## **Hisense VRF**

## Hisense

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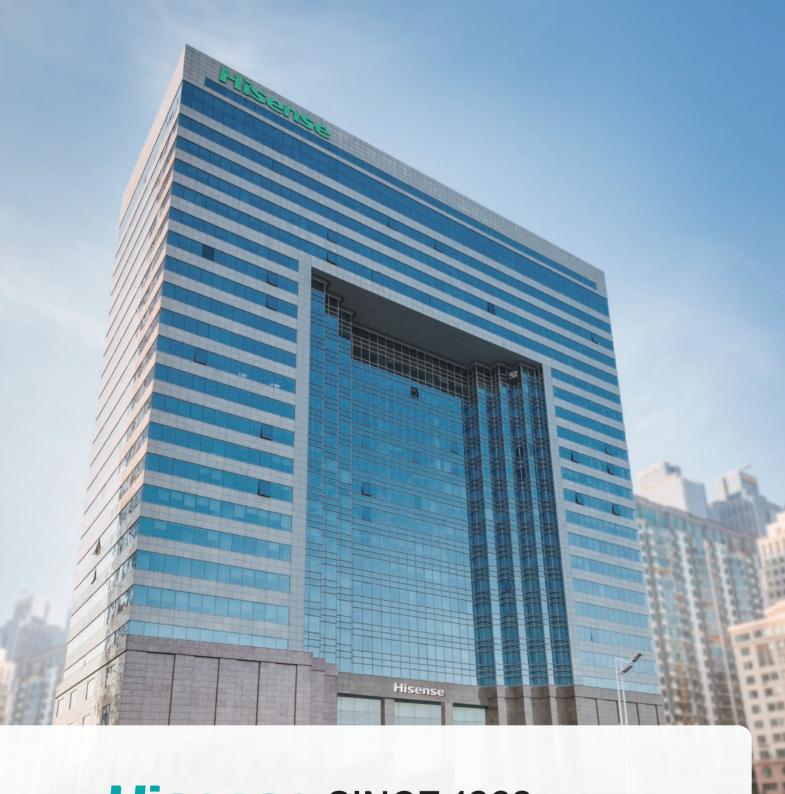


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Reimagine your solution



# **Hisense SINCE 1969**

Hisense is a well-known large-scale electronic information industrial group. With strong emphasis on technology and innovation, its efficient technological innovation system firmly grounds Hisense at the forefront of its peers. At present, Hisense brand family has expanded to include multiple famous brand Hisense, Toshiba, Gorenje and ASKO.

## BUSINESS LAYOUT

#### Multimedia •

TV and Display Devices Internet TV Operation Mobile Communication Devices Optical Communication Devices Chip

# Household • Appliances

Refrigerator Freezer Air-conditioner Washing Machine Kitchen Appliance

#### IT Smart Systems •----

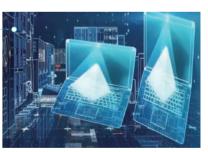
Smart City
Smart Community
Smart Transportation
Smart Business
Medical Electronic Devices
Smart Home System and Service

# Real Estate & • • • Modern Services

Real Estate
High-end Plaza Chains
Mould Design and Manufacturing
Finance
Trade









## **GLOBAL MARKETING**

Hisense has started a long-term sports marketing strategy to increase brand awareness worldwide. After the successful sponsorship of UEFA EURO 2016&2020 and FIFA WORLD CUP 2018, Hisense has made clear its focus on football. And now, Hisense becomes the official partner of FIFA WORLD CUP 2022.



## Hisense HVAC MANUFACTURING BASE

Qingdao Hisense HVAC Equipment Co. Ltd. is a leading manufacturer of heating, ventilation, air conditioning and other HVAC equipments, integrated with the product development, manufacturing, sales and after—sales service as a whole.

Hisense HVAC always regards product technology research and development as the most important value. With strong ability of technological innovation, Hisense HVAC has participated in the formulation and revision of 50 national standards, industry standards and association standards, and boasts 1045 authorized patents in the field of CAC and heat pump products. With the great support of all shareholders and customers, Hisense HVAC is expected to become the leading brand in the industry.

Note: The above data is as of Dec. 31th, 2021.



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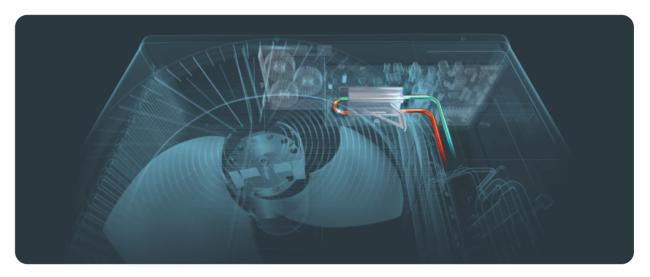






# Patented 360° Fitted Refrigerant Cooling Technology

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

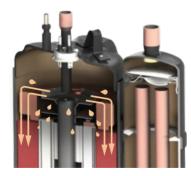


Note: 1.Compared with air-cooled technology, the temperature in electric box can be reduced about by 10%. 2. There is no refrigerant cooling kit inside the Hi-Smart L+ series(single phase unit).

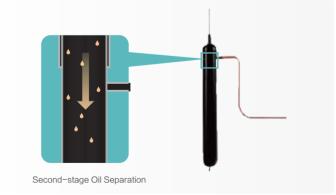


#### Multiple Oil Control

#### Oil separation



First-stage Oil Separation



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

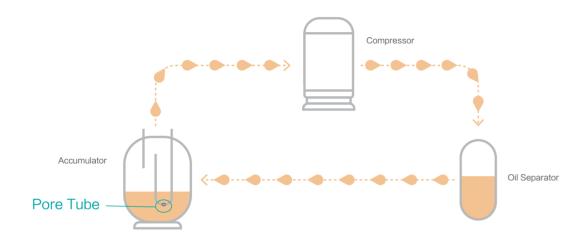
During the second-stage oil separation, the small amount of oil discharged from compressor is separated by a large-capacity, high-efficiency centrifugal oil separator, with efficiency over 99%.

#### Oil return

The accumulator adopts pore tube oil return technology with a built-in fine strainer, which not only ensures oil balance between compressors within one module, but also plays an important role in the oil balance between modules.

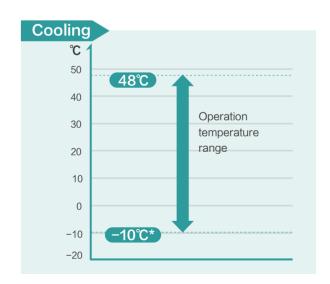
Besides this, the system implements oil-return function based on compressor frequency and corresponding operation time. The oil-return takes 60 seconds and can return to previous condition when it is finished.

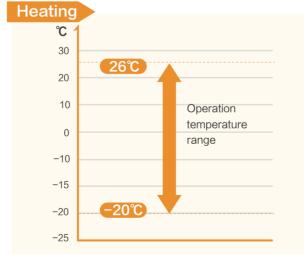
In winter under heating mode, this operation is implemented without switching to cooling mode, which guarantees the heating performance.



## **Wide Operating** Range

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





<sup>\*</sup> In cooling mode, the operation is under interval operation when the temperature is below -5°C.



# Enclosed Electrical Box

Thanks to the enclosed electrical box design of E+ series unit, the small insects can be prevented entering the electrical box, ensuring the normal operation of the system. Besides, the electrical box is located in the top part of the unit independently, easy for communicate and maintenance.



Insect

Protection







Convenient Maintenance

Note: Enclosed electrical box located in the top is adopted only in E+ series.

Located



#### Industrial **PCB**

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





#### Hisense PCB board:

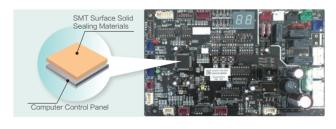
Epoxy resin composite substrate: double-sided printing, SMD welding, high strength, good weather resistance great flame retardancy, high reliability, compact structure,

#### Conventional PCB board:

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

#### **SMT Sealing Technology**

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.

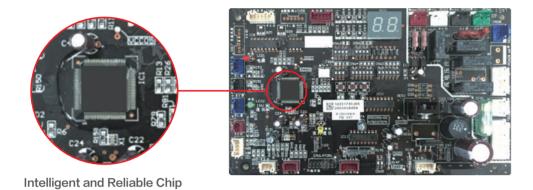






# Error Information Storage "Black Box"

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





## Hi-Black Fin (Standard)

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

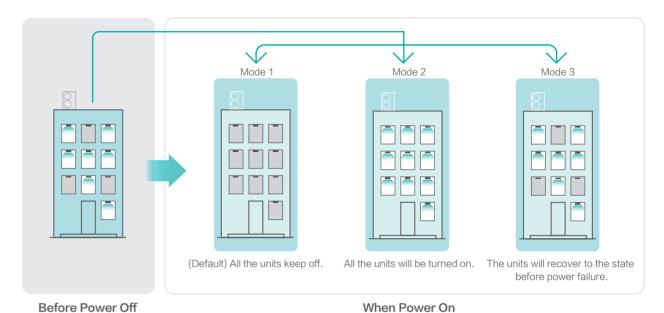


Note: For the anti-corrosive solution for the whole outdoor unit, please contact with our local engineers.



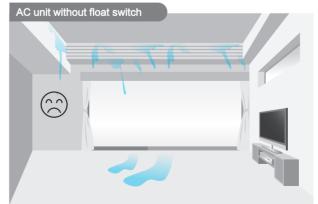
#### **Automatic** Restart

Hisense indoor units are capable to restart automatically to the previous state whenever the power supply is shut off suddenly and restores immediately. When there is long power shortage, the default setting is to keep all the indoor units off when the power restores. Also there are two other settings for users' choice, recovering to the state before power failure or restarting all the indoor units.



# **Condensate Water Leakage Protection**

Indoor units have built-in water-leakage float switches. Alarming warning will be displayed on the controller when condensate reaches a certain level. Save your ceiling and carpet from being soaked in time when drain pipe is clogged or drain pump breakdown.









## Multiple Protections

#### **Inverter Protection**

- O Inverter temperature protection
- Voltage protection

#### **Compressor Protection**

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

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#### **Electric Protection**

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

#### **System Protection**

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





# High-efficiency DC Inverter Compressor

A high–efficiency DC inverter dual rotary compressor is adopted. It features unique dual–pressure chamber design and symmetrical location, which can effectively reduce the vibration and noise and improve the compressor performance, especially the performance under low–frequency operation.

Moreover, the dual rotary compressor has a small lubricating oil injection volume with stable oil return, and comes with a gas-liquid separator, which makes the system more reliable.



#### 1 High-efficiency motor

Optimize the motor design to improve compressor performance.

#### 2 Optimized rotor design

Lower the center of gravity of the compressor to reduce the noise and vibration.

#### 3 Flat mechanism design

Improve the volumetric efficiency and the total performance.

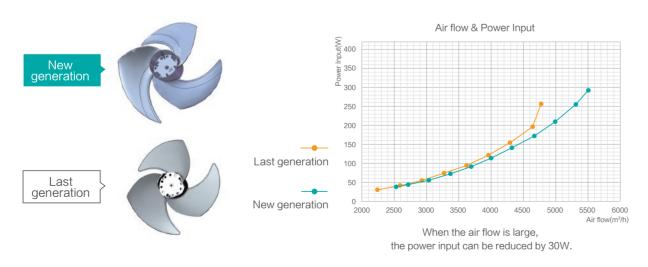
#### 4 Screw interactive fastening

Improve fastening effect and reduce deformation of the core.



## Brand-new High-efficiency Fan Motor

The outdoor unit adopts DC inverter fan motor to realize stepless speed regulation, ensuring stable and efficient operation. What's more, the new generation high-efficiency axial flow fan with curved and soft line blade enables stronger flow and lower noise.

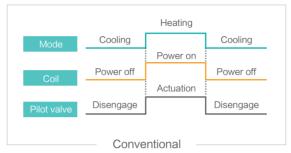


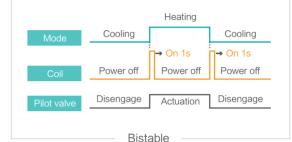


# Bistable Four-way Valve

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





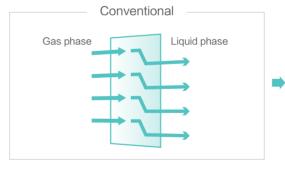


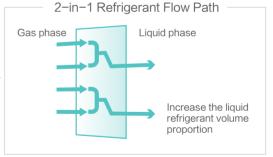


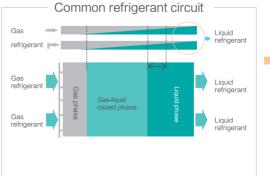
## High-efficiency Heat Exchanger

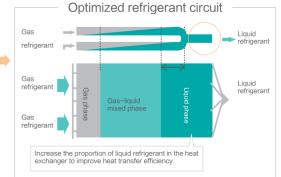
#### **Optimized Refrigerant Circuit**

Using high precision imported equipment, our Hisense manufactured heat exchangers are of the highest quality. The non-expansion tube technology avoids reduced lifetime reliability caused by the stretching of copper pipes. The multi-column  $\Phi$ 7 refrigerant tubes effectively increase the heat exchange area and improve the heat exchanging efficiency.





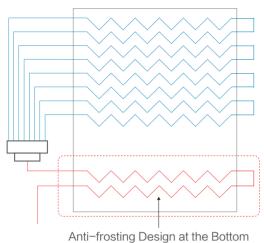


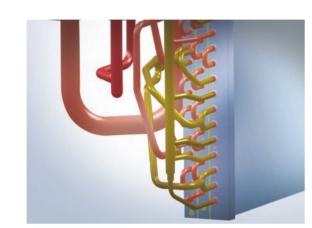




## **New Anti-frosting** Design at the Bottom

Advanced design of anti-frosting structure at the bottom of heat exchanger ensures the bottom of heat exchanger frost-free while heating operation. Also, under defrosting mode, the ice water mixture left on the fins can be fully heated to liquid, and can be discharged through the drain holes at the bottom, avoiding poor heating performance caused by frost accumulated on the coil.







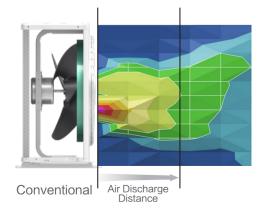
#### **Further Air Discharge Distance**

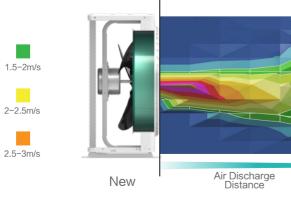
#### **Optimized Air Duct System Design**

An additional air duct like channel surrounding the fan is designed to further discharge the air and avoid discharge air from being absorbed again. Besides, together with the 30Pa external static pressure, air is tested to discharge up to 24% further compared with the conventional one.



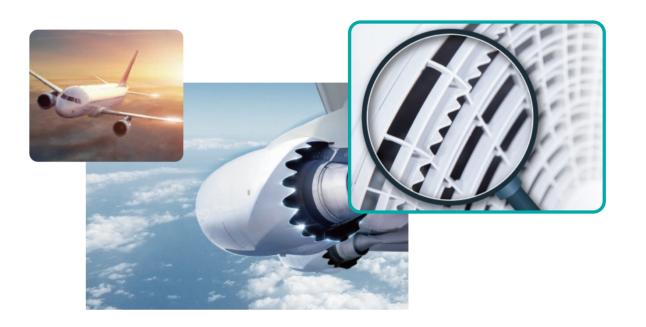






#### **Aviation Level Design of Grill**

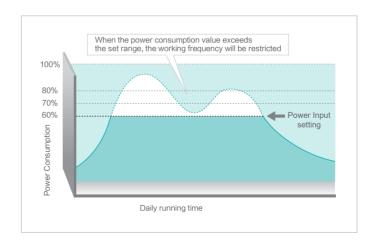
The design of the grill follows the design concept of the aircraft engine design, which conforms to the aerodynamics principle. It helps to improve the air discharge distance and heat exchange effect, maximizing the cooling and heating performance.

