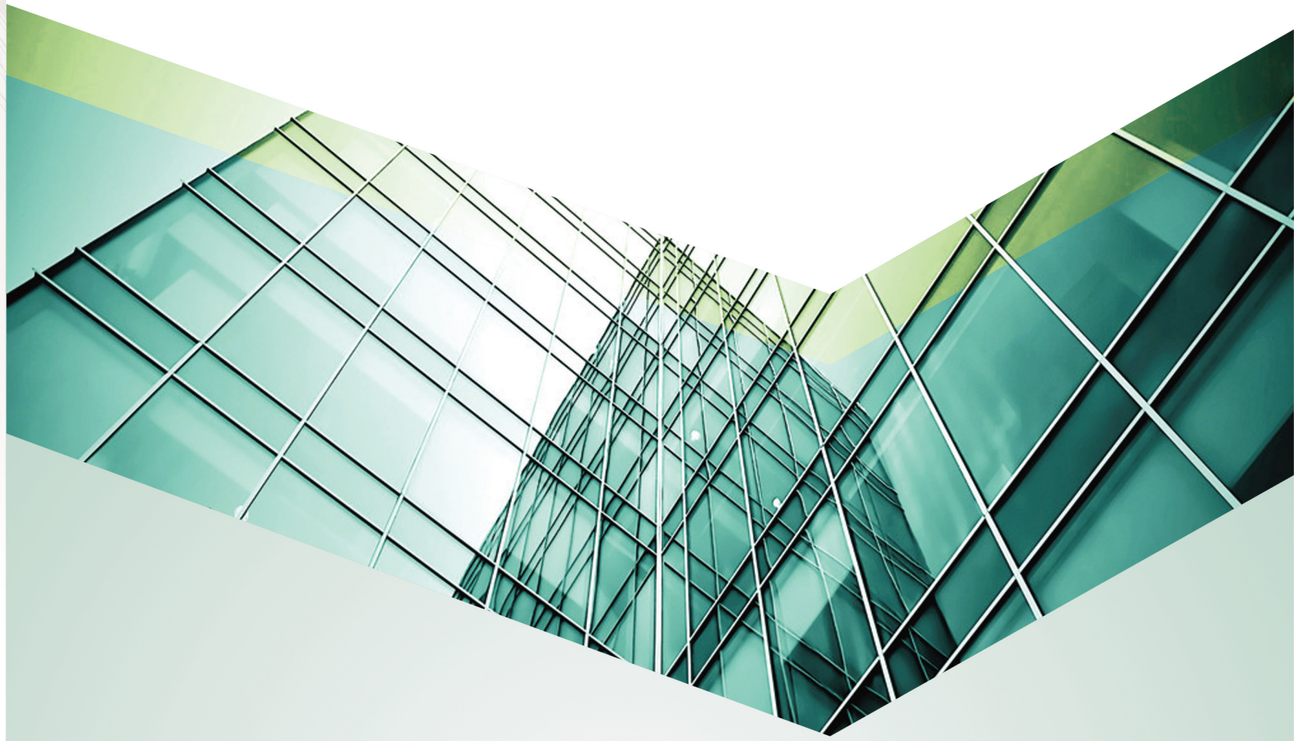
Hisense

Hi-FLEXi H

Inverter-Driven Multi-Split Central Air Conditioning Heat Recovery System



R410A

Hisense

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Hisense

Hi-FLEXi H Series





Hi-Flexi · Hisense HiQuality

Hisense Hi-Flexi Series stems from Hisense high-quality and high-grade intelligent Commercial Central Air Conditioning. It relies on Hisense high technical platform of inverter-driven central air conditioning and has a brand gene of high-tech and high-quality from the date of birth which perfectly implements Hisense's value concept —"create perfect, service society"

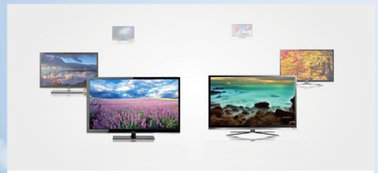
Hisense Inverter-driven Central Air Conditioning Hi-Flexi H Series standing on the high level of multi-split technology adopts high efficient high pressure chamber compressor and leading inverter control technology, which further improves the system performance and energy efficiency. The modular combination method realizes the system capacity of 8~48HP in a 2HP increment by combining 5 base units from 8HP to 16HP. Such a strong lineup provides better air conditioning solution for work, leisure and living space.

CONTENTS

Technological Hisense

Hisense is a large electronic information industry corporation of China founded in 1969 and owns Hisense Appliance and Hisense Kelon Appliance these two listed companies. Furthermore, Hisense is the only enterprise group in China which has three well-known trademarks as Hisense, Kelon and Ronshen at the same time.

Hisense adheres to the development strategy as “Technology Support, Steady Operation” and sustains healthy development by taking optimized industrial structure as the base, technological innovation as the drive force, capital operation as a leverage. In the 21st century, with powerful R&D strength and excellent internationalized management team, Hisense has speeded up the pace of industrial expansion and formed an industrial structure including digital multimedia, home appliances, communications, intelligent information systems, modern real estate and service.



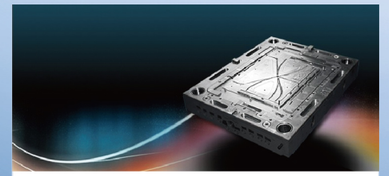
Multimedia Products

Home Appliances

Information Communication Products

Commercial Equipment

Real Estate and Property Management



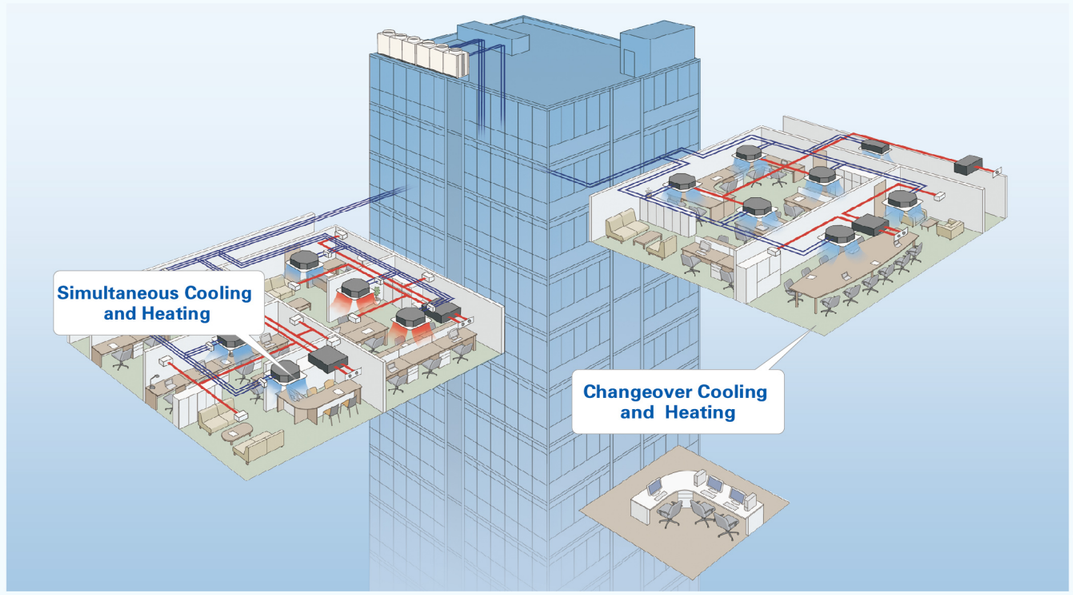
Mould and Industrial Design

HiQuality
HI-FLEXI H Series

Hi–Flexi H Series

Multi Air-conditioning Heat Recovery System
Introduction.

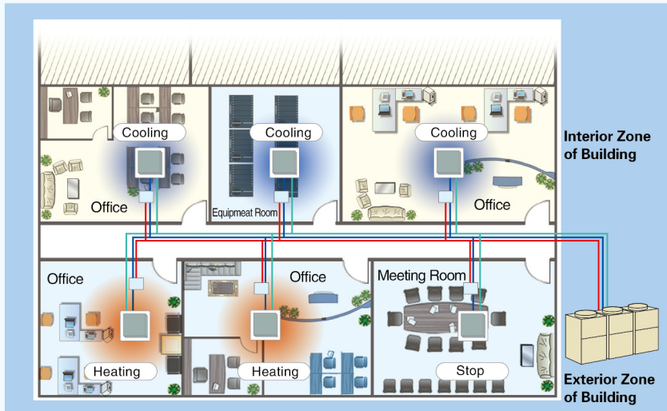
Hisense Hi–Flexi H Series heat recovery air conditioning systems realize simultaneous cooling and heating operation within one refrigerating system, which not only contributes to energy conservation but also meets various requirements of different customers.
Because rooms generate varying thermal loads according to building orientation or local hot or cold spots, the space where cooling is required all year round and space where cooling and heating should be changed over seasonally coexist in the same building. Also, air conditioning needs vary from person to person, from room to room, especially at the turn of seasons. Under these circumstances, Hisense heat recovery system debuted.
Besides, from the viewpoints of application and environmental protection, Hisense introduce a comprehensive air–conditioning management system that makes it easier for users to conduct air–conditioning monitoring and control according to usage status.



Heat Recovery Green Design, Environmentally Friendly, High Efficiency and Energy Saving

Heat Recovery Multi-split Air Conditioning System realizes simultaneous cooling and heating through perfect combination of DC inverter technology and heat recovery technology, which results in a 20% energy saving compared with traditional air conditioning. At the same time, the extended scope of application and high quality that users experienced have been offered on the basis of effective running cost reduction.

Humanized Design, Flexible Response to the Change of Demand

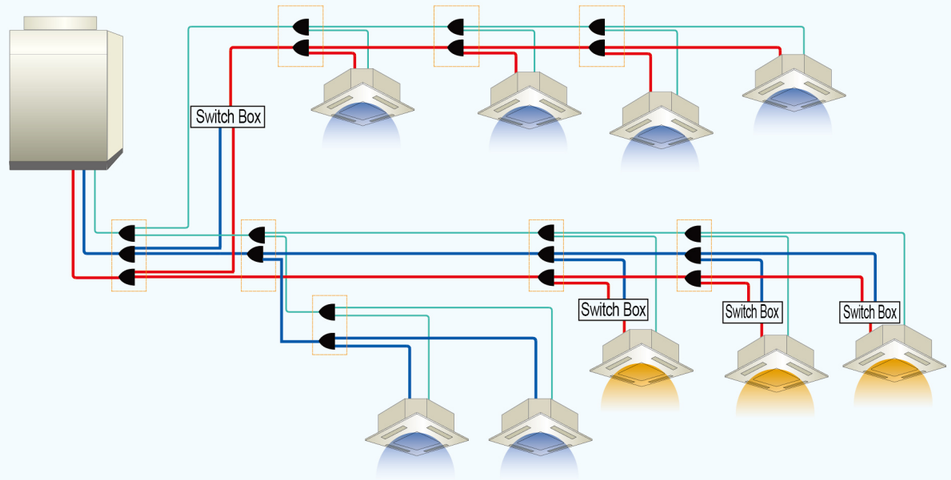


Meeting various requirements of consumers who are sensitive to temperature and diverse space with different function from the perspective of humanity especially at the turn of the season, like the complex of equipment rooms and offices, or the guest rooms and dining hall in the same hotel etc.

The latest heat recovery multi-split system achieves indoor units cooling and heating at the same time and being switched between two modes individually,which flexibly satisfies personalized need of different users.

Configuration of Heat Recovery Operation System

Hi-Flexi H Series heat recovery operation system is composed of heat recovery outdoor unit, indoor unit, switch box, multi-kits and refrigerant pipes. One switch box unit could connect to one or multiple indoor units. The indoor units equipped with a same switch box unit will keep the same operation mode. The indoor units connecting directly to the refrigerant liquid pipe and the low pressure gas pipe instead of via switch box unit will stick to cooling only operation.



Hi–Flexi， Hisense Hi Quality!

