

PRO-V6s

SKM VRF Air Conditioners



50/60Hz

R-410A
REFRIGERANT



Product Range: 8-96HP



CE

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Legend

The following legends are used throughout this manual

cfm..... Cubic Feet per Minute	AFR ... Air Flow Rate
Hz Hertz	MBh ... BTUH x1000
kW Kilowatts	Ph Phase
kg..... Kilogram	PI Power Input of Compressor
lbs Pounds	BPF.... By Pass Factor
l/s Liters per Second	TR..... Tons of Refrigeration
Pa Pascal	V Volts
in. wg . Inch Water Gauge	



SKM reserves the right to change, in part or in whole the specifications of its Air Conditioning Equipment at any time in order to add the latest technology. Therefore, the enclosed information may change without any prior notice.

Introduction

SKM Air Conditioning is a premier name in the Air conditioning industry, known for its indigenously designed and engineered Air conditioning Equipment. It is one of the leading manufacturers of HVAC equipment in the Gulf, operates on a philosophy of total customer satisfaction and offers superior quality HVAC products.

SKM products & services have been manufactured & delivered under the controls established by a Bureau Veritas Certification approved Quality, Environment, Occupational, Health & Safety Management Systems that confirms with ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007. Bureau Veritas Certification under certification numbers IND11.1107, IND10:1005, IND11.4392 HS.

SKM Testing Laboratory quality system and Competency of Testing Laboratory in accordance to ISO 17025:2005.

SKM provides qualified service and stock of replacement parts in all major Middle east countries. See back cover for details.

SKM Air Conditioning LLC



You name it.....We cool it

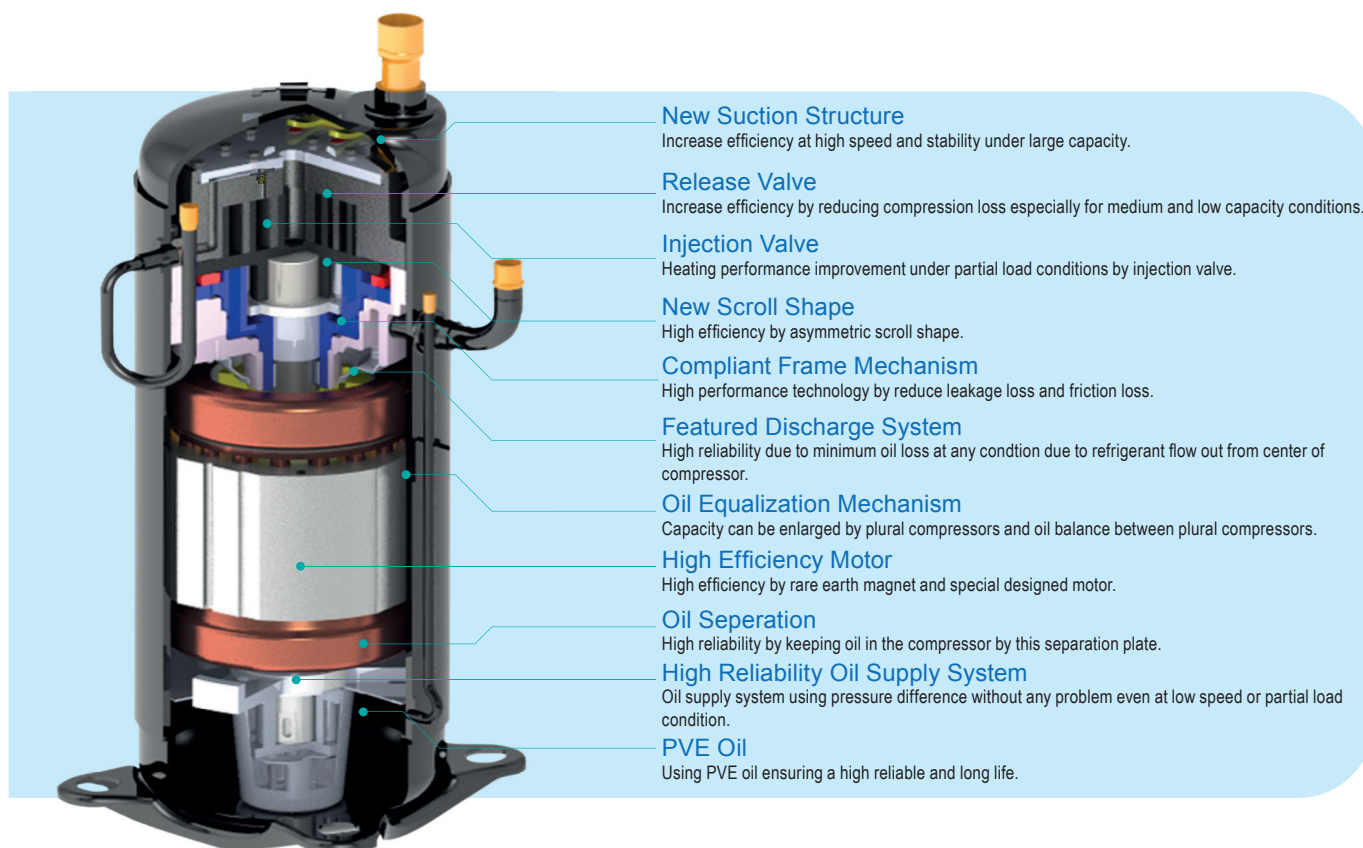


High Efficiency

Statistics shows that the central air conditioning consumes 40% to 60% energy of the entire building therefore energy-saving air conditioning is essential for the modern building. SKM PRO-V6s high ambient series is our new advanced system which uses a new generation of enhanced vapor injection compressor and applies all DC inverter energy saving technology. The S high ambient series has more powerful heating capacity and is more energy efficient therefore perfectly meeting the energy-saving needs of the central air conditioning market.

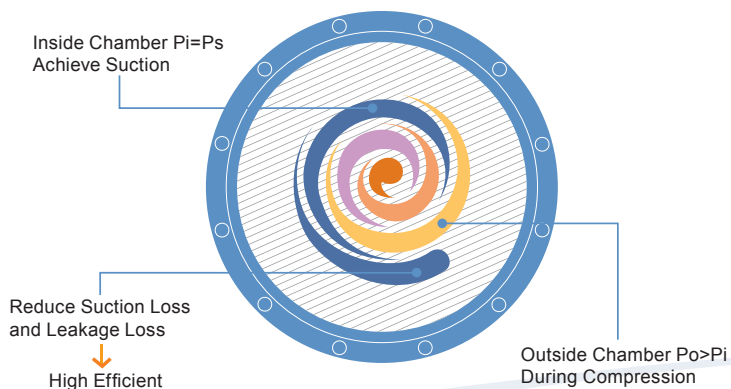
New Generation of Enhanced Vapor Injection Scroll Compressors

SKM PRO-V6s high ambient series adopts a new generation of the high efficiency scroll compressor with the patented vapor injection technology. It can greatly enhance the heating performance and achieves high energy-saving efficiency. Powerful heating is guaranteed with the SKM PRO-V6s high ambient series, especially in low temperature conditions where heating capacity is increased by up to 25%, compared with the normal model.

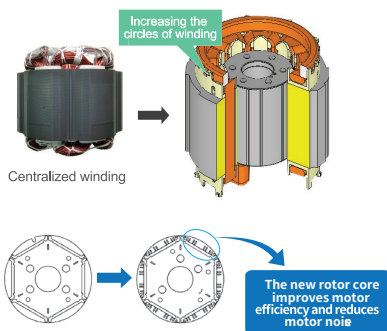


Asymmetrical Scroll Structure

The asymmetric scroll structure effectively reduces refrigerant gas leakage during suction and compression and enhances operation efficiency and reliability.



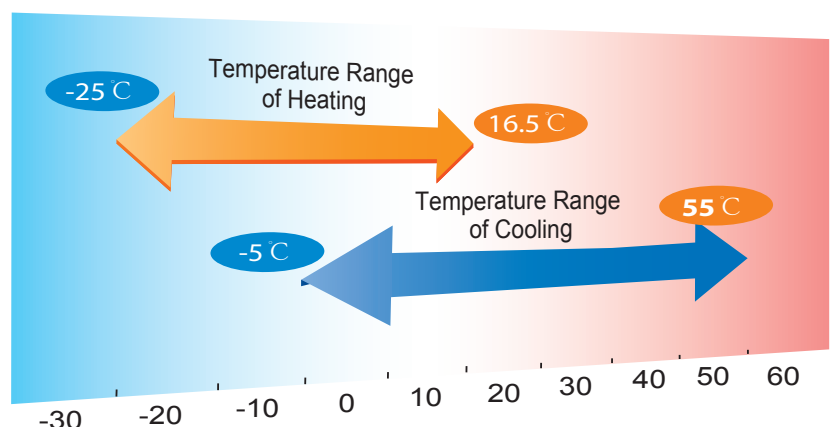
- A special design of double back pressure chambers' structure to improve energy efficiency and reliability of the compressor.
- The new involute scroll, using advanced materials, effectively reducing the friction and refrigerant gas leakage loss (ie, mechanical loss and pressure loss), and improves efficiency and reliability of the overall operation.
- The high pressure chamber design inhales directly reducing the loss of inspiratory overheating when compared to the low-pressure chamber compressor. This design greatly improves the compression efficiency.
- The compressor unloader valve effectively prevents over-compression of gas in the cavity and the increase of power consumption caused by the excessive exhaust pressure. This greatly improves the operation efficiency of the compressor at low and medium frequency so that the compressor runs more efficiently and steadily.



- The concentrated winding stator lowers the copper loss and increases higher compressor efficiency; the stator coil applies "keel motor" manufacturing technique to enhance the compressor COP, and to further enhance the compressor efficiency under low load.
- The new 6-pole high efficiency rubidium magnet rotor core of motor rotor improves the motor efficiency and reduces noise of the motor.

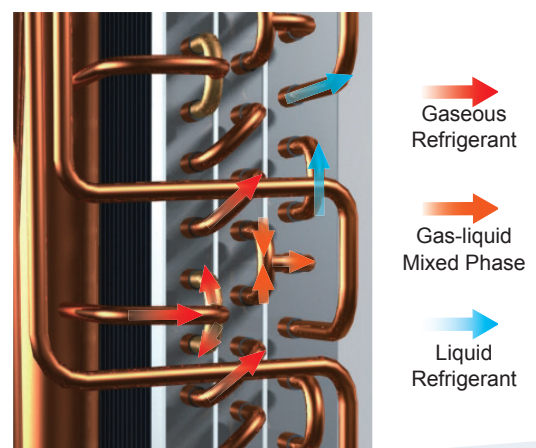
Wide Operating Range Meets Greater Demand

With a wide operating temperature range, the outdoor unit can operate from -25°C to 16.5°C. The heating effect in winter is strong, which perfectly meets the customers' needs in different environments. The unit is able to operate in -25°C ambient, when the unit is heating mode and also operate at 55°C ambient in cooling mode.



The New G-type Heat Exchanger, More Efficient and Powerful

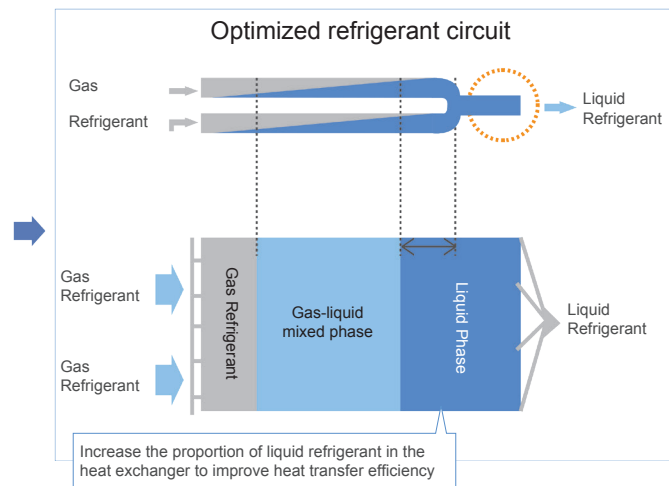
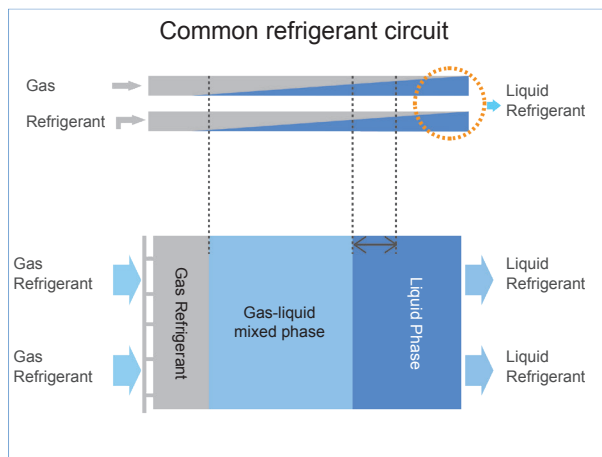
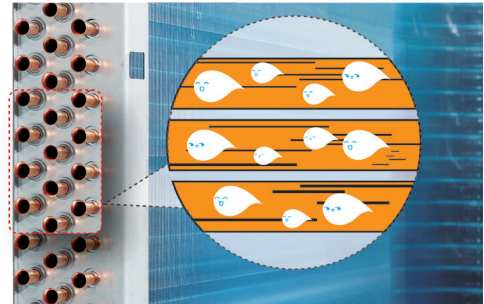
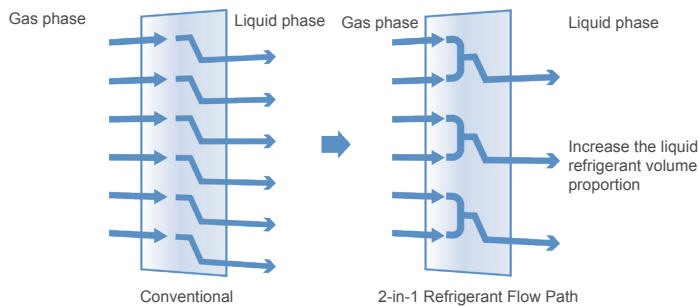
The outdoor unit is equipped with a newly designed high-efficiency G-type heat exchanger, which greatly enlarges the heat exchange area and the efficiency. By using double electronic expansion valves in the shunt system, the heat exchanger achieves partition control, the refrigerant load distribution is more reliable and therefore the overall heat transfer performance is extremely efficient. The heat exchanger, using the internal thread copper of high thermal conductivity with the diameter of $\Phi 7.0\text{mm}$ and new fins reduces the air flow resistance and makes heat transfer more equably and greatly improves heat transfer efficiency. The decrease in the frosting amount of the heat exchanger in winter greatly improves the heating efficiency. Through a specially designed refrigerant flow process of two-in-one-out, the heat exchanger is more efficient and effectively improves the subcooling degree of the system.





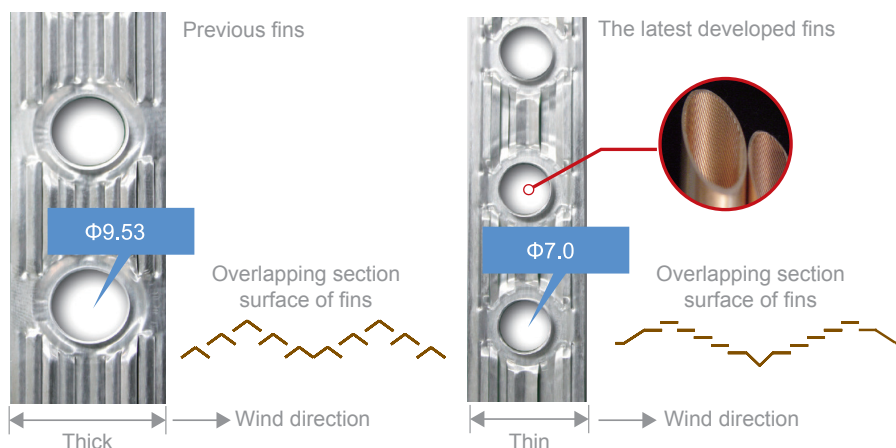
Optimized Refrigerant Circuit

With a wide operating temperature range, the outdoor unit can operate from -25°C to 16.5°C. The heating effect in winter is strong, which perfectly meets the customers' needs in different environments. The unit is able to operate in -25°C ambient, when the unit is heating mode and also operate at 55°C ambient in cooling mode.

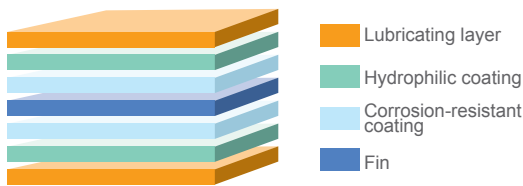


High-efficiency Inner Grooved Tube and Stepped Fins

SKM new step-like high-efficiency heat transfer coils use new low-pressure-loss fins and copper tubes.



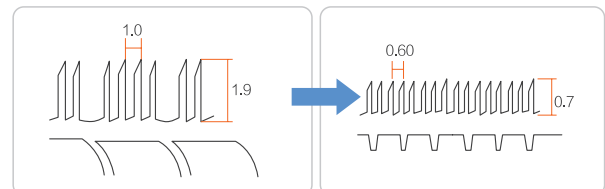
Hierarchical diagram of hydrophilic aluminum foil



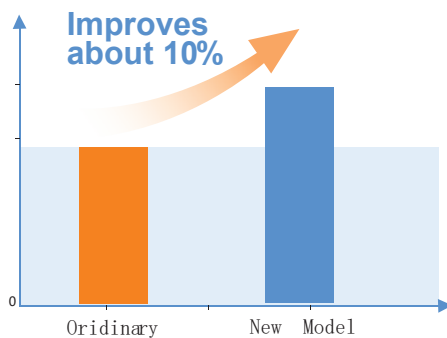
- Not easy to frost in heating mode
- Slow down the corrosion of heat exchanger by corrosive gases
- Destroying the surface tension of water droplets accelerates the down flow speed of defrost water or condensate water and improves the air conditioning performance.

Improved Super-cooling

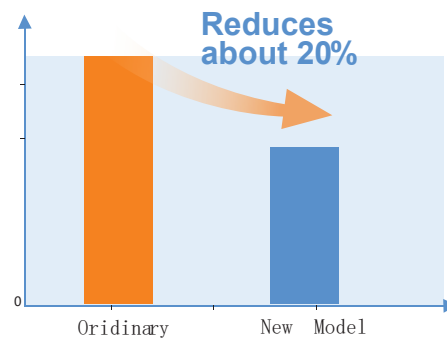
The optimization of finned tubes, increasing of fins number and reducing of height on the basis of traditional secondary super-cooler reduces its pressure loss, increases coefficient of heat conduction and improves super-cooling performance.



The heat transfer efficiency improves 10%



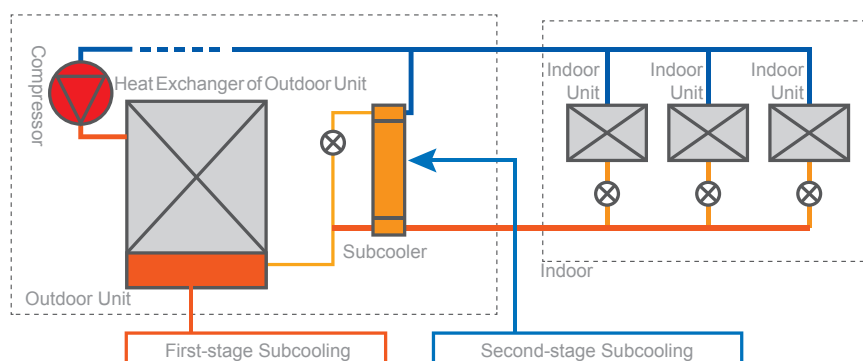
The ventilation resistance reduces 20%



Two-stage Sub-cooling; Bigger Capacity and Longer Pipe

The Cooling section of the outdoor heat exchanger is uniquely designed to be more effective than the traditional outdoor units of the multi-split air conditioner without a sub-cooling design. First stage sub-cooling can lower temperature by 12.5°C whilst two stage sub-cooling can reduce the temperature by 27°C thus realizing as a far more efficient re-cooler.

- Increasing cooling capacity of the unit refrigerant
- Reducing the resistance when refrigerant flowing in pipelines
- Increasing sub-cooling degree, more accurate controlling of electronic expansion valve, more stable operation
- Increasing sub-cooling degree, increasing the length of refrigerant pipe

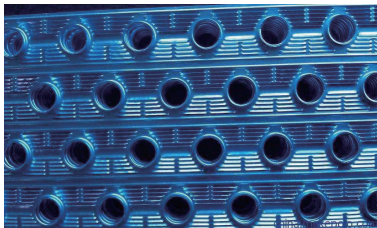




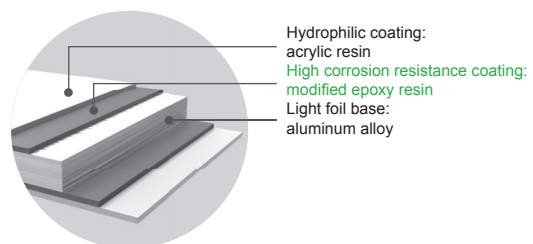
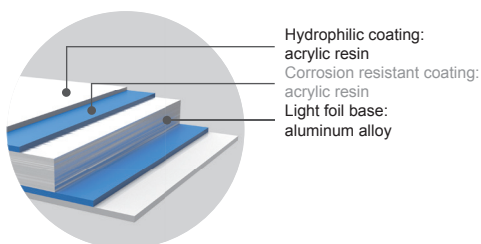
SKM Anti-corrosion Black Fin (optional)

The main film forming resins of traditional blue anticorrosive fins are acrylic resins and the film forming resins of SKM anticorrosive fins are epoxy resins. The film thickness of epoxy resin is 1.5 times that of acrylic resin, and its acid-resistant, alkali-resistant and salt-fog resistant properties are 3 times that of acrylic resin.

Conventional Blue Fin

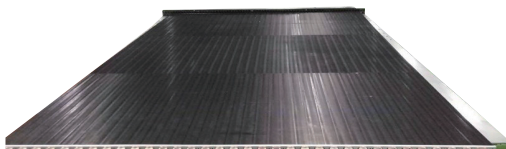


SKM Anti-corrosion Black Fin



Notes: This black fin can achieve 1500h corrosion resistance under the following conditions: neutral salt spray test, 5% NaCl, 35°C

SKM VRF with Anti-corrosion Black Fin



SKM Anti-corrosion Surface Treatment

The corrosion of the outdoor unit is directly related to the irradiation of ultraviolet rays. SKM continuously improves the weather resistance of the product, and improves the weather resistance of the powder coating of the net and the appearance of the sheet metal parts to continuously increase the anti-corrosion ability.



SKM Anti-corrosion Surface Treatment Step:

1st Step: Zirconium-based Treatment

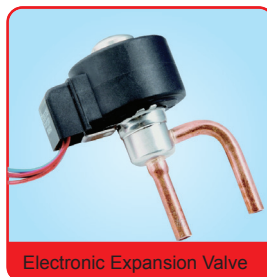
2nd Step: Spray Coating of Epoxy Zinc Rich Primer

3rd Step: Spray Coating of Pure Polyester Paint

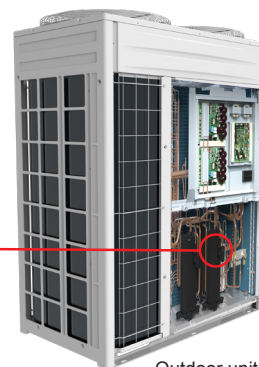
Benefits: After SKM anti-corrosion surface treatment all of the metals and alloys panel and frame can achieve a 60 years corrosion lifespan.

Multi-electronic Expansion Valve Control Technology

There are more than one high-precision electronic expansion valves installed in the outdoor unit. The electronic expansion valve can quickly respond to the changes of the outdoor environment and indoor load. The unit refrigerant flow can be regulated by the indoor electronic expansion valve. With the control range of 2000 steps, the indoor temperature fluctuation is minimal and the indoor environment is more comfortable.



Electronic Expansion Valve



Outdoor unit profile



Stable Operation With High Intelligence

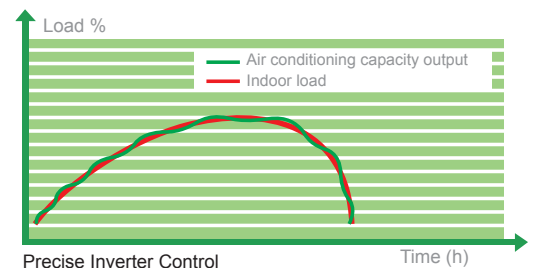
SKM PRO-V6s high ambient series has an innovative structure appearance. It applies a variety of intelligent technologies which achieves intelligent operation from component selection to unit operation. A full range of controls ensure the stability of the system and due to the high level of technical support platform from SKM VRF the operation is more reliable and efficient.

Full DC Inverter Energy-saving Technology, High Energy Efficient and Reliable

DC Frequency Inverter Technology in Compressor

Stepless Frequency Conversion Control Technology

SKM VRF adopts a high-precision inverter compressor with an adjustment range of 0-450Hz and the control accuracy is 0.01Hz. The operating speed of outdoor DC inverter compressor can be adjusted continuously and freely, which does not only improve user experience, but also enhances the energy efficiency of the unit.



The Latest Dual FOC 180 Degree Sine Wave DC Variable Speed Drive Technology

Using the top inverter controller of the industry, this product is an upgraded version of the current mainstream IGBT inverter controller. With small size, high precision, and internal self-protection control (over voltage, under voltage, phase, phase error, over current, overheating, etc.), the inverter controller is significantly improved in control accuracy and reliability.

New Generation of Power Sharing CIB Dual-module Inverter-driven Technology

The inverter adopts double FOC 180° vector sine wave drive algorithm to drive the compressor motor in dual mode and possesses various protective functions against over current, over voltage, under voltage, short circuit, modules and heat sinks temperatures, power phase loss, bus voltage fluctuations and communication failures to ensure the efficiency and reliability. In the high frequency band, the two-phase over-modulation technology improves the utilization of the voltage, and increases a substantial output voltage and then reduces the module current so as to greatly decrease the module's heat loss. In the low frequency band, the torque compensation technology reduces the compressor vibration and the machine noise and greatly improves the module's reliability and efficiency. At the same time, the integrated CIB module also makes the electrical system and electrical box with a better layout and better design, this effectively reduces the electromagnetic interference and further improves the reliability of the drive module.

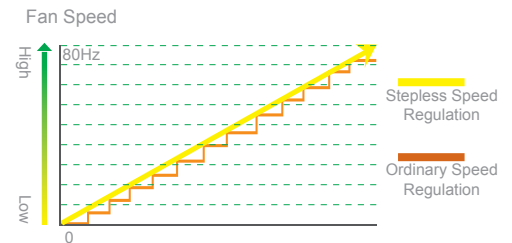


Outdoor Unit Fans With Variable Speed Control

DC variable speed motor are used on outdoor fans which increases the motor efficiency by 40 percent and significantly reduces the power consumption. Matching the stepless frequency conversion technology of the compressor the fans carry out stepless speed control with high precision influenced by the environmental conditions and air conditioning load conditions therefore ensuring that the system runs more steadily and reliably.

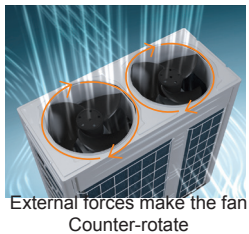
Stepless Frequency Conversion Speed Control of Fan

Ensure stability of compressor discharge pressure and suction pressure to improve unit reliability;
Ensure stability of unit dynamic distribution of refrigerant flow and capacity of indoor unit;
Quickly control response speed of system to better meet the needs of load changes of the air conditioner.



Fan Protection

Convection

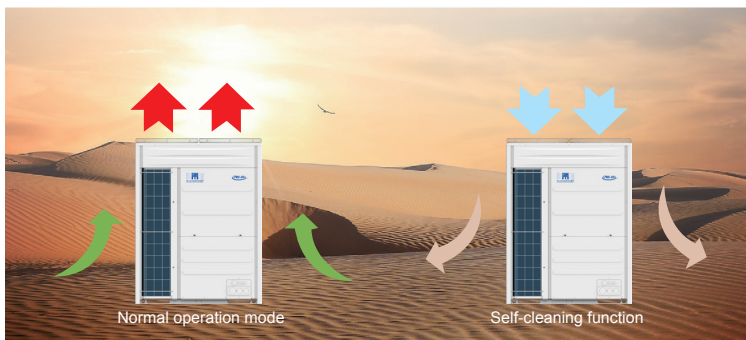


Instantaneous reverse rotation with sudden increased torque may cause damage to the blades

Fan Protection Function



Intelligent Self-cleaning Function, removing Dust Automatically

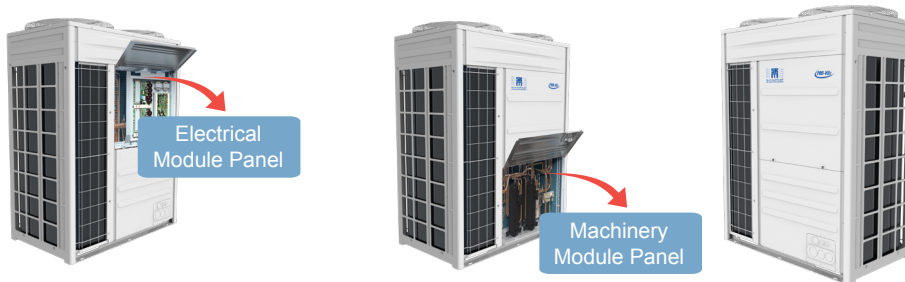


During the Automatic Dust removal function, the air enters from the top and removes the dust accumulated by rotating the fan in reverse direction.



