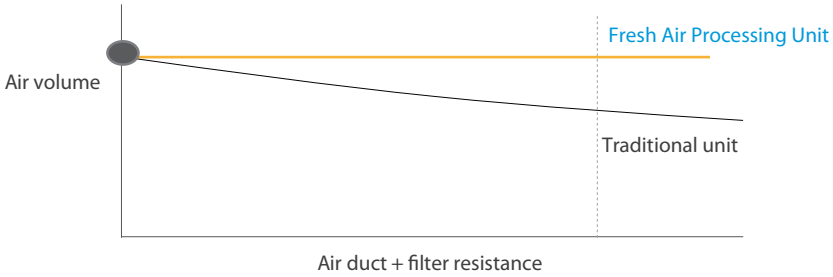
Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Fan motor speed and air flow rate are from the highest to the lowest, 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 1.5m below the unit in a anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Fresh Air Processing Unit

AIR FLOW

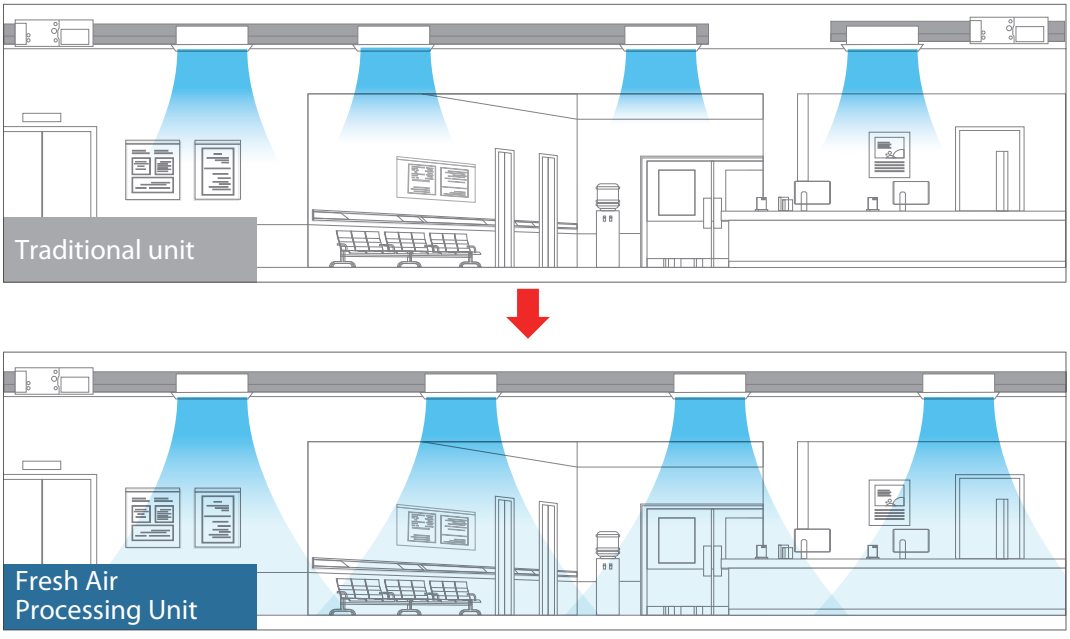
Constant Airflow Technology

Through the independent constant air volume digital fan technology, the air volume is independently detected and adjusted to realize constant air volume and no attenuation in the whole life.



Ultra-high Static Pressure

The static pressure can reach 400Pa (5.6 - 16kW) or 400Pa (20 - 56kW), so the air supply distance is longer. Especially in long and narrow spaces such as corridors, it can reduce the number of units used and save investment costs..

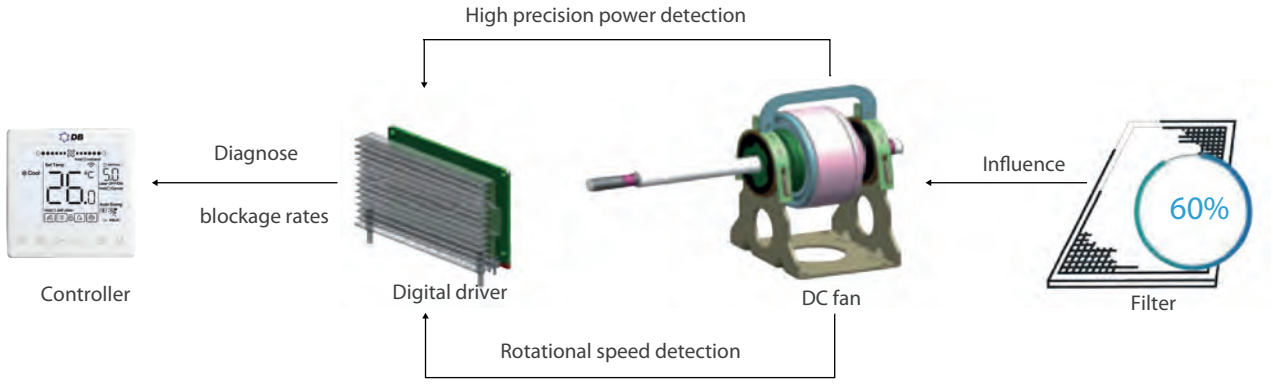




HEALTH

Visualization Of Dirty Blockage Rate

Built-in self-learning model can detect the real-time resistance of the filter screen and restore the true state of the filter screen. 10 levels blockage rates can be accurately identified and displayed on the controller, reminding the user to clean the filter in time.



Innovative Puro-air Kit

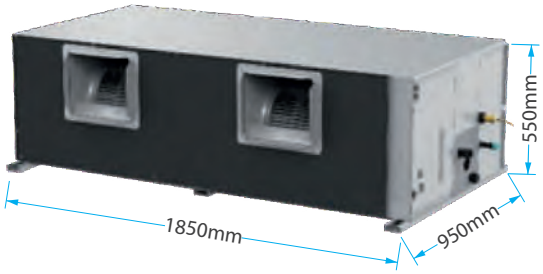
Protectors of health and safety

From Germany -OSRAM quality UV light source

*The indoor unit needs to be customized in order to use the Puro-air Kit.

Ultra-thin fuselage

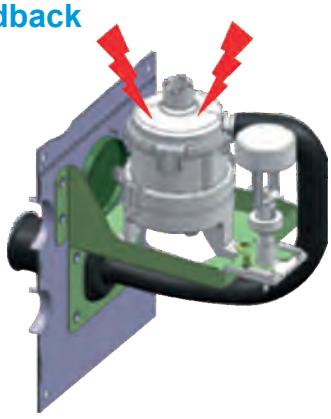
20 -56 kW model, the fuselage thickness is only 550mm,the height required for ceiling installation is greatly reduced which leads to be able to cope with more installation situations.



WIDER APPLICATION

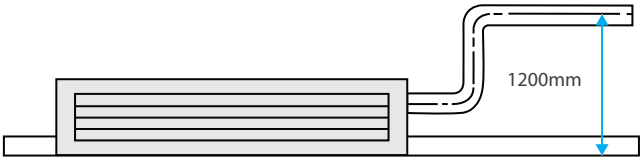
Intelligent Leak Feedback

Digital feedback DC water pump, Take the initiative to sense the pump speed and water flow, judge whether there is jamming attenuation or damage, and give early warning to avoid water leakage. Integrated drainage pipe design reduces the sealing points of traditional design from 6 to 2, reduces breakpoints and reduces leakage risks



High-lift Drain Pump

A drain pump with a 1200mm raise height is fitted as standard, simplifying installation of the drain piping.





Fresh Air Processing Unit

Model			DBV-90FASAG6	DBV-140FASAG6	DBV-160FASAG6	DBV-224FASAG6	DBV-280FASAG6
Power supply			1-phase, 220-240V, 50/60Hz				
Cooling[1]	Capacity	kW	9	14	16	22.4	28
		kBut/h	30.7	47.8	54.6	76.5	95.6
	Input	W	128	184	210	252	284
Heating[2]	Capacity	kW	5.7	8.9	10.1	13.9	17.4
		kBut/h	19.5	30.4	34.5	47.4	59.4
	Input	W	128	184	210	252	284
Airflow rate[3]		m³/h	690/635/580/ 525/470/415/360	1080/990/900/ 810/720/630/540	1230/1130/1030/ 930/830/730/630	1680/1540/1400/ 1260/1120/980/840	2100/1930/1760/ 1590/1420/1250/1080
External static pressure[4]		Pa	100 (0~250)				
Sound pressure level[5]		dB(A)	38/36.5/35/33.5/ 32/30.5/29	42/40/38/36/ 34/32/30	43/41/39/37/ 35/33/31	46/44/42/40/ 38/36/34	48/46/44/42/ 40/38/36
Unit	Net dimensions[6] (W×H×D)	mm	1135×299×770			1485×299×770	
	Packed dimensions (W×H×D)	mm	1215×359×890			1565×359×890	
	Net/Gross weight	kg	34.5/38	34.5/38	34.5/38	46/50	46/50
Pipe connections	Liquid/Gas pipe	mm	Φ9.52/Φ15.9			Φ9.52/Φ19.1	Φ9.52/Φ22.2
	Drain pipe	mm	OD Φ25				