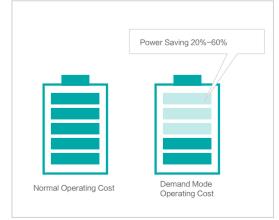




#### **Demand** Mode

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









## **AirPure**

Hisense VRF indoor unit equipped with AirPure kit can release lots of negative ions, about 20 million pcs/cc.

These negative ions are carried throughout the room with air-conditioned air flow whereby obtaining air conditioning and air purification simultaneously. With the AirPure kit, the indoor unit has got the Tick Mark certification for air-conditioning sterilization products.



\*Take AVE-09HCFRL as the test sample.



4-way Cassette, Mini 4-way Cassette, Console, Ceiling Ducted can be equipped with the AirPure kit (optional).

# Self-cleaning Function

Featured with self-cleaning technology, the evaporator can be self-cleaned automatically, preventing the dust and potentially harmful substances from accumulating on the surface of the heat exchanger. Thus the air blown from the air conditioner is clean and healthy.

At present, the self-cleaning function is available in the wall mounted unit.

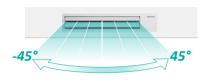


4 processes for deep cleaning

# 3D Air-flow

The 3D air-flow panel with luxurious appearance is available for the low-height ceiling ducted indoor units. The 3D airflow panel can offer even airflow and wide airflow coverage to keep every corners of your room cool or warm. It also has three wind setting, normal mode, 3D mode and super long distance mode, flexible for you choice.







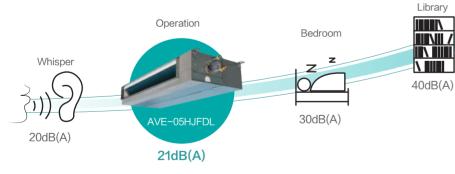


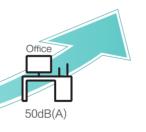


#### **Indoor Unit Quiet Operation**

#### **Noise Control of Indoor Unit**

Hisense VRF offers indoor units with sound pressure level as low as 21dB(A). Perfectly blends into library, auditorium and hospital room where require sound level lower than 25dB(A).





Note: The value is measured at low-speed operation in an anechoic chamber.

#### **Convenient Eliminate Four Kinds of Noise**



Eliminate the whistling noise of the EEV



Eliminate refrigerant flow noise



Dispel the wind blowing against fins noise

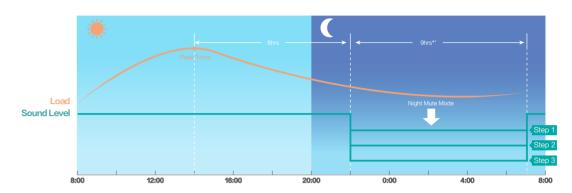


Eliminate abnormal electromagnetic noise of fan motor

#### **Outdoor Unit** Noise Control

#### **Auto Night Quiet Mode**

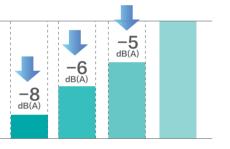
In gerneal, people are more sensitive to noise at night. Night quiet mode can be activated when necessary, and the noise can be reduced by up to 8dB(A).



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

#### Low Noise Mode

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



#### Precise **Temperature Control**

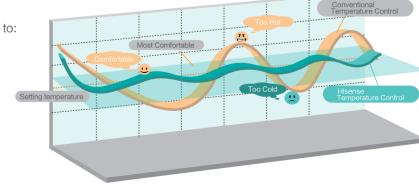
Multiple thermal probes in indoor unit to provide precise real-time temperature feedback.



2000-step electronic expansion valve to ensure precise flow adjustment based on the actual load of Indoor Unit. 2000-step Electronic Expansion Valve

Precise indoor temperature according to:

- 1. Air return temperature sensor
- 2. Temperature sensor on wired remote controller
- 3. Based on the average value (Suitable for irregularly shaped room)





# Humidity Sensor (Optional)

To keep up with the indoor quality requirements, Hisense VRF offers auto dehumidification function and it can be achieved by choosing a humidity sensor, and the control range is from 35% to 90%.









#### Fresh Air Intake

Hisense VRF indoor units are infused with a fresh air duct opening for 10% free fresh air introductory directly from outdoor air, reducing the need of fresh air systems for medium to small spaces. These indoor units include 4-way cassette, mini 4-way cassette, 2-way cassette, 1-way cassette, AC/DC low height ceiling ducted, low/high static pressure ceiling ducted and console.

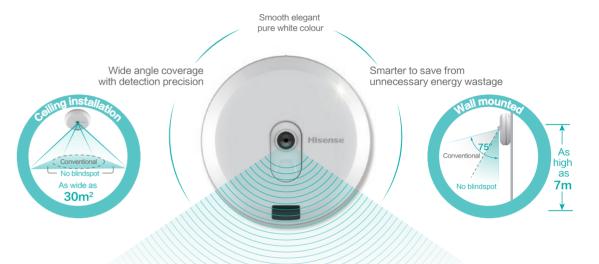




## Hi-Motion (Optional)

Hi-Motion works as an independent human sensor and can be installed separately from indoor unit. It can detect the human activities indoors to provide comfort and energy savings.

- 1) Automatically stops the unit when no one is in the room in order to realize energy saving.
- 2) Adjusting the setting temperature and air flow according to the actual human activity.

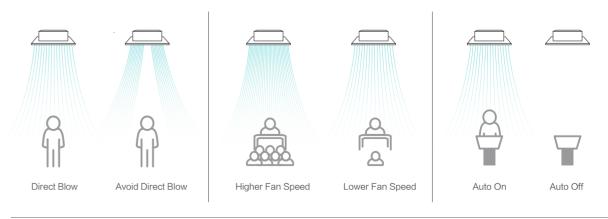




## **Motion Sensor** (Optional)

Motion Sensor, assembled in the panel of 4-Way Cassette and Mini 4-Way Cassette, can provide a more comfortable environment, and achieve efficient and energy-saving operation of the unit at the same time.

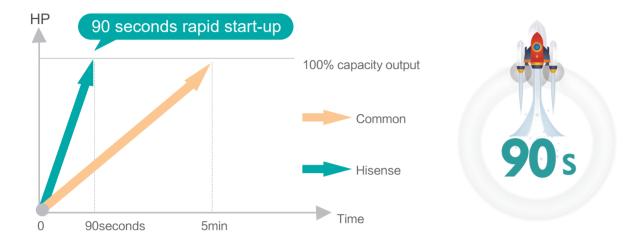
- 1) With the sensor, indoor unit can ON or OFF automatically when people enter or leave the room.
- 2) The people location can be detected by the sensor automatically, and the air flow direction can be set to blow directly or to avoid blowing at people as they like.
- 3) The setting temperature can be changed automatically by detecting the number of people changing.



# **90**s

# Rapid Cooling&Heating Start-up

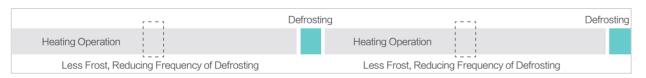
Combing the soft start of DC inverter compressor and rapid start of fixed speed compressor, the system can achieve 100% capacity output instantly to meet the air conditioning demand.



# Intelligent Defrost

Hisense VRF owns its exclusive intelligent defrost technology, which adopts 3 sensors to compresively monitor the system state and determine the prefect time to defrost. It will reduce the frequency of defrosting and give more comfortable enivornment for customers.

#### **Hisense's Optimal Defrosting Mode**



#### **Convenient Defrosting Mode**



Convenient defrost mode only refers to time, ambient temperature and temperature detected on the heat exchanger, while Hisense adopts pressure defrost mode together with all above factors.



# Compact Size and Light Weight

The body of outdoor unit is more compact, which offers an increased degree of freedom of installation. Also thanks to its smaller body frame, a lot of unnecessary weight is removed, making transportation and installation more convenient.

What's more, the exterior screws are designed in counterbore holes. The screw heads are on the same flat as the exterior sheet metal, which is more beautiful and fashionable.



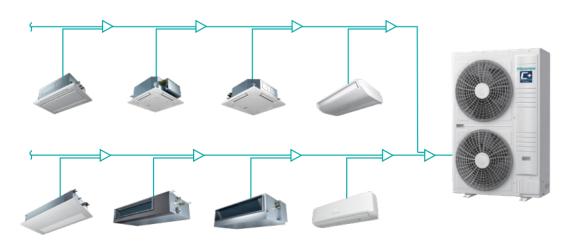
\*Take the AVW-54HJFHH1 as an example, compared with the last generation product with the same capacity.



# Large Number of Connectable IDUs

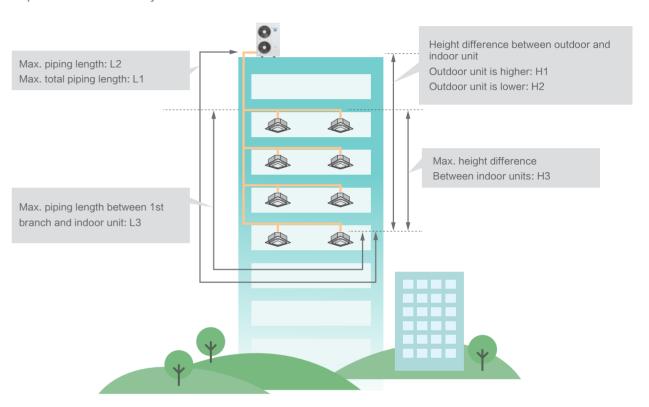
Various kinds of indoor units can be chosen to cater to interior decoration. Moreover max. 19 indoor units can be connected to one outdoor unit, achieving more flexible design and reducing project cost.

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





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

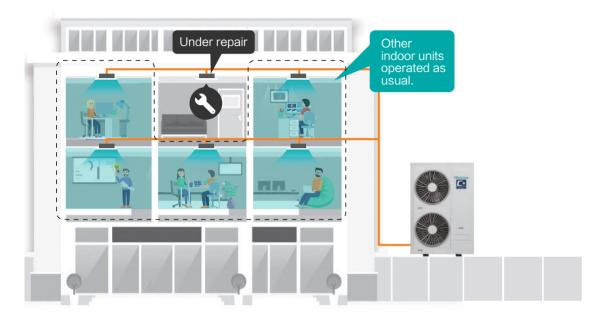


Seri	es	Hi-Smart E+	Hi-Smart L+	Hi-Smart C+
Pictu	ıre			
Total piping	g length L1	135m	150m	300m
Max. piping	g length L2	70m	100m	150m
Max.length betwe pipe to the farther	en the first branch est indoor unit L3	40m	40m	40m
Height difference between ODU	ODU is higher H1	40m	50m	
and IDU	IDU is higher H2	30m	40m	40m
Height difference	between IDUs H3	15m	15m	15m



# **Independent Maintenance** of Indoor Units

To remain the whole system operating continuously even if an indoor unit goes breakdown, the system is capable to isolate the malfunction indoor unit from the others while conducting restoration and maintaining continuous operation of other units simultaneously.





## Dry Contact Interface

External input & output ports are reserved in indoor units and outdoor units for a wider choice of applications to control the air conditioning system. The key-card control, window contact control and any other third-party sensors or devices control can be available through setting in the indoor units or outdoor units.

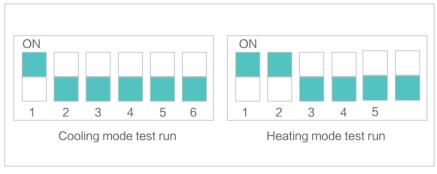




#### One-touch Test Run

Test run is one of the essential part in testing and commissioning to make sure the air—conditioning system works steadily and safely before handing over or soft opening. To make test run as simple as possible, it's possible to conduct test runs with just a button in the wired controllers indoors or in the PCB of outdoor units.







Test run through the wired controller

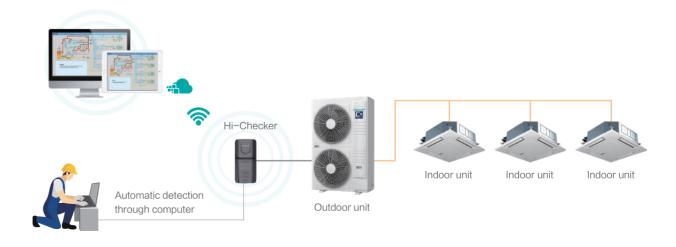


Test run through the ODU PCB



## Hi-Checker

Hi-Checker is an intelligent service tool for system diagnosis, which can enable easy access to service parameters. Detailed operation data and recent error history can be checked and analyzed by using Hi-Checker. Moreover, remote monitoring and diagnosis is available thanks to the cloud-based technology.



## Fast Start No Need Preheating for ODU

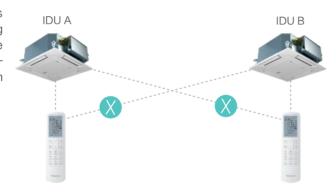
When the ambient temperature is above -10°C, the system can start without preheating, achieving quick cool and heat.





## No Adjacent Interference

The control signal from one wireless controller is easy to interfere the adjacent indoor units, causing wrong directives. Hisense VRF has optimized the control logic and been featured with identifying function of indoor units, ensuring correct control of each indoor unit.

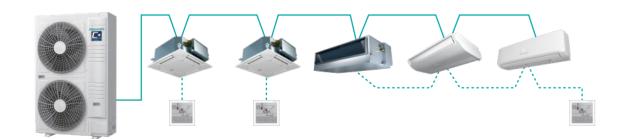




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# H-Net Communication without Polarity

Hisense VRF adopts no polarity twisted pair lines to avoid incorrect connections. In addition, saving time for installation.







## **Outdoor Unit Specifications**



	Capacity (HP)		4.0	6.0				
	Model		AVW-41HJFHH1	AVW-48HJFHH1	AVW-54HJFHH1			
	Power Supply			AC 1Ф, 220-240V/50/60Hz				
	Conceity	kW	12.1	14.0	15.5			
	Capacity	Btu/h	41500	48000	53000			
Cooling	Power Input	kW	2.80	3.45	4.21			
	EER	W/W	4.32	4.05	3.68			
	SEER	_	8.10	7.70	7.00			
	Capacity	kW	14.0	16.0	18.0			
	Oupdoity	Btu/h	48000	54500	61500			
Heating	Power Input	kW	3.18	4.00	4.50			
	COP	W/W	4.40	4.00	4.00			
	SCOP	_	4.75	4.60	4.45			
Ventilation	Air Flow Rate	m³/min	71	71	71			
Sound Pressure Level	Cooling/Heating	dB(A)	53/54	54/55	54/55			
Weight	Net	kg	88	89	90			
Weight	Gross	kg	103	104	105			
	Height	mm	990	990	990			
Outer Dimensions	Width	mm	950	950	950			
	Depth	mm	320	320	320			
	Height	mm	1126	1126	1126			
Packing Dimensions	Width	mm	1070	1070	1070			
	Depth	mm	470	470	470			
(	Cabinet Color	_		Grayish White				
	Gas	mm	Φ15.88	Φ15.88	Ф15.88			
Ref. Piping	Gas	in.	5/8	5/8	5/8			
rtor. r iping	Limital	mm	Φ9.53	Φ9.53	Φ9.53			
	Liquid	in.	3/8	3/8	3/8			
Refrigerant	Туре	_		R410A				
Reingerani	Before Shipment	kg	4.0	4.0	4.0			
Connectable Indoor Units	Max. Qty.	рс	8	9	10			
CONTROCADIO INGCO CINIC	Connection Ratio	%	50-150	50-150	50-150			
	Max. Piping Length	m	70	70	70			
	Total Piping Length	m	135	135	135			
Piping Design	Height Difference Between	m	40	40	40			
	ODU and IDU	m	30	30	30			
	Height Difference Between IDUs	m	15	15	15			
Operation Range	Cooling	DB(℃)		(-10*) -5~48				
Operation Range Heating		DB/WB(℃)	-20/-20.5 ~ 26/15.5					

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

Cooling Operation Conditions: indoor air inlet temperature: 27°C DB 19°C WB, outdoor air inlet temperature: 35°C DB, pipe length: 7.5m, pipe lift: 0m Heating Operation Conditions: indoor air inlet temperature: 20°C DB, outdoor air inlet temperature: 7°C DB 6°C WB, pipe length: 7.5m, pipe lift: 0m

2. The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be taken into consideration at the scene. Measurement point: 1m from the service cover surface and 1.5m from floor level.