Installation and Maintenance Convenience

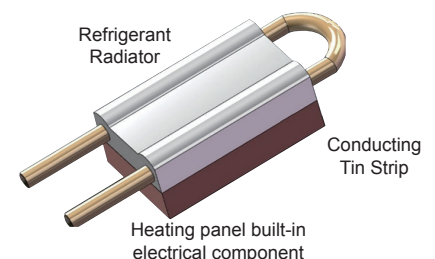
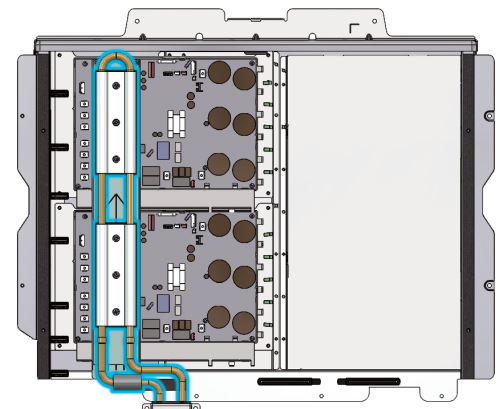
The strong frame and thick steel support for the motors guarantee operation stability and reliability. The panels of the outdoor unit and the mechanical compartment can be disassembled and installed separately which provides convenience for the installation, maintenance and trouble shooting of the unit. Ventilation holes on the side panels of the outdoor unit can effectively reduce the ventilation resistance, increasing the ventilation volume thus enhancing the heat exchange efficiency of the heat exchanger.



Refrigerant Cooling Technology for PCB

Refrigerant Cooling technology for PCB in SKM MODEL will remove the heat from the main control board, inverter module and outdoor unit's electric box to improve the electrical reliability of the unit when operating under high ambient conditions. This ensures stability and safety of operation and also, it prevents poor heat dissipation caused by the fan cycle rotation or during stop mode.

- The refrigerant heat sink is made by aluminum alloy with high thermal conductivity, and the internal mechanical tube expansion processing makes the copper tube 360° fitting.
- A thermal pad is added between the refrigerant radiator and the heat sink built-in the electrical component to increase the heat transfer efficiency. Made by imported lead-free solder film with high thermal conductivity, the thermal pads greatly improve the overall performance.

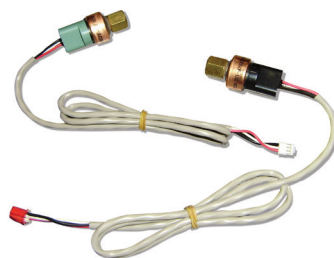


Accurate Self-diagnosis and Self-regulation for System Pressure and Temperature

Fast and Accurate Pressure Sensing Technology

Incorporating high precision pressure sensors the outdoor unit can control the system pressure with optimal accuracy. Real time data collection being fed back to the main PCB results in accurate control of the system pressure enabling efficient and reliable operation.

Combined with compressor frequency control, fan operating speed and electronic expansion valve opening degree, the pressure sensing technology adjusts the condensing pressure and evaporation pressure of the system to an optimal condition, therefore, ensuring stable operation, timely protection and a longer life for the unit.



Pressure Sensor



Compressor Frequency Control



Fan Operation Control



Electronic Expansion Valve Opening Degree Control

32-bit MCU and High-speed Transfer

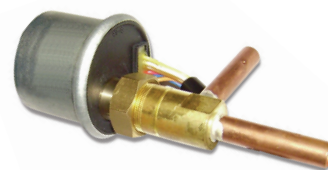
32-bit MCU data processing combining with the high-speed transmission can do multitasking of signal processing including outdoor unit control, indoor unit control, temperature control, compressor frequency and fan speed enabling the system to maintain the stability while ensuring efficient operation and realizing non-polarized communications of high speed and high efficiency.



32-bit MCU Data Processing

Refrigerant Flow Control

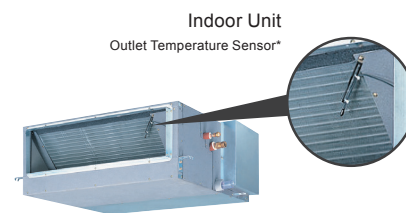
Utilizing the microcomputer electronic expansion valve, the indoor unit incorporates automatic regulation function of 2000-level which can carry out precise automatic flow regulation with a more accurate temperature regulation and better energy-saving according to the actual indoor load.



Electronic Expansion Valve of 2000-level

Temperature Sensors

The multi-point temperature sensors can carry out real-time detection and feedback about the outside temperature, indoor temperature and outlet air temperature therefore analyzing and regulating the system output through the main controller of the system.



Temperature Sensors

Note: Only for partial indoor units



Multiple Oil Separation Circuits Ensuring High Efficiency and Reliability

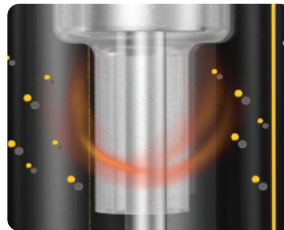
Utilizing multiple oil separation technology, oil return and advanced system control the oil balance between outdoor units can be maintained ensuring the stable and reliable system operation with oil return of up to 99%.

Oil Separation Technology Details

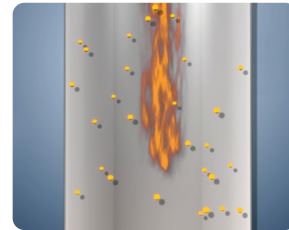
With multiple oil separation technology, through components such as barrier oil separation, centrifugal oil separation and gravity oil separation in the high-pressure chamber, industry leading internal multistage oil separation is carried out. Utilizing technology of oil supply through pressure differences and intelligent oil level control maintains a stable internal oil level with only a small amount of oil loss from the compressor. After the compressor, the small amount of oil discharged is re-separated by a high-efficiency centrifugal oil separator of large capacity and a gas-liquid separator. The overall separation efficiency is up to 99.9% or more.



Barrier Oil Separation



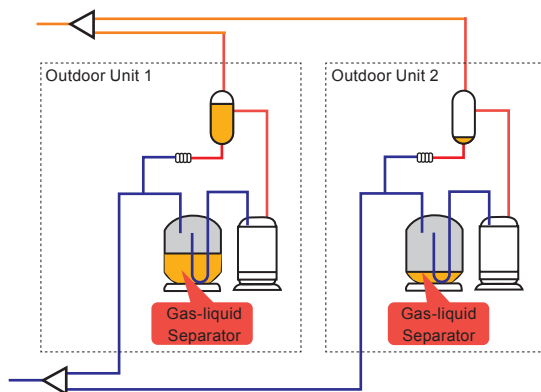
Gravity Oil Separation



Centrifugal Oil Separation

The First Stage Oil Return Control

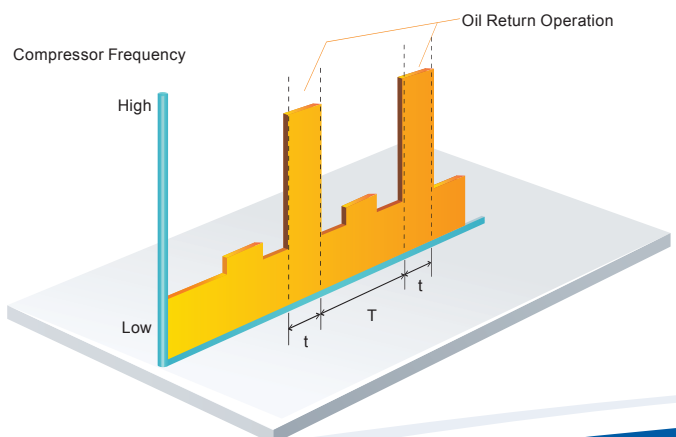
Using porous oil return technology, the gas-liquid separator with a built-in high-efficiency fine mesh keeps the oil balance between modules.



The Second Stage Oil Return Operation

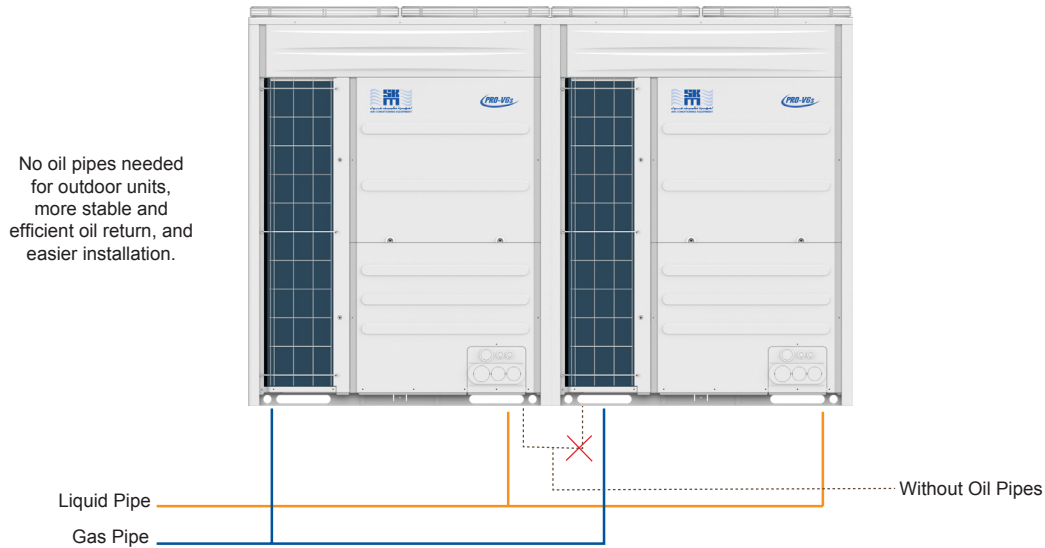
The system carries out oil return operation according to the compressor operating frequency and corresponding operating time, thus avoiding oil remaining in the indoor or outdoor heat exchanger when system runs with low load for a long time causing compressor failure by the lack of refrigeration oil. The oil return operation lasts only 60 seconds, after which, it will automatically return to the former status.

When heating in winter, there is no need to change the mode to carry out oil return operation, achieving oil return without stopping operation and a better heating effect.



Two-pipe Even Oil Control

By coordinating the oil discharge and oil return in the compressor, gas-liquid separator and oil separator, the automatic balance of the lubricant between each outdoor unit can be adjusted without using oil balance pipes, which eliminates the fluctuations like system pressure, temperature etc. By eliminating oil balance pipes this simplifies, simplifying the installation and improves the operation stability and comfortability.



Intelligent & Accurate Unit Capacity Allocation

Tests show that multi-coupled air conditioning unit reaches its highest efficiency and the lowest power consumption at 40% to 75% of its full load.

Eg: Each module load distribution of 14HP unit (double module full load) at 28HP load



SKM PRO-V6s high ambient series
14HP + 14HP (intermediate load)

VS



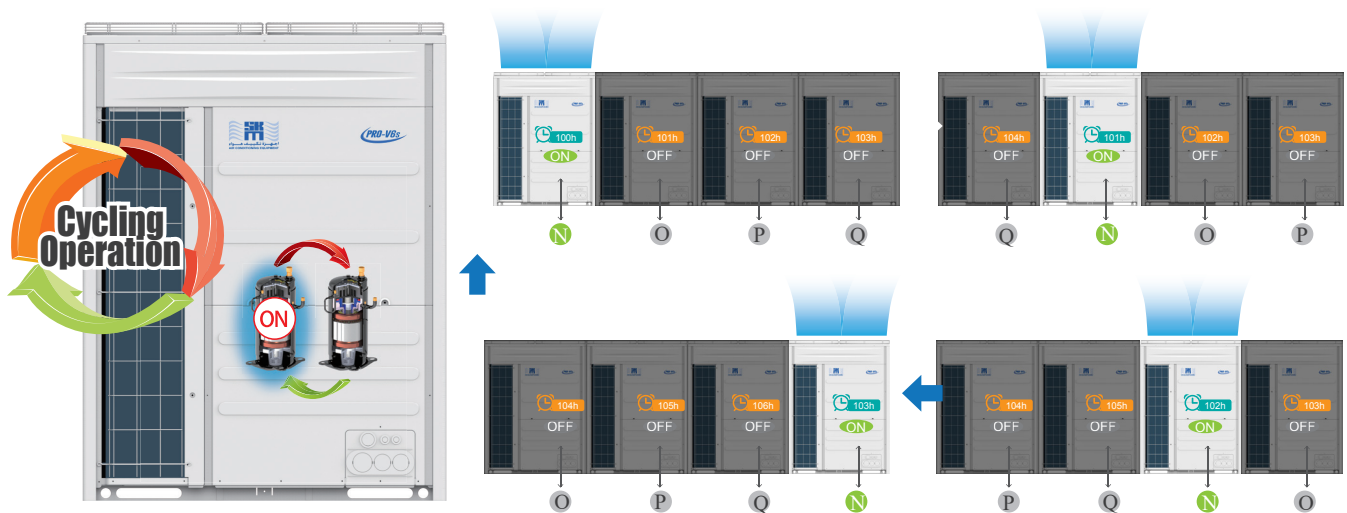
Ordinary product:
22HP (full load) + 6HP (ultra-low load),



Load Sharing Operation Ensuring Long-life and Reliability

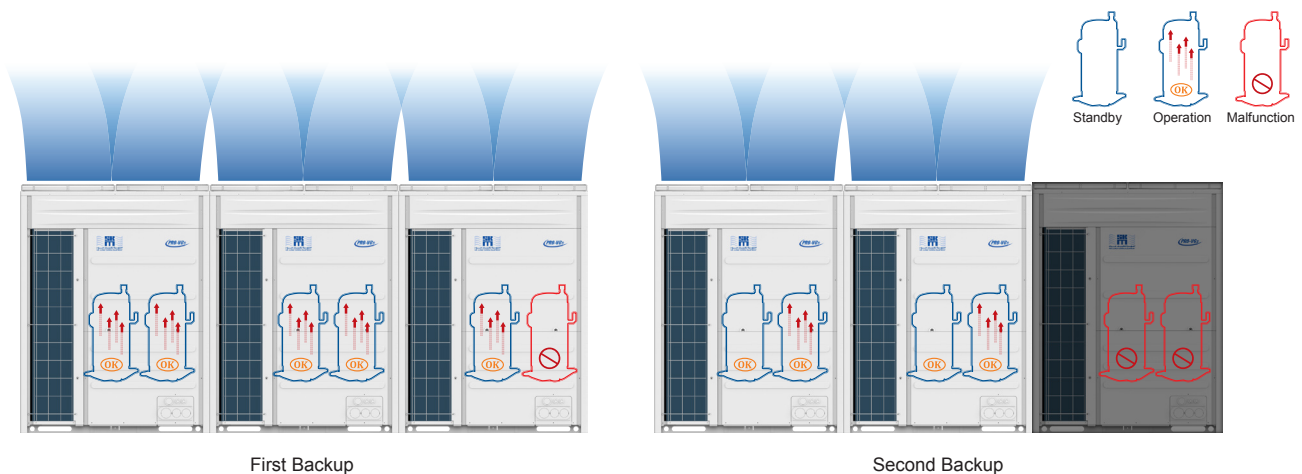
Rotation Technology

Through the rotation technology, the running time of each outdoor unit is shared ensuring longer service life and durability for each system.



Dual Backup Operation

The outdoor unit has dual emergency functions. As for the first backup, if one of the two compressors in the outdoor unit fails (18HP or more), the other compressor can run in emergency. As for the second backup, in a combination system, if one outdoor unit fails, then the alternative outdoor unit can operate in emergency mode.



First Backup

Second Backup

Multiple Protections Ensuring Safer and More Stable Operation



Compressor Protection

- Compressor suction
- Discharge pressure protection
- Compression ratio protection
- Discharge temperature protection
- Oil return protection

Inverter Protection

- Inverter temperature protection
- Voltage protection

System Protection

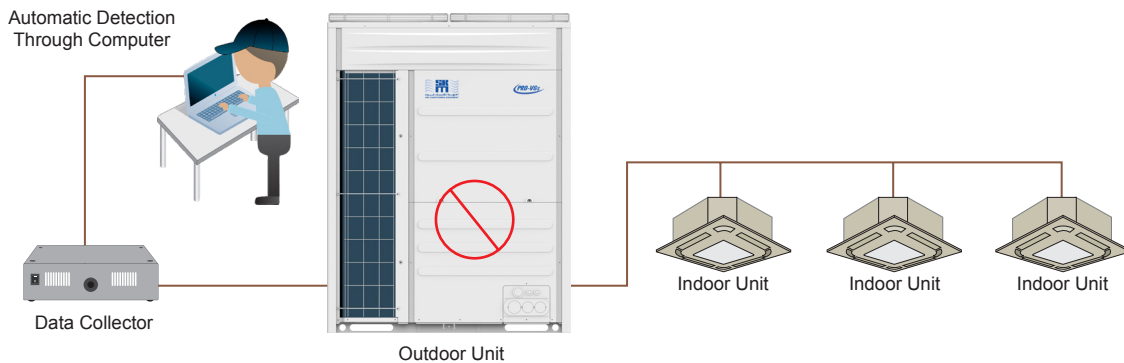
- Ventilator pressure protection
- Four-way valve protection
- Indoor and outdoor temperature protection
- Subcooling protection

Electric Protection

- Voltage phase-failure
- Current protection
- Motor protection
- protecting from Lightning

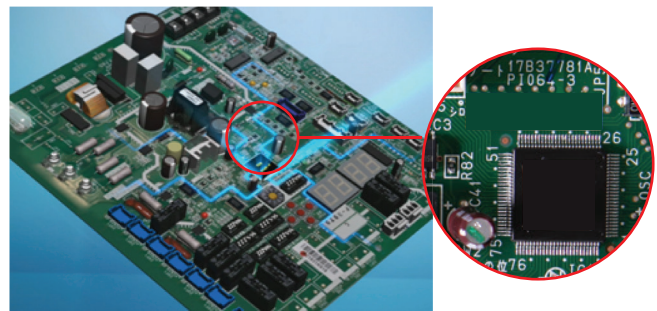
Intelligent Data Collector

The specially designed H-Assist device (intelligent detection assistant) can automatically detect the systems running condition. With real time monitoring, system parameters, trouble shooting and preventative maintenance can be managed.



Error Information Storage “Black Box”

Both the main computer board and the wired controller of the outdoor unit can store error information so that the maintenance personnel can detect the operation information before the malfunction and determine the cause.

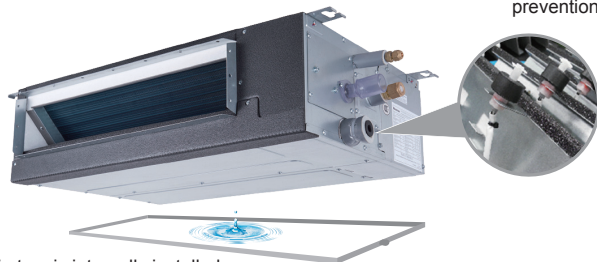




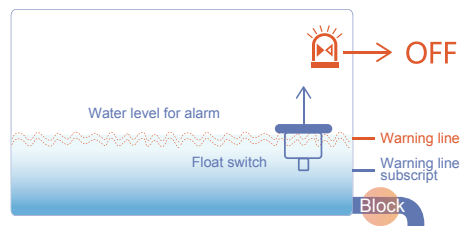
Float Switch Design, Ensure Decoration Safety

The new float switch can monitor the water level of the water pan in the indoor unit at any time. When the problems like blocked drainage, pump failure, insufficient slope and air block occur, the new float switch can quickly and automatically issue warning sign and stop the machine. As a result, the home life is more secure and the system is more reliable.

Float switch is standard equipped, over-flow prevention.

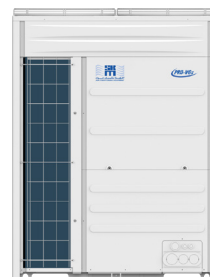


The drain tray is internally installed.
No duct, beautiful and clean.



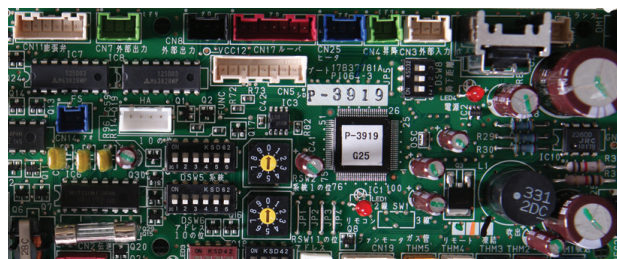
Lightning Protection

The outdoor unit has advanced lightning protection module which has functions of anti-interference and lightning protection, to prevent system failure and reliable performance.



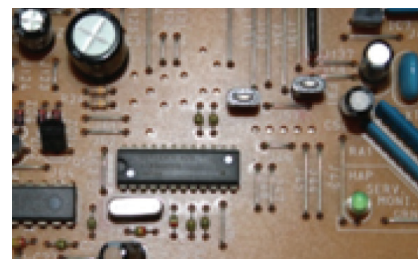
PCB's layers

Indoor and outdoor PCB's layers are made of double sided resin PCB board with high integration level, which make maintenance and repair simpler.



SKM 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.

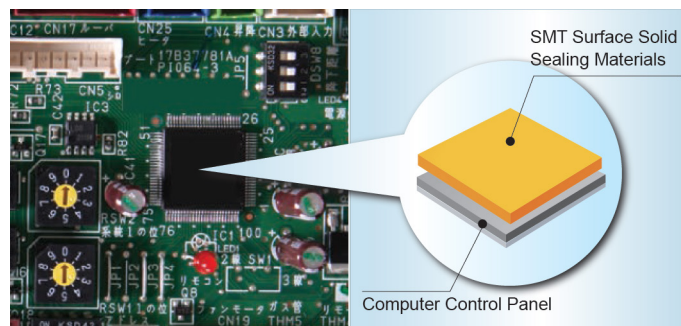


Ordinary PCB board:

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

Control Panel of High Reliability

The SMT sealing technology, through strict optical inspection, low temperature environment test, high temperature environment test, on-line inspection, functional inspection, and vibration and stress test, can effectively improve the anti-interference ability of the control panel without being affected by smog, sand storm, high temperature and humidity, and significantly improve the anti-corrosion performance.

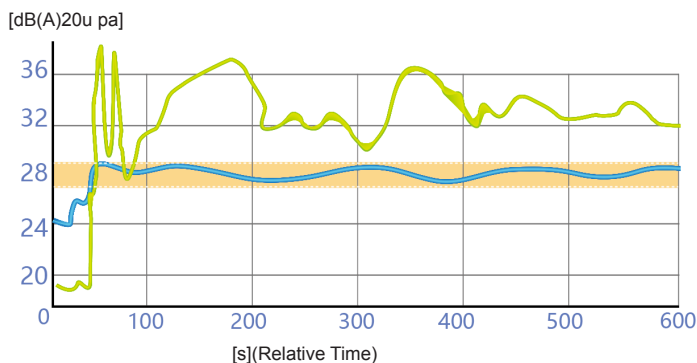


User-Friendly Experience

In order to enhance user experience and pursue harmonious coexistence between human and ambient environment, SKM PRO-V6s high ambient series focuses on improving the quality of the environment by handling and controlling air temperature, humidity, speed and air cleanliness, This will create a healthy and comfortable environment for all users.

What Is High Quality Mute?

Low decibel does not mean the true tranquility. More importantly, the control of sound quality matters. SKM joins hand with Danish B & K and Belgium LMS Vibration Testing System to create a high standard anechoic lab(that is, echo-free anechoic chamber), strictly controlling and processing the sound, reducing various irritable high-frequency, broadband and abnormal sound to create a more quiet environment.



Ordinary Product

Upgraded SKM Product

Note: This picture shows the laboratory measurement of operating noise of SKM indoor unit products and ordinary indoor unit products when the indoor unit air-feeding stall is set to highwind gear under standard cooling conditions, of which the SKM product models are Type 22 thin duct indoor unit.

15 Mute Technologies Offer You a Quiet and Comfortable Environment

Advanced Mute Design, Ideal Mute Environment

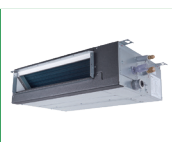
At present, more and more people are beginning to pay attention to the quality of their living environment, which forms part of their high quality of life. SKM central air conditioning systems are concerned about peoples physical and mental well being and therefore focus on creating the most comfortable environment by attentively creating a harmonious and healthy atmosphere.

Noise Control of Indoor Unit

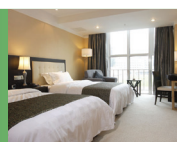
Based on the application occasions of the indoor unit and its structural characteristics, R&D Personnel of SKM do research on technical aspects and installation methods to reduce the noise levels in several aspects, such as electric fan motor, fan blades and duct layout, ensuring that users enjoy a quiet and comfortable air-conditioned environment.



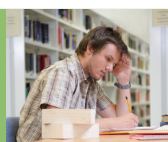
20dB(A)
Whispering



21dB(A)
Operating*



30dB(A)
Bedroom



40dB(A)
Quiet library

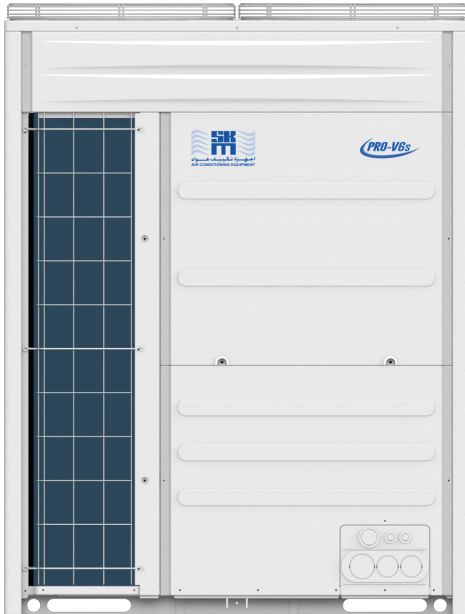


70dB(A)
Bustling streets



15 Mute Technologies for Quietness and Comfort

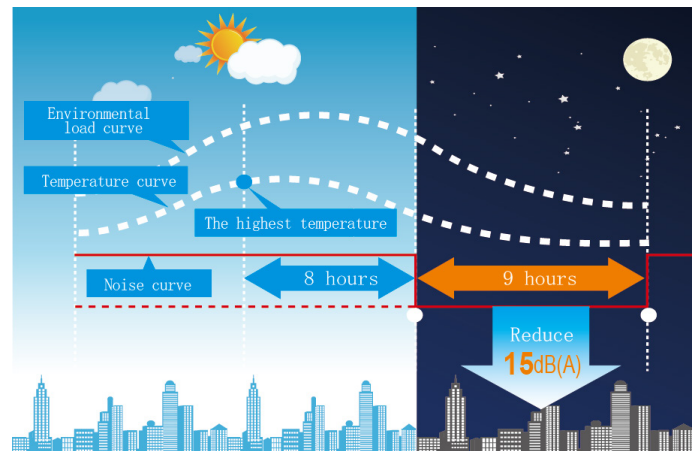
SKM strive for excellence continues so that end users can enjoy a quiet, healthy and comfortable environment.



