



DRV Air Conditioner



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► Specifications subject to change without notice.

 **DEKON** Inverter VRF System

Ningbo Dekon Refrigeration Equipment Co., Ltd, a large-scale industry and trade integrated company , is one of the leading manufacture and supplier for air conditioner products and ventilation systems in China. Products focus on air cooled or water cooled chiller; air handling units; water fan coil units; VRF air conditioner; light commercial air conditioner and special function industrial air conditioner.

Designing and manufacturing a wide range of A/C and ventilation products, we can supply models for use in residential apartments, houses, commercial buildings, hotels, shopping malls and public venues. Marketing all series under our proprietary brand "DEKON" , we can also complete ODM and OEM orders as per customers' requirements.

DEKON strives for better air in your home, hotel, shopping Center and office buildings. And our aim is to supply our air conditioner product to each corner of the world !



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Product Lineup-Outdoor

Basic Modules

DRV-X Combination modules



Model	DRV-AX	DRV090AX	DRV100AX	DRV120AX	DRV140AX	DRV160AX	DRV180AX	DRV200AX	DRV220AX			
Capacity	HP	8	10	12	14	16	18	20	22			
	KW	25.0	28.0	33.5	40.0	45.0	50.0	56.0	61.5			
Compressor		DC	DC	DC	DC	DC	DC+DC	DC+DC	DC+DC			
Fan motor		DC	DC	DC	DC	DC	DC+DC	DC+DC	DC+DC			
Power type		208-230V	380-415V									
		50Hz/3N	/	Available								
		60Hz/3N	/	Available								

DRV-S Independent modules



Model	DRV-AS	DRV090AS	DRV100AS	DRV120AS	DRV140AS	DRV160AS	DRV180AS	DRV200AS	DRV220AS	DRV240AS	DRV260AS	DRV280AS	DRV300AS	DRV320AS			
Capacity	HP	8	10	12	14	16	18	20	22	24	26	28	30	32			
	KW	25	28	33.5	40	45	50	56	61.5	67.0	73	78.5	85	90			
Compressor		DC	DC	DC	DC	DC	DC+DC	DC+DC	DC+DC	DC+DC	DC+DC	DC+DC	DC+DC	DC+DC			
Fan motor		DC	DC	DC	DC	DC	DC+DC	DC+DC	DC+DC	DC+DC	DC+DC	DC+DC	DC+DC	DC+DC			
Power type		208-230V	380-415V														
		50Hz/3N	/	Available													
		60Hz/3N	/	Available													

Product Lineup-Indoor

Model	Type	Photo	Capacity(kW)																																																		
			2.2	2.5	2.8	3.2	3.6	4	4.5	5	5.6	6.3	7.1	8	9	10	11.2	12.5	14	16	19.5	25	25.5	28	41	45	52	56	62	79																							
DCA	Round Flow cassette		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•																								
DCS	One way cassette		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•																				
DCD	Two way cassette		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•																				
DLD AC	Slim duct		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•																				
DLDAB	Low ESP duct		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•																			
DHD A	High ESP duct																															•	•	•	•																		
DCF	Ceiling & Floor		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•																			
DWM	Wall-mounted		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•																			
DHD AI	Big Capacity duct																																	•	•	•	•	•	•	•	•	•	•										
DFR	Fresh air processor																																											•	•	•	•	•	•	•	•	•	•

AHU Box

Model	Setting cooling capacity (HP)	Indoor unit capacity (kW)	Internal volume of heat exchanger (dm ³)	Reference air volume (m ³ /h)	Picture
DK280	8	20-25	3.6855-4.6069	3000	
	10	25-30	4.9069-5.5263	3700	
	12	30-36	5.5263-6.5430	4500	
DK450	14	36-40	6.5430-7.3711	5400	
	16	40-45	7.3711-8.2925	6000	

DRV-X DRV-S



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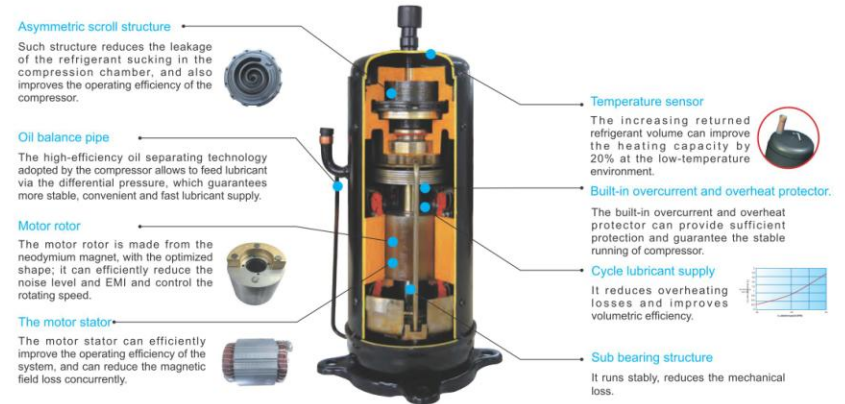
High Efficiency

Catering to the global low-carbon trend, DEKON launches a new product - DRV DC Inverter Multi System central air-conditioning unit. It comes from multiple energy-saving technologies and is featured in the advanced energy-saving performance.



1. All DC Inverter Compressors

The DRV adopts the high-efficiency DC inverter scroll compressor with high-pressure chamber, which adopts asymmetric scroll design and high-efficiency internal oil separator. By integrating with the enhanced vapor injection technique, the DRV can realize the heating under low ambient temperature in winter, and save more energy. The kind of system can run more stably and reliably.



- ◆ The high-pressure chamber scroll compressor takes advantage of the inherent differential pressure to supply lubricant, and the lubricant supply is not affected by the rotational speed. Moreover it has long service life and good stability. The refrigerant goes into the scroll of the compressor directly, it has less suction gas superheat and high volumetric efficiency.
- ◆ The high-pressure chamber compressor uses its discharging gas to cool motor, which can not only guarantee the lubricant temperature when the motor runs at the low temperature, but also provide good control on low temperature. When DRV operates in heating mode, the high compression ratio guarantees the high discharge pressure, improves supply air temperature and heating efficiency.
- ◆ The high-pressure chamber compressor has low noise and good noise reduction result.
- ◆ The new refrigerant cycle design makes the electric motor have the best cooling, lower the operating temperature, and further improves the motor efficiency.

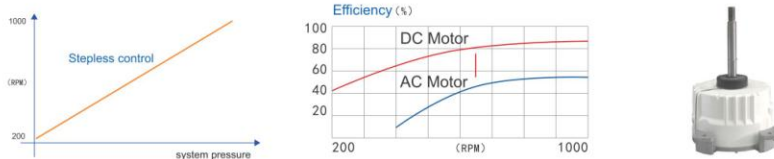
2. 180° Sine Wave Control Technology

Non sensor control technology of permanent magnet synchronous motor makes output current of DC converter sine wave, which guarantee stability, reduce vibration prevent from electromagnetic interference to improve running efficiency



3. All DC Fan Motors

The new DC inverter fan motor allows to make the five-stage speed regulation and adjust the speed according to the change in the system operation, and finally guarantees the system runs under the best condition. By matching the air flow changes and variable refrigerant flow also the heat exchanging demand, the system operates in high efficiency and low operating noise.

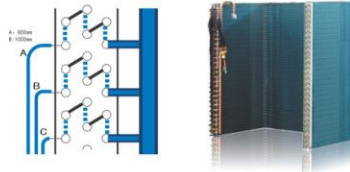


4. High Efficiency Heat Exchanger

The outdoor heat exchanger adopts the high-efficiency internal thread copper pipe with the diameter of 7.0 and the new aluminium fin; its integral molding technology guarantees the larger heat exchange area, improves the air flow distribution, reduces the airflow resistance, exchanges the heat more efficiently, and reduces the impact of the frosting on the heating capacity of the system.

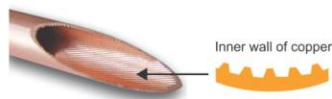
Refrigerant circuit of TOD

The specially designed TOD circuit increase the liquid refrigerant volume, improves and optimizes the heat exchange efficiency of the refrigerant.



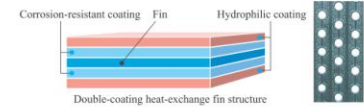
Inner-grooved copper pipe

The groove of the premium & efficient inner-grooved copper is designed on its inner surface, which increase the contact area of the refrigerant and improves the heat transfer efficiency.



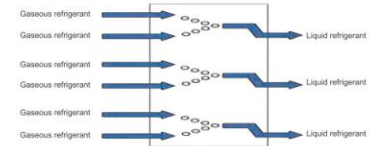
Hydrophilic aluminum fin

The outdoor unit adopts the louver-type aluminum foil with the hydrophilic coating, which can efficiently prevent dirt accumulation, improve defrosting efficiency and enhance the heat exchange efficiency.



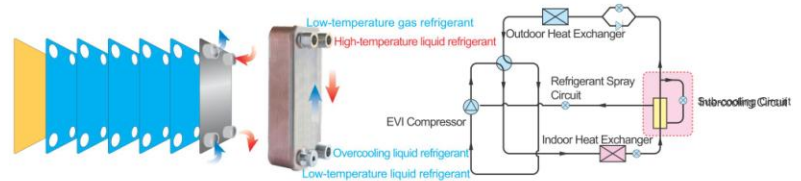
2-in-1 Refrigerant Loop

The specially designed 2-in-1 refrigerant loop can increase the liquid refrigerant volume and comprehensive heat exchange coefficient, making refrigerant heat exchange more sufficient and system more optimized.



5. Sub-cooling Design

The unique sub-cooling design enhances the cooling capacity, heating capacity, cooling efficiency ratio (EER) and heating efficiency ratio (COP).



6. Large Capacity Compressor Design

Less compressor configuration improves the system stability. The heating capacity is more powerful under low temperature, the exhaust volume and heating capacity are further improved for the large capacity compressor configuration under the equivalent heat frequency.



7. Stereo Air Inlet Technology of Four Directions

In comparison to air inlet through three sides, the stereo air inlet technology of four directions can maximize utilization of the heat exchange area of heat exchanger, increase the air speed range, make heat exchange more sufficient, and improve the operation efficiency.



High Reliability



1. Six-fold Oil Return Control Technology

By virtue of the solid R&D strength, DEKON central air conditioning system integrates the advanced VRF technology process of Japanese expert team, and the full series of VRF units adopt the six-level oil control technology to make operation more stable and reliable.

● Internal Oil Separation Technology of Compressor

After realizing lubrication in the compressor, only a little lubricating oil enters the system together with the exhausted air. This effectively prevents excessive refrigeration oil from staying in the refrigeration cycle pipeline, thus ensuring the oil amount required for normal operation of the compressor.



● Oil Separation Technology of Oil Balancing Pipe for Compressor

The oil balancing pipe for compressor is used to provide excessive lubricating oil in the oil pool to the compressor with insufficient oil in the oil pool in the module, ensuring the lubrication effect of all the compressors.



● Efficient Oil Separator

The centrifugal oil separator separates the oil discharged from the compressor rapidly with the separation efficiency of 99.9%, and transports the oil back to each compressor efficiently in time, ensuring the oil amount required by the compressor.



● Intelligent Oil Return Control Technology of Main Board

The main board sends an oil return instruction through the main chip according to the system operating time and status to implement automatic oil return of the system.



● ODU Oil Balancing Technology

The system can control and regulate the oil amount in the oil pools of different compressors between ODU units to balance oil return between all the modules.

The system automatically determines the proper oil discharge amount according to the oil amount of compressor, preventing oil leakage of the compressor and improving reliability. When the oil level reach a fixed height, the refrigeration oil back to the compressor will be discharged from to the

● No Oil Balancing Pipe between ODU units

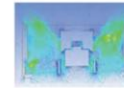
No oil balancing pipe is needed between ODU modules. This reduces pipeline leak points, improves the oil return stability and efficiency and makes installation convenient.



2. Ten Major Ultra Quiet Technologies

The DRV series adopt the omni-directional noise reduction technology and spiral flow fan blade to ensure a smooth suction structure and reduce the air flow noise. Supplemented with the sound insulation design of compressor, the unit can realize ultra quiet operation and create a comfortable environment of high quality.

The professional streamlined duct based on the fluid mechanics design helps to reduce the duct tremor generated due to the air flow resistance and has been awarded the title of patent technology.



