Products that perform...By people who care

DUNHAM-BUSH

www.dunham-bush.com

CAT_DBV-G-202109V1

SINCE 1894...

R410A

DB

DBVG

DC Inverter VRF System

DUNHAM-BUSH PRODUCT

MILESTONE

DUNHAM-BUSH PROFILE

Dunham-Bush, one of the world stop commercial air conditioning manufactures, has long been committed to offering creative solutions for the customers requirements over its nearly 120 years history in the HVAC/R, Dunham-Bush offers a complete range of HVA C/R products such as large chillers, unitary, airside system, and cooling towers for residences, commercial buildings and industrial facilities, and even disaster area. Dunham-Bush is striving to be the leader in the commercialization of green technologies. Today, by utilizing our global network of sales and service offices, Dunham-Bush is offering our valueadded products and solutions to all corners of the world.

- **1894** Built in USA as a professional manufacturer of HVACR equipments.
- **1904** Developed the first air compressor system.
- **1906** The second Dunham-Bush company was built.
- **1924** Developed the first reciprocating compressor.
- **1930** Manufactured the first air cooled air conditio ner.
- **1935** Factoryin Morden, Great Britain was built to produce heating products.
- **1948** The factory in West Hartford, Connecticut, USA was built.
- **1956** Engaged in the research, development and production of high standard products.
- **1965** Developed the first centrifugal chiller.
- **1967** Patented the technology to use a screw compressor for refrigeration/cooling.
- **1995** Dunham-Bush Yantai Co. Ltd. was jointly built by Dunham-Bush Group and Yantai Moon Group.
- **1996** Hartford Compressors Incorporated was built in USA.
- **1998** Dunham-Bush built the factory in Kajang, Malaysia. Later built Global Headquarters there in 2000.
- **2008** Dunham-Bush launched its new logo to match its new global brand & business strategy.
- **2013** New compressor R&D center was founded in UK to engage in high tiercompressor technology
- **Today and Beyond** The tradition of innovative thinking continues.
- **2015** Dunham Bush self-developed magnetic levitation centrifugal compressor has been rolled out in China
- **2017** Dunham Bush USA Miami development and manufacturing facility opened
- **2018** Global synchronous release of self-developed frequency conversion air suspension centrifuge
- **2021** Progress never stops

DUNHAM-BUSH CHINA

Founded in Yantai in 1995, Dunham-Bush China adhered to the innovation system of focusing on customers demands to drive global research & design, and superior quality manufacturing. Nowadays we Dunham-Bush China are creating innovative cooling solutions appropriate to the individual requirements of commercial buildings, schools, hospitals, airports, factories and residences. No matter where you are, what we deliver is the same: high performing, highly engineered cooling solutions developed to take on the challenges of the 21st century

Technical Support

VRF Selector

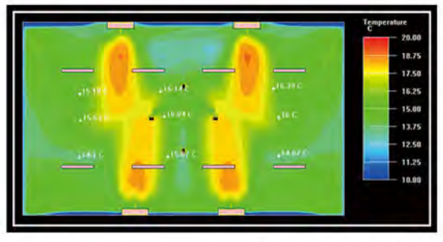
Selection software is an essential tool for the sales of VRF system in overseas market. Dunham Bush has provided a smart, rapid and diversified selection software for customers in order to respond the urgent demand for export sales, meet the diversified needs of export market and enhance the competitiveness of Dunham Bush products in overseas market.

The software can find the suitable unit and piping through automatic calculation to get the most optimal scheme by combining the factors, such as the ambient temperature, operation site, reliability and comfort, etc. It has greatly improved the efficiency of software modeling by visual modeling and intelligent fast wiring.

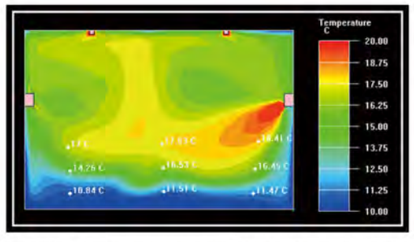
Simulation

Based on CFD-Fluent, Dunham Bush provides wind field/temperature filed simulation computing service for overseas customers. This technology is used to simulate and calculate complex flows that are incompressible toa highly compressible range. CFD-Fluent is based on thefinite-volume algorithm of unstructured grids, and it hasthe gradient algorithm of grid nodes and grid cells at the same time.

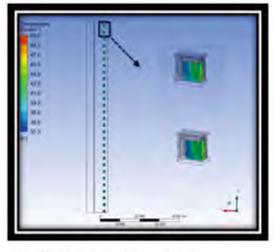
Dunham Bush can provide customers with professional wind field/temperature filed simulation computing services because it has rich research experience in transition and turbulence, heat transfer and phase transition, chemical reaction and combustion, multiple flow, noise, etc



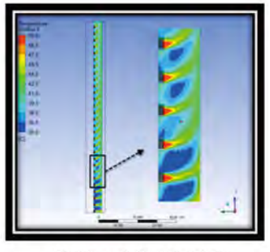
Simulated plane room temperature field distribution in a project



Simulated 3D room temperature field distribution in a project



Airflow simulation diagram



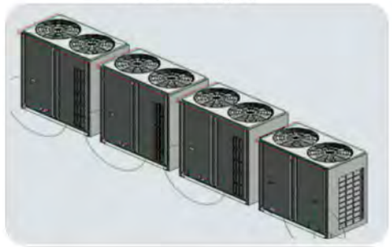
Building airflow simulation

BIM

Dunam-Bush Overseas Technical Support Center provides building information modeling technicalsupport in HVAC design for overseas projects and customers, and it shorted as BIM-revit.

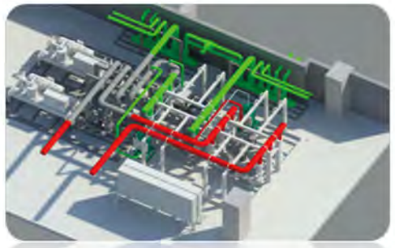
At present, this Center has begun to take shape in the research of 3D modeling of HVAC system, unit data information, HVAC system informatization, electromechanical system informatization and system simulation operation in BIM-revit. It can provide a full range of technical support services for the owners on the aspect of visualization, refine and rationalization of HVAC system, production efficiency and cost-saving.

BIM model diagram

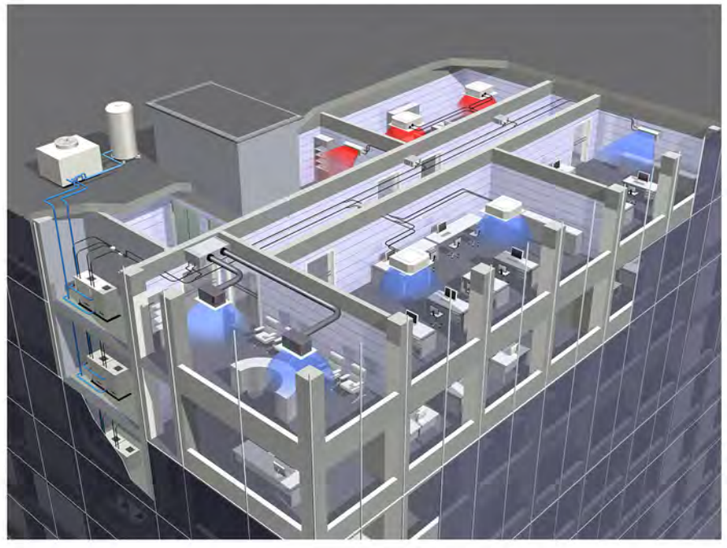


Outdoor unit rendergraph

Unit layout drawing



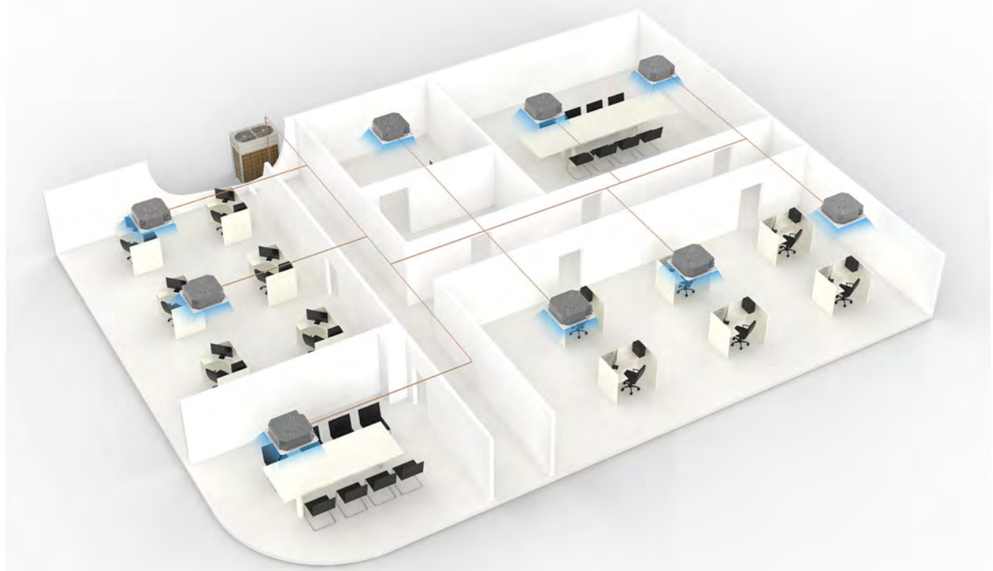
Installation effect diagram



Why Choose VRF Heat Pump System

Demand

In a system without external constraints, if user requires only cooling or heating, then the heat pump system is a good choice.



Low Cost

If there is only cooling or heating demand, a VRF heat pump system is recommended for it is cost-saving and easy to maintain.

Flexible

Because of the characteristics of the VRF system (One outdoor unit can be connected to multiple indoor units), indoor units in different areas can be controlled independently, which is very flexible in use compared to common air conditioners.

Outdoor Unit Lineup

Series	Certification	Appearance	Capacity HP																																												
			8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96
DBVG6 (380-415V 3N~50/60Hz)	CE		🔵	🔵	🔵	🔵	🔵	🔵	🔵	🔵	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
	CE		🔵	🔵	🔵	🔵	🔵	🔵	🔵	🔵	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
DBVG6 (380-415V 3N~50/60Hz)	CE CB		🔵	🔵	🔵	🔵	🔵	🔵	🔵	🔵	🔵	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
DBVG6 (208/230V 3~60Hz)	ETL Intertek Listed US 3907844, CB		🔵	🔵	🔵	🔵	🔵	🔵	🔵	🔵	🔵	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
DBVG6 (440-460V 3~60Hz)	ETL Intertek Listed US 3907844, CB		🔵	🔵	🔵	🔵	🔵	🔵	🔵	🔵	🔵	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

🔵 means basic model ● means combination models

DBVG6 Features:

1、High energy efficiency
2、Large air volume low noise fan blade
3、Multiple prevention technologies (corrosion prevention, lightning prevention, dust prevention, wind prevention, snow prevention)
4、CAN+ communication technology
5、Intelligent control and management
6、Clean and healthy fresh air

High-efficiency and Energy-saving

High-efficiency enthalpy-adding inverter compressor, high-efficiency DC motor and new modular control way are adopted, which greatly improves the operation efficiency of the unit.

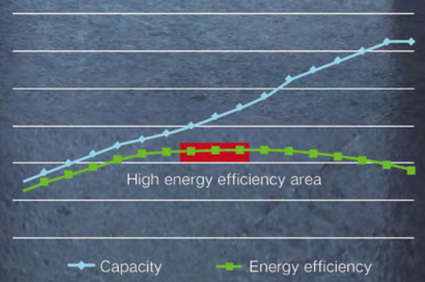
High-efficiency and Energy-saving

HPAC High-efficiency Alternate Control

Dunham Bush adopts high-efficiency alternate control method to intelligently adjust the distributing method according to the demand of indoor load, which has ensured the service life of the integrated module, and improved the overall operating energy efficiency at the same time.

The best matching features exist among the compressor, indoor heat exchanger, and outdoor heat exchanger. It can automatically match the capacity of indoor and outdoor heat exchangers, and adjust in real time according to operating situation.

Dunham Bush-HPAC control



High-efficiency EVI Compressor

① High-efficiency EVI control technology

High-efficiency EVI compressor, which is developed according to the features of VRF unit, its 0-420Hz adjusting range can perfectly match with the whole unit, so as to excel the performance to the greatest extent.

② Release valve

Improving partial load energy efficiency, adapting to the condition of variable pressure ratio, upgrading compressor performance.

③ Improved asymmetric wrap

New asymmetric wrap is adopted and compressor efficiency is improved by reducing leakage and invalid suction superheat.

④ Dynamic oil balance structure

Advanced oil balance technology, with high reliability and flexible design without installation limit, which can realize parallel connection of compressors with different delivery capacity and revolving speed.

⑤ High speed

0~420Hz stepless inverter operation, wide adjustment range of capacity, precision can be up to 1Hz.

⑥ Oil pump filter

Filtrate the impurities to ensure the supplied oil is clean.

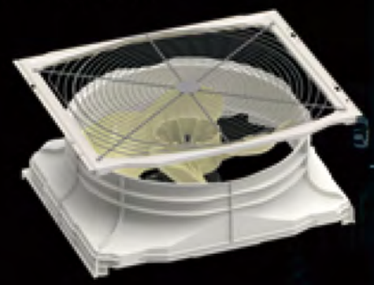
⑦ Positive displacement gear pump

Ensure necessary oil supply under the revolving speed, improve reliability of compressor.

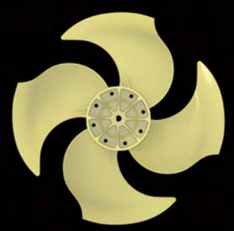
Large Air Volume Low Noise Fan Blade

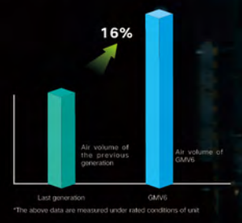
The “Reverse-S shape” tail design can effectively increase the working area of fan blades and greatly improve the air volume. The tail of the blade adopts the aircraft winglet design, which can effectively suppress the tip vortex caused by wing tip pressure difference and reduce noise.

The new air-out grille design increases the air supply area by 7.8%.



The"Reverse-S shape"tail design, with 4-blade control and separate design of blade pressure surface and suction surface, effectively increases the working area of fan blades and greatly improves the air volume.





Note: Applicable for some models.

Multiple Prevention Technologies

Multiple prevention technologies: to protect the unit from corrosion, dust, wind, lightning and snow; to prolong the service life of the unit; to suit different environmental conditions.

1. The heat exchanger adopts acid-proof and highly anticorrosive black aluminum fins.
   Neutral salt spray time is up to 2000 hours.

2. The sheet metal of the casing is coated with high weather resistance powder for corrosion prevention.
   Neutral salt spray time is up to 1000 hours.

3. The surface of controller is coated with special protection material, which has good dampproof, mildewproof and anticorrosive performance.

4. The grille received the treatment of phosphating and electrophoresis, and is coated with high weather resistance powder to prevent corrosion.

5. The external part adopts fasteners made of zinc-nickel alloy for better anticorrosive performance.

6. The anti-corrosion motor adopts stainless steel shaft, and electrophoresis for the outer case, with IP55 protection level*[2].

7. Outer sealing material of the coil adopts stainless steel and electrophoresis*[2].

8. The surface of the pressure vessel adopts the treatment of phosphating and is coated with high weather resistance powder to prevent corrosion.

Note:
1. Applicable to Dunham-Bush series. For special environments with acid, alkali and salt corrosion, the unit can be customized to provide more comprehensive protection. Please consult our sales representatives for more information.
2. Standard models Dunham Bush do not have this anti-corrosion treatment but can be customized if needed.

Corrosion Prevention

Corrosion Prevention

Multiple Prevention Technologies

Dust Prevention Function*

According to operating time of unit and real-time operating parameters, situation of heat exchanger can be estimated. When the accumulative dust of heat exchanger impacts the heat exchange efficiency, activating the backward operating function of fan can effectively remove the dust.

Normal operation status

Auto-clean status

*This function should be customized.

Wind Prevention Function

Before the unit is turned on, if the fan conducts backward operation due to adverse wind, it will adopt dynamic braking to stop the backward fan, and then turn on the unit according to normal program.

Lightning Prevention Function

Central air conditioning system has lightning protection and anti-surge function, which can effectively prevent the impact on air conditioning system due to instant overvoltage or overcurrent, so as to protect the personal and property safety of user.

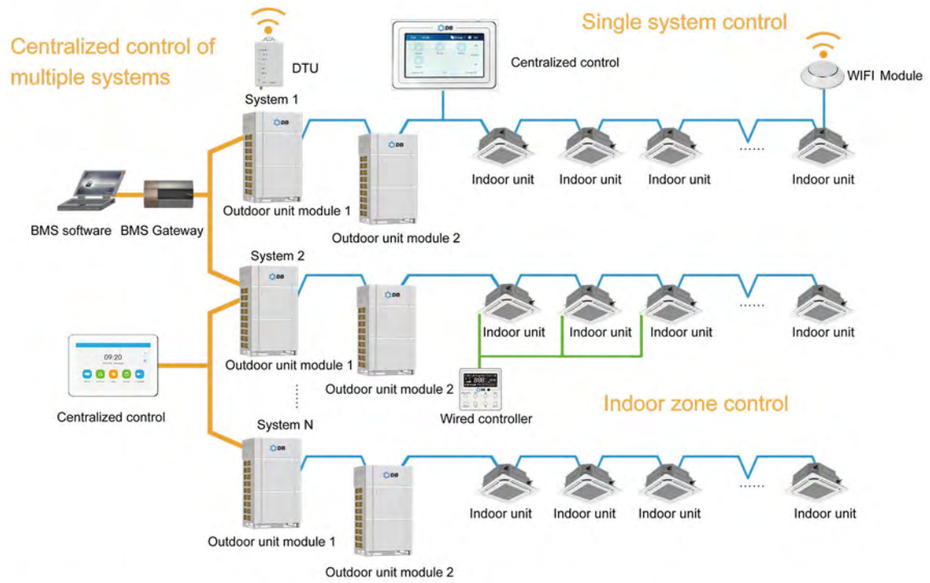
Snow Prevention Function

In order to prevent the influence of snow accumulated on the top of the outdoor fan, the unit will automatically turn on the fan to clear the snow and ensure normal operation.

CAN+ Communication Technology

Innovative Stratification CAN+ Structure with Multiple Master Networks

Considering that the application of an air conditioning system requires multiple nodes, multistep control and intelligent expansion, we originally developed the stratification CAN+ structure with multiple master networks, which makes it possible for the number of nodes in a single system to be increased relatively by 56% and the response time for centralized control to be shortened by hundreds of times.



First Formulated CAN+ Communication Protocol

It is the first time to formulate and standardize CAN+ communication protocol: two-stage network universal design, data can be directly transferred; functional code, network address, data field and related core concepts are developed, realizing grading, classification and real-time transfer of communication data, satisfying the demand of intelligent expansion.

The First Nonpolarity CAN+ Communication Chip

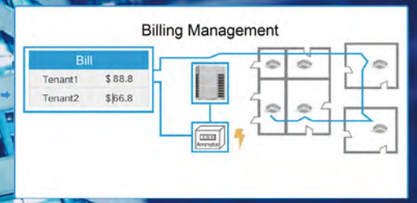
CAN+ self-adaptive networking technology includes single chip automatic nonpolarity technology and all network automatic address distribution technology, which can realize automatic networking for hundreds of nodes of large multi VRF unit within 10 seconds, the newly increased nodes can be activated instantly once it is inserted, greatly improving the networking speed and expansion capability.

Intelligent Control and Management

New-generation intelligent management and control solution, satisfying various demands of users.

Keycard Wired Controller

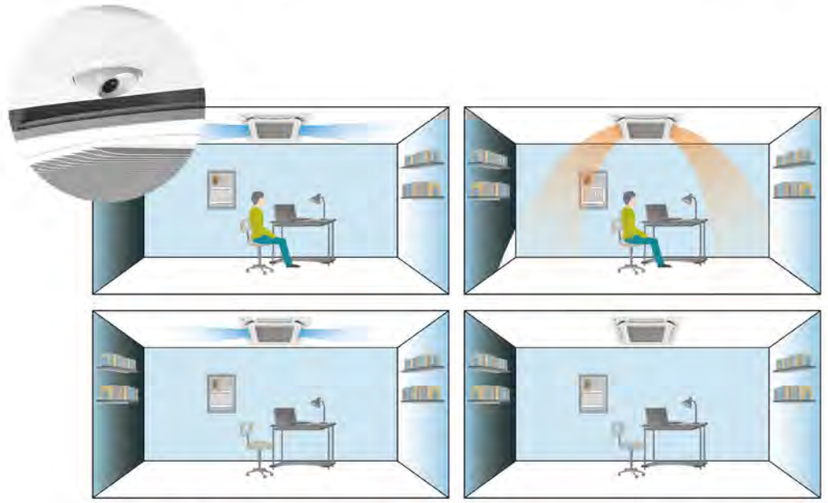
Centralized Controller



Intelligent Control and Management

Intelligent Sensing Function

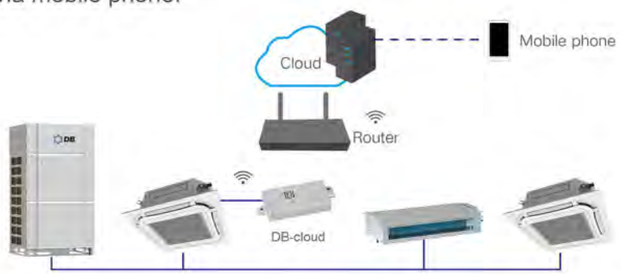
Intelligent sensing function control, 360°panoramic temperature field identification; high precision of temperature field identification, achieving cold air prevention, warm air surrounding; multiple intelligent control, more well-proportioned temperature field, more energy-saving operation.



*This function should be customized.

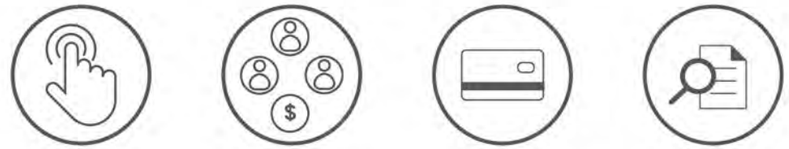
Cloud Control

DB-cloud is a compact WiFi controller, which connects DB-cloud to the corresponding interface of any one of the multi VRF indoor units. Use mobile phone to download the Dunham Bush APP, after simple network configuration, the multi VRF air conditioner can be easily controlled by the mobile phone anytime and anywhere. One set of multi VRF system only requires one DB-cloud to realize the control of all indoor units under the system via mobile phone.



One DB-cloud can control up to 80 sets of indoor units within one system

Intelligent Management



Centralized Control: Centralized Control of Building Terminal

One button control, unified management of air conditioners for a building: Dunham Bush centralized controller can achieve unified management of the air conditioners of a whole building via one button, which saves time and power.

Long-distance Control: Distributed Centralized Control System

Restriction management, reducing waste of energy due to misoperation: restriction management can set restriction on the indoor unit to limit on/off status, temperature range, and modes.

Billing System: Reasonable Distribution of Electricity Billing

Billing system, clear management: Dunham-Bush billing system for multi VRF unit can calculate and distribute the electricity via unique calculation mode to reasonably allocate the energy consumption and electricity fee.

Prepaid Automatic Withholding Mode

Prepaid automatic withholding mode is provided to satisfy the demands for lending of apartment and shops to prevent loss of lesser.

Export accountant bill, energy consumption report and energy-saving strategy push.

Data cloud backup, which can resume the engineering data and electricity data quickly.

Clean and Healthy Fresh Air

DBVG6 can be matched with fresh air indoor unit and ERV system. Meanwhile, fresh air accessories, high-efficiency filter and other clean and healthy fresh air solutions are optional, to achieve dual functions of air conditioning and fresh air, and improve the indoor air quality obviously.

Clean and Healthy Fresh Air

Fresh Air System

Fresh air system satisfies multiple indoor fresh air supply demands.

Less investment: Combine air conditioning system and fresh air ventilation system, undertake partial fresh air load, reduce the initial investment of air conditioning equipment.

Less operating cost: Adopt DC inverter technology, output of refrigerant can be adjusted according to actual situation, ensuring stable air supply and avoiding small load and large power.

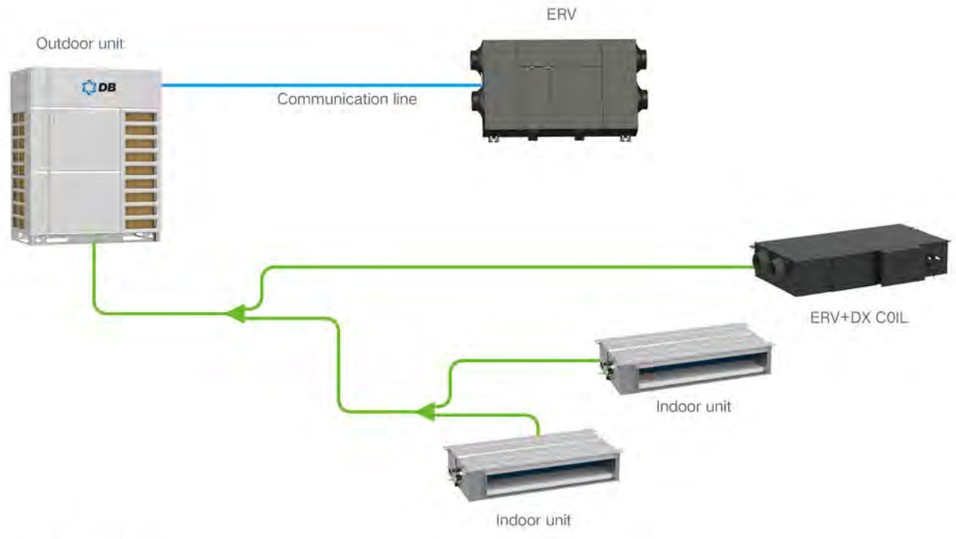
Less installation space: Indoor unit links with VRF fresh air indoor unit, reducing outdoor installation space.

Fresh Air Accessory

The cassette type unit can work with fresh air accessories to efficiently introduce 8%~10% outdoor fresh air.

ERV System

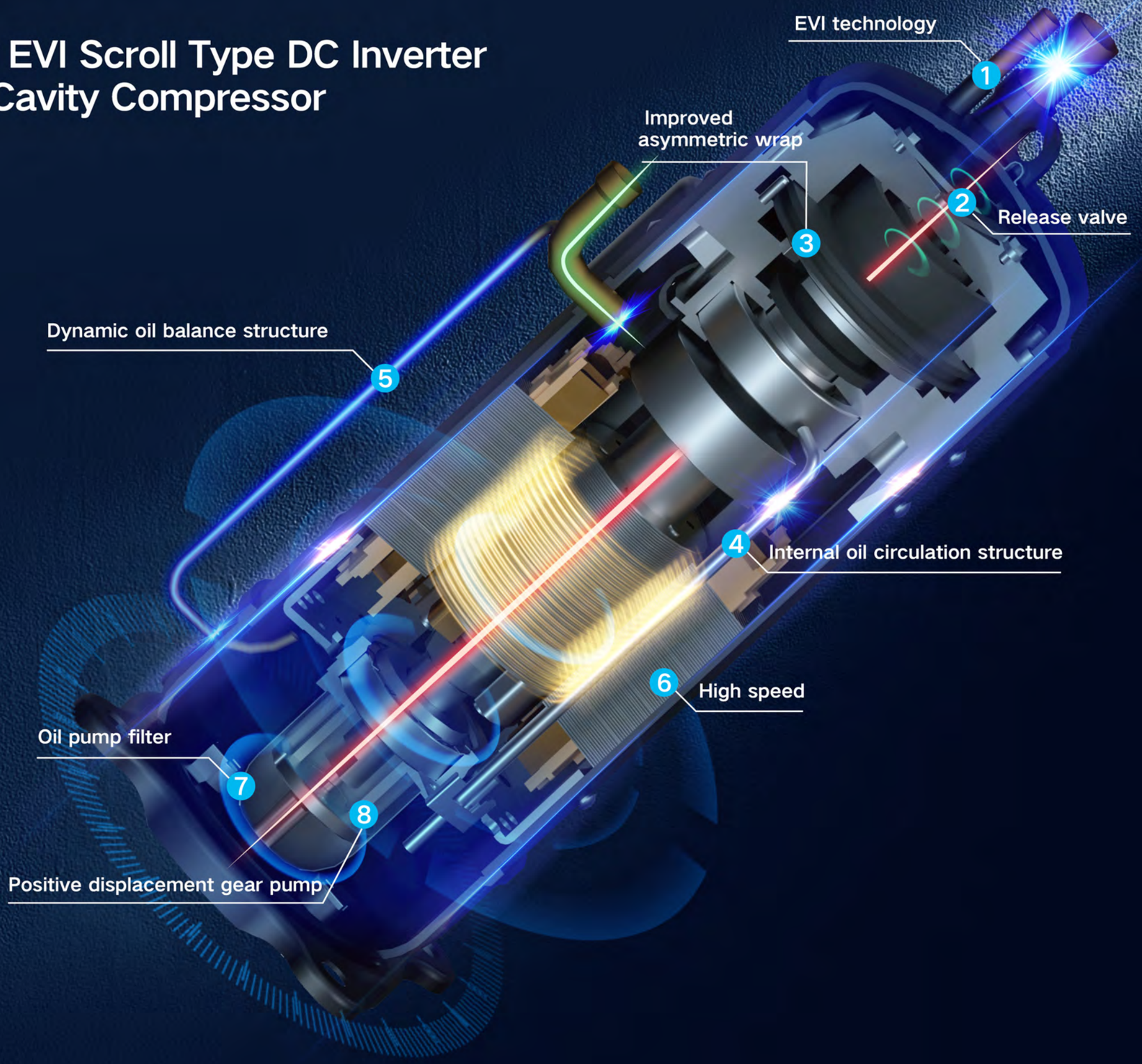
DBVG6 system can connect to ERV and ERV+DX COIL, which can realize air conditioning with fresh air ventilation.



Clean System

Dunham Bush direct-expansion air handling unit can be connected to Gree VRF system, so that the air handling unit is with the functions of VRF system and can meet the cooling/heating requirement in large-scale spaces. This air handling unit can be equipped with purification devices with various filter grade for meeting the purification requirements of different occasions.

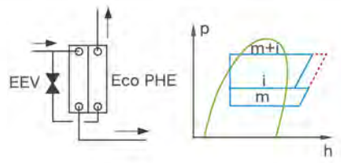
High-efficiency EVI Scroll Type DC Inverter High-pressure Cavity Compressor



High-efficiency Enthalpy Control Technology

High-efficiency Enthalpy Compressor

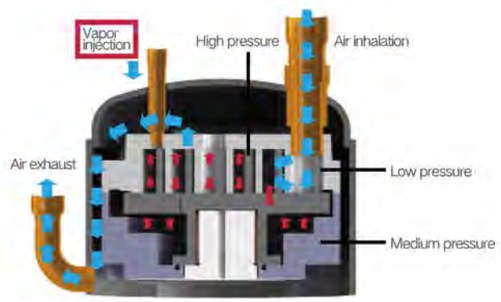
High-efficiency enthalpy compressor is developed according to the features of VRF unit, its 0-420Hz adjusting range can perfectly match with the whole unit, so as to excel the performance to the greatest extent.



High-efficiency EVI Scroll Type DC Inverter High-pressure Cavity Compressor

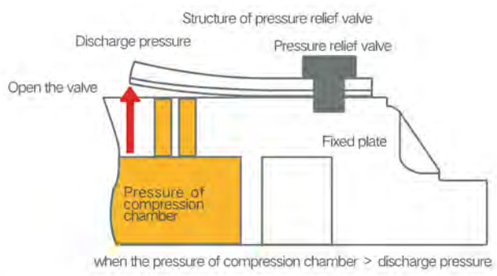
① EVI Technology

Reinforce system capacity, widen operating range, accelerate heating.



② Release valve

Improving partial load energy efficiency, adapting to the condition of variable pressure ratio, upgrading compressor performance.



③ Improved asymmetric wrap

New asymmetric wrap is adopted and compressor efficiency is improved by reducing leakage and invalid suction superheat.

④ Internal oil circulation structure

Internal circulation of lubricating oil to reduce over-heat losses and oil discharge rate and to improve efficiency and reliability.

⑤ Dynamic oil balance structure

Advanced oil balance technology, with high reliability and flexible design without installation limit, which can realize parallel connection of compressors with different delivery capacity and revolving speed.

⑥ High speed

0~420Hz stepless inverter operation, wide adjustment range of capacity, precision can be up to 1Hz.

⑦ Oil pump filter

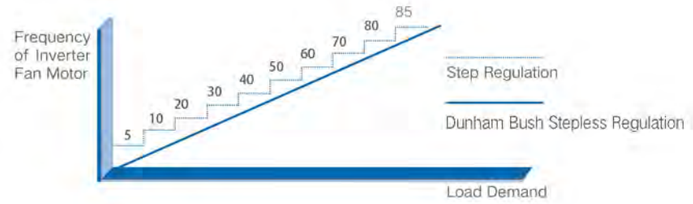
Filtrate the impurities to ensure the supplied oil is clean.

⑧ Positive displacement gear pump

Ensure necessary oil supply under the revolving speed, improve reliability of compressor.

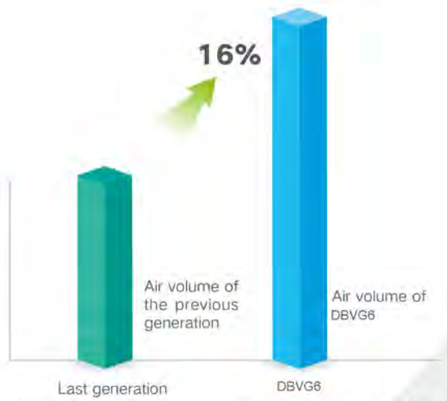
Sensorless DC Inverter Fan Motor

Adopt the DC inverter motor with high back electromotive force to realize stepless speed adjustment within 5~85Hz, the precision is 1Hz, with low operating current, low motor input power, and high efficiency.



Large Air Volume and Low Noise Air Duct

"Reverse-S shape" tail design, which can effectively increase the working area of fan blade, greatly improve the air volume. The blade tail adopts winglet design of the aircraft to effectively suppress the blade tip vortex caused by the pressure difference of wing tip and reduce the noise.



*China Patent 201820495665.8 Axial Fan Blade and Air Conditioner

*Applicable for some models.

*The above data are measured under rated conditions of unit

High-efficiency Heat Exchanger Design

DB-shape Integrated Heat Exchanger

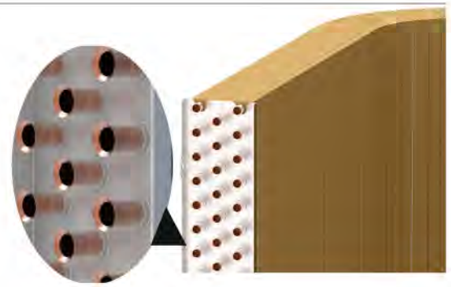
Adopt DB shape integrated heat exchanger, one-time processing , improving space utilization efficiency, increasing heat exchanger area, and improving heat exchange efficiency.

*Note: Applicable for some models.

Multi-row Small Diameter Design

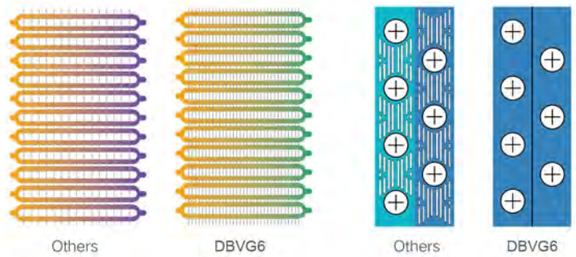
Single pipe of refrigerant pipeline adopts φ7mm and 3-row design, which can reduce the flowing resistance of refrigerant inside the pipe and effectively increase the heat exchange area of refrigerant, so as to optimize and improve the heat exchange efficiency.

*Note: Applicable for some models.



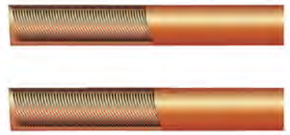
Small Pitch Corrugated Heat Exchanger Fins

Small pitch corrugated fins design to increase effective contact area between fins and the air, for more sufficient heat exchange of refrigerant and higher heat exchange efficiency.



Internal Screw Thread Design of Copper Tube

The refrigerant pipe adopts internal screw thread design, choose the appropriate internal screw thread type (tooth height and angle) through experiment, to increase the contact area with the refrigerant, optimize the turbulent state of refrigerant flow, and improve the heat exchange efficiency.



Internal screw thread high-efficiency heat exchange tube

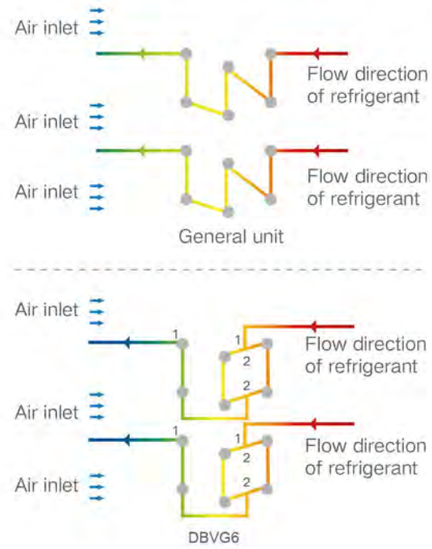
Multi-functional Heat Exchanger Fins

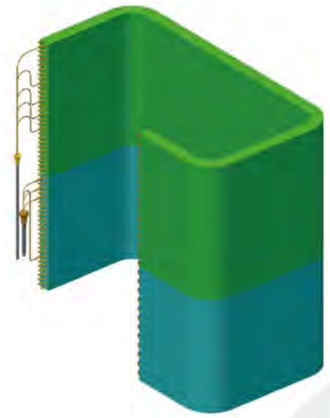
The heat exchanger fins adopt double-sided double-effect coating and hydrophilic membrane design so that the unit is not easy to get frosted and the condensate water or water from defrosting can flow down more quickly; the anti-corrosion coating isolates the pollutants and dust from air to protect the fins, thus stronger corrosion resistance and better heat exchange effect.