3.  $^{\star 1}$  When the temperature is between  $-10^{\circ}$ C and  $-5^{\circ}$ C, the cooling operation is under interval operation.



#### **Outdoor Unit Specifications**



	Capacity (HP)		4.0	5.0	6.0	4.0	5.0	6.0			
	Model		AVW-41HJFHH2	AVW-48HJFHH2	AVW-54HJFHH2	AVW-41HKFHH2	AVW-48HKFHH2	AVW-54HKFHH2			
	Power Supply		AC	1Φ, 220-240V/50/60	)Hz	AC	ЭФ, 380-415V/50/6	0Hz			
		kW	12.1	14.0	15.5	12.1	14.0	15.5			
	Capacity	Btu/h	41500	48000	53000	41500	48000	53000			
Cooling	Power Input	kW	2.79	3.43	4.18	2.79	3.43	4.18			
	EER	W/W	4.33	4.08	3.71	4.33	4.08	3.71			
	SEER	_	8.20	8.10	8.00	8.20	8.10	8.00			
	Capacity	kW	14.0	16.0	18.0	14.0	16.0	18.0			
	Оараску	Btu/h	48000	54500	61500	48000	54500	61500			
Heating	Power Input	kW	3.08	3.71	4.47	3.08	3.71	4.47			
	COP	W/W	4.55	4.31	4.03	4.55	4.31	4.03			
	SCOP	_	4.85	4.70	4.55	4.85	4.70	4.55			
Ventilation	Air Flow Rate	m³/min	90	90	100	120	120	127			
Sound Pressure Level	Cooling/Heating	dB(A)	52/55	52/55	53/56	52/55	52/55	53/56			
Weight	Net	kg	106	107	108	112	113	114			
Wolgitt	Gross	kg	118	119	120	123	124	125			
	Height	mm	1380	1380	1380	1380	1380	1380			
Outer Dimensions	Width	mm	950	950	950	950	950	950			
Outer Dimensions	Depth	mm	370	370	370	370	370	370			
	Height	mm	1531	1531	1531	1531	1531	1531			
Packing Dimensions	Width	mm	1070	1070	1070	1070	1070	1070			
	Depth	mm	515	515	515	515	515	515			
(	Cabinet Color	_			Grayis	sh White					
	Gas	mm	Ф15.88	Φ15.88	Ф 15.88	Ф 15.88	Ф 15.88	Ф 15.88			
Ref. Piping	Gas	in.	5/8	5/8	5/8	5/8	5/8	5/8			
ixer. Fibility	11-24	mm	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53			
	Liquid	in.	3/8	3/8	3/8	3/8	3/8	3/8			
Refrigerant	Туре	_			R41	0A					
Reingerani	Before Shipment	kg	3.8	3.8	4.1	3.8	3.8	4.1			
Connectable Indoor Units	Max. Qty.	pc	9	11	12	9	11	12			
CONTROCADIO INCOO CINIO	Connection Ratio	%	50-150	50-150	50-150	50-150	50-150	50-150			
	Max. Piping Length	m	100	100	100	100	100	100			
	Total Piping Length	m	150	150	150	150	150	150			
Piping Design	Height Difference Between	m	50	50	50	50	50	50			
	ODU and IDU	m	40	40	40	40	40	40			
	Height Difference Between IDUs	m	15	15	15	15	15	15			
Operation Range	Cooling	DB(°C)	C) (-10*) -5~48								
Operation Name	Heating	DB/WB(°C)			-20/-20.	5 ~ 26/15.5					

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

Cooling Operation Conditions: indoor air inlet temperature: 27°C DB 19°C WB, outdoor air inlet temperature: 35°C DB, pipe length: 7.5m, pipe lift: 0m

Heating Operation Conditions: indoor air inlet temperature: 20°C DB, outdoor air inlet temperature: 7°C DB 6°C WB, pipe length: 7.5m, pipe lift: 0m

2. The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be taken into consideration at the scene. Measurement point: 1m from the service cover surface and 1.5m from floor level.

3.  $^{\star 1}$  When the temperature is between  $-10\,^{\circ}$ C and  $-5\,^{\circ}$ C, the cooling operation is under interval operation.



#### **Outdoor Unit Specifications**



	Capacity (HP)		8.0	12.0	
	Model		AVW-76HKFHH2	AVW-96HKFHH2	AVW-114HKFHH2
	Power Supply			AC 3Ф, 380-415V/50/60Hz	
	0	kW	22.4	28.0	33.5
	Capacity	Btu/h	76400	95500	114300
Cooling	Power Input	kW	6.22	8.12	13.40
	EER	W/W	3.60	3.45	2.50
	SEER	_	7.00	7.80	7.55
	Capacity	kW	25.0	31.5	37.5
	Odpacity	Btu/h	85300	107500	128000
Heating	Power Input	kW	5.81	7.59	10.08
	COP	W/W	4.30	4.15	3.72
	SCOP	_	4.50	4.50	4.30
Ventilation	Air Flow Rate	m³/min	150	163	163
Sound Pressure Level	Cooling/Heating	dB(A)	55/58	56/59	56/59
Weight	Net	kg	145	157	158
vveignt	Gross	kg	161	174	175
	Height	mm	1650	1650	1650
Outer Dimensions	Width	mm	1100	1100	1100
	Depth	mm	390	390	390
	Height	mm	1806	1806	1806
Packing Dimensions	Width	mm	1185	1185	1185
	Depth	mm	530	530	530
Ci	abinet Color	_		Grayish White	
	Gas	mm	Ф22.2	Φ25.4	Φ25.4
Ref. Piping –	Gas	in.	7/8	1/1	1/1
Rei. Fipilig		mm	Φ12.7	Ф12.7	Φ12.7
	Liquid	in.	1/2	1/2	1/2
Defilement	Туре	_		R410A	
Refrigerant	Before Shipment	kg	5.5	6.5	6.5
Connectable Indoor Units	Max. Qty.	рс	15	18	19
Corniectable indoor offits –	Connection Ratio	%	50-150	50-150	50-150
	Max. Piping Length	m	150	150	150
	Total Piping Length	m	300	300	300
Piping Design	Height Difference Between	m	50	50	50
	ODU and IDU	m	40	40	40
	Height Difference Between IDUs	m	15	15	15
Operation Range	Cooling	DB(℃)		(-10*) -5 ~ 48	
Operation Range –	Heating	DB/WB(℃)		-20/-20.5 ~ 26/15.5	

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

Cooling Operation Conditions: indoor air inlet temperature: 27°C DB 19°C WB, outdoor air inlet temperature: 35°C DB, pipe length: 7.5m, pipe lift: 0m

Heating Operation Conditions: indoor air inlet temperature: 20°C DB, outdoor air inlet temperature: 7°C DB 6°C WB, pipe length: 7.5m, pipe lift: 0m

2. The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be taken into consideration at the scene. Measurement point: 1m from the service cover surface and 1.5m from floor level.

3. \*1 When the temperature is between -10°C and -5°C, the cooling operation is under interval operation.



## **Indoor Unit Range**

# kBtu/h 4-Way Cassette Type Mini 4-Way Cassette Type 1-Way Cassette Type 2-Way Cassette Type Console Type Ceiling Ducted Type (AC Low-height) Ceiling Ducted Type (DC Low-height) Ceiling Ducted Type (High Static Pressure) Ceiling Ducted Type (Low Static Pressure) Ceiling Ducted Type (DC High Static Pressure) Wall Mounted Type Ceiling & Floor Type Floor Concealed Type

## **Functions & Accessories**



#### 1200mm condensate pump

Drain Pumps help to discharge condensate water from the indoor unit smoothly.

#### Self-Diagnosis

The self-diagnosis function in indoor units smartly determines and analyses problems occurred providing with troubleshooting hints. It is displayable and could be tracked on controller, outdoor and indoor



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nstallation

#### Compact size

Compact size on indoor units offer greater installation flexibility especially in restricted space.



Clean effortlessly by dragging cloths across smooth flat surfaces on indoor units and prevents heavy dust accumulation.



#### Large capacity range

Indoor unit series with large capacity range offer more capacity options to closely satisfy various



#### Auto restart

Indoor units with Auto Restart Function .automatically restarts in default mode or restoring to the previous mode after any involuntary power cut off.



#### Low temperature cooling

Setting temperature of indoor units is widen with selectable temperature to as low as 16°C.



#### Wireless receiver

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



#### Humidity sensor (optional)

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



#### Hi-Motion (optional)

Hi-Motion is an human presence sensor optional accessory which enables auto airflow direction. auto ON/OFF, auto fan and setting based on human presence.



#### **Cold wind limit setting**

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



#### Remote control

Control indoor units remotely using the blind spotless LCD display wireless controller.



#### Silent operation

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



#### Adjustable louver's position

Louver's position of indoor units can be adjusted and fixed in different levels and angles.



#### 3D Air-flow Panel

Selectable wind settings from normal, 3D and super long distance mode are available thanks to the 3D air-flow panel.



#### Six levels of fan speed

Six levels of fan speed are available.



#### Auto fan speed

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



#### Fresh air introduction

Indoor units that are compatible to introduce fresh air into rooms with either an optional adapter or direct connection to the air return segment of the unit.



# Standard

#### Standard filter included

Washable long life synthetic fibre return air filters are included with the unit.



#### AirPure (optional)

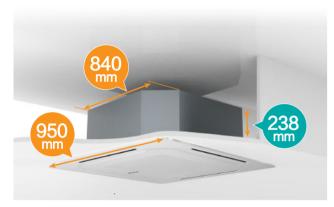
Achieving air purification by equipping with AirPure kit.



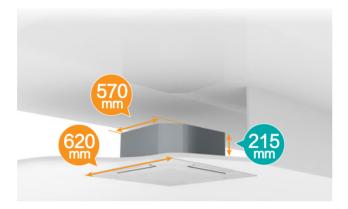
## 4-Way Cassette Type Mini 4-Way Cassette Type

#### **Compact and Classy Design**

The 4-way cassette is now as slim as 238mm and 215mm for mini 4-way cassettes, fit for narrow ceiling spaces. Boring straight return air grille patterns are replaced with exquisite hexagon pattern design, upgrading taste and classiness of any interior aesthetic.



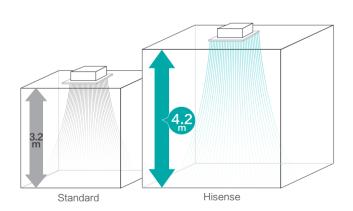
4-Way Cassette Type



Mini 4-way Cassette Type

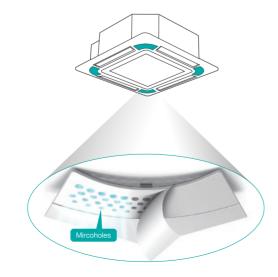
#### **Higher Installation**

Air from the cassette still manages to flow down from ceiling heights as high as 4.2m. Not to mention human presence and density detection by motion sensor at such height.



#### **Breeze Mode**

Under the new designed breeze mode, the cold air is blown out from the microholes in the panel, and the unit is working in a mute mode, which can avoid blowing air directly on people and achieve more even and comfortable airflow.

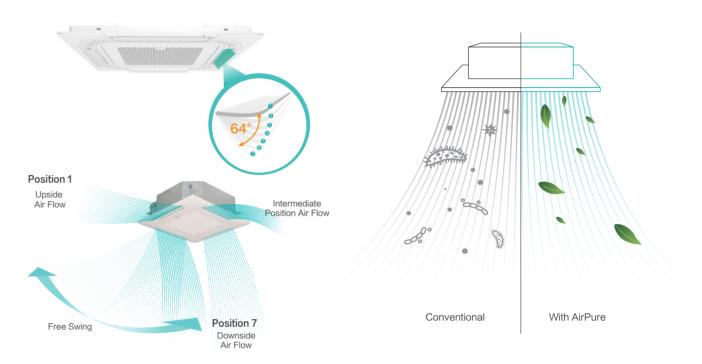


#### **Individual Louvers Control**

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

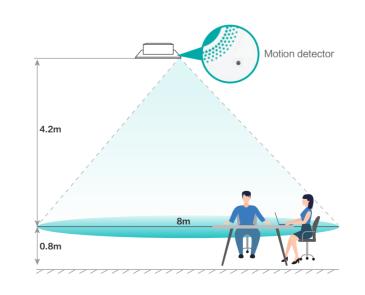
#### **AirPure**

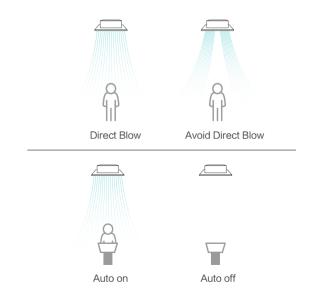
AirPure is a healthy alternative accessory to the normal conventional cassette unit to improve overall air quality. Airpure helps in improving skin condition, effective deodorizer and deactivating bacterias, virus and allergens floating in the air.



#### **Motion Sensor**

The sensor senses the presence of people to automatically turn the cassette unit on or off and whether to direct airflow towards or avoiding humans depend settings set on the controller. During crowded times, the setting temperature is automatically lowered down and vise versa. Meeting comfort and using energy only when necessary.





#### 4-Way Cassette Type





















	Model			AVBC-12 HJFKA	AVBC-15 HJFKA	AVBC-19 HJFKA	AVBC-22 HJFKA	AVBC-24 HJFKA	AVBC-27 HJFKA	AVBC-30 HJFKA	AVBC-38 HJFKA	AVBC-48 HJFKA	AVBC-54 HJFKA
	Power Supply				'	•	AC 1Φ,	220~240V/50	Hz/60Hz		•	•	
		kW	2.8	3.6	4.5	5.6	6.3	7.1	8.0	9.0	11.2	14.0	16.0
Canaait	Cooling	Btu/h	9,600	12,300	15,400	19,100	21,500	24,200	27,300	30,700	38,200	47,800	54,600
Capacity		kW	3.2	4.0	5.0	6.3	7.1	8.0	9.0	10.0	12.5	16.0	18.0
	Heating	Btu/h	10,900	13,700	17,100	21,500	24,200	27,300	30,700	34,100	42,700	54,600	61,400
Dower Input	Cooling	W	14	24	24	34	54	64	54	54	124	124	124
Power Input	Heating	W	14	24	24	34	54	64	54	54	124	124	124
0		JD(A)	30/28/28/	32/29/29/	33/31/29/	34/31/30/	36/33/32/	36/33/32/	37/36/35/	37/36/35/	42/40/38/	46/44/40/	46/44/41/
500	ind Pressure	dB(A)	27/26/26	28/27/26	29/27/26	28/28/26	31/29/28	31/29/28	33/31/30	33/31/30	36/34/33	38/36/34	40/38/36
			15.0/13.4/	17.0/14.0/	21.0/16.0/	22.0/17.5/	26.0/20.0/	27.0/21.0/	27.0/22.0/	27.0/23.0/	37.0/30.0/	37.0/33.5/	37.0/34.0/
Air	flow Rate	m³/min	12.0/10.8/	12.8/11.8/	14.9/13.6/	15.9/15.5/	18.3/17.0/	19.1/18.0/	20.3/18.7/	20.7/19.6/	27.4/24.8/	29.6/27.2/	30.7/28.9/
			10.0/8.8	10.8/9.1	12.7/11.2	13.6/12.5	15.1/13.0	16.3/14.7	16.8/15.4	17.7/16.1	22.4/19.6	24.5/22.4	25.6/23.8
	Connection Type	-					Flare-nut C	onnection(with	r Flare Nuts)				
		mm	Φ6.35	Ф6.35	Φ6.35	Ф6.35	Ф6.35	Ф9.53	Φ9.53	Φ9.53	Ф9.53	Φ9.53	Φ9.53
Piping	Liquid	inch	1/4	1/4	1/4	1/4	1/4	3/8	3/8	3/8	3/8	3/8	3/8
riping	_	mm	Ф12.7	Ф12.7	Ф12.7	Ф12.7	Ф12.7	Ф 15.88	Φ15.88	Φ15.88	Φ15.88	Ф 15.88	Φ15.88
	Gas	inch	1/2	1/2	1/2	1/2	1/2	5/8	5/8	5/8	5/8	5/8	5/8
	Condensate Drain	mm	O.D.32										
	Net Weight	kg	20	20	21	21	23	23	26	26	26	26	26
Weight	Gross Weight	kg	24	24	25	25	27	27	31	31	31	31	31
		H mm	238	238	238	238	238	238	288	288	288	288	288
	External	W mm	840	840	840	840	840	840	840	840	840	840	840
D		D mm	840	840	840	840	840	840	840	840	840	840	840
Dimensions		H mm	292	292	292	292	292	292	342	342	342	342	342
	Packaging	W mm	945	945	945	945	945	945	945	945	945	945	945
		D mm	945	945	945	945	945	945	945	945	945	945	945
	Model	-	HP-G-NK	HP-G-NK	HP-G-NK	HP-G-NK	HP-G-NK	HP-G-NK	HP-G-NK	HP-G-NK	HP-G-NK	HP-G-NK	HP-G-NK
	Panel Colour	-						Neutral White					
		H mm	47	47	47	47	47	47	47	47	47	47	47
	Body Dimensions	W mm	950	950	950	950	950	950	950	950	950	950	950
Decoration	3	D mm	950	950	950	950	950	950	950	950	950	950	950
Panel	Declaring	H mm	105	105	105	105	105	105	105	105	105	105	105
	Packaging Dimensions	W mm	1014	1014	1014	1014	1014	1014	1014	1014	1014	1014	1014
		D mm	1014	1014	1014	1014	1014	1014	1014	1014	1014	1014	1014
	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
	Gross Weight	kg	8	8	8	8	8	8	8	8	8	8	8

