# Hisense

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Hisense



# To Know Hisense

Hisense Group, located in eastern China, is an international comprehensive corporation who wins the 3rd popular TV worldwide and 2nd popular VRF in Chinese market. Since 1969, we always focus on technology, innovation and quality and service. In the coming 2017, with Hisense R&D center, Hisense branch office, Hisense service center, we commit to you the unbreakable product quality, excellent product performance, 24-hour product butler service.

# **INDUSTRIAL MODULES**



# **GLOBAL NETWORK**





# **SPORTS MARKETING**



Title Sponsor of Hisense 300 NASCAR Xfinity Series and Team sponsor of Joe Gibbs Racina

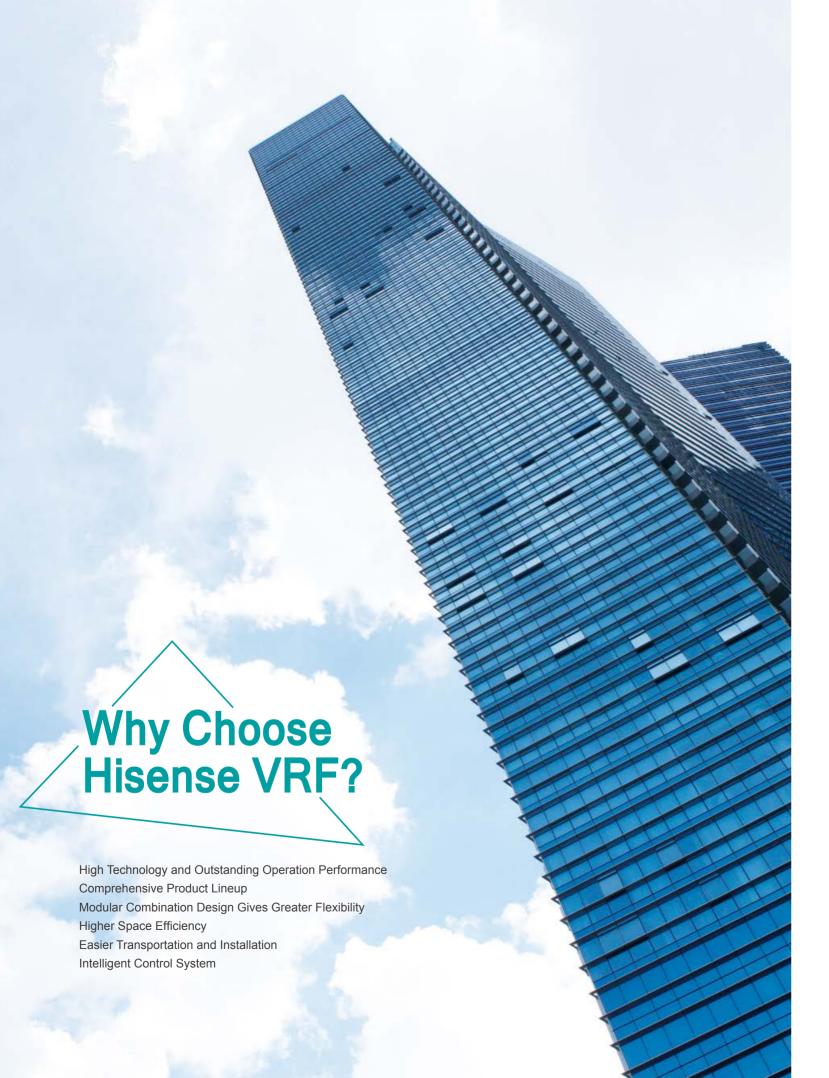




Team Supplier to Red Bull Racing



Official Partner of UEFA EURO 2016



# What is Hisense VRF

Hisense VRF is produced by Qingdao Hisense Hitachi Air-conditioning Systems Co., Ltd., who is a joint venture between Hisense Group and Hitachi Appliances Inc, for air-conditioning manufacturing, technology development, marketing and service.

The strict quality control system is the trustworthy guarantee of Hisense VRF. From designing, manufacturing to testing, Hisense VRF insists on abiding by the highest standard to keep high quality.

- Computer Simulation Development---the Most Advanced and Engergy Saving Development Mode
- Excellence-led Manufacture Mode---Efficiency and Energy Saving
- Strict Quality Control and Component Test---High Quality, High Efficiency and Low Energy Consumption



# **CORE TECHNOLOGY**

- High Efficiency Performance
- High Intelligence and Reliable Operation
- High Quality User Experience
- High Flexibility of Installation and Maintenance

PR • Out

# **PRODUCT LINE**

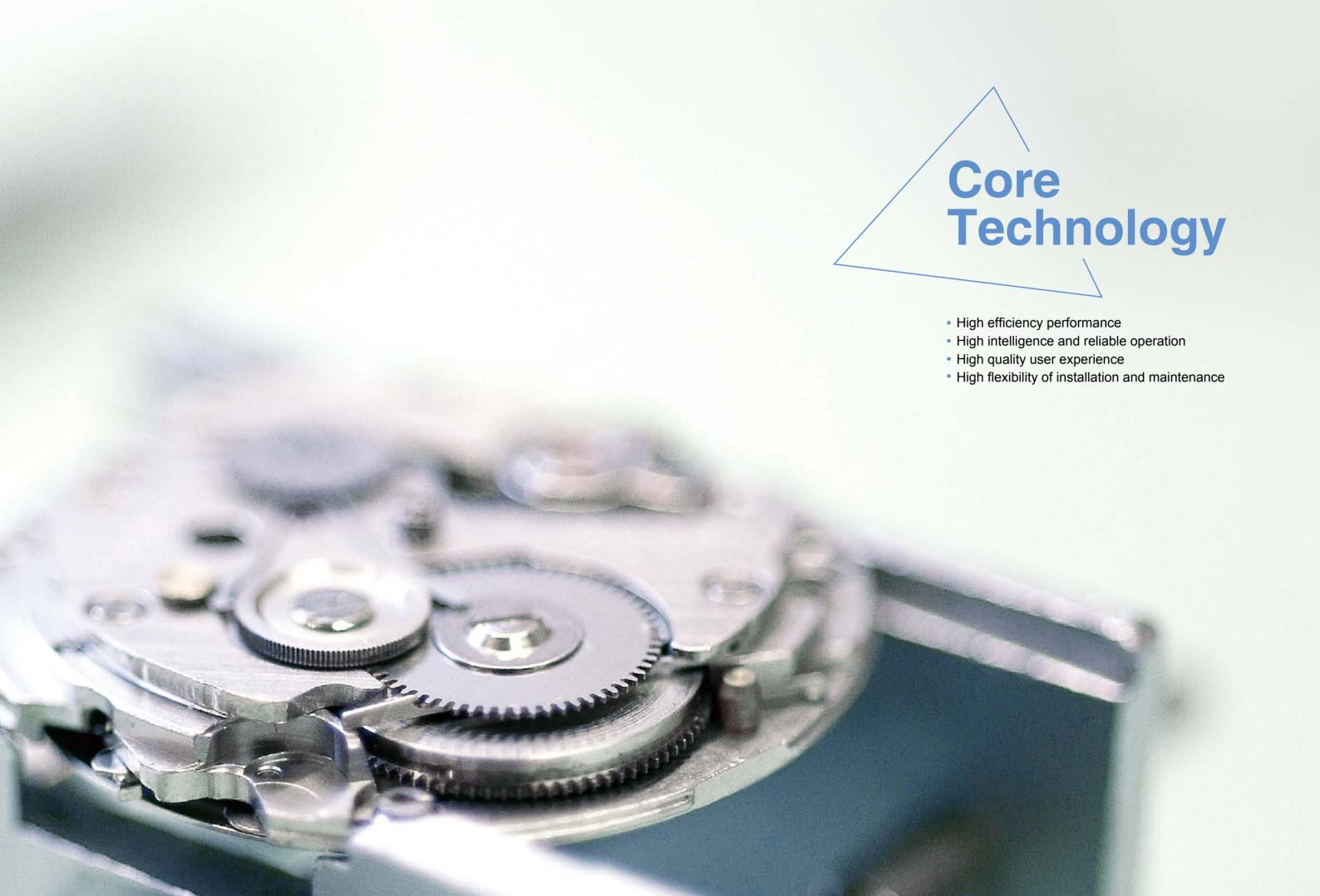
- Outdoor Unit
- Air to Water Heat Pump
- Indoor Unit
- Fresh Air Solution

OPTIONAL PARTS

• Optional parts

# CONTROL SYSTEM

- Wired Controller
- Wireless Controller
- Centralized Controller
- Receiver Kit for Wireless Control-Optional
- Building Management System







# High-pressure-chamber DC Inverter Driven Scroll Compressor

Hisense VRF adopts newest high-pressure-chamber compressor, which provides higher compression ratio, smoother oil supply and lower noise level.



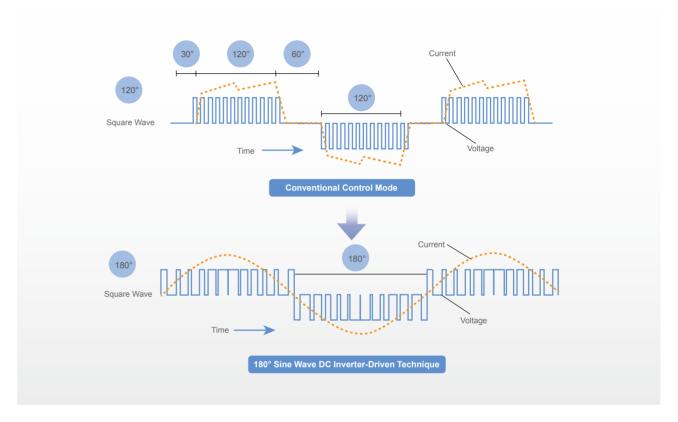
# **Exclusive Asymmetric Scroll**

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



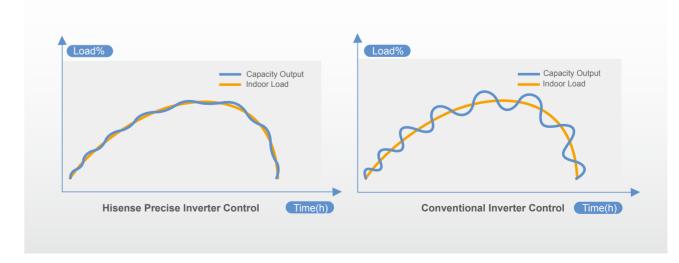
# 180°Sine Wave DC Inverter-Driven Technique

The 180° sine wave control enables motor to operate smoothly, efficiently, and less noisily.



# | Precise Capacity-output Control

The inverter technique combined with elaborate control algorithm ensures responsive capacity-output adjustment based on real-time indoor load, which reduces temperature fluctuation and provides coziness.

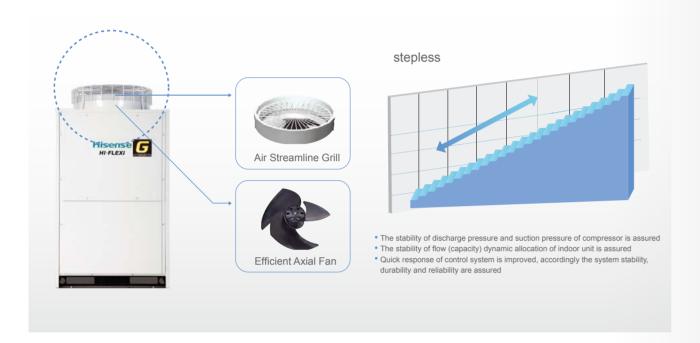






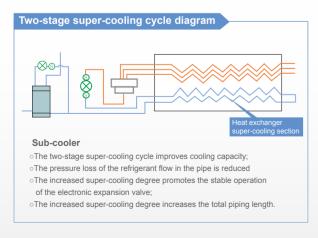
# **Stepless Fan-speed Control**

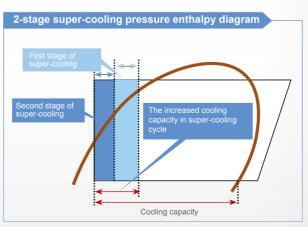
The BLDC motor equipped in ODU can realize stepless fan-speed adjustment to ensure system efficiency and stability.



# **Two-stage Subcooling**

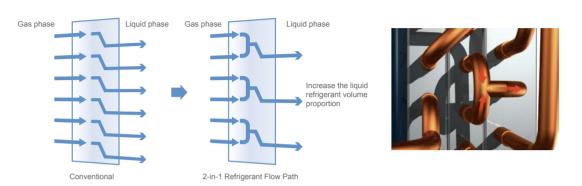
A subcooling section is designed in the heat exchanger of ODU to realize the first-stage subcooling. Furthermore, a high efficient double pipe is applied to achieve the second-stage subcooling. The total subcooling degree is up to  $27^{\circ}$ C, which improves cooling capacity and increases the total piping length.

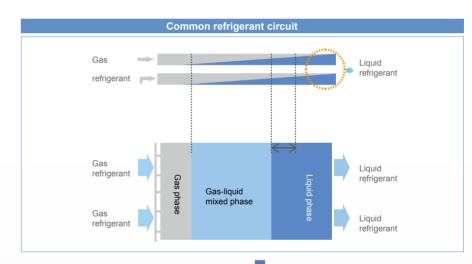


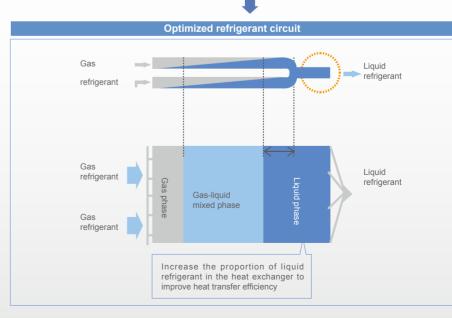


# | Optimized Refrigerant Circuit

The heat-exchange efficiency is substantially increased due to the specially designed refrigerant flow structure.



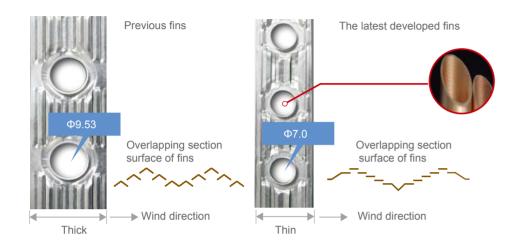




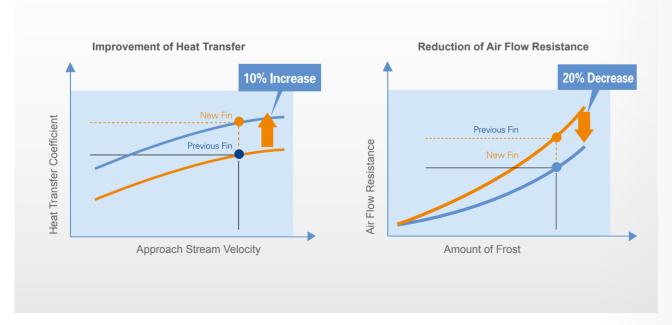




# **Stepped Fins**

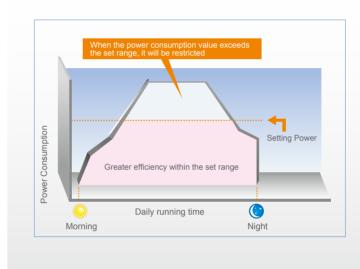


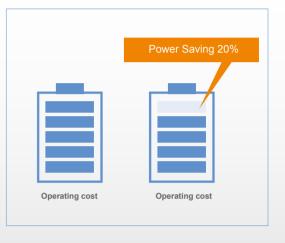




# **Demand Mode**

The intelligent demand mode can adjust the air conditioning operation automatically according to peak-valley requirements of electricity. It achieves balance between comfort and energy-saving while meeting the power demand for daily work.





# **Smart Capacity Allocation**

Generally, VRF system is more efficient under 40%~75% partial load condition. Therefore, we allocate capacity as evenly as possible to achieve maximum efficiency.



#### Hisense Hi-FIEXi G Series:

The efficiency will be the highest and the power consumption will be lowest when each module unit is working at 40% - 75% partial load.

#### **Traditional product:**

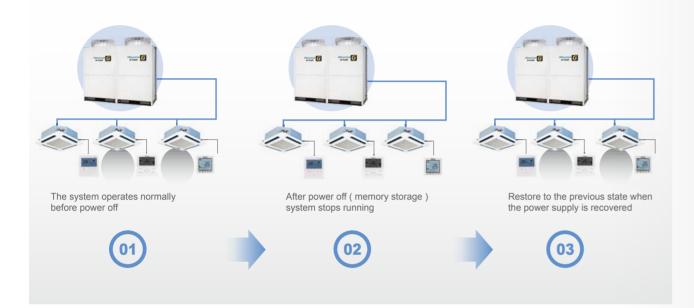
In normal operation, the module combination is operated at full load + ultra-low load, which influences the service life of units and consumes more power.

# HIGH INTELLIGENCE AND RELIABLE OPERATION



# **Automatic Restart**

The operating data can be recorded in case that power failure occurs. When power resumes, the AC can return to previous setting automatically.



# **Rotational Operation**

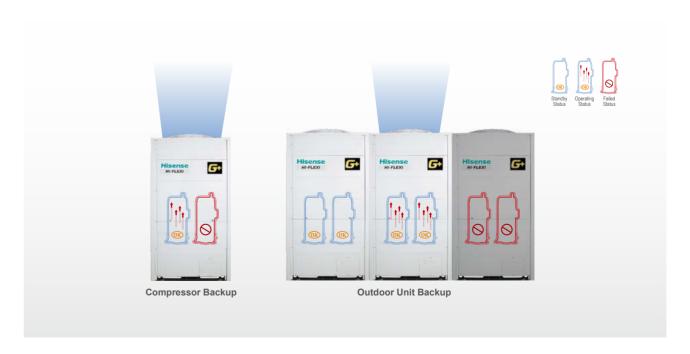
Regulating the operation time of each ODU leads to load reduction on compressors, thus, ODU endurance is improved.





# | Double Back-up Function

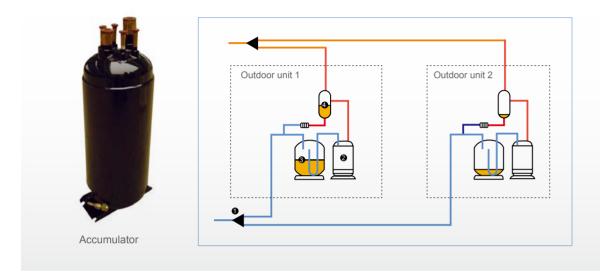
In single module system, one compressor can start to operate when another fails. In module combination, one ODU can start to operate when another fails. Double back-up function ensures reliability and stability of Hisense VRF system.





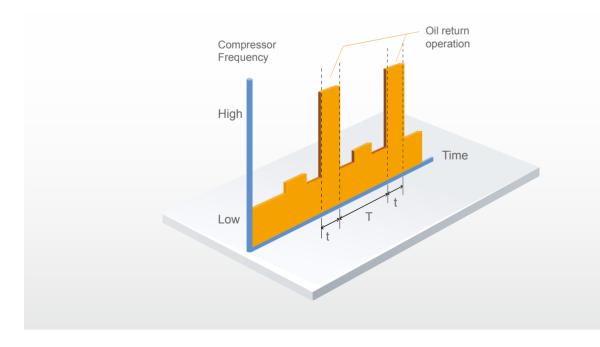
# Oil Return

The accumulator adopts porous 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.



Except for this, the system implements oil-return operation based on compressor frequency and corresponding operation time. The oil-return operation takes 60 seconds, and can return to previous operation state when it's done.

In winter under heating mode, this operation is implemented without changing to cooling, which guarantees heating effect.

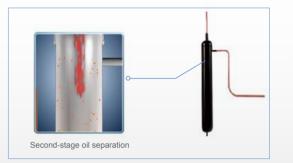


# Oil Separation

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

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





# Oil Balance

Through adjusting the amount of discharge oil and return oil in the compressor, accumulator and oil separator, oil balance is perfectly achieved without oil balance pipe. This can avoid fluctuations of system pressure and temperature to ensure stability, and simplify the construction work.



# HIGH INTELLIGENCE AND RELIABLE OPERATION



#### **Anti-corrosion**

The anti-corrosion treated ODUs have been designed to provide corrosion resistance against acid rain and salt corrosion.



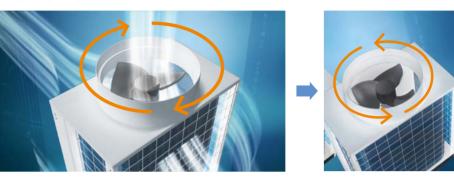
# | Condensed Water Leakage Protection

Float switch is a standard part in Hisense IDU. To protect the ceiling from getting wet or soaked, the float switch will work to stop IDU when condensed water can't be drained in time because of blockage in the drain pump or drain pump breakdown.



# **Fan Protection**

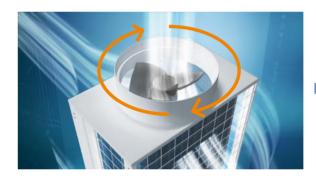
#### Convention

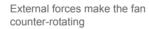


Instantaneous reverse rotation with sudden increased torque may cause damage to the blades

External forces make the fan counter-rotating

#### **Fan Protection Function**







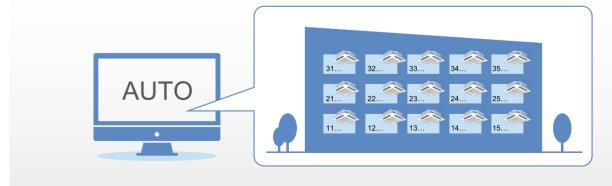
Stop the fan before start the unit



Forward rotation with small starting torque, protect fan

# Automatic Addressing

Hisense VRF system can assign IDU addresses automatically, which is convenient in the case of large system with a lot of IDUs.



# HIGH INTELLIGENCE AND RELIABLE OPERATION

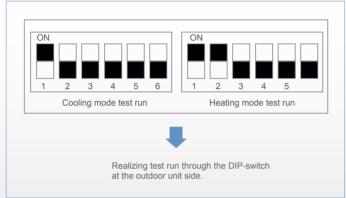
# HIGH QUALITY USER EXPERIENCE



# **One-touch Test Run**

The one-touch test run can be operated at the ODU side as well as the IDU side, which makes it much easier for commissioning.





# **Convenient Inspection**

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



# **Data Collector**

Data collector is designed to quickly and accurately inspect unit operating status.



# **Precise Temperature Control**

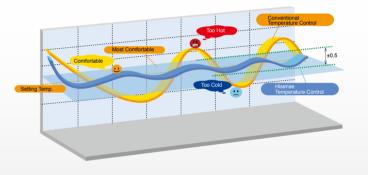
Multiple thermal probes in IDU to provide precise real-time temperature feedback.



2000-step electronic expansion valve to ensure precise flow adjustment based on actual load of IDU.



Room temperature fluctuation within ±0.5 °C .



# Outdoor Unit Noise Control

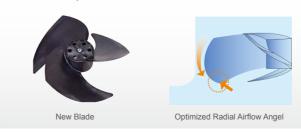
First-class scroll compressor ensures minimum vibration and noise.



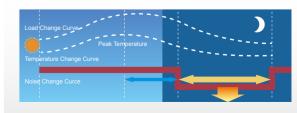
Aluminum-casted motor with nonresonant hanger structure provides stable motor performance and attenuates vibration noise.



The axial fan is made out of noise—absorbing material, which also has a shape that decreases turbulence around.



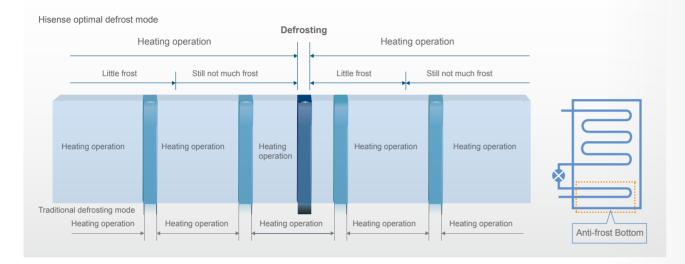
Night-shift function equipped to reduce the noise by up to 15 dB.



# HIGH QUALITY USER EXPERIENCE

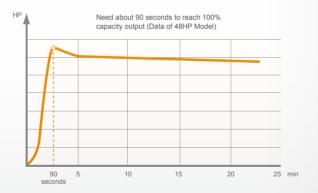
# **Intelligent Defrosting Mode**

The ODU adopts 3 sensors to precisely grasp the defrosting opportunity. Also, it has an anti-frost structure at the bottom, both of which reduces the amount of frost to only 1/3 compared to ordinary defrosting mode.



# Rapid Heating Start-up

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



# **Fresh Air Introduction**

Hisense VRF system can introduce outdoor fresh air into indoor space through fresh air equipment such as all fresh air indoor unit and heat recovery ventilator, which constantly supplies fresh air and creates a healthy environment for users.



# **Environmental Protection**

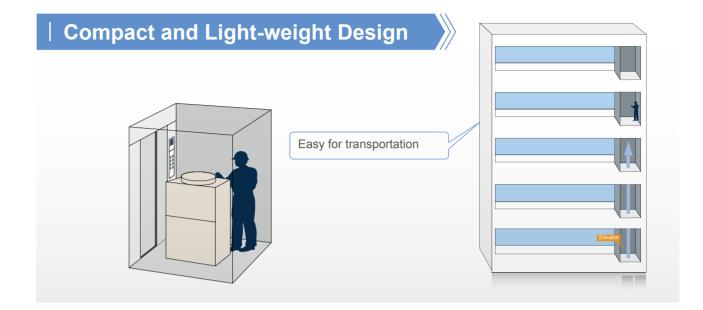
Hisense VRF adopts reliable eco-friendly refrigerant R410A, which is non-toxic to human and does not damage the Earth's ozone layer. Also, we actively respond to Europe RoHS directive, controlling the use of hazardous substance strictly.





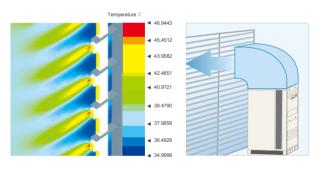
# HIGH FLEXIBILITY OF INSTALLATION AND MAINTENANCE





# | High-rise Buildings Compatibility

By using exhaust duct, short circuit of return air can be avoided with long air exhaust distance, which ensures good ventilation and heat transfer effect of ODU.



Airflow Schematic

Exhaust duct installation

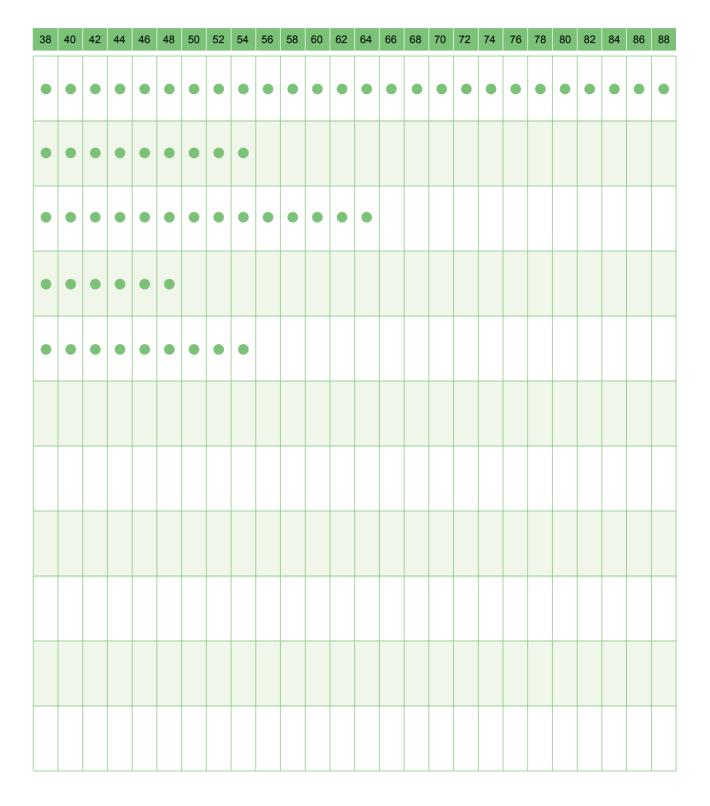








	HP	2.5	3	4	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
G+	NEW						•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
G	we we we						•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
X	0 ≈0 ≈0 ≈0						•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
М	wa wa wa						•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
R	wa wa wa						•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
С	0						•	•	•												
L	0 -			•	•	•															
E	0=		•	•	•																
W	25		•	•	•	•	•	•			•	•	•								
Multi-	function			•	•	•															
Hi-Aq	uaSmart	•	•	•	•	•															







# Hi-FLEXi G+ Series

Hisense G+ series is the latest larger capacity full DC inverter-driven multi-split central air conditioning product. It's focus on the customers' requirements and comfort, representing Hisense high quality and technology. It's characterized by:

Latest enhanced capacity series:

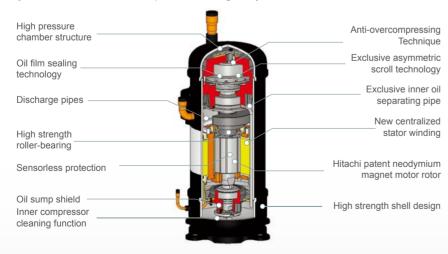
- Brand new high-pressure chamber scroll compressor
- Integrated high-strength structure and convenient installation
- Adoption of double larger fans and low-pressure loss heat exchanger
- Max.22HP single unit, 4 modules' combination



# **Upgraded Core Technology**

New Hitachi high-pressure chamber scroll compressor, enhancing the efficiency

Adoption of the brand new high-pressure chamber scroll compressor realizes high efficiency of motor, optimization of scroll plate and optimum fuel feeding, etc. and increases operation efficiency of compressor under overall operating conditions, especially, enhances intermediate performance greatly.



Motor is the source of power of a compressor. G+ series compressor is equipped with a new DC motor (with centralized winding) which enhances performance of the compressor significantly at a frequency of 20-80Hz that the compressor operates at most frequently.

#### 6-pole high-flux neodymium magnetic motor rotor

Motor rotor of the new type compressor uses the latest 6-grade highflux neodymium magneto structure, rotor shape design is optimized and all rotational speed control is more efficient:



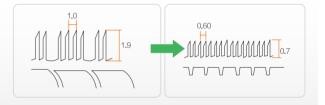
#### New improved concentrated stator winding

The new type motor stator is equipped with a centralized winding and more turns of windings, sets induced voltage to a higher value (to reduce current) and improves efficiency of motor at low rotational speed.



#### Improved super-cooling

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



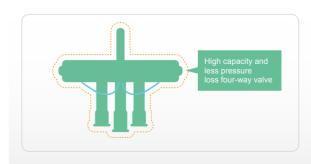
#### High-precise multiple electronic expansion valves control technology

The multiple high-precision electronic expansion valves equipped on the outdoor unit can adjust refrigerant flow of the unit rapidly and accurately according to commands, reduce power consumption during operation, improve energy efficiency and reduce fluctuation of indoor temperature, thus making the environment more comfortable and pleasant.



#### Optimization of the four-way valve

Adoption of the new type high-capacity four-way valve reduces compression at four-way valve greatly, ensures suction intensity of compressor and improves performance of the complete machine.



The brand-new ball check valve, in which there is almost no part hindering fluid flow and thus the local pressure loss is improved significantly, enhances efficiency of the whole system.



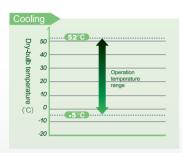


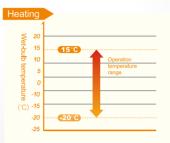


# **Wide Operation Range**

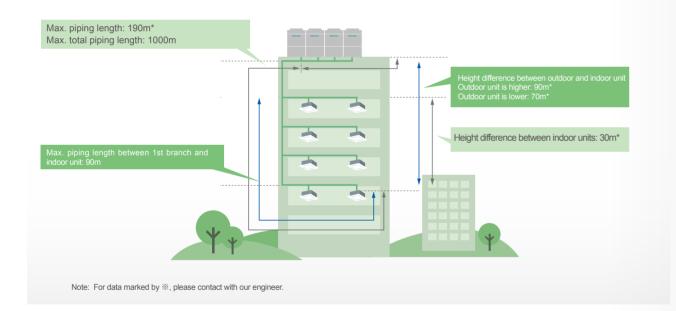
The Hisense G+ series can operate within a wide temperature range. The lowest temperature of heating operation is -20°C, that insures the heating capacity in winter.

Note: when the cooling operation temperature is over 43  $^{\rm C}$  , please contact with our professional engineer.





# | More Flexible Refrigerant Piping Work



# **New-efficiency**

The Hisense G+ series adopts new structure and advanced technology, providing new High efficiency combination solution.

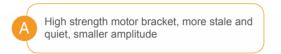
	8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP
EER	4.48	4.03	3.87	3.77	3.57	3.48	3.41	3.06
СОР	5.00	4.96	4.65	4.54	4.07	4.01	3.84	3.61



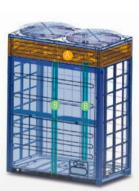
# **New Appearance**

#### The built-in design of PP air duct ensures safety of inner core effectively

Combination of the integrated sheet-metal upper cover and protecting wire net structure realizes built-in design of PP air duct with optimal protection performance, effectively protecting important parts (e.g. fan) from being damaged when the machine falls from high altitudes.







#### Integrated high-strength side plate decreases vibration and reduces noises

Compared with the form combining stand column with wire net, Hisense G+ series is equipped with integrated high-strength side plates made from high-quality materials, which increases air handling area and reduces the vibration and noises produced during operation of the machine.





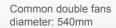


Hisense G+ series

#### The 644mm large dual-fan leads the industry

Hisense G+ series (20-22HP) is equipped with 644mm×2 large fans characterized by low noise and large air flow, greatly improving heat exchange efficiency of heat exchanger.







