

Hisense

Air

CONDITIONING SOLUTION

Reimagine your solution

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RELIABILITY

*AIR
CONDITIONING
SOLUTION*



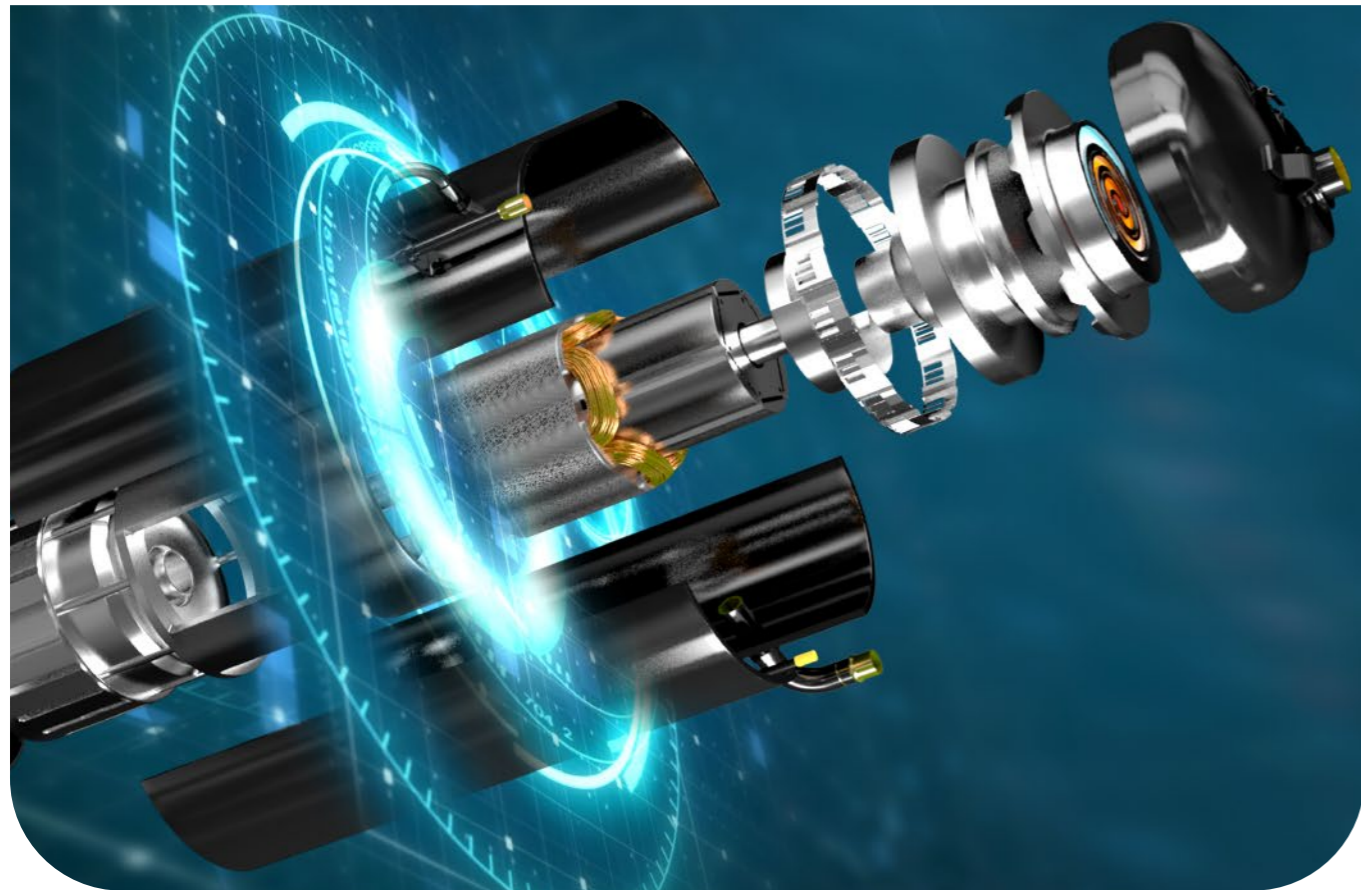
Refrigerant Circuit

Anti-corrosion Solution

System & Operation

Reliability

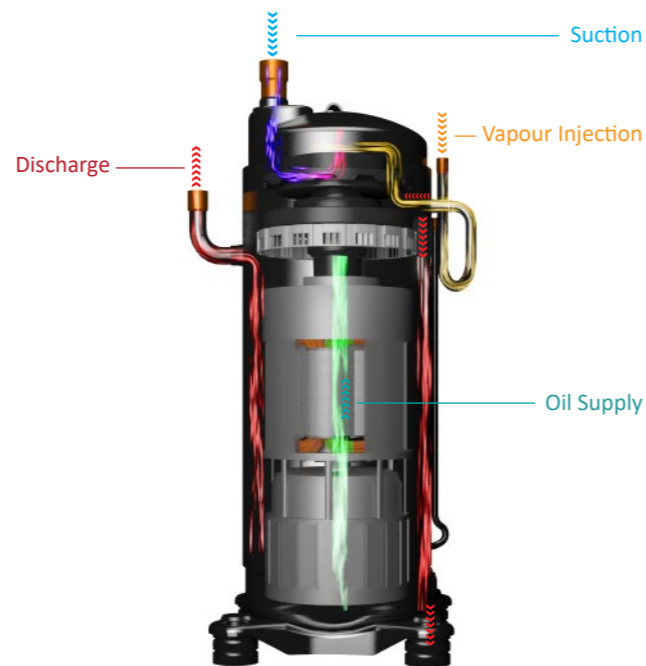
Refrigerant Circuit



Revolutionary HVAC compressor

Vapour injection technology

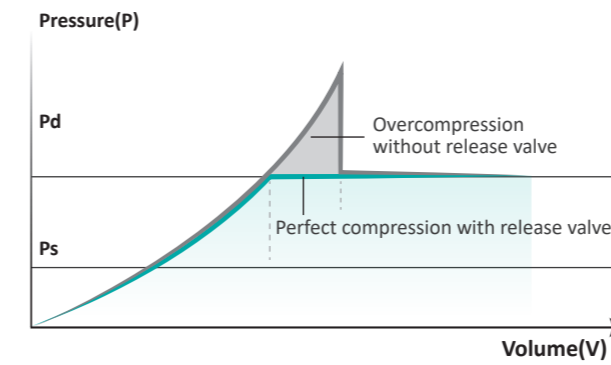
New generation scroll compressor is now patented with higher performance capability vapour injection technology, increasing capacity upto 25% compared to conventional scroll compressor with same amount of power consumed.



Refrigerant Circuit

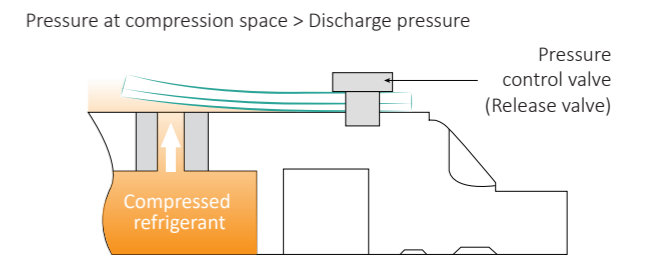
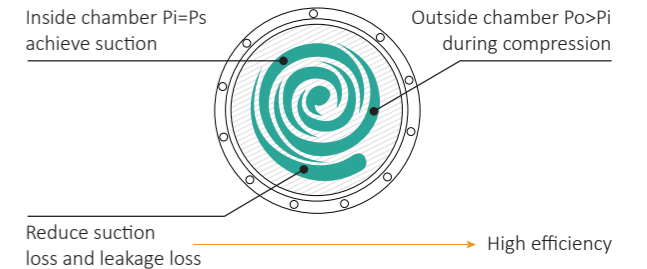
Efficient energy usage

Wasted power is reduced by minimizing leakage and anti-overcompression while compressing refrigerant gas with asymmetric scroll and patented release valves.

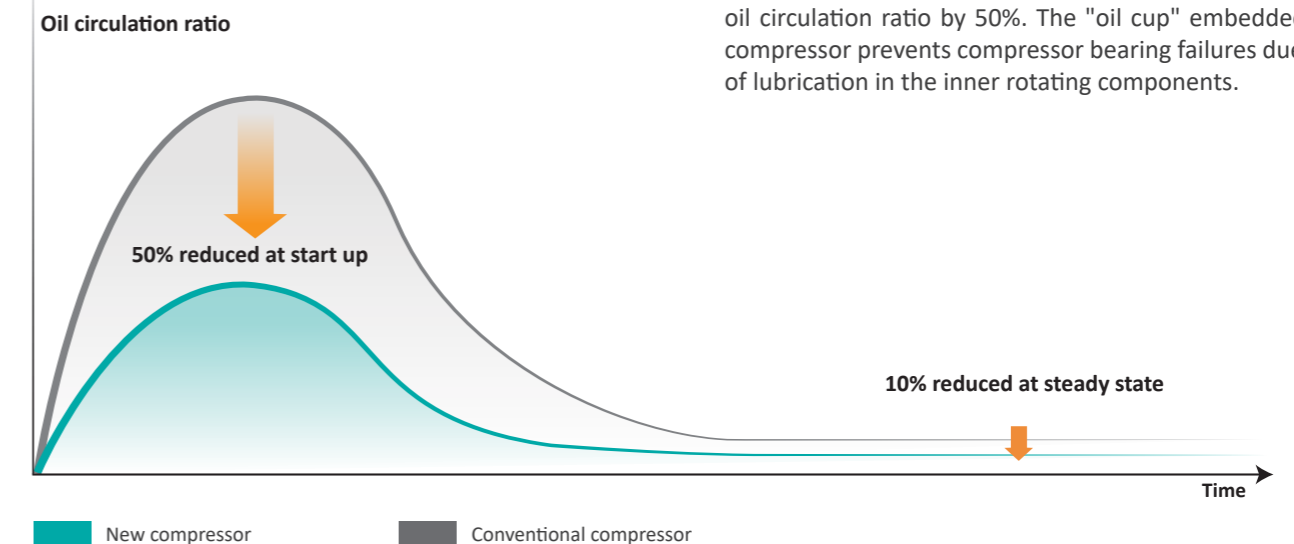


— Conventional compressor
 — Perfect compression with release valve and asymmetric scroll

P_i =Inlet pressure P_o =Outlet pressure P_s =Suction pressure



Enhanced oil level retaining capability

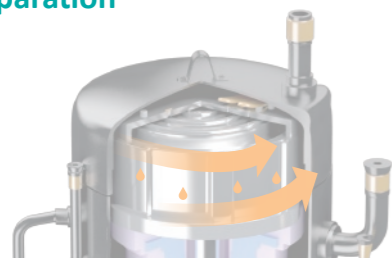


The new compressor has now greater improvement in reliability by enhancing the oil retaining capability with lower oil circulation ratio by 50%. The "oil cup" embedded in the compressor prevents compressor bearing failures due to lack of lubrication in the inner rotating components.

Refrigerant Circuit

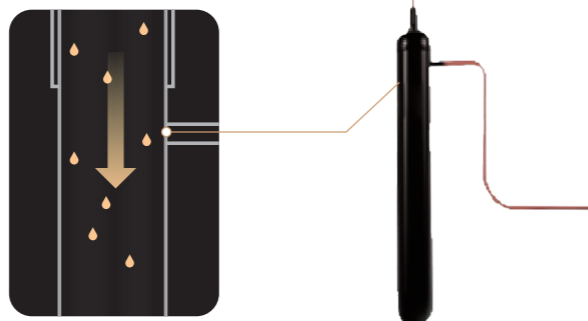
Oil separation and oil return

Oil separation



First-stage Oil Separation

First-stage oil separation is realized through efficient oil separation structure inside the high-pressure-chamber compressor. Only a small amount of oil is brought out of the compressor.

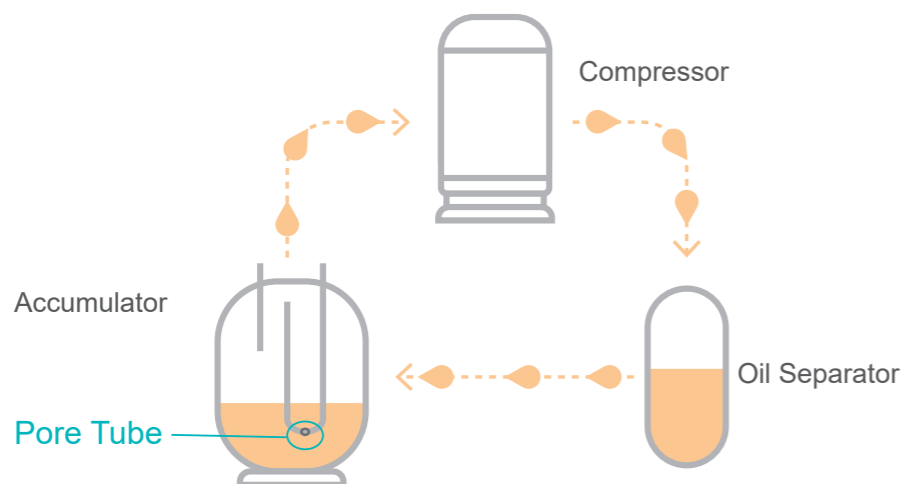


Second-stage Oil Separation

During second-stage oil separation, the small amount of oil discharged from compressor is separated by a large-capacity, high-efficiency centrifugal oil separator, with efficiency over 99%.

Oil return

The accumulator adopts pore tube oil return technology with a built-in fine strainer, which not only ensures oil balance between compressors within one module, but also plays an important role in the oil balance between modules. Besides this, the system implements oil-return function based on compressor frequency and corresponding operation time. The oil-return takes 60 seconds and can return to previous condition when it is finished. In winter under heating mode, this operation is implemented without switching to cooling mode, which guarantees the heating performance.



Anti-corrosion Solution

Hisense's complete corrosion-proof is a perfect solution in seaside and chemical factory applications, providing ultimate comfort without sacrificing life span and reducing maintenance cost simultaneously. Besides the heat exchanger, component from top to toe are treated with effective treatments and tested according to ISO, ASTM and GB standards.

- 1 Front Panel**
Galvanized steel treated with zirconium & 100µm~180µm epoxy zinc rich primer + pure polyester paint coating.
- 2 Heat Exchanger**
Black fin with epoxy resin & hydrophilic film .
- 3 Electrical Box**
Galvanized steel treated with zirconium & 50µm~120µm pure polyester.
- 4 Fan Motor**
Coated with 10µm ~30µm Acrylic Resin coating Thickness: 10µm ~30µm
- 5 Top Grill** **6 Motor Bracket** **7 Protection Net**



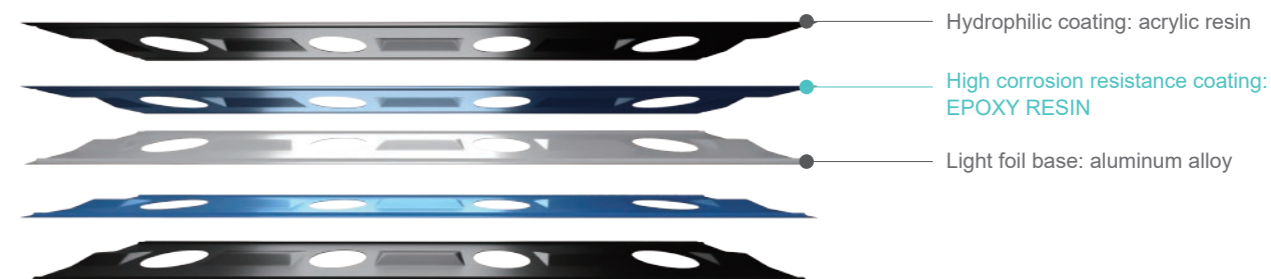
Hisense anti-corrosion black fin (optional)

Hisense anti-corrosive fins are coated with epoxy resin using film-forming techniques compared with traditional acrylic resins. The epoxy resin is 1.5 times thicker than

acrylic resin, and its acid-resistant, alkali-resistant and salt-fog resistant properties is 3 times better than acrylic resin.

Hi black fin

The moisture facilitates ionization of Zinc. It will protect fins from corrosion.



System & Operation



Severe reliability quality tests

Non-affecting reliability transportation

As common as items being transported by logistic transportations on roads and sea, the constant vibration during shipment would accelerate wear and tear rates, which eventually pull down the reliability of the unit. To cope to and overcome such conditions, strict laboratory assessments are required using simulators mimicking the real shipping conditions of upto 6000 km and 500 minutes road distance and 240 minutes sea distance.



Extreme weather withstand ability

Hisense VRF air-conditioning units are tested many times under extreme conditions, such as intense low outdoor temperature, extreme high indoor temperature, rain or sun shine, etc. to ensure the best performance in the laboratory.

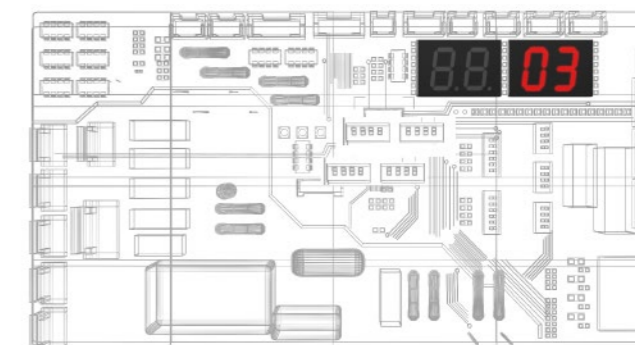
System & Operation



Self-diagnosis, protect & regulate

Self-diagnosis

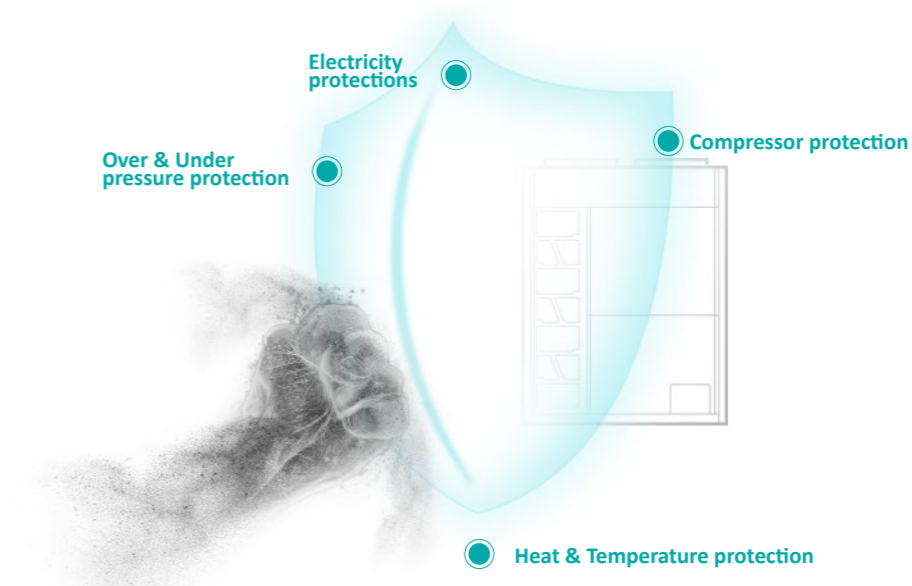
Alarm codes will flash when an error or breakdown occurs, which is helpful for installers and end-users to understand what's going on during test run. Besides alarm codes, operating status and parameters such as history temperature, pressure, compressor frequency and etc. are traceable on controllers and the outdoor unit, making service maintenance and troubleshooting much easier.



Self-protection measures

Hisense VRF can protect itself with algorithms embedded to make necessary protective decisions and measures by different sensor readings and parameters, including

compressor protections, temperature protections, system pressure protections and electricity protections.

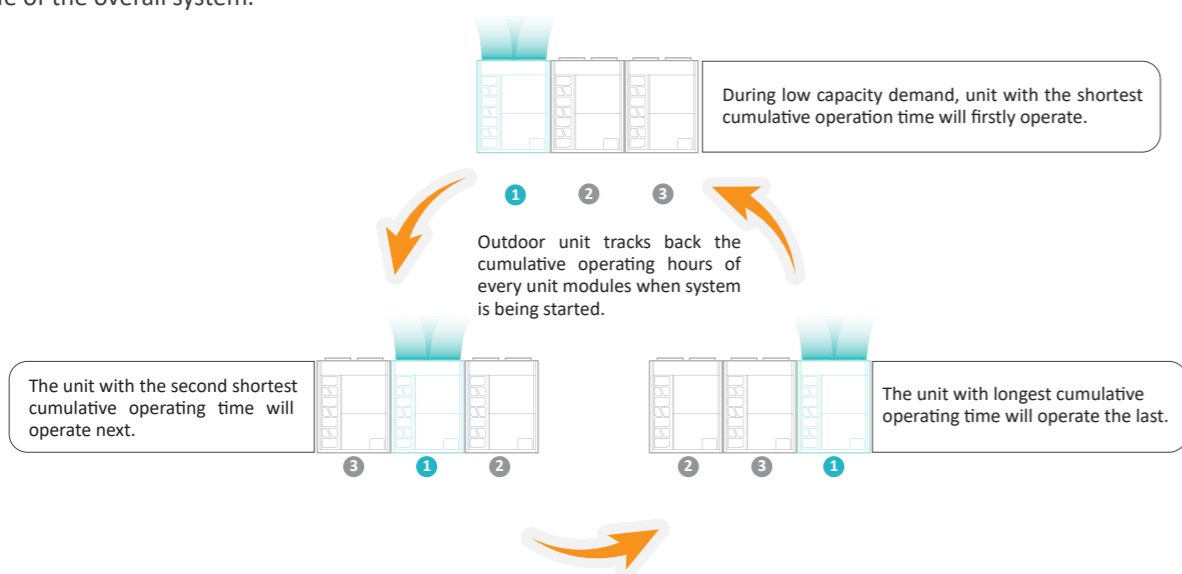


System & Operation

Smart rotative operation & double back-up protection

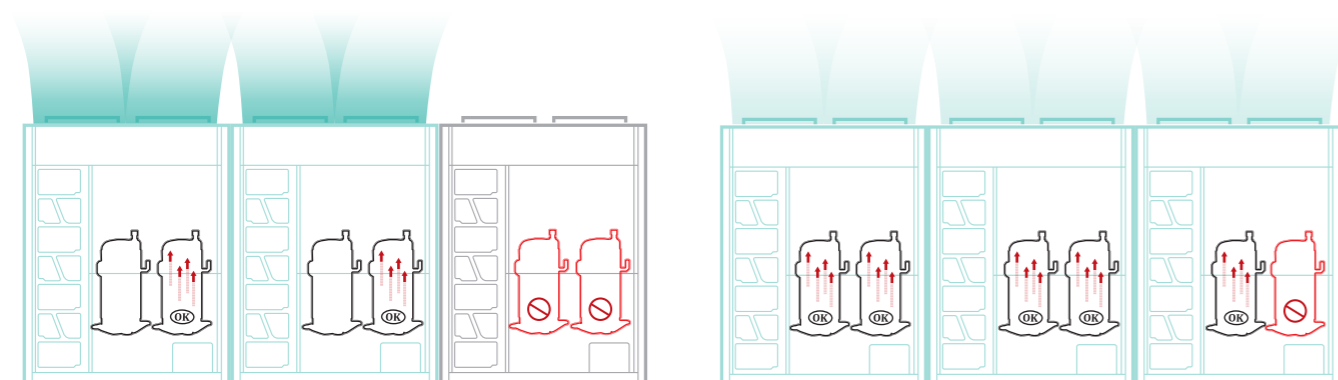
Smart rotational operation

Operation duties are smartly balanced in higher capacity module combinations to prevent occurrence of individual unit overworked and hence extending the overall operating life of the overall system.



Double back-up protection

Hisense VRF has a standard double back-ups to keep you staying comfy indoors despite having a compressor or any one unit of a modular combination fails as other compressors and units will proceed and step up its operation to ensure user's continuous comfort.



First Backup (When single module fails)

Note For modular combination units

Second Backup (when any compressor fails)

Note For units with dual compressors

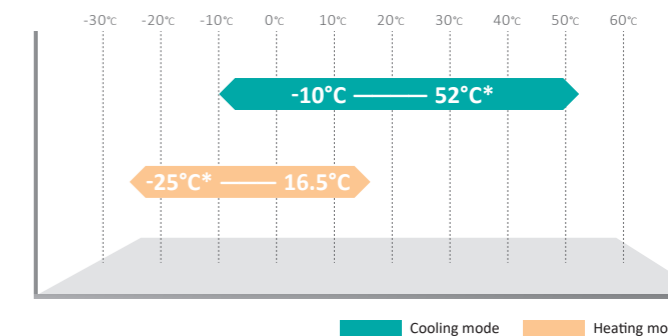
System & Operation

Wider operation range

Extended operation range creates wider application potential, in cooling mode the operation range is from -10°C to 52°C and in heating mode the operation range is from -25°C to 16.5°C, which adapts to extreme conditions.

Note

-25~16.5°C is the Web bulb temp. range. When the temperature is in 48°C~52°C and -20°C~-25°C, the module is in intermittent operation.



Auto snow accumulation prevention

To maintain the reliability of the outdoor unit despite with harsh environmental conditions, Hisense VRF is made compatible to snow sensors to naturally cast out snow, preventing snow being piled up.

Note

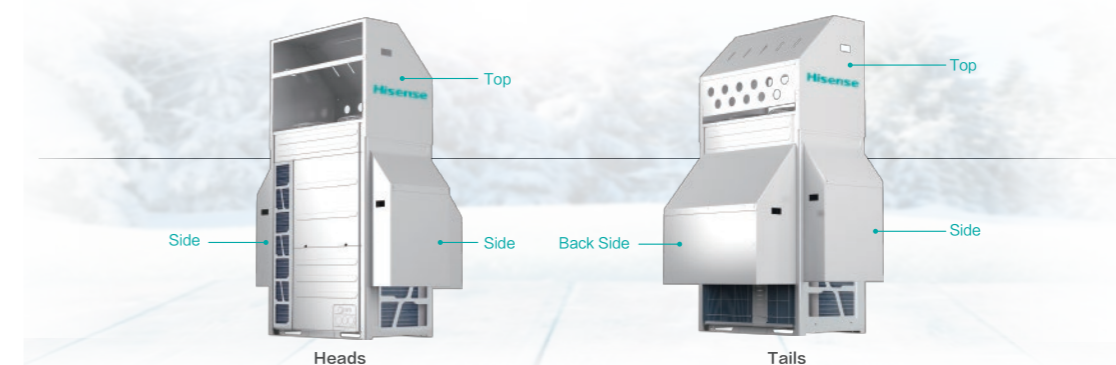
Sensor connection ports are available for connection but snow sensors are not supplied.



Snow hood (optional)

The snow hood kit can effectively prevent heavy snow from accumulating on the top of the unit and covering the heat exchanger. Heavy snow accumulating will

affect the heat exchange seriously, thus stable operation can be ensured thanks to the snow hood.



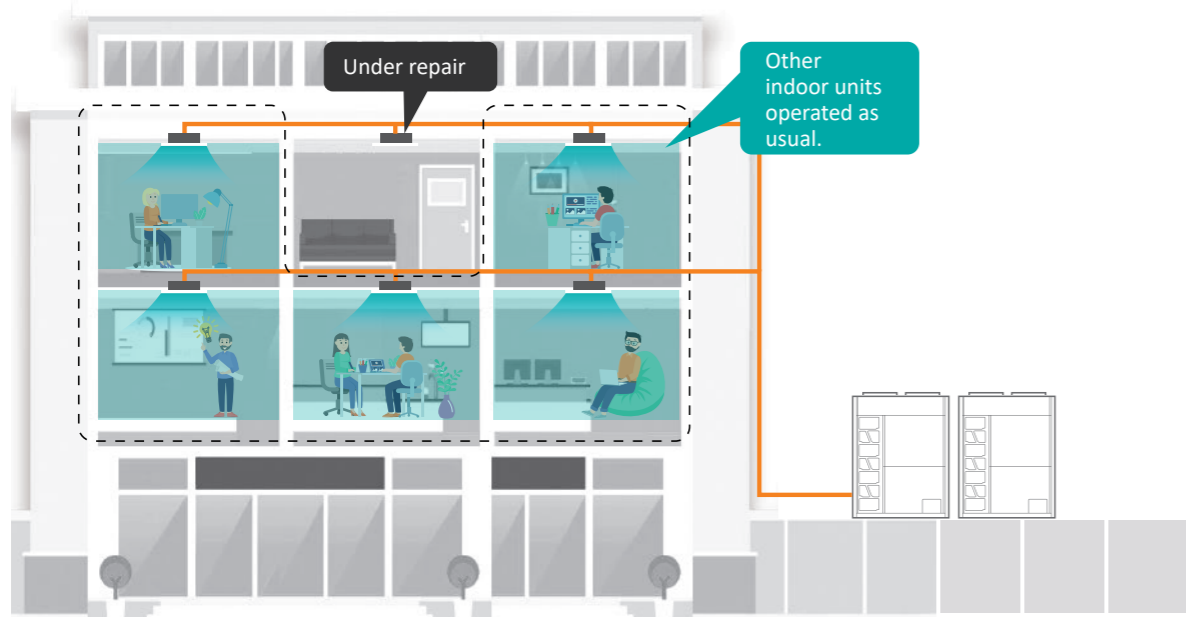
Reliability



Urgent power-off

To maintain the whole system's continual operation when there is a breakdown in the system, Hisense VRF is capable to isolate the malfunction unit from the others while conducting restoration and maintaining continuous operation of other units simultaneously. Especially

practical for retail shops or offices where multiple indoor units share the same system, there is a breakdown or powered cut-off during renovation of a shop does not affect shops of the same system from routine business operation.

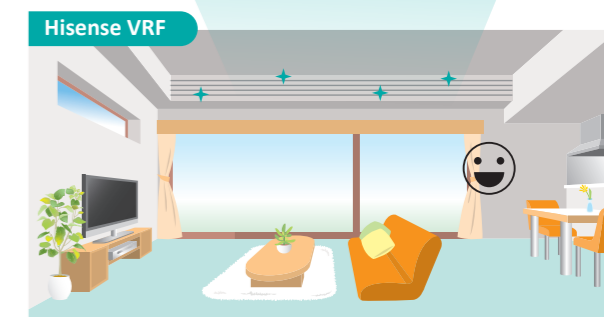
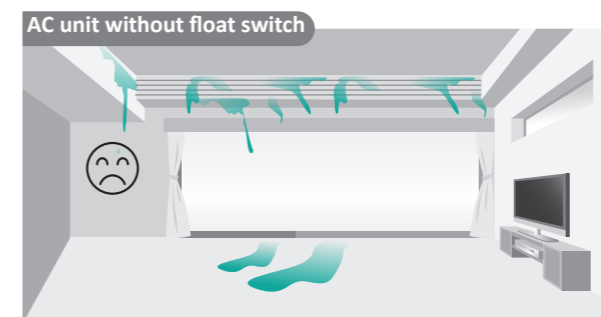
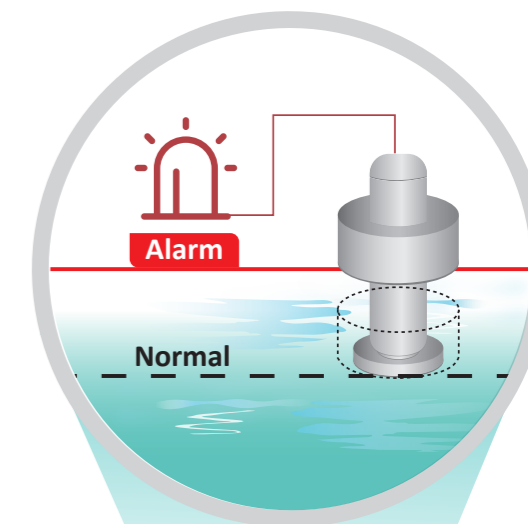


*Preliminary setting is unnecessary

Reliability

Condensate leakage protection

Besides providing reliable air-conditioning units, we also want to keep your possessions lasting. Hence, our indoor units have built-in water-leakage float switches. Alarming warnings will be displayed on controllers when condensate reaches a certain level, and will automatically turn-off itself when it reaches a threatening level, to save your ceilings and carpets from being soaked in times when drain pipes are clogged or drain pump breakdowns.



Effective drainage solution

High quality seals

Water could seep through anywhere as long as there is a void. Thus, Hisense utilizes the best quality sealing material to seal up gaps between the heat exchanger and drain pan, which effectively prevents condensate leakage.

Transparent drain pipe

To ease drainage inspection, Hisense indoor units adopt transparent drain hose connection. It enhances installation and maintenance, making sure drain hoses are connected securely and make blockage inspections much easier.

Anti-corrosion drain pan

Conventional drain pans made of metal are prone to corrosion after continual exposure in moisture and air, as well as mold and algae reproduction. Hisense indoor unit built-in drain pans made out of ABS coated foam keep them from corrosion and smooth condensate discharge, effectively prevents mold and algae growth. Not to mention, it will greatly improve thermal insulation and anti-aging properties.



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SOLUTION*

EFFICIENCY

Efficient Heat Exchanger

Intelligent Defrosting

Steady Air Discharge

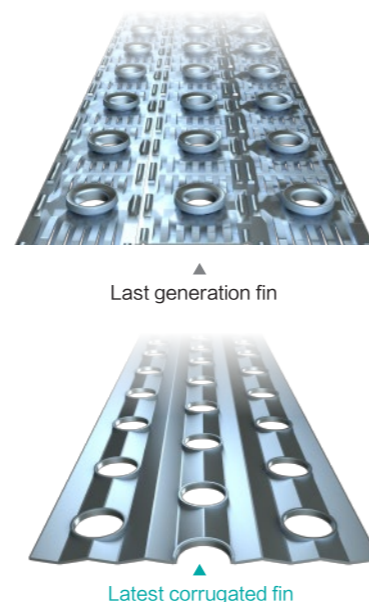
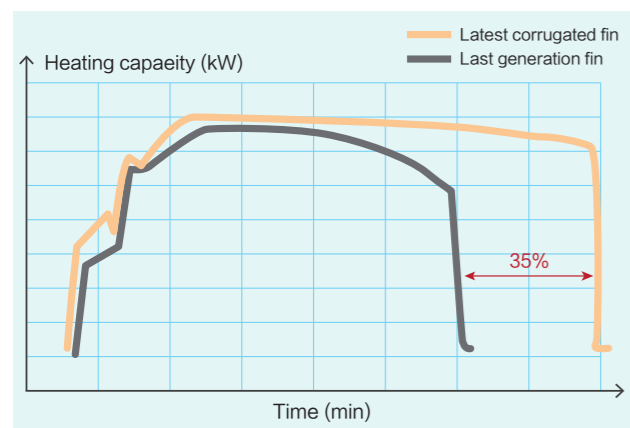
High Precision Automatic
Capacity Output

Efficient Heat Exchanger

New advanced corrugated fin design

A new commitment is made on new fin design to create better efficiency and more durable heat exchanger. With this new design, larger amount of fins can be allocated into the heat exchanger, increasing 22% heat exchange surface area.

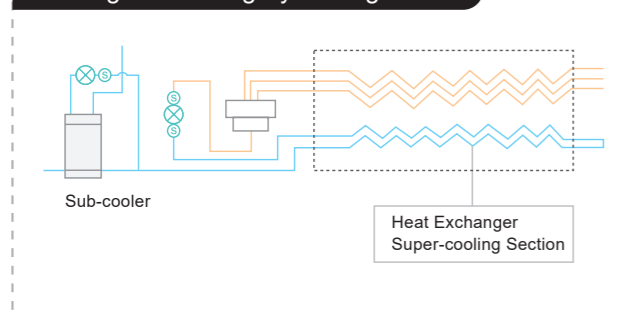
Long-time stable heating performance



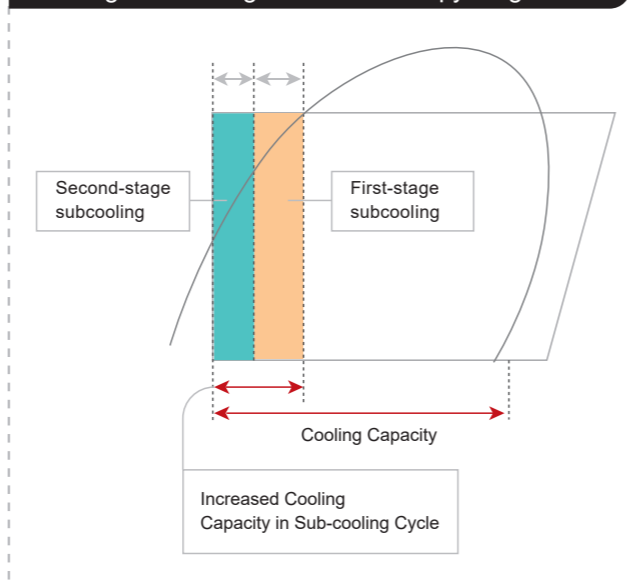
Two-stage subcooling

Comparing with the conventional VRF systems without subcoolers, the subcooling temperature is about 12.5°C in systems with one stage subcoolers. However, Hisense VRF's 2-stage subcooling technology can realize the subcooling temperature upto 27°C, distinctly improved cooling capacity of the system by pushing refrigerant further beyond its condensing temperature.

Two-stage subcooling Cycle Diagram



Two-stage subcooling Pressure Enthalpy Diagram



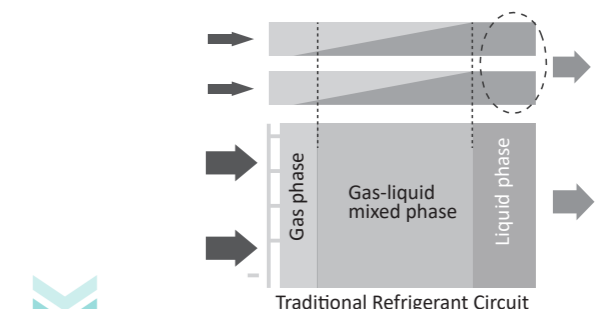
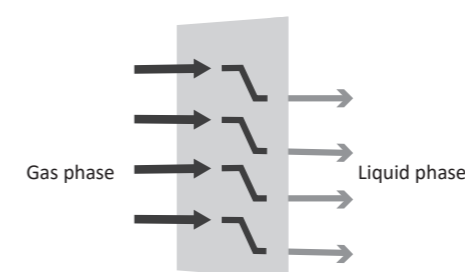
Efficient Heat Exchanger

Optimized refrigerant circuit

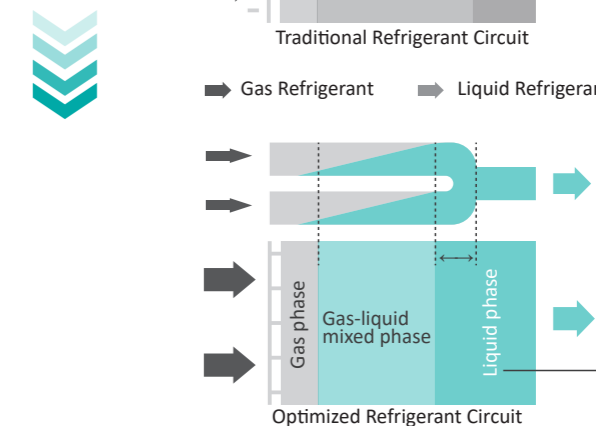
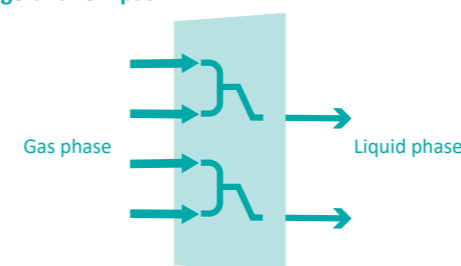
As refrigerant flows in the system, energy will be lost due to friction and other factors naturally, especially with refrigerant change phase, latent heat is lost when gas turns to liquid. In order to make full use of heat dissipation, refrigerant flow layout is maneuvered into 2 to 1. Refrigerant Flow Path extends liquid refrigerant's occupancy and eventually improves the efficiency too.

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Conventional technology



2-to-1 Refrigerant flow path

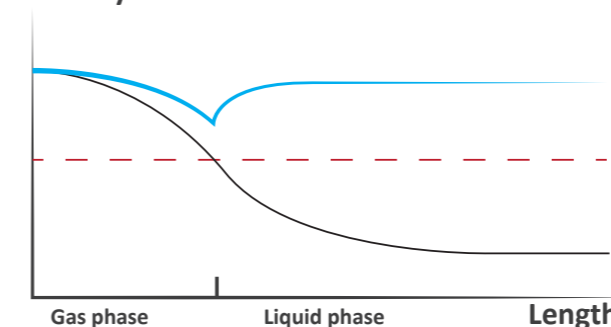


Increase the proportion of liquid refrigerant in the heat exchanger to improve heat transfer efficiency

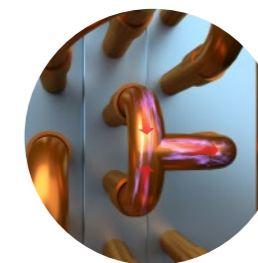
Gas Refrigerant, Liquid Refrigerant

Why does 2 to 1 refrigerant circuit is higher in efficiency?

Velocity

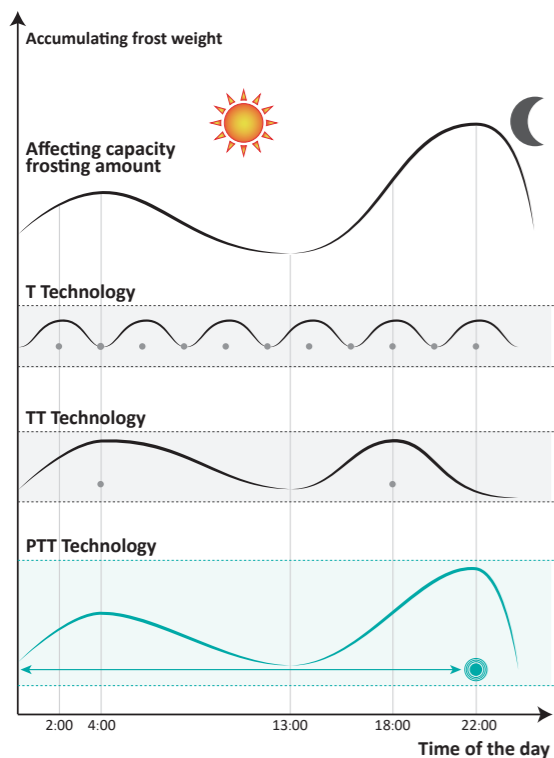


2 to 1 circuit: velocity is maintained same goes to the efficiency of refrigerant heat exchange.
Conventional refrigerant circuit: Heat exchange slows down with decreased velocity. Efficiency is greatly reduced.



Intelligent Defrosting

PTT PTT defrosting mode



During freezing days with low temperature and high humidity, water vapour in the air would solidifies into frost and objects under such environment would accumulate frost. As frosts pile up on the heat exchanger of an outdoor unit, it needs to be liquified and removed. The PTT Intelligent Defrosting Logic could determine the perfect timing to defrost, saving unnecessary energy usage comparing to conventional defrost measures, maximizing users' comfort indoors.

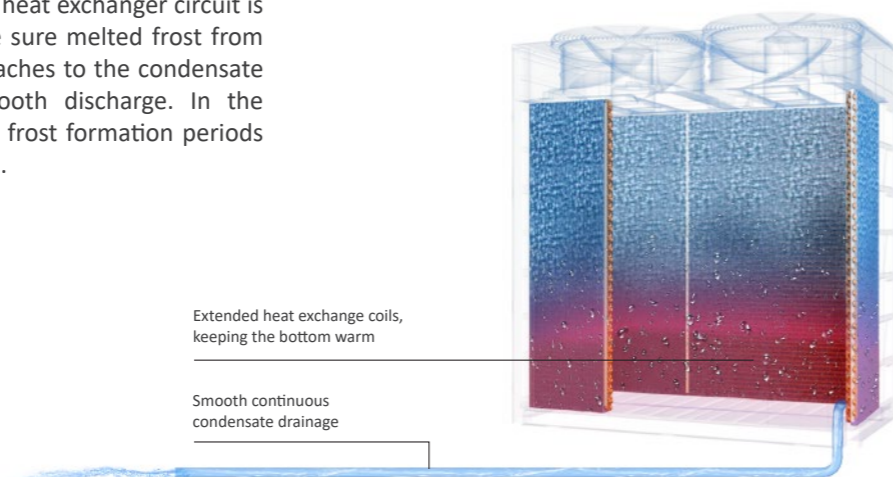
Defrosting timer
High energy wastage and causing low indoor comfort

Time & temperature
Energy wastage and might not defrosting at accurate time

Defrosting only when necessary
High energy saving and efficient use of energy

Bottom anti-frosting structure

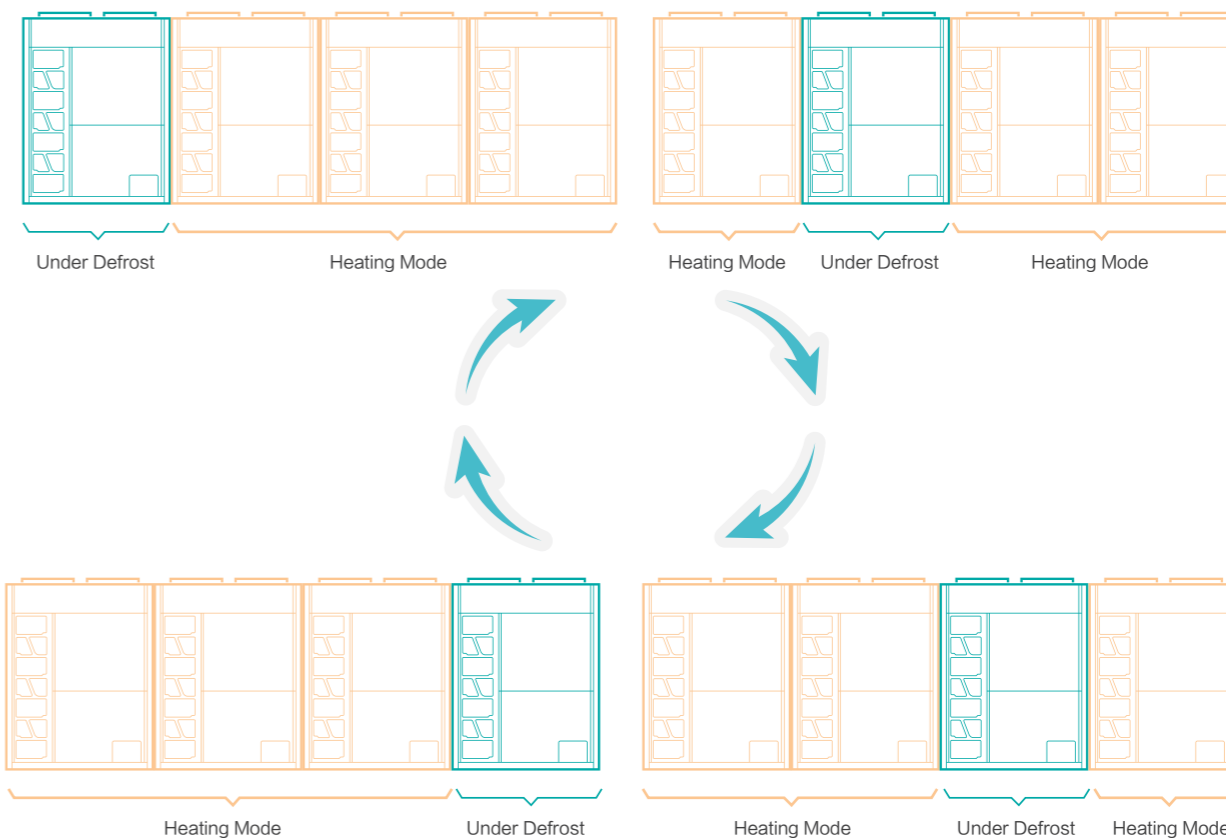
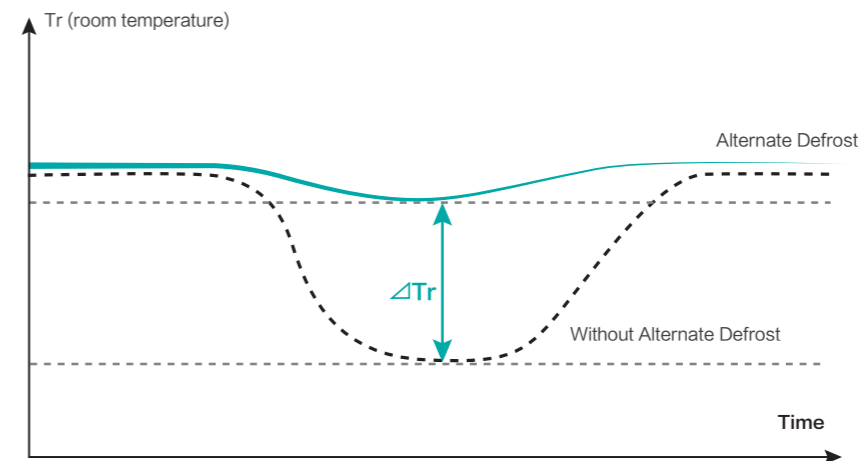
To ensure effective frost removal, heat exchanger circuit is extended to the bottom to make sure melted frost from the top does not solidify, as it reaches to the condensate drain and hence enhances smooth discharge. In the meantime, the heat also extends frost formation periods whereby prolongs defrost interval.



Intelligent Defrosting

Continuous heating during defrost

Alternate defrost function can keep indoor ambient temperature less fluctuating, provide you with a more comfortable environment.



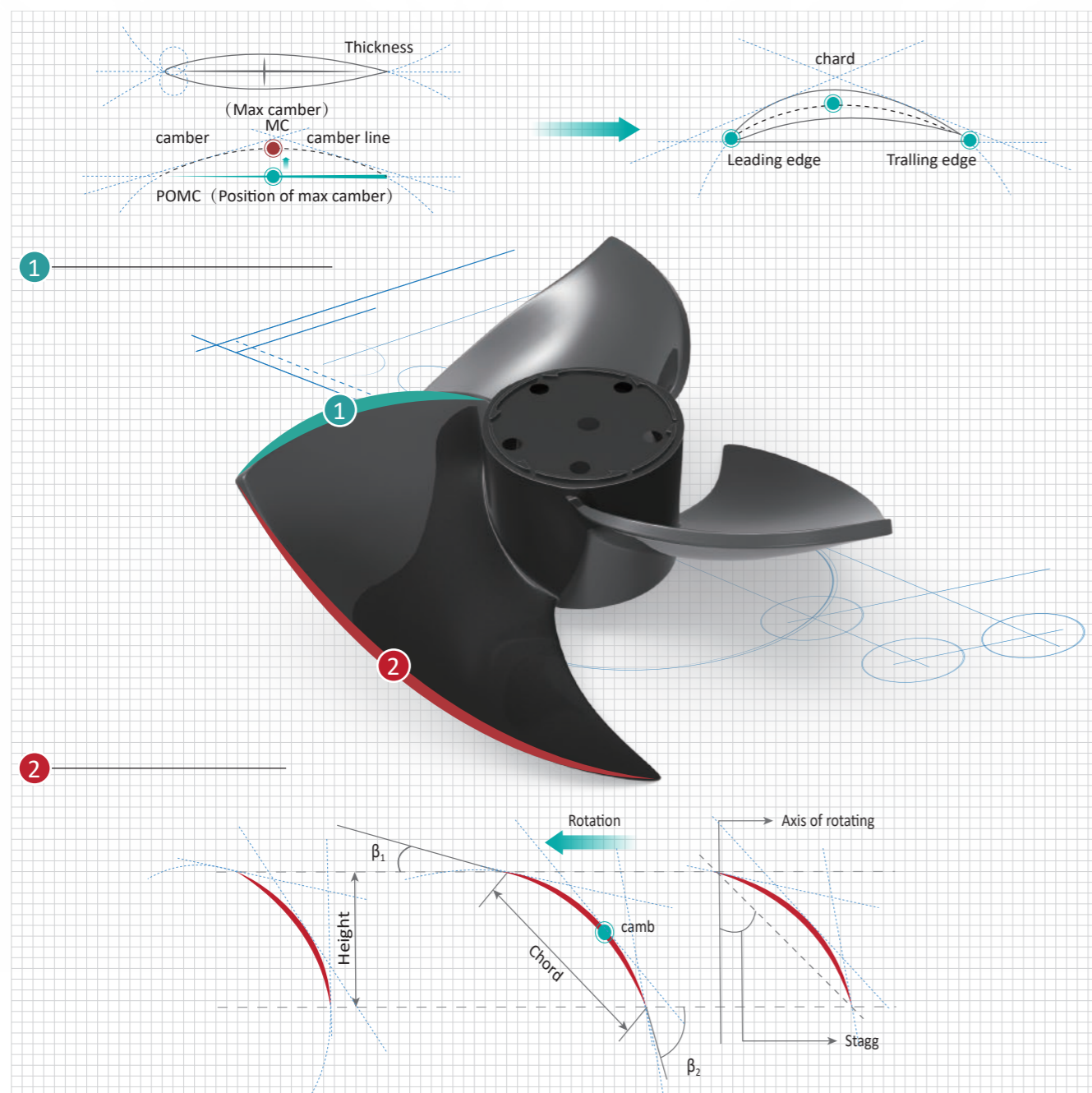
Note
Only available for module combinations of Hi-FLEXI S series.

Steady Air Discharge

High efficiency aerodynamic axial fan

The propeller bearing which acts as the joint connecting the propeller and motor are specially treated with anti-rain corrosion treatment. The propeller is now made of fiber glass composite to resist corrosion better, and have better durability and approximately 60% lighter in weight than to conventional metal propellers. Fan blades are aerodynamically designed to reduce

energy wastage in converting power consumed to unnecessary noise energy, reserving the energy to improve on flowrate performance and static pressure. Integration with brushless DC fan motor further improves the efficiency and noise of the propeller structure.



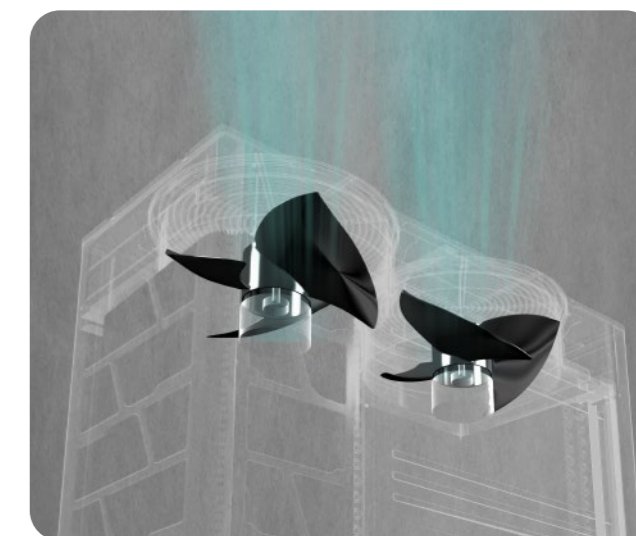
Steady Air Discharge

Stepless-smooth fan speed control

Inverter fan motors are now commonly used, where efficiency increase by 40%. Whereas in Hisense VRF, brushless DC fan motors are used, as it could further reduce power consumption and noise production than normal inverter motors.

Bell shroud

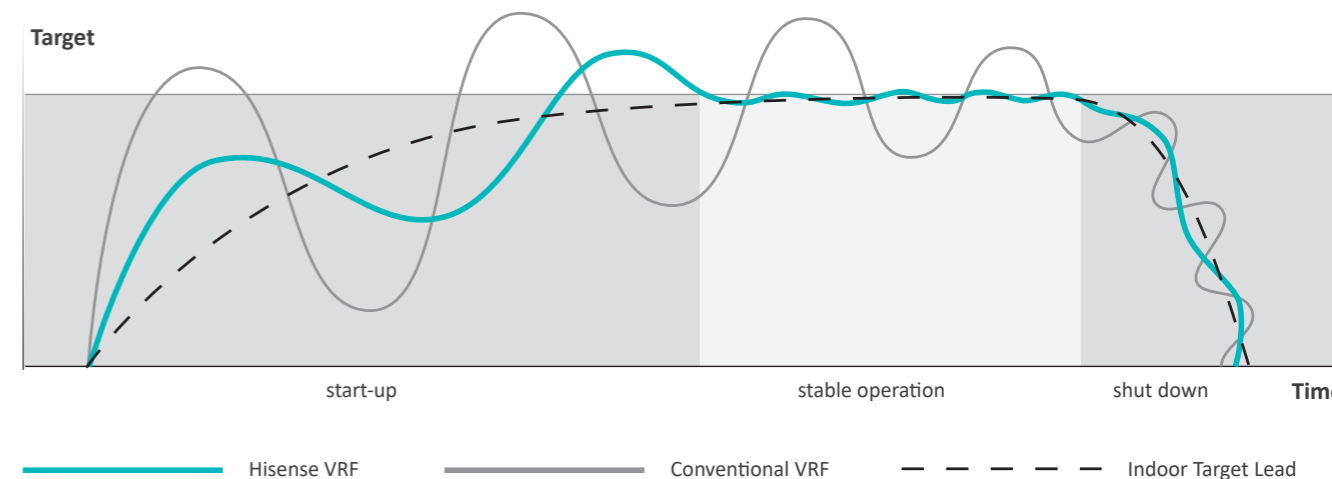
As a smooth tunnel, the bell mouth of the propeller discharge out a more stable air current, creating further and quieter air discharge.



High Precision Automatic Capacity Output

Besides having a high quality powerful compressor, a precise compressor control is extremely crucial in keeping system operating in optimum efficiency. The 180° Sine Wave DC Variable Speed Drive is now a common way to control HVAC compressors, but what makes Hisense VRF stands out is the calculation algorithm we adopt in all our

inverters, called Hybrid sensorless are now having 50% faster feedback and response time than our previous models. This new algorithm also improved compressor's stability and control precision by 52%, improving capacity output precision, closer to actual load requirement automatically and reduce unnecessary energy wastage.





COMFORT

*AIR
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SOLUTION*

Temperature Control

Rapid Start-up

Smart Air Supply

Agile Air Supply

Lower Noise

Clean Fresh Air

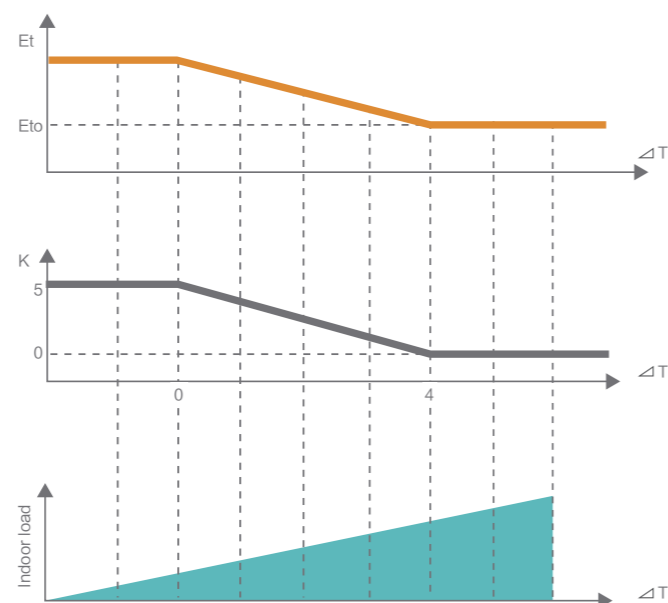
Temperature Control

Auto refrigerant temperature control

Energy-efficient operation and comfortable environment can be provided to users simultaneously by adopting auto refrigerant temperature control (ART) technology. The evaporating temperature value can be adjusted automatically according to indoor load in a certain range.

Features:

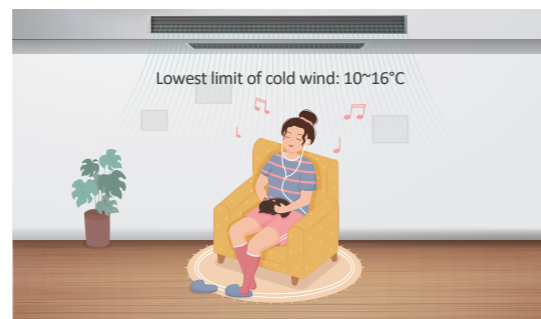
1. Energy efficiency is improved without sacrificing comfort.
2. ART is particularly efficient under low-load operation.
3. The initial evaporation temperature can be adjusted between 2~11°C, which is the widest in the market.
4. Realize rapid cooling with lower evaporating temperature.
5. Avoiding cold draft with higher evaporating temperature.



$E_t = E_{to} + K$
 E_t : Evaporation temperature
 E_{to} : The initial evaporation temperature
 ΔT : The temperature difference between air inlet and the setting temperature

Cold Wind Limit Setting

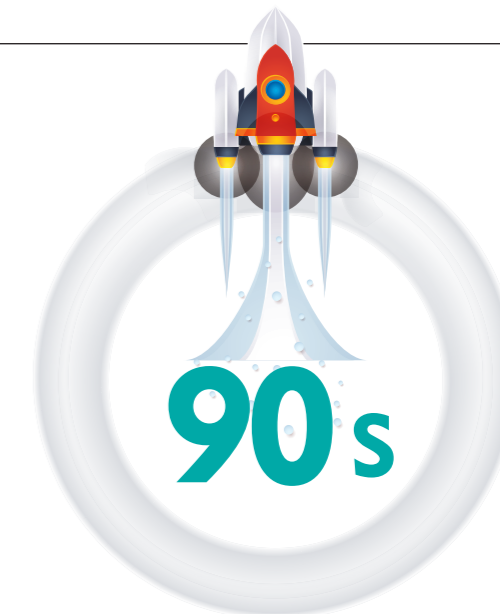
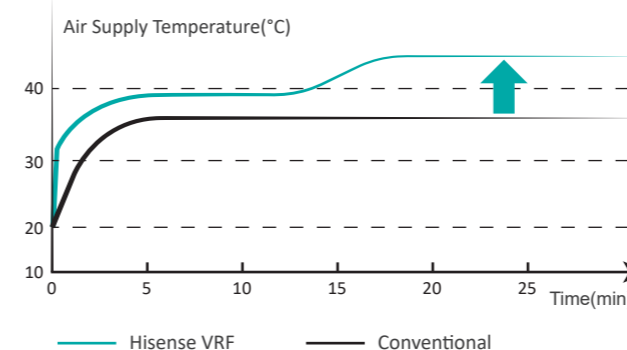
Thanks to the Cold Wind Limit Setting function, the lowest limit of the outlet air temperature can be set in the range of 10~16°C, which can ensure that the actual outlet temperature will never be lower than the set value, and avoid uncomfortable feeling caused by the direct blowing of cold wind.



Rapid Start-up

90s 90s Rapid Start-up

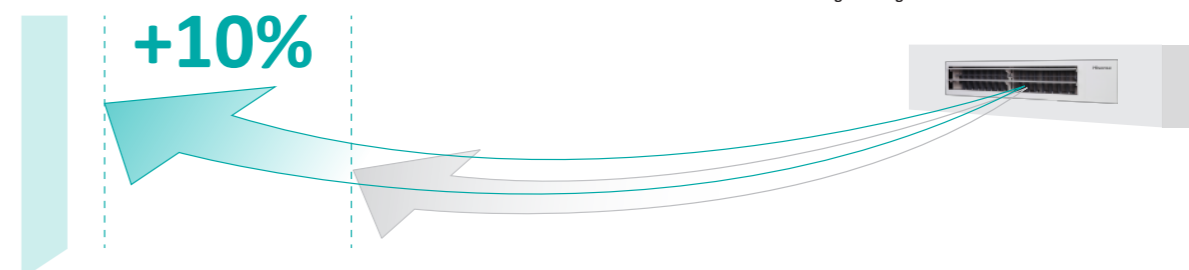
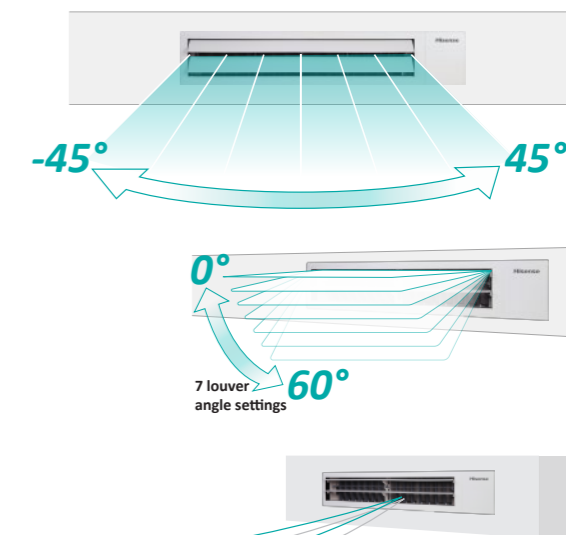
To keep comfort as fast as possible in the freezing frosty days, Hisense VRF starts supplying warm air so rapidly with only just 90s reaching a 100% capacity output. Besides, even in the extreme weather condition of -15°C outdoor temperature, Hisense VRF performance is tested with persisting capability to supply 40°C or higher warm air within 7 minutes.