Double coating heat exchange fins structure

Divisional Heat Exchange Flow Path

According to the feature of wind field, the flow path of heat exchanger adopts divisional design for more reasonable flow division. Design according to 1-2-2-1 flow path for higher exchange efficiency.





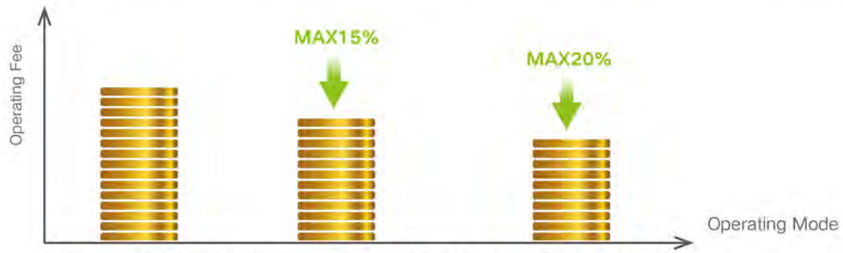
Multiple Energy-saving Modes

With the deepening of energy conservation and emission reduction, and the increasing requirements for urban electricity consumption, especially during the peak season of electricity consumption in summer, many cities will issue corresponding electricity curtailment measures. DBVG6 has a variety of operating modes for users to choose, to meet the city's peak power consumption and power limit requirements.

Capacity Priority Mode
When the power supply is sufficient, it will satisfy the using capacity demand in priority. This mode is default mode.

Auto Energy-saving Mode
When this mode is activated, the system will automatically adjust the control parameters according to operating status, and automatically balance the capacity and energy consumption to realize the minimization of bilateral impact.

Compulsory Energy-saving Mode
Compulsorily limit the output of outdoor unit, satisfy the using capacity demand in priority. 90% and 80% capacity proportion can be selected to limit the output according to the power consumption of unit and user demand.

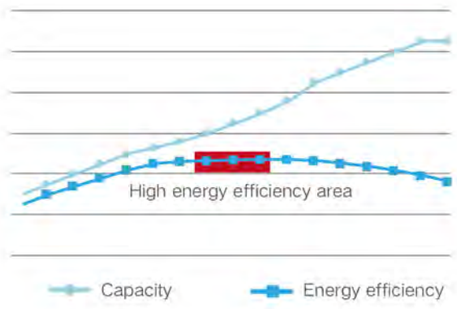


HPAC High-efficiency Alternate Control

DBVG6 adopts high-efficiency alternate control method to intelligently adjust the distributing method according to the demand of indoor load, which has ensured the service life of the integrated module, and improved the overall operating energy efficiency at the same time.

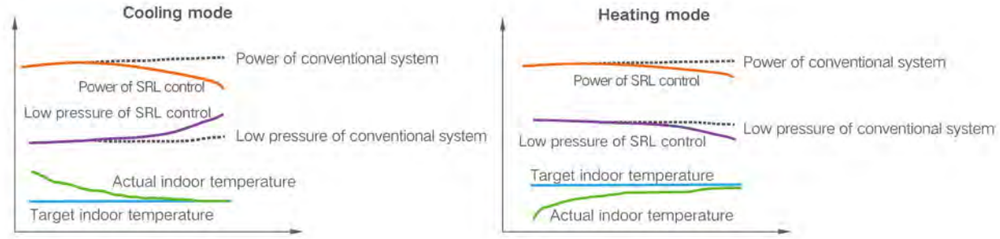
The best matching features exist among the compressor, indoor heat exchanger, and outdoor heat exchanger. It can automatically match the capacity of indoor and outdoor heat exchangers, and adjust in real time according to operating situation.

DBVG6-HPAC control



SRL(Self-reaction Load)Self-adaptive Control

SRL (Self-reaction Load) can intelligently detect and control pressure and temperature of system refrigerant according to user status and indoor temperature variation, so as to automatically adapt to indoor cold/heat load balance control of energy conservation.

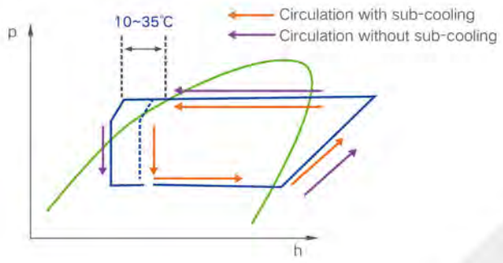


Variable Sub-cooling Design

With new generation of high-efficiency plate type sub-cooler and variable super-cooling degree control method, the maximum sub-cooling degree can reach 35℃ , the unit 's operation and engineering matching are greatly improved, and the effect is more obvious.

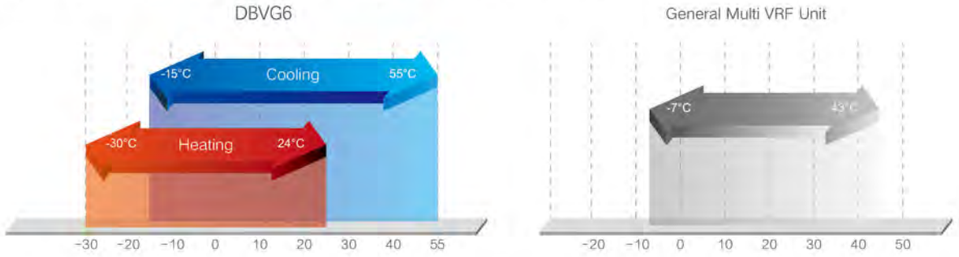
Problems with fixed sub-cooling and excessive sub-cooling:

With fixed sub-cooling degree, output of the unit cannot adapt to changes in load. When the system conducts excessive sub-cooling, performance of the whole unit is reduced, degree of superheat for the exhaust of compressor is insufficient, and the reliability is reduced



Wide Operation Range

-30℃-55℃ stable operation to provide users with comfortable environment in both cold and hot weather, operating ambient temperature for cooling can be as low as -15℃ .



Note:
1. The maximum operating temperature in cooling is 55℃ while the minimum operating temperature in heating is -30℃ . Different series have different operating ranges, please refer to the corresponding technical information.
2.Cooling at -15~-5℃ is conditional. Please inquire our engineers for more information. Generally, the lowest operating temperature for cooling is -5℃ .

Integrated Mainboard

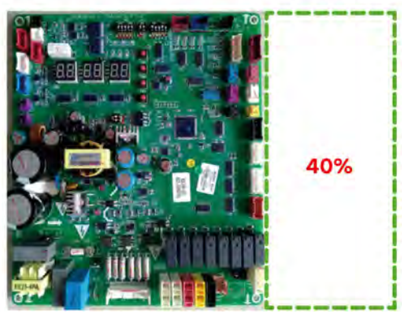
Adopt miniaturized design and new high-efficiency process to reduce the area of main board by 40% and the occupied space, increase the power density of inverter, and realize the diversification of functions.

Intelligent Design
low power consumption control, auto address allocation, auto commissioning, error memory and inquiry;

High Reliability Design
It is designed with wide voltage protection, default phase protection, overload protection, anti-surge protection, anti-static protection and so on. Together with advanced moisture-proof, dust-proof and anti-corrosion design, the system is more stable and reliable.

Advanced Production and Inspection Technology
The controller mainboard undergoes a series of strict production inspection processes such as SMT processing—AOI optical inspection—ICT online inspection—FCI functional test—DCT test and vibration and stress test. The rigorous manufacturing and inspection process ensure that the control mainboard can withstand high temperature and high humidity, abrasion and drop and other harsh environments.

Other



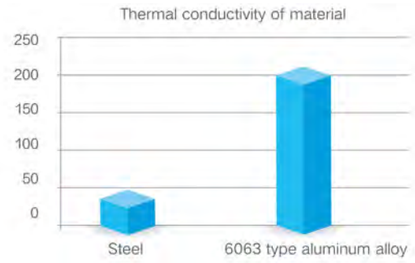
DBVG6

Integrated High-efficiency Heat Dissipation Electric Controller

Main body of electric box is made of 6063T5 aluminum alloy material with high thermal conductivity (the heat dissipation capacity is 4.5 times that of conventional steel plates). The integrated structure design reduces the overall volume by 35%. Installation and maintenance are more convenient.

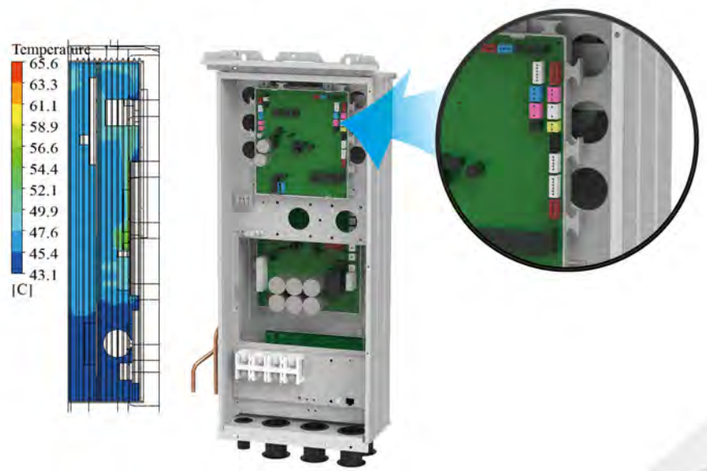
Other (sheet metal structure)

DBVG6(Aluminum alloy)



*Chinese Patent for Utility Model No.ZL201720497732.5 Outdoor unit, Electric Box and its Box Subassembly of Air Conditioner.
Note: Aluminum control box is not applicable for DBVG6.

The main body of electric box adopts refrigerant for heat dissipation, cooperates with high thermal conductivity aluminum alloy material, and uses thermal simulation design to optimize the layout of inverter power components, thus reducing the internal temperature of inverter electric box by about 8℃ , and improving the reliability of inverter components of large-capacity inverter compressor.



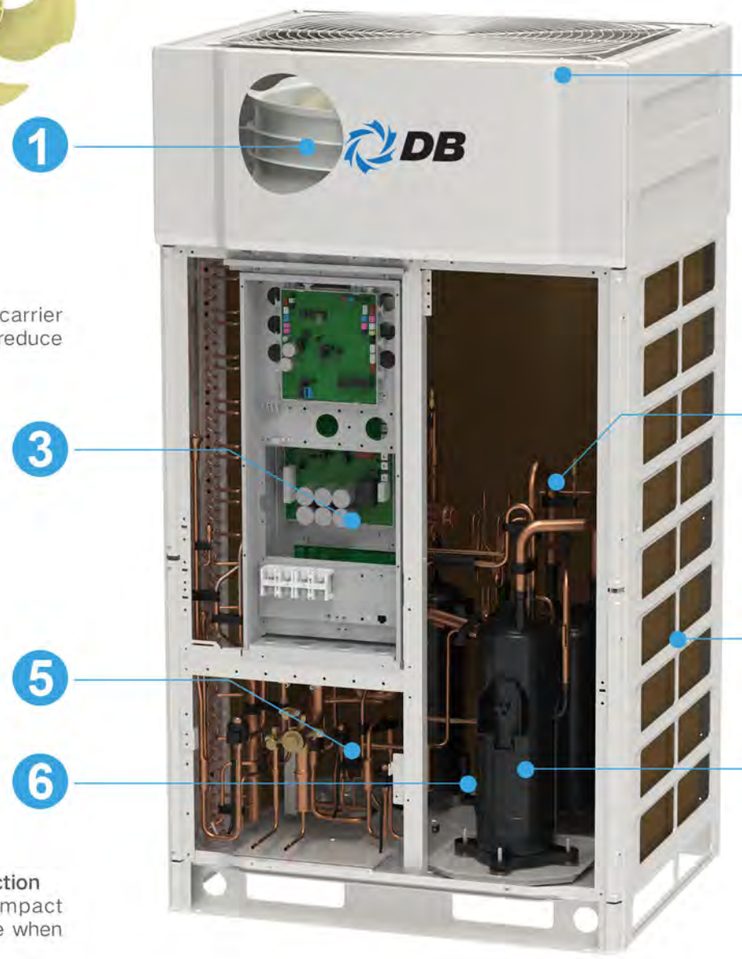
Quiet and Comfortable Experience

DBVG6 adopts multiple professional noise-reduction technologies to improve the operation of the unit and create a quiet and comfortable environment.

Multiple Professional Noise Reduction Technologies

① **Large Air Volume and Low Noise Fan Blade**
Reverse S shape tail design and aircraft winglet 4-blade design to achieve large air volume and low noise.

③ **Intelligent Noise Reduction Converter**
IGBT adopts exciting voltage and control carrier frequency switching technology to actively reduce electromagnetic noise.



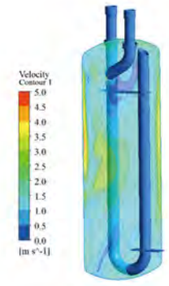
② **New Streamline Grill and Immersed Layout Air Duct**
The general air duct system of unit goes down to form an immersed layout, which can effectively reduce the fan noise.

④ **Pipeline Simulation Shock Absorption Design**
Pipeline is designed based on ANSYS to effectively reduce the vibration of pipes.

⑤ **Quiet Throttling Component**
The quiet expansion valve with special structural design meets the needs of pressure-reducing flow distribution and can minimize the throttle noise.

⑥ **Enthalpy-adding Pulsation Noise Reduction**
Design a special buffer to reduce the impact noise of refrigerant pulsation on the pipeline when spraying enthalpy by 90%.

⑦ **Quiet Gas-liquid Separator**
It is a special low-noise and large-capacity gas liquid separator. The shape and angle of the gas-in and gas-out tubes are specially designed to reduce noise.



⑧ **Sound Absorption and Sound Insulation Design of Compressor**
Adopt compound material with high sound absorption and insulation effect to reduce the noise of compressor effectively.

Sound absorption material

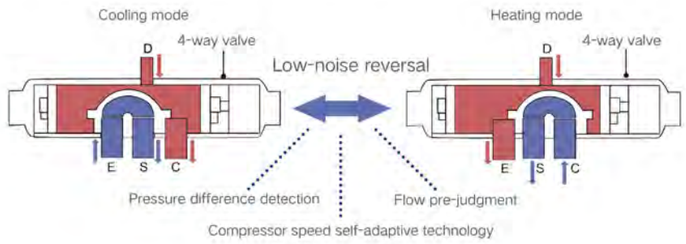
Metal sound insulation cover

*Configuration of some models

Low-noise Operating Technology

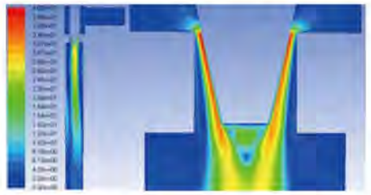
Low-noise Reversing Control Technology

The 4-way valve adopts low-frequency reversing design. Through the detection of reversing pressure difference and the prediction of flow, the compressor speed is adjusted accordingly during reversing, for small pulsation of refrigerant flow and effective noise reduction. The reversing control technology can not only improve the reliability of the 4-way valve action but also improve the comfort degree of the unit.



Refrigerant Flow Noise Reduction Technology

DBVG6 adopts three refrigerant flow noise reduction technologies for overall control to further improve the operation. The gas-liquid two-phase refrigerant encounters throttling parts or elbows and abrupt cross-sectional areas of the flow channel during the flow process, turbulence will increase due to pressure changes and vortex shedding, cavitation noise and vortex noise are easily generated in the pipeline, and the abnormal sound of the noise will accelerate and deteriorate with the increase of the two-phase status.



Refrigerant Status Control

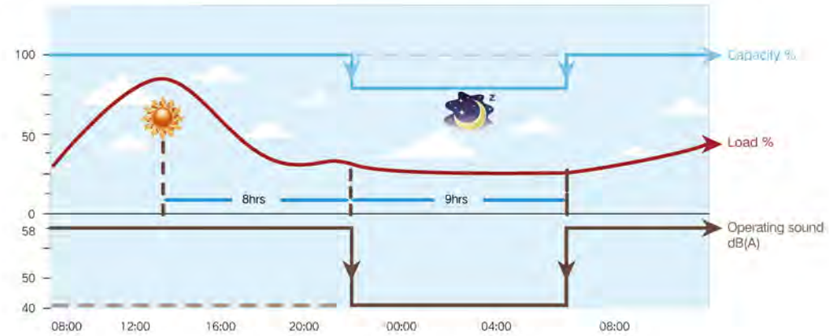
According to the mechanism of refrigerant flow noise, high-efficiency sub-cooling and sub-heating technologies are used in cooling and heating operation to fundamentally control the single-phase state of the refrigerant in the flow process.

Quiet Technology

13 Quiet Modes

Quiet at Night

The system can record the highest outdoor temperature. At night, the system will automatically turn to quiet mode. There are 9 quiet modes which can be set according to actual needs. For example, the unit can automatically enter night mode after working for 8 hours, and resume to normal operating mode after 9 hours.

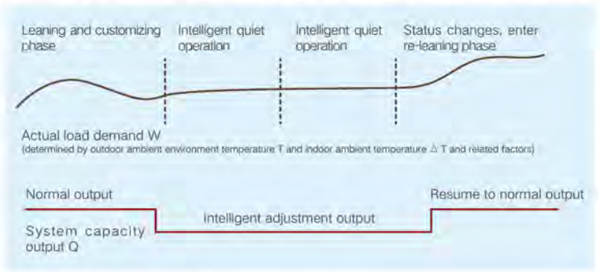


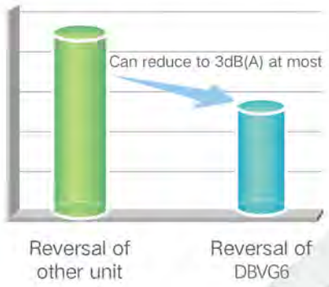
Quiet in Compulsion

When the unit is installed in an environment with high noise requirements, it needs to operate silently during the day or night. Then you can choose three mandatory settings of quiet modes to ensure that the unit operates in low noise mode at any time, and the noise value can be as low as 40dB (A).

Intelligent Quiet

The unit can learn and customize user habits, and at the same time memorize the characteristics of user 's habits. According to the user 's using habit and actual load, it can automatically determine the output capacity of the system in the next 24 hours to achieve automatic quiet operation.



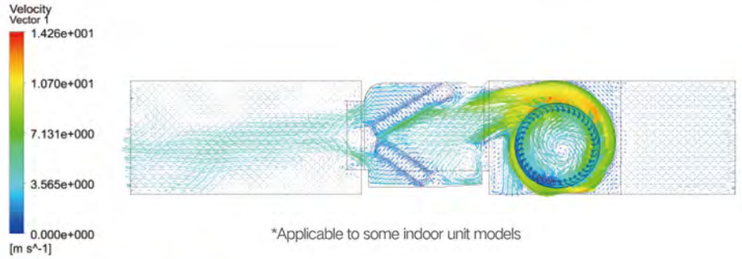


* Internal measurement value.

Indoor Unit Quiet Technology

Indoor Quiet Air Duct Design

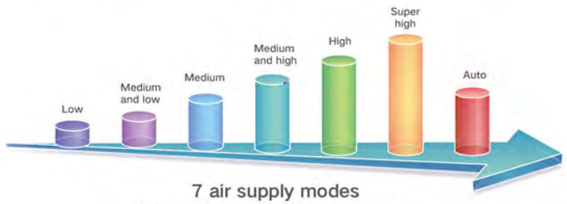
Heat exchanger of indoor unit adopts V shape design for even and smooth air flow to create a quiet and comfortable environment.



*Applicable to some indoor unit models

7 Fan Speeds for Selection

The indoor unit has 6 fan speeds (super high, high, medium and high, medium, medium and low, low) and auto fan speed for selection to satisfy different user demands.

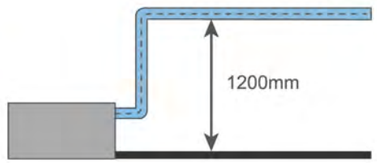


7 air supply modes

Note: applicable to partial DC motor models

Low-noise High Delivery Lift Water Pump Design

The indoor unit is equipped with a quiet water pump with delivery lift up to 1200mm, solving the drain problem of unit in low floors, with high engineering adaptability.



DC Motor Design

The indoor unit of DBVG6 adopts DC motor design to realize stepless adjustment of revolving speed for lower noise operation. Auto quiet mode of indoor unit can be set via the wired controller and the unit will activate auto quiet function according to indoor temperature and the activity of occupants. Noise is as low as 22dB(A).

Stable and Reliable Operation

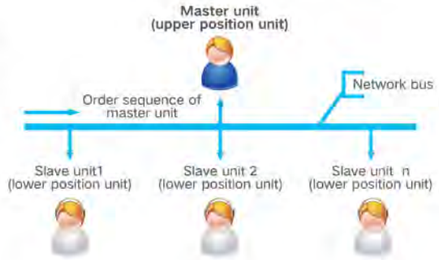
DBVG6 adopts CAN+ communication, multiple oil circuits control and other technologies, which greatly improves the stability and reliability of the unit.

CAN+ Communication Technology

Current Situation for Communication Technology of Multi VRF Unit Industry

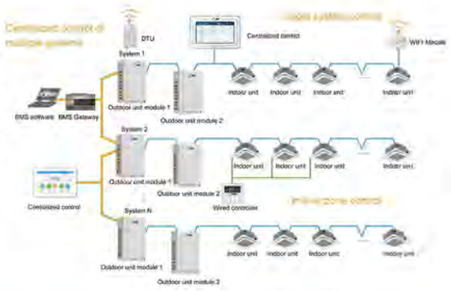
In the field of commercial VRF, as the installed capacity of the system increases, the number of connected indoor units also increases. Thus, the multi-system integrated control requires a highly stable communication network.

The current air conditioning communication technology adopts master-slave polling mechanism, which has the technical bottlenecks with low reliability, poor real-time performance, and poor extendibility, which restrict the development of intelligence; slow response of centralized control and low efficiency of control; communication is susceptible to interference, resulting in abnormal operation; expansion of functions and number of nodes are difficult.



Innovative Stratification CAN+ Structure with Multiple Master Networks

Considering that the application of an air conditioning system requires multiple nodes, multistep control and intelligent expansion, we originally developed the stratification CAN+ structure with multiple master networks, which makes it possible for the number of nodes in a single system to be increased relatively by 56% and the response time for centralized control to be shortened by hundreds of times.

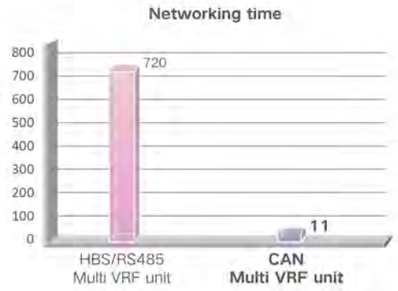


Technical Effect		CAN+ Network Structure	Traditional Network Structure
Real-time capability of interaction	Communication cycle of single system	<500ms	About 5s
	Preferential response	Microseconds	Seconds
	Centralized control response time	6s	10min
Reliability of interaction	Error isolation	Automatic	No
	Impact of node malfunction	Not rely on any node	Totally rely on master unit
	Sub-net scale	80 (it should be customized if over 80, 100 sets can be customized at most)	64
Expansibility	Intelligent equipment	Free access	Require bridge connection

First Formulated CAN+ Communication Protocol

It is the first time to formulate and standardize CAN+ communication protocol: two-stage network universal design, data can be directly transferred; functional code, network address, data field and related core concepts are developed, realizing grading, classification and real-time transfer of communication data, satisfying the demand of intelligent expansion.

Full network automatic address allocation technology: the protocol supports dynamic IP automatic allocation and full network addresses automatic offset, which realizes large-scale air conditioning network automatic networking without commissioning. The networking time is relatively shortened by more than 60 times, ensuring fast network distribution and free access to multiple online devices.



The First Nonpolarity CAN+ Communication Chip

Good Expansibility

- Network scale: single system can control up to 100* indoor units, reducing equipment investment and management costs;
- Instant use: new device can be accessed freely, with flexible engineering configuration;
- Centralized control: two-stage CAN+ communication network structure, no bridge device is needed between the systems, and the centralized control equipment can control up to 16 systems.

  * Require engineering customization

High-efficiency and Reliable

- Innovatively integrate the air conditioning control business with the bus arbitration mechanism to achieve second-level response of large centralized control system;
- With fault isolation function, the faulty node quits actively, and the network is not affected by the faulty node.

Convenient Installation Commissioning

- With automatic addressing function, the system automatically assigns addresses without manual DIP switch setting and networking, saving time and effort;
- The interface adopts non-polar design. Engineering wiring does not need to consider the positive and negative poles, which is safe and reliable.

Honors

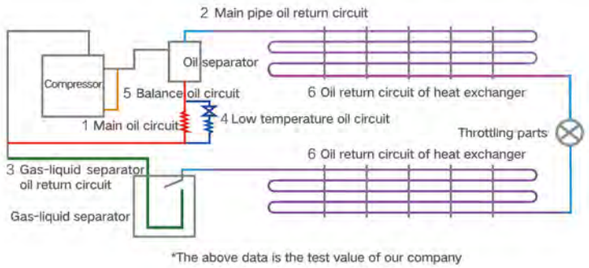
- In 2017, the project "Research and Application of CAN + Communication Technology Based on Multi VRF Unit" was accredited by the Chinese Association of Refrigeration and reached the "international leading" level;
- In 2018, the project "Research and Application of CAN + Communication Technology for Mult VRF Unit" won the Gold Medal at the 70th Nuremberg International Invention Exhibition in Germany;
- In 2018, the core patent of CAN + communication technology "Mult VRF Air Conditioning System ZL201410312939.1" won the Silver Award of China Invention Patent.

Precise Oil Control for Stable Operation of Compressor

Oil Return Control Technology

Multiple Oil Circuits Management

Six oil circuits ensure smooth and reliable oil passage.



*The above data is the test value of our company

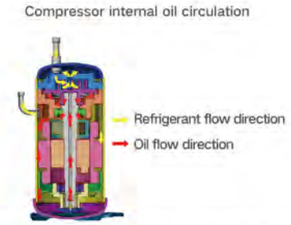
Self-balancing Control Without Oil Balancing Tube

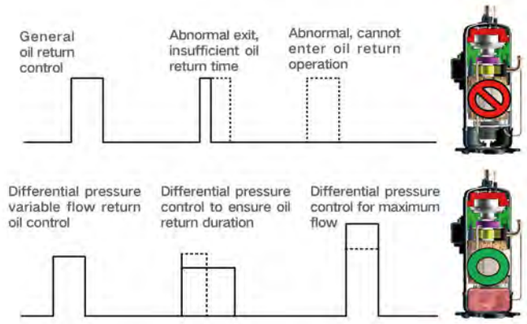
Advanced oil balancing control method, no external oil balancing pipeline is required between modules, and the installation is simple and fast. By collecting and calculating the capacity output and threshold conditions between each module, the distribution of refrigeration oil between the modules is automatically controlled to ensure stable operation of the system.

China Patent No. 201510307364.9 "Oil Balancing Control Method of Air Conditioning System"

Pressure Difference Type Variable Flow Oil Return Technology

According to different operating conditions of the unit, on the premise of ensuring the reliability of the unit, the pressure difference control factor is introduced to conduct intelligent variable flow oil return operation according to the real-time operating parameters of the unit, to ensure the maximum return flow rate and duration, and to improve the reliability of unit again.

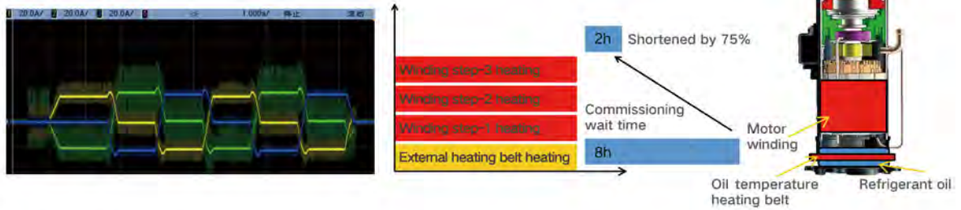




Double Heating Source Oil Temperature Control Technology

Under standby status, the compressor winding and external electric heating belt can independently or simultaneously conduct heating control of the refrigerant oil.

Variable control of motor winding heating power enables fast and safe start-up under different environmental conditions, and the preheating time is shortened from 8 hours to 2 hours.



Backup Heating

Under the condition that the external heating belt works abnormally in the DBVG6 unit, the winding heating can also work normally to ensure the reliability of compressor.

Ordinary units only have external electric heating control. Once the electric heating is faulted, the probability of damage to the compressor is greatly increased.

Self-adaptive Drive Technology

Variable Carrier Frequency Control Technology

According to the operating characteristics of compressor, the carrier frequency is automatically switched, high-frequency noise reduction and low-frequency loss reduction are realized, which can maximize the efficiency and reliability.

Strong Torque Start Control

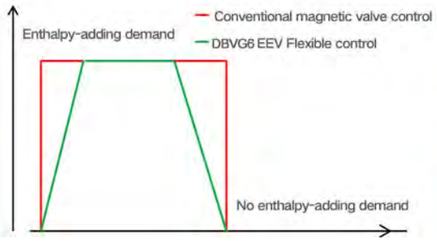
No external balancing device is needed, and the compressor torque self-feedback and adjustment control are adopted. The compressor can be started during the system operation with a high pressure difference, effectively ensuring the continuity and stability of system operation.

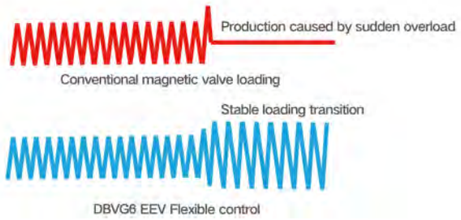
Conventional startup mode

DBVG6 startup mode

Flexible Enthalpy Loading Control

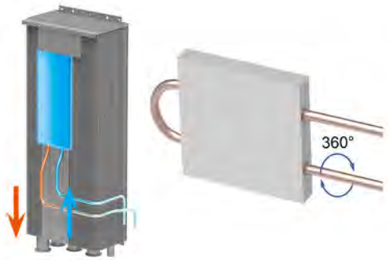
The general enthalpy-adding system adopts "0⟷1" on-off method to switch between enthalpy-adding mode and non-enthalpy-adding mode. This will cause the compressor load to change drastically, which may lead to runaway and shutdown. In serious cases, the compressor may be damaged. The DBVG6 unit uses the linear flow change feature of EEV to gradually increase the load during enthalpy-adding control to achieve flexible transition and ensure stable and continuous operation of the system.





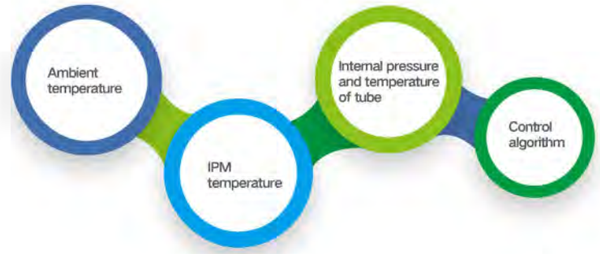
Sub-cooling Module Cooling Technology

The compressor drive IPM high-power device adopts sub-cooling 360 ° ring-shaped heat dissipation structure module cooling technology to ensure that the internal components work under relatively low temperature conditions. Compared with ordinary air-cooled heat dissipation, the internal temperature can be reduced by up to 8℃ , and reliability raised dramatically.



Anti-condensation Control Algorithm for High Humidity Environment

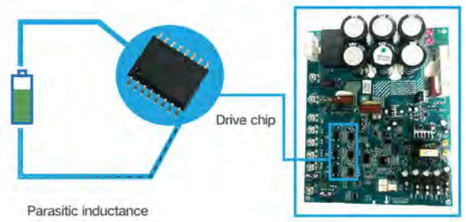
By detecting the ambient temperature, internal pressure and temperature of the tube, IPM temperature, etc., the anti-low temperature control algorithm for the high humidity environment is determined to prevent the condensation of internal components and avoid damage to the devices.

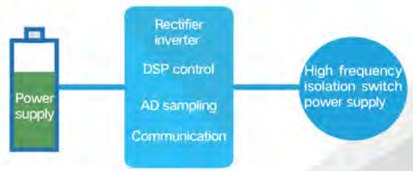


Anti-high Voltage Impact Technology

The greater the compressor capacity is, the greater the unit current will be, and influence of the parasitic inductance of the wiring will also increase, operating reliability of unit will decrease, and even the components will be damaged.

With high-voltage switch power supply and fully isolated drive technology, multiple output electromagnetic isolation, to avoid mutual interference. The circuit protection function is synchronously isolated, and the desat setting can suppress transient peak current. Industrial-grade performance and high-power drive greatly improve safety and reliability.





Indoor Unit Emergency Maintenance Function

When a certain indoor unit of the system needs to be powered down for maintenance, the indoor unit can be turned off separately, while other indoor units can maintain normal operation.

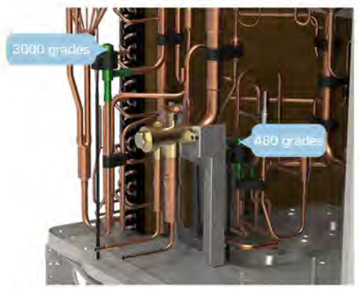
Note: There should be less than 3 indoor units that are powered off at the same time within the same cooling system.

Multi-electronic Expansion Valve Control Technology

Electronic expansion valve is one of the four basic components of the air conditioner. In addition to the throttling function, it can also adjust the refrigerant flow into the evaporator. The wider the adjustment range of the electronic expansion valve is, the higher the accuracy will be.

Outdoor Unit

The outdoor unit adopts double electronic expansion valves, the main electronic expansion valve is 3000 grade, and the subcooled electronic expansion valve is 480 grade, which can accurately control the flow between the modules of indoor unit and outdoor unit.

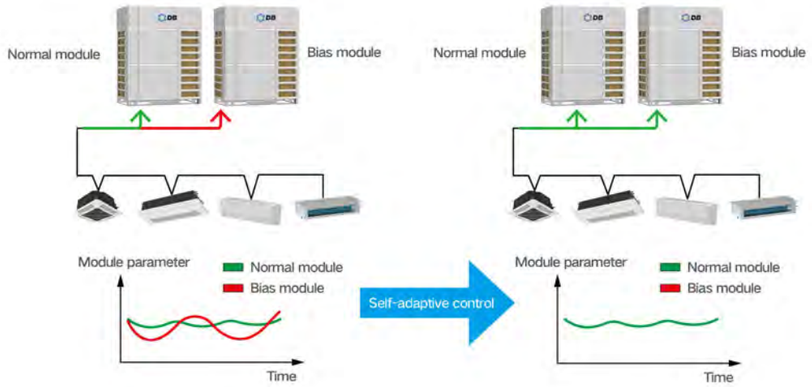


Indoor Unit

The quiet electronic expansion valve is used to accurately control the refrigerant flow, the adjustment is smooth and stable, and the comfort and reliability are improved.

Modular Engineering Piping Self-adaptive Control

During the modular design of a project, the outdoor unit detects the parameters of each module, the system self-defines the bias current module, and memorizes the operating characteristics of the bias current module. Each module automatically adjusts the control methods and control thresholds of key components according to the difference in characteristics, and memorizes automatically to quickly reach a reliable and efficient operating state when it is restarted next time.



New Generation Intelligent Alternate Control Technology

Variable Cycle Module Alternate Control

DBVG6 adopts a new modular control method to ensure the service life of the complete unit and improve the overall operating performance.

X refers to the variable cycle

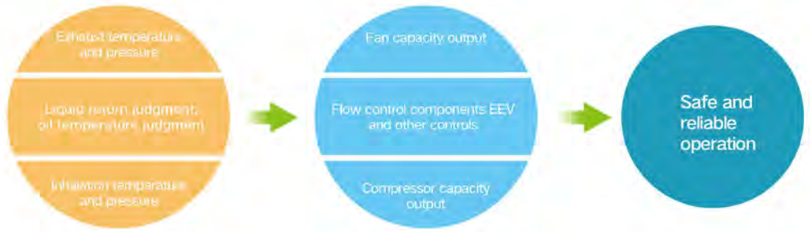
Compressor Alternate Control

As for the system control, not only the overall service life of the modular design is considered, when the module is designed for multiple compressors, the internal compressors will also conduct rotation control to balance the operating service life of each compressor.

*Applicable to partial models.

Advanced Anti-liquid Impact Technology

High-efficiency large-capacity gas-liquid separator design for effective separation of refrigerant in gas and liquid state, to avoid large amount of refrigerant be directly inhaled into the compressor. At the same time, the liquid return judgment is combined with the inhalation and exhaust temperature and other parameters. The compressor, EEV and other components are adjusted in real time to effectively prevent the compressor from liquid impact.



Emergency Stop Function

Without remote monitoring, the outdoor unit can be directly connected to the fire alarm linkage signal to stop the operation of the whole unit immediately in an emergency to avoid greater losses.

VIP Function

In high-end hotels and other occasions, when the diesel generator is used for power supply temporarily, the outdoor unit can directly connect different power identification signals and send a signal of insufficient power supply to the system. At this time, only rooms set as VIPs such as presidential suites are allowed to use the air conditioner, other rooms are forbidden to use the air conditioner.