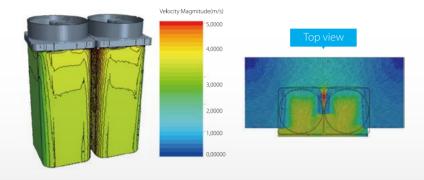
Hisense double large fans diameter: 644mm





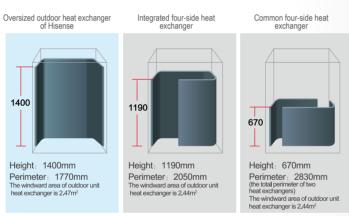
#### 6-side heat exchanging of low pressure-loss ∑ type heat exchanger

The low pressure-loss  $\sum$  type heat exchanger is structurally designed with a 6-side heat exchange structure and dual-fan, which realizes more uniform distribution of heat exchanger's wind field gradient under the same air-flow conditions, and improves heat-exchanging efficiency of heat exchanger. Meanwhile, higher height, larger heat exchange area and low pressure-loss optimization of flow in bypass branch of the heat exchanger itself improves heat-exchanging efficiency of refrigerant and ensures strong heat-exchanging performance of the complete machine.



#### Oversized outdoor heat exchanger

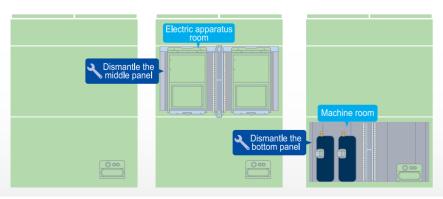
For the oversized outdoor heat exchanger of Hisense, the heat exchanger is characterized by larger face area and better heat-exchanging efficiency. Meanwhile, it reserves more space for arrangement of piping of refrigerating system and heat exchanger distribution pipe, thus ensuring better maintainability.



Note: the 96 type outdoor unit is taken as an example

#### Separation of machine room and electric room makes maintenance more convenient.

In the new structure, divisional design of front metal plate, separate assembling of metal plates in each part and separation of electric room and machine room improve repair and maintenance convenience. Modularized design of electric box and spatial independence of two variable frequency compressors' control circuits reduce mutual crosstalk, enhance EMC performance greatly and make heat emission efficiency better.



# **New Installation**

#### The modular design makes installation easier

Hisense G+ series is characterized by compact structure and modular design by breaking up the whole system into parts, making it easier for both installation and transportation. Taking 88HP as an example, capacity of a single-module product is up to 22HP. And, it can be an assembly of 4 modules, not only meeting the high-capacity requirement but effectively save the space.



The volume is convenient for elevator transportation

#### Static pressure of outdoor unit is up to 85Pa

The maximum static pressure of outdoor unit is up to 85Pa and is more suitable for layered installation and centralized installation.

The higher static pressure and longer air supplying distance of outdoor unit ensures smooth circulation of air flow and solves the problem of heat dissipation of outdoor unit effectively.

The outdoor unit featured with higher static pressure, well responds to the severe environment where the outdoor unit is placed at, is available for more flexible arrangement and is favorable for concealed installation of outdoor unit.

\*Note: for details, please consult the technical personnel



Layered arrangement of outdoor unit solves the problem of heat dissipation easily

Favorable for concealed installation of outdoor unit and making the facade more aesthetic

Air distribution schematic diagram







Hi-FLEXI G+ Series		HP	8HP	10HP	12HP	14HP			
Model Power Supply	AC3Ф380V~415V/5	0/60Hz	AVWT-76UKSNA	AVWT-96UKSNA	AVWT-114UKSNA	AVWT-136UKSTA			
wiodel Fowel Supply	АС3Ф208~230V/60	Hz	AVWT-76U8SNA	AVWT-96U8SNA	AVWT-114U8SNA	AVWT-136U8STA			
Combination									
	Nominal Capacity	kW	22.4	28.0	33.5	40.0			
Cooling Operation	Nominal Capacity	KBtu/h	76.4	95.5	114.3	136.5			
Cooling Operation	Power Consumption	kW	5.00	6.95	8.66	10.61			
	EER		4.48	4.03	3.87	3.77			
	Nominal Capacity	kW	25.0	31.5	37.5	45.0			
Heating Opeartion	Nominal Capacity	KBtu/h	85.3	107.5	128.0	153.5			
Heating Opeartion	Power Consumption	kW	5.00	6.35	8.06	9.91			
	COP		5.00	4.96	4.65	4.54			
Air Flow Rate		m³/h	9,300	10,200	10,500	11,700			
Outer Dimension (H×\	W×D)	mm	1,730×950×750	1,730×950×750	1,730×950×750	1,730×1,210×750			
Packing Dimension (F	ł×W×D)	mm	1,930×1,015×790	1,930×1,015×790	1,930×1,015×790	1,930×1,275×790			
Net Weight		Kg	239	240	241	331			
Gross Weight		Kg	251	252	253	353			
Compressor Quantity			1	1	1	2			
Condenser Fan Quan	tity		1	1	1	1			
Cabinet Color				lvory	White				
Refrigerant Piping	Gas Line	mm	Ф19.05	Ф22.2	Ф25.4	Ф25.4			
Reingerant Piping	Liquid Line	mm	Ф9.53	Ф9.53	Ф12.7	Ф12.7			
Max. number of conn	ectable IDU		13	16	19	23			
Max. Piping Length		m	165(190*)	165(190*)	165(190*)	165(190*)			
Height Difference	Between ODU&IDU	m	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)			
neight billerence	Between IDUs	m	15(30*)	15(30*)	15(30*)	15(30*)			
Noise Level		dB(A)	63/64	65/65	65/66	66/68			
Cooling			B -5~52*						
Operation Range	Heating	C WB	WB -20~15						

- 1. Rated cooling capacity and rated heating capacity are tested in the following conditions:
- Cooling conditions: indoor air inlet temperature: 27 C DB 19 C WB, Outdoor air inlet temperature: 35 C DB, pipe length : 7.5m, pipe height difference: 0m Heating conditions: indoor air inlet temperature: 20 C DB, Outdoor air inlet temperature: 7 C DB 6 C WB, pipe length: 7.5m, pipe height difference: 0m
- 2. The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- 3. The final appearance of outdoor units is subject to the actual products.
- 4.For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our



Hi-FLEXI G+ Series		HP	16HP	18HP	20HP	22HP			
	AC3Φ380V~415V/5	0/60Hz	AVWT-154UKSTA	AVWT-170UKSTA	AVWT-190UKS1A	AVWT-212UKS1A			
Model Power Supply	AC3Φ208~230V/60H	Нz	AVWT-154U8STA	AVWT-170U8STA	AVWT-190U8S1A	AVWT-212U8S1A			
Combination									
		kW	45.0	50.0	56.0	61.5			
0	Nominal Capacity	KBtu/h	153.5	170.6	191.1	209.8			
Cooling Operation	Power Consumption	kW	12.61	14.37	16.42	20.10			
	EER		3.57	3.48	3.41	3.06			
	Nominal Capacity	kW	50.0	56.0	63.0	69.0			
	Nominal Capacity	KBtu/h	170.6	191.1	215.0	235.4			
Heating Opeartion	Power Consumption	kW	12.29	13.97	16.41	19.11			
	COP		4.07	4.01	3.84	3.61			
Air Flow Rate		m³/h	11,700	14,400	15,300	16,200			
Outer Dimension (H×\	N×D)	mm	1,730×1,210×750	1,730×1,210×750	1,730×1,350×750	1,730×1,350×750			
Packing Dimension (F	l×W×D)	mm	1,930×1,275×790	1,930×1,275×790	1,930×1,420×790	1,930×1,420×790			
Net Weight		Kg	332	333	394	395			
Gross Weight		Kg	354	355	415	416			
Compressor Quantity			2	2	2	2			
Condenser Fan Quan	tity		1	1	2	2			
Cabinet Color				lvory	White				
Refrigerant Piping	Gas Line	mm	Ф28.6	Ф28.6	Ф28.6	Ф28.6			
Kenigerani Fiping	Liquid Line	mm	Ф12.7	Ф15.88	Ф15.88	φ15.88			
Max. number of conn	ectable IDU		26	26	33	36			
Max. Piping Length		m	165(190*)	165(190*)	165(190*)	165(190*)			
Height Difference	Between ODU&IDU	m	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)			
Height Dilielence	Between IDUs	m	15(30*)	15(30*)	15(30*)	15(30*)			
Noise Level		dB(A)	66/68	67/68	69/69	69/69			
Cooling Cooling		C DB	DB -5~52*						
Operation Range Heating		℃ WB		-20	~15				

- ${\it 1. Rated cooling capacity and rated heating capacity are tested in the following conditions:}\\$
- Cooling conditions: indoor air inlet temperature: 27 C DB 19 C WB, Outdoor air inlet temperature: 35 C DB, pipe length : 7.5m, pipe height difference: 0m Heating conditions: indoor air inlet temperature: 20 C DB, Outdoor air inlet temperature: 7 C DB 6 C WB, pipe length: 7.5m, pipe height difference: 0m
- 2.The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- 3. The final appearance of outdoor units is subject to the actual products.
- 4.For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our







Hi-FLEXI G+ Series		HP	24HP	26HP	28HP	30HP	32HP	34HP		
MadalBarra	AC3Ф380V~415V/5	0/60Hz	AVWT-232UKSZA	AVWT-250UKSZA	AVWT-268UKSZA	AVWT-287UKSZA	AVWT-306UKSZA	AVWT-324UKSZA		
Model Power Supply	AC3Ф208~230V/60	Hz	AVWT-232U8SZA	AVWT-250U8SZA	AVWT-268U8SZA	AVWT-287U8SZA	AVWT-306U8SZA	AVWT-324U8SZA		
Combination			AVWT-96U*	AVWT-114U*	AVWT-114U*	AVWT-96U*	AVWT-114U*	AVWT-154U*		
Combination			AVWT-136U*	AVWT-136U*	AVWT-154U*	AVWT-190U*	AVWT-190U*	AVWT-170U*		
	Nominal Capacity	kW	68.0	73.5	78.5	84.0	89.5	95		
Cooling Operation	Nominal Capacity	KBtu/h	232.0	250.8	267.8	286.6	305.4	324.1		
Cooling Operation	Power Consumption	kW	17.56	19.27	21.26	23.37	25.08	26.97		
	EER		3.87	3.81	3.69	3.59	3.57	3.52		
	Nominal Capacity	kW	76.5	82.5	87.5	94.5	100.5	106.0		
Heating Opeartion	Nominal Capacity	KBtu/h	261.0	281.5	298.6	322.4	342.9	361.7		
Heating Opeanion	Power Consumption	kW	16.3	18.0	20.3	22.8	24.5	26.25		
	COP		4.71	4.59	4.30	4.15	4.11	4.04		
Air Flow Rate m³/			21,900	22,200	22,200	25,500	25,800	26,100		
Outer Dimension (H×)	W×D)	mm	1,730	0× (950+1,210) ×7	'50	1,730× (950-	+1,350) ×750	1,730× (1,210+1,210) ×750		
Packing Dimension (F	ł×W×D)	mm	1,930	0×(1,015+1,275)×7	90	1,930× (1,015	5+1,420) ×790	1,930× (1,275+1,275) ×790		
Net Weight		Kg	571	572	573	634	635	665		
Gross Weight		Kg	605	606	607	667	668	709		
Compressor Quantity			3	3	3	3	3	4		
Condenser Fan Quan	tity		2	2	2	3	3	2		
Cabinet Color					lvory '	White				
Refrigerant Piping	Gas Line	mm	Ф28.6	Ф31.75	Ф31.75	Ф31.75	Ф31.75	Ф38.1		
Keingerant Fiping	Liquid Line	mm	Ф15.88	Ф19.05	Ф19.05	Ф19.05	Ф19.05	Ф19.05		
Max. number of conn	ectable IDU		40	43	47	50	53	56		
Max. Piping Length		m	165(190*)	165(190*)	165(190*)	165(190*)	165(190*)	165(190*)		
Height Difference	Between ODU&IDU	m	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)		
Tieight Dilierence	Between IDUs	m	15(30*)	15(30*)	15(30*)	15(30*)	15(30*)	15(30*)		
Noise Level dB(A)			68/69	69/70	71/73	72/73	72/73	72/73		
Operation Range	Cooling	℃ DB	-5~52*							
Operation Range	Heating	℃ WB	-20~15							

- 1. Rated cooling capacity and rated heating capacity are tested in the following conditions:
- Cooling conditions: indoor air inlet temperature: 27 C DB 19 C WB, Outdoor air inlet temperature: 35 C DB, pipe length: 7.5m, pipe height difference: 0m Heating conditions: indoor air inlet temperature: 20 C DB, Outdoor air inlet temperature: 7 C DB 6 C WB, pipe length: 7.5m, pipe height difference: 0m
- 2.The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- 3. The final appearance of outdoor units is subject to the actual products.
- 4.For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our professinal engineer.
- 5. When the cooling operation temperature is over 43 °C , please contact with our professional engineer.



Hi-FLEXI G+ Series		HP	36HP	38HP	40HP	42HP	44HP		
Madal Day and and	AC3Ф380V~415V/5	0/60Hz	AVWT-340UKSZA	AVWT-364UKSZA	AVWT-382UKSZA	AVWT-398UKSZA	AVWT-420UKSZA		
Model Power Supply	АС3Ф208~230V/60	Hz	AVWT-340U8SZA	AVWT-364U8SZA	AVWT-382U8SZA	AVWT-398U8SZA	AVWT-420U8SZA		
	1		AVWT-170U*	AVWT-154U*	AVWT-190*	AVWT-190U*	AVWT-212U*		
Combination			AVWT-170U*	AVWT-212U*	AVWT-190*	AVWT-212U*	AVWT-212U*		
	Naminal Canasitu	kW	100	106.5	112	117.5	123		
Oneline Oneseties	Nominal Capacity	KBtu/h	341.2	363.4	382.1	400.9	419.7		
Cooling Operation	Power Consumption	kW	28.74	32.70	32.84	36.52	40.20		
	EER		3.48	3.26	3.41	3.22	3.06		
	Nominal Capacity	kW	112.0	119.0	126.0	132.0	138.0		
Haakina Oanaakina	Nominal Capacity	KBtu/h	382.1	406.0	429.9	450.4	470.9		
Heating Opeartion	Power Consumption	kW	27.9	31.4	32.8	35.5	38.2		
	COP		4.01	3.79	3.84	3.72	3.61		
Air Flow Rate		m³/h	28,800	27,900	30,600	31,500	32,400		
Outer Dimension (H×)	mm	1,730× (1,210+1,210) ×750	1,730× (1,210+1,350) ×750	1,730×	(1,350+1,350) ×750				
Packing Dimension (F	H×W×D)	mm	1,930× (1,275+1,275) ×790	1,930× (1,275+1,420) ×790	1,930×	(1,420+1,420) ×790			
Net Weight		Kg	666	727	788	789	790		
Gross Weight		Kg	710	770	830	831	832		
Compressor Quantity			4	4	4	4	4		
Condenser Fan Quan	tity		2	3	4	4	4		
Cabinet Color					Ivory White				
Defeience Dinie	Gas Line	mm	Ф38.1	Ф38.1	Ф38.1	Ф38.1	Ф38.1		
Refrigerant Piping	Liquid Line	mm	Ф19.05	Ф19.05	Ф19.05	Ф19.05	Ф19.05		
Max. number of conr	nectable IDU		59	64	64	64	64		
Max. Piping Length		m	165(190*)	165(190*)	165(190*)	165(190*)	165(190*)		
Height Difference	Between ODU&IDU	m	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*		
Height Difference	Between IDUs	m	15(30*)	15(30*)	15(30*)	15(30*)	15(30*)		
Noise Level		dB(A)	72/73	72/73	74/74	74/74	74/74		
Operation Dans	Cooling	°C DB			-5~52*				
Operation Range	Operation Range Heating	°C WB	VB -20~15						

- 1. Rated cooling capacity and rated heating capacity are tested in the following conditions:
- Cooling conditions: indoor air inlet temperature: 27 C DB 19 C WB, Outdoor air inlet temperature: 35 C DB, pipe length: 7.5m, pipe height difference: 0m Heating conditions: indoor air inlet temperature: 20 C DB, Outdoor air inlet temperature: 7 C DB 6 C WB, pipe length: 7.5m, pipe height difference: 0m
- 2.The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- 3. The final appearance of outdoor units is subject to the actual products.
- 4.For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our professinal engineer.
- 5. When the cooling operation temperature is over 43 °C , please contact with our professional engineer.







Hi-FLEXI G+ Series		HP	46HP	48HP	50HP	52HP	54HP		
Model Power Supply	AC3Ф380V~415V/5	0/60Hz	AVWT-438UKSZA	AVWT-454UKSZA	AVWT-476UKSZA	AVWT-494UKSZA	AVWT-510UKSZA		
woder Fower Supply	АС3Ф208~230V/60	Hz	AVWT-438U8SZA	AVWT-454U8SZA	AVWT-476U8SZA	AVWT-494U8SZA	AVWT-510U8SZA		
Combination			AVWT-114U*	AVWT-114U*	AVWT-114U*	AVWT-114U*	AVWT-170U*		
			AVWT-154U*	AVWT-170U*	AVWT-154U*	AVWT-170U*	AVWT-170U*		
			AVWT-170U*	AVWT-170U*	AVWT-212U*	AVWT-212U*	AVWT-170U*		
	Naminal Canasity	kW	128.5	133.5	140	145.0	150		
Cooling Operation	Nominal Capacity	KBtu/h	438.4	455.5	477.7	494.7	511.8		
Cooling Operation	Power Consumption	kW	35.63	37.39	41.36	43.12	43.10		
	EER		3.61	3.57	3.38	3.36	3.48		
	Nominal Capacity	kW	143.5	149.5	156.5	162.5	168.0		
Heating Operation	Nominal Capacity	KBtu/h	489.6	510.1	534.0	554.5	573.2		
Heating Opeartion	Power Consumption	kW	34.3	35.99	39.5	41.1	41.9		
	COP		4.18	4.15	3.97	3.95	4.01		
Air Flow Rate	m³/h	36,600	39,300	38,400	41,100	43,200			
Outer Dimension (H×	W×D)	mm	1,730× (950+1,2	210+1,210) ×750	1,730× (950+12	2,10+1,350) ×750	1,730×(1,210+1,210+1,210)×750		
Packing Dimension (H	H×W×D)	mm	1,930× (1,015+1,	275+1,275) ×790	1,930× (1,015+1	,275+1,420) ×790	1,930×(1,275+1,275+1,275)×790		
Net Weight		Kg	906	907	968	969	999		
Gross Weight		Kg	962	963	1,023	1,024	1,065		
Compressor Quantity			5	5	5	5	6		
Condenser Fan Quan	tity		3	3	4	4	3		
Cabinet Color					Ivory White	)			
Refrigerant Piping	Gas Line	mm	Ф41.3	Ф41.3	Ф41.3	Ф41.3	Ф41.3		
Reingerant Fibring	Liquid Line	mm	Ф22.2	Ф22.2	Ф22.2	Ф22.2	Ф22.2		
Max. number of conr	nectable IDU		64	64	64	64	64		
Max. Piping Length		m	165(190*)	165(190*)	165(190*)	165(190*)	165(190*)		
Height Difference	Between ODU&IDU	m	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)		
Treight Dilierence	Between IDUs	m	15(30*)	15(30*)	15(30*)	15(30*)	15(30*)		
Noise Level dE		dB(A)	74/75	74/75	74/75	74/75	75/75		
Operation Range	Cooling Cooling		-5~52*						
Operation Range	Heating	°C WB	-20~15						

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

   Republic to the cooling capacity and rated heating capacity are tested in the following conditions:
- Cooling conditions: indoor air inlet temperature: 27  $\mathbb C$  DB 19  $\mathbb C$  WB, Outdoor air inlet temperature: 35  $\mathbb C$  DB, pipe length: 7.5m, pipe height difference: 0m Heating conditions: indoor air inlet temperature: 20  $\mathbb C$  DB, Outdoor air inlet temperature: 7  $\mathbb C$  DB 6  $\mathbb C$  WB, pipe length: 7.5m, pipe height difference: 0m
- 2. The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- $3. \\ \mbox{The final appearance of outdoor units is subject to the actual products.}$
- 4.For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our professinal engineer.
- 5. When the cooling operation temperature is over 43  $^\circ$ C , please contact with our professional engineer.



Hi-FLEXI G+ Series		HP	56HP	58HP	60HP	62HP	64HP	66HP		
Madal Barra Const	AC3Ф380V~415V/5	0/60Hz	AVWT-534UKSZA	AVWT-551UKSZA	AVWT-572UKSZA	AVWT-590UKSZA	AVWT-611UKSZA	AVWT-630UKSZA		
Model Power Supply	АС3Ф208~230V/60H	Ηz	AVWT-534U8SZA	AVWT-551U8SZA	AVWT-572U8SZA	AVWT-590U8SZA	AVWT-611U8SZA	AVWT-630U8SZA		
Combination			AVWT-154U*	AVWT-170U*	AVWT-170U*	AVWT-170U*	AVWT-190U*	AVWT-212U*		
			AVWT-170U*	AVWT-170U*	AVWT-190U*	AVWT-212U*	AVWT-212U*	AVWT-212U*		
			AVWT-212U*	AVWT-212U*	AVWT-212U*	AVWT-212U*	AVWT-212U*	AVWT-212U*		
		kW	156.5	161.5	167.5	173	179	184.5		
0 " 0 "	Nominal Capacity	KBtu/h	534.0	551.0	571.5	590.3	610.7	629.5		
Cooling Operation	Power Consumption	kW	47.07	48.83	50.89	54.56	56.62	60.29		
	EER		3.32	3.31	3.29	3.17	3.16	3.06		
	Naminal Canasity	kW	175.0	181.0	188.0	194.0	201.0	207.0		
Haatiaa Oaasatiaa	Nominal Capacity	KBtu/h	597.1	617.6	641.5	661.9	685.8	706.3		
Heating Opeartion	Power Consumption	kW	45.4	47.0	49.5	52.2	54.6	57.3		
	COP		3.86	3.85	3.80	3.72	3.68	3.61		
Air Flow Rate		m³/h	42,300	45,000	45,900	46,800	47,700	48,600		
Outer Dimension (H×)	W×D)	mm	1,730×(1,210-	+1,210+1,350)×750	1,730×(1,210+1,	350+1,350)×750	1,730×(1,350+1,	350+1,350)×750		
Packing Dimension (H	l×W×D)	mm	1,930×(1,275+1,275+1,420)×790		1,930×(1,210+1,	420+1,420)×790	1,930×(1,420+1,4	420+1,420)×790		
Net Weight		Kg	1,060	1,061	1,122	1,123	1,184	1,185		
Gross Weight		Kg	1,125	1,126	1,186	1,187	1,247	1,248		
Compressor Quantity			6	6	6	6	6	6		
Condenser Fan Quan	tity		4	4	5	5	6	6		
Cabinet Color					lvory	White				
Defricerent Dining	Gas Line	mm	Ф41.3	Ф44.5	Ф44.5	Ф44.5	Ф44.5	Ф44.5		
Refrigerant Piping	Liquid Line	mm	Ф22.2	Ф22.2	Ф22.2	Ф22.2	Ф22.2	Ф22.2		
Max. number of conn	ectable IDU		64	64	64	64	64	64		
Max. Piping Length		m	165(190*)	165(190*)	165(190*)	165(190*)	165(190*)	165(190*)		
Hoight Difforence	Between ODU&IDU	m	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)		
Height Difference	Between IDUs	m	15(30*)	15(30*)	15(30*)	15(30*)	15(30*)	15(30*)		
Noise Level		dB(A)	75/76	75/76	76/76	76/76	76/76	76/76		
Operation Dans	Cooling	C DB	-5~52*							
Operation Range Heating		°C WB	-20~15							

- 1. Rated cooling capacity and rated heating capacity are tested in the following conditions:
- Cooling conditions: indoor air inlet temperature: 27 C DB 19 C WB, Outdoor air inlet temperature: 35 C DB, pipe length: 7.5m, pipe height difference: 0m Heating conditions: indoor air inlet temperature: 20 C DB, Outdoor air inlet temperature: 7 C DB 6 C WB, pipe length: 7.5m, pipe height difference: 0m
- 2.The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- 3. The final appearance of outdoor units is subject to the actual products.
- 4.For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our professinal engineer.
- 5. When the cooling operation temperature is over 43  $\ensuremath{\mathbb{C}}$  , please contact with our professional engineer.







Hi-FLEXI G+ Series		HP	68HP	70HP	72HP	74HP	76HP	78HP				
Madal Dawas Const.	AC3Ф380V~415V/5	0/60Hz	AVWT-649UKSZA	AVWT-666UKSZA	AVWT-688UKSZA	AVWT-705UKSZA	AVWT-722UKSZA	AVWT-742UKSZA				
Model Power Supply	AC3Ф208~230V/60I	Hz	AVWT-649U8SZA	AVWT-666U8SZA	AVWT-688U8SZA	AVWT-705U8SZA	AVWT-722U8SZA	AVWT-742U8SZA				
			AVWT-114U*	AVWT-114U*	AVWT-114U*	AVWT-114U*	AVWT-170U*	AVWT-170U*				
Combination			AVWT-154U*	AVWT-170U*	AVWT-154U*	AVWT-170U*	AVWT-170U*	AVWT-170U*				
Combination			AVWT-170U*	AVWT-170U*	AVWT-212U*	AVWT-212U*	AVWT-170U*	AVWT-190U*				
			AVWT-212U*	AVWT-212U*	AVWT-212U*	AVWT-212U*	AVWT-212U*	AVWT-212U*				
	No selection of the selection	kW	190	195	201.5	206.5	211.5	217.5				
0	Nominal Capacity	KBtu/h	648.3	665.3	687.5	704.6	721.6	742.1				
Cooling Operation	Power Consumption	kW	57.51	57.49	61.46	63.22	63.20	65.26				
	EER		3.30	3.39	3.28	3.27	3.35	3.33				
	Naminal Casasita	kW	212.5	218.5	225.5	231.5	237.0	244.0				
	Nominal Capacity	KBtu/h	725.1	745.5	769.4	789.9	808.6	832.5				
Heating Opeartion	Power Consumption	kW	53.4	55.1	58.6	60.2	61.0	63.4				
	COP		3.98	3.97	3.85	3.84	3.88	3.85				
Air Flow Rate	m³/h	52,800	55,500	54,600	57,300	59,400	60,300					
Outer Dimension (H×1	W×D)	mm	1,730×(950+1,210 +1,210+1,350)×750	1,730× (950+1,210 +1,210+1,350) ×750	1,730× (950+1,210-	+1,350+1,350) ×750	1,730×(1,210+1,210 +1,210+1,350)×750	1,730×(1,210+1,210 +1,350+1,350)×750				
Packing Dimension (F	H×W×D)	mm	1,930×(1,015+1,275 +1,275+1,420)×790	1,930× (1,015+1,275 +1,275+1,420) ×790	1,930× (1,015+1,210	+1,420+1,420) ×790	1,930×(1,275+1,275 +1,275+1,420)×790	1,930×(1,275+1,275 +1,420+1,420)×790				
Net Weight		Kg	1,301	1,302	1,363	1,363 1,364		1,455				
Gross Weight		Kg	1,378	1,379	1,439	1,439 1,440		1,541				
Compressor Quantity			7	7	7	7	8	8				
Condenser Fan Quan	tity		5	5	6	6	5	6				
Cabinet Color					lvory	White						
Defrigerent Dining	Gas Line	mm	Ф50.8	Ф50.8	Ф50.8	Ф50.8	Ф50.8	Ф50.8				
Refrigerant Piping	Liquid Line	mm	Ф25.4	Ф25.4	Ф25.4	Ф25.4	Ф25.4	Ф25.4				
Max. number of conr	nectable IDU		64	64	64	64	64	64				
Max. Piping Length		m	165(190*)	165(190*)	165(190*)	165(190*)	165(190*)	165(190*)				
Height Difference	Between ODU&IDU	m	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)				
Theight Difference	Between IDUs	m	15(30*)	15(30*)	15(30*)	15(30*)	15(30*)	15(30*)				
Noise Level		dB(A)	76/77	76/77	76/77	76/77	76/77	76/77				
Operation Pance	Cooling		-5~52*									
Operation Range Heating		℃ WB		-20~15								

- 1. Rated cooling capacity and rated heating capacity are tested in the following conditions:
- Cooling conditions: indoor air inlet temperature: 27  $\mathbb C$  DB 19  $\mathbb C$  WB, Outdoor air inlet temperature: 35  $\mathbb C$  DB, pipe length: 7.5m, pipe height difference: 0m Heating conditions: indoor air inlet temperature: 20  $\mathbb C$  DB, Outdoor air inlet temperature: 7  $\mathbb C$  DB 6  $\mathbb C$  WB, pipe length: 7.5m, pipe height difference: 0m
- 2. The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- $3. \\ \mbox{The final appearance of outdoor units is subject to the actual products.}$
- 4.For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our professinal engineer.
- 5. When the cooling operation temperature is over 43  $^\circ$ C , please contact with our professional engineer.



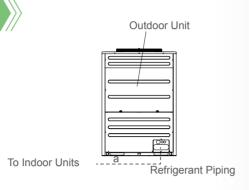
Hi-FLEXI G+ Series		HP	80HP	82HP	84HP	86HP	88HP		
	AC3Φ380V~415V/5	0/60Hz	AVWT-761UKSZA	AVWT-782UKSZA	AVWT-800UKSZA	AVWT-821UKSZA	AVWT-840UKSZA		
Model Power Supply	АС3Ф208~230V/60	Hz	AVWT-761U8SZA	AVWT-782U8SZA	AVWT-800U8SZA	AVWT-821U8SZA	AVWT-840U8SZA		
			AVWT-170U*	AVWT-170U*	AVWT-170U*	AVWT-190U*	AVWT-212U*		
Combination			AVWT-170U*	AVWT-190U*	AVWT-212U*	AVWT-212U*	AVWT-212U*		
Combination			AVWT-212U*	AVWT-212U*	AVWT-212U*	AVWT-212U*	AVWT-212U*		
			AVWT-212U*	AVWT-212U*	AVWT-212U*	AVWT-212U*	AVWT-212U*		
	Naminal Canadia	kW	223	229	234.5	240.5	246		
Casling Operation	Nominal Capacity	KBtu/h	760.9	781.3	800.1	820.6	839.4		
Cooling Operation	Power Consumption	kW	68.93	70.99	74.66	76.72	80.39		
	EER		3.24	3.23	3.14	3.13	3.06		
	Naminal Canasity	kW	250.0	257.0	263.0	270.0	276.0		
Haatina Oasaatina	Nominal Capacity	KBtu/h	853.0	876.9	897.4	921.2	941.7		
Heating Opeartion	Power Consumption	kW	66.2	68.6	71.3	73.7	76.5		
	COP		3.78	3.75	3.69	3.66	3.61		
Air Flow Rate		m³/h	61,200	62,100	63,000	63,900	64,800		
Outer Dimension (H×	W×D)	mm	1,730×(1,210+1,210 +1,350+1,350)×750	1,730×(1,210+1,3	50+1,350+1,350)×750	1,730×(1,350+1,350	+1,350+1,350)×750		
Packing Dimension (I	H×W×D)	mm	1,930×(1,275+1,275 +1,420+1,420)×790	1,930×(1,275+1,4	20+1,420+1,420)×790	1,930×(1,420+1,420	+1,420+1,420)×790		
Net Weight		Kg	1,456	1,517	1,517 1,518		1,580		
Gross Weight		Kg	1,542	1,602	1,603	1,663	1,664		
Compressor Quantity	,		8	8	8	8	8		
Condenser Fan Quar	ntity		6	7	7	8	8		
Cabinet Color					Ivory White				
Defeirement Dining	Gas Line	mm	Ф50.8	Ф50.8	Ф50.8	Ф50.8	Ф50.8		
Refrigerant Piping	Liquid Line	mm	Ф25.4	Ф25.4	Ф25.4	Ф25.4	Ф25.4		
Max. number of con	nectable IDU		64	64	64	64	64		
Max. Piping Length		m	165(190*)	165(190*)	165(190*)	165(190*)	165(190*)		
Hoight Difference	Between ODU&IDU	m	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)	50(90*)/40(70*)		
Height Difference	Between IDUs	m	15(30*)	15(30*)	15(30*)	15(30*)	15(30*)		
Noise Level dB		dB(A)	77/77	77/77	77/77	77/77	77/77		
Operation Descri	Cooling	°C DB			-5~52*				
Operation Range	Heating	°C WB	WB -20∼15						

- 1. Rated cooling capacity and rated heating capacity are tested in the following conditions:
- Cooling conditions: indoor air inlet temperature: 27 C DB 19 C WB, Outdoor air inlet temperature: 35 C DB, pipe length: 7.5m, pipe height difference: 0m Heating conditions: indoor air inlet temperature: 20 C DB, Outdoor air inlet temperature: 7 C DB 6 C WB, pipe length: 7.5m, pipe height difference: 0m
- 2. The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- 3.The final appearance of outdoor units is subject to the actual products.
- 4.For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our professinal engineer.
- 5. When the cooling operation temperature is over 43  $^\circ$ C , please contact with our professional engineer.