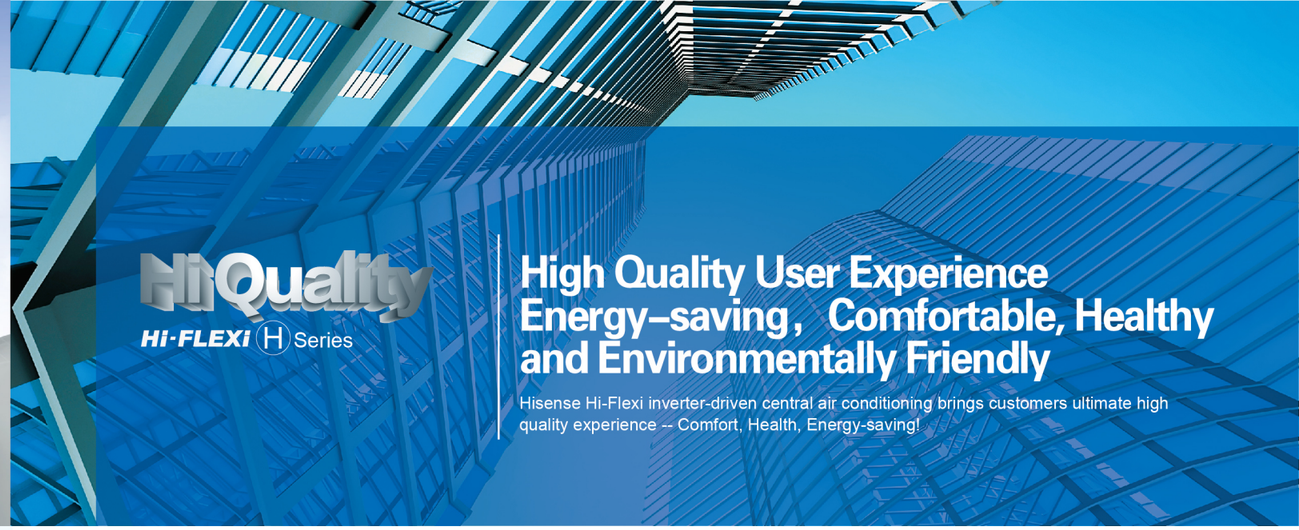
Hisense Hi-Flexi H series inverter-driven central air conditioning integrates Hisense superb product quality --- “Hisense Hi Quality”, high energy efficiency, high technology, high flexible installation and perfect after-sale service, which strives to provide high level and high quality environment experience for customers.
Precise temperature control, even air supply, more comfort and fresh air take care of every corner of space.

01 Hi-Flexi H Series Lineup

Model		AVWT–86F	AVWT–96F	AVWT–114F	AVWT–136F	AVWT–154F
Cooling Capacity	kBtu/h	86.0	95.5	114.3	136.5	153.5
Heating Capacity	kBtu/h	92.1	107.5	128.0	153.5	170.6

Model		AVWT–182F	AVWT–190F	AVWT–210F	AVWT–232F	AVWT–250F	AVWT–272F	AVWT–290F	AVWT–307F
Cooling Capacity	kBtu/h	181.5	191.1	209.8	232.0	249.1	267.8	290.0	307.1
Heating Capacity	kBtu/h	199.6	215.0	235.4	261.0	278.1	298.6	324.1	341.2
Combination		8HP+10HP	10HP+10HP	8HP+14HP	10HP+14HP	12HP+14HP	14HP+14HP	14HP+16HP	16HP+16HP

Model		AVWT–328F	AVWT–345F	AVWT–365F	AVWT–386F	AVWT–402F	AVWT–426F	AVWT–444F	AVWT–460F
Cooling Capacity	kBtu/h	327.6	344.6	363.4	385.6	402.6	421.4	443.6	460.6
Heating Capacity	kBtu/h	368.5	385.6	406.0	431.6	448.7	469.2	494.7	511.8
Combination		8HP+10HP+16HP	10HP+10HP+16HP	12HP+12HP+14HP	12HP+12HP+16HP	12HP+14HP+16HP	12HP+16HP+16HP	14HP+16HP+16HP	16HP+16HP+16HP



High Quality User Experience Energy–saving， Comfortable, Healthy and Environmentally Friendly

Hisense Hi-Flexi inverter-driven central air conditioning brings customers ultimate high quality experience -- Comfort, Health, Energy-saving!

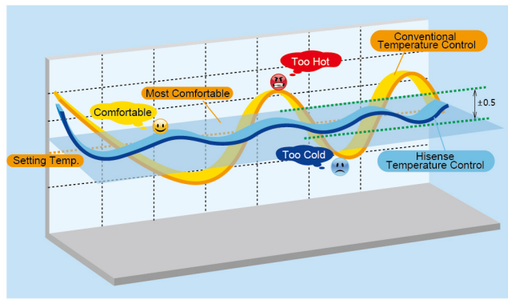
02 Precise Temperature Control, Even Air Supply

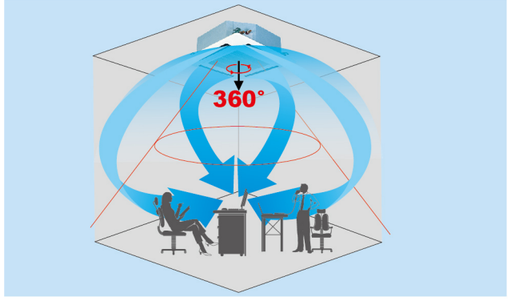
Precise Room Temperature Control

Hi-Flexi sets temperature sensors on air outlet /air inlet of indoor units and remote controller, and adopts microcomputer control 2000-pulse high precision electronic expansion valve to adjust refrigerant flow rate, which can maintain the room temperature within 0.5℃ of setting temperature and satisfy the indoor comfort requirement.

Circulating Airflow, Even Air Supply

Hisense 4-way cassette type distributes the airflow to every corner of the room by 360°air supply and adjustment of louver position. All-directional circulating airflow contributes to avoid the dead air in corner, creates the most comfortable space with uniform temperature.

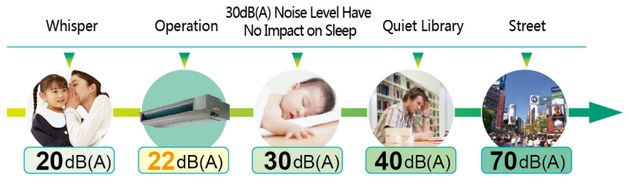




03 Top Class Low Noise Design

Indoor Unit Noise Control

In accordance with application situation and structure, Hisense has been studying the technical means and installation methods for noise reduction of indoor units from various aspects of fan motor, fan blade and air duct layout, which provides customers with the quietest air conditioned environment.



Hisense

Outdoor Unit Noise Control

Adoption of Hitachi High Pressure Chamber Scroll Compressor

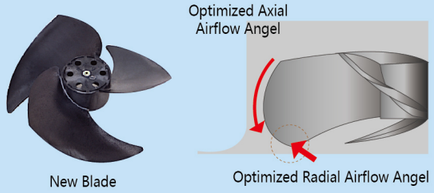
Sophisticated manufacturing technology contributes to little vibration and low noise level.

Noise Deadening of Fan Motor

The material of fan motor is cast aluminum. The motor bracket is of non-resonant hanger structure, which ensures stable motor performance, lowers vibrating noise.

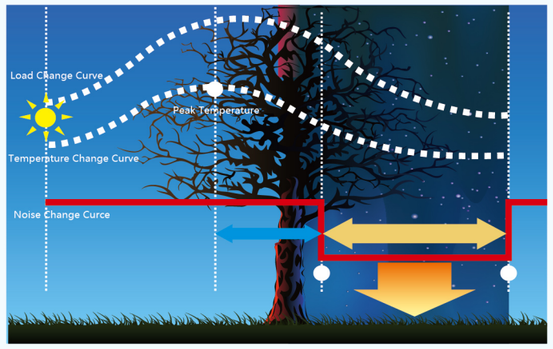
New Efficient Axial Fan

The newly developed efficient axial fan with new blade shape helps decrease turbulence around. It is made of special material which has an obvious effect to absorb vibrating noise and minimizes the “Buzz” dramatically.



Low Noise Mode at Night

The outdoor unit has a peculiar function of night-shift setting, which reduces the noise level by max.10dB (8HP) when in full-load operation.



04 The Advocate and Practicer of Low Carbon Life

RoHS Reaction

Actively respond to Europe RoHS directive, control the use of hazardous substance strictly. RoHS stands for Restriction of Hazardous Substance Directive, which specifies six substances (Lead (Pb), Mercury(Hg),Cadmium(Cd), Hexavalent chromium(Cr),PBDE orPBB) banned from using in electrical and electronic equipment. Hisense actively reponded to RoHS directive and implemented a series of programs and measures, which aims to preserve human health and ensure that the recycling and treatment of waste eletronic and electrical equipment meet the environmental stardard.

R410A Refrigerant, Protect Ozone Layer

Hi-Flexi adopts non-toxic and harmless environmentally friendly refrigerant R410A which has been worldwide affirmed and applied.

HiQuality

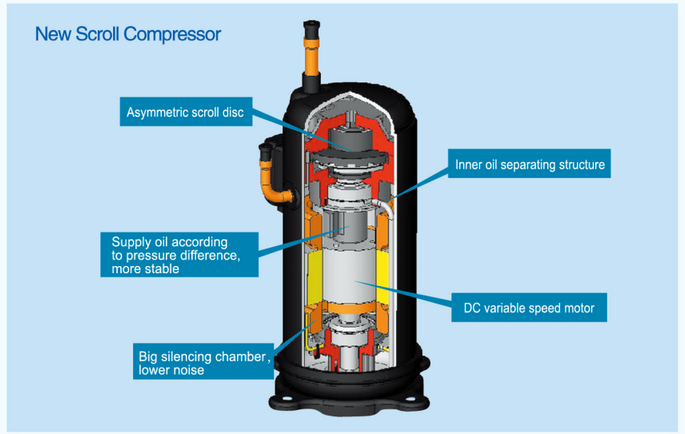
HI-FLEXI H Series

High Technology Support Platform Creates Hisense High Quality Product

Technology says quality. Continuous progress of Hisense technology leads to continuous improvement of product quality. With the technological principle of “Emotional Technology” and the drive force of humanized technology, Hisense targets high quality products and offers high quality products to customers through constant transformation, optimization and improvement of technology on the platform of Hisense inverter-driven central air conditioning system.

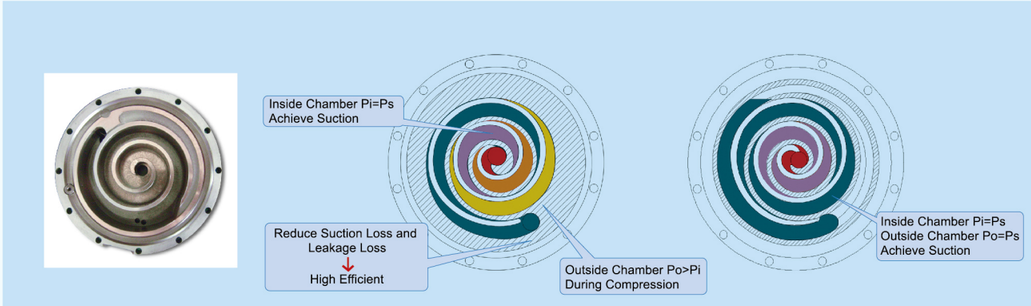
01 High Efficient High Pressure Scroll Compressor

Hi-Flexi adopts large capacity high-pressure chamber scroll compressor with an interior oil separating section, which maintains most of lubricating oil in compressor by the use of the interior oil mist separator and oil-returning pipe design. Only much less oil is discharged from compressor along with refrigerant, which avoids cooling capacity decrease due to redundant oil in refrigeration cycle, further improves efficiency.



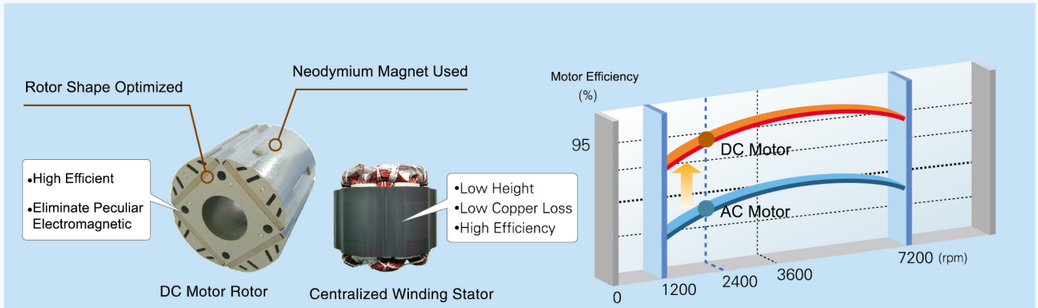
Exclusive Asymmetric Scroll Technology

The asymmetric scroll structure of Hitachi compressor effectively helps reduce the refrigerant gas leakage loss in the process of suction and compression, enhances operating efficiency and reliability.