Smart Air Supply

3D air-flow panel

The panel is an optional accessories for AC and DC low height ducted unit. By using Hisense's luxurious looking, smooth, easy and clean 3D air-flow panel, it saves the hassle in buying normal louvers. It has LED temperature and humidity level display which is perfect for hotel applications. It also has selectable wind settings from normal, 3D and super long distance modes, cool or warm air flows out from the panel according to the wide horizontal and vertical louvers with 7 options.



Agile Air Supply

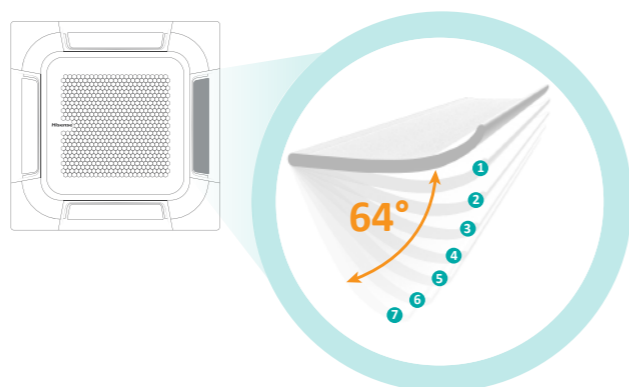
Micro-holes and breeze mode

Different regions and country have different preference and personal viewpoint of comfort. Some may prefer cool chilly air from AC unit to cool down the room without wind gushes directly towards their faces or bodies. Hisense VRF's new 4-way Cassettes are now designed with micro-holes on every corners on the panels making full use of the whole panel to cool down spaces evenly.



Individual louver control

4-way cassettes louvers are now capable of individual control to freely choose how you want your AC unit supplies air according to different needs, applications and installation layout. Each louvers have 7 angle settings and maximum angle reach at 64°.



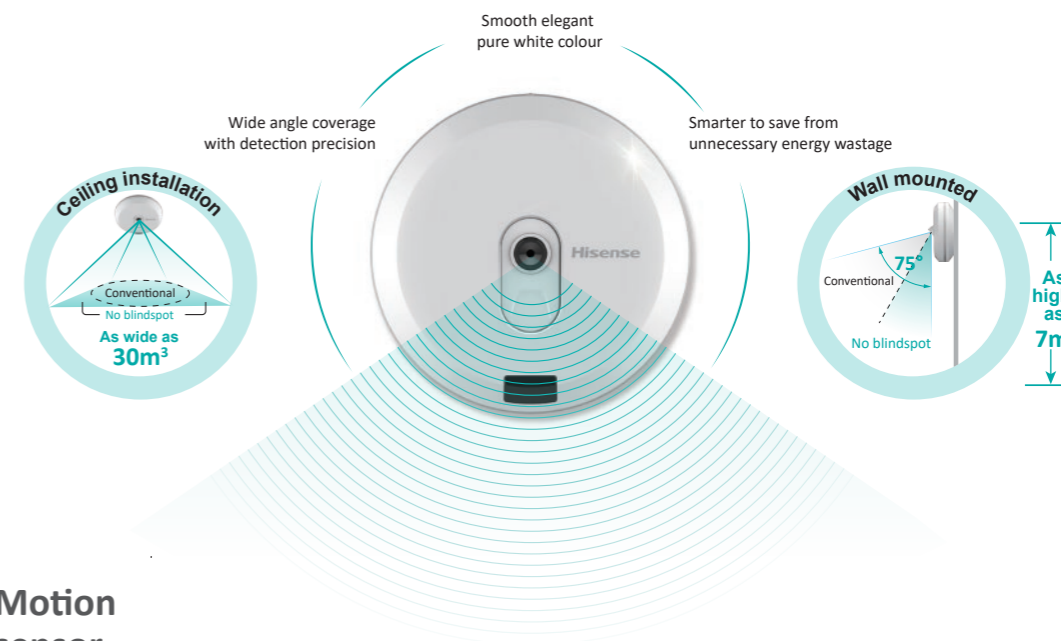
Agile Air Supply

Hi-Motion

With fashion appearance, Hi-Motion can provide not only comfortable environment but also energy-efficient operation.

1)Automatically stops the unit when no one is in the room in order to realize energy saving.

2)Adjusting the setting temperature and air flow according to the actual human activity. Since both wall mounted and ceiling mounted installations are suitable for Hi-motion, which is more convenient for different installation require-ment.



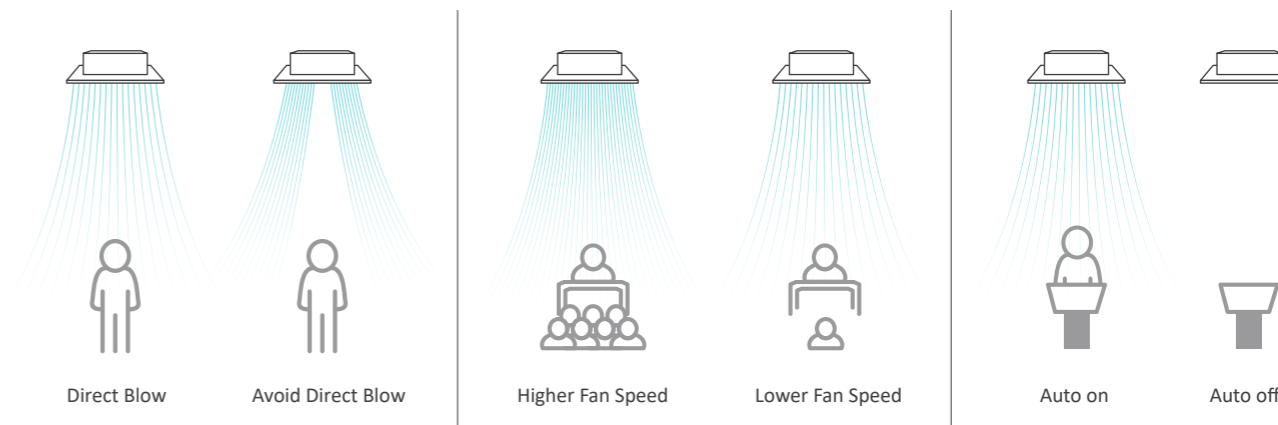
Motion sensor

Motion Sensor can provide a more comfortable environment, and achieve efficient and energy-saving operation of the unit at the same time.

1) With the sensor, indoor unit can ON or OFF automatically when people enter or leave the room.

2) The location of people can be detected by sensor. Then the direction of the airflow can be set, to avoid people or blow directly at people.

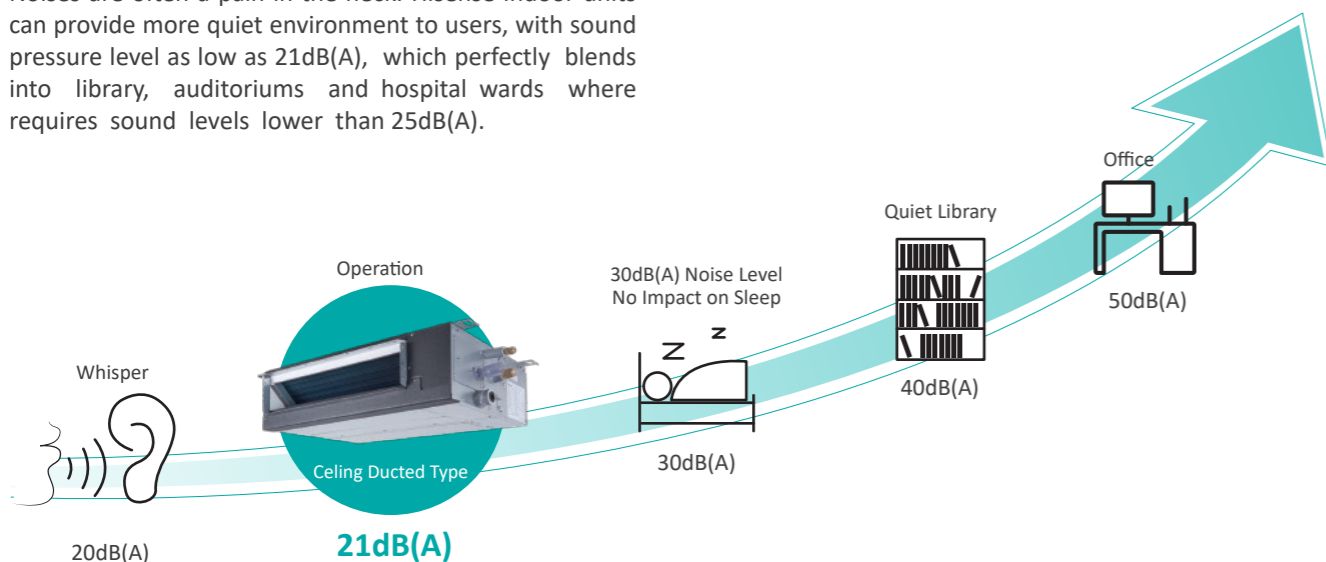
3)With detect the number of people changes, the setting temperature is automatically changed .



Lower Noise

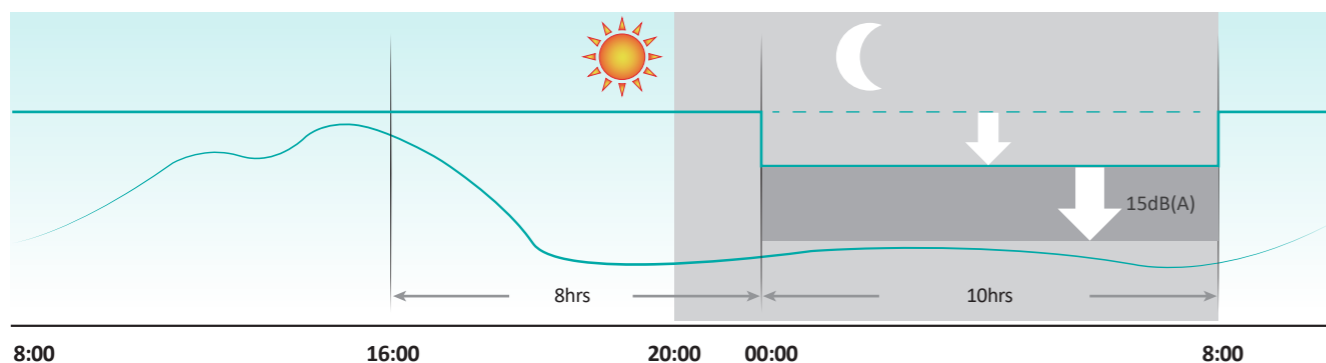
Low noise for indoor units

Noises are often a pain in the neck. Hisense indoor units can provide more quiet environment to users, with sound pressure level as low as 21dB(A), which perfectly blends into library, auditoriums and hospital wards where requires sound levels lower than 25dB(A).



Night mode

In general, people are more sensitive to noise at night. To provide more quiet environment, Hisense night mode function can be adopted to reduce sound pressure level by up to 15dB.



Clean Fresh Air

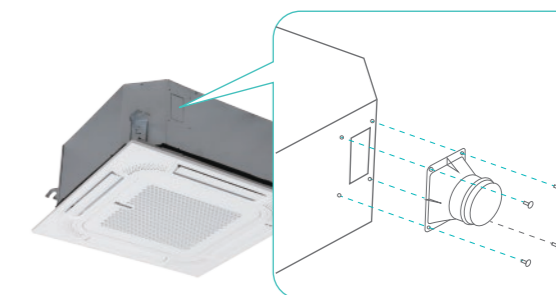
Humidity sensor (optional)

Automatic dehumidification control can be achieved by choosing humidity sensor. The control humidity range is 35%~90%.



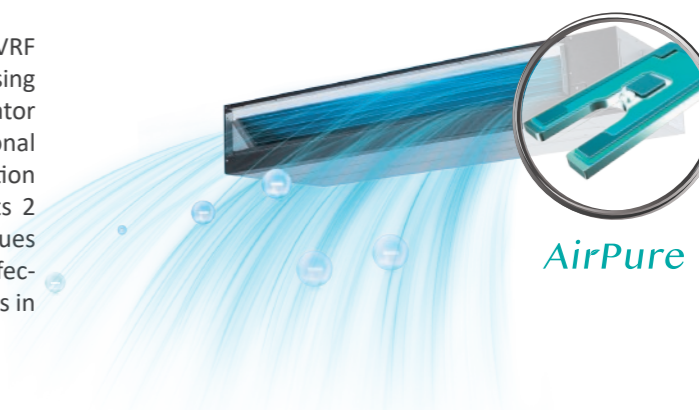
Fresh air intake (optional)

Fresh Air Intake is an optional accessories to assist 4-way cassette unit to introduce the fresh air to indoor environment, which is easy and convenient for install when there is a fresh air requirement.



AirPure (optional)

To improve air quality and hygienic air supply, Hisense VRF IDUs* are applicable to AirPure, an negative ionizer using imported Japan nanotechnology. The anion generator accessory has 50% longer life cycle than conventional devices with a minimum of 10,000 hour anion generation time with the lowest noise production. AirPure emits 2 million pcs/cm³, effectively removing odor, airborne viruses, allergens and bacteria inactivation so much more effective. Negative ions in the air are proven by many studies in improving one's emotion, health and skin condition.



Note
4-way Cassette, Mini 4-way Cassette, Low-height ceiling ducted type, Ceiling Ducted type can be equipped with the AirPure (optional).



*Take AVE-09HCFRL as the test sample.

- Anti-Bacteria and Anti-Virus
- Formaldehyde Removal
- Anti-mold
- Odor Removal
- PM2.5 Purification
- Anti-allergen

*AIR
CONDITIONING
SOLUTION*

Design Flexibility

Installation Convenience

Service & Maintenance
Simplicity



FLEXIBILITY

Design Flexibility



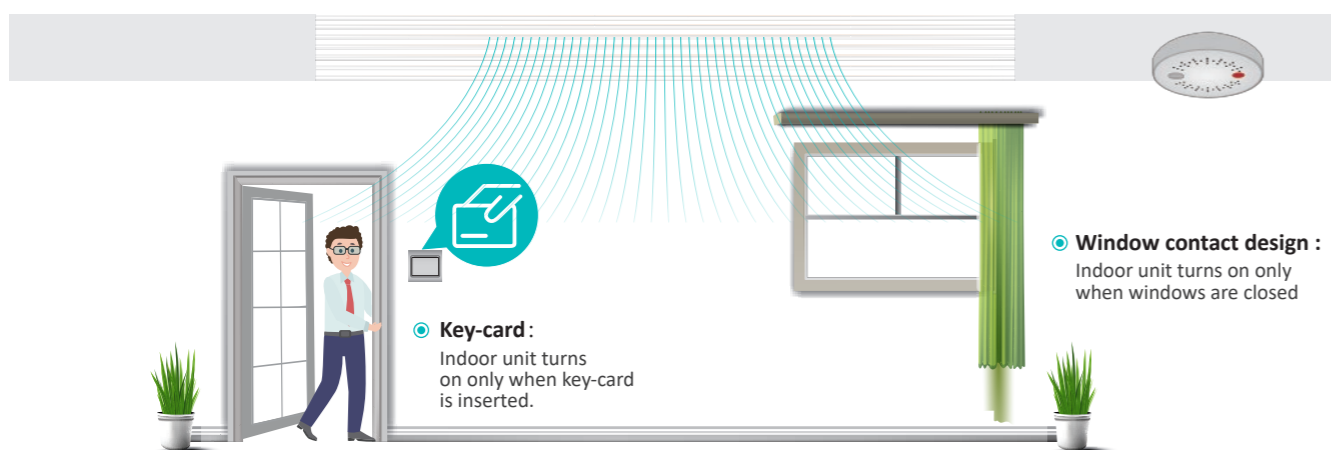
Indoor unit dry contact interface

In the indoor unit, ports are reserved for wider choice range of applications to turn the AC unit ON or OFF, like key-card power, window contact power and any other third party sensors or devices.

Fire and smoke alarm:
Outdoor unit automatically turns off when alarm is activated to ensure user's safety.

Window contact design:
Indoor unit turns on only when windows are closed

Key-card:
Indoor unit turns on only when key-card is inserted.



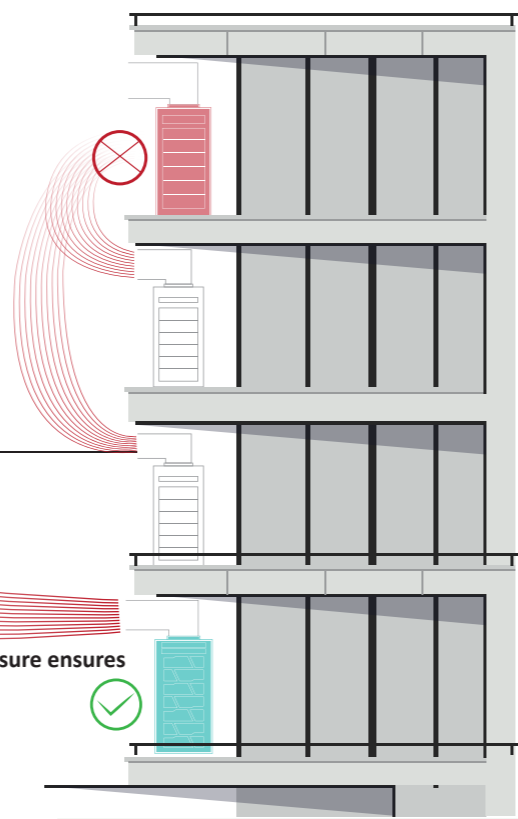
Adaptive fan static pressure technology

External static pressure is essential to determine the air discharge and duct connection distance. Hisense VRF's outdoor unit external static pressure is reachable upto 110Pa compare to the conventional 80Pa, allowing longer ducting connection for better air discharge when installed indoors.



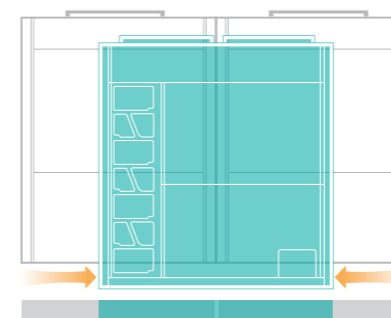
Lower static pressure

Higher outdoor unit fan static pressure ensures further discharge of air



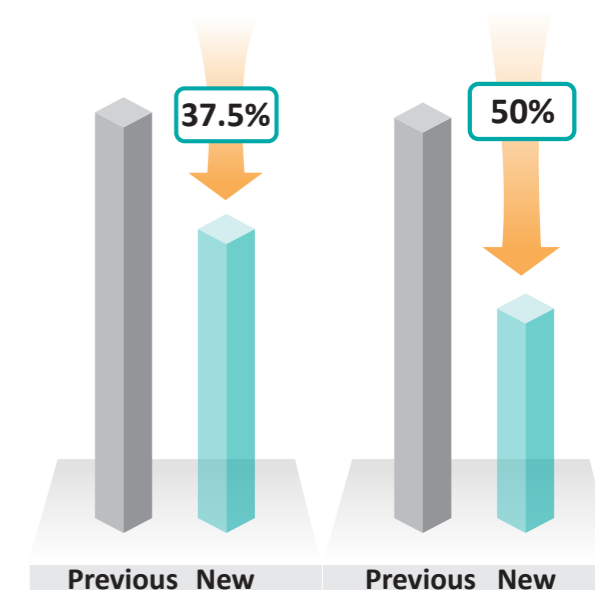
Larger capacity, minimizing footprint area

Hisense VRF outdoor units now possess larger capacity per single module unit. Reducing the installation floor space significantly also eliminates the necessity of modules for bigger capacity. Despite the beneficial space saving properties, same goes to the unit's weight per capacity too. Hence, it brings more design and installation flexibility even in limited spaces.



Footprint Area

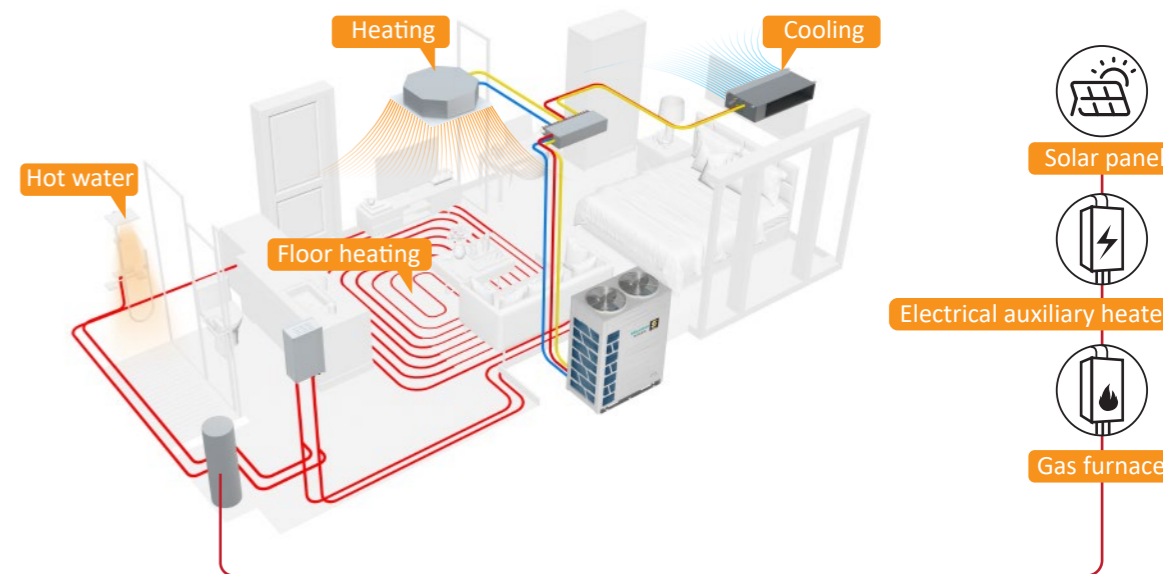
Weight



All in one energy solution and application

Hisense VRF Heat recovery series offers an ultimate solution to satisfy heating and cooling through AHU or fan coil units, domestic hot water supply, floor/wall/ceiling cooling and heating simultaneously. The heat recovery system is also compatible with any auxiliary heaters like solar panels, electric

heater and gas boilers to supply additional energy to the system in unfavorable conditions and climates. The heat recovery series is best suited for residential, hotel, gymnasium and spa applications.



Installation Convenience

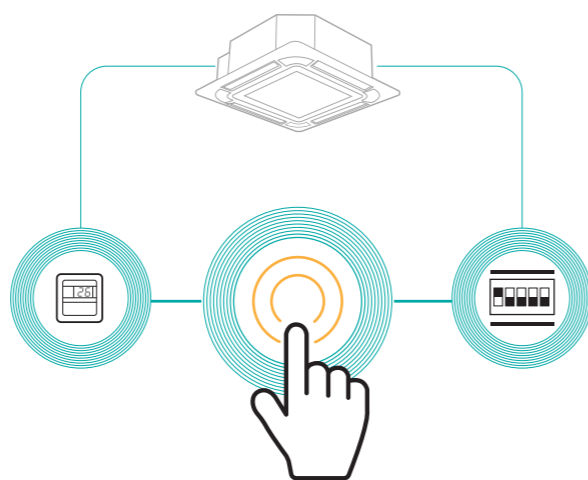
Compact and light-weight

With compact and light weight structure, the maximum capacity of Hisense VRF ODU can up to 28HP, which can realize more convenient transportation and installation. The size of ODU is suitable to carry for general elevators, so that it can save the cost of transportation and simplify the installation process.



One-touch test run

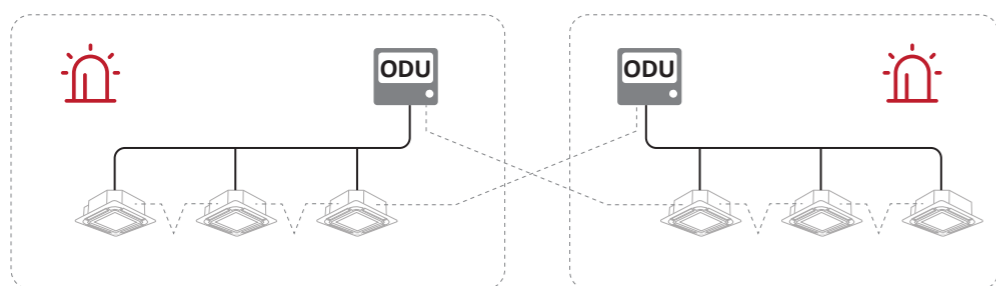
Test runs are one of the essential part in testing & commissioning to make sure the HVAC system in a building works steadily and safely before hand over or soft openings. To make test run as simple as possible, Hisense VRF systems are capable to conduct test runs with just a button away wherever installers are, one-touch test run functions are applicable in both outdoor and indoor units.



Mistake-free communication connection

Communication line connections between outdoor unit to indoor units might be confusing when comes to long cables from the outdoors to the indoors and vice versa. It is often incorrectly connected and cause various errors. Despite of

Hisense VRF's simple wiring connection ports, the outdoor unit itself could also check on the connections and display warnings when the connections are incorrect.



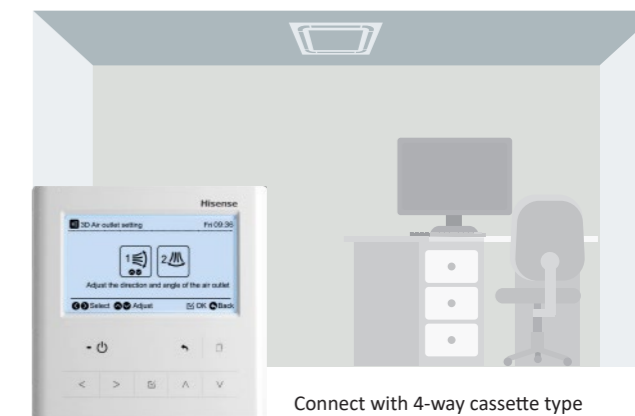
Indoor units from different systems are connected to the incorrect outdoor unit, alarm codes flashes out warning installers to make proper corrections.

Installation Convenience

AUTO Intelligent matching IDUs

According to the different functions of different indoor units, Hisense controller can intelligently match the indoor units. For example, If air deflector of the IDU can be

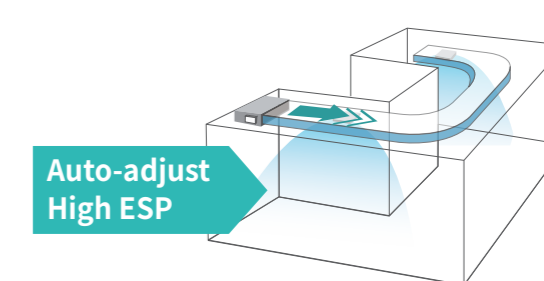
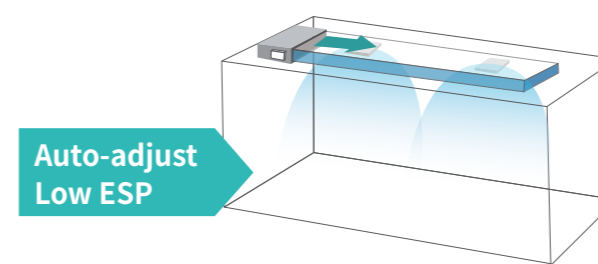
controlled independently, the relative button of wired controller will be available. On the contrary, the button will be dim and unavailable.



Pa Auto-adjust External Static Pressure

After installation, the actual duct resistance frequently differ from the initially calculated, causing the actual air flow too low or too high. The auto-adjust ESP function can effectively solve this problem. At the initial commission,

the system can automatically select the most appropriate ESP value according to the actual duct resistance, between 50Pa and 250Pa.

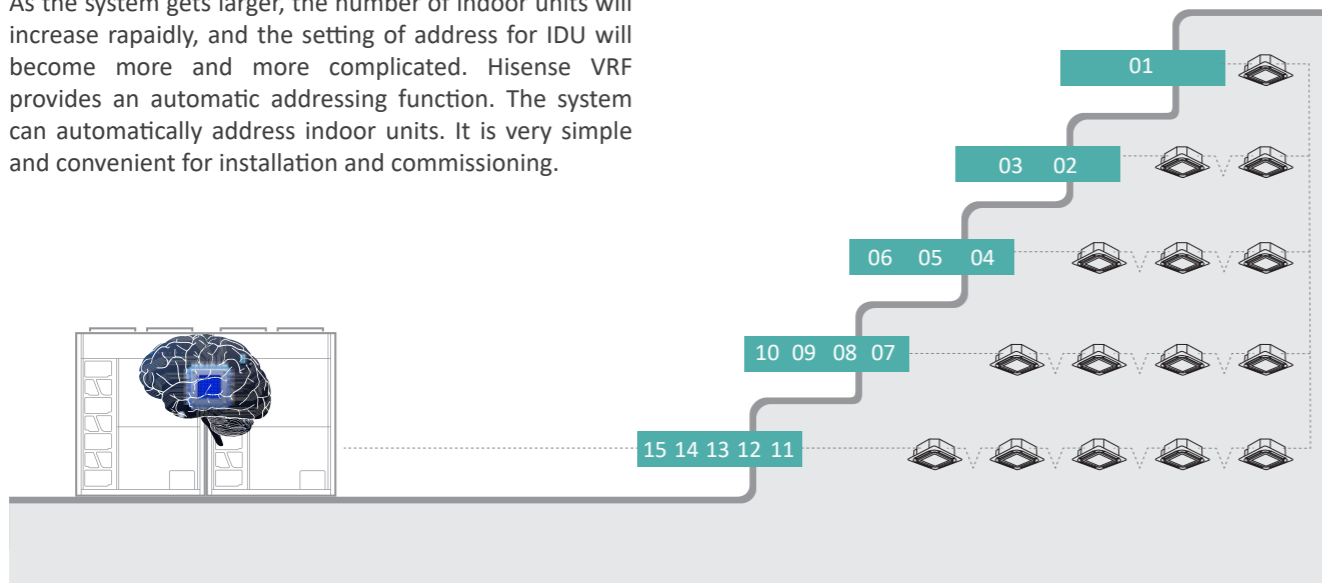


Service & Maintenance Simplicity



Automatically addressing

As the system gets larger, the number of indoor units will increase rapidly, and the setting of address for IDU will become more and more complicated. Hisense VRF provides an automatic addressing function. The system can automatically address indoor units. It is very simple and convenient for installation and commissioning.



Safe and convenient system management

The new outdoor units are equipped with a service window on top of the electrical box protection panel, to help easily access to parameters check and maintenance manipulation safely without exposing to high voltage segments of the electric box. With the new service windows, press switch buttons, DIP switches and the 7 segment LED operation are safer and more convenient to operate.



Automatic restart

Hisense VRF is capable to restart automatically whenever there is an involuntary power supply shortage. Customers are free to choose from restoring to it to the state before power failure state or restarting the system completely. Such function comes in handy in equipment rooms whereby are constantly humanless, like genset rooms or server rooms.

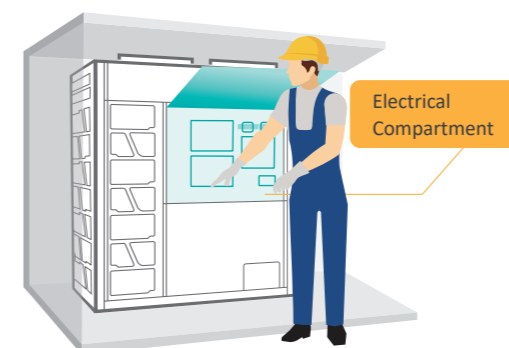
Service & Maintenance Simplicity



Separated mechanical & electrical segments

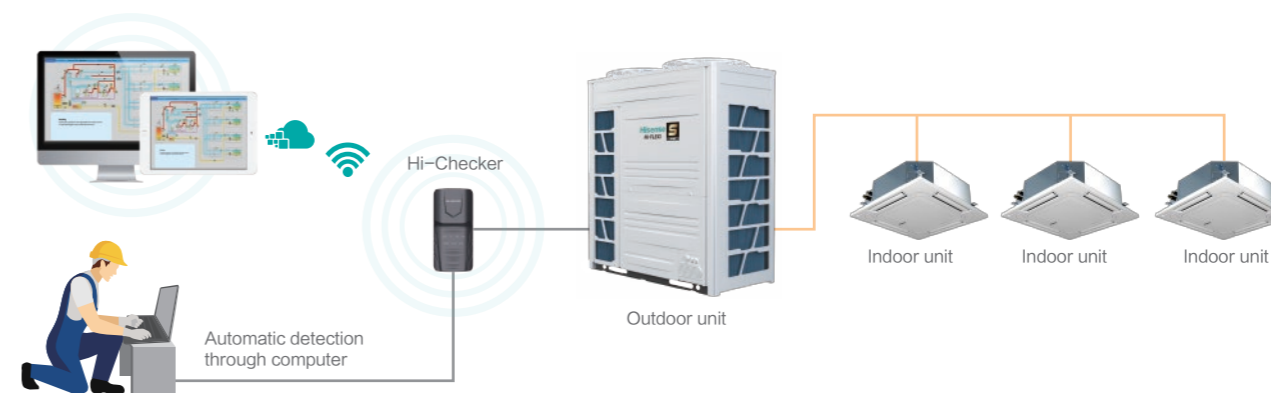
The outdoor unit's mechanical and electrical segments is now designed and optimized repositioned separately for a more organized maintenance. The electrical and electronics are placed on top of the compressors and accumulator to meet the practical law of center of gravity, hence

minimizing toppling accidents and unnecessary vibration produced during operation. Besides, it also maximizes the heat dissipation of electrical box to keep the electrical in a stable temperature by maximizing airflow passed by.



Accurate intelligent system diagnosis

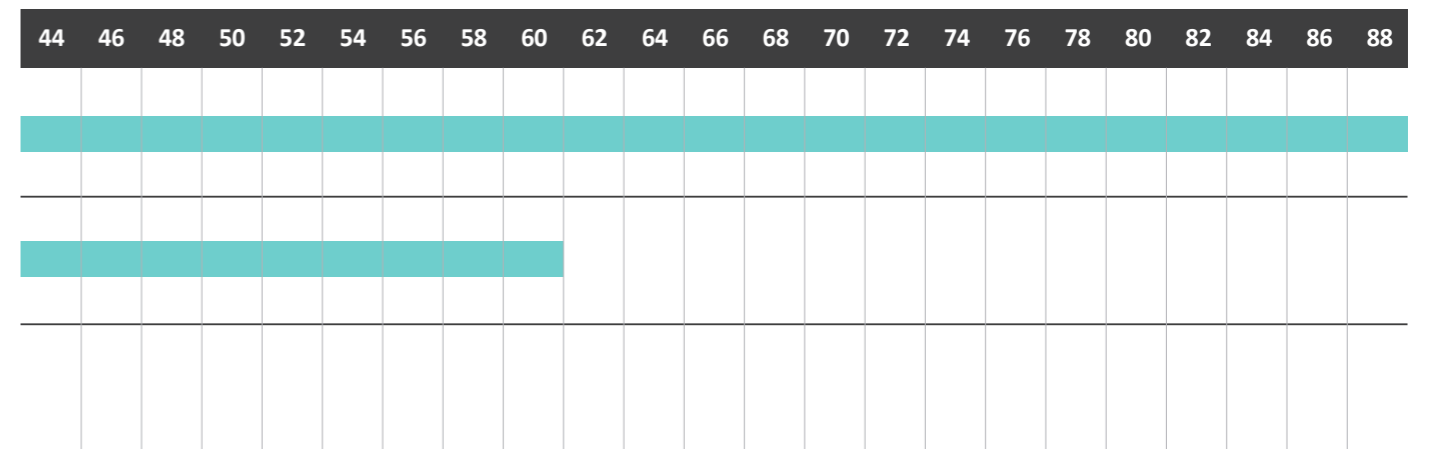
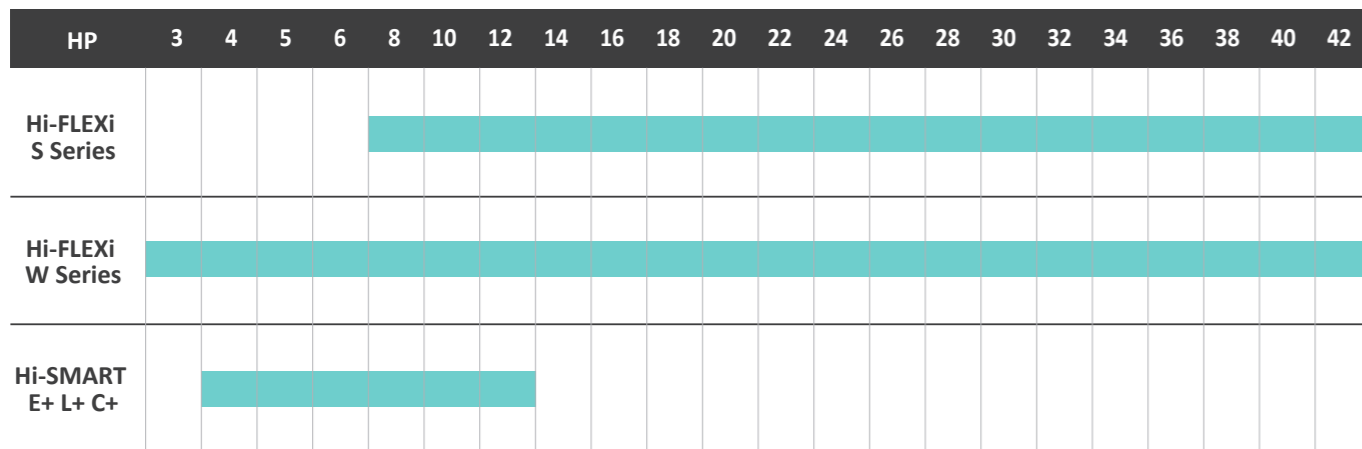
Exclusive Hi-Checker is a super service tool for system diagnosis, which can provides easy access to service parameters. Detail operation status and recent error history can be checked and analyzed by using Hi-Checker. Moreover, remote monitoring and diagnosis will be available soon.





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OUTDOOR UNIT



Hi-FLEXi S Series



Hi-FLEXi S Series

The S Series can make full use of energy to realize cooling and heating simultaneously in heat recovery mode and also can be used as two-pipe systems. Water module is available to be connected in refrigerant system which can support floor heating & DHW & fan coil & radiator to provide more comfortable environment.

Excellent design in VRF

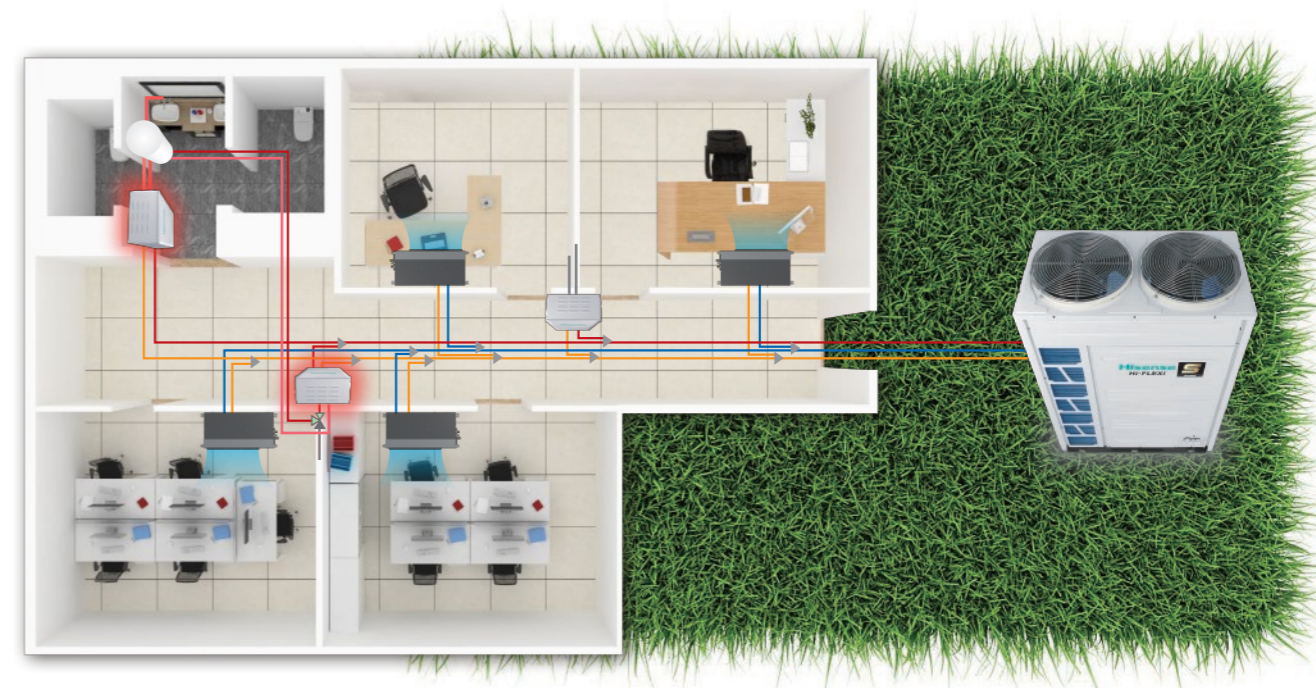
Wide operating range, precise temperature control

New generation of vapor injection technology

Applications of heat pump



Applications of heat recovery



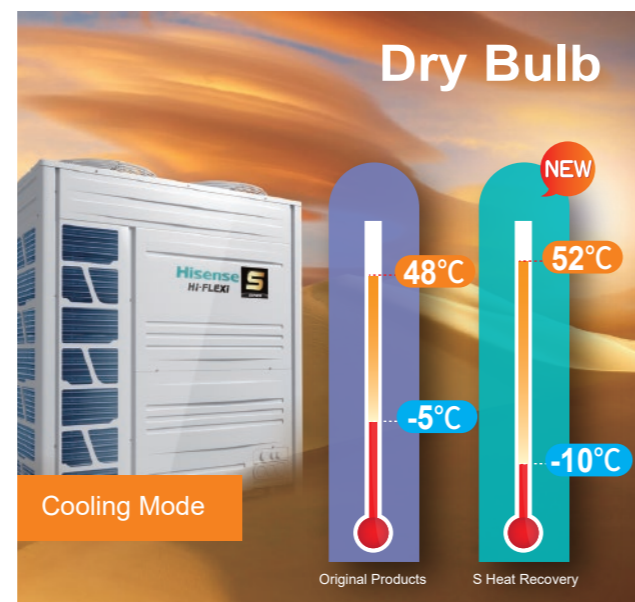
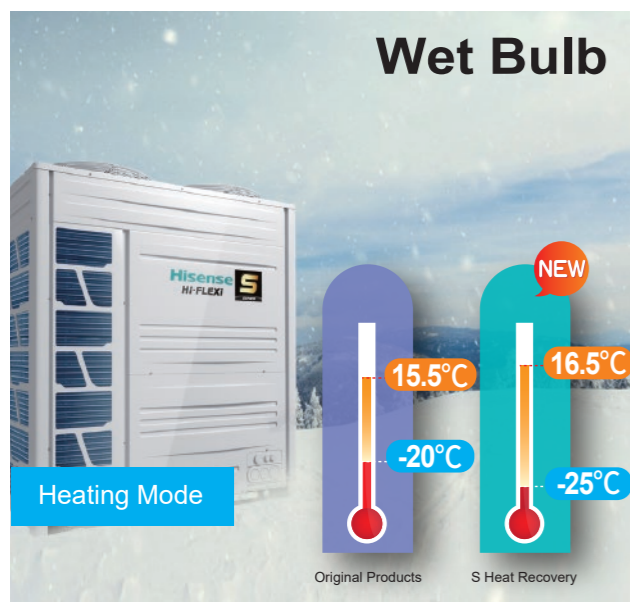
Note: The 3-pipe system can be used with or without SW-BOX. The picture above only shows the case without SW-box.

Hi-FLEXi S Series

Wide operating range meets greater demand

With wide operating temperature range, it is available to adapt to the different requirements of different environments. In heating mode, the machine can operate at

lower ambient temperatures, down to -25°C. In cooling mode, the machine can operate at higher ambient temperatures, up to 52°C.



Note: In heating mode, the temperature range of dry bulb is -25°C to 26°C.

VIP mode

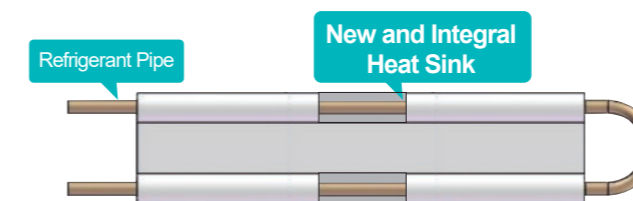
Hisense VRF offers VIP mode to give priority to the specific room, ensuring the AC requirements can be met with priority. Maximum 5 indoor units can be set as VIP mode at the same time. Such function is exclusively practical for hotel application, where AC unit in the presidential suite is often need to set to VIP.



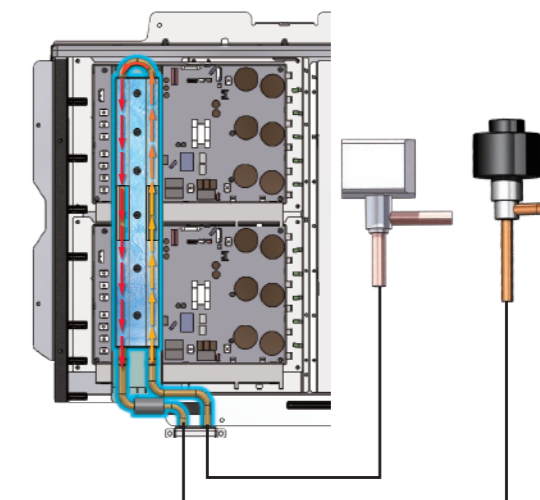
Hi-FLEXi S Series

360° fitted refrigerant cooling technology

With the 360° refrigerant cooling technology, Hi-FLEXi S Series will remove the heat from the main PCB, making inverter module and electrical box stable and efficiency. New and integral heat sink can help to improve the electrical reliability of the unit when it is running under high ambient temperature.

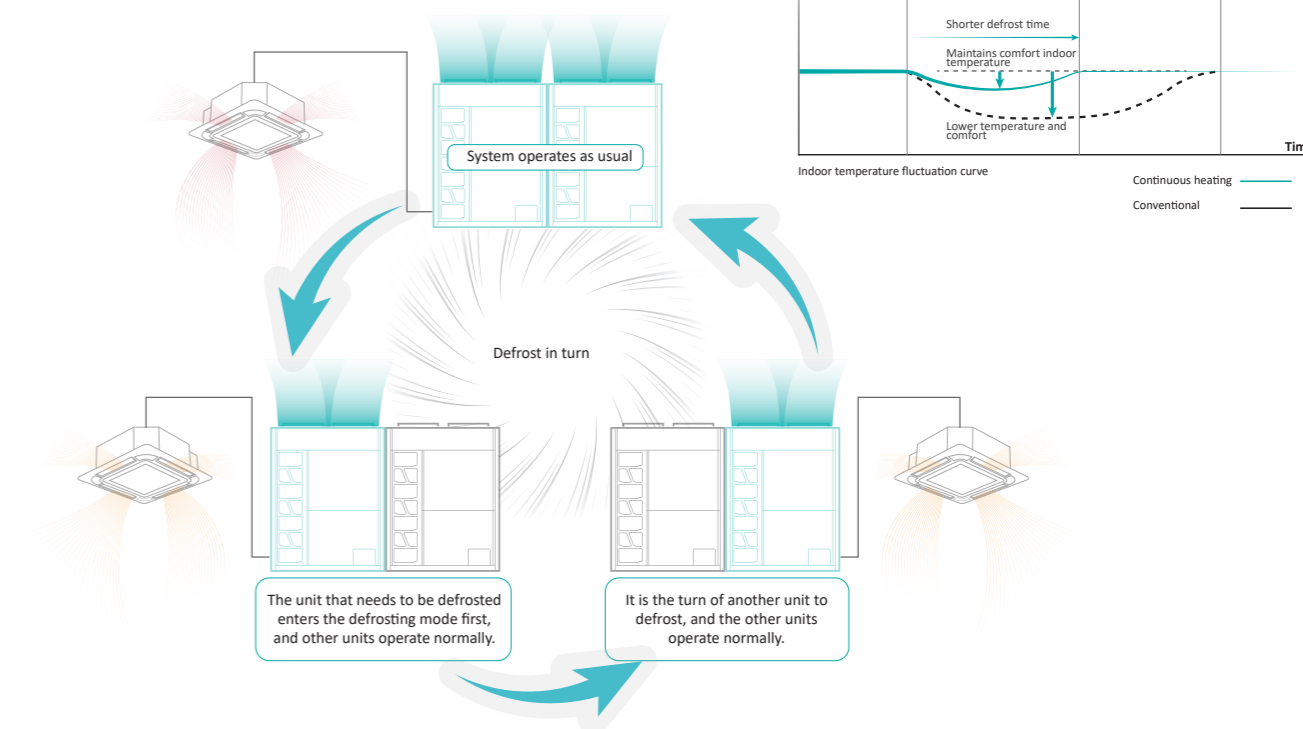


The new electronic expansion valve and solenoid valve are more precise to control temperature of PCB, preventing the temperature from becoming too high or too low, making it stable to operate.



Continuous heating during defrost

In winter, our products can achieve continuous heating by rotational defrost, providing with a more comfortable and warmer indoor environment.



Note: Only available for module combinations

Hi-FLEXi S Series

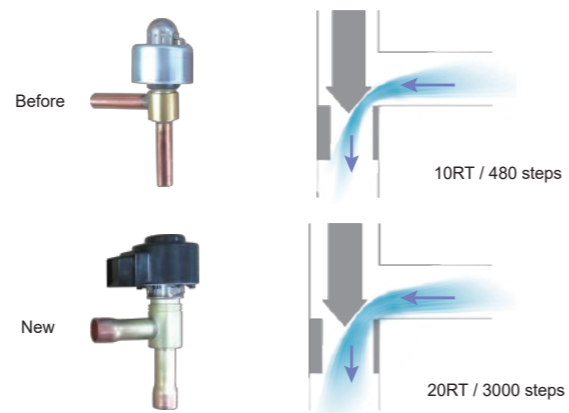
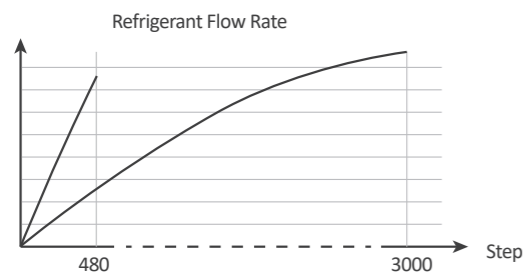
Hydro box defrost

Hi-FLEXi S Series can choose hydro box defrost. There is no doubt that room temperature will be less fluctuation to keep comfort.



Dual 20RT EEV

Compared with conventional 10RT EEV with 480 steps, dual 20RT EEV with 3000pls can better reduce pressure loss and improve performance.



Flexible long piping design

With extra long pipe, the height difference between the indoor unit and outdoor unit is up to 90 meters*, which makes installation more flexible.

- Maximum height difference between indoor and outdoor units:
when the outdoor unit is above: 90m*(50m)
when the outdoor unit is below: 90m*(40m)
- Maximum height difference of indoor units: 30m*(15m)
- Maximum length from the first branch pipe to the farthest indoor unit: 90m
- Maximum length of a single pipe: 190 meters
Total length of pipes: 1000 meters
- Largest pipe length between outdoor units: 10 meters



*Note: For detailed information, please contact Hisense's technical engineers.

Hi-FLEXi S Series

High match ratio of ODU and IDUs

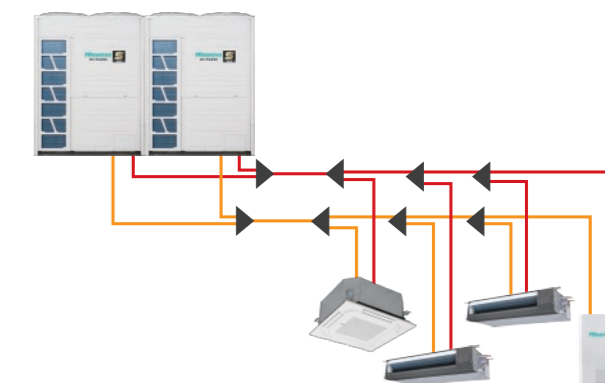
Hi-FLEXi S Series can realize that the match ratio of ODU and IDUs is 50%~150%(200%)*

Note: If some applications require match ratio up to 200%, please contact with our professional engineer.



Flexible connection to hydro box

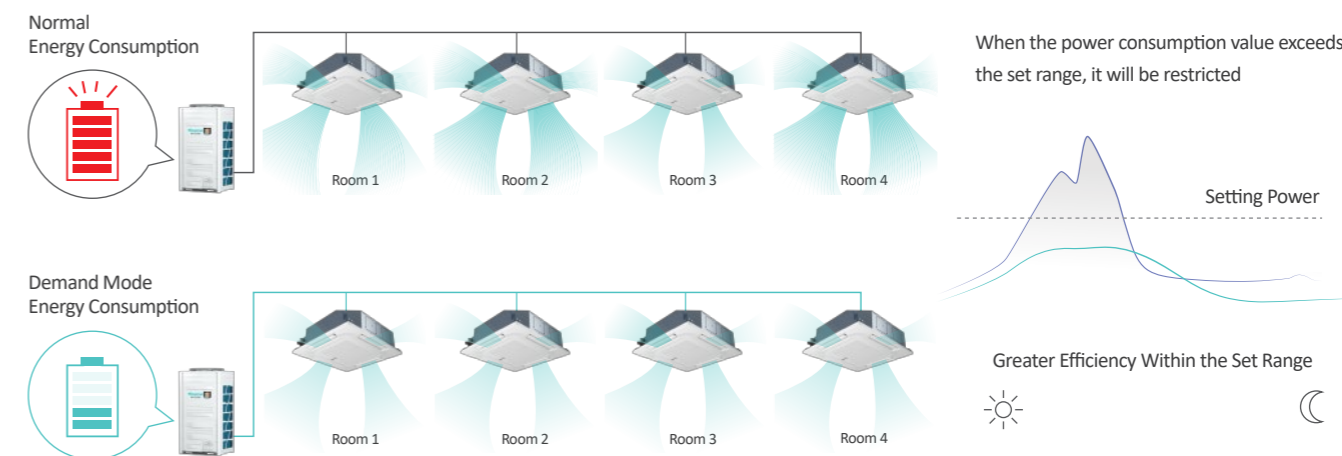
The Hydro Box can be used in both two-pipe and three-pipe systems to provide cold or hot water.



Energy saving mode

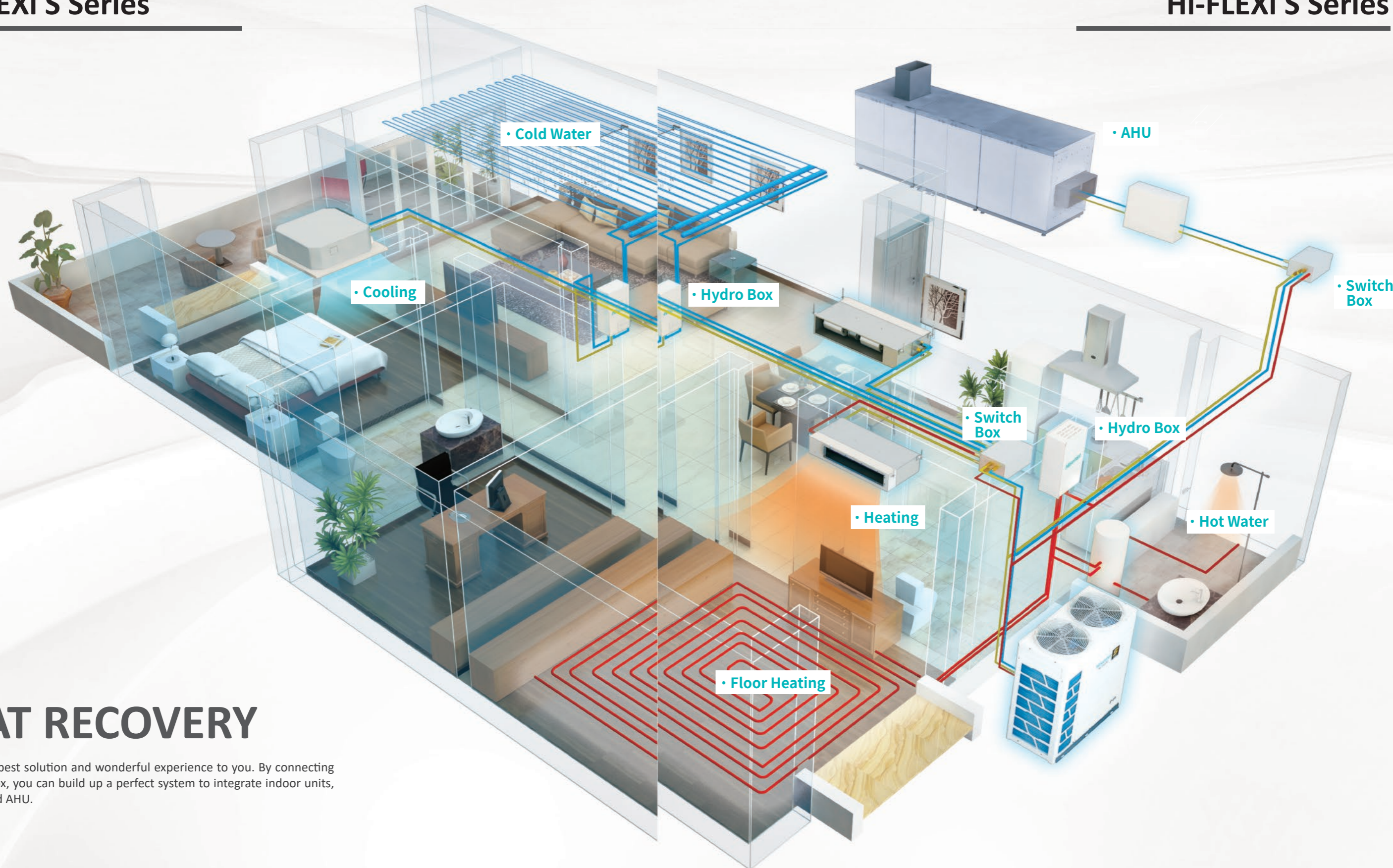
The intelligent demand mode can adjust the air conditioning automatically according to peak-valley requirements of electricity. It achieves balance between comfort and

energy-saving while meeting the power demand for daily work.



Hi-FLEXi S Series

Hi-FLEXi S Series



HEAT RECOVERY

Provides the best solution and wonderful experience to you. By connecting the Switch Box, you can build up a perfect system to integrate indoor units, hydro box and AHU.

Hi-FLEXi S Series

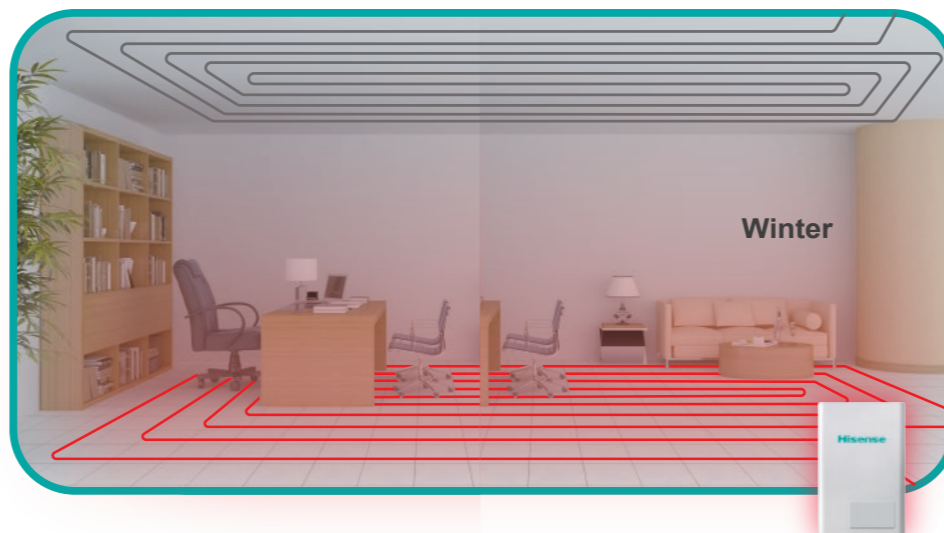
Hi-FLEXi S Series

Application case

Simultaneous Cooling and Heating



Floor Heating



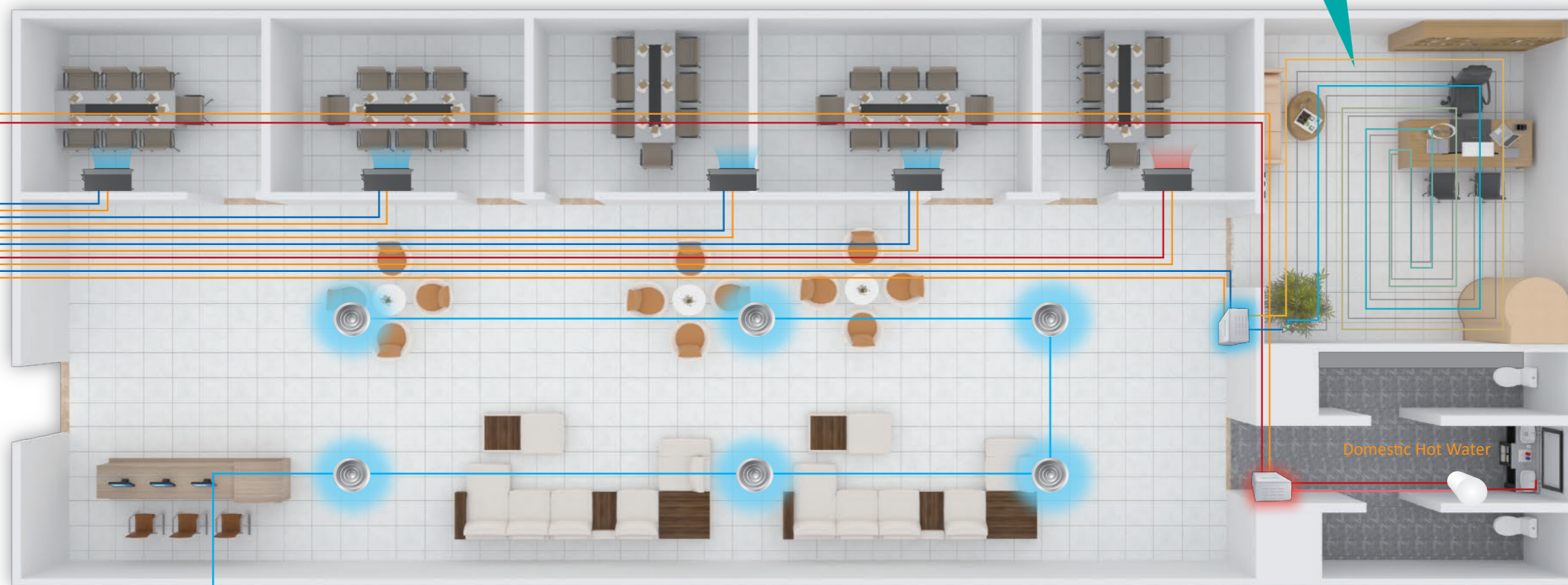
Radiant cooling



Connect with Switch Box, Flexible installation



Connect AHU



Hi-FLEXi S Series

Outdoor unit specifications



Capacity		8HP	10HP	12HP	14HP	16HP	18HP	
Model		AVWT-76FKFSHA	AVWT-96FKFSHA	AVWT-114FKFSHA	AVWT-136FKFSHA	AVWT-154FKFSHA	AVWT-170FKFSHA	
Combination		AVWT-76FKFSHA	AVWT-96FKFSHA	AVWT-114FKFSHA	AVWT-136FKFSHA	AVWT-154FKFSHA	AVWT-170FKFSHA	
Power Supply		AC 3Φ,380-415V/50/60Hz						
Cooling Operation	Nominal Capacity	kW	22.4	28.0	33.5	40.0	45.0	50.0
		kBtu/h	76.4	95.5	114.3	136.5	153.5	170.6
	Power Consumption	kW	4.77	6.67	7.25	8.70	11.22	12.69
	EER	kW/kW	4.70	4.20	4.62	4.60	4.01	3.94
Heating Operation	Capacity (Max/Nom)	kW	25.0 / 22.4	31.5 / 28.0	37.5 / 33.5	45.0 / 40.0	50.0 / 45.0	56.0 / 50.0
		kBtu/h	85.3 / 76.4	107.5 / 95.5	128.0 / 114.3	153.5 / 136.5	170.6 / 153.5	191.1 / 170.6
	Power Consumption	kW	4.88 / 4.06	6.29 / 5.18	7.50 / 6.20	9.55 / 8.16	11.88 / 10.23	13.97 / 11.88
	COP	kW	5.12 / 5.52	5.01 / 5.41	5.00 / 5.40	4.71 / 4.90	4.21 / 4.40	4.01 / 4.21
Sound Pressure Level		dB(A)	59	60	62	62	62	62
Outer Dimensions	Height	mm	1730	1730	1730	1730	1730	1730
	Width	mm	950	950	1210	1210	1350	1350
	Depth	mm	750	750	750	750	750	750
Packing Dimensions	Height	mm	1930	1930	1930	1930	1930	1930
	Width	mm	1015	1015	1275	1275	1420	1420
	Depth	mm	790	790	790	790	790	790
Cabinet Color		-	Ivory White					
Net Weight	kg	246	247	290	349	369	377	
Gross Weight	kg	266	267	312	371	393	401	
Air Flow Rate	m³/min	183	183	200	200	267	296	
Refrigerant charge before shipment	kg	6.00	6.00	8.80	9.20	9.80	10.60	
Compressor Quantity	-	1	1	1	2	2	2	
Condenser Fan Quantity	-	1	1	2	2	2	2	
Heat Recovery Operation System	Low Pressure Gas Line	mm(in.)	Φ19.05 (3/4)	Φ22.20 (7/8)	Φ25.40 (1)	Φ25.40 (1)	Φ28.60 (1-1/8)	Φ28.60 (1-1/8)
	High/Low Pressure Gas Line	mm(in.)	Φ15.88 (5/8)	Φ19.05 (3/4)	Φ22.2 (7/8)	Φ22.2 (7/8)	Φ22.2 (7/8)	Φ22.2 (7/8)
	Liquid Line	mm(in.)	Φ9.53 (3/8)	Φ9.53 (3/8)	Φ12.70 (1/2)	Φ12.70 (1/2)	Φ12.70 (1/2)	Φ15.88 (5/8)
Heat Pump Operation System	Gas Line	mm(in.)	Φ19.05 (3/4)	Φ22.20 (7/8)	Φ25.40 (1)	Φ25.40 (1)	Φ28.60 (1-1/8)	Φ28.60 (1-1/8)
	Liquid Line	mm(in.)	Φ9.53 (3/8)	Φ9.53 (3/8)	Φ12.70 (1/2)	Φ12.70 (1/2)	Φ12.70 (1/2)	Φ15.88 (5/8)
Operation Range	Cooling	°C DB						-10~52
	Heating	°C WB						-25~16.5

Notes:

- Rated cooling capacity and rated heating capacity are tested in the following conditions:
Cooling conditions: indoor air inlet temperature: 27 °C DB 19 °C WB, Outdoor air inlet temperature: 35 °C DB, pipe length: 7.5m, pipe height difference: 0m
Heating conditions: indoor air inlet temperature: 20 °C DB, Outdoor air inlet temperature: 7 °C DB 6 °C WB, pipe length: 7.5m, pipe height difference : 0m
- The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- The final appearance of outdoor units is subject to the actual products.