# **Piping Size for Base Units**



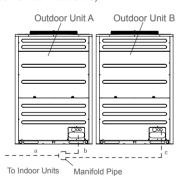
(Фmm)

	Model		AVWT-76UKSNA	AVWT-96UKSNA	AVWT-114UKSNA	AVWT-136UKSNA
Piping Size		Gas	19.05	22.2	25.4	25.4
SIZE		Liquid	9.53	9.53	12.7	12.7

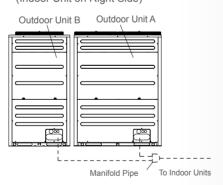
Model			AVWT-154UKSNA	AVWT-170UKSTA	AVWT-190UKS1A	AVWT-212UKS1A
Piping Size		Gas	28.6	28.6	28.6	28.6
SiZe	_ u	Liquid	12.7	15.88	15.88	15.88

# **Piping Size for Two Units Combination**

(Indoor Unit on Left Side)



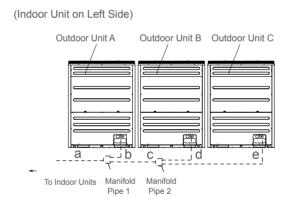


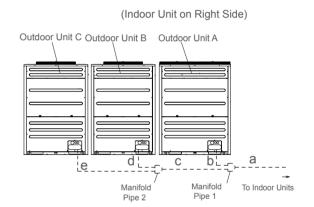


ľ	Model		AVWT-232UKSZA	AVWT-250UKSZA	AVWT-268UKSZA	AVWT-287UKSZA	AVWT-306UKSZA
Combination	Α Ι		AVWT-136UKSTA	AVWT-136UKSTA	AVWT-154UKSTA	AVWT-190UKS1A	AVWT-190UKS1A
Unit			AVWT-96UKSNA	AVWT-114UKSNA	AVWT-114UKSNA	AVWT-96UKSNA	AVWT-114UKSNA
Manif	old F	Pipe	HFQ-M22F		HFQ-M	32F	
	Gas	28.6	31.75	31.75	31.75	31.75	
	u	Liquid	15.88	19.05	19.05	19.05	19.05
Piping Size	b	Gas	25.4	25.4	28.6	28.6	28.6
		Liquid	12.7	12.7	12.7	15.88	15.88
	С	Gas	22.2	25.4	25.4	22.2	25.4
		Liquid	9.53	12.7	12.7	9.53	12.7

N	Model		AVWT-324UKSZA	AVWT-340UKSZA	AVWT-364UKSZA	AVWT-382UKSZA	AVWT-398UKSZA	AVWT-420UKSZA
Combination	Outdoor Unit Combination A		AVWT-170UKSTA	AVWT-170UKSTA	AVWT-212UKS1A	AVWT-190UKS1A	AVWT-212UKS1A	AVWT-212UKS1A
Unit Outdoor Unit B		AVWT-154UKSTA	AVWT-170UKSNA	AVWT-154UKSTA	AVWT-190UKS1A	AVWT-190UKS1A	AVWT-212UKS1A	
Manifold Pipe HFQ-M22F			HFQ-M22F		HFQ-I	M32F		
	Gas	38.1	38.1	38.1	38.1	38.1	38.1	
	а	Liquid	19.05	19.05	19.05	19.05	19.05	19.05
Piping Size	b	Gas	28.6	28.6	28.6	28.6	28.6	28.6
0,20	D	Liquid	15.88	15.88	15.88	15.88	15.88	15.88
	Gas	25.4	25.4	28.6	28.6	28.6	28.6	
		Liquid	12.7	12.7	12.7	15.88	15.88	15.88

# Piping Size for Three Units Combination





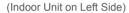
N	Model		AVWT-438UKSZA	AVWT-452UKSZA	AVWT-476UKSZA	AVWT-494UKSZA	AVWT-510UKSZA	AVWT-534UKSZA
	Outdoor Unit A	AVWT-170UKSTA	AVWT-170UKSTA	AVWT-212UKS1A	AVWT-212UKS1A	AVWT-170UKSTA	AVWT-212UKS1A	
Combination Unit		Outdoor Unit B	AVWT-154UKSTA	AVWT-170UKSTA	AVWT-154UKSTA	AVWT-170UKSTA	AVWT-170UKSTA	AVWT-170UKSTA
		Outdoor Unit C	AVWT-114UKSNA	AVWT-114UKSNA	AVWT-114UKSNA	AVWT-114UKSNA	AVWT-170UKSTA	AVWT-154UKSTA
Mani	fold	Pipe1			HFQ-N	Л462F		
Mani	fold	Pipe2			HFQ-N	M32F		
	a Gas Liquid	Gas	41.3	41.3	41.3	41.3	41.3	41.3
		Liquid	22.2	22.2	22.2	22.2	22.2	22.2
	b	Gas	28.6	28.6	28.6	28.6	28.6	28.6
		Liquid	15.88	15.88	15.88	15.88	15.88	15.88
Piping Size	С	Gas	31.75	31.75	31.75	31.75	38.1	38.1
		Liquid	19.05	19.05	19.05	19.05	19.05	19.05
	d	Gas	25.4	25.4	25.4	28.6	28.6	28.6
	-	Liquid	12.7	12.7	12.7	12.7	15.88	15.88
	е	Gas	25.4	25.4	25.4	25.4	25.4	25.4
		Liquid	12.7	12.7	12.7	12.7	12.7	12.7

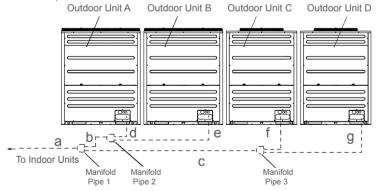


٨	/lode	el	AVWT-551UKSZA	AVWT-572UKSZA	AVWT-590UKSZA	AVWT-611UKSZA	AVWT-630UKSZA
		Outdoor Unit A	AVWT-212UKS1A	AVWT-212UKS1A	AVWT-212UKS1A	AVWT-212UKS1A	AVWT-212UKS1A
Combination Unit		Outdoor Unit B	AVWT-170UKSTA	AVWT-190UKS1A	AVWT-212UKS1A	AVWT-212UKS1A	AVWT-212UKS1A
		Outdoor Unit C	AVWT-170UKSTA	AVWT-170UKSTA	AVWT-170UKSTA	AVWT-190UKS1A	AVWT-212UKS1A
Manif	old F	Pipe1			HFQ-M	462F	
Manif	old F	Pipe2			HFQ-M	32F	
	а	Gas	44.5	44.5	44.5	44.5	44.5
	Liquid	22.2	22.2	22.2	22.2	22.2	
	b	Gas	28.6	28.6	28.6	28.6	28.6
	D	Liquid	15.88	15.88	15.88	15.88	15.88
Piping Size	С	Gas	38.1	38.1	38.1	38.1	38.1
	C	Liquid	19.05	19.05	19.05	19.05	19.05
	d	Gas	28.6	28.6	28.6	28.6	28.6
	u	Liquid	15.88	15.88	15.88	12.7	15.88
	е	Gas	25.4	28.6	28.6	28.6	28.6
	е	Liquid	12.7	15.88	15.88	15.88	15.88

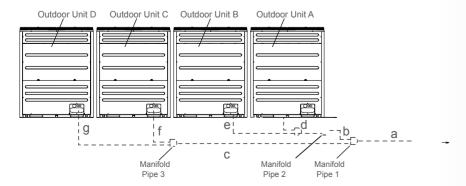
\*Perform piping for outdoor unit in accordance with the requirements as set forth above. Select manifold pipe model and tube size by referring to the models of outdoor unit provided above.

# Piping Size for Two Units Combination





(Indoor Unit on Right side)





N	Nod	el	AVWT-649UKSZA	AVWT-666UKSZA	AVWT-688UKSZA	AVWT-705UKSZA	AVWT-722UKSZA	AVWT-742UKSZA		
	(	Outdoor Unit A	AVWT-212UKS1A	AVWT-212UKS1A	AVWT-212UKS1A	AVWT-212UKS1A	AVWT-212UKS1A	AVWT-212UKS1A		
Combination Unit		Outdoor Unit B	AVWT-170UKSTA	AVWT-170UKSTA	AVWT-212UKS1A	AVWT-212UKS1A	AVWT-170UKSTA	AVWT-190UKS1A		
J		Outdoor Unit C	AVWT-154UKSTA	AVWT-170UKSTA	AVWT-154UKSTA	AVWT-170UKSTA	AVWT-170UKSTA	AVWT-170UKSTA		
		Outdoor Unit D	AVWT-114UKSNA	AVWT-114UKSNA	AVWT-114UKSNA	AVWT-114UKSNA	AVWT-170UKSTA	AVWT-170UKSTA		
Mani	fold	Pipe1			HFQ-N	Л682F				
Mani	fold	Pipe2			HFQ-N	VI32F				
Mani	fold	Pipe3			HFQ-I	V132F				
	а	Gas	50.8	50.8	50.8	50.8	50.8	50.8		
	a	Liquid	25.4	25.4	25.4	25.4	25.4	25.4		
	b	Gas	38.1	38.1	38.1	38.1	38.1	38.1		
	D	Liquid	19.05	19.05	19.05	19.05	19.05	19.05		
Piping Size	С	Gas	31.75	31.75	31.75	31.75	31.75	31.75		
		Liquid	19.05	19.05	19.05	19.05	19.05	19.05		
	d	Gas	28.6	28.6	28.6	28.6	28.6	28.6		
	u	Liquid	15.88	15.88	15.88	15.88	15.88	15.88		
	e			Gas	28.6	28.6	28.6	28.6	28.6	28.6
	е	Liquid	15.88	15.88	15.88	15.88	15.88	15.88		
	f	Gas	25.4	25.4	25.4	28.6	28.6	28.6		
	Ľ	Liquid	12.7	12.7	12.7	15.88	15.88	15.88		
	g	Gas	25.4	25.4	25.4	25.4	25.4	28.6		
	3	Liquid	12.7	12.7	12.7	12.7	12.7	12.7		

N	/lode	el	AVWT-761UKSZA	AVWT-782UKSZA	AVWT-800UKSZA	AVWT-821UKSZA	AVWT-840UKSZA			
		Outdoor Unit A	AVWT-212UKS1A	AVWT-212UKS1A	AVWT-212UKS1A	AVWT-212UKS1A	AVWT-212UKS1A			
Combination	nbination Outdoor Unit B		AVWT-212UKS1A	AVWT-212UKS1A	AVWT-212UKS1A	AVWT-212UKS1A	AVWT-212UKS1A			
<b>5</b>		Outdoor Unit C	AVWT-170UKSTA	AVWT-190UKS1A	AVWT-212UKS1A	AVWT-212UKS1A	AVWT-212UKS1A			
		Outdoor Unit D	AVWT-170UKSTA	AVWT-170UKSTA	AVWT-170UKSTA	AVWT-190UKS1A	AVWT-212UKS1A			
Manif	old F	Pipe1		'	HFQ-M682	F				
Manif	old F	Pipe2			HFQ-M32F	HFQ-M32F				
Manif	old F	Pipe3		HFQ-M32F						
	a Liqu	Gas	50.8	50.8	50.8	50.8	50.8			
		Liquid	25.4	25.4	25.4	25.4	25.4			
		Gas	38.1	38.1	38.1	38.1	38.1			
	b	Liquid	19.05	19.05	19.05	19.05	19.05			
Tube	С	Gas	38.1	38.1	38.1	38.1	38.1			
Size	C	Liquid	19.05	19.05	19.05	19.05	19.05			
	d	Gas	28.6	28.6	28.6	28.6	28.6			
	u	Liquid	15.88	15.88	15.88	15.88	15.88			
	е	Gas	28.6	28.6	28.6	28.6	28.6			
	6	Liquid	15.88	15.88	15.88	15.88	15.88			
	f	Gas	28.6	28.6	28.6	28.6	28.6			
	Ĺ	Liquid	15. 88	15. 88	15. 88	15.88	15.88			
	g	Gas	25.4	28.6	28.6	28.6	28.6			

\*Perform piping for outdoor unit in accordance with the requirements as set forth above. Select manifold pipe model and tube size by referring to the models of outdoor unit provided above.





# Hi-FLEXi G Series

Latest Full DC Inverter Series

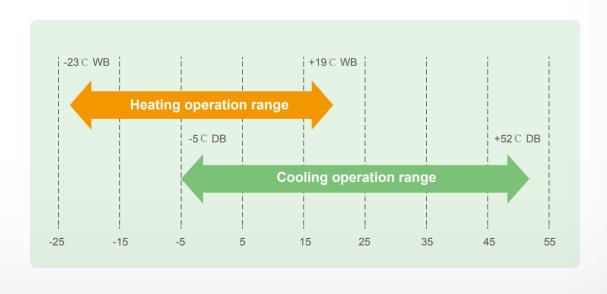
Hi-FLEXi G series is the full DC inverter-driven multi-split central air conditioning product. It is the concentrated expression of Hisense's R&D ability and technical strength. Multiple advanced technology is adopted:

- High efficiency high-pressure chamber scroll compressor
- Full DC inverter-driven control technology
- Stepless fan speed regulation and fan production technology
- Smart and precise unit capacity allocation technology
- Intelligent demand mode control technology



# **Wide Operating Range**

The system can run within a wide temperature range, the lowest heating operation can reach -23 °C WB, ensure a good heating effect in winter.

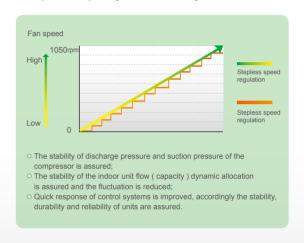


# **Stepless Fan Speed Regulation Technology**

Full DC inverter series outdoor unit fan motor adopts DC inverter-driven motor which improves the motor efficiency by 40% and reduces the input power significantly. The outdoor unit fan can achieve stepless speed regulation according to the ambient temperature changes



Stepless frequency conversion adjustment of the fan



# **Smart and Precise Unit Capacity Allocation**

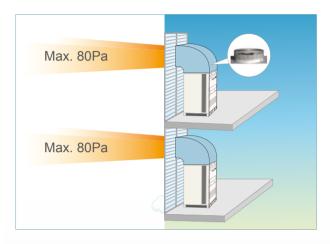
Tests show that multi-split air conditioning units are most efficient under 40% 75% partial load condition, and the power consumption is lowest. Take 20HP units ( double module ) as an example, when the units operate under 12HP load, the load distribution of each module: common product is 10HP ( full load ) +2HP ( ultra-low load ); Hisense Hi-FIEXi G series is 6HP+6HP ( intermediate load ).







# **Extra-high External Static Pressure Design**

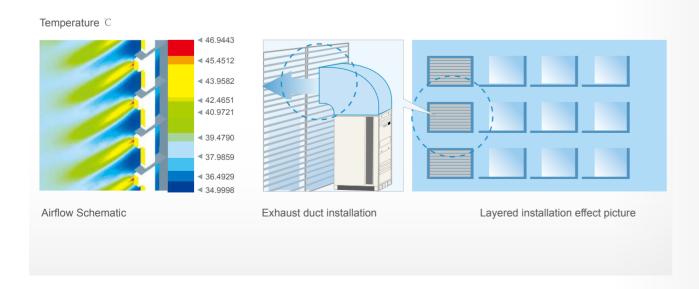


- Adopt high-efficiency DC fan motor
- The use of high-efficiency fan reduces energy consumption of the motor
- Can achieve industry-leading level of external static pressure 80Pa

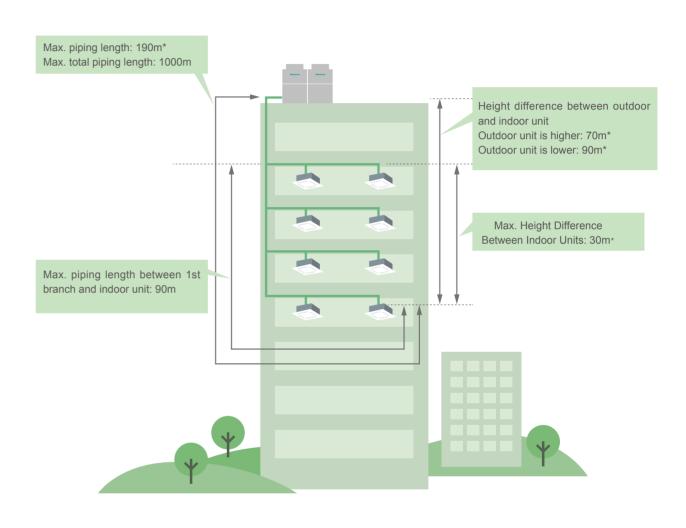
The efficient axial fan is designed adopting CFD, finite element method, aviation dynamic fluid simulation analysis and other advanced concepts; its air inlet angle and outlet angle are optimized; together with unique horn air vent design, the external static pressure of outdoor unit is higher, to ensure smooth air flow.

# Layered Installation, Flexibly Corresponding to High-rise Buildings

For high-rise buildings, crawl space can be left to place outdoor units, or machine room can be set up on each floor. By using exhaust duct to exhaust the air, short circuit of return air can be avoided with long exhaust distance, which ensures good ventilation and heat exchange effects of outdoor units.



# | More Flexible Refrigerant Piping Work



Note: For data marked by \*, please contact with our engineer.







Hi-FLEXI G Series		HP	8HP	10HP	12HP	14HP	16HP	18HP
	AC3Ф380V~415V/5	50Hz	AVWT-76UESRG	AVWT-96UESRG	AVWT-114UESRG	AVWT-136UESSG	AVWT-154UESSG	AVWT-170UESSG
Model Power Supply	АС3Ф380V/60Hz		AVWT-76U7SRG	AVWT-96U7SRG	AVWT-114U7SRG	AVWT-136U7SSG	AVWT-154U7SSG	AVWT-170U7SSG
	АС3Ф220V/60Hz		AVWT-76U9SRG	AVWT-96U9SRG	AVWT-114U9SRG	AVWT-136U9SSG	AVWT-154U9SSG	AVWT-170U9SSG
Combination	Combination							
	Nominal Capacity	kW	22.4	28.0	33.5	40.0	45.0	50.0
Cooling Operation	Nominal Capacity	KBtu/h	76.5	95.6	114.3	136.5	153.6	170.6
Cooling Operation	Power Consumption	kW	5.22	729	8.7	10.99	13.12	15.11
	EER		4.29	3.84	3.85	3.64	3.43	3.31
	Nominal Capacity	kW	25.0	31.5	37.5	45.0	50.0	56.0
Heating Opeartion	Nominal Capacity	KBtu/h	85.3	107.5	128.0	153.6	170.6	191.1
Heating Opeartion	Power Consumption	kW	5.57	7.48	9.35	10.98	12.41	14.7
	COP		4.49	4.21	4.01	4.10	4.03	3.81
Air Flow Rate		m³/h	9,300	10,200	10,500	11,700	11,700	11,700
Outer Dimension (H×)	W×D)	mm	1,720×950×750	1,720×950×750	1,720×950×750	1,720×1,210×750	1,720×1,210×750	1,720×1,210×750
Packing Dimension (F	ł×W×D)	mm	1,882×1,018×828	1,882×1,018×828	1,882×1,018×828	1,882×1,278×828	1,882×1,278×828	1,882×1,278×828
Net Weight		Kg	224	225	227	312	315	318
Gross Weight		Kg	237	238	240	327	330	333
Compressor Quantity			1	1	1	2	2	2
Condenser Fan Quan	tity		1	1	1	1	1	1
Cabinet Color					lvory	White		
Refrigerant Piping	Gas Line	mm	Ф19.05	Ф22.2	Ф25.4	Ф25.4	Ф28.6	Ф28.6
Reingerant Fibing	Liquid Line	mm	Ф9.53	Ф9.53	Ф12.7	Ф12.7	Ф12.7	Ф15.88
Max. number of conn	ectable IDU		13	16	19	23	26	26
Max. Piping Length		m	165(190*)	165(190*)	165(190*)	165(190*)	165(190*)	165(190*)
Height Difference Between ODU&IDU  Between IDUs		m	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)
		m	15(30*)	15(30*)	15(30*)	15(30*)	15(30*)	15(30*)
Noise Level		dB(A)	56	57	59	59	59	60
Operation Range	Cooling				-5~	-52		
Operation Range	Heating	℃ WB			-23	~19		

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

  Cooling conditions: indoor air inlet temperature: 27 C DB 19 C WB, Outdoor air inlet temperature: 35 C DB, pipe length: 7.5m, pipe height difference: 0m Heating conditions: indoor air inlet temperature: 20 C DB, Outdoor air inlet temperature: 7 C DB 6 C WB, pipe length: 7.5m, pipe height difference: 0m
- 2.The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- $3. \\ \mbox{The final appearance of outdoor units is subject to the actual products.}$
- 4.For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our professinal engineer.



Hi-FLEXI G Series		HP	20HP	22HP	24HP	26HP
	AC3Ф380V~415V/5	50Hz	AVWT-190UESZG	AVWT-212UESZG	AVWT-232UESZG	AVWT-250UESZG
Model Power Supply	АС3Ф380V/60Hz		AVWT-190U7SZG	AVWT-212U7SZG	AVWT-232U7SZG	AVWT-250U7SZG
	АС3Ф220V/60Hz		AVWT-190U9SZG	AVWT-212U9SZG	AVWT-232U9SZG	AVWT-250U9SZG
Combination			AVWT-76U*AVWT-114U*	AVWT-76U*AVWT-136U*	AVWT-96U*AVWT-136U*	AVWT-114U*AVWT-136U*
	Nominal Capacity	kW	56.0	61.5	69.0	73.0
Cooling Operation	Nominal Capacity	KBtu/h	191.1	209.9	235.5	249.1
Cooling Operation	Power Consumption	kW	13.90	16.20	18.28	19.74
	EER		4.03	3.80	3.77	3.70
	Nominal Capacity	kW	63.0	69.0	77.5	82.5
Heating Opeartion	Nominal Capacity	KBtu/h	215.0	235.5	264.5	281.6
	Power Consumption	kW	14.95	16.55	18.44	20.34
	COP		4.21	4.17	4.20	4.06
Air Flow Rate		m³/h	19,800	21,000	21,900	22,200
Outer Dimension (H×\	W×D)	mm	1,720×(950+950)×750	1,720×(950+1210)×750	1,720×(950+1,210)×750	1,720×(950+1,210)×750
Packing Dimension (F	ł×W×D)	mm	-	-	-	-
Net Weight		Kg	224+227 224+312 225+31		225+312	227+312
Gross Weight		Kg	237+240 237+327		238+327	240+327
Compressor Quantity			2	3	3	3
Condenser Fan Quan	tity		2	2	2	2
Cabinet Color				lvory	White	
Refrigerant Piping	Gas Line	mm	Ф28.6	Ф28.6	Ф28.6	Ф31.75
Reingerant Piping	Liquid Line	mm	Ф15.88	Ф15.88	Ф15.88	Ф19.05
Max. number of conn	ectable IDU		33	36	40	43
Max. Piping Length		m	165(190*)	165(190*)	165(190*)	165(190*)
Height Difference	Between ODU&IDU	m	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)
Tieight Dilicience	Between IDUs	m	15(30*)	15(30*)	15(30*)	15(30*)
Noise Level		dB(A)	61	61	61	62
Operation Bangs	Cooling	°C DB		-5	~52	
Operation Range	Heating	°C WB		-23	~19	

- 1. Rated cooling capacity and rated heating capacity are tested in the following conditions:
- Cooling conditions: indoor air inlet temperature: 27 C DB 19 C WB, Outdoor air inlet temperature: 35 C DB, pipe length: 7.5m, pipe height difference: 0m Heating conditions: indoor air inlet temperature: 20 C DB, Outdoor air inlet temperature: 7 C DB 6 C WB, pipe length: 7.5m, pipe height difference: 0m
- 2.The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- $3. \\ \mbox{The final appearance of outdoor units is subject to the actual products.}$
- 4.For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our professinal engineer.







Hi-FLEXi G Series		HP	28HP	30HP	32HP	34HP	36HP
	AC3Ф380 ~ 415V/5	0Hz	AVWT-272UESZG	AVWT-290UESZG	AVWT-308UESZG	AVWT-324UESZG	AVWT-340UESZG
Model Power Supply	АС3Ф380V/60Hz		AVWT-272U7SZG	AVWT-290U7SZG	AVWT-308U7SZG	AVWT-324U7SZG	AVWT-340U7SZG
	АС3Ф220V/60Hz		AVWT-272U9SZG	AVWT-290U9SZG	AVWT-308U9SZG	AVWT-324U9SZG	AVWT-340U9SZG
Combination			AVWT-136U*	AVWT-136U*	AVWT-154U*	AVWT-154U*	AVWT-170U*
Combination			AVWT-136U*	AVWT-154U*	AVWT-154U*	AVWT-170U*	AVWT-170U*
	Nominal Capacity	kW	80.0	85.0	90.0	95.0	100.0
Cooling Operation	Nominal Capacity	KBtu/h	273.0	290.1	307.2	324.2	341.3
Cooling Operation	Power Consumption	kW	21.98	24.07	26.24	28.25	30.22
	EER		3.64	3.53	3.43	3.36	3.31
	Nominal Capacity	kW	90.0	95.0	100.0	106.0	112.0
Heating Operation	Nominal Capacity	KBtu/h	307.2	324.2	341.3	361.8	382.3
Heating Opeartion	Power Consumption	kW	22.02	23.42	24.82	27.11	29.40
	COP		4.09	4.06	4.03	3.91	3.81
Air Flow Rate		m³/h	23,400	23,400	23,400	23,400	23,400
Outer Dimension (H×V	V×D)	mm	1,720×(1,210+1,210)×750	1,720×(1,210+1,210)×750	1,720×(1,210+1,210)×750	1,720×(1,210+1,210)×750	1,720×(1,210+1,210)×750
Packing Dimension (H	×W×D)	mm	-	-	-	-	-
Net Weight		Kg	312+312	312+315	315+315	315+318	318+318
Gross Weight		Kg	327+327	327+330	330+330	330+333	333+333
Compressor Quantity			4	4	4	4	4
Condenser Fan Quantity			2	2	2	2	2
Cabinet Color			lvory	White		Ivory White	
Defricerent Dining	Gas Line	mm	Ф31.75	Ф31.75	Ф31.75	Ф31.75	Ф38.1
Refrigerant Piping	Liquid Line	mm	Ф19.05	Ф19.05	Ф19.05	Ф19.05	Ф19.05
Max. number of connectable IDU			47	50	53	56	59
Max. Piping Length		m	165(190*)	165(190*)	165(190*)	165(190*)	165(190*)
Height Difference	Between ODU&IDU	m	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)
Tioight Dilicionoe	Between IDUs	m	15(30*)	15(30*)	15(30*)	15(30*)	15(30*)
Noise Level		dB(A)	62	62	62	63	63
Operation Range	Cooling	°C DB	-5~52	-5~52	-5~52	-5~52	-5~52
Operation Range	Heating	℃ WB	-23~19	-23~19	-23~19	-23~19	-23~19

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

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

  Heating conditions: indoor air inlet temperature: 20 °C DB, Outdoor air inlet temperature: 7 °C DB 6 °C WB, pipe length: 7.5m, pipe height difference: 0m
- 2. The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- 3. The final appearance of outdoor units is subject to the actual products.
- 4.For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our professinal engineer.



Hi-FLEXi G Series		HP	38HP	40HP	42HP
	AC3Ф380 ~ 415V/5	50Hz	AVWT-364UESZG	AVWT-382UESZG	AVWT-398UESZG
Model Power Supply	АС3Ф380V/60Hz		AVWT-364U7SZG	AVWT-382U7SZG	AVWT-398U7SZG
	АС3Ф220V/60Hz		AVWT-364U9SZG	AVWT-382U9SZG	AVWT-398U9SZG
Combination			AVWT-114U*	AVWT-114U*	AVWT-114U*
Combination			AVWT-114U* AVWT-136U*	AVWT-114U* AVWT-154U*	AVWT-114U* AVWT-170U*
	Naminal Canasity	kW	109.0	112.0	118.0
Cooling Operation	Nominal Capacity	KBtu/h	372.0	382.3	402.7
Cooling Operation	Power Consumption	kW	28.43	30.58	32.52
	EER		3.83	3.66	3.63
	Naminal Canasity	kW	118.0	125.0	132.0
Haatiaa Oaasatiaa	Nominal Capacity	KBtu/h	402.7	426.6	450.5
Heating Opeartion	Power Consumption kW		29.71	31.11	33.37
	COP		3.97	4.02	3.96
Air Flow Rate		m³/h	32,700	32,700	32,700
Outer Dimension (H×V	V×D)	mm	1,720×(950+950+1,210)×750	1,720×(950+950+1,210)×750	1,720×(950+950+1,210)×750
Packing Dimension (H	×W×D)	mm	-	-	-
Net Weight		Kg	227+227+312 227+227+315		227+227+318
Gross Weight		Kg	240+240+327	240+240+330	240+240+333
Compressor Quantity			4	4	4
Condenser Fan Quantity			3	3	3
Cabinet Color				Ivory White	
Defricement Dining	Gas Line	mm	Ф38.1	Ф38.1	Ф38.1
Refrigerant Piping	Liquid Line	mm	Ф19.05	Ф19.05	Ф19.05
Max.number of connectable IDU			64	64	64
Max. Piping Length		m	165(190*)	165(190*)	165(190*)
Height Difference	Between ODU&IDU	m	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)
gat Dinorono	Between IDUs	m	15(30*)	15(30*)	15(30*)
Noise Level		dB(A)	64	64	64
Operation Range	Cooling	°C DB	-5~52	-5~52	-5~52
Operation Range	Heating	℃ WB	-23~19	-23~19	-23~19

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

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

  Heating conditions: indoor air inlet temperature: 20 C DB, Outdoor air inlet temperature: 7 C DB 6 C WB, pipe length: 7.5m, pipe height difference: 0m
- 2.The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- 3. The final appearance of outdoor units is subject to the actual products.
- 4.For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our professinal engineer.







Hi-FLEXi G Series		HP	44HP	46HP	48HP
	AC3Ф380 ~ 415V/5	50Hz	AVWT-420UESZG	AVWT-438UESZG	AVWT-454UESZG
Model Power Supply	АС3Ф380V/60Hz		AVWT-420U7SZG	AVWT-438U7SZG	AVWT-454U7SZG
	АС3Ф220V/60Hz		AVWT-420U9SZG	AVWT-438U9SZG	AVWT-454U9SZG
Combination			AVWT-114U*	AVWT-114U*	AVWT-114U*
Combination			AVWT-136U* AVWT-170U*	AVWT-154U* AVWT-170U*	AVWT-170U* AVWT-170U*
	Nominal Capacity	kW	125.0	132.0	136.0
Cooling Operation	Nominal Capacity	KBtu/h	426.6	450.5	464.2
Cooling Operation	Power Consumption	kW	34.84	36.91	38.83
	EER		3.59	3.58	3.50
	Nominal Capacity	kW	140.0	145.0	150.0
Heating Opeartion	Nominal Capacity	KBtu/h	477.8	494.9	511.9
	Power Consumption	kW	35.06	36.51	38.80
	COP		3.99	3.97	3.87
Air Flow Rate		m³/h	33,900	33,900	33,900
Outer Dimension (H×V	V×D)	mm	1,720×(950+1,210+1,210)×750	1,720×(950+1,210+1,210)×750	1,720×(950+1,210+1,210)×750
Packing Dimension (H	×W×D)	mm	-	-	-
Net Weight		Kg	227+312+318	227+312+318 227+315+318	
Gross Weight		Kg	240+327+333	240+327+333 240+330+333	
Compressor Quantity			5	5	5
Condenser Fan Quantity			3	3	3
Cabinet Color				Ivory White	
Refrigerant Piping	Gas Line	mm	Ф38.1	Ф38.1	Ф38.1
Kenigerant Fiping	Liquid Line	mm	Ф19.05	Ф19.05	Ф19.05
Max. number of connectable IDU			64	64	64
Max. Piping Length		m	165(190*)	165(190*)	165(190*)
Height Difference	Between ODU&IDU	m	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)
	Between IDUs	m	15(30*)	15(30*)	15(30*)
Noise Level		dB(A)	64	64	65
Operation Range	Cooling	℃ DB	-5~52	-5~52	-5~52
Operation Range	Heating	℃ WB	-23~19	-23~19	-23~19

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

  Cooling conditions: indoor air inlet temperature: 27 C DB 19 C WB, Outdoor air inlet temperature: 35 C DB, pipe length: 7.5m, pipe height difference: 0m Heating conditions: indoor air inlet temperature: 20 C DB, Outdoor air inlet temperature: 7 C DB 6 C WB, pipe length: 7.5m, pipe height difference: 0m
- 2. The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- 3. The final appearance of outdoor units is subject to the actual products.
- 4.For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our professinal engineer.



Hi-FLEXi G Series		HP	50HP	52HP	54HP	
	AC3Ф380 ~ 415V/5	50Hz	AVWT-476UESZG	AVWT-494UESZG	AVWT-510UESZG	
Model Power Supply	АС3Ф380V/60Hz		AVWT-476U7SZG	AVWT-494U7SZG	AVWT-510U7SZG	
	АС3Ф220V/60Hz		AVWT-476U9SZG	AVWT-494U9SZG	AVWT-510U9SZG	
Combination			AVWT-136U*	AVWT-154U*	AVWT-170U*	
Combination			AVWT-170U* AVWT-170U*	AVWT-170U* AVWT-170U*	AVWT-170U* AVWT-170U*	
	Naminal Canasita	kW	140.0	145.0	150.0	
Casling Operation	Nominal Capacity	KBtu/h	477.8	494.9	511.9	
Cooling Operation	Power Consumption	kW	41.21	43.32	45.33	
	EER		3.40	3.35	3.31	
	Naminal Canasity	kW	155.0	160.0	165.0	
Heating Opeartion	Nominal Capacity	KBtu/h	529.0	546.1	563.1	
	Power Consumption	kW	40.36	41.86	44.16	
	COP		3.84	3.82	3.74	
Air Flow Rate		m³/h	35,100	35,100	35,100	
Outer Dimension (H×V	V×D)	mm	1,720×(1,210+1,210+1,210)×750	1,720×(1,210+1,210+1,210)×750	1,720×(1,210+1,210+1,210)×750	
Packing Dimension (H	×W×D)	mm	-	-	-	
Net Weight		Kg	312+318+318 315+318+318		318+318+318	
Gross Weight		Kg	327+333+333	330+333+333	333+333+333	
Compressor Quantity			6	6	6	
Condenser Fan Quantity			3	3	3	
Cabinet Color				Ivory White		
Refrigerant Piping	Gas Line	mm	Ф38.1	Ф38.1	Ф38.1	
Reingerant Piping	Liquid Line	mm	Ф19.05	Ф19.05	Ф19.05	
Max.number of connectable IDU			64	64	64	
Max. Piping Length		m	165(190*)	165(190*)	165(190*)	
Height Difference	Between ODU&IDU	m	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)	
g.it Billololloo	Between IDUs	m	15(30*)	15(30*)	15(30*)	
Noise Level		dB(A)	65	65	65	
Operation Range	Cooling	°C DB	-5~52	-5~52	-5~52	
Operation Range	Heating	°C WB	-23~19	-23~19	-23~19	

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

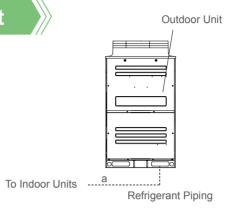
  Cooling conditions: indoor air inlet temperature: 27 C DB 19 C WB, Outdoor air inlet temperature: 35 C DB, pipe length: 7.5m, pipe height difference: 0m Heating conditions: indoor air inlet temperature: 20 C DB, Outdoor air inlet temperature: 7 C DB 6 C WB, pipe length: 7.5m, pipe height difference: 0m
- 2. The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- 3. The final appearance of outdoor units is subject to the actual products.
- 4.For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our professinal engineer.