The fan blades with a larger diameter are adopted to yield a larger air volume at a lower speed and make noises lower.



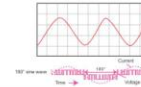
The fan motor support employs a non-resonant hanger structure to ensure stable operation performance of the motor and reduce the vibration noise.



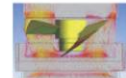
The air streamlined fan grille promotes more smooth discharge of vortex air flow and reduces the pressure loss.



The compressor employs the 180° sine wave control technology to ensure smooth and stable operation, and abnormal noise during operation of the compressor can be suppressed effectively.



The brushless DC motor is adopted to implement stepless speed regulation and more stable operation, reducing noises as ensuring energy conservation and high efficiency.



Vortex fan blade: The CAE auxiliary design and CFD air flow analysis technology are used to optimize the fan design, not only lowering the vibration, but also greatly reducing the pressure loss.



The noise enclosure design for the compressor avoids diffusion of compressor noises effectively.

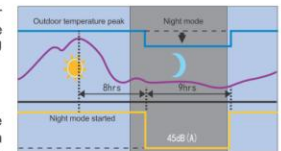


● Night Silent Mode

The system adopts the delay judgment mode based on the outdoor ambient temperature peak. Meanwhile, it will automatically judge whether to start the night silent operation mode according to the ODU ambient temperature and the current load size.

● Forced Silent Mode

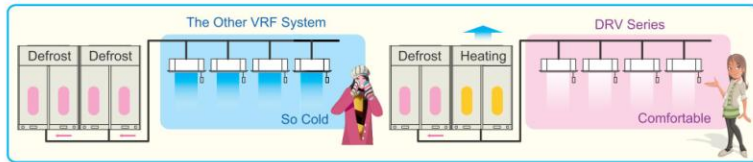
For the site with a higher silent requirement, the user can select the forced silent operation mode as actually needed to reduce the operation noise of the unit and create a more quiet and comfortable environment.



3. Efficient Heating and Smart Defrosting

● TCC defrosting technology

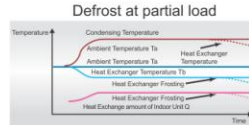
The unique TCC defrosting technology of DEKON adopts the non-stop method. It is unnecessary to switch to the cooling mode when defrosting in winter, and less exhaust temperature fluctuation of IDU. There is no need to worry about the indoor instantaneous temperature reduction. The technology makes the system performance more stable and noise lower.



● Smart defrosting technology

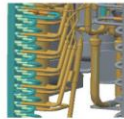
The smart defrosting technology allows to detect when to defrost according to every heating parameter, which can guarantee high heating capacity and energy efficiency ratio.

With the full load, the DRV system will detect the defrosting time according to the heat transfer temperature difference of the outdoor unit. With the partial load, the DRV system will detect the defrosting time according to the heat exchange efficiency of the outdoor unit.



● Bottom Frosting Prevention Design during Heating

The system employs the unique bottom frosting prevention design during heating to ensure that the ice water mixture is completely exhausted from the unit bottom during heating defrosting in winter, and avoid decrease of the heating capacity caused by frosting at the unit bottom.



● Anti snow capacity

When it snows heavily in winter, the DRV unit will give priority to start the outdoor fan motor before user starts the outdoor unit; such design prevents the unit from being covered by the snow. Once the unit works normally, the fan will run normally.



4. Automatic Detection and Regulation Technologies

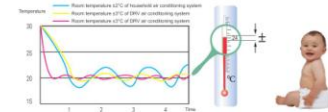
● Control Technology of Multiple Electronic Expansion Valves

A single ODU module is provided with multiple electronic expansion valves. Every electronic expansion valve can implement 480-step refrigerant flow regulation, control the refrigerant circulation quantity and meet the actual IDU requirement accurately, thus creating a more comfortable indoor environment.



● Small Room Temperature Fluctuation and High Precision

The DC inverter control technology is adopted to reach the set temperature rapidly when the unit starts, fine regulation is performed according to the load in the room, and the room temperature is controlled within $\pm 0.3^{\circ}\text{C}$ of the set temperature, fully meeting the customer's temperature requirement.



● Accurate Detection Technology of Refrigerant Pressure

The high/low pressure sensor is used to conduct real-time monitoring on the system refrigerant pressure, match the DC inverter module perfectly, and regulate the system refrigerant pressure to the optimal state, ensuring more stable operation of the unit.



● Automatic Addressing

The ODU main board automatically checks the IDU quantity and allocates addresses to IDUs without requiring manual code dialing, and installation is very convenient.



● SMT Surface Sealing Technology of Control Board

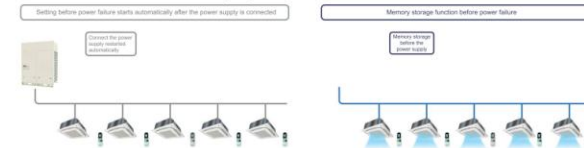
All the control boards adopt the SMT surface sealing technology, and sealing material is added to the control board surface to improve the anti-clutter interference performance of control board, prevent the control board from being affected by wind, sand and humid environment, and prolong the service life.



5. Stable Operation Functions

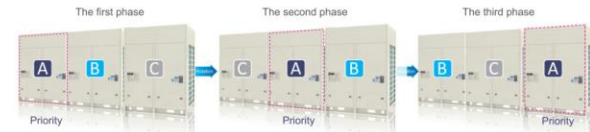
● Automatic Startup after Power Restoration

In case of an unexpected power failure, the system automatically stores the set memory. When power is restored, the system can restart automatically (manual startup can also be set), and the setting before the power failure will not be canceled but will continue to take effect. The program does not need to be reset, so service becomes more intelligent.



● Dual-rotation Operation Function

To ensure operation time balance between compressors and modules, DRV can implement cyclic operation of all the compressors and modules to average the operation time of each compressor and each module effectively, enhance durability of the entire unit or system, and prolong the service life.



● Three-backup Operation Function

For single-module ODU, If one compressor or motor malfunctions or is being maintained, other compressors and motors can be urgently put to use. For multi-module ODU, if one module is being maintained, the other modules can also be urgently put to use, without affecting usability.



6. Multiple Protection Technologies

● Pipeline Exception Protection

When detecting a pipeline exception (too much or too little refrigerant, etc.) through real-time monitoring, the system can start pipeline exception protection immediately to avoid further losses.

● Anti-Reverse-Rotation Protection

In case of reverse rotation of ODU fan, the system will stop the fan first upon air conditioner startup, and then make it rotate in the correct direction of rotation as programmed, preventing the fan blade from being damaged.



● Thunder Stroke Protection

The ODU is designed with a thunder stroke protection module, greatly reinforcing the anti-interference and thunder stroke protection functions of the unit and making the system operation safer.



● IDU Maintenance Power-down Function

When an IDU needs to be stopped for maintenance, it can be powered down separately, without affecting operation of the entire system.

● Emergency Shutdown Function

In case of an emergency, the ODU can be shut down immediately and forcedly, to avoid causing harms and losses.

● Power Phase Sequence Protection and Grounding Protection Function

The unit is equipped with a power supply protector. In case of any exception such as phase sequence error or phase loss, the controller will record the power supply failure and report an alarm for shutdown.

● Power High/Low Voltage and Current Protection Function

The ODU can identify the power supply signal directly. In case of inadequate power supply (insufficient or too much), the ODU will send an instruction to the IDU to prohibit startup, thus effectively protecting the system safety.

● Compressor and Motor Overheat Protection

Multiple temperature sensors are installed to efficiently prevent scroll plate wear, carbonization metamorphism of oil, and motor damage due to reasons such as overheat of the compressor or motor.

● Compressor Error Protection

The function includes compressor suction and exhaust temperature protection, compressor high/low pressure protection, compressor oil return protection, compression ratio protection, compressor oil temperature protection, pressure difference protection, compressor overload and over-current protection, compressor anti-liquid hammer protection, etc.

● Inverter EMI Protection and Temperature Protection

The system adopts the inverter of upgraded control accuracy, which can suppress harmonic current well and features high degree of EMI protection. When the system detects overheat of the inverter, it can start the inverter temperature protection function to prevent damage to the inverter.

Convenient Application



1. All DC Inverter Compressors

● Compact, Easy to Transport and Handle

The modular combination requires less floor space, even the largest module occupies only an area of 1.07 m², and seamless assembling between modules promotes further space savings.



● 360° Outlet Pipe Connection

During construction, the refrigerant pipe can be connected to the unit front, left or right freely, reducing the construction cost and construction difficulty and facilitating engineering design and installation.



● Stable and Worry-free Operation

The system can control the air conditioner of each room respectively. Once an IDU fails, the other IDUs of the system are not affected and can keep operating properly.



● Easy and Convenient Maintenance

DRV adopts intelligent control and requires no equipment room. Maintenance by designated person is not needed even during system operation, and control is more flexible.



● Automated Diagnosis and Self Repair of Faults

The unique automatic fault diagnosis function can be used to get the fault information easily and realize self repair of some faults, enhancing the operation stability and reliability.



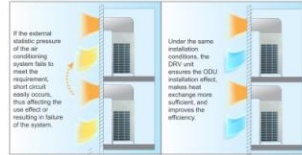
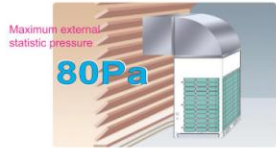
● Trial Operation Technology of ODU

During commissioning, the button on the ODU main board can be pressed to implement the forced trial operation function of the unit, making commissioning easier.

● Ultra-high External Static Pressure

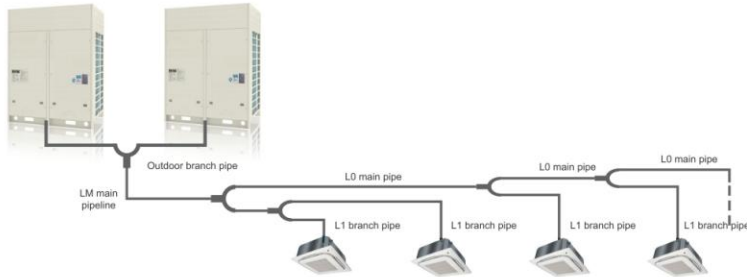
The system selects the blade with a higher air flow and the DC fan motor to realize a higher external static pressure on the precondition of avoiding noise change. The maximum external static pressure is 80 Pa.

Exhaust ducts can be installed by layer or in a centralized manner. The higher external static pressure realizes long distance air supply, prevents short circuit of the loop effectively, and ensures good ventilation effect.



● Easy Refrigerant Pipe Design and Selection

The models of ODU main pipes and IDU branch pipes should be selected according to the parameter table. For the ultra-long pipeline, refer to the installation manual.



Design of DRV Independent Main Pipe

Total capacity (kW) of downstream IDUs	Liquid pipe size (mm)	Gas pipe size (mm)	Branch joint
X<16.8	Φ9.52	Φ15.88	TBP4022TA
16.8≤X<22.5	Φ9.52	Φ19.05	TBP4022TA
22.5≤X<33.0	Φ9.52	Φ22.23	TBP4033TA
33.0≤X<46.0	Φ12.70	Φ25.40	TBP4072TA
46.0≤X<67.0	Φ15.88	Φ28.58	TBP4072TA
67.0≤X<86.0	Φ19.05	Φ31.75	TBP4073TA
X≥86.0	Φ19.05	Φ34.92	TBP4073TA

Design for Main Pipes of DRV Modular unit Series

Total capacity (kW) of downstream IDUs	Liquid pipe size (mm)	Gas pipe size (mm)	Branch joint
X<16.8	Φ9.52	Φ15.88	TBP4022TA
16.8≤X<22.5	Φ9.52	Φ19.05	TBP4022TA
22.5≤X<33.0	Φ9.52	Φ22.23	TBP4033TA
33.0≤X<46.0	Φ12.70	Φ25.40	TBP4072TA
46.0≤X<67.0	Φ15.88	Φ28.58	TBP4072TA
67.0≤X<86.0	Φ19.05	Φ31.75	TBP4073TA
86.0≤X<114.0	Φ19.05	Φ34.92	TBP4073TA
114.0≤X<140.0	Φ19.05	Φ38.10	TBP4073TA
X≥140.0	Φ19.05	Φ41.30	TBP4073TA



Widely Application Range

1. Widely Capacity Range

DEKON DRV-X series extensive capacity ranging from 8HP to 66HP and DEKON DRV-S series, Non-Modular type VRF

2. Widely Operating Range of Cooling and Heating

Through the strict system matching and test, the system has very powerful cooling and heating performance, even operates under -20°C during cold winter or 50°C in summer.