Hi-FLEXi S Series



Capacity		20HP	22HP	24HP	26HP	28HP	
Model		AVWT-190FKFSHA	AVWT-212FKFSHA	AVWT-228FKFSHA	AVWT-250FKFSHA	AVWT-272FKFSHA	
Combination		AVWT-190FKFSHA	AVWT-212FKFSHA	AVWT-114FKFSHA AVWT-114FKFSHA	AVWT-114FKFSHA AVWT-136FKFSHA	AVWT-136FKFSHA AVWT-136FKFSHA	
Power Supply		AC 3Φ,380-415V/50/60Hz					
Cooling Operation	Nominal Capacity	kW	56.0	61.5	67.0	73.5	80.0
		kBtu/h	191.1	209.8	228.6	250.8	273.0
	Power Consumption	kW	14.36	16.62	14.50	15.95	17.39
	EER	kW/kW	3.90	3.70	4.62	4.61	4.60
Heating Operation	Capacity (Max/Nom)	kW	63.0 / 56.0	69.0 / 61.5	75.0 / 67.0	82.5 / 73.5	90.0 / 80.0
		kBtu/h	215.0 / 191.1	235.4 / 209.8	255.9 / 228.6	281.5 / 250.8	307.1 / 273.0
	Power Consumption	kW	15.75 / 13.40	18.11 / 15.73	15.00 / 12.41	17.04 / 14.33	19.11 / 16.33
	COP	kW	4.00 / 4.18	3.81 / 3.91	5.00 / 5.40	4.84 / 5.13	4.71 / 4.90
Sound Pressure Level		dB(A)	63	64	65	65	65
Outer Dimensions	Height	mm	1730	1730	1730	1730	1730
	Width	mm	1600	1600	1210+1210	1210+1210	1210+1210
	Depth	mm	750	750	750	750	750
Packing Dimensions	Height	mm	1930	1930	1930	1930	1930
	Width	mm	1665	1665	1275+1275	1275+1275	1275+1275
	Depth	mm	790	790	790	790	790
Cabinet Color		-	Ivory White				
Net Weight	kg	400	401	290+290	290+349	349+349	
Gross Weight	kg	426	427	312+312	312+371	371+371	
Air Flow Rate	m³/min	350	350	400	400	400	
Refrigerant charge before shipment	kg	11.50	11.50	8.80+8.80	8.80+9.20	9.20+9.20	
Compressor Quantity	-	2	2	2	3	4	
Condenser Fan Quantity	-	2	2	4	4	4	
Heat Recovery Operation System	Low Pressure Gas Line	mm(in.)	Φ28.60 (1-1/8)	Φ28.60 (1-1/8)	Φ28.60 (1-1/8)	Φ31.75 (1-1/4)	Φ31.75 (1-1/4)
	High/Low Pressure Gas Line	mm(in.)	Φ22.2 (7/8)	Φ25.4 (1)	Φ25.4 (1)	Φ25.4 (1)	Φ28.6 (1-1/8)
	Liquid Line	mm(in.)	Φ15.88 (5/8)	Φ15.88 (5/8)	Φ15.88 (5/8)	Φ19.05 (3/4)	Φ19.05 (3/4)
Heat Pump Operation System	Gas Line	mm(in.)	Φ28.60 (1-1/8)	Φ28.60 (1-1/8)	Φ28.60 (1-1/8)	Φ31.75 (1-1/4)	Φ31.75 (1-1/4)
	Liquid Line	mm(in.)	Φ15.88 (5/8)	Φ15.88 (5/8)	Φ15.88 (5/8)	Φ19.05 (3/4)	Φ19.05 (3/4)
Operation Range	Cooling	°C DB				-10~52	
	Heating	°C WB				-25~16.5	

Notes:

- Rated cooling capacity and rated heating capacity are tested in the following conditions:
Cooling conditions: indoor air inlet temperature: 27 °C DB 19 °C WB, Outdoor air inlet temperature: 35 °C DB, pipe length: 7.5m, pipe height difference: 0m
Heating conditions: indoor air inlet temperature: 20 °C DB, Outdoor air inlet temperature: 7 °C DB 6 °C WB, pipe length: 7.5m, pipe height difference : 0m
- The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- The final appearance of outdoor units is subject to the actual products.

Hi-FLEXi S Series

Outdoor unit specifications



Capacity		30HP	32HP	34HP	36HP	38HP
Model		AVWT-290FKFSHA	AVWT-308FKFSHA	AVWT-324FKFSHA	AVWT-340FKFSHA	AVWT-360FKFSHA
Combination		AVWT-136FKFSHA AVWT-154FKFSHA	AVWT-154FKFSHA AVWT-154FKFSHA	AVWT-154FKFSHA AVWT-170FKFSHA	AVWT-170FKFSHA AVWT-170FKFSHA	AVWT-170FKFSHA AVWT-190FKFSHA
Power Supply		AC 3Φ,380-415V/50/60Hz				
Cooling Operation	Nominal Capacity	kW 85.0	90.0	95.0	100.0	106.0
		kBtu/h 290.0	307.1	324.1	341.2	361.7
	Power Consumption	kW 19.83	22.44	23.91	25.38	27.05
	EER	kW/kW 4.29	4.01	3.97	3.94	3.92
Heating Operation	Capacity (Max/Nom)	kW 95.0 / 85.0	100.0 / 90.0	106.0 / 95.0	112.0 / 100.0	119.0 / 106.0
		kBtu/h 324.1 / 290.0	341.2 / 307.1	361.7 / 324.1	382.1 / 341.2	406.0 / 361.7
	Power Consumption	kW 21.37 / 18.34	23.75 / 20.45	25.82 / 22.09	27.93 / 23.75	29.71 / 25.27
	COP	kW 4.44 / 4.63	4.21 / 4.40	4.11 / 4.30	4.01 / 4.21	4.00 / 4.19
Sound Pressure Level		dB(A)	65	65	65	66
Outer Dimensions	Height	mm	1730	1730	1730	1730
	Width	mm	1210+1350	1350+1350	1350+1350	1350+1350
	Depth	mm	750	750	750	750
Packing Dimensions	Height	mm	1930	1930	1930	1930
	Width	mm	1275+1420	1420+1420	1420+1420	1420+1420
	Depth	mm	790	790	790	790
Cabinet Color		-	Ivory White			
Net Weight		kg	349+369	369+369	369+377	377+400
Gross Weight		kg	371+393	393+393	393+401	401+426
Air Flow Rate		m³/min	467	534	563	646
Refrigerant charge before shipment		kg	9.20+9.80	9.80+9.80	9.80+10.60	10.60+11.50
Compressor Quantity		-	4	4	4	4
Condenser Fan Quantity		-	4	4	4	4
Heat Recovery Operation System	Low Pressure Gas Line	mm(in.)	Φ31.75 (1-1/4)	Φ31.75 (1-1/4)	Φ31.75 (1-1/4)	Φ38.1 (1-1/2)
	High/Low Pressure Gas Line	mm(in.)	Φ28.6 (1-1/8)	Φ28.6 (1-1/8)	Φ28.6 (1-1/8)	Φ31.75 (1-1/4)
	Liquid Line	mm(in.)	Φ19.05 (3/4)	Φ19.05 (3/4)	Φ19.05 (3/4)	Φ19.05 (3/4)
Heat Pump Operation System	Gas Line	mm(in.)	Φ31.75 (1-1/4)	Φ31.75 (1-1/4)	Φ31.75 (1-1/4)	Φ38.1 (1-1/2)
	Liquid Line	mm(in.)	Φ19.05 (3/4)	Φ19.05 (3/4)	Φ19.05 (3/4)	Φ19.05 (3/4)
Operation Range	Cooling	°C DB	-10~52			
	Heating	°C WB	-25~16.5			

Notes:

- Rated cooling capacity and rated heating capacity are tested in the following conditions:
Cooling conditions: indoor air inlet temperature: 27 °C DB 19 °C WB, Outdoor air inlet temperature: 35 °C DB, pipe length: 7.5m, pipe height difference: 0m
Heating conditions: indoor air inlet temperature: 20 °C DB, Outdoor air inlet temperature: 7 °C DB 6 °C WB, pipe length: 7.5m, pipe height difference : 0m
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Hi-FLEXi S Series



Capacity		40HP	42HP	44HP	46HP	48HP
Model		AVWT-380FKFSHA	AVWT-402FKFSHA	AVWT-424FKFSHA	AVWT-444FKFSHA	AVWT-462FKFSHA
Combination		AVWT-190FKFSHA AVWT-190FKFSHA	AVWT-190FKFSHA AVWT-212FKFSHA	AVWT-212FKFSHA AVWT-212FKFSHA	AVWT-136FKFSHA AVWT-154FKFSHA AVWT-154FKFSHA	AVWT-154FKFSHA AVWT-154FKFSHA AVWT-154FKFSHA
Power Supply		AC 3Φ,380-415V/50/60Hz				
Cooling Operation	Nominal Capacity	kW 112.0	117.5	123.0	130.0	135.0
		kBtu/h 382.1	400.9	419.7	443.6	460.6
	Power Consumption	kW 28.72	30.97	33.24	31.02	33.67
	EER	kW/kW 3.90	3.79	3.70	4.19	4.01
Heating Operation	Capacity (Max/Nom)	kW 126.0 / 112.0	132.0 / 117.5	138.0 / 123.0	145.0 / 130.0	150.0 / 135.0
		kBtu/h 429.9 / 382.1	450.4 / 400.9	470.9 / 419.7	494.7 / 443.6	511.8 / 460.6
	Power Consumption	kW 31.50 / 26.79	33.85 / 29.10	36.22 / 31.46	33.23 / 28.55	35.63 / 30.68
	COP	kW 4.00 / 4.18	3.90 / 4.04	3.81 / 3.91	4.36 / 4.55	4.21 / 4.40
Sound Pressure Level		dB(A)	66	67	67	67
Outer Dimensions	Height	mm	1730	1730	1730	1730
	Width	mm	1600+1600	1600+1600	1600+1600	1210+1350+1350
	Depth	mm	750	750	750	750
Packing Dimensions	Height	mm	1930	1930	1930	1930
	Width	mm	1665+1665	1665+1665	1665+1665	1275+1420+1420
	Depth	mm	790	790	790	790
Cabinet Color		-	Ivory White			
Net Weight		kg	400+400	400+401	401+401	349+369+369
Gross Weight		kg	426+426	426+427	427+427	371+393+393
Air Flow Rate		m³/min	700	700	700	734
Refrigerant charge before shipment		kg	11.50+11.50	11.50+11.50	11.50+11.50	9.20+9.80+9.80
Compressor Quantity		-	4	4	4	6
Condenser Fan Quantity		-	4	4	4	6
Heat Recovery Operation System	Low Pressure Gas Line	mm(in.)	Φ38.1 (1-1/2)	Φ38.1 (1-1/2)	Φ38.1 (1-1/2)	Φ38.1 (1-1/2)
	High/Low Pressure Gas Line	mm(in.)	Φ31.75 (1-1/4)	Φ31.75 (1-1/4)	Φ31.75 (1-1/4)	Φ31.75 (1-1/4)
	Liquid Line	mm(in.)	Φ19.05 (3/4)	Φ19.05 (3/4)	Φ19.05 (3/4)	Φ19.05 (3/4)
Heat Pump Operation System	Gas Line	mm(in.)	Φ38.1 (1-1/2)	Φ38.1 (1-1/2)	Φ38.1 (1-1/2)	Φ38.1 (1-1/2)
	Liquid Line	mm(in.)	Φ19.05 (3/4)	Φ19.05 (3/4)	Φ19.05 (3/4)	Φ19.05 (3/4)
Operation Range	Cooling	°C DB	-10~52			
	Heating	°C WB	-25~16.5			

Notes:

- Rated cooling capacity and rated heating capacity are tested in the following conditions:
Cooling conditions: indoor air inlet temperature: 27 °C DB 19 °C WB, Outdoor air inlet temperature: 35 °C DB, pipe length: 7.5m, pipe height difference: 0m
Heating conditions: indoor air inlet temperature: 20 °C DB, Outdoor air inlet temperature: 7 °C DB 6 °C WB, pipe length: 7.5m, pipe height difference : 0m
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Hi-FLEXi S Series

Outdoor unit specifications



Capacity		50HP	52HP	54HP	56HP
Model		AVWT-478FKFSHA	AVWT-494FKFSHA	AVWT-510FKFSHA	AVWT-530FKFSHA
Combination		AVWT-154FKFSHA AVWT-154FKFSHA AVWT-170FKFSHA	AVWT-154FKFSHA AVWT-170FKFSHA AVWT-170FKFSHA	AVWT-170FKFSHA AVWT-170FKFSHA AVWT-170FKFSHA	AVWT-170FKFSHA AVWT-170FKFSHA AVWT-190FKFSHA
Power Supply		AC 3Φ,380-415V/50/60Hz			
Cooling Operation	Nominal Capacity	kW 477.7	145.0 494.7	150.0 511.8	156.0 532.3
	Power Consumption	kW 35.13	36.60	38.07	39.74
	EER	kW/kW 3.99	3.96	3.94	3.93
	Capacity (Max/Nom)	kW 532.3 / 477.7	162.0 / 145.0 552.7 / 494.7	168.0 / 150.0 573.2 / 511.8	175.0 / 156.0 597.1 / 532.3
Heating Operation	Power Consumption	kW 37.69 / 32.31	39.78 / 33.96	41.90 / 35.63	43.68 / 37.15
	COP	kW 4.14 / 4.33	4.07 / 4.27	4.01 / 4.21	4.01 / 4.20
	Sound Pressure Level	dB(A) 67	67	67	67
Outer Dimensions	Height	mm 1730	1730	1730	1730
	Width	mm 1350+1350+1350	1350+1350+1350	1350+1350+1350	1350+1350+1600
	Depth	mm 750	750	750	750
Packing Dimensions	Height	mm 1930	1930	1930	1930
	Width	mm 1420+1420+1420	1420+1420+1420	1420+1420+1420	1420+1420+1665
	Depth	mm 790	790	790	790
Cabinet Color	-	Ivory White			
Net Weight	kg	369+369+377	369+377+377	377+377+377	377+377+400
Gross Weight	kg	393+393+401	393+401+401	401+401+401	401+401+426
Air Flow Rate	m³/min	830	859	888	942
Refrigerant charge before shipment	kg	9.80+9.80+10.60	9.80+10.60+10.60	10.60+10.60+10.60	10.60+10.60+11.50
Compressor Quantity	-	6	6	6	6
Condenser Fan Quantity	-	6	6	6	6
Heat Recovery Operation System	Low Pressure Gas Line	mm(in.) Φ38.1 (1-1/2)	Φ38.1 (1-1/2)	Φ38.1 (1-1/2)	Φ41.3 (1-5/8)
	High/Low Pressure Gas Line	mm(in.) Φ31.75 (1-1/4)	Φ31.75 (1-1/4)	Φ31.75 (1-1/4)	Φ38.1 (1-1/2)
	Liquid Line	mm(in.) Φ19.05 (3/4)	Φ19.05 (3/4)	Φ19.05 (3/4)	Φ22.2 (7/8)
Heat Pump Operation System	Gas Line	mm(in.) Φ38.1 (1-1/2)	Φ38.1 (1-1/2)	Φ38.1 (1-1/2)	Φ41.3 (1-5/8)
	Liquid Line	mm(in.) Φ19.05 (3/4)	Φ19.05 (3/4)	Φ19.05 (3/4)	Φ22.2 (7/8)
Operation Range	Cooling	°C DB	-10~52		
	Heating	°C WB	-25~16.5		

Notes:

- Rated cooling capacity and rated heating capacity are tested in the following conditions:
Cooling conditions: indoor air inlet temperature: 27 °C DB 19 °C WB, Outdoor air inlet temperature: 35 °C DB, pipe length: 7.5m, pipe height difference: 0m
Heating conditions: indoor air inlet temperature: 20 °C DB, Outdoor air inlet temperature: 7 °C DB 6 °C WB, pipe length: 7.5m, pipe height difference : 0m
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Hi-FLEXi S Series



Capacity		58HP	60HP	62HP	64HP
Model		AVWT-550FKFSHA	AVWT-570FKFSHA	AVWT-592FKFSHA	AVWT-614FKFSHA
Combination		AVWT-170FKFSHA AVWT-190FKFSHA AVWT-190FKFSHA	AVWT-190FKFSHA AVWT-190FKFSHA AVWT-190FKFSHA	AVWT-190FKFSHA AVWT-190FKFSHA AVWT-212FKFSHA	AVWT-190FKFSHA AVWT-212FKFSHA AVWT-212FKFSHA
Power Supply		AC 3Φ,380-415V/50/60Hz			
Cooling Operation	Nominal Capacity	kW 552.7	168.0 573.2	173.5 592.0	179.0 610.7
	Power Consumption	kW 41.41	43.08	45.32	47.58
	EER	kW/kW 3.91	3.90	3.83	3.76
	Capacity (Max/Nom)	kW 621.0 / 552.7	182.0 / 162.0 644.9 / 573.2	189.0 / 168.0 665.3 / 592.0	195.0 / 173.5 685.8 / 610.7
Heating Operation	Power Consumption	kW 45.46 / 38.67	47.25 / 40.19	49.59 / 42.49	51.95 / 44.82
	COP	kW 4.00 / 4.19	4.00 / 4.18	3.93 / 4.08	3.87 / 3.99
	Sound Pressure Level	dB(A) 67	68	68	68
Outer Dimensions	Height	mm 1730	1730	1730	1730
	Width	mm 1350+1600+1600	1600+1600+1600	1600+1600+1600	1600+1600+1600
	Depth	mm 750	750	750	750
Packing Dimensions	Height	mm 1930	1930	1930	1930
	Width	mm 1420+1665+1665	1665+1665+1665	1665+1665+1665	1665+1665+1665
	Depth	mm 790	790	790	790
Cabinet Color	-	Ivory White			
Net Weight	kg	377+400+400	400+400+400	400+400+401	400+401+401
Gross Weight	kg	401+426+426	426+426+426	426+426+427	426+427+427
Air Flow Rate	m³/min	996	1050	1050	1050
Refrigerant charge before shipment	kg	10.60+11.50+11.50	11.50+11.50+11.50	11.50+11.50+11.50	11.50+11.50+11.50
Compressor Quantity	-	6	6	6	6
Condenser Fan Quantity	-	6	6	6	6
Heat Recovery Operation System	Low Pressure Gas Line	mm(in.) Φ44.5 (1-3/4)	Φ44.5 (1-3/4)	Φ44.5 (1-3/4)	Φ44.5 (1-3/4)
	High/Low Pressure Gas Line	mm(in.) Φ41.3 (1-5/8)	Φ41.3 (1-5/8)	Φ41.3 (1-5/8)	Φ41.3 (1-5/8)
	Liquid Line	mm(in.) Φ22.2 (7/8)	Φ22.2 (7/8)	Φ22.2 (7/8)	Φ22.2 (7/8)
Heat Pump Operation System	Gas Line	mm(in.) Φ44.5 (1-3/4)	Φ44.5 (1-3/4)	Φ44.5 (1-3/4)	Φ44.5 (1-3/4)
	Liquid Line	mm(in.) Φ22.2 (7/8)	Φ22.2 (7/8)	Φ22.2 (7/8)	Φ22.2 (7/8)
Operation Range	Cooling	°C DB	-10~52		
	Heating	°C WB	-25~16.5		

Notes:

- Rated cooling capacity and rated heating capacity are tested in the following conditions:
Cooling conditions: indoor air inlet temperature: 27 °C DB 19 °C WB, Outdoor air inlet temperature: 35 °C DB, pipe length: 7.5m, pipe height difference: 0m
Heating conditions: indoor air inlet temperature: 20 °C DB, Outdoor air inlet temperature: 7 °C DB 6 °C WB, pipe length: 7.5m, pipe height difference : 0m
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Hi-FLEXi S Series

Outdoor unit specifications



Capacity		66HP		68HP		70HP	
Model		AVWT-636FKFSHA		AVWT-648FKFSHA		AVWT-664FKFSHA	
Combination		AVWT-212FKFSHA AVWT-212FKFSHA AVWT-212FKFSHA		AVWT-154FKFSHA AVWT-154FKFSHA AVWT-170FKFSHA AVWT-170FKFSHA		AVWT-154FKFSHA AVWT-170FKFSHA AVWT-170FKFSHA	
Power Supply		AC 3Φ,380-415V/50/60Hz					
Cooling Operation	Nominal Capacity	kW	184.5	190.0	195.0		
		kBtu/h	629.5	648.3	665.3		
	Power Consumption	kW	49.86	47.82	49.29		
	EER	kW/kW	3.70	3.97	3.96		
Heating Operation	Capacity (Max/Nom)	kW	207.0 / 184.5	212.0 / 190.0	218.0 / 195.0		
		kBtu/h	706.3 / 629.5	723.3 / 648.3	743.8 / 665.3		
	Power Consumption	kW	54.33 / 47.19	51.64 / 44.18	53.74 / 45.84		
	COP	kW	3.81 / 3.91	4.11 / 4.30	4.06 / 4.25		
Sound Pressure Level		dB(A)	69	69	69		
Outer Dimensions	Height	mm	1730	1730	1730		
	Width	mm	1600+1600+1600	1350+1350+1350+1350	1350+1350+1350+1350		
	Depth	mm	750	750	750		
Packing Dimensions	Height	mm	1930	1930	1930		
	Width	mm	1665+1665+1665	1420+1420+1420+1420	1420+1420+1420+1420		
	Depth	mm	790	790	790		
Cabinet Color		-	Ivory White				
Net Weight		kg	401+401+401	369+369+377+377	369+377+377+377		
Gross Weight		kg	427+427+427	393+393+401+401	393+401+401+401		
Air Flow Rate		m³/min	1050	1126	1155		
Refrigerant charge before shipment		kg	11.50+11.50+11.50	9.80+9.80+10.60+10.60	9.80+10.60+10.60+10.60		
Compressor Quantity		-	6	8	8		
Condenser Fan Quantity		-	6	8	8		
Heat Recovery Operation System	Low Pressure Gas Line	mm(in.)	Φ44.5 (1-3/4)	Φ50.8 (2)	Φ50.8 (2)		
	High/Low Pressure Gas Line	mm(in.)	Φ41.3 (1-5/8)	Φ44.5 (1-3/4)	Φ44.5 (1-3/4)		
	Liquid Line	mm(in.)	Φ22.2 (7/8)	Φ25.4 (1)	Φ25.4 (1)		
Heat Pump Operation System	Gas Line	mm(in.)	Φ44.5 (1-3/4)	Φ50.8 (2)	Φ50.8 (2)		
	Liquid Line	mm(in.)	Φ22.2 (7/8)	Φ25.4 (1)	Φ25.4 (1)		
Operation Range	Cooling	°C DB		-10~52			
	Heating	°C WB		-25~16.5			

Notes:

- Rated cooling capacity and rated heating capacity are tested in the following conditions:
Cooling conditions: indoor air inlet temperature: 27 °C DB 19 °C WB, Outdoor air inlet temperature: 35 °C DB, pipe length: 7.5m, pipe height difference: 0m
Heating conditions: indoor air inlet temperature: 20 °C DB, Outdoor air inlet temperature: 7 °C DB 6 °C WB, pipe length: 7.5m, pipe height difference : 0m
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Hi-FLEXi S Series



Capacity		72HP		74HP		76HP	
Model		AVWT-680FKFSHA		AVWT-700FKFSHA		AVWT-720FKFSHA	
Combination		AVWT-170FKFSHA AVWT-170FKFSHA AVWT-170FKFSHA AVWT-170FKFSHA		AVWT-170FKFSHA AVWT-170FKFSHA AVWT-170FKFSHA AVWT-190FKFSHA		AVWT-170FKFSHA AVWT-170FKFSHA AVWT-190FKFSHA AVWT-190FKFSHA	
Power Supply		AC 3Φ,380-415V/50/60Hz					
Cooling Operation	Nominal Capacity	kW	200.0	206.0	212.0		
		kBtu/h	682.4	702.9	723.3		
	Power Consumption	kW	50.76	52.43	54.10		
	EER	kW/kW	3.94	3.93	3.92		
Heating Operation	Capacity (Max/Nom)	kW	224.0 / 200.0	231.0 / 206.0	238.0 / 212.0		
		kBtu/h	764.3 / 682.4	788.2 / 702.9	812.1 / 723.3		
	Power Consumption	kW	55.86 / 47.51	57.65 / 49.03	59.43 / 50.55		
	COP	kW	4.01 / 4.21	4.01 / 4.20	4.00 / 4.19		
Sound Pressure Level		dB(A)	69	69	69		
Outer Dimensions	Height	mm	1730	1730	1730		
	Width	mm	1350+1350+1350+1350	1350+1350+1350+1600	1350+1350+1600+1600		
	Depth	mm	750	750	750		
Packing Dimensions	Height	mm	1930	1930	1930		
	Width	mm	1420+1420+1420+1420	1420+1420+1420+1665	1420+1420+1665+1665		
	Depth	mm	790	790	790		
Cabinet Color		-	Ivory White				
Net Weight		kg	377+377+377+377	377+377+377+400	377+377+400+400		
Gross Weight		kg	401+401+401+401	401+401+401+426	401+401+426+426		
Air Flow Rate		m³/min	1184	1238	1292		
Refrigerant charge before shipment		kg	10.60+10.60+10.60+10.60	10.60+10.60+10.60+11.50	10.60+10.60+11.50+11.50		
Compressor Quantity		-	8	8	8		
Condenser Fan Quantity		-	8	8	8		
Heat Recovery Operation System	Low Pressure Gas Line	mm(in.)	Φ50.8 (2)	Φ50.8 (2)	Φ50.8 (2)		
	High/Low Pressure Gas Line	mm(in.)	Φ44.5 (1-3/4)	Φ44.5 (1-3/4)	Φ44.5 (1-3/4)		
	Liquid Line	mm(in.)	Φ25.4 (1)	Φ25.4 (1)	Φ25.4 (1)		
Heat Pump Operation System	Gas Line	mm(in.)	Φ50.8 (2)	Φ50.8 (2)	Φ50.8 (2)		
	Liquid Line	mm(in.)	Φ25.4 (1)	Φ25.4 (1)	Φ25.4 (1)		
Operation Range	Cooling	°C DB		-10~52			
	Heating	°C WB		-25~16.5			

Notes:

- Rated cooling capacity and rated heating capacity are tested in the following conditions:
Cooling conditions: indoor air inlet temperature: 27 °C DB 19 °C WB, Outdoor air inlet temperature: 35 °C DB, pipe length: 7.5m, pipe height difference: 0m
Heating conditions: indoor air inlet temperature: 20 °C DB, Outdoor air inlet temperature: 7 °C DB 6 °C WB, pipe length: 7.5m, pipe height difference : 0m
- The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
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Hi-FLEXi S Series

Outdoor unit specifications



Capacity		78HP	80HP	82HP
Model		AVWT-740FKFSHA	AVWT-760FKFSHA	AVWT-782FKFSHA
Combination		AVWT-170FKFSHA	AVWT-190FKFSHA	AVWT-190FKFSHA
		AVWT-190FKFSHA	AVWT-190FKFSHA	AVWT-190FKFSHA
		AVWT-190FKFSHA	AVWT-190FKFSHA	AVWT-190FKFSHA
		AVWT-190FKFSHA	AVWT-190FKFSHA	AVWT-212FKFSHA
Power Supply		AC 3Φ,380-415V/50/60Hz		
Cooling Operation	Nominal Capacity	kW	218.0	224.0
		kBtu/h	743.8	764.3
	Power Consumption	kW	55.77	57.44
		EER	3.91	3.90
Heating Operation	Capacity (Max/Nom)	kW	245.0 / 218.0	252.0 / 224.0
		kBtu/h	835.9 / 743.8	859.8 / 764.3
	Power Consumption	kW	61.21 / 52.07	63.00 / 53.59
		COP	4.00 / 4.19	4.00 / 4.18
Sound Pressure Level		dB(A)		
Outer Dimensions	Height	mm	1730	1730
	Width	mm	1350+1600+1600+1600	1600+1600+1600+1600
	Depth	mm	750	750
Packing Dimensions	Height	mm	1930	1930
	Width	mm	1420+1665+1665+1665	1665+1665+1665+1665
	Depth	mm	790	790
Cabinet Color		Ivory White		
Net Weight		kg	377+400+400+400	400+400+400+401
Gross Weight		kg	401+426+426+426	426+426+426+427
Air Flow Rate		m³/min	1346	1400
Refrigerant charge before shipment		kg	10.60+11.50+11.50+11.50	11.50+11.50+11.50+11.50
Compressor Quantity		-	8	8
Condenser Fan Quantity		-	8	8
Heat Recovery Operation System	Low Pressure Gas Line	mm(in.)	Φ50.8 (2)	Φ50.8 (2)
	High/Low Pressure Gas Line	mm(in.)	Φ44.5 (1-3/4)	Φ44.5 (1-3/4)
	Liquid Line	mm(in.)	Φ25.4 (1)	Φ25.4 (1)
Heat Pump Operation System	Gas Line	mm(in.)	Φ50.8 (2)	Φ50.8 (2)
	Liquid Line	mm(in.)	Φ25.4 (1)	Φ25.4 (1)
Operation Range	Cooling	°C DB	-10~52	
	Heating	°C WB	-25~16.5	

Notes:

- Rated cooling capacity and rated heating capacity are tested in the following conditions:
Cooling conditions: indoor air inlet temperature: 27 °C DB 19 °C WB, Outdoor air inlet temperature: 35 °C DB, pipe length: 7.5m, pipe height difference: 0m
Heating conditions: indoor air inlet temperature: 20 °C DB, Outdoor air inlet temperature: 7 °C DB 6 °C WB, pipe length: 7.5m, pipe height difference : 0m
- The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- The final appearance of outdoor units is subject to the actual products.

Hi-FLEXi S Series



Capacity		84HP	86HP	88HP
Model		AVWT-804FKFSHA	AVWT-826FKFSHA	AVWT-848FKFSHA
Combination		AVWT-190FKFSHA	AVWT-190FKFSHA	AVWT-212FKFSHA
		AVWT-190FKFSHA	AVWT-212FKFSHA	AVWT-212FKFSHA
		AVWT-212FKFSHA	AVWT-212FKFSHA	AVWT-212FKFSHA
		AVWT-212FKFSHA	AVWT-212FKFSHA	AVWT-212FKFSHA
Power Supply		AC 3Φ,380-415V/50/60Hz		
Cooling Operation	Nominal Capacity	kW	235.0	240.5
		kBtu/h	801.8	820.6
	Power Consumption	kW	61.93	64.20
		EER	3.79	3.75
Heating Operation	Capacity (Max/Nom)	kW	264.0 / 235.0	270.0 / 240.5
		kBtu/h	900.8 / 801.8	921.2 / 820.6
	Power Consumption	kW	67.70 / 58.20	70.06 / 60.55
		COP	3.90 / 4.04	3.85 / 3.97
Sound Pressure Level		dB(A)		
Outer Dimensions	Height	mm	1730	1730
	Width	mm	1600+1600+1600+1600	1600+1600+1600+1600
	Depth	mm	750	750
Packing Dimensions	Height	mm	1930	1930
	Width	mm	1665+1665+1665+1665	1665+1665+1665+1665
	Depth	mm	790	790
Cabinet Color		Ivory White		
Net Weight		kg	400+400+401+401	401+401+401+401
Gross Weight		kg	426+426+427+427	427+427+427+427
Air Flow Rate		m³/min	1400	1400
Refrigerant charge before shipment		kg	11.50+11.50+11.50+11.05	11.50+11.50+11.50+11.05
Compressor Quantity		-	8	8
Condenser Fan Quantity		-	8	8
Heat Recovery Operation System	Low Pressure Gas Line	mm(in.)	Φ50.8 (2)	Φ50.8 (2)
	High/Low Pressure Gas Line	mm(in.)	Φ44.5 (1-3/4)	Φ44.5 (1-3/4)
	Liquid Line	mm(in.)	Φ25.4 (1)	Φ25.4 (1)
Heat Pump Operation System	Gas Line	mm(in.)	Φ50.8 (2)	Φ50.8 (2)
	Liquid Line	mm(in.)	Φ25.4 (1)	Φ25.4 (1)
Operation Range	Cooling	°C DB	-10~52	
	Heating	°C WB	-25~16.5	

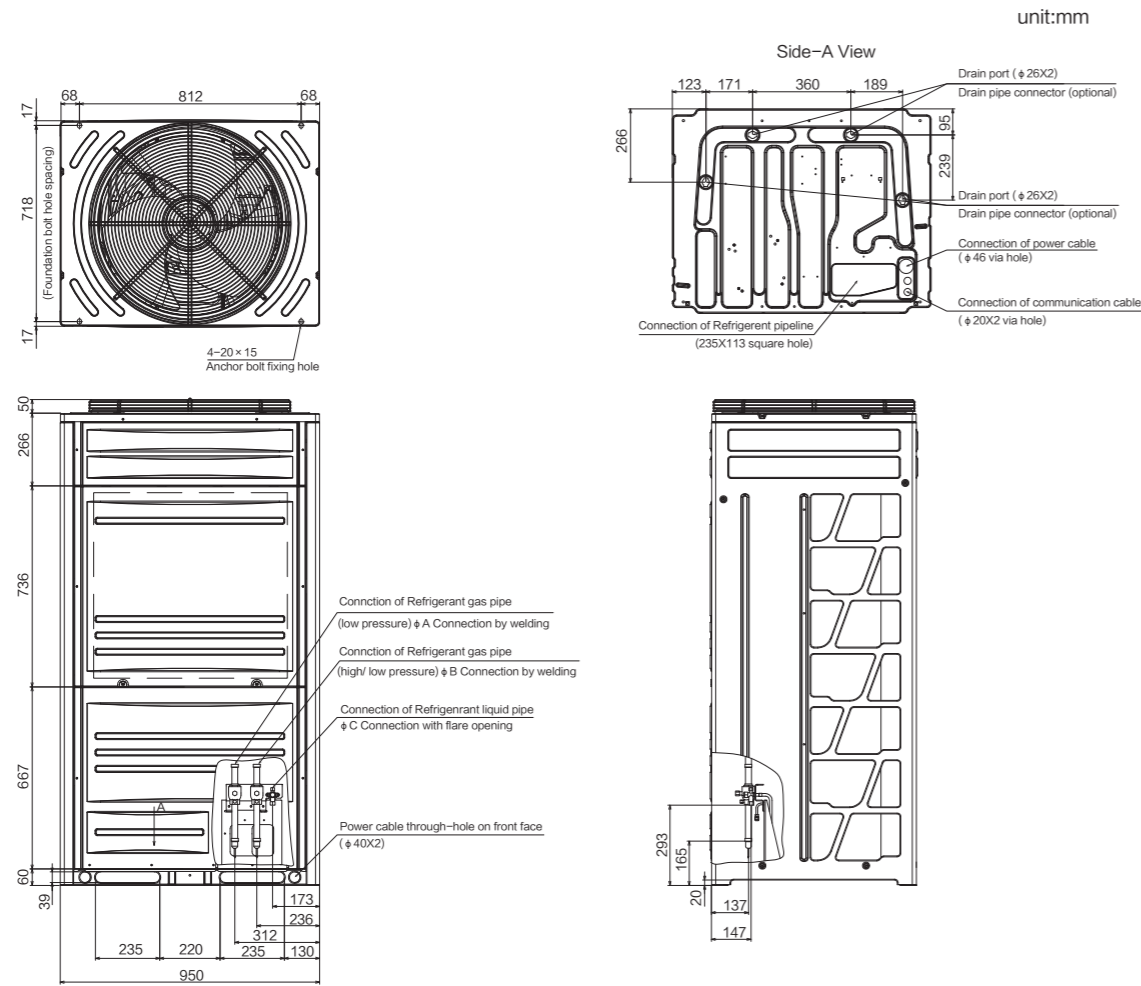
Notes:

- Rated cooling capacity and rated heating capacity are tested in the following conditions:
Cooling conditions: indoor air inlet temperature: 27 °C DB 19 °C WB, Outdoor air inlet temperature: 35 °C DB, pipe length: 7.5m, pipe height difference: 0m
Heating conditions: indoor air inlet temperature: 20 °C DB, Outdoor air inlet temperature: 7 °C DB 6 °C WB, pipe length: 7.5m, pipe height difference : 0m
- The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- The final appearance of outdoor units is subject to the actual products.

Dimensional Drawings

Hi-FLEXi S Series

AVWT-76 ~ 96FKFSHA



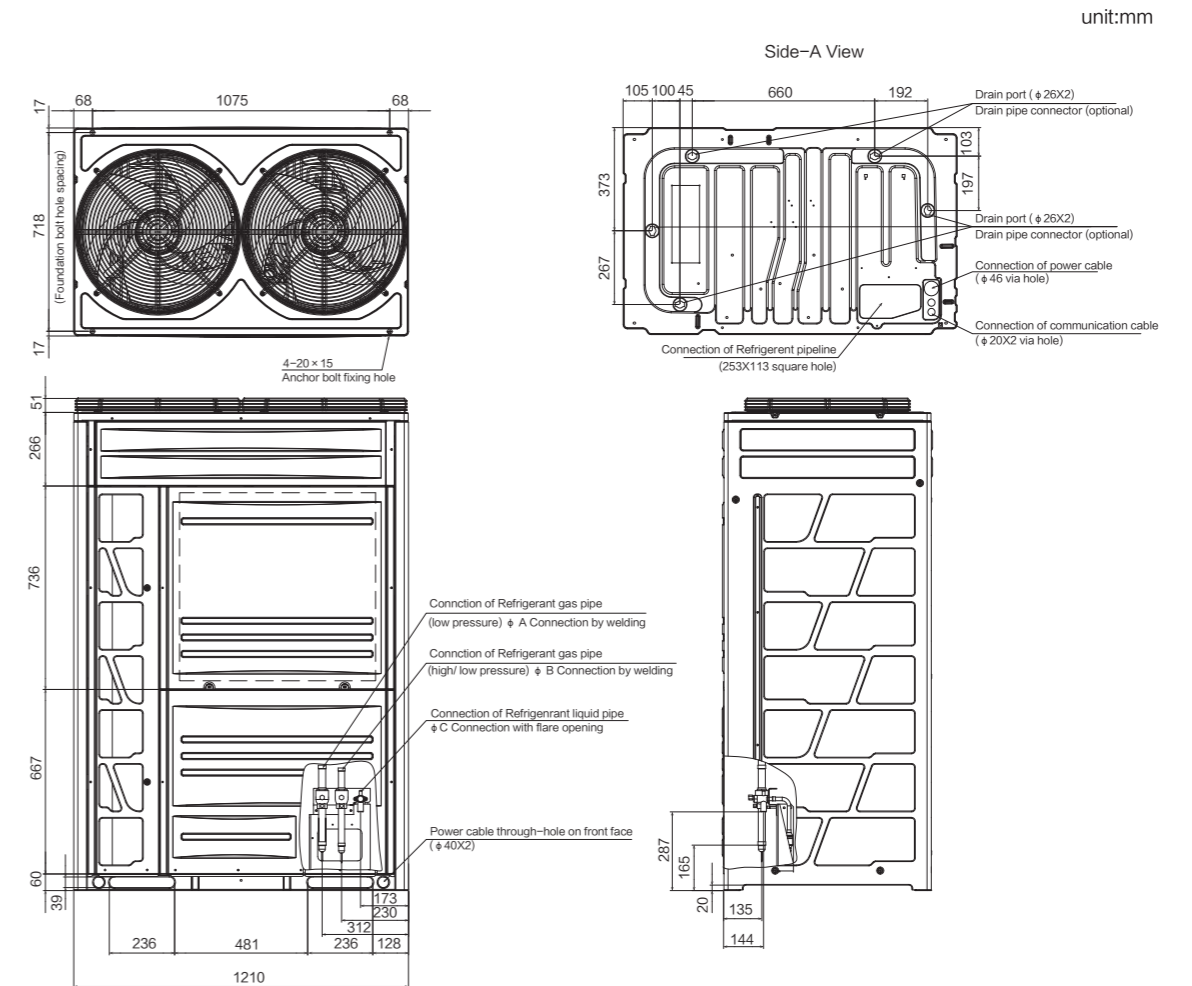
unit:mm

Model	Sizes	A	B	C
AVWT-76FKFSA		19.05	15.88	9.53
AVWT-96FKFSA		22.2	19.05	9.53
AVWT-114FKFSA		25.4	22.2	12.7
AVWT-76FKFSHA		19.05	15.88	9.53
AVWT-96FKFSHA		22.2	19.05	9.53

Dimensional Drawings

Hi-FLEXi S Series

AVWT-114 ~ 136FKFSHA



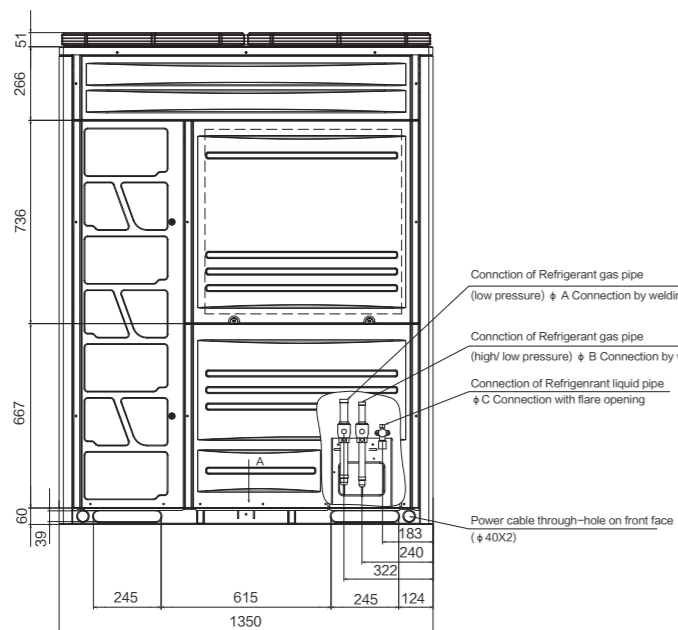
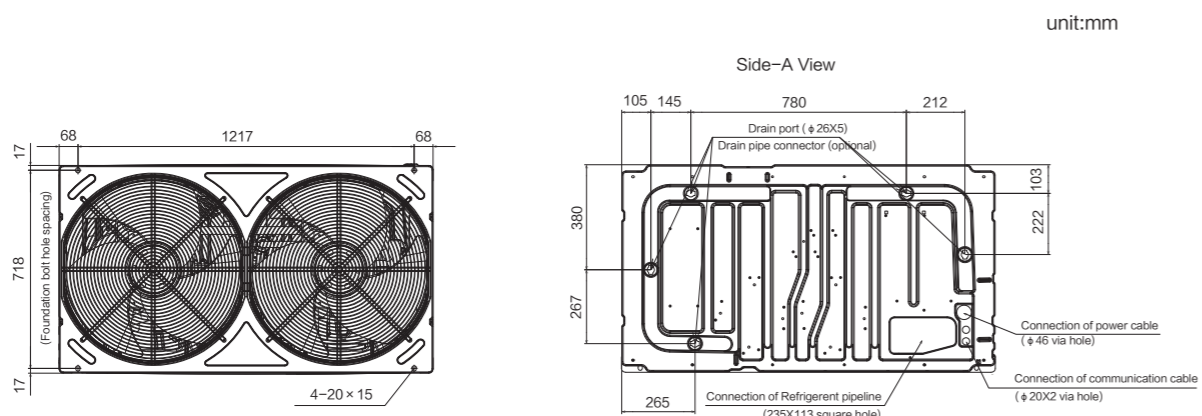
unit:mm

Model	Sizes	A	B	C
AVWT-136FKFSA		25.4	22.2	12.7
AVWT-154FKFSA		28.6	22.2	12.7
AVWT-170FKFSA		28.6	22.2	15.88
AVWT-114FKFSHA		25.4	22.2	12.7
AVWT-136FKFSHA		25.4	22.2	12.7

Dimensional Drawings

Hi-FLEXi S Series

AVWT-154 ~ 170FKFSHA



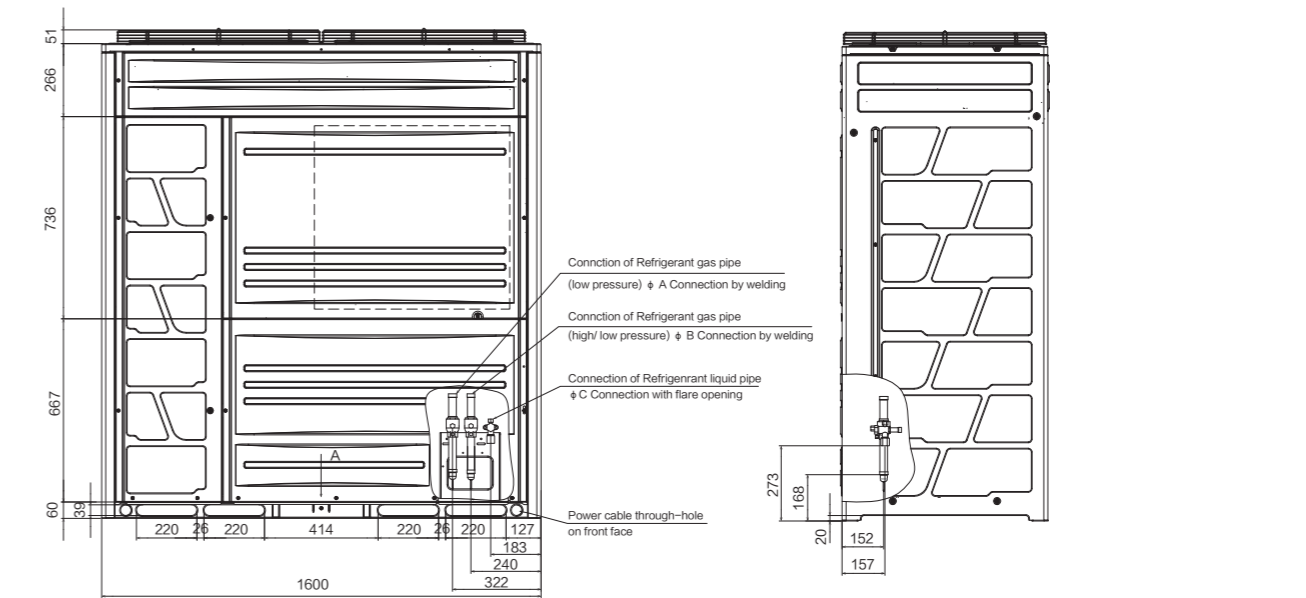
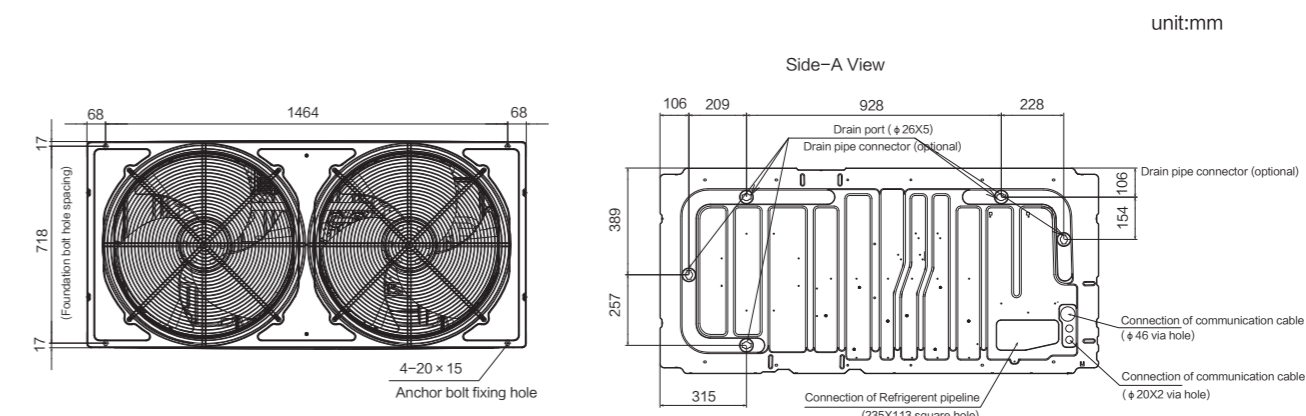
unit:mm

Model	Sizes	A	B	C
AVWT-190FKFSA		28.6	22.2	15.88
AVWT-212FKFSA		28.6	25.4	15.88
AVWT-232FKFSA		28.6	25.4	15.88
AVWT-154FKFSHA		28.6	22.2	12.7
AVWT-170FKFSHA		28.6	22.2	15.88

Dimensional Drawings

Hi-FLEXi S Series

AVWT-190 ~ 212FKFSHA



unit:mm

Model	Sizes	A	B	C
AVWT-250FKFSA		31.75	25.4	19.05
AVWT-272FKFSA		31.75	28.6	19.05
AVWT-250FKFSA		28.6	22.2	15.88
AVWT-272FKFSHA		28.6	25.4	15.88



Hi-FLEXi W Series

Hi-FLEXi W Series Heat Recovery is available to two-pipes and three-pipes system, and can realize two-stage heat recovery (water-side heat recovery and refrigerant-side heat recovery) to achieve simultaneous cooling and heating in one system, bring you a more comfortable indoor environment.

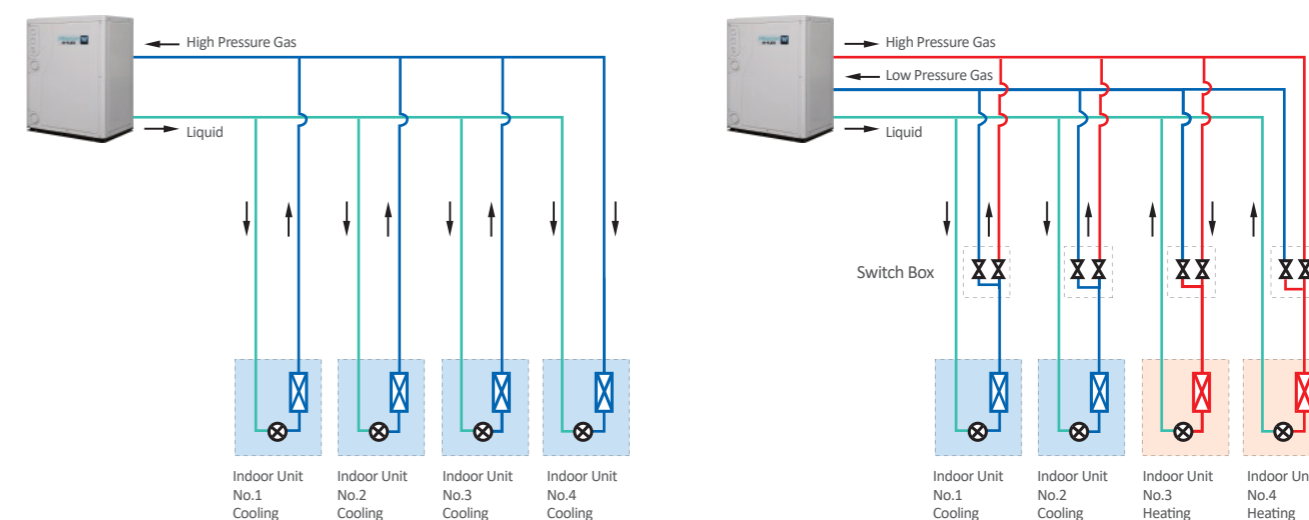
Simultaneous cooling and heating

Convenient installation

360° fitted refrigerant cooling technology

Hi-FLEXi W Series

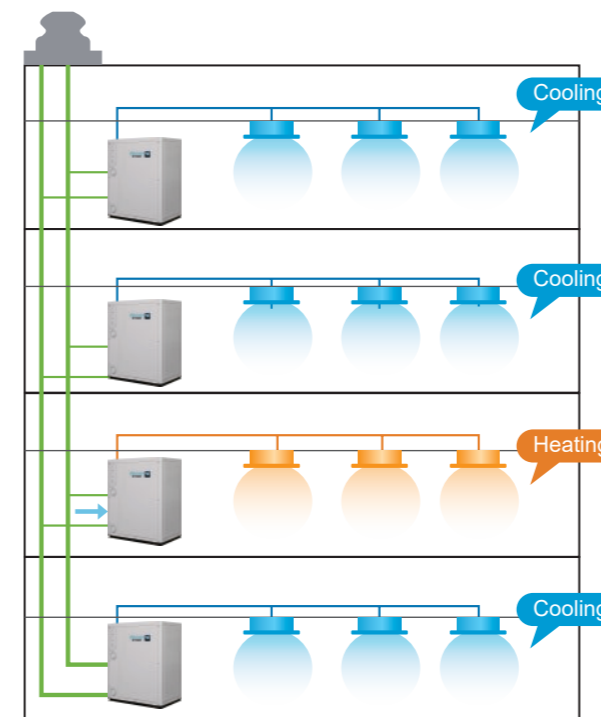
Available for two-pipe systems and three-pipe systems



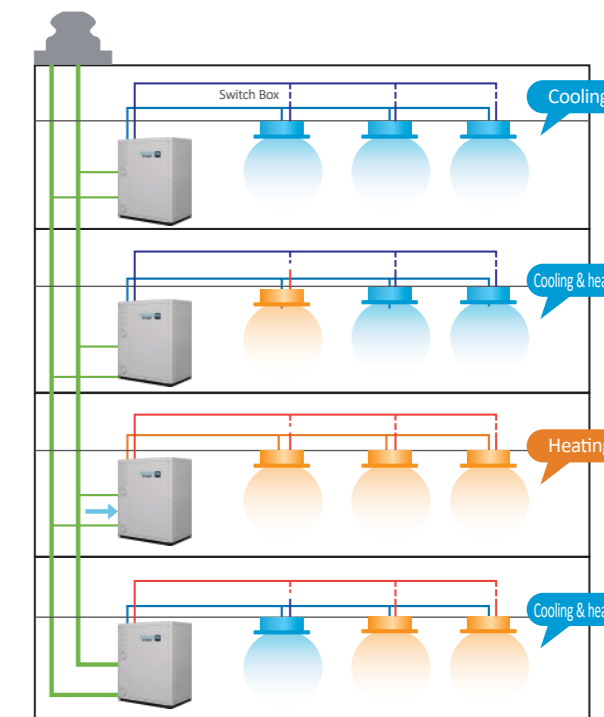
Note: Mini W Series (3~6HP) is only suitable for 2-pipe heat pump systems.

2-stage heat recovery

1-stage heat recovery



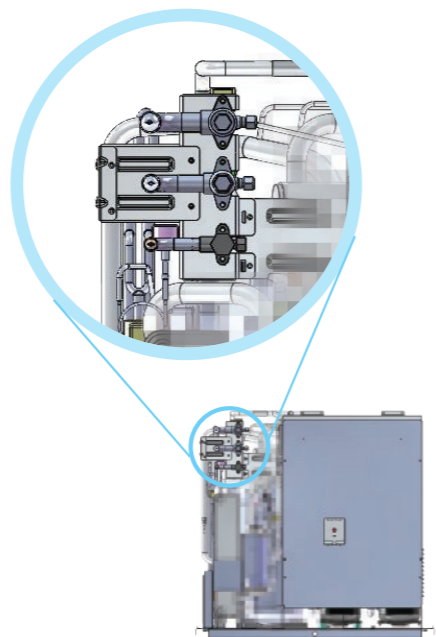
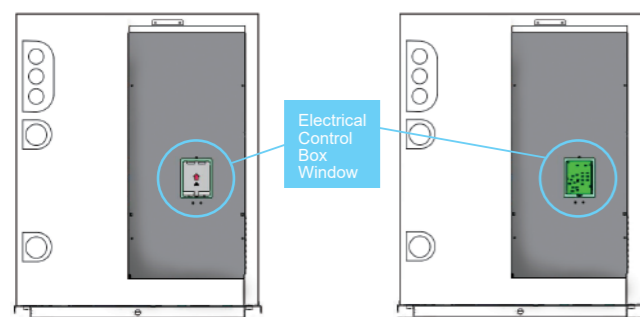
2-stage heat recovery



Hi-FLEXi W Series

Convenient installation

The electrical control box window is designed for service engineers to check issues of PCB conveniently. Especially for issues with a high voltage risk of electric shock, it can help engineers to avoid some risks.



It is very convenient to install and save installation space because of the front outlet pipes.



- Compared with air-cooled units, it has no ventilation requirements.
- Convenient installation, no need to install air duct.

Note: This point is not suitable for Mini W Series (3~6HP).

Continuous heating without defrosting operation

Because the product is generally installed indoors, in heating mode, the cold energy is discharged to the outside through water, which avoids the defrosting problem of air-cooled products.



Hi-FLEXi W Series

Indoor installation, not affected by weather conditions

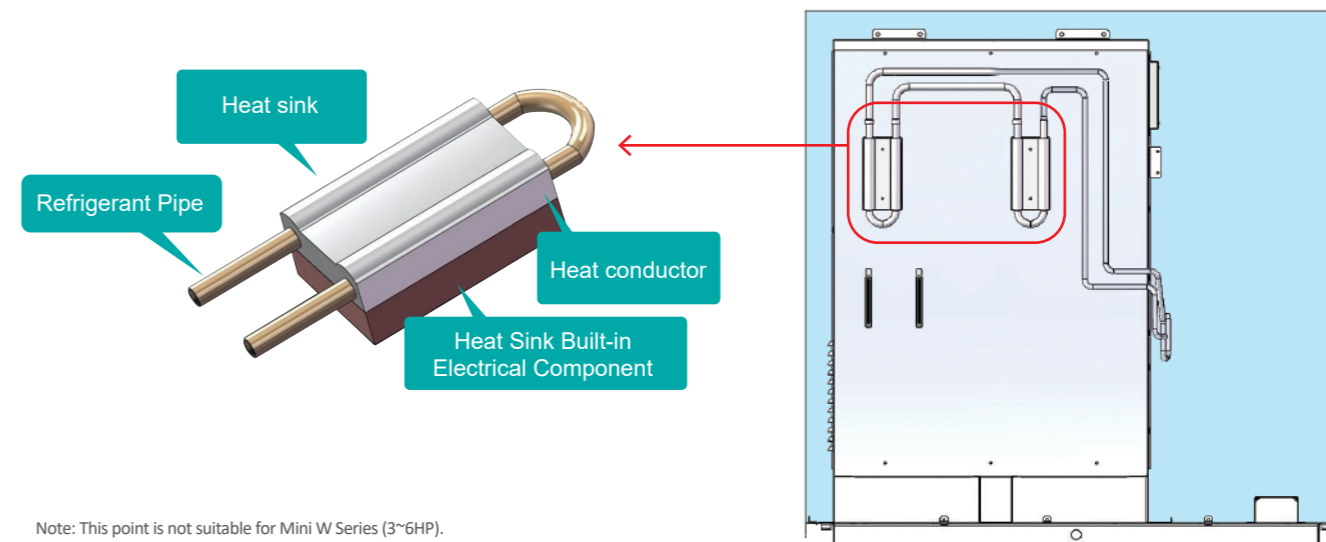
Indoor installation does not affect the facade of building, and avoids the poor heat dissipation problems which often encountered by many air-cooled outdoor units. Water-cooled efficiency is higher than air-cooled, making the system more energy efficient.



PATENTED 360° fitted refrigerant cooling technology

Patented 360° refrigerant cooling technology can help to remove the heat from the main PCB, inverter module and electrical box efficiently, which will greatly improve the reliability of the machine, especially in the high temperature ambient.

- A tin heat conductor is adopted between the refrigerant pipe and the heat sink to increase the heat transfer efficiency.
- The heat sink, made of aluminum alloy with high thermal conductivity, and the refrigerant tube are tightly combined through tube expander to improve heat exchange efficiency.



Note: This point is not suitable for Mini W Series (3~6HP).

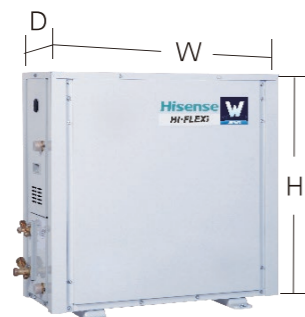
Hi-FLEXi W Series

Compact Structure, Easy Transportation

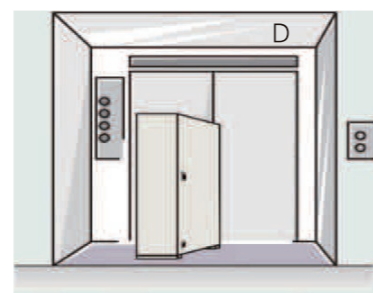
Mini W Series (3~6HP) has more compact structure, with dimensions: 800*800*370. Compared with conventional central water-source unit, it is more convenient to install and transport.



Machine Room for Conventional Central Water-source Unit



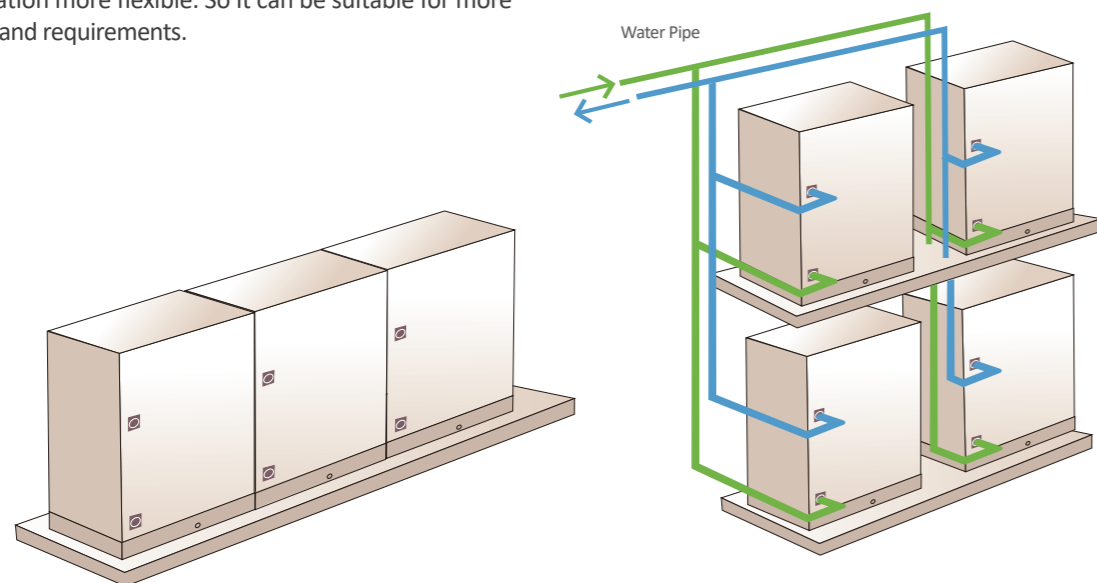
3-6HP:H800×W800×D370mm



Elevator Transport

Flexible Installation

Modular structure can easily realize module stacking and combination, which can greatly save installation space and make installation more flexible. So It can be suitable for more applications and requirements.