Model			DBV-200FAAG6	DBV-224FAAG6	DBV-252FAAG6	DBV-280FAAG6	DBV-335FAAG6	DBV-400FAAG6	DBV-450FAAG6	DBV-560FAAG6
Power supply			1-phase, 220-240V, 50/60Hz							
Cooling[1]	Capacity	kW	20.0	22.4	25.2	28	33.5	40	45	56
		kBut/h	68.3	76.5	86.0	95.6	114.3	136.5	153.6	191.1
	Input	W	425	425	480	540	550	900	900	1330
Heating[2]	Capacity	kW	12	13.7	16	18	22	26.5	27.8	39
		kBut/h	41.0	46.8	54.6	61.4	75.1	90.4	94.9	133.1
	Input	W	425	425	480	540	550	900	900	1330
Airflow rate[3]		m³/h	2500/2417/2333/ 2250/2167/ 2083/2000	2500/2417/2333/ 2250/2167/ 2083/2000	2800/2667/2533/ 2400/2267/ 2133/2000	3000/2833/2667/ 2500/2333/ 2167/2000	3200/3000/2800/ 2600/2400/ 2200/2000	4500/4217/3933/ 3650/3367/ 3083/2800	4500/4217/3933/ 3650/3367/ 3083/2800	6200/5833/5467/ 5100/4733/ 4367/4000
External static pressure[4]		Pa	220(0-400)					300(0-400)		
Sound pressure level[5]		dB(A)	47/46/46/45/ 44/43/42	47/46/46/45/ 44/43/42	48/47/47/46/ 45/44/43	49/48/48/47/ 46/45/44	51/50/49/48/ 47/46/45	53/52/52/51/ 50/49/48	53/52/52/51/ 50/49/48	56/55/55/54/ 53/52/51
Unit	Net dimensions[6] (W×H×D)	mm	1300×580×1050					1850×580×1050		
	Packed dimensions (W×H×D)	mm	1530×730×1060					2080×730×1060		
	Net/Gross weight	kg	117/142	117/142	117/142	117/142	121/146	161/198	161/198	164/201
Pipe connections	Liquid/Gas pipe	mm	Φ9.52/Φ19.1		Φ12.7/Φ22.2		Φ12.7/Φ25.4		Φ16/Φ28.6	
	Drain pipe	mm	OD Φ32							

Notes:
1. Indoor temperature 33°C DB, 28°C WB; outdoor temperature 33°C DB; equivalent refrigerant piping length 5m with zero level difference.
2. Indoor temperature 0°C DB; outdoor temperature 0°C DB, -2.9°C WB; equivalent refrigerant piping length 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 1.5m below the unit in a semi-anechoic chamber.
6. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.
7. All specifications are measured at standard external static pressure.
8. Fresh air processing units are- not allowed to be used in the same VRF system as other series of indoor units.
9. When there are only fresh air processing units in the system, the combination ratio is 50-100%.

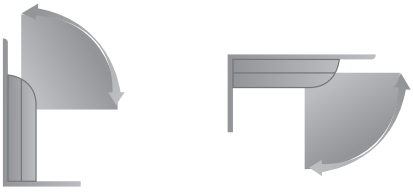


Ceiling & Floor

Feature

Two Installation Options

A sleek design suits installation either on the ceiling or floor, providing flexibility to accommodate a wide range of room designs.



The unit can be installed either horizontally on the ceiling or vertically against the wall.

Quiet Operation

The fan motor and water pump* are DC power supply, which is more energy-saving and silent than AC power supply, creating a more quiet and comfortable environment

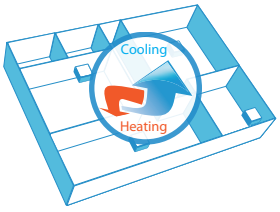

Fan Motor


Drain Pump

*Drain Pump is available as a customization option for unit

Auto Cooling Heating Changeover

Automatically selects cooling or heating mode to achieve the set temperature.



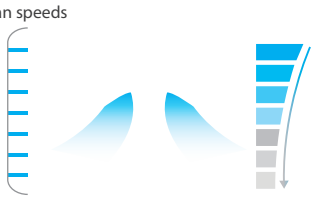
Digital Feedback DC Water Pump*

Digital feedback DC water pump: actively sense the pump speed and water flow to determine whether there is jamming attenuation or damage, and give early warning to avoid water leakage.

*Drain Pump is available as a customization option for unit

Multiple Steps Vertical Swing

There are 5-steps louver control makes the air flow direction more precisely. In addition, the auto swing mode can better meet different customer needs. Air supply angle 35-65 °.



Human Detect Sensor*

Using millimeter-wave radar sensor controller automatically turns indoor units on or off upon detecting that the room is occupied or unoccupied, ensuring climate control whilst minimizing energy consumption.

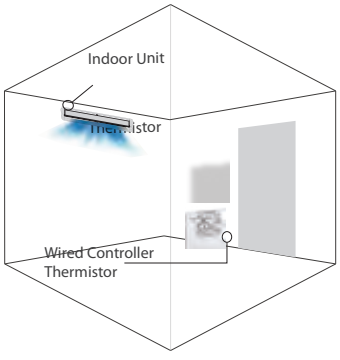

The indoor unit automatically runs when detecting human body


The indoor unit automatically stops when detecting absence

*This function is available as a customization option for unit.

Two Thermistors Control

The indoor temperature can be checked using the thermistor in the wired controller as well as from the indoor unit





INDOOR UNIT
TECHNICAL SPECIFICATIONS

Ceiling & Floor

Model			DBV-36DLAG6	DBV-45DLAG6	DBV-56DLAG6	DBV-71DLAG6	DBV-80DLAG6
Power supply			1-phase, 220-240V, 50/60Hz				
Cooling[1]	Capacity	kW	3.6	4.5	5.6	7.1	8
		kBut/h	12.3	15.4	19.1	24.2	27.3
	Input	W	16	24	40	42	56
Heating[2]	Capacity	kW	4	5	6.3	8	9
		kBut/h	13.7	17.1	21.5	27.3	30.7
	Input	W	16	24	40	42	56
Airflow rate[3]		m³/h	564/539/514/492/ 467/445/424	712/674/637/603/ 565/531/500	927/883/840/794/ 751/707/665	1128/1062/1024/ 926/860/791/729	1300/1218/1138/ 1057/982/904/824
Sound pressure level[4]		dB(A)	32/30/29/28/ 27/26/25	36/35/34/33/ 32/31/30	43/41/40/38/ 36/34/33	43/40/39/37/ 35/34/33	45/44/42/40/ 38/36/34
Sound power level		dB(A)	43/42/40/39/ 38/38/37	47/45/45/43/ 42/41/40	54/53/51/50/ 48/47/45	54/53/52/51/ 49/48/48	55/53/51/50/ 49/46/44
Unit	Net dimensions[5] (W×H×D)	mm	1069×674×234			1284×674×234	
	Packed dimensions (W×H×D)	mm	1190×755×313			1405×755×323	
	Net/Gross weight	kg	24.7/29.5	24.7/29.5	24.7/29.5	29.8/34.8	29.8/34.8
Refrigerant type			R410A/R32				
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7			Φ9.52/Φ15.9	
	Drain pipe	mm	OD Φ25				

Model			DBV-90DLAG6	DBV-100DLAG6	DBV-112DLAG6	DBV-125DLAG6	DBV-140DLAG6
Power supply			1-phase, 220-240V, 50/60Hz				
Cooling[1]	Capacity	kW	9	10	11.2	12.5	14
		kBut/h	30.7	34.1	38.2	42.7	47.8
	Input	W	75	50	65	95	140
Heating[2]	Capacity	kW	10	11.2	12.5	14	16
		kBut/h	34.1	38.2	42.7	47.8	54.6
	Input	W	75	50	65	95	140
Airflow rate[3]		m³/h	1480/1397/1302/1218/ 1138/1056/979	1497/1469/1296/1200/ 1104/1015/918	1648/1530/1469/1292/ 1178/1067/956	2012/1879/1772/1649/ 1531/1469/1285	2206/2070/1937/1810/ 1677/1516/1402
Sound pressure level[4]		dB(A)	48/47/46/44/ 42/40/37	42/40/39/37/ 35/33/32	44/42/41/39/ 37/35/33	49/48/46/44/ 42/40/38	51.5/50/48/46/ 44/42/40
Sound power level		dB(A)	58/57/55/54/ 52/50/49	54/53/51/50/ 48/46/44	56/54/53/51/ 49/47/45	60/59/58/56/ 54/53/51	63/62/60/58/ 56/54/53
Unit	Net dimensions[5] (W×H×D)	mm	1284×674×234	1649×674×234			
	Packed dimensions (W×H×D)	mm	1405×755×323	1770×755×323			
	Net/Gross weight	kg	29.8/34.8	36.4/42.7	36.4/42.7	36.4/42.7	36.4/42.7
Refrigerant type			R410A/R32				
Pipe connections	Liquid/Gas pipe	mm	Φ9.52/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 1.5m below the unit in a semi-anechoic chamber.
5. The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual.



Wireless Remote Controller

Model	 DB-RM12F1
On / Off	●
Mode selection	●
Temperature setting	● (0.5℃ or 1℃ steps)
7-speed fan control	●
Auto swing	●
5-step swing louver	●
Address setting	●
Follow me	X
Eco mode	●
Silent mode	●
Display shut-off	●
Self Cleaning Mode setting	●
Sterilization function setting	●
Daily timer	●
Keyboard lock	●
Background light	●
Indoor Unit parameter setting	●
Dimensions (H×W×D) (mm)	170×48×20

● : equipped as standard; ×: without this function



Wired Controller

Model	 DB-WDC3-86S	 DB-WDC3-86T	 DB-WDC3-120T
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	X	●	●
App control	X	●	●
7-speed fan control	●	●	●
Auto swing	●	●	●
5-step swing louver	●	●	●
Address setting	●	●	●
Follow me	●	●	●
Meta mode	●	●	●
Room temperature display	●	●	●
°F/°C display	●	●	●
Keyboard lock	X	●	●
Background light	●	●	●
Daily timer	●	●	●
Weekly schedule timer	X	●	●
Auto restart	●	●	●
2 permission levels	●	●	●
Bi-directional communication	●	●	●
Group control	●	●	●
Main or secondary controller setting	●	●	●
Display shut-off	●	●	●
Silent mode	●	●	●
Remote signal receiver	●	●	●
Clean filter reminder	●	●	●
Extension function	X	●	●
Daylight saving time	X	●	●
Clock display	X	●	●
Error check function	●	●	●
System parameter querying	●	●	●
After Hours/Off Timer function	X	●	●
Language	English	14 Languages	14 Languages
One to more control	X	●	●
Dimensions (WxHxD) (mm)	86x86x18	86x86x18	120x120x20
Power supply	18V DC	18V DC	18V DC