3. Overlong Pipe & High Drop Design

Maximum actual length of single pipe	200 m
Maximum equivalent length of single pipe	240 m
Maximum total equivalent pipe length	1000 m
Maximum drop of indoor/outdoor unit	110 m
Maximum drop of indoor unit	30 m
Maximum permitted length after first branch	40 m



* Pls consult the detailed technical documentation or other matters with the relative technicians.

ODU Specifications

DRV-X

- Single Module: 8/10/12/14/16/18/20/22HP
- Combination Module: 24HP-66HP, 2-3 modules
- Full DC Inverter Technology
- Max. 1000m pipe length, Max. 110m height drop



Model	DRV80AX	DRV100AX	DRV120AX	DRV140AX	DRV160AX	DRV180AX	DRV200AX	DRV220AX		
Capacity	Combination model		-		-		-			
	Capacity range	HP	8	10	12	14	16	20	22	
	Cooling	kW	25.0	28.0	33.5	40.0	45.0	50.0	56.0	61.5
	Heating	kW	27.0	31.5	37.5	45.0	50.0	56.0	63.0	69.0
Power supply	V/Hz		380V/3N/50Hz/50Hz		380V/3N/50Hz/50Hz		380V/3N/50Hz/50Hz			
	EER	kW/kW	4.08	3.95	3.88	3.75	3.56	3.53	3.60	3.68
	COF	kW/kW	4.45	4.49	4.36	4.25	3.99	3.96	4.06	4.14
Rated input	Cooling	kW	6.12	7.09	8.63	10.67	12.64	14.16	15.56	16.71
	Heating	kW	6.07	7.02	8.50	10.56	12.50	14.12	15.52	16.65
	Cooling	A	12.5	13.4	16.4	19.6	24.1	30.5	35.2	40.0
	Heating	A	13.6	13.9	16.7	20.0	24.0	30.1	34.9	38.0
Refrigerant	Type		R410A		R410A		R410A			
	Charge volume	kg	8	10	12	16	16	16		
	Brand	-	Hitachi		Hitachi		Hitachi			
Compressor	Type		Scroll type		Scroll type		Scroll type			
	Quantity	-	1		1		1+1			
	Refrigerant oil charge volume	L	0.50	0.50	0.50	0.50	0.50	0.50		
Fan	Type		Axial flow		Axial flow		Axial flow			
	Quantity	-	1		1		1+1			
Fan motor	Insulation class		F24		F24		F24			
	Drive Type		DC		DC		DC			
Airflow rate		m ³ /h	12000	12000	13980	18780	20820	22020		
Connecting pipe	Liquid pipe	mm	φ12.7	φ12.7	φ12.7	φ12.7	φ15.88	φ15.88		
	Gas pipe	mm	φ22.23	φ25.4	φ28.58	φ28.58	φ28.58	φ28.58		
	Connection method		Welding		Welding		Welding			
ESP		Pa	0-85		0-85		0-85			
Sound pressure level		dB(A)	45-57		45-59		45-62			
Outline dimension		mm	930*960*1710		1240*960*1710		1500*960*1710			
Package dimension		mm	930*960*2000		1240*960*2000		1500*960*2000			
Net weight		kg	225	225	225	290	290	430		
Gross weight		kg	245	245	245	310	310	450		
Maximum drive IDU NO.		unit	14	16	19	22	23	31		
Max. equivalent connection pipe length		m	240	240	240	240	240	240		
Working temp.	Cooling	°C	-		-5-52°C		-5-52°C			
	Heating	°C	-		-		-20-24°C			

Notes:

1. Cooling operating temperature range is from -5°C to 52°C. Heating operating temperature range is from -20°C to 24°C.
2. The cooling condition: indoor side 27°C (80.6°F) DB, 19°C (66°F) WB outdoor side 35°C (95°F) DB
3. The heating condition: indoor side 20°C (68°F) DB, 15°C (44.6°F) WB outdoor side 7°C (42.8°F) DB
4. Sound level: measured at point 1m in front of the unit at a height of 1.3m. During actual operation, these values are normally somewhat higher as a result of ambient conditions and lower as a result of ambient conditions when under ultra-silent operation
5. Choosing fuse or breaker according to MFA and electrical wiring according to MCA.
6. The above data may be changed without notice for future improvement on quality and performance.

DRV-X

- Single Module: 8/10/12/14/16/18/20/22HP
- Combination Module: 24HP-66HP, 2-3 modules
- Full DC Inverter Technology
- Max. 1000m pipe length, Max. 110m height drop



Model	DRV24AX	DRV26AX	DRV28AX	T1MS30AX	DRV32AX	DRV34AX	DRV36AX	DRV38AX	DRV40AX	DRV42AX	DRV44AX			
Combination model	10+14	10+16	14+14	14+16	16+16	14+20	14+22	16+22	20+20	20+22	22+22			
Capacity	Capacity range	HP	24	26	28	30	32	34	36	38	40	42	44	
	Cooling	KW	68.0	73.0	80.0	85.0	90.0	96.0	101.5	106.5	112.0	117.5	123.0	
	Heating	KW	76.5	81.5	90.0	95.0	100.0	106.0	114.0	119.0	126.0	132.0	138.0	
Power supply	V/Hz	380V/3N/50Hz/60Hz												
EER	KW/KW	3.83	3.70	3.75	3.65	3.56	3.66	3.71	3.63	3.60	3.64	3.68		
COP	KW/KW	4.35	4.15	4.25	4.10	3.97	4.14	4.19	4.07	4.06	4.10	4.14		
Rated input	Cooling	KW	17.76	19.73	21.34	23.31	25.28	26.23	27.38	29.35	31.12	32.27	33.42	
	Heating	KW	17.60	19.62	21.16	23.18	25.20	26.10	27.23	29.25	31.04	32.17	33.30	
Rated current	Cooling	A	33.00	37.50	39.20	43.70	48.20	54.80	59.60	61.04	70.40	75.20	80.00	
	Heating	A	3360	37.90	40.00	44.00	48.00	54.90	59.00	69.80	69.90	70.00		
Refrigerant	Type	R410A												
	Charge volume	kg	8+12		12+12			12+16			16+16			
Compressor	Brand	Hitachi												
	Type	Scroll type												
	Quantity	1+1		1+2			2+2			2+2				
Fan	Refrigerant oil charge volume	L	0.5+1.10		1.10+1.10			1.10+0.50			0.50+0.50			
	Type	Axial flow												
Fan motor	Insulation class	IP24												
	Drive type	DC												
Airflow rate	m ³ /h	12030+13880		13990+13980			13930+20320			20820+20820			22020+22020	
Connecting pipe	Liquid pipe	φ19.05												
	Gas pipe	φ31.75		φ34.92			φ38.10			φ38.10				
	Connection method	Welding												
ESP	Pa	0-80												
	Sound pressure level	dB(A)	48-59		48-60			48-66			50-67			
Outline dimension	mm	(930+1240)*860*1710		(1240+1240)*850*1710			(1240+1500)*860*1710			(1500+1500)*860*1710				
Package dimension	mm	(930+1240)*860*2500		(1240+1240)*860*2500			(1240+1500)*860*2500			(1500+1500)*860*2500				
Net weight	kg	225+290		225+290		290+290		290+290		290+430		430+430		
Gross weight	kg	245+310		245+310		310+310		310+310		310+450		450+450		
Maximum drive IDU NO.	unit	35		35		33		40		42		44		
Max. equivalent connection pipe length	m	240		240		240		240		240		240		
Working temp.	Cooling	-5~52°C												
	Heating	-20~24°C												

- Notes:
1. Cooling operating temperature range is from -5°C to 52°C, Heating operating temperature range is from -20°C to 24°C.
 2. The cooling condition/indoor side 27°C (80.6°F) DB, 19°C (66°F) WB outdoor side 35°C (95°F) DB
 3. The heating condition/indoor side 20°C (68°F) DB, 15°C (44.6°F) WB outdoor side 7°C (42.8°F) DB
 4. Sound level: measured at point 1m in front of the unit at a height of 1.3m. During actual operation, these values are normally somewhat higher as a result of ambient conditions and lower as a result of ambient conditions when under ultra-silent operation
 5. Choosing fuse or breaker according to MFA and electrical wiring according to MCA.
 6. The above data may be changed without notice for future improvement on quality and performance.

DRV-X

- Single Module: 8/10/12/14/16/18/20/22HP
- Combination Module: 24HP-66HP, 2-3 modules
- Full DC Inverter Technology
- Max. 1000m pipe length, Max. 110m height drop



Model	DRV46AX	DRV48AX	DRV50AX	DRV52AX	DRV54AX	DRV56AX	DRV58AX	DRV60AX	DRV62AX	T1MS64AX	DRV66AX			
Combination model	14+16+16	16+16+16	14+16+20	14+16+22	16+16+22	14+20+22	14+22+22	16+22+22	20+20+22	20+22+22	22+22+22			
Capacity	Capacity range	HP	46	48	50	52	54	56	58	60	62	64	66	
	Cooling	KW	130.0	135.0	141.0	146.5	151.5	157.5	163.0	168.0	173.5	179.0	184.5	
	Heating	KW	145.0	150.0	158.0	164.0	169.0	177.0	183.0	183.0	195.0	201.0	207.0	
Power supply	V/Hz	380V/3N/50Hz/60Hz												
EER	KW/KW	3.62	3.56	3.63	3.66	3.61	3.67	3.70	3.65	3.63	3.65	3.68		
COP	KW/KW	4.05	3.96	4.08	4.12	4.04	4.14	4.17	3.99	4.09	4.12	4.14		
Rated input	Cooling	KW	35.95	37.92	38.87	40.02	41.99	42.94	44.09	46.06	47.83	48.98	50.13	
	Heating	KW	35.78	37.80	38.70	39.83	41.85	42.75	43.88	45.90	47.69	48.82	49.95	
Rated current	Cooling	A	67.80	72.30	75.90	83.70	88.20	94.83	99.60	104.10	110.40	115.20	120.03	
	Heating	A	68.00	72.00	75.90	79.00	83.00	89.90	90.00	94.03	104.80	104.90	105.03	
Refrigerant	Type	R410A												
	Charge volume	kg	12+12+12		12+12+16			12+16+16			16+16+16			
Compressor	Brand	Hitachi												
	Type	Scroll type												
	Quantity	1+1+1		1+1+2			1+2+2			2+2+2				
Fan	Refrigerant oil charge volume	L	1.10+1.10+1.10		1.10+1.10+0.50			1.10+0.50+0.50			0.50+0.50+0.50			
	Type	Axial flow												
Fan motor	Insulation class	IP24												
	Drive type	DC												
Airflow rate	m ³ /h	13860+13860+13860		13960+13960+20820			13960+22020+22020			20820+20820+22020			22020+22020+22020	
Connecting pipe	Liquid pipe	φ19.05												
	Gas pipe	φ38.10		φ41.30			φ41.30			φ41.30				
	Connection method	Welding												
ESP	Pa	0-80												
	Sound pressure level	dB(A)	50-63		50-68			50-67			50-68			50-69
Outline dimension	mm	(1240+1240+1240)*860*1710		(1240+1240+1500)*860*1710			(1240+1500+1500)*860*1710			(1500+1500+1500)*860*1710				
Package dimension	mm	(1240+1240+1240)*860*2000		(1240+1240+1500)*860*2000			(1240+1500+1500)*860*2000			(1500+1500+1500)*860*2000				
Net weight	kg	290+290+290		290+290+430			290+430+430			430+430+430				
Gross weight	kg	290+290+290		310+310+450			310+450+450			450+450+450				
Maximum drive IDU NO.	unit	54		56		58		60		62		64		
Max. equivalent connection pipe length	m	240		240		240		240		240		240		
Working temp.	Cooling	-5~52°C												
	Heating	-20~24°C												

- Notes:
1. Cooling operating temperature range is from -5°C to 52°C, Heating operating temperature range is from -20°C to 24°C.
 2. The cooling condition/indoor side 27°C (80.6°F) DB, 19°C (66°F) WB outdoor side 35°C (95°F) DB
 3. The heating condition/indoor side 20°C (68°F) DB, 15°C (44.6°F) WB outdoor side 7°C (42.8°F) DB
 4. Sound level: measured at point 1m in front of the unit at a height of 1.3m. During actual operation, these values are normally somewhat higher as a result of ambient conditions and lower as a result of ambient conditions when under ultra-silent operation
 5. Choosing fuse or breaker according to MFA and electrical wiring according to MCA.
 6. The above data may be changed without notice for future improvement on quality and performance.