Note: 3~6HP machines is only suitable for 2-pipe system, it cannot be combined or stacked with 8-20HP machines.

Hi-FLEXi W Series

Outdoor unit specifications



Hi-FLEXi W Series		HP	3HP	4HP	5HP	6HP
Model Power Supply	AC1Φ, 220~240V/50Hz		AVWW-28UCSA	AVWW-38UCSA	AVWW-48UCSA	AVWW-54UCSA
Cooling Operation	Nominal Capacity*1	kW	8.0	11.2	14.0	15.5
		KBtu/h	27.3	38.2	47.8	52.9
	Nominal Input	kW	1.90	2.60	3.41	3.88
	EER	W/W	4.21	4.31	4.11	3.99
Heating Operation	Nominal Capacity*1	kW	9.0	12.5	16.0	18.0
		KBtu/h	30.7	42.7	54.6	61.4
	Nominal Input	kW	1.80	2.40	3.14	3.60
	COP	W/W	5.00	5.21	5.10	5.00
Outer Dimensions	Height	mm	800	800	800	800
	Width	mm	800	800	800	800
	Depth	mm	370	370	370	370
	Area	m ²	0.3	0.3	0.3	0.3
Packing Dimensions	H×W×D	mm	980×450×930	980×450×930	980×450×930	980×450×930
Net Weight		Kg	78	100	100	100
Gross Weight		Kg	85	107	107	107
Sound Pressure Level *2	Cooling/Heating	dB(A)	49	51	51	51
Water-Side Heat Exchanger	Water Temperature*3	°C	10~45	10~45	10~45	10~45
	Water Flow Rate	L/min	30	38	48	53
	Water Pressure Drop	kPa	30	30	35	40
	Maximum Pressure Resistance	kgf/cm ²	20	20	20	20
Refrigerant Connecting Pipes	Liquid Pipe	mm(in.)	Φ9.53(3/8)	Φ9.53(3/8)	Φ9.53(3/8)	Φ9.53(3/8)
	Low Pressure Gas Pipe	mm(in.)	Φ15.88(5/8)	Φ15.88(5/8)	Φ15.88(5/8)	Φ15.88(5/8)
Water Connecting Pipes	Water Pipe		DN25	DN25	DN25	DN25
	Thread of Connector		G1B	G1B	G1B	G1B
	Drain Pipe		Outer Diameter 18			
MAX. Connectable Indoor Units		mm	4	5	6	7

Notes:

- *1. Operation Condition:
Cooling:Indoor Temperature 27°CDB/19°C WB, Water Inlet/Outlet 30/35°C.
Heating:Indoor Temperature 20°C DB/15°C WB, Water Inlet 20°C.
- *2. The sound pressure is based on the following conditions.
1 Meter from the unit service cover surface, and 1.5 Meters from floor level.
The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- *3. When unit is operating out of the allowable water temperature range, it won't start normally and will alarm.
- * It is only suitable for 2-pipe heat pump systems.

Hi-FLEXi W Series

Outdoor unit specifications



Hi-FLEXi W Series Heat Recovery		HP	8HP	10HP	12HP	14HP
Model Power Supply	AC 3Φ, 380 ~ 415V/50Hz(60Hz)		AVWW-76FKFW	AVWW-96FKFW	AVWW-114FKFW	AVWW-136FKFW
Cooling Operation	Nominal Capacity*1	kW	22.4	28.0	33.5	40.0
		KBtu/h	76.5	95.6	114.3	136.5
	Nominal Input	kW	3.85	5.04	6.32	7.84
	EER	W/W	5.82	5.55	5.30	5.10
Heating Operation	Nominal Capacity*1	kW	25.0	31.5	37.5	45.0
		KBtu/h	85.3	107.5	128.0	153.6
	Nominal Input	kW	4.08	5.25	6.45	8.03
	COP	W/W	6.12	6.00	5.81	5.60
Outer Dimensions	Height	mm	1030	1030	1030	1030
	Width	mm	820	820	820	820
	Depth	mm	560	560	560	560
	Area	m ²	0.46	0.46	0.46	0.46
Packing Dimensions	H×W×D	mm	1180×900×632	1180×900×632	1180×900×632	1180×900×632
Net Weight		Kg	166	166	171	171
Gross Weight		Kg	170	170	175	175
Sound Pressure Level *2	Cooling/Heating	dB(A)	49/51	51/53	53/54	55/57
	Water Temperature*3	°C	10~45	10~45	10~45	10~45
Water-Side Heat Exchanger	Water Flow Rate	L/min	76.7	96.0	115.0	138.3
	Water Pressure Drop	kPa	30	45	45	60
	Maximum Pressure Resistance	kgf/cm ²	20	20	20	20
	Liquid Pipe	mm(in.)	Φ9.53(3/8)	Φ9.53(3/8)	Φ12.7(1/2)	Φ12.7(1/2)
Refrigerant Connecting Pipes	Low Pressure Gas Pipe	mm(in.)	Φ19.05(3/4)	Φ22.2(7/8)	Φ25.4(1)	Φ25.4(1)
	High/Low Pressure Gas Pipe	mm(in.)	Φ15.88(5/8)	Φ19.05(3/4)	Φ22.2(7/8)	Φ22.2(7/8)
	Water Pipe		DN32	DN32	DN32	DN32
Water Connecting Pipes	Thread of Connector		G1-1/4B	G1-1/4B	G1-1/4B	G1-1/4B
	Drain Pipe	mm	Outer Diameter 18			
	MAX. Connectable Indoor Units	Recommended	12	15	18	21
	MAX.	19	24	29	34	
MAX. Piping Length*4		m	300(500)	300(500)	300(500)	300(500)
MAX. Height Difference Between ODU and IDU		m	50	50	50	50
MAX. Piping length Between IDUs with same SW Box		m	40	40	40	40

Notes:

- *1. Operation Condition:
Cooling:Indoor Temperature 27°CDB/19°C WB, Water Inlet/Outlet 30/35°C.
Heating:Indoor Temperature 20°C DB/15°C WB, Water Inlet 20°C.
- *2. The sound pressure is based on the following conditions.
1 Meter from the unit service cover surface, and 1.5 Meters from floor level.
The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- *3. When unit is operating out of the allowable water temperature range, it won't strat normally and will alarm.
- *4. For Max.pipe length more than 300m, please contact our professional engineer.

Hi-FLEXi W Series



Hi-FLEXi W Series Heat Recovery		HP	16HP	18HP	20HP
Model Power Supply	AC 3Φ, 380 ~ 415V/50Hz(60Hz)		AVWW-154FKFW	AVWW-170FKFW	AVWW-190FKFW
Cooling Operation	Nominal Capacity*1	kW	45.0	50.0	56.0
		KBtu/h	153.6	170.6	191.1
	Nominal Input	kW	8.11	9.43	10.98
	EER	W/W	5.55	5.30	5.10
Heating Operation	Nominal Capacity*1	kW	50.0	56.0	63.0
		KBtu/h	170.6	191.1	215.0
	Nominal Input	kW	8.33	9.62	10.86
	COP	W/W	6.00	5.82	5.80
Outer Dimensions	Height	mm	1030	1030	1030
	Width	mm	1040	1040	1040
	Depth	mm	560	560	560
	Area	m ²	0.58	0.58	0.58
Packing Dimensions	H×W×D	mm	1180×1112×632	1180×1112×632	1180×1112×632
Net Weight		Kg	245	246	246
Gross Weight		Kg	250	251	251
Sound Pressure Level *2	Cooling/Heating	dB(A)	51/52	53/53	53/55
	Water Temperature*3	°C	10~45	10~45	10~45
Water-Side Heat Exchanger	Water Flow Rate	L/min	153.3	166.7	193.3
	Water Pressure Drop	kPa	40	45	60
	Maximum Pressure Resistance	kgf/cm ²	20	20	20
	Liquid Pipe	mm(in.)	Φ12.7(1/2)	Φ15.88(5/8)	Φ15.88(5/8)
Refrigerant Connecting Pipes	Low Pressure Gas Pipe	mm(in.)	Φ28.6(1-1/8)	Φ28.6(1-1/8)	Φ28.6(1-1/8)
	High/Low Pressure Gas Pipe	mm(in.)	Φ22.2(7/8)	Φ22.2(7/8)	Φ22.2(7/8)
	Water Pipe		DN32	DN32	DN32
Water Connecting Pipes	Thread of Connector		G1-1/4B	G1-1/4B	G1-1/4B
	Drain Pipe	mm	Outer Diameter 18		
	MAX. Connectable Indoor Units	Recommended	23	26	29
	MAX.	39	43	48	
MAX. Piping Length*4		m	300(500)	300(500)	300(500)
MAX. Height Difference Between ODU and IDU		m	50	50	50
MAX. Piping length Between IDUs with same SW Box		m	40	40	40

Notes:

- *1. Operation Condition:
Cooling:Indoor Temperature 27°CDB/19°C WB, Water Inlet/Outlet 30/35°C.
Heating:Indoor Temperature 20°C DB/15°C WB, Water Inlet 20°C.
- *2. The sound pressure is based on the following conditions.
1 Meter from the unit service cover surface, and 1.5 Meters from floor level.
The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- *3. When unit is operating out of the allowable water temperature range, it won't strat normally and will alarm.
- *4. For Max.pipe length more than 300m, please contact our professional engineer.

Hi-FLEXi W Series

Outdoor unit specifications



Hi-FLEXi W Series Heat Recovery		HP	22HP	24HP	26HP	28HP	30HP
Model Power Supply	AC 3Φ, 380 ~ 415V/50Hz(60Hz)		AVWW-210FKFW	AVWW-228FKFW	AVWW-250FKFW	AVWW-268FKFW	AVWW-286FKFW
Combination			AVWW-96FKFW AVWW-114FKFW	AVWW-114FKFW AVWW-114FKFW	AVWW-114FKFW AVWW-136FKFW	AVWW-114FKFW AVWW-154FKFW	AVWW-96FKFW AVWW-190FKFW
Cooling Operation	Nominal Capacity*1	kW	61.5	67.0	73.5	78.5	84.0
		KBtu/h	209.9	228.6	250.8	267.9	286.7
	Nominal Input	kW	11.4	12.6	14.2	14.4	16.0
	EER		5.41	5.30	5.19	5.44	5.24
Heating Operation	Nominal Capacity*1	kW	69.0	75.0	82.5	87.5	94.5
		KBtu/h	235.4	255.9	281.6	298.6	322.4
	Nominal Input	kW	11.7	12.9	14.5	14.8	16.1
	COP		5.90	5.81	5.70	5.92	5.87
Outer Dimensions	H×W×D	mm	1030×820×560+ 1030×820×560	1030×820×560+ 1030×820×560	1030×820×560+ 1030×820×560	1030×820×560+ 1030×1040×560	1030×820×560+ 1030×1040×560
	Area	m ²	0.9	0.9	0.9	1.0	1.0
Packing Dimensions	H×W×D	mm	1180×900×632+ 1180×900×632	1180×900×632+ 1180×900×632	1180×900×632+ 1180×900×632	1180×900×632+ 1180×1112×632	1180×900×632+ 1180×1112×632
Net Weight		Kg	337	342	342	416	412
Gross Weight		Kg	345	350	350	425	421
Sound Pressure Level *2	Cooling/Heating	dB(A)	56/57	56/57	58/60	56/57	56/58
	Water Temperature*3	°C	10~45	10~45	10~45	10~45	10~45
Water-Side Heat Exchanger	Water Flow Rate	L/min	211.0	230.0	253.3	268.3	289.3
	Water Pressure Drop	kPa	/	/	/	/	/
	Maximum Pressure Resistance	kgf/cm ²	20	20	20	20	20
	Liquid Pipe	mm(in.)	Φ15.88(5/8)	Φ15.88(5/8)	Φ19.05(3/4)	Φ19.05(3/4)	Φ19.05(3/4)
Refrigerant Connecting Pipes	Low Pressure Gas Pipe	mm(in.)	Φ28.6(1-1/8)	Φ28.6(1-1/8)	Φ31.75(1-1/4)	Φ31.75(1-1/4)	Φ31.75(1-1/4)
	High/Low Pressure Gas Pipe	mm(in.)	Φ25.4(1)	Φ25.4(1)	Φ25.4(1)	Φ28.6(1-1/8)	Φ28.6(1-1/8)
	Water Pipe		DN32	DN32	DN32	DN32	DN32
Water Connecting Pipes	Thread of Connector		G1-1/4B	G1-1/4B	G1-1/4B	G1-1/4B	G1-1/4B
	Drain Pipe	mm	Outer Diameter 18				
	MAX. Connectable Indoor Units	Recommended	33	36	39	40	40
	MAX.	53	58	63	64	64	
MAX. Piping Length*4		m	300(500)	300(500)	300(500)	300(500)	300(500)
MAX. Height Difference Between ODU and IDU		m	50	50	50	50	50
MAX. Piping length Between IDUs with same SW Box		m	40	40	40	40	40

Notes:

- *1. Operation Condition:
Cooling:Indoor Temperature 27°CDB/19°C WB, Water Inlet/Outlet 30/35°C.
Heating:Indoor Temperature 20°C DB/15°C WB, Water Inlet 20°C.
- *2. The sound pressure is based on the following conditions.
1 Meter from the unit service cover surface, and 1.5 Meters from floor level.
The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- *3. When unit is operating out of the allowable water temperature range, it won't strat normally and will alarm.
- *4. For Max.piping length more than 300m, please contact our professional engineer.

Hi-FLEXi W Series



Hi-FLEXi W Series Heat Recovery		HP	32HP	34HP	36HP	38HP	40HP
Model Power Supply	AC 3Φ, 380 ~ 415V/50Hz(60Hz)		AVWW-304FKFW	AVWW-326FKFW	AVWW-344FKFW	AVWW-360FKFW	AVWW-380FKFW
Combination			AVWW-114FKFW AVWW-190FKFW	AVWW-136FKFW AVWW-190FKFW	AVWW-154FKFW AVWW-190FKFW	AVWW-170FKFW AVWW-190FKFW	AVWW-190FKFW AVWW-190FKFW
Cooling Operation	Nominal Capacity*1	kW	89.5	96.0	101.0	106.0	112.0
		KBtu/h	305.4	327.6	344.7	361.7	382.1
	Nominal Input	kW	17.3	18.8	19.1	20.4	22.0
	EER		5.17	5.10	5.29	5.19	5.10
Heating Operation	Nominal Capacity*1	kW	100.5	108.0	113.0	119.0	126.0
		KBtu/h	342.9	368.6	385.6	406.0	429.9
	Nominal Input	kW	17.3	18.9	19.2	20.5	21.7
	COP		5.81	5.72	5.89	5.81	5.80
Outer Dimensions	H×W×D	mm	1030×820×560+ 1030×1040×560	1030×820×560+ 1030×1040×560	1030×1040×560+ 1030×1040×560	1030×1040×560+ 1030×1040×560	1030×1040×560+ 1030×1040×560
	Area	m ²	1.0	1.0	1.2	1.2	1.2
Packing Dimensions	H×W×D	mm	1180×900×632+ 1180×1112×632	1180×900×632+ 1180×1112×632	1180×1112×632+ 1180×1112×632	1180×1112×632+ 1180×1112×632	1180×1112×632+ 1180×1112×632
Net Weight		Kg	417	417	491	492	492
Gross Weight		Kg	426	426	501	502	502
Sound Pressure Level *2	Cooling/Heating	dB(A)	56/58	58/60	56/58	56/58	56/58
	Water Temperature*3	°C	10~45	10~45	10~45	10~45	10~45
Water-Side Heat Exchanger	Water Flow Rate	L/min	308.3	331.7	346.7	360.0	386.7
	Water Pressure Drop	kPa	/	/	/	/	/
	Maximum Pressure Resistance	kgf/cm ²	20	20	20	20	20
	Liquid Pipe	mm(in.)	Φ19.05(3/4)	Φ19.05(3/4)	Φ19.05(3/4)	Φ19.05(3/4)	Φ19.05(3/4)
Refrigerant Connecting Pipes	Low Pressure Gas Pipe	mm(in.)	Φ31.75(1-1/4)	Φ31.75(1-1/4)	Φ31.75(1-1/4)	Φ38.1(1-1/2)	Φ38.1(1-1/2)
	High/Low Pressure Gas Pipe	mm(in.)	Φ28.6(1-1/8)	Φ28.6(1-1/8)	Φ28.6(1-1/8)	Φ31.75(1-1/4)	Φ31.75(1-1/4)
	Water Pipe		DN32	DN32	DN32	DN32	DN32
Water Connecting Pipes	Thread of Connector		G1-1/4B	G1-1/4B	G1-1/4B	G1-1/4B	G1-1/4B
	Drain Pipe	mm	Outer Diameter 18				
	MAX. Connectable Indoor Units	Recommended	40	40	40	40	40
	MAX.	64	64	64	64	64	
MAX. Piping Length*4		m	300(500)	300(500)	300(500)	300(500)	300(500)
MAX. Height Difference Between ODU and IDU		m	50	50	50	50	50
MAX. Piping length Between IDUs with same SW Box		m	40	40	40	40	40

Notes:

- *1. Operation Condition:
Cooling:Indoor Temperature 27°CDB/19°C WB, Water Inlet/Outlet 30/35°C.
Heating:Indoor Temperature 20°C DB/15°C WB, Water Inlet 20°C.
- *2. The sound pressure is based on the following conditions.
1 Meter from the unit service cover surface, and 1.5 Meters from floor level.
The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- *3. When unit is operating out of the allowable water temperature range, it won't strat normally and will alarm.
- *4. For Max.piping length more than 300m, please contact our professional engineer.

Hi-FLEXi W Series

Outdoor Unit Specifications



Hi-FLEXi W Series Heat Recovery		HP	42HP	44HP	46HP	48HP	50HP
Model Power Supply	AC 3Φ, 380 ~ 415V/50Hz(60Hz)		AVWW-400FKFW	AVWW-418FKFW	AVWW-440FKFW	AVWW-456FKFW	AVWW-476FKFW
Combination			AVWW-96FKFW AVWW-114FKFW AVWW-190FKFW	AVWW-114FKFW AVWW-114FKFW AVWW-190FKFW	AVWW-96FKFW AVWW-154FKFW AVWW-190FKFW	AVWW-96FKFW AVWW-170FKFW AVWW-190FKFW	AVWW-96FKFW AVWW-190FKFW AVWW-190FKFW
Cooling Operation	Nominal Capacity*1	kW	117.5	123.0	129.0	134.0	140.0
		KBtu/h	401.0	419.7	440.3	457.3	477.7
	Nominal Input	kW	22.3	23.6	24.1	25.5	27.0
	EER		5.26	5.21	5.35	5.27	5.19
Heating Operation	Nominal Capacity*1	kW	132.0	138.0	144.5	150.5	157.5
		KBtu/h	450.4	470.9	493.0	513.5	537.4
	Nominal Input	kW	22.6	23.8	24.4	25.7	27.0
	COP		5.85	5.81	5.91	5.85	5.84
Outer Dimensions	H×W×D	mm	1030×820×560+ 1030×820×560+ 1030×1040×560	1030×820×560+ 1030×820×560+ 1030×1040×560	1030×820×560+ 1030×1040×560+ 1030×1040×560	1030×820×560+ 1030×1040×560+ 1030×1040×560	1030×820×560+ 1030×1040×560+ 1030×1040×560
	Area	m ²	1.5	1.5	1.6	1.6	1.6
Packing Dimensions	H×W×D	mm	1180×900×632+ 1180×900×632+ 1180×1112×632	1180×900×632+ 1180×900×632+ 1180×1112×632	1180×900×632+ 1180×1112×632+ 1180×1112×632	1180×900×632+ 1180×1112×632+ 1180×1112×632	1180×900×632+ 1180×1112×632+ 1180×1112×632
Net Weight		Kg	583	588	657	658	658
Gross Weight		Kg	596	601	671	672	672
Sound Pressure Level *2	Cooling/Heating	dB(A)	58/60	58/60	58/60	58/60	58/60
Water-Side Heat Exchanger	Water Temperature*3	°C	10~45	10~45	10~45	10~45	10~45
	Water Flow Rate	L/min	404.3	423.3	442.7	456.0	482.7
	Water Pressure Drop	kPa	/	/	/	/	/
	Maximum Pressure Resistance	kgf/cm ²	20	20	20	20	20
Refrigerant Connecting Pipes	Liquid Pipe	mm(in.)	Φ19.05(3/4)	Φ19.05(3/4)	Φ19.05(3/4)	Φ19.05(3/4)	Φ19.05(3/4)
	Low Pressure Gas Pipe	mm(in.)	Φ38.1(1-1/2)	Φ38.1(1-1/2)	Φ38.1(1-1/2)	Φ38.1(1-1/2)	Φ38.1(1-1/2)
	High/Low Pressure Gas Pipe	mm(in.)	Φ31.75(1-1/4)	Φ31.75(1-1/4)	Φ31.75(1-1/4)	Φ31.75(1-1/4)	Φ31.75(1-1/4)
Water Connecting Pipes	Water Pipe		DN32	DN32	DN32	DN32	DN32
	Thread of Connector		G1-1/4B	G1-1/4B	G1-1/4B	G1-1/4B	G1-1/4B
	Drain Pipe	mm	Outer Diameter 18				
MAX. Connectable Indoor Units	Recommended		40	40	40	40	40
	MAX.		64	64	64	64	64
MAX. Piping Length*4		m	300(500)	300(500)	300(500)	300(500)	300(500)
MAX. Height Difference Between ODU and IDU		m	50	50	50	50	50
MAX. Piping length Between IDUs with same SW Box		m	40	40	40	40	40

Notes:

- *1. Operation Condition:
Cooling:Indoor Temperature 27°CDB/19°C WB, Water Inlet/Outlet 30/35°C.
Heating:Indoor Temperature 20°C DB/15°C WB, Water Inlet 20°C.
- *2. The sound pressure is based on the following conditions.
1 Meter from the unit service cover surface, and 1.5 Meters from floor level.
The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- *3. When unit is operating out of the allowable water temperature range, it won't strat normally and will alarm.
- *4. For Max.piping length more than 300m, please contact our professional engineer.

Hi-FLEXi W Series



Hi-FLEXi W Series Heat Recovery		HP	52HP	54HP	56HP	58HP	60HP
Model Power Supply	AC 3Φ, 380 ~ 415V/50Hz(60Hz)		AVWW-494FKFW	AVWW-516FKFW	AVWW-534FKFW	AVWW-550FKFW	AVWW-570FKFW
Combination			AVWW-114FKFW AVWW-190FKFW AVWW-190FKFW	AVWW-136FKFW AVWW-190FKFW AVWW-190FKFW	AVWW-154FKFW AVWW-190FKFW AVWW-190FKFW	AVWW-170FKFW AVWW-190FKFW AVWW-190FKFW	AVWW-190FKFW AVWW-190FKFW AVWW-190FKFW
Cooling Operation	Nominal Capacity*1	kW	145.5	152.0	157.0	162.0	168.0
		KBtu/h	496.4	518.6	535.7	552.7	573.2
	Nominal Input	kW	28.3	29.8	30.1	31.4	32.9
	EER		5.14	5.10	5.22	5.16	5.10
Heating Operation	Nominal Capacity*1	kW	163.5	171.0	176.0	182.0	189.0
		KBtu/h	557.9	583.5	600.5	621.0	644.9
	Nominal Input	kW	28.2	29.8	30.1	31.3	32.6
	COP		5.80	5.75	5.86	5.81	5.80
Outer Dimensions	H×W×D	mm	1030×820×560+ 1030×1040×560+ 1030×1040×560	1030×820×560+ 1030×1040×560+ 1030×1040×560	1030×1040×560+ 1030×1040×560+ 1030×1040×560	1030×1040×560+ 1030×1040×560+ 1030×1040×560	1030×1040×560+ 1030×1040×560+ 1030×1040×560
	Area	m ²	1.6	1.6	1.7	1.7	1.7
Packing Dimensions	H×W×D	mm	1180×900×632+ 1180×1112×632+ 1180×1112×632	1180×900×632+ 1180×1112×632+ 1180×1112×632	1180×1112×632+ 1180×1112×632+ 1180×1112×632	1180×1112×632+ 1180×1112×632+ 1180×1112×632	1180×1112×632+ 1180×1112×632+ 1180×1112×632
Net Weight		Kg	663	663	737	738	738
Gross Weight		Kg	677	677	752	753	753
Sound Pressure Level *2	Cooling/Heating	dB(A)	58/60	60/62	58/60	58/60	58/60
Water-Side Heat Exchanger	Water Temperature*3	°C	10~45	10~45	10~45	10~45	10~45
	Water Flow Rate	L/min	501.7	525.0	540.0	553.3	580.0
	Water Pressure Drop	kPa	/	/	/	/	/
	Maximum Pressure Resistance	kgf/cm ²	20	20	20	20	20
Refrigerant Connecting Pipes	Liquid Pipe	mm	Φ19.05(3/4)	Φ19.05(3/4)	Φ22.2(7/8)	Φ22.2(7/8)	Φ22.2(7/8)
	Low Pressure Gas Pipe	mm	Φ38.1(1-1/2)	Φ38.1(1-1/2)	Φ38.1(1-1/2)	Φ38.1(1-1/2)	Φ38.1(1-1/2)
	High/Low Pressure Gas Pipe	mm	Φ31.75(1-1/4)	Φ31.75(1-1/4)	Φ38.1(1-1/2)	Φ38.1(1-1/2)	Φ38.1(1-1/2)
Water Connecting Pipes	Water Pipe		DN32	DN32	DN32	DN32	DN32
	Thread of Connector		G1-1/4B	G1-1/4B	G1-1/4B	G1-1/4B	G1-1/4B
	Drain Pipe	mm	Outer Diameter 18				
MAX. Connectable Indoor Units	Recommended		40	40	40	40	40
	MAX.		64	64	64	64	64
MAX. Piping Length*4		m	300(500)	300(500)	300(500)	300(500)	300(500)
MAX. Height Difference Between ODU and IDU		m	50	50	50	50	50
MAX. Piping length Between IDUs with same SW Box		m	40	40	40	40	40

Notes:

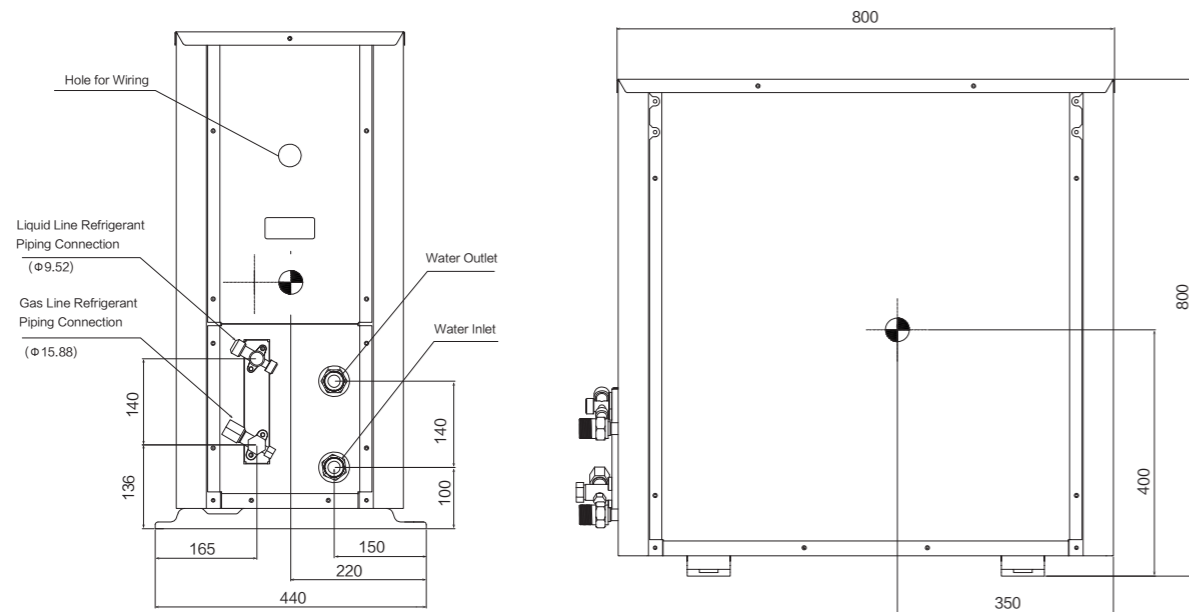
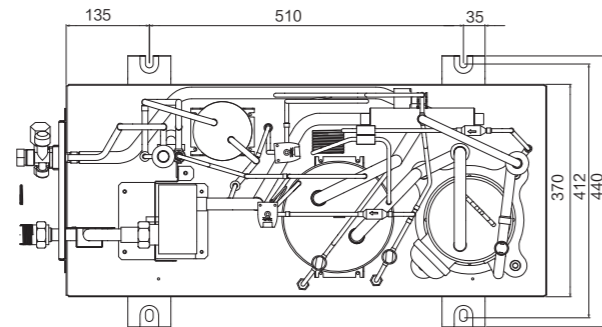
- *1. Operation Condition:
Cooling:Indoor Temperature 27°CDB/19°C WB, Water Inlet/Outlet 30/35°C.
Heating:Indoor Temperature 20°C DB/15°C WB, Water Inlet 20°C.
- *2. The sound pressure is based on the following conditions.
1 Meter from the unit service cover surface, and 1.5 Meters from floor level.
The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- *3. When unit is operating out of the allowable water temperature range, it won't strat normally and will alarm.
- *4. For Max.piping length more than 300m, please contact our professional engineer.

Dimensional Drawings

Hi-FLEXi W Series

AVWW-28 ~ 54UCSA

unit:mm

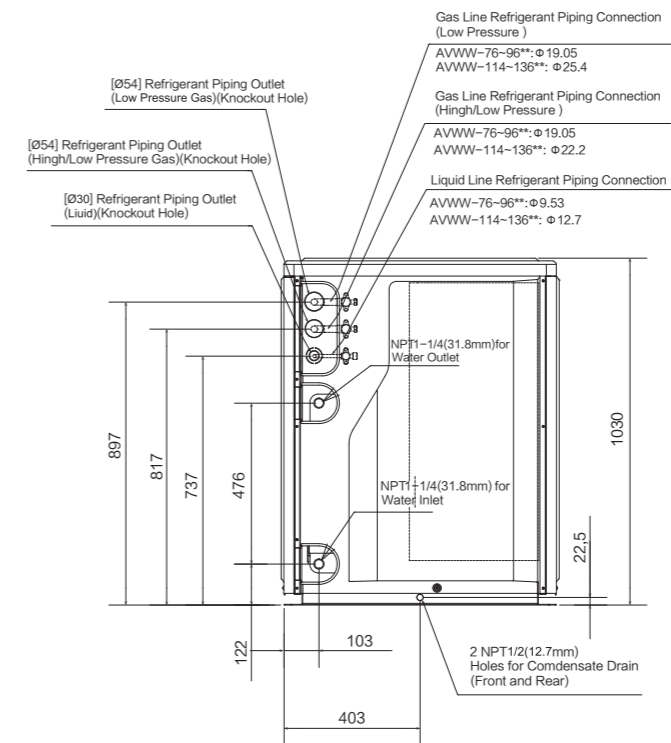
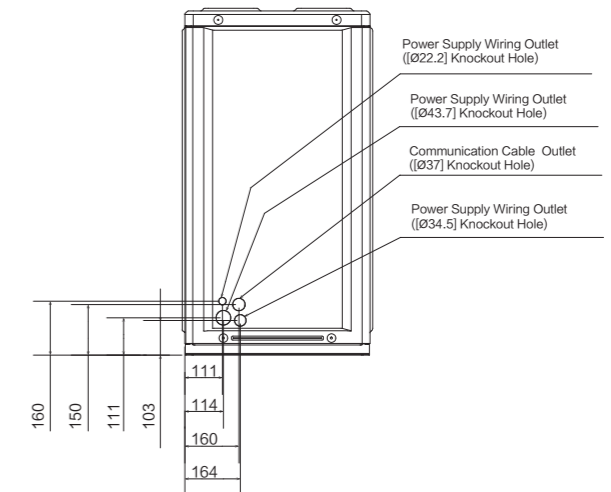
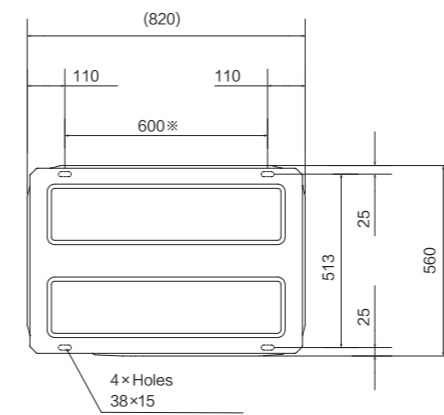


Dimensional Drawings

Hi-FLEXi W Series

AVWW-76 ~ 136FKFW

unit:mm



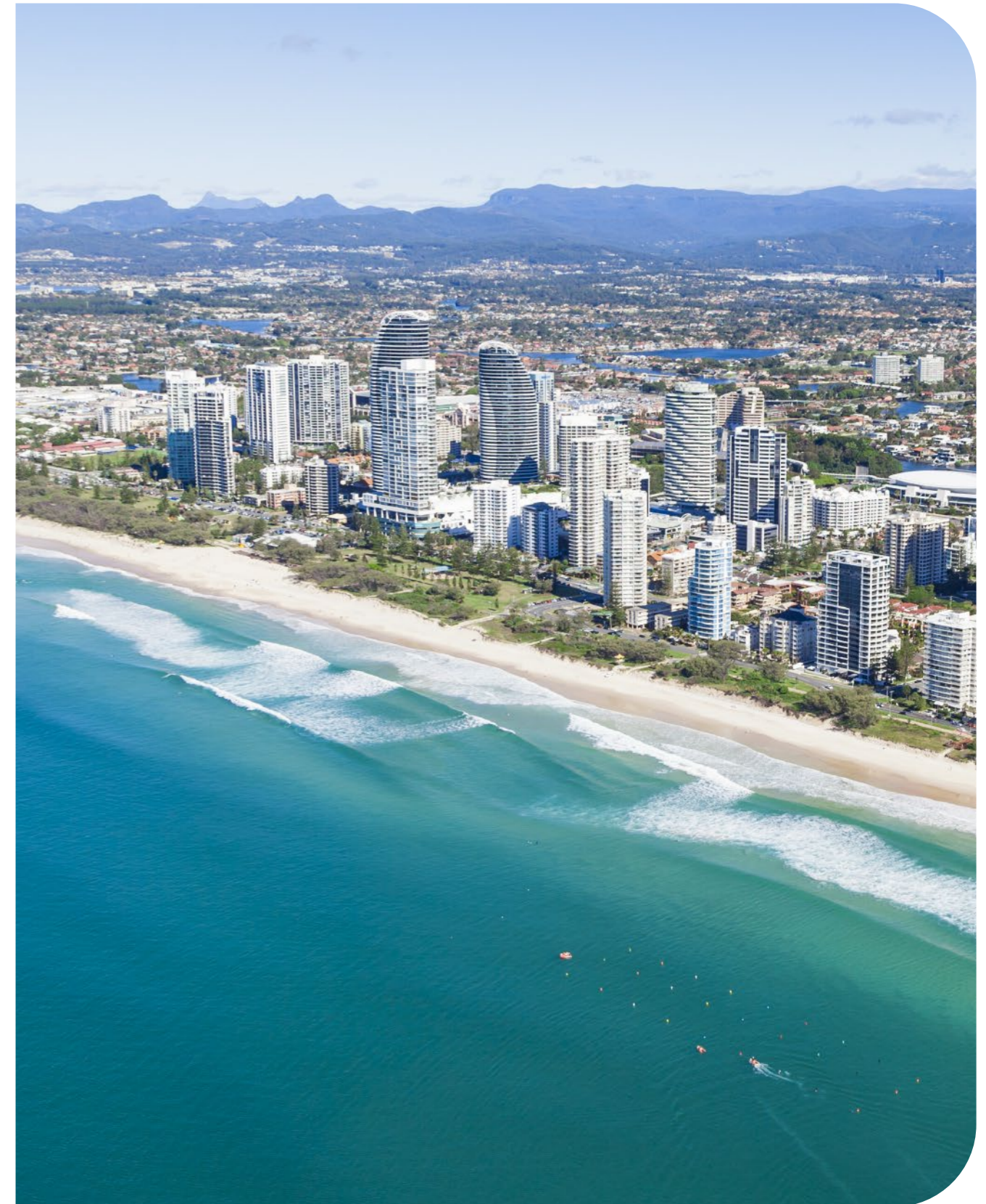
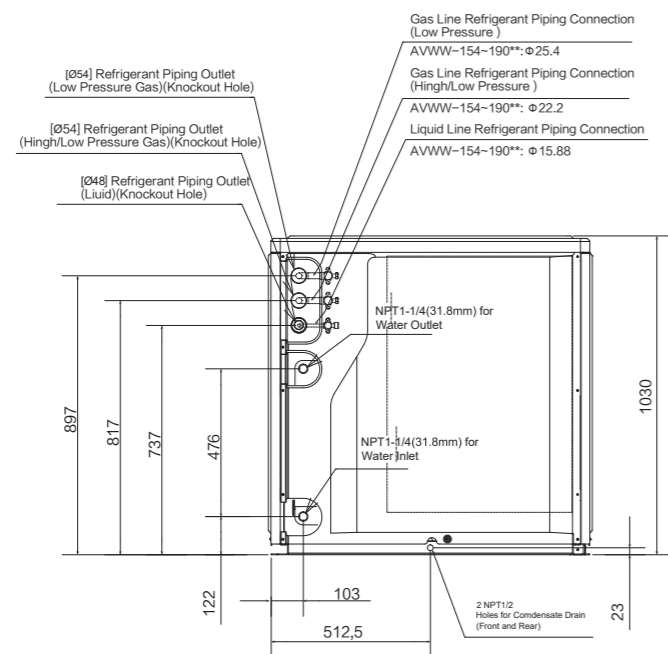
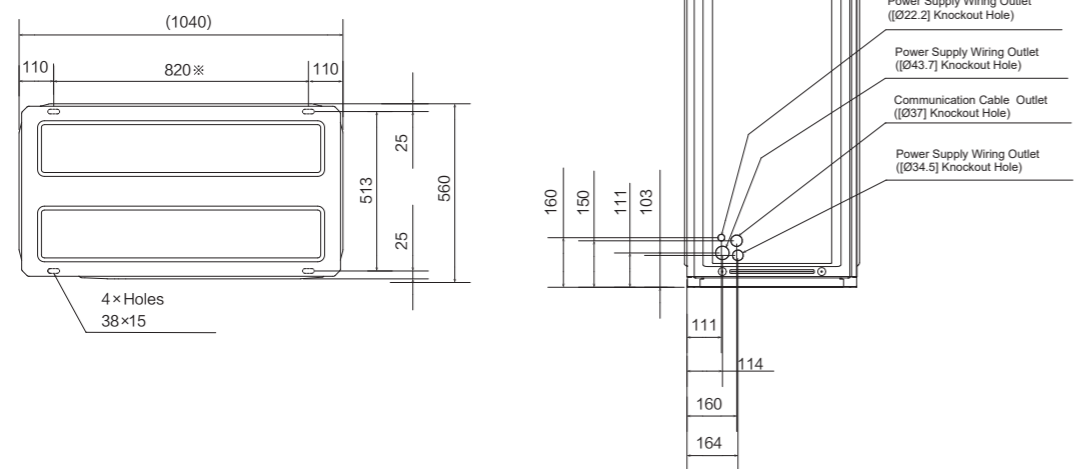
Dimensional Drawings

Hi-FLEXi W Series

Hi-FLEXi W Series

AVWW-154 ~ 190FKFW

unit:mm





Hi-Smart E+ L+ C+ Series

- DC inverter-driven compressor
- Low noise technologies
- Compact and lightweight design

Hi-Smart E+ L+ C+ Series

Aviation level design of grille

The Hi-Smart H series can create a high-quality quiet environment. The design of the grille follows the design concepts of

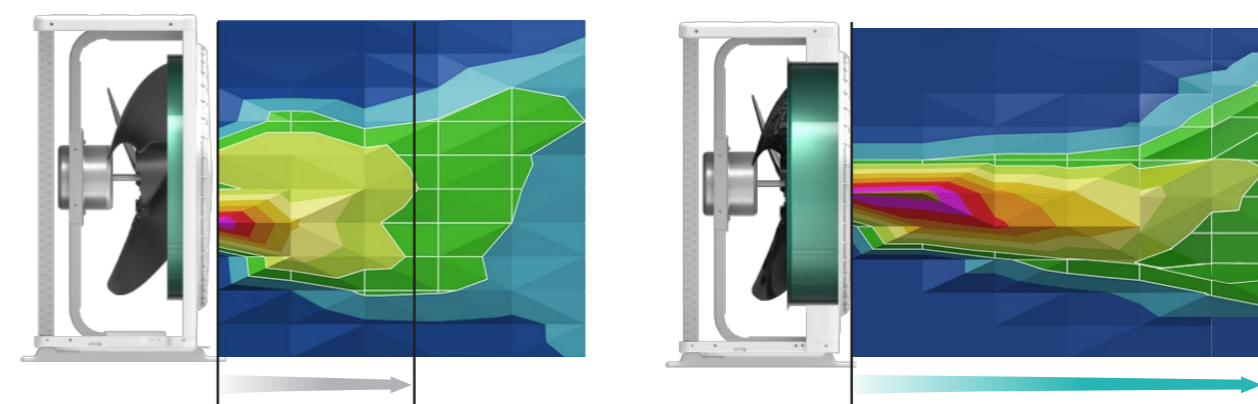
aircraft engines which conform to aerodynamic principle and greatly reduced the noise.



Efficient air channel

By extending the air duct near the fan, as shown in the figure below, the exhaust efficiency can be greatly improved. For the design of conventional air duct, the exhaust air will quickly mix with the surrounding air, resulting in increased resistance and reducing exhaust efficiency. Compared with the conventional

design, the exhaust efficiency can be increased by 24% with extended air duct, thereby ensuring the smooth exhaust and stable operation of the machine.



Air Discharge Distance (Conventional)

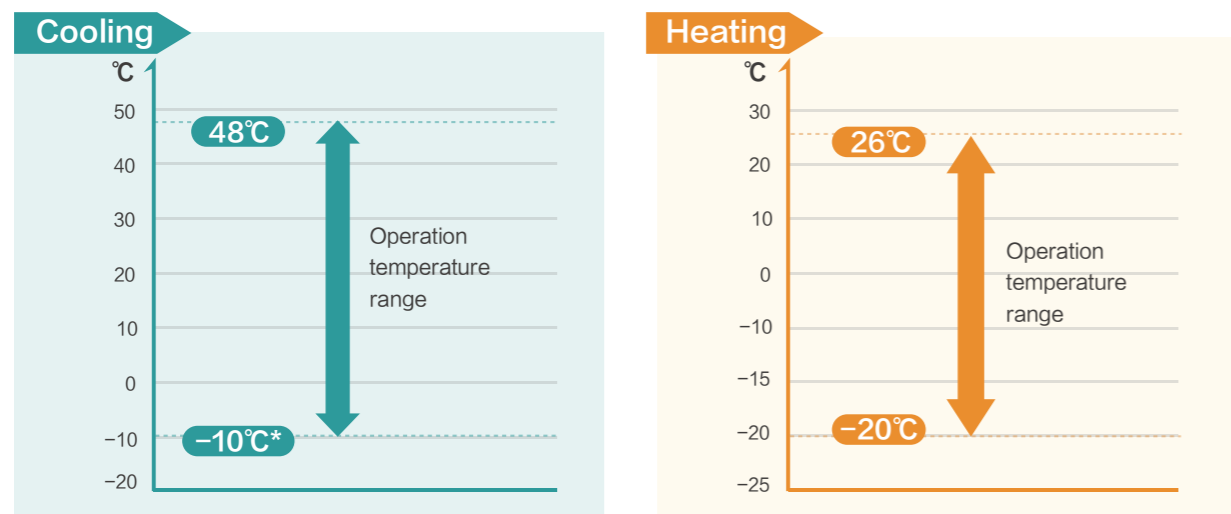
Air Discharge Distance (New)

1.5-2m/s 2-2.5m/s 2.5-3m/s

Hi-Smart E+ L+ C+ Series

Wide Operating Range

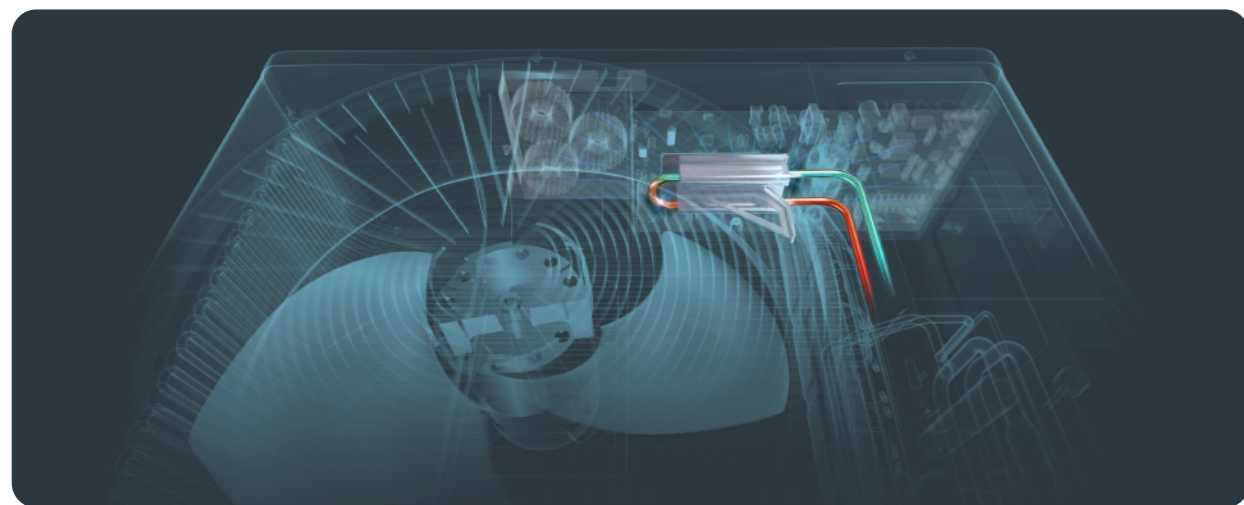
Extended operation range creates wider application potential, in cooling mode the operation range is from -10°C* to 48°C and in heating mode the operation range is from -20°C to 26°C, which adapts to many extreme conditions.



* In cooling mode, the operation is under interval operation when the temperature is below -5°C.

Patented 360°Fitted Refrigerant Cooling Technology

The outdoor unit uses patented 360°fitted refrigerant cooling technology to cool the whole electronic box effectively. It can overcome poor heat dissipation and solve high ambient temperature issues inside the electronic box, maintaining an efficient and reliable operation under harsh environment.

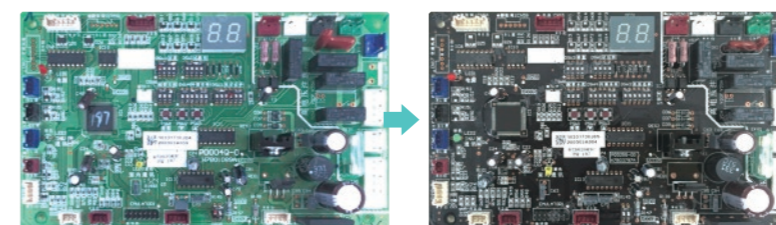


Note: 1. Compared with air-cooled technology, the temperature in electric box can be reduced about by 10%.
2. There is no refrigerant cooling kit inside the Hi-Smart L+ series (single phase unit).

Hi-Smart E+ L+ C+ Series

Industrial Grade PCB

The PCB of indoor and outdoor are made of black double sided resin board with high integration level. The highly integrated black PCB will greatly improve the reliability and efficiency of the electronic components and reduce the electromagnetic interference.



Hisense PCB board:

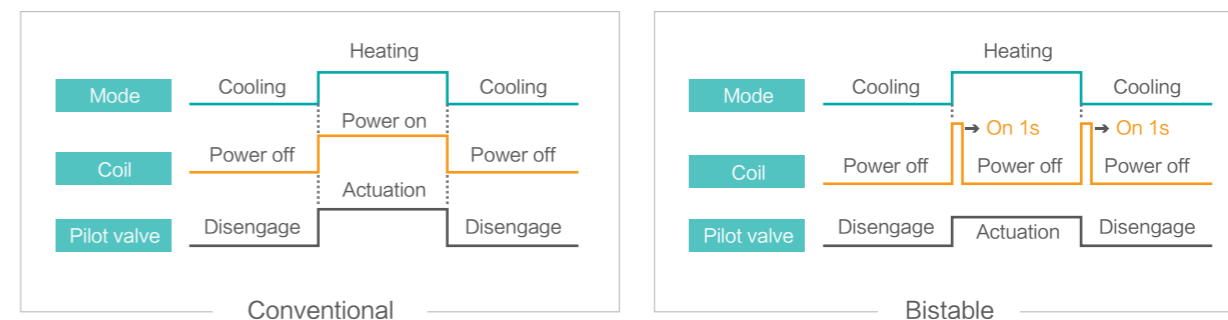
Epoxy resin composite substrate: double-sided printing, SMD welding, high strength, good weather resistance, great flame retardancy, high reliability, compact structure, small size.

Conventional PCB board:

Paper-made phenolic substrate: single-sided printing, inserting welding, bad weather resistance, less flame retardancy, big size.

Bistable Four-way Valve

The bistable four-way valve is adopted in the outdoor unit, which only consumes power when reversing. During the normal operation (regardless of cooling or heating), it is no need to be energized. Compared with conventional four-way valve, it is more energy-saving. Moreover, the reliability of valve coil is greatly improved.



No Preheating Required Under Low Temperature Conditions

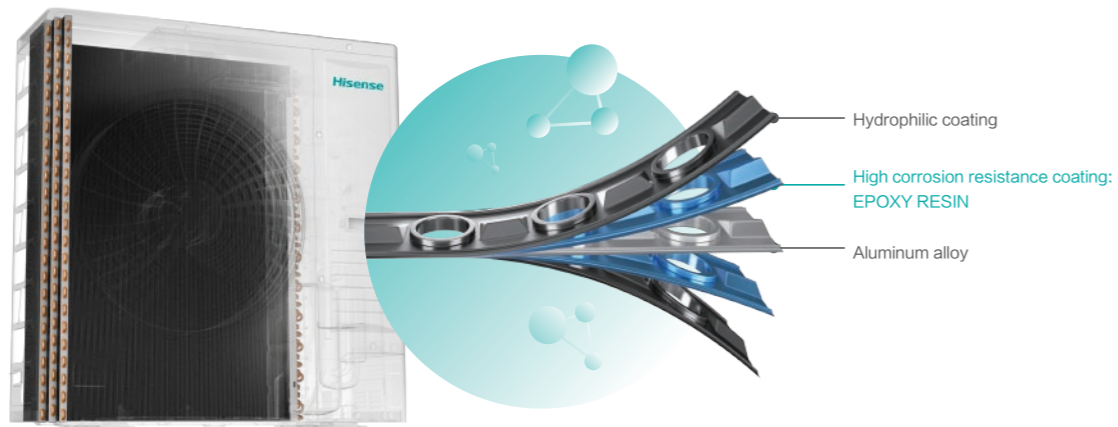
When the ambient temperature is above -10°C, the system can start without preheating, achieving quick cool and heat.



Hi-Smart E+ L+ C+ Series

Hi-Black Fin (Standard)

All the heat exchangers adopt Hi-Black fin, which has excellent anti-corrosive performance. Hi-Black fins are coated with epoxy resin using film-forming techniques while the traditional resins are acrylic resins. The epoxy resin is 1.5 times thicker than acrylic resin, and its acid-resistant, alkali-resistant and salt-fog resistant properties is 3 times better than acrylic resin.



Enhanced Anti-corrosion Solution (Optional)

Hisense's complete corrosion-proof is a perfect solution in seaside and chemical factory applications, providing ultimate comfort without sacrificing life span and reducing maintenance cost simultaneously. The component from top to toe are treated with effective treatments and tested according to ISO, ASTM and GB standards.

1 Front/Side/Top Panel:

Anti-corrosion galvanized steel(Zirconium-based treatment +spray coating of epoxy zinc rich primer+spray coating of pure polyester paint)

2 Heat Exchanger:

Black fin (modified epoxy resin+hydrophilic film); Cooper fin

3 Electrical Box:

Anti-corrosion galvanized steel(Zirconium-based treatment +spray coating of pure polyester paint)

4 Fan Motor:

Coated with 10µm ~30µm acrylic resin coating

5 Protection Net:

Anti-corrosion low-carbon steel(Zirconium-based treatment+dipped in plastic polyethylene resin)

6 Bottom Base Pan:

Anti-corrosion galvanized steel(Zirconium-based treatment +spray coating of epoxy zinc rich primer+spray coating of pure polyester paint)

7 Pressure Vessel:

Anti-corrosion treated carbon steel(Zirconium-based treatment +spray coating of pure polyester paint or electrophoresis)

8 Screw:

Anti-corrosion Stainless Steel(Spray Coating of DACROMET® ※ Coating)

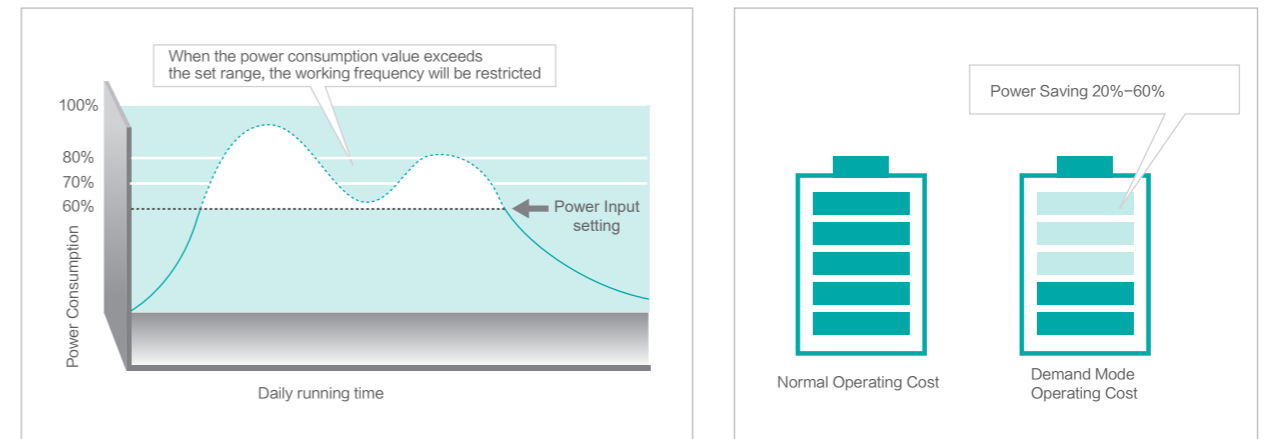


※ Note: The Enhanced Anti-corrosion Solution can be provided as options.

Hi-Smart E+ L+ C+ Series

Demand Mode

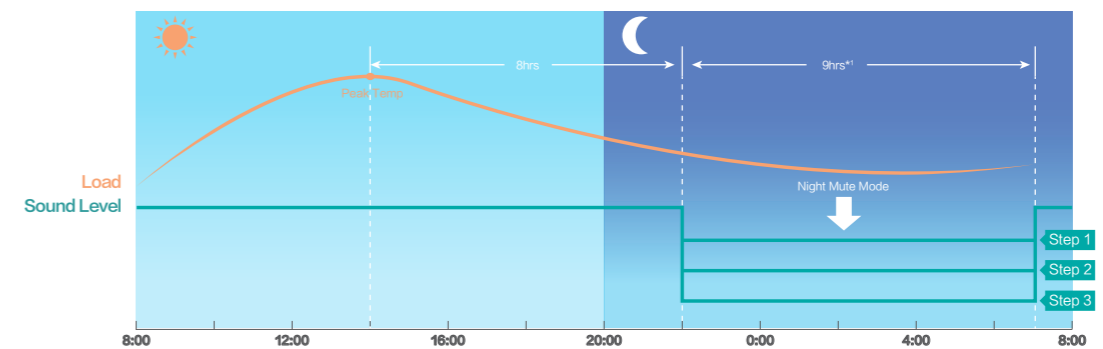
The intelligent demand mode can adjust the air conditioning system capacity output automatically according to peak-valley requirements of electricity. There are three levels setting, 80%, 70% and 60%. It achieves balance between comfort and energy-saving while meeting the power demand for daily work.



Outdoor Unit Noise Control

Night Mode

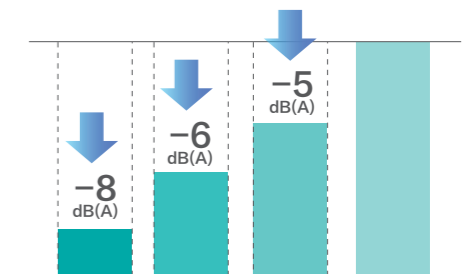
In general, people are more sensitive to noise at night. Night quiet mode can be activated when necessary, and the noise can be reduced by up to 8dB(A).



Step 1: 5dB(A) decreased; Step 2: 6dB(A) decreased; Step 3: 8dB(A) decreased.

Low Noise Mode

Users can flexibly set the low noise mode at any time. There are three levels for choice, which can be set on the controllers or the PCB.



Hi-Smart E+ L+ C+ Series

Multiple Protections

Inverter Protection

- Inverter temperature protection
- Voltage protection

Compressor Protection

- Gas suction protection
- Heater belt control
- Start conditions limit
- Exhaust superheat protection
- Compressor ratio protection
- High pressure rising protection
- High/low pressure protection
- Exhaust temperature protection
- Current protection

Electric Protection

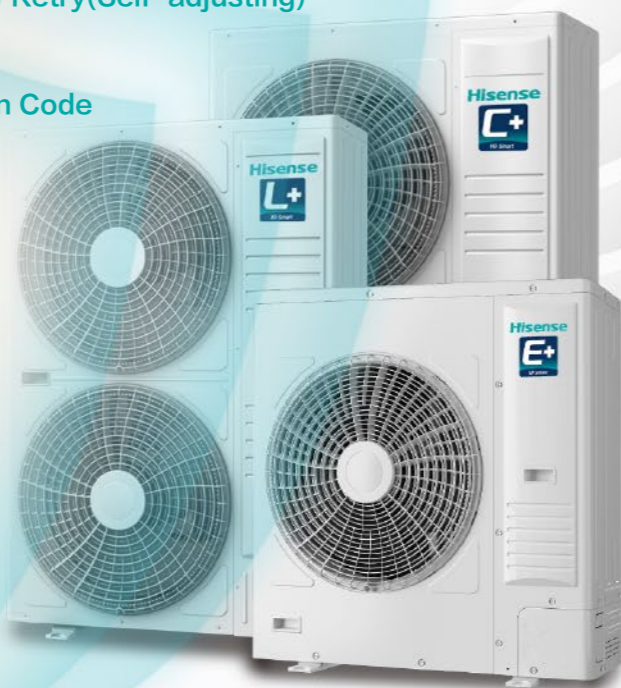
- Voltage phase failure
- Current protection
- Motor protection
- Protecting from lightning

System Protection

- Ventilator pressure protection
- Four-way valve protection
- Indoor and outdoor temperature protection
- Subcooling protection

Three-level Protection

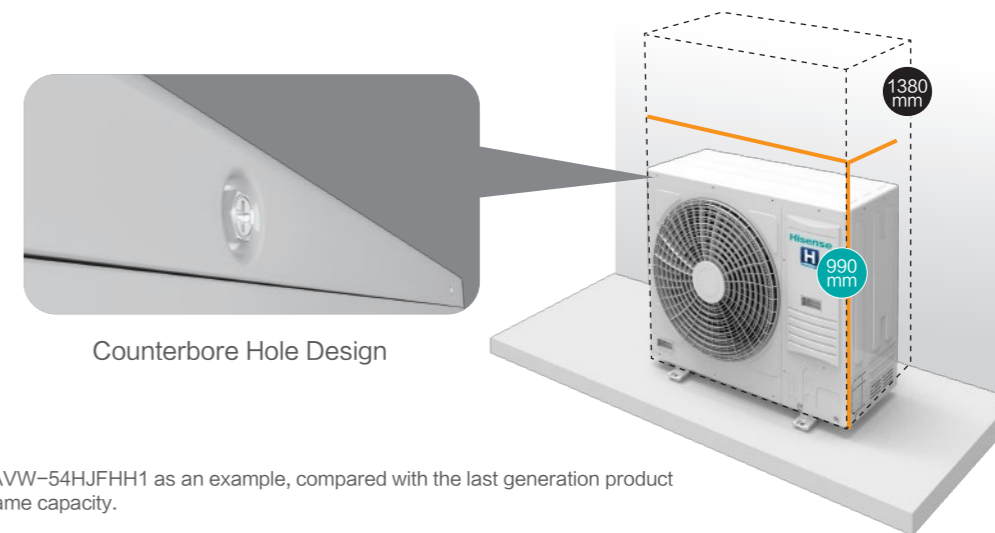
- Alarm Code
- Retry(Self-adjusting)
- Protection Code



Hi-Smart E+ L+ C+ Series

Compact Size and Light Weight

The body of outdoor unit is more compact, which offers an increased degree of freedom of installation. Also thanks to its smaller body frame, a lot of unnecessary weight is removed, making transportation and installation more convenient. What's more, the exterior screws are designed in counterbore holes. The screw heads are on the same flat as the exterior sheet metal, which is more beautiful and fashionable.



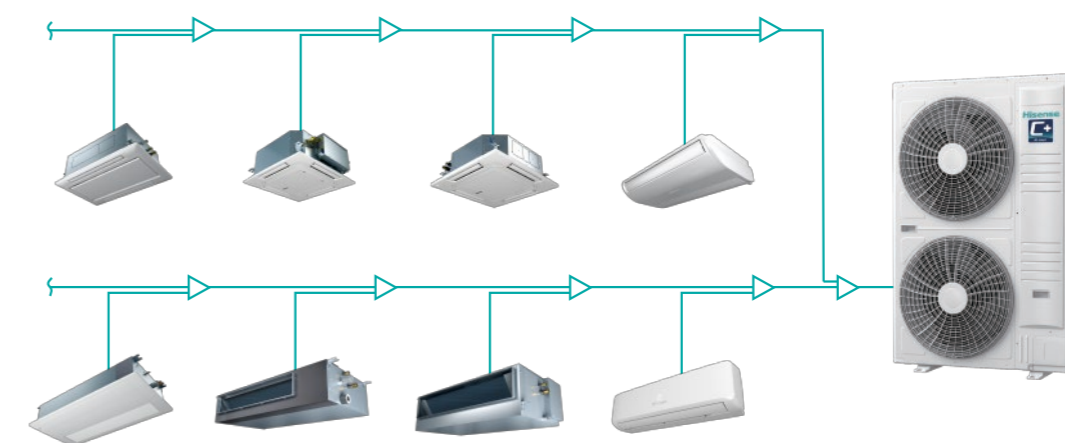
Counterbore Hole Design

*Take the AVW-54HJFHH1 as an example, compared with the last generation product with the same capacity.

Large Number of Connectable IDUs

Various kinds of indoor units can be chosen to cater to interior decoration. Moreover max. 19 indoor units can be connected to one outdoor unit, achieving more flexible design and reducing project cost.