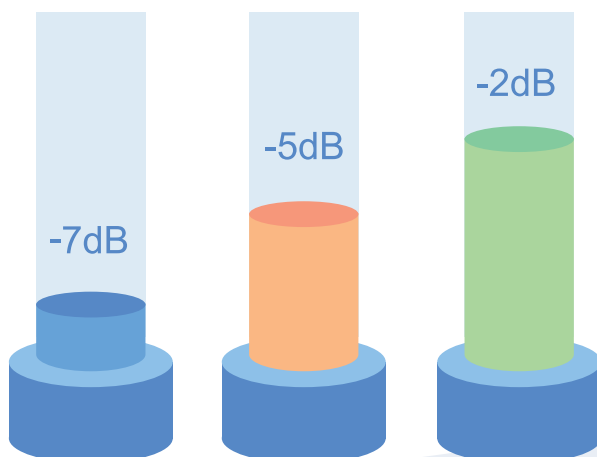
- New energy efficient & low noise DC inverter compressor
- DC inverter electric fan motor
- Motor supporting frame shock absorption design
- Exhaust pipe mute design
- New compressor sound insulation processing
- New air guide structure
- New high efficiency axial fan
- Refrigerant flow mute technology
- Capacity priority mode
- Night mute function
- Compressor injection circuit mute design
- Integrated CIB module, low electromagnetic noise design
- 3D simulation of pipeline shock absorption design
- Outer shell shock absorption design
- New air grille

Night Silent Mode

The outdoor unit, with automatic night mute setting function and mandatory mute function, has 9 mute modes that can be selected. When the outdoor unit is set to night mute mode, the unit will operate silently according to the outdoor ambient temperature so that the minimum noise of the operation of the outdoor unit at night is only 42 dB(A), reduced by 15 dB(A) compared with daytime. (Taking product model 10HP as an example)



Low Noise Mode



The user can flexibly select the noise reduction value according to the actual requirement and meet the ability requirements. In addition, the operation period of low noise mode can be determined by external input (Signal input).

Electronic Fan Motor Mute Processing

The flexible damping enclosed motor ensures more effective noise insulation. Cast aluminum is adopted as manufacturing material for the electronic fan motor so that lower noise will be obtained. The motor bracket adopts non-resonant hanger structure to ensure the stable performance of the motor and reduces the vibration noise.

The New High Efficiency Axial Fan

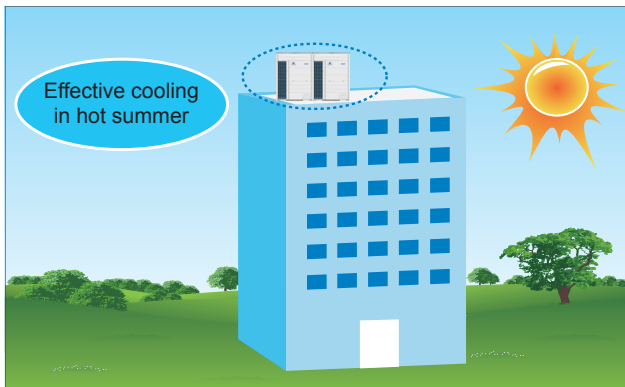
The new high efficiency axial fan can reduce turbulence around the fan by up to 60% with even lower running sound. The use of noise reduction mica composite materials with good sound-absorbing effect can significantly reduce the “buzzing”.



Intelligent Unit Operation and Control

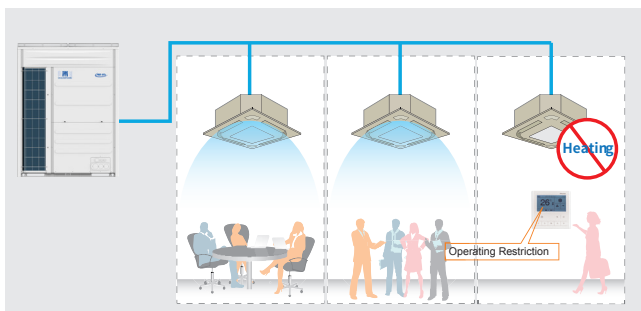
Operating Mode Control

The cooling and heating control mode of the controller can be preset to avoid user's complaints because the conditioner is set differently in various rooms during transitional seasons. Once set, the unit will operate only when the preset mode is selected.



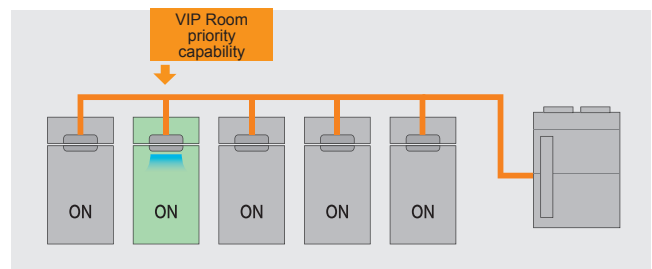
“Preconceived” Control

When the system is in operation, if mode conflict happens on one indoor unit, “Operation Restriction” will be displayed on that indoor unit to remind the user while the rest of the units will operate without stopping or alarm indication.



VIP setting mode

In the system, the “VIP priority mode” can be set for important air-conditioned rooms. When the system output is limited, the VIP rooms will take the priority to be served.





Automatic Addressing

The system automatically allocates the address to the indoor units, which is suitable for the large system with multiple indoor units, without manual dialing.

Hotel Room Access Control

The function setting of room card and access control can achieve the linked control for hotel room management or smart home system. When the key card inserted the air conditioner starts to work and executes the memorized mode which can avoid waste of operation.

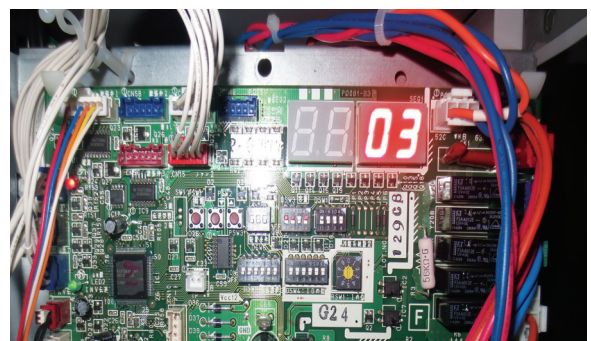


Fire Control Function

The Indoor unit function interface can be linked with the building's fire protection system. When a fire alarm beeps, the system will automatically shut down to ensure safety.

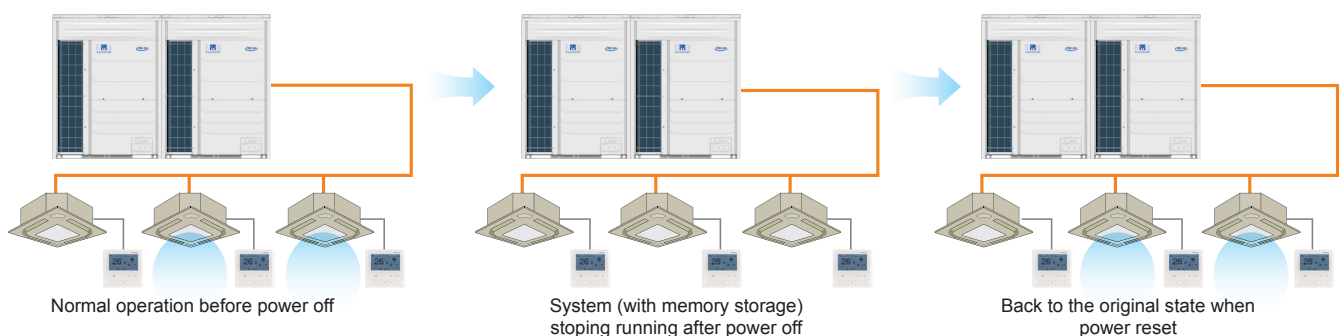
Error code Display

The system automatically stores and displays the parameters of different diagnostics. By adjusting the main control panel keys of the outdoor unit's, four 7-segment high-brightness digital display tubes can show the real-time fault parameters, which is convenient for after sales service troubleshooting and maintenance.



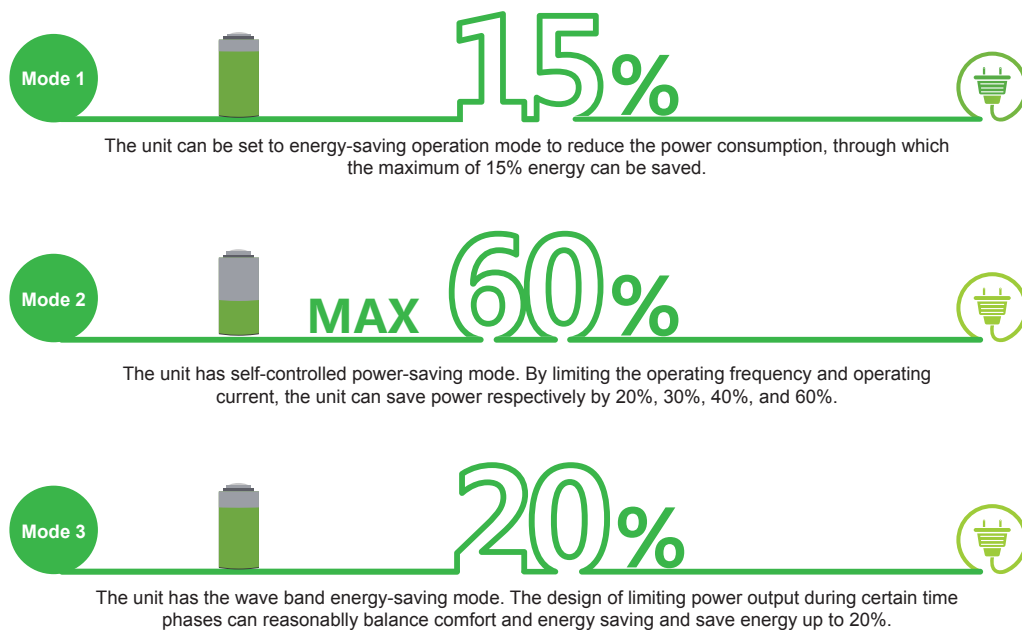
Automatic Restart After Power Failure

The system will automatically save the setting memory when the power off occurs for a long time. The system will restart automatically when the power is restored (or set to manual start). The set points before the power failure will not be erased but will be stored allowing the setting to take affect eliminating the need to re-set all the procedures which is more intelligent and cost effective.



New Energy-saving Operation Mode, Intelligent Power-saving Control

Due to the imbalanced demand for power supply, there will be power shortage in summer, and some cities will introduce the corresponding power rationing measures. SKM PRO-V6s high ambient series unit can automatically identify the running mode of the whole unit to provide three kinds of energy-saving modes in response to the electricity restriction because of the power shortage. Meanwhile, the new designed standby power-saving mode can cut off the power supply of the inverter board, entering the power-saving mode with zero power consumption when the inverter stands by, therefore, reduce unit power consumption effectively.

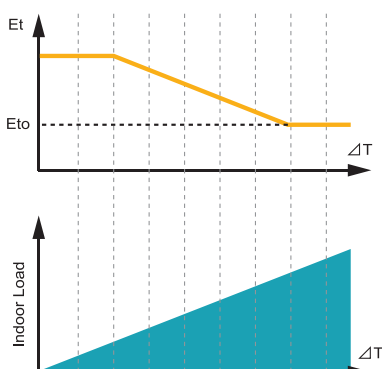


Precise Temperature Control

SKM's diversified controllers are smart and exquisite with convenient and flexible practices. It allows users to choose according to their needs and brings a new feeling of comfort and intelligence.

Refrigerant Temperature Control

SKM refrigerant temperature control can provide best comfort for users. The evaporating temperature value can be adjusted either automatically according to indoor load in a certain range or manually according to the outside ambient.



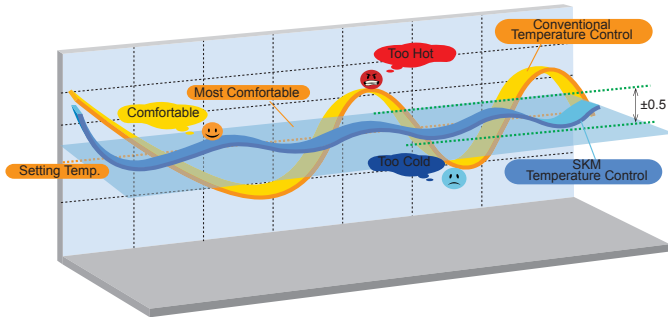
Features:

1. Evaporating temperature can be adjusted between 2°C to 16°C which is the widest on the market.
2. Rapidly cooling depends on the lower evaporating temperature.
3. Preventing cold draft bases on the higher evaporating temperatures.
4. Save energy by increasing seasonal efficiency.

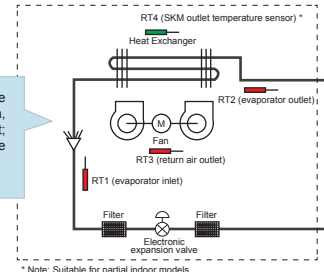


Supply Air Temp. Sensor, Three-dimensional Temp Sensing Design, Precise Temp Control

Traditional multi-split air-conditioners control the room temperature according to the indoor return air temperature sensor. PRO-V6s high ambient series adds a wired remote control temperature sensor and air temperature sensor *. The air temperature sensor, return air temperature sensor and room temperature sensor will successfully calculate the indoor temperature precisely adjusting the room supply air temperature.



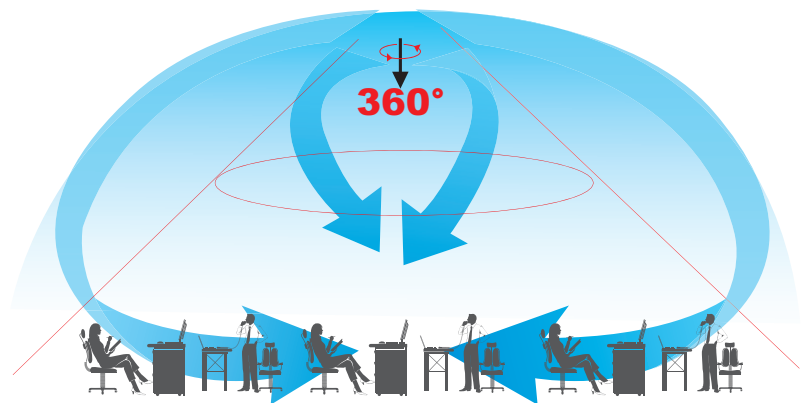
Four indoor temperature sensors on the indoor unit respectively at the trachea, liquid pipe, return air outlet and air outlet; only three temperature sensors on the multi-split air conditioner.



* Note: Suitable for partial indoor models

360° Air Supply

SKM offers 360 degree all directional air flow functionality controlling the vane positions at allow air supply to all corners of the air-conditioned space.



Environmental Protection Concerns, Creating A Low-carbon Living Space



Environment-friendly Refrigerant

PRO-V6s high ambient series products use the efficient and reliable R410A green refrigerant which is non-toxic to humans and will not damage the Earth's ozone layer to create a comfortable and clean living environment for you.

Actively Responding to The Rohs Directive

RoHS is short for Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment. The directive bans the use of the following six hazardous substances in electrical and electronic equipment including lead, mercury, cadmium, hexavalent chromium, polybrominated diphenyl ethers (PBDE), and PBB. Actively responding to the European RoHS Directive, SKM VRF has implemented a series of procedures and measures to control hazardous substances. The directive is intended to protect human health and ensure the recycling and the processing of waste electrical and electronic equipment to meet environmental requirements.



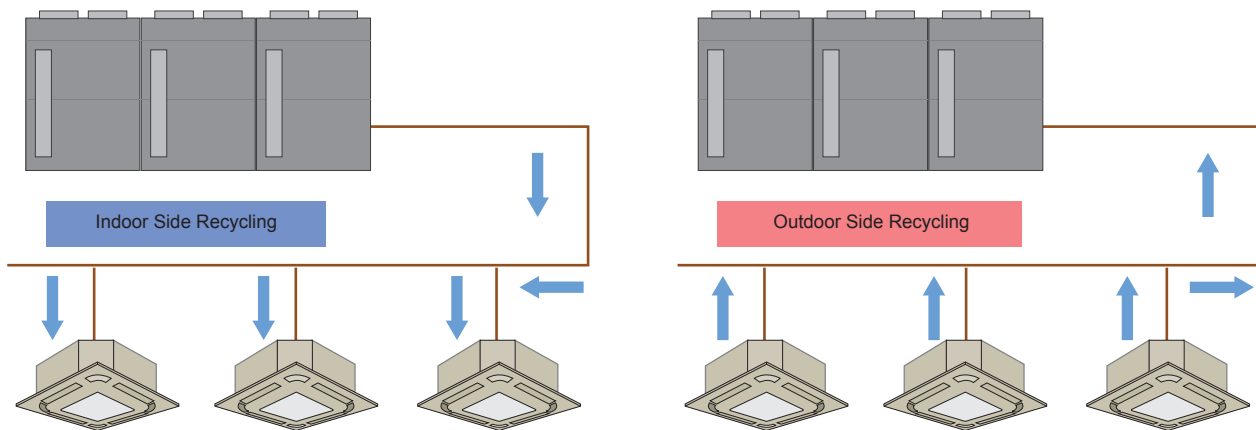
Substances	RoHS limits	Typical Testing Meethods
Lead	1000ppm	Wet chemical treatment or X-ray fluorescence
Cadmium	100ppm	Wet chemical treatment or X-ray fluorescence
hexavalent Chromium	1000ppm	Wet chemical treatment or X-ray fluorescence
Mercury	1000ppm	Wet chemical treatment or X-ray fluorescence
PBB/PBDE	1000ppm	GCMS, FTTR, or X-ray fluorescence

Product Design and Installation With High Flexibility

Fully considering the real environment in engineering applications, SKM are fully aware of the real environment in engineering applications and SKM PRO-V6s high ambient series focuses on every detail of this need. Through continuous innovation and technological upgrades the products installation flexibility has been greatly enhanced. The product is safe and convenient and meets users all-round needs with innovative flexibility.

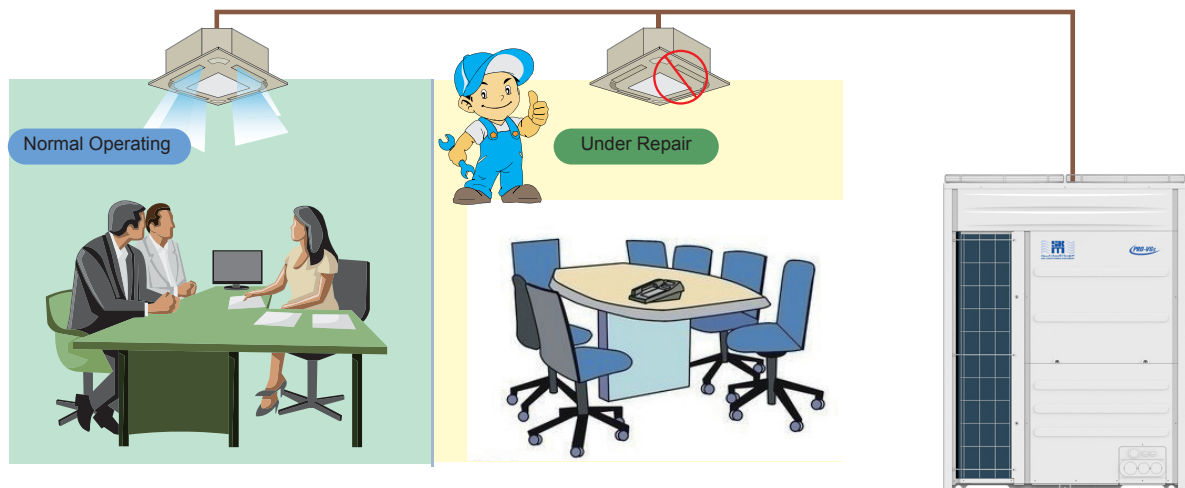
Refrigerant Automatic Recycling Technology

When the system needs maintenance, the refrigerant can be automatically recycled into the storage tank, outdoor unit heat exchanger, or the side of the indoor unit.



Indoor Unit Power-down Emergency Maintenance

When a faulty indoor unit needs repairing, it can be powered off alone without affecting the entire system.





Extra Long Pipe Enabling The Height Difference Between Indoor and Outdoor Units up to 90 Meters *

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 length of a single pipe: **190m**
Total length of pipes: **1000m**

Maximum height difference between indoor and outdoor units:
the upper face of the outdoor unit is **50m**
and the bottom of the outdoor unit is **40m**

By the note corresponding:
when the outdoor unit is above **90m***
when the outdoor unit is below **90m***

Maximum height difference of indoor units: **30m**

Largest pipe length of pipes between outdoor units: **10m**

Maximum length from the first branch pipe to the farthest indoor unit: **90m**

*NOTE: For detailed information, please consult the technical staff.

Light Weight Making Transportation and Installation Easier

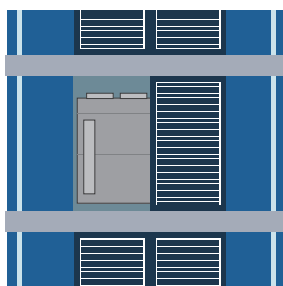
The largest size of module 24HP is only 1730mm × 1350mm × 750mm (height × width × depth), which can be delivered through freight elevator, making transportation and installation easier.

Volume suitable to be delivered by elevators

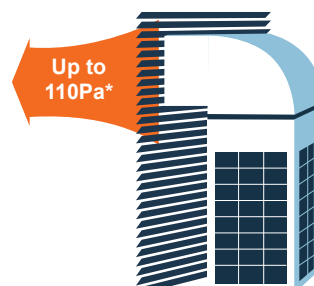


ODU Unit Fan Static Pressure Adjustment For Flexible Installation Space

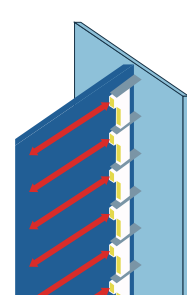
With static pressure adaptive technology, the fan of the outdoor unit can be adjusted in free static pressure based on system requirements to meet a variety of needs in different environments. The maximum external static pressure of the outdoor unit can be up to 110Pa *, which provides better conditions for the layered installation and centralized installation. Higher static pressure and further distance of air supply of the outdoor unit ensure the smooth flow of air and solve condensing problems of the outdoor unit effectively.



Layered installing outdoor units easily dealing with heat dissipation problem.



Easy to conceal outdoor unit, good looking of facades



Air flow diagram

*Note: By the note corresponding, external static pressure of the outdoor unit can be up to 110Pa. For detailed information, please contact SKM's technical staff.

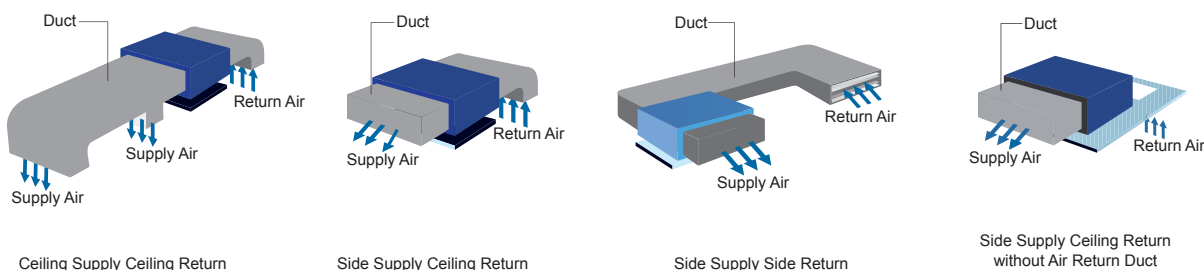
Wide range and capacity of indoor units

The outdoor unit is rich in capacity which can be chosen based on the actual situation of the building. The indoor unit currently has 12 models with more than 100 combinations to be chosen from and the largest capacity indoor unit is 28kw. On basis of the floor location of owners, interior decoration and use of the room, the outdoor unit can match with different type of indoor units. An outdoor unit From 48HP to 96HP can connect upto 64 indoor units.



Flexible duct installation

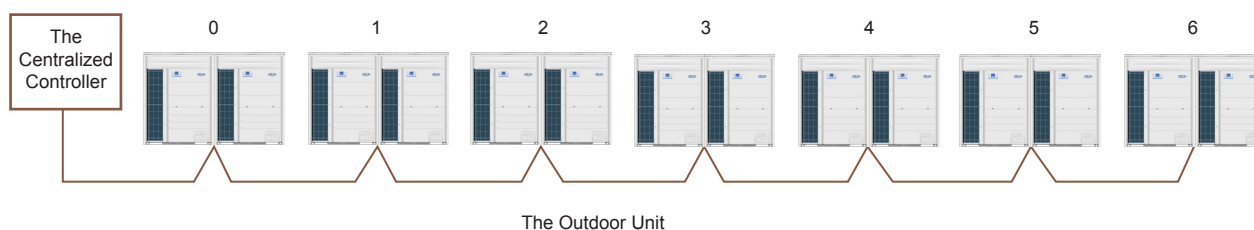
According to different construction structures and interior decoration of buildings, users can now select different duct layouts to suite recommended designer requests. The flexibility of return air applications allow SKM to fit most interior decoration demands and meet all layout requirements.



Note: Side Supply Bottom Return will increase the noise level by 5-10 dB. It is not recommend to use in the environment which has high level requirement of noise.

Simple and Convenient Communication Wiring System

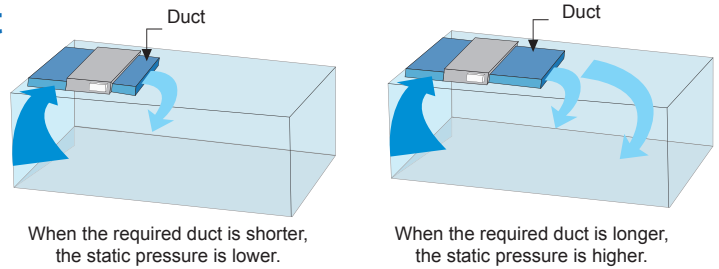
When using a variety of centralized controllers, only one communication line can connect all the air conditioners. This “one-line” connection is convenient for construction and material-saving. The non-polar twisted pair lines are used in non-polar twisted pair communication lines to avoid the wiring error of positive and negative.





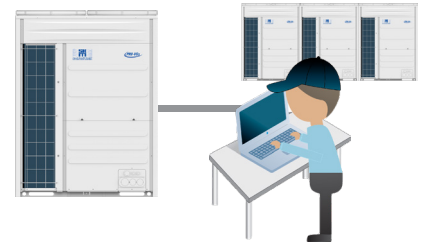
Indoor Unit Static Pressure Adjustment

The indoor unit can be automatically adjusted to suite the static pressure of the installed duct length at the site to ensure correct supply air required.



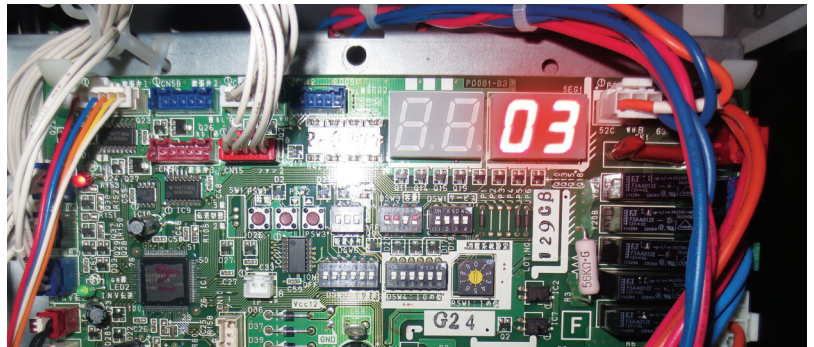
Automatic Judgement for Refrigerant Amount

The function of automatic judgement for refrigerant amount can ensure the refrigerant amount in the system is within an appropriate range, which guarantees the VRF system to operate efficiently.



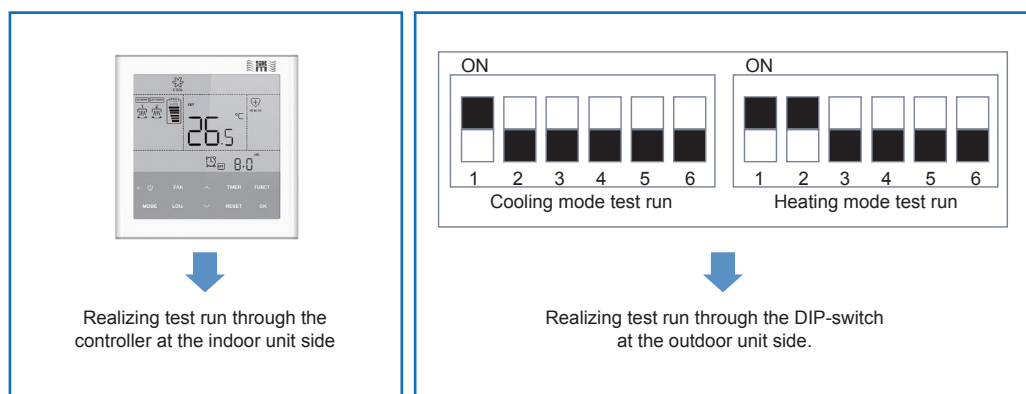
7-Segment LED Display on the Outdoor Unit

The 7-segment LED on the outdoor unit makes it easy to monitor and check the details about the operating status such as refrigerant temperature, pressure, compressor frequency, alarm code, etc., which makes both operation management and maintenance more convenient.