DRV-S

- Single Module: 8/10/12/14/16/18/20/22HP
- Combination Module: 24HP-66HP, 2-3 modules
- Full DC Inverter Technology
- Max. 1000m pipe length, Max. 110m height drop



Model			DRV080AS	DRV100AS	DRV120AS	DRV140AS	DRV160AS
Capacity	Capacity range	HP	8	10	12	14	16
	Cooling	kW	25.0	28.0	33.5	40.0	45.0
		kW	27.0	31.5	37.5	45.0	50.0
Power supply		V/Hz	380V/3N-50Hz				
EER	COP	Kw/kW	4.05	3.93	3.86	3.74	3.54
		Kw/kW	4.41	4.45	4.35	4.23	3.94
Rated input	Cooling	kW	6.17	7.13	8.68	10.70	12.71
	Heating	kW	6.12	7.08	8.62	10.65	12.66
Rated current	Cooling	A	12.50	13.40	16.40	19.60	24.10
	Heating	A	13.60	13.90	16.70	20.00	24.00
Refrigerant	Type		R410A				
	Charge volume	kg	8	8	10	12	12
Compressor	Brand		Hitachi				
	Type		Scroll type				
	Quantity		1				
	Refrigerant oil charge volume	L	0.50		1.10		
Fan	Type		Axial flow				
	Quantity		1				
Fan motor	Air flow	m ³ /h	12000		13980		
	Insulation class		IP24				
Air flow rate	Drive type		DC				
		m ³ /h					
Connecting pipe	Liquid pipe	mm	φ12.7		φ12.70		φ12.70
	Gas pipe	mm	φ22.23		φ25.4		φ28.58
	Connection method		Welding				
ESP		Pa	0-80Pa				
Sound pressure level		dB (A)	45-57			45-59	
Outline dimension		mm	930X860X1710			1240X860X1710	
Package dimension		mm					
Net weight		kg	220	220	220	285	285
Gross weight		kg	225	225	225	290	290
Maximum drive IDU NO.		unit	14	16	19	22	23
Max. equivalent connection pipe length	Cooling	m	240	240	240	240	240
	Heating	°C	-5~52°C				
Working temp.	Cooling	°C	-5~52°C				
	Heating	°C	-20~24°C				

Notes:

1. Cooling operating temperature range is from -5°C to 52°C, Heating operating temperature range is from -20°C to 24°C.
2. The cooling condition: indoor side 27°C (80.6°F) DB, 19°C (66°F) WB outdoor side 35°C (95°F) DB
3. The heating condition: indoor side 20°C (68°F) DB, 15°C (44.6°F) WB outdoor side 7°C (42.8°F) DB
4. Sound level: measured at point 1m in front of the unit at a height of 1.3m. During actual operation, these values are normally somewhat higher as a result of ambient conditions and lower as a result of ambient conditions when under ultra-silent operation
5. Choosing fuse or breaker according to MFA and electrical wiring according to MCA.
6. The above data may be changed without notice for future improvement on quality and performance.

DRV-S

- Single Module: 8/10/12/14/16/18/20/22HP
- Combination Module: 24HP-66HP, 2-3 modules
- Full DC Inverter Technology
- Max. 1000m pipe length, Max. 110m height drop



Model			DRV180AS	DRV200AS	DRV220AS	DRV240AS	DRV260AS	DRV280AS	DRV300AS	DRV320AS	
Capacity	Capacity range	HP	18	20	22	24	26	28	30	32	
	Cooling	kW	53.0	56.0	61.5	67.0	73.0	78.5	85.0	90.0	
		Heating	kW	58.5	63.0	69.0	75.0	81.5	87.5	95.0	100.0
Power supply		V/Hz	380V/3N-50Hz								
EER	COP	Kw/kW	3.71	3.65	3.68	3.58	3.98	3.78	3.73	3.64	
		Kw/kW	4.13	4.13	4.10	3.96	4.46	4.23	4.18	4.06	
Rated input	Cooling	kW	14.26	15.34	16.70	18.71	18.34	20.76	22.79	24.73	
	Heating	kW	14.18	15.25	16.83	18.93	18.28	20.70	22.71	24.65	
Rated current	Cooling	A	30.50	35.20	40.00	33.00	37.20	39.20	43.70	48.20	
	Heating	A	30.10	34.90	35.00	33.90	37.90	40.00	44.00	48.00	
Refrigerant	Type		R410A								
	Charge volume	kg	16	16	16	16	18	22	22	22	
Compressor	Brand		Hitachi								
	Type		Scroll type								
	Quantity		1								
	Refrigerant oil charge volume	L	0.50				1.10+1.10				
Fan	Type		Axial flow								
	Quantity		1+1								
Fan motor	Air flow	m ³ /h	25800				27000				
	Insulation class		IP24								
Air flow rate	Drive type		DC								
		m ³ /h									
Connecting pipe	Liquid pipe	mm	φ15.88		φ19.05						
	Gas pipe	mm	φ28.58		φ31.75						
	Connection method		Welding								
ESP		Pa	0-80Pa								
Sound pressure level		dB (A)	48 - 59			48 - 60		48 - 62			
Outline dimension		mm	1500×860×1710				1900×860×1710				
Package dimension		mm									
Net weight		kg	425	425	425	425	425	495	495	495	
Gross weight		kg	430	430	430	430	430	500	500	500	
Maximum drive IDU NO.		unit	31	33	34	35	35	36	38	40	
Max. equivalent connection pipe length	Cooling	m	240	240	240	240	240	240	240	240	
	Heating	°C	-5~52°C								
Working temp.	Cooling	°C	-5~52°C								
	Heating	°C	-20~24°C								

Notes:

1. Cooling operating temperature range is from -5°C to 52°C, Heating operating temperature range is from -20°C to 24°C.
2. The cooling condition: indoor side 27°C (80.6°F) DB, 19°C (66°F) WB outdoor side 35°C (95°F) DB
3. The heating condition: indoor side 20°C (68°F) DB, 15°C (44.6°F) WB outdoor side 7°C (42.8°F) DB
4. Sound level: measured at point 1m in front of the unit at a height of 1.3m. During actual operation, these values are normally somewhat higher as a result of ambient conditions and lower as a result of ambient conditions when under ultra-silent operation
5. Choosing fuse or breaker according to MFA and electrical wiring according to MCA.
6. The above data may be changed without notice for future improvement on quality and performance.



MINI VRF

- Superior Technologies
- Specifications

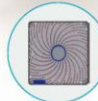
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Ultra Quiet Operation

Ten Major Ultra-silent Technologies

The scroll heating series adopt the all-round noise-reducing technology and newly-designed fan blade to reduce the airflow noise through the smooth suction structure, and the compressor noise isolation technology to implement ultra-silent operation, creating a high-quality and comfortable environment.

Newly-designed fan air duct with the streamlined distribution of the air discharge grilles can reduce the wind resistance and noise.



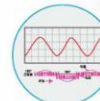
The PET (macromolecule acupuncture cotton), which is the kind of cotton specially used by high-speed railway to isolate noise, perfectly absorbs noises of all frequency bands.

CFD analogue simulation, together with the new fan blade, and the 4-blade axial flow design guarantee a better heat-exchanging performance and lower noise.



The DC brushless motor features stepless speed adjustment and more stable operation, achieving higher energy efficiency and reducing noises.

The 180° sine wave control technology applied to the compressor ensures the smooth and stable operation of compressor and effectively inhibits the abnormal noise during operation.



Advanced reactor can completely eliminate electromagnetic noise.



The compressor noise enclosure effectively avoids the proliferation of compressor noise.

Smart Night Silent Mode

The system adopts the delay judgment mode based on the outdoor ambient temperature peak. Meanwhile, it will automatically determine whether to enter the night silent mode according to the current ambient temperature and load size. The minimum noise of silent operation can be as low as 45 dB (A).

Forced Silent Mode

For supporting projects of high-rise buildings or sites with a stricter silent requirement, users can select the forced silent operation mode as required to reduce the operation noise of the unit and create a more quiet and comfortable environment.

Night Forced Silent Mode

For a higher requirements of quietness and higher requirements for silent mode at night, the night forced silent mode provides a more quiet environment under a variety of conditions.



Superior Technologies

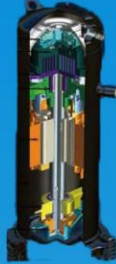
Are you looking for a cozy room with less electricity used? All DC Compliant Enhanced Vapor Injection Scroll Compressor Three Core Technologies for Excellent Performance

Floating sealing ring technology
improves compressor's starting performance

Patented enhanced vapor injection
(EVI) technology

High-efficiency centralized stator winding
improves motor rated efficiency to > 95%

3.4 mm-thick casing design



Variable volume ratio scroll technology
substantially improves energy efficiency
of compressor with low pressure ratio

6-pole permanent magnet motor
Stable operation with 900~7200 RPM

Oil duct
reduces oil circulation rate when compressor
is working at high speed

Volumetric oil pump
Oil pumped does not vary with oil level.

DC — All DC Inverter Technology

The secret of high energy efficiency

All DC inverter compressor, the core source of power, is equipped with a 6-pole high-efficiency motor, and the enhancement of part load efficiency is tailored to better suit the operations of low ambient temperature heating units.

6-pole reluctance-type DC motor



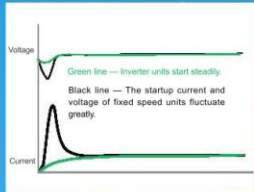
50% increase in magnetic force
Higher shaft rotating efficiency

More applicable to regions with voltage fluctuation in power supply

The all DC inverter system starts flexibly, with the rotating speed of the compressor increasing steadily, the current rising slowly, and small impact on the power grid. Even under the condition of 180 V ultra-low voltage or 260 V ultra-high voltage, the system can still start and operate normally, and provide comfortable heating service.

VS

The fixed speed system starts the compressor instantly. The startup current of up to 6~7 times of the operating current may result in a sharp drop in power supply voltage, and lead to a failure of unit startup and the even more serious problems during peak periods.



No heating capability attenuation at -20°C No cooling capability attenuation at 43°C

Enhanced Vapor Injection Technology — Strong Heating Capability Without Electric Auxiliary
Just like the difference between turbo supercharging and normal aspiration (2.0 T = 3.0 L)
The world's most advanced technology for heat pump system dealing with low-temperature heating

The whole series adopt the high-efficiency EVI system and the new variable-frequency control and refrigerant system of DEKON, achieving excellent heating performance even at the ultra-low temperature of -30°C. The heating capability is increased by over 45% and won't subside at -20°C. In hot summer, the cooling capability won't decrease even at 43°C, assuring you a cool summer indoors.

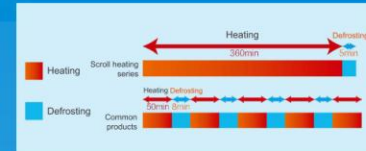


Mini Body

DEKON scroll heating series of household central air conditioner feature a compact design with a single fan and three-layer high-efficiency and high-quality heat exchanger.
With a mini body, they can be easily installed in a small space such as a bay window, optimizing the spatial pattern and making your home more beautiful and fashionable.

Smart and Quick Defrosting

The patented smart vapor injection defrosting technology of DEKON can increase the refrigerant circulation flow during defrosting, which will shorten the defrosting time, reduce the cold air felt by customers during defrosting, improve the defrosting efficiency, and cut down the power consumption.



Oil Return When Heating Without Stopping the Unit

Traditional units have to be turned off to achieve oil return, while DEKON scroll heating series of household VRF units can implement heating without switching the direction of the refrigerant flow. This series adopt the modes of on-demand oil return and high/low frequency switchover oil return to prevent wild fluctuation of indoor temperature, and provide user with more comfortable experience.



Maximum actual length of single pipe	50m
Maximum equivalent length of single pipe	75 m
Maximum total equivalent pipe length	100m
Maximum drop of indoor/outdoor unit	30 m
Maximum drop of indoor unit	8 m
Maximum permitted length after first branch	15 m

* Pls consult the detailed technical documentation or other matters with the relative technicians.



Smart Home

Technology-driven intelligence for smarter life, be a real air conditioning messenger.