● : equipped as standard; X : without this function



Centralized Controllers

Function	 DB-TC3-10.1
Max. number of indoor units	384
Max. number of refrigerant systems	48
Touch screen	● (10.1-inch)
On/Off	●
Mode selection	●
Temperature setting	● (0.5℃ steps)
7-speed fan control	●*
Auto swing	●
5-step swing louver*	●
Room temperature display	●
Holiday setting	●
°C/°F display	●
Schedule management	●
Clock display	●
2 permission levels	●
Indoor unit type/ model recognition	●*
Indoor unit with capacity larger than 16kW recognition	●*
Energy management	●
Group management	●
Error check function	●*
USB output	●
Report display	Error report andoperation record
Operation log	●
LAN access	●
Language supported	English, Chinese, French, Spanish, Portuguese, Italian, German, Polish, Turkish, Hungarian, Russian, Korean
Dimensions (W×H×D)(mm)	270×183×27
Power supply	24V AC

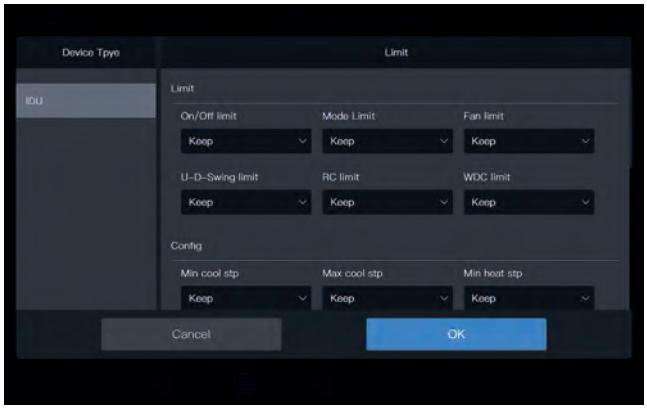
●: equipped as standard; ×: without this function;

Optimal Heating Comfort

Colorful touch screen and vivid display make operation more convenient and simple.

Energy Management

User can set limits on an indoor unit, such as operation temperature range, fan speed, mode, swing command, on/off command, remote controller signal and wired controller signal.



Unit Model Recognition

The controller recognizes the model of indoor and outdoor units and different models are represented by different icons.

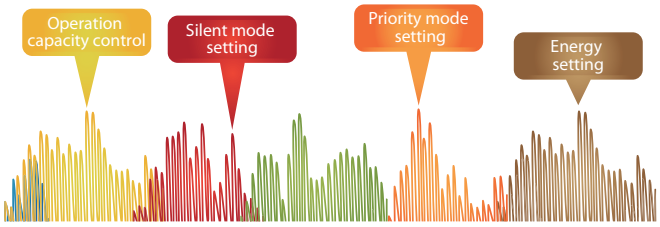
Icon	Model	Icon	Model
	Low static pressure and middle static pressure (L-DUCT/M-DUCT)		Vertical concealed installation/vertical surface mounting (FS)
	High static pressure (H-DUCT)		Four-way Cassette
	Purifier (FAPU)		Compact Four-way Cassette (COMPACT)
	Wall mounting (WALL)		Ceiling-floor type (C&F)
	Old IDU (1st Gen. IDU)		Two-way Cassette
	One-way Cassette		CONSOLE
	Group control device icon		New ODU (New generation ODU)

Group Management

Units can be viewed according to group, system or location, making unit management clearer and more convenient.

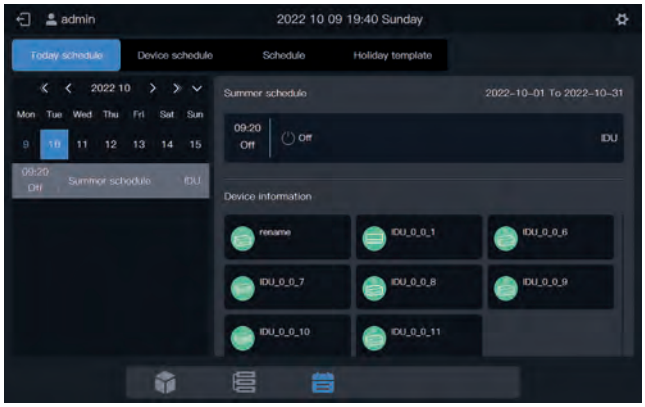
Outdoor Unit Configuration

Outdoor unit configuration and settings can be monitored and controlled without having to go outdoors.



Schedule Management

Daily, weekly or annual schedules can be used to set unit settings such as on/off, operating mode, set temperature, fan speed and swing.



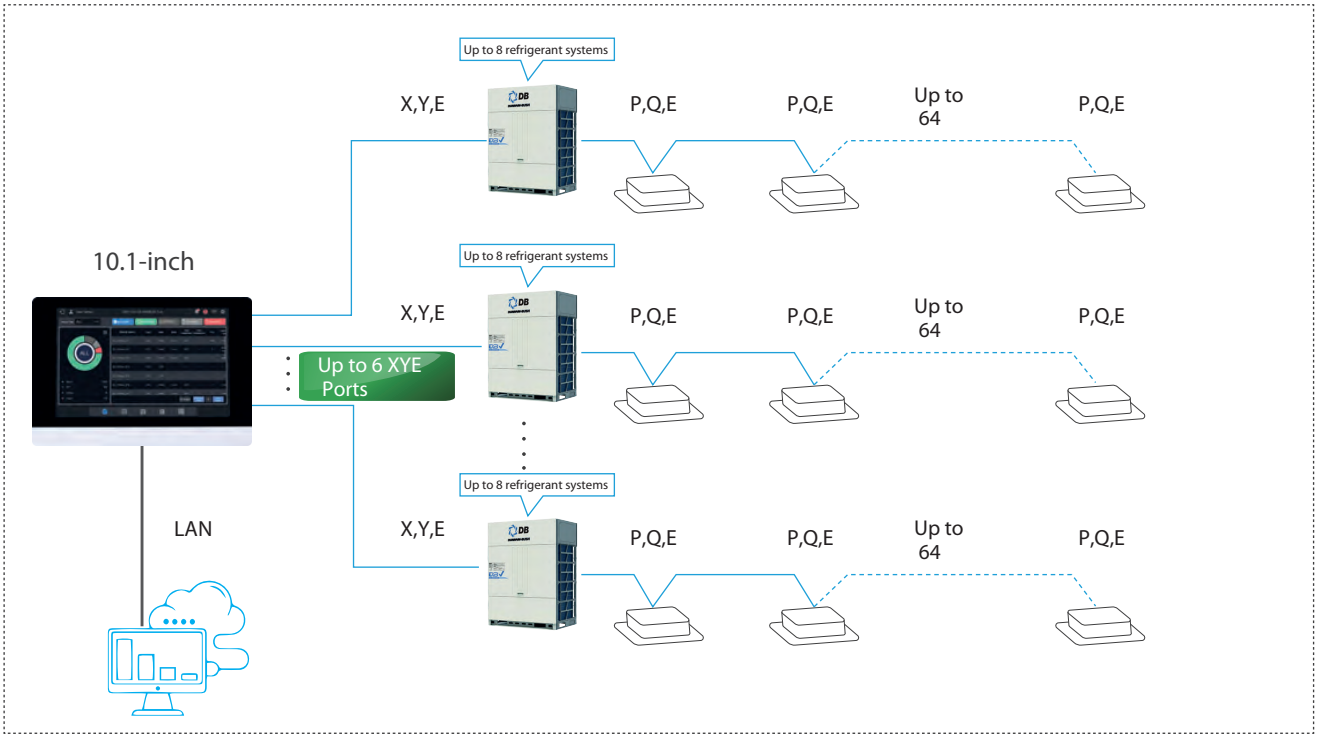


LAN Access

A desktop or laptop PC can be used for browser-based access via a LAN connection.

Wiring Flexibility

The controllers can be connected to the master outdoor unit directly.



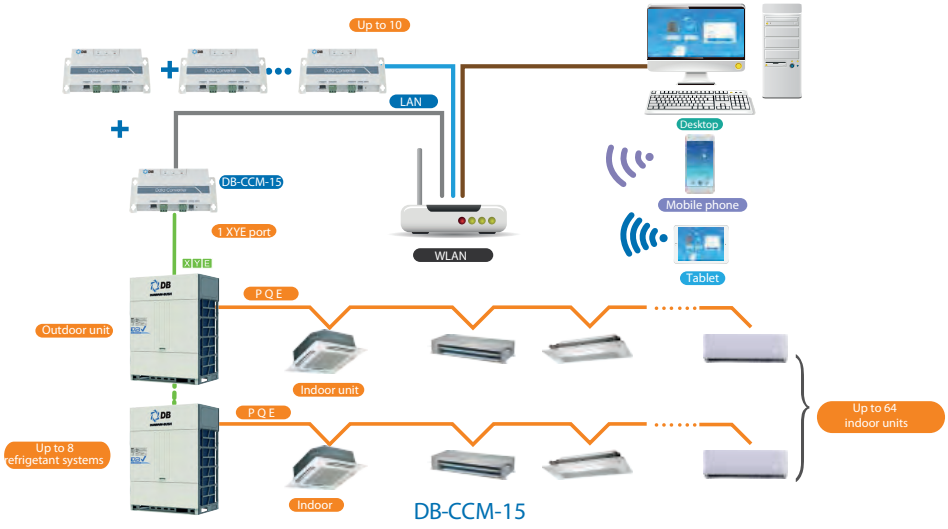


Data Converter

Hardware model	 DB-CCM-15(A)	
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℃ steps)	● (1℃ steps)
Auto swing	●	●
Room temperature display	●	●
℃/℉ display	●	●
Weekly timer	●	●
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	

Flexibility

The Data Converter can be connected directly to a network of indoor/outdoor units.