# **Pipe Diameter for Outdoor Unit**

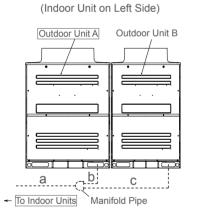
Piping Size for AVWT-76UE(7)SRG to AVWT-170UE(7)SSG (Base Unit)

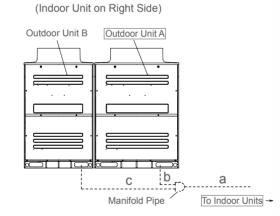


Mod	el		AVWT-76UE(7)SRG	AVWT-96UE(7)SRG	AVWT-114UE(7)SRG	AVWT-136UE(7)SSG	AVWT-154UE(7)SSG	AVWT-170UE(7)SSG
Piping	0	Gas	19.05	22.2	25.4	25.4	28.6	28.6
Size	а	Liquid	9.53	9.53	12.7	12.7	12.7	15.88

Piping Size for AVWT-190UE(7)SZG to AVWT-340UE(7)SZG (2 Units Combination)

< Figure for AVWT-232UE(7)SZG >





(Фmm)

(Фmm)

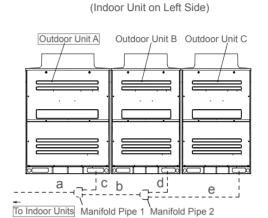
Model			AVWT-190*	AVWT-212*	AVWT-232*	AVWT-250*	AVWT-272*	AVWT-290*	AVWT-308*	AVWT-324*	AVWT-340*
Combination		itdoor it A	AVWT-76*	AVWT-76*	AVWT-96*	AVWT-114*	AVWT-136*	AVWT-136*	AVWT-154*	AVWT-154*	AVWT-170*
Unit		itdoor iit B	AVWT-114*	AVWT-136*	AVWT-136*	AVWT-136*	AVWT-136*	AVWT-154*	AVWT-154*	AVWT-170*	AVWT-170*
Manifold				HFQ-M22F			HFQ-M32F				
		Gas	28.6	28.6	28.6	31.75	31.75	31.75	31.75	31.75	38.1
	а	Liquid	15.88	15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05
Piping Size		Gas	25.4	25.4	25.4	25.4	25.4	28.6	28.6	28.6	28.6
Fibility Size	b	Liquid	12.7	12.7	12.7	12.7	12.7	12.7	12.7	15.88	15.88
		Gas	19.05	19.05	22.2	25.4	25.4	25.4	28.6	28.6	28.6
	С	Liquid	9.53	9.53	9.53	12.7	12.7	12.7	12.7	12.7	15.88

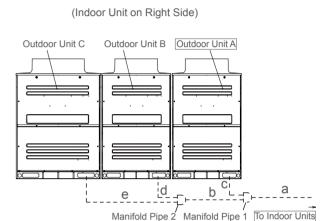
<sup>\*</sup> Perform the installation of the outdoor unit and piping connection according to the figure.

Refer to the table for the outdoor unit model, the manifold pipe model and the piping diameter.

Piping Size for AVWT-364UE(7)SZG to AVWT-510UE(7)SZG (Triple Units Combination)

< Figure for AVWT-364UE(7)SZG >





(Фmm)

Model			AVWT-364*	AVWT-382*	AVWT-398*	AVWT-420*	AVWT-438*	AVWT-454*	AVWT-476*	AVWT-494*	AVWT-510*	
	_	itdoor iit A	AVWT-114*	AVWT-114*	AVWT-114*	AVWT-114*	AVWT-114*	AVWT-114*	AVWT-136*	AVWT-154*	AVWT-170*	
Combination Unit		itdoor iit B	AVWT-114*	AVWT-114*	AVWT-114*	AVWT-136*	AVWT-154*	AVWT-170*	AVWT-170*	AVWT-170*	AVWT-170*	
		itdoor iit C	AVWT-136*	AVWT-154*	AVWT-170*							
Manifold	Manifold Pipe			HFQ-M32F+HFQ-M32F								
	а	Gas	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	
	<u> </u>	Liquid	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	
	D	Gas	28.6	28.6	28.6	31.75	31.75	31.75	31.75	31.75	31.75	
		Liquid	15.88	15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05	
Piping Size		Gas	25.4	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.6	
	С	Liquid	12.7	12.7	15.88	15.88	15.88	15.88	15.88	15.88	15.88	
	d	Gas	25.4	25.4	25.4	25.4	28.6	28.6	28.6	28.6	28.6	
	u	Liquid	12.7	12.7	12.7	12.7	12.7	15.88	15.88	15.88	15.88	
		Gas	25.4	25.4	25.4	25.4	25.4	25.4	25.4	28.6	28.6	
	е	Liquid	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	15.88	

<sup>\*</sup> Perform the installation of the outdoor unit and piping connection according to the figure.

Refer to the table for the outdoor unit model, the manifold pipe model and the piping diameter.





# Hi-FLEXi X Series

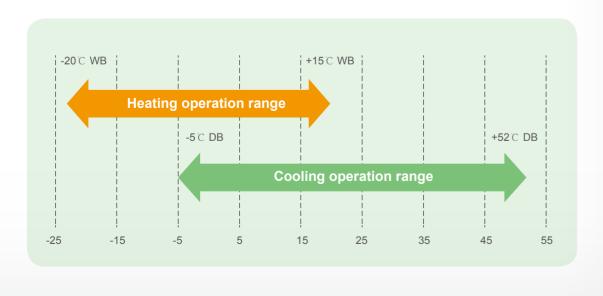
Hi-Flexi X series is equipped with large capacity full DC inverter compressor. The wide capacity range and compact structure design make it suitable for various place such as office building, shopping mall, hospital, school and so on.

- High efficiency and large capacity scroll compressor
- Latest DC inverter-driven technology
- Stepless fan speed regulation technology
- Smart and accurate unit capacity allocation technology
- Intelligent control mode

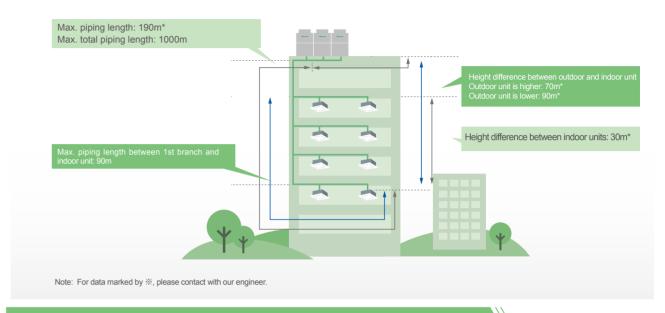


# Wide Operating Range

The system can run in a wide temperature range, the lowest temperature can reach -20 °C WB, ensure a good heating effect in winter.

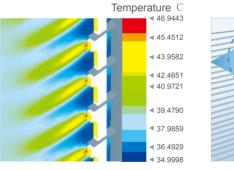


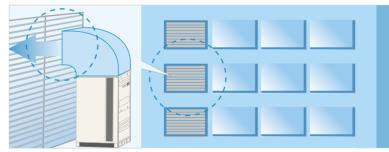
# Super-long piping conditions, more convenient design



# Layered installation, flexibly corresponding to high-rise buildings

For high-rise buildings,machine layer can be left to place outdoor units ,or machine room can be set up on each floor,By using exhaust duct to exhaust the air ,with long distance supply air ,can effectively prevent short circuit of return air,ensure good ventilation and heat exchange effects of outdoor units.

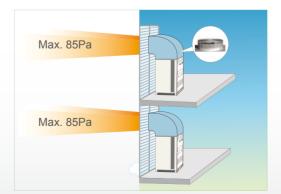




Airflow Schematic

Exhaust duct installation

Layered installation effect picture



#### Extra-high external static pressure design

The efficient axial fan is designed adopting CFD, finite element method, aviation dynamic fluid simulation analysis and other advanced concepts; its air inlet angle and outlet angle are optimized; together with unique horn air vent design, the external static pressure of outdoor unit is higher, which can better exhaust air and ensure smooth air flow.

- Adopt high-efficiency DC fan motor
- $\bullet$  The use of high-efficiency fan reduces energy consumption of the motor
- Can achieve industry-leading level of external static pressure 85Pa







Hi-FL	_EXI X Series	HP	8HP	10HP	12HP	14HP	16HP	18HP			
	Model		AVWT-76UESRX	AVWT-96UESRX	AVWT-114UESSX	AVWT-136UESSX	AVWT-154UESSX	AVWT-172UESZX			
								AVWT-76UESRX			
	Combination							AVWT-96UESRX			
	Power Supply		3Ф380-415V/50Hz								
	Cooling Capacity	kW	22.4	28	33.5	40	45	50.4			
	Cooling Capacity	Btu/h	76	96	114	136	154	172			
Cooling Operatin	Power Consumption	kW	5.25	7.31	8.57	11.05	13.16	12.56			
•	EER		4.27	3.83	3.91	3.62	3.42	4.01			
Heating Capacit		kW	25	31.5	37.5	45	50	56.5			
Operatin	Power Consumption	kW	5.62	7.61	8.89	11.08	12.47	13.23			
	COP		4.45	4.14	4.22	4.06	4.01	4.27			
	Air Flow Rate	m³/h	9,300	10,200	10,500	11,400	11,400	19,500			
	Н	mm	1,720	1,720	1,720	1,720	1,720	1,720			
Outer Dimension	W	mm	950	950	1,210	1,210	1,210	950+950			
	D	mm	765	765	765	765	765	765			
N	let Weight	kg	197	197	224	227	247	394			
G	Gross Weight	kg	223	223	248	250	272	446			
С	abinet Color				Ivory	white					
G	Sas Line	mm	Ф19.05	Ф22.2	Ф25.4	Ф25.4	Ф28.6	Ф28.6			
L	iquid Line	mm	Ф9.53	Ф9.53	Ф12.7	Ф12.7	Ф12.7	Ф15.88			
Max.Indoor Unit Connectable		table	8	10	12	16	16	18			
N	loise Level	dB(A)	56	57	59	60	61	61			
Operation	Cooling Mode	°C	-5 ∼ 52	-5 ∼ 52	-5 ~ 52	-5 ∼ 52	-5 ∼ 52	<b>-5</b> ∼ <b>52</b>			
Range	Heating Mode	C	-20 ~ 15	-20 ~ 15	-20 ~ 15	-20 ~ 15	-20 ~ 15	-20 ~ 15			

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



4.22

21,000

1,720

1,210+1,210

765

448

496

Ф28.6

Ф15.88

26

62

-5  $\sim$  52

-20 ~ 15

4.13

21,900

1,720

1,210+1,210

765

451

498

Ivory white Φ31.75

Ф19.05

26

63

-5  $\sim$  52

**-20** ∼ 15

4.10

21,900

1,720

1,210+1,210

471

520

Ф31.75

Ф19.05

28

63

-5  $\sim$  52

-20 ~ 15

4.03

22,800

1,720

1,210+1,210

765

474

522

Ф31.75

Ф19.05

32

64

-5  $\sim$  52

-20 ~ 15

4.01

22.800

1,720

1,210+1,210

765

494

Ф31.75

Ф19.05

32

64

-5 ~ 52

-20 ~ 15

#### Notes:

1. Rated cooling capacity capacity is tested in the following conditions:

COP

W

D

Net Weight

Gross Weight

Cabinet Color

Gas Line

Liquid Line

Noise Level

Operation Cooling Mode

Max.Indoor Unit Connectable

Heating Mode

Air Flow Rate

4.31

19,800

1,720

950+1,210

765

421

471

Ф28.6

Ф15.88

20

61

-5  $\sim$  52

-20 ~ 15

m³/h

mm

mm

kg

kg

mm

4.18

20,700

1,720

950+1,210

765

421

471

Ф15.88

22

61

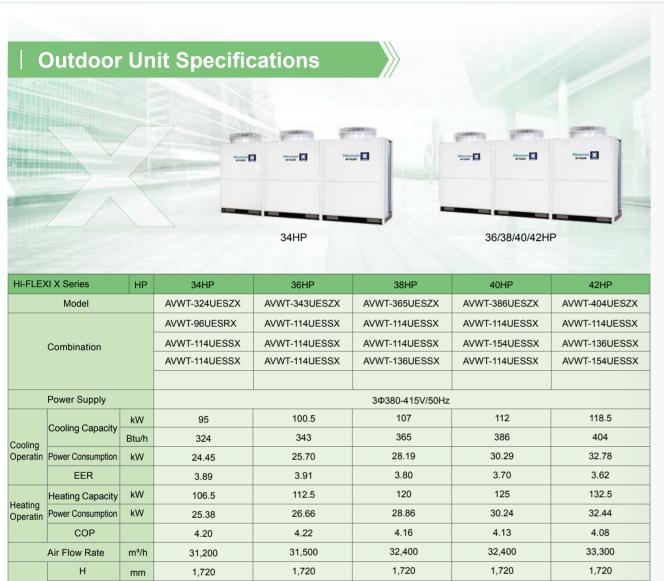
-5 ~ 52

-20 ~ 15

- Cooling conditions: indoor air inlet temperature: 27 C DB 19 C WB, Outdoor air inlet temperature: 35 C DB, pipe length : 7.5m, pipe height difference: 0m
- 2. The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- 3. The final appearance of outdoor units is subject to the actual products.







	Power Supply				3Ф380-415V/50Hz		
	Cooling Consoity	kW	95	100.5	107	112	118.5
Cooling	Cooling Capacity	Btu/h	324	343	365	386	404
Cooling Operatin  Heating Operatin  Outer Dimension  Ne  Gr  Ca  Ga  Lic  Max.in	Power Consumption	kW	24.45	25.70	28.19	30.29	32.78
	EER		3.89	3.91	3.80	3.70	3.62
Llooting	Heating Capacity	kW	106.5	112.5	120	125	132.5
	Power Consumption	kW	25.38	26.66	28.86	30.24	32.44
	COP		4.20	4.22	4.16	4.13	4.08
	Air Flow Rate	m³/h	31,200	31,500	32,400	32,400	33,300
	Н	mm	1,720	1,720	1,720	1,720	1,720
	W	mm	950+1,210+1,210	1,210+1,210+1,210	1,210+1,210+1,210	1,210+1,210+1,210	1,210+1,210+1,210
	D	mm	765	765	765	765	765
N	let Weight	kg	645	672	675	695	698
G	Gross Weight	kg	719	744	746	768	770
C	Cabinet Color				Ivory white		
G	Sas Line	mm	Ф31.75	Ф38.1	Ф38.1	Ф38.1	Ф38.1
L	iquid Line	mm	Ф19.05	Ф19.05	Ф19.05	Ф19.05	Ф19.05
Max.i	ndoor unit connec	ctable	36	36	38	42	42
N	loise Level	dB(A)	64	64	65	65	65
Operation	Cooling Mode	°C	-5 ∼ 52	-5 ∼ 52	-5 ∼ 52	<b>-</b> 5 ∼ 52	<b>-</b> 5 ∼ 52
Range	Heating Mode	C	-20 ~ 15	-20 ∼ 15	-20 ~ 15	-20 ∼ 15	-20 ∼ 15

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



Hi-FLE	KI X Series	HP	44HP	46HP	48HP	50HP	52HP			
	Model		AVWT-420UESZX	AVWT-444UESZX	AVWT-460UESZX	AVWT-480UESZX	AVWT-500UESZX			
			AVWT-114UESSX	AVWT-136UESSX	AVWT-154UESSX	AVWT-76UESRX	AVWT-96UESRX			
	Combination		AVWT-154UESSX	AVWT-154UESSX	AVWT-154UESSX	AVWT-96UESRX	AVWT-96UESRX			
	Combination		AVWT-154UESSX	AVWT-154UESSX	AVWT-154UESSX	AVWT-154UESSX	AVWT-154UESSX			
				AVWT-154UE						
Power Supply					3Ф380-415V/50Hz					
Caslina Canasit		kW	123.5	130	135	140.4	146			
Caalina	Cooling Capacity	Btu/h	420	444	460	480	500			
Cooling Operatin	Power Consumption	kW	34.88	37.37	39.47	38.87	40.94			
	EER		3.54	3.48	3.42	3.61	3.57			
	Heating Capacity	kW	137.5	145	150	156.5	163			
Heating Operatin	Power Consumption	kW	33.82	36.02	37.41	38.16	40.16			
	COP		4.07	4.03	4.01	4.10	4.06			
	Air Flow Rate	m³/h	33,300	34,200	34,200	42,300	43,200			
	Н	mm	1,720	1,720	1,720	1,720	1,720			
Outer Dimension	W	mm	1,210+1,210+1,210	1,210+1,210+1,210	1,210+1,210+1,210	950+950+1,210+1,210	950+950+1,210+1,210			
	D	mm	765	765	765	765	765			
N	let Weight	kg	718	721	741	888	888			
G	Fross Weight	kg	792	794	816	990	990			
С	abinet Color				Ivory white					
G	as Line	mm	Ф38.1	Ф38.1	Ф38.1	Ф44.4	Ф44.4			
L	iquid Line	mm	Ф19.05	Ф19.05	Ф19.05	Ф19.05	Ф19.05			
Max.lı	Max.Indoor Unit Connectable		44	48	48	50	52			
N	Noise Level dB(A)		65	65	65	66	66			
Operation	Cooling Mode	C	<b>-5</b> ∼ <b>52</b>	-5 ∼ 52	-5 ∼ 52	-5 ∼ 52	-5 ∼ 52			
Range	Heating Mode	°C	<b>-20</b> ∼ 15	<b>-20</b> ∼ 15	-20 ∼ 15	-20 ∼ 15	-20 ~ 15			

- 1. Rated cooling capacity capacity is tested in the following conditions:
- Cooling conditions: indoor air inlet temperature: 27 °C DB 19 °C WB, Outdoor air inlet temperature: 35 °C DB, pipe length : 7.5m, pipe height difference: 0m
- 2. The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- 3. The final appearance of outdoor units is subject to the actual products.
- 4.For 4 modular combination please contact manufacture for special design.







Hi-FLEX	(I X Series	HP	54HP	56HP	58HP
	Model		AVWT-520UESZX	AVWT-540UESZX	AVWT-560UESZX
			AVWT-96UESRX	AVWT-114UESSX	AVWT-114UESSX
	Combination		AVWT-114UESSX	AVWT-114UESSX	AVWT-136UESSX
			AVWT-154UESSX	AVWT-154UESSX	AVWT-154UESSX
			AVWT-154UESSX	AVWT-154UESSX	
	Power Supply			3Ф380-415V/50Hz	
	Cooling Capacity		151.5	157	163.5
	Cooling Capacity	Btu/h	520	540	560
Cooling Operatin	Power Consumption	kW	42.19	43.45	45.93
·	EER	3.59		3.61	3.56
I I a a tim m	Heating Capacity peratin Power Consumption		169	175	182.5
Operatin			41.43	42.71	44.91
	COP		4.08	4.10	4.06
	Air Flow Rate	m³/h	43,500	43,800	44,700
	Н	mm	1,720	1,720	1,720
Outer Dimension	W	mm	950+1,210+1,210+1,210	1,210+1,210+1,210+1,210	1,210+1,210+1,210+1,210
	D	mm	765	765	765
N	et Weight	kg	915	942	945
G	ross Weight	kg	1,015	1,040	1,040
С	abinet Color			Ivory white	
G	as Line	mm	Ф44.4	Ф44.4	Ф44.4
L	Liquid Line mm		Ф19.05	Ф22.2	Ф22.2
Max.Indoor Unit Connectable		table	54	56	60
N	Noise Level dB(A)		66	66	67
Operation	Cooling Mode	C	-5 ∼ 52	-5 ∼ 52	-5 ∼ 52
Range	Heating Mode	C	-20 ~ 15	<b>-20</b> ∼ 15	-20 ~ 15

- 1. Rated cooling capacity capacity is tested in the following conditions:
- Cooling conditions: indoor air inlet temperature: 27 C DB 19 C WB, Outdoor air inlet temperature: 35 C DB, pipe length : 7.5m, pipe height diference: 0m
- 2. The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- 3. The final appearance of outdoor units is subject to the actual products.
- 4.For 4 modular combination please contact manufacture for special design.



Hi-FLEX	(I X Series	HP	60HP	62HP	64HP	
	Model		AVWT-580UESZX	AVWT-600UESZX	AVWT-620UESZX	
			AVWT-114UESSX	AVWT-136UESSX	AVWT-154UESSX	
	Combination		AVWT-154UESSX	AVWT-154UESSX	AVWT-154UESSX	
			AVWT-154UESSX	AVWT-154UESSX	AVWT-154UESSX	
			AVWT-154UESSX	AVWT-154UESSX	AVWT-154UESSX	
	Power Supply			3Ф380-415V/50Hz		
	Cooling Capacity	kW	168.5	175	180	
	Cooling Capacity	Btu/h	580	600	620	
Cooling Operatin	Power Consumption	kW	48.04	50.52	52.63	
	EER		3.51	3.46	3.42	
lastina.	Heating Capacity	kW	187.5	195	200	
Heating	Power Consumption	kW	46.29	48.49	49.88	
	COP		4.05	4.02	4.01	
	Air Flow Rate	m³/h	44,700	45,600	45,600	
	Н	mm	1,720	1,720	1,720	
Duter Dimension	W	mm	1,210+1,210+1,210+1,210	1,210+1,210+1,210+1,210	1,210+1,210+1,210+1,210	
	D	mm	765	765	765	
N	et Weight	kg	965	968	988	
G	Fross Weight	kg	1,064	1,066	1,088	
С	abinet Color			Ivory white		
G	as Line	mm	Ф44.4	Ф44.4	Ф44.4	
L	iquid Line	mm	Ф22.2	Ф22.2	Ф22.2	
Max.lı	ndoor Unit Connec	table	60	64	64	
N	Noise Level dB(A		67	67	67	
Operation	Cooling Mode	C	-5 ∼ 52	-5 ∼ 52	-5 ∼ 52	
Range	Heating Mode	°C	-20 ∼ 15	-20 ∼ 15	-20 ∼ 15	

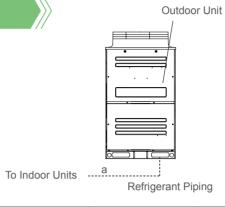
- 1. Rated cooling capacity capacity is tested in the following conditions:
- Cooling conditions: indoor air inlet temperature: 27 C DB 19 C WB, Outdoor air inlet temperature: 35 C DB, pipe length : 7.5m, pipe height difference: 0m
- 2. The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.
- 3. The final appearance of outdoor units is subject to the actual products.
- 4.For 4 modular combination please contact manufacture for special design.





# **Piping Connection**

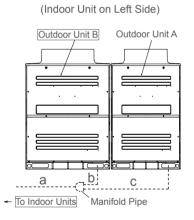
Piping Size for Base Unit

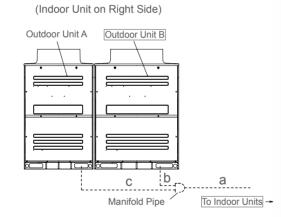


Mod	del( l	ΚΒtι	u/h)	76	96	114	136	154
Pipin	ıg		Gas	19.05	22.2	25.4	25.4	28.6
Pipin Size		а	Liquid	9.53	9.53	12.7	12.7	12.7

Piping Size for Two Units Combination

< Figure for AVWT-210UESZX>





(Фmm)

(Фmm)

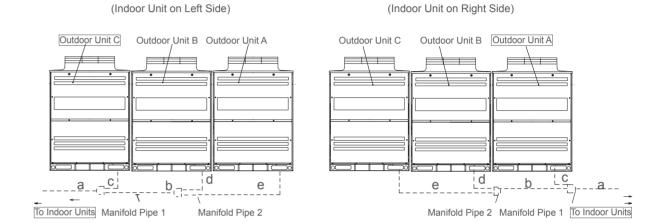
Model			AVWT-172UESZX	AVWT-190UESZX	AVWT-210UESZX	AVWT-229UESZX	AVWT-250UESZX	AVWT-268UESZX	AVWT-290UESZX	AVWT-307UESZX
Combination	Outdoor Unit A Outdoor Unit B		AVWT-76UESRX	AVWT-76UESRX	AVWT-96UESRX	AVWT-114UESSX	AVWT-114UESSX	AVWT-114UESSX	AVWT-136UESSX	AVWT-154UESSX
Unit			AVWT-96UESRX	AVWT-114UESSX	AVWT-114UESSX	AVWT-114UESSX	AVWT-136UESSX	AVWT-154UESSX	AVWT-154UESSX	AVWT-154UESSX
Manifold I	Pipe			HFQ-M22F				HFQ-M3	32F	
	2	Gas	28.6	28.6	28.6	28.6	31.75	31.75	31.75	31.75
	а	Liquid	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05
Piping Size	h	Gas	22.2	25.4	25.4	25.4	25.4	25.4	28.6	28.6
i iping oize	b	Liquid	9.53	12.7	12.7	12.7	12.7	12.7	12.7	12.7
	С	Gas	19.05	19.05	22.2	25.4	25.4	25.4	25.4	28.6
	C	Liquid	9.53	9.53	9.53	12.7	12.7	12.7	12.7	12.7

<sup>\*</sup> Perform the installation of the outdoor unit and piping connection according to the figure.

Refer to the table for the outdoor unit model, the Manifold Pipe model and the piping diamete.

### Piping Size for Three Units Combination

< Figure for AVWT-365UESZX>



(Фmm)

Model			AVWT-324UESZX	AVWT-343UESZX	AVWT-365UESZX	AVWT-386UESZX	AVWT-404UESZX	AVWT-420UESZX	AVWT-444UESZX	AVWT-460UESZX
		tdoor it A	AVWT-96UESRX	AVWT-114UESSX	AVWT-114UESSX	AVWT-114UESSX	AVWT-114UESSX	AVWT-114UESSX	AVWT-136UESSX	AVWT-154UESSX
Combination Unit		tdoor it B	AVWT-114UESSX	AVWT-114UESSX	AVWT-114UESSX	AVWT-114UESSX	AVWT-136UESSX	AVWT-154UESSX	AVWT-154UESSX	AVWT-154UESSX
J	Outdoor Unit C		AVWT-114UESSX	AVWT-114UESSX	AVWT-136UESSX	AVWT-154UESSX	AVWT-154UESSX	AVWT-154UESSX	AVWT-154UESSX	AVWT-154UESSX
Manifold	Pipe	1		HFQ-M	132F			HFQ-N	/32F	
Manifold	Pipe	2		HFQ-M	122F			HFQ-N	//32F	
	а	Gas	31.75	38.1	38.1	38.1	38.1	38.1	38.1	38.1
		Liquid	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	b	Gas	28.6	28.6	28.6	28.6	31.75	31.75	31.75	31.75
		Liquid	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05
Piping Size	С	Gas	25.4	25.4	25.4	28.6	28.6	28.6	28.6	28.6
		Liquid	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
	d	Gas	25.4	25.4	25.4	25.4	25.4	28.6	28.6	28.6
	u	Liquid	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
		Gas	22.2	25.4	25.4	25.4	25.4	25.4	25.4	28.6
	е	Liquid	9.53	12.7	12.7	12.7	12.7	12.7	12.7	12.7

<sup>\*</sup> Perform the installation of the outdoor unit and piping connection according to the figure.

Refer to the table for the outdoor unit model, the Manifold Pipe model and the piping diameter.





# Hi-FLEXi M Series

DC Inverter-driven Compressor

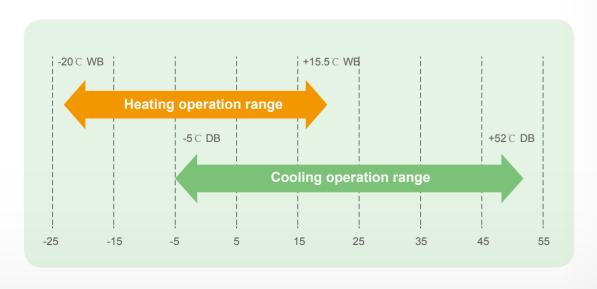
Hisense VRF Hi-FLEXi M Series inverter air conditioning system adopt high efficiency scroll compressor and leading frequency inverter control technology, realizing significant improvement in operation efficiency under partial load.

- High efficiency inverter + fixed compressor
- Leading inverter control technology
- Small volume and light weight, save transport and installation space
- Intelligent control system

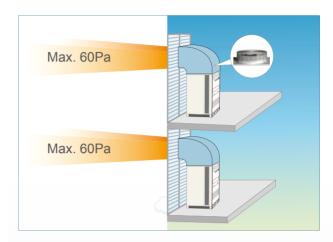


# **Wide Operating Range**

The system can run within a wide temperature range, the lowest heating operation can reach -20 C WB, ensure a good heating effect in winter.



# | Extra-high External Static Pressure Design



- Adopt high-efficiency DC fan motor
- The use of high-efficiency fan reduces energy consumption of the motor
- Can achieve industry-leading level of external static pressure 60Pa

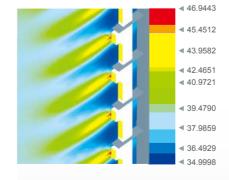
The efficient axial fan is designed adopting CFD, finite element method, aviation dynamic fluid simulation analysis and other advanced concepts; its air inlet angle and outlet angle are optimized; together with unique horn air vent design, the external static pressure of outdoor unit is higher, which can better exhaust air and ensure smooth air flow.

# Layered Installation, Flexibly Corresponding to High-rise Buildings

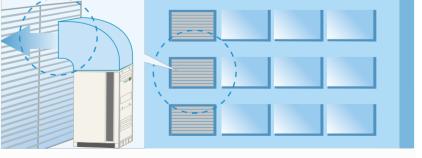
For high-rise buildings, crawl space can be left to place outdoor units, or machine room can be set up on each floor. By using exhaust duct to exhaust the air, short circuit of return air can be avoided with long exhaust distance, which ensures good ventilation and heat exchange effects of outdoor units.

#### Temperature °C

Airflow Schematic



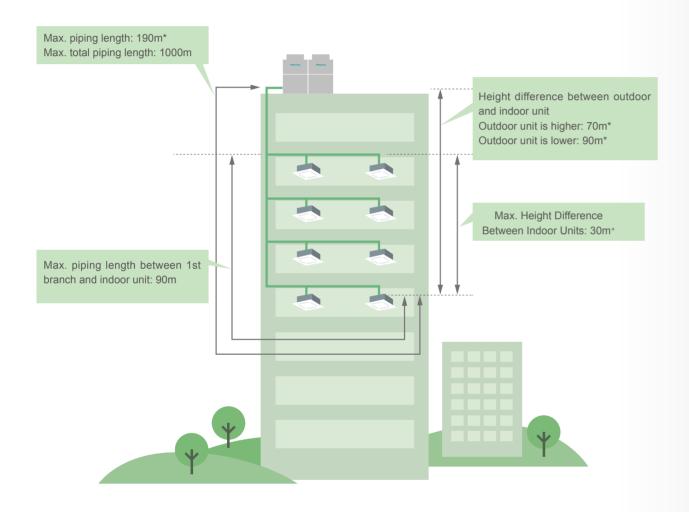




Layered installation effect picture

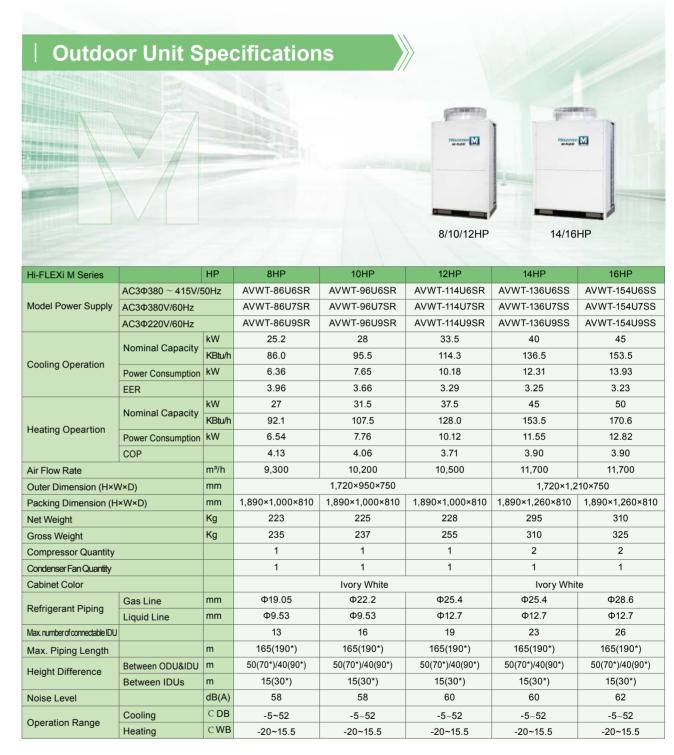


## **More Flexible Refrigerant Piping Work**



Note: For data marked by \*, please contact with our engineer





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

  2. The sound pressure is based on the following conditions. 1 Meter from the unit service cover surface, and 1.5 Meter from floor level. The above data is based on the cooling 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)

- mode. In case of heating mode, the sound pressure level increases by approximately 1~2dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- 3. Except for the specified combination in the table, there is no other combination of the base
- 4. The width of outer dimension, it is the value when each distance between the base
- outdoor units is specified to 20mm. 5. For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our professinal engineer.