DEKON Intelligent Air Quality Monitoring

- Intelligent management over each air conditioner (remote control, one-key startup)
- Real-time monitoring of indoor air quality (real-time detection of PM2.5, CO₂, temperature, humidity, etc.)

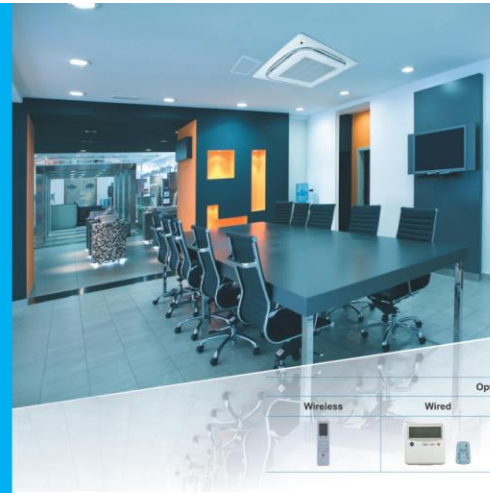


Mini VRF specification

Model		DRV100AHT	DRV125AHT	DRV140AHT	DRV160AHT	
Power Supply		220V~50Hz				
Capacity	Cooling/Heating	kW	10.0/12.5	12.5/14.0	14.0/16.0	16.0/18.0
power consumption	Cooling/Heating	kW	2.9/3.0	3.1/3.2	3.8/4.1	4.7/4.5
EER		kW/kW	3.45	4.03	3.68	3.40
COP		kW/kW	4.17	4.38	3.90	4
Rated input	Cooling	kW	2.9	3.1	3.8	4.7
	Heating	kW	3.0	3.2	4.1	4.5
Rated current	Cooling	A	18	20	26	32
	Heating	A	16	18	24	28
Refrigerant		Type	R410A			
Charge volume		kg	2.5	2.5	3.0	3.0
Brand		-	EMERSON	EMERSON	EMERSON	EMERSON
Type		-	Scroll			
Quantity		-	1	1	1	1
Refrigerant oil charge volume		L	1.183	1.183	1.183	1.183
Type		-				
Quantity		-	1			
Airflow rate		m ³ /h	6000			
Connecting pipe		Liquid/Gas	9.52/12.88			
Sound pressure level		dB(A)	50-54	50-55	52-55	53-56
Outline dimension (L*W*H)		mm	980*370*850			
Package dimension (L*W*H)		mm	1036*482*866			
Weight		Net weight	kg			
Gross weight		kg				
Capacity ratio		%				
Maximum drive IDU.No.		unit				
Max.total equivalent pipe length		m				
Max.equivalent connection pipe length		m				
Max.drop of indoor/outdoor unit		m				
Max.drop of indoor unit		m				
Working temp. (°C)		Cooling	°C			
Heating		°C				

IDU UNITS

● Round Flow cassette	26	● Standard duct	32
● Two-way cassette	28	● Slim duct	33
● One-way cassette	29	● High ESP duct	34
● Ceiling & Floor	30	● Big capacity duct	35
● Wall mounted	31	● Fresh air Processor	36



		Optional	
Wireless	Wired	Wired	Centralized

● Accessories

Plenum box	Air filter	EXV	Drain pump	AC motor	DC Motor
/	Standard	Standard (built-in)	Standard	Standard	/

● 360° air outlet, no blind spot



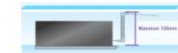
● Compact design, only 230mm height

Has slim body with 230mm height, it is specially suitable for low suspended ceiling rooms.



● Built-in drain pump, drain height can be 1200mm

Built-in with long life drainage pump, Pumping head is 1200mm, flexible for drainage pipe design.



Model		DCA298A	DCA398A	DCA498A	DCA598A	DCA698A	DCA798A	DCA898A	DCA998A	DCA1098A	DCA1198A	DCA1298A	DCA1498A	DCA1698A
Capacity	Cooling kW	2.8	3.6	4.5	5.5	6.3	7.1	8.0	9.0	10.0	11.2	12.5	14.0	16.0
	Heating kW	3.2	4.0	5.0	5.8	6.3	7.1	8.0	9.0	10.0	11.2	12.5	14.0	16.0
Power supply	V/Ph/Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz
	W	55	55	70	70	75	75	90	90	150	150	190	190	210
Air flow volume (HML)	m ³ /h	750/660/540	810/690/540	900/720/600	900/720/600	960/780/660	960/780/660	1020/900/690	1020/900/690	1200/1080/870	1200/1080/870	1620/1400/1180	1800/1500/1200	2100/1800/1500
Sound pressure level (HML)	dB(A)	32/30/25	32/30/25	36/33/31	36/33/31	36/33/31	36/33/31	39/36/33	39/36/33	42/39/35	42/39/35	44/40/35	44/40/35	44/40/36
Fan	Type	—	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
	Speed (HML/S/L)	rpm	480/300/400/350	480/300/400/350	560/350/490/350	560/350/490/350	560/350/490/350	560/350/490/350	670/350/800/350	670/350/800/350	670/350/800/350	670/350/800/350	830/350/990/350	830/350/990/350
Fan motor	Power output	W	26	26	30	30	30	30	37	37	50	50	65	65
	Insulation class	—	B	B	B	B	B	B	B	B	B	B	B	B
Connecting pipe	Liquid pipe	mm	φ6.35	φ6.35	φ6.35	φ6.35	φ6.35	φ6.35	φ6.52	φ6.52	φ6.52	φ6.52	φ6.52	φ6.52
	Gas pipe	mm	φ12.7	φ12.7	φ12.7	φ12.7	φ12.7	φ12.7	φ15.88	φ15.88	φ15.88	φ15.88	φ15.88	φ15.88
Drain pipe	External diameter	mm	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25
	Connection method		Flared	Flared	Flared	Flared	Flared	Flared	Flared	Flared	Flared	Flared	Flared	Flared
Package dimension (body)	mm	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230
	mm	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230
Package dimension (panel)	mm	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230
	mm	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230	847*847*230
Net weight	kg	22.5	22.5	24.5	24.5	24.5	24.5	24.5	29.5	29.5	29.5	29.5	32	32
	kg	6	6	6	6	6	6	6	6	6	6	6	6	6
Gross weight	kg	24.5	24.5	26.5	26.5	26.5	26.5	26.5	31.5	31.5	31.5	31.5	34	34
	kg	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5

Notes:
 1. Power supply: 220V/1PH for 50Hz
 2. The cooling condition: indoor side 27°C (80.6°F) DB, 18°C (64°F) WB outdoor side 35°C (95°F) DB
 3. The heating condition: indoor side 20°C (68°F) DB, 15°C (44.6°F) WB outdoor side 7°C (42.8°F) DB
 4. Sound level: measured at point 1m in front of the unit at a height of 1.3m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
 5. The above data may be changed without notice for future improvement on quality and performance.



Optional			
Wireless	Wired	Wired	Centralized

● Accessories

Plenum box	Air filter	EXV	Drain pump	AC motor	DC Motor
/	Standard	Standard(built-in)	Standard	Standard	/

● Special design for corridor or narrow and long room



● Available for room with 3.5m floor height



● Built-in drain pump, drain height can be 1200mm

Built-in with long life drainage pump. Pumping head is 1200mm, flexible for drainage pipe design.



Model		DCD008A	DCD009A	DCD046A	DCD056A	DCD071A	DCD098A	DCD066A	DCD109A	DCD112A	DCD115A	DCD116A
Capacity	Cooling kW	2.6	3.6	4.5	5.6	7.1	8.0	9.0	10.0	11.2	12.5	14.0
	Heating kW	3.2	4.0	5.0	6.3	8.0	9.0	10.0	11.2	12.5	14.0	16.0
Power supply	V/Ph/Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz
	W	60	62	68	85	94	98	129	135	175	185	208
Air flow volume (HML)	m ³ /h	500/426/378	616/523/462	773/657/580	900/765/667	1165/990/873	1300/1120/980	1450/1310/1160	1600/1450/1280	1725/1550/1280	1980/1680/1500	1980/1680/1500
Sound pressure level (HML)	dB(A)	37/31/25	39/36/32	43/37/31	45/41/39	47/43/40	49/45/42	45/42/38	48/43/40	50/46/43	53/50/46	53/50/46
Fan	Type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
	Power output	W	10	12	16	25	30	30	20 ²	25 ²	30 ²	45 ²
Fan motor	Insulation class	—	B	B	B	B	B	B	B	B	B	B
	Liquid pipe	mm	φ6.35	φ6.35	φ6.35	φ6.35	φ6.52	φ6.52	φ6.52	φ6.52	φ6.52	φ6.52
Connecting pipe	Gas pipe	mm	φ12.70	φ12.70	φ12.70	φ12.70	φ15.88	φ15.88	φ15.88	φ15.88	φ15.88	φ15.88
	Connection method		Flared	Flared	Flared	Flared	Flared	Flared	Flared	Flared	Flared	Flared
Drain pipe	External diameter	mm	DN20	DN20	DN20	DN20	DN20	DN20	DN20	DN20	DN20	DN20
	mm	847*520*315	847*520*315	960*520*315	960*520*315	1200*520*315	1200*520*315	1680*520*315	1680*520*315	1680*520*315	1680*520*315	1680*520*315
Outline dimension (body)	mm	1083*630*333	1083*630*333	1203*630*333	1203*630*333	1443*630*333	1443*630*333	1923*630*333	1923*630*333	1923*630*333	1923*630*333	1923*630*333
	mm	1145*685*395	1145*685*395	1265*685*395	1265*685*395	1505*685*395	1505*685*395	1983*685*395	1983*685*395	1983*685*395	1983*685*395	1983*685*395
Package dimension (body)	mm	1145*685*395	1145*685*395	1265*685*395	1265*685*395	1505*685*395	1505*685*395	1983*685*395	1983*685*395	1983*685*395	1983*685*395	1983*685*395
	mm	1145*685*395	1145*685*395	1265*685*395	1265*685*395	1505*685*395	1505*685*395	1983*685*395	1983*685*395	1983*685*395	1983*685*395	1983*685*395
Net weight	kg	32	32	37	37	40	40	45	45	47	47	47
	kg	35	35	40	40	43	43	48	48	50	50	50

Notes:
 1. Power supply: 220V/1PH for 50Hz
 2. The cooling condition: indoor side 27°C (80.6°F) DB, 18°C (64°F) WB outdoor side 35°C (95°F) DB
 3. The heating condition: indoor side 20°C (68°F) DB, 15°C (44.6°F) WB outdoor side 7°C (42.8°F) DB
 4. Sound level: measured at point 1m in front of the unit at a height of 1.3m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
 5. The above data may be changed without notice for future improvement on quality and performance.



Optional			
Wireless	Wired	Wired	Centralized

● Accessories

Plenum box	Air filter	EXV	Drain pump	AC motor	DC Motor
/	Standard	Standard External	Standard	Standard	/

● Horizontal and vertical air flow



● Built-in drain pump, drain height can be 1200mm

Built-in with long life drainage pump, Pumping head is 1200mm, flexible for drainage pipe design.



● Compact design, unit height only 250mm

Model		DC5028A	DC5036A	DC5044A	DC5056A	DC5071A
Capacity	Cooling	2.8	3.6	4.5	5.6	7.1
	Heating	3.2	4.0	5.0	6.3	8.0
Power supply		220V/1Ph/50Hz		220V/1Ph/50Hz		220V/1Ph/50Hz
Power input		W	45	45	50	1000/850/750
Air flow volume (HML)		m ³ /h	518/410/310	600/480/380	720/570/450	910/830/700
Sound pressure level (HML)		dB(A)	36/34/30	38/28/26	42/39/35	45/41/39
Fan		Type	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Fan motor		Power output	W	16	25	30
		Insulation class	B	B	B	B
Connecting pipe		Liquid pipe	mm	φ6.35	φ6.35	φ6.35
		Gas pipe	mm	φ12.70	φ12.70	φ12.70
		Connection method	Flared	Flared	Flared	Flared
Drain pipe		External diameter	mm	DN20	DN20	DN20
Outline dimension (body)		mm	870*460*250	870*460*250	870*460*250	1180*495*290
Outline dimension (panel)		mm	1070*520*33	1070*520*33	1070*520*33	1380*550*33
Package dimension (body)		mm	1135*625*355	1135*625*355	1135*625*355	1445*655*395
Net weight		kg	25	27	27	39
Gross weight		kg	27.5	29.5	29.5	42

- Notes:
- Power supply: 220V/1Ph for 50Hz
 - The cooling condition: indoor side 27°C (80.6°F) DB, 19°C (66°F) WB outdoor side 35°C (95°F) DB
 - The heating condition: indoor side 20°C (68°F) DB, 15°C (44.6°F) WB outdoor side 7°C (42.8°F) DB
 - Sound level: measured at point 1m in front of the unit at a height of 1.3m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
 - The above data may be changed without notice for future improvement on quality and performance.