DB-CCM-15



IMMPRO II

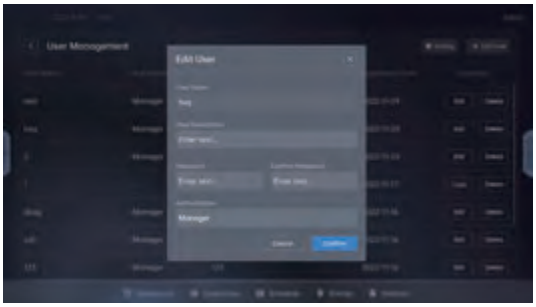
Model	 IMMPRO II
On/Off	●
Mode selection	●
Temperature setting	●
7-speed fan contro	●
Auto swing	●
5-step swing louver*	●
Room temperature display	●
Schedule management	●
℃/ ℉ display	●
Clock display	●
4 permission levels	●
Indoor unit type/model recognition	●
Energy management	●
Group management	●
Error check function	●
Report display and output	Error history, Operation history, User history, Cycle data history
3D view	●
Language supported	English,Chinese,Arabic,Spanish,Turkish, Portuguese,Korean,Russian,Italian,Polish, French,German,Georgian
Dimensions (HxWxD)(mm)	237×144×87.2
Max. number of gateways per software system	2
Power supply	9~30V DC
Max. number of indoor units per gateway	512
Max. number of refrigerant systems per gateway	64

Device Management and Control

Users can flexibly group and centralize control the VRF devices based on diffferent system or location and scenario. And limit the device functions, such as temperature setting range fan speed, operation mode, swing lock, remote controller lock and wired controller lock.

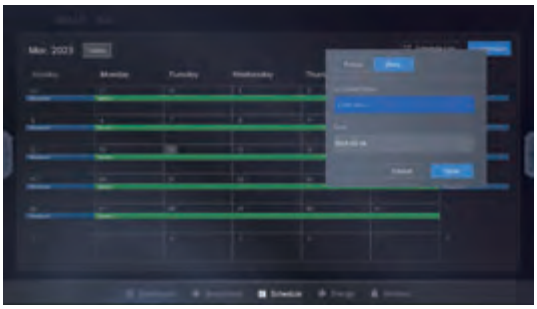
User and Permission Management

The administrator can add or reduce user accounts according to the VRF management teams of the buliding, and set corresponding roles for each account. The administrator can flexibly assign permissions of each function of the software to each role



Schedule Function

IMMPRO II can be used to make a detailed schedule for the indoor units. The schedule can be set for the whole year.



2D/3D view and setting

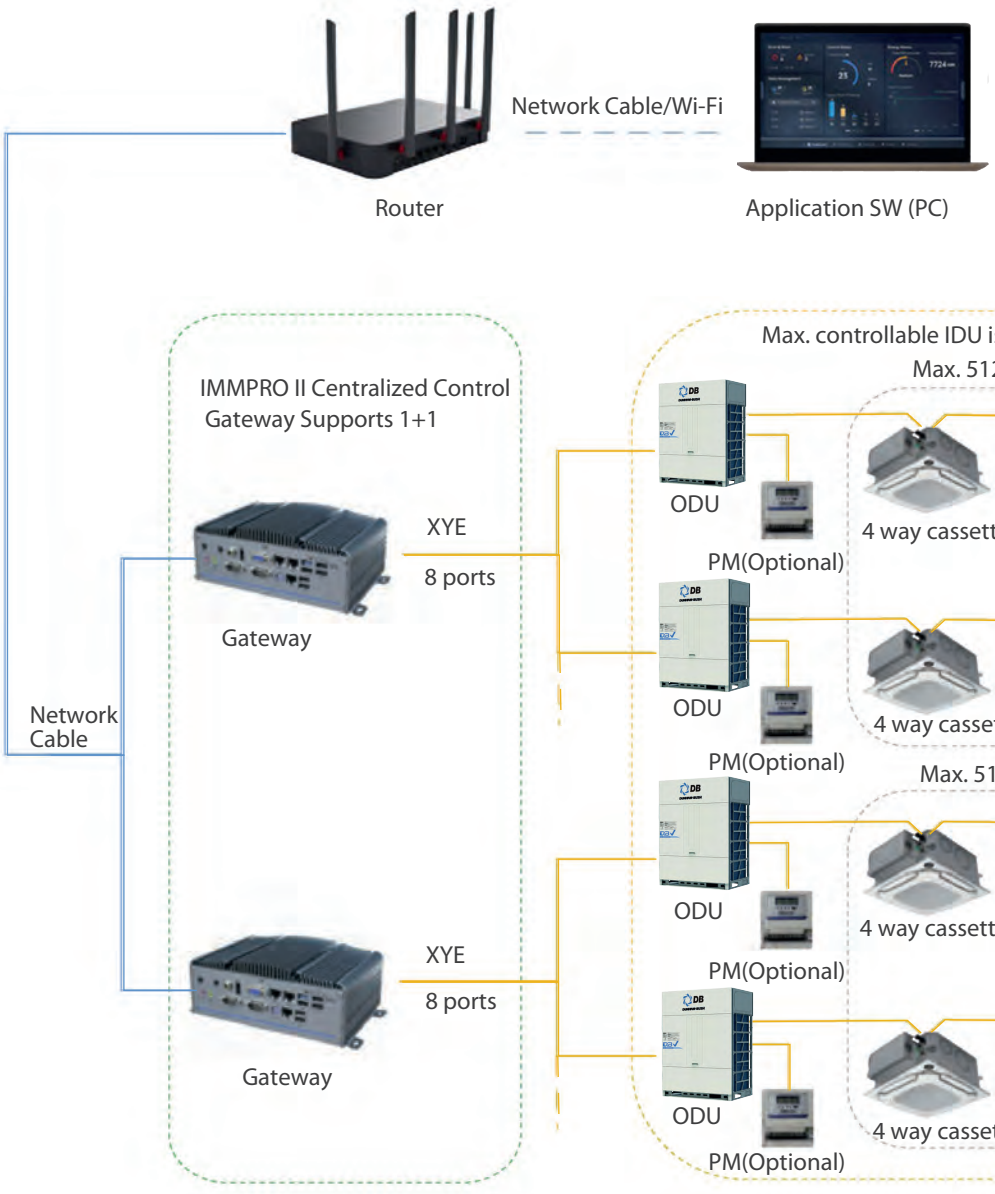
Users can upload project floor drawings and arrange equipment locations according to the engineering information. The software will be able to display the distribution of system equipment in a 2D or 3D manner

Power Distribution

Cooperated with the Dunham-Bush digital power meter, IMMPRO II can collect ODU power consumption information and use the patented Dunham-Bush Calculation Method to estimate the electricity consumption of the indoor units and then using the rules set by the user divide the whole power comsumption among building occupants.



Easy Installation and Debugging





BACnet Gateway

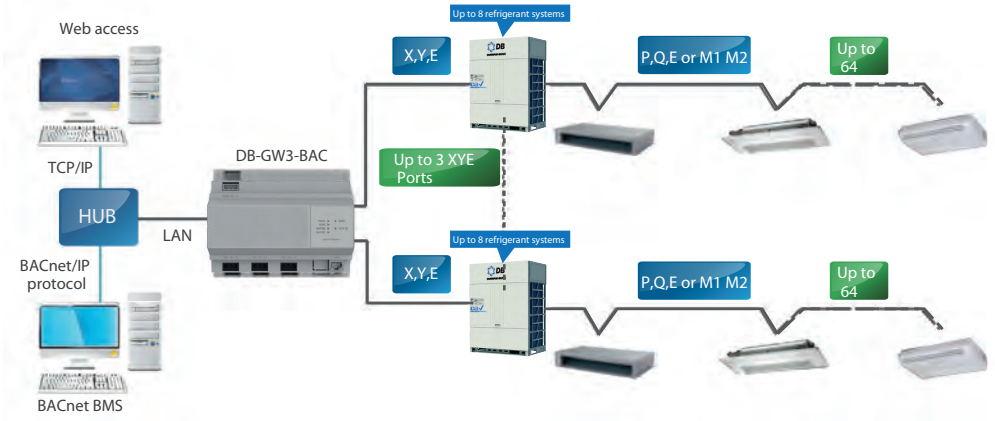
DB-GW3-BAC

Full Integration

The BACnet Gateway enables seamless connection of Dunham-Bush VRF systems with building management systems built on the BACnet communication protocol.

Network Flexibility

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



Model		DB-GW3-BAC
Max number of indoor units		192
Max. number of refrigerant systems		24
Indoor unit control	On / Off	●
	Mode selection	●
	Temperature setting	●
	Fan speed	●
	Swing	●
	Energy management	●
Indoor unit monitoring	Room temperature display	●
	Running status	●
	Error status	●
	EXV status	●
Outdoor unit control	Emergency Stop	●
Outdoor unit monitoring	Operating mode	●
	Outdoor ambient temperature	●
	Fan speed	●
	Compressor operating frequency	●
	Exhaust Temperature	●
	System pressure	●
	Error status	●
	Error alarms	●
LAN access		●
Dimensions (HxWxD)(mm)		154×124×51.5
Power supply		24V AC/DC

●: equipped as standard; ×: without this function



LonWorks Gateway

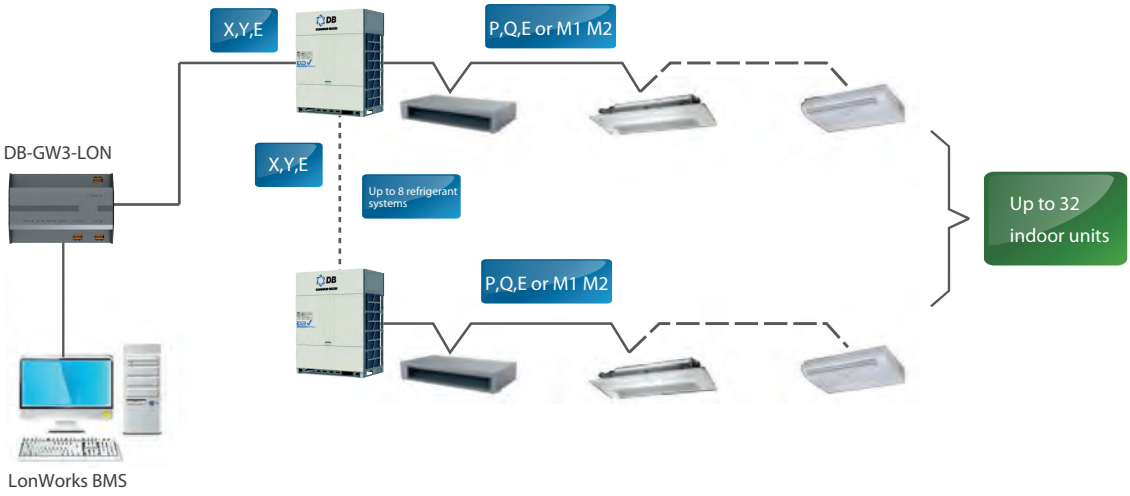
DB-GW3-LON

Full Integration

The Lonworks Gateway enables seamless connection of Dunham-Bush VRF systems with home and building management systems built on the Lonworks communication protocol.