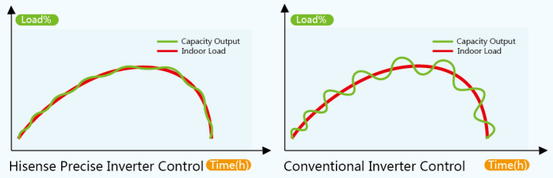
DC Inverter-driven Compressor

By the use of DC motor, the performance is improved at around 20~40Hz where the operation time of the inverter compressor is longest. Meanwhile,the rotor of compressor's motor is divided into two parts to suppress electromagnetic interference (EMI) which achieves low noise.



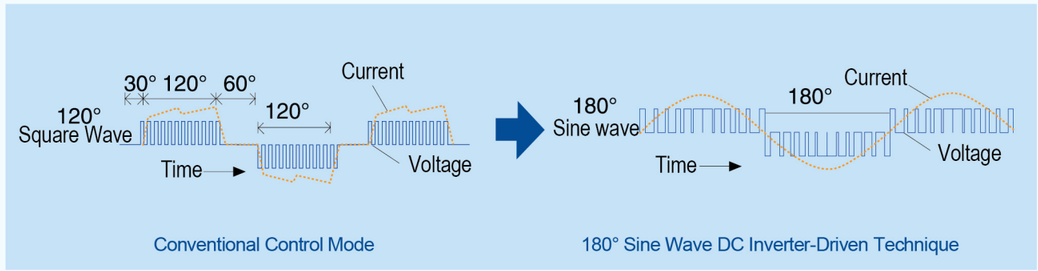
02 DC Inverter-Driven Technique

The operating speed of DC motor in compressor can be adjusted continuously and freely relating to the variability of system capacity. This technique integrated with auto-adaptive control technique automatically adjusts capacity output according to actual air conditioning load in order to achieve a smoother curve of temperature fluctuation to satisfy higher requirements of coziness.



180°Sine Wave DC Inverter-Driven Technique

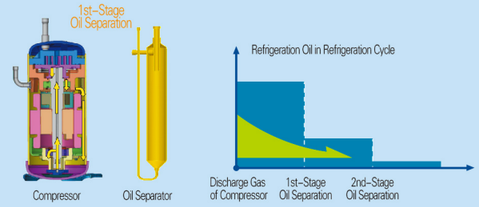
The application of advanced sensorless three phase vectoring control technique on permanent magnetism synchronous motor ensures the output current of DIP-IPM DC inverter to be a smooth sine wave curve, and accordingly enables motor to operate smoothly with efficiency dramatically increased. At the same time, both harmonic current and electromagnetic noise are suppressed.



03 Oil Control Technique, Improve the Reliability

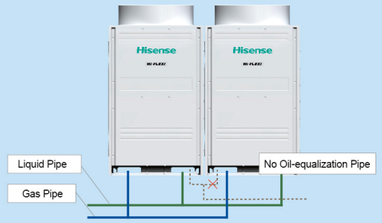
High Efficient Oil Separating Technique

The system can operate safely and reliably by the use of interior oil-separating section and exterior oil separator. Much less oil enters refrigerating circulation, accordingly enough oil can be guaranteed for lubricating compressor.



Oil-equalization Control Technology Between Outdoor Units

Synthetic application of scroll compressor with internal oil separating function, efficient external oil separator, accumulator, and intelligent oil level control technology regulates the oil level within the appropriate limits, ensures oil balance between outdoor units, and guarantees system stability and reliability.



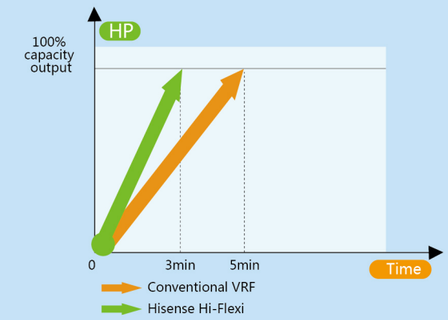
Oil Return Contol

Oil return operation conducted according to the operation frequency and operation time of compressor effectively avoids the oil retention in indoor heat exchanger and outdoor heat exchanger and reduces the compressor failure due to inadequate refrigeration oil. After oil return control, system returns to previous operation automatically.

04 Intelligent Defrosting, Rapid Heating

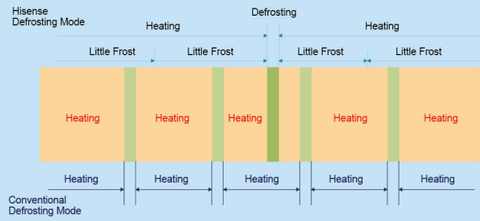
Rapid Heating Start-up

Combining the soft start of DC inverter compressor and rapid start of fixed speed compressor, the system can achieve 100% heating capacity output instantly and quickly meet the air-conditioning demand.（Taking 48HP as an example）



Intelligent Defrosting Mode

Frosting doesn't occur frequently and the short defrosting time ensures heating effect in winter.



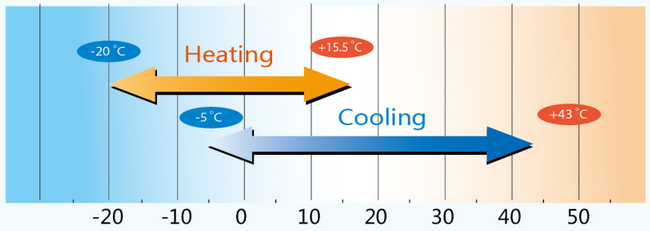
- Outdoor unit adopts the outdoor temperature sensor and heat exchanger temperature sensor, and precisely calculates the defrosting time.
- Through the adjustment of outdoor fan, electronic expansion valve and compressor frequency, defrosting frequency and defrosting time can be largely reduced.

05 Rotational Operation to Distribute Load of Outdoor Units

Regulating the operation time of each outdoor unit leads to load reduction on compressors. Therefore, outdoor unit endurance is improved.

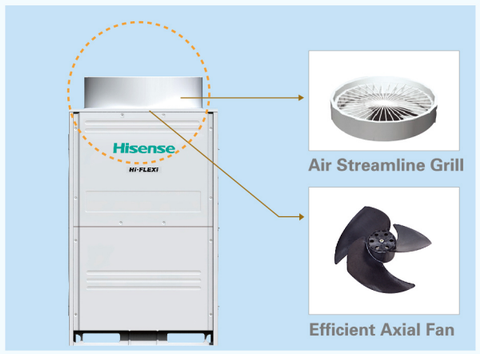
06 Wide Working Range

Hi-Flexi H Series can handle a wide range of outside air conditions, thus extending the flexibility of installation space and climatic environment.

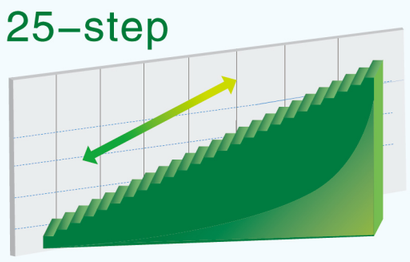


07 25-Step Fan Speed Control

The DC variable-speed motor is adopted in outdoor unit, which results in efficiency promotion and power input reduction. The outdoor fan speed can be adjusted by 25 steps.



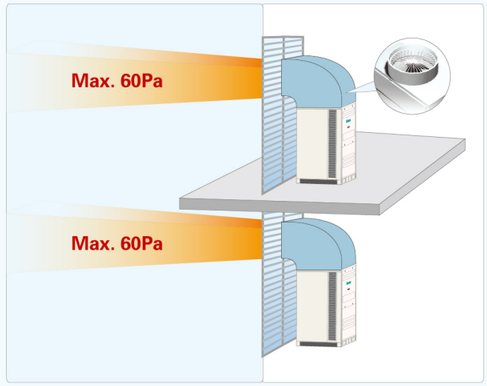
- The stability of discharge pressure and suction pressure of compressor is assured
- The stability of flow (capacity) dynamic allocation of indoor unit is assured
- Quick response of control system is improved, accordingly the system stability, durability and reliability are assured



08 Wide Range of External Static Pressure of Outdoor Units

High efficient axial fan designed with computer fluid analysis, finite element method and aerodynamic simulation analysis owns optimized inlet and outlet angle, as well as a special flared outlet design, which results in higher external static pressure allowance, better air exhaust and sound air circulation.

- High Efficient Fan Reduces Motor Power Consumption
- Top Class External Static Pressure: 60Pa

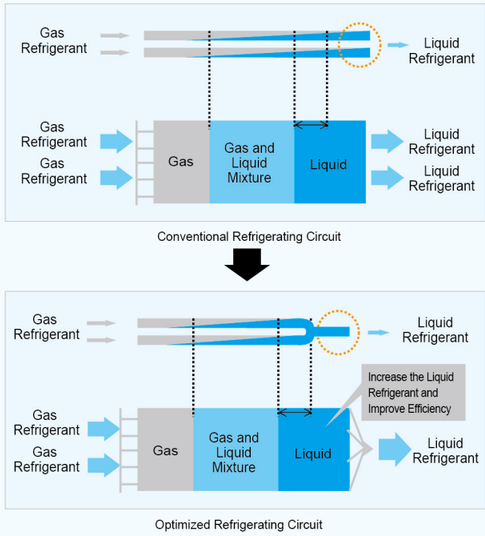


09 New Efficient Heat Exchanger

New efficient heat exchanger adopts Φ7.0 inner grooved copper pipes with high thermal conductivity and new Step Fin, which leads to air flow resistance reduction, even and full heat exchange and heat transfer improvement. Furthermore, the amount of frost on heat exchanger decreases in winter, which improves heating effect.

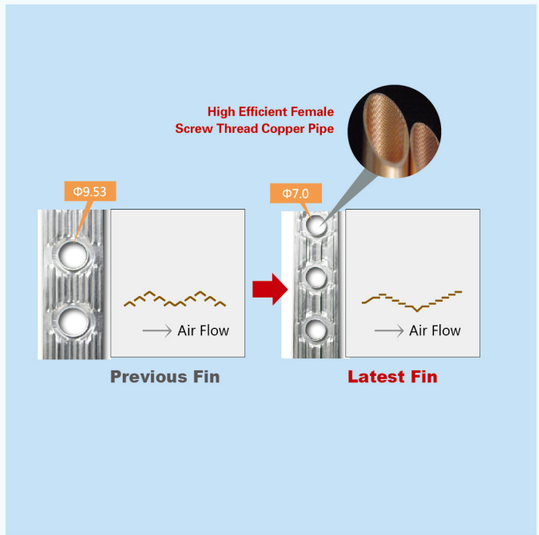
Optimized Refrigerant Circuit Design

The specially designed refrigerant flow circuit optimizes the efficiency of heat exchanger.



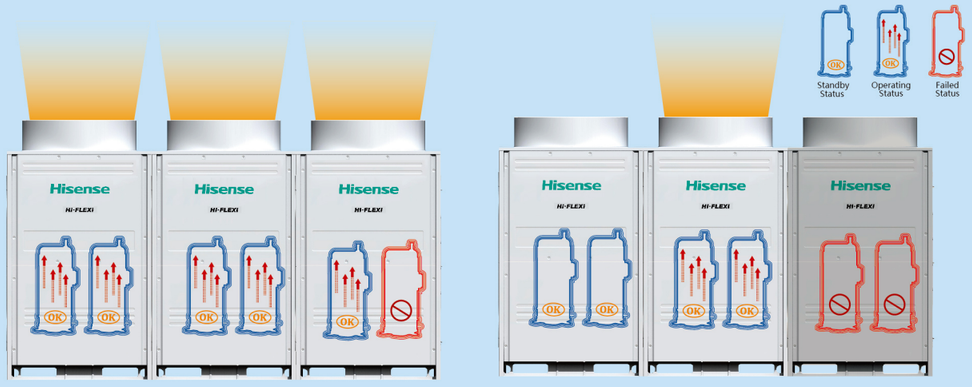
Newly Developed Fin with Efficient Heat Transfer

New fin and copper pipe contribute to promote heat transfer efficiency



10 Double Back-up Operation Function , Double Service Guarantee

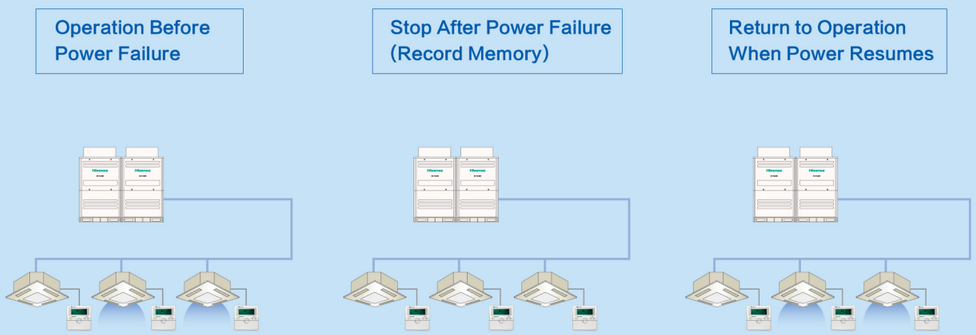
The back-up operation function that prevents the system from coming to a complete stop can be fulfilled in two ways.
1.As one of outdoor units breaks down, the rest of outdoor units in the same refrigerant system can turn to operate urgently (more than 16HP system practicable).
2.As one compressor is failed, the other compressor in the same outdoor unit can be set to emergency operation mode.