Optional			
Wireless	Wired	Wired	Centralized

● Accessories

Plenum box	Air filter	EXV	Drain pump	AC motor	DC Motor
/	/	Standard External	/	Standard	/

● Flexible installation, on the floor or on the ceiling



● Automatic horizontal and vertical air flow



● One sided access hole, easy for maintenance

Model		DCF028A	DCF036A	DCF056A	DCF071A	DCF086A	DCF102A	DCF125A	DCF146A
Capacity	Cooling	2.8	3.6	5.6	7.1	9.0	11.2	12.5	14.0
	Heating	3.2	4.0	6.3	8.0	10.0	12.5	14.0	16.0
Power supply		220V/1Ph/50Hz		220V/1Ph/50Hz		220V/1Ph/50Hz		220V/1Ph/50Hz	
Power input		W	48	62	85	120	156	210	240
Air flow volume (HML)		m ³ /h	450/400/370	600/480/370	820/700/570	1100/980/850	1470/1280/1080	1800/1550/1250	2000/1680/1350
Sound pressure level (HML)		dB(A)	42/39/36	43/40/38	45/42/40	47/44/41	49/46/42	50/47/44	51/48/45
Fan		Type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Fan motor		Power output	W	35	35	35	60	60	80
		Insulation class	B	B	B	B	B	B	B
Connecting pipe		Liquid pipe	mm	φ6.35	φ6.35	φ6.35	φ9.52	φ9.52	φ9.52
		Gas pipe	mm	φ12.70	φ12.70	φ12.70	φ15.88	φ15.88	φ15.88
		Connection method	Flared	Flared	Flared	Flared	Flared	Flared	Flared
Drain pipe		External diameter	mm	φ25	φ25	φ25	φ25	φ25	φ25
Outline dimension		mm	905*673*243	905*673*243	905*673*243	1288*673*243	1288*673*243	1672*673*243	1672*673*243
Package dimension		mm	1000*756*383	1000*756*383	1000*756*383	1383*756*383	1383*756*383	1767*756*383	1767*756*383
Net weight		kg	28	30	30	40	40	45	45
Gross weight		kg	31	31	33	43	43	48	48

- Notes:
- Power supply: 220V/1Ph for 50Hz
 - The cooling condition: indoor side 27°C (80.6°F) DB, 19°C (66°F) WB outdoor side 35°C (95°F) DB
 - The heating condition: indoor side 20°C (68°F) DB, 15°C (44.6°F) WB outdoor side 7°C (42.8°F) DB
 - Sound level: measured at point 1m in front of the unit at a height of 1.3m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
 - The above data may be changed without notice for future improvement on quality and performance.



● Accessories

Plenum box	Air filter	EXV	Drain pump	AC motor	DC Motor
/	Standard	Standard External	/	Standard	/

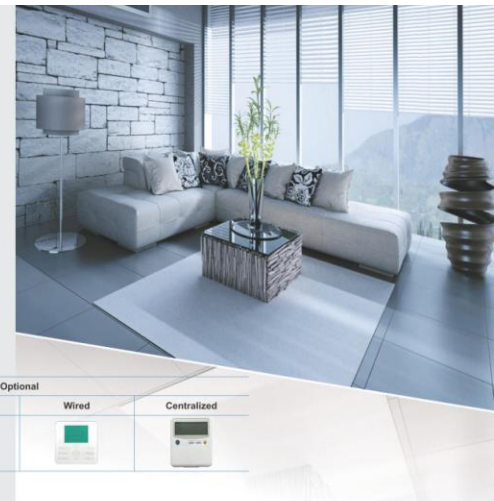
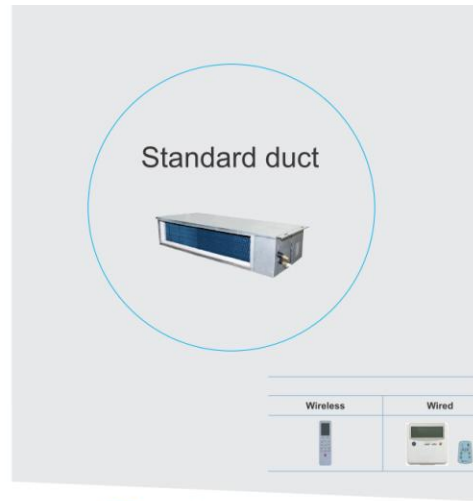
● Simple design, easy as optional

● Wired controller as optional

Model		DWM28A	DWM36A	DWM40A	DWM56A	DWM63A	DWM71A
Capacity	Cooling	kW 2.8	3.6	4.0	5.6	6.3	7.1
	Heating	kW 3.2	4.0	4.5	6.3	7.1	8.0
Power supply	V/Ph/Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz
Power input	W	30	35	35	42	42	65
Air flow volume (HML)	m ³ /h	450/410/380	500/460/425	500/460/425	800/750/710	800/750/710	1000/950/910
Sound pressure level (HML)	dB(A)	38/35/27	38/35/27	40/36/29	45/41/31	45/41/31	48/45/39
Fan	Type	—	Tubular	Tubular	Tubular	Tubular	Tubular
	Power output	W 13	13	13	30	30	30
Fan motor	Insulation class	—	B	B	B	B	B
	Liquid pipe	mm φ6.35	φ6.35	φ6.35	φ6.35	φ6.35	φ6.52
Connecting pipe	Gas pipe	mm φ12.70	φ12.70	φ12.70	φ12.70	φ12.70	φ15.88
	Connection method	Flared	Flared	Flared	Flared	Flared	Flared
Drain pipe	External diameter	mm φ16	φ16	φ16	φ16	φ16	φ16
	Outline dimension	mm 790*270*185	795*285*215	795*285*215	990*330*230	990*330*230	1090*330*255
Package dimension	mm 860*320*230	865*335*260	865*335*260	1060*380*275	1060*380*275	1160*380*300	
Net weight	kg	11.2	11.2	11.2	14.5	14.5	16.5
Gross weight	kg	14.8	14.8	14.8	18.5	18.5	20.5

Notes:

1. Power supply: 220V/1Ph for 50Hz
2. The cooling condition: indoor side 27°C (80.6°F) DB, 19°C (66°F) WB outdoor side 35°C (95°F) DB
3. The heating condition: indoor side 20°C (68°F) DB, 15°C (44.9°F) WB outdoor side 7°C (44.2°F) DB
4. Sound level: measured at point 1m in front of the unit at a height of 1.3m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
5. The above data may be changed without notice for future improvement on quality and performance.



● Accessories

Plenum box	Air filter	EXV	Drain pump	AC motor	DC Motor
Standard	/	Standard (built-in)	Optional	Standard	/

● Simple design, short body, easy to install

● Built-in drain pump, drain height can be 1200mm

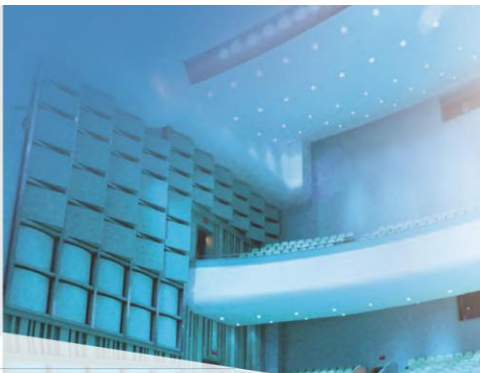
Built-in with long life drainage pump, Pumping head is 1200mm, flexible for drainage pipe design.



Model		DLD071AB	DLD090AB	DLD090AB	DLD100AB	DLD112AB	DLD125AB	DLD140AB	DLD160AB
Capacity	Cooling	kW 8.0	8.0	9.0	10.0	11.2	12.5	14.0	16.0
	Heating	kW 7.1	9.0	10.0	11.2	12.5	14.0	16.0	18.0
Power supply	V/Ph/Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz
Power input	W	144	170	230			303		
Air flow volume (HML)	m ³ /h	1100/1000/900	1300/1150/950	1600/1400/1200			2000/1700/1400		
ESP	Pa		30(15/30/70)				50(15/30/70)		
Sound pressure level (HML)	dB(A)	40/37/33		42/39/35			44/41/39		
Fan	Type	—	Centrifugal						
	Power output	W 80	35+55	35+80	60+125	60+125	60+125	60+125	60+125
Fan motor	Insulation class	—	B	B	B	B	B	B	B
	Gas pipe	mm				φ15.88			
Connecting pipe	Liquid pipe	mm				φ9.52			
	Connection method					Flared			
Drain pipe	External diameter	mm				DN25			
	Outline dimension	mm	1350*515*250				1350*557*292		
Package dimension	mm	1550*600*280				1550*640*320			
Net weight	kg	38	43			48			
Gross weight	kg	45	50			56			

Notes:

1. Power supply: 220V/1Ph for 50Hz
2. The cooling condition: indoor side 27°C (80.6°F) DB, 19°C (66°F) WB outdoor side 35°C (95°F) DB
3. The heating condition: indoor side 20°C (68°F) DB, 15°C (44.9°F) WB outdoor side 7°C (44.2°F) DB
4. Sound level: measured at point 1m in front of the unit at a height of 1.3m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
5. The above data may be changed without notice for future improvement on quality and performance.



Optional			
Wireless	Wired	Wired	Centralized

Optional			
Wireless	Wired	Wired	Centralized

● Accessories

Plenum box	Air filter	EXV	Drain pump	AC motor	DC Motor
Standard	/	Standard (built-in)	Optional	Standard	/

● Compact design, only 200mm height

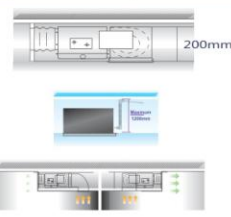
● Low noise, minimum 23dB(A)

● Built-in drain pump, drain height can be 1200mm

Built-in with long life drainage pump, Pumping head is 1200mm, flexible for drainage pipe design.

● Left and right drain pipe options

● Flexible air return



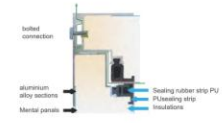
● Accessories

Plenum box	Air filter	EXV	Drain pump	AC motor	DC Motor
Standard	Standard	Standard (built-in)	/	Standard	/

● Labyrinth patent design, air leakage rate lower to 0.029%

● 300Pa high static pressure, suitable for large space

● Purification section as optional



Capacity	Model	Optional										
		DLD 022AC	DLD 025AC	DLD 029AC	DLD 032AC	DLD 036AC	DLD 040AC	DLD 045AC	DLD 050AC	DLD 055AC	DLD 063AC	DLD 071AC
Cooling	kW	2.2	2.5	2.8	3.2	3.6	4.0	4.5	5.0	5.6	6.3	7.1
	kW	2.5	2.8	3.2	3.6	4.0	4.5	5.0	5.6	6.3	7.1	8.0
Heating	kW	2.2	2.5	2.8	3.2	3.6	4.0	4.5	5.0	5.6	6.3	7.1
	kW	2.5	2.8	3.2	3.6	4.0	4.5	5.0	5.6	6.3	7.1	8.0
Power supply	V/Ph/Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz
	W	54	54	55	55	55	55	55	55	55	55	55
Air flow volume (HML)	m ³ /h	500/370/310	500/370/310	500/370/310	560/430/360	560/430/360	560/430/360	750/620/550	750/620/550	750/620/550	920/710/590	1000/800/680
	Pa	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)
ESP	Pa	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)
	dB(A)	33/28/23	33/28/23	33/28/23	33/28/24	33/28/24	33/28/24	35/30/28	35/30/28	35/30/28	36/32/28	37/32/29
Fan	Type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
	Speed (HML/SL)	rpm	1180/1050/820/760	1180/1050/820/760	1220/1080/880/810	1220/1080/880/810	1220/1080/880/810	1250/1110/810/720	1250/1110/810/720	1300/1130/890/720	1320/1150/900/720	1320/1150/900/880
Fan motor	Power output	W	26	26	26	26	26	26	40	40	60	60
	Insulation class	—	B	B	B	B	B	B	B	B	B	B
Connecting pipe	Liquid pipe	mm	ø6.35	ø6.35	ø6.35	ø6.35	ø6.35	ø6.35	ø6.35	ø6.35	ø6.35	ø9.52
	Gas pipe	mm	ø9.52	ø9.52	ø9.52	ø12.7	ø12.7	ø12.7	ø12.7	ø12.7	ø12.7	ø15.88
Drain pipe	Connection method	—	Flared	Flared	Flared	Flared	Flared	Flared	Flared	Flared	Flared	Flared
	External diameter	mm	ø25	ø25	ø25	ø25	ø25	ø25	ø25	ø25	ø25	ø25
Package dimension	mm	700*450*200	700*450*200	700*450*200	700*450*200	700*450*200	700*450*200	920*450*200	920*450*200	1140*450*200	1140*450*200	1140*450*200
	Net weight	kg	17.5	17.5	17.5	17.5	17.5	21.5	21.5	21.5	28	28
Gross weight	kg	17.5	17.5	17.5	17.5	17.5	21.5	21.5	21.5	21.5	28	28

Notes:
 1. Power supply: 220V/1Ph for 50Hz
 2. The cooling condition: indoor side 27°C (80.6°F) DB, 19°C (66°F) WB outdoor side 35°C (95°F) DB
 3. The heating condition: indoor side 20°C (68°F) DB, 15°C (44.8°F) WB outdoor side 7°C (42.8°F) DB
 4. Sound level: measured at point 1m in front of the unit at a height of 1.3m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
 5. The above data may be changed without notice for future improvement on quality and performance.