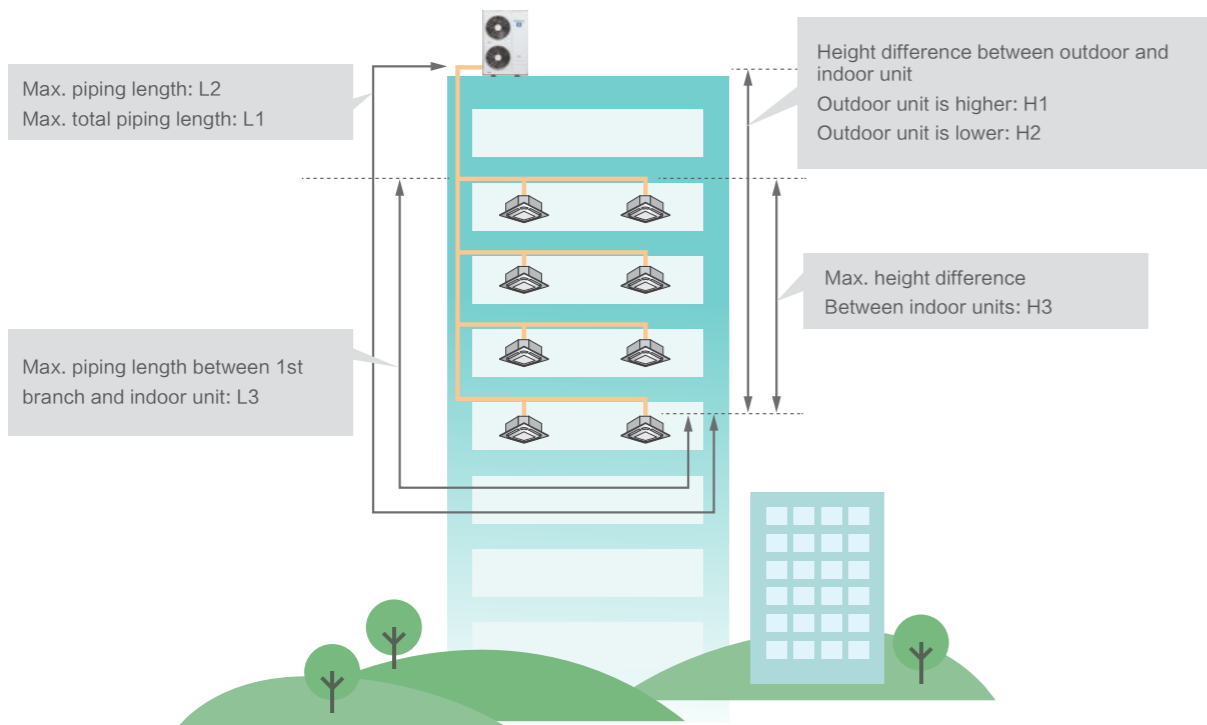
* The quantity of connectable IDUs of each outdoor unit, please refer to the specification part.



Hi-Smart E+ L+ C+ Series

Excellent Piping Length

Increased piping length allows for flexible design and installation. Hisense inverter technology and two-level cooling technology allow longer piping length and outstanding height differences. The air-conditioning system can be implemented more flexibly.



Series	Hi-Smart E+	Hi-Smart L+	Hi-Smart C+
Picture			
Total piping length L1	135m	150m	300m
Max. piping length L2	70m	100m	150m
Max. length between the first branch pipe to the farthest indoor unit L3	40m	40m	40m
Height difference between ODU and IDU	ODU is higher H1	50m	50m
	IDU is higher H2	40m	40m
Height difference between IDUs H3	15m	15m	15m

Hi-Smart E+ Series

Outdoor Unit Specifications



Capacity (HP)		4.0	5.0	6.0
Model		AVW-41HJFHH1	AVW-48HJFHH1	AVW-54HJFHH1
Power Supply		AC 1 φ, 220-240V/50/60Hz		
Cooling	Capacity	kW 12.1	14.0	15.5
	Power Input	Btu/h 41500	48000	53000
	EER	kW 2.80	3.45	4.21
	SEER	W/W 4.32	4.05	3.68
Heating	Capacity	— 8.10	7.70	7.00
	Power Input	kW 14.0	16.0	18.0
	COP	Btu/h 48000	54500	61500
	SCOP	W/W 4.40	4.00	4.00
Ventilation	Air Flow Rate	m³/min 71	71	71
Sound Pressure Level	Cooling/Heating	dB(A) 53/54	54/55	54/55
Weight	Net	kg 88	89	90
	Gross	kg 103	104	105
Outer Dimensions	Height	mm 990	990	990
	Width	mm 950	950	950
	Depth	mm 320	320	320
Packing Dimensions	Height	mm 1126	1126	1126
	Width	mm 1070	1070	1070
	Depth	mm 470	470	470
Cabinet Color		Grayish White		
Ref. Piping	Gas	mm φ 15.88	φ 15.88	φ 15.88
	Liquid	in. 5/8	5/8	5/8
Refrigerant	Type	mm φ 9.53	φ 9.53	φ 9.53
	Before Shipment	in. 3/8	3/8	3/8
Connectable Indoor Units	Type	R410A		
	Max. Qty.	kg 4.0	4.0	4.0
Piping Design	Max. Qty.	pc 8	9	10
	Connection Ratio	% 50-150	50-150	50-150
	Max. Piping Length	m 70	70	70
Operation Range	Total Piping Length	m 135	135	135
	Height Difference Between ODU and IDU	m 40	40	40
	Height Difference Between IDUs	m 30	30	30
Cooling	DB(°C)	(-10*) -5 - 48		
	DB/WB(°C)	-20/-20.5 - 26/15.5		

NOTES:

- The rated cooling and heating capacity are tested in the following conditions:
Cooling Operation Conditions: indoor air inlet temperature: 27°C DB 19°C WB, outdoor air inlet temperature: 35°C DB, pipe length : 7.5m, pipe lift: 0m
Heating Operation Conditions: indoor air inlet temperature: 20°C DB, outdoor air inlet temperature: 7°C DB 6°C WB, pipe length: 7.5m, pipe lift: 0m
- The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be taken into consideration at the scene.
Measurement point: 1m from the service cover surface and 1.5m from floor level.
- *1 When the temperature is between -10°C and -5°C, the cooling operation is under interval operation.

Hi-Smart L+ Series

Outdoor Unit Specifications



Capacity (HP)			4.0	5.0	6.0	4.0	5.0	6.0
Model			AVW-41HJFHH2	AVW-48HJFHH2	AVW-54HJFHH2	AVW-41HKFHH2	AVW-48HKFHH2	AVW-54HKFHH2
Power Supply			AC 1 ϕ, 220-240V/50/60Hz			AC 3 ϕ, 380-415V/50/60Hz		
Cooling	Capacity	kW	12.1	14.0	15.5	12.1	14.0	15.5
		Btu/h	41500	48000	53000	41500	48000	53000
	Power Input	kW	2.79	3.43	4.18	2.79	3.43	4.18
	EER	W/W	4.33	4.08	3.71	4.33	4.08	3.71
	SEER	—	8.20	8.10	8.00	8.20	8.10	8.00
Heating	Capacity	kW	14.0	16.0	18.0	14.0	16.0	18.0
		Btu/h	48000	54500	61500	48000	54500	61500
	Power Input	kW	3.08	3.71	4.47	3.08	3.71	4.47
	COP	W/W	4.55	4.31	4.03	4.55	4.31	4.03
	SCOP	—	4.85	4.70	4.55	4.85	4.70	4.55
Ventilation	Air Flow Rate	m³/min	90	90	100	120	120	127
Sound Pressure Level	Cooling/Heating	dB(A)	52/55	52/55	53/56	52/55	52/55	53/56
Weight	Net	kg	106	107	108	112	113	114
	Gross	kg	118	119	120	123	124	125
Outer Dimensions	Height	mm	1380	1380	1380	1380	1380	1380
	Width	mm	950	950	950	950	950	950
	Depth	mm	370	370	370	370	370	370
Packing Dimensions	Height	mm	1531	1531	1531	1531	1531	1531
	Width	mm	1070	1070	1070	1070	1070	1070
	Depth	mm	515	515	515	515	515	515
Cabinet Color			Grayish White					
Ref. Piping	Gas	mm	ϕ15.88	ϕ15.88	ϕ15.88	ϕ15.88	ϕ15.88	ϕ15.88
		in.	5/8	5/8	5/8	5/8	5/8	5/8
	Liquid	mm	ϕ9.53	ϕ9.53	ϕ9.53	ϕ9.53	ϕ9.53	ϕ9.53
		in.	3/8	3/8	3/8	3/8	3/8	3/8
Refrigerant	Type	—	R410A					
	Before Shipment	kg	3.8	3.8	4.1	3.8	3.8	4.1
Connectable Indoor Units	Max. Qty.	pc	9	11	12	9	11	12
	Connection Ratio	%	50-150	50-150	50-150	50-150	50-150	50-150
Piping Design	Max. Piping Length	m	100	100	100	100	100	100
	Total Piping Length	m	150	150	150	150	150	150
	Height Difference Between ODU and IDU	m	50	50	50	50	50	50
		m	40	40	40	40	40	40
Height Difference Between IDUs	m	15	15	15	15	15	15	
Operation Range	Cooling	DB(°C)	(-10*) -5 ~ 48					
	Heating	DB/WB(°C)	-20/-20.5 ~ 26/15.5					

NOTES:

- The rated cooling and heating capacity are tested in the following conditions:
Cooling Operation Conditions: indoor air inlet temperature: 27°C DB 19°C WB, outdoor air inlet temperature: 35°C DB, pipe length : 7.5m, pipe lift: 0m
Heating Operation Conditions: indoor air inlet temperature: 20°C DB, outdoor air inlet temperature: 7°C DB 6°C WB, pipe length: 7.5m, pipe lift: 0m
- The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be taken into consideration at the scene.
Measurement point: 1m from the service cover surface and 1.5m from floor level.
- *1 When the temperature is between -10°C and -5°C, the cooling operation is under interval operation.

Hi-Smart C+ Series

Outdoor Unit Specifications



Capacity (HP)			8.0	10.0	12.0
Model			AVW-76HKFHH2	AVW-96HKFHH2	AVW-114HKFHH2
Power Supply			AC 3 ϕ, 380-415V/50/60Hz		
Cooling	Capacity	kW	22.4	28.0	33.5
		Btu/h	76400	95500	114300
	Power Input	kW	6.22	8.12	13.40
	EER	W/W	3.60	3.45	2.50
	SEER	—	7.00	7.80	7.55
Heating	Capacity	kW	25.0	31.5	37.5
		Btu/h	85300	107500	128000
	Power Input	kW	5.81	7.59	10.08
	COP	W/W	4.30	4.15	3.72
	SCOP	—	4.50	4.50	4.30
Ventilation	Air Flow Rate	m³/min	150	163	163
Sound Pressure Level	Cooling/Heating	dB(A)	55/58	56/59	56/59
Weight	Net	kg	145	157	158
	Gross	kg	161	174	175
Outer Dimensions	Height	mm	1650	1650	1650
	Width	mm	1100	1100	1100
	Depth	mm	390	390	390
Packing Dimensions	Height	mm	1806	1806	1806
	Width	mm	1185	1185	1185
	Depth	mm	530	530	530
Cabinet Color			Grayish White		
Ref. Piping	Gas	mm	ϕ22.2	ϕ25.4	ϕ25.4
		in.	7/8	1/1	1/1
	Liquid	mm	ϕ12.7	ϕ12.7	ϕ12.7
		in.	1/2	1/2	1/2
Refrigerant	Type	—	R410A		
	Before Shipment	kg	5.5	6.5	6.5
Connectable Indoor Units	Max. Qty.	pc	15	18	19
	Connection Ratio	%	50-150	50-150	50-150
Piping Design	Max. Piping Length	m	150	150	150
	Total Piping Length	m	300	300	300
	Height Difference Between ODU and IDU	m	50	50	50
		m	40	40	40
Height Difference Between IDUs	m	15	15	15	
Operation Range	Cooling	DB(°C)	(-10*) -5 ~ 48		
	Heating	DB/WB(°C)	-20/-20.5 ~ 26/15.5		

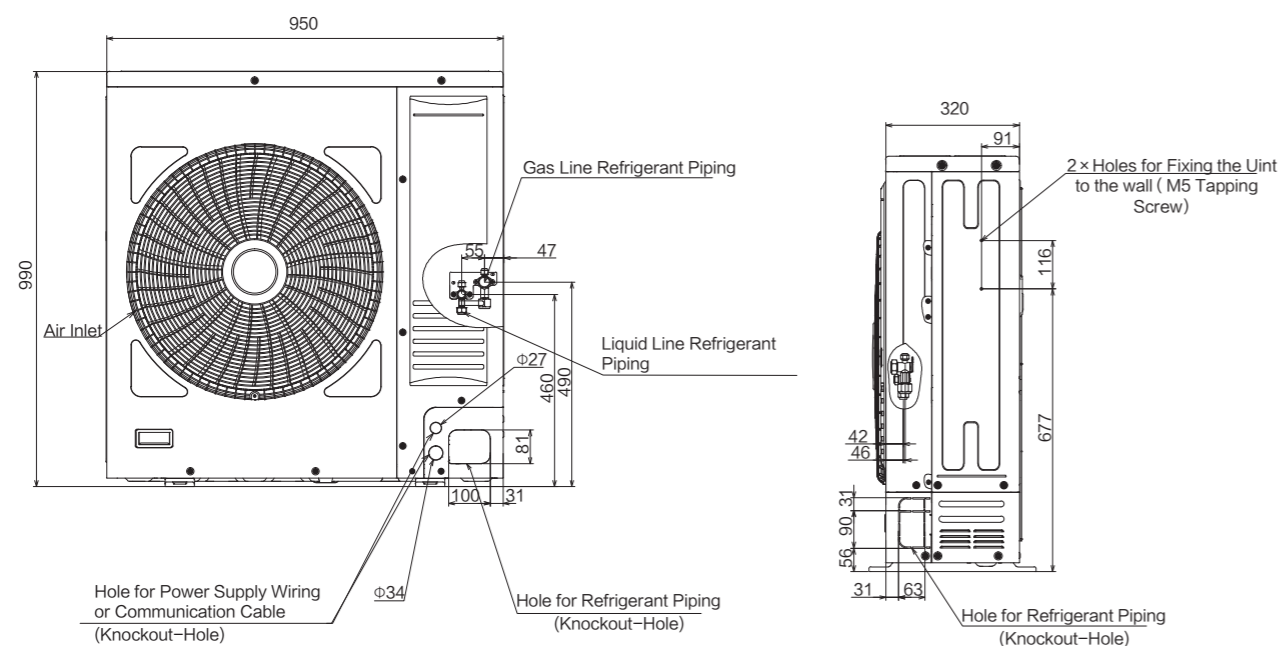
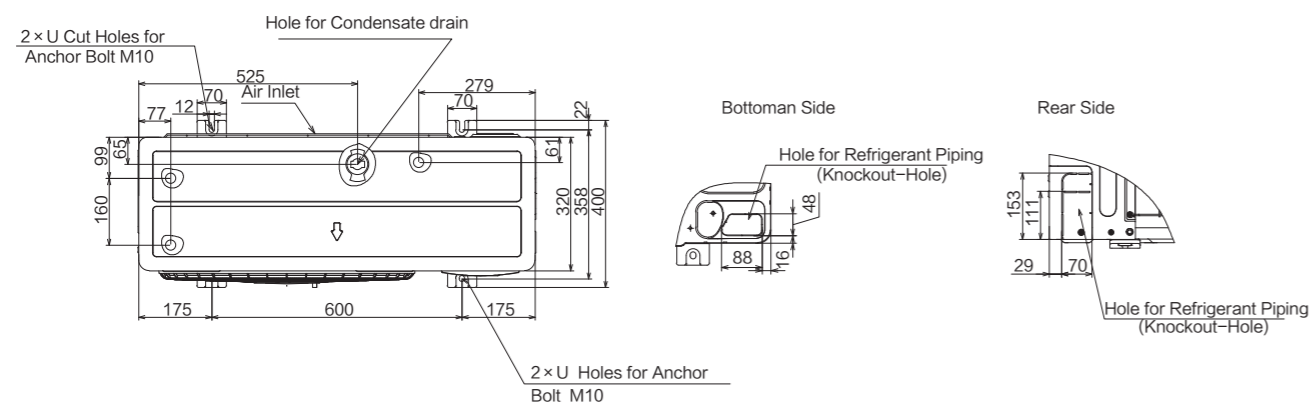
NOTES:

- The rated cooling and heating capacity are tested in the following conditions:
Cooling Operation Conditions: indoor air inlet temperature: 27°C DB 19°C WB, outdoor air inlet temperature: 35°C DB, pipe length : 7.5m, pipe lift: 0m
Heating Operation Conditions: indoor air inlet temperature: 20°C DB, outdoor air inlet temperature: 7°C DB 6°C WB, pipe length: 7.5m, pipe lift: 0m
- The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be taken into consideration at the scene.
Measurement point: 1m from the service cover surface and 1.5m from floor level.
- *1 When the temperature is between -10°C and -5°C, the cooling operation is under interval operation.

Dimensional Drawings

Hi-Smart E+ Series

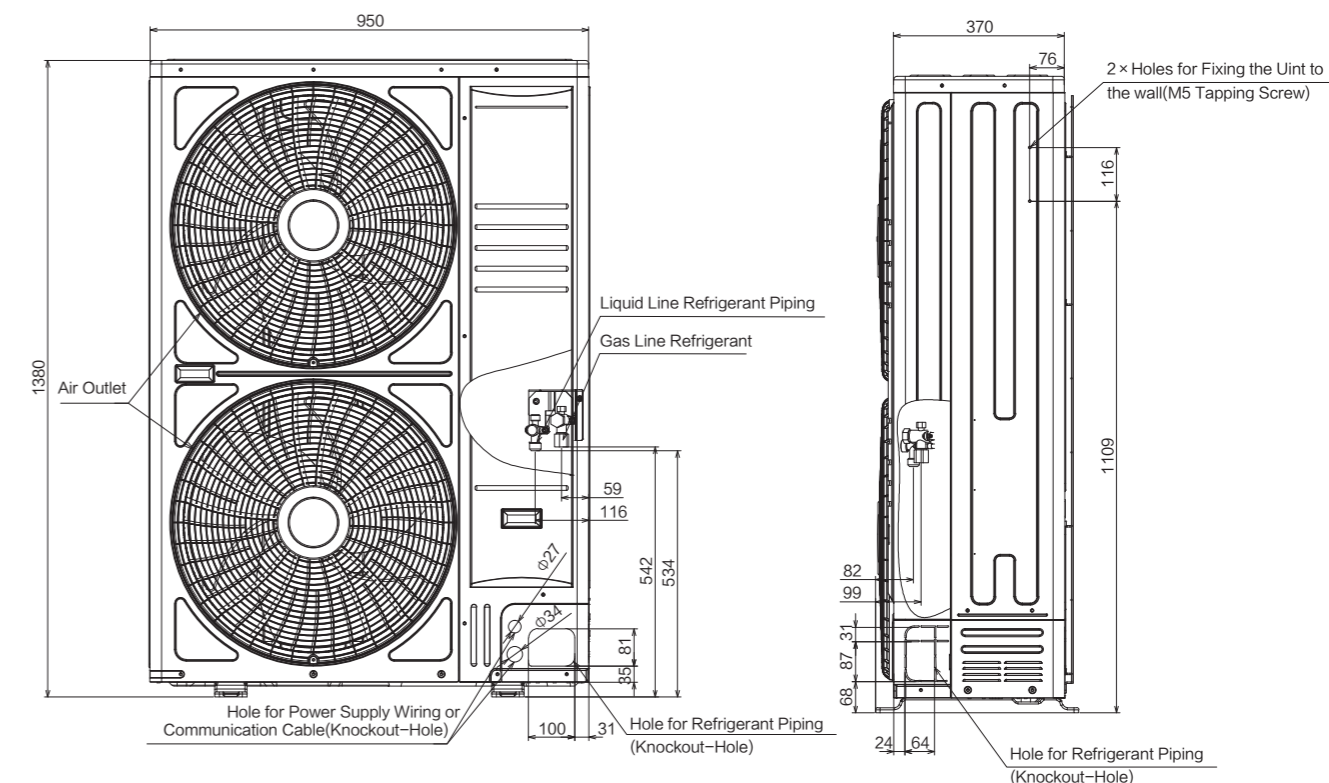
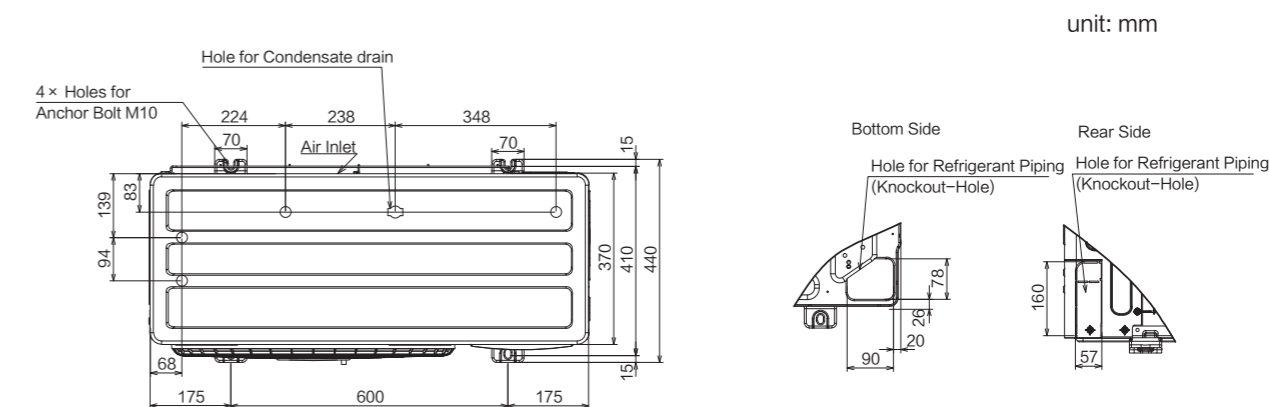
AVW-41 ~ 54HJFHH1



Dimensional Drawings

Hi-Smart L+ Series

AVW-41~54HJFHH2 AVW-41~54HKFHH2

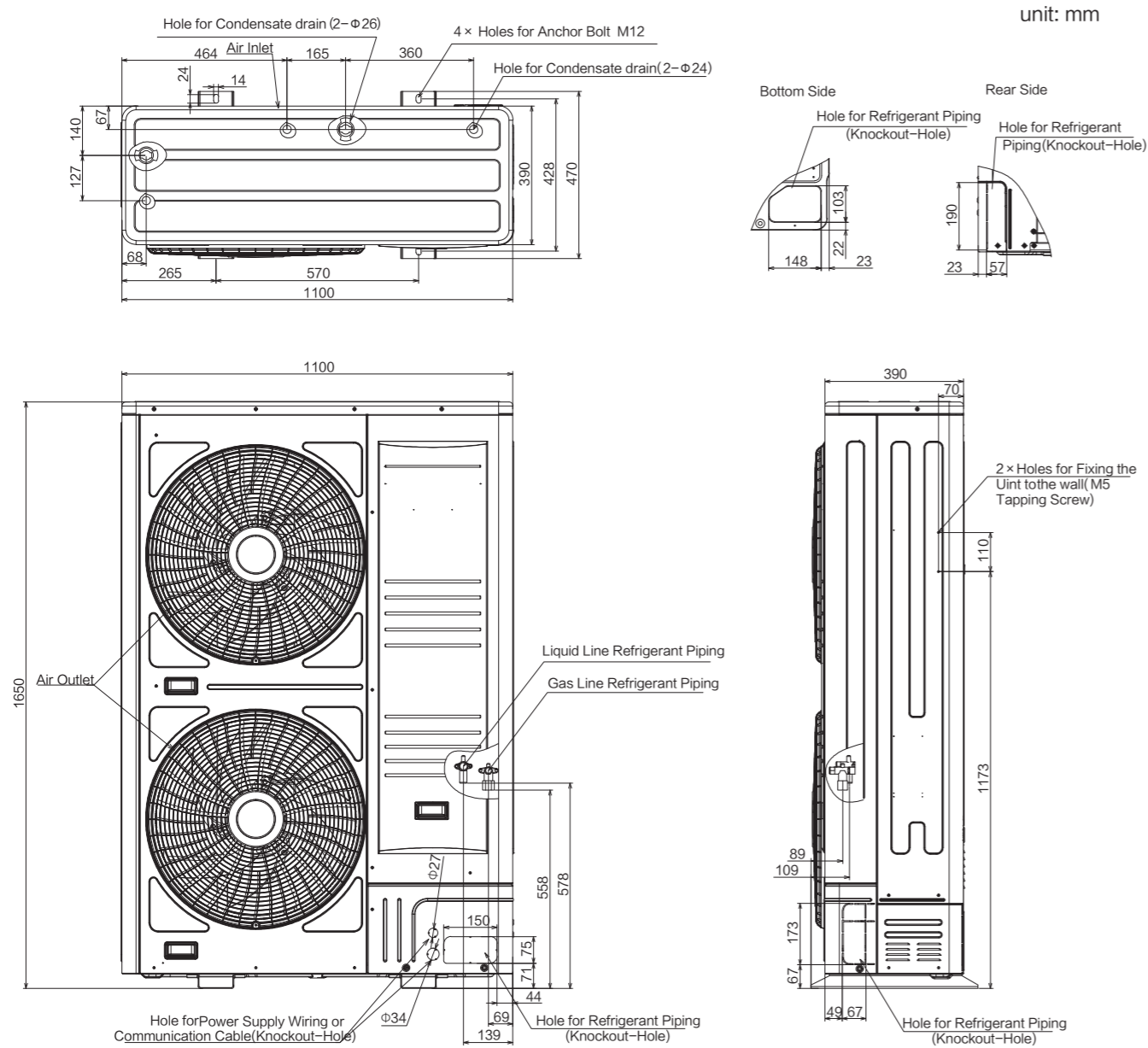


Dimensional Drawings

Hi-Smart E+ L+ C+ Series

Hi-Smart C+ Series

AVW-76 ~ 114HKFHH2





HP		0.6	0.8	1.0	1.3	1.5	1.8	2.0	2.3	2.5	3.0	3.3	4.0	5.0	6.0	8.0	10.0
kBtu/h		5	7	9	12	14	17	19	22	24	27	30	38	48	54	76	96
4-Way Cassette Type				•	•	•		•	•	•	•	•	•	•	•		
Mini 4-Way Cassette Type		•	•	•	•	•	•	•									
1-Way Cassette Type			•	•	•	•		•		•							
2-Way Cassette Type			•	•	•	•		•		•	•	•	•	•	•		
Console Type		•	•	•	•	•	•										
Low-height Ceiling Ducted Type		•	•	•	•	•	•	•	•	•							
Ceiling Ducted Type (High Static Pressure)			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DC High ESP Ceiling Ducted Unit																•	•
Wall Mounted Type			•	•	•	•	•	•	•	•							
Ceiling & Floor Type							•	•	•	•	•	•	•	•			
Floor Concealed Type				•		•		•		•							
Ventilation Solution				•	•		•	•		•							

Functions & Accessories

Cassette Type

Installation & Maintenance



850mm drainage height

Drain pump helps to smooth drainage of condensate from the indoor unit. The higher drainage height is, the safer drainage system is, especially in large systems with a large number of indoor units.



Self-diagnosis

The self-diagnosis function in indoor units smartly determines and analyses the problems occurred, to provide troubleshooting guide. It can be displayed and tracked on controllers, and PCB of unit.



Compact size

The compact size of the indoor unit provides greater installation flexibility, especially in tight spaces.



Easy cleaning

Because of the smooth flat surfaces, it's easy to clean with dragging cloths across on indoor units and prevents heavy dust accumulation.



Large capacity range

Indoor unit series with large capacity range offers more capacity options to closely satisfy various indoor loads.



Auto restart

The indoor unit with automatic restart function will automatically restart or restore to the previous mode in the default mode after the power is cut off abnormally.



Low temperature cooling

Target temperature of indoor units can be set as low as 16°C.



Cold wind limit setting

Thanks to the Cold Wind Limit Setting function, the lowest limit of the outlet air temperature can be set in the range of 10~16°C, which can ensure that the actual outlet temperature will never be lower than the set value.



Wireless receiver

Indoor units compatible to an optional wireless receiver to enable remote control when a wireless control is not the standard controller of the unit



Humidity sensor (optional)

Indoor units compatible with humidity sensor accessory could access to Auto Dehumidification function on the indoor unit.



Hi-Motion (optional)

Hi-Motion or Motion sensor is a human sensor accessory which enables auto ON/OFF, auto fan and temperature setting based on human presence.



Window contact function

Linked with window sensor, IDUs will stop when the window is opened, and return to the previous status when the window is closed.

Air Quality



Remote control

Can be remotely controlled using a wireless controller with LCD display



Silent operation

Indoor units that offers very low sound pressure levels during operation.



Adjustable louver's position

Louver position of indoor units can be adjusted into several different angles.



Swing louver

Louvers of indoor unit automatically swings up and down to evenly distribute air across the room.



Fan speed

Selectable Fan Speeds are available.



Auto fan speed

Automatically controls rotation speed of fan depending on indoor load to achieve efficiency and comfort simultaneously.

Air Quality



Fresh air introduction

Fresh air can be introduced into rooms with an optional adapter or direct connection to the air return segment of the unit.



Standard filter included

As a washable long life type, the unit the filter is built in unit return air as a standard part.



Optional filter

As a washable long life type, the filter can be used as an option accessory.



AirPure (optional)

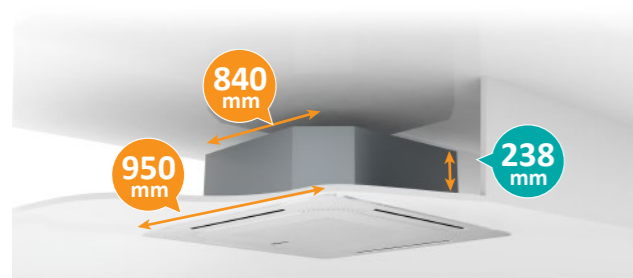
Achieving air purification by equipping with AirPure kit.



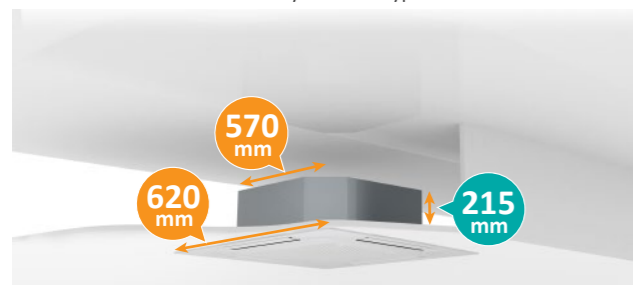
Cassette Type

Compact and classy design

The 4 way cassette is slim as 238mm and mini 4-way cassette is slim with 215mm, suitable for narrow ceiling spaces. The straight return air grille are replaced with new fashion design, upgrading taste and classiness of any interior aesthetic.



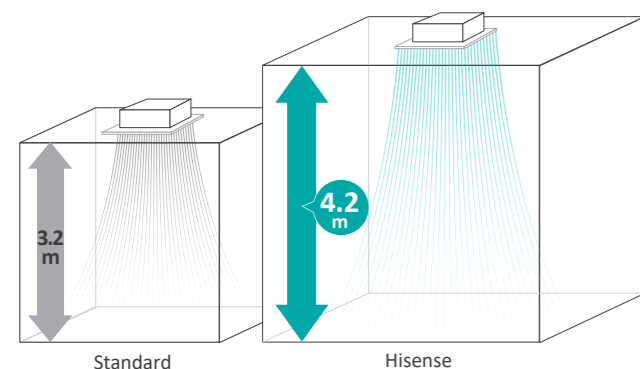
4-Way Cassette Type



Mini 4-way Cassette Type

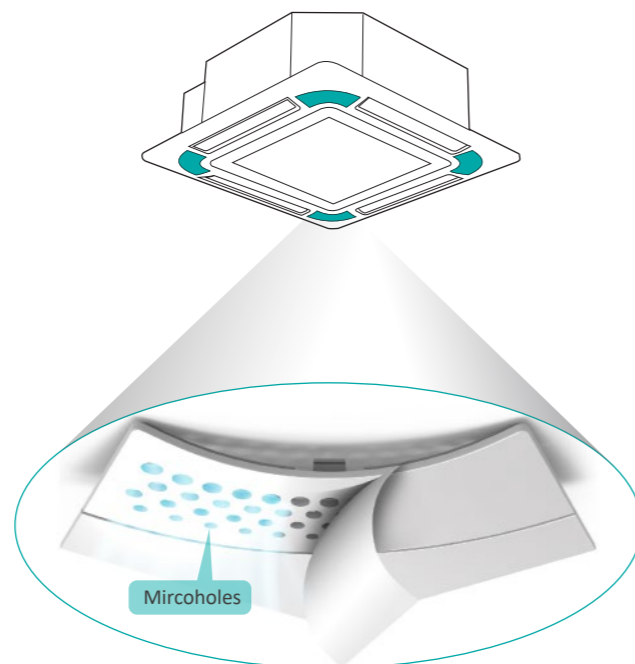
Higher range installation

Air from the cassette can flow down from ceiling heights as high as 4.2m. And suitable for working with motion sensor.



Breeze mode

In new designed breeze mode, the air is blown out from the micro hole in the panel. To avoid the cool air towards your face or body directly.



Super compact flat panel

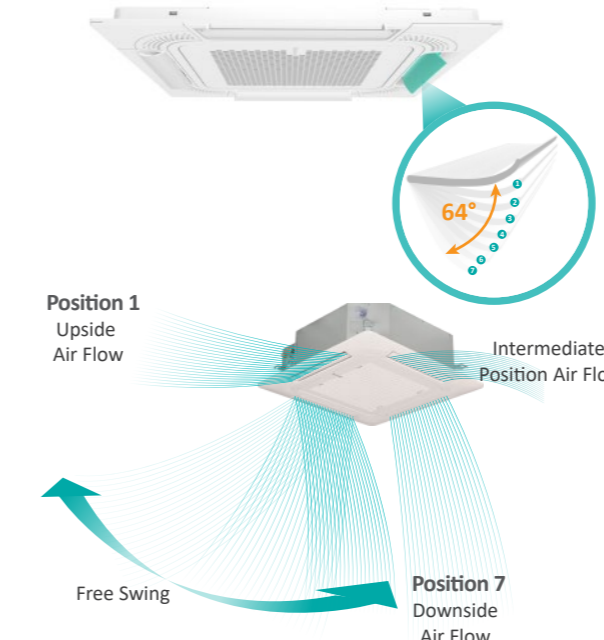
With the ultra-thin panel installed, it only protrudes for 10 mm and perfectly integrates with the ceiling.



Cassette Type

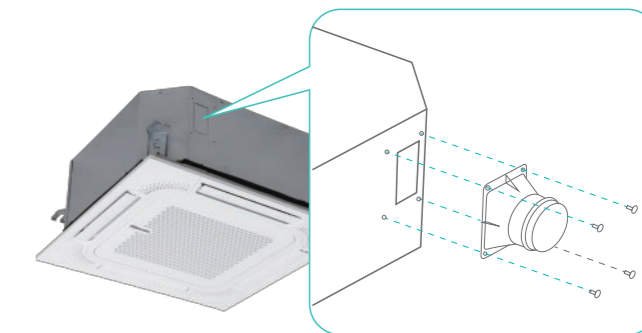
Individual louver control

4-way cassettes louvers are now capable of individual control to freely choose how you want your AC unit supplies air according to different needs, applications and installation layout. Each louvers have 7 angle settings and maximum angle reach at 64°.



Fresh air intake (optional)

In order to satisfy the fresh air intake function, the duct adapter as the optional part equips at the mini 4-way cassette type and 4-way cassette type.



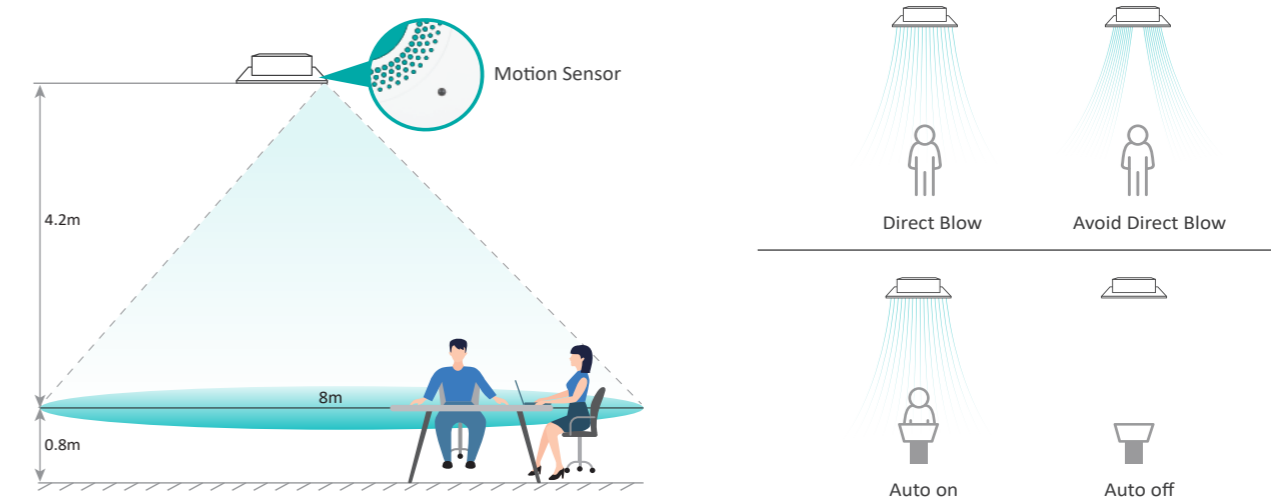
Humidity sensor(optional)

Automatic dehumidification can be achieved by choosing humidity sensor, setting humidity range from 35% to 90% .

Motion sensor (optional)

Motion Sensor can provide more comfortable to customer, and realize energy saving.

- 1) With the sensor, indoor unit can ON or OFF automatic when people in the room or leave.
- 2) The location of people can be detected by sensor. Then the direction of the airflow can be set, to avoid people or blow directly at people.
- 3) With detect the number of people changes, the setting temperature is automatically changed.

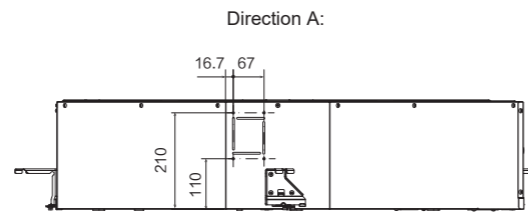
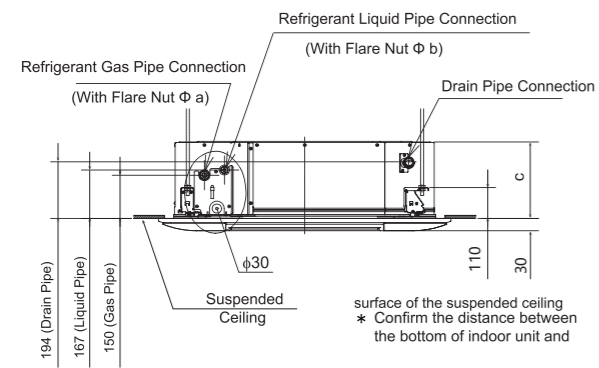
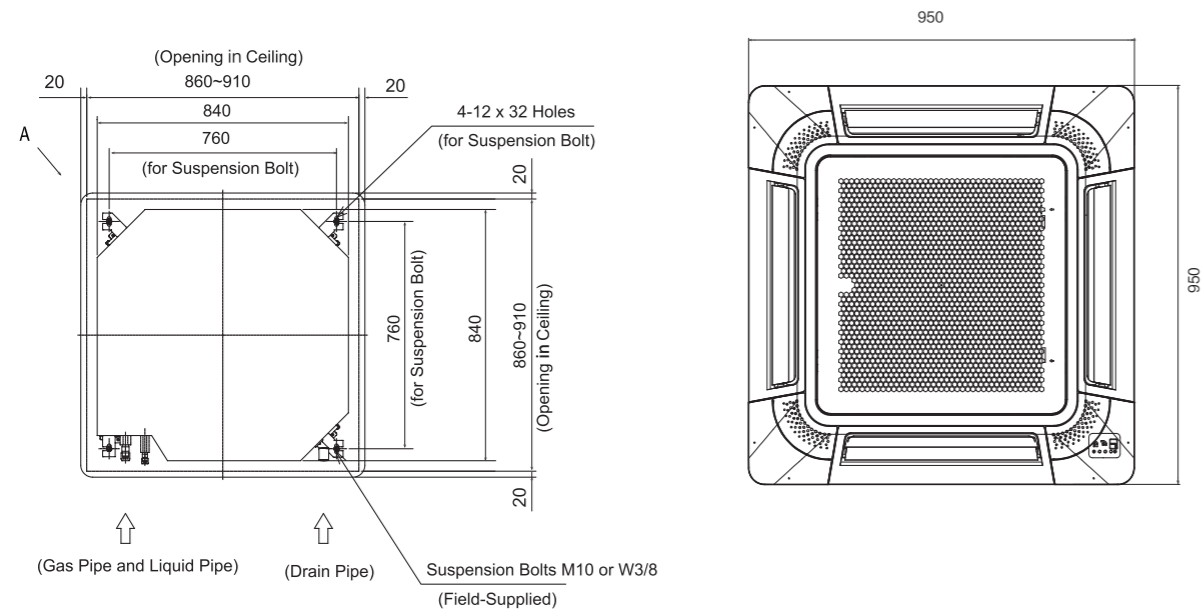


Dimensional Drawings

4-Way Cassette Type (AVBC)

AVBC-09~54HJFKA

unit:mm



Model	a	b	c
AVBC-09HJFKA	12.7	6.35	260
AVBC-12HJFKA			
AVBC-15HJFKA			
AVBC-19HJFKA			
AVBC-22HJFKA			
AVBC-24HJFKA	15.88	9.53	260
AVBC-27HJFKA			
AVBC-30HJFKA			
AVBC-38HJFKA			
AVBC-48HJFKA			
AVBC-54HJFKA	15.88	9.53	310

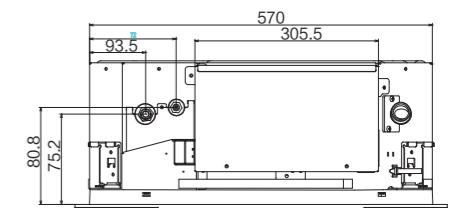
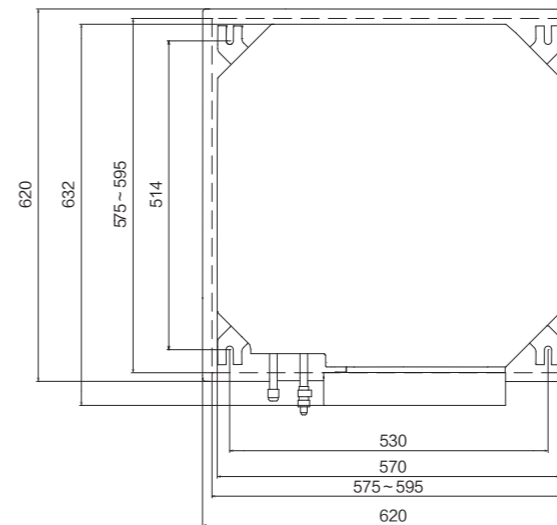
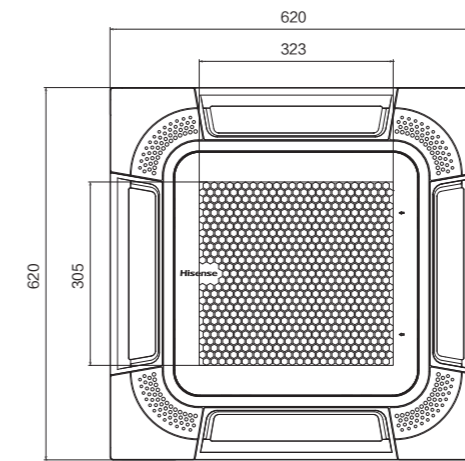
unit:mm

Dimensional Drawings

Mini 4-Way Cassette Type (AVC)

AVC-05~19HJFA

unit:mm



1-Way Cassette Type

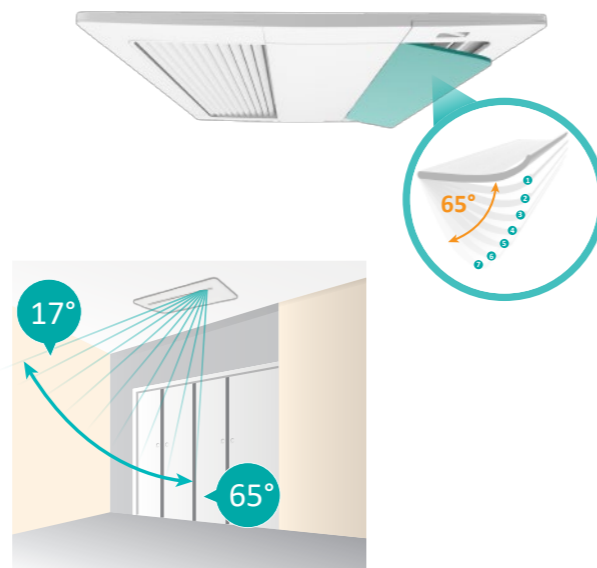
Modern classic style panel

Inspired from ceiling concealed ducted units and integrated with the design of cassette units to present 1 way cassette. High class appearance blends into common white plaster ceilings and practical solution for cornered floor layouts, hotel rooms and residential applications.



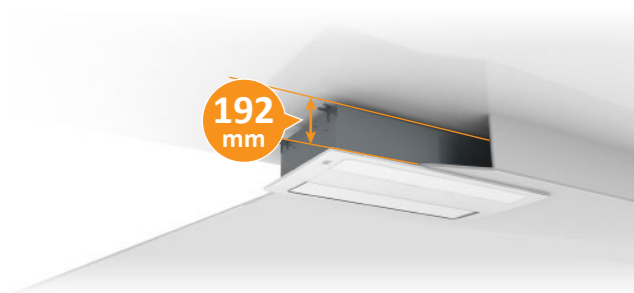
3D air supply

Louvers are consist of horizontal and vertical flaps to supply air evenly to the edges of any rooms. Wider opening angle from 17° to 65° supplies air further and lower down to floor needed during heating modes.



Space saving

Slim body height of 192mm fits in limited ceiling spaces commonly seen in budget hotels and residential applications.



Easier maintain

The electric box of the cassette is designed and placed beneath the panel. When operate on PCB, it just needs to open the panel and the cover of box. It's easy to take the service, maintenance and commissioning.



1-Way Cassette Type



Model		AVY-07UXJSJA	AVY-09UXJSJA	AVY-12UXJSJA	AVY-14UXJSJA	AVY-18UXJSKA	AVY-24UXJSKA	
Power Supply		AC 1Φ,220~240V/50Hz/60Hz						
Capacity	Cooling	kW	2.2	2.8	3.6	4.0	5.6	7.1
		Btu/h	7,500	9,600	12,300	13,600	19,100	24,200
Heating	kW	2.5	3.2	4.0	4.5	6.3	8.0	
	Btu/h	8,500	10,900	13,600	15,400	21,500	27,300	
Power Input	Cooling	W	14	14	24	34	34	74
	Heating	W	14	24	34	44	44	94
Sound Pressure	dB(A)	33/32/31/30/29/28	35/34/32/31/29/28	40/36/35/33/30/29	40/36/35/33/30/29	41/39/36/35/33/31	48/46/43/40/37/33	
Airflow Rate	m³/min	6.2/5.9/5.6/	6.6/6.2/5.6/	8.3/7.3/6.8/	8.3/7.3/6.8/	12.1/9.9/8.8/	15.6/12.6/11.2/	
		5.1/4.8/4.6	5.1/4.8/4.6	6.2/5.6/5.1	6.2/5.6/5.1	8.2/7.8/6.6	9.9/8.4/7.1	
Connection Type	-	Flare-nut Connection(with Flare Nuts)						
Piping	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.53
		inch	1/4	1/4	1/4	1/4	1/4	3/8
	Gas	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88
		inch	1/2	1/2	1/2	1/2	5/8	5/8
Condensate Drain	mm	I.D.32						
Weight	Net Weight	kg	19	19	20	20	24	24
	Gross Weight	kg	23	23	24	24	29	29
Dimensions	External	H mm	192	192	192	192	192	192
		W mm	910	910	910	910	1180	1180
		D mm	470	470	470	470	470	470
Model	-	HP-D-NA	HP-D-NA	HP-D-NA	HP-D-NA	HP-E-NA	HP-E-NA	
Panel Colour	-	Neutral White						
Decoration Panel	Body Dimensions	H mm	55	55	55	55	55	55
		W mm	1100	1100	1100	1100	1370	1370
		D mm	550	550	550	550	550	550
	Net Weight	kg	5	5	5	5	6	6
Gross Weight	kg	8	8	8	8	10	10	

NOTES:

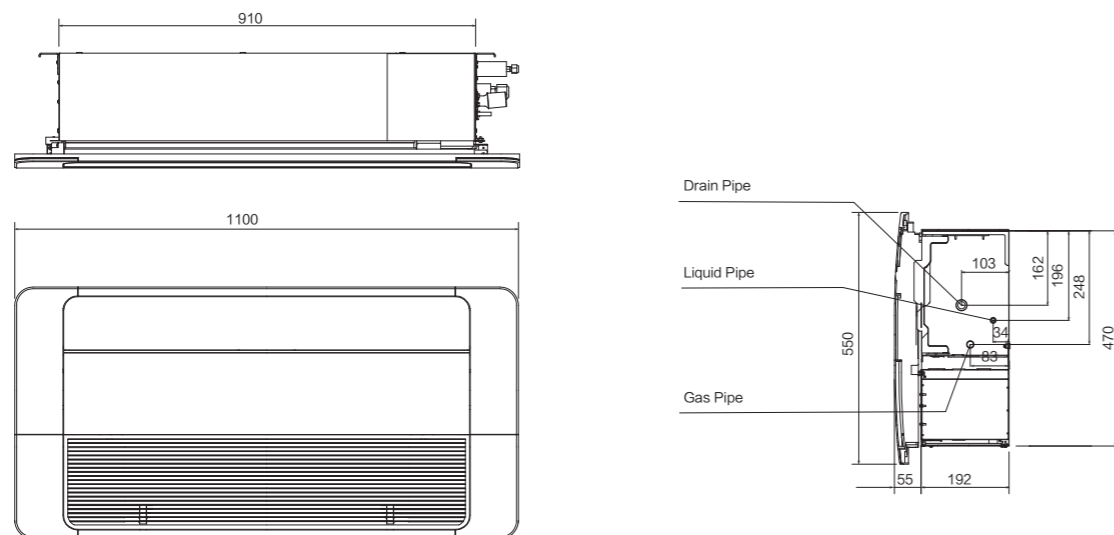
1. The nominal cooling capacity is based on the following conditions:
 Indoor Air Inlet Temperature: 27°C DB (80°F DB), 19.0°C WB(66.2°F WB)
 Outdoor Air Inlet Temperature: 35°C DB(95°F DB)
 Piping Length: 7.5 Meters Piping Lift: 0 Meter

2. The sound pressure level is based on following conditions.
 1.5 Meters Beneath the Unit.
 The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

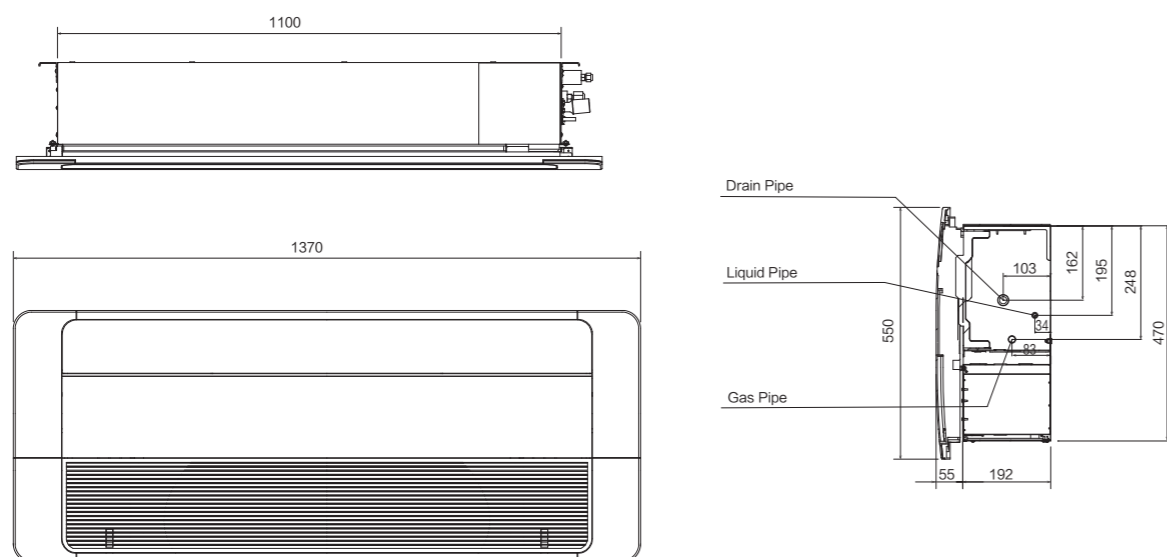
Dimensional Drawings

1-Way Cassette Type (AVY)

AVY-07~14UXJSJA



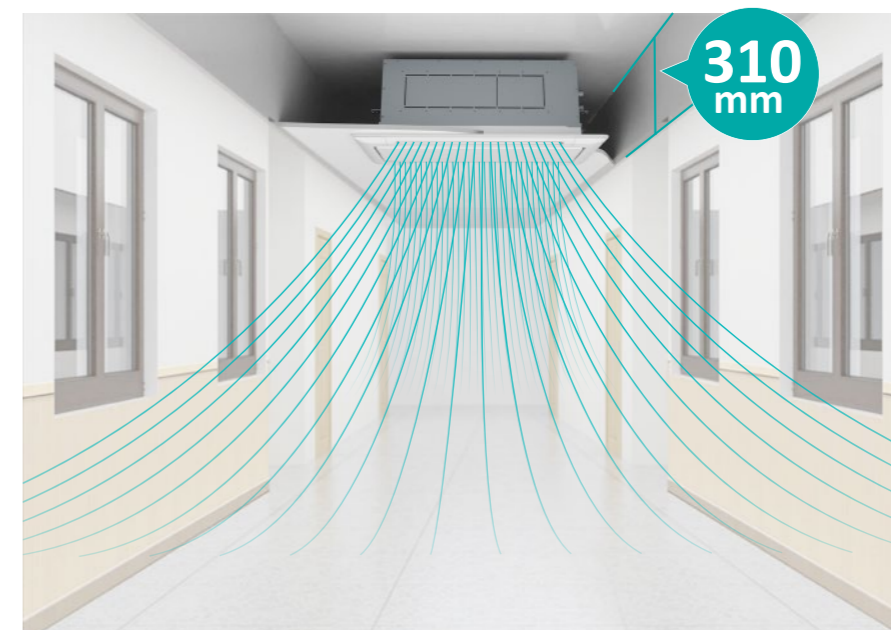
AVY-18~24UXJSKA



2-Way Cassette Type

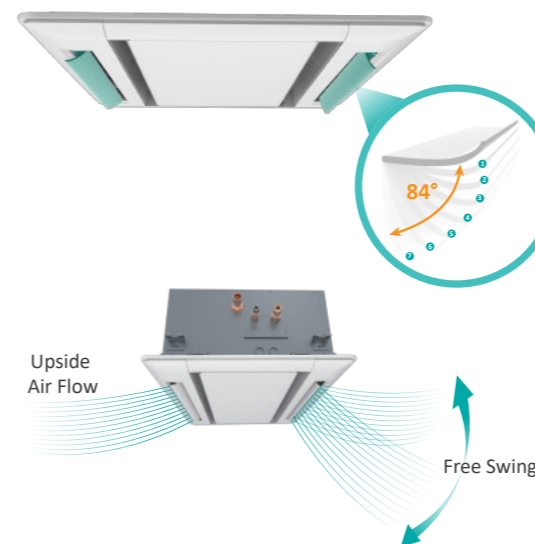
Compact and classy design

The slim structure of the cassette having height as low as 298mm can be installed in ceiling spaces with a minimum of 310mm. Narrow corridors or zoned spaces are best fitted with 2 way cassette due to its compact design having 1.42m.



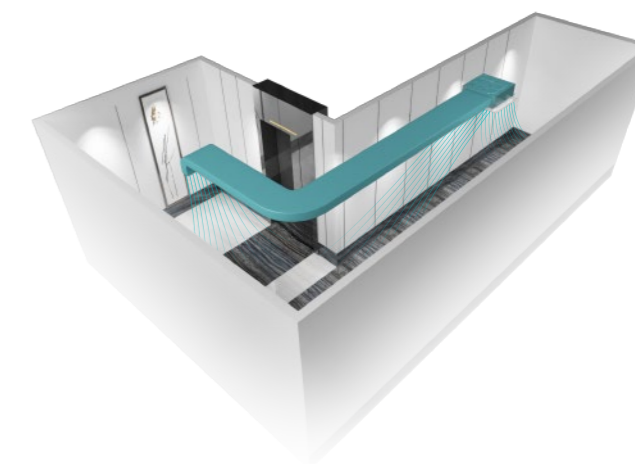
Individual louver control

Each louver's opening angles can be controlled individually, with total of 7 opening angle from 27° to 84°. It can meet the requirement of narrow corridors with high ceiling, and supply the warm air supply during winter seasons.



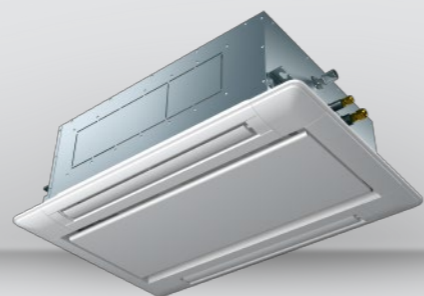
Branch discharge option

For the irregular room, branch discharge can extend air distribution area to the special corners without additional indoor units.



2-Way Cassette Type

2-Way Cassette Type



Model	AVL-07 UXJSGA	AVL-09 UXJSGA	AVL-12 UXJSGA	AVL-14 UXJSGA	AVL-18 UXJSGA	AVL-24 UXJSGA	AVL-27 UXJSGA	AVL-30 UXJSGA	AVL-38 UXJSHA	AVL-48 UXJSHA	AVL-54 UXJSHA		
Power Supply	AC 1Φ,220~240V/50Hz/60Hz												
Capacity	Cooling	kW	2.2	2.8	3.6	4.3	5.6	7.1	8.4	9.0	11.2	14.0	16.0
		Btu/h	7,500	9,600	12,300	14,700	19,100	24,200	28,700	30,700	38,200	47,800	54,600
Power Input	Cooling	kW	2.8	3.3	4.0	4.9	6.5	8.0	9.0	10.0	13.0	16.0	18.0
		Btu/h	9,600	11,300	13,600	16,700	22,200	27,300	30,700	34,100	44,400	54,600	61,400
Sound Pressure	Cooling	W	14	14	14	24	34	44	64	74	84	104	114
		dB(A)	32/30/29/27	33/30/29/28	34/31/30/28	40/37/34/32	42/39/36/33	45/42/40/36	47/44/40/36	49/46/42/37	46/44/40/38	48/45/42/38	49/46/43/40
Airflow Rate	Cooling	m ³ /min	10.0/8.5/7.2/6.0	11.0/9.4/8.2/6.6	12.0/10.5/8.9/7.5	15.0/13.2/11.5/9.9	17.0/14.9/13.0/11.2	19.0/16.4/14.3/12.3	21.0/18.4/15.6/12.6	22.0/19.3/16.3/13.1	30.0/26.4/23.1/19.8	35.0/30.8/26.9/21.1	37.0/32.5/28.4/24.1
		Connection Type	Flare-nut Connection(with Flare Nuts)										
Piping	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53
		inch	1/4	1/4	1/4	1/4	1/4	3/8	3/8	3/8	3/8	3/8	3/8
	Gas	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
		inch	1/2	1/2	1/2	1/2	5/8	5/8	5/8	5/8	5/8	5/8	5/8
Condensate Drain	mm	I.D.32											
Weight	Net Weight	kg	22	22	22	24	24	24	24	24	39	39	39
	Gross Weight	kg	28	28	28	30	30	30	30	30	47	47	47
Dimensions	External	H	mm	298	298	298	298	298	298	298	298	298	298
		W	mm	860	860	860	860	860	860	860	1420	1420	1420
		D	mm	630	630	630	630	630	630	630	630	630	630
Model			HP-C-NA	HP-C-NA	HP-C-NA	HP-C-NA	HP-C-NA	HP-C-NA	HP-C-NA	HP-C-NA	HP-F-NA	HP-F-NA	HP-F-NA
	Panel Colour		Neutral White										
Decoration Panel	Body Dimensions	H	mm	30	30	30	30	30	30	30	30	30	30
		W	mm	1100	1100	1100	1100	1100	1100	1100	1100	1660	1660
	D	mm	710	710	710	710	710	710	710	710	710	710	710
	Net Weight	kg	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	10.5	10.5
Gross Weight	kg	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	17.8	17.8	17.8

NOTES:

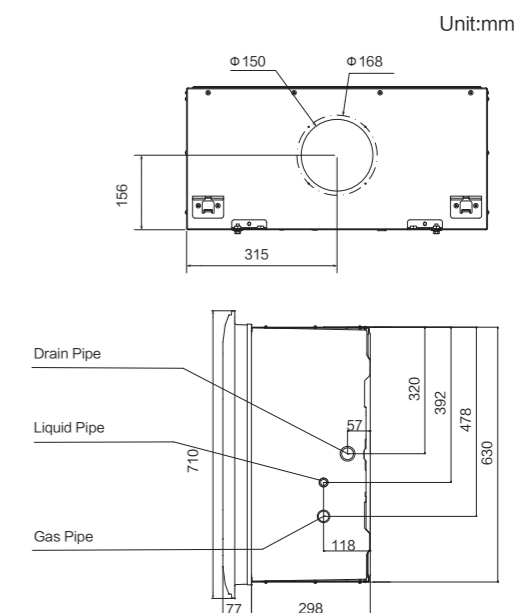
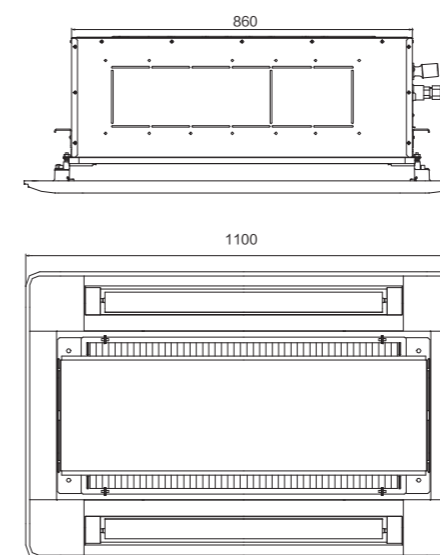
1. The nominal cooling capacity is based on the following conditions:
 Indoor Air Inlet Temperature: 27°C DB (80°F DB), 19.0°C WB(66.2°F WB)
 Outdoor Air Inlet Temperature: 35°C DB(95°F DB)
 Piping Length: 7.5 Meters Piping Lift: 0 Meter

2. The sound pressure level is based on the following conditions: 1.5m beneath the unit.
 The above data was measured in an anechoic chamber so that the reflected sound should be taken into consideration in the field.

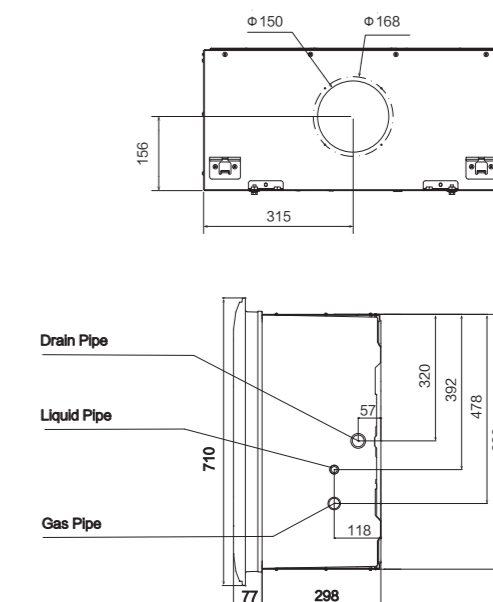
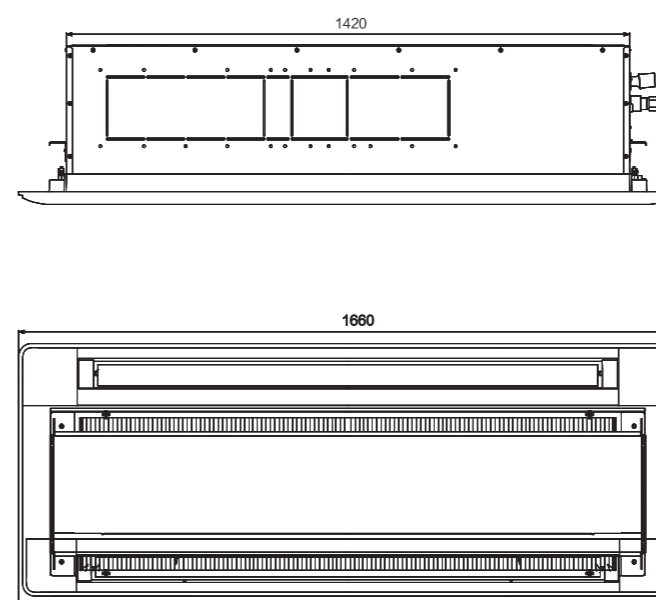
Dimensional Drawings

2-Way Cassette Type (AVL)

AVL-07~30UXJSGA



AVL-38~54UXJSHA



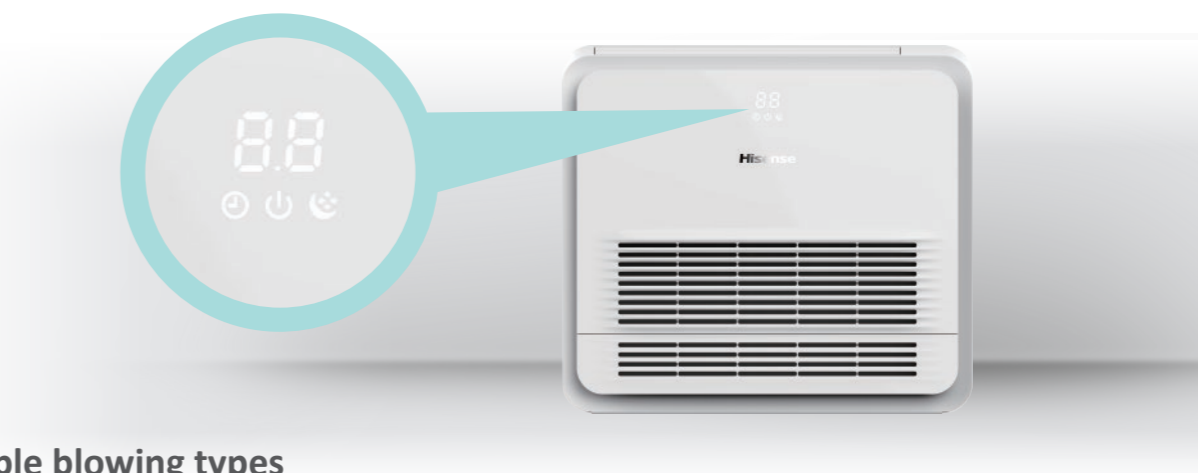
Console Type



Console Type

Stylish design

With smooth white cover, LED shown and temperature display, the console unit is a super stylish air-conditioning. Suitable for the residential or commercial applications which need an unit installed on or close to the floor.