Advanced Commissioning Technology




































There is a one-key commissioning on either side of the outdoor unit or the indoor unit to facilitate on-site commissioning adjustment and enhance the installation quality of the project site.



- Automatically detect whether the main powers of the indoor and outdoor units in reverse phase or phase loss.
- Automatically detect the abnormal communication between the outdoor unit board and the inverter motherboard.
- Automatically detect and confirm the wrong wiring of the indoor and outdoor units.
- Automatically identify the length of pipes, correct and optimize the operation based on the length of pipes.
- Automatically detect and confirm the operation status of the parts inside the air conditioning units such as compressors, fan motors, electronic expansion valves, four-way valves, solenoid valves, etc. to ensure that they are all in normal operation.

Diverse Selection of Outdoor Units

PRO-V6s Series offers Nine single module outdoor units of 8HP, 10HP, 12HP, 14HP, 16HP, 18HP, 20HP, 22HP, 24HP. The capacity of combination module is up to 96HP, with small size, light weight and diverse combination. Users can choose different products and combinations to meet their own space requirements according to their actual needs.

Capacity	Model	Outdoor Unit Combination								
		8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP	24HP
8HP	SK-HPH076DXSYR									
10HP	SK-HPH096DXSYR									
12HP	SK-HPH114DXSYR									
14HP	SK-HPH136DXSYR									
16HP	SK-HPH154DXSYR									
18HP	SK-HPH170DXSYR									
20HP	SK-HPH190DXSYR									
22HP	SK-HPH212DXSYR									
24HP	SK-HPH232DXSYR									
16HP	SK-HPH152DXSYR									
18HP	SK-HPH172DXSYR									
20HP	SK-HPH192DXSYR									
22HP	SK-HPH210DXSYR									
24HP	SK-HPH228DXSYR									
26HP	SK-HPH250DXSYR									
28HP	SK-HPH272DXSYR									
30HP	SK-HPH290DXSYR									
32HP	SK-HPH308DXSYR									
34HP	SK-HPH324DXSYR									
36HP	SK-HPH344DXSYR									
38HP	SK-HPH360DXSYR									
40HP	SK-HPH380DXSYR									
42HP	SK-HPH402DXSYR									
44HP	SK-HPH422DXSYR									
46HP	SK-HPH444DXSYR									



Diverse Selection of Outdoor Units

Capacity	Model	Outdoor Unit Combination								
		8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP	24HP
48HP	SK-HPH464DXSYR									
50HP	SK-HPH482DXSYR									
52HP	SK-HPH504DXSYR									
54HP	SK-HPH522DXSYR									
56HP	SK-HPH544DXSYR									
58HP	SK-HPH552DXSYR									
60HP	SK-HPH570DXSYR									
62HP	SK-HPH592DXSYR									
64HP	SK-HPH612DXSYR									
66HP	SK-HPH634DXSYR									
68HP	SK-HPH654DXSYR									
70HP	SK-HPH676DXSYR									
72HP	SK-HPH696DXSYR									
74HP	SK-HPH714DXSYR									
76HP	SK-HPH732DXSYR									
78HP	SK-HPH754DXSYR									
80HP	SK-HPH776DXSYR									
82HP	SK-HPH794DXSYR									
84HP	SK-HPH816DXSYR									
86HP	SK-HPH824DXSYR									
88HP	SK-HPH844DXSYR									
90HP	SK-HPH866DXSYR									
92HP	SK-HPH886DXSYR									
94HP	SK-HPH908DXSYR									
96HP	SK-HPH928DXSYR									

Outdoor Unit Specifications



Capacity (HP)			8	10	12	14	
Model		Outdoor Model	SK-HPH076DXSYR	SK-HPH096DXSYR	SK-HPH114DXSYR	SK-HPH136DXSYR	
		Combination	SK-HPH076DXSYR	SK-HPH096DXSYR	SK-HPH114DXSYR	SK-HPH136DXSYR	
			/	/	/	/	
			/	/	/	/	
Power Supply		—	AC 3Φ 380V~415V/50Hz/60Hz				
Performance	Cooling Operating Range		℃	-5 ~ 55			
	Nominal Cooling Capacity T1 35℃		Ton	6.4	8.0	9.5	11.4
			kW	22.4	28.0	33.5	40.0
			Btu/h	76000	96000	114000	136000
	Nominal Cooling Capacity T3 46℃		Ton	5.5	6.8	8.0	9.6
			kW	19.5	24.0	28.1	33.6
			Btu/h	67000	82000	96000	115000
	Nominal Cooling Capacity T4 48℃		kW	18.9	23.3	27.6	32.6
			Btu/h	64500	79000	94000	111000
	Power Consumption T1 35℃		kW	5.21	7.00	8.65	10.53
	Power Consumption T3 46℃		kW	6.72	8.36	9.87	11.91
	Power Consumption T4 48℃		kW	6.37	7.68	9.36	10.92
	EER T1 35℃		—	4.30	4.00	3.85	3.80
	EER T3 46℃		—	2.90	2.85	2.85	2.80
	EER T4 48℃ (kw/ton)		—	1.18	1.16	1.19	1.18
	Heating Operating Range		℃	-25 ~ 16.5			
Heating Capacity		kW	25.0	31.5	37.5	45.0	
		Btu/h	85000	107000	128000	154000	
Power Consumption		kW	5.8	7.6	9.2	11.7	
COP		—	4.35	4.15	4.05	3.85	
Sound Pressure Level/Night-Shift *2		dB(A)	59/42	60/42	62/44	62/44	
Cabinet Color		—	White				
Outer Dimensions (H×W×D)		mm	1730×950×750	1730×950×750	1730×950×750	1730×1210×750	
Packing Dimensions (H×W×D)		mm	1930×1015×790	1930×1015×790	1930×1015×790	1930×1275×790	
Net Weight / Gross Weight		kg	224/243	244/263	245/265	297/321	
Refrigerating Piping	Gas Pipe	mm	Φ19.05	Φ22.20	Φ25.40	Φ25.40	
	Liquid Pipe	mm	Φ9.53	Φ9.53	Φ12.70	Φ12.70	
Pressure(High/Low Pressure)		MPa	4.15/2.21	4.15/2.21	4.15/2.21	4.15/2.21	
Fan	Condenser Fan Quantity	—	1	1	1	2	
	Air Flow Rate	m³/min	183	183	183	200	

Notes:

1. Rated cooling capacity and rated heating capacity are tested in the following conditions:

Cooling conditions: indoor air inlet temperature: 27° DB 19° WB, Outdoor air inlet temperature: 35° DB, pipe length: 7.5m, pipe height difference: 0m

Heating conditions: indoor air inlet temperature: 20° DB, Outdoor air inlet temperature: 7° DB 6° WB, pipe length: 7.5m, pipe height difference : 0m

Cooling Operation Conditions: Indoor Air Inlet Temperature 29.0° DB/ 19.0° WB, Outdoor Ambient Temperature 46° DB.

2.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.

3.For height difference between ODU&IDU more than 50(40)m, please contact our professional engineer.



Outdoor Unit Specifications



Capacity (HP)			16	18	20	22	24	
Model		Outdoor Model	SK-HPH154DXSYR	SK-HPH170DXSYR	SK-HPH190DXSYR	SK-HPH212DXSYR	SK-HPH232DXSYR	
		Combination	SK-HPH154DXSYR	SK-HPH170DXSYR	SK-HPH190DXSYR	SK-HPH212DXSYR	SK-HPH232DXSYR	
			/	/	/	/	/	
			/	/	/	/	/	
Power Supply		—	AC 3Φ 380V~415V/50Hz/60Hz					
Performance	Cooling Operating Range		C	-5 ~ 55				
	Nominal Cooling Capacity T1 35 C	Ton	12.8	14.2	15.9	17.5	19.3	
		kW	45.0	50.0	56.0	61.5	68.0	
		Btu/h	154000	170000	192000	210000	232000	
	Nominal Cooling Capacity T3 46 C	Ton	10.7	11.9	13.4	14.0	16.2	
		kW	37.8	42.0	47.0	49.2	57.1	
		Btu/h	129000	144000	160000	168000	194000	
	Nominal Cooling Capacity T4 48 C	kW	36.7	40.7	45.6	47.7	51.7	
		Btu/h	125000	140000	156000	162000	176000	
	Power Consumption T1 35 C	kW	12.50	14.02	16.02	17.58	20.61	
	Power Consumption T3 46 C	kW	13.50	14.38	16.62	17.70	21.00	
	Power Consumption T4 48 C	kW	12.44	13.7	15.47	16.04	17.52	
	EER T1 35 C	—	3.60	3.55	3.50	3.50	3.30	
	EER T3 46 C	—	2.80	2.90	2.85	2.80	2.70	
	EER T4 48 C (kw/ton)	—	1.19	1.18	1.19	1.18	1.19	
Heating Operating Range		C	-25 ~ 16.5					
Heating Capacity		kW	50.0	56.0	63.0	69.0	75.0	
		Btu/h	170000	192000	214000	236000	256000	
Power Consumption		kW	13.7	17.0	19.9	22.5	24.6	
COP		—	3.65	3.30	3.15	3.05	3.05	
Sound Pressure Level/Night-Shift *2		dB(A)	62/45	62/46	63/47	64/48	66/48	
Cabinet Color		—	White					
Outer Dimensions (H×W×D)		mm	1730×1210×750	1730×1210×750	1730×1350×750	1730×1350×750	1730×1350×750	
Packing Dimensions (H×W×D)		mm	1930×1275×790	1930×1275×790	1930×1420×790	1930×1420×790	1930×1420×790	
Net Weight / Gross Weight		kg	298/322	347/371	361/395	369/396	370/397	
Refrigerating Piping	Gas Pipe	mm	Φ28.60	Φ28.60	Φ28.60	Φ28.60	Φ28.60	
	Liquid Pipe	mm	Φ12.70	Φ15.88	Φ15.88	Φ15.88	Φ15.88	
Pressure(High/Low Pressure)		MPa	4.15/2.21	4.15/2.21	4.15/2.21	4.15/2.21	4.15/2.21	
Fan	Condenser Fan Quantity	—	2	2	2	2	2	
	Air Flow Rate	m³/min	200	200	267	296	296	

Notes:

1. Rated cooling capacity and rated heating capacity are tested in the following conditions:

Cooling conditions: indoor air inlet temperature: 27° DB 19° WB, Outdoor air inlet temperature: 35° DB, pipe length: 7.5m, pipe height difference: 0m

Heating conditions: indoor air inlet temperature: 20° DB, Outdoor air inlet temperature: 7° DB 6° WB, pipe length: 7.5m, pipe height difference : 0m

Cooling Operation Conditions: Indoor Air Inlet Temperature 29.0° DB/ 19.0° WB, Outdoor Ambient Temperature 46° DB.

2.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.

3.For height difference between ODU&IDU more than 50(40)m, please contact our professional engineer.

Outdoor Unit Specifications



Capacity (HP)			16	18	20	22	
Model		Outdoor Model	SK-HPH152DXSYR	SK-HPH172DXSYR	SK-HPH192DXSYR	SK-HPH210DXSYR	
		Combination	SK-HPH076DXSYR	SK-HPH076DXSYR	SK-HPH096DXSYR	SK-HPH096DXSYR	
			SK-HPH076DXSYR	SK-HPH096DXSYR	SK-HPH096DXSYR	SK-HPH114DXSYR	
			/	/	/	/	
Power Supply			—	AC 3Φ 380V~415V/50Hz/60Hz			
Performance	Cooling Operating Range		℃	-5 ~ 55			
	Nominal Cooling Capacity T1 35℃		Ton	12.7	14.3	15.9	17.5
			kW	44.8	50.4	56.0	61.5
			Btu/h	152000	172000	192000	210000
	Nominal Cooling Capacity T3 46℃		Ton	11.1	12.4	13.6	14.8
			kW	39.0	43.5	48.0	52.1
			Btu/h	133000	148000	164000	178000
	Nominal Cooling Capacity T4 48℃		kW	37.8	42.2	46.6	50.9
			Btu/h	129000	144000	158000	174000
	Power Consumption T1 35℃		kW	10.42	12.21	14.00	15.65
	Power Consumption T3 46℃		kW	13.44	15.08	16.72	18.23
	Power Consumption T4 48℃		kW	12.74	14.05	15.36	17.04
	EER T1 35℃		—	4.30	4.15	4.00	3.95
	EER T3 46℃		—	2.90	2.90	2.85	2.85
	EER T4 48℃ (kw/ton)		—	1.18	1.17	1.16	1.18
	Heating Operating Range		℃	-25 ~ 16.5			
	Heating Capacity		kW	50.0	56.5	63.0	69.0
Btu/h			170000	192000	214000	236000	
Power Consumption		kW	11.5	13.4	15.2	16.8	
COP		—	4.35	4.25	4.15	4.10	
Sound Pressure Level/Night-Shift *2			dB(A)	62/45	63/45	63/45	64/46
Cabinet Color			—	White			
Outer Dimensions (H×W×D)			mm	1730×1900×750	1730×1900×750	1730×1900×750	1730×1900×750
Packing Dimensions (H×W×D)			mm	1930×2030×790	1930×2030×790	1930×2030×790	1930×2030×790
Net Weight / Gross Weight			kg	448/486	468/506	488/526	489/528
Refrigerating Piping	Gas Pipe		mm	Φ28.60	Φ28.60	Φ28.60	Φ28.60
	Liquid Pipe		mm	Φ12.70	Φ15.88	Φ15.88	Φ15.88
Pressure(High/Low Pressure)			MPa	4.15/2.21	4.15/2.21	4.15/2.21	4.15/2.21
Fan	Condenser Fan Quantity		—	2	2	2	2
	Air Flow Rate		m³/min	366	366	366	366

Notes:

1. Rated cooling capacity and rated heating capacity are tested in the following conditions:

Cooling conditions: indoor air inlet temperature: 27° DB 19° WB, Outdoor air inlet temperature: 35° DB, pipe length: 7.5m, pipe height difference: 0m

Heating conditions: indoor air inlet temperature: 20° DB, Outdoor air inlet temperature: 7° DB 6° WB, pipe length: 7.5m, pipe height difference : 0m

Cooling Operation Conditions: Indoor Air Inlet Temperature 29.0° DB/ 19.0° WB, Outdoor Ambient Temperature 46° DB.

2.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.

3.For height difference between ODU&IDU more than 50(40)m, please contact our professional engineer.



Outdoor Unit Specifications



Capacity (HP)			24	26	28	30	
Model		Outdoor Model	SK-HPH228DXSYR	SK-HPH250DXSYR	SK-HPH272DXSYR	SK-HPH290DXSYR	
		Combination	SK-HPH114DXSYR	SK-HPH114DXSYR	SK-HPH136DXSYR	SK-HPH136DXSYR	
			SK-HPH114DXSYR	SK-HPH136DXSYR	SK-HPH136DXSYR	SK-HPH154DXSYR	
			/	/	/	/	
Power Supply			—	AC 3Φ 380V~415V/50Hz/60Hz			
Performance	Cooling Operating Range		℃	-5 ~ 55			
	Nominal Cooling Capacity T1 35℃		Ton	19.1	20.9	22.7	24.2
			kW	67.0	73.5	80.0	85.0
			Btu/h	228000	250000	272000	290000
	Nominal Cooling Capacity T3 46℃		Ton	16.0	17.6	19.1	20.3
			kW	56.3	61.7	67.2	71.4
			Btu/h	192000	210000	230000	244000
	Nominal Cooling Capacity T4 48℃		kW	55.2	60.2	65.2	69.3
			Btu/h	188000	206000	222000	236000
	Power Consumption T1 35℃		kW	17.30	19.18	21.06	23.03
	Power Consumption T3 46℃		kW	19.74	21.78	23.82	25.41
	Power Consumption T4 48℃		kW	18.72	20.28	21.84	23.36
	EER T1 35℃		—	3.85	3.85	3.80	3.70
	EER T3 46℃		—	2.85	2.85	2.80	2.80
	EER T4 48℃ (kw/ton)		—	1.19	1.18	1.18	1.19
	Heating Operating Range		℃	-25 ~ 16.5			
	Heating Capacity		kW	75.0	82.5	90.0	95.0
			Btu/h	256000	282000	308000	324000
	Power Consumption		kW	18.4	20.9	23.4	25.4
	COP		—	4.05	3.95	3.85	3.75
Sound Pressure Level/Night-Shift *2			dB(A)	65/47	65/47	65/47	65/48
Cabinet Color			—	White			
Outer Dimensions (H×W×D)			mm	1730×1900×750	1730×2160×750	1730×2420×750	1730×2420×750
Packing Dimensions (H×W×D)			mm	1930×2030×790	1930×2290×790	1930×2550×790	1930×2550×790
Net Weight / Gross Weight			kg	490/530	542/586	594/642	595/643
Refrigerating Piping	Gas Pipe		mm	Φ28.60	Φ31.75	Φ31.75	Φ31.75
	Liquid Pipe		mm	Φ15.88	Φ19.05	Φ19.05	Φ19.05
Pressure(High/Low Pressure)			MPa	4.15/2.21	4.15/2.21	4.15/2.21	4.15/2.21
Fan	Condenser Fan Quantity		—	2	3	4	4
	Air Flow Rate		m³/min	366	383	400	400

Notes:

1. Rated cooling capacity and rated heating capacity are tested in the following conditions:

Cooling conditions: indoor air inlet temperature: 27° DB 19° WB, Outdoor air inlet temperature: 35° DB, pipe length: 7.5m, pipe height difference: 0m

Heating conditions: indoor air inlet temperature: 20° DB, Outdoor air inlet temperature: 7° DB 6° WB, pipe length: 7.5m, pipe height difference : 0m

Cooling Operation Conditions: Indoor Air Inlet Temperature 29.0° DB/ 19.0° WB, Outdoor Ambient Temperature 46° DB.

2.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.

3.For height difference between ODU&IDU more than 50(40)m, please contact our professional engineer.

Outdoor Unit Specifications



Capacity (HP)			32	34	36	38
Model		Outdoor Model	SK-HPH308DXSYR	SK-HPH324DXSYR	SK-HPH344DXSYR	SK-HPH360DXSYR
		Combination	SK-HPH154DXSYR	SK-HPH154DXSYR	SK-HPH154DXSYR	SK-HPH170DXSYR
			SK-HPH154DXSYR	SK-HPH170DXSYR	SK-HPH190DXSYR	SK-HPH190DXSYR
			/	/	/	/
Power Supply			—	AC 3Φ 380V~415V/50Hz/60Hz		
Performance	Cooling Operating Range		℃	-5 ~ 55		
	Nominal Cooling Capacity T1 35℃	Ton	25.6	27.0	28.7	30.1
		kW	90.0	95.0	101.0	106.0
		Btu/h	308000	324000	344000	362000
	Nominal Cooling Capacity T3 46℃	Ton	21.5	22.7	24.1	25.3
		kW	75.6	79.8	84.8	89.0
		Btu/h	258000	272000	290000	304000
	Nominal Cooling Capacity T4 48℃	kW	73.3	77.4	82.3	86.4
		Btu/h	250000	264000	280000	294000
	Power Consumption T1 35℃	kW	25.00	26.52	28.52	30.04
	Power Consumption T3 46℃	kW	27.00	27.88	30.12	31.00
	Power Consumption T4 48℃	kW	24.88	24.14	27.91	29.17
	EER T1 35℃	—	3.60	3.60	3.55	3.55
	EER T3 46℃	—	2.80	2.85	2.80	2.85
	EER T4 48℃ (kw/ton)	—	1.19	1.19	1.19	1.19
	Heating Operating Range		℃	-25 ~ 16.5		
Heating Capacity	kW	100.0	106.0	113.0	119.0	
	Btu/h	342000	362000	386000	406000	
Power Consumption	kW	27.4	30.7	33.6	36.8	
COP	—	3.65	3.45	3.35	3.25	
Sound Pressure Level/Night-Shift *2		dB(A)	65/48	65/49	66/49	66/50
Cabinet Color		—	White			
Outer Dimensions (H×W×D)		mm	1730×2420×750	1730×2420×750	1730×2560×750	1730×2560×750
Packing Dimensions (H×W×D)		mm	1930×2550×790	1930×2550×790	1930×2695×790	1930×2695×790
Net Weight / Gross Weight		kg	596/644	645/693	659/717	708/766
Refrigerating Piping	Gas Pipe	mm	Φ31.75	Φ38.1	Φ38.1	Φ38.1
	Liquid Pipe	mm	Φ19.05	Φ19.05	Φ19.05	Φ19.05
Pressure(High/Low Pressure)		MPa	4.15/2.21	4.15/2.21	4.15/2.21	4.15/2.21
Fan	Condenser Fan Quantity	—	4	4	4	4
	Air Flow Rate	m³/min	400	400	467	467

Notes:

1. Rated cooling capacity and rated heating capacity are tested in the following conditions:

Cooling conditions: indoor air inlet temperature: 27° DB 19° WB, Outdoor air inlet temperature: 35° DB, pipe length: 7.5m, pipe height difference: 0m

Heating conditions: indoor air inlet temperature: 20° DB, Outdoor air inlet temperature: 7° DB 6° WB, pipe length: 7.5m, pipe height difference : 0m

Cooling Operation Conditions: Indoor Air Inlet Temperature 29.0° DB/ 19.0° WB, Outdoor Ambient Temperature 46° DB.

2.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.

3.For height difference between ODU&IDU more than 50(40)m, please contact our professional engineer.



Outdoor Unit Specifications



Capacity (HP)			40	42	44	46	48	
Model		Outdoor Model	SK-HPH380DXSYR	SK-HPH402DXSYR	SK-HPH422DXSYR	SK-HPH444DXSYR	SK-HPH464DXSYR	
		Combination	SK-HPH190DXSYR	SK-HPH170DXSYR	SK-HPH190DXSYR	SK-HPH212DXSYR	SK-HPH232DXSYR	
			SK-HPH190DXSYR	SK-HPH232DXSYR	SK-HPH232DXSYR	SK-HPH232DXSYR	SK-HPH232DXSYR	
			/	/	/	/	/	
Power Supply			AC 3Φ 380V~415V/50Hz/60Hz					
Cooling Operating Range		℃	-5 ~ 55					
Performance	Nominal Cooling Capacity T1 35℃		Ton	31.8	33.6	35.3	36.8	38.7
			kW	112.0	118.0	124.0	129.5	136.0
			Btu/h	382000	402000	424000	442000	464000
	Nominal Cooling Capacity T3 46℃		Ton	26.8	28.2	29.6	30.2	32.5
			kW	94.1	99.1	104.2	106.3	114.2
			Btu/h	322000	338000	356000	362000	390000
	Nominal Cooling Capacity T4 48℃		kW	91.3	92.4	97.3	99.4	103.4
			Btu/h	312000	316000	332000	340000	352000
	Power Consumption T1 35℃		kW	32.04	34.63	36.63	38.19	41.22
	Power Consumption T3 46℃		kW	33.24	35.38	37.62	38.70	42.00
	Power Consumption T4 48℃		kW	30.94	31.22	32.99	33.56	35.04
	EER T1 35℃		—	3.50	3.40	3.40	3.40	3.30
	EER T3 46℃		—	2.85	2.80	2.75	2.75	2.70
	EER T4 48℃ (kw/ton)		—	1.19	1.19	1.19	1.19	1.19
	Heating Operating Range		℃	-25 ~ 16.5				
Heating Capacity		kW	126.0	131.0	138.0	144.0	150.0	
		Btu/h	430000	446000	470000	492000	512000	
Power Consumption		kW	39.7	41.6	44.5	47.1	49.2	
COP		—	3.15	3.15	3.10	3.05	3.05	
Sound Pressure Level/Night-Shift *2		dB(A)	66/50	67/50	68/51	68/51	69/51	
Cabinet Color		—	White					
Outer Dimensions (H×W×D)		mm	1730×2700×750	1730×2560×750	1730×2700×750	1730×2700×750	1730×2700×750	
Packing Dimensions (H×W×D)		mm	1930×2840×790	1930×2695×790	1930×2840×790	1930×2840×790	1930×2840×790	
Net Weight / Gross Weight		kg	722/790	717/768	731/792	739/793	740/794	
Refrigerating Piping	Gas Pipe	mm	Φ38.1	Φ38.1	Φ38.1	Φ41.3	Φ41.3	
	Liquid Pipe	mm	Φ19.05	Φ19.05	Φ19.05	Φ22.2	Φ22.2	
Pressure(High/Low Pressure)		MPa	4.15/2.21	4.15/2.21	4.15/2.21	4.15/2.21	4.15/2.21	
Fan	Condenser Fan Quantity	—	4	4	4	4	4	
	Air Flow Rate	m³/min	534	496	563	592	592	

Notes:

1. Rated cooling capacity and rated heating capacity are tested in the following conditions:

Cooling conditions: indoor air inlet temperature: 27° DB 19° WB, Outdoor air inlet temperature: 35° DB, pipe length: 7.5m, pipe height difference: 0m

Heating conditions: indoor air inlet temperature: 20° DB, Outdoor air inlet temperature: 7° DB 6° WB, pipe length: 7.5m, pipe height difference : 0m

Cooling Operation Conditions: Indoor Air Inlet Temperature 29.0° DB/ 19.0° WB, Outdoor Ambient Temperature 46° DB.

2.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.

3.For height difference between ODU&IDU more than 50(40)m, please contact our professional engineer.

Outdoor Unit Specifications



Capacity (HP)			50	52	54	56	
Model		Outdoor Model	SK-HPH482DXSYR	SK-HPH504DXSYR	SK-HPH522DXSYR	SK-HPH544DXSYR	
		Combination	SK-HPH154DXSYR	SK-HPH154DXSYR	SK-HPH170DXSYR	SK-HPH170DXSYR	
			SK-HPH154DXSYR	SK-HPH170DXSYR	SK-HPH170DXSYR	SK-HPH170DXSYR	
			SK-HPH170DXSYR	SK-HPH170DXSYR	SK-HPH170DXSYR	SK-HPH190DXSYR	
			/	/	/	/	
Power Supply		—	AC 3Φ 380V~415V/50Hz/60Hz				
Performance	Cooling Operating Range		℃	-5 ~ 55			
	Nominal Cooling Capacity T1 35℃		Ton	39.8	41.2	42.6	44.4
			kW	140.0	145.0	150.0	156.0
			Btu/h	478000	494000	512000	532000
	Nominal Cooling Capacity T3 46℃		Ton	33.4	34.6	35.8	37.3
			kW	117.6	121.8	126.0	131.0
			Btu/h	402000	416000	430000	448000
	Nominal Cooling Capacity T4 48℃		kW	114.1	118.1	122.2	127.1
			Btu/h	390000	404000	418000	434000
			Power Consumption T1 35℃	kW	39.02	40.54	42.06
	Power Consumption T3 46℃	kW	41.38	42.26	43.14	45.38	
	Power Consumption T4 48℃	kW	38.58	39.84	41.1	42.87	
	EER T1 35℃	—	3.60	3.60	3.55	3.55	
	EER T3 46℃	—	2.85	2.90	2.90	2.90	
	EER T4 48℃ (kw/ton)	—	1.19	1.19	1.18	1.19	
	Heating Operating Range		℃	-25 ~ 16.5			
	Heating Capacity		kW	156.0	162.0	168.0	175.0
Btu/h			532000	552000	574000	598000	
Power Consumption		kW	44.4	47.6	50.9	53.8	
COP		—	3.50	3.40	3.30	3.25	
Sound Pressure Level/Night-Shift *2		dB(A)	67/50	67/50	67/51	67/51	
Cabinet Color		—	White				
Outer Dimensions (H×W×D)		mm	1730×3630×750	1730×3630×750	1730×3630×750	1730×3770×750	
Packing Dimensions (H×W×D)		mm	1930×3825×790	1930×3825×790	1930×3825×790	1930×3970×790	
Net Weight / Gross Weight		kg	943/1015	992/1064	1041/1113	1055/1137	
Refrigerating Piping	Gas Pipe	mm	Φ41.3	Φ41.3	Φ41.3	Φ41.3	
	Liquid Pipe	mm	Φ22.2	Φ22.2	Φ22.2	Φ22.2	
Pressure(High/Low Pressure)		MPa	4.15/2.21	4.15/2.21	4.15/2.21	4.15/2.21	
Fan	Condenser Fan Quantity	—	6	6	6	6	
	Air Flow Rate	m³/min	600	600	600	667	

Notes:

1. Rated cooling capacity and rated heating capacity are tested in the following conditions:

Cooling conditions: indoor air inlet temperature: 27° DB 19° WB, Outdoor air inlet temperature: 35° DB, pipe length: 7.5m, pipe height difference: 0m

Heating conditions: indoor air inlet temperature: 20° DB, Outdoor air inlet temperature: 7° DB 6° WB, pipe length: 7.5m, pipe height difference : 0m

Cooling Operation Conditions: Indoor Air Inlet Temperature 29.0° DB/ 19.0° WB, Outdoor Ambient Temperature 46° DB.