Network Flexibility

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



Model		DB-GW3-LON
Max. number of indoor units		32
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)		116×170×67
Power supply		24V AC

●: equipped as standard; ×: without this function



Modbus Gateway

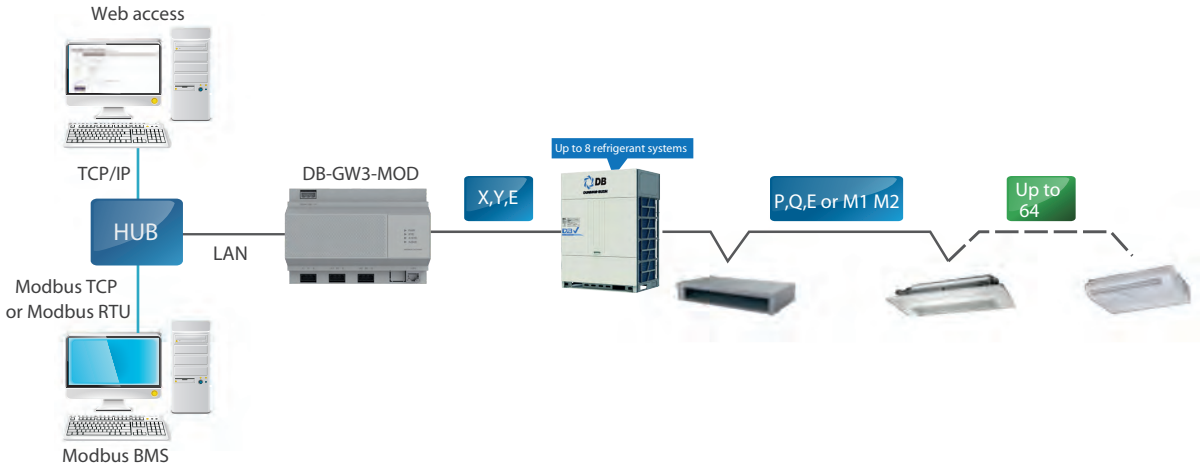
DB-GW3-MOD

Full Integration

The Modbus Gateway enables seamless connection of Dunham-Bush VRF systems with building management systems built on the Modbus communication protocol.

Network Flexibility

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

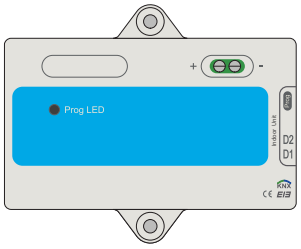


Model		DB-GW3-MOD
Max. number of indoor units		64
Max. number of refrigerant systems		8
Control	On / Off	●
	Mode selection	●
	Temperature setting	●
	Fan speed	●
	Energy management	●
	Group on/off	●
Indoor unit monitoring	Online status	●
	Room temperature	●
	Error status	●
	Operating mode	●
Outdoor unit monitoring	Operating mode	●
	Number of operating IDUs	●
	Outdoor ambient temperature	●
	Error status	●
LAN access		●
Dimensions (HxWxD)(mm)		154×124×51.5
Power supply		12V DC

●: equipped as standard; ×: without this function



KNX Gateway



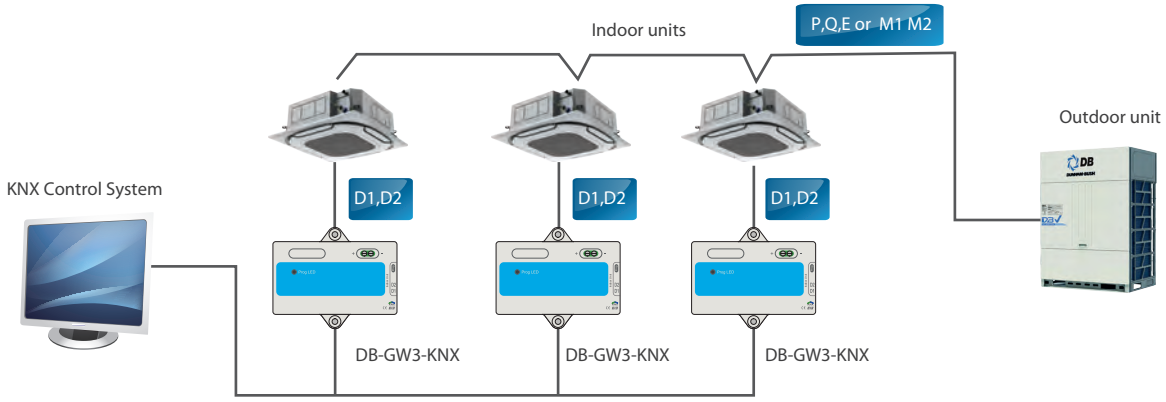
DB-GW3-KNX

Full Integration

The KNX Gateway enables seamless connection of Dunham-Bush VRF systems with home and building management systems built on the KNX communication protocol.

Network Flexibility

The gateway can be connected to indoor units' D1D2 port directly.



Model		DB-GW3-KNX
Max. number of indoor units		1
Control	On / Off	●
	Mode selection	●
	Temperature setting	● (1°C steps)
	7-speed fan control	● (3-speed)
	Swing	●
Monitoring	On / Off	●
	Mode selection	●
	Temperature setting	●
	Fan speed	●
	Swing	●
	Room temperature	●
	Error alarm	●
Dimensions (HxWxD)(mm)		85×51×16
Power supply		29VDC (KNX bus supply)

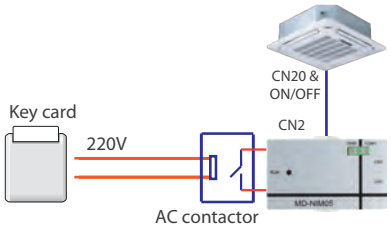
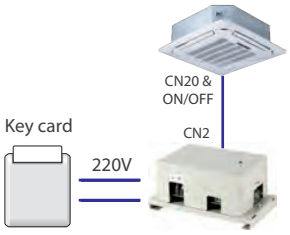
●: equipped as standard; ×: without this function

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

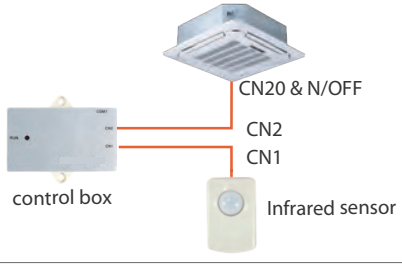
Model	DB-MA-HKCW	DB-MA-HKCS
Appearance		
Network flexibility		
Auto restart	●	●
Compatiblity	Remote and wired controller	Remote and wired controller
Dimensions (H×W×D) (mm)	15.5×86×72.8	87×150×70
Power supply	5V DC (Supplied by indoor unit)	220V AC

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 hotels,offices, conference rooms and residences, the Infrared Sensor Controller ensures climate control whilst minimizing energy consumption.

Features

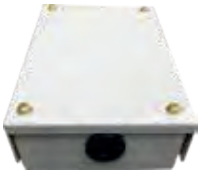
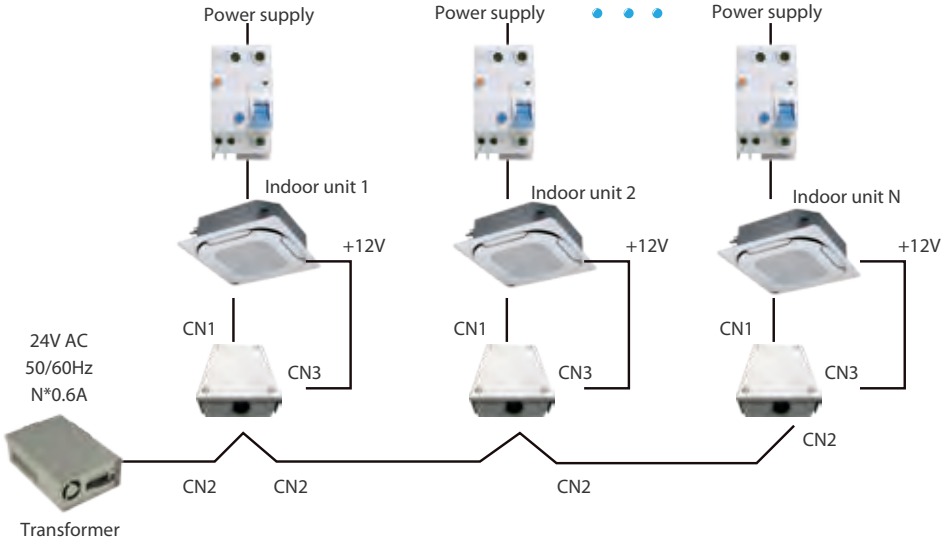
Model	DB-MA-IS
Appearance	
Network flexibility	
Dimensions (H×W×D)(mm)	Sensor 46×30×25.6, Control box 86×72.8×15.5
Power supply	5V DC (Supplied by indoor unit)



IDU Online Kit

If the power supply for one indoor unit fails , the indoor unit will still remain online and the whole VRF system will not stop. The IDU online kit will keep the indoor unit online , thus keeping the other indoor units of the system working normally and prevent unnecessary shutdown.