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

Heating Operation Conditions Indoor Air Inlet Temperature:20°C DB(68° F DB) Outdoor Air Inlet Temperature:7°C DB(45°F DB), 6°C WB(43°F WB)  $2. \ The sound pressure level is based on following conditions: 1.5 m beneath the unit.\\$ The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

#### Mini 4-Way Cassette Type



















	Model		AVC-05HJFA	AVC-07HJFA	AVC-09HJFA	AVC-12HJFA	AVC-15HJFA	AVC-17HJFA	AVC-19HJFA
	Power Supply				AC	1Φ, 220~240V/50Hz/6	60Hz	<u> </u>	
		kW	1.5	2.2	2.8	3.6	4.5	5.0	5.6
Cananita	Cooling	Btu/h	5,100	7,480	9,520	12,240	15,300	17,000	19,040
Capacity		kW	2.0	2.5	3.3	4.2	5.0	5.6	6.3
	Heating	Btu/h	6,800	8,500	11,220	14,280	17,000	19,040	21,420
Power Input	Cooling	W	14	14	14	16	22	30	40
Power input	Heating	W	14	14	14	16	22	30	40
Sour	nd Pressure	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
Airfl	ow Rate	m³/min	7.2/6.5/6.2/5.6	7.2/6.5/6.2/5.6	7.8/7.2/6.5/5.8	9.3/8.7/7.1/6.7	11.0/9.5/8.7/7.1	12.5/10.8/9.3/8.0	
	Connection Type	-			Flare-n	ut Connection(with Fla	are Nuts)		
	Liquid		Ф6.35	Φ6.35	Φ6.35	Ф6.35	Φ6.35	Φ6.35	Φ6.35
Dining	Liquid	inch	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Piping	Piping	mm	Ф12.7	Φ12.7	Ф12.7	Ф12.7	Ф12.7	Φ12.7	Φ12.7
	Gas	inch	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	Condensate Drain	mm				O.D.32			
Mainh	Net Weight	kg	14.5	14.5	30/29/28/26 32/30/28/26 34 7.2/6.5/6.2/5.6 7.8/7.2/6.5/5.8 8.2  Flare-nut Con Φ6.35 Φ6.35 1/4 1/4 Φ12.7 Φ12.7 1/2 1/2  14.5 14.8 17.3 17.6 215 215 570 570 570 570 292 292 668 668 730 730  HPE-D-NK HPE-D-NK HI		15.8	15.8	15.8
Weight	Gross Weight	kg	17.3	17.3	17.6	17.6	18.6	18.6	18.6
		H mm	215	215	215	215	215	215	215
	External	W mm	570	570	570	570	570	570	570
		D mm	570	570	570	570	570	570	570
Dimensions		H mm	292	292	292	292	292	292	292
	Packaging	W mm	668	668	668	668	668	668	668
		D mm	730	730	730	730	730	730	730
	Model	-	HPE-D-NK	HPE-D-NK	HPE-D-NK	HPE-D-NK	HPE-D-NK	HPE-D-NK	HPE-D-NK
	Panel Colour	-				Neutral White			
		H mm	37	37	37	37	37	37	37
	Body Dimensions	W mm	620	620	620	620	620	620	620
Decoration		D mm	620	620	620	620	620	620	620
Panel		H mm	115	115	115	115	115	115	115
	Packaging	W mm	680	680	680	680	680	680	680
	Dimensions	D mm	690	690	690	690	690	690	690
	Net Weight	kg	2.7	2.7	2.7	2.7	2.7	2.7	2.7
	Gross Weight	kg	4.5	4.5	4.5	4.5	4.5	4.5	4.5

Outdoor Air Inlet Temperature:7°C DB(45° F DB), 6°C WB(43° F WB)

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

<sup>1.</sup> The nominal cooling capacity and heating capacity are based on following conditions: Cooling Operation Conditions

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

## 1-Way Cassette Type

#### **Chic Aesthetics**

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



## **Even Air Supply**

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



## **Space Saving**

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



#### **Easier Maintain**

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



#### 1-Way Cassette Type















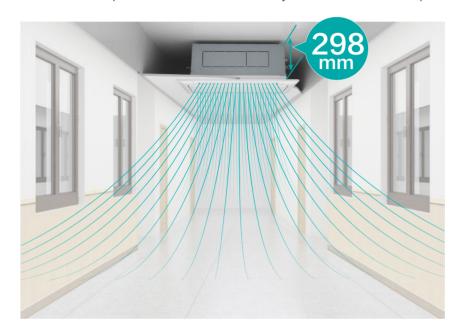
	Model		AVY-07UXJSJA	AVY-09UXJSJA	AVY-12UXJSJA	AVY-14UXJSJA	AVY-18UXJSKA	AVY-24UXJSKA
	Power Supply				AC 1Φ, 220~2	40V/50Hz/60Hz		
		kW	2.2	2.8	3.6	4.5	5.6	7.1
Canacity	Cooling	Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
Capacity		kW	2.5	3.2	4.0	5.0	6.3	8.0
	Heating	Btu/h	8,500	10,900	13,600	17,100	21,500	27,300
Dower Input	Cooling	W	14	14	24	34	34	74
Power Input	Heating	W	14	24	34	44	44	94
Sound I	Pressure	dB(A)	33/32/31/30/29/28	35/34/32/31/29/28	40/36/35/33/30/29	40/36/35/33/30/29	41/39/36/35/33/31	48/46/43/40/37/33
4: 5	5.		6.2/5.9/5.6/	6.6/6.2/5.6/	8.3/7.3/6.8/	8.3/7.3/6.8/	12.1/9.9/8.8/	15.6/12.6/11.2/
Airflow	/ Rate	m³/min	5.1/4.8/4.6	5.1/4.8/4.6	8.2/7.8/6.6	9.9/8.4/7.1		
	Connection Type	-			Flare-nut Connect	ion(with Flare Nuts)		
	11-11	mm	Ф6.35	Ф6.35	Φ6.35	Ф6.35	Φ6.35	Ф9.53
Dining	Liquia	inch	1/4	1/4	1/4	1/4	1/4	3/8
Piping	0	mm	Ф12.7	Ф12.7	Ф12.7	Ф12.7	Ф15.88	Ф 15.88
	Gas	inch	1/2	1/2	1/2	1/2	5/8	5/8
Cooling Capacity  Heating Heating Power Input  Sound Pressure Airflow Rate  Connec Liquid Piping Gas Conder Weight  Externa  Dimensions  Model Panel Panel Body Dimens Panel Packag Dimens	Condensate Drain	mm			I.D	. 32		
	Net Weight	kg	19	19	20	20	24	24
Weight	Gross Weight	kg	23	23	24	24	29	29
		H mm	192	192	192	192	192	192
	External	W mm	910	910	910	910	1180	1180
		D mm	470	470	470	470	470	470
Dimensions		H mm	268	268	268	268	268	268
	Packaging	W mm	1136	1136	1136	1136	1406	1406
		D mm	574	574	574	574	574	574
	Model	-	HP-D-NA	HP-D-NA	HP-D-NA	HP-D-NA	HP-E-NA	HP-E-NA
	Panel Colour	-			Neutra	al White		
		H mm	55	55	55	55	55	55
	Body Dimensions	W mm	1100	1100	1100	1100	1370	1370
Decoration	Dimensions	D mm	550	550	550	550	550	550
Panel		H mm	130	130	130	130	130	130
	Packaging	W mm	1160	1160	1160	1160	1430	1430
	Dimensions	D mm	610	610	610	610	610	610
	Net Weight	kg	5	5	5	5	6	6
	Gross Weight	kg	8	8	8	8	10	10

- 1. The nominal cooling capacity is based on the following conditions: Indoor Air Inlet Temperature: 27°C DB (80° F DB), 19.0°C WB(66.2° F WB) Outdoor Air Inlet Temperature: 35°C DB(95° F DB) Piping Length: 7.5 Meters Piping Lift: 0 Meter
- 2. The sound pressure level is based on the following conditions:1.0m 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

## **Compact and Classy Design**

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



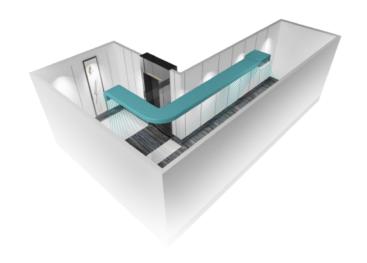
## **Independent Louvers Control**

Each louver's opening angles are controllable individually with a total of 7 choices, with opening angle from 27° to 84° to cover high ceiling narrow long corridors needs and effective warm air supply during winter seasons.



## **Branch Discharge Option**

In irregular room layouts, branch discharge could come in handy by extending air distribution area to the most awkward corners without additional indoor units.



#### 2-Way Cassette Type













	Model		AVL-07 UXJSGA	AVL-09 UXJSGA	AVL-12 UXJSGA	AVL-14 UXJSGA	AVL-18 UXJSGA	AVL-24 UXJSGA	AVL-27 UXJSGA	AVL-30 UXJSGA	AVL-38 UXJSHA	AVL-48 UXJSHA	AVL-54 UXJSHA	
	Power Supply						AC 1Φ,	220~240V/50	Hz/60Hz					
	Cooling	kW	2.2	2.8	3.6	4.3	5.6	7.1	8.4	9.0	11.2	14.0	16.0	
Canacity	Cooling	Btu/h	7,500	9,600	12,300	14,700	19,100	24,200	28,700	30,700	38,200	47,800	54,600	
Capacity		kW	2.8	3.3	4.0	4.9	6.5	8.0	9.0	10.0	13.0	16.0	18.0	
	Heating	Btu/h	9,600	11,300	13,600	16,700	22,200	27,300	30,700	34,100	44,400	54,600	61,400	
Power Input	Cooling	W	14	14	14	24	34	44	64	74	84	104	114	
rowel Iliput	Heating	W	14	14	14	24	34	44	64	74	84	104	114	
Carra	I Danas una	AD(A)	32/30/	33/30/	34/31/	40/37/	42/39/	45/42/	47/44/	49/46/	46/44/	48/45/	49/46/	
Sourio	l Pressure	dB(A)	29/27	29/28	30/28	34/32	36/33	40/36	40/36	42/37	40/38	42/38	43/40	
			10.0/8.5/	11.0/9.4/	12.0/10.5/	15.0/13.2/	17.0/14.9/	19.0/16.4/	21.0/18.4/	22.0/19.3/	30.0/26.4/	35.0/30.8/	37.0/32.5/	
Airflow	v Rate	m³/min	7.2/6.0	8.2/6.6	8.9/7.5	11.5/9.9	13.0/11.2	14.3/12.3	15.6/12.6	16.3/13.1	23.1/19.8	26.9/21.1	28.4/24.1	
	Connection Type	-		Flare-nut Connection(with Flare Nuts)										
		mm	Ф6.35	Ф6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.53	Ф9.53	Ф9.53	Ф9.53	Ф9.53	Φ9.53	
Piping Gas	Liquid	inch	1/4	1/4	1/4	1/4	1/4	3/8	3/8	3/8	3/8	3/8	3/8	
		mm	Ф12.7	Ф12.7	Ф12.7	Ф12.7	Ф12.7	Ф 15.88						
	Gas	inch	1/2	1/2	1/2	1/2	1/2	5/8	5/8	5/8	5/8	5/8	5/8	
	Condensate Drain	mm		I.D. 32										
147-1-1-4	Net Weight	kg	22	22	22	24	24	24	24	24	39	39	39	
Weight	Gross Weight	kg	28	28	28	30	30	30	30	30	47	47	47	
		H mm	298	298	298	298	298	298	298	298	298	298	298	
	External	W mm	860	860	860	860	860	860	860	860	1420	1420	1420	
		D mm	630	630	630	630	630	630	630	630	630	630	630	
Dimensions		H mm	350	350	350	350	350	350	350	350	350	350	350	
	Packaging	W mm	1070	1070	1070	1070	1070	1070	1070	1070	1630	1630	1630	
		D mm	710	710	710	710	710	710	710	710	710	710	710	
	Model	-	HP-C-NA	HP-C-NA	HP-C-NA	HP-C-NA	HP-C-NA	HP-C-NA	HP-C-NA	HP-C-NA	HP-F-NA	HP-F-NA	HP-F-NA	
	Panel Colour	-						Neutral White						
		H mm	30	30	30	30	30	30	30	30	30	30	30	
	Body	W mm	1100	1100	1100	1100	1100	1100	1100	1100	1660	1660	1660	
Decoration	Dimensions	D mm	710	710	710	710	710	710	710	710	710	710	710	
		H mm	160	160	160	160	160	160	160	160	160	160	160	
	Packaging Dimensions	W mm	1170	1170	1170	1170	1170	1170	1170	1170	1710	1710	1710	
	Diriletisions	D mm	740	740	740	740	740	740	740	740	740	740	740	
	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	
	Gross Weight kg											1		

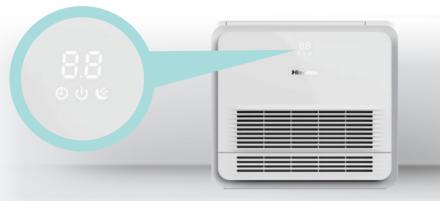
<sup>1.</sup> The nominal cooling capacity is based on the following conditions: Indoor Air Inlet Temperature: 27°C DB (80° F DB), 19.0°C WB(66.2° F WB) Outdoor Air Inlet Temperature: 35°C DB(95° F DB) Piping Length: 7.5 Meters Piping Lift: 0 Meter

<sup>2.</sup> 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.

## **Console Type**

## Stylish Design

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



#### **Multiple Blowing Types**

#### **Cooling Mode**

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



Note: During cooling mode, the lower air louver will close automatically after the indoor unit operates in low fan speed mode for an hour. Otherwise it will keep open.

#### **Heating Mode**

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



Note: In the Eco mode, when the indoor return air temp. is close to the setting temp., the upper air deflector is automatically closed, and the lower air outlet mode is activated.

## **Flexible Installation Options**

The unit can stand directly on the floor, or be hanged on the wall.

According to the interior decoration style, the machine can choose surface mounted, embedded mounted, concealed mounted.