2.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.

3.For height difference between ODU&IDU more than 50(40)m, please contact our professional engineer.



Outdoor Unit Specifications



Capacity (HP)			58	60	62	64	
Model		Outdoor Model	SK-HPH552DXSYR	SK-HPH570DXSYR	SK-HPH592DXSYR	SK-HPH612DXSYR	
		Combination	SK-HPH170DXSYR	SK-HPH190DXSYR	SK-HPH170DXSYR	SK-HPH190DXSYR	
			SK-HPH170DXSYR	SK-HPH190DXSYR	SK-HPH190DXSYR	SK-HPH190DXSYR	
			SK-HPH212DXSYR	SK-HPH190DXSYR	SK-HPH232DXSYR	SK-HPH232DXSYR	
Power Supply		—	AC 3Φ 380V~415V/50Hz/60Hz				
Performance	Cooling Operating Range		℃	-5 ~ 55			
	Nominal Cooling Capacity T1 35℃		Ton	45.9	47.8	49.5	51.2
			kW	161.5	168.0	174.0	180.0
			Btu/h	552000	574000	594000	614000
	Nominal Cooling Capacity T3 46℃		Ton	37.9	40.1	41.6	43.0
			kW	133.2	141.1	146.2	151.2
			Btu/h	454000	482000	498000	516000
	Nominal Cooling Capacity T4 48℃		kW	129.2	136.9	138.0	142.9
			Btu/h	440000	468000	472000	488000
	Power Consumption T1 35℃		kW	45.62	48.06	50.65	52.65
	Power Consumption T3 46℃		kW	46.46	49.86	52.00	54.24
	Power Consumption T4 48℃		kW	43.44	46.41	46.69	48.46
	EER T1 35℃		—	3.55	3.50	3.45	3.40
	EER T3 46℃		—	2.85	2.85	2.80	2.80
	EER T4 48℃ (kw/ton)		—	1.18	1.19	1.19	1.19
	Heating Operating Range		℃	-25 ~ 16.5			
	Heating Capacity		kW	181.0	189.0	194.0	201.0
Btu/h			618000	644000	662000	686000	
Power Consumption		kW	56.4	59.6	61.4	64.3	
COP		—	3.20	3.15	3.15	3.10	
Sound Pressure Level/Night-Shift *2			dB(A)	68/52	68/52	69/52	69/52
Cabinet Color			—	White			
Outer Dimensions (H×W×D)			mm	1730×3770×750	1730×4050×750	1730×3910×750	1730×4050×750
Packing Dimensions (H×W×D)			mm	1930×3970×790	1930×4260×790	1930×4115×790	1930×4260×790
Net Weight / Gross Weight			kg	1063/1138	1083/1185	1078/1163	1092/1187
Refrigerating Piping	Gas Pipe		mm	Φ44.5	Φ44.5	Φ44.5	Φ44.5
	Liquid Pipe		mm	Φ22.2	Φ22.2	Φ22.2	Φ22.2
Pressure(High/Low Pressure)			MPa	4.15/2.21	4.15/2.21	4.15/2.21	4.15/2.21
Fan	Condenser Fan Quantity		—	6	6	6	6
	Air Flow Rate		m³/min	696	801	763	830

Notes:

1. Rated cooling capacity and rated heating capacity are tested in the following conditions:

Cooling conditions: indoor air inlet temperature: 27° DB 19° WB, Outdoor air inlet temperature: 35° DB, pipe length: 7.5m, pipe height difference: 0m

Heating conditions: indoor air inlet temperature: 20° DB, Outdoor air inlet temperature: 7° DB 6° WB, pipe length: 7.5m, pipe height difference : 0m

Cooling Operation Conditions: Indoor Air Inlet Temperature 29.0° DB/ 19.0° WB, Outdoor Ambient Temperature 46° DB.

2.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.

3.For height difference between ODU&IDU more than 50(40)m, please contact our professional engineer.

Outdoor Unit Specifications



Capacity (HP)			66	68	70	72	
Model		Outdoor Model	SK-HPH634DXSYR	SK-HPH654DXSYR	SK-HPH676DXSYR	SK-HPH696DXSYR	
		Combination	SK-HPH190DXSYR	SK-HPH190DXSYR	SK-HPH212DXSYR	SK-HPH232DXSYR	
			SK-HPH212DXSYR	SK-HPH232DXSYR	SK-HPH232DXSYR	SK-HPH232DXSYR	
			SK-HPH232DXSYR	SK-HPH232DXSYR	SK-HPH232DXSYR	SK-HPH232DXSYR	
			/	/	/	/	
Power Supply		—	AC 3Φ 380V~415V/50Hz/60Hz				
Performance	Cooling Operating Range		℃	-5 ~ 55			
	Nominal Cooling Capacity T1 35℃		Ton	52.7	54.6	56.2	58.0
			kW	185.5	192.0	197.5	204.0
			Btu/h	632000	656000	674000	696000
	Nominal Cooling Capacity T3 46℃		Ton	43.6	45.9	46.5	48.7
			kW	153.4	161.3	163.4	171.4
			Btu/h	524000	550000	558000	584000
	Nominal Cooling Capacity T4 48℃		kW	145	149	151.1	155
			Btu/h	494000	508000	516000	528000
			Power Consumption T1 35℃	kW	54.21	57.24	58.80
	Power Consumption T3 46℃	kW	55.32	58.62	59.70	63.00	
	Power Consumption T4 48℃	kW	49.03	50.51	51.08	52.56	
	EER T1 35℃	—	3.40	3.35	3.35	3.30	
	EER T3 46℃	—	2.75	2.75	2.75	2.70	
	EER T4 48℃ (kw/ton)	—	1.19	1.19	1.19	1.19	
	Heating Operating Range		℃	-25 ~ 16.5			
	Heating Capacity		kW	207.0	213.0	219.0	225.0
			Btu/h	706000	726000	748000	768000
	Power Consumption		kW	66.9	69.1	71.7	73.8
	COP		—	3.10	3.10	3.05	3.05
Sound Pressure Level/Night-Shift *2		dB(A)	69/52	70/52	70/53	71/53	
Cabinet Color		—	White				
Outer Dimensions (H×W×D)		mm	1730×4050×750	1730×4050×750	1730×4050×750	1730×4050×750	
Packing Dimensions (H×W×D)		mm	1930×4260×790	1930×4260×790	1930×4260×790	1930×4260×790	
Net Weight / Gross Weight		kg	1100/1188	1101/1189	1109/1190	1110/1191	
Refrigerating Piping	Gas Pipe	mm	Φ44.5	Φ50.8	Φ50.8	Φ50.8	
	Liquid Pipe	mm	Φ22.2	Φ25.4	Φ25.4	Φ25.4	
Pressure(High/Low Pressure)		MPa	4.15/2.21	4.15/2.21	4.15/2.21	4.15/2.21	
Fan	Condenser Fan Quantity	—	6	6	6	6	
	Air Flow Rate	m³/min	859	859	888	888	

Notes:

1. Rated cooling capacity and rated heating capacity are tested in the following conditions:

Cooling conditions: indoor air inlet temperature: 27° DB 19° WB, Outdoor air inlet temperature: 35° DB, pipe length: 7.5m, pipe height difference: 0m

Heating conditions: indoor air inlet temperature: 20° DB, Outdoor air inlet temperature: 7° DB 6° WB, pipe length: 7.5m, pipe height difference : 0m

Cooling Operation Conditions: Indoor Air Inlet Temperature 29.0° DB/ 19.0° WB, Outdoor Ambient Temperature 46° DB.

2.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.

3.For height difference between ODU&IDU more than 50(40)m, please contact our professional engineer.



Outdoor Unit Specifications



Capacity (HP)			74	76	78	80	
Model		Outdoor Model	SK-HPH714DXSYR	SK-HPH732DXSYR	SK-HPH754DXSYR	SK-HPH776DXSYR	
		Combination	SK-HPH170DXSYR	SK-HPH170DXSYR	SK-HPH170DXSYR	SK-HPH190DXSYR	
			SK-HPH170DXSYR	SK-HPH170DXSYR	SK-HPH190DXSYR	SK-HPH190DXSYR	
			SK-HPH170DXSYR	SK-HPH190DXSYR	SK-HPH190DXSYR	SK-HPH190DXSYR	
Power Supply		—	AC 3Φ 380V~415V/50Hz/60Hz				
Performance	Cooling Operating Range		℃	-5 ~ 55			
	Nominal Cooling Capacity T1 35℃		Ton	58.6	60.3	62.0	63.7
			kW	206.0	212.0	218.0	224.0
			Btu/h	702000	724000	744000	764000
	Nominal Cooling Capacity T3 46℃		Ton	49.2	50.6	52.1	53.5
			kW	173.0	178.1	183.1	188.2
			Btu/h	590000	608000	624000	642000
	Nominal Cooling Capacity T4 48℃		kW	167.8	172.7	177.6	182.5
			Btu/h	572000	590000	606000	622000
			Power Consumption T1 35℃	kW	58.08	60.08	62.08
	Power Consumption T3 46℃	kW	59.76	62.00	64.24	66.48	
	Power Consumption T4 48℃	kW	56.57	58.34	60.11	61.88	
	EER T1 35℃	—	3.55	3.55	3.50	3.50	
	EER T3 46℃	—	2.90	2.85	2.85	2.85	
	EER T4 48℃ (kw/ton)	—	1.19	1.19	1.19	1.19	
	Heating Operating Range		℃	-25 ~ 16.5			
	Heating Capacity		kW	231.0	238.0	245.0	252.0
Btu/h			788000	812000	836000	860000	
Power Consumption		kW	70.8	73.7	76.6	79.5	
COP		—	3.25	3.25	3.20	3.15	
Sound Pressure Level/Night-Shift *2			dB(A)	68/52	69/53	69/53	69/53
Cabinet Color			—	White			
Outer Dimensions (H×W×D)			mm	1730×4980×750	1730×5120×750	1730×5260×750	1730×5400×750
Packing Dimensions (H×W×D)			mm	1930×5245×790	1930×5390×790	1930×5535×790	1930×5680×790
Net Weight / Gross Weight			kg	1402/1508	1416/1532	1430/1556	1444/1580
Refrigerating Piping	Gas Pipe		mm	Φ50.8	Φ50.8	Φ50.8	Φ50.8
	Liquid Pipe		mm	Φ25.4	Φ25.4	Φ25.4	Φ25.4
Pressure(High/Low Pressure)			MPa	4.15/2.21	4.15/2.21	4.15/2.21	4.15/2.21
Fan	Condenser Fan Quantity		—	8	8	8	8
	Air Flow Rate		m³/min	867	934	1001	1068

Notes:

1. Rated cooling capacity and rated heating capacity are tested in the following conditions:

Cooling conditions: indoor air inlet temperature: 27° DB 19° WB, Outdoor air inlet temperature: 35° DB, pipe length: 7.5m, pipe height difference: 0m

Heating conditions: indoor air inlet temperature: 20° DB, Outdoor air inlet temperature: 7° DB 6° WB, pipe length: 7.5m, pipe height difference : 0m

Cooling Operation Conditions: Indoor Air Inlet Temperature 29.0° DB/ 19.0° WB, Outdoor Ambient Temperature 46° DB.

2.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.

3.For height difference between ODU&IDU more than 50(40)m, please contact our professional engineer.

Outdoor Unit Specifications



Capacity (HP)			82	84	86	88	
Model		Outdoor Model	SK-HPH794DXSYR	SK-HPH816DXSYR	SK-HPH824DXSYR	SK-HPH844DXSYR	
		Combination	SK-HPH190DXSYR	SK-HPH190DXSYR	SK-HPH190DXSYR	SK-HPH190DXSYR	
			SK-HPH190DXSYR	SK-HPH190DXSYR	SK-HPH190DXSYR	SK-HPH190DXSYR	
			SK-HPH190DXSYR	SK-HPH212DXSYR	SK-HPH212DXSYR	SK-HPH232DXSYR	
			SK-HPH212DXSYR	SK-HPH212DXSYR	SK-HPH232DXSYR	SK-HPH232DXSYR	
Power Supply		—	AC 3Φ 380V~415V/50Hz/60Hz				
Performance	Cooling Operating Range		℃	-5 ~ 55			
	Nominal Cooling Capacity T1 35℃	Ton	65.3	66.8	68.7	70.5	
		kW	229.5	235.0	241.5	248.0	
		Btu/h	784000	802000	824000	846000	
	Nominal Cooling Capacity T3 46℃	Ton	54.1	54.7	57.0	59.2	
		kW	190.3	192.5	200.4	208.3	
		Btu/h	650000	656000	684000	710000	
	Nominal Cooling Capacity T4 48℃	kW	184.6	186.7	190.7	194.6	
		Btu/h	630000	638000	650000	664000	
	Power Consumption T1 35℃	kW	65.64	67.20	70.23	73.26	
	Power Consumption T3 46℃	kW	67.56	68.64	71.94	75.24	
	Power Consumption T4 48℃	kW	62.45	63.02	64.5	65.98	
	EER T1 35℃	—	3.50	3.50	3.45	3.40	
	EER T3 46℃	—	2.80	2.80	2.80	2.75	
	EER T4 48℃ (kw/ton)	—	1.19	1.19	1.19	1.19	
	Heating Operating Range		℃	-25 ~ 16.5			
	Heating Capacity	kW	258.0	264.0	270.0	276.0	
Btu/h		880000	900000	922000	942000		
Power Consumption	kW	82.1	84.7	86.8	88.9		
COP	—	3.15	3.10	3.10	3.10		
Sound Pressure Level/Night-Shift *2		dB(A)	69/53	70/54	70/54	71/54	
Cabinet Color		—	White				
Outer Dimensions (H×W×D)		mm	1730×5400×750	1730×5400×750	1730×5400×750	1730×5400×750	
Packing Dimensions (H×W×D)		mm	1930×5680×790	1930×5680×790	1930×5680×790	1930×5680×790	
Net Weight / Gross Weight		kg	1452/1581	1460/1582	1461/1583	1462/1584	
Refrigerating Piping	Gas Pipe	mm	Φ50.8	Φ50.8	Φ50.8	Φ50.8	
	Liquid Pipe	mm	Φ25.4	Φ25.4	Φ25.4	Φ25.4	
Pressure(High/Low Pressure)		MPa	4.15/2.21	4.15/2.21	4.15/2.21	4.15/2.21	
Fan	Condenser Fan Quantity	—	8	8	8	8	
	Air Flow Rate	m³/min	1097	1126	1126	1126	

Notes:

1. Rated cooling capacity and rated heating capacity are tested in the following conditions:

Cooling conditions: indoor air inlet temperature: 27° DB 19° WB, Outdoor air inlet temperature: 35° DB, pipe length: 7.5m, pipe height difference: 0m

Heating conditions: indoor air inlet temperature: 20° DB, Outdoor air inlet temperature: 7° DB 6° WB, pipe length: 7.5m, pipe height difference : 0m

Cooling Operation Conditions: Indoor Air Inlet Temperature 29.0° DB/ 19.0° WB, Outdoor Ambient Temperature 46° DB.

2.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.

3.For height difference between ODU&IDU more than 50(40)m, please contact our professional engineer.



Outdoor Unit Specifications



Capacity (HP)			90	92	94	96	
Model		Outdoor Model	SK-HPH866DXSYR	SK-HPH886DXSYR	SK-HPH908DXSYR	SK-HPH928DXSYR	
		Combination	SK-HPH190DXSYR	SK-HPH190DXSYR	SK-HPH212DXSYR	SK-HPH232DXSYR	
			SK-HPH212DXSYR	SK-HPH232DXSYR	SK-HPH232DXSYR	SK-HPH232DXSYR	
			SK-HPH232DXSYR	SK-HPH232DXSYR	SK-HPH232DXSYR	SK-HPH232DXSYR	
Power Supply		—	AC 3Φ 380V~415V/50Hz/60Hz				
Performance	Cooling Operating Range		℃	-5 ~ 55			
	Nominal Cooling Capacity T1 35℃		Ton	72.1	73.9	75.5	77.3
			kW	253.5	260.0	265.5	272.0
			Btu/h	864000	888000	906000	928000
	Nominal Cooling Capacity T3 46℃		Ton	59.8	62.1	62.7	65.0
			kW	210.5	218.4	220.6	228.5
			Btu/h	718000	746000	752000	780000
	Nominal Cooling Capacity T4 48℃		kW	196.7	200.7	202.8	206.7
			Btu/h	672000	684000	692000	706000
	Power Consumption T1 35℃		kW	74.82	77.85	79.41	82.44
	Power Consumption T3 46℃		kW	76.32	79.62	80.70	84.00
	Power Consumption T4 48℃		kW	66.55	68.03	68.6	70.08
	EER T1 35℃		—	3.40	3.35	3.35	3.30
	EER T3 46℃		—	2.75	2.75	2.75	2.70
	EER T4 48℃ (kw/ton)		—	1.19	1.19	1.19	1.19
	Heating Operating Range		℃	-25 ~ 16.5			
	Heating Capacity		kW	282.0	288.0	294.0	300.0
			Btu/h	962000	982000	1004000	1024000
Power Consumption		kW	91.5	93.6	96.3	98.4	
COP		—	3.10	3.10	3.05	3.05	
Sound Pressure Level/Night-Shift *2			dB(A)	71/54	71/54	72/54	72/54
Cabinet Color			—	White			
Outer Dimensions (H×W×D)			mm	1730×5400×750	1730×5400×750	1730×5400×750	1730×5400×750
Packing Dimensions (H×W×D)			mm	1930×5680×790	1930×5680×790	1930×5680×790	1930×5680×790
Net Weight / Gross Weight			kg	1470/1585	1471/1586	1479/1587	1480/1588
Refrigerating Piping	Gas Pipe		mm	Φ50.8	Φ50.8	Φ50.8	Φ50.8
	Liquid Pipe		mm	Φ25.4	Φ25.4	Φ25.4	Φ25.4
Pressure(High/Low Pressure)			MPa	4.15/2.21	4.15/2.21	4.15/2.21	4.15/2.21
Fan	Condenser Fan Quantity		—	8	8	8	8
	Air Flow Rate		m³/min	1155	1155	1184	1184

Notes:

1. Rated cooling capacity and rated heating capacity are tested in the following conditions:

Cooling conditions: indoor air inlet temperature: 27° DB 19° WB, Outdoor air inlet temperature: 35° DB, pipe length: 7.5m, pipe height difference: 0m

Heating conditions: indoor air inlet temperature: 20° DB, Outdoor air inlet temperature: 7° DB 6° WB, pipe length: 7.5m, pipe height difference : 0m








Cooling Operation Conditions: Indoor Air Inlet Temperature 29.0° DB/ 19.0° WB, Outdoor Ambient Temperature 46° DB.

2. 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.

3. For height difference between ODU&IDU more than 50(40)m, please contact our professional engineer.

SKM Indoor Unit Range

SKM series provide a wide selection of indoor units for indoor decoration and create a personalized living space.

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	10
kBtu/h		5	7	9	12	14	17	19	22	24	27	30	38	48	54	76	96
1-Way Cassette Type																	
2-Way Cassette Type																	
4-Way Cassette Type																	
Mini 4-Way Cassette Type																	
Ceiling Ducted Type (High Static Pressure)																	
Ceiling Ducted Type (Low Static Pressure)																	
Ceiling Ducted Type (AC Low-height)																	
Ceiling Ducted Type (DC Low-height)																	
Ceiling & Floor Type																	
Wall Mounted Type																	



1-Way Cassette Type

Efficiency DC Motor, Adjustable Air Speed

Adoption of the efficient DC motor and the optimized duct design assure the smooth air flow.

Wider 3D-air Flow Range Design

Broad air deflector design realized broad air supply range. The wind direction can be adjusted according to the need thus makes the customers feel more comfortable.

Fresh Air Intake

The unit can introduce fresh air from the external environment. With the filter facility, the air quality is guaranteed.

Drain Pump as Standard

Standard equipped drain pump with the maximum drainage height up to 1200mm.

Indoor unit			1-Way Cassette Type					
Model	Power Supply	AC1Φ 220V~240V /50Hz/60Hz	SKS-C1HP07HS00	SKS-C1HP09HS00	SKS-C1HP12HS00	SKS-C1HP14HS00	SKS-C1HP18HS00	SKS-C1HP24HS00
Cooling Operation		kW	2.2	2.8	3.6	4.0	5.6	7.1
		kcal/h	1,900	2,400	3,100	3,400	4,800	6,100
		Btu/h	7,500	9,600	12,300	13,600	19,100	24,200
Heating Operation		kW	2.5	3.2	4.0	4.5	6.3	8
		kcal/h	2,100	2,700	3,400	3,800	5,400	6,800
		Btu/h	85,00	10,900	13,600	15,400	21,500	27,300
Noise Level		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
Outer Dimensions	H	mm	192	192	192	192	192	192
	W	mm	910	910	910	910	1,180	1,180
	D	mm	470	470	470	470	470	470
Net Weight		kg	19	19	20	20	24	24
Air Flow Rate		m³/h	372/354/336/306/288/276	396/372/336/306/288/276	498/438/408/372/336/306	498/438/408/372/336/306	726/594/528/492/468/396	936/756/672/594/504/426
Motor Power		W	40	40	40	40	60	60
Refrigerant Piping Connection			Flare-nut Connection (with Flare Nuts)					
Liquid Line		mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.53
Gas Line		mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88
Condensate Drain			VP25 (Outer Diameter Φ32)					
Panel Model			HSD-IK0030	HSD-IK0030	HSD-IK0030	HSD-IK0030	HSD-IK0040	HSD-IK0040
Cabinet Color			Neutral White					
Panel Outer Dimensions	H	mm	55	55	55	55	55	55
	W	mm	1,100	1,100	1,100	1,100	1,370	1,370
	D	mm	550	550	550	550	550	550
Net Weight		kg	5	5	5	5	6	6

Notes:

1. The nominal cooling capacity is based on the following conditions:

Indoor Air Inlet Temperature: 27° DB (80°F DB), 19.0° WB(66.2°F WB) Outdoor Air Inlet Temperature: 35° DB(95°F DB) Piping Length: 7.5 Meters Piping Lift: 0 Meter

2. The sound pressure level is based on the following conditions:

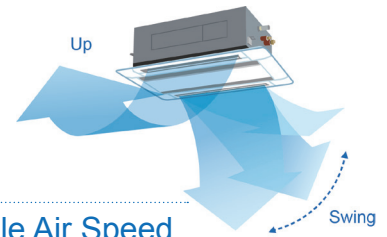
1.0m beneath the unit, 1.0m from Discharge Grille. The above data was measured in an anechoic chamber so that the reflected sound should be taken into consideration in the field. When bottom air inlet is adopted, the sound pressure will increase according to factors such as installation mode and the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



2-Way Cassette Type

2-way Individual Louver

The newly equipped individual louver setting function allows the angles of the 2 louvers to be adjusted individually.



Efficiency DC Motor, Adjustable Air Speed

The adoption of the efficient DC motor and the optimized duct design assure the smooth air flow.

Super Compact Structure Design, Easy for Installation

Drain Pump as Standard

The maximum drainage height up to 1200mm.

Low Noise Design

The high efficiency turbofan form the wind pressure by rotating. Larger fan blades and slower fan speed realize the low operating noise.

Fresh Air Intake

The unit can introduce fresh air from the external environment. With the filter facility, the air quality is ensured.

Indoor unit			2-Way Cassette Type										
Model	Power Supply		SKS-C2 HP07HS00	SKS-C2 HP09HS00	SKS-C2 HP12HS00	SKS-C2 HP14HS00	SKS-C2 HP18HS00	SKS-C2 HP24HS00	SKS-C2 HP27HS00	SKS-C2 HP30HS00	SKS-C2 HP38HS00	SKS-C2 HP48HS00	SKS-C2 HP54HS00
Cooling Operation		kW	2.2	2.8	3.6	4.3	5.6	7.1	8.4	9.0	11.2	14.0	16.0
		kcal/h	1,900	2,400	3,100	3,700	4,800	6,100	6,900	7,700	9,600	12,000	13,800
		Btu/h	7,500	9,600	12,300	14,700	19,100	24,200	28,700	30,700	38,200	47,800	54,600
Heating Operation		kW	2.8	3.3	4.0	4.9	6.5	8.0	9.0	10.0	13.0	16.0	18.0
		kcal/h	2,400	2,800	3,400	4,200	5,600	6,800	7,800	8,600	11,200	13,800	15,500
		Btu/h	9,600	11,300	13,600	16,700	22,200	27,300	30,700	34,100	44,400	54,600	61,400
Noise Level		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
Outer Dimensions	H	mm	298	298	298	298	298	298	298	298	298	298	298
	W	mm	860	860	860	860	860	860	860	860	1,420	1,420	1,420
	D	mm	630	630	630	630	630	630	630	630	630	630	630
Net Weight		kg	22	22	22	24	24	24	24	24	39	39	39
Air Flow Rate		m³/h	600/510 /432/360	660/564 /492/396	720/630 /534/450	900/792 /690/594	1,020/894 /780/672	1,140/984 /858/738	1,260/1,104 /936/756	1,320/1,158 /978/786	1,800/1,584 /1,386/1,188	2,100/1,848 /1,614/1,266	2,220/1,950 /1,704/1,446
Motor Power			57	57	57	57	57	57	57	57	57x2	57x2	57x2
Refrigerant Piping Connection			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
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
Condensate Drain			VP25(Outer Diameter Φ32)										
Panel Model			HSD-IK0050	HSD-IK0050	HSD-IK0050	HSD-IK0050	HSD-IK0050	HSD-IK0050	HSD-IK0050	HSD-IK0050	HSD-IK0060	HSD-IK0060	HSD-IK0060
Cabinet Color			Neutral White										
Panel Outer Dimensions	H	mm	30	30	30	30	30	30	30	30	30	30	30
	W	mm	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,660	1,660	1,660
	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	10.5	10.5	10.5

Notes:

1. The nominal cooling capacity is based on the following conditions:

Indoor Air Inlet Temperature: 27°DB (80°F DB), 19.0° WB(66.2°F WB) Outdoor Air Inlet Temperature: 35° 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.

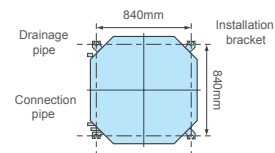
The above data was measured in an anechoic chamber so that the reflected sound should be taken into consideration in the field.



4-Way Cassette Type

Ease of Installation

Squared design for unit body and installation bracket, unit body can be installed in any direction horizontally for convenient pipe connect position.



User-friendly air supply mode

a. The unit has the breeze mode that provides miniature draft through the holes at the four flat corners.

b. The 4 air louvers can be controlled independently and 6 air speed adjustments are available to meet various requirement.

These functions can be achieved by the wired controllers:
HSW-IA0020*, HSW-IA0010*.

Motion Sensor (Optional)

The indoor unit will automatically set through Motion Sensor. This function can be achieved by the wired controllers:
HSW-IA0020*, HSW-IA0010*, HSW-IA0050*.

Standard Equipped Drain Pump

Standard equipped drain pump with the maximum drainage height up to 1200mm.