Features

Model	 DB-MCAC-PIDU
Network flexibility	
Dimensions (H×W×D)(mm)	146.6 x 100.6x 46.8
Power supply	24V AC

XYE Extension Kit

Simple Design

The MA-EK is used to extend the XYE port of outdoor unit as the 2-way one which can connect to 2 Central Controllers or gateways.

Features

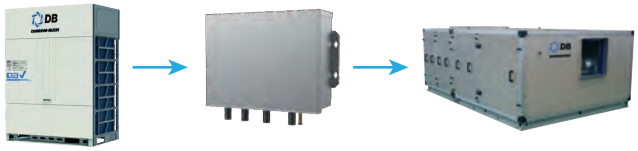
Model	DB-MA3-EK
Max. number of refrigerant systems	8
Wiring flexibility	
Dimensions (H×W×D)(mm)	154X124X51.5
Power supply	12V DC
Unit Series	Pure 6 Pro system



VRF DX AHU Control Box

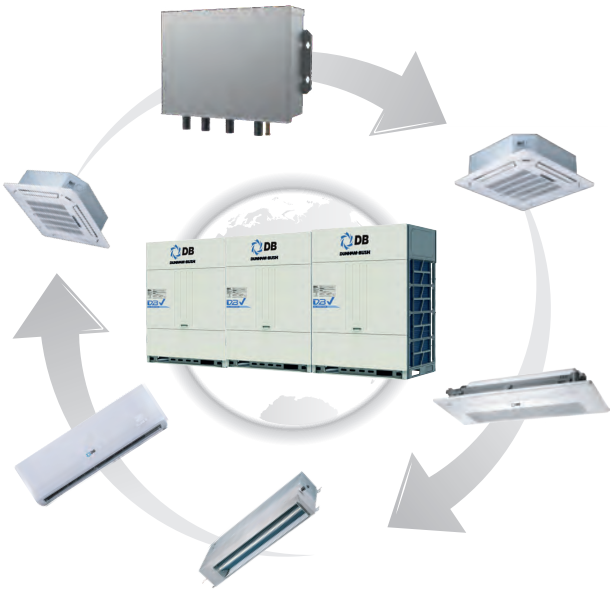
High Efficiency

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



Compatible with VRF Systems

AHU Control Box are compatible with Dunham-Bush VRF outdoor units and can be used together with all types of Dunham-bush VRF indoor units.



Wide Capacity Range

Four control boxes can be used in parallel, giving an overall capacity range of 0.8HP to 80HP.

DB-AHUKZ-00D: 2.2~9kW
DB-AHUKZ-01D: 9~20kW
DB-AHUKZ-02D: 20~36kW
DB-AHUKZ-03D: 36~56kW

Diverse Options For Control

AHU Kit can be connected to multiple controllers, and can choose between factory controllers or DDC (third-party control-lers), but only one can be selected. AHU Kit can directly connect to DDC and receive product control information through contact signals or Modbus protocol.

Direct wiring between DDC and AHU Kit

- Embedded digital I/O and analog inputs
- Supports Modbus RTU

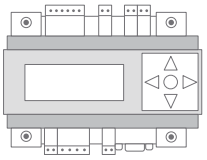
Note: For details, contact technical personnel.

Controller provided by the factory

Central Controller | Wired Controller | Remote Controller

AHU Kit

DDC by Contact signal

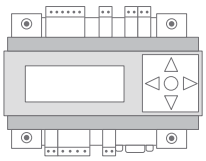


DDC

AI / DI / DO signal

AHU Kit

DDC by Modbus



DDC

Modbus

AHU Kit

Matchable Controller Type

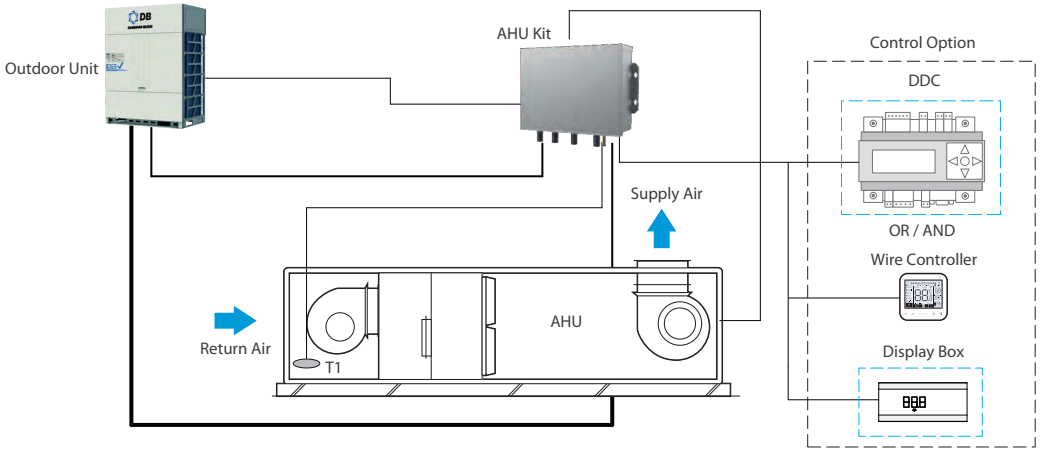
Matching controller model	
Remote controller	12F1+Display box
Wired controller	DB-WDC3-86S
Central controller	IMMRPO II

Specifications

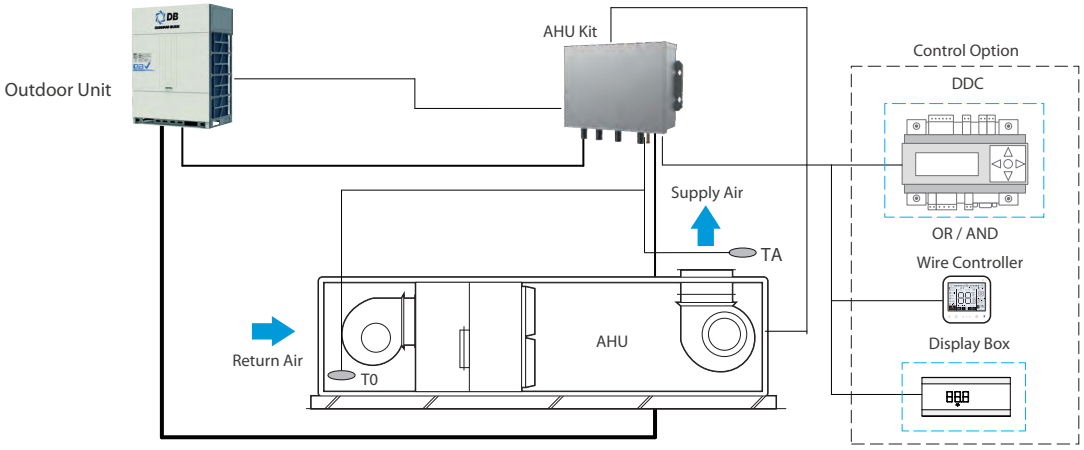
Model	DB-AHUKZ-00F	DB-AHUKZ-01F	DB-AHUKZ-02F	DB-AHUKZ-03F
Capacity A (kW)	2.2≤A<9	9≤A≤20	20<A≤36	36<A≤56
Power supply	220-240V~50/60Hz			
Liquid pipe (in/out) (mm)	Φ8/Φ8	Φ8/Φ8	Φ12.7/Φ12.7	Φ12.7/Φ12.7
Dimension (WxHxD) (mm)	479x134x384			
Weight (kg)	6.2	6.2	6.4	6.4
Operation range (cooling on coil) (℃)	17-43			
Operation range (heating on coil) (℃)	5-30			
Applicable outdoor units	Heat pump / heat recovery / cooling only			

Application (AHU Kit & Controller Module)

AHU Kit + Return Air Control



AHU Kit + Supply Air Control



T1: AHU indoor return air temperature sensor
T0: AHU outdoor fresh air temperature sensor
TA: AHU supply air temperature sensor

Note: For detailed installation and use requirements, please read the installation instructions.



Heat Recovery Ventilator (HRV)

200/300/400m³/h

500/800/1000m³/h

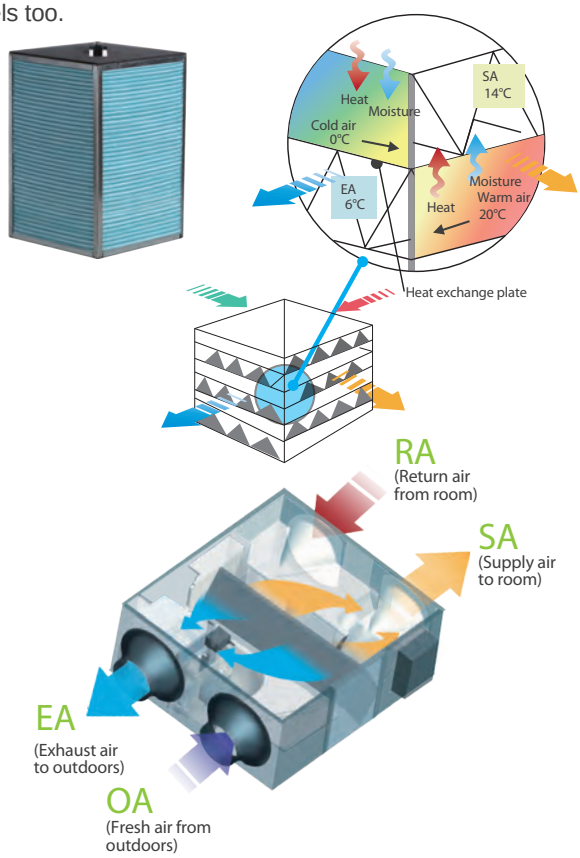
1500/2000m³/h

Wide Capacity Range

The airflow is from 200m³/h to 2000m³/h which can meet the requirements of most scenarios.