Standing on the floor









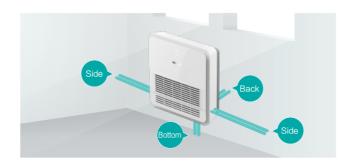
Surface mounted

Embedded mounted

Concealed mounted

## **Flexible Piping Connection**

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



#### **Console Type**



















								1
	Model		AVK-05HJFCAA	AVK-07HJFCAA	AVK-09HJFCAA	AVK-12HJFCAA	AVK-15HJFCAA	AVK-17HJFCAA
	Power Supply				AC 1Φ, 220V~	240V/50Hz/60Hz	1	1
		kW	1.5	2.2	2.8	3.6	4.5	5.0
	Cooling	Btu/h	5,100	7,500	9,600	12,300	15,300	17,000
Capacity		kW	2.0	2.5	3.3	4.2	5.0	5.6
	Heating	Btu/h	6,800	8,500	11,200	14,300	17,000	19,100
	Sound Pressure  Airflow Rate  Panel Colour	W	10	11	12	14	18	23
Power Input	Heating	W	10	) 11 12		14	18	23
Sound	Pressure	dB(A)	32/30/29/28/26/24	34/32/31/29/27/26	36/35/32/31/29/27	39/36/34/31/29/27	41/39/37/35/33/32	44/43/41/39/37/36
			6.0/5.7/5.3/	7.4/7.0/6.4/	8.0/7.4/7.0/	8.2/7.6/6.8/	9.0/8.5/7.8/	10.1/9.7/9.0/
Airflo	w Rate	m³/min	5.1/4.7/4.5	6.0/5.6/5.3	6.4/6.0/5.6	6.2/5.7/5.3	7.2/6.6/6.4	8.5/7.9/7.3
Panel	l Colour	_	Pure White	Pure White	Pure White	Pure White	Pure White	Pure White
	Connection Type	-			Flare-nut Connec	tion(with Flare Nuts)	l	
		mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Liquid	inch	1/4	1/4	1/4	1/4	1/4	1/4
Piping		mm	Ф12.7	Ф12.7	Ф12.7	Ф12.7	Ф12.7	Ф12.7
	Gas	inch	1/2	1/2	1/2	1/2	1/2	1/2
	Condensate Drain	mm		I	1.0	D. 18	I	
	Net Weight	kg	16.1	16.1	16.1	17.4	17.4	17.4
Weight	Gross Weight	kg	21.1	21.1	21.1	22.4	22.4	22.4
		H mm	630	630	630	630	630	630
	External	W mm	700	700	700	700	700	700
		D mm	225	225	225	225	225	225
Dimensions		H mm	725	725	725	725	725	725
	Packaging	W mm	790	790	790	790	790	790
		D mm	315	315	315	315	315	315

#### NOTES:

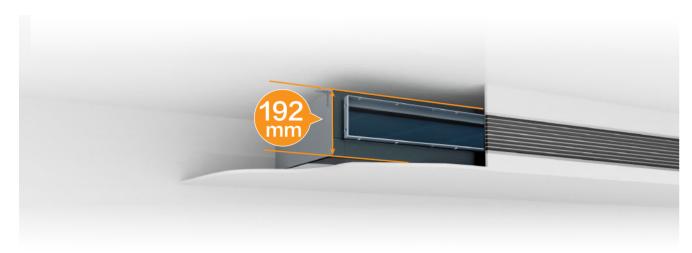
- 1. The nominal cooling capacity and heating capacity are based on the following conditions: Cooling Operation Conditions Indoor Air Inlet Temperature: 27°C DB(80° F DB), 19.0°C WB(66.2° F WB)
- Outdoor Air Inlet Temperature: 35°C DB(95° F DB) Piping Length: 7.5 Meters Piping Lift: 0 Meter
- **Heating Operation Conditions**
- Indoor Air Inlet Temperature: 20°C DB(68° F DB) Outdoor Air Inlet Temperature: 7  $^{\circ}\text{C DB}(45^{\circ}\,\text{F DB}),\,6^{\circ}\text{C WB}(43^{\circ}\,\text{F WB})$
- 2. The sound pressure level is based on following conditions: It is measured in anechoic room. Operation noise differs with operation and ambient conditions. Location of Microphone:



## **Ceiling Ducted Type** (AC/DC Low Height)

## **Space Saving**

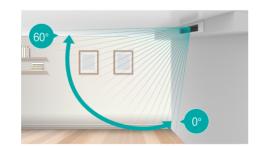
Concealed AC/DC Low Height Ducted unit is as slim as 192mm, fitting into the narrowest ceiling spaces. Save ceiling spaces for higher room height without compromising user's comfort and satisfaction.

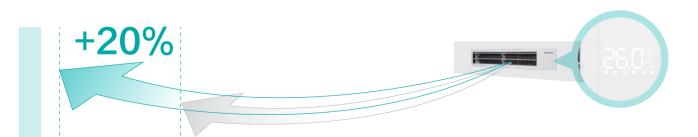


#### 3D Air Flow

Classy air discharge louver panel with LED temperature and humidity display is available as an optional accessory for the AC/DC Low Height Ducted Units. The 3D louvers on the panel offer wide air flow coverage to keep every corners of your room cool or warm in any seasons of the year.







#### **Smart & Precise Temperature Control**

To prevent the human height area of the room cools or warms to user's ideal temperature setting. Two Temperature Sensor Control Technology is integrated into the unit whereby the controller, and return section consist of built in temperature sensors to send real-time signals to the unit for a more precise supplying temperature.



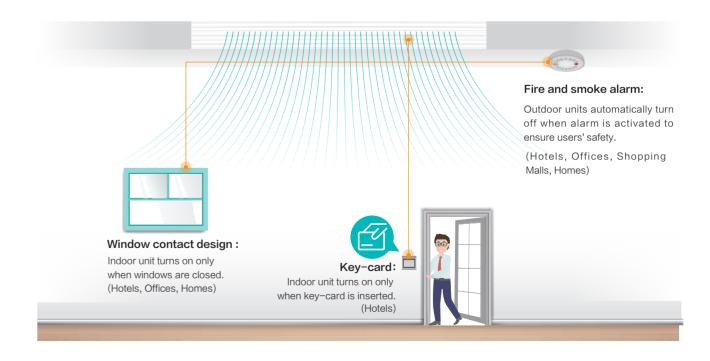


Hisense VRF

Conventional

#### **Various Device Connection Options**

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



#### Hi-Smart E+ L+ C+ SERIES

#### Ceiling Ducted Type(AC Low Height)





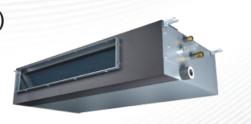












	Model		AVE-05 HCFRL	AVE-07 HCFRL	AVE-09 HCFRL	AVE-12 HCFRL	AVE-15 HCFRL	AVE-17 HCFRL	AVE-19 HCFRL	AVE-22 HCFRL	AVE-24 HCFRL				
	Power Supply					AC ·	1Φ, 220V~240V/	50Hz							
		kW	1.7	2.2	2.8	3.6	4.5	5.0	5.6	6.3	7.1				
Canacity	Cooling	Btu/h	5,800	7,500	9,600	12,300	15,300	17,100	19,100	21,500	24,200				
Capacity	Heating	kW	1.9	2.5	3.2	4.0	5.0	5.6	6.3	7.1	8.0				
	Heating	Btu/h	6,500	8,500	11,300	13,600	17,100	19,100	21,500	24,200	27,300				
Power Input	Cooling	W	50	50	70	70	80	80	100	120	120				
rower input	Heating	W	50	50	70	70	80	80	100	120	120				
Sou	nd 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				
Air	flow Rate	m³/min	7/5.5/4.7	7/5.5/4.7	9/5.7/4.8	9/5.7/4.8	12/6.3/5.5	12/6.3/5.5	13.5/8/7.7	18/9.3/8.7	18/9.3/8.7				
Externa	l Static Pressure	Pa	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)				
	Connection Type	-		Flare-nut Connection(with Flare Nuts)											
	Liquid -	mm	Ф6.35	Ф6.35	Φ6.35	Φ6.35	Φ6.35	Ф6.35	Ф6.35	Ф9.53	Ф9.53				
		inch	1/4	1/4	1/4	1/4	1/4	1/4	1/4	3/8	3/8				
Piping	Con	mm	Φ12.7	Ф12.7	Φ12.7	Φ12.7	Ф12.7	Φ12.7	Ф 15.88	Φ15.88	Ф15.88				
	Gas	inch	1/2	1/2	1/2	1/2	1/2	1/2	5/8	5/8	5/8				
	Condensate Drain	mm					I.D. 32								
Mariaba	Net Weight	kg	16	16	17	17	21	21	25	26	26				
Weight	Gross Weight	kg	19	19	20	20	24	24	29	29	29				
		H mm	192	192	192	192	192	192	192	192	192				
	External	W mm	700	700	700	700	910	910	1180	1180	1180				
		D mm	447	447	447	447	447	447	447	447	447				
Dimensions		H mm	270	270	270	270	270	270	270	270	270				
	Packaging	W mm	925	925	925	925	1136	1136	1406	1406	1406				
		D mm	574	574	574	574	574	574	574	574	574				

- 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.

#### Ceiling Ducted Type(DC Low Height)















	Model		AVE-05 HJFDL	AVE-07 HJFDL	AVE-09 HJFDL	AVE-12 HJFDL	AVE-15 HJFDL	AVE-17 HJFDL	AVE-19 HJFDL	AVE-22 HJFDL	AVE-24 HJFDL				
	Power Supply					AC 1Φ,	220V~240V/50	Hz/60Hz							
		kW	1.7	2.2	2.8	3.6	4.5	5.0	5.6	6.3	7.1				
Capacity	Cooling	Btu/h	5,800	7,500	9,600	12,300	15,300	17,100	19,100	21,500	24,200				
Сараску	Heating	kW	1.9	2.5	3.2	4.0	5.0	5.6	6.3	7.1	8.0				
	Heating	Btu/h	6,500	8,500	11,300	13,600	17,100	19,100	21,500	24,200	27,300				
Power Input	Cooling	W	30	30	50	50	60	60	60	90	90				
Power Input	Heating	W	30	30	50	50	60	60	60	90	90				
Soun	d Pressure	dB(A)	28/27/26/	28/27/26/	35/32/32/	35/32/32/	35/32/32/	35/32/32/	35/32/30/	38/36/35/	38/36/35/				
30011	u Flessule	UB(A)	24/23/21	24/23/21	30/26/23	30/26/23	30/26/23	30/26/23	28/25/23	33/31/24	33/31/24				
A:-0	D. I.	21	7.0/6.5/6.1/	7.0/6.5/6.1/	9.0/8.1/7.3/	9.0/8.1/7.3/	12/10.8/9.4/	12/10.8/9.4/	13.5/12.5/11.2/	18/16.1/14.3/	18/16.1/14.3/				
Airti	ow Rate	m³/min	5.7/5.3/4.8	5.7/5.3/4.8	6.7/5.9/5.2	6.7/5.9/5.2	8.1/6.8/5.5	8.1/6.8/5.5	10.0/8.8/7.7	12.3/10.5/8.7	12.3/10.5/8.7				
External St	atic Pressure	Pa	10(10/30/50)	10(10/30/50)	10(10/30/50)	10(10/30/50)	10(10/30/50)	10(10/30/50)	10(10/30/50)	10(10/30/50)	10(10/30/50)				
	Connection Type	-		Flare-nut Connection(with Flare Nuts)											
	12-24	mm	Φ6.35	Ф6.35	Ф6.35	Φ6.35	Φ6.35	Ф6.35	Ф6.35	Ф9.53	Φ9.53				
	Liquid	inch	1/4	1/4	1/4	1/4	1/4	1/4	1/4	3/8	3/8				
Piping	_	mm	Ф12.7	Ф12.7	Ф12.7	Ф 12.7	Ф12.7	Ф12.7	Φ15.88	Φ15.88	Ф 15.88				
	Gas	inch	1/2	1/2	1/2	1/2	1/2	1/2	5/8	5/8	5/8				
	Condensate Drain	mm		'	'		I.D. 32								
	Net Weight	kg	16	16	17	17	20	20	24	24	24				
Weight	Gross Weight	kg	19	19	20	20	24	24	29	29	29				
		H mm	192	192	192	192	192	192	192	192	192				
	External	W mm	700	700	700	700	910	910	1180	1180	1180				
		D mm	447	447	447	447	447	447	447	447	447				
Dimensions		H mm	270	270	270	270	270	270	270	270	270				
	Packaging	W mm	925	925	925	925	1136	1136	1406	1406	1406				
		D mm	574	574	574	574	574	574	574	574	574				

- 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)

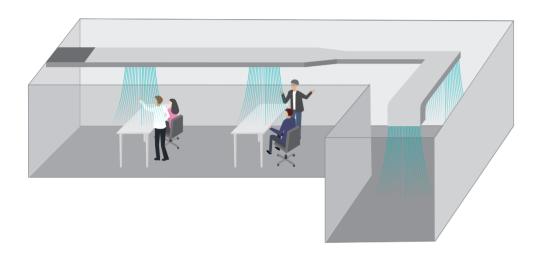
Outdoor Air Inlet Temperature: 7°C DB(45° F DB), 6°C WB(43° F WB)

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.

## **Ceiling Ducted Type** (High/Low Static Pressure)

## Flexible Air Duct Layout

High static pressure facilitates extensive ducts and air outlets network, effectively sends air-conditioned air to every corner of the room.



## **New Improved Bendable Filters**

Standard filters that comes with high/low static pressure ceiling ducted type are now improved to be bendable by improving the material's malleability to improve installation flexibility in narrow ceiling height and restricted spaces.



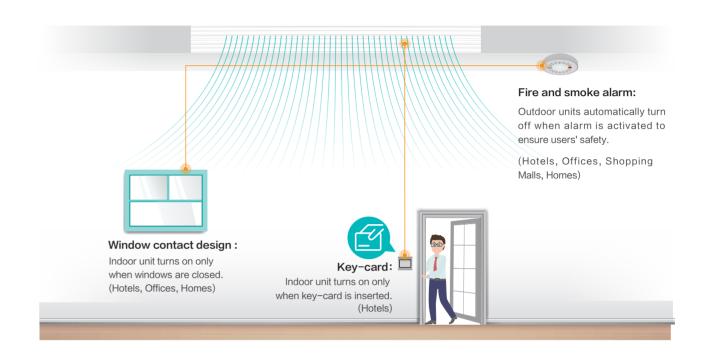
#### Fresh Air Introducing

There is a fresh air duct opening reserved in the unit for 10% free fresh air introductory directly from outdoor, providing fresh air to the indoor continuously.



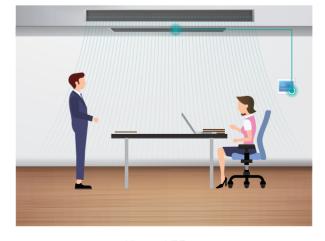
#### **Various Device Connection Options**

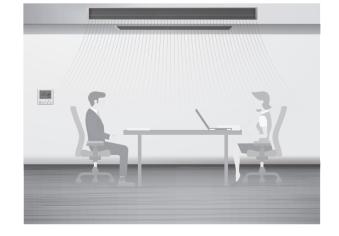
Third party devices to control the on-off air conditioners is possible with dry contact connections to the Indoor unit. Devices like room key card, window contact and fire alarms can be connected simultaneously.



#### **Smart & Precise Temperature Control**

To prevent the human height area of the room cools or warms to user's ideal temperature setting. Two Temperature Sensor Control Technology is integrated into the unit whereby the controller, and return section consist of built in temperature sensors to send real-time signals to the unit for a more precise supplying temperature.