Capacity	Model	Optional			
		DHD100A	DHD112A	DHD125A	DHD140A
Cooling	kW	10.0	11.2	12.5	14.0
	kW	11.2	12.5	14.0	16.0
Heating	kW	10.0	11.2	12.5	14.0
	kW	11.2	12.5	14.0	16.0
Power supply	V/Ph/Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz
	W	400	420	500	550
Air flow volume (HML)	m ³ /h	1800/1450/1050	2000/1600/1300	2250/1800/1450	2700/2150/1750
	Pa	50(100)	50(100)	50(100)	50(100)
ESP	Pa	50(100)	50(100)	50(100)	50(100)
	dB(A)	49/46/42	49/46/42	51/47/43	51/47/43
Sound pressure level (HML)	Type	Centrifugal	Centrifugal	Centrifugal	Centrifugal
	W	200	200	250	250
Fan motor	Insulation class	—	B	B	B
	Liquid pipe	mm	ø9.52	ø9.52	ø9.52
Connecting pipe	Gas pipe	mm	ø15.88	ø15.88	ø15.88
	Connection method	—	Flared	Flared	Flared
Drain pipe	External diameter	mm	ø25	ø25	ø25
	mm	1200*750*400	1200*750*400	1200*750*400	1200*750*400
Outline dimension	mm	1270*765*400	1270*765*400	1270*765*400	1270*765*400
	kg	57	57	60	60
Net weight	kg	62	62	65	65
	kg	62	62	65	65

Notes:
 1. Power supply: 220V/1Ph for 50Hz
 2. The cooling condition: indoor side 27°C (80.6°F) DB, 19°C (66°F) WB outdoor side 35°C (95°F) DB
 3. The heating condition: indoor side 20°C (68°F) DB, 15°C (44.8°F) WB outdoor side 7°C (42.8°F) DB
 4. Sound level: measured at point 1m in front of the unit at a height of 1.3m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
 5. The above data may be changed without notice for future improvement on quality and performance.



● Accessories

Plenum box	Air filter	EXV	Drain pump	AC motor	DC Motor
/	Standard	Standard (built-in)	/	DHD195/255AI	DHD410-790AI

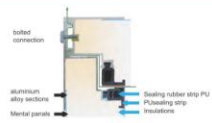
● Accessories

Plenum box	Air filter	EXV	Drain pump	AC motor	DC Motor
/	Standard	Standard (built-in)	/	Standard	/

● Labyrinth patent design, air leakage rate lower to 0.029%

● 300Pa high static pressure, suitable for large space

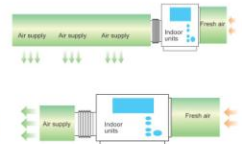
● Purification section as optional



● 300Pa high static pressure, suitable for large space

● Flexible air outlet

● Automatic fresh air introduction, improve room air quality



Model	DHD195AI	DHD255AI	DHD410AI	DHD520AI	DHD620AI	DHD790AI
Capacity	Cooling	19.5	25.5	41.0	52.0	62.0
	Heating	20.4	28.5	41.5	55.0	68.0
Power supply	V/PHz	380V/3N/50Hz	380V/3N/50Hz	380V/3N/50Hz	380V/3N/50Hz	380V/3N/50Hz
Power input	W	1320	1320	2640	2640	4480
Air flow volume	m ³ /h	4300	4800	7500	9000	11000
ESP	Pa	200	200	250	250	300
Sound pressure level	dB(A)	54	54	55	57	60
Fan	Type	—	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Fan motor	Insulation class	—	B	B	B	B
Connecting pipe	Liquid pipe	mm	φ12.7	φ12.7	φ15.88	φ15.88
	Gas pipe	mm	φ22.23	φ22.23	φ28.60	φ28.60
Drain pipe	External diameter	mm	DN32	DN32	DN32	DN32
	Outline dimension	mm	1451*1204*608	1951*1604*908	1951*1604*908	2293*1604*1008
Package dimension	mm	1451*1204*608	1951*1604*908	1951*1604*908	2293*1604*1008	
Net weight	kg	150	275	325	335	335
Gross weight	kg	152	277	327	337	339

Notes:
 1. Power supply: 220V/1PH for 50Hz
 2. The cooling condition: indoor side 27°C (80.6°F) DB, 19°C (66°F) WB outdoor side 35°C (95°F) DB
 3. The heating condition: indoor side 20°C (68°F) DB, 15°C (44.6°F) WB outdoor side 7°C (42.8°F) DB
 4. Sound level: measured at point 1m in front of the unit at a height of 1.3m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
 5. The above data may be changed without notice for future improvement on quality and performance.

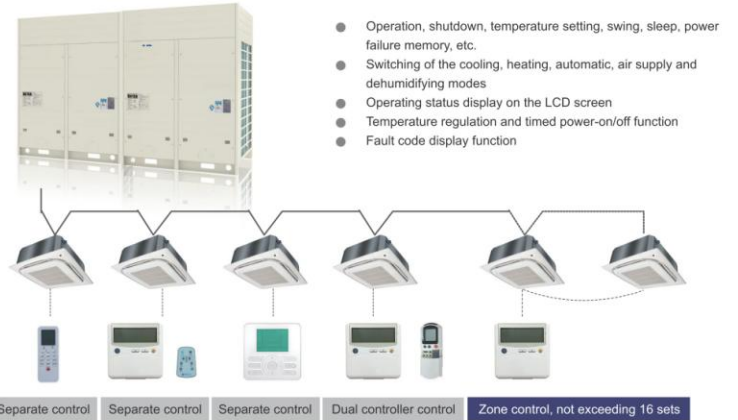
Model	DFR 115A-022	DFR 210A-020	DFR 255A-015	DFR 250A-020	DFR 250A-030	DFR 300A-020	DFR 400A-020	DFR 400A-030	DFR 500A-020	DFR 500A-030	DFR 600A-030
Capacity	Cooling	25.0	28.0	28.0	28.0	28.0	28.0	28.0	45.0	45.0	56.0
	Heating	14.0	17.4	17.4	17.4	17.4	17.4	17.4	28.0	28.0	35.0
Power supply	V/PHz	220V/1PH/50Hz	220V/1PH/50Hz	380V/3N/50Hz	380V/3N/50Hz	380V/3N/50Hz	380V/3N/50Hz	380V/3N/50Hz	380V/3N/50Hz	380V/3N/50Hz	380V/3N/50Hz
Power input	W	630	700	480	560	790	750	880	1290	1000	1400
Air flow volume	m ³ /h	1750	2100	2500	2500	2500	3000	4000	5000	5000	6000
ESP	Pa	220	200	150	200	300	200	200	300	200	300
Sound pressure level	dB(A)	49	49	52	55	58	56	59	62	62	65
Fan	Type	—	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Fan motor	Power input	W	630	700	480	560	790	750	880	1290	1000
Fan motor	Insulation class	—	B	B	B	B	B	B	B	B	B
Connecting pipe	Liquid pipe	mm	φ12.70	φ12.70	φ12.70	φ12.70	φ12.70	φ12.70	φ12.70	φ15.88	φ15.88
	Gas pipe	mm	φ22.23	φ22.23	φ22.23	φ22.23	φ22.23	φ22.23	φ28.58	φ28.58	φ28.58
Drain pipe	External diameter	mm	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25
	Outline dimension	mm	1300*820*500	1300*820*500	1300*820*500	1300*820*500	1300*820*500	1300*820*500	1650*850*665	1650*850*665	2000*850*665
Package dimension	mm	1360*830*510	1360*830*510	1360*830*510	1360*830*510	1360*830*510	1360*830*510	1360*830*510	1767.5*948*848	1767.5*948*848	2117.5*948*848
Net weight	kg	75	75	75	75	75	75	75	140	140	165
Gross weight	kg	80	80	80	80	80	80	80	160	160	185

Notes:
 1. Power supply: 220V/1PH for 50Hz
 2. The cooling condition: indoor side 27°C (80.6°F) DB, 19°C (66°F) WB outdoor side 35°C (95°F) DB
 3. The heating condition: indoor side 20°C (68°F) DB, 15°C (44.6°F) WB outdoor side 7°C (42.8°F) DB
 4. Sound level: measured at point 1m in front of the unit at a height of 1.3m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
 5. The above data may be changed without notice for future improvement on quality and performance.

INTELLIGENT CONTROL

- Independent Control 38
- Centralized Control 39
- Implementing Intelligent Control 39
- Household-based Charging 40
- Building Automation (BMS) System 41

Independent Control



IDU type	Model	Appearance			
Four-way cassette	DCA		Optional	Optional	Optional
One-way cassette	DCS		Optional	Optional	Optional
Two-way cassette	DCD		Optional	Optional	Optional
Slim Low ESP duct	DLD		Optional	Optional	Optional
Standard duct	DLD		Optional	Optional	Optional
High ESP duct	DHD		Optional	Optional	Optional
Big capacity duct	DHD		Optional	Optional	Optional
Fresh air handling unit	DFR		Optional	Optional	Optional
Floor ceiling	DCF		Optional	Optional	Optional
Wall mounted	DWM		Optional		

Centralized Control

Remote centralized controller

- Able to implement centralized control or separate control on 64 IDUs in 8 systems
- Mode locking and single unit query/all control functions
- Setting operation start and end time of air conditioner
- Fault indication, uniform control interface and humanized operation interface
- Mode switching
- Supporting the longest control signal line of 1000 m
- Operating status monitoring function
- Fault code display function



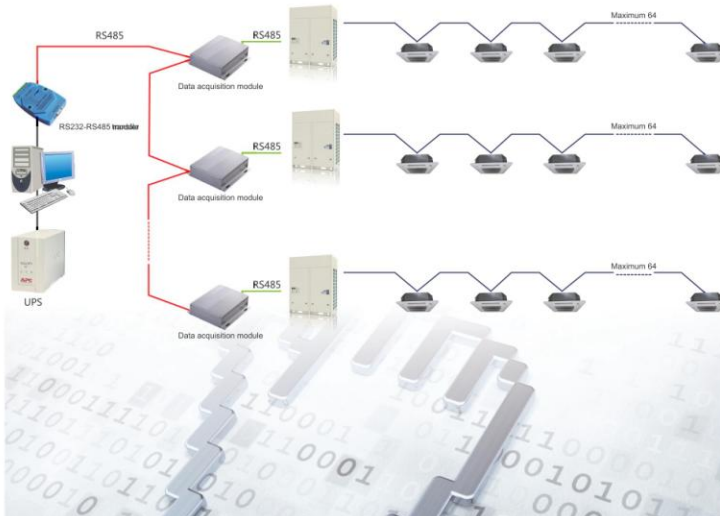
Centralized control

Implementing Intelligent Control

Intelligent Management System

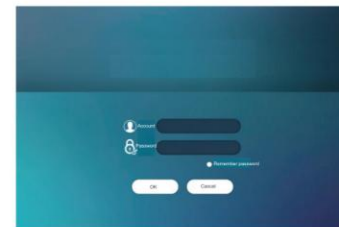
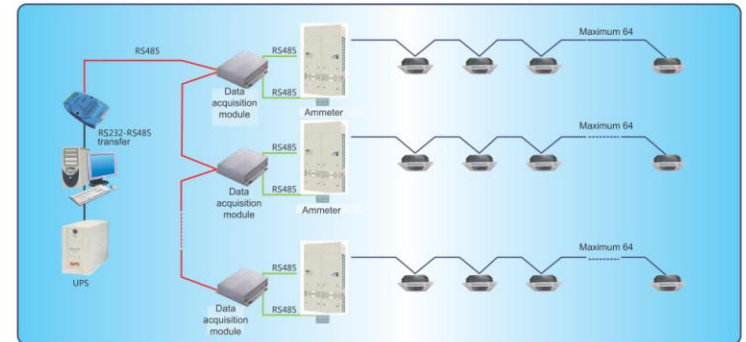
The IDUs are connected to a computer so that full automatic control can be implemented on the system through the computer. The control function is powerful, and operations are simple and clear. One set of intelligent management system can connect to 32 sets of systems and 2048 IDUs at most, and realize large scale centralized control.