Hi-FLEXi M Series		HP	18HP	20HP	22HP	24HP	26HP
	AC3Ф380 ~ 415V/5	50Hz	AVWT-182U6SZ	AVWT-190U6SZ	AVWT-210U6SZ	AVWT-232U6SZ	AVWT-250U6SZ
Model Power Supply	АС3Ф380V/60Hz		AVWT-182U7SZ	AVWT-190U7SZ	AVWT-210U7SZ	AVWT-232U7SZ	AVWT-250U7SZ
	АС3Ф220V/60Hz		AVWT-182U9SZ	AVWT-190U9SZ	AVWT-210U9SZ	AVWT-232U9SZ	AVWT-250U9SZ
Combination			AVWT-86U* AVWT-96U*	AVWT-96U* AVWT-96U*	AVWT-86U* AVWT-136U*	AVWT-96U* AVWT-136U*	AVWT-114U* AVWT-136U*
		kW	53.2	56	61.5	68	73
0 " 0 "	Nominal Capacity	KBtu/h	181.5	191.1	209.8	232.0	249.1
Cooling Operation	Power Consumption	kW	14.01	15.3	18.67	19.96	22.49
	EER		3.80	3.66	3.29	3.41	3.25
	Naminal Canasitu	kW	58.5	63	69	76.5	81.5
Haatiaa Oasaatiaa	Nominal Capacity	KBtu/h	199.6	215.0	235.4	261.0	278.1
Heating Opeartion	Power Consumption kW		14.3	15.52	18.09	19.31	21.67
	COP		4.09	4.06	3.98	3.96	3.81
Air Flow Rate		m³/h	19,500	20,400	21,000	21,900	22,200
Outer Dimension (H×V	V×D)	mm	1,720× (950	)+950) ×750	1,7	20× (950+1,210) ×75	50
Packing Dimension (H	×W×D)	mm					
Net Weight		Kg	223+225	225+225	223+295	225+295	225+295
Gross Weight		Kg	235+237	237×2	235+310	237+310	255+310
Compressor Quantity			2	2	3	3	3
Condenser Fan Quantity			2	2	2	2	2
Cabinet Color			lvory	White		Ivory White	
Pofrigorant Dining	Gas Line	mm	Ф28.6	Ф28.6	Ф28.6	Ф28.6	Ф31.75
Refrigerant Piping	Liquid Line	mm	Ф15.88	Ф15.88	Ф15.88	Ф15.88	Ф19.05
Max. number of connectable IDU			26	33	36	40	43
Max. Piping Length		m	165(190*)	165(190*)	165(190*)	165(190*)	165(190*)
Height Difference	Between ODU&IDU	m	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)
g.it Billorolloc	Between IDUs	m	15(30*)	15(30*)	15(30*)	15(30*)	15(30*)
Noise Level		dB(A)	61	61	62	63	63
Operation Range	Cooling	°C DB	-5~52	-5~52	-5~52	-5~52	-5~52
Operation Range	Heating	°C WB	-20~15.5	-20~15.5	-20~15.5	-20~15.5	-20~15.5

#### Notes:

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

  2. The sound pressure is based on the following conditions. 1 Meter from the unit service cover surface, and 1.5 Meter from floor level. The above data is based on the cooling mode. In case of heating mode, the sound pressure level increases by approximately 1~2dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
  - 3. Except for the specified combination in the table, there is no other combination of the base
  - 4. The width of outer dimension, it is the value when each distance between the base outdoor units is specified to 20mm.

    5. For Max. pipe length more than 165m, height difference between ODU&IDU more than
  - 50(40)m or height difference between IDUs more than 15m, please contact with our professinal engineer.



Hi-FLEXi M Series		HP	28HP	30HP	32HP	
	AC3Ф380 ~ 415V/5	60Hz	AVWT-272U6SZ	AVWT-290U6SZ	AVWT-307U6SZ	
Model Power Supply	АС3Ф380V/60Hz		AVWT-272U7SZ	AVWT-290U7SZ	AVWT-307U7SZ	
	АС3Ф220V/60Hz		AVWT-272U9SZ	AVWT-290U9SZ	AVWT-307U9SZ	
Combination			AVWT-136U* AVWT-136U*	AVWT-136U* AVWT-154U*	AVWT-154U* AVWT-154U*	
	Naminal Canadit	kW	78.5	85	90	
Cooling Operation	Nominal Capacity	KBtu/h	267.8	290.0	307.1	
Cooling Operation	Power Consumption	kW	24.62	26.24	27.86	
	EER		3.17	3.24	3.23	
	Nominal Capacity	kW	87.5	95	100	
Heating Opeartion	INOTHINAL Capacity	KBtu/h	298.6	324.1	341.2	
ricating Opeartion	Power Consumption	kW	23.1	24.37	25.64	
	COP		3.90	3.90	3.90	
Air Flow Rate		m³/h	23,400	23,400	23,400	
Outer Dimension (H×V	V×D)	mm		1,720x(1,210+1,210)x750		
Packing Dimension (H	×W×D)	mm				
Net Weight		Kg	295+295	295+310	310+310	
Gross Weight		Kg	310+310	310+325	325+325	
Compressor Quantity			4	4	4	
Condenser Fan Quantity			2	3	3	
Cabinet Color				Ivory White		
Refrigerant Piping	Gas Line	mm	Ф31.75	Ф31.75	Ф31.75	
Kenngerant Fibility	Liquid Line	mm	Ф19.05	Ф19.05	Ф19.05	
Max. number of connectable IDU			47	50	53	
Max. Piping Length		m	165(190*)	165(190*)	165(190*)	
Height Difference	Between ODU&IDU	m	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)	
	Between IDUs	m	15(30*)	15(30*)	15(30*)	
Noise Level		dB(A)	63	63	63	
Operation Range	Cooling	C DB	-5~52	-5~52	-5~52	
Operation Range	Heating	℃ WB	-20~15.5	-20~15.5	-20~15.5	

#### Notes:

- **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)
- 1. The nominal cooling capacity and heating capacity are based on following conditions: 2. The sound pressure is based on the following conditions. 1 Meter from the unit service cover surface, and 1.5 Meter from floor level. The above data is based on the cooling mode. In case of heating mode, the sound pressure level increases by approximately 1~2dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
  - 3. Except for the specified combination in the table, there is no other combination of the base
  - 4. The width of outer dimension, it is the value when each distance between the base outdoor units is specified to 20mm.

    5. For Max. pipe length more than 165m, height difference between ODU&IDU more than
  - 50(40)m or height difference between IDUs more than 15m, please contact with our professinal engineer.







Hi-FLEXi M Series		HP	34HP	36HP	38HP	40HP
	AC3Ф380 ~ 415V/5	0Hz	AVWT-328U6SZ	AVWT-345U6SZ	AVWT-365U6SZ	AVWT-386U6SZ
Model Power Supply	АС3Ф380V/60Hz		AVWT-328U7SZ	AVWT-345U7SZ	AVWT-365U7SZ	AVWT-386U7SZ
	АС3Ф220V/60Hz		AVWT-328U9SZ	AVWT-345U9SZ	AVWT-365U9SZ	AVWT-386U9SZ
Combination			AVWT-86U* AVWT-96U* AVWT-154U*	AVWT-96U* AVWT-96U* AVWT-154U*	AVWT-114U* AVWT-114U* AVWT-136U*	AVWT-114U* AVWT-114U* AVWT-154U*
	Nominal Capacity	kW	96	101	106.5	113
Cooling Operation	Nominal Capacity	KBtu/h	327.6	344.6	365.1	385.6
Cooling Operation	Power Consumption	kW	27.94	29.23	32.67	34.29
	EER		3.51	3.46	3.28	3.30
	Nominal Capacity	kW	108	113	119	126.5
Heating Operation	Nominal Capacity	KBtu/h	368.5	385.6	406	431.6
Heating Opeartion	Power Consumption	kW	27.12	28.34	31.79	33.06
	COP		3.98	3.99	3.77	3.78
Air Flow Rate		m³/h	31,200	32,100	32,700	32,700
Outer Dimension (H×V	/×D)	mm		1,720x(950+	950+1,210)x750	
Packing Dimension (H	×W×D)	mm				
Net Weight		Kg	208+210+310	225+225+310	228+228+295	228+228+310
Gross Weight		Kg	235+237+325	237+237+325	255+255+310	255+255+325
Compressor Quantity			4	4	4	4
Condenser Fan Quantity			3	3	3	3
Cabinet Color				lvory	White	
Defeierent Dining	Gas Line	mm	Ф31.75	Ф38.1	Ф38.1	Ф38.1
Refrigerant Piping	Liquid Line	mm	Ф19.05	Ф19.05	Ф19.05	Ф19.05
Max. number of connectable IDU			56	59	64	64
Max. Piping Length		m	165(190*)	165(190*)	165(190*)	165(190*)
Height Difference	Between ODU&IDU	m	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)
Troight Dilloronoe	Between IDUs	m	15(30*)	15(30*)	15(30*)	15(30*)
Noise Level		dB(A)	64	64	64	64
On section Descri	Cooling	C DB	-5~52	-5~52	-5~52	-5~52
Operation Range	Heating	℃ WB	-20~15.5	-20~15.5	-20~15.5	-20~15.5

#### Notes:

- 1.The nominal cooling capacity and heating capacity are based on following conditions:
   Cooling Operation Conditions
   2. The sound pressure is based on the following conditions. 1 Meter from the unit service cover surface, and 1.5 Meter from floor level. The above data is based on the cooling 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)
- mode. In case of heating mode, the sound pressure level increases by approximately 1~2dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- 3. Except for the specified combination in the table, there is no other combination of the base
- 4. The width of outer dimension, it is the value when each distance between the base
- •- The would be outer uniterision, it is the value when each distance between the base outdoor units is specified to 20mm.
  5. For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our professinal engineer.



Hi-FLEXi M Series		HP	42HP	44HP	46HP	48HP	
	AC3Ф380 ~ 415V/5	0Hz	AVWT-402U6SZ	AVWT-426U6SZ	AVWT-444U6SZ	AVWT-460U6SZ	
Model Power Supply	АС3Ф380V/60Hz		AVWT-402U7SZ	AVWT-426U7SZ	AVWT-444U7SZ	AVWT-460U7SZ	
	АС3Ф220V/60Hz		AVWT-402U9SZ	AVWT-402U9SZ AVWT-426U9SZ AV		AVWT-460U9SZ	
Combination			AVWT-114U* AVWT-136U* AVWT-154U*	AVWT-114U* AVWT-154U* AVWT-154U*	AVWT-136U* AVWT-154U* AVWT-154U*	AVWT-154U* AVWT-154U* AVWT-154U*	
	Naminal Canacity	kW	118	123.5	130	135	
Caaling Operation	Nominal Capacity	KBtu/h	402.6	421.4	443.6	460.6	
Cooling Operation	Power Consumption	kW	36.42	38.04	40.17	41.79	
	EER		3.24	3.25	3.24	3.23	
	Naminal Canasity	kW	131.5	137.5	145	150	
Jactina Oppostis	Nominal Capacity	KBtu/h	448.7	469.2	494.7	511.8	
Heating Opeartion	Power Consumption	kW	34.49	35.76	37.19	38.46	
	COP		3.84	3.85	3.90	3.90	
Air Flow Rate		m³/h	33,900	33,900	35,100	35,100	
Outer Dimension (H×V	/×D)	mm	1,720×(950+1,210	+1,210)×750	1,720×(1,210+1,2	210+1,210)×750	
Packing Dimension (H	×W×D)	mm					
Net Weight		Kg	228+295+310	228+310+310	295+310+310	310+310+310	
Gross Weight		Kg	255+310+325	255+325+325	310+325+325	325+325+325	
Compressor Quantity			6	6	6	6	
Condenser Fan Quantity			3	3	3	3	
Cabinet Color				Ivory W	hite		
Dofrigarant Dining	Gas Line	mm	Ф38.1	Ф38.1	Ф38.1	Ф38.1	
Refrigerant Piping	Liquid Line	mm	Ф19.05	Ф19.05	Ф19.05	Ф19.05	
Max. number of connectable IDU			64	64	64	64	
Max. Piping Length		m	165(190*)	165(190*)	165(190*)	165(190*)	
Height Difference	Between ODU&IDU	m	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)	
loight Dilletence	Between IDUs	m	15(30*)	15(30*)	15(30*)	15(30*)	
Noise Level		dB(A)	64	64	65	65	
Ozzation Donos	Cooling	C DB	-5~52	-5~52	-5~52	-5~52	
Operation Range	Heating	°C WB	-20~15.5	-20~15.5	-20~15.5	-20~15.5	

#### Notes:

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

  2. The sound pressure is based on the following conditions. 1 Meter from the unit service cover surface, and 1.5 Meter from floor level. The above data is based on the cooling mode. In case of heating mode, the sound pressure level increases by approximately 1~2dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
  - 3. Except for the specified combination in the table, there is no other combination of the base

  - unit.

    4. The width of outer dimension, it is the value when each distance between the base outdoor units is specified to 20mm.

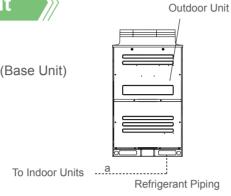
    5. For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our professinal engineer.





## **Pipe Diameter for Outdoor Unit**

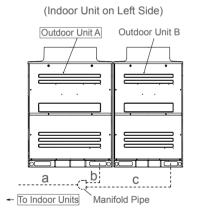
Piping Size for AVWT-86U6(7)SR to AVWT-154U6(7)SS (Base Unit)

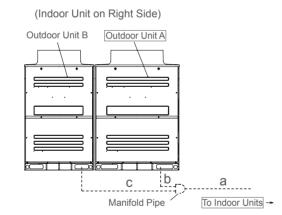


Mod	el		AVWT-86U6(7)SR	AVWT-96U6(7)SR	AVWT-114U6(7)SR	AVWT-136U6(7)SS	AVWT-154U6(7)SS	(Φmm)
Piping	0	Gas	19.05	22.2	25.4	25.4	28.6	
Piping Size	а	Liquid	9.53	9.53	12.7	12.7	12.7	

Piping Size for AVWT-182U6(7)SZ to AVWT-307U6(7)SZ(2 Units Combination)

< Figure for AVWT-232UE(7)SZ >





Model			710 001 102	710 00 100	710 717 210	710 001 202	710 00 1 200	710 44 1 212	710 00 1 200	710 44 1 007
Combination		tdoor it A	AVWT-96*	AVWT-96*	AVWT-136*	AVWT-136*	AVWT-136*	AVWT-136*	AVWT-154*	AVWT-154*
Unit		tdoor it B	AVWT-86*	AVWT-96*	AVWT-86*	AVWT-96*	AVWT-114*	AVWT-136*	AVWT-136*	AVWT-154*
Manifold	Pip	е		HFQ-M22F				HFQ-M	32F	
		Gas	28.6	28.6	28.6	28.6	31.75	31.75	31.75	31.75
	а	Liquid	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05
Piping Size	b	Gas	22.2	22.2	25.4	25.4	25.4	25.4	28.6	28.6
i iping oize		Liquid	9.53	9.53	12.7	12.7	12.7	12.7	12.7	12.7

22.2

9.53

25.4

12.7

25.4

12.7

25.4

12.7

28.6

12.7

19.05

9.53

\( \Delta \text{VWT\_182\*} \) \( \Delta \text{VWT\_190\*} \) \( \Delta \text{VWT\_210\*} \) \( \Delta \text{VWT\_232\*} \) \( \Delta \text{VWT\_250\*} \) \( \Delta \text{VWT\_272\*} \) \( \Delta \text{VWT\_290\*} \) \( \Delta \text{VWT\_307\*} \)

 $^{\star}$  Perform the installation of the outdoor unit and piping connection according to the figure.

19.05

9.53

Gas

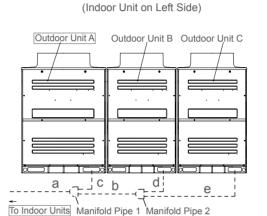
Liquid

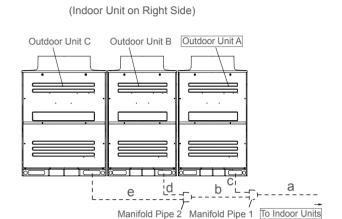
22.2

9.53

Piping Size for AVWT-328U6(7)SZ to AVWT-460U6(7)SZ(Triple Units Combination)

< Figure for AVWT-365U6(7)SZ >





(Фmm)

Model			AVWT-328*	AVWT-345*	AVWT-365*	AVWT-386*	AVWT-402*	AVWT-426*	AVWT-444*	AVWT-460*
	_	itdoor it A	AVWT-154*	AVWT-154*	AVWT-136*	AVWT-154*	AVWT-154*	AVWT-154*	AVWT-154*	AVWT-154*
Combination Unit	nbination Outdoor		AVWT-96*	AVWT-96*	AVWT-114*	AVWT-114*	AVWT-136*	AVWT-154*	AVWT-154*	AVWT-154*
	Οu	itdoor it C	AVWT-86*	AVWT-96*	AVWT-114*	AVWT-114*	AVWT-114*	AVWT-114*	AVWT-136*	AVWT-154*
Manifold Pipe				HFQ-M22F	+ HFQ-M32F			HFQ-M	32F + HFQ-I	M32F
	а	Gas	31.75	38.1	38.1	38.1	38.1	38.1	38.1	38.1
	a	Liquid	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	b	Gas	28.6	28.6	28.6	28.6	31.75	31.75	31.75	31.75
		Liquid	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05
Piping Size		Gas	28.6	28.6	25.4	28.6	28.6	28.6	28.6	28.6
	С	Liquid	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
		Gas	22.2	22.2	25.4	25.4	25.4	28.6	28.6	28.6
	d	Liquid	9.53	9.53	12.7	12.7	12.7	12.7	12.7	12.7
		Gas	19.05	22.2	25.4	25.4	25.4	25.4	25.4	28.6
	е	Liquid	9.53	9.53	12.7	12.7	12.7	12.7	12.7	12.7

<sup>\*</sup> Perform the installation of the outdoor unit and piping connection according to the figure.

Refer to the table for the outdoor unit model, the manifold pipe model and the piping diameter.

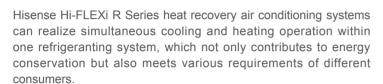
Refer to the table for the outdoor unit model, the manifold pipe model and the piping diameter.





## Hi-FLEXi R Series

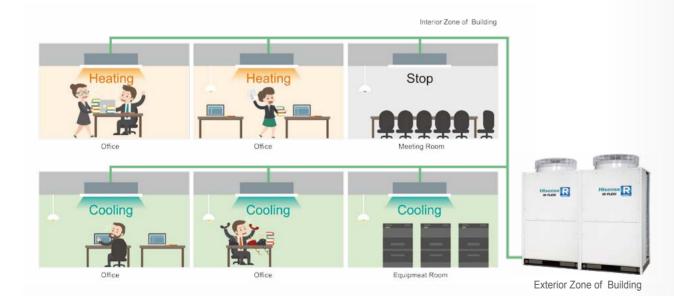
Humanized Design, Flexible Response to Different Demand



- High efficiency scroll compressor
- Simultaneous cooling and heating
- Lastest inverter control technology
- Intelligent control system



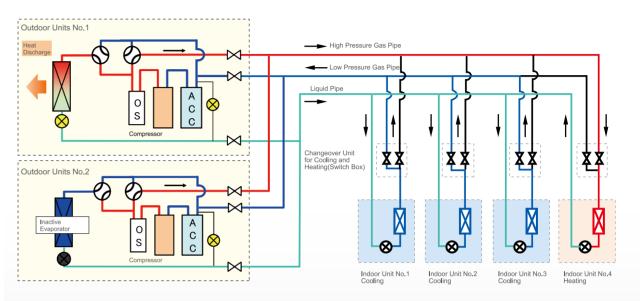




Meeting various requirements of customers who are sensitive to temperature and diverse space with different function from the perspective of humanity especially at the transition season, like the complex of equipment rooms and offices, or the guest rooms and dining hall in the same hotel etc.

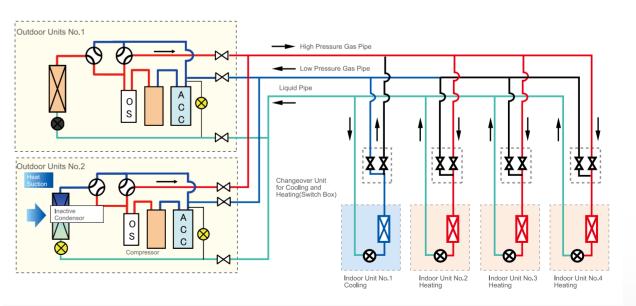
The latest heat recovery multi-split system make season indoor units work in cooling and heating at the same time and being switched between two modes individually, which flexibly satisfies personalized need of different users.

## **Cooling Domination Mode**



When total indoor heating load is less than cooling load, heat is being transferred from cooling room to heating room, part of heat exchanger is used as condenser to exhaust the redundant heat.

## **Heating Domination Mode**

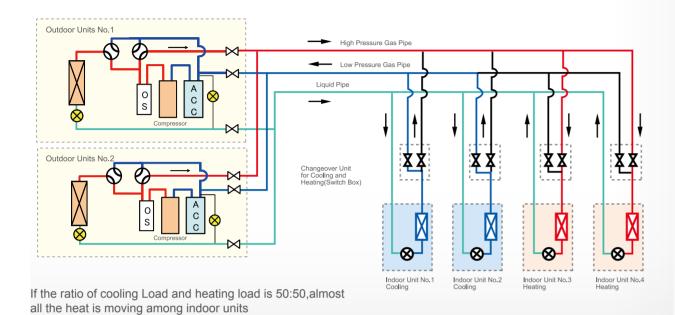


When total indoor heating load is more than cooling load, heat is being transferred from cooling room to heating room, part of heat exchanger is used as evaporator to compensate the required heat.

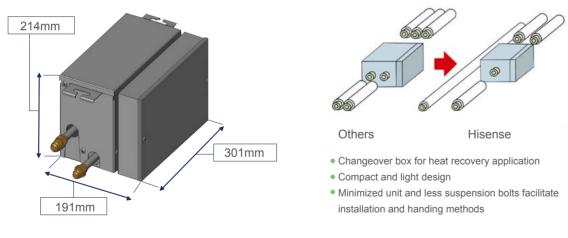




## Cooling/Heating Equilibrium Mode



## CH Box (heat recovery system only)

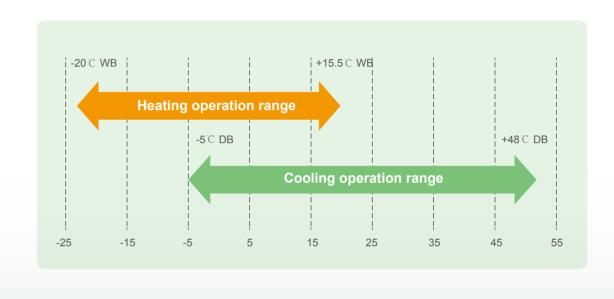


Model	Specification	ons	Indoor Unit Connection		
Model	Specifications W×D×H (mm)	Net Weight(kg)	Total HP	Number of Indoor Units*	
HCH-160D	301×214×191	7	6HP≥	1~7	
HCH-280D	301^214*191	1	6.1HP to 10HP	1~8	

<sup>\*</sup>When multiple indoor units are connected to the same CH unit, they are controlled with the same operation mode.

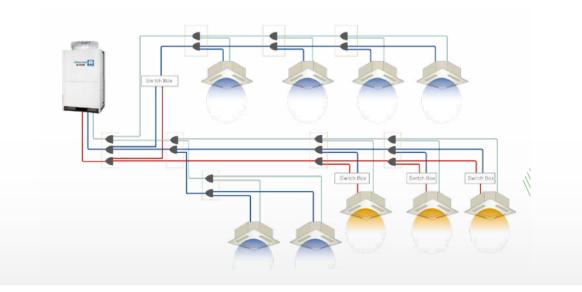
## Wide Operating Range

The system can run within a wide temperature range, the lowest heating operation can reach -20°C WB, ensure a good heating effect in winter.



## Configuration of Heat Recovery Operation System

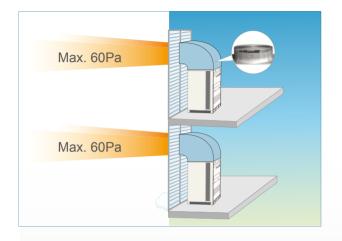
Hi-Flexi R Series heat recovery operation system is composed of heat recovery outdoor unit, indoor unit, switch box, branch pipes and refrigerant pipes. One switch box unit could connect to one or multiple indoor units. The indoor units equipped with a same switch box unit will keep the same operation mode.







## **Extra-high External Static Pressure Design**



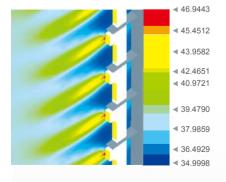
- Adopt high-efficiency DC fan motor
- The use of high-efficiency fan reduces energy consumption of the motor
- Can achieve industry-leading level of external static pressure 60Pa

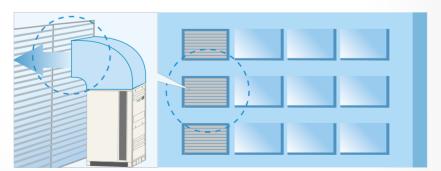
The efficient axial fan is designed adopting CFD, finite element method, aviation dynamic fluid simulation analysis and other advanced concepts; its air inlet angle and outlet angle are optimized; together with unique horn air vent design, the external static pressure of outdoor unit is higher, which can better exhaust air and ensure smooth air flow.

## Layered Installation, Flexibly Corresponding to High-rise Buildings

For high-rise buildings, crawl space can be left to place outdoor units, or machine room can be set up on each floor. By using exhaust duct to exhaust the air, short circuit of return air can be avoided with long exhaust distance, which ensures good ventilation and heat exchange effects of outdoor units.

#### Temperature °C



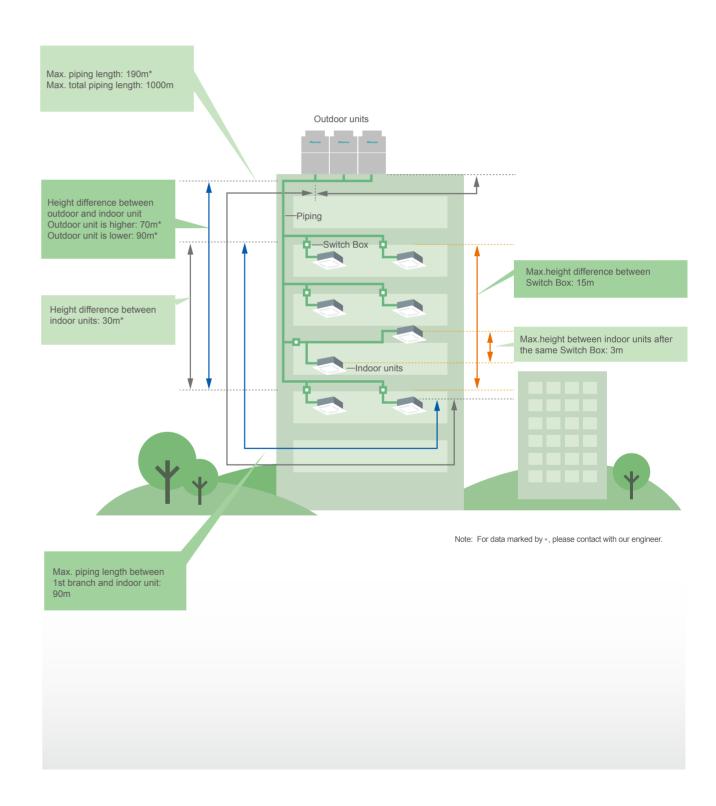


Airflow Schematic

Exhaust duct installation

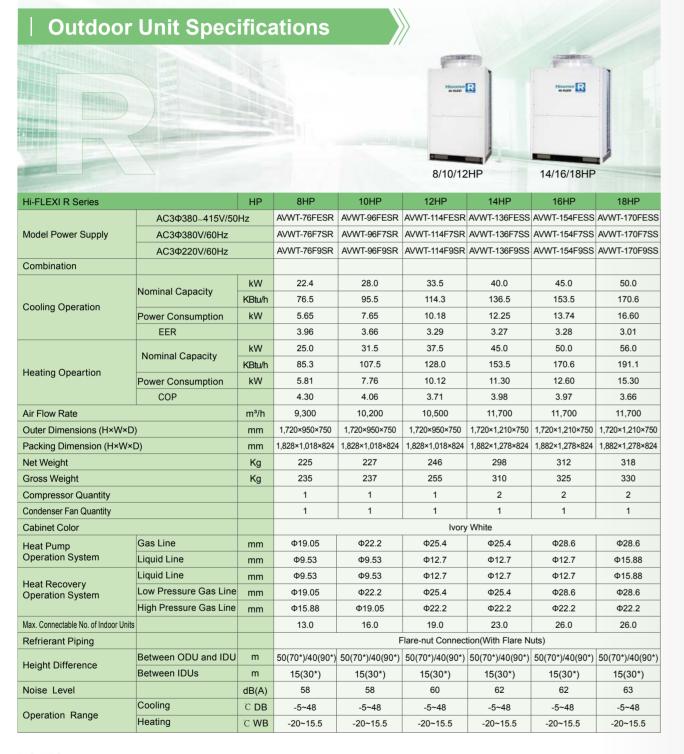
Layered installation effect picture

## | More Flexible Refrigerant Piping Work









#### NOTES:

- 1. The nominal cooling capacity and heating capacity are based on following conditions: 2. The sound pressure is based on the following conditions. 1 Meter from the unit service 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)
- cover surface, and 1.5 Meter from floor level. The above data is based on the cooling mode. In case of heating mode, the sound pressure level increases by approximately 1~2dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field
- 3. Except for the specified combination in the table, there is no other combination of the base unit. 4. The width of outer dimension, it is the value when each distance between the base outdoor units is specified to 20mm.
- 5. For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our

			Misense R	Historica R	Hisonse R H	beense R
			201		22/24/26	
Hi-FLEXI R Series		HP	20HP	22HP	24HP	26HP
	AC3Φ380~415V/50	Hz	AVWT-190FESZ	AVWT-212FESZ	AVWT-232FESZ	AVWT-250FESZ
Model Power Supply	АС3Ф380V/60Hz		AVWT-190F7SZ	AVWT-212F7SZ	AVWT-232F7SZ	AVWT-250F7SZ
	АС3Ф220V/60Hz		AVWT-190F9SZ	AVWT-212F9SZ	AVWT-232F9SZ	AVWT-250F9SZ
Combination			AVWT-76FESR AVWT-114FESR	AVWT-76FESR AVWT-136FESS	AVWT-96FESR AVWT-136FESS	AVWT-114FESR AVWT-136FESS
	Nominal Capacity	kW	56.0	61.5	69.0	73.0
Cooling Operation	Norminal Capacity	KBtu/h	190.8	213.0	232.0	250.8
Cooling Operation	Power Consumption	kW	15.83	17.90	19.90	22.43
	EER		3.54	3.44	3.47	3.25
	Naminal Canacity	kW	63.0	69.0	77.5	82.5
Heating Operation	Nominal Capacity	KBtu/h	213.3	239.0	261.0	281.5
Heating Opeartion	Power Consumption	kW	15.93	17.11	19.06	21.42
	COP		3.95	4.03	4.07	3.85
Air Flow Rate		m³/h	19,800	21,000	21,900	22,200
Outer Dimensions (H×W×D	))	mm	1,720×(950+950)×750	1,720×(950+1,210)×750	1,720×(950+1,210)×750	1,720×(950+1,210)×75
Packing Dimension (H×W×I	D)	mm				
Net Weight		Kg	225+246	225+298	227+298	246+298
Gross Weight		Kg	235+255	235+310	237+310	255+310
Compressor Quantity			2	3	3	3
Condenser Fan Quantity			2	2	2	2
Cabinet Color				Ivory	White	
Heat Pump	Gas Line	mm	Ф28.6	Ф28.6	Ф28.6	Ф31.75
Operation System	Liquid Line	mm	Ф15.88	Ф15.88	Ф15.88	Ф19.05
Hoot Possyony	Liquid Line	mm	Ф15.88	Ф15.88	Ф15.88	Ф19.05
Heat Recovery Operation System	Low Pressure Gas Line	mm	Ф28.6	Ф28.6	Ф28.6	Ф31.75
	High Pressure Gas Line	mm	Ф22.2	Ф25.4	Ф25.4	Ф25.4
Max. Connectable No. of Indoor Units	3		33.0	36.0	40.0	43.0
Refrierant Piping				Flare-nut Conn	ection(With Flare Nuts)	
Height Difference	Between ODU and IDU	m	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)
Height Difference						

#### NOTES:

Operation Range

Noise Level

1. The nominal cooling capacity and heating capacity are based on following conditions: 2. The sound pressure is based on the following conditions. 1 Meter from the unit service Cooling Operation Conditions

Between IDUs

Cooling

Heating

m

dB(A)

°C DB

°C WB

15(30\*)

62

-5~48

-20~15.5

- 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)
- cover surface, and 1.5 Meter from floor level. The above data is based on the cooling mode. In case of heating mode, the sound pressure level increases by approximately 1~2dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field

15(30\*)

63

-5~48

-20~15.5

3. Except for the specified combination in the table, there is no other combination of the base unit.

15(30\*)

63

-5~48

-20~15.5

15(30\*)

64

-5~48

-20~15.5

- 4. The width of outer dimension, it is the value when each distance between the base outdoor units is specified to 20mm.
- 5. For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our professinal engineer.







Hi-FLEXI R Series		HP	28HP	30HP	32HP	34HP	36HP
	AC3Φ380~415V/50	Hz	AVWT-272FESZ	AVWT-290FESZ	AVWT-308FESZ	AVWT-324FESZ	AVWT-340FESZ
Model Power Supply	АС3Ф380V/60Hz		AVWT-272F7SZ	AVWT-290F7SZ	AVWT-308F7SZ	AVWT-324F7SZ	AVWT-340F7SZ
	АС3Ф220V/60Hz		AVWT-272F9SZ	AVWT-290F9SZ	AVWT-308F9SZ	AVWT-324F9SZ	AVWT-340F9SZ
Combination			AVWT-136FESS AVWT-136FESS	AVWT-136FESS AVWT-154FESS	AVWT-154FESS AVWT-154FESS	AVWT-154FESS AVWT-170FESS	AVWT-170FESS AVWT-170FESS
	Naminal Canasity	kW	80.0	85.0	90.0	95.0	100.0
Cooling Operation	Nominal Capacity	KBtu/h	273.0	290.0	307.0	324.1	341.2
Cooling Operation	Power Consumption	kW	24.50	25.99	27.48	30.34	33.20
	EER		3.27	3.27	3.28	3.13	3.01
	Naminal Canacity	kW	90.0	95.0	100.0	106.0	112.0
Heating Operation	Nominal Capacity	KBtu/h	307.1	324.1	341.2	361.7	382.1
Heating Opeartion	Power Consumption	kW	22.60	23.90	25.20	27.90	30.60
	COP		3.98	3.97	3.97	3.80	3.66
Air Flow Rate		m³/h	23,400	23,400	23,400	23,400	23,400
Outer Dimensions (H×W×D	)	mm	1,720×(1,210+1,210)×750	1,720×(1,210+1,210)×750	1,720×(1,210+1,210)×750	1,720×(1,210+1,210)×750	1,720×(1,210+1,210)×75
Packing Dimension (H×W×	D)	mm					
Net Weight		Kg	298+298	298+312	312+312	312+318	318+318
Gross Weight		Kg	310+310	310+325	325+325	325+330	330+330
Compressor Quantity			4	4	4	4	4
Condenser Fan Quantity			2	2	2	2	2
Cabinet Color					Ivory White		
Heat Pump	Gas Line	mm	Ф31.75	Ф31.75	Ф31.75	Ф31.75	Ф38.1
Operation System	Liquid Line	mm	Ф19.05	Ф19.05	Ф19.05	Ф19.05	Ф19.05
Heat Recovery	Liquid Line	mm	Ф19.05	Ф19.05	Ф19.05	Ф19.05	Ф19.05
Operation System	Low Pressure Gas Line	mm	Ф31.75	Ф31.75	Ф31.75	Ф31.75	Ф31.75
	High Pressure Gas Line	mm	Ф28.6	Ф28.6	Ф28.6	Ф28.6	Ф28.6
Max. Connectable No. of Indoor Units			47.0	50.0	53.0	56.0	59.0
Refrierant Piping				Flare-r	nut Connection(With F	lare Nuts)	
Height Difference	Between ODU and IDU	m	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)
Height Difference	Between IDUs	m	15(30*)	15(30*)	15(30*)	15(30*)	15(30*)
Noise Level		dB(A)	65	65	65	66	66
O	Cooling	°C DB	-5~48	-5~48	-5~48	-5~48	-5~48
Operation Range	Heating	°C WB	-20~15.5	-20~15.5	-20~15.5	-20~15.5	-20~15.5

#### NOTES:

- 1. The nominal cooling capacity and heating capacity are based on following conditions: 2. The sound pressure is based on the following conditions.1 Meter from the unit service 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)

- cover surface, and 1.5 Meter from floor level. The above data is based on the cooling mode. In case of heating mode, the sound pressure level increases by approximately 1~2dB. The above data was measured in an anechoic chamber so that reflected sound
- should be taken into consideration in the field.