Hisense VRF

Conventional





	Model		AVD-07 HCFCH	AVD-09 HCFCH	AVD-12 HCFCH	AVD-15 HCFCH	AVD-19 HCFCH	AVD-22 HCFCH	AVD-24 HCFCH	AVD-27 HCFCH	AVD-30 HCFCH	AVD-38 HCFCH	AVD-48 HCFCH	AVD-54 HCFCH	AVD-76U X6SEH*2	AVD-96U X6SFH*2
	Power Supply							A	С 1Ф, 220\	/~240V/50	Hz				AC 3Φ, 380	~415V/50Hz
	Model		AVD-07 H3FCH	AVD-09 H3FCH	AVD-12 H3FCH	AVD-15 H3FCH	AVD-19 H3FCH	AVD-22 H3FCH	AVD-24 H3FCH	AVD-27 H3FCH	AVD-30 H3FCH	AVD-38 H3FCH	AVD-48 H3FCH	AVD-54 H3FCH	_	_
	Power Supply							A	AC 1Φ, 208	~230V/60H	lz					
	Cooling	kW	2.2	2.8	3.6	4.5	5.6	6.3	7.1	8.0	9.0	11.2	14.0	16.0	22.4	28.0
Capacity	Cooming	Btu/h	7,500	9,600	12,300	15,400	19,100	21,600	24,200	27,400	30,800	38,000	48,000	54,500	76,500	95,600
	Heating	kW	2.5	3.2	4.0	5.0	6.3	7.1	8.0	9.0	10.0	12.5	16.0	18.0	25.0	31.5
	riealing	Btu/h	8,500	10,900	13,700	17,100	21,600	24,200	27,400	30,800	34,200	42,500	54,500	61,500	85,300	107,500
Power Input	Cooling	kW	0.10(0.13*1)	0.10(0.13*1)	0.13(0.16*1)	0.13(0.16*1)	0.14(0.21*1)	0.19(0.24*1)	0.19(0.24*1)	0.25(0.34*1)	0.25(0.34*1)	0.25(0.34*1)	0.34(0.45*1)	0.43(0.59*1)	1.08	1.34
r ower input	Heating	kW	0.10(0.13*1)	0.10(0.13*1)	0.13(0.16*1)	0.13(0.16*1)	0.14(0.21*1)	0.19(0.24*1)	0.19(0.24*1)	0.25(0.34*1)	0.25(0.34*1)	0.25(0.34*1)	0.34(0.45*1)	0.43(0.59*1)	1.08	1.34
	220-240V/50Hz	dB(A)	32/27/25	32/27/25	35/32/26	35/32/26	36/35/30	39/32/25	39/32/25	42/39/34	42/39/34	42/39/34	43/40/35	46/40/35	52	54
Sound Pressure	208V/60Hz	dB(A)	33/28/24	33/28/24	37/34/29	37/34/29	37/35/29	39/32/25	39/32/25	42/38/33	42/38/33	42/38/33	44/39/34	45/40/34	52	54
	230V/60Hz	dB(A)	37/33/28	37/33/28	40/38/33	40/38/33	42/40/34	43/37/30	43/37/30	44/42/37	44/42/37	44/42/37	47/43/38	46/42/38	52	54
Air Flow(	Hi/Me/Lo)	m³/min	9/7/6	9/7/6	12/10/8.5	12/10/8.5	15/13/10	19/14/10	19/14/10	28/24/19.5	28/24/19.5	28/24/19.5	35.5/29/24	39/31/24	58	77.5
External	220-240V/50Hz 208V/60Hz	Pa	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
Static Pressure	230V/60Hz	Pa	80(105)	80(105)	90(115)	90(115)	90(115)	90(115)	90(115)	170(150)	170(150)	170(150)	170(150)	170(150)	-	-
	Connection Type	-					Flare-r	nut Connec	tion(with FI	are Nuts)					Bra	azing
		mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Ф 6.35	Φ9.53	Φ 9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53
B	Liquid	inch	1/4	1/4	1/4	1/4	1/4	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Piping	0	mm	Ф12.7	Ф12.7	Ф12.7	Ф12.7	Ф 15.88	Ф 15.88	Ф 15.88	Ф 15.88	Ф15.88	Ф15.88	Φ15.88	Ф 15.88	Φ19.05	Ф22.2
	Gas	inch	1/2	1/2	1/2	1/2	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	3/4	7/8
	Condensate Drain	mm							I.D	. 32						
	Net Weight	kg	25(24*1)	25(24*1)	25(24*1)	25(24*1)	30(31*1)	30(31*1)	30(31*1)	45(44*1)	45(44*1)	45(44*1)	53(50*1)	53(50*1)	94	106
Weight	Gross Weight	kg	31(30*1)	31(30*1)	31(30*1)	31(30*1)	36(38*1)	37(38*1)	37(38*1)	52(52*1)	52(52*1)	52(52*1)	61(59*1)	61(59*1)	106	111
		H mm	270	270	270	270	270	270	270	300	300	300	300	300	470	470
	External	W mm	650+75	650+75	650+75	650+75	900+75	900+75	900+75	1100+75	1100+75	1100+75	1400+75	1400+75	1060	1250
Dimensions		D mm	720	720	720	720	720	720	720	800	800	800	800	800	1120	1120
		H mm	385	385	385	385	385	385	385	415	415	415	415	415	546	546
	Packaging	W mm	895	895	895	895	1140	1140	1140	1345	1345	1345	1640	1640	1276	1466
	Packaging W	D mm	870	870	870	870	870	870	870	950	950	950	950	950	1345	1345

- 1. The nominal cooling capacity and heating capacity are based on the following conditions: Cooling Operation Conditions
- Indoor Air Inlet Temperature: 27°CDB(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.
- $^{\star 1}\!\!:$  The value noted  $^{\star 1}$  is the parameter of the indoor units with power supply 208~230V/60Hz.
- \*2: For AVD-76/96\*, an optional filter is needed.

#### **Ceiling Ducted Type (Low Static Pressure)**













	Model		AVD-07 HCFCL	AVD-09 HCFCL	AVD-12 HCFCL	AVD-15 HCFCL	AVD-19 HCFCL	AVD-22 HCFCL	AVD-24 HCFCL	AVD-27 HCFCL	AVD-30 HCFCL	AVD-38 HCFCL	AVD-48 HCFCL	AVD-54 HCFCL	AVD-76U X6SEL	AVD-96L X6SFL
	Power Supply			AC 1Φ, 220V-240V/50Hz									AC 3Φ, 380~415V/50Hz			
		kW	2.2	2.8	3.6	4.5	5.6	6.3	7.1	8.0	9.0	11.2	14.0	16.0	22.4	28.0
	Cooling	Btu/h	7,500	9,600	12,300	15,400	19,100	21,600	24,200	27,400	30,800	38,000	48,000	54,500	76,500	95,600
Capacity	II. see a	kW	2.5	3.2	4.0	5.0	6.3	7.1	8.0	9.0	10.0	12.5	16.0	18.0	25.0	31.5
	Heating	Btu/h	8,500	10,900	13,700	17,100	21,600	24,200	27,400	30,800	34,200	42,500	54,500	61,500	85,300	107,500
	Cooling	W	60	60	110	110	90	160	160	240	240	240	290	360	950	1120
Power Input	Heating	W	60	60	110	110	90	160	160	240	240	240	290	360	950	1120
Sound	l Pressure	dB(A)	27/23/21	27/23/21	34/30/25	34/30/25	32/30/26	35/28/24	35/28/24	38/33/30	38/33/30	38/33/30	41/38/33	44/39/33	50	52
Air Flow Ra	ite (Hi/Me/Lo)	m³/min	9/7/6	9/7/6	12/10/8.5	12/10/8.5	15/13/10	19/14/10	19/14/10	28/24/19.5	28/24/19.5	28/24/19.5	35.5/29/24	39/31/24	58	72
External St	atic Pressure	Pa	30	30	30	30	30	30	30	60	60	60	60	60	100	100
	Connection Type	-		Flare-nut Connection(with Flare Nuts)									Bra	zing		
	Liquid	mm	Ф6.35	Ф6.35	Ф6.35	Ф6.35	Ф6.35	Ф9.53	Ф9.53	Ф9.53	Ф9.53	Ф9.53	Ф9.53	Ф9.53	Φ9.53	Ф9.53
Distant		inch	1/4	1/4	1/4	1/4	1/4	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Piping		mm	Φ12.7	Ф12.7	Ф12.7	Φ12.7	Ф 15.88	Ф 15.88	Ф 19.05	Ф22.2						
	Gas	inch	1/2	1/2	1/2	1/2	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	3/4	7/8
	Condensate Drain	mm							I.D	. 32					ı	
147-1-1-1	Net Weight	kg	25	25	25	25	30	30	30	45	45	45	52	52	94	106
Weight	Gross Weight	kg	31	31	31	31	36	37	37	52	52	52	61	61	106	111
		H mm	270	270	270	270	270	270	270	300	300	300	300	300	470	470
	External	W mm	650+75	650+75	650+75	650+75	900+75	900+75	900+75	1100+75	1100+75	1100+75	1400+75	1400+75	1060	1250
		D mm	720	720	720	720	720	720	720	800	800	800	800	800	1120	1120
Dimensions		H mm	385	385	385	385	385	385	385	415	415	415	415	415	546	546
F	Packaging	W mm	895	895	895	895	1140	1140	1140	1345	1345	1345	1640	1640	1276	1466
	-	D mm	870	870	870	870	870	870	870	950	950	950	950	950	1345	1345

#### NOTES:

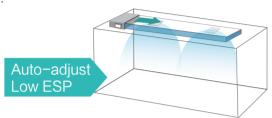
- 1. The nominal cooling capacity and heating capacity are based on the following conditions: **Cooling Operation Conditions**
- Indoor Air Inlet Temperature: 27°C DB(80° F DB), 19.0°C WB(66.2° F WB) Outdoor Air Inlet Temperature: 35°C DB(95° F DB)
- Piping Length: 7.5 Meters Piping Lift: 0 Meter **Heating 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
- 3. When bottom air inlet is adopted, the sound pressure will increase according to factors such as installation mode and the room structure.

should be taken into consideration in the field.

## **Ceiling Ducted Type** (DC High Static Pressure)

#### Auto-adjust External Static Pressure

After installation, the actual duct resistance frequently differ from the initially calculated, causing the actual air flow too low or too high. The auto-adjust ESP function can effectively solve this problem. At the initial commission, the system can automatically select the most appropriate ESP value according to the actual duct resistance, between 50Pa and 250Pa.





#### **Cold Wind Limit Setting**

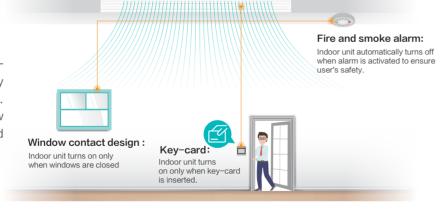
Thanks to the Cold Wind Limit Setting function, the lowest limit of the outlet air temperature can be set in the range of 10~16°C, which can ensure that the actual outlet temperature will never be lower than the set value, and avoid uncomfortable feeling caused by the direct blowing of cold wind.





## **Various Device Connection Options**

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



## **Multiple Filters for Different** Requirements(Optional)

A dedicated filter box can be connected to the unit, satisfying the indoor air quality requirements. Either a coarse filter or a high-efficiency filter (filter level ePM10 55%) can be installed in the filter box, also both of them can be installed for better filtering simultaneously.

Model	Descriptions
HFB-96LFGDE	Dedicated filter box
HF-96HFGDE	High-efficiency filter with filter level ePM10 55%
HF-96LFGDE	Coarse filter

Note: When using HF-96HFGDE and HF-96LFGDE, the dedicated filter box is required. The convenient coarse filter HF-280L-FE can also be used directly.

#### Ceiling Ducted Type (DC High Static Pressure)













Model			AVD-76HJFH	AVD-96HJFH				
Power Supply			AC 1Φ, 220~240V/50	htz; AC1Ф, 220V/60Hz				
	O. allan	kW	22.4	28.0				
Capacity	Cooling	Btu/h	76,500	95,600				
Capacity		kW	25.0	31.5				
	Heating	Btu/h	85,300	107,500				
Power Input	Cooling	kW	0.61	0.83				
rower input	Heating	kW	0.61	0.83				
Sound Pressure	o Lovol	dB	49/48/47/	53/52/50/				
Journa Fressur	e Level	ub	46/45/44	49/47/45				
A'-9 D-1-		341-	57/54/52/	72/68/65/				
Airflow Rate		m³/min	51/49/48	61/58/50				
External Static	Pressure	Pa	150(50~250)	150(50~250)				
	Connection Type	-	Brazing					
		mm	Φ9.53	Φ9.53				
	Liquid	inch	3/8	3/8				
Piping		mm	Φ22.2 (Φ19.05)*1	Φ22.2				
	Gas	inch	7/8 (3/4)*1	7/8				
	Condensate Drain	mm	I.D.	32				
Mainht	Net Weight	kg	104	104				
Weight	Gross Weight	kg	125	125				
		H mm	470	470				
Dimensions	External	W mm	1250	1250				
		D mm	1120	1120				

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)

The sound pressure level is based on following conditions:

1.5m beneath the unit

With discharge duct (2.0m) and return duct (1.0m)

Voltage of the power supply is 220V

Without air filter installed

Under the external static pressure 150Pa

The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration on site. In case of the power supply of 240V, the sound pressure level will be increased by about 1 dB(A).

3. \*1: The size of AVD-76\* series gas pipe is Φ22.2mm when leaving the factory, and the diameter can be changed to 19.05mm after welding the adapter pipe.

## **Wall Mounted Type**

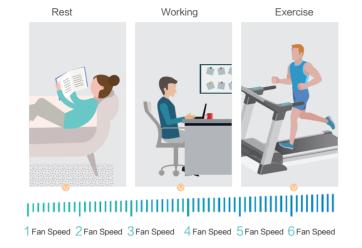
## High-efficiency DC Fan Motor

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



#### 6 Fan Speed

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



#### **Optimal Noise Control**

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

\*Take AVS-12\* as an example



#### **Self-cleaning Function**

Featured with self-cleaning technology, the evaporator can be self-cleaned automatically just with the tap of a button in the controller, which is very convenient and saves the cost of manual cleaning, while ensuing a clean environment.



#### **Wall Mounted Type**



















	Model		AVS-05 HJFTDD	AVS-07 HJFTDD	AVS-09 HJFTDD	AVS-12 HJFTDD	AVS-15 HJFTDD	AVS-18 HJFTDD	AVS-24 HJFTDD	AVS-28 HJFTDD
	Power Supply				AC	1Φ, 220~240V/50	Hz; AC 1Φ, 220V/60	Hz		
	0	kW	1.7	2.2	2.8	3.6	4.5	5.6	7.1	8.4
	Cooling	Btu/h	5,800	7,500	9,600	12,300	15,400	19,100	24,200	28,700
Capacity		kW	2.0	2.5	3.3	4.0	5.0	6.3	8.0	8.4
	Heating	Btu/h	6,500	8,500	11,300	13,700	17,100	21,500	27,300	28,700
D	Cooling	W	20	20	20	30	20	30	50	80
Power Input	Heating	W	20	20	20	30	30	30	70	80
Soun	d Pressure	dB(A)	33/32/32/ 30/30/28	36/35/33/ 32/30/28	36/35/33/ 32/30/28	38/35/33/ 32/30/28	38/37/36/ 32/31/29	40/38/36/ 35/33/31	45/42/41/ 38/35/31	50/48/45/ 41/36/33
Air	flow Rate	m³/min	8.7/8.3/8.2/ 7.5/7.2/7.0	9.8/9.2/8.7/ 8.2/7.5/7.0	9.8/9.2/8.7/ 8.2/7.5/7.0	10.3/9.2/8.7/ 8.2/7.5/7.0	11.5/11.0/10.3/ 9.0/8.7/8.0	16.2/15.0/14.2/ 13.3/12.2/11.5	20.0/18.0/17.0/ 15.0/13.3/11.7	23.3/22.0/20.0/ 17.0/14.2/12.2
Par	nel Colour	-				W	nite			
	Connection Ty	pe	Flare Nuts							
	Liquid	mm	Ф6.35	Φ6.35	Ф6.35	Ф6.35	Φ6.35	Ф9.53	Ф9.53	Ф9.53
Dining		inch	1/4	1/4	1/4	1/4	1/4	3/8	3/8	3/8
Piping	_	mm	Ф9.53	Ф9.53	Φ9.53	Ф9.53	Ф12.7	Φ15.88	Ф 15.88	Φ15.88
	Gas	inch	3/8	3/8	3/8	3/8	1/2	5/8	5/8	5/8
	Drain Pipe	mm				0.0	. 18			
	Net Weight	kg	9	9	9	9	13	14.5	14.5	14.5
Weight	Gross Weight	kg	12.5	12.5	12.5	12.5	17	19	19	19
		H mm	270	270	270	270	315	315	315	315
	External	Wmm	845	845	845	845	960	1120	1120	1120
Demensions		D mm	203	203	203	203	230	230	230	230
		H mm	375	375	375	375	430	430	430	430
	Packaging	Wmm	943	943	943	943	1058	1223	1223	1223
		D mm	310	310	310	310	328	328	328	328

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

# **Sleek Smooth Design**

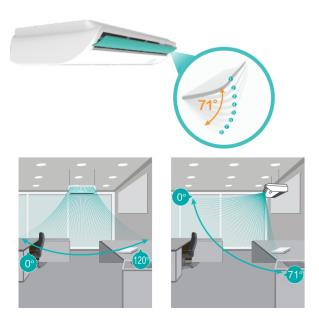
Shiny white cover panel of the unit has an streamlined elegant aesthetic. The bolts and nuts used to secure the unit onto wall or ceiling are designed to be concealed in the unit for a sleek room interior look.