Multiple blowing types

Cooling Mode

The unit adopts the stereo cooling mode that can reach the setting temperature rapidly.



*Note: The air deflector of the console type cannot be adjusted manually. After one hour of cooling or dehumidifying operation, if the wind speed detected by the machine is the last two speeds of 6 speeds, the lower louver will automatically close, and then only the upper louver is running.

Heating Mode

Air supply through the below louver achieves floor heating effect and increases the comfortability.



*Note: The air deflector of the console type cannot be adjusted manually. In heating mode, if the energy-saving mode is selected, the temperature difference between the setting temperature and the indoor ambient temperature is less than 1 °C ($T_s - T_i < 1\text{ °C}$), or IDU enters thermo off state, the upper louver will be automatically closed, and then only the lower louver is running.

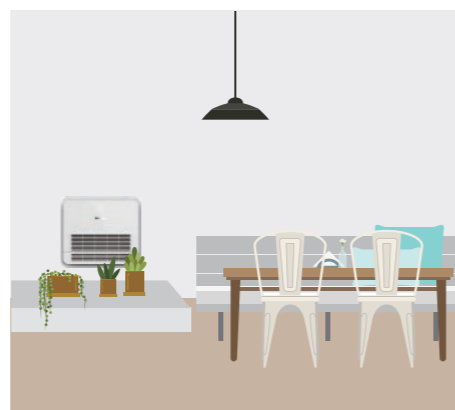
Console Type

Flexible installation options

The unit can stand directly on the floor, or hanging on the wall. According to the interior decoration style, the machine can choose surface mounted, flush mounted, concealed mounted.



Standing on the floor



Hanging on the wall



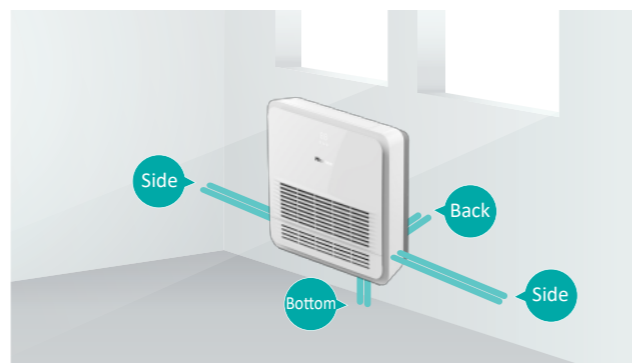
Surface mounted

Embedded mounted

Concealed mounted

Flexible piping connection

Both Refrigerant and drainage pipings are freely to connect in any direction including two sides(L or R) and bottom and back. An additional direction to the back of the unit suitable for pipes which passing through walls.



Console Type

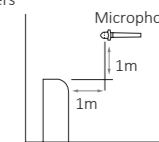


Model		AVK-05HJFCAA	AVK-07HJFCAA	AVK-09HJFCAA	AVK-12HJFCAA	AVK-15HJFCAA	AVK-17HJFCAA	
Power Supply		AC 1Φ,220V~240V/50Hz/60Hz						
Capacity	Cooling	kW	1.5	2.2	2.8	3.6	4.5	5.0
		Btu/h	5,100	7,500	9,600	12,300	15,300	17,100
Capacity	Heating	kW	2.0	2.5	3.3	4.2	5.0	5.6
		Btu/h	6,800	8,500	11,200	14,300	17,000	19,100
Power Input	Cooling	W	10	11	12	14	18	23
	Heating	W	10	11	12	14	18	23
Sound Pressure	dB(A)	32/30/29/28/26/24	34/32/31/29/27/26	36/35/32/31/29/27	39/36/34/31/29/27	41/39/37/35/33/32	44/43/41/39/37/36	
Airflow Rate		m ³ /min	6.0/5.7/5.3/	7.4/7.0/6.4/	8.0/7.4/7.0/	8.2/7.6/6.8/	9.0/8.5/7.8/	10.1/9.7/9.0/
			5.1/4.7/4.5	6.0/5.6/5.3	6.4/6.0/5.6	6.2/5.7/5.3	7.2/6.6/6.4	8.5/7.9/7.3
Panel Colour	-	Pure White	Pure White	Pure White	Pure White	Pure White	Pure White	
Piping	Connection Type	-	Flare-nut Connection(with Flare Nuts)					
	Liquid	mm	Φ 6.35	Φ 6.35	Φ 6.35	Φ 6.35	Φ 6.35	Φ 6.35
		inch	1/4	1/4	1/4	1/4	1/4	1/4
	Gas	mm	Φ 12.7	Φ 12.7	Φ 12.7	Φ 12.7	Φ 12.7	Φ 12.7
inch		1/2	1/2	1/2	1/2	1/2	1/2	
Condensate Drain	mm	O.D.18						
Weight	Net Weight	kg	16.1	16.1	16.1	17.4	17.4	17.4
	Gross Weight	kg	20.6	21.1	21.1	21.5	21.5	21.5
Dimensions	External	H mm	630	630	630	630	630	630
		W mm	700	700	700	700	700	700
		D mm	225	225	225	225	225	225

NOTES:

1. The nominal cooling capacity and heating capacity are based on the following conditions:
 Cooling Operation Conditions
 Indoor Air Inlet Temperature: 27°C DB(80°F DB), 19.0°C WB(66.2°F WB)
 Outdoor Air Inlet Temperature: 35°C DB(95°F DB)
 Piping Length: 7.5 Meters Piping Lift: 0 Meter
 Heating Operation Conditions
 Indoor Air Inlet Temperature: 20°C DB(68°F DB).
 Outdoor Air Inlet Temperature: 7°C DB(45°F DB), 6°C WB(43°F WB)

2. The sound pressure level is based on following conditions:
 It is measured in anechoic room. Operation noise differs with operation and ambient conditions.
 Location of Microphone:

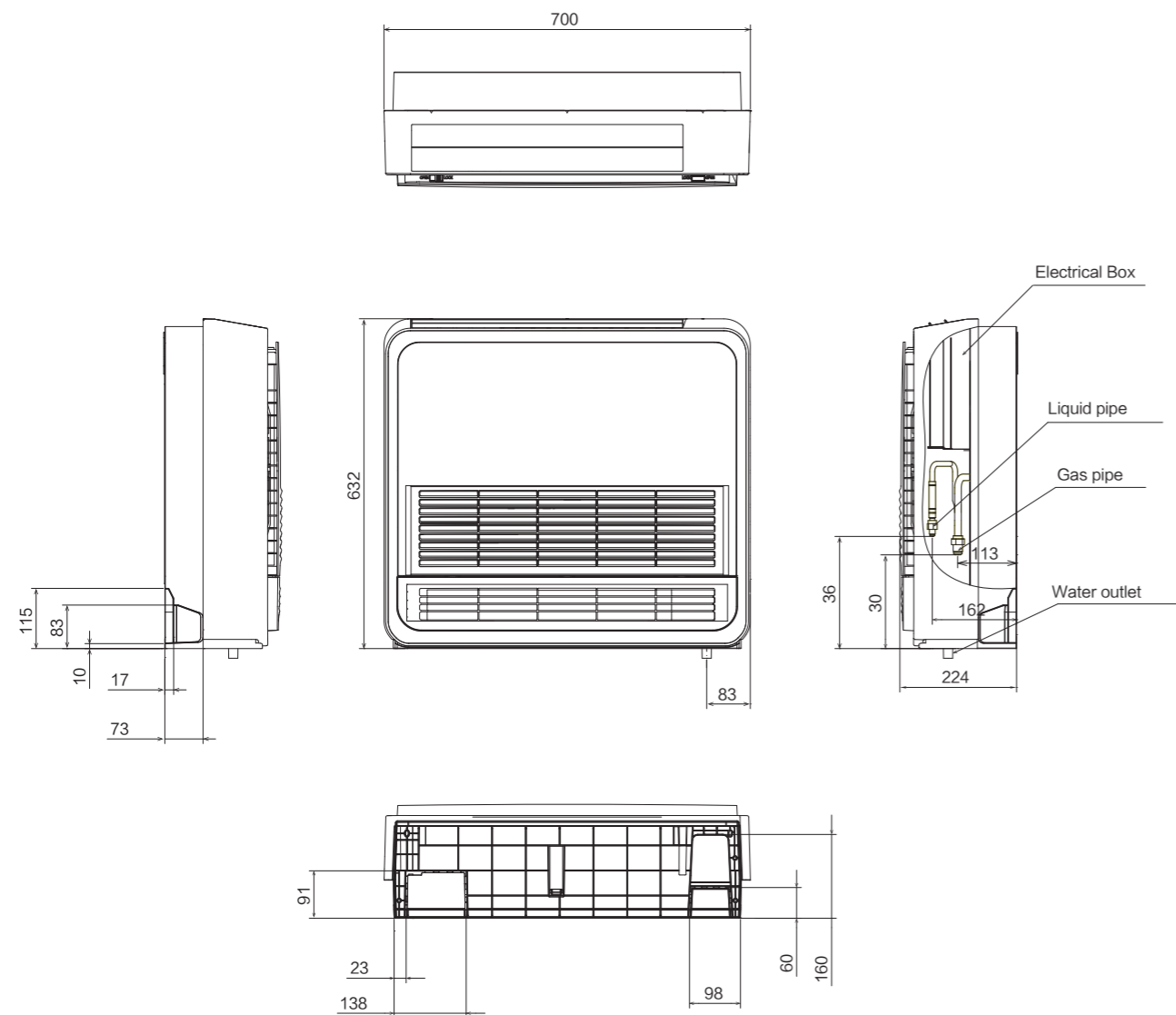


Dimensional Drawings

Console Type (AVK)

AVK-05~17HJFCAA

unit: mm



Console Type



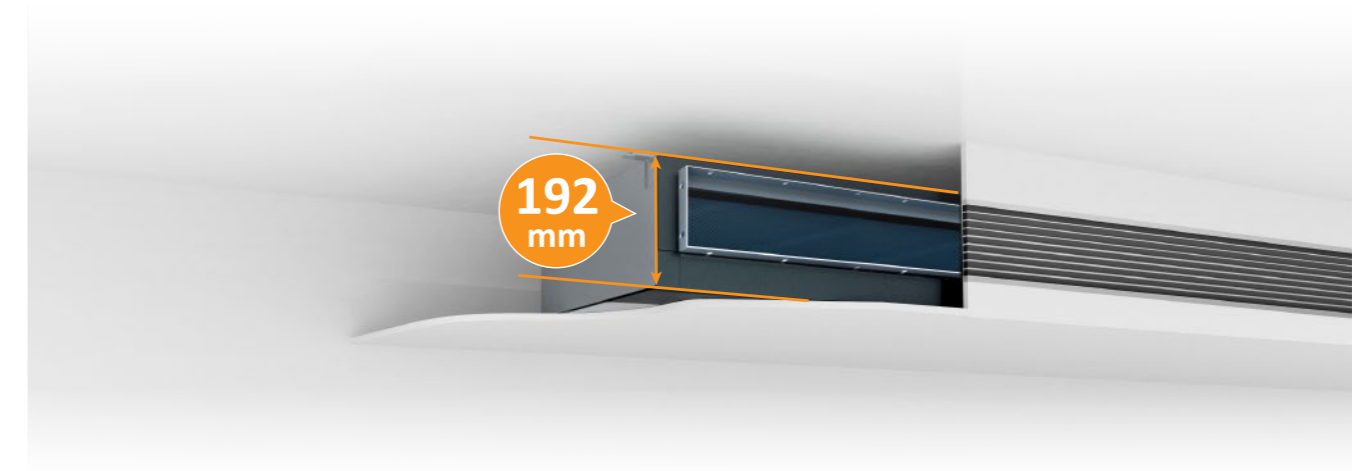
Ceiling Ducted Type



Ceiling Ducted Type

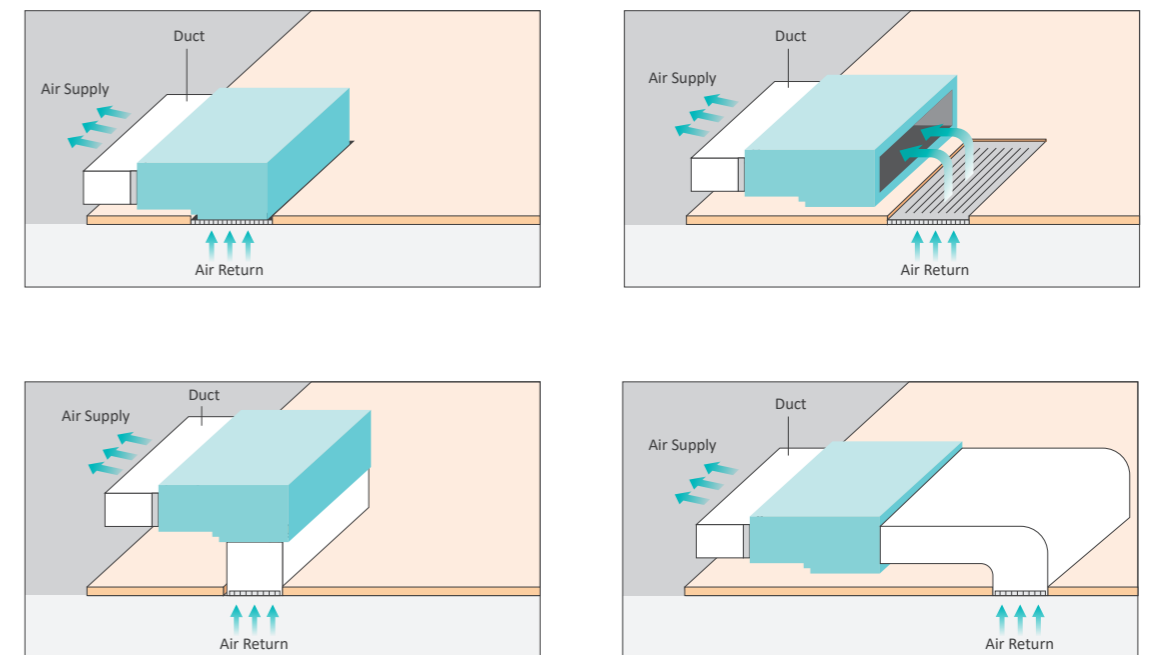
Space saving

Concealed Low Height Ducted unit is as slim as 192mm, and the width can be below 770mm, which fits into the narrowest ceiling spaces. Save ceiling spaces for higher room height.



Flexible air supply and return

Air from indoor units can be discharged directly with louvers (*1 3D Airflow Panel is recommended) or by duct connections. Whereas ducted or ceiling return air from the rear or bottom of the indoor unit is also possible *2, when ceiling areas are very limited.



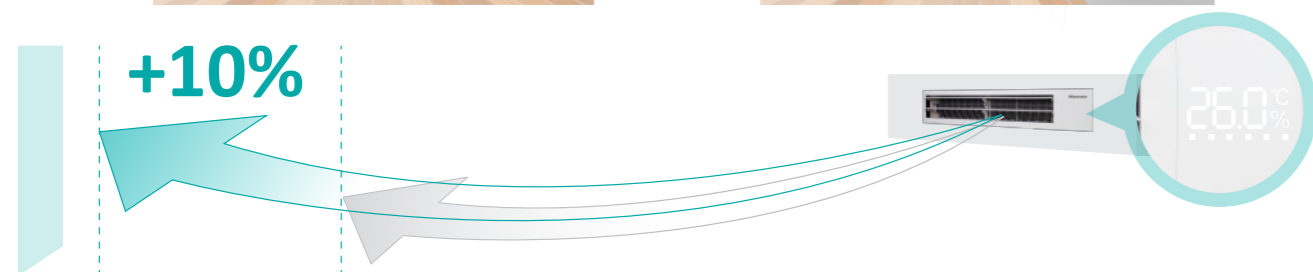
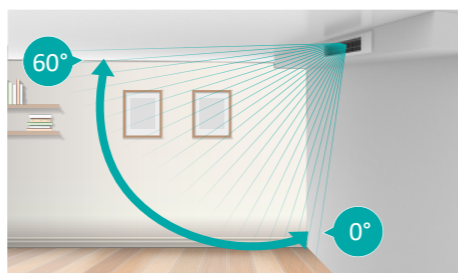
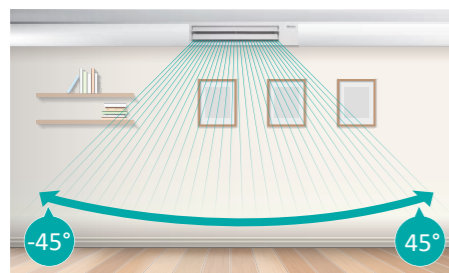
*1: 3D Airflow Panel is an optional accessory only for Low Height Ducted Unit. For more information please refer to (Accessory:3D Air-flow Panel)

*2: Removing and replacing the factory installed metal panels may impose a higher sound pressure level by 3 to 4dB(A).

Ceiling Ducted Type

3D-airflow

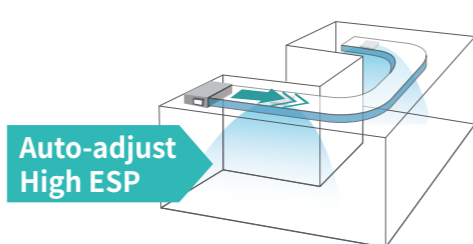
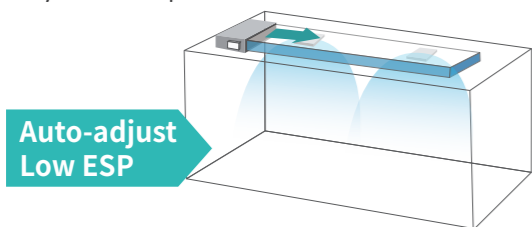
The 3D airflow panel is an accessory for ceiling ducted unit, with LED temperature and humidity display. With the horizontal louver and vertical louver, the panel can offer wide air flow coverage to keep every corners of your room cool or warm in any seasons of the year.



+10%
Auto-adjust External Static Pressure

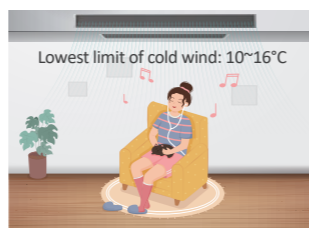
After installation, the actual duct resistance frequently differ from the initially calculated, causing the actual air flow too low or too high. The auto-adjust ESP function can effectively solve this problem. At the initial commission,

the system can automatically select the most appropriate ESP value according to the actual duct resistance, between 50Pa and 250Pa.



Cold Wind Limit Setting

Thanks to the Cold Wind Limit Setting function, the lowest limit of the outlet air temperature can be set in the range of 10~16°C, which can ensure that the actual outlet temperature will never be lower than the set value, and avoid uncomfortable feeling caused by the direct blowing of cold wind.



Ceiling Ducted Type

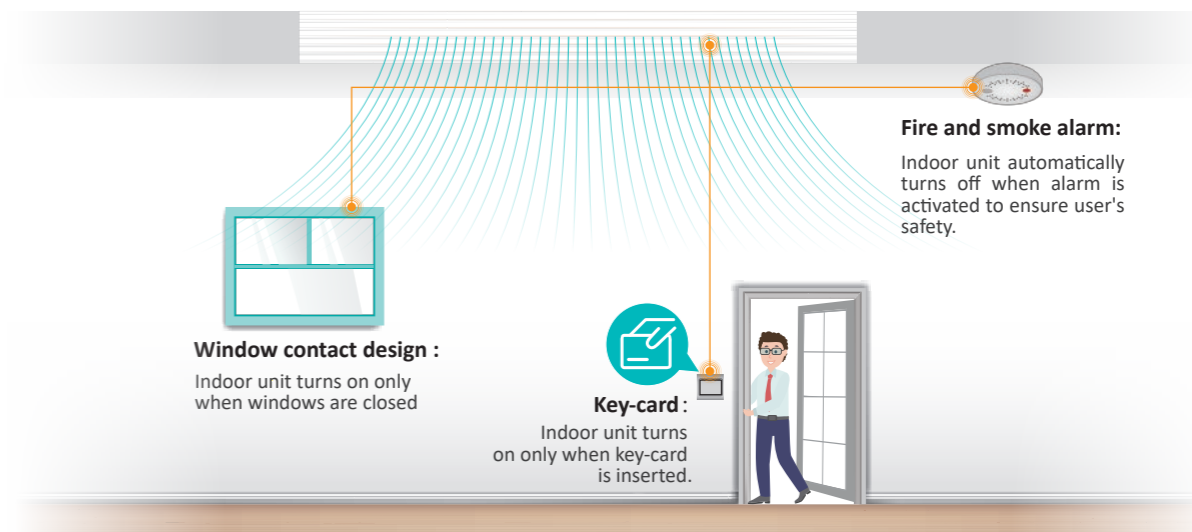
New improved bendable filters

Standard filters that comes with Low Height Ducted Units are now improved to be bendable by improving the material's malleability to improve installation flexibility in narrow ceiling height and restricted spaces.



Various device connection options

Third party devices and sensors to control the power supply is possible with dry contact connections to the indoor unit. Devices like Hotel room key card, window contact and fire alarms can be connected simultaneously.



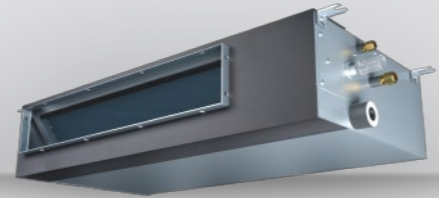
Filter options for different requirements

Filter model	Descriptions
HFB-96LFGDE	Dedicated filter box
HF-96HFGDE	High-efficiency filter with filter level ePM10 55%
HF-96LFGDE	Coarse filter
HF-224L-FE	Coarse filter
HF-280L-FE	Coarse filter
KW-PP1Q, KW-PP2Q, KW-PP3Q#E, KW-PP4Q#E	Coarse filter

Note:
When using HF-96HFGDE and HF-96LFGDE, the dedicated filter box is also required. The convenient coarse filter HF-280L-FE can be used separately.
When using the high-efficiency filter, it is recommended to install the coarse filter together.
The details of available models for these filters can be found in the accessories tables at the page 189.

Ceiling Ducted Type

Ceiling Ducted Type



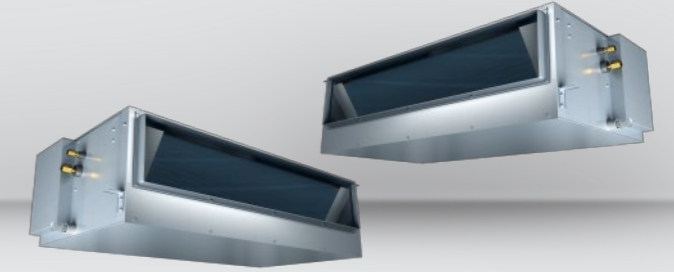
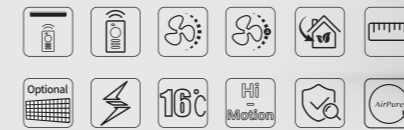
Model		AVE-05HJFDL	AVE-07HJFDL	AVE-09HJFDL	AVE-12HJFDL	AVE-15HJFDL	AVE-17HJFDL	AVE-19HJFDL	AVE-22HJFDL	AVE-24HJFDL		
Power Supply		AC 1Φ, 220V~240V/50Hz/60Hz										
Capacity	Cooling	kW	1.7	2.2	2.8	3.6	4.5	5.0	5.6	6.3	7.1	
		Btu/h	5,800	7,500	9,600	12,300	15,300	17,100	19,100	21,500	24,200	
Capacity	Heating	kW	1.9	2.5	3.2	4.0	5.0	5.6	6.3	7.1	8.0	
		Btu/h	6,500	8,500	11,300	13,600	17,100	19,100	21,500	24,200	27,300	
Power Input	Cooling	W	30	30	50	50	60	60	60	90	90	
		Heating	W	30	30	50	50	60	60	60	90	90
Sound Pressure	dB(A)		28/27/26/	28/27/26/	35/32/32/	35/32/32/	35/32/32/	35/32/32/	35/32/30/	38/36/35/	38/36/35/	
			24/23/21	24/23/21	30/26/23	30/26/23	30/26/23	30/26/23	28/25/23	33/31/24	33/31/24	
Airflow Rate	m³/min		7.0/6.5/6.1/	7.0/6.5/6.1/	9.0/8.1/7.3/	9.0/8.1/7.3/	12/10.8/9.4/	12/10.8/9.4/	13.5/12.5/11.2/	18/16.1/14.3/	18/16.1/14.3/	
			5.7/5.3/4.8	5.7/5.3/4.8	6.7/5.9/5.2	6.7/5.9/5.2	8.1/6.8/5.5	8.1/6.8/5.5	10.0/8.8/7.7	12.3/10.5/8.7	12.3/10.5/8.7	
External Static Pressure	Pa	10(10-30-50)	10(10-30-50)	10(10-30-50)	10(10-30-50)	10(10-30-50)	10(10-30-50)	10(10-30-50)	10(10-30-50)	10(10-30-50)		
Piping	Connection Type	-	Flare-nut Connection(with Flare Nuts)								Brazing	
	Liquid	mm	Φ 6.35	Φ 6.35	Φ 6.35	Φ 6.35	Φ 6.35	Φ 6.35	Φ 6.35	Φ 6.35	Φ 9.53	Φ 9.53
		inch	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	3/8	3/8
	Gas	mm	Φ 12.70	Φ 12.70	Φ 12.70	Φ 12.70	Φ 12.70	Φ 12.70	Φ 15.88	Φ 15.88	Φ 15.88	Φ 15.88
		inch	1/2	1/2	1/2	1/2	1/2	1/2	5/8	5/8	5/8	5/8
	Condensate Drain	mm	I.D.32									
Weight	Net Weight	kg	16	16	17	17	20	20	24	24	24	
	Gross Weight	kg	19	19	20	20	24	24	29	29	29	
Dimensions	External	H mm	192	192	192	192	192	192	192	192	192	
		W mm	700	700	700	700	910	910	1180	1180	1180	
		D mm	447	447	447	447	447	447	447	447	447	

NOTES:

- The nominal cooling capacity and heating capacity are based on the following conditions:
Cooling Operation Conditions
Indoor Air Inlet Temperature: 27°C DB(80°F DB), 19.0°C WB(66.2°F WB)
Outdoor Air Inlet Temperature: 35°C DB(95°F DB)
Piping Length: 7.5 Meters Piping Lift: 0 Meter
Heating Operation Conditions
Indoor Air Inlet Temperature: 20°C DB(68°F DB).
Outdoor Air Inlet Temperature: 7°C DB(45°F DB), 6°C WB(43°F WB)
- The sound pressure level is based on the following conditions: 1.5m beneath the unit. The above data was measured in an anechoic chamber so that the reflected sound should be taken into consideration in the field.

Ceiling Ducted Type

Ceiling Ducted Type (High Pressure)



Model		AVD-07 UXCSAH	AVD-09 UXCSAH	AVD-12 UXCSAH	AVD-14 UXCSAH	AVD-17 UXCSBH	AVD-18 UXCSBH	AVD-22 UXCSBH	AVD-24 UXCSBH	AVD-27 UXCSCH	AVD-30 UXCSCH	AVD-38 UXCSCH	AVD-48 UXCSDH	AVD-54 UXCSDH	AVD-76 UX6SEH*1	AVD-96 UX6SFH*1	
Power Supply		AC 1Φ, 220V~240V/50Hz														AC 3Φ, 380-415V/50Hz	
Capacity	Cooling	kW	2.2	2.8	3.6	4.3	5.0	5.6	6.3	7.1	8.4	9.0	11.2	14.2	16.0	22.4	28.0
		Btu/h	7,500	9,600	12,300	14,700	17,100	19,100	21,500	24,200	28,700	30,700	38,200	48,500	54,600	76,500	95,600
Capacity	Heating	kW	2.8	3.3	4.2	4.9	5.6	6.5	7.5	8.5	9.6	10.0	13.0	16.3	18.0	25.0	31.5
		Btu/h	9,600	11,300	14,300	16,700	19,100	22,200	25,600	29,000	32,800	34,100	44,400	55,600	61,400	85,300	107,500
Power Input	Cooling	W	110	110	150	150	150	150	150	190	300	300	300	430	430	1030	1280
		Heating	W	110	110	150	150	150	150	150	190	300	300	300	430	430	1030
Sound Pressure	dB(A)	33/31/29	33/31/29	33/31/29	33/31/29	34/32/30	34/32/30	36/34/32	36/34/32	41/39/34	41/39/34	43/40/36	44/41/36	43/40/37	52	54	
Airflow Rate	m³/min	8.0/7.0/6.0	8.0/7.0/6.0	13.0/11.0/9.0	13.0/11.0/9.0	15.0/13.0/11.0	15.0/13.0/11.0	16.0/14.0/12.0	16.0/14.0/12.0	26.7/23.3/19.1	26.7/23.3/19.1	26.7/23.3/19.1	35.0/29.1/24.1	35.8/30.0/25.8	58.0	77.5	
External Static Pressure	Pa	50(80)	50(80)	50(80)	50(80)	50(80)	50(80)	50(80)	50(80)	120(90)	120(90)	120(90)	120(90)	120(90)	220	220	
Piping	Connection Type	-	Flare-nut Connection(with Flare Nuts)													Brazing	
	Liquid	mm	Φ 6.35	Φ 6.35	Φ 6.35	Φ 6.35	Φ 6.35	Φ 6.35	Φ 6.35	Φ 9.53	Φ 9.53	Φ 9.53	Φ 9.53	Φ 9.53	Φ 9.53	Φ 9.53	Φ 9.53
		inch	1/4	1/4	1/4	1/4	1/4	1/4	1/4	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
	Gas	mm	Φ 12.7	Φ 12.7	Φ 12.7	Φ 12.7	Φ 15.88	Φ 15.88	Φ 15.88	Φ 15.88	Φ 15.88	Φ 15.88	Φ 15.88	Φ 15.88	Φ 15.88	Φ 19.05	Φ 22.2
		inch	1/2	1/2	1/2	1/2	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	3/4	7/8
	Condensate Drain	mm	I.D.32														
Weight	Net Weight	kg	25	25	25	25	34	34	34	34	44	44	44	56	56	94	106
	Gross Weight	kg	33	33	33	33	41	41	41	41	54	54	54	68	68	106	111
Dimensions	External	H mm	270	270	270	270	270	270	270	350	350	350	350	350	470	470	
		W mm	650+75	650+75	650+75	650+75	900+75	900+75	900+75	900+75	900+75	900+75	900+75	1300+75	1300+75	1060	1250
		D mm	720	720	720	720	720	720	720	720	800	800	800	800	800	1120	1120

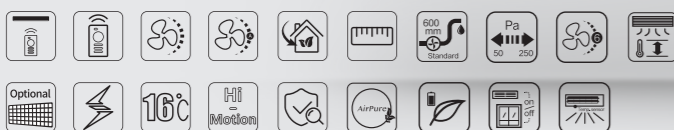
NOTES:

- The nominal cooling capacity and heating capacity are based on the following conditions:
Cooling Operation Conditions
Indoor Air Inlet Temperature: 27°C DB(80°F DB), 19.0°C WB(66.2°F WB)
Outdoor Air Inlet Temperature: 35°C DB(95°F DB)
Piping Length: 7.5 Meters Piping Lift: 0 Meter
Heating Operation Conditions
Indoor Air Inlet Temperature: 20°C DB(68°F DB).
Outdoor Air Inlet Temperature: 7°C DB(45°F DB), 6°C WB(43°F WB)
- The sound pressure level is based on the following conditions: 1.5m beneath the unit. With discharge duct (2.0m) and return duct(1.0m) The above data was measured in an anechoic chamber so that the reflected sound should be taken into consideration in the field.
- When bottom air inlet is adopted, the sound pressure will increase according to factors such as installation mode and the room structure.
*1: AC 3Φ, 380-415V/50Hz

Ceiling Ducted Type

Dimensional Drawings

Ceiling Ducted Type NEW



Model	AVD-76HJFH		AVD-96HJFH	
Power Supply	AC 1Φ, 220V~240V/50Hz/60Hz			
Capacity*1)	Cooling	kW	22.4	28.0
		Btu/h	76,500	95,600
Heating		kW	25.0	31.5
		Btu/h	85,300	107,500
Power Input	Cooling	kW	0.61	0.83
	Heating	kW	0.61	0.83
Sound Pressure Level *2)		dB	49/48/47/ 46/45/44	53/52/50/ 49/47/45
	Airflow Rate	m ³ /min	57/54/52/ 51/49/48	72/68/65/ 61/58/50
External Static Pressure*3)	Pa	150(50~250)		150(50~250)
Connection Type	- Brazing			
Piping	Liquid	mm	Φ9.53	Φ9.53
		inch	(3/8)	(3/8)
	Gas*4)	mm	Φ19.05	Φ22.2
		inch	3/4	7/8
	Condensate Drain	-	VP25	
Weight	Net Weight	kg	104	104
	Gross Weight	kg	125	125
Dimensions	External	H mm	470	470
		W mm	1250	1250
		D mm	1120	1120

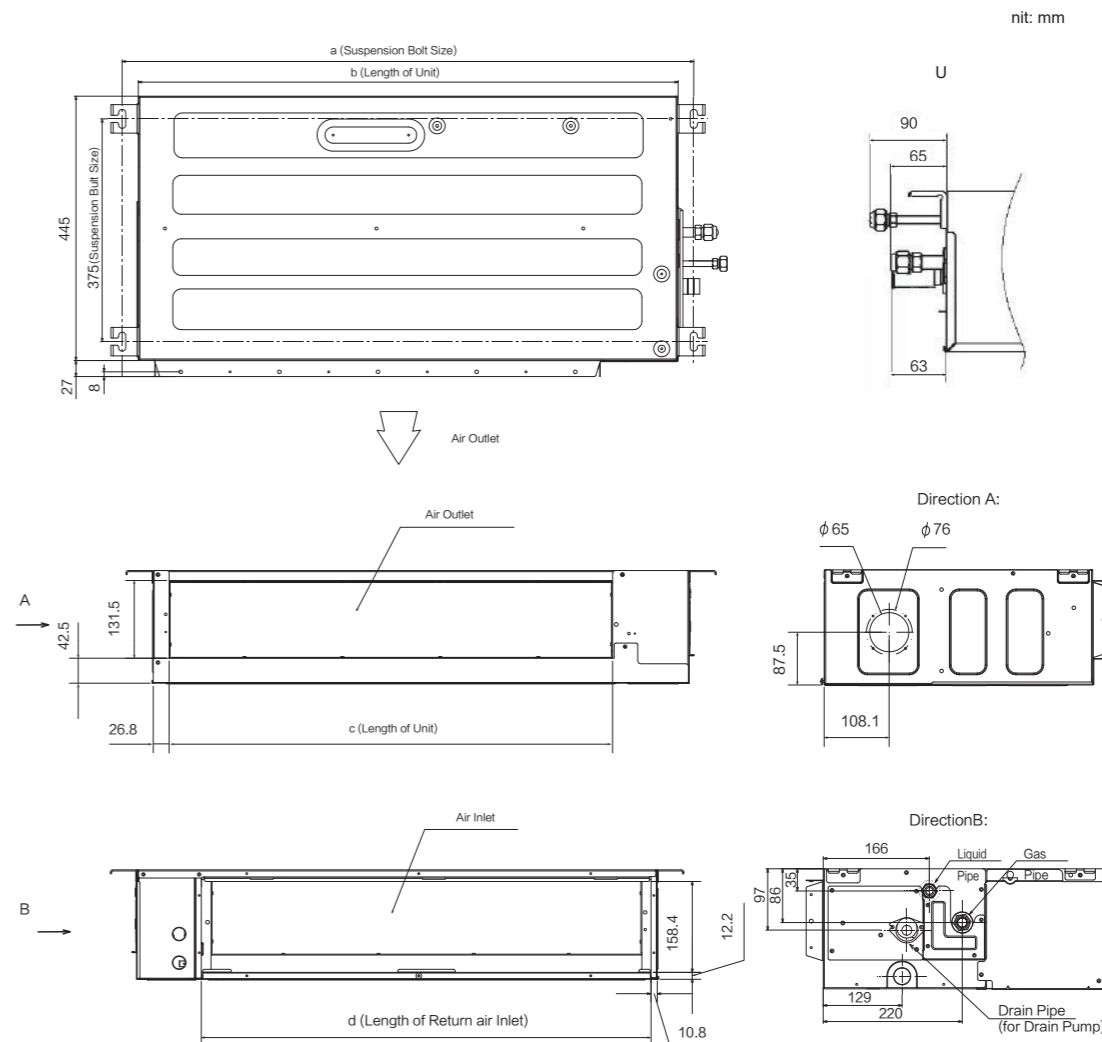
NOTES:

1. The nominal cooling capacity and heating capacity are based on the following conditions:
 Cooling Operation Conditions
 Indoor Air Inlet Temperature: 27°C DB(80°F DB), 19.0°C WB(66.2°F WB)
 Outdoor Air Inlet Temperature: 35°C DB(95°F DB)
 Piping Length: 7.5 Meters Piping Lift: 0 Meter
 Heating Operation Conditions
 Indoor Air Inlet Temperature: 20°C DB(68°F DB)
 Outdoor Air Inlet Temperature: 7°C DB(45°F DB), 6°C WB(43°F WB)

2. The sound pressure level is based on following conditions.
 1.5 Meter Beneath the Unit.
 With Discharge Duct (2.0m) and Return Duct (1.0m).
 Voltage of the power source for the indoor fan motor is 220V.
 In case of the power source of 240V, the sound pressure level increases by about 1 dB.
 The above data was measured in an anechoic chamber so that reflected sound should.
 The noise value of AVD-**HJFH is 150Pa corresponding value.
 3. The data for external pressure *3) indicates "Standard Pressure Setting values when a filter is not used."
 4. The size of AVD-76* series gas pipe is Φ22.2mm when leaving the factory, and the diameter can be changed to 19.05mm after welding the adapter pipe.

Ceiling Ducted Type

AVE-05~24HJFDL



unit:mm

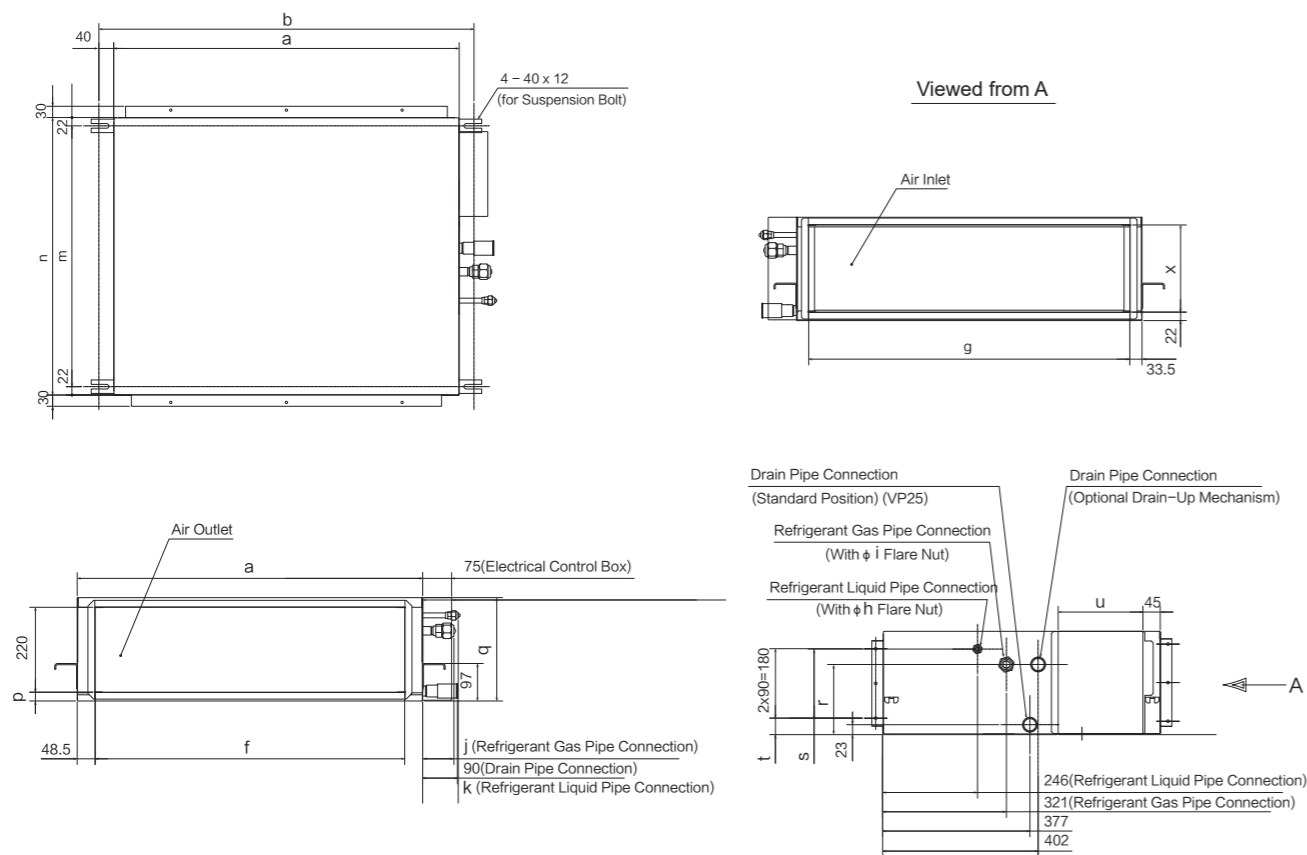
Model	a	b	c	d
05~12	752	700	537	573
15~17	962	910	748	784
19~24	1232	1180	1018	1053

Dimensional Drawings

Ceiling Ducted Type (High Pressure)

AVD- 07~14UXCSAH AVD- 17~24UXCSBH AVD- 27~38UXCSCH
 AVD- 48~54UXCSDH

Unit:mm



Model	a	b	f	g	h	i	j	k	l
07-14	650	730	553	583	6.35	12.7	70	92	10
17/18	900	980	803	833	15.88	6.35	77	92	12
22/24	900	980	803	833	9.53	15.88	77	95	12
27/30	900	980	803	833	9.53	15.88	78	95	12
38	900	980	803	833	9.53	15.88	81	95	12
48/54	1300	1380	1203	1233	9.53	15.88	81	95	14

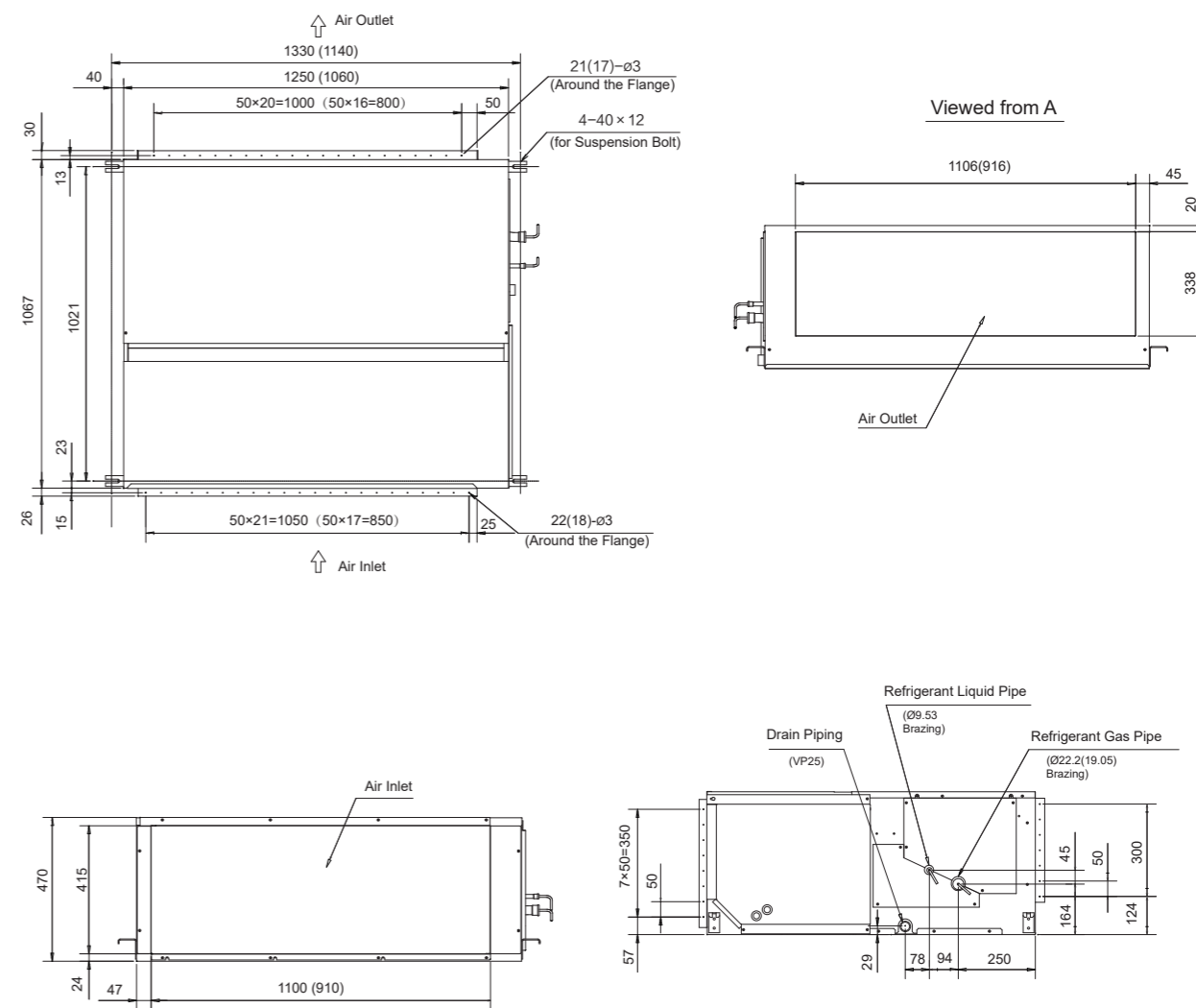
Model	m	n	p	q	r	s	t	u	x
07-24	676	720	23	270	182	222	43	220	226
27-54	756	800	103	350	204	244	123	300	306

Dimensional Drawings

Ceiling Ducted Type (High Pressure)

AVD- 76UX6SEH AVD- 96UX6SFH

Unit:mm

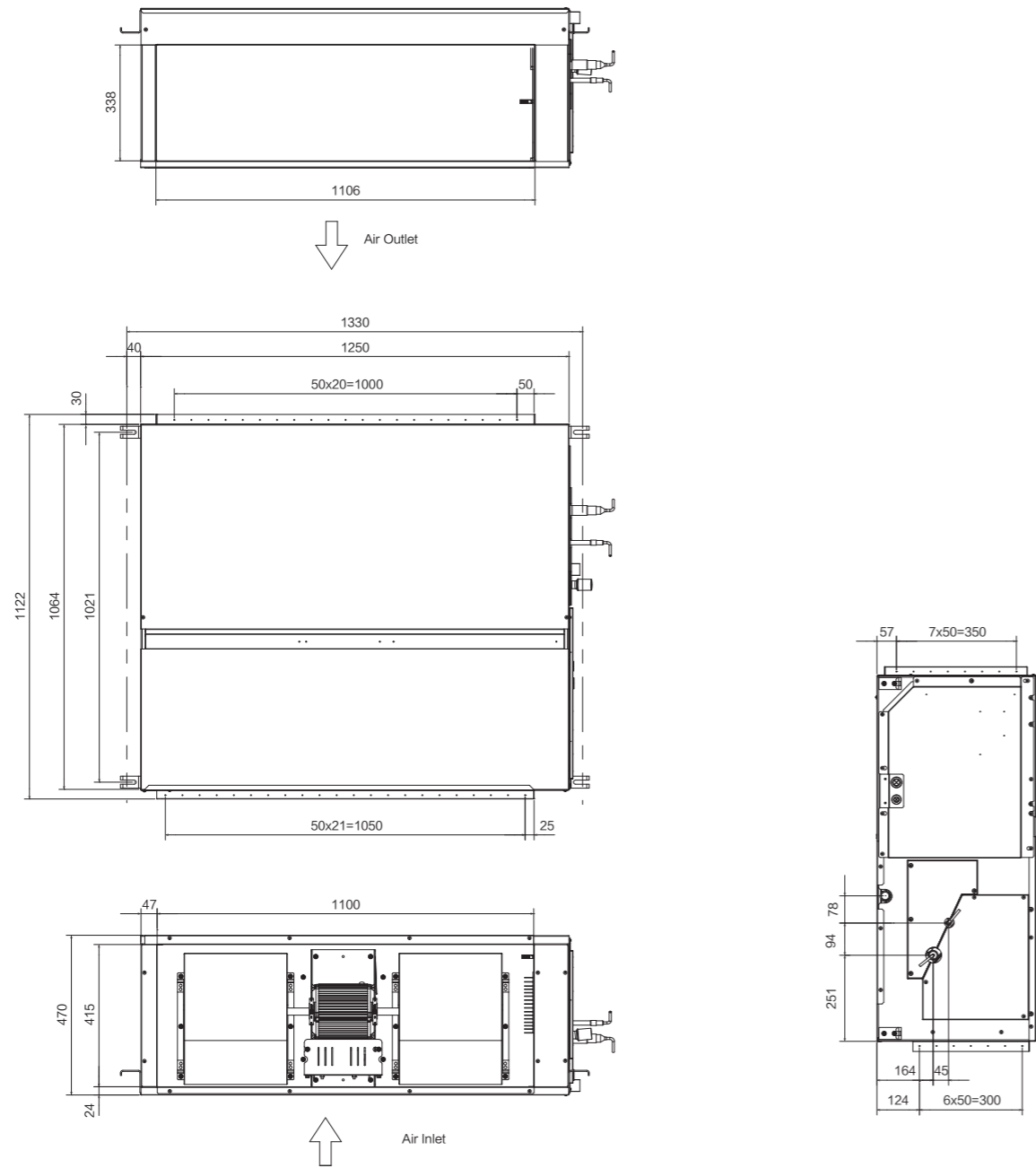


Dimensional Drawings

Ceiling Ducted Unit(New)

AVD- 76~96HJFH

Unit:mm



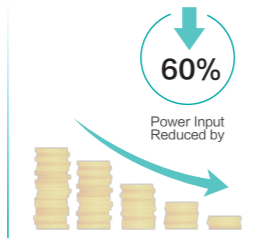
Ceiling Ducted Type



Wall Mounted Type

High-efficiency DC Fan Motor

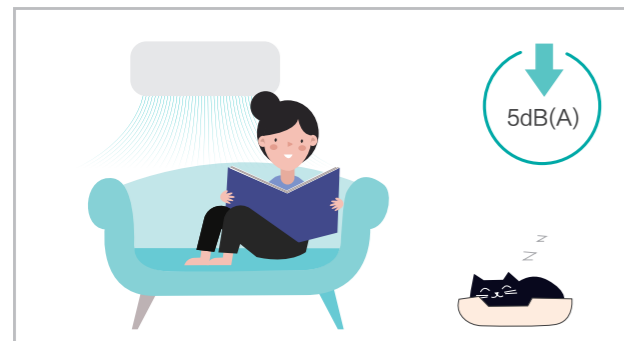
The power consumption of the unit with DC fan motor can be reduced greatly in comparison to the old AC product. The minimum power consumption is only 20W, which is reduced by 60%. It can achieve low-cost operation.



Optimal Noise Control

The low-noise DC fan motor and the enhanced vibration pad on the distribution pipe and EEV will ensure a quieter operation. Besides, with Hisense special smart noise reduction technology, the operation noise can also be decreased effectively. During the high airflow operation, maximum 5dB(A)* is decreased compare with the previous generation. What's more, sleep mode and quiet mode are also available for users to further enjoy a quiet environment.

Take AVS-12 as an example



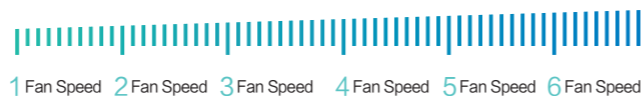
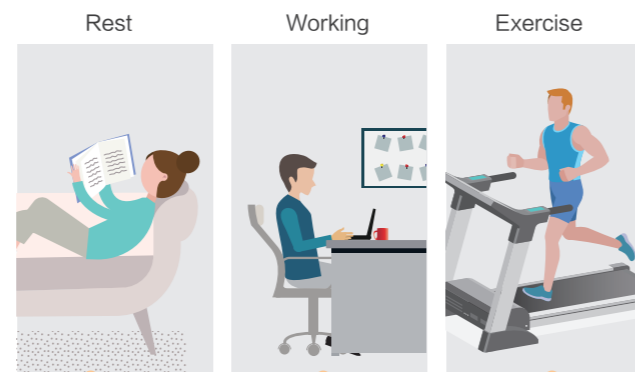
AirPure Embedded

AirPure kit is embedded in the unit, which can purify the indoor air, including anti-bacteria and anti-virus, formaldehyde removal, anti-mold, odor removal, PM2.5 purification and anti-allergen. When activate the "Health" icon in the controller, the AirPure will start to work, supplying us clean and health indoor environment.



6 Fan Speed

6 indoor fan speeds are available to meet the needs of different indoor conditions.



Easy Installation

Gas and Liquid pipes can be connected when the air conditioner is hung on the wall with unique easy installation structure, which is convenient and efficiency, improving the installation efficiency up to 35%.



Refrigerant and condensated water outlet direction can be left, right or rear as the installation situation requires.



Wall Mounted Type



Model		AVS-05HJFDJD	AVS-07HJFDJD	AVS-09HJFDJD	AVS-12HJFDJD	AVS-15HJFDJD	AVS-18HJFDJD	AVS-24HJFDJD	AVS-28HJFDJD		
Power Supply		AC 1Φ, 220V~240V/50Hz/60Hz									
Capacity	Cooling	kW	1.7	2.2	2.8	3.6	4.5	5.6	7.1	8.4	
		Btu/h	5,800	7,500	9,600	12,300	15,400	19,100	24,200	28,700	
Capacity	Heating	kW	2.0	2.5	3.3	4.0	5.0	6.3	8.0	8.4	
		Btu/h	6,500	8,500	11,300	13,700	17,100	21,500	27,300	28,700	
Power Input	Cooling	W	20	20	20	30	20	30	50	80	
	Heating	W	20	20	20	30	30	30	70	80	
Sound Pressure		dB(A)	33/32/32/ 30/30/28	36/35/33/ 32/30/28	36/35/33/ 32/30/28	38/35/33/ 32/30/28	38/37/36/ 32/31/29	40/38/36/ 35/33/31	45/42/41/ 38/35/31	50/48/45/ 41/36/33	
	Airflow Rate	m ³ /h	520/500/490/ 450/430/420	590/550/520/ 490/450/420	590/550/520/ 490/450/420	620/550/520/ 490/450/420	690/660/620/ 540/520/480	970/900/850/ 800/730/690	1200/1080/1020/ 900/800/700	1400/1320/1200/ 1020/850/730	
Panel Colour		White									
Piping	Connection Type		Flare Nuts								
	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.53	Φ9.53	Φ9.53	
		inch	1/4	1/4	1/4	1/4	1/4	3/8	3/8	3/8	
	Gas	mm	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ12.70	Φ15.88	Φ15.88	Φ15.88	
inch		3/8	3/8	3/8	3/8	1/2	5/8	5/8	5/8		
Drain Pipe	mm	O.D. 18									
Weight	Net Weight	kg	9.0	9.0	9.0	9.0	12.5	14.0	14.0	14.0	
	Gross Weight	kg	12.5	12.5	12.5	12.5	17.0	18.5	18.5	18.5	
Dimensions	External	H	mm	270	270	270	270	315	315	315	315
		W	mm	815	815	815	815	915	1085	1085	1085
		D	mm	203	203	203	203	230	230	230	230
Wireless Remote Controller (Standard)		HYE-W01									

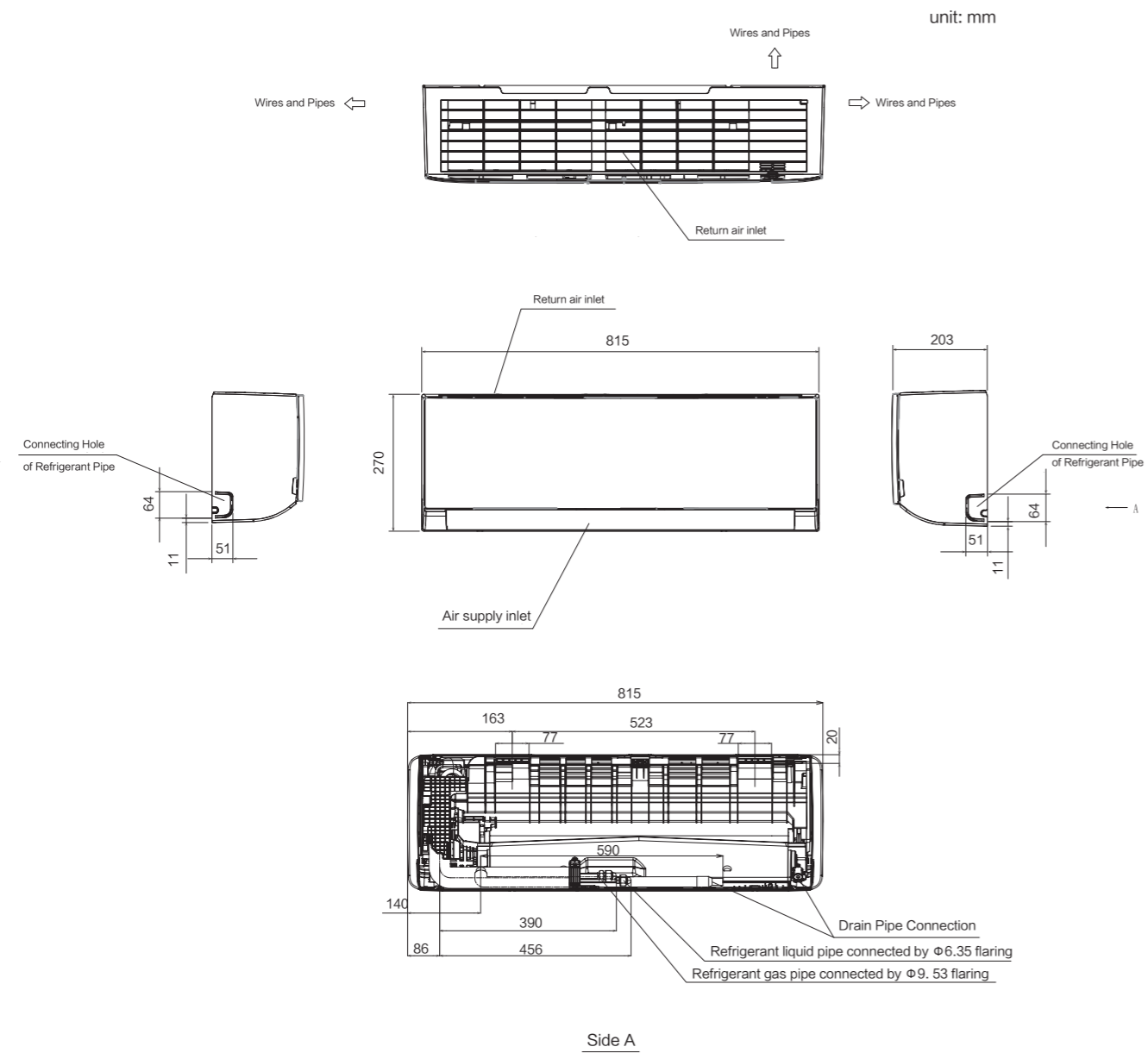
NOTES:

- The rated capacity is based on the following conditions:
Cooling conditions: indoor air inlet temperature: 27°C DB, 19°C WB, outdoor air inlet temperature: 35°C DB, pipe length: 7.5m, pipe height difference: 0m
Heating conditions: indoor air inlet temperature: 20°C DB, outdoor air inlet temperature: 7°C DB, 6°C WB, pipe length: 7.5m, pipe height difference: 0m
- The above noise values are measured in an anechoic chamber so that reflected sound should be taken into consideration during actual operation.
The above noise values are measured under the fan mode operation, and measured at a point 1m in front of the unit and 0.8m below the unit.