Compressor Backup　　Outdoor Unit Backup

11 Automatic Reset Function

The operating data can be recorded automatically as power failure occurs. When the power supply is restored, the system can fulfill automatic start-up (manual operation allowed), the previous operation mode can be renewed without being reset, which brings more intelligent and considerate service to users.



Hi Quality

Hi-FLEXI H Series

Flexible Design and Installation, Optimized Combination

Hi-Flexi fully takes actual installation conditions into consideration. Modular combination not only makes design and installation work more flexible, but also facilitates the transportation and decreases the land occupation. Adhere to the concept of “all for customers”, Hisense incorporates utilization of space and air conditioning load effect into product design basing on Long refrigerating piping design, flexible match of indoor units and outdoor units and the ways of air supply.

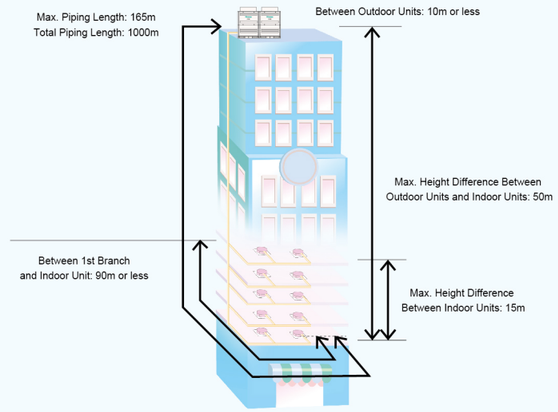
01 More Flexible Refrigerant Piping Work

Actual piping length: **165m**

Height difference between the highest and lowest indoor units: **15m**

Height difference between outdoor and indoor units: **50m** (when outdoor units are higher than indoor units)

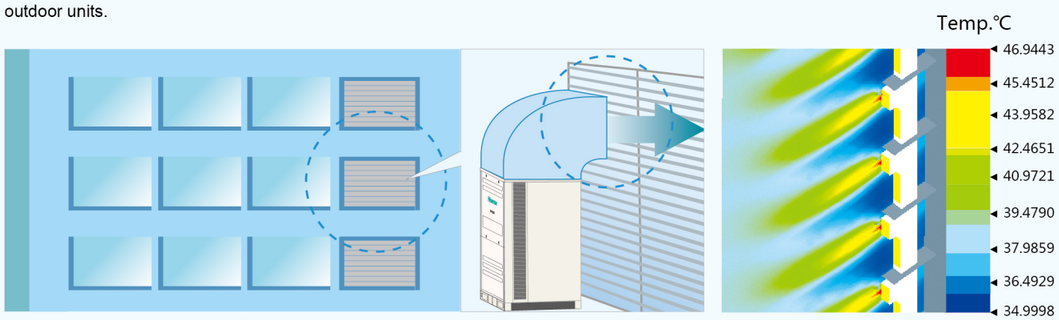
Height difference between outdoor and indoor units: **40m** (when outdoor units are lower than indoor units)



Long Piping Length

02 Layered Placement for High-Rise Building

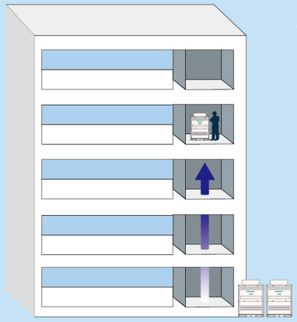
Outdoor fan motor can provide a higher external static pressure and a long distance air supply, which prevents air return from short-cut in an effective way, then ensures a sound ventilation and heat transfer. The installation of exhaust duct enables layered placement of outdoor units.



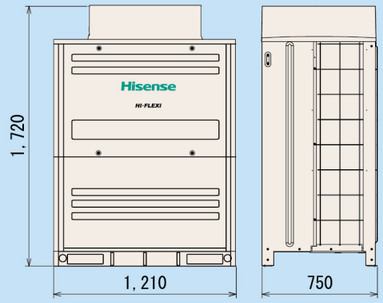
Layered Intallation　　Exhaust Duct Installation　　Air Distribution

03 Compact and Lightweight design, Save Space

The elevator can be used to uplift the base unit (Max.16HP) separately.
Easy and flexible transportation and installation are further enhanced by adopting the outdoor unit's lightweight and compact design.



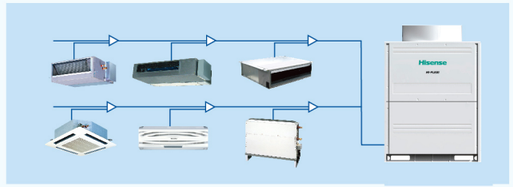
Transportation



16HP Base Unit Dimension

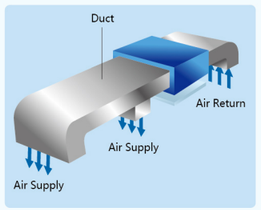
04 Various Model Types Easily Match Different Spatial Layout

Wide capacity range of outdoor units enables free model combination according to the actual situation of building. There are 7 types of indoor units for selection. Planner can choose appropriate type and capacity of indoor units according to interior decoration and functions.

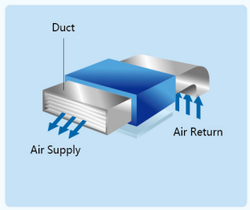


05 Flexible Ways of Air Supply and Air Return

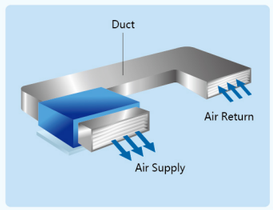
Different duct types can be chosen to suit different construction structure and interior decoration, which meets various personalized requirement of customers.



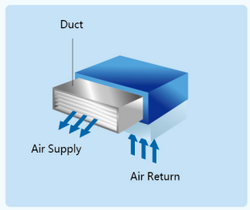
Ceiling Supply Ceiling Return



Side Supply Ceiling Return



Side Supply Side Return



Side Supply Bottom Return

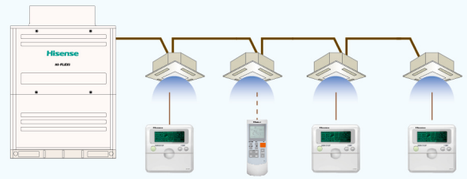
High Intelligent and Humanized Control System

The development of technology makes people's life easier.
Hisense inverter-driven central air conditioning creates a humanized system and realizes more convenient operation with intelligent central control system.

01 Various Controllers

Remote Control Switch

- Cooling/Heating/Dry/Fan/Auto
- High/Medium/Low/Swing Louver
- Set Temperature/ Timer
- Filter Clean
- Check
- Alarm Code Display
- Ventilation Increase



Individual Control

Wireless Remote Control Switch

- Cooling/Heating/Dry/Fan/Auto
- High/Medium/Low
- Swing Louver
- Set Temperature
- Timer
- Filter Clean

Central Station

- Cooling/Heating/Dry/Fan/Auto
- High/Medium/Low
- Swing Louver
- Set Temperature
- Operation monitoring
- Wireless Controller Disable
- Alarm Code Display
- Max. 160 Indoor Units Control
- Indoor Unit Selection

7-Day Timer

- Time Setting
- Holiday Setting
- 3 time period setting on weekday
- Two Modes of Timetable

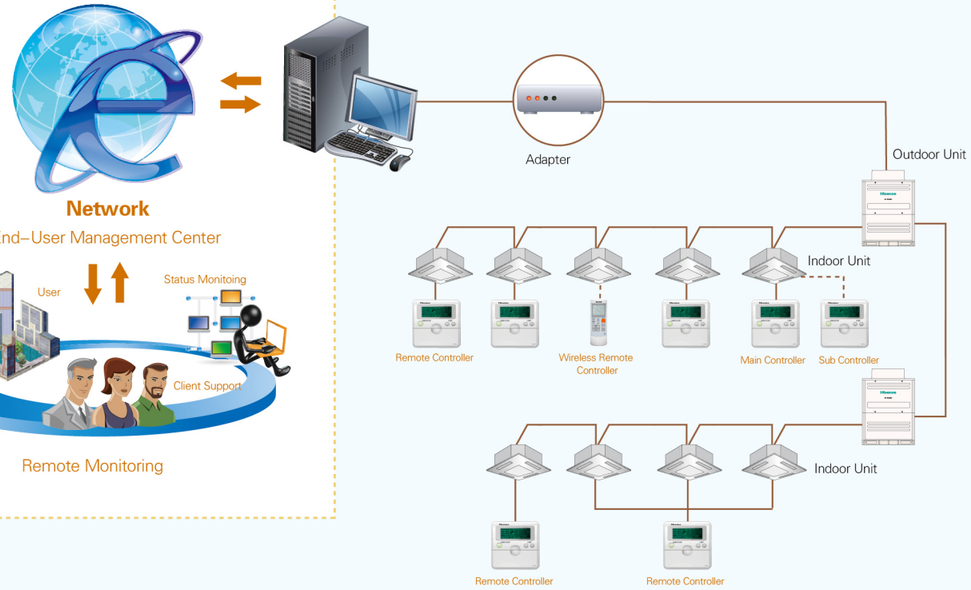
02 H-NET Management System

H-NET air conditioning management system connects indoor units and computer through net adapter and BUS connection, which can monitor and control utmost 1024 outdoor units and 2560 indoor units and realize easy operation.

Main Function

Monitoring Center

- Running-state monitoring
- Access control
- Temperature setting limit
- Auto-operating function
- Operation Record Display
- Malfunction alarm
- Controller Limit
- Service monitoring

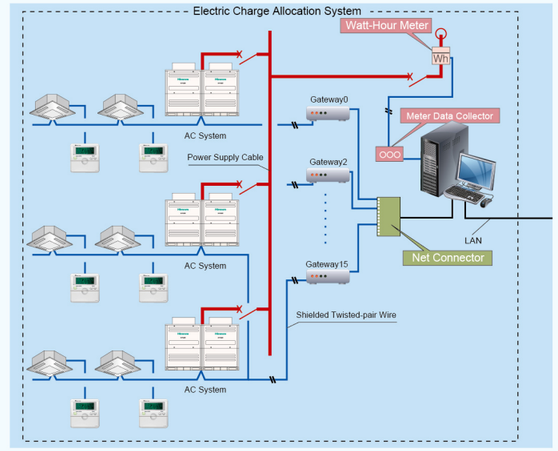


03 Air-conditioning Electric Charge Allocation System

Hisense electric charge allocation system consists of meter reading system and air conditioning management system. In accordance with the operation time and capacity output of indoor and outdoor units, the opening degree of EEV, the electric charge allocation software allocates the total power consumption to each indoor unit.

Main Features

- Accurate and timely electricity calculation
- User's electricity bill reading by the hour
- Electric charge allocation according to multi-rate of peak-vally period of time

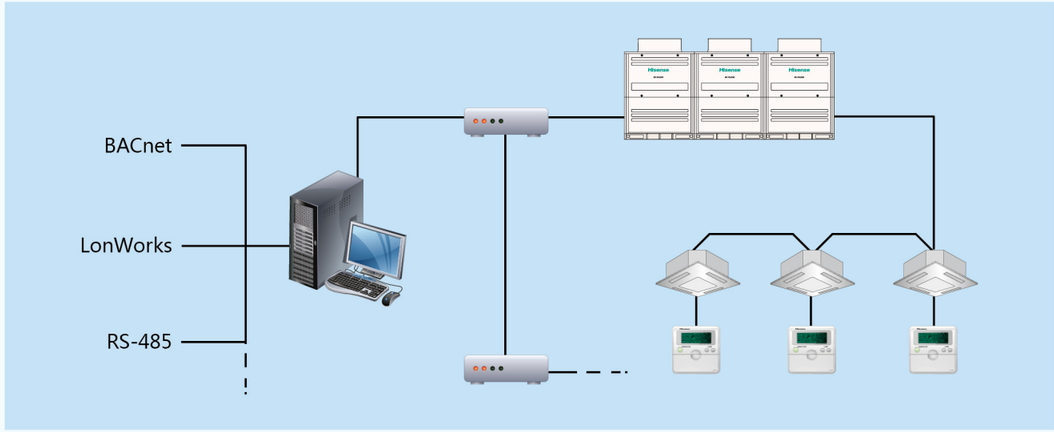


All the indoor units and outdoor units connected with one adapter comprise one communication BUS system .
Max.64 outdoor units and 160 indoor units can be connected to a BUS system
Max.16 adapters can be controlled by one computer
Max.2560 indoor units and 1024 outdoor units are under control.