  3. Except for the specified combination in the table, there is no other combination of the base unit.
- The width of outer dimension, it is the value when each distance between the base outdoor units is specified to 20mm.
- 5. For Max, pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our

				Street Street	
				us - El Hannell	Hisense 🖸
				Hisense R Hisense R	Hisense R
				38/40/42HP	
				30/40/42111	
Hi-FLEXI R Series		HP	38HP	40HP	42HP
	AC3Ф380~415V/50	Hz	AVWT-364FESZ	AVWT-382FESZ	AVWT-398FESZ
Model Power Supply	АС3Ф380V/60Hz		AVWT-364F7SZ	AVWT-382F7SZ	AVWT-398F7SZ
	АС3Ф220V/60Hz		AVWT-364F9SZ	AVWT-382F9SZ	AVWT-398F9SZ
Combination			AVWT-114FESR AVWT-114FESR AVWT-136FESS	AVWT-114FESR AVWT-114FESR AVWT-154FESS	AVWT-114FESR AVWT-114FESR AVWT-170FESS
	Naminal Canacity	kW	109.0	112.0	118.0
Cooling Operation	Nominal Capacity	KBtu/h	365.1	382.1	399.2
Cooling Operation	Power Consumption	kW	32.61	34.10	36.96
	EER		3.34	3.28	3.19
	Nominal Capacity	kW	118.0	125.0	132.0
Heating Opeartion	140mmar Supacity	KBtu/h	409.5	426.5	447.5
ricating Opeartion	Power Consumption	kW	31.54	32.84	35.54
	СОР		3.74	3.81	3.71
Air Flow Rate		m³/h	32,700	32,700	32,700
Outer Dimensions (H×W×D)		mm	1,720×(950+950+1,210)×750	1,720×(950+950+1,210)×750	1,720×(950+950+1,210)×750
Packing Dimension (H×W×D	0)	mm			
Net Weight		Kg	246+246+298	246+246+312	246+246+318
Gross Weight		Kg	255+255+310	255+255+325	255+255+330
Compressor Quantity			4	4	4
Condenser Fan Quantity			3	3	3
Cabinet Color	Caslins		400.4	Ivory White	400.4
Heat Pump Operation System	Gas Line	mm	Ф38.1	Ф38.1	Ф38.1
Operation Oystem	Liquid Line	mm	Ф19.05	Φ19.05 Φ19.05	Ф19.05
Heat Recovery	Liquid Line Low Pressure Gas Line	mm	Ф19.05 Ф38.1		Ф19.05
Operation System	High Pressure Gas Line	mm	Ф31.75	Ф38.1	Ф38.1
Max. Connectable No. of Indoor Units	g.,	mm	64.0	64.0	64.0
Refrierant Piping			57.0	Flare-nut Connection(With Flare Nut	
	Between ODU and IDU	m	50(70*)/40(90*)	50(70*)/40(90*)	50(70*)/40(90*)
Height Difference	Between IDUs	m	15(30*)	15(30*)	15(30*)
Noise Level		dB(A)	66	66	66
	Cooling	C DB	-5~48	-5~48	-5~48
Operation Range	Heating	C WB	-20~15.5	-20~15.5	-20~15.5

#### NOTES:

- 1. The nominal cooling capacity and heating capacity are based on following conditions: 2. The sound pressure is based on the following conditions. 1 Meter from the unit service 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

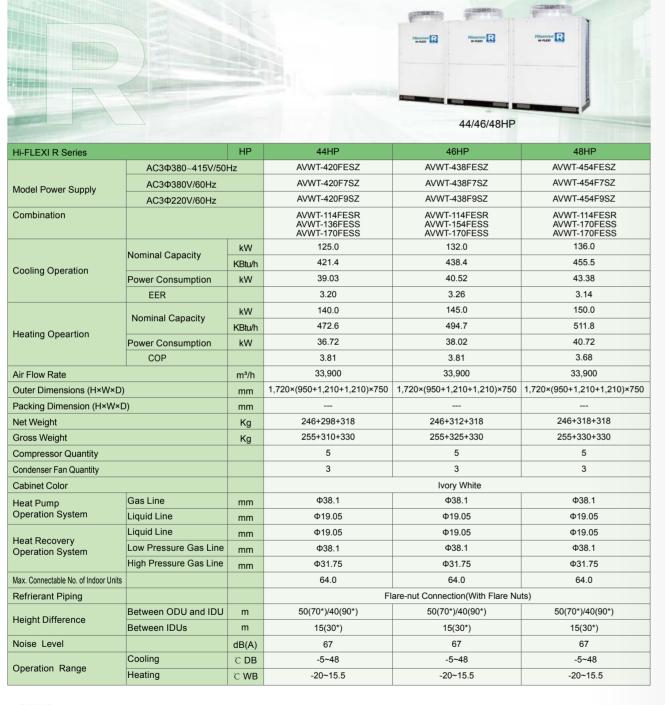
Indoor Air Inlet Temperature: 20 °C DB(68°F DB), Outdoor Air Inlet Temperature: 7  $^{\circ}$  DB(45  $^{\circ}$ F DB), 6  $^{\circ}$  WB(43  $^{\circ}$ F WB)

- cover surface, and 1.5 Meter from floor level. The above data is based on the cooling mode. In case of heating mode, the sound pressure level increases by approximately 1~2dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- 3. Except for the specified combination in the table, there is no other combination of the base unit.
- The width of outer dimension, it is the value when each distance between the base outdoor units is specified to 20mm.
- 5. For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our



**Outdoor Unit Specifications** 





#### NOTES:

- 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)

- 1. The nominal cooling capacity and heating capacity are based on following conditions: 2. The sound pressure is based on the following conditions. 1 Meter from the unit service cover surface, and 1.5 Meter from floor level. The above data is based on the cooling mode. In case of heating mode, the sound pressure level increases by approximately 1~2dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field
  - 3. Except for the specified combination in the table, there is no other combination of the base unit.
  - 4. The width of outer dimension, it is the value when each distance between the base outdoor units is specified to 20mm.
  - 5. For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our

				COMMENTS NO.	-CHREC	
				Hisensc R	Hisense R	Hisense R
					50/52/54HP	
Hi-FLEXI R Series		HP	50HP		52HP	54HP
	AC3Ф380~415V/50	Hz	AVWT-476FESZ	AV	WT-494FESZ	AVWT-510FESZ
Model Power Supply	АС3Ф380V/60Hz		AVWT-476F7SZ	AV	WT-494F7SZ	AVWT-510F7SZ
	АС3Ф220V/60Hz		AVWT-476F9SZ	AV	WT-494F9SZ	AVWT-510F9SZ
Combination			AVWT-136FESS AVWT-170FESS AVWT-170FESS	AV	WT-154FESS WT-170FESS WT-170FESS	AVWT-170FESS AVWT-170FESS AVWT-170FESS
	Naminal Canasity	kW	140.0		145.0	150.0
Cooling Operation	Nominal Capacity	KBtu/h	477.7		494.7	511.8
Cooling Operation	Power Consumption	kW	45.45		46.94	49.80
	EER		3.08		3.09	3.01
	Naminal Caracita	kW	155.0		160.0	165.0
	Nominal Capacity	KBtu/h	528.9		545.9	563.0
Heating Opeartion	Power Consumption	kW	41.90		43.20	45.90
	COP		3.70		3.70	3.59
Air Flow Rate		m³/h	35,100		35,100	35,100
Outer Dimensions (H×W×D)		mm	(1,720×1,210×750)×3	(1,720	0×1,210×750)×3	(1,720×1,210×750)×3
Packing Dimension (H×W×D	))	mm				
Net Weight		Kg	298+318+318	3.	12+318+318	318+318+318
Gross Weight		Kg	310+330+330	32	25+330+330	330+330+330
Compressor Quantity			6		6	6
Condenser Fan Quantity			3		3	3
Cabinet Color					Ivory White	
Heat Pump	Gas Line	mm	Ф38.1		Ф38.1	Ф38.1
Operation System	Liquid Line	mm	Ф19.05		Ф19.05	Ф19.05
	Liquid Line	mm	Ф19.05		Ф19.05	Ф19.05
Heat Recovery Operation System	Low Pressure Gas Line	mm	Ф38.1		Ф38.1	Ф38.1
	High Pressure Gas Line	mm	Ф31.75		Ф31.75	Ф31.75
Max. Connectable No. of Indoor Units			64.0		64.0	64.0
Refrierant Piping				Flare-nut Conr	nection(With Flare N	luts)
	Between ODU and IDU	m	50(70*)/40(90*)		(70*)/40(90*)	50(70*)/40(90*)
Height Difference	Between IDUs	m	15(30*)		15(30*)	15(30*)
Noise Level		dB(A)	67		67	68
	Cooling	C DB	-5~48		-5~48	-5~48
Operation Range			0 70		-J - <del>T</del> U	-U <del>-</del> U

#### NOTES:

- 1. The nominal cooling capacity and heating capacity are based on following conditions: 2. The sound pressure is based on the following conditions. 1 Meter from the unit service 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)

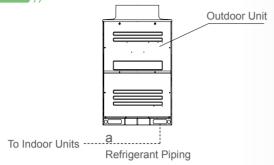
- cover surface, and 1.5 Meter from floor level. The above data is based on the cooling mode. In case of heating mode, the sound pressure level increases by approximately 1~2dB. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field
- 3. Except for the specified combination in the table, there is no other combination of the base unit. 4. The width of outer dimension, it is the value when each distance between the base outdoor units is specified to 20mm.
- 5. For Max. pipe length more than 165m, height difference between ODU&IDU more than 50(40)m or height difference between IDUs more than 15m, please contact with our





## **Pipe Diameter for Outdoor Unit**

Piping Size for AVWT-86U6(7)SR to AVWT-154U6(7)SS (Base Unit)

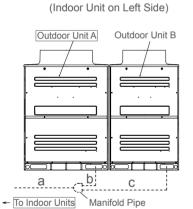


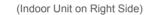
(Фmm)

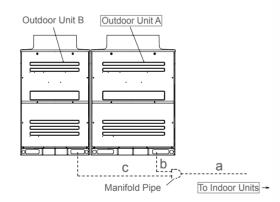
Mod	el		AVWT-76FESR	AVWT-96FESR	AVWT-114FESR	AVWT-136FESS	AVWT-154FESS	AVWT-170FESS
Piping	0	Gas	19.05	22.2	25.4	25.4	28.6	28.6
Piping Size	а	Liquid	9.53	9.53	12.7	12.7	12.7	15.88

Piping Size for AVWT-190FESZ to AVWT-340FESZ (2 Units Combination)

< Figure for AVWT-232FESZ >







(Фmm)

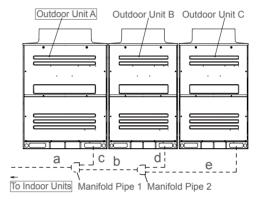
Model			AVWT-190*	AVWT-212*	AVWT-232*	AVWT-250*	AVWT-272*	AVWT-290*	AVWT-308*	AVWT-324*	AVWT-340*
Combination	Outdoor Unit A Outdoor Unit B		AVWT-114*	AVWT-136*	AVWT-136*	AVWT-136*	AVWT-136*	AVWT-154*	AVWT-154*	AVWT-170*	AVWT-170*
Unit			AVWT-76*	AVWT-76*	AVWT-96*	AVWT-114*	AVWT-136*	AVWT-136*	AVWT-154*	AVWT-154*	AVWT-170*
Manifold	Manifold Pipe			HFQ-M22F		HFQ-M32F					
		Gas	28.6	28.6	28.6	31.75	31.75	31.75	31.75	31.75	38.1
	а	Liquid	15.88	15.88	15.88	19.05	19.05	19.05	19.05	19.05	19.05
Piping Size	b	Gas	25.4	25.4	25.4	25.4	25.4	28.6	28.6	28.6	28.6
T Iping Oize		Liquid	12.7	12.7	12.7	12.7	12.7	12.7	12.7	15.88	15.88
	С	Gas	19.05	19.05	22.2	25.4	25.4	25.4	28.6	28.6	28.6
		Liquid	9.53	9.53	9.53	12.7	12.7	12.7	12.7	12.7	15.88

<sup>\*</sup> Perform the installation of the outdoor unit and piping connection according to the figure. Refer to the table for the outdoor unit model, the manifold pipe model and the piping diameter

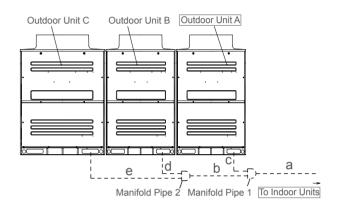
#### Piping Size for AVWT-328U6(7)SZ to AVWT-460U6(7)SZ (Triple Units Combination)

< Figure for AVWT-365U6(7)SZ >

#### (Indoor Unit on Left Side)



#### (Indoor Unit on Right Side)



(Фmm)

										( -
Model			AVWT-328*	AVWT-345*	AVWT-365*	AVWT-386*	AVWT-402*	AVWT-426*	AVWT-444*	AVWT-460*
		itdoor it A	AVWT-154*	AVWT-154*	AVWT-136*	AVWT-154*	AVWT-154*	AVWT-154*	AVWT-154*	AVWT-154*
Combination Unit	Outdoor Unit B		AVWT-96*	AVWT-96*	AVWT-114*	AVWT-114*	AVWT-136*	AVWT-154*	AVWT-154*	AVWT-154*
	Outdoor Unit C		AVWT-86*	AVWT-96*	AVWT-114*	AVWT-114*	AVWT-114*	AVWT-114*	AVWT-136*	AVWT-154*
Manifold	Pip	е	Н	IFQ-M22F+HF	Q-M32F			HFQ-M32F-	+HFQ-M32F	
	а	Gas	31.75	38.1	38.1	38.1	38.1	38.1	38.1	38.1
		Liquid	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	D	Gas	28.6	28.6	28.6	28.6	31.75	31.75	31.75	31.75
		Liquid	15.88	15.88	15.88	15.88	19.05	19.05	19.05	19.05
Piping Size		Gas	28.6	28.6	25.4	28.6	28.6	28.6	28.6	28.6
	С	Liquid	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
	اء	Gas	22.2	22.2	25.4	25.4	25.4	28.6	28.6	28.6
	d	Liquid	9.53	9.53	12.7	12.7	12.7	12.7	12.7	12.7
		Gas	19.05	22.2	25.4	25.4	25.4	25.4	25.4	28.6
	е	Liquid	9.53	9.53	12.7	12.7	12.7	12.7	12.7	12.7

<sup>\*</sup> Perform the installation of the outdoor unit and piping connection according to the figure. Refer to the table for the outdoor unit model, the manifold pipe model and the piping diameter.





## Hi-FLEXi C Series

Hisense

- DC inverter-driven compressor
- Low noise technologies
- Compact and lightweight design
- Long refrigerant pipe and drop

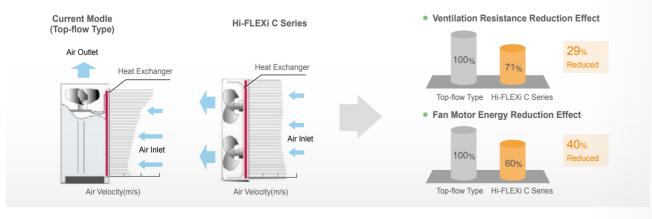
## Top-class Compact and Light Weight Design

Facilitation and flexibility at installation are further advanced by adopting outdoor units light weight and compact design compared to the current top-flow model.



## Technology to Improve Heat Exchanger Performance

In the Hi-FLEXi C series model, wind speed distribution is rendered uniform by making the direction of the wind flow same to the fan and the heat exchanger. As a result, the performance of the heat exchanger is optimized and energy is saved.



## Low Noise Technologies

#### **DC Fan Motor**

The smooth rotating fan motor with low vibration reduces the noise level.

#### Super High-stream Fan

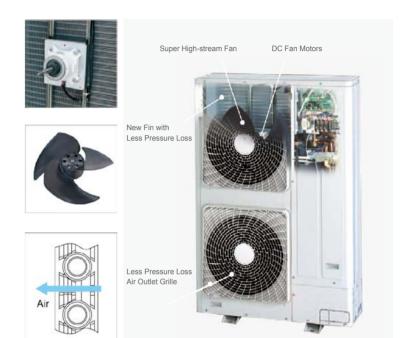
Supper high-stream fan of  $\Phi$ 544mm cuts down the noise level.

#### Low Pressure Loss Air Outlet Grille

The rib structure synchronized with rotation flow from the fan reduces the air resistance at the air outlet grille.

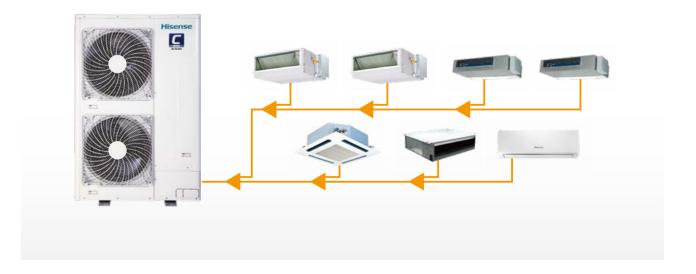
#### **New Fin with Less Pressure Loss**

The draft resistance is reduced by 20%. Both high-efficiency and low noise operation are simultaneously satisfied.



## | Various Model Types Easily Match Different Layout

Wide capacity range of outdoor units enables free model combination of indoor units according to the actual situation of building. There are 12 types of indoor units for selection. Designer can choose the appropriate type and capacity of indoor units according to the interior decoration and furnitures.







## **Greater Convenience During Delivery and Installation**

With light and compact body, the Hi-FLEXi C Series can be easily carried in the elevator even in a small

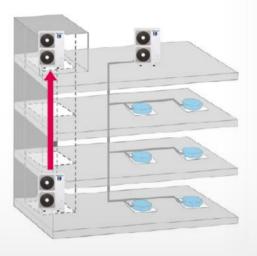
No cranes required for delivery



• The unit can be carried at one time. Elevators can be used for delivery.







Light and compact body facilitates renewal

## **Long Piping Design**

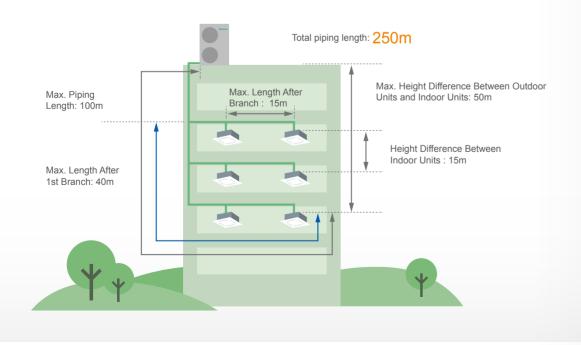
• Total piping length: 250m

Max. piping length: 100m

• Max. length after first branch : 40m

• Max. length after branch : 15m

- Height difference between indoor units : 15m
- Max. height difference between outdoor and indoor units: 50m (when outdoor units are higher than indoor units)
- Max. height difference between outdoor and indoor units: 40m (when outdoor units are lower than indoor units)



## **Outdoor Unit Specifications**



Hi-FLEXi C		HP	8HP 10HP 12HP		
	AC3Φ380~415V/50H	lz	AVW-76UESR	AVW-96UESR	AVW-114UESR
Model Power Supply	AC3Ф380V/60Hz	:	AVW-76U7SR	AVW-96U7SR	AVW-114U7SR
	AC3Φ220V/60Hz	:	AVW-76U9SR	AVW-96U9SR	AVW-114U9SR
	Nominal Capacity	kW	22.4	28.0	33.5
Cooling Operation	Nominal Capacity	KBtu/h	76.5	95.6	114.3
and a parameter	Consumption Power	kW	6.3	8.3	10.7
	EER		3.6	3.4	3.1
	Nominal Capacity	kW	25.0	31.5	37.5
Heating	Nominal Capacity	KBtu/h	85.3	107.5	128.0
Treating	Consumption Power	kW	5.9	7.8	9.9
	COP		4.2	4.0	3.8
Air Flow Rate		m³/h	7,260	9,000	9,780
Outer Dimension (H×W×D)		mm		1,650x1,100x390	
Packing Dimension (H×W×D)		mm		1,748x1,151x500	
Net Weight		kg	168	168	171
Gross Weight		kg	179	179	182
Refrigerant piping	Gas Line	mm	Ф19.05	Ф22.2	Ф25.4
Reingerant piping	Liquid Line	mm	Ф9.53	Ф12.7	Ф12.7
Max. number of connectable IDU			10	10	10
Max. Piping Length		m	100	100	100
Height Difference	Between ODU & IDU	m	50(40)	50(40)	50(40)
Height Difference	Between IDUs	m	15	15	15
Noise Level		dB(A)	53/55	56/58	56/61
Operation Banga	Cooling	C DB		-5 ∼ 48*	
Operation Range	Heating	C WB		<b>-20</b> ∼ 15	

#### Notes:

1.The nominal cooling heating capacities show the capacities when the outdoor unit is operated with the100% rating of indoor units,and are based on the standard JIS B8616.

Cooling Operation Conditions
Indoor Air Inlet Temperature:27 ℂ DB(80° F DB)

\*1):19.5°C WB(67° F WB)

\*2):19.0 © WB(66.2° F WB)

Outdoor Air Inlet Temperature:35 © DB(95° F DB) Piping Length: 7.5Meters Piping Lift: 0Meter

Indoor Air Inlet Temperature: 20 ℃ DB(68° F DB)

Outdoor Air Inlet Temperature: 7 ℂ DB(95° F DB)

- The sound pressure level is based on following conditions:
   1.5Meters from floor Level,and 1 Meter from the unitservice
- cover surface.
  The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- 3. For height differences between ODU&IDU more than 50(40) or height differences between IDUs more than 15, please contact with our engineer.

  4. When the cooling operation temperature is over 43 °C, please contact with our professional engineer.





## Hi-Smart L Series

Hisense Hi-Smart L Series is designed and developed for high-end residential and commercial space.

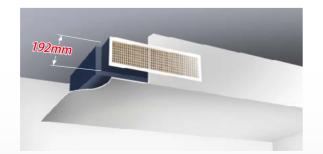
- DC inverter-driven compressor
- Low noise technologies
- Compact and lightweight design
- Long refrigerant pipe and drop



## Slim and Refined Body Design

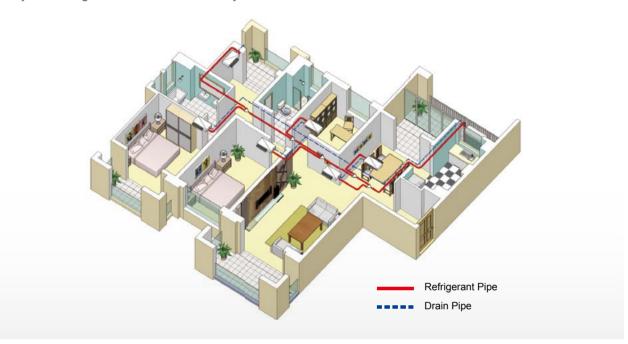
The compact outdoor unit can be flexibly placed according to outdoor condition. Low-height ducted type can be easily installed inside the low-height residential ceiling with a height of 192mm, which makes low height indoor units and elegant home decoration style set off mutually.





## **Free Combination**

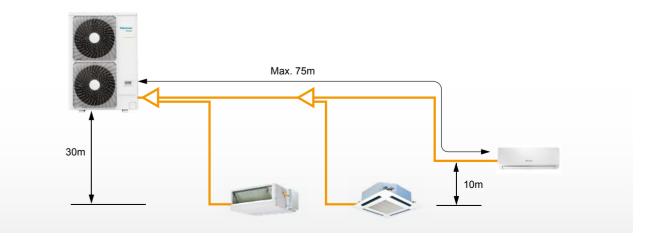
One outdoor unit of Hi-Smart L series can connect maximum 12 indoor units in different types. The free combination not only meets the air condition needs of large space, but also helps to match the indoor decoration. Flexible choice and better system configuration start a tour of Luxury life.



## Long Piping Design

Long refrigerant piping design makes project design and installation works more convenient.

- Total piping length can be 120m.
- Max. piping length is 75m.
- Max. height difference between outdoor and indoor units is 30m.
- Max. height difference between the highest and the lowest indoor units is 10m.









#### Note:

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

**Cooling Operation Conditions** 

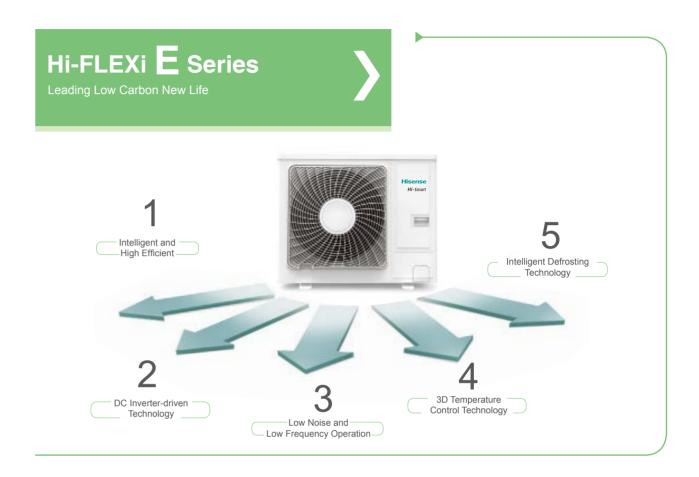
Indoor Air Inlet Temperature:27 C DB(80° F DB) 19.0°C WB(66.2° F WB) Outdoor Air Inlet Temperature:35 °C DB(95° F DB)

Piping Length: 7.5Meters Piping Lift: 0Meter

**Heating Operation Conditions** 

Indoor Air Inlet Temperature: 20 °C DB(68° F DB)
Outdoor Air Inlet Temperature: 7 °C DB(45° F DB) 6°C WB(43° F WB)

- 2. The sound pressure level is based on following conditions 1.5m beneath the unit.
- The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in
- 3. When the cooling operation temperature is over 48°C please contact with our professional engineer.



## Intelligent Multi-split Design

Hi-Smart E outdoor unit adopts the leading single-piping connection technology and connects multiple indoor units freely. The indoor unit adopts 2000-step micro-computer EEV (electronic expansion valve) to achieve automatic refrigerant flow control according to indoor load, which results in more precise and comfortable temperature control.



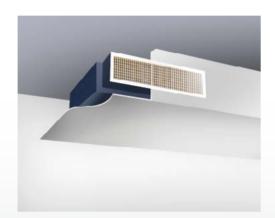




## Slim and Refined Body Design

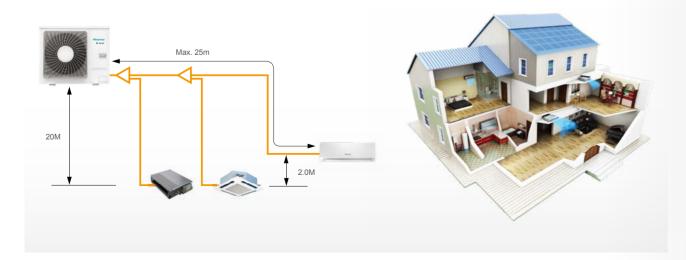
The compact outdoor unit can be flexibly placed according to outdoor condition. Low-height in-the-ceiling type can be easily installed inside the low-height residential ceiling with a height of 192mm, which makes low height indoor units and elegant home decoration style set off mutually.

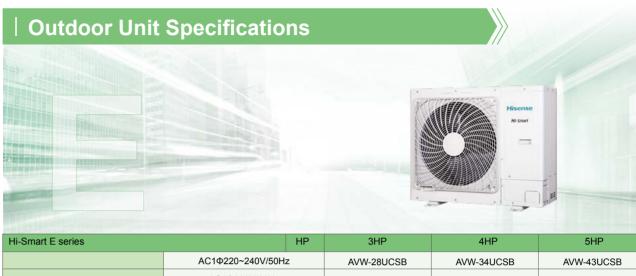




## | Flexible Long Piping Design

- Max. total piping length is 40m.
- Max. height difference between outdoor and indoor units is 20m.
- Height difference between indoor units is 2m.





Hi-Smart E series		HP	3HP	4HP	5HP	
	AC1Φ220~240V/5	i0Hz	AVW-28UCSB	AVW-34UCSB	AVW-43UCSB	
	AC1Φ220V/60H	łz	AVW-28U2SB	AVW-34U2SB	AVW-43U2SB	
Model Power Supply	AC3Ф380~415V/50Hz				AVW-43UESB	
	AC3Ф380V/60H	łz			AVW-43U7SB	
	Naminal Canasity	kW	8.0	10.0	12.5	
Cooling Operation	Nominal Capacity	kBtu/h	27.3	34.1	42.7	
Cooling Operation	Power Consumption	kW	2.66	2.86	3.81	
	EER		3.01	3.50	3.28	
	Nominal Capacity	kW	9.5	11.2	14.0	
Lloating	Nominal Capacity	kBtu/h	32.4	38.2	47.8	
Heating	Power Consumption	kW	2.42	2.75	3.68	
	COP		3.93	4.07	3.80	
Air Flow Rate		m³/h	2,970	4,140	4,680	
Outer Dimension (H×W×D)		mm		800×950×370	:370	
Packing Dimension (H×W×D)		mm		1020×940×370		
Net Weight		kg	65	73	78	
Gross Weight		kg	75	83	88	
Defeience de de la	Liquid Line	mm	Ф9.53	Ф9.53	Ф9.53	
Refrigerant piping	Gas Line	mm	Ф15.88	Ф15.88	Ф15.88	
Max. number of connectable IDU	АС1Ф/АС3Ф		4	5	5	
Noise Level	Cooling/Heating	dB(A)	50/52	53/54	54/57	
Operation Dange	Cooling Operation	°C DB		10~43		
Operation Range	Heating Operation	°C WB		-15~15		
Branch Pipe			HFQ-052F			

#### Notes:

- 1. The nominal cooling and heating capacities show the capacities when the outdoor with the 100% rating of indoor unit.
- Cooling Operation Conditions
- Indoor Air Inlet Temperature:27 C DB/19 C WB
- Outdoor Air Inlet Temperature:35 C DB
  Piping Length:7.5Meters Piping Lift:0 Meter
- 2.The sound pressure level is based on following conditions:
- 1.5 Meters from floor Level, and 1Meter from the unit service cover surface.
- The above data was measured in an anechoic chamber so that reflected sounde shoulde be taken into consideration in the field.





## Hi-FLEXi W Series

Water Source Application Advantages

Hisense water-source inverter-driven multi-split air conditioning incorporates the merits of air-cooled inverter-driven multi-split system and water-source heat pump system.

- Inverter-driven control technology
- Water-source technology
- Simultaneous cooling and heating
- Stable performance



## Wide Application Area



Adoption of Soil Source



Building Water-cycling System



Adoption of Underground Water



Urban Sewage, Recycled Water, Trade Effluent



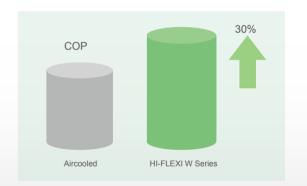
Adoption of Seawater Source



Adoption of Surface Water

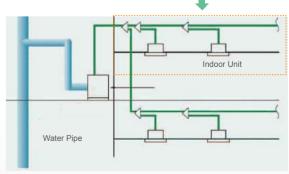
## High Efficiency, Superb Model

Hisense Flexi W series central air conditioning integrates inverter-driven technology with water-source heat exchange technology. Through all the aspects of optimization design, a high COP value can be maintained in a larger operating range of cooling and heating.



## | Primary Heat Exchange, Less Energy Loss

Middle-and-low-temperature water(10~45°C) is flowing in waterside pipeline, which results in less loss in intermediate links. Furthermore, a direct evaporation technology of refrigerant is applied in indoor units, which avoids heat exchange efficiency decrease caused by secondary heat exchange and greatly enhances COP value in air conditioning system.



Hisense Hi-FLEXI W Series

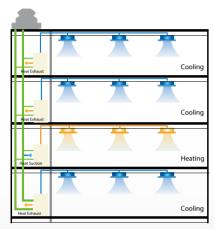
Refrigerant Evaporates Directly Primary Heat Exchange

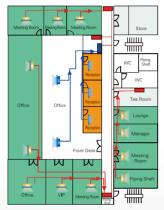




#### Simultaneous Cooling and Heating, More Energy-saving in Heat Recovery System

The requirement of simultaneous cooling and heating operation has been increasing due to the large modern buildings with complex structure, function and more demand for comfort, especially at the transition season or in winter. Conventional central air conditioning system consumes more energy when cooling and heating coexist. Hi-FLEXi W series divides space into interior and exterior sections, easily satisfies the requirement of simultaneous cooling and heating in the same building, realizes heat recovery and maximum energy-saving.