Energy Saving, Heat Recovery for Both Heat and Humidity

The heat recovery ventilator (HRV) can greatly reduce energy loss and room temperature fluctuations caused by the ventilation process. The Dunham-Bush HRV's strong performance is a result of the advanced technology incorporated into its design. The heat exchanger core is made of specially filter material which gives enhanced temperature and humidity control. It prevents energy being wasted by recovering waste heat from the outgoing air, thus offering much greater levels of efficiency, while improving comfort levels too.

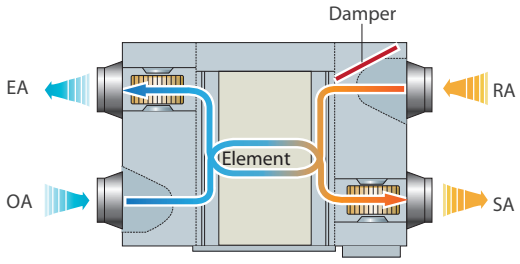


Multiple Operation Modes

Multiple operation modes: Auto, Bypass, Heat recovery, Free cooling mode.

Heat exchange mode

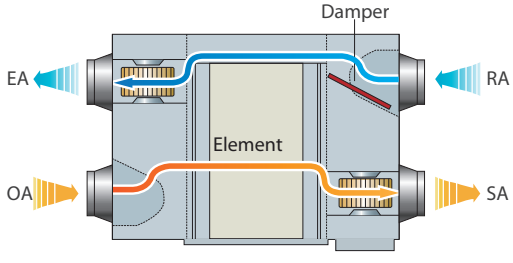
The flows of incoming and outgoing air pass close to each other, allowing heat transfer between the two channels. During summer, incoming air is cooled by the indoor air being exhausted and in winter, incoming air is warmed.



Heat exchange mode

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.



Bypass mode

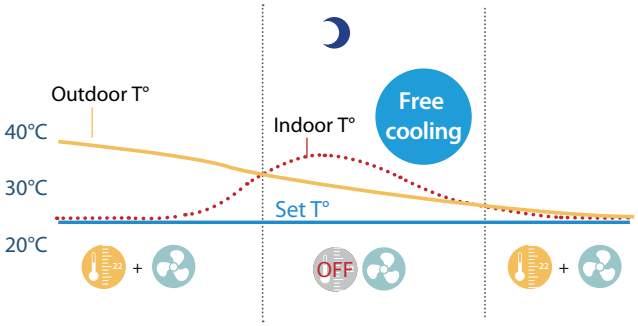
Auto mode

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.



Free Cooling Mode

Free cooling mode is only available for DC Series HRV. Free cooling operation is an energy saving function operating when outdoor ambient temperature is below indoor ambient temperature, it uses low temperature fresh air to cool down indoor temperature, reducing the running costs.



High Efficiency Filter

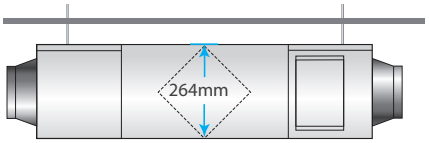
Standard Built-in G4-class dust filter, optional F7-class filter for air supply side and M5-class filter for exhaust air side in line with EU legislations can be customized.


F7-class filter


M5-class filter

Easy Installation

Slim and compact design of units, making the installation more convenient.



Wide Range of Controllers

The HRV has its special wired controller DB-KJR-27B for standard functions control and compatible with group controller DB-WDC-120G/WK for new functions (CO2 sensor function, differential pressure sensor function) control. It also can be centralized control with VRF system through centralized controller and network control with VRF system through Dunham-Bush BMS gateways.


Wired controller
DB-KJR-27B

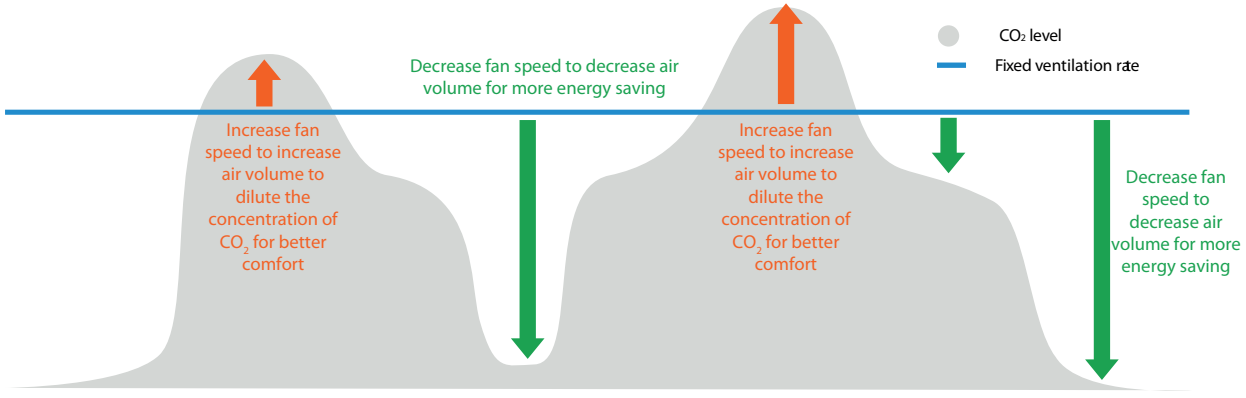

Wired controller
DB-WDC-120G/WK(A)


BMS gateway


Centralized controller
DB-CCM-270B/WS(A)

CO_2 Sensor Option

Enough fresh air is needed to create an enjoyable environment, but ventilating constantly is leading to energy waste. Therefore, an optional CO_2 sensor can be installed which switches off the ventilation system when there is enough fresh air in the room, thus saving energy.



HEAT RECOVERY
VENTILATOR



HRV

Model			DBHRV-D200	DBHRV-D300	DBHRV-D400	DBHRV-D500
Power supply		Ph-V-Hz	1-phase, 220-240V-50/60Hz			
Input power (H/M/L)(standard G4)		W	70/45/25	100/55/35	110/70/40	150/95/50
Input power (H/M/L)(F7+M5)		W	80/40/25	100/55/35	110/70/40	150/95/50
Nominal Temperature Efficiency (standard G4) (H/M/L)		%	79.5/81.1/83.5	75.5/78.8/82.5	77.7/79.0/81.3	80.6/82.2/85.5
Nominal Enthalpy Efficiency (standard G4) (H/M/L)		%	75.0/77.5/79.6	72.1/75.0/79.3	73.5/75.3/78.0	74.0/76.6/80.5
Nominal Temperature Efficiency (F7+M5) (H/M/L)		%	81.8/85.4/87.5	80.4/81.8/83.5	79.2/81.1/83.3	77.2/79.4/82.5
Nominal Enthalpy Efficiency (F7+M5) (H/M/L)		%	81.2/83.1/85.0	79.4/81.2/84.0	79.6/81.8/84.2	72.3/75.6/78.6
Current		A	0.64	0.84	0.97	1.2
Indoor external static pressure (H speed+ standard G4)		Pa	100	90	100	90
Fresh air external static pressure (H speed +F7+M5)		Pa	75	70	70	65
Discharge air external static pressure (H speed +F7+M5)		Pa	100	110	110	110
Nominal air flow		m^3/h	200	300	400	500
Sound Pressure (H/M/L)		dB(A)	33/29.5/25.5	36.5/33.5/30	36.5/32/28	36/30.5/24.5
Sound Power		dB	45	48	48	50
Net dimension[1] (L×W×H)		mm	1195×784×272	1195×898×272	1276×1189×272	1311×1090×390
Packing size (L×W×H)		mm	1275×880×420	1275×994×420	1360×1284×420	1390×1244×540
Net/Gross weight		kg	51/68	57/74	72/92	62/85
Power supply wire	Wire qty.		3	3	3	3
	Code wire cross- section	mm^2	2.5	2.5	2.5	2.5
Controller			Wired controller, Centralized controller, BMS gateway			
Fresh air	Fresh Air Diameter	mm	Φ144	Φ144	Φ198	Φ244
	Air drop	Pa	52	179	218	357

Note:
The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual.



HEAT RECOVERY VENTILATOR

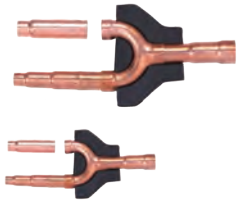
HRV

Model			DBHRV-D800	DBHRV-D1000	DBHRV-D1500	DBHRV-D2000
Power supply		Ph-V-Hz	1-phase, 220-240V-50/60Hz			
Input power (H/M/L)(standard G4)		W	320/170/80	380/210/100	680/320/200	950/500/230
Input power (H/M/L)(F7+M5)		W	320/170/80	420/230/100	680/320/200	950/500/230
Nominal Temperature Efficiency (standard G4) (H/M/L)		%	78.7/82.1/86.8	82.8/84.0/87.4	75.5/78.6/80.2	77.2/79.5/83.4
Nominal Enthalpy Efficiency (standard G4) (H/M/L)		%	72.3/75.4/79.0	76.0/76.0/80.1	69.4/71.2/74.8	74.7/77.0/80.6
Nominal Temperature Efficiency (F7+M5) (H/M/L)		%	74.9/77.1/80.8	75.4/78.0/81.4	83.8/84.6/86.2	78.8/80.5/83.4
Nominal Enthalpy Efficiency (F7+M5) (H/M/L)		%	71.1/74.4/78.0	67.3/71.1/75.0	74.6/76.2/78.8	71.1/75.0/79.6
Current		A	2.4	2.9	3.8	5.7
Indoor external static pressure (H speed+ standard G4)		Pa	140	160	180	200
Fresh air external static pressure (H speed +F7+M5)		Pa	100	110	150	160
Discharge air external static pressure (H speed +F7+M5)		Pa	155	145	180	180
Nominal air flow		m^3/h	800	1000	1500	2000
Sound Pressure (H/M/L)		dB(A)	42/39/34	44/39/33.5	51.5/46.5/41.5	53/48.5/42.5
Sound Power		dB	55	54	69	70
Net dimension[1] (L×W×H)		mm	1311×1270×390	1311×1510×390	1740×1344×615	1811×1545×685
Packing size (L×W×H)		mm	1390×1424×540	1390×1670×540	1830×1520×770	1900×1720×845
Net/Gross weight		kg	77/101	85/112	168/200	195/235
Power supply wire	Wire qty.		3	3	3	3
	Code wire cross- section	mm^2	2.5	2.5	2.5	2.5
Controller			Wired controller, Centralized controller, BMS gateway			
Fresh air	Fresh Air Diameter	mm	Φ244	Φ244	346×326	346×326
	Air drop	Pa	357	384	253	322

Note:
The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual.