04 Building Management System

Compatible to multiple communication protocol of Lonworks, BACnet, RS-485 etc. Connectible to BMS or Smart Home System.

- Real-time operation status monitoring for inquiry
- Operation order from monitoring center



Power Consumption

Item \ Outdoor Units													
HP			8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP	24HP	26HP	28HP
Model Power Supply		AC3Φ 380V/50Hz	AVWT-86F6SR	AVWT-96F6SR	AVWT-114F6SR	AVWT-136F6SS	AVWT-154F6SS	AVWT-182F6SZ	AVWT-190F6SZ	AVWT-210F6SZ	AVWT-232F6SZ	AVWT-250F6SZ	AVWT-272F6SZ
		AC3Φ 415V/50Hz	AVWT-86FBSR	AVWT-96FBSR	AVWT-114FBSR	AVWT-136FBSS	AVWT-154FBSS	AVWT-182FBSZ	AVWT-190FBSZ	AVWT-210FBSZ	AVWT-232FBSZ	AVWT-250FBSZ	AVWT-272FBSZ
		AC1Φ 380V/60Hz	AVWT-86F7SR	AVWT-96F7SR	AVWT-114F7SR	AVWT-136F7SS	AVWT-154F7SS	AVWT-182F7SZ	AVWT-190F7SZ	AVWT-210F7SZ	AVWT-232F7SZ	AVWT-250F7SZ	AVWT-272F7SZ
Combination								AVWT-86F* + AVWT-96F*	AVWT-96F* + AVWT-96F*	AVWT-86F* + AVWT-136F*	AVWT-96F* + AVWT-136F*	AVWT-114F* + AVWT-136F*	AVWT-136F* + AVWT-136F*
Cooling Operation	Rated Capacity	kW	25.2	28.0	33.5	40.0	45.0	53.2	56.0	61.5	68.0	73.0	78.5
		kBtu/h	86.0	95.5	114.3	136.5	153.5	181.5	191.5	209.8	232.0	249.1	267.8
	Power Consumption	kW	7.7	8.45	10.5	13.9	15.6	16.15	16.9	21.6	22.35	24.4	27.8
Heating Operation	Rated Capacity	kW	27.0	31.5	37.5	45.0	50.0	58.5	63.0	69.0	76.5	81.5	87.5
		kBtu/h	92.1	107.5	128.0	153.5	170.6	199.6	215.0	235.4	261.0	278.1	298.6
	Power Consumption	kW	7.5	8.4	10.2	13.2	14.8	15.9	16.8	20.7	21.6	23.4	26.4
Air Flow Rate		m^3/min	155	170	175	195	195	325	340	350	365	370	390
Outer Dimension (H × W × D)		mm	1720 × 950 × 750	1720 × 950 × 750	1720 × 950 × 750	1720 × 1210 × 750	1720 × 1210 × 750	1720 × 1920 × 750	1720 × 1920 × 750	1720 × 2180 × 750	1720 × 2180 × 750	1720 × 2180 × 750	1720 × 2440 × 750
Net Weight		kg	210	212	215	298	312	210+212	212+212	210+298	212+298	215+298	298+298
Comperessor Quantity			1	1	1	2	2	2	2	3	3	3	4
Condenser Fan Quantity			1	1	1	1	1	2	2	2	2	2	2
Cabinet Color			Ivory white					Ivory white					
2-Pipe Heat Pump Operation System	Gas Line	mm	Φ19.05	Φ22.2	Φ25.4	Φ25.4	Φ28.6	Φ28.6	Φ28.6	Φ28.6	Φ28.6	Φ31.75	Φ31.75
	Liquid Line	mm	Φ9.53	Φ9.53	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ19.05	Φ19.05
Heat Recovery Operation System	Liquid Line	mm	Φ9.53	Φ9.53	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ19.05	Φ19.05
	Lower Pressure Gas Line	mm	Φ19.05	Φ22.2	Φ25.4	Φ25.4	Φ28.6	Φ28.6	Φ28.6	Φ28.6	Φ28.6	Φ31.75	Φ31.75
	Higher Pressure Gas Line	mm	Φ15.88	Φ19.05	Φ22.2	Φ22.2	Φ22.2	Φ22.2	Φ22.2	Φ25.4	Φ25.4	Φ25.4	Φ28.6
Refrigerant Piping			Flare-nut Connection(With Flare Nuts)					Flare-nut Connection(With Flare Nuts)					
Hight Difference	Between Outdoor and Indoor Units	m	50 (40)	50 (40)	50 (40)	50 (40)	50 (40)	50 (40)	50 (40)	50 (40)	50 (40)	50 (40)	50 (40)
	Between Indoor Units	m	15	15	15	15	15	15	15	15	15	15	15
Noise		dB(A)	58	58	60	60	62	61	61	62	62	63	63
Operation Range	Cooling	℃ DB	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43
	Heating	℃ WB	-20~15.5	-20~15.5	-20~15.5	-20~15.5	-20~15.5	-20~15.5	-20~15.5	-20~15.5	-20~15.5	-20~15.5	-20~15.5

NOTES: 1.The nominal cooling capacity and heating capacity are based on following conditions:

Cooling Operation Conditions
Indoor Air Inlet Temperature:27℃ DB(80℉ DB)
19.0℃ WB (66.2℉ WB)

Heating Operation Conditions
Indoor Air Inlet Temperature: 20℃ DB(68℉ DB)
Outdoor Air Inlet Temperature: 7℃ DB(45℉ DB)
6℃ WB(43℉ WB)

Outdoor Air Inlet Temperature: 35℃ DB(95℉ DB)
Piping Length: 7.5 Meters Piping Lift: 0 Meter

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

Power Consumption

Item \ Outdoor Units												
HP			30HP	32HP	34HP	36HP	38HP	40HP	42HP	44HP	46HP	48HP
Model Power Supply		AC3Φ 380V/50Hz	AVWT-290F6SZ	AVWT-307F6SZ	AVWT-328F6SZ	AVWT-345F6SZ	AVWT-365F6SZ	AVWT-386F6SZ	AVWT-402F6SZ	AVWT-426F6SZ	AVWT-444F6SZ	AVWT-460F6SZ
		AC3Φ 415V/50Hz	AVWT-290FBSZ	AVWT-307FBSZ	AVWT-328FBSZ	AVWT-345FBSZ	AVWT-365FBSZ	AVWT-386FBSZ	AVWT-402FBSZ	AVWT-426FBSZ	AVWT-444FBSZ	AVWT-460FBSZ
		AC1Φ 380V/60Hz	AVWT-290F7SZ	AVWT-307F7SZ	AVWT-328F7SZ	AVWT-345F7SZ	AVWT-365F7SZ	AVWT-386F7SZ	AVWT-402F7SZ	AVWT-426F7SZ	AVWT-444F7SZ	AVWT-460F7SZ
Combination			AVWT-136F* + AVWT-154F*	AVWT-154F* + AVWT-154F*	AVWT-86F* + AVWT-96F* + AVWT-154F*	AVWT-96F* + AVWT-96F* + AVWT-154F*	AVWT-114F* + AVWT-114F* + AVWT-136F*	AVWT-114F* + AVWT-114F* + AVWT-154F*	AVWT-114F* + AVWT-136F* + AVWT-154F*	AVWT-114F* + AVWT-154F* + AVWT-154F*	AVWT-136F* + AVWT-154F* + AVWT-154F*	AVWT-154F* + AVWT-154F* + AVWT-154F*
Cooling Operation	Rated Capacity	kW	85.0	90.0	96.0	101.0	106.5	113.0	118.0	123.5	130.0	135.0
		kBtu/h	290.0	307.1	327.6	344.6	363.4	385.6	402.6	421.4	443.6	460.6
	Power Consumption	kW	29.5	31.2	31.75	32.5	34.9	36.6	40.0	41.7	45.1	46.8
Heating Operation	Rated Capacity	kW	95.0	100.0	108.0	113.0	119.0	126.5	131.5	137.5	145.0	150.0
		kBtu/h	324.1	341.2	368.5	385.6	406.0	431.6	448.7	469.2	494.7	511.8
	Power Consumption	kW	28.0	29.6	30.7	31.6	33.6	35.2	38.2	39.8	42.8	44.4
Air Flow Rate		m^3/min	390	390	520	535	545	545	565	565	585	585
Outer Dimension (H × W × D)		mm	1720 × 2440 × 750	1720 × 2440 × 750	1720 × 3150 × 750	1720 × 3150 × 750	1720 × 3150 × 750	1720 × 3150 × 750	1720 × 3410 × 750	1720 × 3410 × 750	1720 × 3670 × 750	1720 × 3670 × 750
Net Weight		kg	298+312	312+312	210+212+312	212+212+312	215+215+298	215+215+312	215+298+312	215+312+312	298+312+312	312+312+312
Comperessor Quantity			4	4	4	4	4	4	5	5	6	6
Condenser Fan Quantity			2	2	3	3	3	3	3	3	3	3
Cabinet Color			Ivory white				Ivory white					
2-Pipe Heat Pump Operation System	Gas Line	mm	Φ31.75	Φ31.75	Φ31.75	Φ38.1	Φ38.1	Φ38.1	Φ38.1	Φ38.1	Φ38.1	Φ38.1
	Liquid Line	mm	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ19.05
Heat Recovery Operation System	Liquid Line	mm	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ19.05
	Lower Pressure Gas Line	mm	Φ31.75	Φ31.75	Φ31.75	Φ38.1	Φ38.1	Φ38.1	Φ38.1	Φ38.1	Φ38.1	Φ38.1
	Higher Pressure Gas Line	mm	Φ28.6	Φ28.6	Φ28.6	Φ28.6	Φ31.75	Φ31.75	Φ31.75	Φ31.75	Φ31.75	Φ31.75
Refrigerant Piping			Flare-nut Connection(With Flare Nuts)				Flare-nut Connection(With Flare Nuts)					
Hight Difference	Between Outdoor and Indoor Units	m	50 (40)	50 (40)	50 (40)	50 (40)	50 (40)	50 (40)	50 (40)	50 (40)	50 (40)	50 (40)
	Between Indoor Units	m	15	15	15	15	15	15	15	15	15	15
Noise		dB(A)	63	63	64	64	64	64	64	64	65	65
Operation Range	Cooling	℃ DB	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43	-5~43
	Heating	℃ WB	-20~15.5	-20~15.5	-20~15.5	-20~15.5	-20~15.5	-20~15.5	-20~15.5	-20~15.5	-20~15.5	-20~15.5

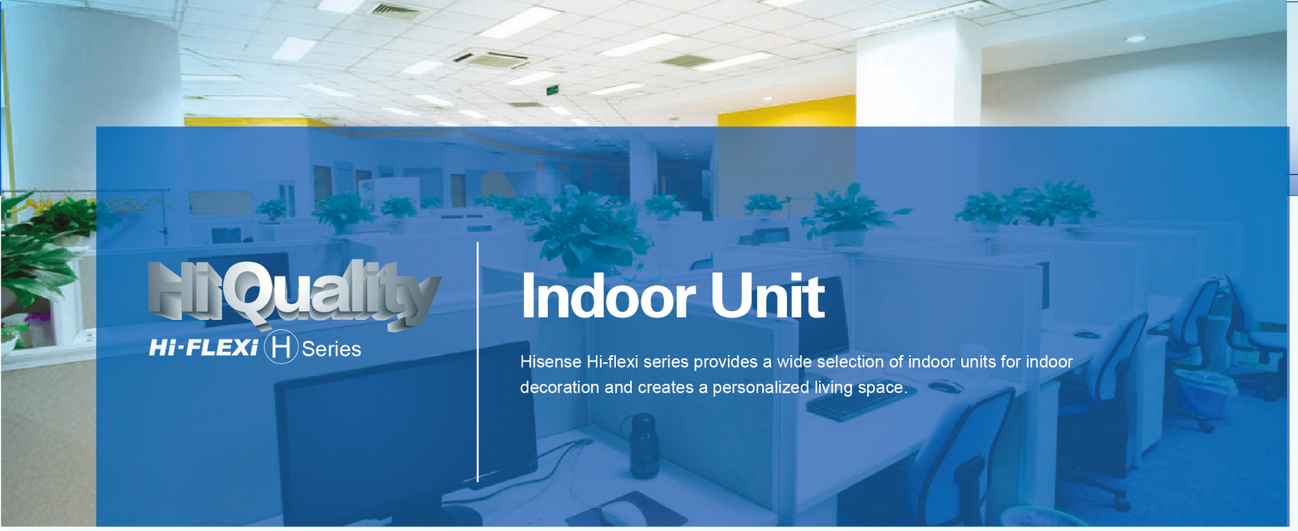
NOTES: 1.The nominal cooling capacity and heating capacity are based on following conditions:

Cooling Operation Conditions
Indoor Air Inlet Temperature:27℃ DB(80℉ DB)
19.0℃ WB (66.2℉ WB)

Heating Operation Conditions
Indoor Air Inlet Temperature: 20℃ DB(68℉ DB)
Outdoor Air Inlet Temperature: 7℃ DB(45℉ DB)
6℃ WB(43℉ WB)

Outdoor Air Inlet Temperature: 35℃ DB(95℉ DB)
Piping Length: 7.5 Meters Piping Lift: 0 Meter

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



Hi-Quality

Hi-FLEXi H Series

Indoor Unit

Hisense Hi-flexi series provides a wide selection of indoor units for indoor decoration and creates a personalized living space.