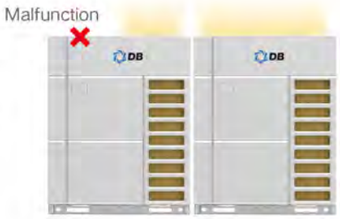
Diversified Backup Operation

Basic module emergency function:

DBVG6 can achieve a combination of four independent units. Each unit is a basic module. When a certain basic module is malfunctioning, other basic modules can achieve emergency operation, which reduces the influence of malfunction.

Fan emergency function

Some basic modules are designed with two fans. Dunham Bush control logic and optimized system design can ensure that•when one of the fans is malfunctioning, the unit can still operate with the other fan, which reduces the influence to users due to sudden stoppage.



Compressor emergency function

For a basic module with two or more compressors, when one of the compressors is malfunctioning, the unit can still operate with other compressors, which reduces the influence of malfunction.

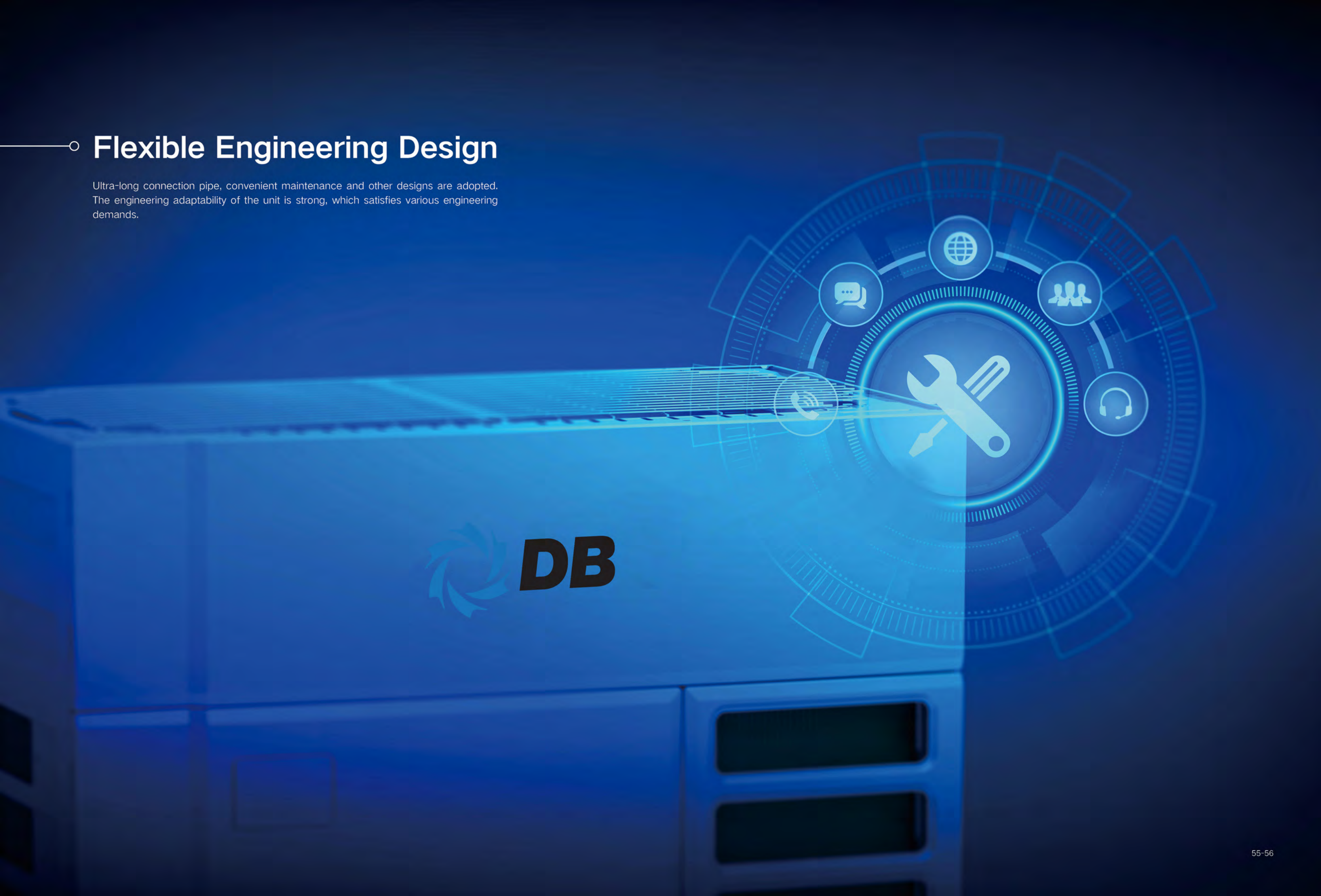
Sensor malfunction emergency function

The application field of VRF systems is complicated. When a temperature sensor malfunction occurs to the unit, the unit will enter back-up mode, which minimizes the influence of malfunction.

* Only for some temperature sensors.

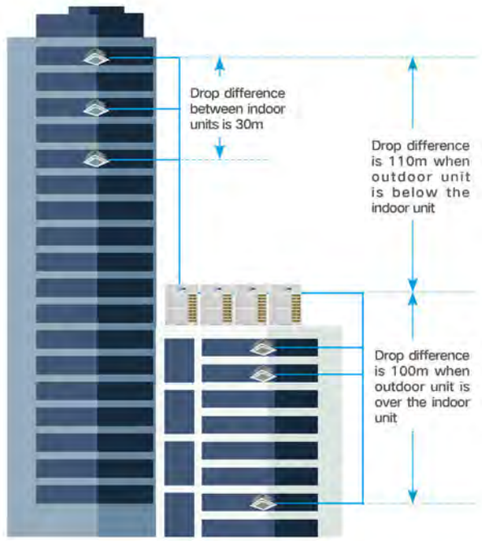
Flexible Engineering Design

Ultra-long connection pipe, convenient maintenance and other designs are adopted. The engineering adaptability of the unit is strong, which satisfies various engineering demands.



Super Long Refrigerant Pipe Design

DBVG6 combines high drop pressure control technology, indoor unit drop identification technology, intermediate pressure adjustment technology, tube length self-correction technology, and deep sub-cooling technology to increase the length of piping and improve the air conditioning effect.



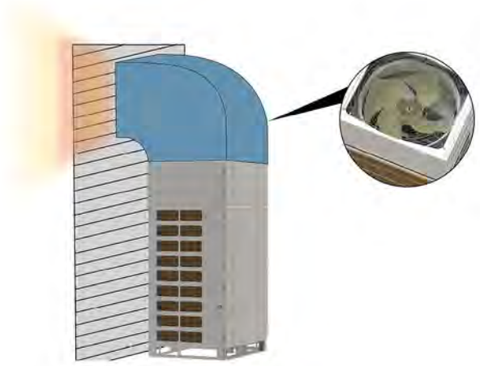
- The maximum actual single pipe length is 200m, the maximum equivalent single pipe length is 240m, and the maximum piping length is 1,000m.
- The maximum length after the first branch pipe is 120m *.
- The maximum drop of indoor and outdoor units is 110m * (100m when the outdoor unit is in upper position) *.
- The maximum drop between indoor units is 30m.

*Please consult technical staff for details.

High Static Pressure Design

New diversion cover: Effectively coupled with fan blade, the flow field is more uniform.

High external static pressure design reduces the engineering application requirements, and the design of equipment layer is more convenient for vortex streamline distribution of air-out grill to reduce the wind resistance and increase the efficiency of motor, maximum static pressure is 110Pa.



Intelligent Commissioning

Quick Installation

- Automatic address allocation: the system automatically allocates addresses to the indoor units, no DIP switch is required for commissioning, which is convenient.
- Five-side outlet pipes connection method: pipes can be lead out from five sides--front side, left and right sides, back and lower sides, which is suitable for various installation occasions.
- No external oil balancing pipe: advanced oil balancing control, no need to connect external oil balancing pipe, for fast and convenient installation and higher efficiency.
- Highly versatile design: DBVG6 are universal for indoor and outdoor mounting holes, universal for supporting terminal controllers, and universal for commissioning.

Efficient Multiple Commissioning Methods

Diversified commissioning methods to meet different needs of project for higher commissioning efficiency.

One button commissioning
One button to enter commissioning, no other operations, simple and fast

DBVG commissioning system
Clear interface, detailed data, and more professional analysis

Multi-functional debugger
Quick connection, no special PC required; automatic data storage (4GB), no external storage required

Debugging before Installing Wired Controller

Before the completion of the project, in order to avoid damage to the wired controller during the construction process, the system can be debugged without installing the wired controller. After the entire project construction is completed, the wired controller can be installed and put in use, which can reduce unnecessary engineering loss.

New Generation Refrigerant Automatic Charging *

The new-generation refrigerant automatic charging function can effectively monitor and judge the status of the refrigerant in the system by detecting the high and low pressure, ambient temperature, and other parameters of the system, and strive to achieve the amount of refrigerant that matches the project and improve the efficiency of unit installation and commissioning.

*This function needs to be customized

New Generation Refrigerant Recovery Function

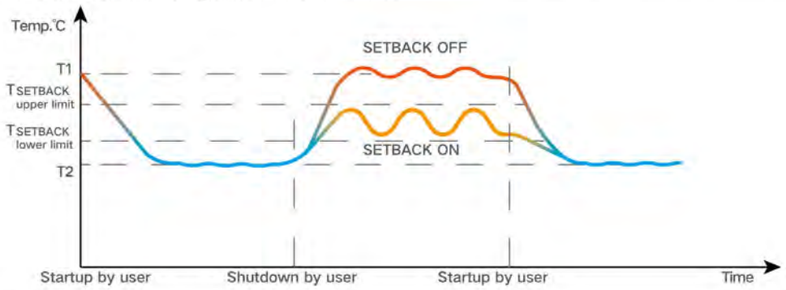
The new generation of indoor unit refrigerant recovery and module refrigerant recovery functions can effectively recover the refrigerant of the indoor unit or the faulted outdoor unit during after-sales maintenance, reducing refrigerant waste and saving maintenance time.

Indoor unit refrigerant recovery

Module refrigerant recovery

SET BACK Function

On occasions with high comfort requirements, such as star-rated hotels, high-end office areas, etc., the unit can start the SET BACK function, even if the unit is turned off, it can also automatically determine the indoor temperature and automatically start operation to ensure the required temperature control under unmanned state, improving the comfort of use.



*Applicable to XK79 wired controller.

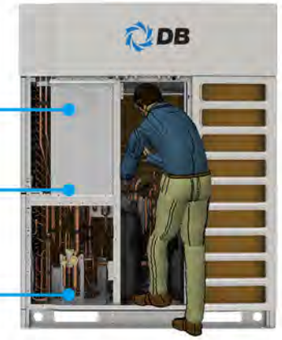
Efficiently Maintained Structural Layout

DBVG6 integrated electronic control layout, with reserved maintenance space for higher maintenance efficiency.

Commissioning window, no need to remove the panel, you can conduct commissioning and troubleshooting during operation.

The electronic control components are highly integrated, the component structure is miniaturized, and there is more space for maintenance.

Front-mounted valve assembly design, fast and reliable piping installation.



Large space for convenient maintenance

Four Seasons Operating Function

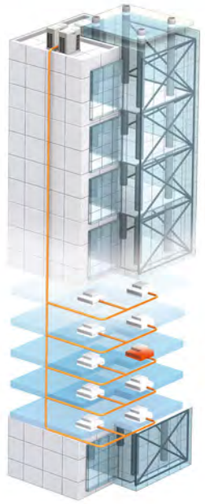
Without adding additional accessories, operation mode of the whole unit can be set through the outdoor unit to achieve centralized management and reduce energy waste.

Summer lock: cooling is effective

Transient season lock: air supply is effective

Winter lock: heating is effective

Indoor Unit Automatic Positioning Function



When multiple indoor units are installed in large spaces such as exhibition halls, conference rooms, offices, etc., the indoor unit can conduct automatic positioning, the corresponding indoor unit buzzer can automatically respond, and the indoor unit can be quickly positioned by sound to achieve efficient maintenance.

Abnormal unit alarms for positioning

Panel Lifting Function

Ordinary panel cleaning requires the hiring of professionals to clean, and the use of auxiliary tools is required for the operation, which has high maintenance cost and low safety.

Automatic Grille Lifting Technology

Convenient Cleaning Function

Air-in grille adopts two-way suspension lifting technology to realize grille lifting function, users can clean the filter by themselves.

Grille Lifting Control

Through suspension self-locking technology, two modes -- stepless lifting and default lifting are realized, and the maximum descending distance can reach 3.3 meters.

In order to prevent users from entering the cleaning mode by mistake, symmetric encryption technology is adopted to give users a better and comfortable experience.

Note: It needs to be customized, and it can be used with 360 ° air discharge cassette type indoor unit.

DBVG6 Outdoor Units Specifications

ODU Specifications

DBVG6 (380-415V 3N~50/60Hz)

Model			DBVG-MTB8EG	DBVG-MTB10EG	DBVG-MTB12EG	DBVG-MTB14EG	DBVG-MTB16EG
Capacity range		HP	8	10	12	14	16
Capacity	Cooling	kW	22.4	28.0	33.5	40.0	45.0
	Heating	kW	25.0	31.5	37.5	45.0	50.0
EER		W/W	4.78	4.52	4.35	4.35	4.17
COP		W/W	5.50	5.34	4.81	4.74	4.67
Power supply		V/Ph/Hz	380-415V 3N~ 50/60Hz				
Min. circuit/Max. fuse current		A	23.0/25	23.5/25	24.1/25	32.5/40	33.5/40
Power consumption	Cooling	kW	4.69	6.20	7.70	9.20	10.80
	Heating	kW	4.55	5.90	7.80	9.50	10.70
Maximum drive IDU NO.		unit	13	16	19	23	26
Refrigerant charge volume		kg	5.5	5.5	5.7	7.0	7.5
Sound pressure level		dB(A)	56	57	59	59	60
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7
	Gas	mm	Φ19.05	Φ22.2	Φ25.4	Φ25.4	Φ28.6
Dimension (W×D×H)	Outline	mm	930×775×1690	930×775×1690	930×775×1690	1340×775×1690	1340×775×1690
	Package	mm	1000×830×1855	1000×830×1855	1000×830×1855	1400×830×1855	1400×830×1855
Net weight/Gross weight		kg	215/225	215/225	220/230	290/305	290/305
Loading quantity	40' GP	unit	28	28	28	22	22
	40' HQ	unit	28	28	28	22	22

Model			DBVG-MTB18EG	DBVG-MTB20EG	DBVG-MTB22EG	DBVG-MTB24EG
Capacity range		HP	18	20	22	24
Capacity	Cooling	kW	50.4	56.0	61.5	68.0
	Heating	kW	56.5	63.0	69.0	76.5
EER		W/W	4.10	4.06	3.80	3.32
COP		W/W	4.38	4.34	4.08	3.81
Power supply		V/Ph/Hz	380-415V 3N~50/60Hz			
Min. circuit/Max. fuse current		A	47.0/50	48.0/50	49.0/50	49.0/50
Power consumption	Cooling	kW	12.30	13.80	16.20	20.50
	Heating	kW	12.90	14.52	16.90	20.10
Maximum drive IDU NO.		unit	29	33	36	39
Refrigerant charge volume		kg	8.0	8.0	8.3	8.3
Sound pressure level		dB(A)	61	62	63	64
Connecting pipe	Liquid	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9
	Gas	mm	Φ28.6	Φ28.6	Φ28.6	Φ28.6
Dimension (W×D×H)	Outline	mm	1340×775×1690	1340×775×1690	1340×775×1690	1340×775×1690
	Package	mm	1400×830×1855	1400×830×1855	1400×830×1855	1400×830×1855
Net weight/Gross weight		kg	295/310	350/365	350/365	355/370
Loading quantity	40' GP	unit	22	22	22	22
	40' HQ	unit	22	22	22	22

DBVG6 (280/230V 3~60Hz)

Model		-	DBVG-MTB8FG	DBVG-MTB10FG	DBVG-MTB12FG	DBVG-MTB14FG
Capacity range		HP	8	10	12	14
Capacity	Cooling	kW	22.4	28.0	33.5	40.0
	Heating	kW	25.0	31.5	37.5	45.0
EER		kW/kW	5.25	5.11	4.70	4.65
COP		kW/kW	5.68	5.25	4.87	4.81
Power supply		V/Ph/Hz	280/230V 3~60Hz			
Max. circuit/Max. fuse current		A	29.9/35	38.8/40	43.6/50	50.3/60
Power comsumption	Cooling	kW	4.27	5.48	7.13	8.60
	Heating	kW	4.40	6.00	7.70	9.36
Maximum drive IDU NO.		unit	13	16	19	23
Refrigerant charge volume		kg	5.5	5.5	5.7	7.0
Sound pressure level		dB(A)	58	59	61	61
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7
	Gas	mm	Φ19.05	Φ22.2	Φ25.4	Φ25.4
Dimension (W×H×D)	Outline	mm	930×775×1690	930×775×1690	930×775×1690	1340×775×1690
	Package	mm	1000×830×1855	1000×830×1855	1000×830×1855	1400×830×1855
Net weight/Gross weight		kg	219/229	219/229	224/234	307/320
Loading quantity	40' GP	set	28	28	28	22
	40' HQ	set	28	28	28	22

Model		-	DBVG-MTB16FG	DBVG-MTB18FG	DBVG-MTB20FG	DBVG-MTB22FG	DBVG-MTB24FG
Capacity range		HP	16	18	20	22	24
Capacity	Cooling	kW	45.0	50.4	56.0	61.5	68.0
	Heating	kW	50.0	56.5	63.0	69.0	76.5
EER		kW/kW	4.46	4.24	4.15	3.89	3.51
COP		kW/kW	4.46	4.15	4.10	4.08	3.92
Power supply		V/Ph/Hz	280/230V 3~60Hz				
Max. circuit/Max. fuse current		A	51.2/60	53.9/60	89.4/100	90.0/100	91.3/100
Power comsumption	Cooling	kW	10.10	11.90	13.50	15.80	19.40
	Heating	kW	11.20	13.60	15.35	16.90	19.50
Maximum drive IDU NO.		unit	26	29	33	36	39
Refrigerant charge volume		kg	7.5	8.0	8.0	8.3	8.3
Sound pressure level		dB(A)	62	63	64	65	66
Connecting pipe	Liquid	mm	Φ12.7	Φ15.9	Φ15.9	Φ15.9	Φ15.9
	Gas	mm	Φ28.6	Φ28.6	Φ28.6	Φ28.6	Φ28.6
Dimension (W×H×D)	Outline	mm	1340×775×1690	1340×775×1690	1340×775×1690	1340×775×1690	1340×775×1690
	Package	mm	1400×830×1855	1400×830×1855	1400×830×1855	1400×830×1855	1400×830×1855
Net weight/Gross weight		kg	307/320	312/325	355/368	355/368	360/373
Loading quantity	40' GP	set	22	22	22	22	22
	40' HQ	set	22	22	22	22	22

ODU Combination Lineup

DBVG6 (440-460V 3~60Hz)

Model		-	DBVG-MTB8UG	DBVG-MTB10UG	DBVG-MTB12UG	DBVG-MTB14UG
Capacity range		HP	8	10	12	14
Capacity	Cooling	kW	22.4	28.0	33.5	40.0
	Heating	kW	25.0	31.5	37.5	45.0
EER		kW/kW	5.25	5.11	4.70	4.65
COP		kW/kW	5.68	5.25	4.87	4.81
Power supply		V/Ph/Hz	440-460V 3~60Hz			
Max. circuit/Max. fuse current		A	19.6/25	20.0/25	21.0/30	23.9/30
Power comsumption	Cooling	kW	4.27	5.48	7.13	8.60
	Heating	kW	4.40	6.00	7.70	9.36
Maximum drive IDU NO.		unit	13	16	19	23
Refrigerant charge volume		kg	5.5	5.5	5.7	7.0
Sound pressure level		dB(A)	58	59	61	61
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7
	Gas	mm	Φ19.05	Φ22.2	Φ25.4	Φ25.4
Dimension (W × H × D)	Outline	mm	930 × 775 × 1690	930 × 775 × 1690	930 × 775 × 1690	1340 × 775 × 1690
	Package	mm	1000 × 830 × 1855	1000 × 830 × 1855	1000 × 830 × 1855	1400 × 830 × 1855
Net weight/Gross weight		kg	230/240	230/240	235/245	295/310
Loading quantity	40' GP	set	28	28	28	22
	40' HQ	set	28	28	28	22

Model		-	DBVG-MTB16UG	DBVG-MTB18UG	DBVG-MTB20UG	DBVG-MTB22UG	DBVG-MTB24UG
Capacity range		HP	16	18	20	22	24
Capacity	Cooling	kW	45.0	50.4	56.0	61.5	68.0
	Heating	kW	50.0	56.5	63.0	69.0	76.5
EER		kW/kW	4.46	4.24	4.15	3.89	3.51
COP		kW/kW	4.46	4.15	4.10	4.08	3.92
Power supply		V/Ph/Hz	440-460V 3~60Hz				
Max. circuit/Max. fuse current		A	24.2/30	25.0/30	36.2/40	38.0/40	40.9/45
Power comsumption	Cooling	kW	10.10	11.90	13.50	15.80	19.40
	Heating	kW	11.20	13.60	15.35	16.90	19.50
Maximum drive IDU NO.		unit	26	29	33	36	39
Refrigerant charge volume		kg	7.5	8.0	8.0	8.3	8.3
Sound pressure level		dB(A)	62	63	64	65	66
Connecting pipe	Liquid	mm	Φ12.7	Φ15.9	Φ15.9	Φ15.9	Φ15.9
	Gas	mm	Φ28.6	Φ28.6	Φ28.6	Φ28.6	Φ28.6
Dimension (W × H × D)	Outline	mm	1340 × 775 × 1690	1340 × 775 × 1690	1340 × 775 × 1690	1340 × 775 × 1690	1340 × 775 × 1690
	Package	mm	1400 × 830 × 1855	1400 × 830 × 1855	1400 × 830 × 1855	1400 × 830 × 1855	1400 × 830 × 1855
Net weight/Gross weight		kg	295/310	300/315	355/370	355/370	360/375
Loading quantity	40' GP	set	22	22	22	22	22
	40' HQ	set	22	22	22	22	22

DBVG6 (440-460V 3~60Hz)

HP	Model	DBVG-MTB8UG	DBVG-MTB10 UG	DBVG-MTB12 UG	DBVG-MTB14 UG	DBVG-MTB16 UG	DBVG-MTB18 UG	DBVG-MTB20 UG	DBVG-MTB22 UG	DBVG-MTB24 UG
8	DBVG-MTB8UG	●								
10	DBVG-MTB10UG		●							
12	DBVG-MTB12UG			●						
14	DBVG-MTB14UG				●					
16	DBVG-MTB16UG					●				
18	DBVG-MTB18UG						●			
20	DBVG-MTB20UG							●		
22	DBVG-MTB22UG								●	
24	DBVG-MTB24UG									●
26	DBVG-MTB26UG			●	●					
28	DBVG-MTB28UG			●		●				
30	DBVG-MTB30UG			●			●			
32	DBVG-MTB32UG		●						●	
34	DBVG-MTB34UG			●					●	
36	DBVG-MTB36UG				●				●	
38	DBVG-MTB38UG						●	●		
40	DBVG-MTB40UG						●		●	
42	DBVG-MTB42UG							●	●	
44	DBVG-MTB44UG								●●	
46	DBVG-MTB46UG								●	●
48	DBVG-MTB48UG									●●
50	DBVG-MTB50UG			●			●	●		
52	DBVG-MTB52UG		●					●	●	
54	DBVG-MTB54UG		●						●●	
56	DBVG-MTB56UG			●					●●	
58	DBVG-MTB58UG						●●		●	
60	DBVG-MTB60UG						●	●	●	
62	DBVG-MTB62UG						●		●●	
64	DBVG-MTB64UG							●	●●	
66	DBVG-MTB66UG								●●●	
68	DBVG-MTB68UG								●●	●
70	DBVG-MTB70UG								●	●●
72	DBVG-MTB72UG									●●●
74	DBVG-MTB74UG			●			●		●●	
76	DBVG-MTB76UG					●	●	●	●	
78	DBVG-MTB78UG				●			●	●●	
80	DBVG-MTB80UG				●				●●●	
82	DBVG-MTB82UG							●●●	●	
84	DBVG-MTB84UG							●●	●●	
86	DBVG-MTB86UG						●		●●	●
88	DBVG-MTB88UG							●	●●	●
90	DBVG-MTB90UG								●●●	●
92	DBVG-MTB92UG								●●	●●
94	DBVG-MTB94UG								●	●●●
96	DBVG-MTB96UG									●●●●

ODU Combination Lineup

DBVG6 (380-415V 3N~50/60Hz)

HP	Model	DBVG-MTB8EG	DBVG-MTB10EG	DBVG-MTB12EG	DBVG-MTB14EG	DBVG-MTB16EG	DBVG-MTB18EG	DBVG-MTB20EG	DBVG-MTB22EG	DBVG-MTB24EG
8	DBVG-MTB8EG	●								
10	DBVG-MTB10EG		●							
12	DBVG-MTB12EG			●						
14	DBVG-MTB14EG				●					
16	DBVG-MTB16EG					●				
18	DBVG-MTB18EG						●			
20	DBVG-MTB20EG							●		
22	DBVG-MTB22EG								●	
24	DBVG-MTB24EG									●
26	DBVG-MTB26EG			●	●					
28	DBVG-MTB28EG			●		●				
30	DBVG-MTB30EG			●			●			
32	DBVG-MTB32EG		●						●	
34	DBVG-MTB34EG			●					●	
36	DBVG-MTB36EG				●				●	
38	DBVG-MTB38EG						●	●		
40	DBVG-MTB40EG						●		●	
42	DBVG-MTB42EG							●	●	
44	DBVG-MTB44EG								●●	
46	DBVG-MTB46EG								●	●
48	DBVG-MTB48EG									●●
50	DBVG-MTB50EG			●			●	●		
52	DBVG-MTB52EG		●					●	●	
54	DBVG-MTB54EG		●						●●	
56	DBVG-MTB56EG			●					●●	
58	DBVG-MTB58EG						●●		●	
60	DBVG-MTB60EG						●	●	●	
62	DBVG-MTB62EG						●		●●	
64	DBVG-MTB64EG							●	●●	
66	DBVG-MTB66EG								●●●	
68	DBVG-MTB68EG								●●	●
70	DBVG-MTB70EG								●	●●
72	DBVG-MTB72EG									●●●
74	DBVG-MTB74EG			●			●		●●	
76	DBVG-MTB76EG					●	●	●	●	
78	DBVG-MTB78EG				●			●	●●	
80	DBVG-MTB80EG				●				●●●	
82	DBVG-MTB82EG							●●●	●	
84	DBVG-MTB84EG							●●	●●	
86	DBVG-MTB86EG						●		●●	●
88	DBVG-MTB88EG							●	●●	●
90	DBVG-MTB90EG								●●●	●
92	DBVG-MTB92EG								●●	●●
94	DBVG-MTB94EG								●	●●●
96	DBVG-MTB96EG									●●●●

DBVG6 (280/230V 3~60Hz)

HP	Model	DBVG-MTB8FG	DBVG-MTB10FG	DBVG-MTB12FG	DBVG-MTB14FG	DBVG-MTB16FG	DBVG-MTB18FG	DBVG-MTB20FG	DBVG-MTB22FG	DBVG-MTB24FG
8	DBVG-MTB8FG	●								
10	DBVG-MTB10FG		●							
12	DBVG-MTB12FG			●						
14	DBVG-MTB14FG				●					
16	DBVG-MTB16FG					●				
18	DBVG-MTB18FG						●			
20	DBVG-MTB20FG							●		
22	DBVG-MTB22FG								●	
24	DBVG-MTB24FG									●
26	DBVG-MTB26FG			●	●					
28	DBVG-MTB28FG			●		●				
30	DBVG-MTB30FG			●			●			
32	DBVG-MTB32FG		●						●	
34	DBVG-MTB34FG			●					●	
36	DBVG-MTB36FG				●				●	
38	DBVG-MTB38FG						●	●		
40	DBVG-MTB40FG						●		●	
42	DBVG-MTB42FG							●	●	
44	DBVG-MTB44FG								●●	
46	DBVG-MTB46FG								●	●
48	DBVG-MTB48FG									●●
50	DBVG-MTB50FG			●			●	●		
52	DBVG-MTB52FG		●					●	●	
54	DBVG-MTB54FG		●						●●	
56	DBVG-MTB56FG			●					●●	
58	DBVG-MTB58FG						●●		●	
60	DBVG-MTB60FG						●	●	●	
62	DBVG-MTB62FG						●		●●	
64	DBVG-MTB64FG							●	●●	
66	DBVG-MTB66FG								●●●	
68	DBVG-MTB68FG								●●	●
70	DBVG-MTB70FG								●	●●
72	DBVG-MTB72FG									●●●
74	DBVG-MTB74FG			●			●		●●	
76	DBVG-MTB76FG					●	●	●	●	
78	DBVG-MTB78FG				●			●	●●	
80	DBVG-MTB80FG				●				●●●	
82	DBVG-MTB82FG							●●●	●	
84	DBVG-MTB84FG							●●	●●	
86	DBVG-MTB86FG						●		●●	●
88	DBVG-MTB88FG							●	●●	●
90	DBVG-MTB90FG								●●●	●
92	DBVG-MTB92FG								●●	●●
94	DBVG-MTB94FG								●	●●●
96	DBVG-MTB96FG									●●●●

ODU Combination Specifications

DBVG6 (380-415V 3N~50/60Hz)

HP	Model	Power supply	Capacity		Power input		Dimension(W × D × H)	Airflow volume	ESP	Connecting pipe		Min.circuit current	Max. fuse current	Net weight
			Cooling	Heating	Cooling	Heating				Liquid	Gas			
			kW	kW	kW	kW	mm	m^3/h	Pa	mm	mm	A	A	kg
26	DBVG-MTB26 EG	380-415V 3N~ 50/60Hz	73.5	82.5	16.90	17.30	930×775×1690+ 1340×775×1690	11100+13500	110	Φ19.05	Φ31.8	24.1+32.5	25+40	220+290
28	DBVG-MTB28 EG		78.5	87.5	18.50	18.50	930×775×1690+ 1340×775×1690	11100+15400	110	Φ19.05	Φ31.8	24.1+33.5	25+40	220+290
30	DBVG-MTB30 EG		83.9	94.0	20.00	20.70	930×775×1690+ 1340×775×1690	11100+16000	110	Φ19.05	Φ31.8	24.1+47	25+50	220+295
32	DBVG-MTB32 EG		89.5	100.5	22.40	22.80	930×775×1690+ 1340×775×1690	10500+16500	110	Φ19.05	Φ31.8	23.5+49	25+50	215+350
34	DBVG-MTB34 EG		95.0	106.5	23.90	24.70	930×775×1690+ 1340×775×1690	11100+16500	110	Φ19.05	Φ31.8	24.1+49	25+50	220+350
36	DBVG-MTB36 EG		101.5	114.0	25.40	26.40	1340×775×1690+ 1340×775×1690	13500+16500	110	Φ19.05	Φ38.1	32.5+49	40+50	290+350
38	DBVG-MTB38 EG		106.4	119.5	26.10	26.00	1340×775×1690+ 1340×775×1690	16000+16500	110	Φ19.05	Φ38.1	47+48	50+50	295+350
40	DBVG-MTB40 EG		111.9	125.5	28.50	29.80	1340×775×1690+ 1340×775×1690	16000+16500	110	Φ19.05	Φ38.1	47+49	50+50	295+350
42	DBVG-MTB42 EG		117.5	132.0	30.00	30.00	1340×775×1690+ 1340×775×1690	1650+16500	110	Φ19.05	Φ38.1	48+49	50+50	350×2
44	DBVG-MTB44 EG		123.0	138.0	32.40	33.80	1340×775×1690+ 1340×775×1690	16500+16500	110	Φ19.05	Φ38.1	49+49	50+50	350×2
46	DBVG-MTB46 EG		129.5	145.5	36.70	37.00	1340×775×1690+ 1340×775×1690	16500+18350	110	Φ19.05	Φ38.1	49+49	50+50	350+355
48	DBVG-MTB48 EG		136.0	153.0	41.00	40.20	1340×775×1690+ 1340×775×1690	18350×2	110	Φ19.05	Φ41.3	49+49	50+50	355×2
50	DBVG-MTB50 EG		139.9	157.0	33.80	33.80	930×775×1690+ (1340×775×1690)×2	11100+ 16000+16500	110	Φ19.05	Φ41.3	24.1+47+48	25+50+50	220+295+350
52	DBVG-MTB52 EG		145.5	163.5	36.20	35.90	930×775×1690+ (1340×775×1690)×2	10500+16500×2	110	Φ19.05	Φ41.3	23.5+48+49	25+50+50	215+350×2
54	DBVG-MTB54 EG		151.0	169.5	38.60	39.70	930×775×1690+ (1340×775×1690)×2	10500+16500×2	110	Φ19.05	Φ41.3	23.5+49+49	25+50+50	215+350×2
56	DBVG-MTB56 EG		156.5	175.5	40.10	41.60	930×775×1690+ (1340×775×1690)×2	11100+16500×2	110	Φ19.05	Φ41.3	24.1+49+49	25+50+50	220+350×2
58	DBVG-MTB58 EG		162.3	182.0	40.80	42.70	(1340×775×1690)×3	16000×2+16500	110	Φ19.05	Φ41.3	47+47+49	50+50+50	295×2+350
60	DBVG-MTB60 EG		167.9	188.5	42.30	42.90	(1340×775×1690)×3	16000+16500×2	110	Φ19.05	Φ41.3	47+48+49	50+50+50	295+350×2
62	DBVG-MTB62 EG		173.4	194.5	44.70	46.70	(1340×775×1690)×3	16000+16500×2	110	Φ19.05	Φ41.3	47+49+49	50+50+50	295+350×2
64	DBVG-MTB64 EG		179.0	201.0	46.20	46.90	(1340×775×1690)×3	16500×3	110	Φ19.05	Φ41.3	48+49+49	50+50+50	350×3
66	DBVG-MTB66 EG		184.5	207.0	48.60	50.70	(1340×775×1690)×3	16500×3	110	Φ19.05	Φ41.3	49+49+49	50+50+50	350×3
68	DBVG-MTB68 EG		191.0	214.5	52.90	53.90	(1340×775×1690)×3	16500×2+18350	110	Φ22.2	Φ44.5	49+49+49	50+50+50	350×2+355
70	DBVG-MTB70 EG		197.5	222.0	57.20	57.10	(1340×775×1690)×3	16500+18350×2	110	Φ22.2	Φ44.5	49+49+49	50+50+50	350+355×2
72	DBVG-MTB72 EG		204.0	229.5	61.50	60.30	(1340×775×1690)×3	18350×3	110	Φ22.2	Φ44.5	49+49+49	50+50+50	355×3
74	DBVG-MTB74 EG		206.9	232.0	52.40	54.50	930×775×1690+ (1340×775×1690)×3	11100+ 16000+16500×2	110	Φ22.2	Φ44.5	24.1+47+49+49	25+50+50+50	220+295+350×2
76	DBVG-MTB76 EG		212.9	238.5	53.10	53.60	(1340×775×1690)×4	15400+ 16000+16500×2	110	Φ22.2	Φ44.5	33.5+47+48+49	40+50+50+50	290+295+350×2
78	DBVG-MTB78 EG		219.0	246.0	55.40	56.40	(1340×775×1690)×4	13500+16500×3	110	Φ22.2	Φ44.5	32.5+48+49+49	40+50+50+50	290+350×3
80	DBVG-MTB80 EG		224.5	252.0	57.80	60.20	(1340×775×1690)×4	13500+16500×3	110	Φ22.2	Φ44.5	32.5+49+49+49	40+50+50+50	290+350×3
82	DBVG-MTB82 EG		229.5	258.0	57.60	56.20	(1340×775×1690)×4	16500×4	110	Φ22.2	Φ44.5	48+48+48+49	50+50+50+50	350×4
84	DBVG-MTB84 EG		235.0	264.0	60.00	60.00	(1340×775×1690)×4	16500×4	110	Φ22.2	Φ44.5	48+48+49+49	50+50+50+50	350×4
86	DBVG-MTB86 EG		241.4	271.0	65.20	66.80	(1340×775×1690)×4	16000+ 16500×2+18350	110	Φ22.2	Φ44.5	47+49+49+49	50+50+50+50	295+350×3
88	DBVG-MTB88 EG		247.0	277.5	66.70	67.00	(1340×775×1690)×4	16500×3+18350	110	Φ22.2	Φ44.5	48+49+49+49	50+50+50+50	350×3+355
90	DBVG-MTB90 EG		252.5	283.5	69.10	70.80	(1340×775×1690)×4	16500×3+18350	110	Φ22.2	Φ44.5	49+49+49+49	50+50+50+50	350×3+355
92	DBVG-MTB92 EG		259.0	291.0	73.40	74.00	(1340×775×1690)×4	16500×2+18350×2	110	Φ22.2	Φ44.5	49+49+49+49	50+50+50+50	350×2+355×2
94	DBVG-MTB94 EG		265.5	298.5	77.70	77.20	(1340×775×1690)×4	16500+18350×3	110	Φ22.2	Φ44.5	49+49+49+49	50+50+50+50	350+355×3
96	DBVG-MTB96 EG		272.0	306.0	82.00	80.40	(1340×775×1690)×4	18350×4	110	Φ22.2	Φ44.5	49+49+49+49	50+50+50+50	355×4