Dimensional Drawings

Wall Mounted Type (AVS)

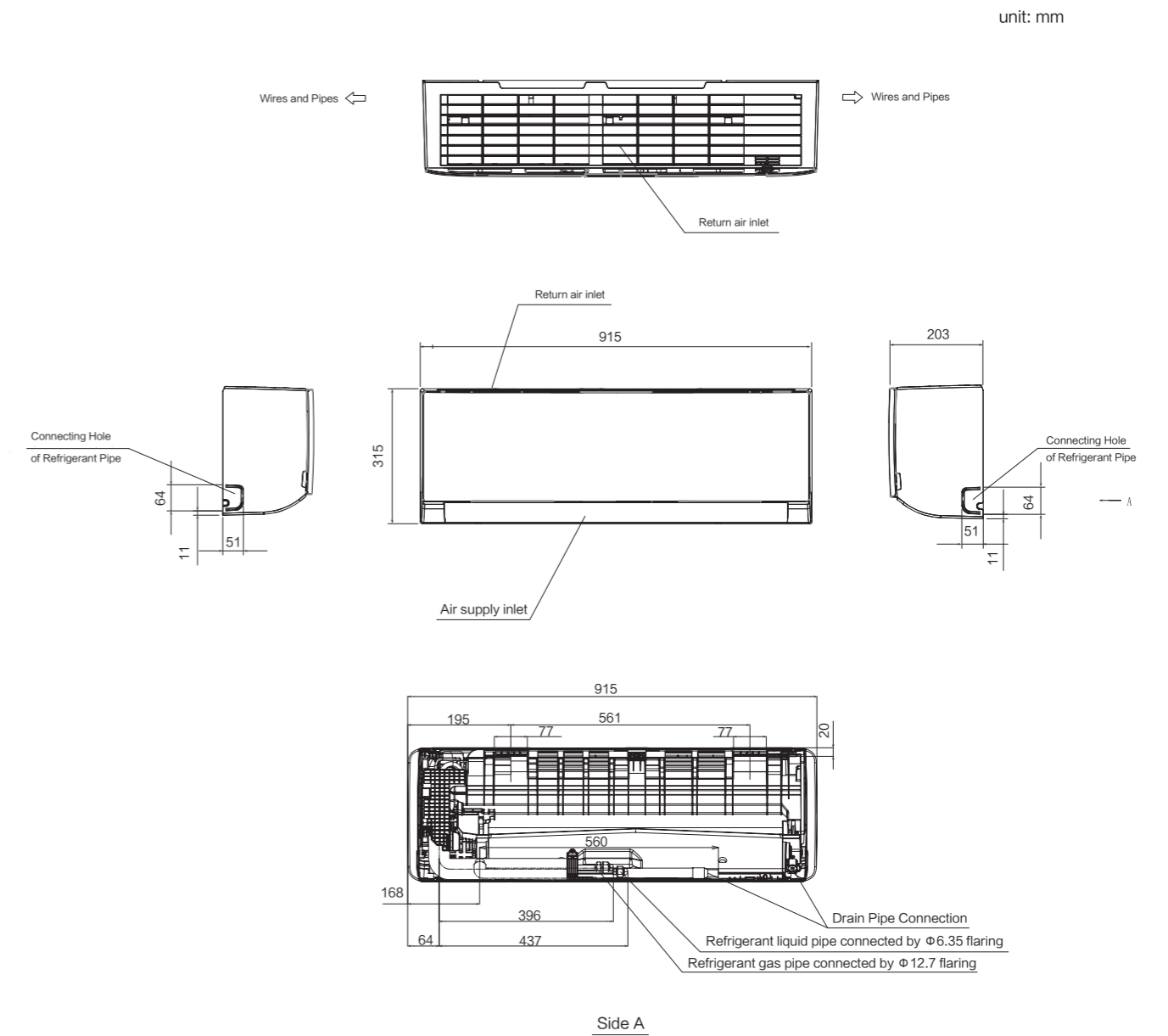
AVS-05~12HJFDJD



Dimensional Drawings

Wall Mounted Type (AVS)

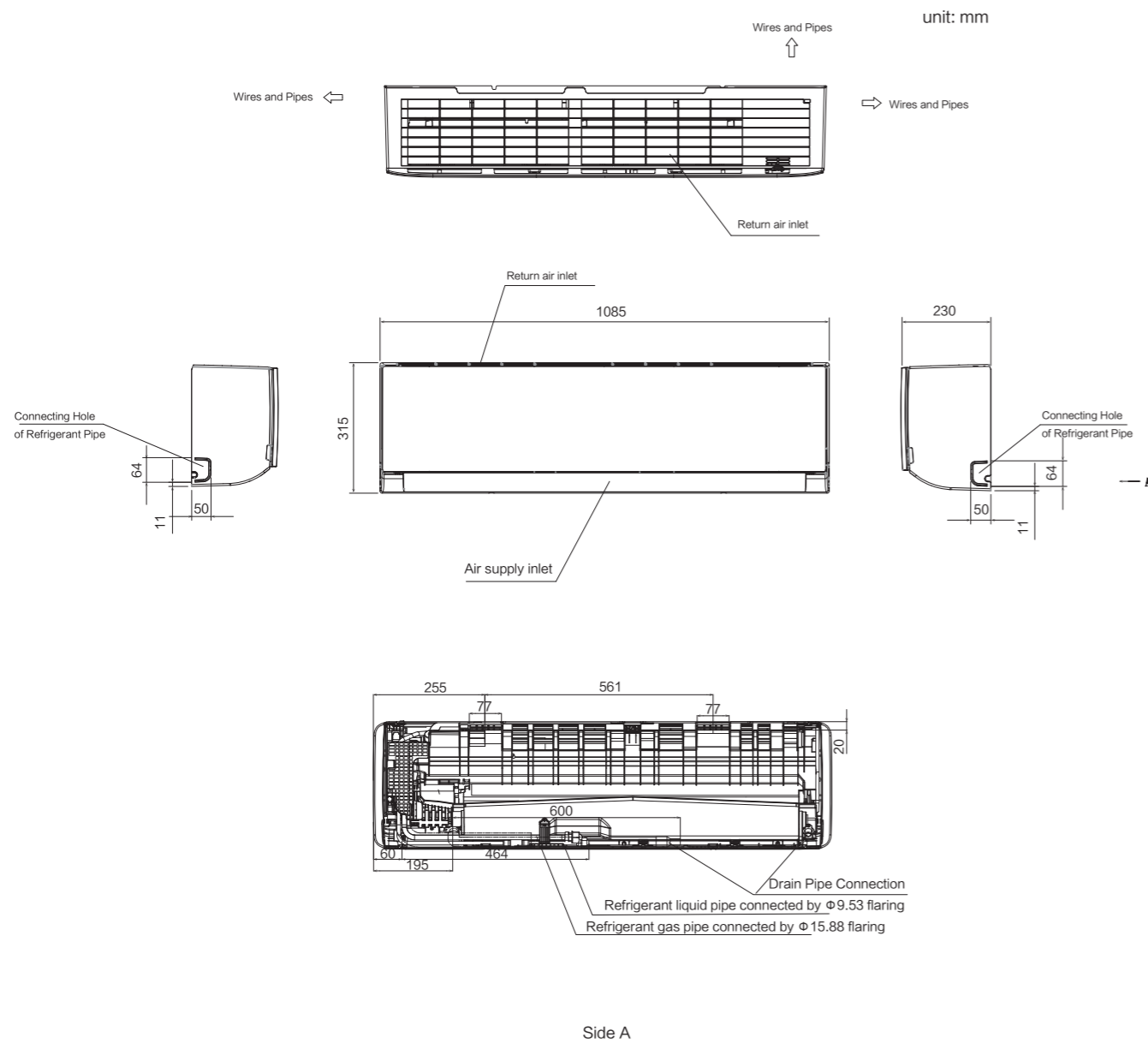
AVS-15HJFDJD



Dimensional Drawings

Wall Mounted Type (AVS)

AVS-18~28HJFDJD



Side A

Ceiling & Floor Type

Sleek smooth design

Shiny White cover panel of the unit has a streamlined elegant aesthetic. The bolts and nuts, which used to secure the unit onto walls or ceiling, are designed to be concealed in the unit for a sleek room interior look.



Flexible installation

The unit can be installed to be standing on floors or hanging on ceilings. Whereby interior walls maximized to display items, can hang the unit on the ceiling. Very significant effect on space saving.

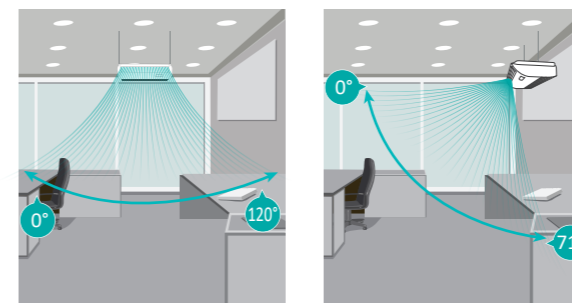


Hanging on the wall

Standing on the floor

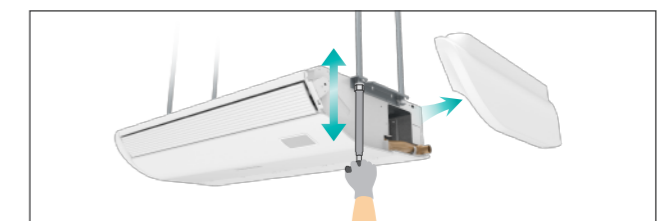
Widely air supply

Louvers consist of horizontal and vertical flaps to cover larger coverage area to the edges of any rooms. Wider opening angle from up to 120° for vertical louvers and up to 71° for horizontal louvers supplies air further and lower down to floor needed during heating modes.



Convenient installation and maintenance

Adjust the ceiling or wall mounting height by just opening the side panels without the need to access the internal parts. Service manholes are unnecessary due to the strategic repositioning of piping connections and electrical box behind the air return panel, service and clean the filter all in the same compartment.



Ceiling & Floor Type

Ceiling & Floor Type



Model		AVV-17URSCA	AVV-18URSCA	AVV-22URSCA	AVV-24URSCA	AVV-27URSCB	AVV-30URSCB	AVV-38URSCB	AVV-48URSCC		
Power Supply		AC 1Φ,220V~240V/50Hz/60Hz									
Capacity	Cooling	kW	5.0	5.6	6.3	7.1	8.4	9.0	11.2	14.2	
		Btu/h	17,100	19,100	21,500	24,200	28,700	30,700	38,200	48,500	
Capacity	Heating	kW	5.6	6.5	7.5	8.5	9.6	10.0	13.0	16.3	
		Btu/h	19,100	22,200	25,600	29,000	32,800	34,100	44,400	55,600	
Power Input	Cooling	W	40	40	70	70	70	80	130	160	
	Heating	W	40	40	70	70	70	80	130	160	
Sound Pressure	Ceiling	dB(A)	39/35/30	39/35/30	45/41/37	45/41/37	43/39/34	45/40/36	51/46/40	50/46/42	
	Floor	dB(A)	43/38/35	43/38/35	48/44/40	48/44/40	46/41/37	48/43/39	54/49/43	55/50/46	
Airflow Rate	m³/min	13.0/11.0/9.0	13.0/11.0/9.0	16.1/14.0/11.3	16.1/14.0/11.3	18.2/15.2/12.2	19.4/16.3/13.3	24.8/20.5/16.3	33.0/28.0/23.0		
Speed-up Setting HH1	m³/min	14.2	14.2	17.8	17.8	19.8	21.2	27.0	36.0		
Speed-up Setting HH2	m³/min	16.0	16.0	20.0	20.0	22.3	23.5	29.2	37.4		
Panel Colour	-	-	-	-	-	-	-	-	-		
Piping	Connection Type	-	Flare-nut Connection(with Flare Nuts)								
	Liquid	mm	Φ 6.35	Φ 6.35	Φ 9.53	Φ 9.53	Φ 9.53	Φ 9.53	Φ 9.53	Φ 9.53	
Piping		inch	1/4	1/4	3/8	3/8	3/8	3/8	3/8	3/8	
	Gas	mm	Φ 15.88	Φ 15.88	Φ 15.88	Φ 15.88	Φ 15.88	Φ 15.88	Φ 15.88	Φ 15.88	
Piping		inch	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	
	Condensate Drain	mm	I.D.32								
Weight	Net Weight	kg	31	31	32	32	39	40	41	47	
	Gross Weight	kg	38	38	39	39	46	47	48	56	
Dimensions	External	H mm	230	230	230	230	230	230	230	230	
		W mm	990	990	990	990	1285	1285	1285	1580	
		D mm	680	680	680	680	680	680	680	680	

NOTES:

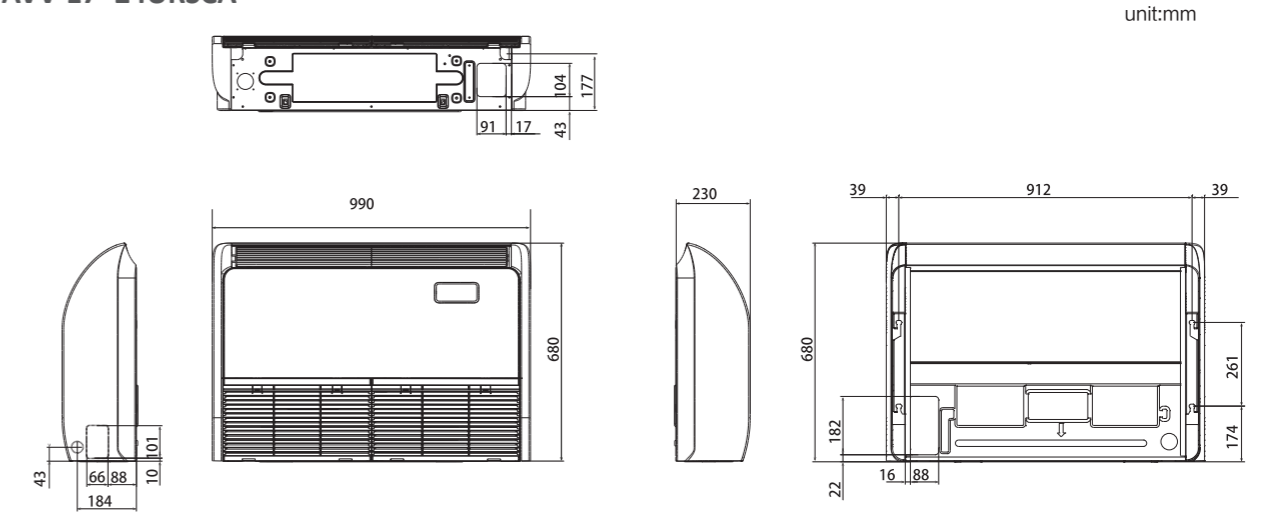
1. The nominal cooling capacity and heating capacity are based on the following conditions:
 Cooling Operation Conditions
 Indoor Air Inlet Temperature: 27°C DB(80°F DB), 19.0°C WB(66.2°F WB)
 Outdoor Air Inlet Temperature: 35°C DB(95°F DB)
 Piping Length: 7.5 Meters Piping Lift: 0 Meter
 Heating Operation Conditions
 Indoor Air Inlet Temperature: 20°C DB(68°F DB)
 Outdoor Air Inlet Temperature: 7°C DB(45°F DB), 6°C WB(43°F WB)

2. The sound pressure level is based on the following conditions:
 1.0m beneath the unit, 1.0m from Discharge Grille.
 The above data was measured in an anechoic chamber so that the reflected sound should be taken into consideration in the field. When bottom air inlet is adopted, sound pressure will increase according to factors such as installation mode and the room structure.

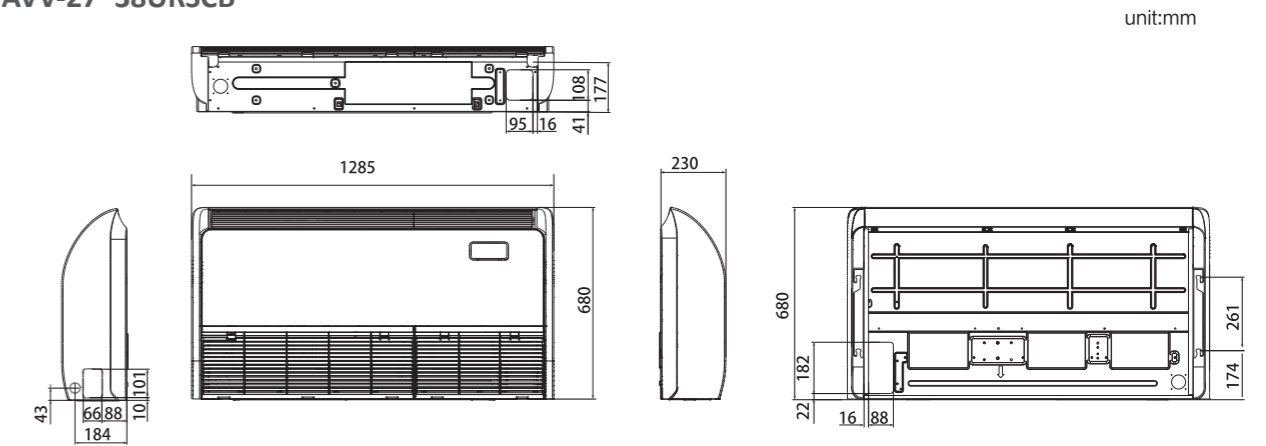
Dimensional Drawings

Ceiling & Floor Type(AVV)

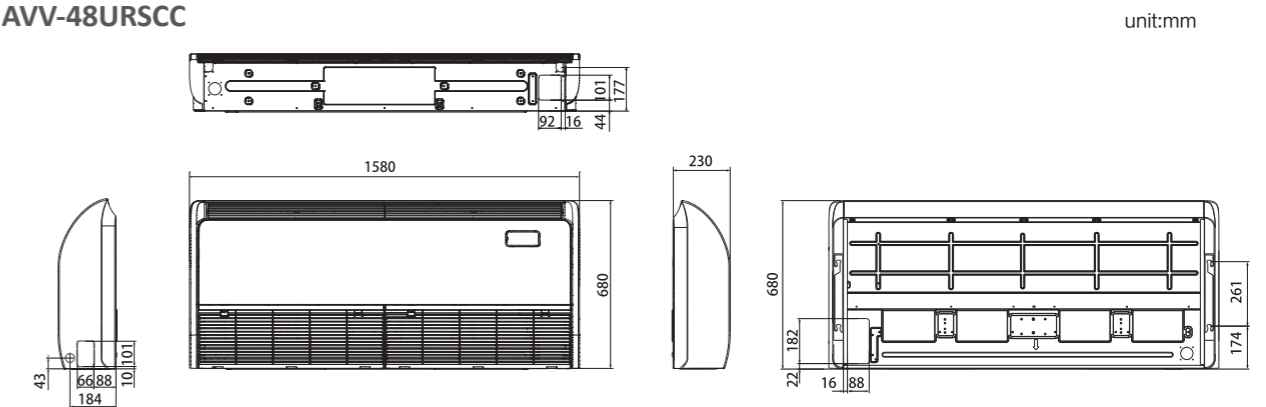
AVV-17~24URSCA



AVV-27~38URSCB



AVV-48URSCC



Floor Concealed Type

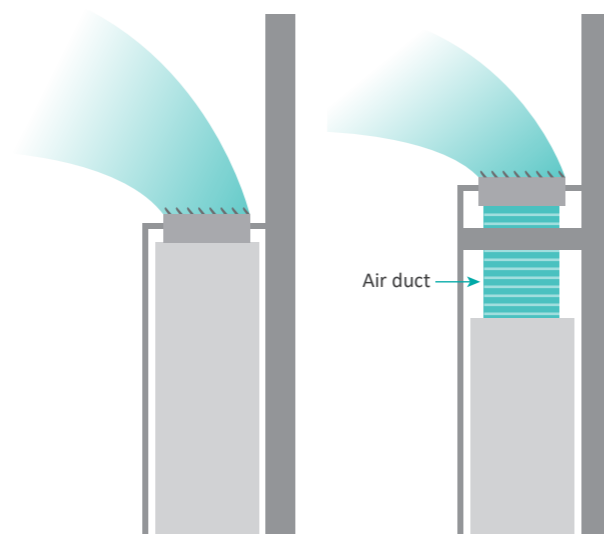
Space saving

Floor concealed units are designed to be installed on floors completely concealed into the walls. It's designed to be slim and compact with only height of 620mm to be hidden under half-heighted windows.



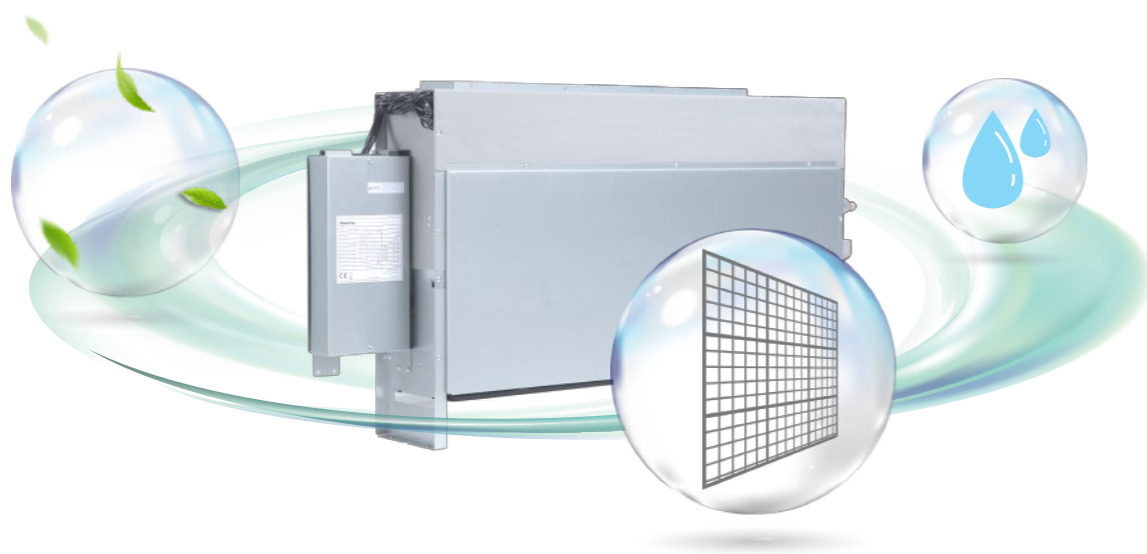
Flexible installation

Users can choose the air duct to increase the air supply distance in order to achieve the completely concealed installation.



Connectable devices

The accessories like air return filters, fresh air adapter and humidity sensors are all connectable to the concealed floor unit.



Floor Concealed Type

Floor Concealed Type



Model		AVH-09UXCSAA	AVH-14UXCSAA	AVH-18UXCSBA	AVH-24UXCSBA		
Power Supply		AC 1Φ, 220V~240V/50Hz					
Model		AVH-09UX2SAA	AVH-14UX2SAA	AVH-18UX2SBA	AVH-24UX2SBA		
Power Supply		AC 1Φ, 220V/60Hz					
Capacity	Cooling	kW	2.8	4.3	5.6	7.1	
		Btu/h	9,600	14,700	19,100	24,200	
Capacity	Heating	kW	3.3	4.9	6.5	8.5	
		Btu/h	11,300	16,700	22,200	29,000	
Power Input	Cooling	W	50	80	90	120	
	Heating	W	50	80	90	120	
Sound Pressure		dB(A)	34/31/27	40/36/34	41/36/32	44/40/36	
Airflow Rate		m ³ /min	8.5/7.5/6.3	10.3/9.0/8.0	14.8/12.3/10.5	16.3/13.8/11.8	
Piping	Connection Type	-	Flare-nut Connection(with Flare Nuts)				
	Liquid	mm	Φ 6.35	Φ 6.35	Φ 6.35	Φ 9.53	
		inch	1/4	1/4	1/4	3/8	
	Gas	mm	Φ 12.7	Φ 12.7	Φ 15.88	Φ 15.88	
		inch	1/2	1/2	5/8	5/8	
	Condensate Drain	mm	I.D.32				
Weight	Net Weight	kg	18	22	26	27	
	Gross Weight	kg	30	31	37	37	
Dimensions	External	H	mm	620	620	620	620
		W	mm	948+139	948+139	1218+139	1218+139
		D	mm	202	202	202	202
External Static Pressure		Pa	10(30)	10(30)	10(30)	10(30)	

NOTES:

1. The nominal cooling capacity and heating capacity are based on the following conditions:
 Cooling Operation Conditions
 Indoor Air Inlet Temperature: 27°C DB(80°F DB), 19.0°C WB(66.2°F WB)
 Outdoor Air Inlet Temperature: 35°C DB(95°F DB)
 Piping Length: 7.5 Meters Piping Lift: 0 Meter
 Heating Operation Conditions
 Indoor Air Inlet Temperature: 20°C DB(68°F DB).
 Outdoor Air Inlet Temperature: 7°C DB(45°F DB), 6°C WB(43°F WB)

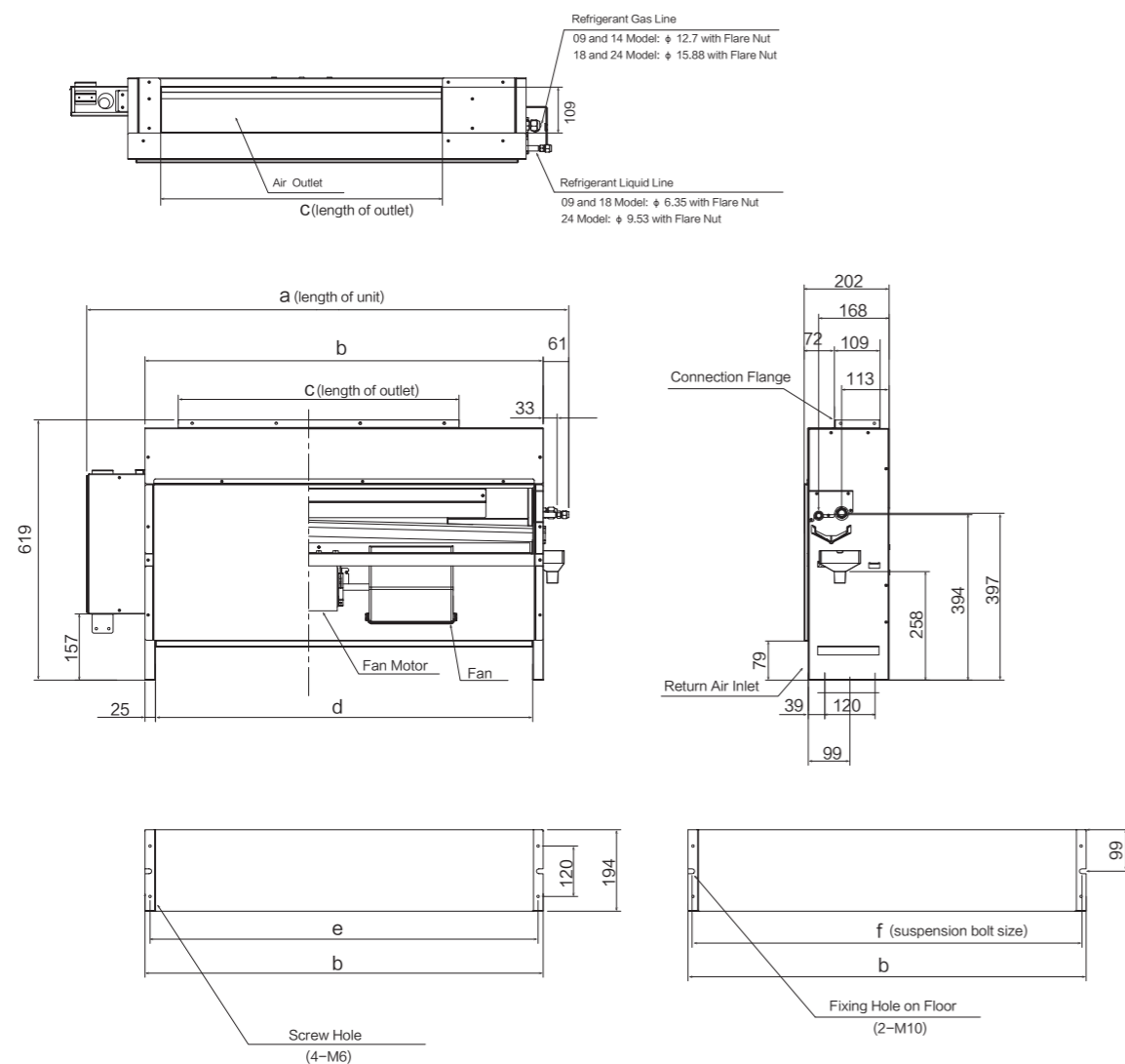
2. The sound pressure level is based on the following conditions:
 1.5m meters from the unit and 1.5m meters from floor level.
 The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

Dimensional Drawings

Floor Concealed Type

Floor Concealed Type (AVH)

AVH-09~14UXCSAA AVH-18~24UXCSBA
 AVH-09~14UX2SAA AVH-18~24UX2SBA



unit:mm

Model	Dimension	a	b	c	d	e	f
AVH-09*		1154	948	669	898	924	928
AVH-14*		1154	948	669	898	924	928
AVH-18*		1424	1218	939	1168	1194	1198
AVH-24*		1424	1218	939	1168	1194	1198



Hydro Box



Hydro Box

Specification for hydro box

Hydro Box Model			AHM-080FJFAA	AHM-160FJFAA
Power Supply			AC 1Φ,220-240V/50/60Hz	
Cooling Capacity (A 35/24°C/W 12-7°C)	kW		7.5	12.5
Heating Capacity (A 7/6°C/W 30-35°C)	kW		8	16
Nominal Power Input	kW		0.08(3.08)	0.14(3.14)
Dimensions	H*W*D	mm	890×520×320	890×520×320
Packing Dimensions	H*W*D	mm	1120×595×462	1120×595×462
Weight	Net	kg	55	58
	Gross	kg	72	75
Heat Exchanger			Plate Heat Exchanger	
Heat Exchanger Insulation Material			Elastomeric Foam	
Water Production	Heating	°C	20 to 55	20 to 55
	DHW(with electric heater)	°C	35 to 75	35 to 75
	Cooling	°C	5 to 20	5 to 20
Sound Pressure		dB(A)	33	33
Sound Power		dB(A)	46	46
Piping Connections	Gas	mm	Φ9.53	Φ9.53
	Liquid	mm	Φ15.88	Φ15.88
Water Pump	Type		DC Motor	
	Pumping Head for Water Circuit	m	5	5
	Power Input	w	100	160
Booster Heating		kW	3	3
Water Filter	Diameter Perforations	mm	0.85	0.85
	Material		Hpb59-1	Hpb59-1
Water Circuit	Piping Connections Diameter	mm	G1-1/4"	G1-1/4"
	Shut off Valve		Yes	Yes
	Drain Valve		Yes	Yes
	Safety Valve	Bar	3	3
	Air Purge Valve		Yes	Yes
Nominal Water		m³/h	1.38	2.75
Expansion Vessel	Volume	L	8	8
	Max. Water Pressure	Bar	3	3

Operation range

Indoor Unit Cooling

	Maximum	Minimum
Indoor	32°C DB / 23°C WB	21°C DB / 15°C WB
Outdoor	52°C DB*	-10°C DB

Indoor Unit Heating

	Maximum	Minimum
Indoor	27°C DB	15°C DB
Outdoor	16.5°C WB	-25°C WB**

Water Module Cooling

	Maximum	Minimum
Inlet Water	25°C	10°C
Outdoor	48°C DB	10°C DB

Water Module Heating (Floor Heating)

	Maximum	Minimum
Inlet Water	54°C	10°C
Outdoor	16.5°C WB	-25°C WB**

Water Module Heating (DHW)

	Maximum	Minimum
Inlet Water	54°C	10°C
Outdoor	43°C WB	-25°C WB**

DB: Dry Bulb
WB: Wet Bulb

(*) 48°C DB ~ 52°C DB, Operation Control Range
(**) -20°C WB ~ -25°C WB, Operation Control Range



Ventilation Solution

HKF D1EC



HKF D1EC TECHNICAL CHARACTERISTICS

Air-to-air enthalpy heat recovery device, thermal efficiency upto 76%

Galvanized steel self-supporting panels, internally and externally insulated; accessibility from side door

ISO 16890 ePM2.5 95% (F9 EN 799) efficiency class filter with synthetic cleanable media and COARSE 50% (G3 EN 779) pre-filter on fresh air, COARSE 50% filter on return air intake

Integrated pressure switch for dirty filter signal

Options

- Touch screen controller **PTS***
- CO₂ wall mount sensor **HKF-CO₂**
- Humidity wall mount sensor **HKF-HUM**
- Electric pre-heater module **HKF-PRE250/500/650**
- Electric post-heater module **HKF-POST250/500/650**

** means it is necessary when you choose HKF D1EC
Note: For detailed information about the options, please refer to "Optional Parts" at Page 190.

Motorised heat recovery by-pass device, automatically controlled by unit control to use fresh air free-cooling when convenient

Low consumption high efficiency & low noise direct driven fans with 10-speed EC motors

Duct connections by circular plastic collars

Built-in electric box equipped with PCB to control fan and by-pass function

HKF D1EC/C

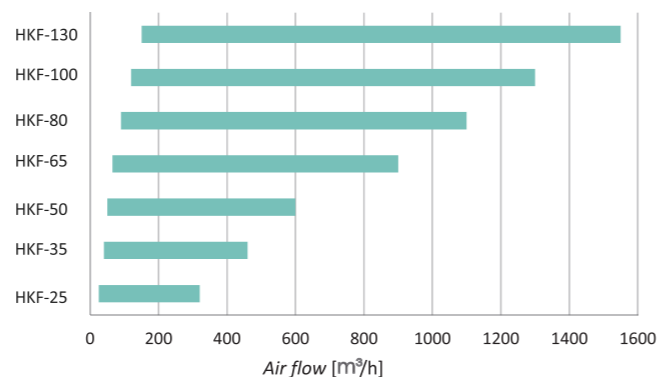


HKF D1EC/C TECHNICAL CHARACTERISTICS

In addition to the same parameters above described, this type of unit has other characters:

Supply section for Hisense VRF system complete with DX(R410A) coil fitted with thermostatic valve, refrigerant filter, sensors on liquid and gas pipe, temperature sensors in outlet and inlet.

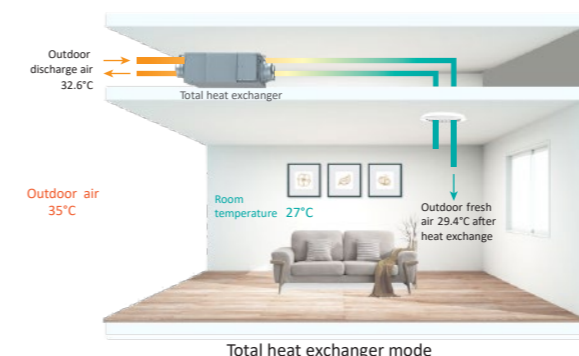
Built-in PCB to control fan speed and air temperature.



Ventilation Solution

Energy saving analysis

Summer energy saving analysis

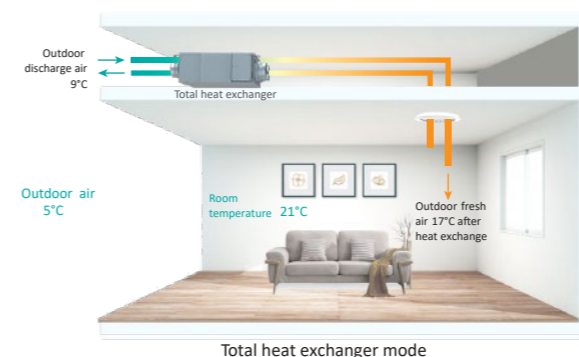


In summer operation, when the cold energy of 27°C air discharged from indoor pass through the heat exchanger, the 35°C outdoor hot air is pre-cooled to 29.4°C fresh air and supplied to indoors, as shown above, the air conditioner only needs to cool the air by 2.4°C to maintain a comfortable room temperature and fresh air. In this process, the discharge air pre-cools the fresh air by HRV, The temperature recovery efficiency in cooling is 70% max, and enthalpy exchange efficiency is 57% max.

Air Inlet	Total Heat Exchanger	Traditional Ventilation Fan	Outdoor Air
Dry Bulb Temperature C	29.4	35	35
Wet Bulb Temperature C	23.3	28	28
Moisture Content g/kg	15.7	21.1	21.1
Relative Humidity %	60.1	59.1	59.1
Enthalpy Value kJ/kg(DA)	69.8	89.4	89.4
Recycling Cold kW	1.57	0	
Heat Load kW	2.8	2.8	

Indoor Air	Discharge Air
Dry Bulb Temperature C	27
Wet Bulb Temperature C	19.5
Relative Humidity %	49.8
Enthalpy Value kJ/kg(DA)	55.5

Winter energy saving analysis



In winter operation, when the heat energy of 21°C air discharged from indoor pass through the heat exchanger, the 5°C outdoor cold air is pre-heated to 17°C fresh air and supplied to indoors, as shown above, when outdoor 5°C air and indoor 21°C air pass through the HRV, the fresh air supplied to indoors is about 17°C, the air conditioner only needs to heat the air by 4°C to maintain a comfortable room temperature and fresh air. The temperature recovery efficiency in heating is 75% max, and enthalpy exchange efficiency is 63% max.

Air Inlet	Total Heat Exchanger	Traditional Ventilation Fan	Outdoor Air
Dry Bulb Temperature C	17	5	5
Wet Bulb Temperature C	9.4	2	2
Moisture Content g/kg	4.2	6	6
Relative Humidity %	35.3	58.5	58.5
Enthalpy Value kJ/kg(DA)	27.8	12.9	12.9
Recycling Cold kW	1.3	0	
Heat Load kW	2	2	

Indoor Air	Discharge Air
Dry Bulb Temperature C	21
Wet Bulb Temperature C	13
Relative Humidity %	39.2
Enthalpy Value kJ/kg(DA)	36.5

Ventilation Solution

Performance

Model	HKF-**D1EC HKF-**D1EC/C	HKF-25	HKF-35	HKF-50 HKF-50	HKF-65	HKF-80 HKF-80	HKF-100 HKF-100	HKF-130 HKF-130
Nominal air flow	m ³ /h	250	350	500	650	800	1000	1300
Nominal external static pressure	Pa	90	140	110 90	100	140	140	135
Electrical power supply	V/ph/Hz	230/1/50						
Total full load amperage	A	0.5	0.6	0.6	1.2	1.4	2.1	2.7

Fans								
Motor tpoly		EC	EC	EC	EC	EC	EC	EC
Number of speeds		10	10	10	10	10	10	10
Fan conto*1		Man	Man	Man	Man	Man	Man	Man
Internal specific fan power of ventilation components-SFP int*5	W/(m ³ /s)	812	670	547	846	865	881	873
Total nominal power input	kW	0.08	0.13	0.15	0.23	0.32	0.39	0.49
Sound pressure level*2	dB(A)	34	37	39	40	42	43	44

Heat Exchanger								
Winter thermal efi.c*3	%	73.0%	74.0%	76.0%	74.0%	76.0%	76.0%	74.2%
Winter enthalpy efi.c*3	%	65.0%	65.0%	67.0%	65.0%	65.0%	62.0%	59.0%
Summer thermal efc.*4	%	73.0%	74.0%	76.0%	74.0%	76.0%	76.0%	74.0%
Summer enthalpy efi.c*4	%	62.0%	62.0%	63.0%	60.0%	63.0%	60.0%	58.0%
Dry thermal efficiency*5	%	73.0%	74.0%	76.0%	74.0%	76.0%	76.0%	74.0%

Dx Coil								
Heating Capacity*6	kW	—	—	2.5(2.7)	3.0(3.3)	4.4(4.8)	5.2(6.7)	6.2(6.7)
Total coling capacit*7	kW	—	—	3.0	3.5	5.1	5.8	7.0

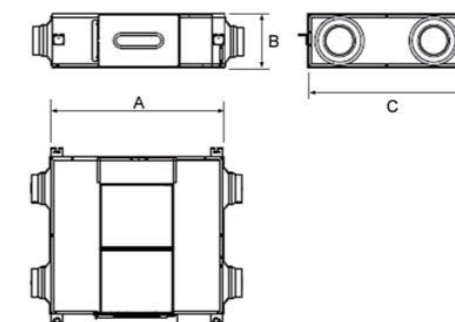
NOTES:

- *1.Man = Manual by selector switch or control panel;
- *2.Sound pressure level calculated at 1 m far from: ducted supply-exhaust air/ducted; return-fresh air intake/service side, at nominal conditions.
- *3.Outside air at -5° 80% RH; room air at 20°C 50% RH
- *4.Outside air at 32° 50% RH; room air at 26°C 50% RH
- *5.Refer to EU 1253/2014 regulation: at nominal pressure; air conditions refer to EN 308 standard
- *6.Air inlet condition: 13°C DB, RH 40% (11°C DB, RH 45%); condensing temp. 40°C
- *7.Air inlet condition: 28,5°C DB, RH 50%; evaporating temp. 7°C

Ventilation Solution

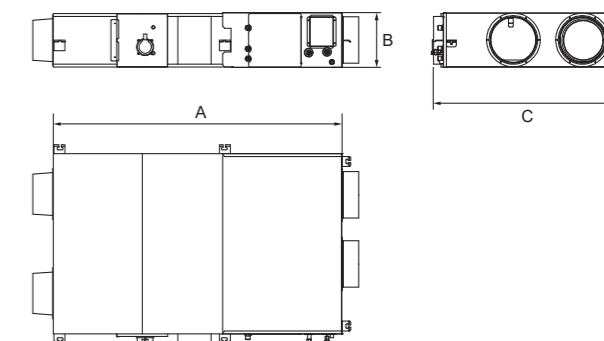
Dimensions

HKF D1EC



Model	A(mm)	B(mm)	C(mm)	Weight(kg)
HKF-25D1EC	814	270	657	30
HKF-35D1EC	814	270	860	37
HKF-50D1EC	894	270	960	43
HKF-65D1EC	1186	388	940	65
HKF-80D1EC	1186	388	1190	71
HKF-100D1EC	1199	388	1273	83
HKF-130D1EC	1199	388	1273	83

HKF D1EC/C

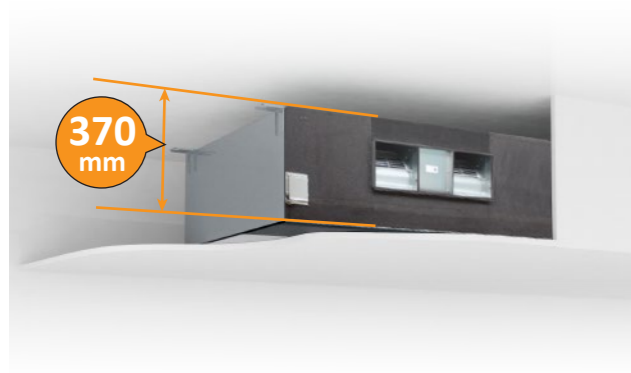


Model	A(mm)	B(mm)	C(mm)	Weight(kg)
HKF-50D1EC/C	1453	275	959	90
HKF-80D1EC/C	1745	390	1190	100
HKF-100D1EC/C	1758	392	1313	105
HKF-130D1EC/C	1758	392	1313	105

All Fresh Air Indoor Unit

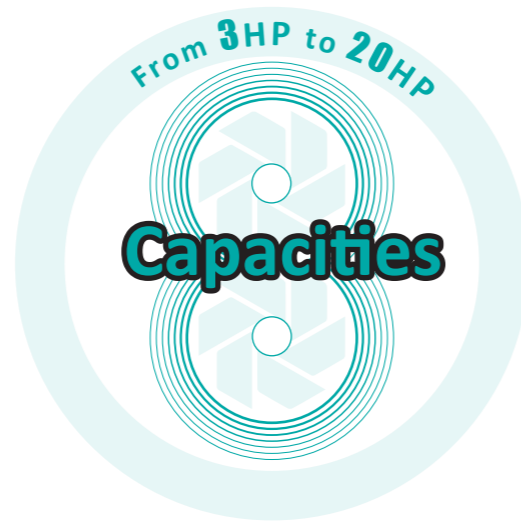
Space saving

Fresh air unit with of height lower until 370mm only require small amount of ceiling space. It fits to the room ceilings with various duct connections.



Larger capacity & static pressure options

The total amount of fresh air units could be reduced with larger capacity and larger airflow rate per unit. With the reduced amount of units, fresh air ducts often need to be supply to the furthest room, achievable with high static pressures offered.



Simple & flexible piping system

Fresh air from the units could be pre-cooled connecting to the same refrigerant systems with other indoor units, introducing cooled or warm fresh air directly without overburdening other indoor units.



All Fresh Air Indoor Unit

All Fresh Air Indoor Unit



Model		AVA-30UXCSCH-70	AVA-48UXCSQH-108	AVA-76UXCSRH-168	AVA-96UXCSRH-210	AVA-114UX6SRH-300	AVA-154UX6SSH-400	AVA-190UX6STH-500	AVA-190UX6STH-600	
Power Supply		AC 1Φ,220V~240V/50Hz				AC 3Φ,380V~415V/50Hz				
Capacity	Cooling	kW	9.0	14.0	22.4	28.0	33.5	45.0	56.0	56.0
		Btu/h	30,700	47,800	76,500	95,600	114,300	153,600	191,100	191,100
Heating	kW	8.6	13.7	21.9	24.5	26.8	36.0	44.8	44.8	
	Btu/h	29,400	46,800	74,700	83,600	91,500	122,900	152,900	152,900	
Power Input	Cooling	W	150	330	490	510	740	1120	1330	1620
	Heating	W	150	330	490	510	740	1120	1330	1620
Sound Pressure		dB(A)	32	43	45	46	56	61	64	66
Airflow Rate		m ³ /min	11.0	18.0	28.0	35.0	50.0	66.7	83.3	100.0
External Static Pressure		Pa	60(120)	200	220	220	220	300	320	300
Piping	Liquid	mm	Φ 9.53	Φ 9.53	Φ 9.53	Φ 9.53	Φ 12.7	Φ 12.7	Φ 15.88	Φ 15.88
		inch	3/8	3/8	3/8	3/8	1/2	1/2	5/8	5/8
	Gas	mm	Φ 15.88	Φ 15.88	Φ 19.05	Φ 22.2	Φ 25.4	Φ 25.4	Φ 28.6	Φ 28.6
		inch	5/8	5/8	3/4	7/8	1	1	1-1/8	1-1/8
Condensate Drain	mm	I.D.32				RC1 (Internal Screw)				
Weight	Net Weight	kg	46	60	97	97	97	196	222	222
	Gross Weight	kg	51	64	117	117	117	240	267	267
Dimensions	External	H mm	370	370	486	486	486	635	735	735
		W mm	920	1320	1270	1270	1270	1950	1950	1950
		D mm	800	800	1069	1069	1069	805	805	805
	Packaging	H mm	390	390	1290	1290	1290	816	916	916
		W mm	1112	1512	1466	1466	1466	2213	2213	2213
		D mm	922	922	540	540	540	1006	1006	1006
Temperature Range of Fresh Air		-	Cooling: 20°C~43°C, Heating: -7°C~15°C							

NOTES:

- The nominal cooling capacity and heating capacity are based on following conditions
Cooling operation conditions: 33°C DB, 28°C WB, piping length: 7.5m, piping lift: 0m
Heating operation conditions: 0°C DB, -9°C WB, piping length: 7.5m, piping lift: 0m
(Heating capacity is tested when defrosting is not available)
- The sound pressure level is based on following conditions: 1.5 Meter beneath the unit.
The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the filed.
- An air filter with duct collection efficiency more than 50% needs to be attached to the duct system of the suction side at site.
- This unit shall be connected to Hi-FLEXi S, X,W and Hi-Smart H Series outdoor units. In case of connecting this unit with other indoor units in the same refrigerant cycle,calculate the capacity of this unit as 46.1KBtu/h(30.7KBtu/h), 71.7KBtu/h(47.8KBtu/h), 143.3KBtu/h(95.6KBtu/h).
- Under cooling mode,when outdoor temperature is lower than 20°C ,the system will automatically shift to ventilation operation; Under heating mode, when outdoor temperature is higher than 15°C the system will automatically shift to ventilation operation; In case inlet temperature is below -7°C all fresh air unit will stop.

AHU Connection Kit



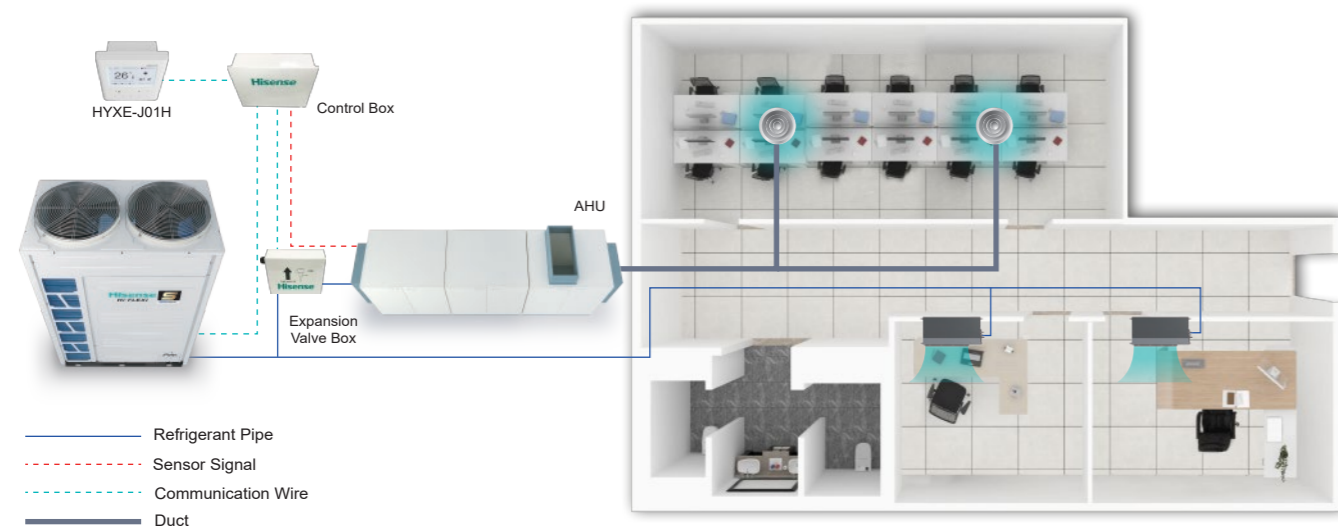
The Hisense AHU-KIT can integrate external heat exchangers of Air-handling units (AHU) into a Hisense VRF system to be used for air conditioning, which can provide more flexible air conditioning solutions and save more cost in the building air conditioning renovation.

Main functions

- ◆ ON/OFF Control
- ◆ Temperature Setting
- ◆ Capacity Demand
- ◆ Operation Mode

Selection and limitation of heat exchanger of AHU

The Heat Exchanger of AHU(field-supplied)should be selected according to the following technical data and limitations. Lifetime of the outdoor unit, operation range or operation reliability may be influenced if these limitations are neglected.



Electric preheating control

With this function, the electric preheating will automatically run according to the inlet air temperature by output signal, when ambient temperature is lower than 0°C.

Humidifier control

In heating mode, humidifier will operate or stop, through detecting and calculating the difference between the actual humidity and target humidity, by output signal.

Optional Part: Humidity Sensor (HCHR-S01E)

AHU Connection Kit

AHU kit can provide 3 kinds of control type for AHU application: Inlet air temperature control, outlet air temperature control and duty signal control.

Capacity Control Mode	Set Temperature by Remote Controller	Set ODU Capacity Range	Compatible ODU Series
Inlet Air (room air) Temperature Control	Cooling: 19~30 °C Heating: 17~30 °C	—	S series, W series, H series
Outlet Air Temperature Control			
Duty Signal Control (0~10V or 0~5V or 4-20mA)	—	15%~100%	

AHU Connection KIT		HZX-2.0 AEC	HZX-4.0 AEC	HZX-6.0 AEC	HZX-10.0AEC	HZX-20.0AEC						HZX-30.0AEC							
Model Power Supply		AC 1Φ,220~240V/50Hz/60Hz																	
Nominal Capacity of AHU	HP	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30			
Allowed Heat Exchanger Capacity (H/M/L)	Cooling	kW	4.0	7.1	11.2	16.0	20.0	28.0	33.5	40.0	45.0	50.0	56.0	61.5	69.0	73.0	80.0		
		kW	5.0	9.0	14.0	20.0	25.0	30.0	35.0	43.0	48.0	52.0	58.0	65.0	71.0	76.0	82.0		
	Heating	kW	5.6	11.2	16.0	22.4	28.0	33.5	40.0	45.0	50.0	56.0	61.5	69.0	73.0	80.0	85.0		
		kW	4.5	8.0	12.5	17.9	22.4	31.5	37.5	45.0	50.0	56.0	63.0	69.0	77.5	82.5	90.0		
Heat Exchanger Volume	Min	dm ³	0.57	1.03	1.92	2.92	3.89	4.76	5.85	6.79	7.57	8.47	9.04	9.50	10.39	11.39	12.36		
	Max	dm ³	1.16	2.37	2.92	3.89	4.76	5.91	6.89	8	8.92	9.97	11.13	12.34	12.89	13.86	14.73		
Equivalent Indoor Unit Capacity	HP	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30			
Control Box Model		HZX-AEC/1																	
Expansion Valve Box Model		HZX-2.0 AEC/2		HZX-4.0 AEC/2		HZX-6.0 AEC/2		HZX-10.0 AEC/2		HZX-20.0 AEC/2						HZX-20.0AEC/2 2set			

*Cooling and heating capacity data based on the following indoor and outdoor temperature conditions:

Operation Conditions		Cooling	Heating
Indoor Air Inlet Temperature	DB	27.0°C	20.0°C
	WB	19.0°C	—
Outdoor Air Inlet Temperature	DB	35.0°C	7.0°C
	WB	—	6.0°C

DB:Dry Bulb; WB:Wet Bulb; Pipe Length:7.5m; Pipe Height:0m



CONTROL SYSTEM

*AIR
CONDITIONING
SOLUTION*









Function Table

Model	Wired Controller			Wireless Controller	Central Controller	
	HYXE-J01H	HYXE-VC01	HYXE-S01H	HYE-VD01	HYJM-S01H	HYJ-J01H
Picture						
Max. connectable indoor units	16	6	16	-	160	128
Cool/Heat/Auto	●	●	●	●	●	○
Dehumidification	●	●	●	×	●	○
Fan speed	●	●	●	●	●	○
Louver setting	●	●	●	●	●	○
Temperature setting	●	●	●	●	●	○
Operation monitoring	●	●	●	●	●	○
24-hour timer	●	●	●	●	●	○
7-day timer	●	○	○	×	●	○
Holiday setting	●	○	○	×	●	○
Main-sub control	●	●	○	×	○	○
Check function	●	●	●	×	○	○
Air filter cleaning reminding	●	●	●	×	●	○
Error code history display	●	●	●	×	●	○
Auto test run	●	●	●	●	○	○
Indoor/Outdoor PCB checking	●	●	●	×	○	○
Self diagnostic function	●	●	●	●	●	●
Back light	●	●	●	●	●	○
Built-in temperature sensor	●	●	○	●	○	○
Wireless control available	○	●	○	×	○	○
Louver controlled independently	●	●	○	●	○	○
Breeze mode	●	●	○	●	○	○
Motion sensor	●	○	○	×	○	○
Health(air pure)	●	●	○	●	○	○
Hi-Motion	●	○	○	×	○	○
ECO(energy saving)	●	●	○	●	●	○
Mute	●	●	●	●	○	○
Sleep	●	●	○	●	○	○
Window contact design	●	●	○	×	○	○
3D-air flow	●	●	○	●	○	○

Remarks: Standard: ● Optional: ○ Incompatible: ×

Matching Table

Type	Wired Controller			Wireless Controller
Model	HYXE-J01H	HYXE-VC01	HYXE-S01H	HYE-VD01
Picture				
4-Way Cassette	●	●	●	○
Mini 4-Way Cassette	●	●	○	○
1-Way Cassette	●	●	○	○
2-Way Cassette	●	●	○	○
Ceiling Ducted Type	●	●	●	○
Ceiling Ducted Type(High/low)	●	●	●	○
Console	●	●	●	●
Wall Mounted Type	●	●	●	●
Ceiling & Floor Type	●	●	●	●
Floor Concealed Type	●	●	○	○
All Fresh Air	●	●	●	○
Heat Recovery Ventilator	●	●	●	×

Type	Receiver Kit				Centralized Controller	ON/OFF
Model	HYRE-V02H	HYRE-Z01H	HYRE-T03H	HYRE-X01H	HYJM-S01H	HYJ-J01H
Picture						
4-Way Cassette	○	○	●	○	●	●
Mini 4-Way Cassette	○	●	○	○	●	●
1-Way Cassette	○	○	○	●	●	●
2-Way Cassette	●	○	○	○	●	●
Ceiling Ducted Type	●	○	○	○	●	●
Ceiling Ducted Type(High/low)	●	○	○	○	●	●
Console	●	○	○	○	●	●
Wall Mounted Type	●	○	○	○	●	●
Ceiling & Floor Type	●	○	○	○	●	●
Floor Concealed Type	●	○	○	○	●	●
All Fresh Air	●	○	○	○	●	●
Heat Recovery Ventilator	○	○	○	○	●	●

Remarks: Standard: ● Optional: ○ Incompatible: ×

Wired Controller



HYXE-J01H(J01H1/J01H2)

Complete functions and spacious comfortable touch buttons with 4" large LCD screen



Features

- Size:120mm×120mm
- Max. connectable indoor units:16
- LCD display
- Touch Button
- Language:
 HYXE-J01H: English, Arabic.
 HYXE-J01H1: English, Spanish,
 Italian, German, Polish.
 HYXE-J01H2: English, Turkish,
 Russian, French, Dutch

Mode	Cool/Heat/Auto/Fan/Dry/ECO/Mute/Sleep
Timer	24-hour/Weekly schedule/Holiday setting
Maintenance	Error code / Parameter check/Auto test run/ Indoor&Outdoor PCB checking/Self diagnostic function
Louver	Louver setting/Louver controlled independently/ 3D-air flow
Special function	Breeze mode/Motion sensor/Health/Hi-Motion
Fan speed	6
Temperature setting	0.5°C
Main-sub control	•
Air filter cleaning reminding	•
Back light	•
Built-in temperature sensor	•

Wired Controller

HYXE-VC01



Features

- Size: 86mm × 86mm
- Max. connectable indoor units: 6
- LCD display with back light
- Touch button
- Flat back-cover for easy mounting

Mode	Cool/Heat/Auto/Fan/Dry
Timer	24-hour timer
Maintenance	Error code/Parameter check/Auto test run/ Self diagnostic function/Indoor & Outdoor PCB checking/ Air filter cleaning reminding/IDU address setting
Louver	7 Louver setting/3D-air flow/ Individual louver control
Special function	Health/ECO/Quiet/Sleep/Self-cleaning
Fan speed	6
Temperature setting	0.5°C accuracy/Display the setting temp. or room temp.
Main-sub control	•
Wireless control available	•
Built-in temperature sensor	•

HYXE-S01H

User-friendly controller with smart size blending into wall switches ideally



Features

- Size:120mm×70mm
- Max. connectable indoor units:16
- LCD display
- Touch Button

Mode	Cool/Heat/Auto/Fan/Dry/Mute
Timer	24-hour
Maintenance	Error code / Parameter check/Auto test run/ Indoor&Outdoor PCB checking/Self diagnostic function
Louver	Louver setting
Special function	6
Fan speed	•
Temperature setting	•
Air filter cleaning reminding	•
Back light	•

Wireless Controller

HYE-VD01

High quality screen display and extremely userfriendly remote controller

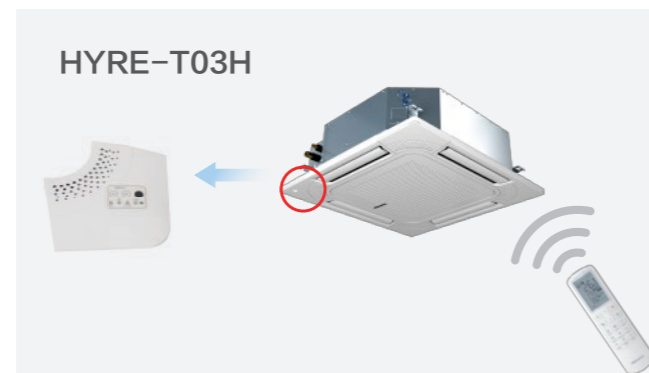
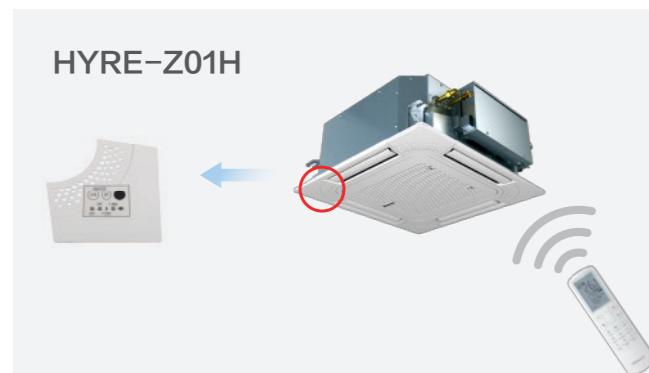
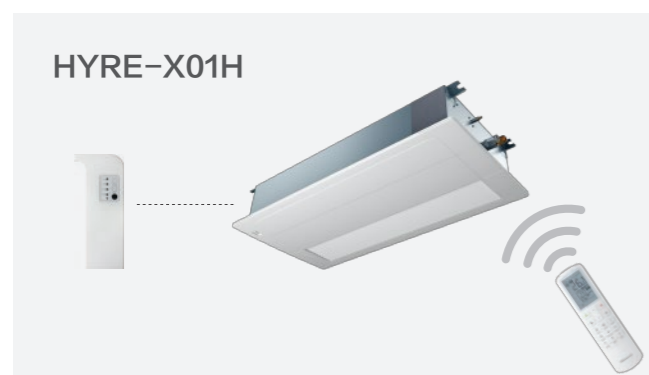


Features

- Size: 178.6mm x 47.8mm
- LCD display with back light

Mode	Cool/Heat/Auto/Fan/Dry
Timer	24-hour timer
Maintenance	Auto test run/Self diagnostic function/ Identification of adjacent receiver
Louver	Louver setting/3D-air flow/Individual louver control
Special function	Health/ECO/Quiet/Sleep/Self-cleaning
Fan speed	6
Temperature setting	1°C accuracy/Display the setting temp. or room temp.
Built-in temperature sensor	•

Receiver Kit for Wireless Control-optional



Central Controller

HYJM-S01H

Advanced 7" coloured full touch screen, convinient yet robust



Features

- Size: 220mmx148mm
- Max. connectable indoor units:160
- Max. connectable indoor unit groups: 64
- Max. distance: 1000m
- Language:
Chinese, English, Russian,Spanish,
Turkish,German,Italian,Dutch,Polish,
Arabic

Cool/Heat/Auto/Fan/Dry/ECO
Holiday setting
Filter cleaning reminder
External input/Output function
Temperature limitation
All/4 zone/Individual control

ON/OFF Controller HYJ-J01H

Simplicity at its best with LED light signals



Features

- Size:120mmx120mm
- Max. connectable indoor units:128
- Max. connectable group:16
- Touch Button

Group control (ON/OFF)
Indoor unit power OFF reminder
Indoor units Auto log in
Error reminder

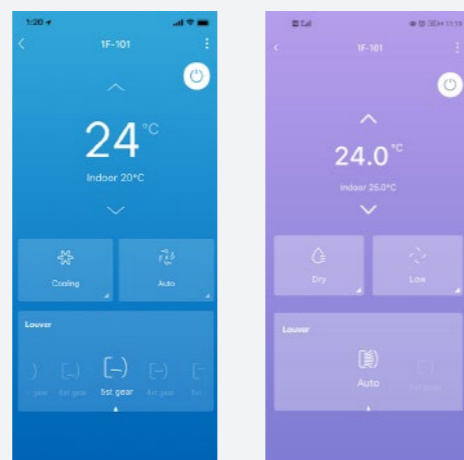
Intelligent Control



Anytime and anywhere, control is in your hands

Brand-new Adapter and App

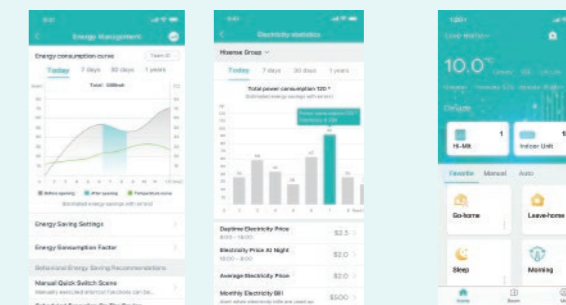
- Stylish appearance and compact body
- Compatible with VRF, hydro box and heat recovery ventilator
- Supporting OTA update
- Simple and intuitive interfaces



Intelligent Control

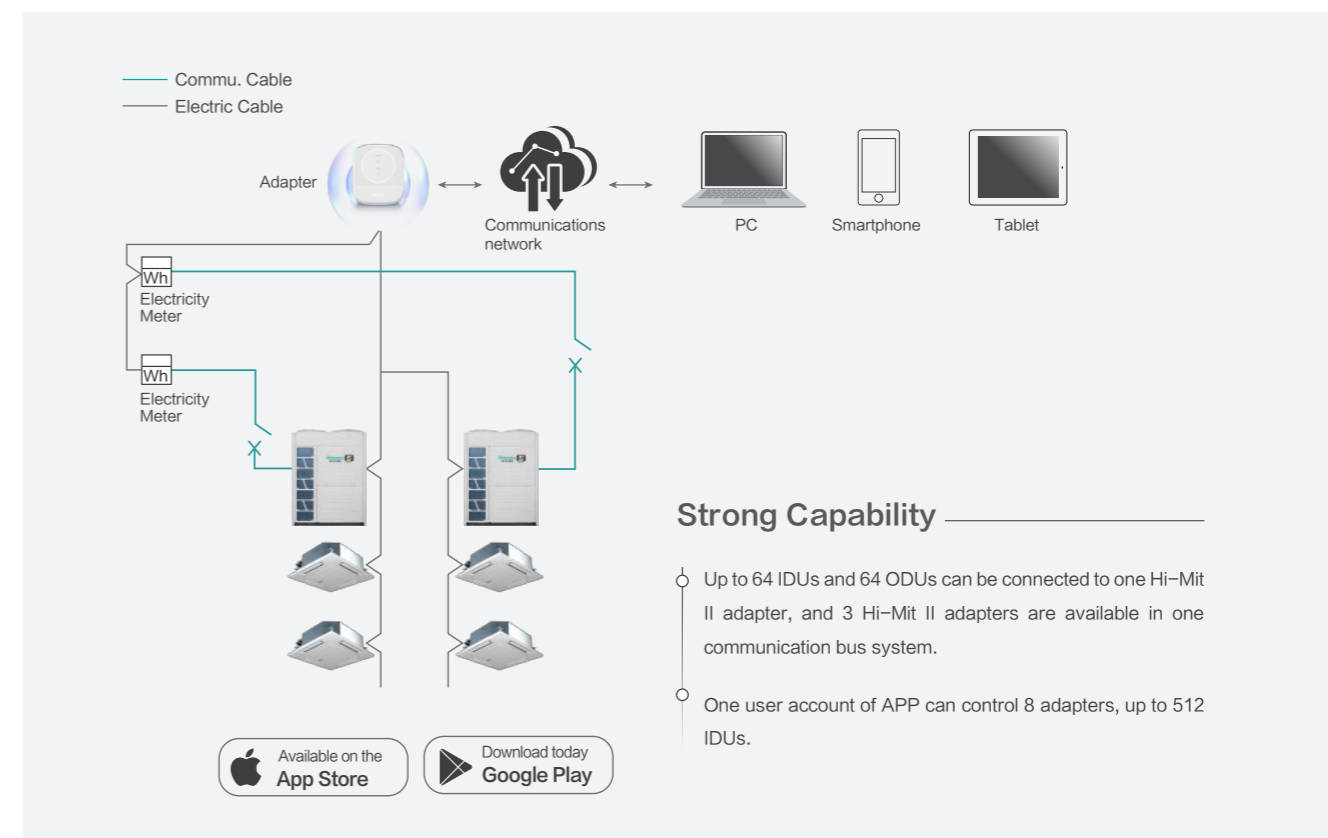
Convenient Control

- 12 languages available
- Energy management
- 2-level permission
- Online repair
- 7x24 schedule setting
- Customized scenes setting



Energy management interface

Customized mode interface



Strong Capability

- Up to 64 IDUs and 64 ODUs can be connected to one Hi-Mit II adapter, and 3 Hi-Mit II adapters are available in one communication bus system.
- One user account of APP can control 8 adapters, up to 512 IDUs.