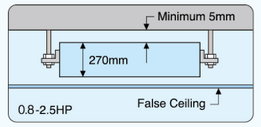
Indoor Units Lineup

Indoor Units

Type	Model	HP	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
		kBtu/h	7	9	12	14	17	18	22	24	27	30	38	48	56	70	90
In-the- ceiling(Low Static Pressure)			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
In-the- ceiling(High Static Pressure)			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Low-Height In-the- ceiling			●	●	●	●	●	●	●	●							
Slim In-the-Ceiling			●	●	●	●											
4-Way Cassette				●	●	●	●	●	●	●	●	●	●	●	●		
Wall				●		●		●	●								
Floor Concealed				●		●		●		●							

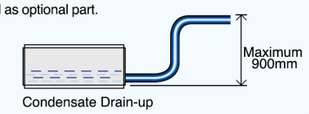
In-the-ceiling Type (Low Static Pressure)

Less than 270mm in height can be easily fit into the limited space in the false ceiling (0.8HP–2.5HP) .

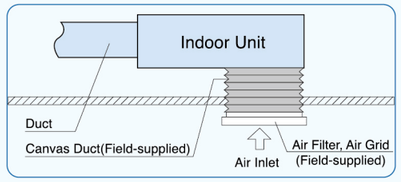


Optional Parts

Drain-up mechanism can be supplied as optional part.



Flexibly supports a wide range of installation conditions at site



NOTE:
When bottom air inlet is adopted, sound pressure will increase according to factors such as installation mode and the room structure.

Fresh Indoor Air

By introducing fresh outdoor air and being equipped with air filter to keep indoor air clean.

Excellent Air Flow

Cooling/heating air is distributed from the unit to indoor space through ducts, which creates a comfortable environment.

Indoor Unit		In-the-ceiling Type (Low Static Pressure)														
Model / Power Supply	AC1Φ 220V/50Hz	AVD-07 UXCSAL	AVD-09 UXCSAL	AVD-12 UXCSAL	AVD-14 UXCSAL	AVD-17 UXCSBL	AVD-18 UXCSBL	AVD-22 UXCSBL	AVD-24 UXCSBL	AVD-27 UXCSCL	AVD-30 UXCSCL	AVD-38 UXCSCL	AVD-48 UXCSDL	AVD-54 UXCSDL	AVD-76 UX6SEL[1)]	AVD-96 UX6SFL[1)]
	AC1Φ 240V/50Hz	AVD-07 UXDSAL	AVD-09 UXDSAL	AVD-12 UXDSAL	AVD-14 UXDSAL	AVD-17 UXDSBL	AVD-18 UXDSBL	AVD-22 UXDSBL	AVD-24 UXDSBL	AVD-27 UXDSCL	AVD-30 UXDSCL	AVD-38 UXDSCL	AVD-48 UXDSDL	AVD-54 UXDSDL	AVD-76 UXBSEL[2)]	AVD-96 UXBSFL[2)]
	AC1Φ 220V/60Hz	AVD-07 UX2SAL	AVD-09 UX2SAL	AVD-12 UX2SAL	AVD-14 UX2SAL	AVD-17 UX2SBL	AVD-18 UX2SBL	AVD-22 UX2SBL	AVD-24 UX2SBL	AVD-27 UX2SCL	AVD-30 UX2SCL	AVD-38 UX2SCL	AVD-48 UX2SDL	AVD-54 UX2SDL	AVD-76 UX7SEL[3)]	AVD-96 UX7SFL[3)]
Nominal Cooling Capacity	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
	kcal/h	1,900	2,400	3,100	3,700	4,300	4,800	5,400	6,100	7,200	7,700	9,600	12,200	13,800	19,300	24,100
	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
Nominal Heating Capacity	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
	kcal/h	2,400	2,800	3,600	4,200	4,800	5,600	6,500	7,300	8,300	8,600	11,200	14,000	15,500	21,500	27,100
	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
Sound Pressure Level (High/Medium/Low)	dB(A)	31-27-26	31-27-26	32-30-28	32-30-28	33-31-29	33-31-29	34-32-30	34-32-30	40.5-38-35	40.5-38-35	41-39-37	42-39-37	45-41-39	50	52
Outer Dimensions (H x W x D)	mm	270×（650+75）×720				270×（900+75）×720				350×（900+75）×800			350×（1300+75）×800		470×1060×1120	470×1250×1120
Net Weight	kg	25	25	25	25	34	34	34	34	44	44	44	56	56	94	106
Refrigerant		R410A(Nitrogen-charged for Corrosion-resistance)														
Indoor Fan Air Flow Rate (High/Medium/Low)	m^3/min	8/7/6	8/7/6	13/11/9	13/11/9	15/13/11	15/13/11	16/14/12	16/14/12	25/21/17	25/21/17	27/23/19	37/31/25	38/35/29	58	72
Motor Power	W	100	100	140	140	140	140	140	180	290	290	290	410	410	900	1070
Connections Refrigerant Piping		Flare-nut Connection(with Flare Nuts)														
Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53
Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ19.05	Φ22.2
Condensate Drain		VP25(Outer Diameter Φ32)														
External Static Pressure	Pa	30	30	30	30	30	30	30	30	60	60	60	60	60	100	100
Approximate Packing Measurement	m^3	0.21	0.21	0.21	0.21	0.27	0.27	0.27	0.27	0.38	0.38	0.38	0.52	0.52	0.90	1.06

NOTES:

1.The nominal cooling capacity and heating capacity are based on 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)

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)

Piping Length: 7.5 Meters Piping Lift: 0 Meter

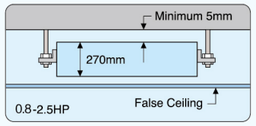
2. The sound pressure level is based on following conditions.1.5m beneath the unit.
The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

3. *1: AC3Φ, 380V/50Hz, *2: AC3Φ, 415V/50Hz, *3: AC3Φ, 380V/60Hz

In-the-ceiling Type (High Static Pressure)

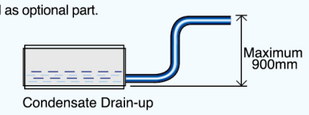
Installation Space-saving

Less than 270mm in height can be easily fit into the limited space in the false ceiling (0.8HP–2.5HP) .



Optional Parts

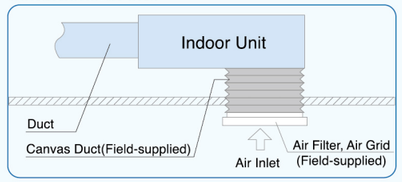
Drain-up mechanism can be supplied as optional part.



Fresh Indoor Air

By introducing fresh outdoor air and being equipped with air filter to keep indoor air clean.

Flexibly supports a wide range of installation conditions at site



NOTE:
When bottom air inlet is adopted, sound pressure will increase. according to factors such as installation mode and the room structure.

Excellent Air Flow

Cooling/heating air is distributed from the unit to indoor space through ducts, which creates a comfortable environment.

Indoor Unit		In-the-ceiling Type(High Static Pressure)														
Model Power Supply	AC1Φ 220V/50Hz	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)
	AC1Φ 240V/50Hz	AVD-07 UXDSAH	AVD-09 UXDSAH	AVD-12 UXDSAH	AVD-14 UXDSAH	AVD-17 UXDSBH	AVD-18 UXDSBH	AVD-22 UXDSBH	AVD-24 UXDSBH	AVD-27 UXDSCH	AVD-30 UXDSCH	AVD-38 UXDSCH	AVD-48 UXDSDH	AVD-54 UXDSDH	AVD-76 UXBSEH*3)	AVD-96 UXBSFH*3)
	AC1Φ 220V/60Hz	AVD-07 UX2SAH	AVD-09 UX2SAH	AVD-12 UX2SAH	AVD-14 UX2SAH	AVD-17 UX2SBH	AVD-18 UX2SBH	AVD-22 UX2SBH	AVD-24 UX2SBH	AVD-27 UX2SCH	AVD-30 UX2SCH	AVD-38 UX2SCH	AVD-48 UX2SDH	AVD-54 UX2SDH	AVD-76 UX7SEH*2)	AVD-96 UX7SFH*2)
Nominal Cooling Capacity	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
	kcal/h	1,900	2,400	3,100	3,700	4,300	4,800	5,400	6,100	7,200	7,700	9,600	12,200	13,800	19,300	24,100
	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
Nominal Heating Capacity	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
	kcal/h	2,400	2,800	3,600	4,200	4,800	5,600	6,500	7,300	8,300	8,600	11,200	14,000	15,500	21,500	27,100
	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
Sound Pressure Level (High/Medium/Low)	dB(A)	34-32-30	34-32-30	35-33-31	35-33-31	36-34-32	36-34-32	38-36-34	38-36-34	42-39-35	42-39-35	43-40-36	44-42-37	47-43-39	52	54
Outer Dimensions (H x W x D)	mm	270×(650+75) ×720				270×(900+75)×720				350×(900+75)×800			350×(1300+75)×800		470×1060×1120	470×1250×1120
Net Weight	kg	25	25	25	25	34	34	34	34	44	44	44	56	56	94	106
Refrigerant		R410A(Nitrogen-charged for Corrosion-resistance)														
Indoor Fan Air Flow Rate (High/Medium/Low)	m^3/min	8/7/6	8/7/6	13/11/9	13/11/9	15/13/11	15/13/11	16/14/12	16/14/12	25/21/17	25/21/17	27/23/19	37/31/25	38/35/29	58	72
Motor Power	W	100	100	140	140	140	140	140	180	290	290	290	410	410	1030	1280
Connections Refrigerant Piping		Flare-nut Connection(with Flare Nuts)														
Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53
Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ19.05	Φ22.2
Condensate Drain		VP25(Outer Diameter Φ32)														
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
Approximate Packing Measurement	m^3	0.21	0.21	0.21	0.21	0.27	0.27	0.27	0.27	0.38	0.38	0.38	0.52	0.52	0.90	1.06

NOTES:

1.The nominal cooling capacity and heating capacity are based on 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)

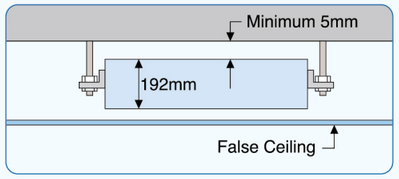
2. The sound pressure level is based on following conditions.1.5m beneath the unit.
The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

3. *1: AC3Φ, 380V/50Hz, *2: AC3Φ, 415V/50Hz, *3: AC3Φ, 380V/60Hz

Low-height In-the-ceiling Type

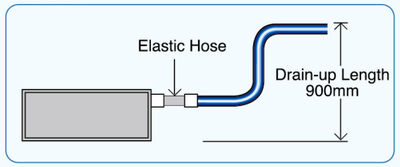
Installation Space-saving

With a height of 192mm may be easily installed inside the low height residential ceiling.