ODU Combination Specifications

DBVG6 (208/230V 3~60Hz)

HP	Model	Power supply	Capacity		Power input		Dimension(W × D × H)	Airflow volume	ESP	Connecting pipe		MCA	MOP	Net weight
			Cooling	Heating	Cooling	Heating				Liquid	Gas			
			kW	kW	kW	kW	mm	m^3/h	Pa	mm	mm	A	A	kg
26	DBVG-MTB26FG	208/230V 3~60Hz	73.5	82.5	15.73	17.06	930×775×1690+ 1340×775×1690	11100+13500	110	Φ19.05	Φ31.8	43.6+50.3	50+60	224+307
28	DBVG-MTB26FG		78.5	87.5	17.23	18.90	930×775×1690+ 1340×775×1690	11100+15400	110	Φ19.05	Φ31.8	43.6+51.2	50+60	224+307
30	DBVG-MTB26FG		83.9	94.0	19.03	21.30	930×775×1690+ 1340×775×1690	11100+16000	110	Φ19.05	Φ31.8	43.6+53.9	50+60	224+312
32	DBVG-MTB26FG		89.5	100.5	21.28	22.90	930×775×1690+ 1340×775×1690	10500+16500	110	Φ19.05	Φ31.8	38.8+90	40+100	219+355
34	DBVG-MTB26FG		95.0	106.5	22.93	24.60	930×775×1690+ 1340×775×1690	11100+16500	110	Φ19.05	Φ31.8	43.6+90	50+100	224+355
36	DBVG-MTB26FG		101.5	114.0	24.40	26.26	1340×775×1690+ 1340×775×1690	13500+16500	110	Φ19.05	Φ38.1	50.3+90	60+100	307+355
38	DBVG-MTB26FG		106.4	119.5	25.40	28.95	1340×775×1690+ 1340×775×1690	16000+16500	110	Φ19.05	Φ38.1	53.9+89.4	60+100	312+355
40	DBVG-MTB26FG		111.9	125.5	27.70	30.50	1340×775×1690+ 1340×775×1690	16000+16500	110	Φ19.05	Φ38.1	53.9+90	60+100	312+355
42	DBVG-MTB26FG		117.5	132.0	29.30	32.25	1340×775×1690+ 1340×775×1690	1650+16500	110	Φ19.05	Φ38.1	89.4+90	100+100	355+355
44	DBVG-MTB26FG		123.0	138.0	31.60	33.80	1340×775×1690+ 1340×775×1690	16500+16500	110	Φ19.05	Φ38.1	90+90	100+100	355+355
46	DBVG-MTB26FG		129.5	145.5	35.20	36.40	1340×775×1690+ 1340×775×1690	16500+18350	110	Φ19.05	Φ38.1	90+91.3	100+100	355+360
48	DBVG-MTB26FG		136.0	153.0	38.80	39.00	1340×775×1690+ 1340×775×1690	18350×2	110	Φ19.05	Φ41.3	91.3+91.3	100+100	360+360
50	DBVG-MTB26FG		139.9	157.0	32.53	36.65	930×775×1690+ (1340×775×1690)×2	11100+16000 +16500	110	Φ19.05	Φ41.3	43.6+53.9+89.4	50+60+100	224+312+355
52	DBVG-MTB26FG		145.5	163.5	34.78	38.25	930×775×1690+ (1340×775×1690)×2	10500+16500×2	110	Φ19.05	Φ41.3	38.8+89.4+90	40+100+100	219+355+355
54	DBVG-MTB26FG		151.0	169.5	37.08	39.80	930×775×1690+ (1340×775×1690)×2	10500+16500×2	110	Φ19.05	Φ41.3	38.8+90+90	40+100+100	219+355+355
56	DBVG-MTB26FG		156.5	175.5	38.73	41.50	930×775×1690+ (1340×775×1690)×2	11100+16500×2	110	Φ19.05	Φ41.3	43.6+90+90	50+100+100	224+355+355
58	DBVG-MTB26FG		162.3	182.0	39.60	44.10	(1340×775×1690)×3	16000×2+16500	110	Φ19.05	Φ41.3	53.9+53.9+90	50+60+100	312+312+355
60	DBVG-MTB26FG		167.9	188.5	41.20	45.85	(1340×775×1690)×3	16000+16500×2	110	Φ19.05	Φ41.3	53.9+89.4+90	50+100+100	312+355+355
62	DBVG-MTB26FG		173.4	194.5	43.50	47.40	(1340×775×1690)×3	16000+16500×2	110	Φ19.05	Φ41.3	53.9+90+90	50+100+100	312+355+355
64	DBVG-MTB26FG		179.0	201.0	45.10	49.15	(1340×775×1690)×3	16500×3	110	Φ19.05	Φ41.3	89.4+90+90	50+100+100	355+355+355
66	DBVG-MTB26FG		184.5	207.0	47.40	50.70	(1340×775×1690)×3	16500×3	110	Φ19.05	Φ41.3	90+90+90	50+100+100	355+355+355
68	DBVG-MTB26FG		191.0	214.5	51.00	53.30	(1340×775×1690)×3	16500×2+18350	110	Φ22.2	Φ44.5	90+90+91.3	100+100+100	355+355+360
70	DBVG-MTB26FG		197.5	222.0	54.80	55.90	(1340×775×1690)×3	16500+18350×2	110	Φ22.2	Φ44.5	90+91.3+91.3	100+100+100	355+360+360
72	DBVG-MTB26FG		204.0	229.5	58.20	58.50	(1340×775×1690)×3	18350×3	110	Φ22.2	Φ44.5	91.3+91.3+91.3	100+100+100	360+360+360
74	DBVG-MTB26FG		206.9	232.0	50.63	55.10	930×775×1690+ (1340×775×1690)×3	11100+16000 +16500×2	110	Φ22.2	Φ44.5	43.6+53.9 +90+90	50+60 +100+100	224+312+ 355+355
76	DBVG-MTB26FG		212.9	238.5	51.30	57.05	(1340×775×1690)×4	15400+16000 +16500×2	110	Φ22.2	Φ44.5	51.2+53.9 +89.4+90	60+60 +100+100	307+312+ 355+355
78	DBVG-MTB26FG		219.0	246.0	53.70	58.51	(1340×775×1690)×4	13500+16500×3	110	Φ22.2	Φ44.5	50.3+89.4 +90+90	60+100 +100+100	307+355+ 355+355
80	DBVG-MTB26FG		224.5	252.0	56.00	60.06	(1340×775×1690)×4	13500+16500×3	110	Φ22.2	Φ44.5	50.3+90 +90+90	60+100 +100+100	307+355+ 355+355
82	DBVG-MTB26FG		229.5	258.0	56.30	62.95	(1340×775×1690)×4	16500×4	110	Φ22.2	Φ44.5	89.4+89.4 +89.4+90	100+100 +100+100	355+355+ 355+355
84	DBVG-MTB26FG		235.0	264.0	58.60	64.50	(1340×775×1690)×4	16500×4	110	Φ22.2	Φ44.5	89.4+89.4 +90+90	100+100 +100+100	355+355+ 355+355
86	DBVG-MTB26FG		241.4	271.0	62.90	66.90	(1340×775×1690)×4	16000+16500×2 +18350	110	Φ22.2	Φ44.5	53.9+90 +90+91.3	60+100 +100+100	312+355+ 355+360
88	DBVG-MTB26FG		247.0	277.5	64.50	68.65	(1340×775×1690)×4	16500×3+18350	110	Φ22.2	Φ44.5	89.4+90 +90+91.3	100+100 +100+100	355+355+ 355+360
90	DBVG-MTB26FG		252.5	283.5	66.80	70.20	(1340×775×1690)×4	16500×3+18350	110	Φ22.2	Φ44.5	90+90 +90+91.3	100+100 +100+100	355+355+ 355+360
92	DBVG-MTB26FG		259.0	291.0	70.40	72.80	(1340×775×1690)×4	16500×2+18350×2	110	Φ22.2	Φ44.5	90+90 +91.3+91.3	100+100 +100+100	355+355+ 360+360
94	DBVG-MTB26FG		265.5	298.5	74.00	75.40	(1340×775×1690)×4	16500+18350×3	110	Φ22.2	Φ44.5	90+91.3 +91.3+91.3	100+100 +100+100	355+360+ 360+360
96	DBVG-MTB26FG		272.0	306.0	77.60	78.00	(1340×775×1690)×4	18350×4	110	Φ22.2	Φ44.5	91.3+91.3 +91.3+91.3	100+100 +100+100	360+360+ 360+360

ODU Combination Specifications

DBVG6 (440-460V 3~60Hz)

HP	Model	Power supply	Capacity		Power input		Dimension(W × D × H)	Airflow volume	ESP	Connecting pipe		MCA	MOP	Net weight
			Cooling	Heating	Cooling	Heating				Liquid	Gas			
			kW	kW	kW	kW	mm	m^3/h	Pa	mm	mm	A	A	kg
26	DBVG-MTB26UG	440-460V 3~60Hz	73.5	82.5	15.73	17.06	930 × 775 × 1690 +1340 × 775 × 1690	11100+13500	110	Φ19.05	Φ31.8	21+23.9	30+30	235+295
28	DBVG-MTB28UG		78.5	87.5	17.23	18.90	930 × 775 × 1690 +1340 × 775 × 1690	11100+15400	110	Φ19.05	Φ31.8	21+24.2	30+30	235+295
30	DBVG-MTB30UG		83.9	94.0	19.03	21.30	930 × 775 × 1690 +1340 × 775 × 1690	11100+16000	110	Φ19.05	Φ31.8	21+25	30+30	235+300
32	DBVG-MTB32UG		89.5	100.5	21.28	22.90	930 × 775 × 1690 +1340 × 775 × 1690	10500+16500	110	Φ19.05	Φ31.8	20+38	25+40	230+355
34	DBVG-MTB34UG		95.0	106.5	22.93	24.60	930 × 775 × 1690 +1340 × 775 × 1690	11100+16500	110	Φ19.05	Φ31.8	21+38	30+40	235+355
36	DBVG-MTB36UG		101.5	114.0	24.40	26.26	1340 × 775 × 1690 +1340 × 775 × 1690	13500+16500	110	Φ19.05	Φ38.1	23.9+38	30+40	295+355
38	DBVG-MTB38UG		106.4	119.5	25.40	28.95	1340 × 775 × 1690 +1340 × 775 × 1690	16000+16500	110	Φ19.05	Φ38.1	25+36.2	30+40	300+355
40	DBVG-MTB40UG		111.9	125.5	27.70	30.50	1340 × 775 × 1690 +1340 × 775 × 1690	16000+16500	110	Φ19.05	Φ38.1	25+38	30+40	300+355
42	DBVG-MTB42UG		117.5	132.0	29.30	32.25	1340 × 775 × 1690 +1340 × 775 × 1690	1650+16500	110	Φ19.05	Φ38.1	36.2+38	40+40	355+355
44	DBVG-MTB44UG		123.0	138.0	31.60	33.80	1340 × 775 × 1690 +1340 × 775 × 1690	16500+16500	110	Φ19.05	Φ38.1	38+38	40+40	355+355
46	DBVG-MTB46UG		129.5	145.5	35.20	36.40	1340 × 775 × 1690 +1340 × 775 × 1690	16500+18350	110	Φ19.05	Φ38.1	38+40.9	40+45	355+360
48	DBVG-MTB48UG		136.0	153.0	38.80	39.00	1340 × 775 × 1690 +1340 × 775 × 1690	18350 × 2	110	Φ19.05	Φ41.3	40.9+40.9	45+45	360+360
50	DBVG-MTB50UG		139.9	157.0	32.53	36.65	930 × 775 × 1690+ (1340 × 775 × 1690) × 2	11100+16000+16500	110	Φ19.05	Φ41.3	21+25+36.2	30+30+40	235+300+355
52	DBVG-MTB52UG		145.5	163.5	34.78	38.25	930 × 775 × 1690+ (1340 × 775 × 1690) × 2	10500+16500 × 2	110	Φ19.05	Φ41.3	20+36.2+38	25+40+40	230+355+355
54	DBVG-MTB54UG		151.0	169.5	37.08	39.80	930 × 775 × 1690+ (1340 × 775 × 1690) × 2	10500+16500 × 2	110	Φ19.05	Φ41.3	20+38+38	25+40+40	230+355+355
56	DBVG-MTB56UG		156.5	175.5	38.73	41.50	930 × 775 × 1690+ (1340 × 775 × 1690) × 2	11100+16500 × 2	110	Φ19.05	Φ41.3	21+38+38	30+40+40	235+355+355
58	DBVG-MTB58UG		162.3	182.0	39.60	44.10	(1340 × 775 × 1690) × 3	16000 × 2+16500	110	Φ19.05	Φ41.3	25+25+38	30+30+40	300+300+355
60	DBVG-MTB60UG		167.9	188.5	41.20	45.85	(1340 × 775 × 1690) × 3	16000+16500 × 2	110	Φ19.05	Φ41.3	25+36.2+38	30+40+40	300+355+355
62	DBVG-MTB62UG		173.4	194.5	43.50	47.40	(1340 × 775 × 1690) × 3	16000+16500 × 2	110	Φ19.05	Φ41.3	25+38+38	30+40+40	300+355+355
64	DBVG-MTB64UG		179.0	201.0	45.10	49.15	(1340 × 775 × 1690) × 3	16500 × 3	110	Φ19.05	Φ41.3	36.2+38+38	40+40+40	355+355+355
66	DBVG-MTB66UG		184.5	207.0	47.40	50.70	(1340 × 775 × 1690) × 3	16500 × 3	110	Φ19.05	Φ41.3	38+38+38	40+40+40	355+355+355
68	DBVG-MTB68UG		191.0	214.5	51.00	53.30	(1340 × 775 × 1690) × 3	16500 × 2+18350	110	Φ22.2	Φ44.5	40.9+38+38	40+40+45	355+355+360
70	DBVG-MTB70UG		197.5	222.0	54.60	55.90	(1340 × 775 × 1690) × 3	16500+18350 × 2	110	Φ22.2	Φ44.5	38+40.9 +40.9	40+45+45	355+360+360
72	DBVG-MTB72UG		204.0	229.5	58.20	58.50	(1340 × 775 × 1690) × 3	18350 × 3	110	Φ22.2	Φ44.5	40.9+40.9 +40.9	45+45+45	360+360+360
74	DBVG-MTB74UG		206.9	232.0	50.63	55.10	930 × 775 × 1690+ (1340 × 775 × 1690) × 3	11100+16000 +16500 × 2	110	Φ22.2	Φ44.5	21+25+ 38+38	30+30+40+40	235+300+355+355
76	DBVG-MTB76UG		212.9	238.5	51.30	57.05	(1340 × 775 × 1690) × 4	15400+16000 +16500 × 2	110	Φ22.2	Φ44.5	24.2+25+ 36.2+38	30+30+40+40	295+300+355+355
78	DBVG-MTB78UG		219.0	246.0	53.70	58.51	(1340 × 775 × 1690) × 4	13500+16500 × 3	110	Φ22.2	Φ44.5	23.9+36.2 +38+38	30+40+40+40	295+355+355+355
80	DBVG-MTB80UG		224.5	252.0	56.00	60.06	(1340 × 775 × 1690) × 4	13500+16500 × 3	110	Φ22.2	Φ44.5	23.9+38 +38+38	30+40+40+40	295+355+355+355
82	DBVG-MTB82UG		229.5	258.0	56.30	62.95	(1340 × 775 × 1690) × 4	16500 × 4	110	Φ22.2	Φ44.5	36.2+36.2 +36.2+38	40+40+40+40	355+355+355+355
84	DBVG-MTB84UG		235.0	264.0	58.60	64.50	(1340 × 775 × 1690) × 4	16500 × 4	110	Φ22.2	Φ44.5	36.2+36.2 +38+38	40+40+40+40	355+355+355+355
86	DBVG-MTB86UG		241.4	271.0	62.90	66.90	(1340 × 775 × 1690) × 4	16000+16500 × 2+18350	110	Φ22.2	Φ44.5	25+38+ 38+40.9	30+40+40+45	300+355+355+360
88	DBVG-MTB88UG		247.0	277.5	64.50	68.65	(1340 × 775 × 1690) × 4	16500 × 3+18350	110	Φ22.2	Φ44.5	36.2+38 +38+40.9	40+40+40+45	355+355+355+360
90	DBVG-MTB90UG		252.5	283.5	66.80	70.20	(1340 × 775 × 1690) × 4	16500 × 3+18350	110	Φ22.2	Φ44.5	38+38+ 38+40.9	40+40+40+45	355+355+355+360
92	DBVG-MTB92UG		259.0	291.0	70.40	72.80	(1340 × 775 × 1690) × 4	16500 × 2+18350 × 2	110	Φ22.2	Φ44.5	38+38+ 40.9+40.9	40+40+45+45	355+355+360+360
94	DBVG-MTB94UG		265.5	298.5	74.00	75.40	(1340 × 775 × 1690) × 4	16500+18350 × 3	110	Φ22.2	Φ44.5	38+40.9+ 40.9+40.9	40+45+45+45	355+360+360+360
96	DBVG-MTB96UG		272.0	306.0	77.60	78.00	(1340 × 775 × 1690) × 4	18350 × 4	110	Φ22.2	Φ44.5	40.9+40.9+ 40.9+40.9	45+45+45+45	360+360+360+360

Indoor Unit Lineup

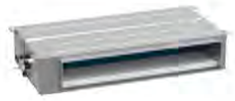
Type			1.5	1.8	2.2	2.5	2.8	3.2	3.6	4.0	4.5	5.0	5.6	6.3	7.1	8.0	9.0	10.0	11.2	12.5	14.0	16.0	18.0	22.4	25.0	28.0	40.0	45.0	56.0
Duct Type Unit	High Static Pressure				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●
	General Static Pressure			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●								
Cassette Unit	360 ° Air Discharge				●		●		●		●	●	●	●	●	●	●	●	●	●	●	●								
	360 ° Air Discharge Compact		●	●	●		●		●		●	●	●																	
	2-way						●		●		●	●	●	●	●	●														
	1-way				●		●		●		●	●	●																	
Fresh Air Processing Indoor Unit																				●	●			●	●	●		●		
Wall-mounted Type Unit			●	●	●		●		●		●	●	●	●	●	●	●	●												
Floor Ceiling Type Indoor Unit							●		●			●	●	●	●		●		●	●	●	●								
Floor Standing Type Indoor Unit																		●			●									
Console Indoor Unit					●		●		●		●	●																		
Concealed Floor Standing Type Indoor Unit					●		●		●		●		●	●	●															
AHU KIT									●						●						●					●			●	

Quick Review of IDU Functions

Types of Indoor Unit		DBVG6 Universal	Indoor Tempe -rature Detection Point (Optional)	Indoor Temperature Detection and Revision	Static Pressure Adjustment	Fresh Air Device (Optional)	PM2.5 Filter (Optional)	Filter Washing Reminding	Intelligent Sensing Air Supply (Optional)	Auto Add -ressing	CAN+ Commu -nication	Singe/ Parallel Connection	Power-off Memory	Low-temp Anti-frost	SET BACK	Manage -ment of schedule	Intelligent Billing System
Duct Type Unit	High Static Pressure	●	●	●	●		●	●		●	●	●	●	●	●	●	●
	General Static Pressure	●	●	●	●			●		●	●	●	●	●	●	●	●
Cassette Unit	360 ° Air Discharge	●	●	●		●		●	●	●	●	●	●	●	●	●	●
	360 ° Air Discharge Compact	●	●	●				●		●	●	●	●	●	●	●	●
	2-way	●	●	●				●		●	●	●	●	●	●	●	●
	1-way	●	●	●				●		●	●	●	●	●	●	●	●
Fresh Air Processing Indoor Unit		●	●	●	●			●		●	●	●	●	●	●	●	●
Wall-mounted Type Unit		●	●	●				●		●	●	●	●	●	●	●	●
Floor Ceiling Type Indoor Unit		●	●	●				●		●	●	●	●	●	●	●	●
Floor Standing Type Indoor Unit		●	●	●				●		●	●	●	●	●	●	●	●
Console Indoor Unit		●	●	●				●		●	●	●	●	●	●	●	●
Concealed Floor Standing Type Indoor Unit		●	●	●	●			●		●	●	●	●	●	●	●	●

Duct Type Indoor Unit

General Static Pressure Duct Type Indoor Unit



- Capacity range 1.8-14kW
- External static pressure can be up to 80Pa
- Standard fitting condensate pump lift; maximum lifting height can be up to 1.2m
- Multiple protections: anti-freeze protection, temperature sensor faulted protection and other multiple guarantees

High Static Pressure Duct Type Unit

- External static pressure can be up to 250Pa
- Standard fitting condensate water pump lift; lifting height can be up to 1.2m
- Optional PM2.5 electrostatic fiber filter
- 9-step static pressure for adjustment, convenient for engineering application

Fresh Air Processing Indoor Unit

- DC inverter technology
- Direct evaporating cooling
- Air conditioner and fresh air function is linked

Cassette Type Indoor Unit

1-way Cassette Unit

- 178mm ultra-thin unit body
- Removable grille, with long life filter
- Standard fitting 1.2m condensate pump lift
- High ceiling function; highest corresponding height is 3.5m

2-way Cassette Indoor Unit

- 2-way air flow design, suitable to narrow and long room
- Standard fitting 1.2m condensate water pump lift
- Streamline panel design, elegant and decent

360 ° Air Discharge Cassette Indoor Unit

- 360 ° air supply
- Smart sensor technology for smart air flow adjustment*
- Standard fitting 1.2m pump lift

*This function is optional.

360 ° Air Discharge Compact Cassette Indoor Unit

- Independent Swing Control
- 360 ° air supply
- DC quiet condensate pump
- DC motor design for more energy-saving operation
- Multiple protection functions for safe and reliable operation
- Brand new designed air duct and fan blade for lower operating noise
- Compact design for more convenient installation

Wall-mounted Type Indoor Unit

- High-efficiency and energy-saving DC motor
- Long-life filter, removable and washable panel and filter for easy maintenance
- Wall-mounted installation, beautiful panel, uniform air flow and up&down 2-way air supply

Floor Ceiling Type Indoor Unit

- Streamlined appearance design, bright white color, pleasing to the eye
- Floor seated or ceiling mounted, flexible installation
- Compact structural design, saving installation space
- Optional fresh air intake, to meet your high quality living standard

Console Indoor Unit

- Uniform temperature distribution, high comfort
- Easy installation without suspended ceiling; arrangement of refrigerant pipe is flexible
- Two-way air supply, upper and lower two air outlets in upper and lower side respectively, 3D air supply

Floor Standing Type

- Up and down swing, long air supply distance
- long-life filter, removable and washable panel and filter for easy maintenance
- With I-feel function, can detect the temperature of user 's position in real time to improve comfort (work with remote controller YAP1F)

Concealed Floor Standing Type

- Capacity range: 2.2~7.1kW
- Compact structure, ultra-thin unit body, only 200mm thickness in vertical installation
- Different steps of static pressure for adjustment; highest static pressure can be up to 60Pa
- Flexible installation, supporting feet design in different height, and can realize flexible switch of lower air return and side air return

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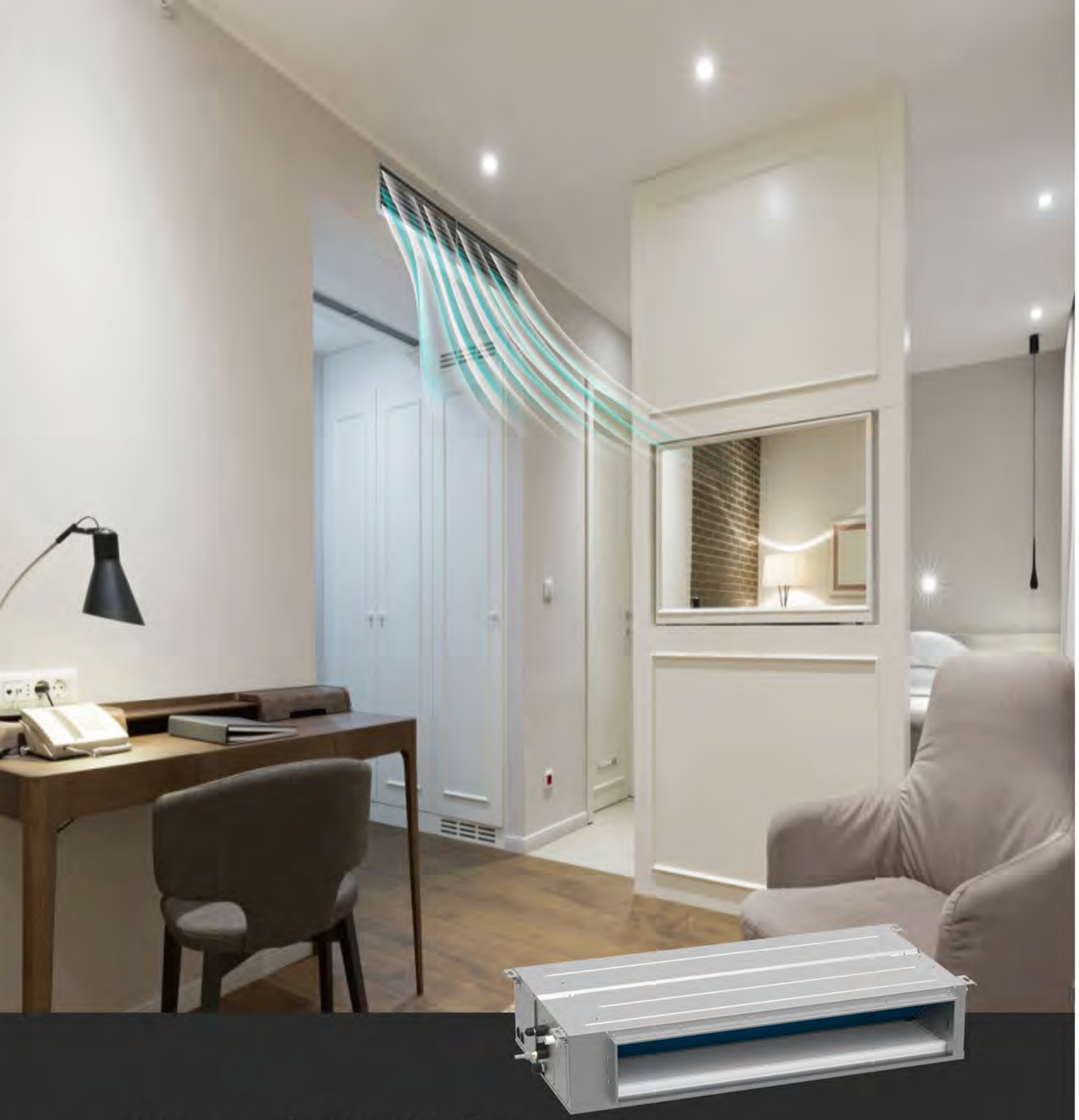
- Independent design, convenient for installation
- Can connect to the third party controller
- Malfunction signal access, safe and reliable

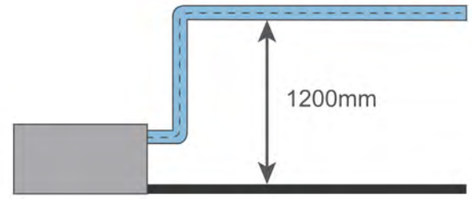


General Static Pressure Duct Type Indoor Unit

General static pressure duct type indoor unit adopts DC motor, multi-step air volume and static pressure adjustable design, free choices of air supply and return modes, flexible and convenient installation, meeting requirements for different locations such as hotels, office buildings, shopping malls, apartments, villas, families, etc.

● Standard Fitting 1,200mm Condensate Water Lift Pump

Pump drainage height can be up to 1,200mm; vertical installation height of the unit can be flexibly adjusted, with high engineering adaptability.

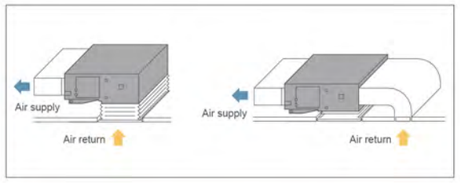


● Fresh Air Introduction Function

It can be connected to the fresh air duct to introduce fresh air from outside to ensure fresh indoor air.

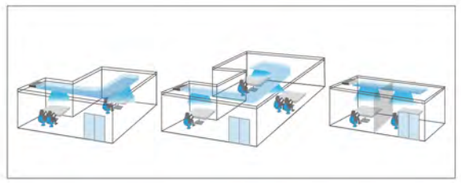
● Flexible Installation

According to the construction and use requirements, flexibly choose different return air ways and supply static pressure.



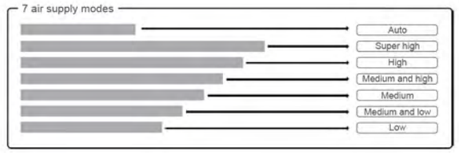
● 80Pa High Static Pressure Design, Multi-step Static Pressure for Adjustment

The highest static pressure can be up to 80Pa, which is applicable to different installation locations to ensure cooling and heating effect. With wide static pressure range and 5 notch of adjustable external static pressure, the engineering design and application is more convenient and fast.



● 7-speed Air Volume Setting to Meet Diverse Needs

The DC motor can adjust up to 7 steps of air volume, accurately divide the air volume interval, reduce the noise value, and can set automatic quiet mode of indoor unit through wired controller, and enable the automatic quiet function according to the indoor temperature and personnel activities. Super high step and strong air volume, cooperating with outdoor compressor operation, it can enter strong cooling/heating mode; indoor unit motor can be adjusted to the highest step for rapid cooling/heating to reach the required temperature.

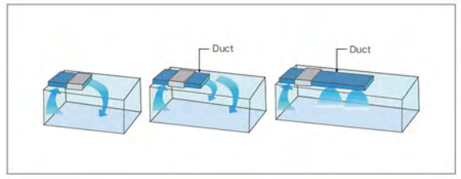


● DC Motor Design, Low Noise Operation

The brushless DC motor realizes stepless speed adjustment, and can set the automatic quiet mode through wired controller to make the operation quieter.

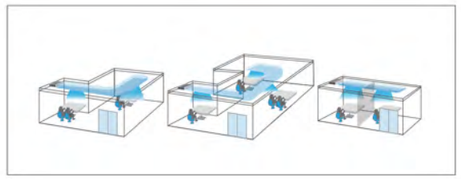
High Static Pressure Duct Type Unit

High static pressure duct type unit, with large air volume, wide static pressure adjustment range and maximum static pressure, can be up to 250Pa; long air supply distance can be widely used in places where it is necessary to connect air pipes to achieve long-distance air supply, such as hotels, office buildings, shopping malls, factories.



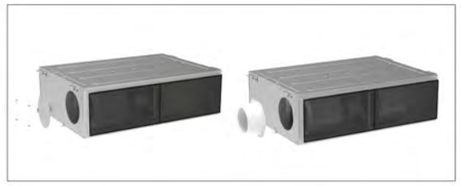
● High Static Pressure Design, Multi-step Static Pressure to Adjust

There are 9-step adjustable external static pressure. The highest static pressure can reach 200Pa. Engineering design and engineering application is more convenient and fast.



● Long-distance Air Supply

Support long-distance air supply to serve multiple air supply area and satisfy complicated layout and locations, creating comfortable environment.

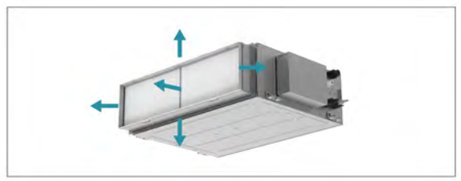


● Fresh Air Introduction Function

It can be connected to the fresh air duct to introduce fresh air from outside to ensure fresh indoor air.

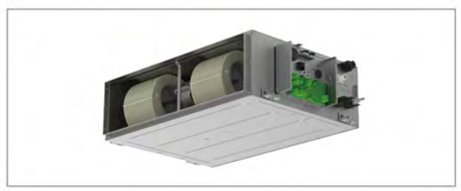
● High Efficiency Filtration

Optional high-efficiency filter device can effectively filtrate PM2.5, with small performance attenuation.



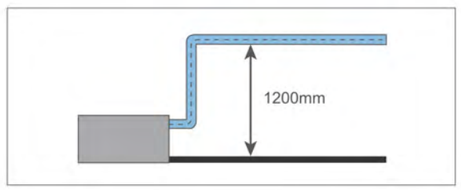
● Multi-directional Removable Filter

The filter can be disassembled from 5 directions (the arrow below shows the direction of the removable filter). Installation and maintenance are convenient and fast.



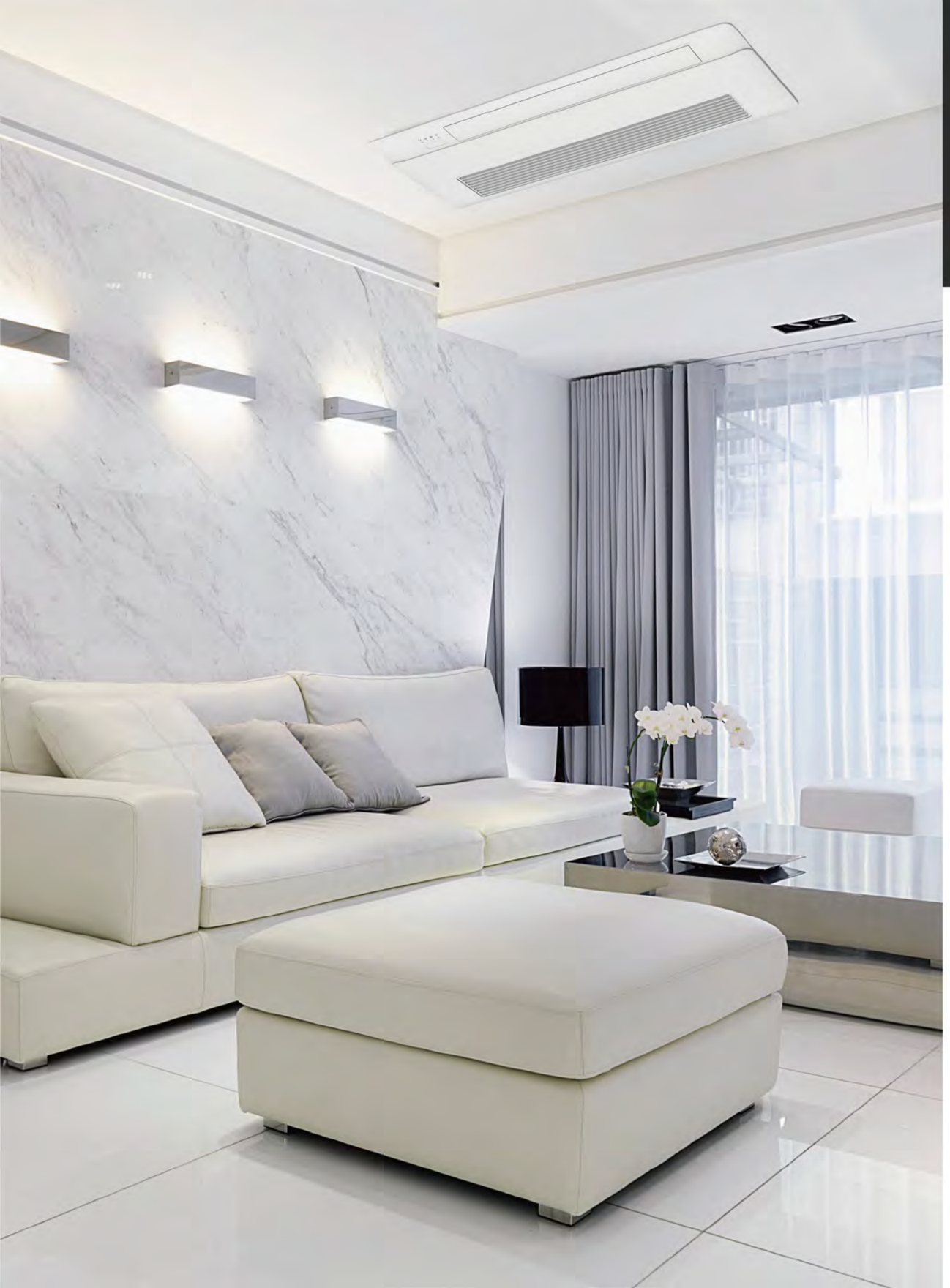
● Convenient Maintenance

External hanging electric box design for convenient maintenance.



● Standard Fitting 1,200mm Condensate Water Lift Pump

The pump drainage height can be up to 1,200mm, and the vertical installation height of the unit can be flexibly adjusted, with high engineering adaptability.

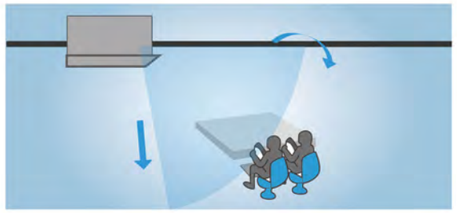


1-way Cassette Unit

The 1-way cassette unit, with ultra-thin and compact body, effectively saves installation space, meeting the air supply requirements of narrow and long rooms, walkways and other applications. It can be applied to households, hotels, small offices and other delicate and compact spaces.

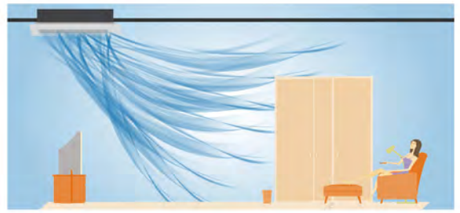
● Ultra Wide Angle Air Supply

The left and right swing angles can be up to 75 °, covering a wide range of air-conditioning spaces and providing a comfortable environment.