Indoor unit			4-Way Cassette Type										
Model Power Supply	AC1Φ, 220~240V/50Hz(60Hz)		SKS-C4 HP09HS00	SKS-C4 HP12HS00	SKS-C4 HP15HS00	SKS-C4 HP19HS00	SKS-C4 HP22HS00	SKS-C4 HP24HS00	SKS-C4 HP27HS00	SKS-C4 HP30HS00	SKS-C4 HP38HS00	SKS-C4 HP48HS00	SKS-C4 HP54HS00
Nominal Cooling Capacity		kW	2.8	3.6	4.5	5.6	6.3	7.1	8.0	9.0	11.2	14.0	16.0
		kcal/h	2,400	3,100	3,900	4,800	5,400	6,100	6,900	7,700	9,600	12,000	13,800
		Btu/h	9,600	12,300	15,400	19,100	21,500	24,200	27,300	30,700	38,200	47,800	54,600
Nominal Heating Capacity		kW	3.2	4.0	5.0	6.3	7.1	8.0	9.0	10.0	12.5	16.0	18.0
		kcal/h	2,500	3,400	4,300	5,400	6,100	5,900	7,700	8,600	10,800	13,800	15,500
		Btu/h	9,900	13,600	17,100	21,500	24,200	27,300	30,700	34,100	42,700	54,600	61,400
Noise Level		dB(A)	30/28/28/27/26/26	32/29/29/28/27/26	33/31/29/29/27/26	34/31/30/28/28/26	36/33/32/31/29/28	36/33/32/31/29/28	37/36/35/33/31/30	37/36/35/33/31/30	42/40/38/36/34/33	46/44/40/38/36/34	46/44/41/40/38/36
Outer Dimensions	H	mm	238	238	238	238	238	238	288	288	288	288	288
	W	mm	840	840	840	840	840	840	840	840	840	840	840
	D	mm	840	840	840	840	840	840	840	840	840	840	840
Net Weight		kg	20	20	21	21	23	23	26	26	26	26	26
Air Flow Rate		m³/h	876/804/720/648/600/528	990/840/768/708/648/546	1,212/960/894/816/762/672	1,320/1,050/954/830/816/750	1,530/1,200/1098/1,020/906/780	1,602/1,260/1,146/1,080/978/882	1,572/1,320/1,218/1,176/1,062/966	2,160/1,800/1,644/1,488/1,344/1,176	2,166/2,010/1,776/1,632/1,452/1,344	2,166/2,040/1,842/1,734/1,536/1,428	
Motor Power		W	60	60	60	60	60	60	60	60	127	127	127
Piping Connections		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
Gas Line		mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
Condensate Drain		VP25(Outer Diameter Φ32mm)											
Panel Model		HSD-IO0010											
Cabinet Color		Neutral White											
Panel Outer Dimensions	H	mm	47	47	47	47	47	47	47	47	47	47	47
	W	mm	950	950	950	950	950	950	950	950	950	950	950
	D	mm	950	950	950	950	950	950	950	950	950	950	950
Net Weight		kg	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Packing Volume		m³	0.110	0.110	0.110	0.110	0.110	0.110	0.110	0.110	0.110	0.110	0.110

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°CWB(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 beneath the unit.

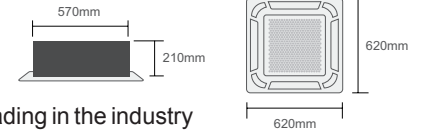
The above data was measured in an anechoic chamber so that the reflected sound should be taken into consideration in the field.



Mini 4-Way Cassette Type

Mini Design

The unit thickness is merely 215mm leading in the industry and the ceiling height required for installation is only 245mm. It is extremely space saving. New appearance of the air return grille is honeycomb structure.



User-friendly air supply mode

a. The unit has the breeze mode that provides miniature draft through the holes at the four flat corners.

b. The 4 air louvers can be controlled independently and 4 air speed adjustments are available to meet various requirement. These functions can be achieved by the wired controllers: HSW-IA0020*, HSW-IA0010*.

Motion Sensor (Optional)

The indoor unit will automatically set through Motion Sensor. This function can be achieved by the wired controllers: HSW-IA0020*, HSW-IA0010, HSW-IA0050*.

Standard Equipped Drain Pump

Standard equipped drain pump with the maximum drainage height up to 1200mm.

Indoor unit			Mini 4-Way Cassette Type						
Model Power Supply	AC1Φ, 220~240V/50Hz(60Hz)		SKS-CMHP05HS00	SKS-CMHP07HS00	SKS-CMHP09HS00	SKS-CMHP12HS00	SKS-CMHP15HS00	SKS-CMHP17HS00	SKS-CMHP19HS00
Nominal Cooling Capacity	kW		1.5	2.2	2.8	3.6	4.5	5.0	5.6
	kcal/h		1,300	1,900	2,400	3,100	3,800	4,300	4,800
	Btu/h		5,100	7,480	9,520	12,240	15,300	17,000	19,040
Nominal Heating Capacity	kW		2.0	2.5	3.3	4.2	5.0	5.6	6.3
	kcal/h		1,700	2,100	2,800	3,600	4,300	4,800	5,400
	Btu/h		6,800	8,500	11,220	14,280	17,000	19,040	21,420
Noise Level	dB(A)		30/29/28/26	30/29/28/26	32/30/28/26	34/32/29/26	38/36/31/28	42/39/36/31	45/42/38/34
Outer Dimensions	H	mm	215	215	215	215	215	215	215
	W	mm	570	570	570	570	570	570	570
	D	mm	570	570	570	570	570	570	570
Net Weight	kg		14.5	14.5	14.8	14.8	15.8	15.8	15.8
Air Flow Rate	m³/h		430/390/370/335	430/390/370/335	470/430/390/350	490/430/390/350	560/524/424/400	660/570/524/424	750/650/560/480
Motor Power	W		57	57	57	57	57	57	57
Piping Connections			Flare-nut Connection(with Flare Nuts)						
Liquid Line	mm		Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
Gas Line	mm		Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ12.7
Condensate Drain			VP25(Outer Diameter Φ32mm)						
Panel Model			HSD-IO0020						
Cabinet Color			Neutral White						
Panel Outer Dimensions	H	mm	37	37	37	37	37	37	37
	W	mm	620	620	620	620	620	620	620
	D	mm	620	620	620	620	620	620	620
Net Weight	kg		2.7	2.7	2.7	2.7	2.7	2.7	2.7
Packing Volume	m³		0.046	0.046	0.046	0.046	0.046	0.046	0.046

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° WB(66.2°F WB), Outdoor Air Inlet Temperature: 35°C DB(95°F DB)

Piping Length: 7.5 Meters Piping Lift: 0 Meter

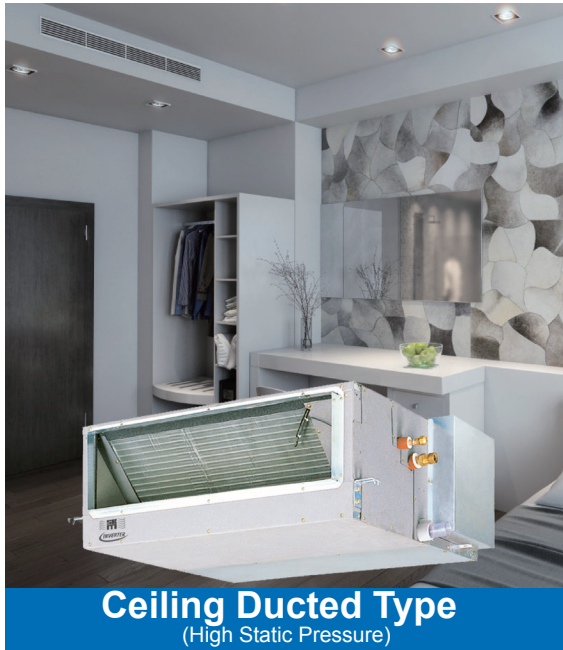
Heating Operation Conditions

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:

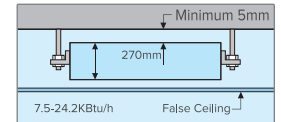
1.5m beneath the unit.

The above data was measured in an anechoic chamber so that the reflected sound should be taken into consideration in the field.



Installation Space-saving

The height less than 270mm can be easily fit into the limited space in the false ceiling (7.5-24.2KBtu/h).



Satisfying Varied Requests on Installation

NOTE:

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



Fresh Air Intake

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

Excellent Air Flow

The cooling and heating air distributed from the unit to the indoor space through ducts, which creates a comfortable environment.

Optional Parts

The drain pump can be supplied as optional part.

Indoor unit		Ceiling Ducted type (High Static Pressure)																*1
Model Power Supply	AC1Φ, 220~240V/50Hz	SKS-HSH P07HS100	SKS-HSH P09HS100	SKS-HSH P12HS100	SKS-HSH P14HS100	SKS-HSH P17HS100	SKS-HSH P18HS100	SKS-HSH P22HS100	SKS-HSH P24HS100	SKS-HSH P27HS100	SKS-HSH P30HS100	SKS-HSH P38HS100	SKS-HSH P48HS100	SKS-HSH P54HS100	SKS-HSH P76HY00	SKS-HSH HP96HY00		
	AC1Φ, 220V/60Hz	SKS-HSH P07HS200	SKS-HSH P09HS200	SKS-HSH P12HS200	SKS-HSH P14HS200	SKS-HSH P17HS200	SKS-HSH P18HS200	SKS-HSH P22HS200	SKS-HSH P24HS200	SKS-HSH P27HS200	SKS-HSH P30HS200	SKS-HSH P38HS200	SKS-HSH P48HS200	SKS-HSH P54HS200	SKS-HSH P76HR00	SKS-HSH HP96HR00		
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		
Noise Level (H/M/L)	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		
Outer Dimensions	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	1300+75	1300+75	1060	1250		
	D	mm	720	720	720	720	720	720	720	800	800	800	800	800	1120	1120		
Net Weight	kg	25	25	25	25	34	34	34	34	44	44	44	56	56	94	106		
Air Flow Rate (H/M/L)	m³/h	480/420/360	480/420/360	780/660/540	780/660/540	900/780/660	900/780/660	960/840/720	960/840/720	1600/1400/1150	1600/1400/1150	1600/1400/1150	2100/1750/1450	2150/1800/1550	3480	4650		
Motor Power	W	110	110	150	150	150	150	150	190	300	300	300	430	430	1030	1280		
Piping Connections		Flare-nut Connection(with Flare Nuts)														Brazing		
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		
Packing Volume	m³	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 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 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.

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

*1: AC3Φ, 380V/50Hz: SKS-HSHP76HY00; SKS-HSHP96HY00

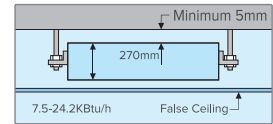
*2: AC3Φ, 380V/60Hz: SKS-HSHP76HR00; SKS-HSHP96HR00



Ceiling Ducted Type
(Low Static Pressure)

Installation Space-saving

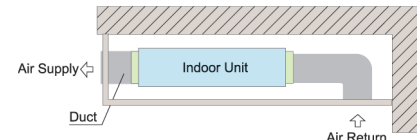
The height less than 270mm can be easily fit into the limited space in the false ceiling (7.5-24.2KBtu/h).



Satisfying Varied Requests on Installation

NOTE:

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



Fresh Air Intake

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

Excellent Air Flow

The cooling and heating air distributed from the unit to the indoor space through ducts which creates a comfortable environment.

Optional Parts

Drain pump can be supplied as optional part.

Indoor unit		Ceiling Ducted type (Low Static Pressure)																
Model Power Supply	AC1Φ, 220~240V/50Hz	SKS-LSH P07HS100	SKS-LSH P09HS100	SKS-LSH P12HS100	SKS-LSH P14HS100	SKS-LSH P17HS100	SKS-LSH P18HS100	SKS-LSH P22HS100	SKS-LSH P24HS100	SKS-LSH P27HS100	SKS-LSH P30HS100	SKS-LSH P38HS100	SKS-LSH P48HS100	SKS-LSH P54HS100	SKS-LSH P76HY100	SKS-LSH P96HY00		
	AC1Φ 220V/60Hz	SKS-LSH P07HS200	SKS-LSH P09HS200	SKS-LSH P12HS200	SKS-LSH P14HS200	SKS-LSH P17HS200	SKS-LSH P18HS200	SKS-LSH P22HS200	SKS-LSH P24HS200	SKS-LSH P27HS200	SKS-LSH P30HS200	SKS-LSH P38HS200	SKS-LSH P48HS200	SKS-LSH P54HS200	SKS-LSH P76HR00	SKS-LSH P96HR00		
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		
Noise Level (H/M/L)	dB(A)	30-26-24	30-26-24	32-30-28	32-30-28	33-31-29	33-31-29	34-32-30	34-32-30	38-34-30	38-34-30	39-35-31	41-38-33	43-39-34	50	52		
Outer Dimensions	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	1300+75	1300+75	1060	1250		
	D	mm	720	720	720	720	720	720	720	720	800	800	800	800	1120	1120		
Net Weight	kg	25	25	25	25	34	34	34	34	44	44	44	56	56	94	106		
Air Flow Rate (H/M/L)	m³/h	480/420 /360	480/420 /360	780/660 /540	780/660 /540	900/780 /660	900/780 /660	960/840 /720	960/840 /720	1550/1350 /1150	1550/1350 /1150	1550/1350 /1150	2150/1800 /1500	2200/1900 /1500	3480	4320		
Motor Power	W	110	110	150	150	150	150	150	190	300	300	300	430	430	950	1120		
Piping Connections		Flare-nut Connection(with Flare Nuts)															Brazing	
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		
Packing Volume	m³	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 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 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.

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

*1: AC3Φ, 380V/50Hz: SKS-HSHP76HY00; SKS-HSHP96HY00

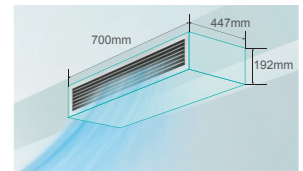
*2: AC3Φ, 380V/60Hz: SKS-HSHP76HR00; SKS-HSHP96HR00



Ceiling Ducted Type
(AC Low-height)

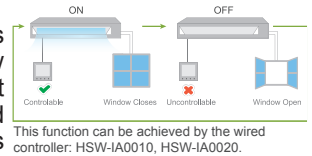
Installation Space-saving

With the height is 192mm and the smallest depth is 447mm, it can make full use of the narrow space to realize various kinds of air flow.



Window contact design

The operation condition of the unit links with the window status through the window sensor and the SKM indoor unit input function. This function saves energy and the automatic switch setting provides convenience for users.

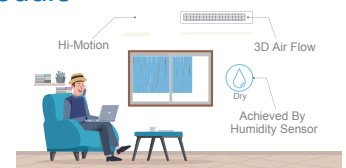


Standard Equipped Drain Pump

Standard equipped drain pump with the maximum drainage height up to 1200mm.

More Choice of the Optional Module

The unit can be controlled automatically through the Hi-Motion. Humidity sensor achieves the automatic dehumidification. 3D air flow provides more comfortable air supply mode.



Indoor unit	Ceiling Ducted Type (AC Low-height)									
Model Power supply	AC 1Φ, 220~240V /50Hz	SKS-ALHP05HS100	SKS-ALHP07HS100	SKS-ALHP09HS100	SKS-ALHP12HS100	SKS-ALHP15HS100	SKS-ALHP17HS100	SKS-ALHP19HS100	SKS-ALHP22HS100	SKS-ALHP24HS100
Nominal Cooling Capacity	kW	1.7	2.2	2.8	3.6	4.5	5.0	5.6	6.3	7.1
	kcal/h	1,500	1,900	2,400	3,100	3,900	4,300	4,800	5,400	6,100
	Btu/h	5,800	7,500	9,600	12,300	15,300	17,100	19,100	21,500	24,200
Nominal Heating Capacity	kW	1.9	2.5	3.2	4.0	5.0	5.6	6.3	7.1	8.0
	kcal/h	1,700	2,100	2,700	3,450	4,300	4,800	5,400	6,100	6,800
	Btu/h	6,500	8,500	11,300	13,600	17,100	19,100	21,500	24,200	27,300
Noise Level (Hi/Me/Lo)	Sound Pressure-dB(A)	29/24/22	29/24/22	35/25/23	35/25/23	36/25/23	36/25/23	35/25/23	39/26/25	39/26/25
Outer Dimensions	H mm	192	192	192	192	192	192	192	192	192
	W mm	700	700	700	700	910	910	1,180	1,180	1,180
	D mm	447	447	447	447	447	447	447	447	447
Net Weight	kg	16	16	17	17	21	21	25	26	26
Air Flow Rate (Hi/Me/Lo)	m³/h	420/330/282	420/330/282	540/342/288	540/342/288	720/378/330	720/378/330	810/480/462	1,080/558/522	1,080/558/522
Motor Power	W	14	14	29	29	35	35	40	60	60
Piping Connections	Flare-nut Connection(with Flare Nuts)									
Liquid Line	mm	Φ6.35	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	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88
Condensate Drain	VP25(Outer Diameter Ø32mm)									
External Pressure	Pa	10(30)								
Approximate Packing Measurement	m³	0.15	0.15	0.15	0.15	0.18	0.18	0.22	0.22	0.22

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)

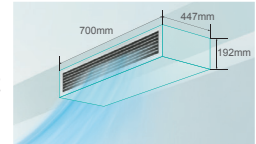
2. The sound pressure level is based on the following conditions: 1.5m beneath the unit. The above data was measured in an anechoic chamber so that the reflected sound should be taken into consideration in the field. When bottom air inlet is adopted, the sound pressure will increase according to factors such as installation mode and the room structure.



Ceiling Ducted Type
(DC Low-height)

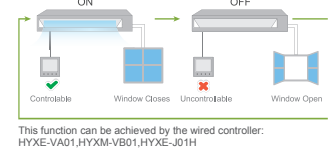
Installation Space-saving

With the height is 192mm and the smallest depth is 447mm, it can make full use of the narrow space to realize various kinds of air flow.



Window contact design

The operation condition of the unit links with the window status through the window sensor and the SKM indoor unit input function. This function saves energy and the automatic switch setting provides convenience for users.

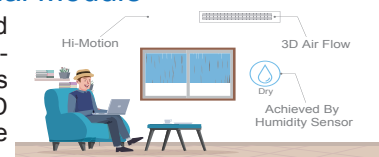


Standard Equipped Drain Pump

Standard equipped drain pump with the maximum drainage height up to 1200mm.

More Choice of the Optional Module

The unit can be controlled automatically through the Hi-Motion. Humidity sensor achieves the automatic dehumidification. 3D air flow provides more comfortable air supply mode.



Indoor unit		Ceiling Ducted Type (DC Low-height)									
Model	Power supply	AC 1Φ, 220~240V /50Hz(60Hz)	SKS-DLHP05HS00	SKS-DLHP07HS00	SKS-DLHP09HS00	SKS-DLHP12HS00	SKS-DLHP15HS00	SKS-DLHP17HS00	SKS-DLHP19HS00	SKS-DLHP22HS00	SKS-DLHP24HS00
Nominal Cooling Capacity	kW		1.7	2.2	2.8	3.6	4.5	5.0	5.6	6.3	7.1
	kcal/h		1,500	1,900	2,400	3,100	3,900	4,300	4,800	5,400	6,100
	Btu/h		5,800	7,500	9,600	12,300	15,300	17,100	19,100	21,500	24,200
Nominal Heating Capacity	kW		1.9	2.5	3.2	4.0	5.0	5.6	6.3	7.1	8.0
	kcal/h		1,700	2,100	2,700	3,450	4,300	4,800	5,400	6,100	6,800
	Btu/h		6,500	8,500	11,300	13,600	17,100	19,100	21,500	24,200	27,300
Noise Level	Sound Pressure-dB(A)		28/27/26/24/23/21	28/27/26/24/23/21	35/32/32/30/26/23	35/32/32/30/26/23	35/32/32/30/26/23	35/32/32/30/26/23	35/32/32/30/26/23	38/36/35/33/31/24	38/36/35/33/31/24
Outer Dimensions	H	mm	192	192	192	192	192	192	192	192	192
	W	mm	700	700	700	700	910	910	1,180	1,180	1,180
	D	mm	447	447	447	447	447	447	447	447	447
Net Weight	kg		16	16	17	17	20	20	24	24	24
Air Flow Rate	m³/h		420/390/366/342/318/288	420/390/366/342/318/288	540/486/438/402/354/312	540/486/438/402/354/312	720/648/564/486/408/330	720/648/564/486/408/330	810/750/672/600/528/462	1,080/966/858/738/630/522	1,080/966/858/738/630/522
Motor Power	W		40	40	40	40	40	40	60	60	60
Piping Connections			Flare-nut Connection(with Flare Nuts)								
Liquid Line	mm		Φ6.35	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	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88
Condensate Drain			VP25(Outer Diameter Ø32mm)								
External Pressure	Pa		10(0-10-30)								
Approximate Packing Measurement	m³		0.15	0.15	0.15	0.15	0.18	0.18	0.22	0.22	0.22

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 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.

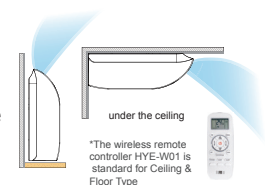
When bottom air inlet is adopted, the sound pressure will increase according to factors such as installation mode and the room structure.



Ceiling & Floor Type

Flexible Installation

The unit can be installed either stand on the floor or hang under the ceiling.

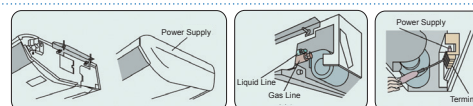


New Fashion Design Appearance and High Quality

The fashionable design and streamline appearance gives a perfect choice for users. The integrative side panel makes the whole unit more concordant. Huge air outlet with an integrative large louver realizes high air volume and low noise.

Convenient Installation and Maintenance

Advanced structure design that makes the unit installation, pipe connection, even wiring work into simple.



1. Unit installation work can be done directly just open the side panel

2. After open side panel, big space for pipe connection provide convenience for pipe installation

3. Set DIP switch by opening electric box cover, simplification and convenience.

Intelligent 3D Air Flow

With horizontal and vertical air louver, the air flow can be adjusted freely. Fullfill the optimum air organization, and bring more comfortable.

Indoor unit		Ceiling & Floor Type							
Model Power Supply	AC1φ 220V~240V 50Hz/60Hz	SKS-CFHP17HS00	SKS-CFHP18HS00	SKS-CFHP22HS00	SKS-CFHP24HS00	SKS-CFHP27HS00	SKS-CFHP30HS00	SKS-CFHP38HS00	SKS-CFHP48HS00
Nominal Cooling Capacity	kW	5	5.6	6.3	7.1	8.4	9	11.2	14.2
	kcal/h	4,300	4,800	5,400	6,100	7,200	7,700	9,600	12,200
	Btu/h	17,100	19,100	21,500	24,200	28,700	30,700	38,200	48,500
Nominal Heating Capacity	kW	5.6	6.5	7.5	8.5	9.6	10	13	16.3
	kcal/h	4,800	5,600	6,500	7,300	8,300	8,600	11,200	14,000
	Btu/h	19,100	22,200	25,600	29,000	32,800	34,100	44,400	55,600
Motor Power	W	40	40	70	70	70	80	130	160
Air Flow Rate (H/M/L)	m ³ /h	780/660/540	780/660/540	966/840/678	966/840/678	1,092/912/732	1,164/978/798	1,488/1,230/978	1,980/1,680/1,380
Noise Level (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
Noise Level (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
Outer Dimensions	H	mm	230	230	230	230	230	230	230
	W	mm	990	990	990	990	1,285	1,285	1,580
	D	mm	680	680	680	680	680	680	680
Net Weight	kg	31	31	32	32	39	40	41	47
Piping Connections		Flare-nut Connection(with Flare Nuts)							
Liquid Line	mm	Φ6.35	Φ6.35	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53
Gas Line	mm	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
Condensate Drain		VP25(Outer Diameter Φ32)							
Speed-up Setting HH1	m ³ /h	852	852	1,068	1,068	1,188	1,272	1,620	2,160
Speed-up Setting HH2	m ³ /h	960	960	1,200	1,200	1,338	1,410	1,752	2,244

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°CWB(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)

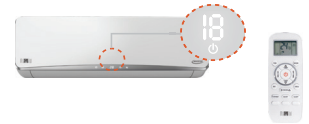
The sound pressure level is based on the following conditions:

1.0m 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.



Elegant Smooth Panel Design with Hidden LED Display

The quality of "Elegance" is to meet contemporary needs. The simple and smooth form harmonizes with any interior style. The smooth panel can be cleaned easily.



*The wireless remote controller HYE-W01 is standard for Wall Mounted Type.

Anti-mold Filter

Anti-mold filter is equipped as standard accessory.

Flexible Installation

The water drain pipe can be set either on the left side or on the right side of the unit. The connection pipe can be set in left, right or back side of the unit.

Compact and Light Weight, Allowing Easy Installation

For easy installation, a slim design is adopted to this new model by using a high proportion of lightweight resin parts, which greatly reduced the weight of the unit.

The Sleep Mode Offers Comfortable Temperature for People to Enjoy Good Sleep

The sleep mode can be kept for 8 hours. The setting temperature can be adjusted automatically for your comfort.

Quiet Operation for Super Low Sound Level

The one-touch quiet operation can set the system work in a super low speed and make the noise level low to 28 dB(A).

Indoor unit		Wall Mounted Type							
Model Power Supply	AC1Φ220V ~240V/50Hz	SKS-WSHP07HS100	SKS-WSHP09HS100	SKS-WSHP12HS100	SKS-WSHP14HS100	SKS-WSHP17HS100	SKS-WSHP18HS100	SKS-WSHP22HS100	SKS-WSHP24HS100
	AC1Φ220V/60Hz	SKS-WSHP07HS200	SKS-WSHP09HS200	SKS-WSHP12HS200	SKS-WSHP14HS200	SKS-WSHP17HS200	SKS-WSHP18HS200	SKS-WSHP22HS200	SKS-WSHP24HS200
Nominal Cooling Capacity	kW	2.2	2.8	3.6	4.0	5.0	5.6	6.3	7.1
	kcal/h	1,900	2,400	3,100	3,450	4,300	4,816	5,418	6,106
	Btu/h	7,500	9,500	12,300	13,600	17,000	19,100	21,500	24,200
Nominal Heating Capacity	kW	2.5	3.3	4.0	4.5	5.6	6.3	7.1	8
	kcal/h	2,150	2,800	3,450	3,900	4,800	5,418	6,106	6,880
	Btu/h	8,500	11,100	13,600	15,300	19,100	21,500	24,200	27,300
Air Flow Rate (High/Medium/Low/Mute)	m ³ /h	660/590/520/460	660/590/520/460	830/660/520/460	830/660/520/460	900/750/590/460	893/782/671/582	1,006/893/716/621	1,122/984/804/649
Noise Level (High/Medium/Low/Mute)	dB(A)	39/34/32/28	39/34/32/28	43/39/32/28	43/39/32/28	45/40/34/29	41/37/34/30	44/41/36/31	46/43/38/33
Net Weight	kg	13.5	13.5	13.5	13.5	13.5	16.0	16.0	16.0
Motor Power	W	50	50	60	60	65	62	72	82
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
Gas Line	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88
Condensate Drain		VP16(Outer Diameter Φ32)							
Outer Dimensions	H	mm	315	315	315	315	315	315	315
	W	mm	960	960	960	960	960	1,120	1,120
	D	mm	230	230	230	230	230	230	230
Packing Volume	m ³	0.17	0.17	0.17	0.17	0.17	0.19	0.19	0.19
Wireless Remote Controller/Receiver		HSR-IB0010 +Receiver							
Wired Remote Controller		Option	Option	Option	Option	Option	Option	Option	Option
Fan motor		PG Fan motor	PG Fan motor	PG Fan motor	PG Fan motor	PG Fan motor	PG Fan motor	PG Fan motor	PG Fan motor
Drain Pump		NO	NO	NO	NO	NO	NO	NO	NO

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:

1.1m beneath the unit and 1.0m from inlet grille. 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 1~2dB. The above data was measured in an anechoic chamber so that the reflected sound should be taken into consideration in the field.



All Fresh Air Indoor Unit

Create Comfortable and Healthy Indoor Environment

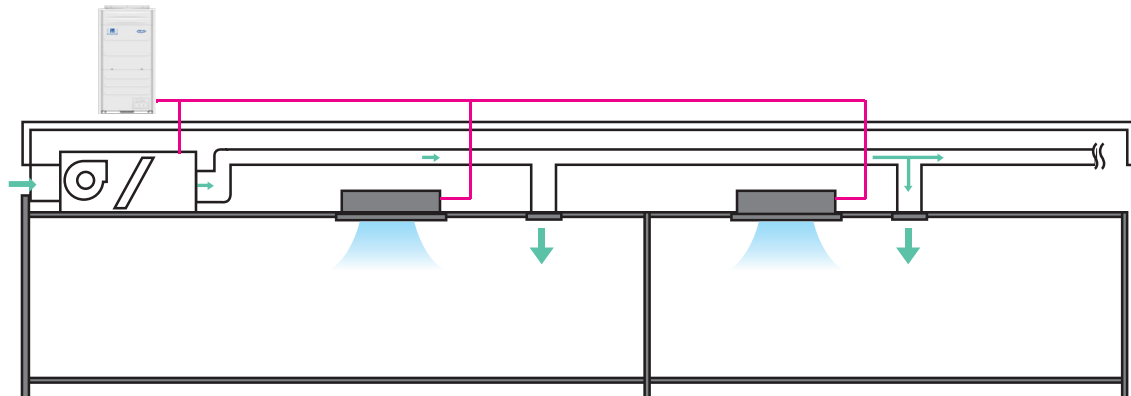
Create a comfortable and healthy indoor environment by introducing fresh outdoor air. By heating or cooling fresh outdoor air to almost the same temperature as room temperature, fresh ambient air can be adapted and then introduced into indoor room. Besides, after filtered, fresh outdoor air in transition 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.

Higher External Static Pressure

Better installation flexibility at site, longer duct can be connected.

Advanced Control

Can be interfaced to central control system. Easy electrical wiring design and installation.