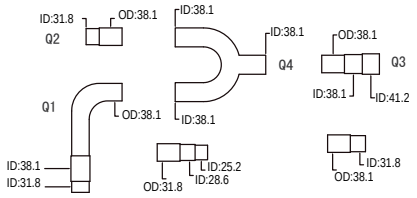
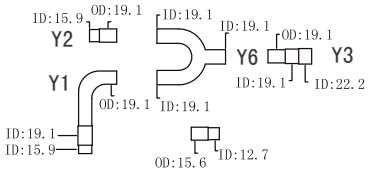
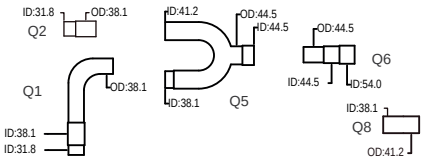
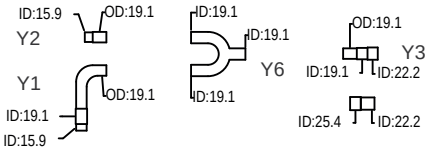
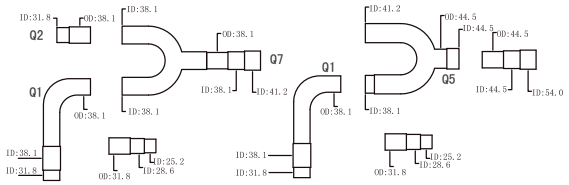
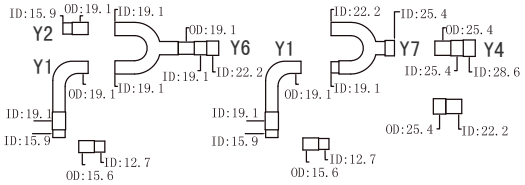
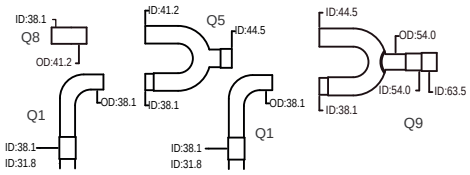
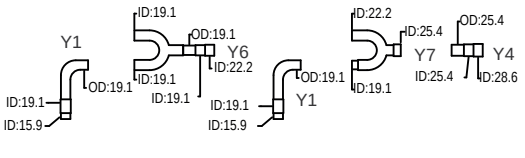
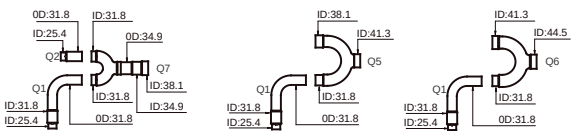
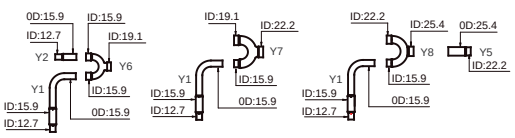
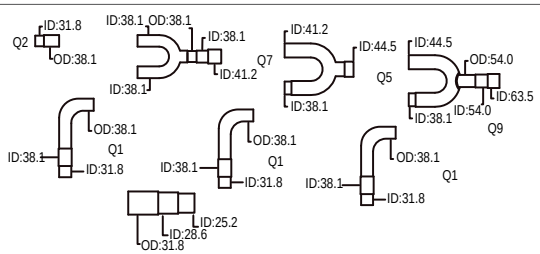
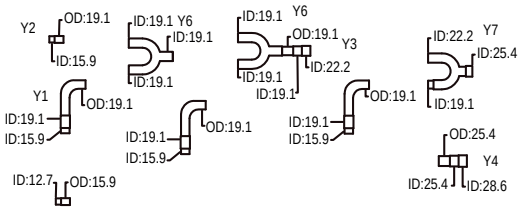


Branch Joints

Type	Appearance	Model	Packed Dimensions mm	Gross Weight kg	Note
Branch joints for outdoor units		OYBP-2CE	255×185×150	2.0	Connecting two outdoor units, outdoor unit capacity＜56HP
		OYBP-2CG	405×270×120	2.8	Connecting two outdoor units, outdoor unit capacity≥56HP
		OYBP-3CE	345×285×160	4.3	Connecting three outdoor units,outdoor unit capacity≤96HP
		OYBP-3CG	585×340×140	5.0	Connecting three outdoor units,outdoor unit capacity＞96HP
		OYBP-4CE	475×300×165	4.8	Connecting four outdoor units,outdoor unit capacity≤82HP
		OYBP-4CG	470×370×260	6.6	Connecting four outdoor units,outdoor unit capacity＞82HP
Branch joints for indoor units		IYBP-16B	290×105×100	0.4	N/A
		IYBP-33B	290×105×100	0.6	N/A
		IYBP-66B	310×130×125	0.9	N/A
		IYBP-92B	350×180×170	1.5	N/A
		IYBP-200B	365×195×215	1.9	N/A
		IYBP-250B	390×230×255	3.1	N/A
		IYBP-300B	390×230×255	3.4	N/A

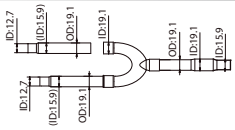
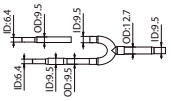
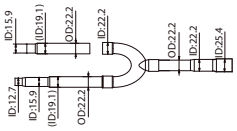
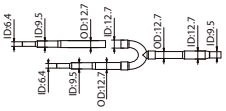
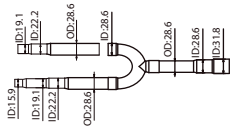
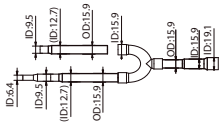
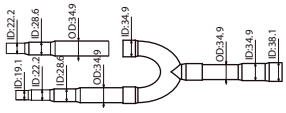
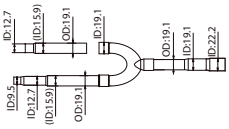
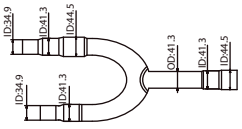
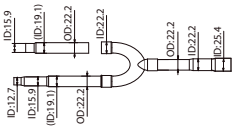
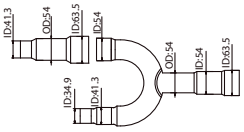
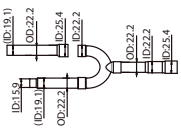
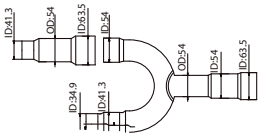
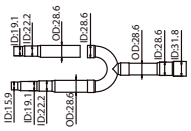


Outdoor Branch Joints

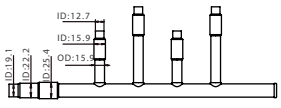
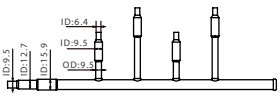
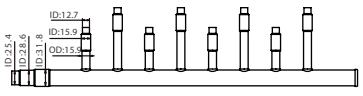
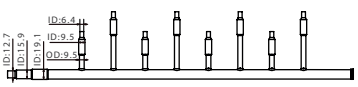
Model	Gas side joints	Liquid side joints
OYBP-2CE		
OYBP-2CG		
OYBP-3CE		
OYBP-3CG		
OYBP-4CE		
OYBP-4CG		



Indoor Branch Joints

Model	Gas Side Joints	Liquid Side Joints
IYBP-16B		
IYBP-33B		
IYBP-66B		
IYBP-92B		
IYBP-200B		
IYBP-250B		
IYBP-300B		

Branch Header (For Indoor Units)

Model	Appearance	Gas Side Dimension	Liquid Side Dimension
IYBPDXFQT4-01			
IYBPDXFQT8-01			

Malaysia

Lot 5755-6,
Kidamai Industrial Park,
Bukit Angkat,
43000 Kajang,
Selangor, Malaysia

Tel: +603-8924 9000
Fax:+603-8739 5020

China

No.1 Dunham-Bush Road,
Laishan District,
Yantai,
Shandong Province,
China 264003

Tel: +86-535-739 7888
Fax:+86-535-739 7999

United States of America

1800 SE 38th Avenue,
Homestead,
Florida 33035
United States of America

Tel: +1(786)-800 9999
Fax: +1(786)-527 3539

India

Unit No : 804-805 , 8th Floor,
Spaze Platinum Tower,
Sohna Road, Sector-47, Gurgaon
Haryana-122018, India

Tel: +91-124-414 4430

United Arab Emirates

Office # 2606,
Fortune Executive Towers,
Cluster T1, Jumeirah Lake Tower
Dubai, UAE

Tel: +971-4-443 9207
Fax:+971-4-443 9208

South Africa

No.57 Sovereign Drive
Route 21 Corporate Park
Irene, Pretoria
South Africa

Tel: +27-12-345 4202
Fax:+27-12-345 4203

Singapore

2, Kallang Pudding Road
#07-07 Mactech Building,
Singapore 349307

Tel: +65-6842 2012
Fax:+65-6842 2013

Indonesia

The Boulevard Office,
3F2 Jl. Fachrudin No.5,
Kp. Bali, Tanah Abang
Jakarta Pusat - 10250, Indonesia

Tel: +62-21-2123 1392

Thailand

48/39 Soi Praditmanutham 19
Praditmanutham Road,
Lat Pharo, Bangkok 10230
Thailand

Tel: +662-002 2125

Vietnam

10th Floor, Nam A Bank Tower,
201-203 Cach Mang Thang 8 Street,
Ward 4, District 3, Ho Chi Minh City,
Vietnam

Tel: +84-8-6290 3108
Fax:+84-8-6290 3109

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info@dunham-bush.com
www.dunham-bush.com

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