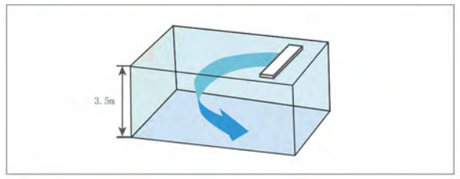


● Uniform Temperature Distribution and High Comfort

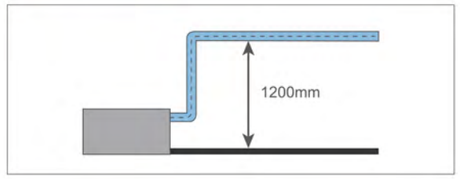
The temperature field is evenly and reasonably distributed, and the heating airflow directly reaches the ground, warming the entire room and greatly improving user comfort.



● High Ceiling Design, up to 3.5 Meters Space



● Standard Fitting 1,200mm Condensate Water Lift Pump



● Ultra-slim Design

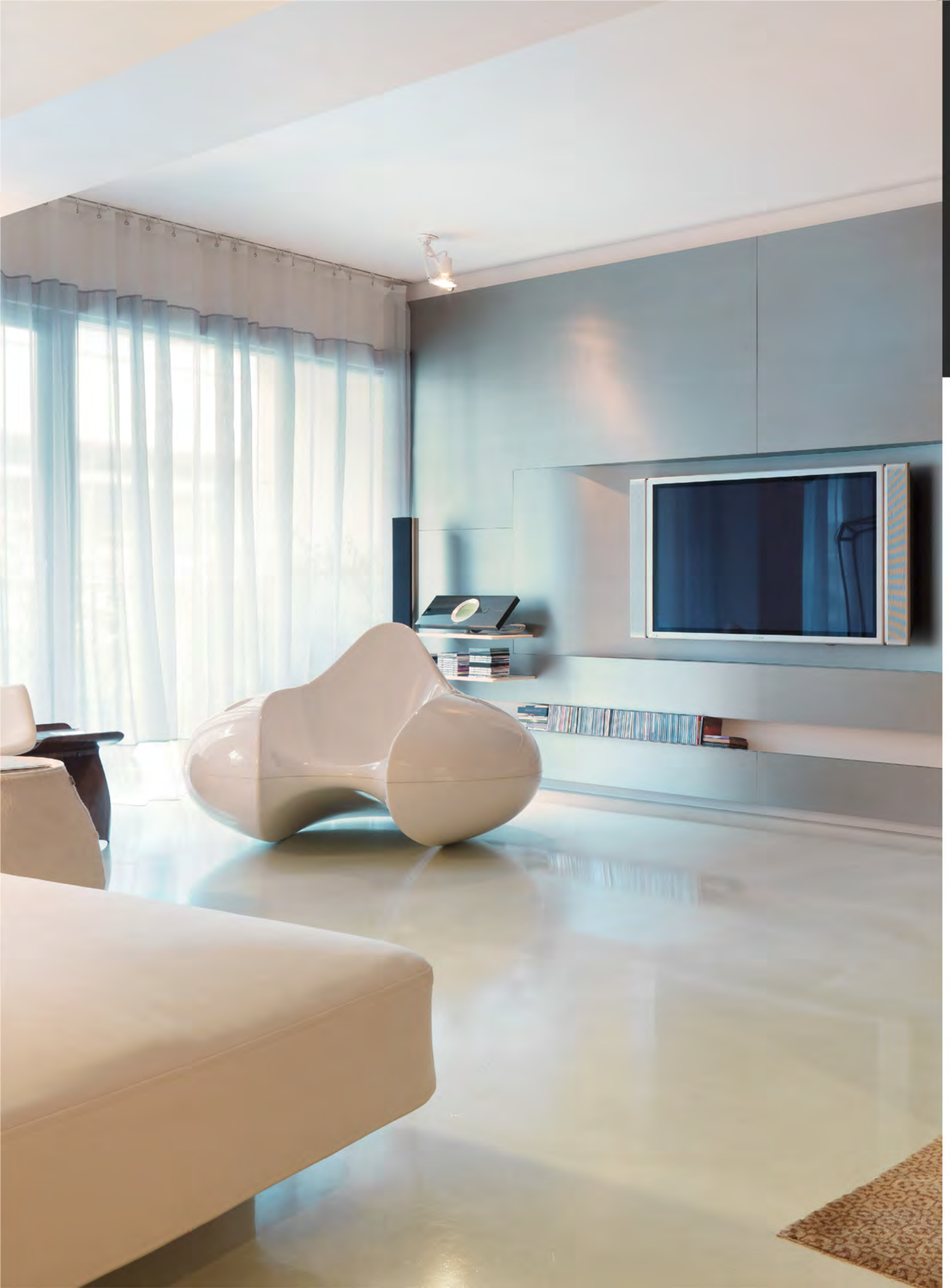
Thickness of the main body is only 178mm, which meets the requirements of delicate and compact space.

● Evaporator Auto-drying Operation

After the cooling mode is stopped, the fan will delay the shutdown time and run for a while to dry the condensate water on the surface of the evaporator to keep the inside of the unit dry, so as not to breed bacteria and mold.

● Anti-fouling Design

By adjusting the angle of the air deflector, it can avoid affecting the ceiling near the air outlet.

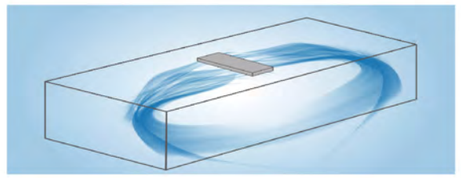


2-way Cassette Indoor Unit

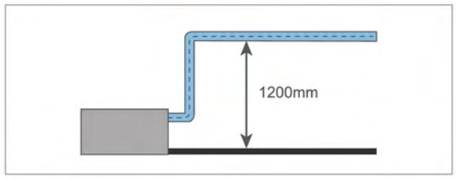
2-way cassette indoor unit adopts high-efficiency DC brushless motor and stylish appearance design, with middle air return and double-sided air supply mode for strong air volume, which can evenly supply air to all parts of the room, widely used in hotels and official buildings, shopping malls, apartments, villas, households and other applications.

● Two-way Air Supply

The double-sided air outlet lengthens the air supply distance to solve the problem of difficult air supply in narrow and long rooms.



● Standard Fitting 1,200mm Condensate Water Lift Pump



● New Streamlined Appearance Design

The new generation of two-way cassette unit adopts a brand new front panel design, making it visually pleasing and perfectly fit into indoor decoration.

● Anti-fouling Design

There are two air deflectors that can be controlled independently to adjust the air supply direction. They can make different combinations of air swing angles to avoid direct airflow to people.

*It must be used with the wired controller (XE70-33/H).

● Quiet Fan Blade Design, Low Noise Operation

Using DC motor and large diameter centrifugal fan blade design, low revolving speed can achieve large air volume, uniform air supply, and lower noise, providing quiet and comfortable space.

● Compact Body Design

The new generation of two-way cassette unit has a very thin body(280mm), which is 11.1% thinner than the last generation. Therefore, it requires less installation space and is more practical in engineering.

● Automatic Louver Control

The front panel adopts an arc design for the end of air deflectors. With structural simulation analysis, the best air supply angle was simulated. In cooling mode, the unit can achieve horizontal air supply to avoid cold air draft to people. In heating mode, it can achieve vertical air supply to improve the degree of heating comfort.

360 ° Air Discharge Cassette Indoor Unit

360 ° air discharge cassette, with 360 ° air discharge, which is suitable for different places such as hotels, office buildings, shopping malls, apartments, villas, and families. The all-round discharge cassette type indoor unit ' s air louver can be independently controlled to realize a new air flow form. The air supply range is wide and temperature distribution is more uniform, bringing a comfortable environment experience. Optional human sensory function, the control is more intelligent and user-friendly.

● 360 ° Overall Temperature Field Identification

Intelligent sensory function control, high temperature field recognition accuracy, realize cold wind avoiding people, hot wind following people, to avoid direct blowing of the human body; when it detects that no one is indoors, it automatically adjusts the set temperature; if there is no one indoors for long, the unit will be automatically shut off.

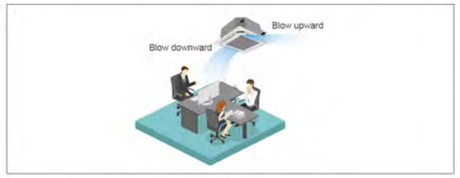
*This function should be customized and needs to be used with wired controller XE70-33/H.

● 360 ° Surrounding Airflow

Wide air supply range, more uniform temperature distribution, more comfortable experience.

● Independent Swing Control

The four air louvers can be controlled independently, and the air supply direction can be adjusted independently to achieve different angle combinations to avoid direct air blowing.



* This function needs to be used with wired controller XE70-33/H.

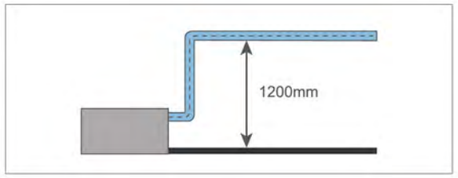
● Optional intelligent voice control module, far-field (5m) voice recognition technology, intelligent status broadcast, leading a new intelligent interaction experience.

* This accessory should be customized.

● Optional fresh air fitting can effectively introduce 8 ~ 10% of outdoor fresh air and improve indoor comfort.

● DC Quiet Condensate Pump

The pump drainage lifting height can be up to 1,200mm, and vertical installation height of the unit can be flexibly adjusted, with high engineering adaptability.



● Optional lifting panel, and the inlet grille adopts two-way suspension lifting technology to realize the lifting function of the grille. User can clean the filter by himself for more convenient maintenance.

*Optional fitting, please consult engineering and technical personnel.

360 ° Air Discharge Compact Cassette Indoor Unit

360 ° air discharge compact cassette, 8 models in the whole series, capacity range: 1.5kW ~ 5.6kW. Newly designed 360 ° air outlet panel can achieve 360 ° surrounding airflow, for wider air supply range, more uniform air distribution and temperature field, and more comfortable user experience. It can be widely used in households, hotels, restaurants, offices, meeting rooms and other places.

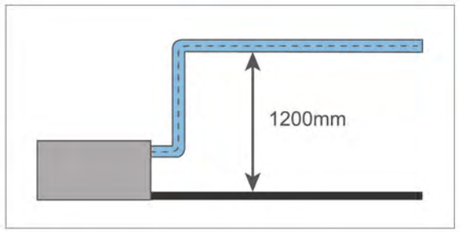
● 360 ° Surrounding Airflow

The newly designed 360 ° surrounding airflow has a wide air supply range, more uniform airflow organization and temperature distribution, avoiding partial hot and cold, and providing a more comfortable user experience.

● Independent Swing Control

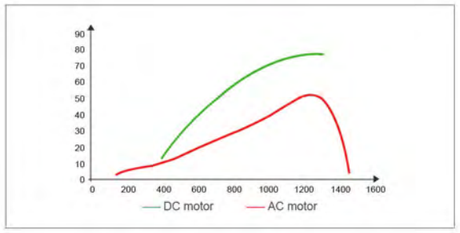
The four air louvers can be controlled independently, and direction of air supply can be regulated independently to achieve different angles of air supply and avoid direct wind blowing to people.

* This function needs to be used with wired controller XE70-33/H.



● DC Quiet Condensate Pump

The high-lift DC quiet condensate pump is adopted, which has lower operating power and better sound quality. The maximum lifting height is 1,200mm, the installation design is more flexible, and it is convenient for the layout of engineering drain pipe.



● DC Motor Design

The fan adopts high-efficiency DC motor to realize stepless speed regulation. Compared with ordinary AC motor, it can achieve effective energy conservation of about 30%.

● Newly Designed Air Ducts and Blades for Lower Operating Noise

Internal air ducts and blades adopt new fluid simulation design, which allows lower operating noise under the same air volume. Noise is as low as 25dB(A).

● Compact Design

With compact structural design, unit body is smaller than the previous generation, and the installation area is smaller.

● Multiple Protection Functions

The unit is designed with multiple protection functions to achieve safe and reliable long-term operation, including water full protection, anti-freezing protection, fan error protection, etc.

Wall-mounted Type Indoor Unit

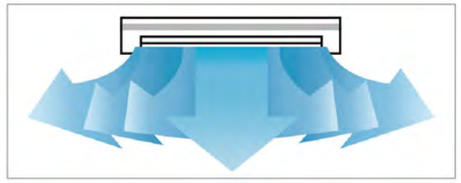
The whole series adopt high-efficiency DC motor, stylish design, simple and easy panel disassembly, convenient cleaning design, uniform air flow distribution, and wide air supply range. It can blow the wind to every corner of the room. It is widely used in various places such as houses, hotels, apartments, offices and meeting rooms.

● Easy Installation

Wall-mounted installation, without occupying floor space, and no need to suspend ceiling, arrangement of refrigerant pipe is flexible.

● Automatic Up and Down Swing Design

With up and down swing function, air louver can realize automatic control, air supply range is increased and air supply is uniform, creating a comfortable working and living environment.



● Wide Angle Air Supply

The wind can be naturally and evenly distributed to all corners of the room.

● Quiet Design

Using high-efficiency cross-flow fan blades, noise of the whole unit is greatly reduced.

● Uniform Temperature Distribution and High Comfort

The temperature field is evenly and reasonably distributed, the heating airflow can directly reach the ground, warming the entire room, greatly improving human comfort.

● Washable Filter

With long-term filter, which can be disassembled and cleaned for easy maintenance.

● Removable Panel

Panel of the indoor unit can be easily slid in or out, disassembly is simple and easy, which is easy to clean and the appearance of indoor unit can be kept clean and new.

● Powerful and Fast

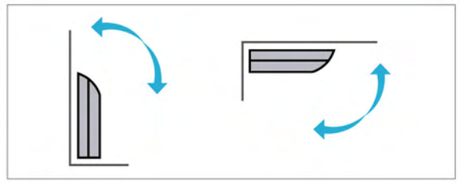
Using intelligent temperature control technology, with powerful and rapid cooling/heating function, can make the indoor temperature quickly reach the set temperature.

● Multiple Protection Functions

Anti-freezing protection, fan motor built-in overload protection, temperature sensor error protection.

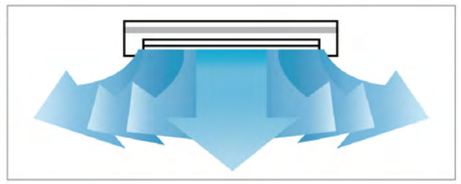
Floor Ceiling Type Indoor Unit

Floor ceiling type indoor unit, installation method of the unit has two types: seated type and suspending type, which is decent without hoisting installation. It is suitable to multiple applications such as hotel, office building, shopping mall, apartment, villa, household, etc.



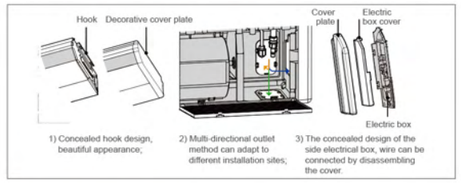
● Flexible Installation

The unit can be seated or hoisted, the flexible and convenient installation method can give customers more installation choices. When seated, the installation is more convenient.



● Automatic Up and Down Swing Design

With up and down swing function, air louver can realize automatic control, air supply range is increased and air supply is uniform, creating a comfortable working and living environment.

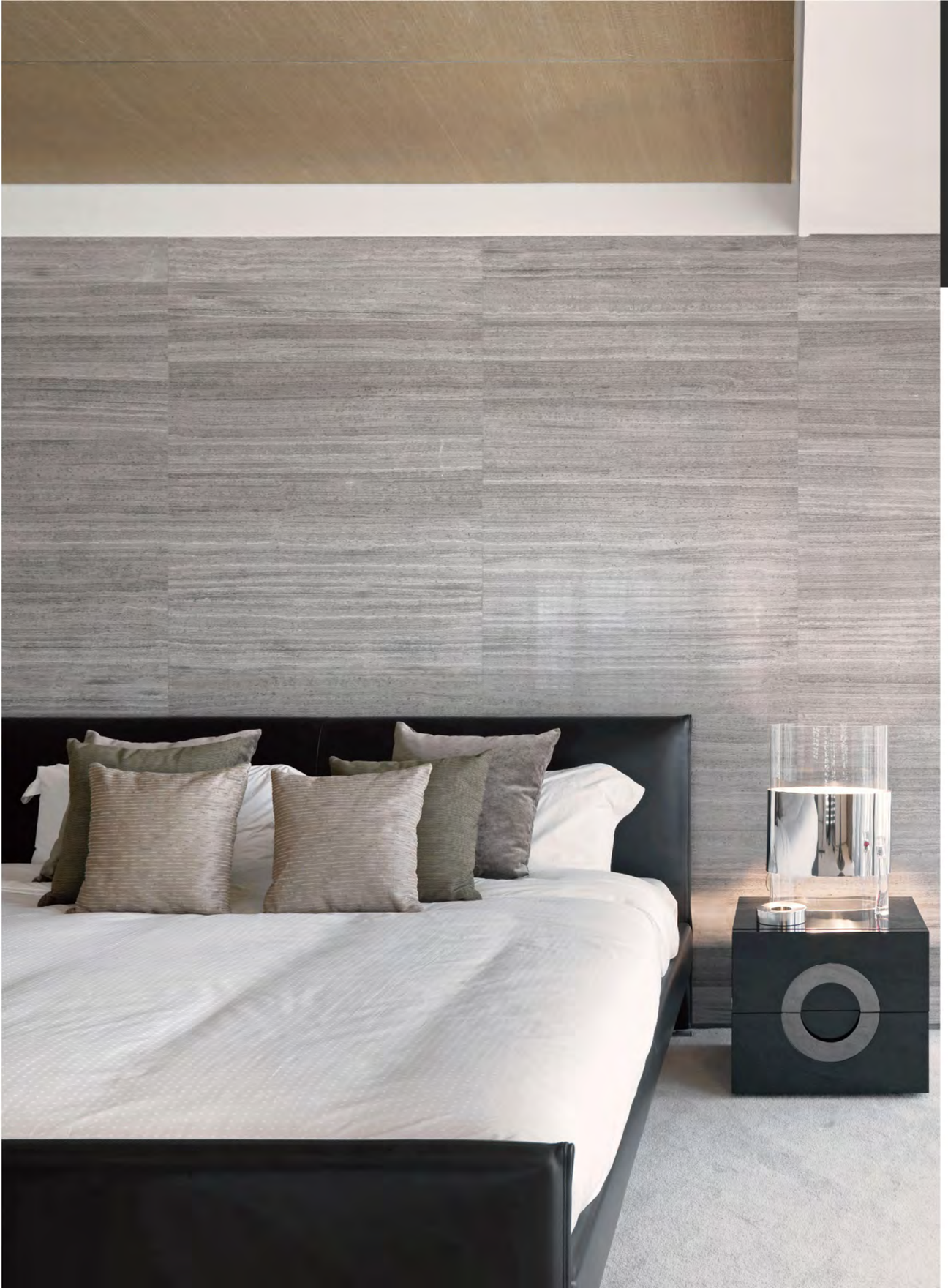


● Easy Installation

By adjusting the angle of the air deflector, avoid infecting the ceiling near the air outlet.

● Quiet Design

The new low-noise fan blade cooperates with the DC motor and excellent soundproof air distribution structure to ensure that the air supply is even and smooth, creating a quiet and comfortable environment.



Console Indoor Unit

Console indoor unit features easy installation without suspended ceiling, which will not affect the integrated indoor decoration. It can be widely applied in villas, offices, meeting rooms, etc., providing users with a comfortable living and working environment.

● Quiet Fan Blade Design, Low Noise Operation

Using DC motor and large diameter centrifugal fan blade design, low speed can achieve large air volume, uniform air distribution, lower noise, providing quiet and comfortable space.

● Uniform Temperature Distribution and High Comfort

The temperature field is evenly and reasonably distributed, and the heating airflow directly reaches the ground, warming the entire room, greatly improves user comfort.

● Removable Panel

Panel of the indoor unit can be easily slid in or out for easy disassembly and convenient cleaning, the appearance of indoor unit can be kept clean and new.

● Multiple Protection Functions

Anti-freezing protection, fan motor built-in overload protection, temperature sensor error protection.

● Strong and Fast

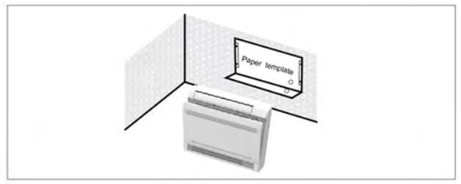
Using intelligent temperature control technology, with powerful and rapid cooling/heating function, can make indoor temperature quickly reach the set temperature.

● Washable Filter

The long-life filter can be disassembled and cleaned, for easier maintenance.

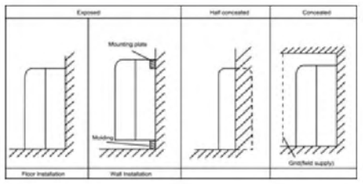
● Two-way Air Supply

With the upper and lower air outlets, the unit can realize 3D air supply, which means the air will flow naturally and evenly to every corner of the room.



● Easy Installation

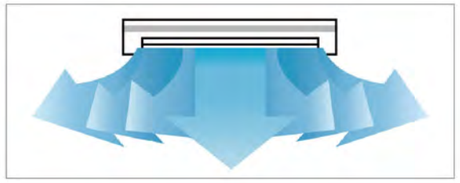
It can be installed on the floor without the need to cooperate with ceiling, and arrangement of refrigerant pipe is flexible and free.



Floor Standing Type

With large cooling capacity and a space-saving vertical structure, it is widely applied in houses, hotels, restaurants, chain stores, offices, and meeting rooms to provide users with a comfortable and pleasant living and working environment.

● Up and Down Swing, Long Air Supply Distance



● Washable Filter

The long-term filter can be disassembled and cleaned, for easier maintenance.

● Quiet Design

Using high-efficiency centrifugal fan blades and quiet valves, noise of the whole unit is greatly reduced.

* Work with remote control YAP1F

● Strong and Fast

Using intelligent temperature control technology, with powerful and rapid cooling/heating function, can make indoor temperature quickly reach the set temperature.

● I Feel Function

After the user turns on this function, the unit can detect the temperature of user ' s location in real time and adjust to improve user comfort.

* Work with remote control YAP1F

● Multiple Protection Functions

Anti-freezing protection, fan motor built-in overload protection, temperature sensor error protection.

Concealed Floor Standing Type

This unit adopts floor standing concealed installation method. With small occupation space, it will not impact the integrated indoor decoration. Cooling capacity ranges from 2.2kW to 7.1kW. It can be widely used in hotels, schools, villas, offices and meeting rooms, providing users with a comfortable living and working environment.

● DC Motor Design, Low Noise Operation

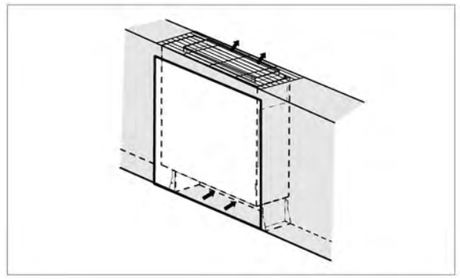
The brushless DC motor realizes stepless speed adjustment, and can set the automatic quiet mode through wired controller to make the operation quieter.

● Ultra-thin Body Design, Saving Installation Space

The structure is compact, thickness of the unit body is only 200mm, and the installation space and decoration space are greatly saved when adopting seated installation.

● High Static Pressure Design, Multi-step Static Pressure to Adjust

On the basis of the limited vertical return air space structure, the 5-step external static pressure can be adjusted, and the maximum static pressure can reach 60Pa. It meets the engineering design and application of air duct installation requirements, which is more convenient and fast.

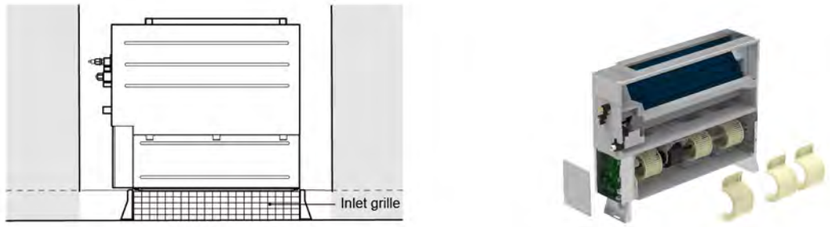


● Flexible installation

The front detachable air return structure can realize the flexible switch between side air return and the bottom air return. Different height support foot designs to meet the user 's choice of different air volume and different decoration space.

● Convenient Maintenance Design

Convenient front-side disassembly maintenance design, only maintenance port in the decorative wall is reserved, so that all the internal parts can be disassembled from the front side.



● Safe and Reliable Operation

The unit adopts multiple internal wiring, water-return elbows and anti-overflow structure, which has perfectly solved the hidden danger of water penetration of electric box due to ultra-thin design.

AHU-KIT

[Constitution]: Electronic expansion valve components, control components.

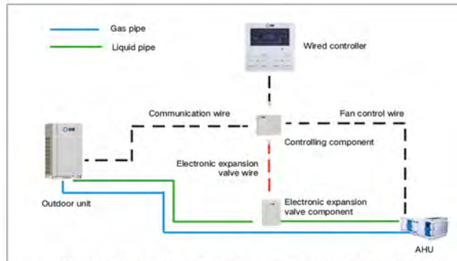
[Function]: Connect the direct-expansion air handling unit (Dunham-Bush's or third-party's direct-expansion air handling unit) to the Gree multi VRF system, so that the air handling unit has the functional advantages of multi VRF unit.

● Connection

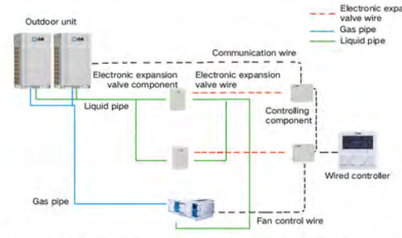
The AHU-KIT with the air handling unit can be used as a multi VRF indoor unit to connect to a multi VRF outdoor unit. The connection is limited by the outdoor unit. There are the following three types of connections:

One to One

The AHU-KIT with the air handling unit can be connected with multi VRF outdoor units in one-to-one way. Total capacity of the AHU-KIT should be between 50% and 110% of the outdoor unit's capacity.



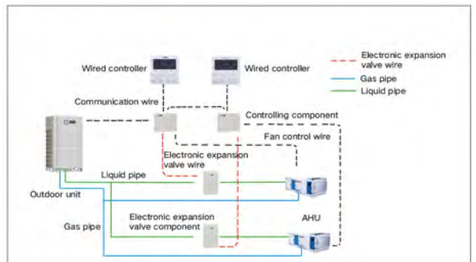
AHU-KIT one to one (single unit) connection (7.1kW≤capacity≤84kW)



AHU-KIT one to one (parallel) connection (84kW < capacity≤252kW)

One to More (Only DX AHU Unit)

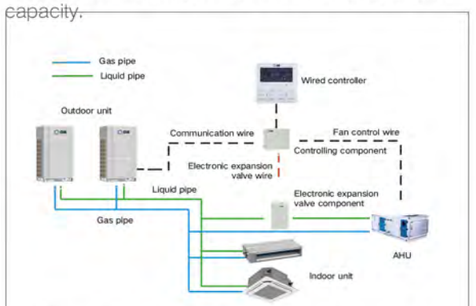
Multiple sets of AHU-KIT-air handling units can be connected to one multi VRF outdoor unit. Total capacity of the AHU-KIT should be between 50% and 110% of the outdoor unit's capacity. (Take one for two as an example)



AHU-KIT one to more connection (2.8kW≤capacity≤84kW)

One to More (DX AHU Unit + DBVG Indoor Unit)

The AHU-KIT and ordinary multi VRF indoor unit can be connected into the same multi VRF outdoor unit. Total capacity of the AHU-KIT and the ordinary multi VRF indoor unit is between 50% and 110% of the outdoor unit's capacity, and total capacity of the AHU-KIT cannot exceed 30% of the outdoor unit's capacity.



AHU-KIT one to more (mixed) connection (2.8kW≤capacity≤28kW)

*2.8~28kW units can be connected in the same system;
22.4~84kw units can be connected in the same system.

● Features:

● The two components are designed independently, and the installation is convenient. The control component is installed indoors and electronic expansion valve can be installed indoors or outdoors, with flexible engineering design.

● A variety of model combinations can expand the capacity range to meet the requirements in most occasions. With fault signal to ensure safe and reliable operation.

● The outdoor unit is used as cooling and heating sources, no additional cooling and heating sources are required.

● Access to variable refrigerant control system, using DC inverter control technology.

● Can connect to the third party's controller to set on/off, modes, temperature and related parameters of the units.

Fresh Air Processing Indoor Unit

- Air volume: 1000-4000m³/ h

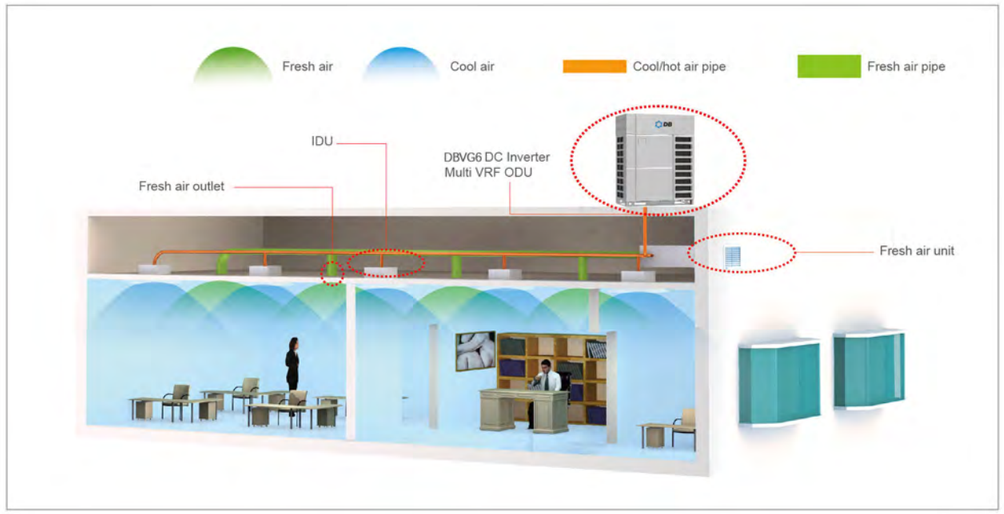
- DC inverter technology: adjust the capacity output according to actual needs, ensure stable humidity and reduce power consumption.

- Direct evaporative refrigeration: treat outdoor air to the state which is required indoors to achieve the dual effect of air conditioning and fresh air.

- Air conditioner and fresh air linkage: achieve simultaneous air conditioning and fresh air treatment in the same system. When the VRF unit is turned on, the fresh air unit is linked at the same time, saving both worry and electricity.

- PM2.5 filter box*: Built-in coarse-effect filter and high-efficiency filter, in order to filter large particles of pollutants and PM2.5, PM10, so that you can enjoy fresh outdoor air without leaving the house.

* The filter box is an optional function



Specifications of Indoor Units

Indoor Unit

High Static Pressure Duct Type Indoor Unit

Model			DBVG-DH22AG	DBVG-DH25AG	DBVG-DH28AG	DBVG-DH32AG	DBVG-DH36AG
Capacity	Cooling	kW	2.2	2.5	2.8	3.2	3.6
	Heating	kW	2.5	2.8	3.2	3.6	4.0
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz				
Power consumption		W	55	55	55	65	65
Airflow volume(H/M/L)		m^3/h	550/480/400	550/480/400	550/480/400	600/500/420	600/500/420
Rated Current	Cooling	A	0.5	0.5	0.5	0.5	0.5
	Heating	A	0.5	0.5	0.5	0.5	0.5
ESP		Pa	60/0 ~ 150	60/0 ~ 150	60/0 ~ 150	60/0 ~ 150	60/0 ~ 150
Sound pressure level(H/M/L)		dB(A)	33/30/28	33/30/28	33/30/28	33/31/29	33/31/29
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas	mm	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ12.7
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5
Dimension (W×D×H)	Outline	mm	700×700×300	700×700×300	700×700×300	700×700×300	700×700×300
	Package	mm	897×808×360	897×808×360	897×808×360	897×808×360	897×808×360
Net weight/Gross weight		kg	32/38	32/38	32/38	32/38	32/38
Loading quantity	40' GP	unit	168	168	168	168	168
	40' HQ	unit	196	196	196	196	196

Model			DBVG-DH40AG	DBVG-DH45AG	DBVG-DH50AG	DBVG-DH56AG	DBVG-DH63AG
Capacity	Cooling	kW	4.0	4.5	5.0	5.6	6.3
	Heating	kW	4.5	5.0	5.6	6.3	7.1
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz				
Power consumption		W	85	85	85	90	90
Airflow volume(H/M/L)		m^3/h	850/700/600	850/700/600	850/700/600	1000/800/700	1000/800/700
Rated Current	Cooling	A	0.5	0.5	0.5	0.8	0.8
	Heating	A	0.5	0.5	0.5	0.8	0.8
ESP		Pa	60/0 ~ 150	60/0 ~ 150	60/0 ~ 150	90/0 ~ 200	90/0 ~ 200
Sound pressure level(H/M/L)		dB(A)	36/34/32	36/34/32	36/34/32	37/35/33	37/35/33
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52
	Gas	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5
Dimension (W×D×H)	Outline	mm	700×700×300	700×700×300	700×700×300	1000×700×300	1000×700×300
	Package	mm	897×808×360	897×808×360	897×808×360	1205×813×360	1205×813×360
Net weight/Gross weight		kg	34/40	34/40	34/40	43/49	43/49
Loading quantity	40' GP	unit	168	168	168	138	138
	40' HQ	unit	196	196	196	161	161

Model			DBVG-DH40AG	DBVG-DH80AG	DBVG-DH90AG	DBVG-DH110AG	DBVG-DH112AG
Capacity	Cooling	kW	7.1	8.0	9.0	10.0	11.2
	Heating	kW	8.0	9.0	10.0	11.2	12.5
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz				
Power consumption		W	100	100	140	140	160
Airflow volume(H/M/L)		m^3/h	1250/1050/950	1250/1050/950	1800/1450/1250	1800/1450/1250	2000/1600/1400
Rated Current	Cooling	A	0.8	0.8	1.1	1.1	1.1
	Heating	A	0.8	0.8	1.1	1.1	1.1
ESP		Pa	90/0 ~ 200	90/0 ~ 200	90/0 ~ 200	90/0 ~ 200	90/0 ~ 200
Sound pressure level(H/M/L)		dB(A)	38/36/34	38/36/34	40/37/35	40/37/35	40/38/36
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5
Dimension (W×D×H)	Outline	mm	1000×700×300	1000×700×300	1400×700×300	1400×700×300	1400×700×300
	Package	mm	1205×813×360	1205×813×360	1601×813×365	1601×813×365	1601×813×365
Net weight/Gross weight		kg	43/49	43/49	57/64	57/64	57/64
Loading quantity	40' GP	unit	138	138	84	84	84
	40' HQ	unit	161	161	98	98	98

Model			DBVG-DH125AG	DBVG-DH140AG	DBVG-DH160AG	DBVG-DH180AG	DBVG-DM224AG
Capacity	Cooling	kW	12.5	14.0	16.0	18.0	22.4
	Heating	kW	14.0	16.0	18.0	20.0	25.0
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz				
Power consumption		W	160	220	230	350	800
Airflow volume(H/M/L)		m^3/h	2000/1600/1400	2350/1900/1650	2500/2000/1750	3000/2600/2000	4000/3600/3200
Rated Current	Cooling	A	1.1	1.5	1.5	2.0	3.7
	Heating	A	1.1	1.5	1.5	2.0	3.7
ESP		Pa	90/0 ~ 200	90/0 ~ 200	90/0 ~ 200	90/0 ~ 170	100/50 ~ 200
Sound pressure level(H/M/L)		dB(A)	40/38/36	42/39/37	44/41/38	49/47/44	54/52/49
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ19.05	Φ19.05	Φ19.05
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.0
Dimension (W×D×H)	Outline	mm	1400×700×300	1400×700×300	1400×700×300	1400×700×300	1483×791×385
	Package	mm	1601×813×365	1678×808×365	1678×808×365	1678×808×365	1578×883×472
Net weight/Gross weight		kg	57/64	58/67	58/67	58/67	82/104
Loading quantity	40' GP	unit	84	84	84	84	60
	40' HQ	unit	98	98	98	98	75

Model			DBVG-DM280AG	DBVG-DM400AG	DBVG-DM450AG	DBVG-DM560AG
Capacity	Cooling	kW	28.0	40.0	45.0	56.0
	Heating	kW	31.0	45.0	50.0	63.0
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz	380-415V 3N~50/60Hz	380-415V 3N~50/60Hz	380V 3N~50Hz
Power consumption		W	900	2500	2550	2700
Airflow volume(H/M/L)		m^3/h	4400/4000/3600	8000/6100/5050	8200/6600/5550	10000
Rated Current	Cooling	A	4.1	2.7	4.1	5.5
	Heating	A	4.1	2.7	4.1	5.5
ESP		Pa	100/50 ~ 200	200/50~250	200/50~250	200
Sound pressure level(H/M/L)		dB(A)	55/52/50	61/59/56	62/60/57	63
Connecting pipe	Liquid	mm	Φ9.52	Φ12.7	Φ12.7	Φ15.9
	Gas	mm	Φ22.2	Φ25.4	Φ28.6	Φ28.6
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.0	1.2	1.2	1.2
Dimension (W×D×H)	Outline	mm	1686×870×450	1680×900×650	1900×1100×700	1900×1100×850
	Package	mm	1788×988×580	1923×1153×850	2093×1463×900	2123×1463×1060
Net weight/Gross weight		kg	105/140	170/220	236/317	282/364
Loading quantity	40' GP	unit	52	24	16	16
	40' HQ	unit	52	36	16	16

* This model is without water pump.