**Ceiling & Floor Type** 



## Wide Air Supply

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



#### Flexible Installation

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

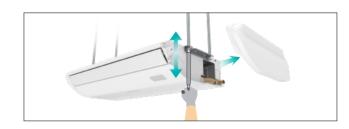


Hanging on the wall

Standing on the floor

## **Convenient Installation** and Maintenance

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





#### Ceiling & Floor Type















	Model		AVV-17URSCA	AVV-18URSCA	AVV-22URSCA	AVV-24URSCA	AVV-27URSCB	AVV-30URSCB	AVV-38URSCB	AVV-48URSCC	
	Power Supply					AC 1Φ, 220V~2	240V/50Hz/60Hz				
		kW	5.0	5.6	6.3	7.1	8.4	9.0	11.2	14.2	
0	Cooling	Btu/h	17,100	19,100	21,500	24,200	28,700	30,700	38,200	48,500	
Capacity		kW	5.6	6.5	7.5	8.5	9.6	10.0	13.0	16.3	
	Heating	Btu/h	19,100	22,200	25,600	29,000	32,800	34,100	44,400	55,600	
	Cooling	W	40	40	70	70	70	80	130	160	
Power Input	Heating	W	40	40	70	70	70	80	130	160	
0 10	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	
Sound Pressure	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	
Airfl	low Rate	m³/min	13.0/11.0/9.0	13.0/11.0/9.0	16.1/14.0/11.3	16.1/14.0/11.3	18.2/15.2/12.2	19.4/16.3/13.3	24.8/20.5/16.3	33.0/28.0/23.0	
Speed-u	p Setting HH1	m³/min	14.2	14.2	17.8	17.8	19.8	21.2	27.0	36.0	
Speed-u	p Setting HH2	m³/min	16.0	16.0	20.0	20.0	22.3	23.5	29.2	37.4	
Pan	el Colour	-				Neture	White	,			
	Connection Type	-	Flare-nut Connection(with Flare Nuts)								
	Liquid	mm	Φ6.35	Φ6.35	Φ9.53	Φ9.53	Ф9.53	Φ9.53	Ф9.53	Φ9.53	
	Liquid	inch	1/4	1/4	3/8	3/8	3/8	3/8	3/8	3/8	
Piping	0	mm	Ф 15.88	Ф15.88	Ф 15.88	Ф15.88					
	Gas	inch	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	
	Condensate Drain	mm			,	I.D	. 32	,			
	Net Weight	kg	31	31	32	32	39	40	41	47	
Weight	Gross Weight	kg	38	38	39	39	46	47	48	56	
		H mm	230	230	230	230	230	230	230	230	
	External	W mm	990	990	990	990	1285	1285	1285	1580	
		D mm	680	680	680	680	680	680	680	680	
Dimensions		H mm	340	340	340	340	340	340	340	340	
	Packaging	W mm	1110	1110	1110	1110	1400	1400	1400	1690	
		D mm	830	830	830	830	830	830	830	830	

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 condations:

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

Floor Concealed Type

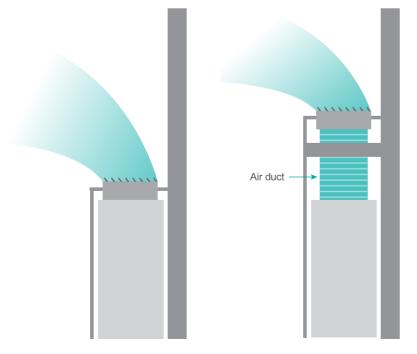
## **Space Saving**

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



## Adjustable Static Pressure and Flexible Installation

With 2-level external static pressure adjustable, project design and installation are more flexible. Users can choose the air duct to increase the air supply distance in order to achieve the completely concealed installation.



## Floor Concealed Type













	Model		AVH-09UXCSAA	AVH-14UXCSAA	AVH-18UXCSBA	AVH-24UXCSBA						
	Power Supply			AC 1Φ, 220 <sup>1</sup>	- √~240V/50Hz							
	Model		AVH-09UX2SAA	AVH-14UX2SAA	AVH-18UX2SBA	AVH-24UX2SBA						
	Power Supply		AC 1Φ, 220V/60Hz									
		kW	2.8	4.3	5.6	7.1						
Capacity	Cooling	Btu/h	9,600	14,700	19,100	24,200						
Сараску	Lingting	kW	3.3	4.9	6.5	8.5						
	Heating	Btu/h	11,300	16,700	22,200	29,000						
Power Input	Cooling W		50	80	90	120						
Power Input	Heating	w	50	80	90	120						
Sound	d Pressure	dB(A)	34/31/27	40/36/34	41/36/32	44/40/36						
Airfl	ow Rate	m³/min	8.5/7.5/6.3	10.3/9.0/8.0	14.8/12.3/10.5	16.3/13.8/11.8						
	Connection Type	-		Flare-nut Connection(with Flare Nuts)								
	Liquid	mm	Ф6.35	Φ6.35	Φ6.35	Ф9.53						
		inch	1/4	1/4	1/4	3/8						
Piping	_	mm	Ф12.7	Ф12.7	Ф15.88	Ф15.88						
	Gas	inch	1/2	1/2	5/8	5/8						
	Condensate Drain	mm		I.D	. 32							
	Net Weight	kg	18	22	26	27						
Weight	Gross Weight	kg	30	31	37	37						
		H mm	620	620	620	620						
	External	W mm	948+139	948+139	1218+139	1218+139						
		D mm	202	202	202	202						
Dimensions		H mm	675	675	675	675						
	Packaging	W mm	1160	1160	1430	1430						
		D mm	240	240	240	240						

1. The nominal cooling capacity and heating capacity are based on the following conditions: Cooling Operation Conditions

Indoor Air Inlet Temperature: 27  $^{\circ}\mathrm{C}$  DB(80  $^{\circ}$  F DB), 19.0  $^{\circ}\mathrm{C}$  WB(66.2  $^{\circ}$  F WB) Outdoor Air Inlet Temperature: 35°C DB(95° F DB)

Piping Length: 7.5 Meters Piping Lift: 0 Meter

Heating Operation Conditions

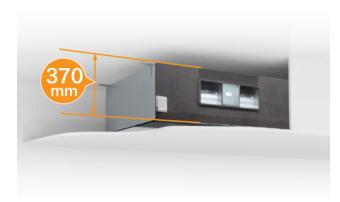
Indoor Air Inlet Temperature: 20 ℃ DB(68° F DB) Outdoor Air Inlet Temperature: 7°C DB(45° F DB), 6°C WB(43° F WB) 2. The sound pressure level is based on the following conditions: 1.5m meters from the unit and 1.5m meters from floor level. The above data was measured in an anechoic chamber so that reflected sound

should be taken into consideration in the field.

## All Fresh Air Indoor Unit

## **Space Saving**

Fresh air unit consising of height of 370mm only requires small amount of ceiling space and fits into complicated kitchen ceilings with various exhaust duct connections.



## **Larger Airflow Rate & Static Pressure Options**

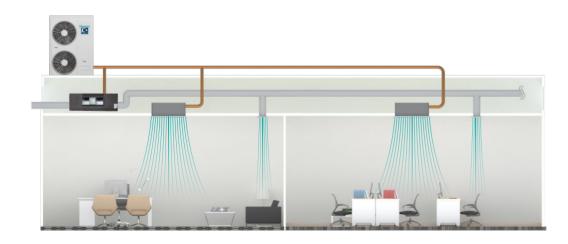
The total amount of fresh air units could be reduced with larger capacity, large airflow rate per unit. With the reduced amount of units, fresh air ducts often need to be supply to the furthest room. Hence achievable with high static pressures offered.



\*Note: only specific model can reach this figure.

## Simple & Flexible Piping System

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



#### All Fresh Air Indoor Unit



	Model		AVA-30UX CSCH-70	AVA-48UX CSQH-108	AVA-76UX CSRH-168	AVA-96UX CSRH-210	AVA-114UX 6SRH-300			
	Power Supply			AC 1Φ, 220\	√~240V/50Hz		AC 3Φ, 380V~415V/50Hz			
	Model		AVA-30UX 2SCH-70	AVA-48UX 2SQH-108	AVA-76UX 2SRH-168	AVA-96UX 2SRH-210	AVA-114UX 7SRH-300			
	Power Supply			AC 3Φ, 380V/60Hz						
	Cooling	kW	9.0	14.0	22.4	28.0	33.5			
Capacity	Cooling	Btu/h	30,700	47,800	76,500	95,600	114,300			
Сараску	Heating	kW	8.6	13.7	21.9	24.5	26.8			
	nealing	Btu/h	29,400	46,800	74,700	83,600	91,500			
Power Input	Cooling	W	150	330	490	510	740			
rowel Iliput	Heating	W	150	330	490	510	740			
Sou	nd Pressure	dB(A)	32	43	45	46	56			
Airflow Rate		m³/min	11.0	18.0	28.0	35.0	50.0			
External	Static Pressure	Pa	60(120)	200	220	220	220			
	Liquid	mm	Ф 9.53	Φ 9.53	Φ 9.53	Ф 9.53	Φ 12.7			
		inch	3/8	3/8	3/8	3/8	1/2			
Piping		mm	Ф 15.88	Ф 15.88	Ф 19.05	Ф 22.2	Ф 25.4			
	Gas	inch	5/8	5/8	3/4	7/8	1			
	Condensate Drain	mm			I.D.32					
	Net Weight	kg	46	60	97	97	97			
Weight	Gross Weight	kg	51	64	117	117	117			
		H mm	370	370	486	486	486			
	External	W mm	920	1320	1270	1270	1270			
		D mm	800	800	1069	1069	1069			
Dimensions		H mm	390	390	540	540	540			
	Packaging	W mm	1112	1512	1290	1290	1290			
		D mm	922	922	1466	1466	1466			
Temperature	e Range of Fresh Air	-	Cooling: 20°C~43°C, Heating: -5°C~15°C							

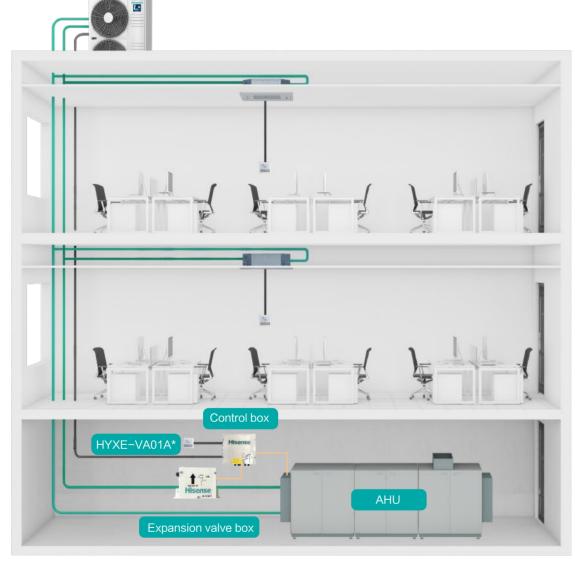
- 1. The nominal cooling capacity and heating capacity are based on following conditions Cooling operation conditions: 33℃ DB, 28℃ WB, piping length: 7.5m, piping lift: 0m Heating operation conditions: 0°C DB, −2.9°C WB, piping length: 7.5m, piping lift: 0m (Heating capacity is tested when defrosting is not available)
- 2. The sound pressure level is based on following conditions: 1.5 Meter beneath the unit. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the filed.
- 3. An air filter with duct collection efficiency more than 50% needs to be attached to the duct system of the suction side at site.
- 4. 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 −5°C all fresh air unit will stop.
- 5. In case of connecting this fresh air unit with other indoor units in the same refrigerant system, please calculate the capacity of this unit as 13.5kW(AVA-30\*), 21.0kW(AVA-48\*), 33.6kW(AVA-76\*), 42.0kW(AVA-96\*).

## **AHU Connection KIT**

#### Main Function

● ON/OFF Control ● Temperature Setting ● Capacity Demand ● Operation Mode

———— Communication wire ———— Sensor signal ———— Refrigerant pipe



<sup>\*</sup>The wired controller HYXE-VA01A is standard.

## **AHU Connection KIT**

AHU Conne	ection KIT		HZX-2.0 AEC	HZX-4.0 AEC	HZX-6.0 AEC		-10.0 EC			HZX-20.0 AEC	)		HZX-30.0 AEC				
Power S	Supply			AC 1Φ, 220V~240V/50Hz/60Hz													
Nominal Capacity of AHU HP			2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
		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
	Cooling	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
Allowed Heat		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
Exchanger Capacity (H/M/L)	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	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
Volume	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 -								1		HZX-	AEC/1					1	
Expansion Valve Box Model –			HZX-2.0 AEC/2	HZX-4.0 AEC/2	HZX-6.0 AEC/2		-10.0 C/2			HZX-20.0 AEC/2	)				HZX-20.0 AEC/2 2se		

Operation conditions		Cooling	Heating
Indoor air inlet temperature	DB	27.0°C	20.0℃
mood all filet temperature	WB	19.0℃	-
Outdoor air inlet temperature	DB	35.0°C	7.0℃
Outdoor all fillet temperature	WB	-	0.0℃

DB: dry bulb; WB: wet bulb Pipe Length: 7.5m; pipe height: 0m



## **Individual Control**

			Wired			Wireless	Cer	
Model			Controller			Controller	Cont	roller
	HYXM-VB01A	HYXE-VC01	HYXE-J01H	HYXE-VA01A	HYXE-S01H	HYE-VD01	HYJ-J01H	HYJM-S01H
Picture	235 11	, co. 1	2654 4.7			21 - 1 21 - 1 2 - 2 2 - 3 2 - 3 2 - 3 2 - 3		
Max. connectable indoor units	6	6	16	16	16	-	128	160
Cooling/Heating/Auto	•	•	•	•	•	•	0	•
Dehumidification	•	•	•	•	•	0	0	•
Fan speed	•	•	•	•	•	•	0	•
Louver setting	•	•	•	•	•	•	0	•
Temperature setting	•	•	•	•	•	•	0	•
Operation monitoring	•	•	•	•	•	•	0	•
24-hour timer	•	•	•	•	•	•	0	•
7-day timer	•	0	•	0	0	0	0	•
Holiday setting	•	0	•	0	0	0	0	•
Main-sub control	•	•	•	•	0	0	0	0
Check function	•	•	•	•	•	0	0	0
Air filter cleaning reminding	•	•	•	•	•	0	0	•
Error code history display	•	•	•	•	•	0	0	•
Auto test run	•	•	•	•	•	•	0	0
Indoor/Outdoor PCB checking	•	•	•	•	•	0	0	0
Self diagnostic function	•	•	•	•	•	•	•	•
Back light	•	•	•	•	•	•	0	•
Built-in temperature sensor	0	•	•	•	0	•	0	0
Wireless control available	•	•	0	0	0	0	0	0
Individual louver control	•	•	•	•	0	•	0	0
Breeze mode	•	•	•	•	0	•	0	0
Motion sensor	•	0	•	•	0	0	0	0
Health(AirPure)	•	•	•	•	0	•	0	0
Hi-Motion	•	0	•	0	0	0	0	0
ECO(energy saving)	•	•	•	•	0	•	0	•
Quiet	•	•	•	•	•	•	0	0
Sleep	•	•	•	•	0	•	0	0
Window contact design	•	•	•	•	0	0	0	0
3D-air flow	•	•	•	•	0	•	0	0
Self-cleaning	•	•	0	•	0	•	0	0