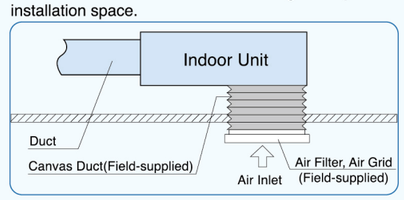
Drain-up Mechanism as Standard Part

Drain-up length achieves 900mm which enables convenient drain piping and enlarges the flexibility of installation.



Satisfy Varied Requests on Installation

Available air inlet as rear or bottom entry, consumers can choose relevant air inlet mode according to the practical installation space.



(Installation Diagram of Air Bottom Inlet)

Broad Range of External Static Pressure

10Pa(or30Pa), flexibly supports a wide range of installation conditions at site, e.g. longer ducts and shorter ducts supplied.

Indoor Unit		Low-height In-the-ceiling Type							
Model Power Supply	AC1Φ 220V/50Hz	AVE-07 UXCSAL	AVE-09 UXCSAL	AVE-12 UXCSAL	AVE-14 UXCSAL	AVE-17 UXCSBL	AVE-18 UXCSBL	AVE-22 UXCSBL	AVE-24 UXCSBL
	AC1Φ 240V/50Hz	AVE-07 UXDSAL	AVE-09 UXDSAL	AVE-12 UXDSAL	AVE-14 UXDSAL	AVE-17 UXDSBL	AVE-18 UXDSBL	AVE-22 UXDSBL	AVE-24 UXDSBL
	AC1Φ 220V/60Hz	AVE-07 UX2SAL	AVE-09 UX2SAL	AVE-12 UX2SAL	AVE-14 UX2SAL	AVE-17 UX2SBL	AVE-18 UX2SBL	AVE-22 UX2SBL	AVE-24 UX2SBL
Nominal Cooling Capacity	kW	2.2	2.8	3.6	4.3	5.0	5.6	6.3	7.1
	kcal/h	1,900	2,400	3,100	3,700	4,300	4,800	5,400	6,100
	Btu/h	7,500	9,600	12,300	14,700	17,100	19,100	21,500	24,200
Nominal Heating Capacity	kW	2.8	3.3	4.2	4.9	5.6	6.5	7.5	8.5
	kcal/h	2,400	2,800	3,600	4,200	4,800	5,600	6,500	7,300
	Btu/h	9,600	11,300	14,300	16,700	19,100	22,200	25,600	29,000
Sound Pressure Level (High/Medium/Low)	dB(A)	28-25-22	28-25-22	32-30-27	32-30-27	35-31-29	35-31-29	36-34-31	36-34-31
Outer Dimensions (H x W x D)	mm	192×900×447	192×900×447	192×900×447	192×900×447	192×1170×447	192×1170×447	192×1170×447	192×1170×447
Net Weight	kg	20	20	21	21	26	26	26	26
Refrigerant		R410A(Nitrogen-charged for Corrosion-resistance)							
Indoor Fan Air Flow Rate (High/Medium/Low)	m^3/min	8/7/6	8/7/6	10/8/7	10/8/7	14.5/12.5/10.5	14.5/12.5/10.5	16/14/12	16/14/12
Motor Power	W	50	50	70	70	90	90	100	100
Connections Refrigerant Piping		Flare-nut Connection(with Flare Nuts)							
Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.53	Φ9.53
Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88
Condensate Drain		VP25(Outer Diameter Φ32)							
External Static Pressure	Pa	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)
Approximate Packing Measurement	m^3	0.15	0.15	0.15	0.15	0.18	0.18	0.18	0.18

NOTES:

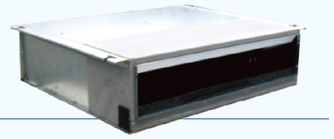
1.The nominal cooling capacity and heating capacity are based on following conditions:

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)

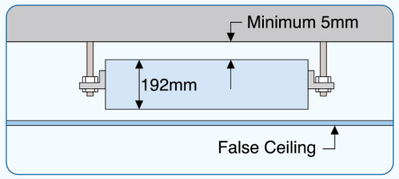
2. The sound pressure level is based on following conditions.1.5m beneath the unit.
The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

Slim In-the-Ceiling Type



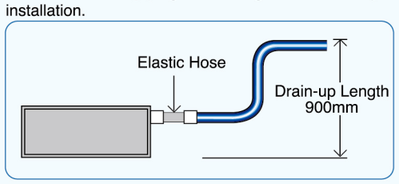
Installation Space-saving

With a height of 192mm may be easily installed inside the low height residential ceiling.



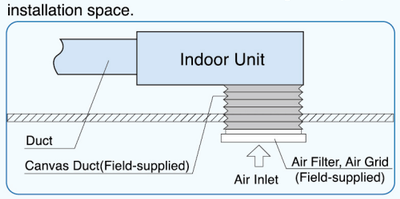
Drain-up Mechanism as Standard Part

Drain-up length achieves 900mm which enables convenient drain piping and enlarges the flexibility of installation.



Satisfy Varied Requests on Installation

Available air inlet as rear or bottom entry, consumers can choose relevant air inlet mode according to the practical installation space.



(Installation Diagram of Air Bottom Inlet)

Broad Range of External Static Pressure

10Pa(or30Pa), flexibly supports a wide range of installation conditions at site, e.g. longer ducts and shorter ducts supplied.

Indoor Unit		Slim In-the-Ceiling			
Model Power Supply	AC1Φ 220V/50Hz	AVE-07UXCSGL	AVE-09UXCSGL	AVE-12UXCSGL	AVE-14UXCSGL
Nominal Cooling Capacity	kW	2.2	2.8	3.6	4.3
	kcal/h	1,900	2,400	3,100	3,700
	Btu/h	7,500	9,600	12,300	14,700
Nominal Heating Capacity	kW	2.8	3.3	4.2	4.9
	kcal/h	2,400	2,800	3,600	4,200
	Btu/h	9,600	11,300	14,300	16,700
Sound Pressure Level (High/Medium/Low)	dB(A)	28-25-22	28-25-22	32-30-28	32-30-28
Outer Dimensions (H x W x D)	mm	192×700×602	192×700×602	192×700×602	192×700×602
Net Weight	kg	21	21	21	21
Refrigerant		R410A(Nitrogen-charged for Corrosion-resistance)			
Indoor Fan Air Flow Rate (High/Medium/Low)	m^3/min	8/7/6	8/7/6	10/8/7	10/8/7
Motor Power	W	50	50	60	60
Connections Refrigerant Piping		Flare-nut Connection(with Flare Nuts)			
Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35
Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7
Condensate Drain		VP25(Outer Diameter Φ32)			
External Static Pressure	Pa	10(30)	10(30)	10(30)	10(30)
Approximate Packing Measurement	m^3	0.15	0.15	0.15	0.15

NOTES:

1.The nominal cooling capacity and heating capacity are based on 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.1.5m beneath the unit.
The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

4-Way Cassette Type

Extremely Quiet Operation

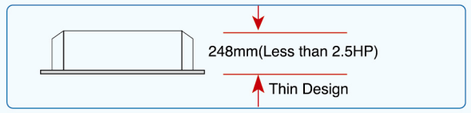
By employing a super-high-stream turbo fan (Three-dimensional twisted wing large bore and high efficiency), the wind flow efficiency has been improved. with the under damping slit mounted near the center of the revolving shaft, the abnormal noise which is unique to DC motors caused by the number of magnetic poles and revolution speed of the motor, is reduced.

Unified Panel Sizes

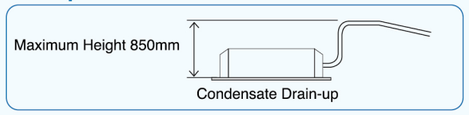
Panel sizes are unified to a 950mm square, neat and elegance, and well harmonized with decoration.

Compact and Thin

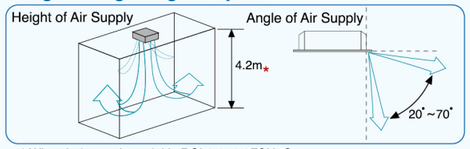
The height of the unit is just 248mm(Less than 2.5HP), so it can be installed in a small space inside a ceiling.



Drain-up Mechanism as Standard Part



With broad range of air supply, is suitable to be used in high ceiling and great space



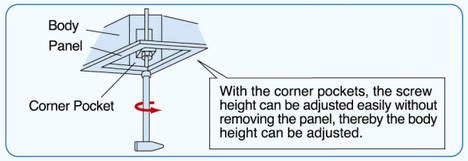
* When indoor unit model is RCI-3.0~6.0FSN1Q.
When indoor unit model is RCI-1.0~2.5FSN1Q, the value is 3.5m.

Input power reduced by applying of new developed DC fan motor.

Employed several new technologies such as a ferritic magnetic surface-mounted rotor, centralized winding system and split core system, the motor efficiency is improved in all aspects, smaller and lighter.

Body height easily adjustable in the corner pockets

A pocket is provided for each of the four panel corners, so that the body height can be adjusted easily without removing the panel.



Indoor Unit		4-Way Cassette Type											
Model Power Supply	AC1Φ 220V/50Hz	AVC-09 UXCSEB	AVC-12 UXCSEB	AVC-14 UXCSEB	AVC-17 UXCSEB	AVC-18 UXCSEB	AVC-22 UXCSEB	AVC-24 UXCSEB	AVC-27 UXCSFB	AVC-30 UXCSFB	AVC-38 UXCSFB	AVC-48 UXCSFB	AVC-54 UXCSFB
	AC1Φ 240V/50Hz	AVC-09 UXDSEB	AVC-12 UXDSEB	AVC-14 UXDSEB	AVC-17 UXDSEB	AVC-18 UXDSEB	AVC-22 UXDSEB	AVC-24 UXDSEB	AVC-27 UXDSFB	AVC-30 UXDSFB	AVC-38 UXDSFB	AVC-48 UXDSFB	AVC-54 UXDSFB
	AC1Φ 220V/60Hz	AVC-09 UX2SEB	AVC-12 UX2SEB	AVC-14 UX2SEB	AVC-17 UX2SEB	AVC-18 UX2SEB	AVC-22 UX2SEB	AVC-24 UX2SEB	AVC-27 UX2SFB	AVC-30 UX2SFB	AVC-38 UX2SFB	AVC-48 UX2SFB	AVC-54 UX2SFB
Nominal Heating Capacity	kW	2.8	3.6	4.3	5.0	5.6	6.3	7.1	8.4	9.0	11.2	14.2	16.0
	kcal/h	2,400	3,100	3,700	4,300	4,800	5,400	6,100	7,200	7,700	9,600	12,200	13,800
	Btu/h	9,600	12,300	14,700	17,100	19,100	21,500	24,200	28,700	30,700	38,200	48,500	54,600
Nominal Heating Capacity	kW	3.3	4.2	4.9	5.6	6.5	7.5	8.5	9.6	10.0	13.0	16.3	18.0
	kcal/h	2,800	3,600	4,200	4,800	5,600	6,500	7,300	8,300	8,600	11,200	14,000	15,500
	Btu/h	11,300	14,300	16,700	19,100	22,200	25,600	29,000	32,800	34,100	44,400	55,600	61,400
Sound Pressure Level (High/Medium/Low)	dB(A)	30-29-27	31-29-27	31-29-27	32-30-27	32-30-27	33-31-29	33-31-29	36-34-32	36-34-32	41-38-35	44-39-36	44-42-38
Outer Dimensions (H x W x D)	mm	248 x 840 x 840							298 x 840 x 840				
Net Weight	kg	22	22	22	23	23	23	23	24	24	27	27	27
Refrigerant		R410A(Nitrogen-charged for Corrosion-resistance)											
Indoor Fan Air Flow Rate (High/Medium/Low)	m^3/min	13/12/11	15/13.5/12	15/13.5/12	16/14/12	16/14/12	19/17/14	20/17/15	26/23/20	26/23/20	32/28/24	34/29/25	37/32/27
Motor Power	W	40	50	50	50	50	60	60	90	90	110	140	150
Connections Refrigerant Piping		Flare-nut Connection(with Flare Nuts)											
Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53
Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
Condensate Drain		VP25(Outer Diameter Φ32)											
Approximate Packing Measurement	m^3	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.26	0.26	0.26	0.26	0.26
Standard Accessories		Suspension Brackets											
Panel Model		PH-A-NA											
Cabinet Color		Neutral White											
Outer Dimensions (H x W x D)	mm	37 x950 x 950											
Net Weight	kg	6	6	6	6	6	6	6	6	6	6	6	6
Approximate Packing Measurement	m^3	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08

NOTES:

1.The nominal cooling capacity and heating capacity are based on 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.1.5m beneath the unit.
The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

Wall Type

Elegant design,harmonizing with any type of interior design

The quality of "elegance" is additionally provided to meet contemporary needs. Features a simple,smooth form that harmonizes with any interior style.