Indoor Unit

360 ° Air Discharge Cassette Indoor Unit

Model				DBVG-CFF22AG	DBVG-CFF28AG	DBVG-CFF36AG	DBVG-CFF45AG	DBVG-CFF50AG
Capacity		Cooling	kW	2.2	2.8	3.6	4.5	5.0
		Heating	kW	2.5	3.2	4.0	5.0	5.6
Power supply			V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz				
Power consumption			W	26	26	26	26	28
Airflow volume(H/M/L)			m^3/h	800/700/600	800/700/600	800/700/600	800/700/600	900/800/700
Rated current		Cooling	A	0.2	0.2	0.2	0.2	0.2
		Heating	A	0.2	0.2	0.2	0.2	0.2
Sound pressure level(H/M/L)			dB(A)	33/30/28	33/30/28	33/30/28	34/30/28	35/32/29
Connecting pipe		Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
		Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7
Drain pipe		External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25
		Thickness	mm	2.5	2.5	2.5	2.5	2.5
Main body	Dimension (W×D×H)	Outline	mm	840×840×240	840×840×240	840×840×240	840×840×240	840×840×240
		Package	mm	963×963×325	963×963×325	963×963×325	963×963×325	963×963×325
	Net weight/Gross weight		kg	27.0/35.0	27.0/35.0	27.0/35.0	27.0/35.0	28.0/36.0
Panel	Model			TF06	TF06	TF06	TF06	TF06
	Dimension (W×D×H)	Outline	mm	950×950×65	950×950×65	950×950×65	950×950×65	950×950×65
		Package	mm	1033×1020×110	1033×1020×110	1033×1020×110	1033×1020×110	1033×1020×110
	Net weight/Gross weight		kg	6.0/9.5	6.0/9.5	6.0/9.5	6.0/9.5	6.0/9.5
Loading quantity		40' GP	unit	120	120	120	120	120
		40' HQ	unit	140	140	140	140	140

Model				DBVG-CFF56AG	DBVG-CFF63AG	DBVG-CFF71AG	DBVG-CFF80AG	DBVG-CFF90AG
Capacity		Cooling	kW	5.6	6.3	7.1	8.0	9.0
		Heating	kW	6.3	7.1	8.0	9.0	10.0
Power supply			V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz				
Power consumption			W	35	60	60	85	85
Airflow volume(H/M/L)			m^3/h	950/850/750	1150/950/850	1150/950/850	1250/1000/900	1250/1000/900
Rated current		Cooling	A	0.2	0.4	0.4	0.4	0.4
		Heating	A	0.2	0.4	0.4	0.4	0.4
Sound pressure level(H/M/L)			dB(A)	37/33/30	37/34/31	37/34/31	39/37/34	39/37/34
Connecting pipe		Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
		Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Drain pipe		External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25
		Thickness	mm	2.5	2.5	2.5	2.5	2.5
Main body	Dimension (W×D×H)	Outline	mm	840×840×240	840×840×240	840×840×240	840×840×240	840×840×240
		Package	mm	963×963×325	963×963×325	963×963×325	963×963×325	963×963×325
	Net weight/Gross weight		kg	28.0/36.0	28.0/36.0	28.0/36.0	29.0/37.0	29.0/37.0
Panel	Model			TF06	TF06	TF06	TF06	TF06
	Dimension (W×D×H)	Outline	mm	950×950×65	950×950×65	950×950×65	950×950×65	950×950×65
		Package	mm	1033×1020×110	1033×1020×110	1033×1020×110	1033×1020×110	1033×1020×110
	Net weight/Gross weight		kg	6.0/9.5	6.0/9.5	6.0/9.5	6.0/9.5	6.0/9.5
Loading quantity		40' GP	unit	120	120	120	120	120
		40' HQ	unit	140	140	140	140	140

Model				DBVG-CFF100AG	DBVG-CFF112AG	DBVG-CFF125AG	DBVG-CFF140AG	DBVG-CFF160AG
Capacity		Cooling	kW	10.0	11.2	12.5	14.0	16.0
		Heating	kW	11.2	12.5	14.0	16.0	18.0
Power supply			V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz				
Power consumption			W	85	115	115	115	170
Airflow volume(H/M/L)			m^3/h	1250/1000/900	1650/1300/1100	1650/1300/1100	1650/1300/1100	2000/1800/1430
Rated current		Cooling	A	0.4	0.6	0.6	0.6	1.2
		Heating	A	0.4	0.6	0.6	0.6	1.2
Sound pressure level(H/M/L)			dB(A)	39/37/34	43/41/39	43/41/39	43/41/39	51/48/42
Connecting pipe		Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
		Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ19.05
Drain pipe		External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25
		Thickness	mm	2.5	2.5	2.5	2.5	2.5
Main body	Dimension (W×D×H)	Outline	mm	840×840×240	840×840×290	840×840×290	840×840×290	840×840×290
		Package	mm	963×963×325	963×963×379	963×963×379	963×963×379	963×963×379
	Net weight/Gross weight		kg	29.0/37.0	33.0/42.0	33.0/42.0	33.0/42.0	36.0/44.0
Panel	Model			TF06	TF06	TF06	TF06	TF06
	Dimension (W×D×H)	Outline	mm	950×950×65	950×950×65	950×950×65	950×950×65	950×950×65
		Package	mm	1033×1020×110	1033×1020×110	1033×1020×110	1033×1020×110	1033×1020×110
	Net weight/Gross weight		kg	6.0/9.5	6.0/9.5	6.0/9.5	6.0/9.5	6.0/9.5
Loading quantity		40' GP	unit	120	120	120	120	120
		40' HQ	unit	140	140	140	140	140

General Static Pressure Duct Type Indoor Unit

Model				DBVG-DL18AG	DBVG-DL22AG	DBVG-DL25AG	DBVG-DL28AG	DBVG-DL32AG	DBVG-DL36AG
Capacity		Cooling	kW	1.8	2.2	2.5	2.8	3.2	3.6
		Heating	kW	2.2	2.5	2.8	3.2	3.6	4.0
Power supply			V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz					
Power consumption			W	78	78	78	78	78	78
Airflow volume(H/M/L)			m^3/h	450/350/200	450/350/200	450/350/200	450/350/200	550/400/300	550/400/300
Rated Current		Cooling	A	0.2	0.2	0.2	0.2	0.3	0.3
		Heating	A	0.2	0.2	0.2	0.2	0.3	0.3
ESP			Pa	15/0 ~ 30	15/0 ~ 30	15/0 ~ 30	15/0 ~ 30	15/0 ~ 30	15/0 ~ 30
Sound pressure level(H/M/L)			dB(A)	30/25/22	30/25/22	30/25/22	30/25/22	31/27/25	31/27/25
Connecting pipe		Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
		Gas	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ12.7
Drain pipe		External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
		Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5
Dimension (W×D×H)		Outline	mm	710×462×200	710×462×200	710×462×200	710×462×200	710×462×200	710×462×200
		Package	mm	1008×568×275	1008×568×275	1008×568×275	1008×568×275	1008×568×275	1008×568×275
Net weight/Gross weight			kg	18.5/23.5	18.5/23.5	18.5/23.5	18.5/23.5	19.0/24.0	19.0/24.0
Loading quantity		40' GP	unit	386	386	386	386	386	386
		40' HQ	unit	430	430	430	430	430	430

Model				DBVG-DL40AG	DBVG-DL45AG	DBVG-DL50AG	DBVG-DL56AG	DBVG-DL63AG	DBVG-DL71AG
Capacity		Cooling	kW	4.0	4.5	5.0	5.6	6.3	7.1
		Heating	kW	4.5	5.0	5.6	6.3	7.1	8.0
Power supply			V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz					
Power consumption			W	78	78	117	117	117	154
Airflow volume(H/M/L)			m^3/h	750/550/400	750/550/400	850/700/550	850/700/550	850/700/550	1100/850/650
Rated Current		Cooling	A	0.3	0.3	0.4	0.4	0.4	0.5
		Heating	A	0.3	0.3	0.4	0.4	0.4	0.5
ESP			Pa	15/0 ~ 30	15/0 ~ 30	15/0 ~ 30	15/0 ~ 30	15/0 ~ 30	15/0 ~ 50
Sound pressure level(H/M/L)			dB(A)	33/29/27	33/29/27	35/31/29	35/31/29	35/31/29	37/32/30
Connecting pipe		Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
		Gas	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
Drain pipe		External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
		Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5
Dimension (W×D×H)		Outline	mm	1010×462×200	1010×462×200	1010×462×200	1010×462×200	1010×462×200	1310×462×200
		Package	mm	1308×568×275	1308×568×275	1308×568×275	1308×568×275	1308×568×275	1608×568×275
Net weight/Gross weight			kg	25.0/31.0	25.0/31.0	25.0/31.0	25.0/31.0	25.0/31.0	31.0/37.5
Loading quantity		40' GP	unit	288	288	288	288	288	229
		40' HQ	unit	340	340	340	340	340	257

Model				DBVG-DL80AG	DBVG-DL90AG	DBVG-DL110AG	DBVG-DL112AG	DBVG-DL125AG	DBVG-DL140AG
Capacity		Cooling	kW	8.0	9.0	10.0	11.2	12.5	14.0
		Heating	kW	9.0	10.0	11.2	12.5	14.0	16.0
Power supply			V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz					
Power consumption			W	110	130	130	130	170	170
Airflow volume(H/M/L)			m^3/h	1250/1100/900	1500/1250/900	1500/1350/1000	1700/1500/1100	2000/1700/1400	2000/1700/1400
Rated Current		Cooling	A	0.53	0.63	0.63	0.63	0.8	0.8
		Heating	A	0.53	0.63	0.63	0.63	0.8	0.8
ESP			Pa	50/0 ~ 80	50/0 ~ 80	50/0 ~ 80	50/0 ~ 80	50/0 ~ 80	50/0 ~ 80
Sound pressure level(H/M/L)			dB(A)	37/34/31	40/36/32	40/36/32	40/36/32	42/40/37	42/40/37
Connecting pipe		Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
		Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Drain pipe		External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
		Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5
Dimension (W×D×H)		Outline	mm	1200×655×260	1340×655×260	1340×655×260	1340×655×260	1340×655×260	1340×655×260
		Package	mm	1448×858×315	1588×858×315	1588×858×315	1588×858×315	1588×858×315	1588×858×315
Net weight/Gross weight			kg	39.0/48.0	45.5/54.5	45.5/54.5	45.5/54.5	46.5/55.5	46.5/55.5
Loading quantity		40' GP	unit	154	105	105	105	105	105
		40' HQ	unit	176	120	120	120	120	120

Indoor Unit

360 ° Air Discharge Compact Cassette Indoor Unit

Model				DBVG-CFE15AG	DBVG-CFE18AG	DBVG-CFE22AG	DBVG-CFE28AG
Capacity		Cooling	kW	1.5	1.8	2.2	2.8
		Heating	kW	1.8	2.2	2.5	3.2
Power supply			V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz			
Power consumption			W	30	30	30	30
Airflow volume(H/M/L)			m^3/h	460/420/370	460/420/370	500/460/370	570/480/420
Rated current		Cooling	A	0.15	0.15	0.15	0.15
		Heating	A	0.15	0.15	0.15	0.15
Sound pressure level(H/M/L)			dB(A)	33/30/25	33/30/25	36/31/25	36/33/28
Connecting pipe		Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35
		Gas	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Drain pipe		External dia.	mm	Φ25	Φ25	Φ25	Φ25
		Thickness	mm	2.5	2.5	2.5	2.5
Main body	Dimension (W×D×H)	Outline	mm	570×570×265	570×570×265	570×570×265	570×570×265
		Package	mm	698×653×295	698×653×295	698×653×295	698×653×295
	Net weight/Gross weight		kg	17.5/22.5	17.5/22.5	17.5/22.5	17.5/22.5
Panel	Model			TF05	TF05	TF05	TF05
	Dimension (W×D×H)	Outline	mm	620×620×47.5	620×620×47.5	620×620×47.5	620×620×47.5
		Package	mm	701×701×125	701×701×125	701×701×125	701×701×125
	Net weight/Gross weight		kg	3.0/4.5	3.0/4.5	3.0/4.5	3.0/4.5
Loading quantity		40' GP	unit	378	378	378	378
		40' HQ	unit	432	432	432	432

Model				DBVG-CFE36AG	DBVG-CFE45AG	DBVG-CFE50AG	DBVG-CFE56AG
Capacity		Cooling	kW	3.6	4.5	5.0	5.6
		Heating	kW	4.0	5.0	5.6	6.3
Power supply			V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz			
Power consumption			W	30	45	45	45
Airflow volume(H/M/L)			m^3/h	620/550/480	730/650/560	730/650/560	730/650/560
Rated current		Cooling	A	0.15	0.23	0.23	0.23
		Heating	A	0.15	0.23	0.23	0.23
Sound pressure level(H/M/L)			dB(A)	39/37/35	43/41/39	43/41/39	43/41/39
Connecting pipe		Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52
		Gas	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.9
Drain pipe		External dia.	mm	Φ25	Φ25	Φ25	Φ25
		Thickness	mm	2.5	2.5	2.5	2.5
Main body	Dimension (W×D×H)	Outline	mm	570×570×265	570×570×265	570×570×265	570×570×265
		Package	mm	698×653×295	698×653×295	698×653×295	698×653×295
	Net weight/Gross weight		kg	17.5/22.5	17.5/22.5	17.5/22.5	17.5/22.5
Panel	Model			TF05	TF05	TF05	TF05
	Dimension (W×D×H)	Outline	mm	620×620×47.5	620×620×47.5	620×620×47.5	620×620×47.5
		Package	mm	701×701×125	701×701×125	701×701×125	701×701×125
	Net weight/Gross weight		kg	3.0/4.5	3.0/4.5	3.0/4.5	3.0/4.5
Loading quantity		40' GP	unit	378	378	378	378
		40' HQ	unit	432	432	432	432

2-way Cassette Indoor Unit

Model				DBVG-CD28 AG	DBVG-CD36 AG	DBVG-CD45 AG	DBVG-CD50 AG	DBVG-CD56 AG	DBVG-CD63 AG	DBVG-CD71 AG
Capacity		Cooling	kW	2.8	3.6	4.5	5.0	5.6	6.3	7.1
		Heating	kW	3.2	4.0	5.0	5.6	6.3	7.1	8.0
Power supply			V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz						
Power consumption			W	20	20	30	30	30	30	55
Airflow volume(H/M/L)			m^3/h	671/616/513	671/616/513	715/616/513	715/616/513	764/709/676	764/709/676	816/745/660
Rated current		Cooling	A	0.25	0.25	0.30	0.30	0.30	0.30	0.49
		Heating	A	0.25	0.25	0.30	0.30	0.30	0.30	0.49
Sound pressure level(H/M/L)			dB(A)	33/31/28	33/31/28	35/31/28	35/31/28	37/34/32	37/34/32	39/37/34
Connecting pipe		Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
		Gas	mm	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
Drain pipe		External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
		Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Main body	Dimension (W×D×H)	Outline	mm	790×630×280	790×630×280	790×630×280	790×630×280	790×630×280	790×630×280	790×630×280
		Package	mm	1033×740×365	1033×740×365	1033×740×365	1033×740×365	1033×740×365	1033×740×365	1033×740×365
	Net weight/Gross weight		kg	25.5/33.0	25.5/33.0	25.5/33.0	25.5/33.0	26.0/33.5	26.0/33.5	26.0/33.5
Panel	Dimension (W×D×H)	Outline	mm	1100×710×28	1100×710×28	1100×710×28	1100×710×28	1100×710×28	1100×710×28	1100×710×28
		Package	mm	1230×843×130	1230×843×130	1230×843×130	1230×843×130	1230×843×130	1230×843×130	1230×843×130
	Net weight/Gross weight		kg	6.0/10.5	6.0/10.5	6.0/10.5	6.0/10.5	6.0/10.5	6.0/10.5	6.0/10.5
Loading quantity		40'GP	unit	144	144	144	144	144	144	144
		40'HQ	unit	166	166	166	166	166	166	166

*Note: This product model is under development. Please confirm the final specifications with sales representatives.

1-way Cassette Indoor Unit

Model				DBVG-CS22AG	DBVG-CS28AG	DBVG-CS36AG	DBVG-CS45AG	DBVG-CS50AG	DBVG-CS56AG
Capacity		Cooling	kW	2.2	2.8	3.6	4.5	5.0	5.6
		Heating	kW	2.5	3.2	4.0	5.0	5.6	6.3
Power supply			V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz					
Power consumption			W	30	30	30	45	45	45
Airflow volume(H/M/L)			m^3/h	600/500/450	600/500/450	600/500/450	830/600/500	830/600/500	890/667/564
Rated current		Cooling	A	0.2	0.2	0.2	0.3	0.3	0.3
		Heating	A	0.2	0.2	0.2	0.3	0.3	0.3
Sound pressure level(H/M/L)			dB(A)	36/32/28	36/32/28	36/32/28	40/35/30	40/35/30	41/38/35
Connecting pipe		Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
		Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9
Drain pipe		External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
		Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5
Main body	Dimension (W×D×H)	Outline	mm	987×385×178	987×385×178	987×385×178	987×385×178	987×385×178	987×385×178
		Package	mm	1307×501×310	1307×501×310	1307×501×310	1307×501×310	1307×501×310	1307×501×310
	Net weight/Gross weight		kg	20/27	20/27	20/27	21/28.5	21/28.5	21/28.5
Panel	Model			TD01	TD01	TD01	TD01	TD01	TD01
	Dimension (W×D×H)	Outline	mm	1200×460×55	1200×460×55	1200×460×55	1200×460×55	1200×460×55	1200×460×55
		Package	mm	1265×536×121	1265×536×121	1265×536×121	1265×536×121	1265×536×121	1265×536×121
	Net weight/Gross weight		kg	4.2/6	4.2/6	4.2/6	4.2/6	4.2/6	4.2/6
Loading quantity		40' GP	unit	138	138	138	138	138	138
		40' HQ	unit	138	138	138	138	138	138

Indoor Unit

Wall-mounted Type Indoor Unit

Model			DBVG-WT15/B4	DBVG-WT18/B4	DBVG-WT22/B4	DBVG-WT22/B4	DBVG-WT36/B4	DBVG-WT45/B4	DBVG-WT50/B4
Capacity	Cooling	kW	1.5	1.8	2.2	2.8	3.6	4.5	5.0
	Heating	kW	1.8	2.2	2.5	3.2	4.0	5.0	5.6
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz						
Power consumption		W	20	20	20	20	25	35	35
Airflow volume(H/M/L)		m^3/h	500/440/300	500/440/300	500/440/300	500/440/300	630/460/320	850/580/500	850/580/500
Rated current	Cooling	A	0.1	0.1	0.1	0.1	0.12	0.17	0.17
	Heating	A	0.1	0.1	0.1	0.1	0.12	0.17	0.17
Sound pressure level(H/M/L)		dB(A)	35/33/30	35/33/30	35/33/30	35/33/30	38/35/31	43/40/37	43/40/37
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7
Drain pipe	External dia.	mm	Φ20	Φ20	Φ20	Φ20	Φ20	Φ20	Φ20
	Thickness	mm	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Dimension (W×D×H)	Outline	mm	845×209×289	845×209×289	845×209×289	845×209×289	845×209×289	970×224×300	970×224×300
	Package	mm	976×281×379	976×281×379	976×281×379	976×281×379	976×281×379	1096×308×395	1096×308×395
Net weight/Gross weight		kg	10.5/12.5	10.5/12.5	10.5/12.5	10.5/12.5	10.5/12.5	12.5/15.5	12.5/15.5
Loading quantity	40' GP	unit	576	576	576	576	576	448	448
	40' HQ	unit	576	576	576	576	576	512	512

Model			DBVG-WT56/B4	DBVG-WT63/B4	DBVG-WT71/B4	DBVG-WT80/B4	DBVG-WT90/B4	DBVG-WT95/B4
Capacity	Cooling	kW	5.6	6.3	7.1	8.0	9.0	9.5
	Heating	kW	6.3	7.1	7.5	9.0	10.0	10.5
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz					
Power consumption		W	50	50	65	80	80	100
Airflow volume(H/M/L)		m^3/h	1100/850/650	1100/850/650	1200/850/650	1550/1050/800	1550/1050/800	1650/1100/900
Rated current	Cooling	A	0.24	0.24	0.31	0.41	0.41	0.41
	Heating	A	0.24	0.24	0.31	0.41	0.41	0.41
Sound pressure level(H/M/L)		dB(A)	43/41/37	43/41/37	44/41/37	49/46/40	49/46/40	52/48/40
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ20	Φ20	Φ20	Φ20	Φ20	Φ20
	Thickness	mm	1.5	1.5	1.5	1.5	1.5	1.5
Dimension (W×D×H)	Outline	mm	1078×246×325	1078×246×325	1078×246×325	1350×258×326	1350×258×326	1350×258×326
	Package	mm	1203×338×425	1203×338×425	1203×338×425	1496×357×433	1496×357×433	1496×357×433
Net weight/Gross weight		kg	16/19	16/19	16/19	20/24	20/24	20/24
Loading quantity	40' GP	unit	282	282	282	228	228	228
	40' HQ	unit	329	329	329	266	266	266

Fresh Air Processing Indoor Unit

Model			DBVG-FA125AG	DBVG-FA140AG	DBVG-FA224AG	DBVG-FA250AG	DBVG-FA280AG	DBVG-FA450AG
Capacity	Cooling *1	kW	12.5	14.0	22.4	25.0	28.0	45.0
	Heating	kW *2	8.5	10.0	16.0	18.0	20.0	32.0
		kW *3	10.5	12.0	20.0	20.0	22.0	35.0
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz					380-415V 3N~50Hz
Power consumption *4		W	200/350	200/350	400/760	520/860	520/860	1240
ESP *5		Pa	150/50~200	150/50~200	200/50 ~ 300	200/50 ~ 300	200/50 ~ 300	200
Airflow volume (Default/Range) *6		m^3/h	1200/1000~2000	1200/1000~2000	2000/1500~3000	2500/2000~3500	2500/2000~3500	4000
Rated current *7	Cooling	A	1.5/2.0	1.5/2.0	2.5/4.3	3.1/4.9	3.1/4.9	3.4
	Heating	A	1.5/2.0	1.5/2.0	2.5/4.3	3.1/4.9	3.1/4.9	3.4
Sound pressure level (Default/Range) *8		dB(A)	46/40~50	46/40~50	45/45~54	47/47~54	47/47~54	58
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ12.7
	Gas	mm	Φ15.9	Φ15.9	Φ19.05	Φ22.2	Φ22.2	Φ28.6
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ33
	Thickness	mm	2.5	2.5	2.0	2.0	2.0	3.0
Dimension (W×D×H)	Outline	mm	1400×700×300	1400×700×300	1483×791×385	1483×791×385	1483×791×385	1700x1100x650
	Package	mm	1601×813×365	1601×813×365	1578×883×472	1578×883×472	1578×883×472	1893x1463x838
Net weight/Gross weight		kg	54/61	54/61	82/104	82/104	82/104	208/266
Loading quantity	40' GP	unit	84	84	52	52	52	16
	40' HQ	unit	98	98	65	65	65	16

Note:
1. Rated cooling capacity test conditions: indoor 35℃ DB/28℃ WB, outdoor 35℃ DB.
2. Rated heating capacity test conditions: indoor 7℃ DB, outdoor 7℃ DB/6℃ WB.
3. Rated heating capacity test conditions: indoor -7℃ DB, outdoor 0℃ DB / -2.9℃ WB.
4. As for power consumption column, the left side of "/" is the rated power, and the right side is the max. power.
5. External static pressure: the left side of "/" is the static pressure of a standard unit while the right side is the static pressure option of a non-standard unit.
6. Air volume: the left side of "/" is the rated air volume while the right side is the adjustable fresh air volume.
7. Input current: the left side of "/" is the rated current while the right side is the maximum current.
8. As to noise: the left side of "/" is the noise value under rated static pressure while the right side is the noise range with the change of static pressure.

Console Indoor Unit

Model			DBVG-CA22AG	DBVG-CA28AG	DBVG-CA36AG	DBVG-CA45AG	DBVG-CA50AG
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.0
	Heating	kW	2.5	3.2	4.0	5.0	5.5
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz				
Power consumption		W	15	15	20	40	40
Airflow volume(H/M/L)		m^3/h	400/320/270	400/320/270	480/400/310	680/600/500	680/600/500
Rated current	Cooling	A	0.17	0.17	0.25	0.4	0.4
	Heating	A	0.17	0.17	0.25	0.4	0.4
Sound pressure level(H/M/L)		dB(A)	38/33/27	38/33/27	40/37/32	46/43/39	46/43/39
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7
Drain pipe	External dia.	mm	Φ28	Φ28	Φ28	Φ28	Φ28
	Thickness	mm	1	1	1	1	1
Dimension (W×D×H)	Outline	mm	700×215×600	700×215×600	700×215×600	700×215×600	700×215×600
	Package	mm	788×283×777	788×283×777	788×283×777	788×283×777	788×283×777
Net weight/Gross weight		kg	16/19	16/19	16/19	16/19	16/19
Loading quantity	40' GP	unit	348	348	348	348	348
	40' HQ	unit	348	348	348	348	348

Indoor Unit

Floor Ceiling Type Indoor Unit

Model			DBVG-FC28AG	DBVG-FC36AG	DBVG-FC50AG	DBVG-FC56AG	DBVG-FC63AG	DBVG-FC71AG
Capacity	Cooling	kW	2.8	3.6	5.0	5.6	6.3	7.1
	Heating	kW	3.2	4.0	5.6	6.3	7.1	8.0
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz					
Power consumption		W	35	35	55	55	80	80
Airflow volume(H/M/L)		m^3/h	600/500/450	600/500/450	750/650/600	750/650/600	1350/1200/1050	1350/1200/1050
Rated current	Cooling	A	0.2	0.2	0.3	0.3	0.4	0.4
	Heating	A	0.2	0.2	0.3	0.3	0.4	0.4
Sound pressure level(H/M/L)		dB(A)	36/32/29	36/32/29	42/39/36	42/39/36	44/41/38	44/41/38
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ9.52	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ17	Φ17	Φ17	Φ17	Φ17	Φ17
	Thickness	mm	1.75	1.75	1.75	1.75	1.75	1.75
Dimension (W × D × H)	Outline	mm	870 × 665 × 235	870 × 665 × 235	870 × 665 × 235	870 × 665 × 235	1200 × 665 × 235	1200 × 665 × 235
	Package	mm	973 × 770 × 300	973 × 770 × 300	973 × 770 × 300	973 × 770 × 300	1303 × 770 × 300	1303 × 770 × 300
Net weight/Gross weight		kg	24/29	24/29	25/30	25/30	32/38	32/38
Loading quantity	40' GP	unit	252	252	252	252	189	189
	40' HQ	unit	288	288	288	288	216	216

Model			DBVG-FC90AG	DBVG-FC112AG	DBVG-FC125AG	DBVG-FC140AG	DBVG-FC160AG
Capacity	Cooling	kW	9.0	11.2	12.5	14.0	16.0
	Heating	kW	10.0	12.5	14.0	16.0	18.0
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz				
Power consumption		W	120	120	120	150	175
Airflow volume(H/M/L)		m^3/h	1550/1400/1250	1800/1600/1400	1800/1600/1400	2000/1750/1600	2150/1850/1650
Rated current	Cooling	A	0.7	0.7	0.7	0.8	0.9
	Heating	A	0.7	0.7	0.7	0.8	0.9
Sound pressure level(H/M/L)		dB(A)	47/44/41	47/44/42	47/44/42	49/45/43	52/48/45
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ19.05
Drain pipe	External dia.	mm	Φ17	Φ17	Φ17	Φ17	Φ17
	Thickness	mm	1.75	1.75	1.75	1.75	1.75
Dimension (W × D × H)	Outline	mm	1200 × 665 × 235	1570 × 665 × 235	1570 × 665 × 235	1570 × 665 × 235	1570 × 665 × 235
	Package	mm	1303 × 770 × 300	1669 × 770 × 300	1669 × 770 × 300	1669 × 770 × 300	1669 × 770 × 300
Net weight/Gross weight		kg	33/39	41/48	41/48	43/50	43/50
Loading quantity	40' GP	unit	189	147	147	147	147
	40' HQ	unit	216	168	168	168	168

Concealed Floor Standing Type

Model			DBVG-ZA22AG	DBVG-ZA28AG	DBVG-ZA36AG	DBVG-ZA45AG	DBVG-ZA56AG	DBVG-ZA63AG	DBVG-ZA71AG
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	6.3	7.1
	Heating	kW	2.5	3.2	4.0	5.0	6.3	7.1	8.0
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz						
Power consumption		W	35	35	43	45	80	80	90
Airflow volume(H/M/L)		m^3/h	450/350/250	450/350/250	550/450/350	650/500/400	900/750/600	900/750/600	1100/900/700
Rated current	Cooling	A	0.18	0.18	0.22	0.23	0.41	0.41	0.46
	Heating	A	0.18	0.18	0.22	0.23	0.41	0.41	0.46
ESP		Pa	10/0 ~ 40	10/0 ~ 40	10/0 ~ 40	15/0 ~ 60	15/0 ~ 60	15/0 ~ 60	15/0 ~ 60
Sound pressure level(H/M/L)		dB(A)	30/28/25	30/28/25	33/31/28	33/31/28	35/33/30	35/33/30	37/35/33
Connecting pipe	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Dimension (W × D × H)	Outline	mm	700 × 615 × 200	700 × 615 × 200	700 × 615 × 200	900 × 615 × 200	1100 × 615 × 200	1100 × 615 × 200	1100 × 615 × 200
	Package	mm	893 × 743 × 305	893 × 743 × 305	893 × 743 × 305	1123 × 743 × 305	1323 × 743 × 305	1323 × 743 × 305	1323 × 743 × 305
Net weight/Gross weight		kg	23/30	23/30	23/30	27/36	32/41	32/41	32/41
Loading quantity	40' GP	unit	273	273	273	217	175	175	175
	40' HQ	unit	312	312	312	248	200	200	200

Floor Standing Type

Model			DBVG-PA100AG	DBVG-PA140AG
Capacity	Cooling	kW	10.0	14.0
	Heating	kW	11.0	15.0
Power supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz	
Power consumption		W	200	200
Airflow volume(H/M/L)		m^3/h	1850/1600/1400	1850/1600/1400
Sound pressure level(H/M/L)		dB(A)	50/48/46	50/48/46
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ31	Φ31
	Thickness	mm	4.5	4.5
Dimension (W × D × H)	Outline	mm	580 × 400 × 1870	580 × 400 × 1870
	Package	mm	738 × 545 × 2083	738 × 545 × 2083
Net weight/Gross weight		kg	54.0/74.0	57.0/77.0
Loading quantity	40' GP	unit	67	67
	40' HQ	unit	67	67

Indoor Unit

AHU-KIT

Model			DBVG-N36UC		DBVG-N71UC			DBVG-N140UC			DBVG-N280UC					DBVG-N560UC		
Defaulted capacity of ex-factory	Capacity		36		71			140			280					560		
	Cooling	kW	3.6		7.1			14.0			28.0					56.0		
	Heating	kW	4.0		8.0			16.0			31.5					63.0		
Adjustable capacity	Capacity		28	36	45	56	71	90	112	140	224	280	335	400	450	504	560	840
	Cooling	kW	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0	22.4	28.0	33.5	40.0	45.0	50.4	56.0	84.0
	Heating	kW	3.2	4.0	5.0	6.3	8.0	10.0	12.5	16.0	25.0	31.5	37.5	45.0	50.0	56.5	63.0	94.5
Power input		W	8		8			8			8					8		
Power Supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz															
Size of connection pipe	AHU-KIT (ex-factory pipe size)	mm	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ15.9	Φ15.9	Φ15.9
	Air handling unit Liquid pipe	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ19.05
	Air handling unit Gas pipe	mm	Φ9.52	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ19.05	Φ22.2	Φ25.4	Φ25.4	Φ28.6	Φ28.6	Φ28.6	Φ31.8
	Connection method		Brazing Connection															
Outline dimension (W × D × H)	EXV box	mm	203 × 326 × 85		203 × 326 × 85			203 × 326 × 85			203 × 326 × 85					246 × 500 × 120		
	Control box	mm	334 × 284 × 111		334 × 284 × 111			334 × 284 × 111			334 × 284 × 111					334 × 284 × 111		
Package dimension(W × D × H)		mm	539 × 461 × 247		539 × 461 × 247			539 × 461 × 247			539 × 461 × 247					759 × 645 × 180		
Net weight		kg	10.0		10.5			10.5			10.5					13.0		
Gross weight		kg	13.0		13.5			13.5			13.5					17.5		
Loading	40' GP	unit	990		990			990			990					702		
	40' HP	unit	1100		1100			1100			1100					756		

Model			DBVG-N560UC +DBVG-N140UC	DBVG-N560UC +DBVG-N280UC	DBVG-N560UC +DBVG-N560UC		DBVG-N560UC +DBVG-N560UC +DBVG-N140UC	DBVG-N560UC +DBVG-N560UC +DBVG-N280UC	DBVG-N560UC +DBVG-N560UC +DBVG-N560UC	
Defaulted capacity of ex-factory	Capacity		840+140	840+280	840+560	840+840	840+840+140	840+840+280	840+840+560	840+840+840
	Cooling	kW	98.0	112.0	140.0	168.0	182.0	196.0	224.0	252.0
	Heating	kW	110.5	126.0	157.5	189.0	204.5	220.5	252.0	283.5
Power input		W	8+8	8+8	8+8		8+8+8	8+8+8	8+8+8	
Power Supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz							
Size of connection pipe	Air handling unit Liquid pipe	mm	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ22.2	Φ22.2	Φ22.2
	Air handling unit Gas pipe	mm	Φ38.1	Φ38.1	Φ41.3	Φ41.3	Φ41.3	Φ44.5	Φ44.5	Φ44.5
	Connection method		Brazing Connection							
Outline dimension (W × D × H)	EXV box	mm	246 × 500 × 120 +203 × 326 × 85	246 × 500 × 120 +203 × 326 × 85	(246 × 500 × 120) × 2		(246 × 500 × 120) × 2 +203 × 326 × 85	(246 × 500 × 120) × 2 +203 × 326 × 85	(246 × 500 × 120) × 3	
	Control box	mm	(334 × 284 × 111) × 2	(334 × 284 × 111) × 2	(334 × 284 × 111) × 2		(334 × 284 × 111) × 3	(334 × 284 × 111) × 3	(334 × 284 × 111) × 3	
Package dimension(W × D × H)		mm	759 × 645 × 180+ 539 × 461 × 247	759 × 645 × 180+ 539 × 461 × 247	(759 × 645 × 180) × 2		(759 × 645 × 180) × 2 +539 × 461 × 247	(759 × 645 × 180) × 2 +539 × 461 × 247	(759 × 645 × 180) × 3	
Net weight		kg	13.0+10.5	13.0+10.5	13.0+13.0		13.0+13.0+10.5	13.0+13.0+10.5	13.0+13.0+10.5	
Gross weight		kg	17.5+13.5	17.5+13.5	17.5+17.5		17.5+17.5+13.5	17.5+17.5+13.5	17.5+17.5+17.5	

Indoor Unit

AHU-KIT

Model			DBVG-N36UC	DBVG-N71UC	DBVG-N140UC	DBVG-N280UC	DBVG-N560UC
Defaulted capacity of ex-factory	Capacity		36	71	140	280	560
	Cooling	kW	3.6	7.1	14.0	28.0	56.0
	Heating	kW	4.0	8.0	16.0	31.5	63.0
Adjustable capacity	Capacity		28 36	45 56 71	90 112 140	224 280 335 400 450	504 560 840
	Cooling	kW	2.8 3.6	4.5 5.6 7.1	9.0 11.2 14.0	22.4 28.0 33.5 40.0 45.0	50.4 56.0 84.0
	Heating	kW	3.2 4.0	5.0 6.3 8.0	10.0 12.5 16.0	25.0 31.5 37.5 45.0 50.0	56.5 63.0 94.5
Power input		W	8	8	8	8	8
Power Supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz				
Size of connection pipe	AHU-KIT (ex-factory pipe size)	mm	Φ6.35 Φ6.35	Φ9.52 Φ9.52 Φ9.52	Φ9.52 Φ9.52 Φ9.52	Φ9.52 Φ9.52 Φ9.52 Φ9.52 Φ9.52	Φ15.9 Φ15.9 Φ15.9
	Air handling unit Liquid pipe	mm	Φ6.35 Φ6.35	Φ6.35 Φ9.52 Φ9.52	Φ9.52 Φ9.52 Φ9.52	Φ9.52 Φ9.52 Φ12.7 Φ12.7 Φ12.7	Φ15.9 Φ15.9 Φ19.05
	Air handling unit Gas pipe	mm	Φ9.52 Φ12.7	Φ12.7 Φ15.9 Φ15.9	Φ15.9 Φ15.9 Φ15.9	Φ19.05 Φ22.2 Φ25.4 Φ25.4 Φ28.6	Φ28.6 Φ28.6 Φ31.8
	Connection method		Brazing Connection				
Outline dimension (W × D × H)	EXV box	mm	203 × 326 × 85	203 × 326 × 85	203 × 326 × 85	203 × 326 × 85	246 × 500 × 120
	Control box	mm	334 × 284 × 111	334 × 284 × 111	334 × 284 × 111	334 × 284 × 111	334 × 284 × 111
Package dimension(W × D × H)		mm	539 × 461 × 247	539 × 461 × 247	539 × 461 × 247	539 × 461 × 247	759 × 645 × 180
Net weight		kg	10.0	10.5	10.5	10.5	13.0
Gross weight		kg	13.0	13.5	13.5	13.5	17.5
Loading	40' GP	unit	990	990	990	990	702
	40' HP	unit	1100	1100	1100	1100	756

Model			DBVG-N560UC +DBVG-N140UC	DBVG-N560UC +DBVG-N280UC	DBVG-N560UC +DBVG-N560UC	DBVG-N560UC +DBVG-N560UC +DBVG-N140UC	DBVG-N560UC +DBVG-N560UC +DBVG-N280UC	DBVG-N560UC +DBVG-N560UC +DBVG-N560UC
Defaulted capacity of ex-factory	Capacity		840+140	840+280	840+560 840+840	840+840+140	840+840+280	840+840+560 840+840+840
	Cooling	kW	98.0	112.0	140.0 168.0	182.0	196.0	224.0 252.0
	Heating	kW	110.5	126.0	157.5 189.0	204.5	220.5	252.0 283.5
Power input		W	8+8	8+8	8+8	8+8+8	8+8+8	8+8+8
Power Supply		V/Ph/Hz	220-240V ~ 50Hz & 208-230V ~ 60Hz					
Size of connection pipe	Air handling unit Liquid pipe	mm	Φ19.05	Φ19.05	Φ19.05 Φ19.05	Φ19.05	Φ22.2	Φ22.2 Φ22.2
	Air handling unit Gas pipe	mm	Φ38.1	Φ38.1	Φ41.3 Φ41.3	Φ41.3	Φ44.5	Φ44.5 Φ44.5
	Connection method		Brazing Connection					
Outline dimension (W × D × H)	EXV box	mm	246 × 500 × 120 +203 × 326 × 85	246 × 500 × 120 +203 × 326 × 85	(246 × 500 × 120) × 2	(246 × 500 × 120) × 2 +203 × 326 × 85	(246 × 500 × 120) × 2 +203 × 326 × 85	(246 × 500 × 120) × 3
	Control box	mm	(334 × 284 × 111) × 2	(334 × 284 × 111) × 2	(334 × 284 × 111) × 2	(334 × 284 × 111) × 3	(334 × 284 × 111) × 3	(334 × 284 × 111) × 3
Package dimension(W × D × H)		mm	759 × 645 × 180+ 539 × 461 × 247	759 × 645 × 180+ 539 × 461 × 247	(759 × 645 × 180) × 2	(759 × 645 × 180) × 2 +539 × 461 × 247	(759 × 645 × 180) × 2 +539 × 461 × 247	(759 × 645 × 180) × 3
Net weight		kg	13.0+10.5	13.0+10.5	13.0+13.0	13.0+13.0+10.5	13.0+13.0+10.5	13.0+13.0+10.5
Gross weight		kg	17.5+13.5	17.5+13.5	17.5+17.5	17.5+17.5+13.5	17.5+17.5+13.5	17.5+17.5+17.5

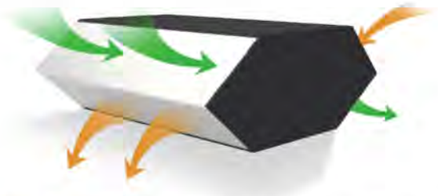
ERV+DX COIL

INVERTER R410A

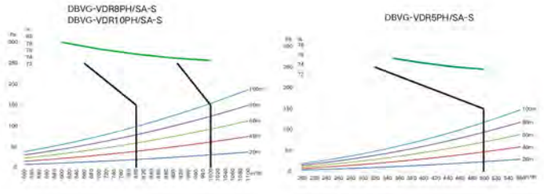
This series are fresh air units with evaporators, which means they have total heat exchangers and evaporators. When it's used with outdoor units, it can deliver fresh air without increasing the indoor load. They have multiple operation modes and are widely applicable.