- Free grouping and zone management
- Perfect schedule management function
- Historical data record
- Schedule control function of week/month/year
- Single-unit or centralized operation, shutdown, temperature setting, mode switching, etc.
- The air conditioning systems of multiple buildings can be controlled in a centralized manner at the same place
- Permission setting
- Temperature control, time switch
- Fault code display function
- Interlock control
- Remote management



Household-based Charging

- The household-based charging software provides the complete unit monitoring and control functions and can realize all-dimensional dynamic monitoring on the ODU operating status.
- Network control is realized for a maximum of 2048 IDUs, and the control signal of the data acquisition module can reach the maximum distance of 1200 m.
- The cooling system topology map can be set and displayed visually.
- The market-tested electricity fee distribution algorithm implements convenient electricity fee distribution management, and detailed historical data forms can be generated.
- Users, electricity prices and groups can be set so that the user can realize flexible management on household-based charging of VRF units.
- System energy saving settings:
 - ① Operating status monitoring function
 - ② Fault code display function



Building Automation (BMS) System

DRV adopts multiple automatic control systems to access the building automation system easily, and full automatic control of the system is realized through the computer. The control function is powerful, and operations are simple and clear.

LonWorks system



- Connecting to a maximum of 1024 IDUs and 16 sets of ODUs
- Powering on/off the air conditioner, controlling operation, and monitoring the operating status
- Monitoring the IDU fault code
- Monitoring and setting the IDU temperature
- Monitoring and switching the operating mode
- Setting remote controller permissions
- Free grouping and zone management
- Perfect schedule management function
- Historical data record
- Schedule control function of week/month/year
- Single-unit or centralized operation, shutdown, temperature setting, mode switching, etc.
- Interlock control (fire alarm, door lock, fault, etc.)

BACnet system



- Connecting to a maximum of 1024 IDUs and 16 sets of ODUs
- Powering on/off the air conditioner, controlling operation, and monitoring the operating status
- Monitoring the IDU fault code
- Monitoring and setting the IDU temperature
- Monitoring and switching the operating mode
- Setting remote controller permissions
- Service monitoring
- Automatic unit operation according to settings
- Shielding function of the user's air conditioner controller
- Free grouping and zone management
- Perfect schedule management function
- Historical data record
- Schedule control function of week/month/year
- Single-unit or centralized operation, shutdown, temperature setting, mode switching, etc.
- Interlock control (fire alarm, door lock, fault, etc.)

ModBus system



- Connecting to a maximum of 1024 IDUs and 16 sets of ODUs
- Powering on/off the air conditioner, controlling operation, and monitoring the operating status
- Monitoring the IDU fault code
- Monitoring and setting the IDU temperature
- Monitoring and switching the operating mode
- Setting remote controller permissions
- Service monitoring
- Automatic unit operation according to settings
- Shielding function of the user's air conditioner controller
- Free grouping and zone management
- Perfect schedule management function
- Historical data record
- Schedule control function of week/month/year
- Single-unit or centralized operation, shutdown, temperature setting, mode switching, etc.
- Interlock control (fire alarm, door lock, fault, etc.)

Intelligent Interlock for Hotels

The specially designed seamless connection interface for hotel door card can be selected in the application scenarios such as hotels. When the door card is inserted, the IDU can be controlled freely; when the door card is removed, the IDU is turned off automatically after a delay, making hotel management convenient and saving power.



Intelligent Diagnosis/Debugging/Upgrade Function ("Black Box")

The "Black Box" data saving device is provided so that the data related to unit operation can be read conveniently during after-sales maintenance and debugging, greatly enhancing the convenience of maintenance and debugging.

When the system program needs to be upgraded, save the IDU and ODU control program in a USB drive, and insert the USB drive into the reserved USB interface of the main board. Then, the system control program can be upgraded through simple and intelligent button operations.



DEKON VRF Unit Cleaning Technology

"Fresh and clean" series return air purifiers

Return Air Purifiers

Characteristics:

- High-grade fashionable appearance design and first-class surface process and texture.
- Installation and maintenance are convenient. DEKON provides six types of standard dimensions, meeting your different decoration requirements.
- The air flow range is wide, from 340 m³/h to 2400 m³/h, meeting the requirements of different occasions.
- Wide application scope: The purifiers can be used together with fan coils, VRF units, and commercial IDUs.
- Low wind resistance: The minimum resistance of air return unit is 8 Pa, and the IDU air return is not affected as clean air is produced.

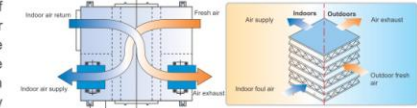
Specification of Return Air Purifiers

Model	TRP070BPF	TRP090BPF	TRP100BPF	TRP110BPF	TRP140BPF	TRP220BPF
Rated Air Volume	540	900	1000	1100	1300	1700
Air Volume Range	340-700	700-900	340-1000	900-1100	950-1700	1300-2400
Outline dimension	386*276*54	1046*276*54	548*548*54	1246*276*54	1396*276*54	1546*276*54

Fresh Air Ventilator

Fresh Air Ventilator

The fresh air ventilator is a fresh air product of recovering exhaust heat energy and reusing it for air supply. The fresh air and exhausted air flow through the heat exchanger crosswise and implement temperature and humidity exchange in the fresh air ventilator. In this way, the fresh air recovers the majority of energy from the air exhausted from the air conditioner, saving energy and reducing consumption.

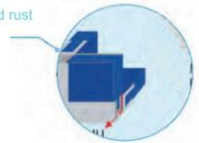


Fresh Air Ventilators of Standard Series

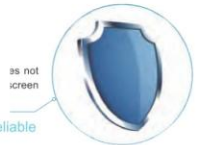


Patent structure with a low air leakage rate

Eradicating cold bridge and rust



The aich mas the
High efficiency and energy conservation



as not screen
Safe and reliable

Model	Air volume (m ³ /h)	ESP (Pa)		Cooling (%)		Heating (%)		Motor input power(kW)		Noise dB(A)	Rated voltage (V)
		Air supply	Air exhaust	Temperature recovery efficiency	Enthalpy recovery efficiency	Temperature recovery efficiency	Enthalpy recovery efficiency	Air supply	Air exhaust		
TFD010FC	1000	90	90	61	52	72	60	0.20	0.20	53	220V - 50Hz
TFD015FC	1500	110	110	59	51	71	59	0.30	0.30	53	220V - 50Hz
TFD020FC	2000	120	120	61	53	73	61	0.45	0.45	55	220V - 50Hz
TFD025FC	2500	110	110	58	50	70	58	0.55	0.55	56	380V 3N - 50Hz
TFD030FC	3000	100	100	59	51	71	59	0.55	0.55	58	380V 3N - 50Hz
TFD040FC	4000	110	110	57	50	69	58	1.00	1.00	59	380V 3N - 50Hz
TFD050FH	5000	100	100	57	50	69	58	1.50	1.50	62	380V 3N - 50Hz
TFD060FH	6000	100	100	59	51	71	59	0.55x2	0.55x2	62	380V 3N - 50Hz
TFD080FH	8000	110	110	57	50	69	58	1.00x2	1.00x2	63	380V 3N - 50Hz
TFD105FH	10500	100	100	57	50	69	58	1.50x2	1.50x2	66	380V 3N - 50Hz

Fresh Air Ventilators of Small Silent Series

● Characteristics:



The air flow range is 150 m³/h–800 m³/h, applicable to sites such as homes, conference rooms, labs, offices, equipment rooms, restaurants, and gyms. The installation is convenient. The machine is installed in the ceiling, without occupying the indoor effective space or affecting the interior decoration effect. The machine can also be turned upside down for installation to improve flexibility. The noise is lower. The international popular structure design, non-metallic material and the accurate and consistent mold production ensure the perfect silent effect. More complete functions are implemented, including bidirectional ventilation, air purification, energy recovery, and bypass system.

Model	Fresh air volume (m ³ /h)	ESP(Pa)	Enthalpy recovery efficiency (%)		Temperature recovery efficiency (%)	Sound pressure level dB(A)	Rated voltage (V)	Current (A)	Power input (W)	Net weight (kg)
			Cooling	Heating						
DFV015	150/200/200	60/70/75	60/55/55	63/59/59	75/70/70	31.5	220	0.5	105	23
DFV020	150/200/200	60/70/75	60/55/55	63/59/59	75/70/70	31.5	220	0.5	105	23
DFV030	250/300/300	75/82/85	62/57/57	65/61/61	73/68/68	34.5	220	0.6	117	25
DFV040	350/400/400	80/85/88	62/57/57	65/60/60	74/69/69	37.5	220	0.7	150	31
DFV060	500/600/600	89/92/97	63/59/59	67/61/61	76/70/70	39.0	220	1.0	200	36
DFV080	700/800/800	92/96/100	57/55/55	63/57/57	74/68/68	41	220	1.7	355	60

Fresh Air Ventilators of Medium-sized High-end Series

● Characteristics:



The air flow range is 1000 m³/h–6000 m³/h, applicable to sites such as homes, conference rooms, labs, offices, equipment rooms, restaurants, and gyms. The installation is convenient. The machine is installed in the ceiling, without occupying the indoor effective space. More complete functions are implemented, including bidirectional ventilation, air purification, and energy recovery. The sheet metal structure is designed, with thermal insulation cotton stuck inside.

Model	Fresh air volume (m ³ /h)	ESP (Pa)	Enthalpy recovery efficiency (%)		Temperature recovery efficiency (%)		Sound pressure level dB(A)	Power input (W)	Current (A)	Rated voltage (V)	Net weight (kg)	Outline dimension (mm)
			Cooling	Heating	Cooling	Heating						
DFV100	850/1000/1000	85/95/120	53/51/51	71/67/67	75/70/70	85/82/82	42/44/45	490/520/550	2.2/2.4/2.7	220	100	1264*1214*388
DFV150	1400/1500/1500	95/110/160	53/51/51	63/62/62	75/70/70	78/77/77	47/50/51	750/860/920	3.5/3.9/4.2	220	143	270*1214*476
DFV200	1400/1700/2000	70/80/105	53/51/51	67/64/61	73/68/68	81/77/75	46/48/52	930/1050/1310	4.5/5.0/6.3	220	175	270*1240*476
DFV250	1600/2000/2500	70/80/100	56/54/51	70/65/62	74/69/69	86/81/80	45/50/53	1000/1410/1630	5.0/6.4/7.6	220	185	270*1240*600
DFV300	1800/2500/3000	70/85/150	68/61/58	79/74/71	76/70/70	88/85/82	45/45/52	1010/1460/1900	4.7/6.8/8.7	220	198	270*1872*660
DFV400	**/4000	**/1125	**/51	0/0/65	74/68/68	**/78	**/58	**/1940	**/75.3	220	290	430*2022*660
DFV500	**/5000	**/195	**/57	**/71	76/70/70	**/82	**/59	**/2790	**/77.3	220	360	430*1842*860
DFV600	**/6000	**/1120	**/58	**/70	74/68/68	**/84	**/60	**/3280	**/77.8	220	390	430*2172*860