Specifications

Model	Power Supply	Max. Current	Power Input	Dimension	Net Weight
HCCS-H64H2C1M	DC 12V	1A	2.4W	91x117x31mm	0.14kg

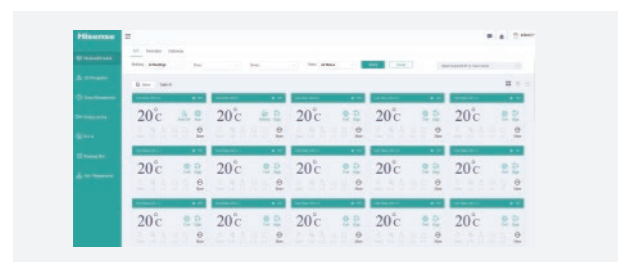
Intelligent Control



Features

- Multilevel user management
- AC control (on-off, mode, temp, fan speed locked, the max. and min. temp locked)
- AC locked control (running forbidden control, the max. and min. temp and cooling/heating locked)
- Running according to yearly schedule
- Malfunction history check
- Running record display
- Data synchronize
- Supporting for external I/O
- 2D navigation
- Electricity consumption allocation
- Data comparison and analysis
- Virtual group function
- Interlock control
- Cloud remote control

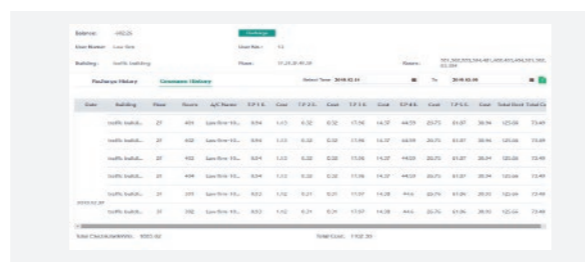
● Humanized interaction interface and comfortable user experience.



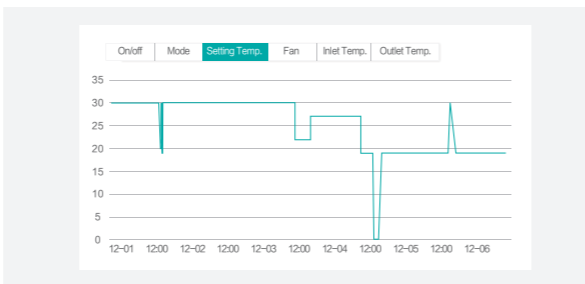
● Thanks to the 2D navigation, users can import floor plans and place indoor units in the corresponding rooms, creating a tailored system schematic. Thus all the indoor units can be monitored and controlled intuitively.



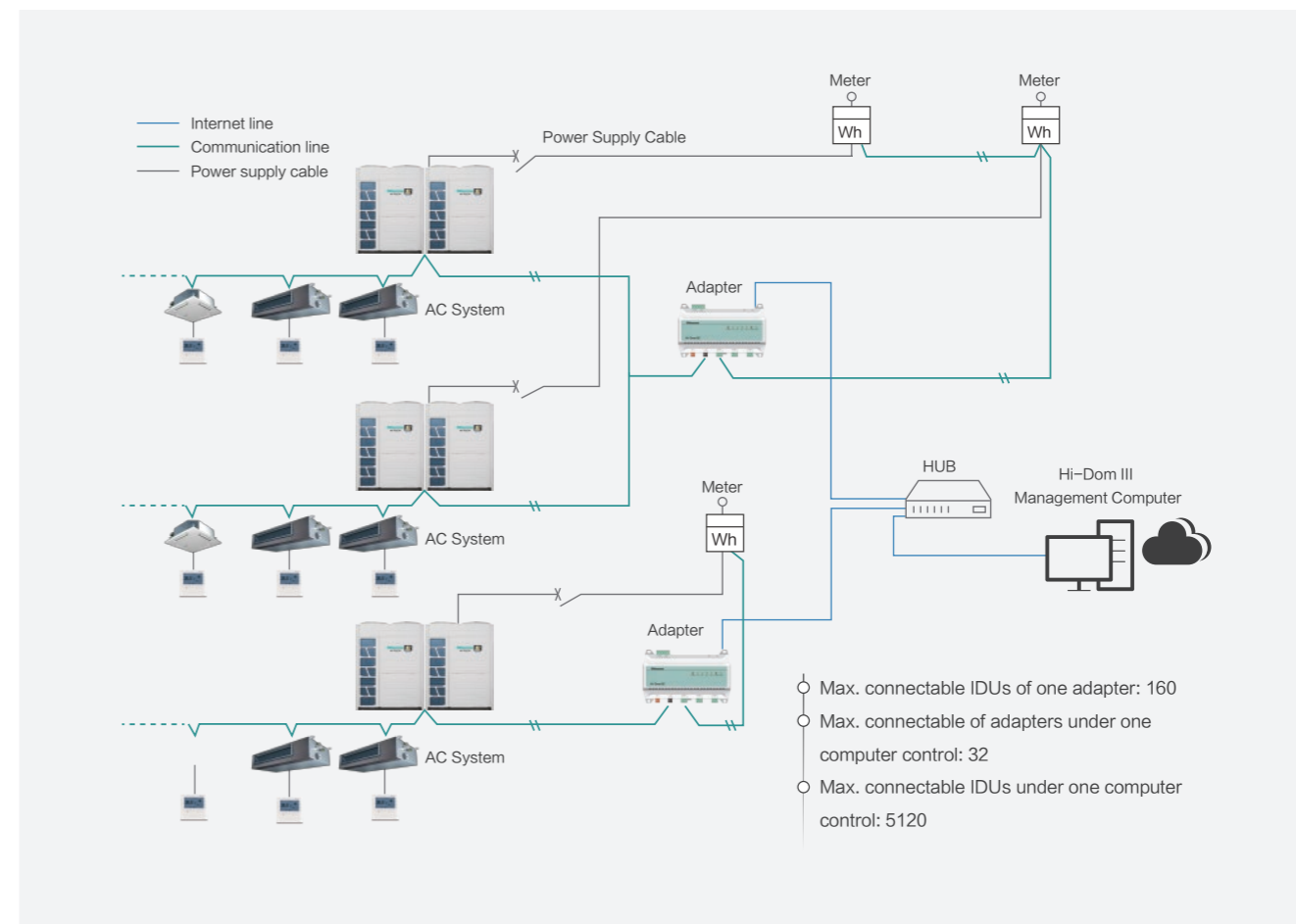
● The electricity consumption allocation makes it easy for users to allocate total electricity consumption among building occupants. Both segmented tariff and single tariff are available.



● Support operation history data record like the below picture. Also the operation data can be exported to excel format, convenient for customers to read.



Intelligent Control



Specifications

Adapter	Model	Power Supply	Dimension (LxWxD)	Note
	HCCS-H160H2C1YM	12V	180x115.4x64.5mm	With electric charging function

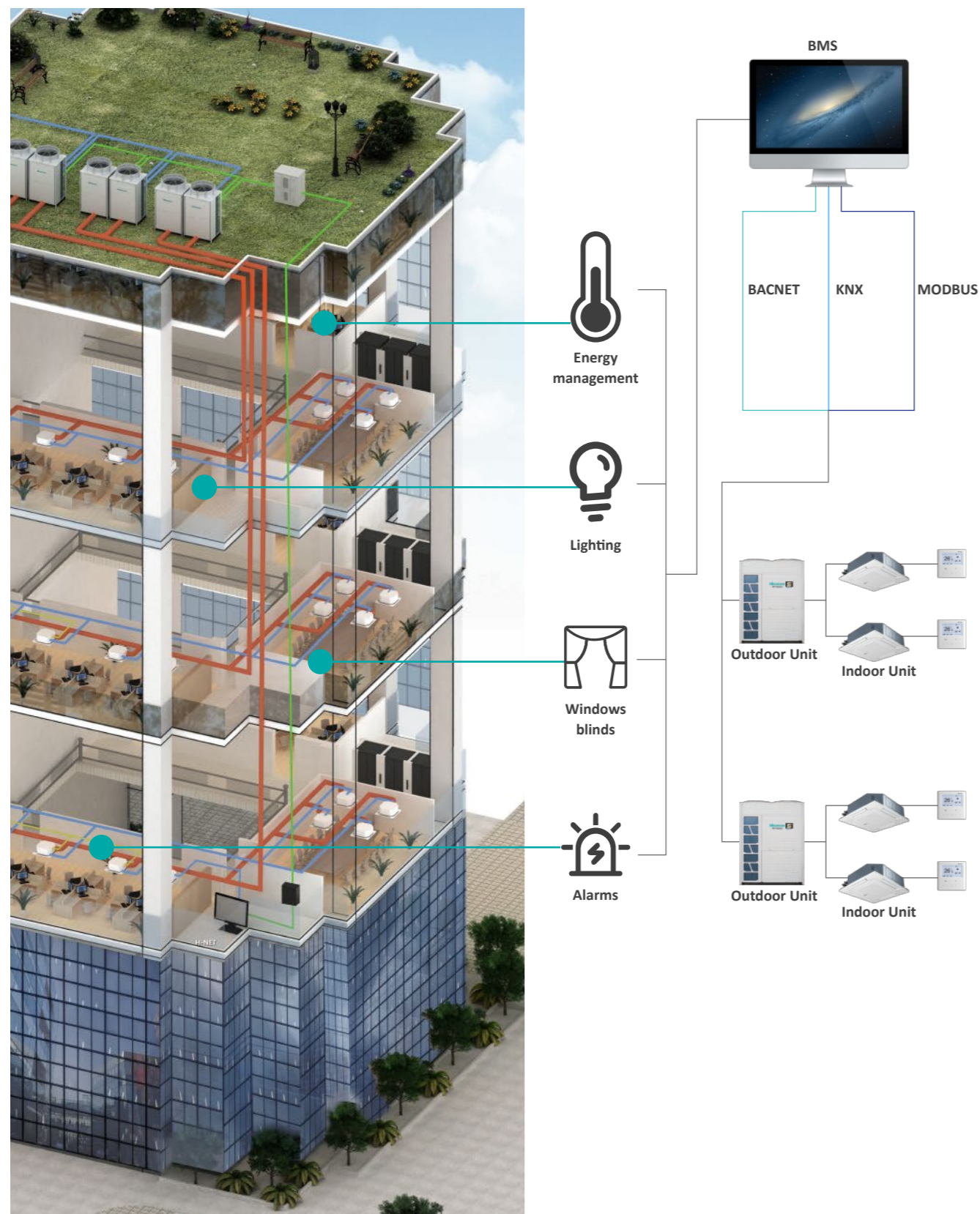
Hi-Dom Manager (EPC-S101CQ-S6A1)

Features

- Connect up to 800 indoor units.
- Optional hardware with built-in software for Hi Dom III control system with an external screen.
- Web access to monitor and control the air conditioners.
- Two Ethernet ports, four USB ports, one HDMI connector and an built-in power adapter.



Building Management System



KNX

KNX	HS-RC-KNX-1i (INKNXHIS001R000)	HS-AC-KNX-16 (INKNXHIS0160000)	HS-AC-KNX-64 (INKNXHIS0640000)
Power Supply	24V, DC	24V, DC	24V, DC
Max. Number of Connectable Indoor Units	1	16	64
Dimension (H×W×D)	70×70×28	90×88×56	90×88×56

- Features**
- Standard data point types (ALL)
 - Error code (ALL)
 - Central control of all IDUs (HS-AC-KNX-16/64)
 - Easy to use tool for the configuration of Intesis Box (HS-AC-KNX-16/64)
 - Directly control of all IDUs (HS-RC-KNX-1i)
 - Air filter reminder (HS-RC-KNX-1i)
 - Running hours counter (HS-RC-KNX-1i)

MODBUS

MODBUS	HPCP-H2M1C
Power Supply	12V, DC
Max. Number of Connectable Indoor Units	160
Dimension (H×W×D)	70×204×240

- Features**
- On-Off Setting
 - Temperature Setting
 - Operating Mode Setting
 - Inlet Air Temp. Monitoring
 - Airflow Setting and Monitoring
 - All Units On/Off Control
 - Alarm Monitoring and Code Display

BACNET

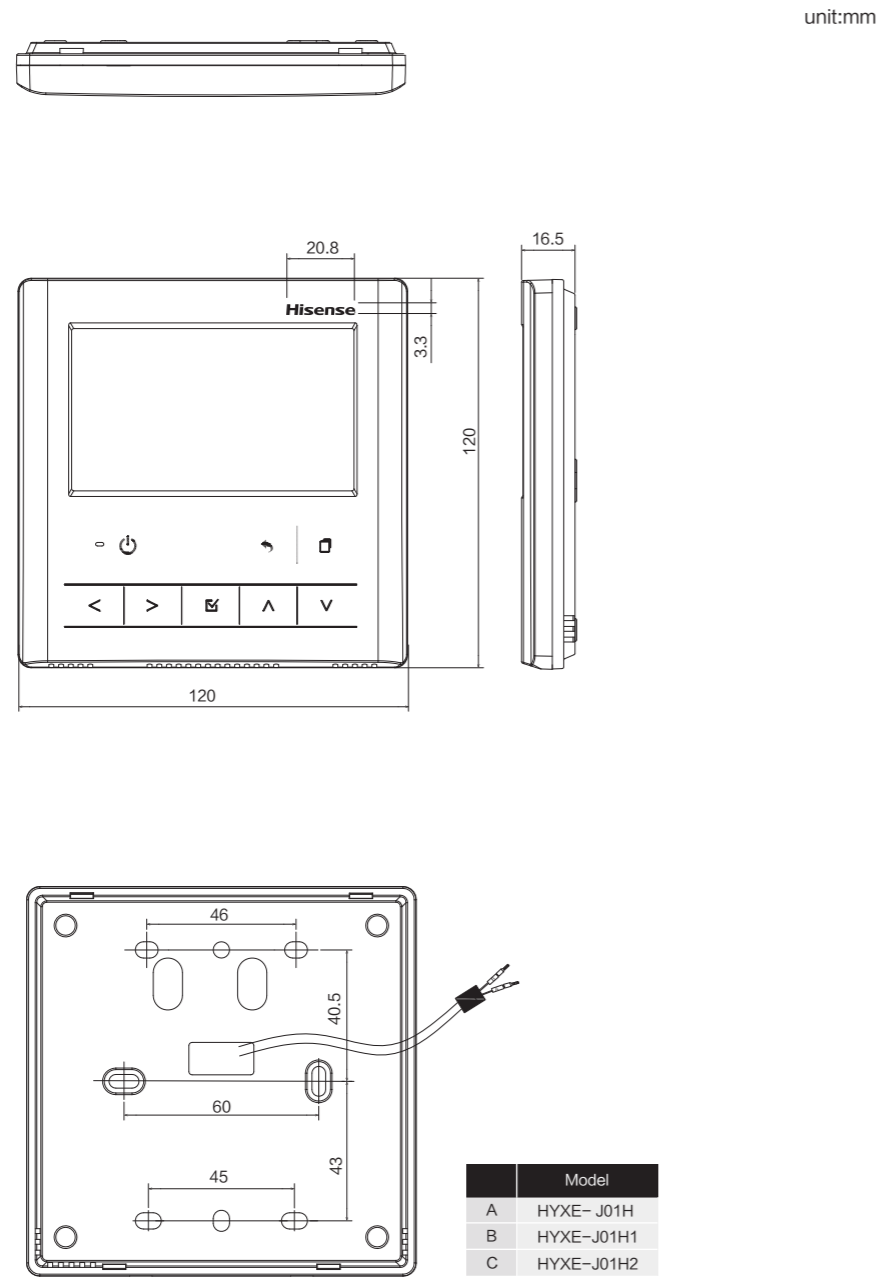
BACNET	HS-AC-BAC-16 (INBACHIS0160000)	HS-AC-BAC-64 (INBACHIS0640000)
Power Supply	24V,DC	24V,DC
Max. Number of Connectable Indoor Units	16	64
Dimension (H×W×D)	90×88×56	90×88×56

- Features**
- Central control of all indoor units
 - Indoor unit data monitoring
 - Heat/ Dry/ Fan/ Cool/ Auto mode
 - ControlVane position swing control
 - Function prohibition of wired controller

Dimensional Drawings

Wired Controller

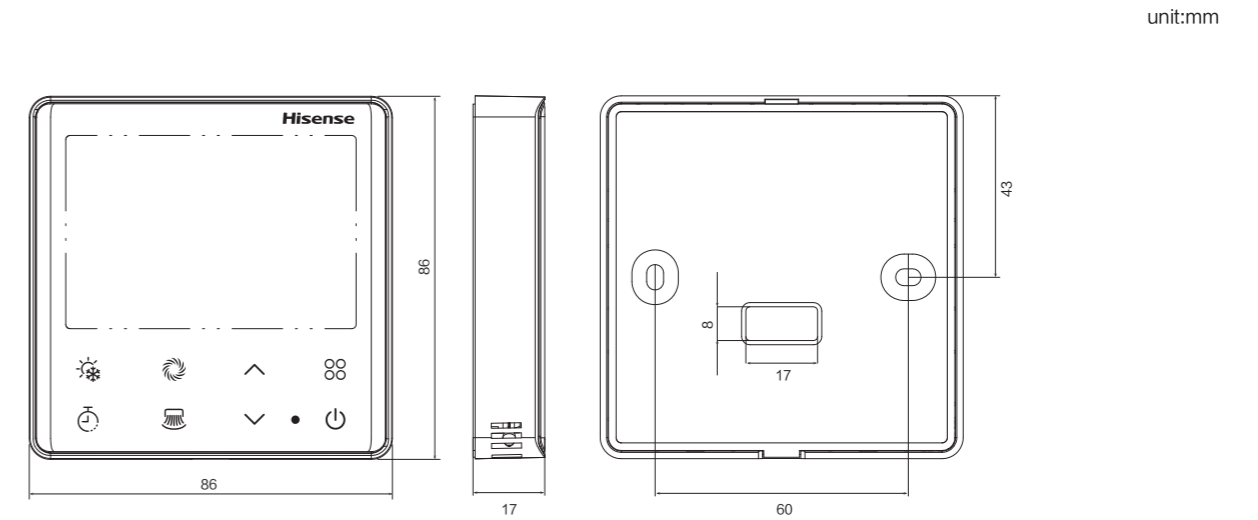
HYXE-J01H



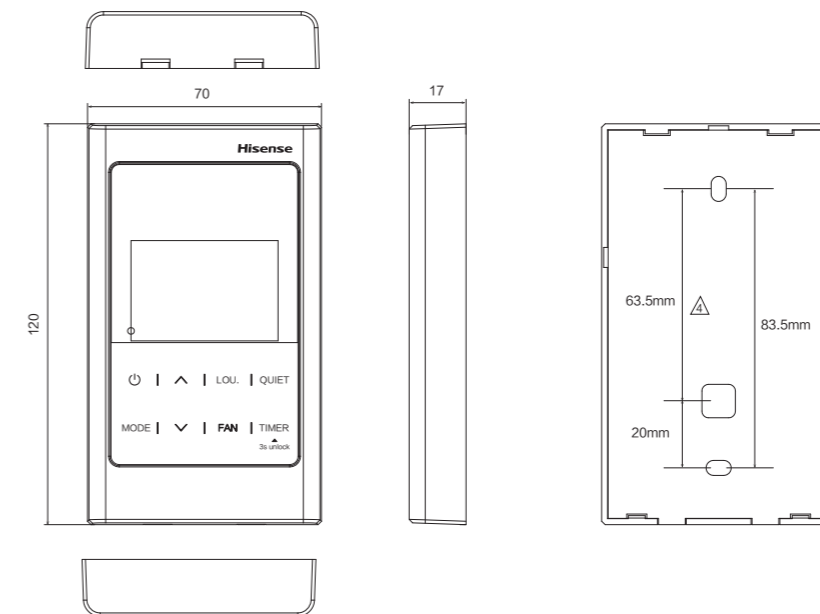
Dimensional Drawings

Wired Controller

HYXE-VC01



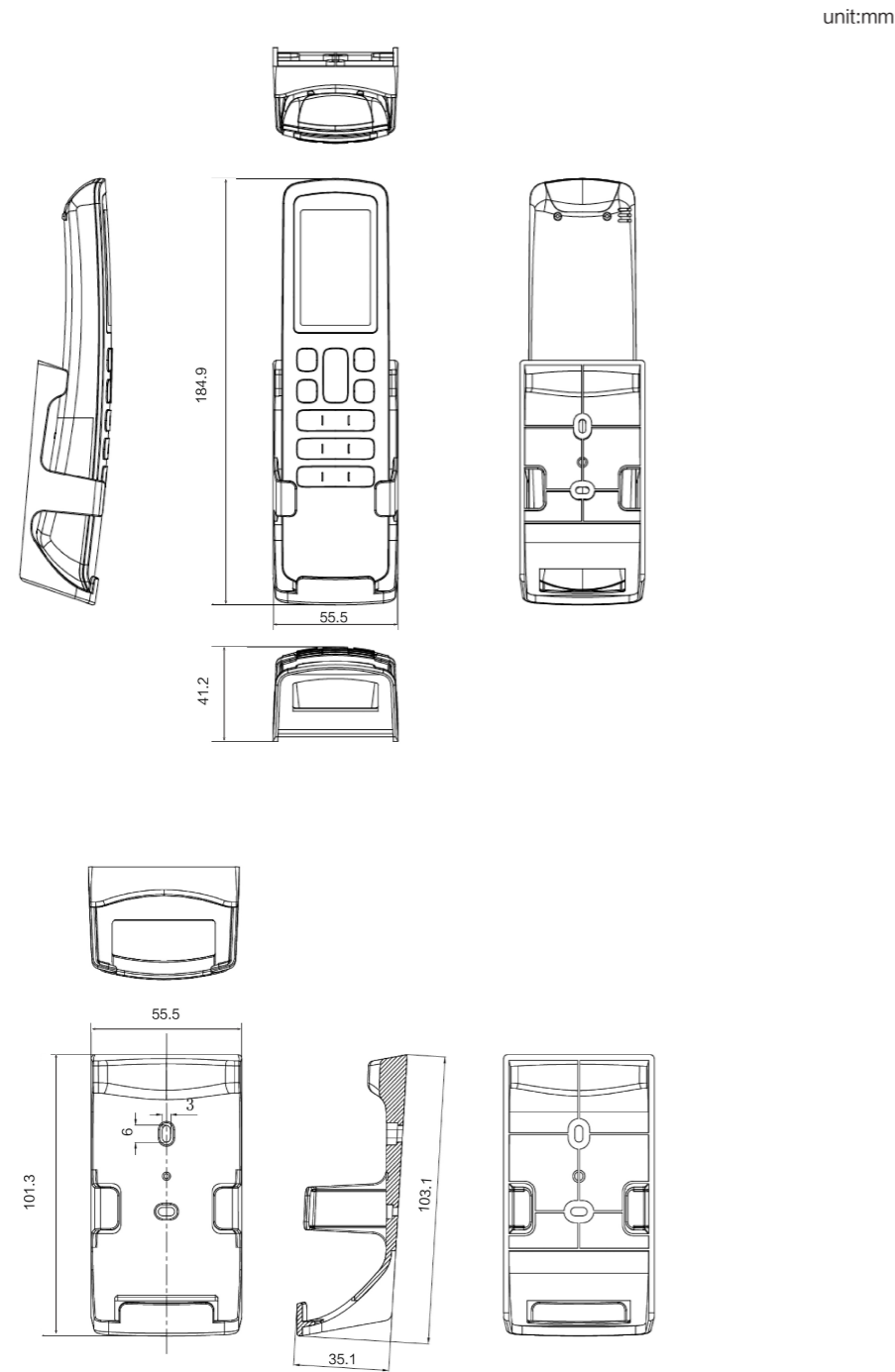
HYXE-S01H



Dimensional Drawings

Wired Controller

HYE-VD01

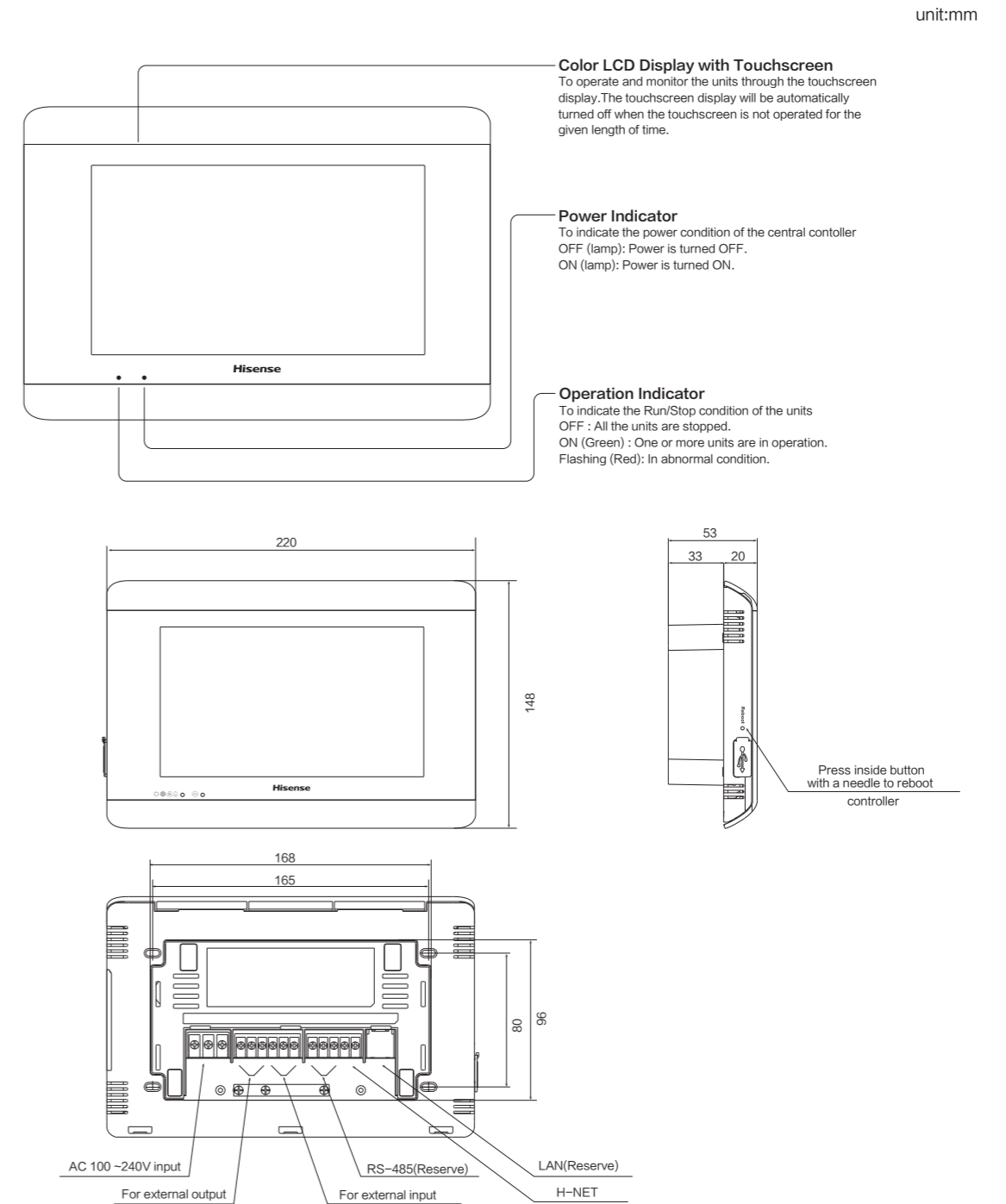


Note: The bracket for HYE-VD01 is standard part.

Dimensional Drawings

Wired Controller

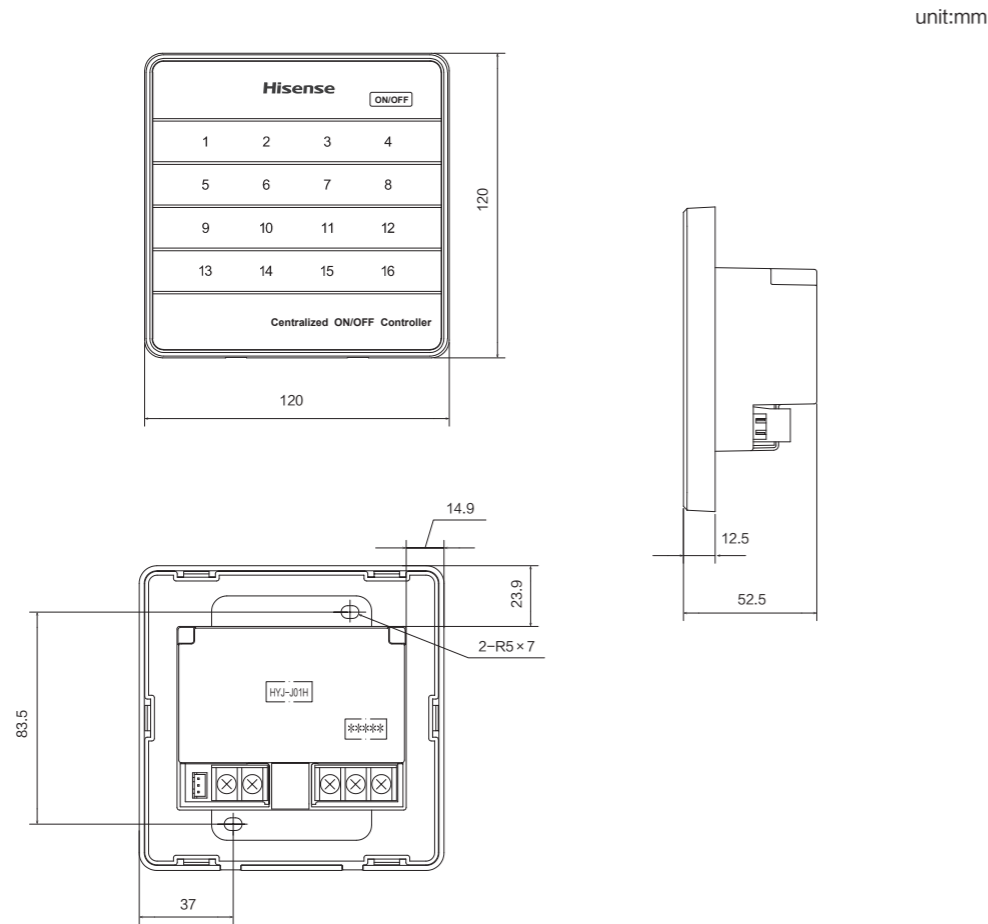
HYJM-S01H



Dimensional Drawings

Wired Controller

HYJ-J01H



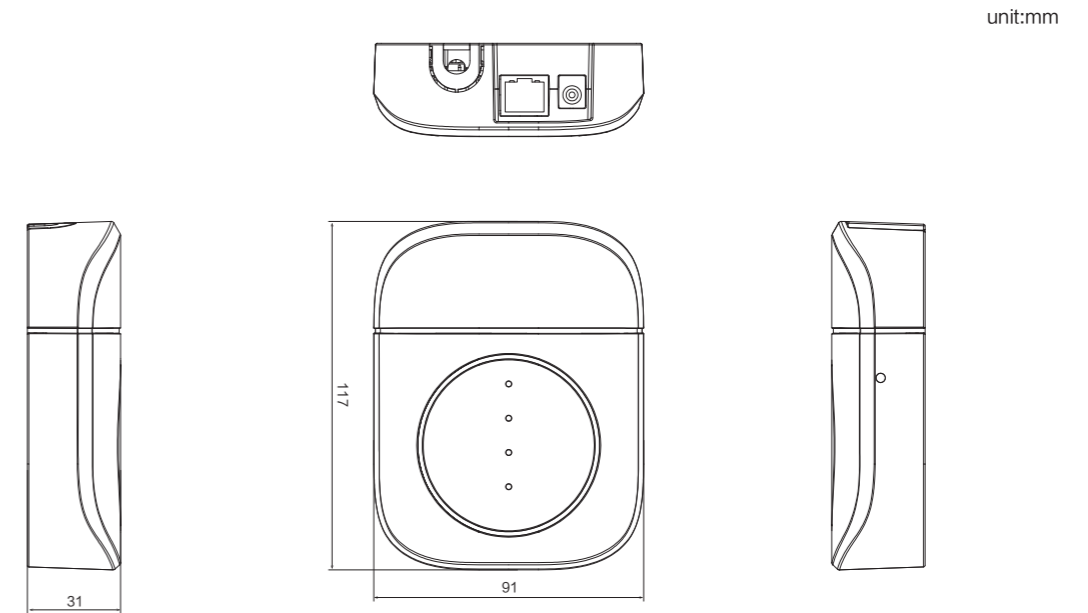
General Data

Outer Dimension W * H * D>	120 * 120 * 52.5 mm
Net Weight	1.0kg
Installation Location	Indoor
Installation Method	Wall Built-in
Connected Indoor Unit	≤160
Clock Accuracy	None
Ambient temperature	None
Ambient Humidity	None
Display	None
Rated Power Supply	220V
Electrical Power Consumption	None

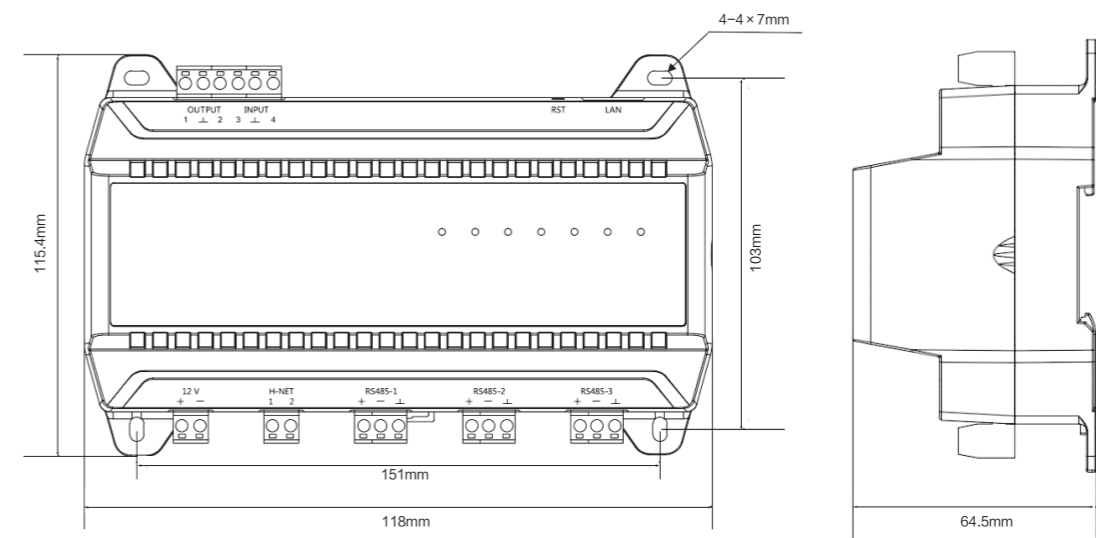
Dimensional Drawings

Wired Controller

Hi-Mit II



Hi-DOM III



ACCESSORY AND TOOLS

- Selection Software
- Design Software
- Piping Connection Kit
- Manifold Pipe Parameter
- Branch Pipe Parameter
- Switch Box
- Hi-Checker
- Optional Parts
- HRV Products Accessories

*AIR
CONDITIONING
SOLUTION*

Selection Software

Hi-selection software developed by Hisense HRF, is a Windows-based program which can run in Window XP and other higher operating systems. This software supports multiple languages, and is convenient for users from different countries. Users can get the latest updated products information easily, because Hisense selection software supports product database update.

Besides, this software is very intelligent. It not only supports manually drawing but also can generate device piping diagram, wiring diagram and project detailed report automatically. Furthermore, the software supports insertion of architectural drawing in DWG,PDF,JPG and PNG file formats, and designing on the architectural drawing.



Design Software

Hisense VRF design software is based on Autocad 2008~2020 which supports both 32-bit and 64-bit operating system. It involves the latest all ranges of products of Hisense, and supports online database update. The software supports system calculating for refriger-

ant pipes and condensate pipes. Besides, the installation material and the amount of the refrigerant charge can be calculated through the software. So that users can design the system easily.



Design Software

BIM

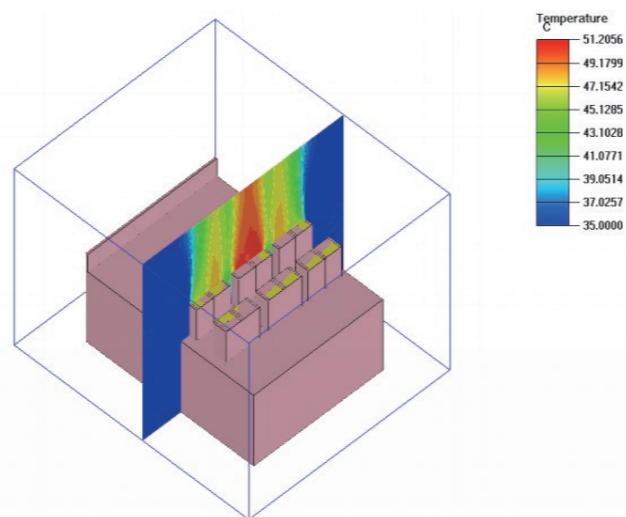
Building Information Modeling (BIM) is an umbrella term to cover many aspects of building modeling. Hisense can provide up-to-date graphic and parametric product information that is ready to use in any BIM process.



CFD

What is CFD technology ?

CFD stands for Computational Fluid Dynamics, which is the science of predicting fluid flow, heat transfer, mass transfer, chemical reactions, and related phenomena by solving the mathematical equations which govern these processes using a numerical process (that is, on a computer).

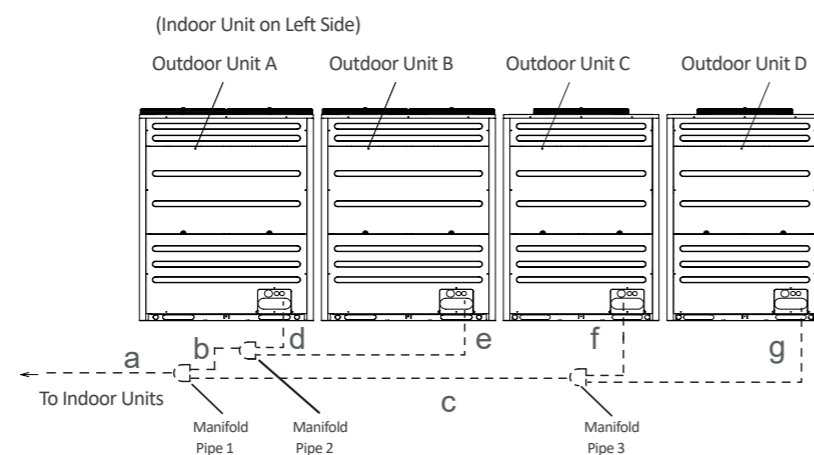


What can we do with CFD technology ?

CFD is the best method to analyze the air flow of building ventilation. It can provide the detailed and obvious simulation result, for example, indoor airflow distribution and temperature and velocity fields around the outdoor unit. These results will bring some good design advice to the architect or consultant before construction. In addition it's very fast and low cost.

Piping Connection Kit

Manifold pipe (For outdoor unit)



Piping Connection Kit

For S Series 2 Pipes System

Outdoor Unit	AVWT-228~AVWT-424 (24HP~44HP)	AVWT-444~AVWT-510 (46HP~54HP)	AVWT-530~AVWT-636 (56HP~66HP)	AVWT-648~AVWT-848 (68HP~88HP)
Manifold Pipe1	HFQ-M32F#ES	HFQ-M32F#ES	HFQ-M462F#ES	HFQ-M682F#ES
Manifold Pipe2	-	HFQ-M32F#ES	HFQ-M32F#ES	HFQ-M32F#ES
Manifold Pipe3	-	-	-	HFQ-M32F#ES

For S Series 3 Pipes Heat Recovery System

Outdoor Unit	AVWT-228 (24HP)	AVWT-250~AVWT-340 (26HP~36HP)	AVWT-360~AVWT-424 (38HP~44HP)	AVWT-444~AVWT-510 (46HP~54HP)	AVWT-530 (56HP)
Manifold Pipe1	HFQ-M202F#E	HFQ-M212F#E	HFQ-M302F#E	HFQ-M302F#E	HFQ-M462XF#ES
Manifold Pipe2	-	-	-	HFQ-M212F#E	HFQ-M212F#E
Manifold Pipe3	-	-	-	-	-

Outdoor Unit	AVWT-550~AVWT-636 (58HP~66HP)	AVWT-648~AVWT-680 (68HP~72HP)	AVWT-700~AVWT-720 (74HP~76HP)	AVWT-740~AVWT-848 (78HP~88HP)
Manifold Pipe1	HFQ-M462XF#ES	HFQ-M462XF#ES	HFQ-M682XF#ES	HFQ-M682XF#ES
Manifold Pipe2	HFQ-M302F#E	HFQ-M212F#E	HFQ-M302F#E	HFQ-M302F#E
Manifold Pipe3	-	HFQ-M212F#E	HFQ-M212F#E	HFQ-M302F#E

For W Series 2 Pipes System

Outdoor Unit	AVWT-210~AVWT-280 (22HP~24HP)	AVWT-250~AVWT-380 (26HP~40HP)	AVWT-400~AVWT-570 (42HP~60HP)
Manifold Pipe1	HFQ-M22F#ES	HFQ-M32F#ES	HFQ-M32F#ES
Manifold Pipe2	-	-	HFQ-M32F#ES

For W Series 3 Pipes Heat Recovery System

Outdoor Unit	AVWT-202~AVWT-212 (22HP~24HP)	AVWT-250~AVWT-344 (26HP~36HP)	AVWT-360~AVWT-380 (38HP~40HP)	AVWT-400~AVWT-570 (42HP~60HP)
Manifold Pipe1	HFQ-M202F#E	HFQ-M212F#E	HFQ-M302F#E	HFQ-M302F#E
Manifold Pipe2	-	-	-	HFQ-M302F#E

Branch pipe (For indoor unit) first branch pipe

For S Series 2 Pipes System

Outdoor Unit HP	8 to 10	12 to 16	18 to 24	26 to 54	56 to 66	68 to 88
Branch Pipe	HFQ-102F#ES	HFQ-162F#ES	HFQ-242F#ES	HFQ-302F#ES	HFQ-462F#ES	HFQ-M682F#ES

For S Series 3 Pipes Heat Recovery System

Outdoor Unit HP	8 to 10	12 to 16	18 to 24	26 to 36	38 to 54	56 to 66	68 to 88
Branch Pipe	HFQ-M282F#E	HFQ-M452F#E	HFQ-M562F#E	HFQ-M692F#E	HFQ-M902F#E	HFQ-462XF#ES	HFQ-682XF#ES

Piping Connection Kit

Branch pipe (For indoor unit) first branch pipe

For W Series 2 Pipes System

Outdoor Unit HP	8 to 10	12 to 16	18 to 24	26 to 54	56 to 60
Branch Pipe	HFQ-102F#ES	HFQ-162F#ES	HFQ-242F#ES	HFQ-302F#ES	HFQ-462F#ES

For W Series 3 Pipes Heat Recovery System

Outdoor Unit HP	8 to 10	12 to 16	18 to 24	26 to 36	38 to 54	56 to 60
Branch Pipe	HFQ-M282F#E	HFQ-M452F#E	HFQ-M562F#E	HFQ-M692F#E	HFQ-M902F#E	HFQ-462XF#ES

First branch pipe~ last branch pipe

For S Series 2 Pipes System

Total Indoor Unit HP	Lower than 6	6 to 8.99	9 to 11.99	12 to 15.99	16 to 17.99	18 to 25.99	26 to 35.99	36 to 55.99	56 to 57.99	58 to 67.99	Over 68
Gas(mm)	15.88	19.05	22.2	25.4	28.6	28.6	31.75	38.1	41.3	44.5	50.8
Liquid(mm)	9.53	9.53	9.53	12.7	12.7	15.88	19.05	19.05	22.2	22.2	25.4
Branch Pipe	HFQ-102F#ES	HFQ-102F#ES	HFQ-102F#ES	HFQ-162F#ES	HFQ-162F#ES	HFQ-242F#ES	HFQ-302F#ES	HFQ-302F#ES	HFQ-462F#ES	HFQ-462F#ES	HFQ-682F#ES

For S Series 3 Pipes Heat Recovery System (3 pipes portion)

Total Indoor Unit HP	Lower than 6	6 to 8.99	9 to 11.99	12 to 15.99	16 to 17.99	18 to 21.99	22 to 25.99	26 to 35.99	36 to 55.99	56 to 57.99	58 to 67.99	Over 68
Low Pressure Gas(mm)	15.88	19.05	22.2	25.4	28.6	28.6	28.6	31.75	38.1	41.3	44.5	50.8
High/Low Pressure Gas(mm)	12.7	15.88	19.05	22.2	22.2	22.2	25.4	28.6	31.75	38.1	41.3	44.5
Liquid(mm)	9.53	9.53	9.53	12.7	12.7	15.88	15.88	19.05	19.05	22.2	22.2	25.4
Branch Pipe	HFQ-M142F#E	HFQ-M282F#E	HFQ-M282F#E	HFQ-M452F#E	HFQ-M562F#E	HFQ-M562F#E	HFQ-M692F#E	HFQ-M692F#E	HFQ-M902F#E	HFQ-462XF#ES	HFQ-462XF#ES	HFQ-682XF#ES

Last Branch Pipe~Indoor Unit

Indoor Unit	Pipe Size (Ømm)		Max. Liquid Pipe Length
	Gas Pipe	Liquid Pipe	
7kBtu/h~14kBtu/h (1.5-4kW)	12.7	6.35	15
17kBtu/h~18kBtu/h (5-5.6kW)	15.88	6.35*1	15
22kBtu/h~54kBtu/h (11-16kW)	15.88	9.53	40
76kBtu/h (22.5kW)	19.05	9.53	40
96kBtu/h (28kW)	22.2	9.53	40

Notes: *1. When liquid pipe length of indoor unit(07~18kBtu/h) is more than 15m, please change the liquid pipe dimension from Ø6.35 into Ø9.53.

Manifold Pipe Parameter

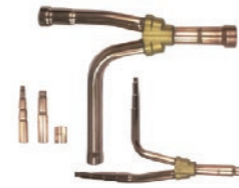


Model	Gas Line	Liquid Line	Reducer fo Gas Line	Reducer fo Liquid Line
HFQ-M22F#ES				
HFQ-M32F#ES				
HFQ-M462F#ES				
HFQ-M682F#ES				

Model	Low Pressure Gas Line	High Pressure Gas Line	Liquid Line	Reducer for Low Pressure Gas Line	Reducer for High Pressure Gas Line	Reducer for Liquid Line
HFQ-M202F#ES						
HFQ-M212F#ES						
HFQ-M302F#ES						

Unit: mm, ID: Inner Diameter, OD: Outer Diameter

Branch Pipe Parameter



Model	Gas Line	Liquid Line	Reducer for Gas Line	Reducer for Liquid Line
HFQ-102F#ES			—	
HFQ-162F#ES				
HFQ-242F#ES				
HFQ-302F#ES				
HFQ-462F#ES				
HFQ-682F#ES				

Unit: mm, ID: Inner Diameter, OD: Outer Diameter

Branch Pipe Parameter



Model	Low Pressure Gas Line	High Pressure Gas Line	Liquid Line	Reducer for Low Pressure Gas Line	Reducer for High Pressure Gas Line	Reducer for Liquid Line
HFQ-M142F#ES				—	—	
HFQ-M282F#ES				—	—	
HFQ-M452F#ES						
HFQ-M562F#ES						
HFQ-M692F#ES						
HFQ-M902F#ES						

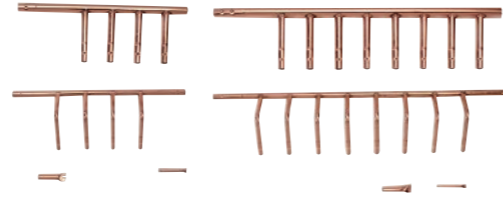
Unit: mm, ID: Inner Diameter, OD: Outer Diameter

*with or without insulation, please contact our sales person or professional engineers

Branch Pipe Parameter

Reference to the total capacity of the indoor units after the Branch-pipes

Total L.U.Capacity kbtu/h (HP)	Branch-pipe	Number of Branches
48~76 (5~8)	HFQ-104HF#ES	4 branches
48~96 (5~10)	HFQ-168HF#ES	8 branches



Model	Gas Line	Liquid Line	Expander	Closing Pipe
HFQ-104HF#ES			(gas pipe) ID19.05 OD12.7 (2 pc)	(gas pipe) OD12.7 (2 pc)
			(liquid pipe) ID9.53 OD6.35 (4 pc)	(liquid pipe) OD6.35 (2 pc)
HFQ-168HF#ES			(gas pipe) ID19.05 OD15.88 (2 pc)	(gas pipe) OD12.7 (6 pc)
			(liquid pipe) ID9.53 OD6.35 (8 pc)	(liquid pipe) OD6.35 (6 pc)

Unit: mm, ID: Inner Diameter, OD: Outer Diameter

Nuts connector is a good choice for mini VRF under 6 HP. No welding required in the installation.

Picture	Model	Description
	HFQ-052F#EN	Nuts branch pipe (Gas & liquid, Adapters)
	H7D-17013A	Double nuts connector for Φ6.35 copper pipe
	H7D-17013B	Double nuts connector for Φ9.53 copper pipe
	H7D-17013C	Double nuts connector for Φ12.7 copper pipe
	H7D-17013D	Double nuts connector for Φ15.88 copper pipe

Switch Box

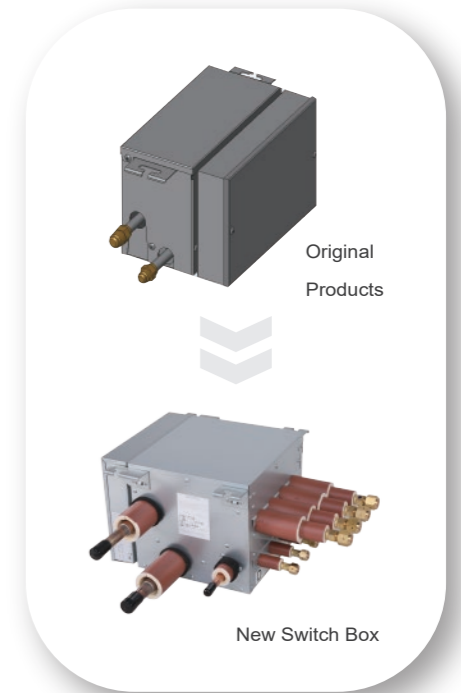
Switch Box

Introduction

Used for heat recovery systems to achieve simultaneous cooling and heating in a system, it is very important to realize installation flexibility and reduce costs.

Advantage

- Enrich the products (1,4,8,12,16) .
- Maximize capacity to 16kW or more.
- Require no drain pipes or drainage connections.
- Provide compact and lightweight design.
- Combine between single branch and multi-branch flexibility.
- Enable fewer connections, hooks and service parts for easy installation.



Model	Single Branch		Multi Branch						
	HCHS-N06XA	HCHS-N10XA	HCHM-N04XA	HCHM-N08XA	HCHM-N12XA	HCHM-N16XA			
Appearance									
Electrical	Power Supply	-	AC 1Φ,220-240V/50/60Hz						
	Power Input	W	5.6	5.6	11.2	22.4	33.6	44.8	
Maximum Total Capacity Index	kW	16	28	44.8	85	85	85		
Number of Branches	-	1	1	4	8	12	16		
Maximum Capacity Index per Branch	kW	-	-	16	16	16	16		
Maximum Connectable Indoor Units per Branch	pics	8	8	8	8	6	6		
Dimensions (H x W x D)	mm	191×301×214	191×301×214	260×303×352	260×543×352	260×783×352	260×1023×352		
Refrigerant	-	R410A							
Refrigerant Piping	Outdoor Unit Side	Gas Line (High and Low Pressure Side)	mm (in.)	Φ15.88(5/8)	Φ15.88(5/8)	Φ22.2(7/8)	Φ22.2(7/8)	Φ25.4(1)	Φ28.58(1-1/8)
		Gas Line (Suction Gas)	mm (in.)	Φ19.05(3/4)	Φ19.05(3/4)	Φ25.4(1)	Φ28.58(1-1/8)	Φ28.58(1-1/8)	Φ31.75(1-1/4)
	Indoor Unit Side	Liquid Line	mm (in.)	Not Included	Not Included	Φ12.7(1/2)	Φ12.7(1/2)	Φ15.88(5/8)	Φ19.05(3/4)
		Gas Line	mm (in.)	Φ15.88(5/8)	Φ19.05(3/4)	Φ15.88(5/8)	Φ15.88(5/8)	Φ15.88(5/8)	Φ15.88(5/8)
Net Weight	kg	Sound Pressure Level	dB (A)	33	33	31	31	34	34
		Max Sound	dB (A)	46	46	43	46	48	49

Note:

Please contact our professional engineer when the IDU capacity is over 16kW.

Hi-Checker



Intelligent service tool, improves your service

Hi-Checker is a plug and play service tool, with which service engineers can access the system and monitor operation status or data, very convenient for system communication and maintenance. Besides, it features cloud-based management, easy to access operation status remotely.



Small and Portable Body



Remote Access



Black Box Function



Powerful Chats



OTA Update

Easy to Use

- Compact size which allows high portability and space saving.
- Capable to slot in a 32G memory card for data collection and storage. Also the memory card and card reader are standard with Hi-Checker.
- Multiple choices of power supply types. It can be powered by the standard adapter (DC 5V), computer or power bank.
- Support OTA update, ensuring the software is always up to date.

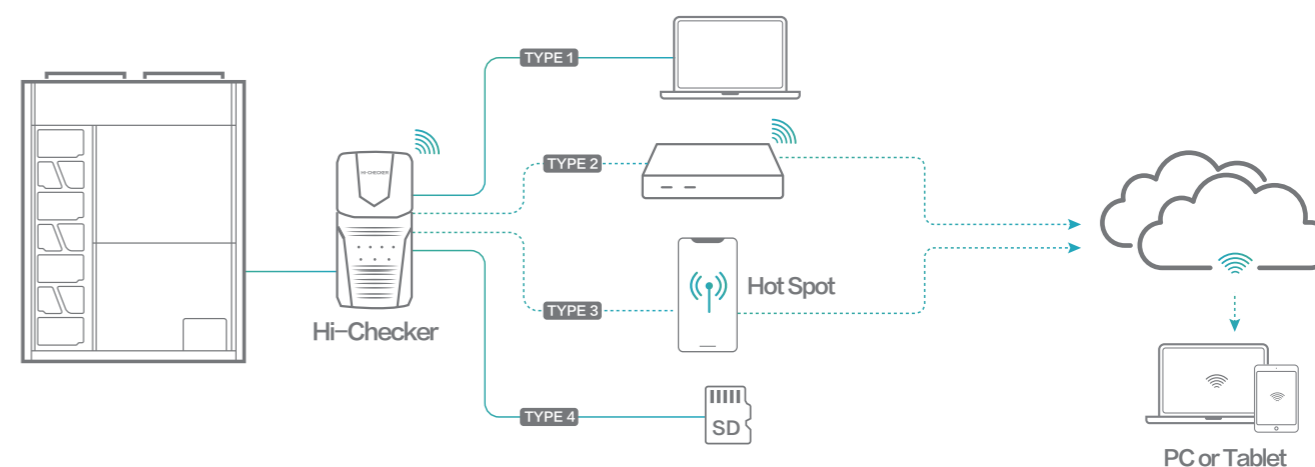


Hi-Checker

Easy to Access

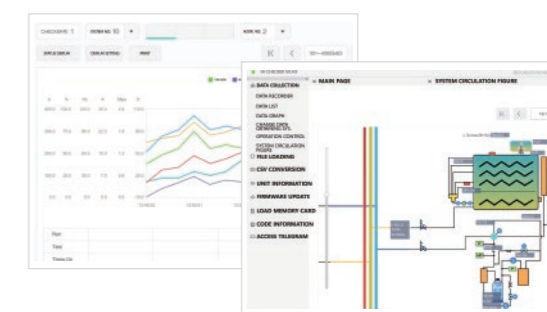
4 Ways to Access the Operation Data

- Conventional connection type. The simplest and reliable way by just connecting the Hi-Checker to your computer directly through USB.
- Internet connection type. Be connected to a stable Wi-Fi signal to achieve operation data and status monitoring anytime and anywhere.
- Hotspot connection type. Be connected to a temporary hotspot signal from the smartphone, allowing the Hi-Checker to remotely monitor the operation data when there is no stable Wi-Fi signal on site.
- SD card storage type. Hi-Checker equipped with SD card can be connected to the air conditioning system all the time, so that all the operation data can be stored in the card for later analysis.



Easy to Understand

- Powerful and detailed chart analysis on the operation data, allowing users to determine the system condition easily. Together with the smart system diagram, it is interesting and easier for maintenance.
- Users can export the professional report either in .csv or .pdf format, very user-friendly.



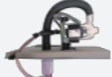


Note: HFB-96LFGDE is the filter box, when HFB-96HFGDE or HFB-96LFGDE is chosen, the filter box is necessary.

Hi-Checker


Model	Size (LxWxH)mm	Net Weight (g)	Power Supply	Connectable IDUs	Picture
HCCS-H64H2C2M	138x68x28	130	5V=500mA	160	

Optional Parts


Drain Pump

Model	Power supply	Consumption	Max. Lift(mm)	Applicable models	Picture
HPS-132#E	AC 220~240V(50/60Hz)	9±1.5 W	900	AVD-07~AVD-24	
HPS-162#E	AC 220~240V(50/60Hz)	9±1.5 W	900	AVD-27~AVD-54	
HPS-151#E	AC 220~240V(50/60Hz)	9±1.5 W	600	AVD-76UX6SEH, AVD-96UX6SFH	
HPS-F8103E	AC 220~240V(50/60Hz)	12±1.5W	600	AVD-76HJFH, AVD-96HJFH	


3D Air-flow Panel

Model	Applicable Models	Outer Dimensions HxWxD(mm)	Interface Dimension HxW(mm)	Picture
HP-CB-NA	For ceiling ducted type (Low- height) 1.7~3.6kW AVE-05-14	180x738x89	546x136	
HP-DB-NA	For ceiling ducted type (Low- height) 4.5~5.0kW AVE-15-17	180x948x89	756x136	
HP-EB-NA	For ceiling ducted type (Low- height) 5.6~7.1kW AVE-19-24	180x1218x89	1026x136	


Hi-Motion

Model	Applicable Models	Unit Size DxH(mm)	Picture
HCM-S01E	all indoor unit except 4-way cassette type and mini 4-way cassette type	100x30	


Motion Sensor

Model	Applicable Models	Picture
HPS-MACN	Mini 4-way cassette type	
HCM-01E	4-way cassette type	


Duct Adapter

Model	Applicable Models	Picture
HFL-56CSA	4-way cassette type and mini 4-way cassette type	


Humidity Sensor

Model	Applicable Models	Picture
HCHR-S01E	4-way cassette type, Console, Ceiling Ducted Type (Low-height)	

Cable for I/O Interface in Indoor Units


Model	Applicable Models	Picture
H7D01759A	All indoor unit	

Wall Mount Temperature Sensor

Model	Applicable Models	Picture
HCT-S01E	Ceiling ducted type, Ceiling ducted type (High pressure), 4-way cassette type, Mini 4-way cassette type	

Optional Parts


AirPure Kit

Model	Applicable Models	Picture
HJK-ELZA	4-way cassette type, Mini 4-way cassette type	
HJK-ELZB	Low height ceiling ducted, high static ceiling ducted	


Snow Cover(side)

Model	Applicable Models	Outer Dimensions HxWxD(mm)	Picture
HAS-ESL	AVWT-76FKFSHA	1060x233x717	
	AVWT-96FKFSHA		
	AVWT-114FKFSHA		
	AVWT-136FKFSHA		
	AVWT-154FKFSHA		
	AVWT-170FKFSHA		
	AVWT-190FKFSHA		
AVWT-212FKFSHA			

Snow Cover(back)

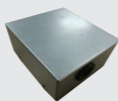
Model	Applicable Models	Outer Dimensions HxWxD(mm)	Picture
HAS-ES095B	AVWT-76FKFSHA AVWT-96FKFSHA	1082x405x925	
HAS-ES121B	AVWT-114FKFSHA AVWT-136FKFSHA	1082x405x1185	
HAS-ES135B	AVWT-154FKFSHA AVWT-170FKFSHA	1082x405x1330	
HAS-ES160B	AVWT-190FKFSHA	1082x405x1575	
	AVWT-212FKFSHA		

Snow Cover(top)

Model	Applicable Models	Outer Dimensions HxWxD(mm)	Picture
HAS-ES095T	AVWT-76FKFSHA AVWT-96FKFSHA	953x755x953	
HAS-ES121T	AVWT-114FKFSHA AVWT-136FKFSHA	953x755x1213	
HAS-ES135T	AVWT-154FKFSHA AVWT-170FKFSHA	953x755x1355	
HAS-ES160T	AVWT-190FKFSHA	953x755x1603	
	AVWT-212FKFSHA		

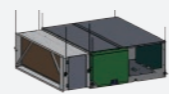


Optional Parts

PAC Centralized Control Convertor


Model	Dimensions (H*L*W)/mm	Picture
HCPC-H3C1	62*152*125	

Note: When this control convertor is used, there is at least one VRF indoor unit in the system.

Filter


Model	Filter Dimension W×H (mm)	Applicable Models	Picture
HFB-96LFGDE	1339×462	AVD-76HJFH,AVD-96HJFH	
HF-96HFGDE	—		
HF-96LFGDE	—		
HF-280L-FE	1100×432.5	AVD-96UX6SFH, AVD-76HJFH,AVD-96HJFH	
HF-224L-FE	910×432.5	AVD-76UX6SEH	
KW-PP1Q	582×236	AVD-07UXCSAH,AVD-09UXCSAH,AVD-12UXCSAH,AVD-14UXCSAH	
KW-PP2Q	832×236	AVD-17UXCSBH,AVD-18UXCSBH,AVD-22UXCSBH,AVD-24UXCSBH	
KW-PP3Q#E	832×316	AVD-27UXCSCH, AVD-30UXCSCH,AVD-38UXCSCH	
KW-PP4Q#E	1230×316	AVD-48UXCSDH,AVD-54UXCSDH	

Hi-Dom Manager


Model	EPC-S101CQ-S6A1		Picture
Environment	Operating	0 ~ 50° C (32 ~ 122° F) w/ 0.7m/s airflow	
	Non-operating	-40 ~ 85° C (-40~185° F)	
	Relative Humidity	40° C @ 95%, Non-Condensing, operating 60° C @ 95%, Non-Condensing, non-operating	
Physical Characteristics	Mounting	Desk/Wall-mounting, VESA mounting, Din rail mounting standoff reserved	
	Dimensions (W x H x D)	System dimension : 188 x 39 x 150 mm	
	Weight	0.95 kg	
Regulation	EMC	CE/FCC Class B	
	Safety	CB, UL, CCC, BSMI	
Applicable Models	HI-DOM III		

HRV Products Accessories


Electric Pre-heater Section

Model	Applicable Models	Picture
HKF-PRE250	HKF-25D1EC, HKF-35D1EC	
HKF-PRE500	HKF-50D1EC	
HKF-PRE650	HKF-65D1EC, HKF-80D1EC, HKF-100D1EC, HKF-130D1EC	


Electric Post-heater

Model	Applicable Models	Picture
HKF-POST250	HKF-25D1EC, HKF-35D1EC	
HKF-POST500	HKF-50D1EC	
HKF-POST650	HKF-65D1EC, HKF-80D1EC, HKF-100D1EC, HKF-130D1EC	

Touch Screen Controller

Model	Applicable Models	Picture
PTS	HKF-**D1EC (All models)	

CO₂ Wall Mount Sensor

Model	Applicable Models	Picture
HKF-CO ₂	HKF-**D1EC (All models)	

Humidity Wall Mount Sensor

Model	Applicable Models	Picture
HKF-HUM	HKF-**D1EC (All models)	