Indoor Unit			All Fresh Air Indoor Unit			
Model	Power Supply		SKS-FAHP30HS100	SKS-FAHP48HS100	SKS-FAHP76HS100	SKS-FAHP96HS100
Nominal Cooling Capacity		kW	9.0	14.0	22.4	28.0
		kcal/h	7,700	12,000	19,300	24,100
		Btu/h	30,700	47,800	76,500	95,600
Nominal Heating Capacity		kW	8.6	13.7	21.9	24.5
		kcal/h	7,400	11,800	18,800	21,100
		Btu/h	29,400	46,800	74,700	83,600
Motor Power		W	150	330	490	510
Outer Dimensions	H	mm	370	370	486	486
	W	mm	920	1,320	1,270	1,270
	D	mm	800	800	1,069	1,069
Noise Level		dB(A)	32	43	45	46
Net Weight		Kg	46	60	97	97
Refrigerant			R410A(Nitrogen-charged for Corrosion-resistance)			
Air Flow Rate		m³/h	660	1,080	1,680	2,100
External Static Pressure		Pa	60(120)	200	220	220
Air Inlet Size		mm	833×306	1233×306	1,100×415	1,100×415
Air Outlet Size		mm	803×220	1203×220	1,106×338	1,106×338
Drain Pipe Size			VP25, Outer Diameter: Φ32mm			
Refrigerant Liquid Line		mm	Φ9.53	Φ9.53	Φ9.53	Φ9.53
Refrigerant Gas Line		mm	Φ15.88	Φ15.88	Φ19.05	Φ22.2
Temperature Range of Fresh Air Drawn			Cooling: 20℃ ~43℃, Heating: -7℃ ~15℃			



Indoor Unit			All Fresh Air Indoor Unit			
Model Power Supply	AC1Φ, 220~240V/50Hz		SKS-FAHP114HY00	SKS-FAHP154HY00	SKS-FAHP190HY04	SKS-FAHP190HY05
Nominal Cooling Capacity		kW	33.5	45.0	56.0	56.0
		kcal/h	28,800	38,700	48,200	48,200
		Btu/h	114,300	153,600	191,100	191,100
Nominal Heating Capacity		kW	26.8	36.0	44.8	44.8
		kcal/h	23 , 100	31 , 000	38 , 500	38 , 500
		Btu/h	91,500	122,900	152,900	152,900
Motor Power		W	740	1120	1330	1620
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		m³/h	3,000	4,000	5,000	6,000
External Static Pressure		Pa	220	300	320	300
Air Inlet Size		mm	1,100×415	1,522×522	1,522×622	1,522×622
Air Outlet Size		mm	1,106×338	850×272	850×272	850×272
Drain Pipe Size			VP25,Outer Diameter: Φ32mm	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℃ ~43℃ , Heating: -7℃ ~15℃			

NOTES:

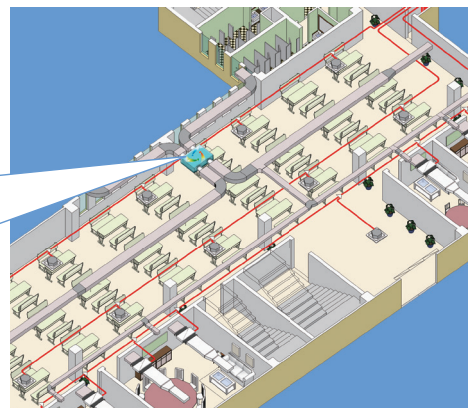
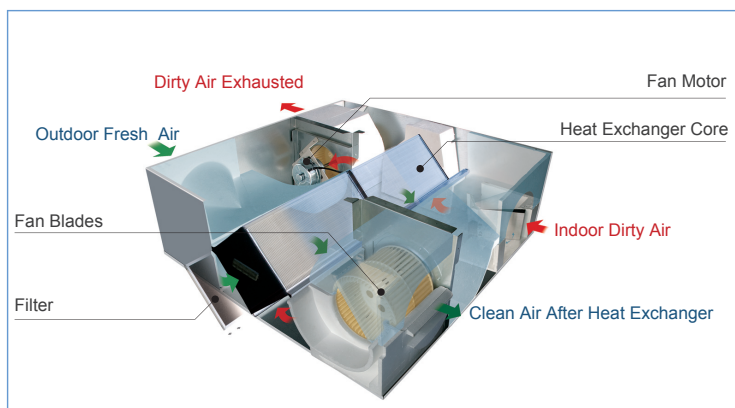
- The nominal cooling capacity and heating capacity are based on following conditions
Cooling operation conditions: 33°C DB, 28°C WB, piping length: 7.5m, piping lift: 0m
Heating operation conditions: 0°C DB, -2.9°C WB, piping length: 7.5m, piping lift: 0m
(Heating capacity is tested when defrosting 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 field.
- An air filter with duct collection efficiency more than 50% needs to be attached to the duct system of the suction side at site.
- When the resistance of the filed-supplied duct is small, it may cause abnormal stop, malfunction, spraying water, etc. Due to excessive air flow. And the duct, which is to be connected to this unit, shall be insulation for dew protection.
- 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.
- This unit shall be connected to PRO-V6s, G+,X,R,W and PRO-VMx 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).
- When VRF outdoor unit connected to only with all fresh air indoor unit, the configuration rate is 100% (Recommended).
- 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°C the system will automatically shift to ventilation operation; In case inlet temperature is below -7°C all fresh air unit will stop.



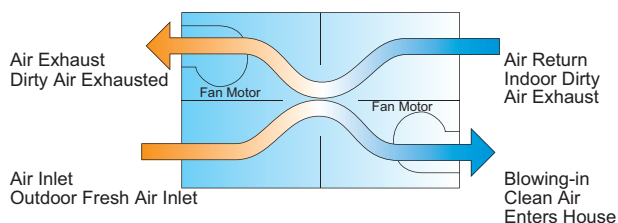
Heat Recovery Ventilator

SKM heat recovery ventilator adopts efficient convective transfer material to effectively recycle the heat losses due to ventilation, reduces the fresh air load, achieves the purpose of energy saving and lower running cost of air conditioning unit, fresh air is supplied to indoors continuously which can make your room more comfortable and healthy.

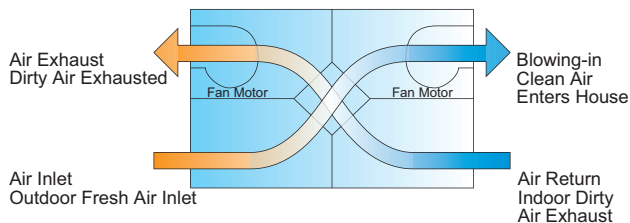
Basic Structure and Operation Principle



Airflow System



SKS-HRHP15HS100 ~ SKS-HRHP100HS100

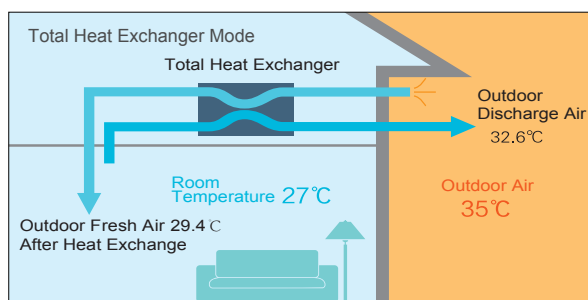


SKS-HRHP150HY00 ~ SKS-HRHP500HY00

Energy Saving Analysis

Summer Energy Saving Analysis

In summer, 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.



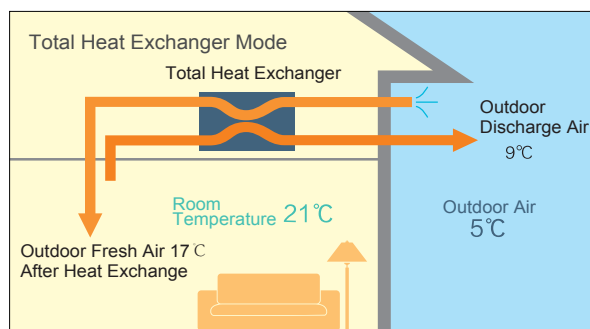
VS ordinary ventilation fan

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

Air Conditioning	
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, when the heat energy of 27°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 5°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.



VS ordinary ventilation fan

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

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

Very Low Noise

Through a low-noise fan motor, advanced internal silence insulation device and optimization of air passage, the units have low noise.

The minimum operating sound is only 28dB(A), which will not affect the users' sleep and rest at all.





With Flexible Control, It Has Access to Centralized Control of SKM Air Conditioning System

Features:

- Streamline appearance design, white highlight shell
- Large LCD screen, humanized operation interface
- Touch key control, easy and convenient
- White backlight; operation indicator light
- Infrared remote control is acceptable, realizing two control method: wired control and remote control

HSW-IA0050

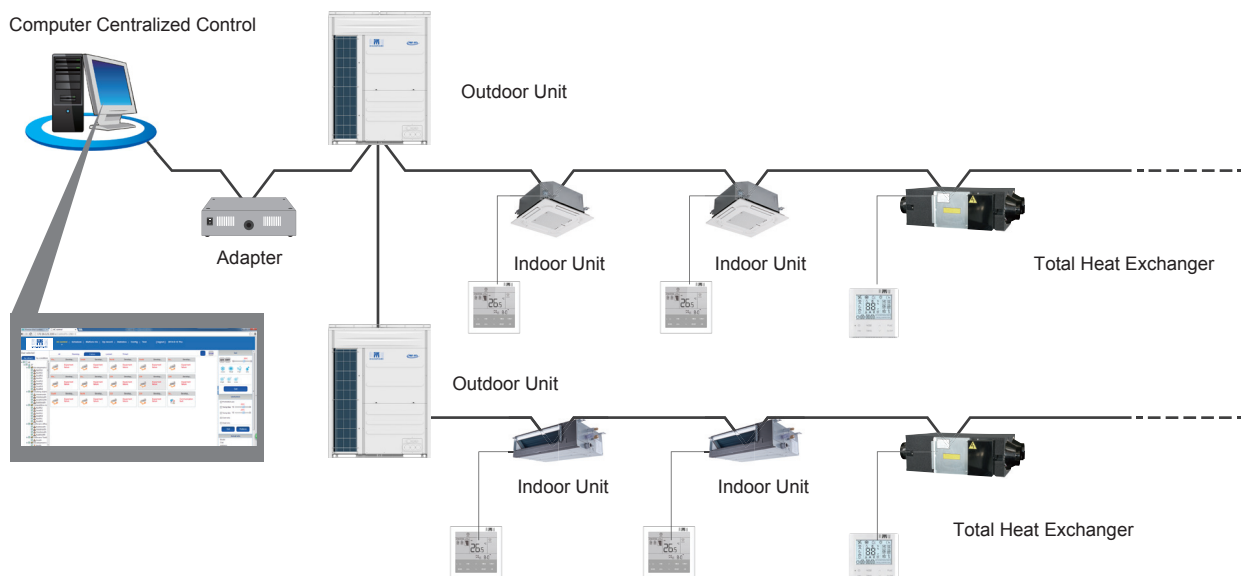


Main Functions:

- | | | | |
|---------------------------------|-----------------------|--------------------------------|------------------------------|
| • 86×86mm smart size | • Inserting | • Cooling/Heating/Dry/Fan/Auto | • Backlight |
| • Multiple speed/Swing louver | • Temperature setting | • 72-hour Timer | • Control Max.6 indoor units |
| • Air filter cleaning reminding | • Check | • Error Code Display | • Dehumidification |

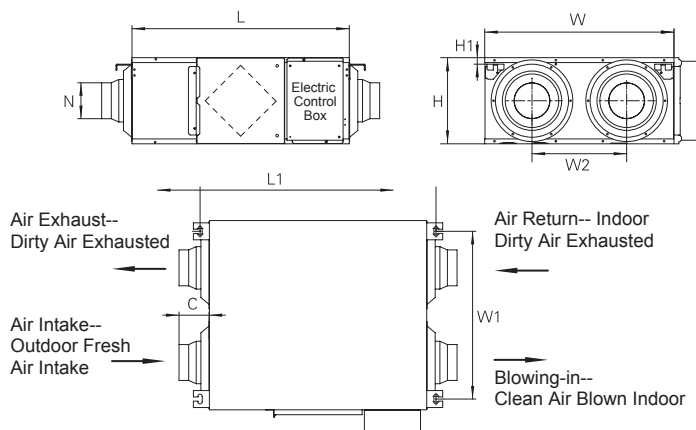
Centralized Control System

SKM centralized control type total heat exchanger products can be connected to the centralized control system of SKM air conditioning* and achieve the linkage with air conditioning system and centralized control, so the operation is more convenient and more intelligent!

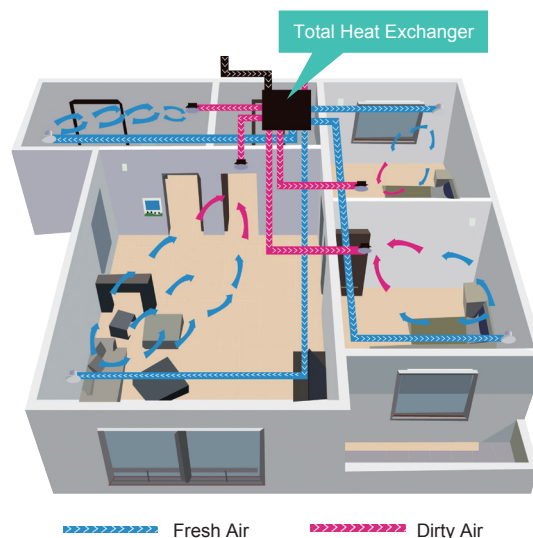


SKS-HRHP15HS100

Product Dimensions:



Model	L	L1	W	W1	W2	H	C	N	H1
SKS-HRHP15HS100	665	723	580	514	290	265	90	Φ144	20



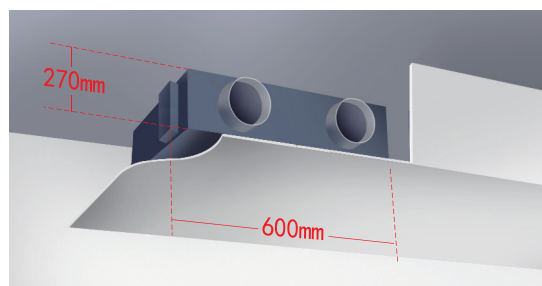
Technical Parameters:

Model	Air Volume m³/h			Enthalpy Efficiency (Summer) I			Enthalpy Efficiency (Winter) I			External Static Pressure Pa			Power Supply	Input Current A			Input Power kW			Noise Level dB(A)			Weight kg
	High	Middle	Low	High	Middle	Low	High	Middle	Low	High	Middle	Low		High	Middle	Low	High	Middle	Low	High	Middle	Low	
SKS-HRHP15HS100*	150	150	110	58	58	60	65	65	69	85	70	65	220-240V /50HZ	0.38	0.36	0.31	2 × 0.041	2 × 0.038	2 × 0.029	30	29	28	25

Product Feature

Compact Machine, Convenient Installation

The thickness of machine is not more than 270mm that can be easily installed in the narrow residential ceiling. The width of the machine whose volume is under 300m³/h is less than 600mm, which is particularly suitable for very narrow spaces in the ceiling, and can save the space of installation and ceiling. It is more convenient for construction.



Adjustable Air Volume, Quiet Operation

The air volume can be adjusted at a range of high, medium, or low level, the lowest noise in low level is only 28 dB(A) (SKS-HRHP15HS100 in low level), which reaches the lowest level in the industry.



Low Level:
Gentle and fine airflow, tenderly caring baby-like sleep.



Medium Level:
Nature warm and refreshing enjoyed during breathing

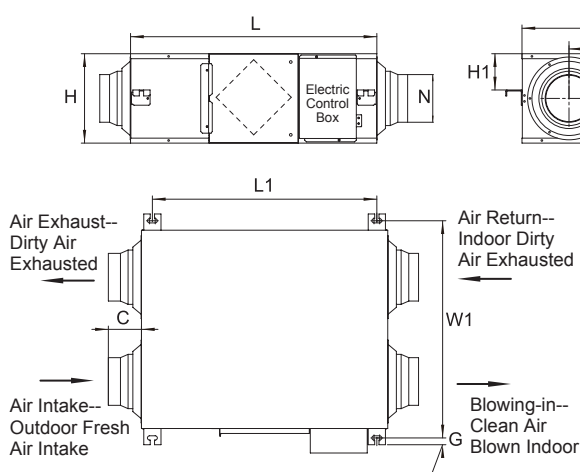


High level:
Experience the natural wind, enjoy aerobic exercise



SKS-HRHP25HS100 ~ SKS-HRHP100HS100

Product Dimensions:



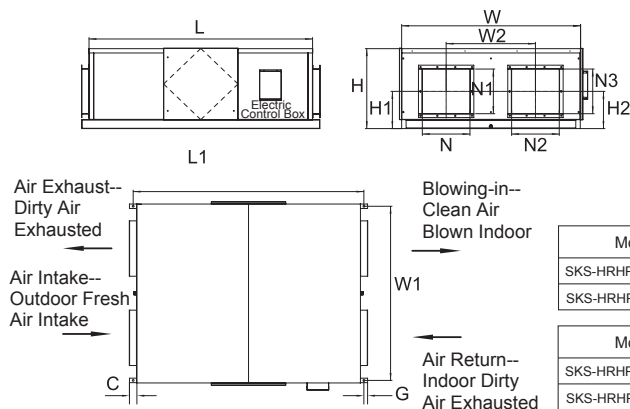
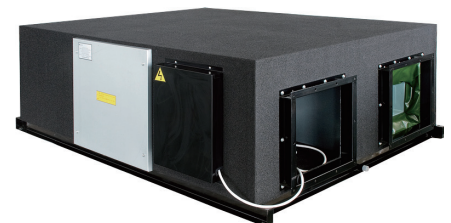
Model	L	L1	W	W1	W2	H	C	G	N	H1
SKS-HRHP25HS100	745	675	600	656	315	270	90	19	Φ144	110
SKS-HRHP35HS100	745	675	805	861	480	270	90	19	Φ144	110
SKS-HRHP50HS100	825	755	905	961	500	270	96	19	Φ194	110
SKS-HRHP65HS100	1115	1050	885	941	430	390	80	19	Φ242	175
SKS-HRHP80HS100	1115	1050	1135	1191	675	390	80	19	Φ242	175
SKS-HRHP100HS100	1115	1050	1135	1191	675	390	80	19	Φ242	175

Technical Parameters:

Model	Air Volume m³/h			Enthalpy Efficiency (Summer) η _i			Enthalpy Efficiency (Winter) η _i			External Static Pressure Pa			Power Supply	Input Current A			Input Power kW			Noise Level dB(A)			Weight kg
	High	Middle	Low	High	Middle	Low	High	Middle	Low	High	Middle	Low		High	Middle	Low	High	Middle	Low	High	Middle	Low	
SKS-HRHP25HS100	250	250	190	57	57	59	63	63	68	85	65	60	220~240V/50Hz	0.66	0.56	0.52	2×0.069	2×0.055	2×0.049	32	31	28	30
SKS-HRHP35HS100	350	350	270	55	55	57	62	62	65	100	75	65		0.76	0.75	0.71	2×0.083	2×0.079	2×0.075	34	33	31	35
SKS-HRHP50HS100	500	500	400	56	56	58	63	63	65	130	110	100		1.82	1.71	1.52	2×0.189	2×0.157	2×0.124	39	38	36	40
SKS-HRHP65HS100	650	650	550	57	57	59	63	63	68	130	100	100		1.75	1.62	1.51	2×0.193	2×0.178	2×0.164	40	38	35	62
SKS-HRHP80HS100	800	800	650	58	58	59	66	66	68	130	100	90		1.98	1.88	1.75	2×0.211	2×0.196	2×0.18	42	40	37	72
SKS-HRHP100HS100	1000	1000	700	56	56	58	63	63	66	165	120	60		4.68	4.18	3.47	2×0.510	2×0.450	2×0.363	44	42	38	79

SKS-HRHP150HY00 ~ SKS-HRHP200HY00

Product Dimensions:



Model	L	L1	W	W1	W2	H	H1
SKS-HRHP150HY00	1500	1550	1200	1170	600	540	250
SKS-HRHP200HY00	1550	1600	1400	1370	700	540	250

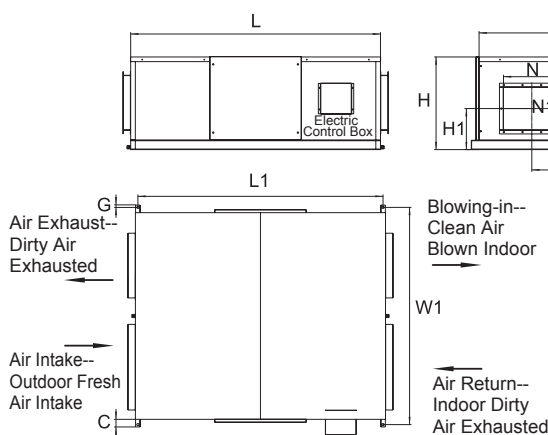
Model	C	G	N	N1	N2	N3	H2
SKS-HRHP150HY00	50	25	320	300	320	300	250
SKS-HRHP200HY00	50	25	320	300	320	300	250

Technical Parameters:

Model	Air Volume m³/h	Enthalpy Efficiency (Summer) η _i	Enthalpy Efficiency (Winter) η _i	External Static Pressure Pa	Power Supply	Input Current A	Input Power	Noise Level dB(A)	Weight kg
SKS-HRHP150HY00	1500	55	63	180	380~415V/50Hz	2.78	2×0.41	48	151
SKS-HRHP200HY00	2000	54	62	160		2.89	2×0.52	49	172

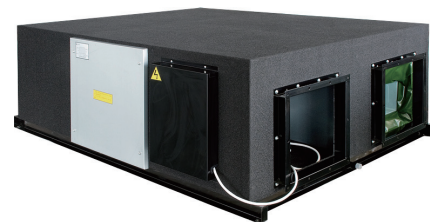
SKS-HRHP250HY00 ~ SKS-HRHP300HY00

Product Dimensions:



Model	L	L1	W	W1	W2	H	H1
SKS-HRHP250HY00	1610	1580	1330	1400	655	600	265
SKS-HRHP300HY00	1700	1670	1500	1570	750	640	272

Model	C	G	N	N1	N2	N3	H2
SKS-HRHP250HY00	50	15	365	275	500	350	300
SKS-HRHP300HY00	50	15	365	275	500	350	309

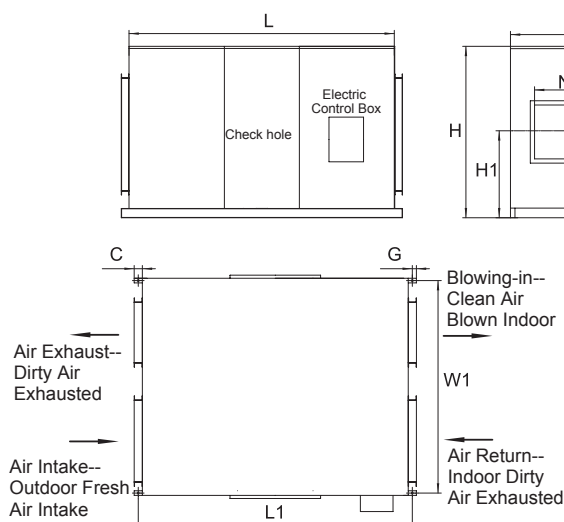


Technical Parameters:

Model A	ir Volume m³/h	Enthalpy Efficiency (Summer) η_i	Enthalpy Efficiency (Winter) η_i	External Static Pressure Pa	Power Supply	Input Current A	Input Power kW	Noise Level dB(A)	Weight kg
SKS-HRHP250HY00	2500	54	62	180	380 ~ 415V/50Hz	3.86	2 × 0.72	53	185
SKS-HRHP300HY00	3000	55	63	200		5.12	2 × 1.16	56	222

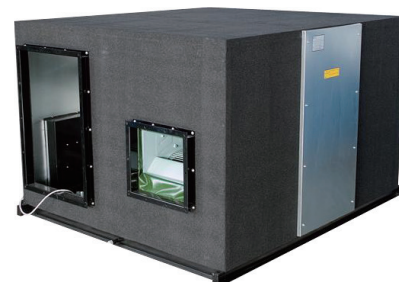
SKS-HRHP400HY00 ~ SKS-HRHP500HY00

Product Dimensions:



Model	L	L1	W	W1	W2	H	H1
SKS-HRHP400HY00	1625	1675	1330	1300	665	1050	490
SKS-HRHP500HY00	1625	1675	1330	1300	665	1050	490

Model	C	G	N	N1	N2	N3	H2
SKS-HRHP400HY00	50	25	370	330	500	690	475
SKS-HRHP500HY00	50	25	370	330	500	690	475



Technical Parameters:

Model A	ir Volume m³/h	Enthalpy Efficiency (Summer) η_i	Enthalpy Efficiency (Winter) η_i	External Static Pressure Pa	Power Supply	Input Current A	Input Power kW	Noise Level dB(A)	Weight kg
SKS-HRHP400HY00	4000	55	63	220	380 ~ 415V/50Hz	5.89	2 × 1.71	57	312
SKS-HRHP500HY00	5000	53	61	240		8.78	2 × 2.2	58	321

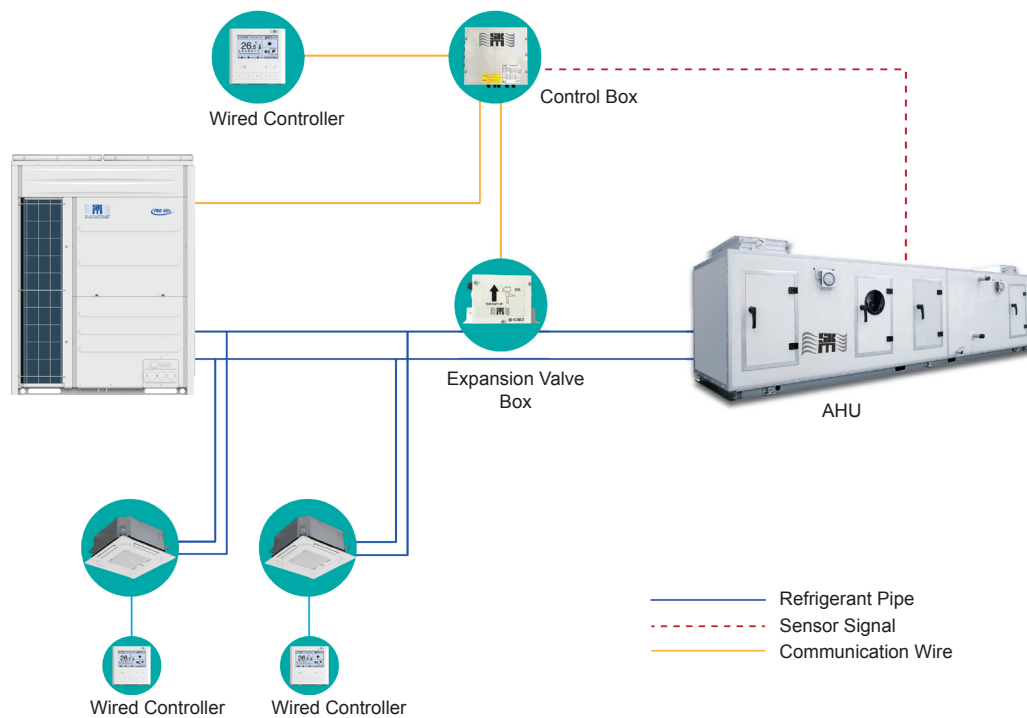


AHU Connection KIT

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

Main Function

- 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.

AHU Connection KIT		HSA-IJ0010	HSA-IJ0020	HSA-IJ0030	HSA-IJ0040		HSA-IJ0050					HSA-IJ0060					
Model Power Supply		AC1Ø 220~240V/50HZ,220~240V/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
		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
	Heating	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
		KW	5.6	10.0	16.0	22.4	28.0	33.5	40.0	47.5	53.0	60.0	66.0	75.0	79.0	86.0	92.0
		KW	7.1	12.5	18.0	25.0	31.5	37.5	45.0	50.0	56.0	63.0	69.0	77.5	82.5	90.0	95.0
Heat Exchanger Volume	Min	dm³	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	dm³	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			HSA-IJ/1														
Expansion Valve Box Model			HSA-IJ0010/2	HSA-IJ0020/2	HSA-IJ0030/2	HSA-IJ0040/2		HSA-IJ0050/2					HSA-IJ0060/2				

*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

[illegible]

Controller System

With High Intelligence

The intelligent control system of SKM central air conditioning can realize automatic control through one computer which makes it easy to learn the overall system operation and detect and solve problems promptly. Meanwhile, this system can achieve electricity household metering with humanized intelligent control and efficient and convenient management to make users enjoy the modern intelligent life.