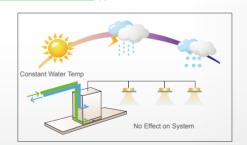
Heat Recovery Among Different Floors

Heat Recovery on the Same Floor

\*Heat recovery is achieved by taking water as heat carrier among multiple units connected to the same water circulation system.

### **Stable Performance**

By the use of water source , the performance of Hi-FLEXi W series will not be affected by high temperature. Even if in hot summer, its cooling capacity will not attenuate. Likewise, in heating operation, practically, the heat source temperature is higher and relatively stable, so that the frosting and defrosting will not occur, which contributes to stable performance.



## Flexible Placement Greatly Improves the Utilization Rate of Space

Generally, conventional centralized water source heat pump units are of large size. In addition, they need special machineroom to be placed centrally. By contrast, Hi-FLEXi W series has the following main features in the installation:

#### **Compact Structure, Easy Transportation.**



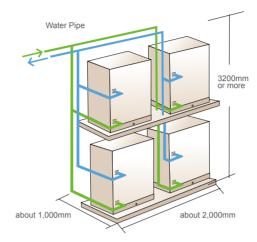


3-6HP:H800×W800×D370mm





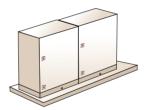
Modular Structure, Flexible Installation



The same module size helps to realize modular combination. and multiple units can be stacked

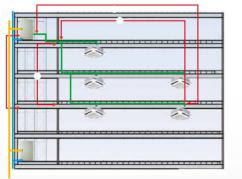
A wide selection of branch pipe can be chosen according to total capacity of indoor units connected, which greatly facilitates refrigerant pipe work on site and simplifies the procedure of construction.

AVWW-154	16HP	AVWW-76+AVWW-76
AVWW-170	18HP	AVWW-76+AVWW-96
AVWW-190	20HP	AVWW-96+AVWW-96



## Long Refrigerant Pipe Design, Suitable for High Rise

Thanks to the integration of water cycling system and refrigerant cycling system, there is no limitation for the length of water pipe-line, which easily meets the AC need of large-scale and high-rise building. Furthermore, Hi-FLEXi W series allows a maximum refrigerant pipe length of 75m between chiller units and indoor units, which contributes to more flexible design. In conventional centralized water source heat pump system, the chiller units provide heat (cold) source directly for indoor units, more power consumption of water pump and more energy loss of refrigerating medium will arise from long pipe-line in system.



Model	3HP	4/5/6HP	8/10/16/18/20HP
Max.Equivalent Piping Length	30	75	120
Total Piping Length	45	120	300
Max.Distance Between 1st Branch and Indoor Unit	15	30	40
Max.Height Difference Between Indoor Units	5	15	15
Max.Height Difference Between I. U. and O. U. ( O. U. is lower than I. U. )	15(15)	30(30)	50(40)

<sup>\*</sup>In case of high-rise building, the water pressure limitation that the plate heat exchanger can bear must be taken into consideration.



## **Outdoor Unit Specifications**



3/4/5/6HP

Hi-FLEXi W Series		HP	3HP	4HP	5HP	6HP
Model Power Supply	AC1Φ 220~240V/5	50Hz	AVWW-28UCSA	AVWW-38UCSA	AVWW-48UCSA	AVWW-54UCSA
woder Power Supply	AC1Φ 220V/60H	-lz	AVWW-28U2SA	AVWW-38U2SA	AVWW-48U2SA	AVWW-54U2SA
Combina	ation					
		kW	8.00	11.20	14.00	15.50
Cooling Operation	Nominal Capacity*1	KBtu/h	27.3	38.2	47.8	52.9
Cooling Operation	Rated Input	kW	1.90	2.60	3.41	3.88
	EER		4.21	4.31	4.11	3.99
	Naminal Canasity#4	kW	9.00	12.50	16.00	18.00
Haatina Ossaatina	Nominal Capacity*1	KBtu/h	30.7	42.7	54.6	61.4
Heating Opeartion	Rated Input	kW	1.80	2.40	3.14	3.60
	COP		5.00	5.21	5.10	5.00
	Height	mm	800	800	800	800
Outer Dimensions	Width	mm	800	800	800	800
Cutor Bimonolono	Depth	mm	370	370	370	370
	Aera	m²	0.3	0.3	0.3	0.3
Packing Dimensions(H×W×D)		mm	980×450×930	980×450×930	980×450×930	980×450×930
Net Weight		Kg	78	100	100	100
Gross Weight		Kg	85	107	107	107
Water Olds	Water Temperature*3	°C	10 ~ 45	10 ~ 45	10 ~ 45	10 ~ 45
Water-Side Heat Exchanger	Water Flow Rate	I/min	30	38	48	53
, and the second	Water Pressure Drop	kPa	30	30	35	40
Sound Pressure Level *2	Cooling/Heating	dB(A)	49	51	51	51
	Refrigerant Liquid Pipe	mm	Ф9.53	Ф9.53	Ф9.53	Ф9.53
	Refrigerant Gas Pipe	mm	Ф15.88	Ф15.88	Ф15.88	Ф15.88
Piping Connection	Water Pipe		DN25	DN25	DN25	DN25
	Thread of Connector		G1B	G1B	G1B	G1B
	Drain Pipe	mm	Ф18	Ф18	Ф18	Ф18
Water-Side Bearing Pressure Ability		Kgf/cm <sup>2</sup>	20	20	20	20
Max. Connectable Indoor Units			4	5	6	7

#### NOTES:

- \*1. Operation Condition:
- Cooling: Indoor Temperature 27°C DB/19°C WB, Outdoor Temperature 27°C DB, Water Inlet/Outlet 30/35°C . Heating: Indoor Temperature 20°C DB/15°C WB, Outdoor Temperature 20°C DB, Water Inlet 20°C .
- \*2. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- \*3. When unit is operating out of the allowable water temperature range, it won't start normally and will alarm.





8/10HP

Hi-FLEXi W Series		HP	8HP	10HP
Model Power Supply	AC3Φ 380~415V/5	50Hz	AVWW-76UESB	AVWW-96UESB
wioder i ower ouppry	АСЗФ 380V/60H	Ηz	AVWW-76U7SB	AVWW-96U7SB
	AC3Ф 208~230V/6	60Hz	AVWW-76U8SB	AVWW-96U8SB
Combin	ation			
		kW	22.40	28.00
0	Nominal Capacity*1	KBtu/h	76.5	95.6
Cooling Operation	Rated Input	kW	4.42	6.26
	EER		5.07	4.47
	Naminal Canadi #4	kW	25.00	31.50
Haaffaa Oo aa faa	Nominal Capacity*1	KBtu/h	85.3	107.5
Heating Opeartion	Rated Input	kW	4.2	5.81
	СОР		6.00	5.42
	Height	mm	1,000	1,000
Outer Dimensions	Width	mm	780	780
Outer Dimensions	Depth	mm	550	550
	Aera	m²	0.4	0.4
Packing Dimensions(H×W×D)		mm	850X600X1,120	850X600X1,120
Net Weight		Kg	160	160
Gross Weight		Kg	165	165
Material Olds	Water Temperature*3	°C	10 ~ 45	10 ~ 45
Water-Side Heat Exchanger	Water Flow Rate	l/min	76.8	96
	Water Pressure Drop	kPa	18	27.7
Sound Pressure Level *2	Cooling/Heating	dB(A)	50	51
	Refrigerant Liquid Pipe	mm	Ф12.7	Ф12.7
	Refrigerant Gas Pipe	mm	Ф19.05	Ф22.2
Piping Connection	Water Pipe		DN32	DN32
	Thread of Connector		G1 1/4B	G1 1/4B
	Drain Pipe	mm	Ф18	Ф18
Water-Side Bearing Pressure Ability		Kgf/cm²	20	20
Max. Connectable Indoor Units			13	16

#### NOTES:

- \*1. Operation Condition:
- Cooling: Indoor Temperature 27°C DB/19°C WB, Outdoor Temperature 27°C DB, Water Inlet/Outlet 30/35°C. Heating: Indoor Temperature 20°C DB/15°C WB, Outdoor Temperature 20°C DB, Water Inlet 20°C.
- \*2. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- \*3. When unit is operating out of the allowable water temperature range, it won't start normally and will alarm.





## **Outdoor Unit Specifications**



Hi-FLEXi W Series		HP	16HP	18HP	20HP
Madel Dawer Cumby	AC3Φ 380~415V/5	50Hz	AVWW-154UESB	AVWW-170UESB	AVWW-190UESB
Model Power Supply	AC3Ф 380V/60I	Нz	AVWW-154U7SB	AVWW-170U7SB	AVWW-190U7SB
	AC3Φ 208~230V/6	60Hz	AVWW-154U8SB	AVWW-170U8SB	AVWW-190U8SB
Combina	ation		AVWW-76U* AVWW-76U*	AVWW-76U* AVWW-96U*	AVWW-96U* AVWW-96U*
		KW	45.00	50.00	56.00
0	Nominal Capacity*1	KBtu/h	153.6	170.6	191.1
Cooling Operation	Rated Input	KW	8.84	10.68	12.52
	EER		5.09	4.68	4.47
		KW	50.00	56.00	63.00
	Nominal Capacity*1	KBtu/h	170.6	191.1	215.0
Heating Opeartion	Rated Input	KW	8.4	10.01	11.62
	COP		5.95	5.95	5.42
	Height	mm	1,000	1,000	1,000
Outer Dimensions	Width	mm	780+780	780+780	780+780
Outer Dimensions	Depth	mm	550	550	550
	Aera	m²	0.86	0.86	0.86
Packing Dimensions(H×W×D)		mm			
Net Weight		Kg	160+160	160+160	160+160
Gross Weight		Kg	165+165	165+165	165+165
	Water Temperature*3	°C	10 ~ 45	10 ~ 45	10 ~ 45
Water-Side Heat Exchanger	Water Flow Rate	I/min	153.6	172.8	192
Tiout Excitatiget	Water Pressure Drop	kPa	18	23	27.7
Sound Pressure Level *2	Cooling/Heating	dB(A)	51	51	52
	Refrigerant Liquid Pipe	mm	Ф15.88	Ф15.88	Ф15.88
	Refrigerant Gas Pipe	mm	Ф28.6	Ф28.6	Ф28.6
Piping Connection	Water Pipe		DN32	DN32	DN32
, •	Thread of Connector		G1 1/4B	G1 1/4B	G1 1/4B
	Drain Pipe	mm	Ф18	Ф18	Ф18
Water-Side Bearing Pressure Ability		Kgf/cm <sup>2</sup>	20	20	20
Max. Connectable Indoor Units			26	29	32

#### NOTES:

- \*1. Operation Condition:
- Cooling: Indoor Temperature 27°C DB/19°C WB, Outdoor Temperature 27°C DB, Water Inlet/Outlet 30/35°C. Heating: Indoor Temperature 20°C DB/15°C WB, Outdoor Temperature 20°C DB, Water Inlet 20°C .
- \*2. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- \*3. When unit is operating out of the allowable water temperature range, it won't start normally and will alarm.



24/26/28/30HP

Hi-FLEXi W Series		HP	24HP	26HP	28HP	30HP
Madel Dawer Cumby	АСЗФ 380~415V/5	0Hz	AVWW-229UESB	AVWW-250UESB	AVWW-268UESB	AVWW-290UESB
Model Power Supply	АС3Ф 380V/60H	z	AVWW-229U7SB	AVWW-250U7SB	AVWW-268U7SB	AVWW-290U7SB
	AC3Φ 208~230V/6	0Hz	AVWW-229U8SB	AVWW-250U8SB	AVWW-268U8SB	AVWW-290U8SB
Combina	ation		AVWW-76U* AVWW-76U* AVWW-76U*	AVWW-76U* AVWW-76U* AVWW-96U*	AVWW-76U* AVWW-96U* AVWW-96U*	AVWW-96U* AVWW-96U* AVWW-96U*
		KW	67.2	72.8	78.4	84
Cooling Operation	Nominal Capacity*1	KBtu/h	229.3	248.5	267.6	286.7
Cooling Operation	Rated Input	KW	13.26	15.1	16.94	18.78
	EER		5.07	4.82	4.63	4.47
	Naminal Canasituta	KW	75	81.5	88	94.5
Harfar Oranifar	Nominal Capacity*1	KBtu/h	256.0	278.1	300.3	322.5
Heating Opeartion	Rated Input	KW	12.6	14.21	15.82	17.43
	COP		5.95	5.74	5.56	5.42
	Height	mm	1,000	1,000	1,000	1,000
Outer Dimensions	Width	mm	780+780+780	780+780+780	780+780+780	780+780+780
Outer Dimensions	Depth	mm	550	550	550	550
	Aera	m²	1.29	1.29	1.29	1.29
Packing Dimensions(H×W×D)		mm				
Net Weight		Kg	160+160+160	160+160+160	160+160+160	160+160+160
Gross Weight		Kg	165+165+165	165+165+165	165+165+165	165+165+165
	Water Temperature*3	°C	10 ~ 45	10 ~ 45	10 ~ 45	10 ~ 45
Water-Side Heat Exchanger	Water Flow Rate	l/min	230.4	249.6	268.8	288
- roat = nortaligor	Water Pressure Drop	kPa	18	21.3	24.5	27.7
Sound Pressure Level *2	Cooling/Heating	dB(A)	55	55	55	56
	Refrigerant Liquid Pipe	mm	Ф19.05	Ф19.05	Ф19.05	Ф19.05
	Refrigerant Gas Pipe	mm	Ф28.6	Ф31.75	Ф31.75	Ф31.75
Piping Connection	Water Pipe		DN32	DN32	DN32	DN32
	Thread of Connector		G1 1/4B	G1 1/4B	G1 1/4B	G1 1/4B
	Drain Pipe	mm	Ф18	Ф18	Ф18	Ф18
Water-Side Bearing Pressure Ability		Kgf/cm <sup>2</sup>	20	20	20	20
Max. Connectable Indoor Units			36	36	36	36

#### NOTES:

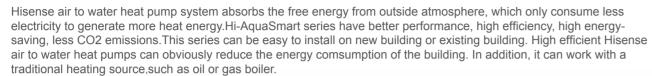
- \*1. Operation Condition:
- Cooling: Indoor Temperature 27°C DB/19°C WB, Outdoor Temperature 27°C DB, Water Inlet/Outlet 30/35°C. Heating: Indoor Temperature 20°C DB/15°C WB, Outdoor Temperature 20°C DB, Water Inlet 20°C.
- \*2. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- \*3. When unit is operating out of the allowable water temperature range, it won't start normally and will alarm.





## **Hi-AquaSmart Series**

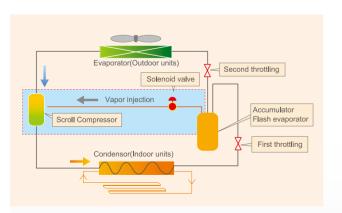
High-efficiency Air to Water Heat Pump 3 in 1 Solution

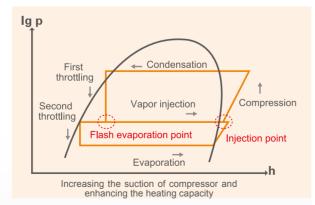




## **Enhanced Vapor Injection**

Hisense adopts vapor injection scroll compressor, which provides higher compression ratio, smoother oil supply and lower noise level.





The vapor injection system and stepless inverter technique greatly improve the refrigerant cycle system. It effectively increases refrigerant flow through vapor injecting, thus substantially enhancing the heating capacity.

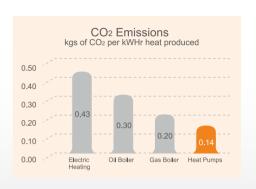
## Less CO<sub>2</sub> Emissions

Using a heat pump can significantly reduce CO<sub>2</sub> emissions.

#### Lower CO<sub>2</sub> emissions

Because heat pumps collect free energy from the air, they produce much less CO<sub>2</sub>.

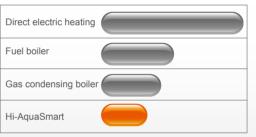
- 66% less than Electric Heating
- 50% less than Oil Heating
- 30% less than Gas Heating



## **Economical**

Compared to the other heating modes, such as electricity, gas, coal/oil, solar, and so on, the heat pump system is more efficient and the annual cost reduction is obvious.

#### Average annual running cost



## | High Efficient Water Pump (DC)

Hi-aquasmart series is equipped with a high efficient DC(inverter) water pump, which can minimize energy consumption during operating time. It has a better linear controllable for capacity output and wider adaptability for many application places compared with AC water pump.



## **COP up to 4.84**



Hi-AquaSmart series is efficient, all products' COP is highter than 4.1, successfully meeting customers' requirements.

Cpacity	Hisense	Brand A	Brand B
7kw	4.5	4.4	4.4
9kw	4.62	4.23	4.65
12kw	4.1	4.49	4.45
14kw	4.84	4.44	4.22
16kw	4.74	4.2	4.1

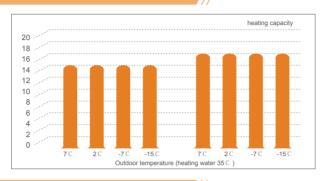
\* Peak value  $_*$  at standard condition working at heating capacity at +7  $^{\circ}$  ( heating water at 35  $^{\circ}$  )





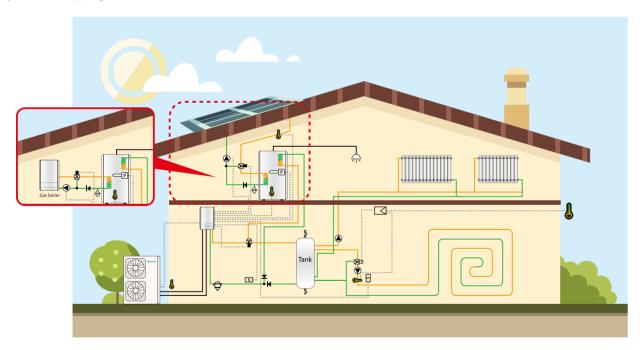
## **Strong Heating Capacity Under Low Ambient**

Hi-AquaSmart(14/16kw) can maintain the same nominal capacity even at -15 °C without electrical booster heater. Heating capacity is stable even at low temperature, so designer don't need to oversize the heat pump's capacity.



## **Assembly Various Heat Sources**

Hi-AquaSmart is allowed to combine with existing boiler or solar, so undoubtedly Hi-AquaSmart will be the best alternative to traditional boiler system in old building, and also as a hot water back-up solution to the existing boiler. In case that one heating unit was not working due to some unforeseen problem, this system can ensure heating system no stopping.



#### > Operation system

- Underfloor heating
- Domestic hot water
- Low temperature radiators
- Hi-aquasmart+solar/boiler(optional)
- Temperature Sensor Security Thermostat Regulator □ Electric Heater

Water Pump

M	Check Valve
	Motorized 2 ways Valve
	Motorized 3 ways Valve

7	Decantation tank
$\phi$	Expension tank

# **Specification for Outdoor unit**



Ou	tdoor unit		AHW-070UCSDP	AHW-090UCS	DP AHW-120UCSD	P AHW-140UCSDP	AHW-160UCSDP				
In	door unit		AHM-070UXCSAPA3		AHM-160U	XCSAPA3					
Re	frigerant		R410A								
Pov	ver supply		1Ф,220~240V/50Hz								
Co	mpressor		Double	-rotor compress	or	Scroll compressor	with Vapor-injected				
Condition 1 Ta7/6°C LWC35°C	Heating capacity	kW	7	9	12	14	16				
(DT=5°C)	COP		4.50 4.62 4.10			4.84	4.74				
Condition 2 Ta7/6°C LWC45°C	Heating capacity	kW	6.2	8.1	10.8	12.5	14.8				
(DT=5°C)	COP		3.87	3.97	3.53	3.70	3.95				
Cooling Ta35°C LWE18°C	Cooling capacity	kW	6.5	8	10.5	12	13.5				
(DT=5°C)	EER		3.00	2.90	2.80	2.77	2.53				
Dimensions	H*W*D	mm		800×950×370		1380x950x370					
	Heating	°C			-20~35						
Operation Ambient Range	DHW	°C			-20~43						
90	cooling	°C	10~43								
Heating Sound	pressure	dB(A)	51	52	54	51	52				
Cooling Sound p	ressure	dB(A)	50	51	53	50	51				

The cooling and heating performance in agreement with EN14511.

Heating condition: Outdoor Air Temperature 7 C DB/6 C DB, Inlet/Outlet water temperation 30 C /35 C Cooling condition: Outdoor Air Temperature 35 C , Inlet/Outlet water temperation 12 C /7 C .

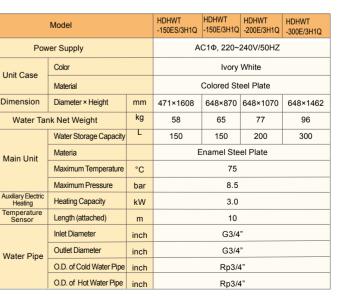
Piping length: 7.5 meter; Piping lift:0 meter



#### Specification for Indoor unit

C	apacity		AHM- 070UXCSAPA3	AHM- 160UXCSAPA3
Pow	ver supply		1Ф,220~240\	//50Hz
Heating ca	apacity	kW	7	16
Hot water c	apacity	kW	7	16
Power in	nput	kW	0.245	0.245
Dimensions	H*W*D	mm	890×520×	320
Heat Exch	anger		plate heat exc	changer
	Heating	°C	25 to 55	25 to 55
Hot water	DHW	°C	25 to 55	25 to 55
temperature	cooling	°C	5 to 22	5 to 22
Sound press	ure level	dB(A)	33	33
Piping	gas	mm	9.53	9.53
connections	liquid	mm	15.88	15.88
Water pump	type		DC	DC
water pump	brand		Grundfos	Grundfos
Booste	r heating	kw	3	3

#### **Central Hot Water Tank**









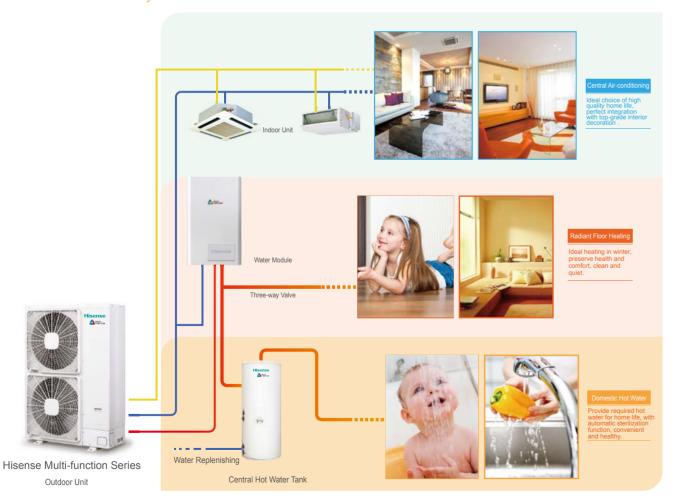
## **Hisense Multi-function Series**



#### Home Central Air Conditioning ·Radiant Floor Heating ·Domestic Hot Water 3 in 1

Hisense Multifunction VRF System is a multifunctional intelligent ecology home system with integration of home central air conditioning, radiant floor heating and domestic hot water. Utilizing high efficient DC inverter technology, air source heat pump technology and heat recovery technology, it builds a more intelligent and more comfortable modern home life.

- High Efficiency
- Comfort and Health
- Hidden Beauty
- Wide Operation Range
- Stable and Reliable



#### Radiant floor heating is the most comfortable, optimal heating system nowadays.

Hisense Multifunction VRF radiant floor heating system utilizes Hisense's leading multi-split technology and advanced air-source heat pump technology, which is outstanding in floor heating system with integration of high efficiency, comfort and environmental protection.

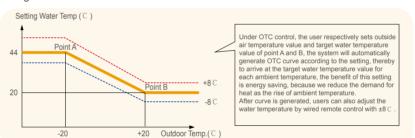
## **Dual Water Temperature Control Technology**

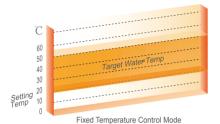
Fixed Water Temperature Control (Fix Control Mode):

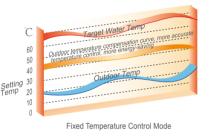
The supplied water temperature maintains constant during operation, Users can set supplied water temperature value within the range of 20~55°C.

Variable Temperature Control (OTC Control Mode):

System automatically adjusts water temperature according to temperature compensation curve basing on outdoor temperature to achieve optimum indoor temperature and reduce system power consumption. The compensation curve can also be adjusted manually according to operation conditions to realize energy







## Safe and Reliable

Floor heating pipes are laid under the floor with advantages such as good stability, less vulnerable to external damage and corrosion, and its lifespan is almost the same with the building. Compared with other heating equipment, the cost of repair and maintenance afterwards is greatly reduced. At the same time, gas leak, explosion or other accidents caused by gas or stove can be avoided.

#### Operation protection of the water system

Starting water pump automatically to avoid water scale generation and ensure the operation of water pump, three-way valve or other waterways



Water temperature curve

#### Water system safeguards

Besides safety valve and exhaust valve, the water flow switch and low pressure switch have been added into system, which can effectively avoid water leakage, water depletion, electric heater dry burning and other accidents.



#### Antifreezing Protection of Water System

Automatic antifreezing function can avoid pipe cracking, leakage and other accidents when equipment is not used in winter.



## Outlet Water Temperature 0 1 2 3 4 5 6 7 8 9 10 11 Number Floor Heating Run Testing

#### Commissioning Protection of Floor Heating

Floor heating pipes need to warm gradually at the beginning of operation, in order to prevent problems such as floor deformation or leakage caused by sudden heat. Commissioning protection can ensure safe run testing.





Hisense Multifunction VRF hot water system enables constant healthy hot water supply around the clock

## **Multiple Hot Water Production Mode**

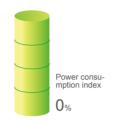


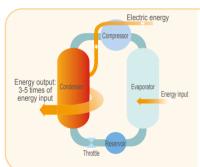
#### Heat Recovery Mode

Under cooling operation in summer, the heat discharged from outdoor unit can be recovered directly and used for heating domestic hot water, allowing you to enjoy free and convenient hot water supply.

Power consumption analysis

When heating water by heat recovery mode, indoor unit performs cooling operation, the heat discharged from indoor unit is recovered and used for heating domestic hot water. Producing domestic hot water does not consume additional power, thereby the produced domestic hot water can be regarded as being acquired free of charge.

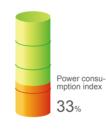




#### Heat Pump Mode

Power consumption analysis

When using heat pump to heat hot water, power consumption required for producing one share of hot water is only 33% of the heat required for heating hot water when COP=3.0.





#### Electric Heating Mode

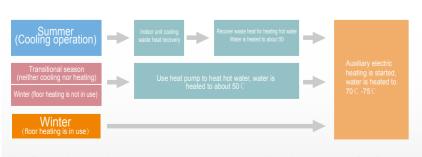
When the desired domestic hot water temp is higher than 55  ${\mathbb C}$  , use energy-efficient heat pump to heat water to 55  ${\mathbb C}$  , then use auxiliary electric heating to heat water to a high temperature up to at most 75  ${\mathbb C}$  .

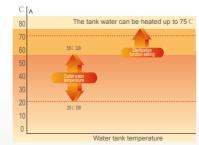
Power consumption analysis

When heating hot water by electric heating, heat required for producing one share of hot water need consume electricity equivalent to the same amount of heat in the case of 100% of efficiency conversion.



## Multifunction VRF Hot Water Production Flow and Water Tank Temperature Range





Note: The actual data are closely related to using environment and conditions, the above data are for reference only.

Hisense home central air conditioning has been widely recognized by the market and users owning to its intelligence, comfort, high-efficiency and energy saving.

Requirements for high-quality decoration and more comfort in villa and luxury residence make Hisense home central air conditioning play a principal role in home daily life.

Hisense, the mark of high-quality life!

## **Delicate and Convenient**

Outdoor unit can be easily installed in small space, one outdoor unit can simultaneously satisfy the need for cool and warmness of multiple rooms, extending indoor exquisiteness and beauty to outdoors at the meantime.



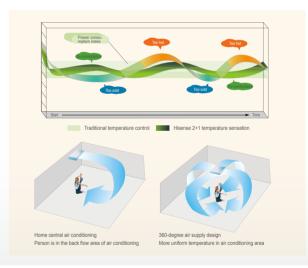
## "Three-dimensional" Cozy and Warm Feeling

#### • Unique 2+1 dimensional temperature sensation

Three temperature sensors including particular one on indoor unit air outlet can intelligently sense the temperature change of each sensitive point indoors and outdoors, dynamically calculate and adjust real-time output of compressor system, and balance the energy exchange variation of each room. Soft air supply keeps tiny temperature fluctuations in an optimum condition and brings gentle refreshing and intimate warmth.

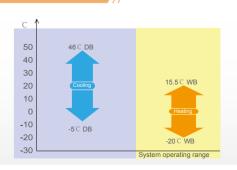
#### Comfortable air supply

Hisense indoor unit can adopt multiple air supply modes such as ceiling-supply and ceiling-return, side-supply and back-return, side-supply and bottom-return etc. according to room structure, making the air flow distribution more excellent. The airflow can be distributed to every corner, more uniform temperature distribution and more comfort.



## Wide Operating Range

System can handle a wide range of outside air condition. The lowest temperature in winter is -20 °C WB, which can meet the heating needs of cold regions.









### **Outdoor Unit Parameters**

M	odel		AFW-38U4SC	AFW-48U4SC	AFW-54U4SC				
	Rated Capacity (1)	kW	11.2	14	16				
	Rated Power (1)	kW	2.51	3.21	3.77				
	COP (1)	-	4.46	4.36	4.24				
Heating(A2W)	Capacity (A 2°C/W 35°C)(2)	kW	8.96	11.2	12.8				
	COP (A 2°C/W 35°C)(2)	-	3.12	3.05	2.97				
	Capacity(A -7°C/W 35°C)(3)	kW	8.6	10.8	12.3				
	COP (A -7°C/W 35°C)(3)	-	2.2	2.14	2.09				
	Heating (35°C)		A+	A+	127%,A+				
Energy Efficiency Grade	Heating (35°C)		A+	A+	118%,A+				
	Rated Capacity (4)	kW	11.2	14	15.5				
Cooling(A2A)	Rated Power (4)	kW	2.99	3.92	4.44				
	EER (4)	-	3.75	3.57	3.49				
	Rated Capacity (4)	kW	12.5	16	18				
Heating(A2A)	Rated Power (4)	kW	2.98	4.03	4.74				
	COP (4)	-	4.19	3.97	3.8				
	Outer Dimensions (Height × Width × Depth)	mm		1380×950×370					
	Weight	Kg	102	103	104				
	Sound Pressure level (5)	dB(A)	50/53	51/54	53/55				
	Sound Power Level (5)	dB(A)	67	68	69				
	Power Supply	Ф,V,Hz		1220-240~, 50Hz	7				
	Inverter Type	-							
	Cabinet Color	-		ivory White					
	Heat Exchanger	-							
Outdoor Units	Compressor Type	-		Hermetic (Scroll)					
Outdoor Office	Compressor Output	kW	2.2	2.5	2.8				
	Compressor Startup Mode	-		Directly startup					
	Fan Type	-		Axial flow fan					
	Fan Output	w	51×2	51×2	51×2				
	Fan Air Volume	m³/min	90	90	100				
	Fan Startup Mode	-		Directly startup					
	Cooling Operation Range (Outdoor Air Inlet Temperature)	°C		-5 ~ 43					
	Heating Operation Range (Outdoor Air Inlet Temperature)	°C		-23 ~ 15					
	Floor Heating Operation Range (Outdoor Air Inlet Temperature)	°C		-23 ~ 15					
	Domestic Hot Water Operation Range (Outdoor Air Inlet Temperature)	°C		-23 ~ 43					
	Liquid Line	mm		Ф9.53					
Installation Data High Pressure Gas Line		mm	Ф12.7						
	Gas Line	mm	Ф15.88						
	Туре	-	R410A						
Refrigerant	Refrigerant Charge	kg		3.6					
	Flow Control		Mic	cro-Computer Control Expansion	/alve				

- When the connectiong capacity rate or indoor unit and outdoor unit is 100%, the cooling capacity and heating capacity are based on the following conditions:

  1. Heating(A2W) conditions: Water inlet/outlet temperature:30°C DB(86°F DB);35°C DB(95°F DB), Outdoor air inlet temperature:7°C DB(45°F DB), 6°C WB(43°F WB)
- 2. Heating(A2W) conditions: Water inlet/outlet temperature:30°C DB(86°F DB)/35°C DB(95°F DB), Outdoor air inlet temperature:2°C DB(35.6°F DB)
- 3. Heating(A2W) conditions: Water inlet/outlet temperature:30°C DB(86°F DB)/35°C DB(95°F DB), Outdoor air inlet temperature:-7°C DB(19.4°F DB)
- 4. Cooling(A2A) conditions: Piping length: 7.5 meters Indoor ait inlet temperature: 27°C DB(80°F DB), 19.0°C WB(66 2°F WB) Outdoor air inlet temperature: 35°C DB(95°F DB) Heating(A2A) conditions: Indoor air inlet temperature: 20°C DB(68°F DB), 15.0°C WB(59°F WB) Outdoot air inlet temperature: 7°C DB(45°F DB),6°C WB(43°F WB)
- 5. The sound pressure level is based on following conditions: 1Meter from the unit service cover surface, and 1.5 Meters fron floor level, The above data was measure in an anechoic chamber so that reflected sound should be taken into consideration in the field
- 6. The final appearance of outdoor unit is subject to the actual product.