Memory function | °C/°F switch | Easier maintenance | Centralized control | Weekly timer | Child lock

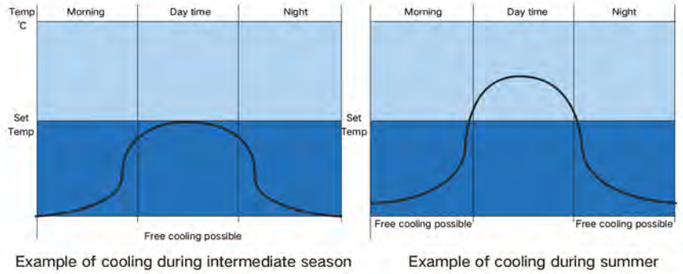
》High-efficiency HR module: They are built with heat exchange chips for efficient energy recovery on the air discharge side. When they are in use, other air conditioning equipment will consume less power.



》Constant air volume: Units adopt constant air volume control technology so that they can maintain constant air volume within a specific range of pipeline resistance.



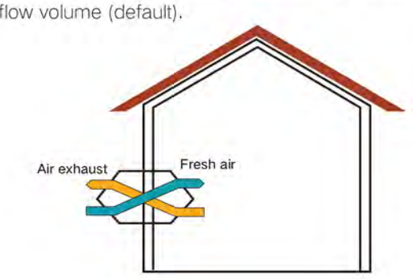
》Free cooling: When outdoor temperature is lower than the set temperature, units can automatically introduce the fresh outdoor air to make the room cooler. In transition season, free cooling can always be valid; under large temperature difference of day and night in summer, the free cooling mode can also be activated to cool down the indoor temperature.



Example of cooling during intermediate season | Example of cooling during summer

ERV+DX COIL

》Multiple air supply modes: Positive pressure air supply: Different air flow volume can be set for the fresh air side and air discharge side to keep the indoor side under minor positive pressure, which will help guarantee room cleanness; Negative pressure air supply: Different air flow volume can be set for the fresh air side and air discharge side to keep the indoor side under minor negative pressure, which will help prevent leakage of indoor pollutants. Balanced air supply: The fresh air side and air discharge side can be set with the same air flow volume (default).

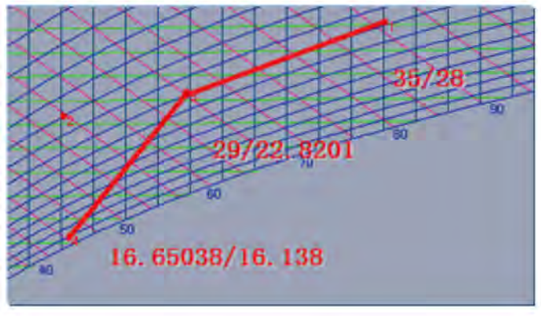


》Multiple operation modes:

Total heat exchange mode: There is heat exchange at the fresh air side and air discharge side for efficiency energy recovery. By-pass mode: Ventilation without heat exchange. Air discharge mode: Only air discharge side is turned on for ventilation.

》Linked control: Units can be connected to other indoor units in the same CAN and HBS networks for linked control.

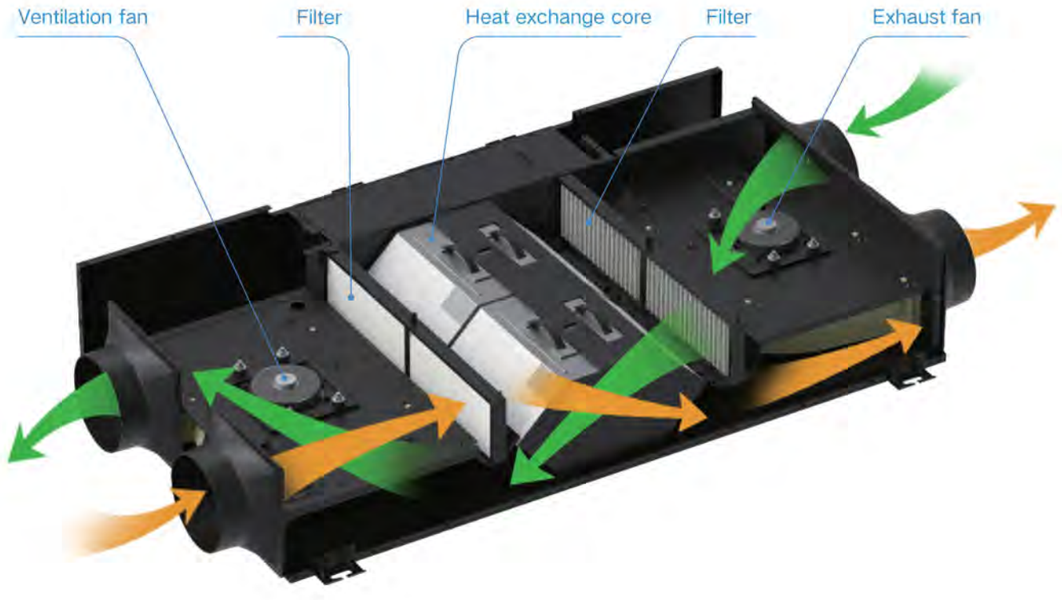
》Cooling and heating functions: With fan coils, they have cooling and heating functions like common air conditioners. For example: Under the condition of 35℃(RH60%) for outdoor temperature, 27℃(RH50%) for indoor temperature and 73% of heat exchanger efficiency, when the fresh air passes through the core heat exchange, and it reaches about 29℃ , and then the fresh air is further cooled down and dehumidified by the evaporator, so that the fresh air reaches the appropriate temperature and then sent into the room.



Model				DBVG-VDR5PH/SA-S	DBVG-VDR8PH/SA-S	DBVG-VD/R10PH/SA-S
Rated voltage			V	220-240		
Rated frequency			Hz	50/60		
Cooling capacity			kW	8.5	12.0	14.5
Heating capacity			kW	4.0	10.6	12.0
Power input			kW	0.27	0.44	0.64
Current input			A	1.65	2.73	3.86
Indoor unit	Airflow volume		CFM	294	471	589
			m³/h	500	800	1000
	ESP	Rated	Pa	150	150	150
	Thermal exchange efficiency		%	73	74	73
	Sound power level		dB	55	59	62
	Dimension (W×D×H)	Outline	mm	1700×880×340	1800×1185×390	1800×1185×390
		Package	mm	1988×1138×535	2110×1440×567	2110×1440×567
	Net weight/Gross weight		kg	120/175	158/225	158/225
Ventiduct	Outer diameter		mm	200	250	250
Loading quantity		20'GP/40'GP/40'HQ	unit	20/44/44	16/32/32	16/32/32
Standard wired controller				XE70-33/H		

ERV

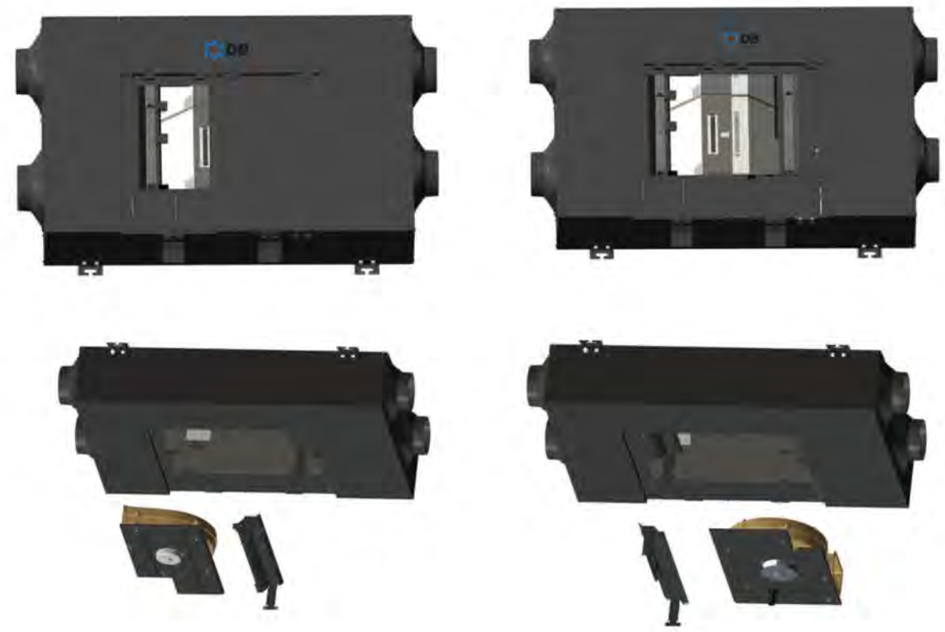
ERV unit is an air terminal treatment equipment that can purify outdoor fresh air and exchange energy with indoor exhaust air. The unit consists of filter, total heat exchanger and fan. In the total heat exchanger, outdoor fresh air and indoor exhaust air exchange heat and moisture through counter-flow heat exchange, effectively reduce the load of fresh air, and finally send it into the room through specially optimized high static pressure fan.



ERV

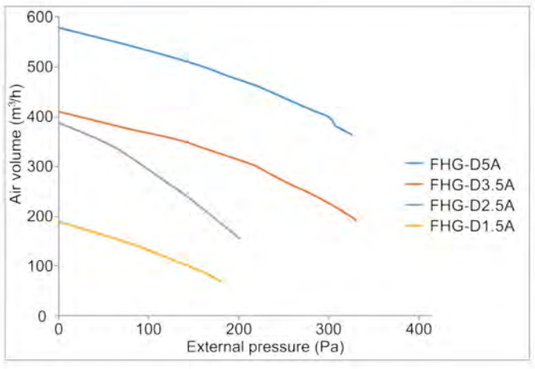
● Ultra-thin Body, Convenient Maintenance

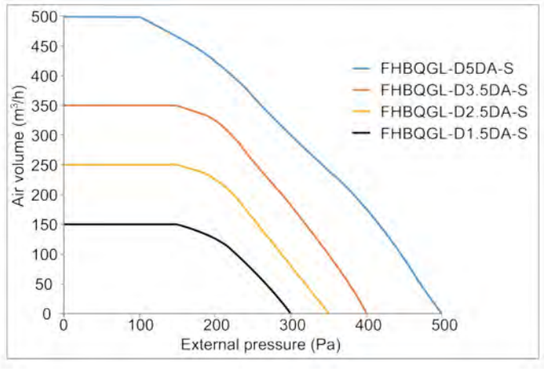
Thickness of the unit is 220mm/240mm, the ultra-thin body design meets the requirement that the unit can be installed on a ceiling in a narrow space; the unit adopts lower maintenance port, which is convenient for unit maintenance.



● Constant Air Volume Control Technology

The unit adopts brushless DC motor stepless speed regulation and constant air volume control technology. Within a certain range of external static pressure, the unit judges through independent operation to keep the fresh air volume output constant.



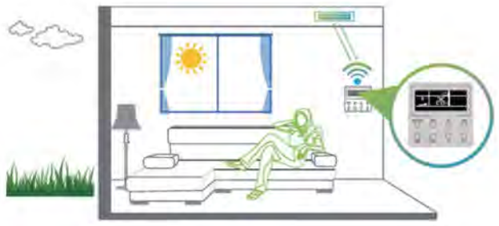


● Multiple Control Methods

The unit can realize linkage control with multi VRF indoor unit (It needs to connect multi VRF system for this function).

> Manual Control

By using the standard wired controller, users can manually control the start and stop of fresh air unit.



> Linkage Control

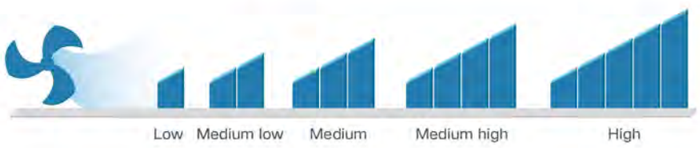
After connecting the fresh air unit to Gree multi VRF indoor unit through communication wire, set the wired controller of fresh air unit to linkage control mode. When the multi VRF air conditioning system is turned on, the fresh air unit automatically turns on to purify the indoor air; when the multi VRF air conditioning system is turned off, the fresh air unit automatically turns off, worry-free and energy-saving.

● Two-way Flow Heat Recovery

The unit sends outdoor fresh air into the room, and at the same time exhausts the indoor dirty air. The fresh air flow and the exhaust air flow conduct counter-flow heat exchange inside the total heat exchanger to efficiently recover the exhaust energy, reduce the fresh air load, and save energy.

● Multi-step Air Volume Control

The unit has five-step air speed for adjustment to meet the fresh air requirements of different houses and different piping sizes.



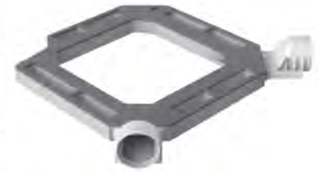
Model			DBVG-FHBQGL-D1.5DA-S	DBVG-FHBQGL-D2.5DA-S	DBVG-FHBQGL-D3.5DA-S	DBVG-FHBQGL-D5DA-S
Rated voltage		V	220-240	220-240	220-240	220-240
Rated frequency		Hz	50/60	50/60	50/60	50/60
Power input		kW	0.05	0.1	0.15	0.3
Current input		A	0.35	0.7	1	1.9
Indoor unit	Airflow volume	CFM	88	147	206	294
		m³/h	150	250	350	500
	ESP Rated	Pa	100	100	100	100
	Thermal exchange efficiency	%	78	75	65	75
	Sound power level	dB(A)	39	44	49	55
	Dimension (W × D × H) Outline	mm	1160 × 700 × 220	1160 × 700 × 220	1200 × 785 × 240	1385 × 785 × 240
	Dimension (W × D × H) Package	mm	1468 × 873 × 285	1468 × 873 × 285	1528 × 973 × 305	1711 × 973 × 305
	Net Weight/Gross weight	kg	50/58.5	50/58.5	60/70.5	71.5/82.5
Ventiduct	Outer diameter	mm	160	160	160	200
Loading quantity	20'GP/40'GP/40'HQ	set	82/172/195	82/172/195	57/121/140	54/117/131

Model			DBVG-FHBQGL-D1.5DA-T	DBVG-FHBQGL-D2.5DA-T	DBVG-FHBQGL-D3.5DA-T	DBVG-FHBQGL-D5DA-T
Air flow volume		m³/h	150	250	350	500
ESP		Pa	100	100	100	100
Temperature exchange efficiency		%	80	75	76	73
Power supply		V/Ph/Hz	208-230/1/60 220-240/1/50	208-230/1/60 220-240/1/50	208-230/1/60 220-240/1/50	208-230/1/60 220-240/1/50
Power input		kW	0.050	0.105	0.155	0.250
Sound power level		dB(A)	43	50	55	57
Dimension (W×D×H)	Outline	mm	1160×700×220	1160×700×220	1200×785×240	1385×785×240
	Package	mm	1468×873×285	1468×873×285	1528×973×305	1711×973×305
Net weight/Gross weight		kg	50/58.5	50/58.5	60/70.5	71.5/82.5
Loading quantity	40'GP/40'HQ	unit	172/195	172/195	121/140	117/131
SEC class		-	A	B	-	-

Fresh Air Accessories

● 8% ~ 10% of outdoor fresh air can be effectively introduced.

● All-foam design, light and durable, used with 360° air discharge cassette type indoor unit, simple and convenient to install; double air inlets, using pressure difference principle, can automatically introduce fresh air without a motor, improving indoor unit air quality.



Model			DBVG-XF150A-T
Fresh air intake volume		%	10
Dimension (W × D × H)	Outline	mm	834 × 834 × 60
	Package	mm	873 × 873 × 180
Dimension of the connection		mm	150
		Pcs	2
Net weight/Gross weight		kg	2.7/7.7

Note: This unit should be used with 360 Air Discharge Cassette Indoor Unit.

High-efficiency Filter

●The high-efficiency filter can effectively remove PM2.5. One pass purification efficiency≥90%

● Small air resistance and less volume attenuation.

● With 5 disassembly directions for convenient replacement and installation.

Filter model	Applicable for the following high static pressure duct type IDU
FKH01A(H)-T	DBVG-ND22~50PHS/B-T
FKH02A(H)-T	DBVG-ND56~80PHS/B-T
FKH03A(H)-T	DBVG-ND90~180PHS/B-T

Controller Function Lineup

Function	Classic wired controller	Access control wired controller	Color screen wired controller	Large matrix wired controller	Remote controller
	DB-XK46	DB-XK79	DB-XK55	DB-XE70-33/H	DB-YAP1F
Dimensions (mm)	112×112	86×86	102×86	112×112	/
Display	Negative segment LCD	Negative segment LCD	TFT LCD	Matrix LCD	Positive segment LCD
Backlight	√	√	√	√	×
Group control (one controller controls 16 IDUs at most)	√	√	√	√	/
Subsidiary controller (one IDU can be controlled by two wired controllers)	√	√	×	√	/
Mode	√ (auto, cooling, drying, fan only, heating, floor heating, 3D heating, space heating)	√ (auto, cooling, drying, fan only, heating, floor heating, 3D heating, space heating)	√ (auto, cooling, drying, fan only, heating, floor heating, 3D heating, space heating)	√ (auto, cooling, drying, fan only, heating, floor heating, 3D heating, space heating)	√ (auto, cooling, drying, fan only, heating)
Fan speed	√ (7 speeds: auto, low, medium-low, medium, medium-high, high, turbo)	√ (7 speeds: auto, low, medium-low, medium, medium-high, high, turbo)	√ (7 speeds: auto, low, medium-low, medium, medium-high, high, turbo)	√ (7 speeds: auto, low, medium-low, medium, medium-high, high, turbo)	√ (7 speeds: auto, low, medium-low, medium, medium-high, high, turbo)
Clock display and setting	√	√	√	√	√
Countdown timer	√	√	√	√	×
Clock timer	√	√	√	√	√
Weekly timer	×	×	√	√	×
Child lock (buttons lock)	√	√	×	√	√
Up&Down swing	√	√	√	√	√
Left&Right swing	√	√	√	√	√
Sleep	√	√	√	√	√
Filter cleaning indication	√	√	√	√	×
Save	√	√	√	√	×
X-Fan	√	√	√	√	√
Quiet	√	√	√	√	×
Absence (8℃ heating)	√	√	√	√	√
Low-temperature drying	√	√	√	√	×
Access detection	×	√	×	×	×
Unit parameters query	√	√	√	√	×
Unit parameters setting	√	√	√	√	×
Error display	√	√	√	√	×
Remote signal	√	√	√	√	×
Power-off recovery	√	√	√	√	×
Indoor temperature query	√	√	√	√	×
I-Feel	/	/	/	/	√
Set back	×	√	×	×	×
Independent swing for cassette units	×	×	×	√	×

Note: √ means available; × means not available; / means not applicable

Controller Function Lineup

Function	Centralized controller CE52-24/F(C)	E-Smart zone controller CE54-24/F(C)
Maximum number of controllable indoor units	255	32
Maximum number of controllable systems	16	16
Screen size	7 inch	4.3 inch
Screen resolution	1280×800	480×272
Touch mode	Capacitor touch	Capacitor touch
Power supply	100-240V AC	100-240V AC
Dimensions (WxHxD) (mm)	185×128×11	128×86×11
On/Off setting	√	√
Mode setting	√	√
Temperature setting	√	√
Fan speed setting	7 fan speeds	7 fan speeds
Swing setting	√	√
Shield setting	√	√
Ambient temperature display	√	√
℃/℉ display	√	√
DST	√	×
Clock display	√	√
Authority management	√	√
Group management	√	√
Schedule management	√	√
Special schedule	√	×
Emergency stop	√	×
Parameter query	√	√
Engineering setting	√	√
Error records	√	√
IDU sort	√	×
Name and icon setting	√	√
Run time	√	×
Data export	Support TF card export	×
Language	• English • Simplified Chinese • Traditional Chinese • Spanish • French • Portuguese • German • Turkish • Russian • Italian • Dutch	• English • Simplified Chinese • Traditional Chinese • German
Applicable units	Air conditioner Water heating units Floor heating units Fresh air units	Air conditioner

Note: √ means available; × means not available; / means not applicable

Controllers

Controller DB-YAP1F

- Can be switched in auto, cooling, dry, fan and heating modes;
- Besides turbo mode, 6 fan speeds can be set;
- Up & down swing and left & right swing;
- Available functions: child lock, drying, health, ventilation, turbo, sleep, light, absence, I-feel and timer;
- Clock display and indoor/outdoor ambient temperature viewing functions;
- I-feel function can be set for the unit. When I-feel is turned on, the unit can monitor the temperature at the location of user (around the remote controller) at real time to adjust indoor temperature for improving the comfort.

Wired Controller DB-XK46

- Moisture-proof design;
- LCD with black background and white words; touch buttons;
- Clock can be displayed and set; 24 hours timer setting for on/off;
- 7 fan speeds, up & down swing and left & right swing;
- Can be switched in auto, cooling, dry, fan, heating, floor heating,3D heating and space heating operation modes;
- Master and slave wired controllers can be set; simultaneous control over several IDUs is available; can simultaneously control 16 sets of IDUs at most;
- Available functions: sleep, ventilation, quiet/auto quiet, light, energy saving,drying, memory, low-temperature dehumidifying, absence in heating, filter cleaning reminder, etc.;
- Detect ambient temperature; receive infrared remote controller signal;
- With project parameters viewing and setting functions.

Wired Controller DB-XK79

- Small and fashionable appearance with thickness only of 12mm, backlighting LCD with black background and white words, touch buttons;
- Clock can be displayed and set in countdown and clock timer;
- 7 fan speeds, up & down swing and left & right swing;
- Can be switched in auto, cooling, dry, fan, heating, floor heating, 3D heating and space heating operation modes;
- Master and slave wired controllers can be set; simultaneous control over several IDUs is available; can simultaneously control 16 sets of IDUs at most;
- Detect ambient temperature; receive infrared remote controller signal;
- With project parameters viewing and setting functions;
- Door control system can be connected, and door card can control ON/OFF of air conditioner;
- Sleep, ventilation, quiet/auto quiet, light, energy saving, drying, memory, low-temperature dehumidifying, absence in heating, and filter cleaning reminder functions can also be set.

Wired Controller DB-XE70-33/H

- Elegant and concise appearance;
- Touch buttons with back lighting LCD;
- Detect ambient temperature precisely;
- Chinese and English display can be switched;
- With project parameters viewing and setting functions;
- 7 fan speeds, up & down swing and left & right swing;
- Applicable to multi VRF air conditioner and fresh air unit with evaporator;
- With service hotline inquiry and after-sales phone number record functions;
- With weekly timer function, multiple weekly timer can be set; under weekly timer function, mode, temperature and fan speed can be preset;
- Master and slave wired controllers can be set; simultaneous control over several IDUs is available; can simultaneously control 16 sets of IDUs at most;
- Sleep, ventilation, quiet/auto quiet, light, energy saving, drying, memory, low-temperature dehumidifying, absence in heating, and filter cleaning reminder functions can be set.

Wired Controller DB-XK55

- With project parameters viewing and setting functions;
- HD color dot matrix LCD, good-looking and user-friendly;
- 7 fan speeds, up & down swing and left & right swing;
- Detect ambient temperature;
- Capacitive touch screen, and supports infrared remote control signal reception;
- Can be switched in auto, cooling, dry, fan, heating, floor heating, 3D heating and space heating operation modes;
- Master and slave wired controllers can be set; simultaneous control over several IDUs is available; can simultaneously control 16 sets of IDUs at most;
- Sleep, ventilation, quiet/auto quiet, light, energy saving, drying, memory, low-temperature dehumidifying, absence in heating, and filter cleaning reminder functions can be set;
- Complete timer function, three weekly timers and one countdown can be set simultaneously;
- Under weekly timers function, mode, temperature and fan speed can be preset;
- Simple and decent appearance, bottom case 86 box design for convenient engineering installation.

Commissioning Tool CE42-24/F(C) (Debugger)

- Built-in 4GB storage space;
- 4.3-inch color touch screen LCD;
- Simulate indoor and outdoor unit;
- With complete unit debugging function;
- With indoor unit control and engineering setting function;
- Outdoor unit program upgrade, indoor unit program upgrade;
- With unit decryption function and barcode two-dimensional code display;
- Communication data can be saved and exported by connecting to PC;
- With system status viewing, outdoor unit status viewing, indoor unit status viewing function;
- The single interface is compatible with CAN and RS485 communication, which can automatically identify the communication type.

Centralized Controller CE52-24/F(C)

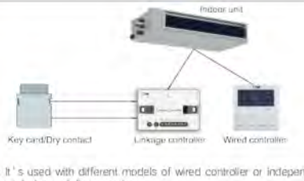
- Elegant and fashionable appearance;
- Color LCD, fine display and true color;
- 7-inch capacitive touch screen for easy operation;
- Up to 255 units can be centrally controlled;
- Connectable with network of indoor units or outdoor units;
- Independent power supply in 100~240V wide voltage range;
- Embedded installation in wall with projecting thickness only of 11mm;
- With project setting, parameter viewing, malfunction record and access management functions;
- Shielding function of single unit, group and all IDUs (shielding on/off, mode, temp setting, etc.), long-distance control at will; Provide naming of indoor units, selection of icons and personalized settings of centralized controller (setting background, back-light, etc.);
- With various functions: centralized control (control all indoor units), group management (support DIY grouping), schedule management (setting of several schedules, support special schedule setting such as holiday) and single indoor unit control (on/off, mode, temp setting, fan speed, quiet, swing control, etc.).

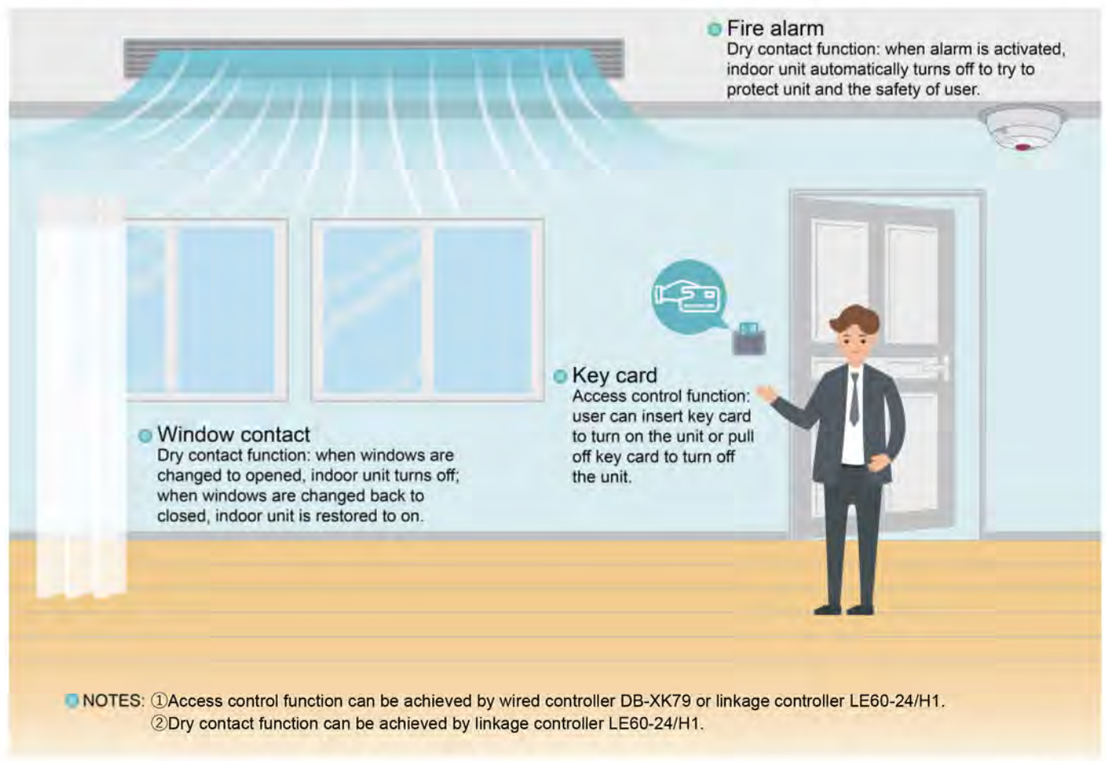
E-Smart Zone Controller CE54-24/F(C)

- Colorful LCD;
- Elegant and fashionable appearance;
- 4.3-inch capacitive touch screen for easy operation;
- Support maximum 32 indoor units, with powerful function;
- Indoor or outdoor unit network can be connected, simple and flexible;
- Embedded installation in wall with projecting thickness only of 11mm;
- 100~240V super wide voltage for independent power supply, stable and reliable;
- Support naming for indoor units, and icon selection, realizing individuation management;
- With long-distance shield function (shield on/off, mode, temperature, etc.) for single unit, group and all indoor units;
- With functions of engineering setting, parameters view, malfunction view and authority management, easy for debugging and maintenance;
- With single indoor unit control (including general functions and advanced functions), group indoor units control (including general functions and advanced functions), group management (supporting DIY group), single indoor unit and group indoor units timer functions; (general functions: ON/OFF, Mode, Temperature, Fan, Swing, etc; advanced functions: Save, Sleep, Absence, Quiet, Turbo, etc.).

Key Card Interface Modules

Indoor unit connects access control system through linkage controller LE60-24/H1 or wired controller XK79 to realize unit off by removing the access card or unit on by inserting the access card, which is suitable for occasions such as hotel, where the access control linkage is needed to control the air conditioner.
Moreover, linkage controller LE60-24/H1 has two groups of dry contact signal interface, which can connect the switch signal of fire alarm or window to turning on or turning off indoor unit.

Model	Linkage Controller LE60-24/H1	Wired Controller **DB**-XK79
Appearance		
Wiring diagram	 Note: It's used with different models of wired controller or independently connects indoor unit for operation.	
Access control interface	AC100-240V/DC5-24V	AC100-240V/DC5-24V
Dry contact interface	2 groups	Null
Dimensions(H×W×D)(mm)	63×94.5×29	86×86×12
Power supply	18V DC(supply power by indoor unit)	
Applicable range	All series of VRF	



DB-cloud

DB-cloud is a compact WiFi controller, which connects DB-cloud to the corresponding interface of any one of the multi VRF indoor units. Use mobile phone to download the "Dunham-Bush" APP; after simple network configuration, themulti VRF air conditioner can be easily controlled by the mobile phone anytime and anywhere. One set of multi VRF system only requires one DB-cloud to realize the control of all indoor units under the system via mobile phone.

- Easy control of on-off, mode and temperature.
- Ventilation, drying, sleep, energy saving functions can be set.
- 10 on/off preset appointments are available, support weekly timer function.
- The above functions can be controlled by voice through the mobile APP (excluding preset function).
- 8-step fan speed control (quiet, automatic, low, medium and low, medium, medium and high, high, turbo).

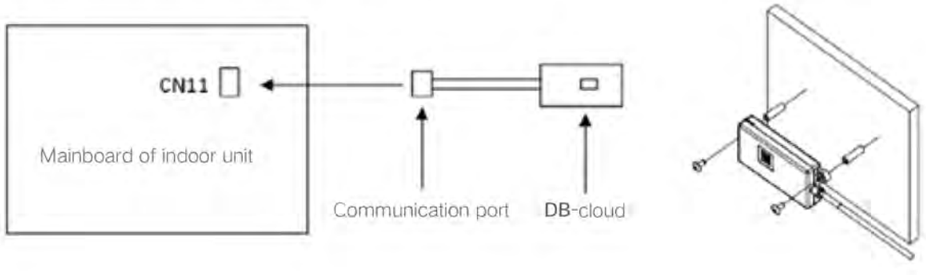
One DB-could can realize the control of up to 80 sets of indoor units in a system

> "Dunham-Bush" APP Control

The "Dunham-Bush" APP of mobile phone can easily control the air conditioner anytime and anywhere. It can be controlled in the house or remotely when going out. You are no longer worried about where to find the remote controller or forget to turn off the air conditioner when you go out.

> Small Size and Convenient Installation

DB-cloud is small in size and flexible in installation. You can connect the DB-cloud to the CAN interface of any indoor unit in the multi VRF system (it is recommended to be close to the router) and fix it.



VRF Selector Ultimate

A model selection system is a necessary tool for the sales of the VRF system in the overseas market. In order to meet the demand of the overseas market for the model selection system, the competitive strength of Dunham-Bush productsin the overseas market has been improved. Dunham-Bush provides clients with intelligent, fast and multivariate modelselection systems.

Intelligent Model Selection

1) The system will take multiple aspects into consideration to provide clients with the optimal plan by combining performance, noise, comfort, reliability, cost, etc.

2) It can calculate according to user demand, ambient temperature, using location, static pressure, etc. to recommend the suitable IDU, ODU and pipe arrangement. It will check by combining the collocation rate, pipe arrangement, etc. of the whole system, and automatically adjust the unit model to get the optimal model selection plan.

3) Using habit and using standard differs in different regions. The intelligent model selection system will conduct a special process according to metric/inch system, unit parameters, different language systems in different regions.

4) It will conduct automatic checking for the whole system. If anyone of the conditions cannot satisfy the user demand, the software will automatically calculate to find a suitable unit and pipe arrangement.

Fast Model Selection

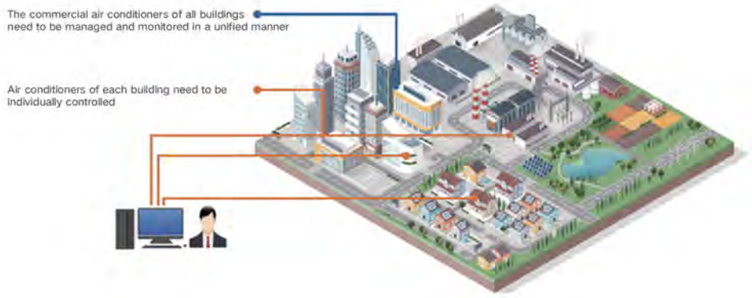
The software can provide users with audio-visual model building experience via a visible modeling method. Through the intelligent fast connection, multiple parts of VRF can be correctly and fast linked, which can greatly improve the modeling efficiency.