Anti-mold filter

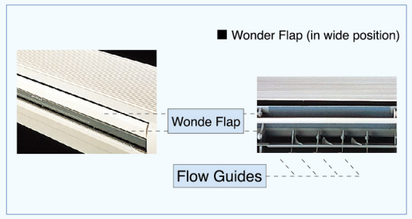
Anti-mold filter is equipped as standard accessory.

Compact and light weight,allowing easy installation

Designed with ease of installation in mind, this new model adopts a slim design and uses a high proportion of lightweight resin parts. Unit weight has been vastly reduced.

Uses the new "Wonder Flap"

Uses the "Wonder Flap" in its air outlet. The flap, provided with three flow guides each at its right and left sides, helps disperse the air flow. this wodening effect allows the air to be comfortably circulated throughout the room.



Indoor Unit		Wall Type			
Model Power Supply	AC1Φ 220V/50Hz	AVS-09URCSRAA	AVS-14URCSRAA	AVS-18URCSRAA	AVS-22UXCSRAA
	AC1Φ 240V/50Hz	AVS-09URDSRAA	AVS-14URDSRAA	AVS-18URDSRAA	AVS-22UXDSRAA
Nominal Cooling Capacity	kW	2.8	4.0	5.6	6.3
	kcal/h	2,400	3,400	4,800	5,400
	Btu/h	9,600	13,700	19,100	21,500
Nominal Heating Capacity	kW	3.2	4.8	6.3	7.5
	kcal/h	2,800	4,100	5,400	6,500
	Btu/h	10,900	16,400	21,500	25,600
Sound Pressure Level (High/Medium/Low)	dB(A)	38-35-32	42-38-35	43-39-36	44-40-38
Cabinet Color		Silky White			
Outer Dimensions(H x W x D)	mm	305 x 870 x 225			
Net Weight	kg	9	16	22	24
Refrigerant		R410A(Nitrogen-charged for Corrosion-resistance)			
Indoor Fan Air Flow Rate (Cooling/Heating)	m^3/min	6.9/6.5/6.1	10.5/10.1/9.6	12.8/12.2/11.6	13.3/12.8/12.1
Motor Power	W	30	40	50	50
Connections Refrigerant Piping		Flare-nut Connection(with Flare Nuts)			
Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35
Gas Line	mm	Φ12.7	Φ12.7	Φ15.88	Φ15.88
Condensate Drain		VP16	VP16	VP16	VP16
Approximate Packing Measurement	m^3	0.11	0.11	0.11	0.11
Standard Accessories		Wall Mounting Bracket			

NOTES:

1.The nominal cooling capacity and heating capacity are based on 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.1.5m beneath the unit.
The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

Floor Concealed Type

Compact design for limited space inside of perimeter wall

So compact that it fits into even a tiny space

Special emphasis placed on interior design compatibility as well as space saving design, allowing it to fit perfectly into the space below a bay window.

Indoor Unit		Floor Concealed Type			
Model Power Supply	AC1Φ 220V/50Hz	AVH-09UXCSAA	AVH-14UXCSAA	AVH-18UXCSBA	AVH-24UXCSBA
	AC1Φ 240V/50Hz	AVH-09UXDSAA	AVH-14UXDSAA	AVH-18UXDSBA	AVH-24UXDSBA
	AC1Φ 220V/60Hz	AVH-09UX2SAA	AVH-14UX2SAA	AVH-18UX2SBA	AVH-24UX2SBA
Nominal Cooling Capacity	kW	2.8	4.3	5.6	7.1
	kcal/h	2,400	3,700	4,800	6,100
	Btu/h	9,600	14,700	19,100	24,200
Nominal Heating Capacity	kW	3.3	4.9	6.5	8.5
	kcal/h	2,800	4,200	5,600	7,300
	Btu/h	11,300	16,700	22,200	29,000
Sound Pressure Level(High/Medium/Low)	dB(A)	36-33-30	39-36-32	40-37-33	43-39-35
Cabinet Color		Silky White			
Outer Dimensions(H x W x D)	mm	620 x 900 x 202		620 x 1170 x 202	
Net Weight	kg	18	22	26	27
Refrigerant		R410A(Nitrogen-charged for Corrosion-resistance)			
Indoor Fan Air Flow Rate(High/Medium/Low)	m^3/min	8/7/6	10/8/7	14.5/12.5/10.5	16/14/12
Motor Power	W	50	80	90	110
Connections Refrigerant Piping		Flare-nut Connection(with Flare Nuts)			
Liquid Line	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.53
Gas Line	mm	Φ12.7	Φ12.7	Φ15.88	Φ15.88
Condensate Drain		VP25	VP25	VP25	VP25
Approximate Packing Measurement	m^3	0.19	0.19	0.23	0.23

NOTES:

1.The nominal cooling capacity and heating capacity are based on 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.1.5m beneath the unit.
The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

All Fresh Air Indoor Unit

Create comfortable and healthy indoor environment
Create a comfortable and healthy indoor environment by introducing fresh outdoor air. By heating or cooling fresh outdoor air to almost the same temperature as room temperature, fresh ambient air can be adapted and then introduced into indoor room. Besides, after filtered, fresh outdoor air in transition seasons can be drawn to indoor room directly with no need of heating or cooling operation. While fresh outdoor air is introduced, other indoor units don't bear fresh air load.

Advanced control
Can be interfaced to H-NET system. easy electrical wiring design and installation.

Flexible line-up to Hi-Flexi series
All fresh air indoor unit is applicable to Hi-Flexi H Series outdoor units. both Hi-Flexi H Series indoor units and all fresh air indoor unit can be used in Hi-Flexi H Series system.

Higher external static pressure
Better installation flexibility at site, longer duct can be connected.

General Data for All Fresh Air Indoor Unit

Model			AVA-38 UXCSQH-108	AVA-38 UXDSQH-108	AVA-76 UXCSRH-168	AVA-76 UXDSRH-168	AVA-76 UX2SRH-168	AVA-96 UXCSRH-210	AVA-96 UXDSRH-210	AVA-96 UX2SRH-210
Power Supply			AC1Φ,220V/50Hz	AC1Φ,240V/50Hz	AC1Φ,220V/50Hz	AC1Φ,240V/50Hz	AC1Φ,220V/60Hz	AC1Φ,220V/50Hz	AC1Φ,240V/50Hz	AC1Φ,220V/60Hz
Combined Outdoor Unit Model			Hi-Flexi Series							
Cooling Capacity		kW	14.0		22.4			28.0		
		Btu/h	47,800		76,500			95,600		
Heating Capacity		kW	13.7		21.9			24.5		
		Btu/h	46,800		74,700			83,600		
Power Input		kW	0.31	0.32	0.49	0.51	0.61	0.51	0.59	0.71
Nominal Current		A	1.45	1.34	2.25	2.14	2.79	2.35	2.48	3.25
Outer Dimensions	H	mm	370		486			486		
	W	mm	1,320		1,270			1,270		
	D	mm	800		1,069			1,069		
Sound Pressure Level (Overall A Scale)		dB	43		45			46		
Net Weight		kg	60		97			97		
Refrigerant			R410A							
Indoor Fan Air Flow Rate		m^3/min	18		28			35		
External Static Pressure		Pa	200		220			220		
Drain Piping Size			VP25,Outer Diameter:Φ32mm							
Refrigerant Liquid Line Size		mm	Φ9.53		Φ9.53			Φ9.53		
Refrigerant Gas Line Size		mm	Φ15.88		Φ19.05			Φ22.2		
Temperature Range of Fresh Air Drawn			Cooling:20°C~43°C, Heating:-7°C~15°C							

NOTES:

1. The nominal cooling capacity and heating capacity are based on following conditions:
   Cooling operation conditions : 33℃ DB ,28℃WB, piping length: 7.5m,piping lift :0m
   Heating operation conditions: 0℃ DB,-2.9℃ WB,piping length: 7.5m,piping lift :0m
   (Heating capacity is tested when defrosting is not available)
2. 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 field.
3. An air filter with dust collection efficiency more than 50% needs to be attached to the duct system of the suction side at site.
4. When the resistance of the field-supplied duct is small, it may cause abnormal stoppage, malfunction, spraying water, etc. due to excessive air flow. And the duct, which is to be connected to this unit, shall be insulated for dew protection.
5. All fresh air indoor unit is for processing fresh air load and not for stabilizing the room temperature. For adjusting the air conditioning load of the room, the additional air conditioner is required.
6. This unit shall be connected to Hi-Flexi outdoor unit. In case of connecting this unit with other indoor units in the same refrigerant cycle, calculate the capacity of this unit as 21.0kW(5HP), 33.6kW(8HP), 42.0kW(10HP).
7. When Hi-Flexi outdoor unit connected only with all fresh air indoor unit, the configuration rate is 100% (Recommended).
8. Under cooling mode, when outdoor temperature is lower than 20℃,the system will automatically shift to ventilation operation;Under heating mode, when outdoor temperature is higher than 15℃, the system will automatically shift to ventilation operation;In case inlet temperature is below -7℃, All Fresh Air Indoor Unit will stop.

General Data for All Fresh Air Indoor Unit

Model			AVA-114 UX6SRH-300	AVA-114 UXBSRH-300	AVA-154 UX6SSH-400	AVA-154 UXBSSH-400	AVA-190 UX6STH-500	AVA-190 UXBSTH-500	AVA-190 UX6STH-600	AVA-190 UXBSTH-600
Power Supply			AC3Φ 380V/50Hz	AC3Φ 415V/50Hz	AC3Φ 380V/50Hz	AC3Φ 415V/50Hz	AC3Φ 380V/50Hz	AC3Φ 415V/50Hz	AC3Φ 380V/50Hz	AC3Φ 415V/50Hz
Combined Outdoor Unit Model			Hi-Flexi Series							
Cooling Capacity		kW	33.5		45.0		56.0		56.0	
		Btu/h	114,300		153,500		191,100		191,100	
Heating Capacity		kW	26.8		36.0		44.8		44.8	
		Btu/h	91,500		122,900		152,900		152,900	
Power Input		kW	0.70	0.74	1.07	1.10	1.27	1.26	1.54	1.58
Nominal Current		A	1.47	1.49	1.92	1.86	2.45	2.44	2.96	2.99
Outer Dimensions	H	mm	486		635		735		735	
	W	mm	1,270		1,950		1,950		1,950	
	D	mm	1,069		805		805		805	
Sound Pressure Level		dB(A)	56		61		64		66	
Net Weight		kg	97		196		222		222	
Refrigerant			R410A							
Indoor Fan Air Flow Rate		m^3/h	3000		4000		5000		6000	
External Static Pressure		Pa	220		300		320		300	
Air Inlet Size		mm	1,100 x 415		1,522 x 522		1,522 x 622		1,522 x 622	
Air Outlet Size		mm	1,106 x 338		850 x 272		850 x 272		850 x 272	
Drain Piping Size			VP25		RC1(Internal Screw)					
Refrigerant Liquid Line Size		mm	Φ12.7		Φ12.7		Φ15.88		Φ15.88	
Refrigerant Gas Line Size		mm	Φ25.4		Φ25.4		Φ28.6		Φ28.6	
Temperature Range of Fresh Air Drawn			Cooling:20°C~43°C, Heating:-7°C~15°C							

NOTES:

1. The nominal cooling capacity and heating capacity are based on following conditions:
   Cooling operation conditions : 33℃ DB ,28℃WB, piping length: 7.5m,piping lift :0m
   Heating operation conditions: 0℃ DB,-2.9℃ WB,piping length: 7.5m,piping lift :0m
   (Heating capacity is tested when defrosting is not available)
2. 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 field.
3. An air filter with dust collection efficiency more than 50% needs to be attached to the duct system of the suction side at site.
4. When the resistance of the field-supplied duct is small, it may cause abnormal stoppage, malfunction, spraying water, etc. due to excessive air flow. And the duct, which is to be connected to this unit, shall be insulated for dew protection.
5. All fresh air indoor unit is for processing fresh air load and not for stabilizing the room temperature. For adjusting the air conditioning load of the room, the additional air conditioner is required.
6. Under cooling mode, when outdoor temperature is lower than 20℃,the system will automatically shift to ventilation operation;Under heating mode, when outdoor temperature is higher than 15℃, the system will automatically shift to ventilation operation;In case inlet temperature is below-7℃, All Fresh Air Indoor Unit will stop.