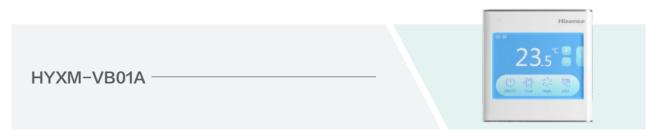
Remarks: • Available OUnavailable

	Туре			Wired Controller			Wireless Controller
	Model	HYXM-VB01A	HYXE-VC01	HYXE-J01H	HYXE-VA01A	HYXE-S01H	HYE-VD01
	Picture	235**	- 253T	2651	\$2Bs.		N. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.
	4-Way Cassette	•	•	•	•	•	•
	Mini 4-Way Cassette	•	•	•	•	•	•
	1-Way Cassette	•	•	•	•	0	•
	2-Way Cassette	•	•	•	•	0	•
· Unit	Ceiling Ducted Type(AC/DC)	•	•	•	•	•	•
Indoor Unit	Ceiling Ducted Type(High/Low)	•	•	•	•	•	•
	Console	•	•	•	•	•	<b>A</b>
	Wall Mounted Type	•	•	•	•	•	<b>A</b>
	Ceiling & Floor Type	•	•	•	•	•	<b>A</b>
	Floor Concealed Type	•	•	•	•	0	•
	All Fresh Air	•	•	•	•	•	•
	Heat Recovery Ventilator	•	<b>A</b>	•	•	•	0
	AHU Kit	•	•	•	<b>A</b>	0	0

	Type		Receiv	Centralized Controller	ON/OFF		
	Model	HYRE-V02H	HYRE-Z01H	HYRE-T03H	HYRE-X01H	HYJM-S01H	HYJ-J01H
	Picture	- 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0	1500 • 15				Mapper  1
	4-Way Cassette	0	0	•	0	•	•
	Mini 4-Way Cassette	0	•	0	0	•	•
	1-Way Cassette	0	0	0	•	•	•
	2-Way Cassette	•	0	0	0	•	•
nit	Ceiling Ducted Type(AC/DC)	•	0	0	0	•	•
Indoor Unit	Ceiling Ducted Type(High/Low)	•	0	0	0	•	•
드	Console	•	0	0	0	•	•
	Wall Mounted Type	•	0	0	0	•	•
	Ceiling & Floor Type	•	0	0	0	•	•
	Floor Concealed Type	•	0	0	0	•	•
	All Fresh Air	•	0	0	0	•	•
	Heat Recovery Ventilator	0	0	0	0	•	•

Remarks: • Optional O Incompatible • Standard

## **Wired Controller**



Mode	Cool/Heat/Auto/Fan/Dry		
Timer	24-hour/Weekly schedule/Holiday setting		
	Error code / Parameter check/Auto test run/		
Maintenance	Indoor&Outdoor PCB checking/Self diagnostic function		
Louver	Louver setting/Individual louver control/		
Louvoi	3D-air flow		
Special function	Breeze mode/Motion sensor/Health/		
	Hi-Motion/ECO/Quiet/Sleep/Self-cleaning		
Fan speed	6		
Temperature setting	0.5℃		
Main-sub control	•		
Air filter cleaning reminding	•		
Back light	•		
Wireless control available			

#### Features

Size:86mm × 90mm Max. connectable indoor units:6 LCD display Touch screen Language: VB01A: English, Turkish, Russian, German, Arabic, spanish VB01A#01: English, French, Italian, Dutch, Polish, Thai

## **Colorful Screen**









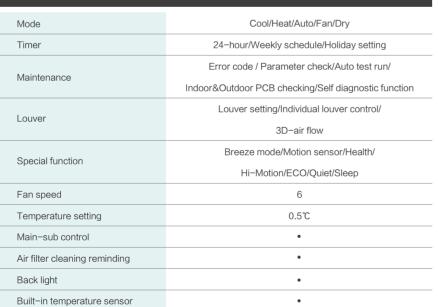
#### HYXE-VC01

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

#### Features

1
Size:86mm×86mm
Max. connectable indoor units: 6
C LCD display with back light
O Touch button
O Flat back-cover for easy mounting

#### HYXE-J01H



#### **Features**

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

#### HYXE-VA01A



Mode	Cool/Heat/Auto/Fan/Dry		
Timer	72-hour		
Maintenance	Error code / Parameter check/Auto test run/		
Maintenance	Indoor&Outdoor PCB checking/Self diagnostic function		
Louver	Louver setting/Individual louver control/3D-air flow		
	Breeze mode/Motion sensor/Health/ECO/Quiet/		
Special function	Sleep/Self-cleaning		
Fan speed	6		
Temperature setting	0.5℃		
Main-sub control	•		
Air filter cleaning reminding	•		
Back light	•		
Built-in temperature sensor			

#### Features

Size:120mm × 120mm Max. connectable indoor units:16 LCD display O Touch button



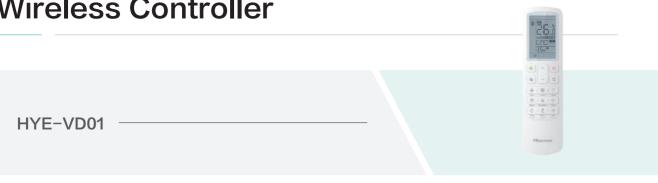


		Featur
Mode	Cool/Heat/Auto/Fan/Dry/Quiet	ı
Timer	24-hour	O Size:12
	Error code / Parameter check/Auto test run/	O Max. c
Maintenance	Indoor&Outdoor PCB checking/Self diagnostic function	O LCD di
Louver	Louver setting	O Touch
Fan speed	6	
Temperature control	•	
Air filter cleaning reminding	•	

#### res

120mm × 70mm connectable indoor units:16 display button

## **Wireless Controller**



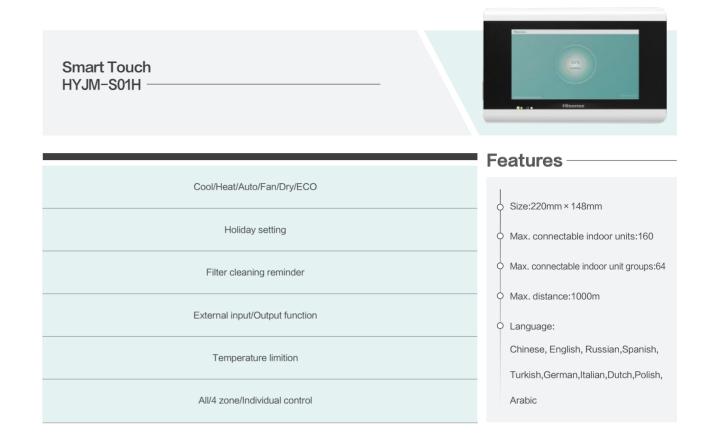
Mode	Cool/Heat/Auto/Fan/Dry	
Timer	24-hour timer	
Maintenance	Auto test run/Self diagnostic function/	
	Identification of adjacent receiver	
Louver	Louver setting/3D-air flow/Individual louver control	
Special function	Health/ECO/Quiet/Sleep/Self-cleaning	
Fan speed	6	
Temperature setting	1°C accuracy/Display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

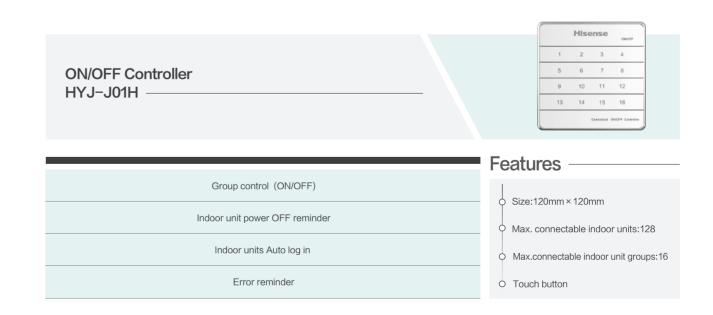
# **Features** Size:178.6mm × 47.8mm LCD display with back light

## Receiver Kit for Wireless Control-Optional



## **Centralized Control**





## **Intelligent Control**

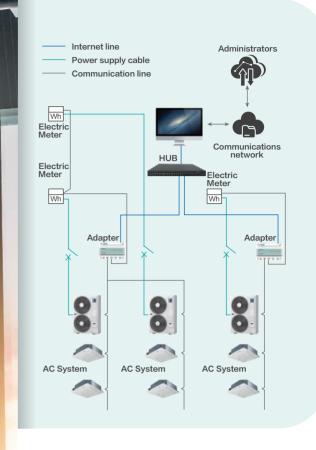


- Supporting online repair report
- Up to 64 IDUs and 64 ODUs can be connected to one
- 3 Hi-Mit II adapters are available in one communication
- One user account of APP can control 8 adapters, up to 512 IDUs

#### **Specifications**

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

# Hi-Dom III

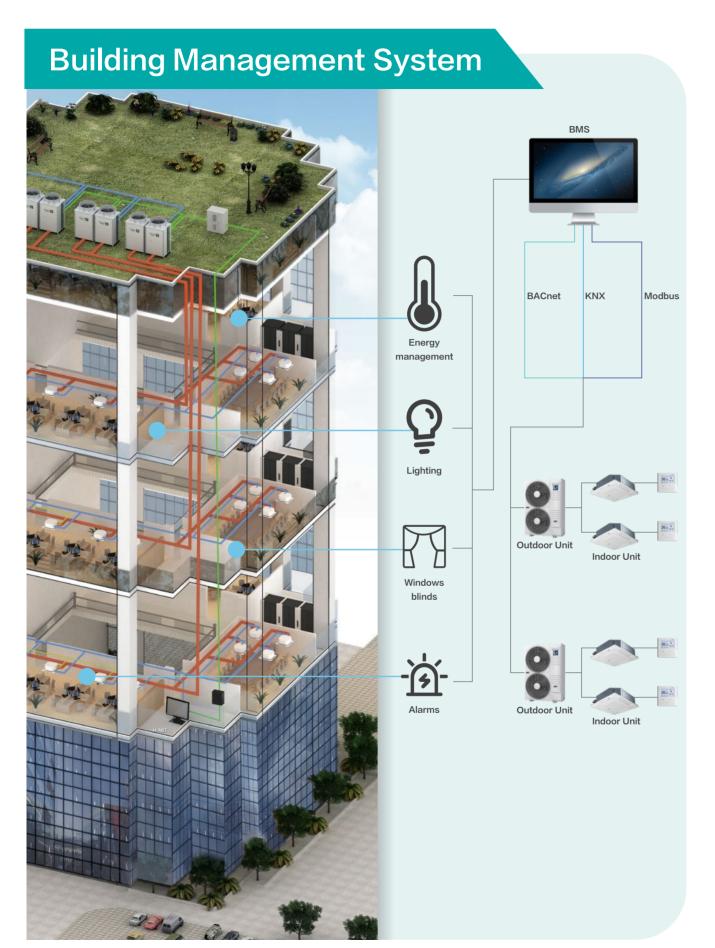


#### Features-

- Multilevel user management
- AC control(on-off,mode,temp,air flow)
- AC locked control(running forbidden control, the max. and min. temp and cooling/heating locked.)
- Running according to timer
- Malfunction history check
- Running record display
- O Data synchronize
- Supporting for external I/O
- O 2D Navigation
- Electricity consumption allocation
- One Hi-DOM controls 160 indoor units
- O Max.5120 indoor units can be controlled

#### **Specifications**

	Model	Power Supply	Dimension(LxWxD)	Note
Adapter	HCCS-H160H2C1YM	12V	180x115.4x64.5mm	With electric charging function
	HCCS-H160H2C1NM	12V	180x115.4x64.5mm	Without electric charging function





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KNX Gateway	HS-RC-KNX-1i	HS-AC-KNX-16	HS-AC-KNX-64
Power Supply	DC, 29V	DC, 24V	DC, 24V
Max. Number of Connectable Indoor Units	1	16	64
Dimension (H × W × D)	70 × 70 × 28mm	56 × 88 × 90mm	56 × 88 × 90mm

#### Features

Standard data point types Central control of all indoor units\*1

Easy to use tool for the configuration of Intesis box \*1

Directly control of all indoor units\*2

Air filter reminder \*2

O Running hours counter \*2

NOTE\*1: Adapted for HS-AC-KNX-16,HS-AC-KNX-64. \*2: Adapted for HS-RC-KNX-1i.

## Modbus<sup>®</sup>

Modbus Gateway	HCPC-H2M1C
Power Supply	DC,12V
Max. Number of Connectable Indoor Units	64
Dimension (H×W×D)	70×204×240mm

#### **Features**

On-Off setting Temperature setting Operating mode setting o Inlet air temperature monitoring Airflow setting and monitoring All units On-Off control

Alarm monitoring and code display

## **BACnet**®

BACnet Ga	teway	HS-AC-BAC-16	HS-AC-BAC-64
Power Su	pply	DC,24V	DC,24V
Max. Number of Connec	ctable Indoor Units	16	64
Dimension (H	×W×D)	56 × 88 × 90mm	56 × 88 × 90mm

#### **Features**

Central control of all indoor units Indoor unit data monitoring

Heat/ Dry/ Fan/ Cool/ Auto mode

Control-vane position swing control Function prohibition of wired controller

 $Note: \ Bacnet \ ^{\circledast} is \ a \ registered \ trademark \ of \ American \ Society \ of \ Heating, \ Refrigerating \ and \ Air-conditioning \ Engineers (ASHRAE).$ 

Modbus®is a registered trademark of Schneider Electric. KNX®is a registered trademark of Konnex.

## Accessories

#### Hi-Motion

Model	Applicable Models	Picture
HCM-S01E	All types of indoor units	•

#### **Motion Sensor**

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

## Fresh Air Duct Adapter

Model	Applicable Models	Picture
HFL-56CSA	4-Way Cassette Type and Mini 4-Way Cassette Type	

## **Humidity Sensor**

Model	Applicable Models	Picture
HCHR-S01E	4-Way Cassette Type, Console, Ceiling Ducted Typee, Wall Mounted Unit	I.

#### Filter

Filter model	Filter Dimension	Frame Dimension	Applicable Models	Picture
HF-224L-FE	910 × 432.5mm	1055 × 463mm	AVD-76UX6SEH/L	
HF-280L-FE	1100 × 432.5mm	1245 × 463mm	AVD-96UX6SFH/L, AVD-76/96HJFH	

Filter Box Model	Dimension(L×W×H)mm	Application Models	Applicable Filter	Picture
HFB-96LFGDE	1339 × 384 × 462	AVD-76/96HJFH	High-efficiency filter:HF-96HFGDE Coarse filter: HF-96LFGDE	

#### **Drain Pump**

Model	Applicable Models	Power Supply		Picture	
HPS-F133E	AVD-07-24HCFCH / AVD-07-24HCFCL	220_240\//50U>			_
HPS-F363E	AVD-27-54HCFCH / AVD-27-54HCFCL	220-240V/30H2	220-240V/50Hz		
HPS-151	All the High/Low Static Pressure Ceiling Ducted Units and All Fresh Air IDU 3-10HP	220-240V/50/60Hz			
HPS-F8103E	AVD-76/96HJFH	220-240V/50/60Hz	HPS-F133/363E	HPS-151	HPS-F8103E

#### 3D Air-flow Panel

Panel Model	Applicable Models	Outer Dimensions (H×W×D)	Picture
HP-CB-NA	Ceiling ducted type ( DC / AC low-height ) 0.5-1.3HP	180×740×70mm	
HP-DB-NA	Ceiling ducted type ( DC / AC low-height ) 1.5–1.8HP	180 × 950 × 70mm	Historia
HP-EB-NA	Ceiling ducted type ( DC / AC low-height ) 2–2.5HP	180 × 1220 × 70mm	

#### AirPure Kit

Model	Power Supply	Applicable Indoor Units	Picture
HJK-ELZA	AC 1Ф, 220V~240V 50/60Hz	4-Way Cassette Type, Mini 4-Way Cassette Type	
HJK-ELZB	AC 1Ф, 220V~240V 50/60Hz	Ceiling Ducted, Console	

## **Branch Pipe**