Multivariate Model Selection

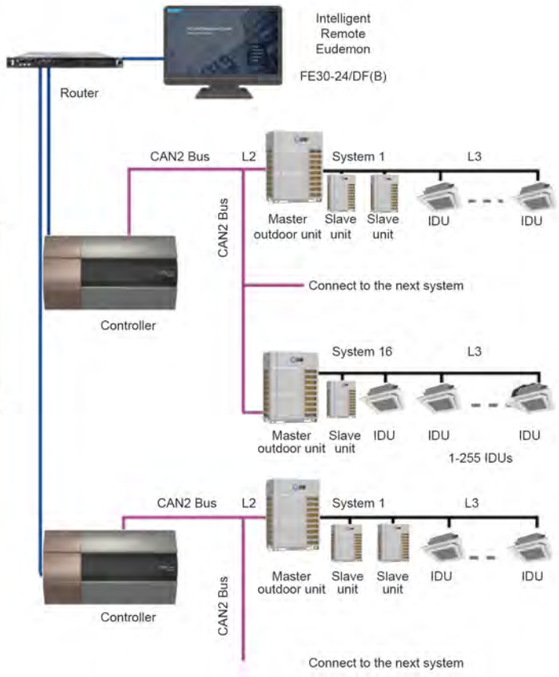
The model selection system will launch multiple model selection terminal applications around the core of model selection parameter data according to different user groups. The model selection data can achieve data resource sharing on the basis of a cloud server, which can provide different terminal users with standard and professional model selection service.

Intelligent Remote Eudemon

Intelligent Remote Eudemon provides intelligent operation and maintenance services based on the cloud platform, meeting the demands of integrated monitoring of equipment in multiple locations.



Intelligent Remote Eudemon adopts world-leading CAN+ multi VRF unit's communication technology and combines with distributed processing methods to ensure that the system has the characteristics of high availability, easy expansion, and easy networking, and can meet the air conditioning monitoring requirements in multiple scenes.



System composition:
(1) Computer
Install monitoring software
(2) Controller
Connect the unit to realize communication between the unit and computer
(3) Router (switch)
Network equipment

Notes:
(1) One controller can connect 16 systems or 255 sets of indoor units;
(2) The communication bus between the unit systems is CAN2 bus.

Intelligent Assistant

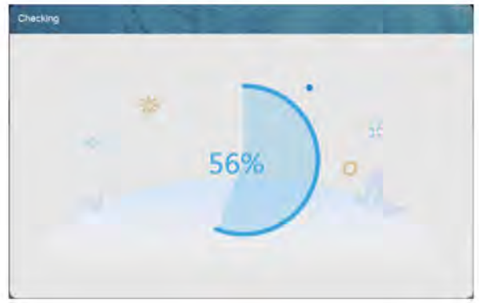
One-stop Debugging

Support automatic one-stop debugging methods such as one-button debugging and code scanning debugging to achieve automatic synchronization matching, reduce debugging difficulty, and improve efficiency and accuracy.

Unit Controller

Intelligent Physical Examination

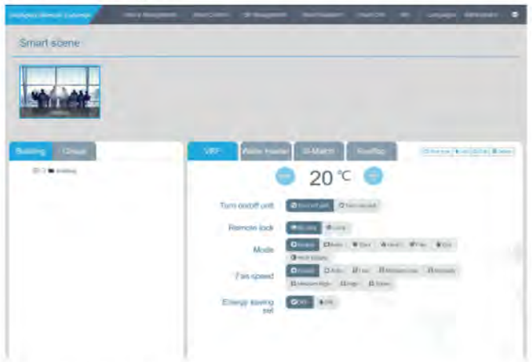
The equipment status can be understood directly and the user can control the health of the unit by themselves.



Intelligent Control

Smart Scenes

The user can preset a set of parameters according to the needs of life and work (similar to the scene mode of a mobile phone), and then the user can enable and switch with one key, without setting parameters one by one.



Soft Start

Delay start of equipment in batches to avoid the impact to the grid in centralized control.

Temperature Field

Realize stepped temperature field, gradually adjust the temperature area, prevent sudden cooling or heating, and stay away from air conditioning sickness.

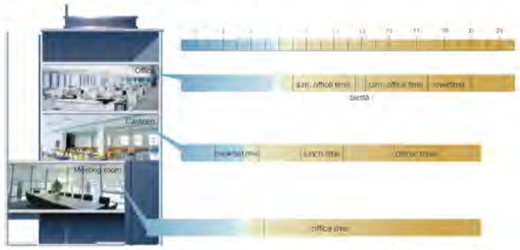
Smart Operation and Maintenance

VIP Exclusive Service

Independent VIP group professional customized service to avoid misoperation and provide a more comfortable environment for the VIP.

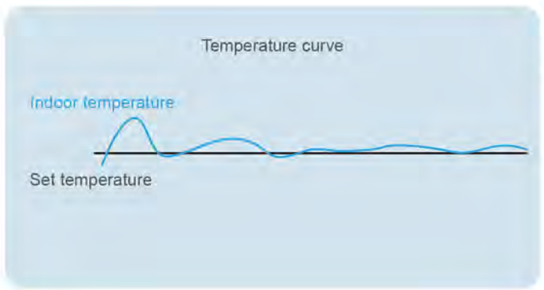
Schedule Management

Set schedules for different regions and different equipment, execute preset commands automatically, and reduce waste of time caused by repeated operations.



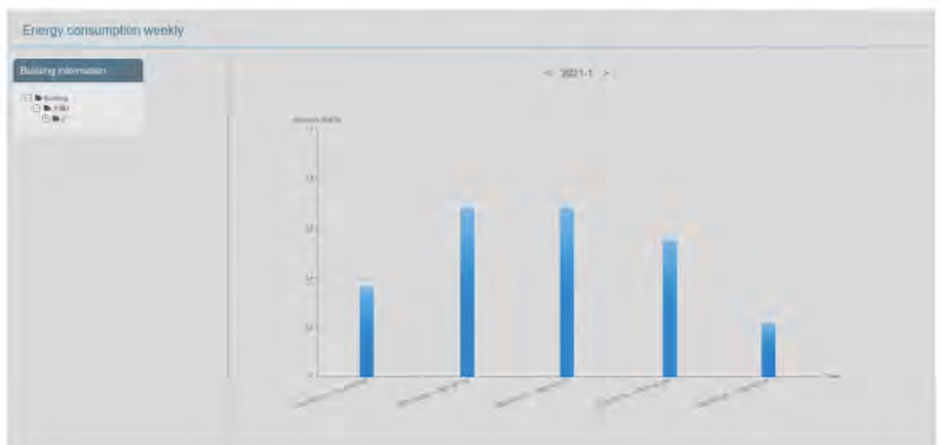
Green Assistant

Perform statistical analysis on the operating time, set temperature, and indoor temperature, and acquire the actual running status of the equipment in time.



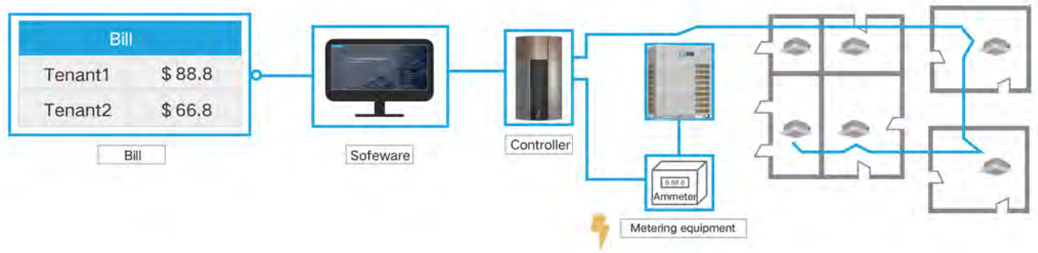
Weekly Energy Consumption Report

Electricity statistics are carried out on a weekly and monthly basis. The background color is used to reflect the electricity consumption, and the user can accurately control the power consumption of the unit.



Intelligent Billing

Intelligent Billing is a solution to power consumption calculation and billing specialized for VRF units. This system adopts Gree ' s unique calculation method that makes the billing more reasonable. In design, it ' s tailored to the features of engineering construction, making the installation less difficult. It can be widely applied in shopping centers, apartment blocks, villa clusters or other commercial or residential occasions in different sizes and for different purposes.



Billing Management

Properly distribute the electricity automatically according to ON/OFF time, mode, set temperature, indoor ambient temperature, outdoor ambient temperature etc.; provide detailed bill, operational details, etc.

Flexible Bill Export

Provide a variety of bill export modes to achieve free choices and convenient management of bill cycle, distribution mode and bill type.

Bill for Air Conditioner				
Room	601			
Time	2016/08/01-2016/08/31			
No.	Equipment	Operation/KWH	Standby/KWH	Subtotal
1	IDU 1	12.5	0.55	13.05
2	IDU 2	11.6	0.21	11.81
3	IDU 3	13.2	0.36	13.56
Total				38.42

Compatible to Different Electric Meters

No.	Manufacturer	Electric Meter Model	Country of Origin	Satisfactory Regions (Reference)
1	ENTES	EPR-04S-96	Turkey	Turkey, Middle East
2	WattNode	WNC-3D-240-MB	America	North America, Latin America
3	Siemens	PAC3200	Germany	Russia, Europe, Asia Pacific
4	Schneider	iEM3255	France	Australia, Europe
5	Wasion	DTS343	China	China

Building Protocol Gateway

Modbus Gateway

Name	Model	Key Parameters	Application	Photo
VRF Protocol Gateway	DB-ME30-24/D1(BM)	Capacity: 255 sets of indoor unit (within 16 systems) Protocol: Modbus RTU、Modbus TCP	It is generally used in large buildings such as office buildings, commercial streets, hospitals, and rail transits to connect to BAS to achieve centralized management of air conditioner.	
Modbus Gateway (Mini)	DB-ME30-24/E6(M)	Capacity: 128 sets of indoor units (within 16 systems) Expansion port: No Protocol: Modbus RTU	It is generally used for small and medium-sized projects such as villas and apartment buildings. It is used for docking with BAS systems or smart home systems. Since there is no I/O interface, the capacity is small, and it is a low-cost solution.	
H2M Gateway	DB-ME31-33/EH1(M)	Capacity: 1-16 sets of indoor units Expansion port: No Protocol: Modbus RTU	Generally, it is an intelligent solution for hotel and household environment. The indoor unit directly connects to the controller of the hotel room RCU or the residential smart home system.	

BACnet Gateway

BACnet features high communication efficiency, flexible protocol and convenient debugging.
Dunham-Bush BACnet gateway can realize the conversion of multi VRF unit' s CAN protocol data into BACnet protocol data,as a bridge for data exchange between air conditioner and BAS.

Name	Model	Key Parameters	Application	Photo
VRF Protocol Gateway	DB-ME30-24/D1(BM)	Capacity: 255 sets of indoor unit Protocol: BACnet	Mainly used in the docking of medium and large building automatic control projects.	

KNX Gateway

KNX gateway can realize the conversion of multi VRF indoor unit HBS protocol data to KNX protocol data. It is mainly used in hotels, households and other environments to achieve docking with room control units or smart homes.

- Standard KNX equipment, easy to install and configure
- Bus power supply, carrier communication
- Preset multiple scene modes and support user self-editing
- Support the monitoring of equipment's status information and error information
- CE, ETL, KNX certificates

Name	Model	Key Parameters	Application	Photo
S2S KNX Gateway	DB-ME30-24/F1(K)	Capacity: 1-16 sets of indoor units Expansion port: No Protocol: KNX	It is generally used in hotels and smart home systems to ensure that the intelligent system directly connects to indoor units and realizes equipment integration in a small area.	

Intelligent Debugging Software

DBVG6 offers intelligent debugging software to end users for faster construction needs.

Monitoring Functions

- Fully control the operation status of each device of the system;
- Hover the mouse over the parameter to display its remarks.
- The online devices will be displayed in a tree structure;
- Display the information of air conditioner in divided regions;
- Each display region can be moved or concealed;
- Display updated status of units in real time.

Control Functions

- Control the operation of unit as you like;
- Comprehensive control of outdoor unit, indoor unit, water tank, hydro box, etc.;
- Real-time display of current status or status after being controlled;
- Both single control and group control are available.

Project Debugging Functions

- One-click and automatic project debugging;
- Project debugging is arranged step by step from left to right;
- Manual intervention and skipping of some debugging phases are available.
- Green icons will be displayed for the items finishing debugging; red icons will be displayed for the items having debugging errors; light yellow icons display debugging information.

Auto Data-Saving Function

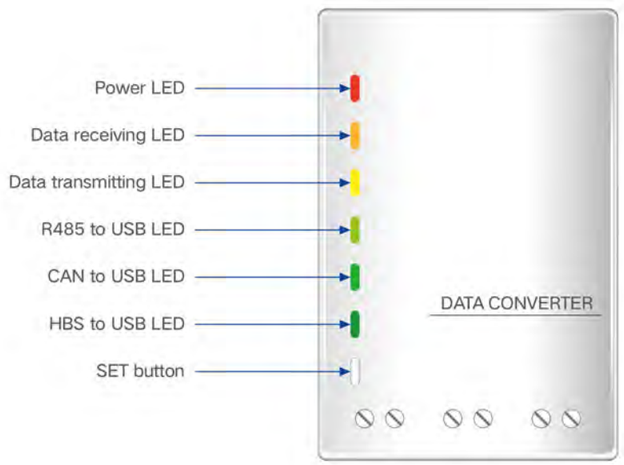
- Data will be saved automatically. Database saving path can be changed or data document can be generated repeatedly.

Step 1: Change Database Saving Path

Step 2: Database Save Setting

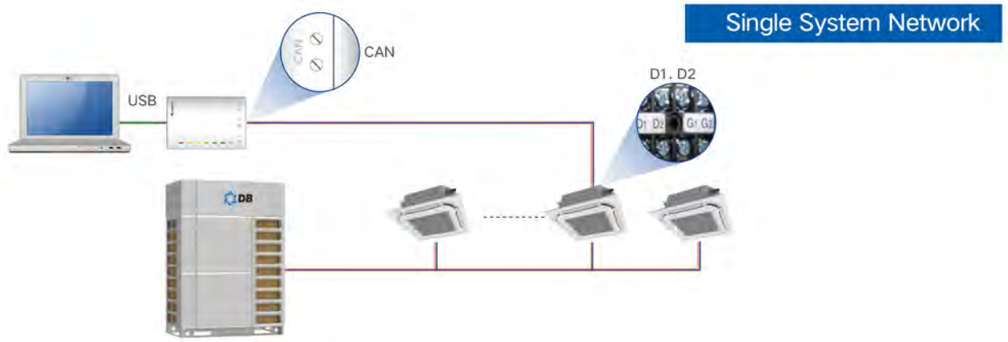
USB Data Converter

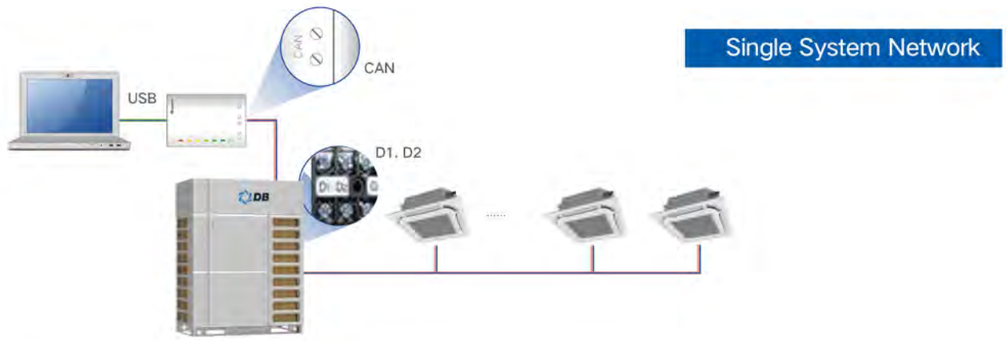
- Users can use USB data converter to freely convert CAN/HBS/RS485 data into USB data, achieving data interchange between computer and air conditioner.

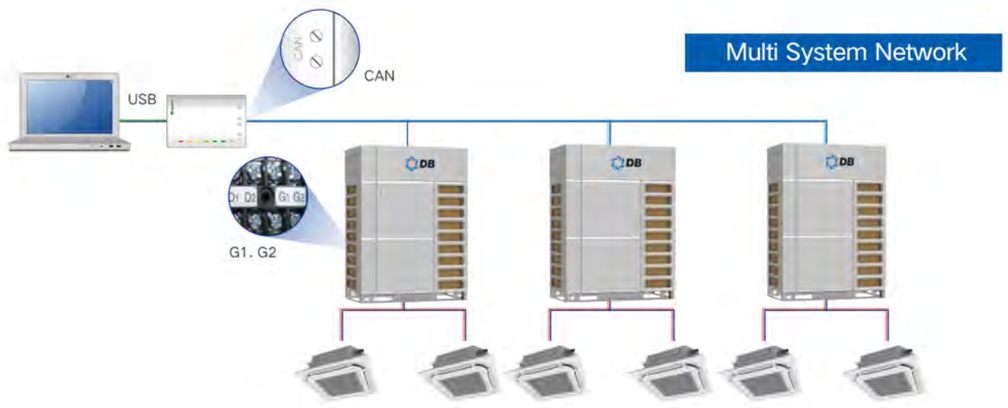


Auto Direction of Connection Way

- The wiring diagram will direct connection way automatically, so that the user can get the connection way quickly.







Outdoor Unit Protective Kit Against Snowstorm and Hail

In order to improve the adaptability of the unit in different environments, and ensure normal operation under harsh weather conditions like high winds, snowstorm and hail, the unit can be equipped with the following protective kit, including the air guide assembly at the top and the condenser protective assembly. Models for selection are:

CF898

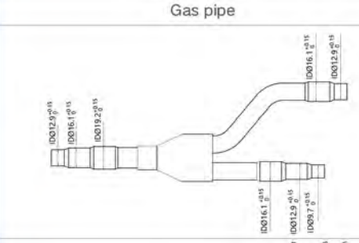
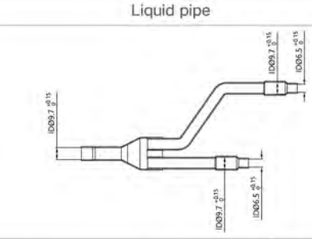
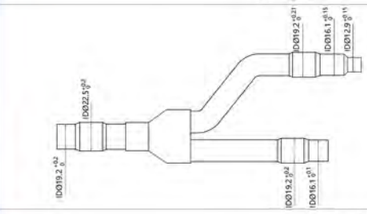
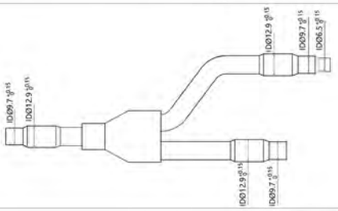
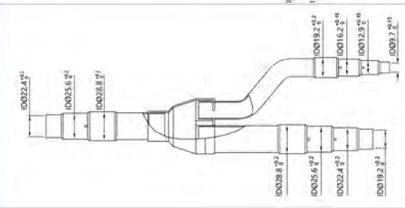
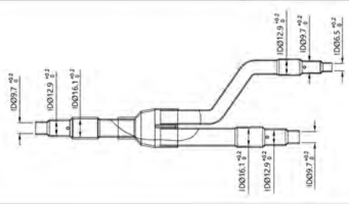
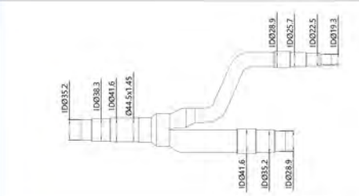
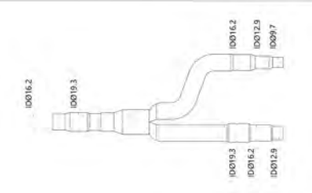
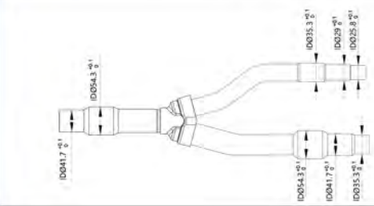
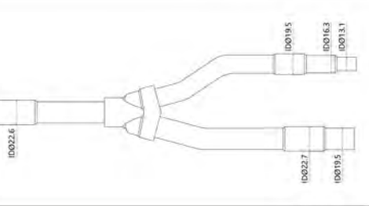
CF899

Model	CF898	CF899
Number of parts	4	5
Applicable model	DBVG-224~335WM/**	DBVG-400~680WM/**

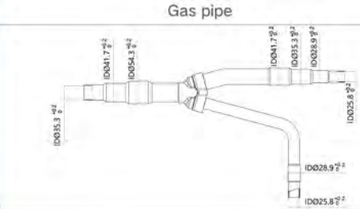
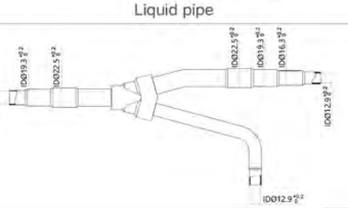
Note: The protective kit will affect the unit's performance to some extent depending on the environment. The actual performance of the unit after installation may vary.

Branching Joint (For DBVG6 units)

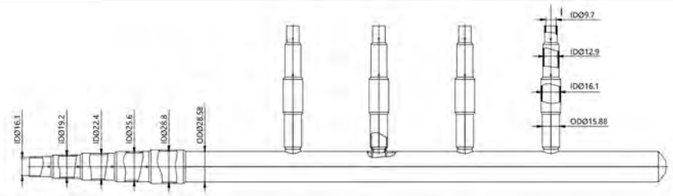
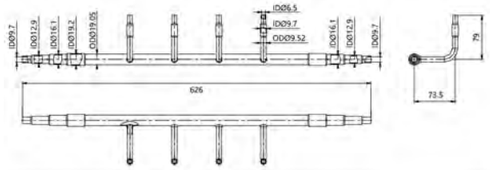
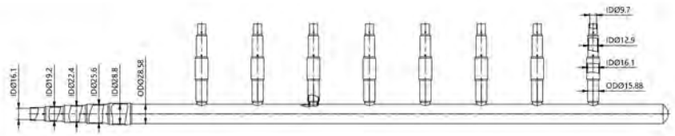
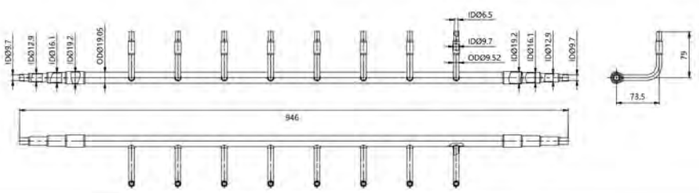
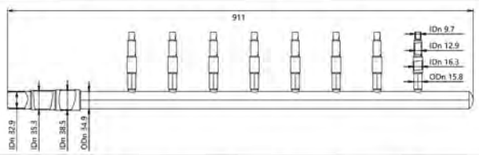
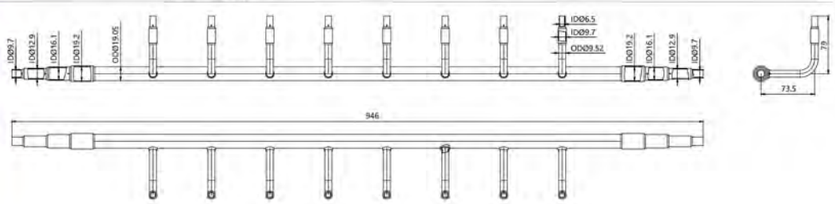
For Indoor & Outdoor Units

Model	Total capacity (xkW)	Appearance	
		Gas pipe	Liquid pipe
DBFQ01A/A	X < 20		
DBFQ01B/A	20≤X≤30		
DBFQ02/A	30 < X≤70		
DBFQ03/A	70<X≤136		
DBFQ04/A	136 < X		

For Outdoor Units

Model	Appearance	
	Gas pipe	Liquid pipe
DBML01/A		

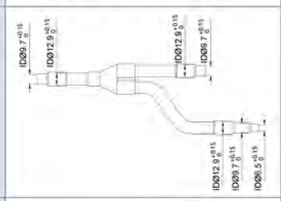
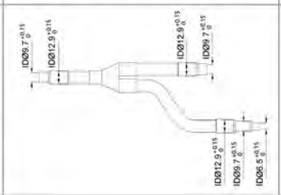
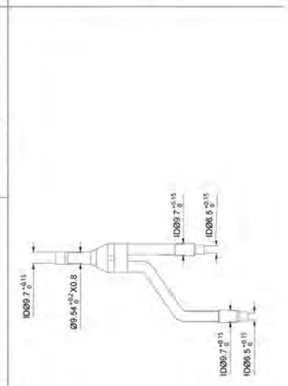
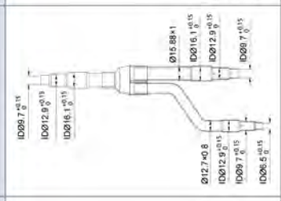
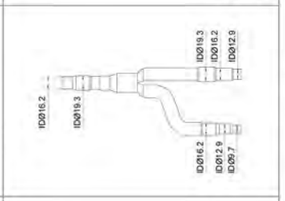
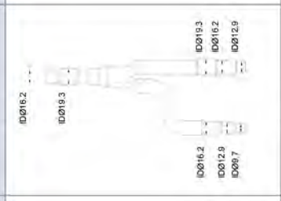
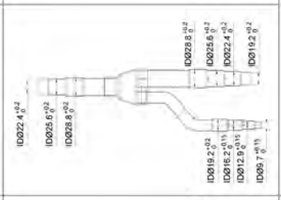
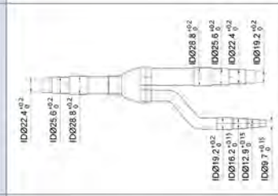
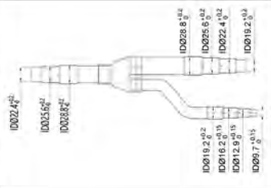
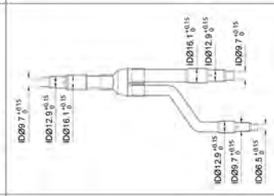
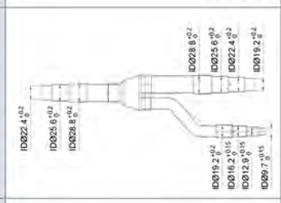
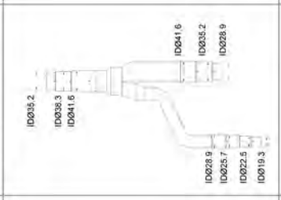
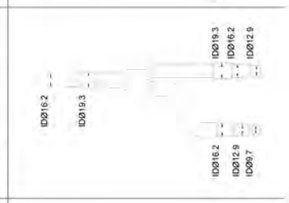
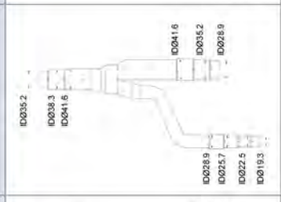
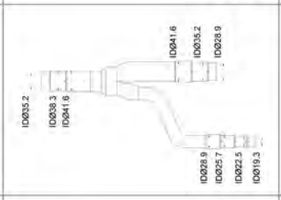
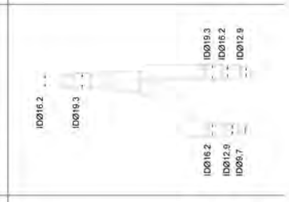
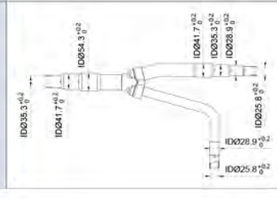
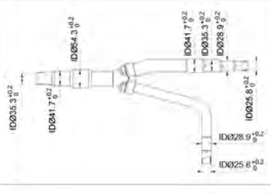
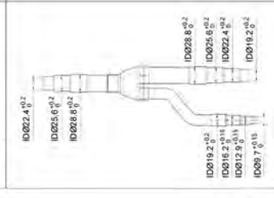
For Indoor Units

Model	Sort	blueprint
DBFQ14/H1	Gas pipe	
	Liquid pipe	
DBFQ18/H1	Gas pipe	
	Liquid pipe	
DBFQ18/H2	Gas pipe	
	Liquid pipe	

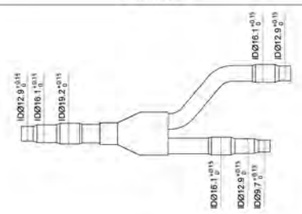
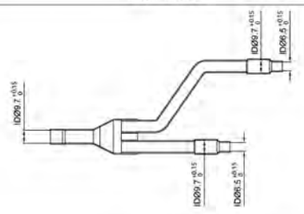
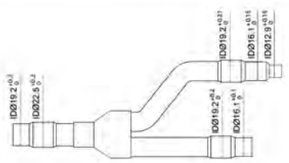
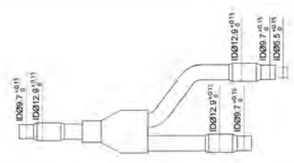
Total rated capacity of downstream indoor units X(kW)	Gas pipe(mm)	Liquid pipe(mm)	Model of manifold pipe
X≤40.0	≤Φ25.4	≤Φ12.7	DBFQ14/H1
X≤68.0	≤Φ28.6	≤Φ15.9	DBFQ18/H1
68.0＜X	≥Φ31.8	≥Φ19.05	DBFQ18/H2

Branching Joint (For DBVG6 HR units)

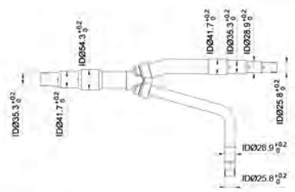
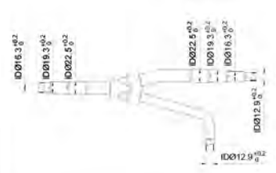
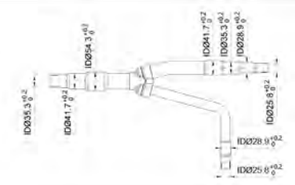
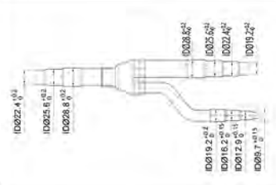
For Outdoor Units and Mode Exchanger

Model	Total capacity of the downstream indoor units X(kW)	Appearance		
		High-pressure gas pipe	Low-pressure gas pipe	Liquid pipe
DBFQ01Na/A	X≤5.0			
DBFQ02Na/A	5.0<X≤22.4			
DBFQ03Na/A	22.4<X≤28.0			
DBFQ04Na/A	28.0<X≤68			
DBFQ05Na/A	68<X≤96			
DBFQ06Na/A	96<X≤135			
DBFQ07Na/A	135.0<X			

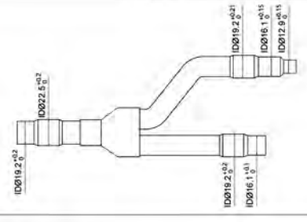
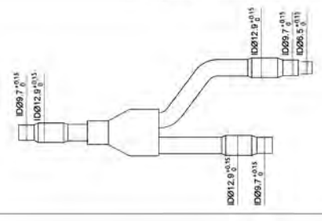
For Indoor & Mode Exchanger

Model	Total capacity of the downstream indoor units X(Kw)	Appearance	
		Gas pipe	Liquid pipe
DBFQ01A/A	X≤14.2		
DBFQ01B/A	14.2<X≤28.0		

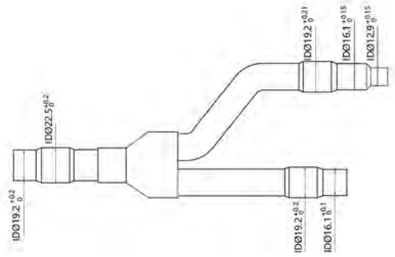
For Outdoor Units

Model	Module's capacity X(kW)	Appearance		
		High-pressure gas pipe	Low-pressure gas pipe	Liquid pipe
DBML01R	50.4≤X≤96			
DBML02R	96<X			

For GMV6 HR Mode Exchanger and Hydro Box

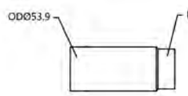
Model	Capacity of the hydro box X(kW)	Appearance	
		Gas pipe	Liquid pipe
DBFQ01B/A	X=30		

Branching Joint (For AHU KIT)

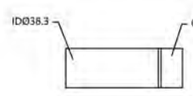
Model	Appearance
	Liquid pipe
DBFQ02U/A	

Reducer/expander pipe dimensions

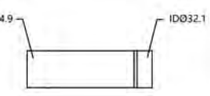
CF333(54/45)



CF334(41/38)

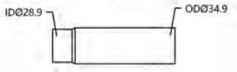


CF335(35/32)

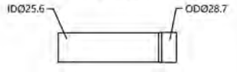


CF342(13/10)

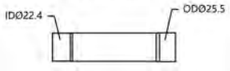
CF336(35/29)



CF337(29/25)

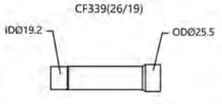


CF338(26/22)

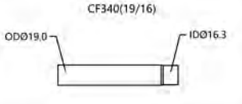


CF343(13/6)

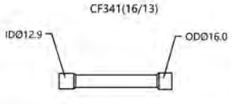
CF339(26/19)



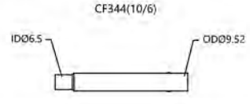
CF340(19/16)



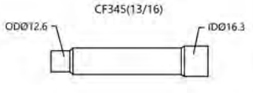
CF341(16/13)



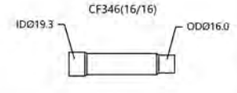
CF344(10/6)



CF345(13/16)



CF346(16/16)



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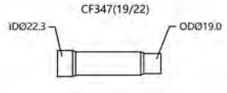

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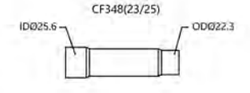

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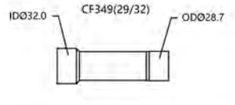


Project References

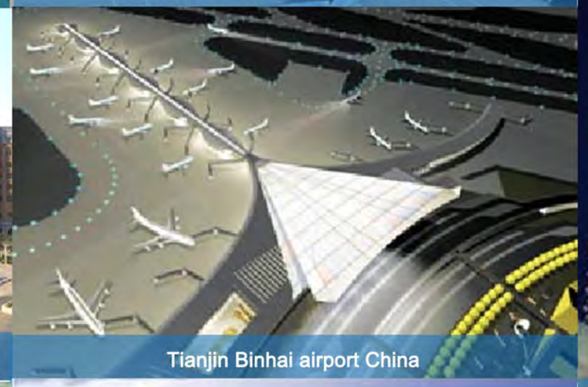

SHI JIAZHUANG YILING PHARMACEUTICAL

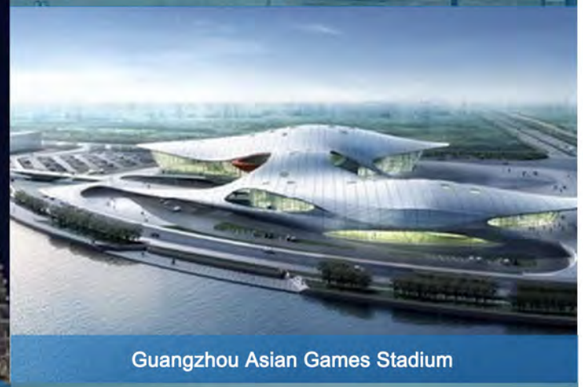

New Doha International Airport, Qatar


KLCC Twin Tower


National builing museum USA


YNATAI YUHUANG HOSPITAL


Tianjin Binhai airport China


Guangzhou Asian Games Stadium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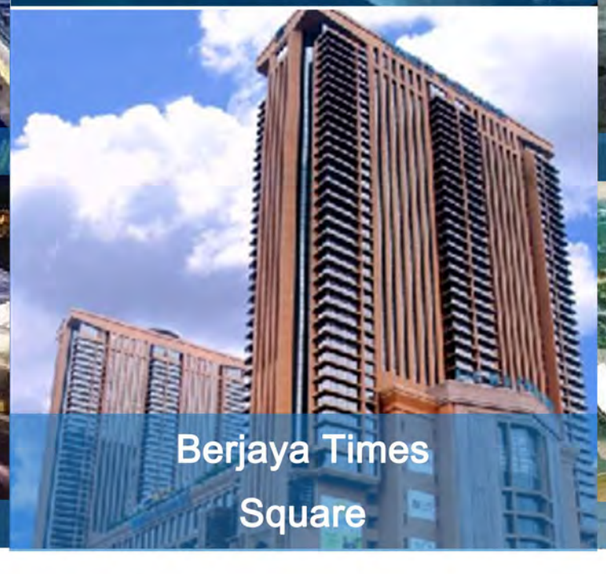
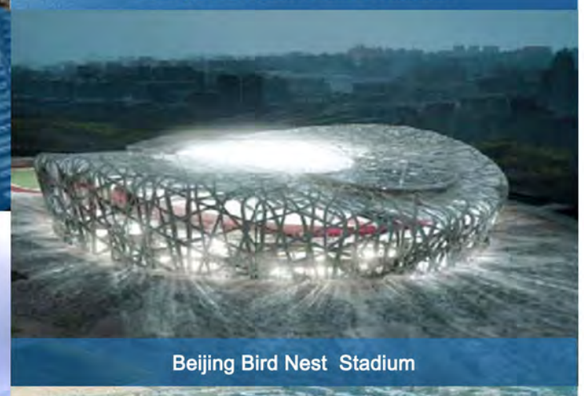
Beijing capital airport China


Berjaya Times Square


Beijing Bird Nest Stadium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