Wired Controller

Main Functions

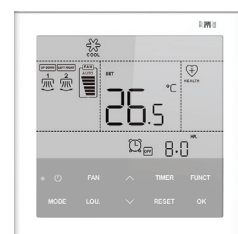
- ◆ Cooling/Heating/Dry/Fan/Auto
- ◆ Fan speed/Swing Louver
- ◆ Temperature Setting
- ◆ Holiday Setting
- ◆ Weekly Timer
- ◆ Check
- ◆ Error Code Display
- ◆ Error History Display
- ◆ Lock
- ◆ Timer
- ◆ Air Filter Cleaning Reminding
- ◆ Address Setting



HSW-IA0020

Main Functions

- ◆ Cooling/Heating/Dry/Fan/Auto
- ◆ Multiple Speed
- ◆ Swing Louver
- ◆ 72-hour Timer
- ◆ Optional Setting
- ◆ Max. 16 Indoor Units can be Connected
- ◆ 0.5°C Temperature Setting
- ◆ One Touch Test Run
- ◆ 3D Airflow Setting
- ◆ Backlight Control
- ◆ Air Filter Cleaning Reminder
- ◆ Error Code Display
- ◆ Check



HSW-IA0010

Main Functions

- ◆ 86×86mm Smart Size
- ◆ Multiple Speed/Swing Louver
- ◆ Air Filter Cleaning Reminding
- ◆ Backlight
- ◆ Inserting
- ◆ Temperature Setting
- ◆ Check
- ◆ Control Max.6 Indoor Units
- ◆ Cooling/Heating/Dry/Fan/Auto
- ◆ 72-hour Timer
- ◆ Error Code Display
- ◆ Dehumidification



HSW-IA0050



Wired Controller

Main Functions

- ♦ Cooling/Heating/Dry/Fan/Auto
- ♦ Icon Function Display
- ♦ Touch Buttons
- ♦ Quiet
- ♦ Check
- ♦ Temperature Setting
- ♦ Air Filter Cleaning Reminding
- ♦ Dehumidification
- ♦ Fan Speed/Swing Louver
- ♦ 3 or 6 Speed Control
- ♦ Timer
- ♦ Test Run
- ♦ Optional Setting



HSW-IA0060

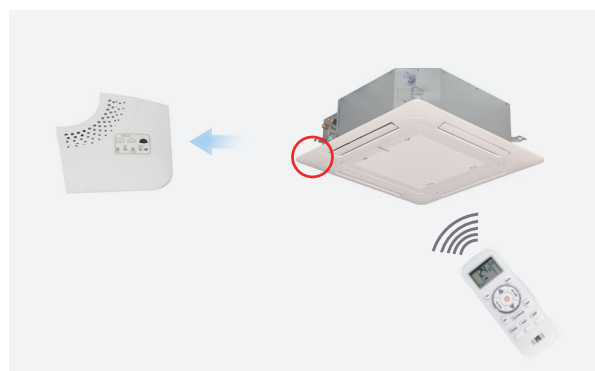
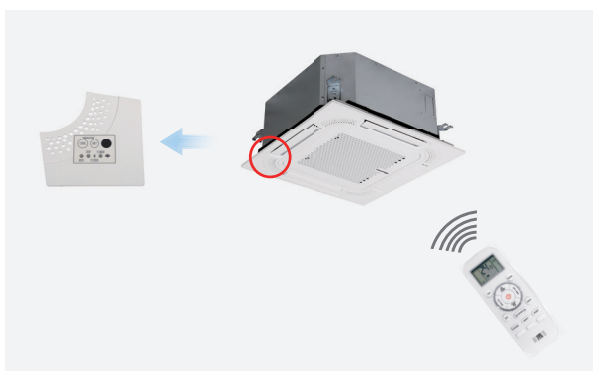
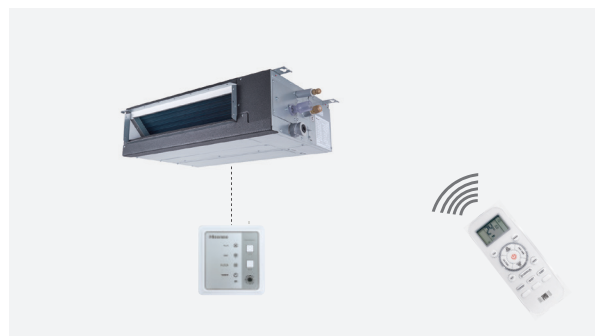
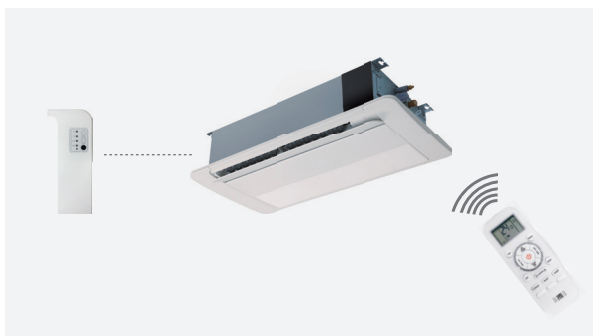
Main Functions

- ♦ Cooling/Heating/Dry/Fan/Auto
- ♦ 24-hour Timer
- ♦ Dehumidification
- ♦ Temperature Setting
- ♦ Quiet Mode Setting
- ♦ 6 Fan Speed/Swing Louver
- ♦ Sleep Mode Setting



HSR-IB0010

Receiver Kit for Wireless Control - Optional



Centralized Controller

Main Functions

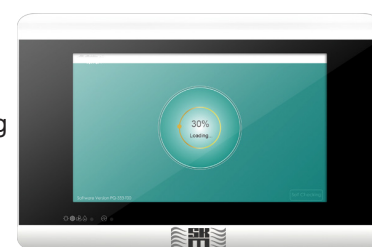
- ◆ Group Control(ON/OFF)
- ◆ Indoor Units Auto Login in
- ◆ Indoor Unit Power OFF Reminder
- ◆ Error Reminder



HSC-IE0010

Main Functions

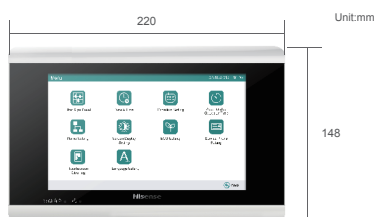
- ◆ Clock Setting
- ◆ Time Display Mode Setting
- ◆ Energy Saving Control Mode
- ◆ Backlight
- ◆ Holiday Setting
- ◆ Setting Temperature Limitation
- ◆ Power Indicator
- ◆ Backlight Brightness
- ◆ Backlight Auto-off Time Adjusting
- ◆ Alarm History
- ◆ Adjusting
- ◆ Weekly Schedule
- ◆ Service Hotline Setting








HSC-ID0010






Smooth Appearance

Easy Installation





Type		Wired Controller				Wireless Controller
Model		HSW-IA0010	HSW-IA0020	HSW-IA0050	HSW-IA0060	HSR-IB0010
Picture						
Suit for indoor unit	Ceiling Duct Type	○	○	○	○	○
	4-Way Cassette	○	○	○	○	○
	Mini 4-Way Cassette	○	○	○	○	○
	1-Way Cassette	○	○	○	×	○
	2-Way Cassette	○	○	○	×	○
	Ceiling&Floor	○	○	○	○	✓
	Wall Mounted	○	○	○	○	✓
	Floor Concoaled	○	○	○	×	○
	DC Low Height AC Low Height	○	○	○	○	○
	Console Type	○	○	○	○	✓
	All Fresh Air Indoor Unit	○	○	○	○	○
	Heat Recovery Ventilation	○	○	✓	○	×
	3D Air-flow Panel	○	○	○	×	○
	AHU KIT	○	○	○	×	×

Type		Receiver Kit			Centralized Controller	ON/OFF
Model		HSR-IC0010	HSR-IC0040	HSR-IC0050	HSC-ID0010	HSC-IE0010
Picture						
Suit for indoor unit	Ceiling Duct Type	○	×	×	○	○
	4-Way Cassette	×	×	○	○	○
	Mini 4-Way Cassette	×	○	×	○	○
	1-Way Cassette	×	×	×	○	○
	2-Way Cassette	○	×	×	○	○
	Ceiling&Floor	○	×	×	○	○
	Wall Mounted	○	×	×	○	○
	Floor Concoaled	○	×	×	○	○
	DC Low Height AC Low Height	○	×	×	○	○
	Console Type	○	×	×	○	○
	All Fresh Air Indoor Unit	○	×	×	○	○
	Heat Recovery Ventilation	×	×	×	○	○
	3D Air-flow Panel	○	×	×	○	○
	AHU KIT	×	×	×	○	○

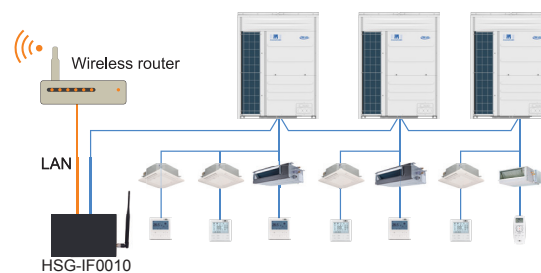
Remarks: ✓ Standard ○ Optional × Incompatible

Centralized Controller



Main Functions

- ♦ ON/OFF control, Operation mode,
- ♦ Temperature setting
- ♦ Operate according to a schedule
- ♦ Display the alarm code
- ♦ 16 operation modes
- ♦ Max. 32 indoor units can be controlled
- ♦ Dimension: 215×137×38 mm



Adapter Specifications

Model name	HSG-IF0010	Operating temperature	0°C ~ 40°C
Input voltage	AC 110~240V 50Hz/60Hz	Maximum operating current	10mA (220V)

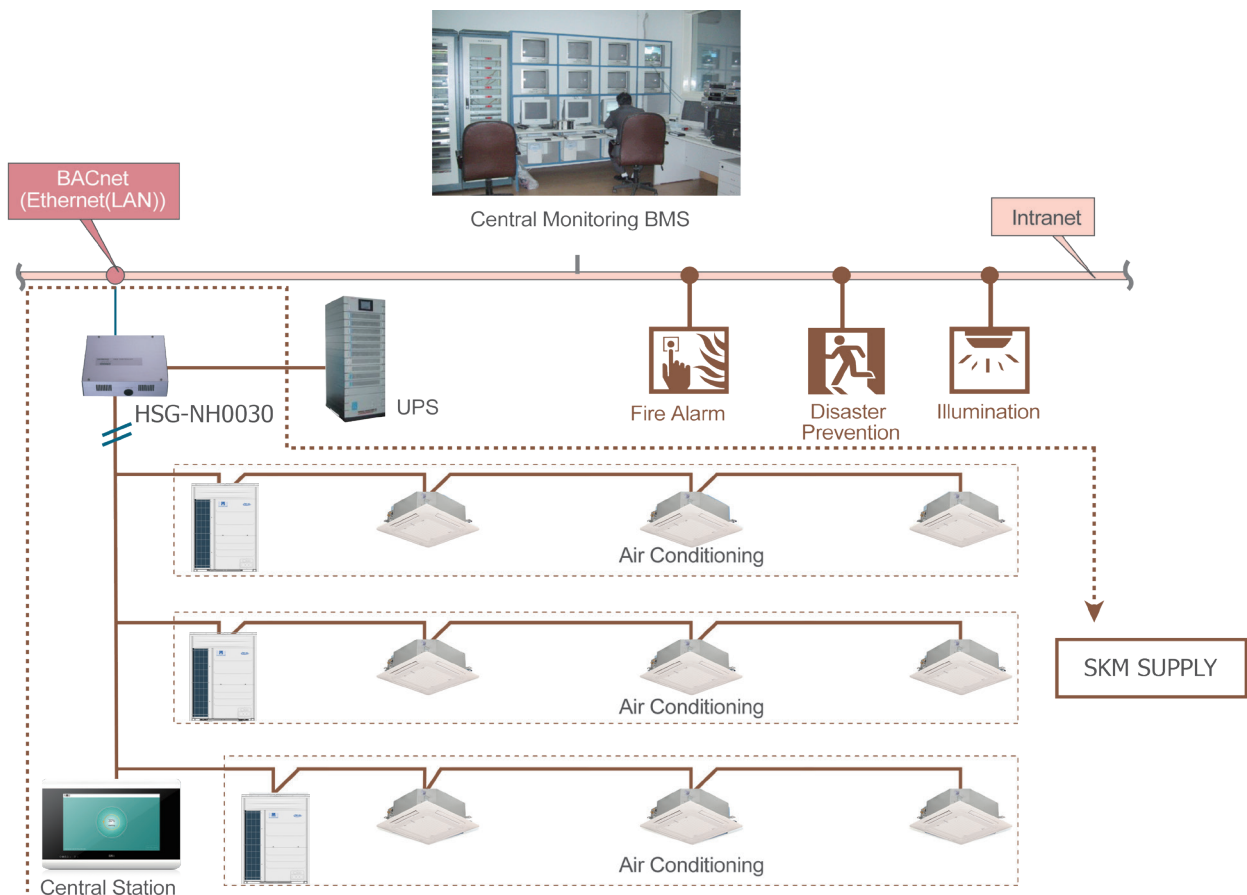


Building Management System

Compatible to multiple communication protocols of BACnet, MODBUS etc. Connectible to BMS or Smart Home System via HSG-NH0030 or HSG-IH0010 all of which can connect to Max. 64 indoor units.

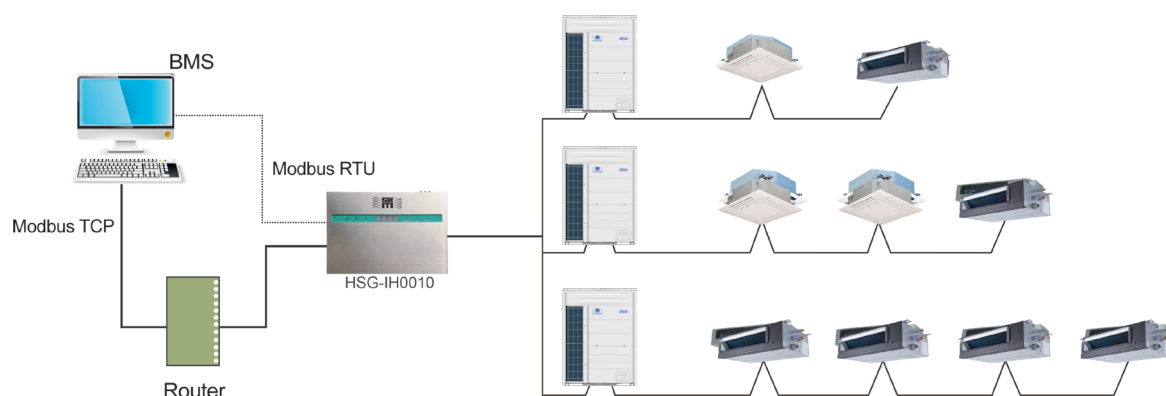
Real-time operation status monitoring on request.
Operation commands from monitoring center

HSG-NH0030 BACnet



- ◆ Running-state Monitoring / On-off Setting
- ◆ Airflow Setting and Monitoring
- ◆ Wireless Controller Permission/Prohibition
- ◆ Operating Mode Setting
- ◆ Alarm Monitoring and Code Display
- ◆ Indoor Temp. Monitoring
- ◆ Temperature Setting and Monitoring
- ◆ Communication Failure Display
- ◆ Filter Cleaning Prompting

HSG-IH0010 Modbus



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

Converter Specifications

Converter		HSG-NH0030	HSG-IH0010
Item			
BMS Connection		BACnet	Modbus
Power Supply		AC100~240V±10%(50Hz/60Hz)	AC100~240V±10%(50Hz/60Hz)
Connectable Central Controller		HSC-ID0010	HSC-ID0010, SKM, HSC-IE0010
Max. Number of Connectable indoor Units		64	64
Dimension (LxWxH)		240mm×204mm×70mm	220mm×140mm×50mm



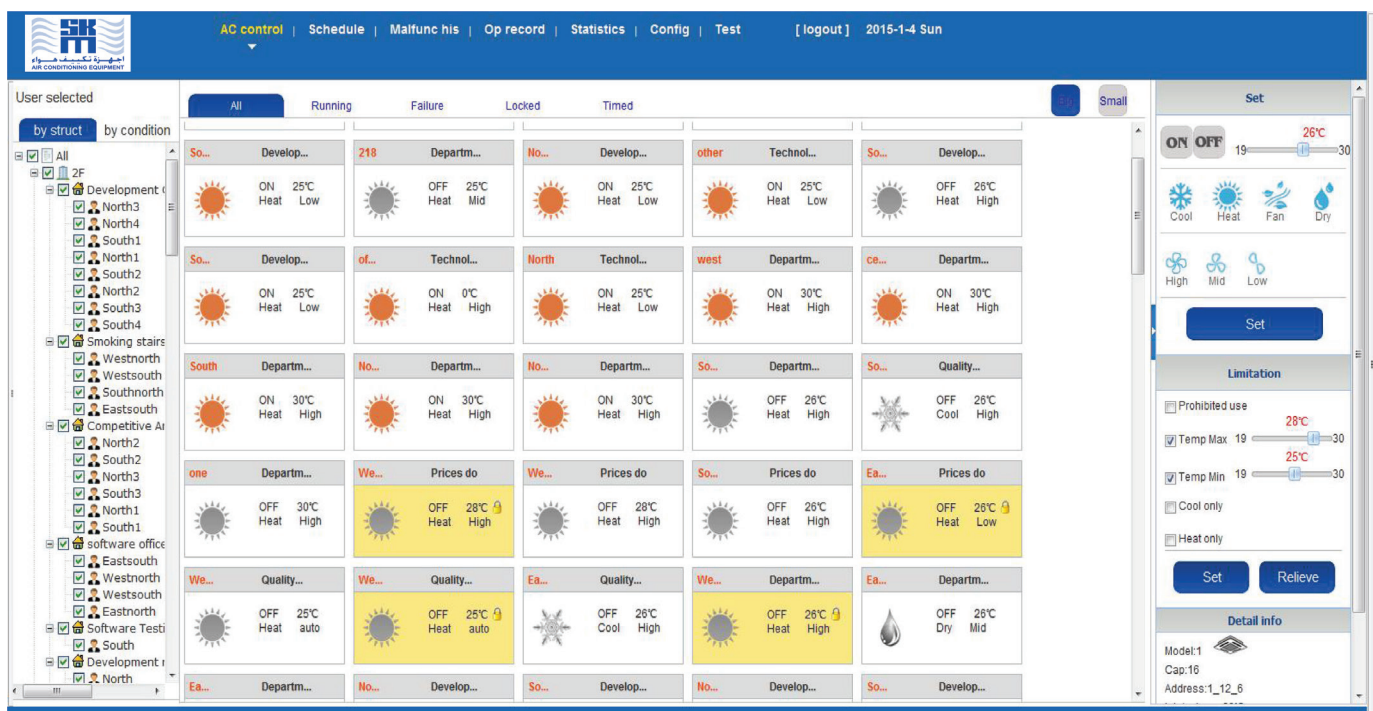
Building Management System with Billing System Feature

Centralized Control

SKM air conditioning management system adopts communication bus connection, air conditioning indoor units are connected to the computer through network converter; the system is controlled automatically by a computer with powerful functions. One single computer control system can manage 4,096 indoor units.

Main Functions

- ♦ Running-state Monitoring
- ♦ Determine the Temperature Limit
- ♦ Running Records Display
- ♦ Controller Prohibition Function
- ♦ Access Control
- ♦ Automatic Operation According to Settings
- ♦ Multifunction Alarm
- ♦ Service Monitoring



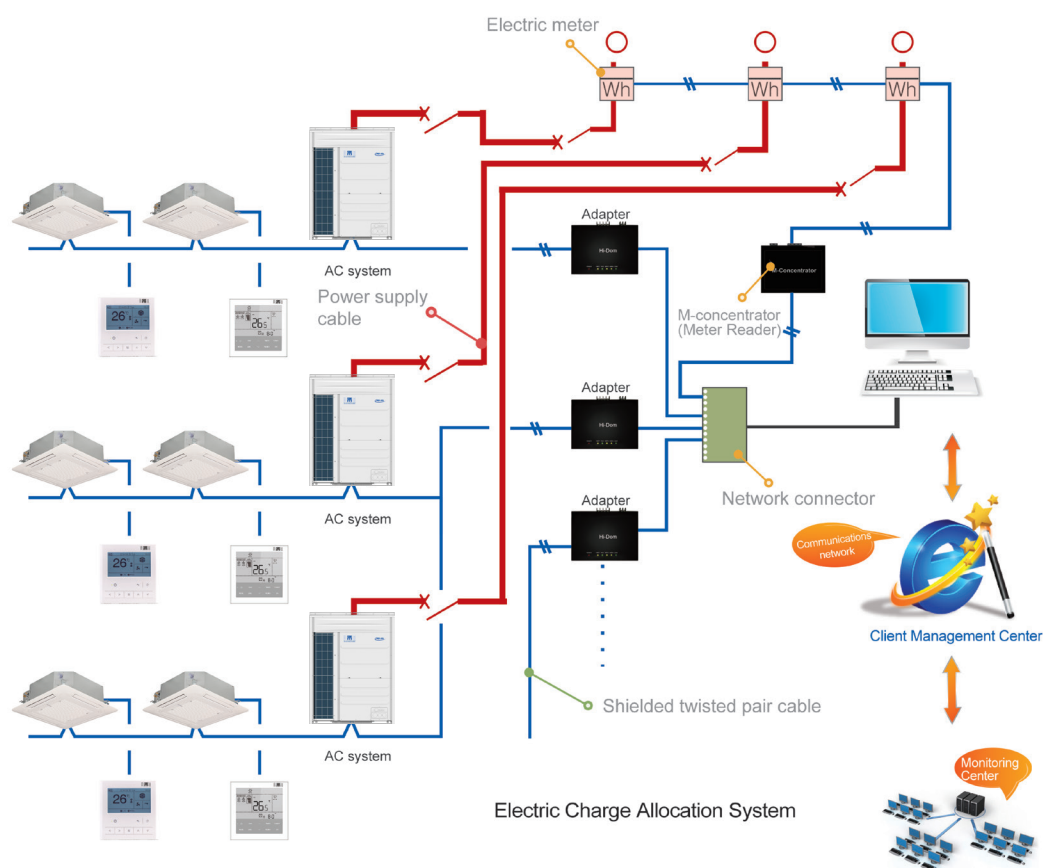
All the indoor units and outdoor units connected with one adapter comprise one communication BUS system.
 Max.128 indoor units can be connected to an adapter
 Max.32 adapters can be controlled by one computer.
 Max.4096 indoor units are under control.

Electric Charge Allocation

SKM air conditioning management 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 electric charge allocation software allocates the total power consumption to each indoor unit.

Note: Due to different laws and regulations in different regions, SKM electrical charge calculation software need to customize processing in project according to the users' requirement.

Note: Only support iEM3150 or iEm3350, which is supplied by Schneider Electric





SKM System Specifications

Adapter (SKM)	Model Name	Power Supply	Dimension(mm)	Charging Function
	HSG-IG0010	DC 12V	180×110×40	With charging function
	HSG-IG0020	DC 12V	180×110×40	Without charging function
	HSG-IG0030	DC 12V	180×110×40	—

Note: HSG-IG0030 is an essential equipment for HSG-IG0010 to charging.



Drain Pump - Optional

Model	Power supply	Consumption	MAX. Lift (mm)	Applicable models	HPS-132/HPS-162	HPS-151
HSP-IL0020	AC 220~240V(60Hz)	9±1.5 W	900	For Ceiling ducted type(0.8~2.5HP)		
HSP-IL0010	AC 220~240V(60Hz)	9±1.5 W	900	For Ceiling ducted type(3.0~6.0HP)		
HSP-IL0030	AC 220~240V(60Hz)	9±1.5 W	600	External type,for general purpose(0.8~10HP)		

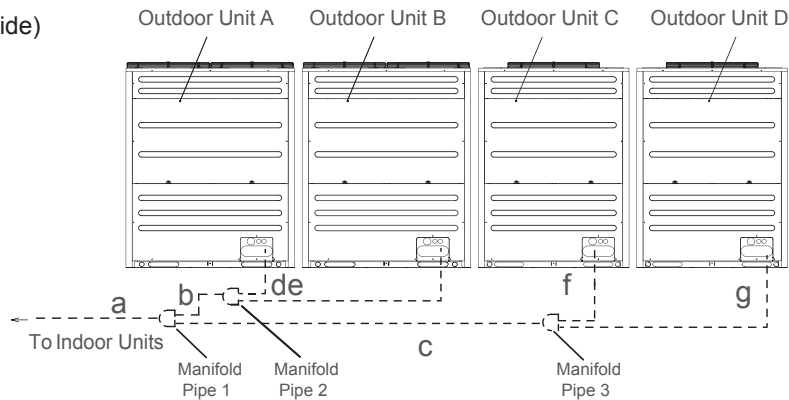
3D Air-Flow Panel

Panel Model	Applicable Models	Outer Dimensions (H×W×D)	Interface Dimension (H×W×D)
HSO-IK0010	0.8~1.5HP	180×950×70	750×130
HSO-IK0020	1.8~2.5HP	180×1220×70	1020×130

Piping Connection Kit

Manifold Pipe (For outdoor unit)

(Indoor Unit on Left Side)



For PRO-V6s Series Heat Pump System

Outdoor Unit	SK-HPH290-422DXSYR	SK-HPH444-544DXSYR	SK-HPH444-544DXSYR	SK-HPH654DXSYR	SK-HPH676-816DXSYR	SK-HPH824-886DXSYR	SK-HPH908-928DXSYR
Manifold Pipe1	HSB-OI0120	HSB-OI0130	HSB-OI0130	HSB-OI0140	HSB-OI0140	HSB-OI0140	HSB-OI0140
Manifold Pipe2	—	—	HSB-OI0120	HSB-OI0120	HSB-OI0130	HSB-OI0130	HSB-OI0130
Manifold Pipe3	—	—	—	—	—	HSB-OI0120	HSB-OI0130

Branch Pipe (For indoor unit)

First Branch Pipe

For PRO-V6s Series Heat Pump System

Outdoor Unit HP	8 to 10	12 to 16	18 to 24	26 to 44	46 to 66	68 to 96
Branch Pipe	HSB-II0010	HSB-II0020	HSB-II0030	HSB-II0040	HSB-II0050	HSB-II0060

First Branch Pipe~ Last Branch Pipe

For PRO-V6s Series 2-Pipe Heat Pump System

Total Indoor Unit HP	Lower than6	6 to 8.99	9 to 11.99	12 to 15.99	16 to 17.99	18 to 25.99	26 to 33.99	34 to 45.99	46 to 58.99	59 to 68.99	Over 69
Gas (Φmm)	15.88	19.05	22.2	25.4	28.6	28.6	31.75	38.1	41.3	44.5	50.8
Liquid (Φmm)	9.53	9.53	9.53	12.7	12.7	15.88	19.05	19.05	22.2	22.2	25.4
Branch Pipe	HSB-II0010	HSB-II0010	HSB-II0010	HSB-II0020	HSB-II0020	HSB-II0030	HSB-II0040	HSB-II0040	HSB-II0050	HSB-II0050	HSB-II0060

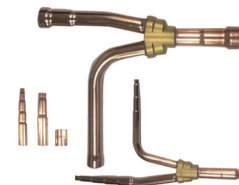
Last Branch Pipe~Indoor Unit

Indoor Unit	Pipe Size (Φmm)		Max. Liquid Pipe Length
	Gas Pipe	Liquid Pipe	
7kBtu/h~14kBtu/h	12.7	6.35	15
17kBtu/h~18kBtu/h	15.88	6.35*1	15
22kBtu/h~54kBtu/h	15.88	9.53	40
76kBtu/h	19.05	9.53	40
96kBtu/h	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 Φ6.35 into Φ9.53.



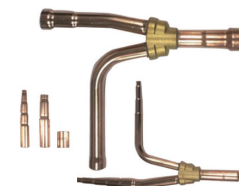
Manifold Pipe Parameter



Model G	as Line	Liquid Line	Reducer for Gas Line	Reducer for Liquid Line
HSB-OI0110				
HSB-OI0120				
HSB-OI0130				
HSB-OI0140				

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

Branch Pipe Parameter



Model	Gas Line	Liquid Line	Reducer for Gas Line	Reducer for Liquid Line
HSB-II0150				
HSB-II0010				
HSB-II0020				
HSB-II0030				
HSB-II0040				
HSB-II0050				
HSB-II0060				

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

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