#### **Water Module**

	Mod	lel		AFM-54EX4SA
	Power Supply			AC1Φ, 220~240V/50HZ
	Rated Cooling Capacity		kW	_
	Rated Heating Capacity		kW	16
	Electrical Heater Capacity		kW	3
	Ohall	Cabinet Color		Ivory White
	Shell	Materialr		Steel
	Dimensions (Height × Width×Depth)		mm	890×520×320
	Weight	Net Weight	kg	58
	Troigin.	Gross Weight	kg	74
		Туре		Constant
	Water Pump	Lift	kpa	60
		Input	W	151
		Туре		Plate heat exchanger
		Number		1
		Water Storage Capacity	L	2.91
	Water Pipe	Minimum Flow	L/min	18
		Rated Flow	L/min	45.8
		Maximum Flow	L/min	-
		Insulation Material		Foamed plastic
		Volume	L	8
	Expansion Tank	Maximum Pressure	bar	3
A		The pre pressure	bar	1
MACT HOW	Water Filter	Pore Size	mm	1
	vvater i liter	Material		Brass
		Interface Size	inch	G1-1/4"
	Water Circulating System	Pipe Size	inch	G1-1/4"
	System	Safety Valve Specification	bar	3
		Total Water Storage	L	-
Hisense	Refrigerant circulating System	Gas Pipe Size	mm	Ф12.7
	System	Liquid Pipe Size	mm	Ф9.53
	Sound Pressure Level		dBA	32
Water Module	Operation range	Temperature of Outdoor Air	°CDB	-23~43
	Operation range	Temperature of Water Supply	°C	20~55

#### **Central Hot Water Tank**

		Model		HDHWT -150ES/3H1Q	HDHWT -150E/3H1Q	HDHWT -200E/3H1Q	HDHWT -300E/3H1Q				
	Pov	ver Supply			АС1Ф	, 220~240V/50HZ					
Hisense	Linit Coop	Color		Ivory White							
<b>△</b> m>	Unit Case	Material	Colored Steel Plate								
	Dimension	Diameter × Height	mm	471×1608	648×870	648×1070	648×1462				
2	Water Tank Net Weight  Water Storage Capacity				65	77	96				
i i					150	200	300				
1 17	Main Unit	Materia			Enam	nel Steel Plate					
	Wall Olli	Maximum Temperature	°C	75							
		Maximum Pressure	bar	8.5							
1	Auxiliary Electric Heating	Heating Capacity	kW	3.0							
	Temperature Sensor	Length (attached)	m			10					
Central Hot Water Tank	Water Tank Inlet Diameter					G3/4"					
	Water Pipe	Outlet Diameter	inch			G3/4"					
	vvaler Pipe	O.D. of Cold Water Pipe	inch			Rp3/4"					
		O.D. of Hot Water Pipe	inch	Rp3/4"							



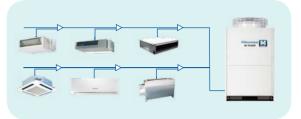


Hisense Hi-Flexi & Hi-Smart series provide a wide selection of indoor units for indoor decoration and create a personalized living space.

н	P	0.6	0.8	1.0	1.3	1.5	1.8	2.0	2.3	2.5	3.0	3.3	4.0	5.0	6.0	8	10
kBt	:u/h	5	7	9	12	14	17	18	22	24	27	30	38	48	54	76	96
1-Way Cassette Type	NEW		•	•			1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1			
2-Way Cassette Type	NEW						1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1				•		•	1	
4-Way Cassette Type			 										•		•	1	
Compact 4-Way Cassette Type		•							 	 	 	 			1		
Ceiling Ducted Type (High Static Pressure)			•	•	•										•	•	•
Ceiling Ducted Type (Low Static Pressure)															•	•	•
Ceiling Ducted Type (Low-height)		•		•							 	 		 			
Ceiling Ducted Type (Slim Low-height)				•			1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1					
Ceiling Ducted Type (DC Low-height)	NEW										1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1					
Ceiling & Floor Type			1 1 1 1 1 1 1	 	 	 											
Wall Mounted Type											1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1			
Floor Concealed Type			1 1 1 1 1 1 1 1						 		1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1		1 1 1 1 1 1 1			

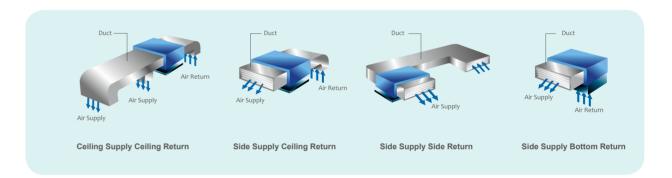
#### Various Model Types Easily Match Different

Wide capacity range of outdoor units enables free model combination according to the actual situation of building. There are 12 types of indoor units for selection. Customer can choose appropriate type and capacity of indoor units according to interior decoration and functions.



#### Flexible Ways of Air Supply and Air Return

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



#### Precise Room Temperature Control

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

#### Top Class Low Noise Design

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





## 1-Way Cassette Type



#### Fashionable Appearance, Convenient Installation

Customers can choose the installation method according to different situation. The concise fashion elements style is suitable for renewal projects and un-decorated shopping malls or classrooms.

#### Efficiency DC Motor, Adjustable Air Speed

Adoption of efficient DC motor and optimized duct design assures the smooth air flow; at the same time, customers can adjust the air speed according to the actual need.

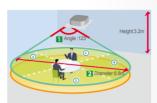
#### Wider 3D-air Flow Range

Broad air deflector design realized broad air supply range. The wind direction can be adjusted according to the need thus makes the customers feel more comfortable. The fan blades will return to the original position when the unit is off.



#### Intelligent sensor(Optional)

- People detecting, moving or not moving
- Air blow to the people or avoid people
- Bottom temperature detecting
- Working load forecast
- Auto stop after people leave



#### Standard Equipped Drain Pump

Standard equipped with drain pump, maximum drainage height is 1200mm.

#### Fresh Air Introducing

The unit can introduce the fresh air from the external environment. With the filter facility, the air quality is garunteed. (For specific ,please contact with the local engineer)

Indoor	unit			1-Way Cas	sette Type				
Model Power Supply	AC1Ф 220V~240V /50Hz/60Hz	AVY-07UXJSJA	AVY-09UXJSJA	AVY-12UXJSJA	AVY-14UXJSJA	AVY-18UXJSKA	AVY-24UXJSKA		
	kW	2.2	2.8	3.6	4.0	5.6	7.1		
Cooling Operation	kcal/h	1,900	2,400	3,100	3,400	4,800	6,100		
	Btu/h	7,500	9,600	12,300	13,600	19,100	24,200		
	kW	2.5	3.2	4.0	4.5	6.3	8		
Heating Opeartion	kcal/h	2,100	2,700	3,400	3,800	5,400	6,800		
	Btu/h	85,00	10,900	13,600	15,400	21,500	27,300		
Sound Pressure Level	dB(A)	33/32/31/30/29/28	35/34/32/31/29/28	40/36/35/33/30/29	40/36/35/33/30/29	41/39/36/35/33/31	48/46/43/40/37/33		
Outer Dimensions (H×W×D)	mm		192×9	192×1,	180×470				
Net Weight	kg	19	19	20	20	24	24		
Refrigerant			R410A (Nitrogen-charged for corrosion-resistance)						
Indoor Fan Air Flow Ra	te m³/h	372/354/336/306/288/276	396/372/336/306/288/276	498/438/408/372/336/306	498/438/408/372/336/306	726/594/528/492/468/396	936/756/672/594/504/426		
Motor Power	kW	0.04	0.04	0.04	0.04	0.06	0.06		
Refrigerant Piping Connec	ction			Flare-nut Connecti	on (with Flare Nuts	)			
Liquid Line	mm	Ф6.35	Ф6.35	Ф6.35	Ф6.35	Ф6.35	Ф9.53		
Gas Line	mm	Ф12.7	Ф12.7	Ф12.7	Ф12.7	Ф15.88	Ф15.88		
Condensate Drain				VP25 (Outer I	Diameter 32)				
Panel Model		HP-D-NA	HP-D-NA	HP-D-NA	HP-D-NA	HP-E-NA	HP-E-NA		
Cabinet Color				Neutral	White				
Outer Dimensions (H×W×D)	mm	55×1,100×550	55×1,100×550	55×1,100×550	55×1,100×550	55×1,370×550	55×1,370×550		
Net Weight	kg	5	5	5	5	6	6		

#### NOTES:



## 2-Way Cassette Type



#### Efficiency DC Motor, Adjustable Air Speed

Adoption of efficient DC motor and optimized duct design assures the smooth air flow; at the same time, customers can adjust the air speed according to the actual need.

#### 2-Way Individual Louver

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



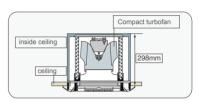
## Super Compact Structure Design, Easy For Installation

#### Standard Equipped Drain Pump

Maximum drainage height is 1200mm

#### Low Noise Level Design

The high efficiency turbofan form the wind pressure by rotating. Larger fan blades and slower fan speed realize the low operating noise. Also, the PWM control method lower the motor noise greatly.



#### Fresh Air Introducing

The unit can introduce the fresh air from the external environment. With the filter facility, the air quality is ensured. (For specific ,please contact with the local engineer)

Indoor	unit					2-Way	cassette T	уре				
Model Dower Supply	АС1Ф 220V~240V 50Hz/60Hz	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
	kW	2.2	2.8	3.6	4.3	5.6	7.1	8.4	9.0	11.2	14.0	16.0
Cooling Operation	kcal/h	1,900	2,400	3,100	3,700	4,800	6,100	6,900	7,700	9,600	12,000	13,800
	Btu/h	7,500	9,600	12,300	14,700	19,100	24,200	28,700	30,700	38,200	47,800	54,600
	kW	2.8	3.3	4.0	4.9	6.5	8.0	9.0	10.0	13.0	16.0	18.0
Heating Opeartion	kcal/h	2,400	2,800	3,400	4,200	5,600	6,800	7,800	8,600	11,200	13,800	15,500
	Btu/h	9,600	11,300	13,600	16,700	22,200	27,300	30,700	34,100	44,400	54,600	61,400
Sound Pressure Level	dB(A)	32/30/29/27	32/30/29/27	34/31/30/28	40/37/34/32	42/39/36/33	45/42/40/36	47/44/40/36	49/46/42/37	46/44/40/38	48/45/42/38	49/46/43/40
Outer Dimensions (H×W×D)	mm		298×860×630							298	8×1,420×6	30
Net Weight	kg	22	22	22	24	24	24	24	24	39	39	39
Refrigerant			R410A(Nitrogen-charged for corrosion-resistance)									
Indoor Fan Air Flow Rat	e m³/h	600/510 /432/360	660/564 /492/396	720/630 /534/450	900/792 /690/594	1,020/894 /780/672	1,140/984 /858/738	1,260/1,104 /936/756	1,320/1,158 /978/786	1,800/1,584 /1,386/1,188	2,100/1,848 /1,614/1,266	2,220/1,950 /1,704/1,446
Motor Power	kW	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057	0.057x2	0.057x2	0.057x2
Refrigerant Piping Connec	tion					Flare-nut	Connectio	n(with Fla	re Nuts)			
Liquid Line	mm	Ф6.35	Ф6.35	Ф6.35	Ф6.35	Ф6.35	Ф9.53	Ф9.53	Ф9.53	Ф9.53	Ф9.53	Ф9.53
Gas Line	mm	Ф12.7	Ф12.7	Ф12.7	Ф12.7	Ф15.88	Ф15.88	Ф15.88	Ф15.88	Ф15.88	Ф15.88	Ф15.88
Condensate Drain						VP2	5(Outer Di	ameter Ф	32)			
Panel 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
Cabinet Color							Neutral	White				
Outer Dimensions (H×W×D)	mm	30×1,100×710	30×1,100×710	30×1,100×710	30×1,100×710	30×1,100×710	30×1,100×710	30×1,100×710	30×1,100×710	30×1,660×710	30×1,660×710	30×1,660×710
Net Weight	kg	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	10.5	10.5	10.5

#### NOTES:

<sup>1.</sup> The nominal cooling capacity is based on 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 following condations:

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

<sup>1.</sup> The nominal cooling capacity is based on following conditions:

Indoor Air Inlet Temperature: 27°C DB(80°F DB), 19.0°C WB(66.2°F WB) Outdoor Air Inlet Temperature: 35°C DB(95°F DB) Piping Length: 7.5 Meters Piping Lift: 0 Meter 2. The sound pressure level is based on following conditions: 1.5m beneath the unit.

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



## **4-Way Cassette Type**

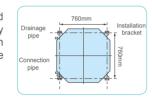


#### Compact and Thin

The height of the unit is just 248mm (Less than 24.2KBtu/h), so it can be installed in a small space inside a ceiling.

## Installation Direction Can be Changed Easily for ConvenientPipe Connection

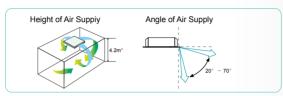
Squared design for unit body and installation bracket, unit body can be installed in any direction horizontally for convenient pipe connect position.



## Power Input Reduced by Applying of New Developed DC Fan Motor

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

## With Broad Range of Air Supply, is Suitable to be Used in High Ceiling and Great Space



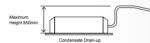
\*When indoor unit model is AVC 27\*~54\* when indoor unit model is AVC 09\*~24\*,the Value is 3.5m.

#### Body Height Easily Adjustable in the Corner Pockets

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



#### Drain Pump as Standard Part



Indoor	unit							4-Way	Cassette Ty	pe				
Model Power	220	АС1Ф, 0~240V/50Hz	AVC-09 UXCSEB	AVC-12 UXCSEB	AVC-14 UXCSEB	AVC-17 UXCSEB	AVC-18 UXCSEB	AVC-22 UXCSEB	AVC-24 UXCSEB	AVC-27 UXCSFB	AVC-30 UXCSFB	AVC-38 UXCSFB	AVC-48 UXCSFB	AVC-54 UXCSFB
Supply	2	АС1Ф, 20V/60Hz	AVC-09 UX2SEB	AVC-12 UX2SEB	AVC-14 UX2SEB	AVC-17 UX2SEB	AVC-18 UX2SEB	AVC-22 UX2SEB	AVC-24 UX2SEB	AVC-27 UX2SFB	AVC-30 UX2SFB	AVC-38 UX2SFB	AVC-48 UX2SFB	AVC-54 UX2SFB
Naminal Carlina		kW	2.8	3.6	4.3	5.0	5.6	6.3	7.1	8.4	9.0	1.2	114.2	16.0
Nominal Cooling Capacity		kcal/h	2,400	3,100	3,700	4,300	4,800	5,400	6,100	7,200	7,700	9,600	12,200	13,800
		Btu/h	9,600	12,300	14,700	17,100	19,100	21,500	24,200	28,700	30,700	38,200	48,500	54,600
Nominal Heating		kW	3.3	4.2	4.9	5.6	6.5	7.5	8.5	9.6	10.0	13.0	16.3	18.0
Capacity		kcal/h	2,800	3,600	4,200	4,800	5,600	6,500	7,300	8,300	8,600	11,200	14,000	15,500
		Btu/h	11,300	14,300	16,700	19,100	22,200	25,600	29,000	32,800	34,100	44,400	55,600	61,400
Noise Level (H/M/L)		dB(A)	30-29-27	31-29-27	31-29-27	32-30-27	32-30-27	33-31-29	33-31-29	36-34-32	36-34-32	41-38-35	44-39-36	44-42-38
Outer	Н	mm	248	248	248	248	248	248	248	298	298	298	298	298
Dimensions	W	mm	840	840	840	840	840	840	840	840	840	840	840	840
D		mm	840	840	840	840	840	840	840	840	840	840	840	840
Net Weight		kg	22	22	22	23	23	23	23	24	24	27	27	27
Air Flow Rate (H/M/L)		m³/h	780/720/660	900/810/720	900/810/720	960/840/720	960/840/720	1,140/1,020/840	1,200/1,020/900	1,560/1,380/1,200	1,560/1,380/1,200	1,920/1,680/1,440	2,040/1,740/1,500	2,220/1,920/1,620
Motor Power		W	40	50	50	50	50	60	60	90	90	120	150	160
Piping Connections			VP25(OuterDiameterΦ32)											
Liquid Line		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
Gas Line		mm	Ф12.7	Ф12.7	Ф12.7	Ф15.88	Ф15.88	Ф15.88	Ф15.88	Ф15.88	Ф15.88	Ф15.88	Ф15.88	Ф15.88
Condensate Drain							Flare-nut (	Connection(with	h Flare Nuts)					
Approximate Packing Measurement		m³	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.26	0.26	0.26	0.26	0.26
Standard Accessories							Sı	spension Drac	ckets					
Panel Model								HPE-A-NA						
Cabinet Color								Neutral White	е					
		mm	37	37	37	37	37	37	37	37	37	37	37	37
Outer Dimensions		mm	950	950	950	950	950	950	950	950	950	950	950	950
		mm	950	950	950	950	950	950	950	950	950	950	950	950
Net Weight		kg	6	6	6	6	6	6	6	6	6	6	6	6
Packing Volume		m³	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08

#### NOTES:

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

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

Outdoor Air Inlet Temperature: 35 °C DB(95°F DB) Piping Length: 7.5 Meters Piping Lift: 0 Meter

Heating Operation Conditions

Indoor Air Inlet Temperature: 20 C DB(68°F DB)

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

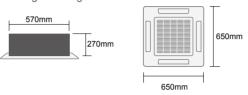
The sound pressure level is based on following conditions: 1.5m beneath the unit.The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.



## 4-Way Cassette Type (Compact)

#### Compact Design

Panel sizes are unifided to a 650mm square, neat and elegance, and fit small ceiling panel, making installation easier in grid ceilings.



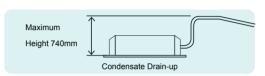
#### Broad Range of Air Supply

The recommended installation height is 2.5 meter, and it's also available for high ceiling installation, by using the fan motor speed-up setting. To shift to SHi setting, connect cable terminal of SHi to the power line of the fan motor.

#### Convenience for Washing Filter

"FILTER" will be shown on the display of the remote control switch after approximately 1200 hours operation. And the filter can be taken out easily.

#### Drain Pump as Standard Part



\* The wireless remote controller HYE-Q01 is standard for 4-Way Cassette Type (Compact)



Indoo	unit				Compact 4-Way C	assette Type						
Model Power		AC1Ф, 240V/50Hz	AVC-05URCSAB NEW	AVC-07URCSAB	AVC-09URCSAB	AVC-12URCSAB	AVC-14URCSAB	AVC-17URCSAB				
Supply	22	AC1Ф. 20V/60Hz	_	AVC-07UR2SAB	AVC-09UR2SAB	AVC-12UR2SAB	AVC-14UR2SAB	AVC-17UR2SAB				
		kW	1.7	2.2	2.8	3.6	4.3	5.0				
Nominal Cooling Capacity		kcal/h	1,500	1,900	2,400	3,100	3,700	4,300				
		Btu/h	5,800	7,500	9,600	12,300	14,700	17,100				
Nominal Heating		kW	1.9	2.8	3.3	4.2	4.9	5.6				
Capacity		kcal/h	1,700	2,400	2,800	3,600	4,200	4,800				
		Btu/h	6,500	9,600	11,300	14,300	16,700	19,100				
Noise Level (H/M/L)		dB(A)	39-34-30	39-34-30	39-34-30	39-34-30	41-38-33	44-41-37				
Outer	н	mm	270	270	270	270	270	270				
Dimensions	W	mm	570	570	570	570	570	570				
	D	mm	570	570	570	570	570	570				
Net Weight		kg	20	20	20	20	20	20				
Air Flow Rate (H/M/L)		m³/h	570/480/384	570/480/384	570/480/384	570/480/384	654/564/456	792/690/588				
Motor Power		W	63	63	63	63	71	89				
Piping Connections												
Liquid Line		mm	Ф6.35	Ф6.35	Ф6.35	Ф6.35	Ф6.35	Ф6.35				
Gas Line		mm	Ф12.7	Ф12.7	Ф12.7	Ф12.7	Ф12.7	Ф12.7				
Condensate Drain												
Approximate Pack Measurement	ing	m³	0.18	0.18	0.18	0.18	0.18	0.18				
Standard Accesso	ies			Suspension Drackets								
Panel Model					HPE-CR-NA							
Cabinet Color					Neutral White							
	Н	mm	30	30	30	30	30	30				
Outer Dimensions	W	mm	650	650	650	650	650	650				
	D	mm	650	650	650	650	650	650				
Net Weight		kg	2.4	2.4	2.4	2.4	2.4	2.4				
Packing Volume		m³	0.07	0.07	0.07	0.07	0.07	0.07				

#### NOTES:

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

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

Outdoor Air Inlet Temperature: 35°C DB(95°F DB)
Piping Length: 7.5 Meters Piping Lift: 0 Meter

Heating Operation Conditions

Indoor Air Inlet Temperature: 20 °C DB(68°F DB)

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

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..



## Ceiling Ducted Type (High Static Pressure)

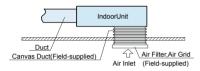


#### Installation Space-saving

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



#### Flexibly Supports a Wide Range OfInstallation



#### NOTE:

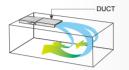
When bottom air inlet is adopted, sound pressure will increase according to factors such as installation mode and the room structure.

#### Fresh Indoor Air

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

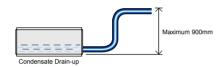
#### **Excellent Air Flow**

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



#### **Optional Parts**

Drain pump can be supplied as optional part.



Indoor	unit						Cei	ling Duct	ed type (	High Stat	ic Pressu	ıre)					
Model Power		Ф, 220 )V/50Hz	UXCSAH	UXCSAH	UXCSAH	UXCSAH	UXCSBH		UXCSBH	UXCSBH		UXCSCH	UXCSCH	UXCSDH	UXCSDH		
Supply	A( 220\	С1Ф, //60Hz	AVD-07 UX2SAH		AVD-12 UX2SAH		AVD-17 UX2SBH	AVD-18 UX2SBH	AVD-22 UX2SBH	AVD-24 UX2SBH		AVD-30 UX2SCH		AVD-48 UX2SDH	AVD-54 UX2SDH		AVD-96 UX2SFH*2
		kW	2.2	2.8	3.6	4.3	5.0	5.6	6.3	7.1	8.4	9.0	11.2	14.2	16.0	22.4	28.0
Nominal Cooling Capacity	9	kcal/h	1,900	2,400	3,100	3,700	4,300	4,800	5,400	6,100	7,200	7,700	9,600	12,200	13,800	19,300	24,100
		Btu/h	7,500	9,600	12,300	14,700	17,100	19,100	21,500	24,200	28,700	30,700	38,200	48,500	54,600	76,500	95,600
		kW	2.8	3.3	4.2	4.9	5.6	6.5	7.5	8.5	9.6	10.0	13.0	16.3	18.0	25.0	31.5
Nominal Heating Capacity	g	kcal/h	2,400	2,800	3,600	4,200	4,800	5,600	6,500	7,300	8,300	8,600	11,200	14,000	15,500	21,500	27,100
		Btu/h	9,600	11,300	14,300	16,700	19,100	22,200	25,600	29,000	32,800	34,100	44,400	55,600	61,400	85,300	107,500
Noise Level (H/M/L)		dB(A)	33-31-29	33-31-29	33-31-29	33-31-29	34-32-30	34-32-30	36-34-32	36-34-32	41-39-34	41-39-34	43-40-36	44-41-36	43-40-37	52	54
	Н	mm	270         270         270         270         270         270         270         270         350         350         350         350									470	470				
Outer Dimensions	W	mm	650+75	650+75	650+75	650+75	900+75	900+75	900+75	900+75	900+75	900+75	900+75	1300+75	1300+75	1060	1250
	D	mm	720	720	720	720	720	720	720	720	800	800	800	800	800	1120	1120
Net Weight		kg	25	25	25	25	34	34	34	34	44	44	44	56	56	94	106
Air Flow Rate (H/M/L)		m³/h	480/420 /360	480/420 /360	780/660 /540	780/660 /540	900/780 /660	900/780 /660	960/840 /720	960/840 /720	1600/1400 /1150	1600/1400 /1150	1600/1400 /1150	2100/1750 /1450	2150/1800 /1550	3480	4650
Motor Power		W	110	110	150	150	150	150	150	190	300	300	300	430	430	1030	1280
Piping Connection	ns						Flar	e-nut Co	nnection(	with Flare	Nuts)					Bra	zing
Liquid Line		mm	Φ6.35         Φ6.35         Φ6.35         Φ6.35         Φ6.35         Φ9.53         Φ9.53 <t< td=""><td>Ф9.53</td><td>Ф9.53</td></t<>									Ф9.53	Ф9.53				
Gas Line		mm										Ф15.88	Ф19.05	Ф22.2			
Condensate Dra	ain		VP25(Outer Diameter Φ32 )														
External Static Pressure		Ра	50(80) 50(80) 50(80) 50(80) 50(80) 50(80) 50(80) 50(80) 50(80) 120(90) 120(90) 120(90) 120(90) 120(90) 22										220	220			
Packing Volume	•	m³	0.21	0.21	0.21	0.21	0.27	0.27	0.27	0.27	0.38	0.38	0.38	0.52	0.52	0.90	1.06

#### NOTES:

- 1.The nominal cooling capacity and heating capacity are based on 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 € DB(68°F DB)
- Outdoor 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)
   The above data was measured in an anechoic chamber so that reflected sound
- The above data was measured in an anechoic chamber so that reflected sour should be taken into consideration in the field.
- When bottom air inlet is adopted, sound pressure will increase according to factors such as installation mode and the room structure.
   \*1: AC3Φ, 380V/50Hz,
- \*2: AC3Ф, 380V/60Hz: AVD- 76UX7SEH; AVD-96UX7SFH



## Ceiling Ducted Type (Low Static Pressure)

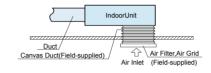


#### Installation Space-saving

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



#### Flexibly Supports a Wide Range OfInstallation



#### NOTE:

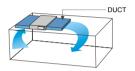
When bottom air inlet is adopted, sound pressure will increase according to factors such as installation mode and the room structure.

#### Fresh Indoor Air

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

#### **Excellent Air Flow**

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



#### **Optional Parts**

Drain pump can be supplied as optional part.



Indoor u	nit							Ceili	ng Ducte	d type (L	ow Static	Pressure					
Model Power	AC10~240\	⊅, 220 //50Hz	AVD-07 UXCSAL	AVD-09 UXCSAL		AVD-14 UXCSAL		AVD-18 UXCSBL			AVD-27 UXCSCL			AVD-48 UXCSDL		AVD-76 UX6SEL*1	AVD-96 UX6SFL*1
Supply	AC 220V	1Ф. /60Hz	AVD-07 UX2SAL	AVD-09 UX2SAL		AVD-14 UX2SAL							AVD-38 UX2SCL	AVD-48 UX2SDL		AVD-76 UX7SEL*2	AVD-96 UX7SFL*2
		kW	2.2	2.8	3.6	4.3	5.0	5.6	6.3	7.1	8.4	9.0	11.2	14.2	16.0	22.4	28.0
Nominal Cooling Capacity		kcal/h	1,900	2,400	3,100	3,700	4,300	4,800	5,400	6,100	7,200	7,700	9,600	12,200	13,800	19,300	24,100
		Btu/h	7,500	9,600	12,300	14,700	17,100	19,100	21,500	24,200	28,700	30,700	38,200	48,500	54,600	76,500	95,600
		kW	2.8	3.3	4.2	4.9	5.6	6.5	7.5	8.5	9.6	10.0	13.0	16.3	18.0	25.0	31.5
Nominal Heating Capacity		kcal/h	2,400	2,800	3,600	4,200	4,800	5,600	6,500	7,300	8,300	8,600	11,200	14,000	15,500	21,500	27,100
,		Btu/h	9,600	11,300	14,300	16,700	19,100	22,200	25,600	29,000	32,800	34,100	44,400	55,600	61,400	85,300	107,500
Noise Level (H/M/L)		dB(A)	30-26-24	30-26-24	32-30-28	32-30-28	33-31-29	33-31-29	34-32-30	34-32-30	38-34-30	38-34-30	39-35-31	41-38-33	43-39-34	50	52
	Н	mm	270	270	270	270	270	270	270	270	350	350	350	350	350	470	470
Outer Dimensions	w	mm	650+75	650+75	650+75	650+75	900+75	900+75	900+75	900+75	900+75	900+75	900+75	1300+75	1300+75	1060	1250
	D	mm	720	720	720	720	720	720	720	720	800	800	800	800	800	1120	1120
Net Weight		kg	25	25	25	25	34	34	34	34	44	44	44	56	56	94	106
Air Flow Rate (H/M/L)		m³/h	480/420 /360	480/420 /360	780/660 /540	780/660 /540	900/780	900/780	960/840 /720	960/840 /720	1550/1350 /1150	1550/1350 /1150	1550/1350 /1150	2150/1800 /1500	2200/1900 /1500	3480	4320
Motor Power		W	110	110	150	150	150	150	150	190	300	300	300	430	430	950	1120
Piping Connections	5						Flar	e-nut Cor	nection(v	vith Flare	Nuts)					Bra	zing
Liquid Line		mm	Ф6.35	Ф6.35	Ф6.35	Ф6.35	Ф6.35	Ф6.35	Ф9.53	Ф9.53	Ф9.53	Ф9.53	Ф9.53	Ф9.53	Ф9.53	Ф9.53	Ф9.53
Gas Line		mm	Ф12.7	Ф12.7	Ф12.7	Ф12.7	Ф15.88	Ф15.88	Ф15.88	Ф15.88	Ф15.88	Ф15.88	Ф15.88	Ф15.88	Ф15.88	Ф19.05	Ф22.2
Condensate Drain	n			VP25(Outer Diameter Φ32 )													
External Static Pressure		Pa	30 30 30 30 30 30 30 30 60 60 60 60									100	100				
Packing Volume		m³	0.21	0.21	0.21	0.21	0.27	0.27	0.27	0.27	0.38	0.38	0.38	0.52	0.52	0.90	1.06

#### NOTES:

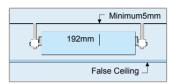
- The nominal cooling capacity and heating capacity are based on following conditions:
   Cooling Operation Conditions
- Outdoor Air Inlet Temperature: 27 C DB(80°F DB), 19.0 C WB(66.2°F WB)
  Outdoor Air Inlet Temperature: 35 C DB(95°F DB)
  Piping Length: 7.5 Meters Piping Lift: 0 Meter
- Heating Operation 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)
  - The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- 3. When bottom air inlet is adopted, sound pressure will increase according to factors such as installation mode and the room structure.
- \*1: AC3Ф, 380V/50Hz, \*2: AC3Ф, 380V/60Hz



## Ceiling Ducted Type (Low-height)

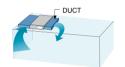
#### Installation Space-saving

With height of 192mm can be easily installed inside narrow residential ceiling.



#### Adjustable Indoor Unit Static Pressure

Indoor unit can adjust static pressure automatically according to the house structure and installation condition, ensure that the indoor unit operates in the optimum exhaust state.



When the required duct is short, the static pressure can be set lower

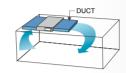


When the required duct is long, the static pressure can be set higher

# 13.

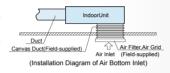
#### **Excellent Air Flow**

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



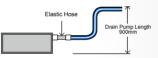
#### Satisfy Varied Requests on Installation

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



#### Drain Pump as Standard part

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



Model Power AC10, 220 AVE-05UXCSAL AVE-07UXCSAL AVE-09UXCSAL AVE-12UXCSAL AVE-14UXCSAL AVE-17UXCSBL AVE-18UXCSBL AVE-22UXCSBL AVE-12UXCSBL AVE-17UXCSBL AVE-18UXCSBL AVE-22UXCSBL AVE-18UXCSBL AVE-18UXC					e (Low-height)	ling Ducted Type	Ceil		NEW		Indoor ui
Nominal Cooling Capacity   RW	AVE-24UXCSBL	AVE-22UXCSBL	AVE-18UXCSBL	AVE-17UXCSBL	AVE-14UXCSAL	AVE-12UXCSAL	AVE-09UXCSAL	AVE-07UXCSAL		Φ, 220 0\//50Hz	odel Power
Nominal Cooling Capacity   Keal/h   1,500   1,900   2,400   3,100   3,700   4,300   4,800   5,400	AVE-24UX2SBL	AVE-22UX2SBL	AVE-18UX2SBL	AVE-17UX2SBL	AVE-14UX2SAL	AVE-12UX2SAL	AVE-09UX2SAL	AVE-07UX2SAL	AVE-05UXCSAL	C1Ф. V/60Hz	upply 2
Capacity    Koal/n   1,500   1,900   2,400   3,100   3,700   4,300   4,800   5,400	7.1	6.3	5.6	5.0	4.3	3.6	2.8	2.2	1.7	kW	
Rtu/h   5,800   7,500   9,600   12,300   14,700   17,100   19,100   21,500	6,100	5,400	4,800	4,300	3,700	3,100	2,400	1,900	1,500	kcal/h	
Nominal Heating Capacity	24,200	21,500	19,100	17,100	14,700	12,300	9,600	7,500	5,800	Btu/h	аравку
Capacity	8.5	7.5	6.5	5.8	4.9	4.2	3.3	2.8	1.9	kW	
Btu/h   6,500   9,600   11,300   14,300   16,700   19,800   22,200   25,600	7,300	6,500	5,600	5,000	4,200	3,600	2,800	2,400	1,700	kcal/h	
(H/M/L)         dB(A)         29-28-25         27-24-21         27-24-21         32-30-27         32-30-27         34-30-28         34-30-28         36-32-29           Outer Dimensions         W         mm         697         900+73         900+73         900+73         1170+73         1170+73         1170+73           D         mm         447         447         447         447         447         447         447           Net Weight         kg         16         20         20         21         21         26         26         26           Air Flow Rate (H/M/L)         m³/h         300/372/354/3         500/440/350         500/440/350         640/590/520         640/590/520         870/750/630         870/750/630         950/820/710           Motor Power         W         19         50         50         70         70         100         100         110           Piping Connections         Flare-nut Connection(with Flare Nuts)           Liquid Line         mm         46.35         46.35         46.35         46.35         46.35         46.35         46.35         46.35         46.35         46.35         46.35         46.35         46.35         46.35         46.35 </td <td>29,000</td> <td>25,600</td> <td>22,200</td> <td>19,800</td> <td>16,700</td> <td>14,300</td> <td>11,300</td> <td>9,600</td> <td>6,500</td> <td>Btu/h</td> <td>apaony</td>	29,000	25,600	22,200	19,800	16,700	14,300	11,300	9,600	6,500	Btu/h	apaony
Outer Dimensions         W         mm         697         900+73         900+73         900+73         900+73         1170+73         1170+73         1170+73           D         mm         447 <td< td=""><td>36-32-29</td><td>36-32-29</td><td>34-30-28</td><td>34-30-28</td><td>32-30-27</td><td>32-30-27</td><td>27-24-21</td><td>27-24-21</td><td>29-28-25</td><td>dB(A)</td><td>oise Level H/M/L)</td></td<>	36-32-29	36-32-29	34-30-28	34-30-28	32-30-27	32-30-27	27-24-21	27-24-21	29-28-25	dB(A)	oise Level H/M/L)
Dimensions   W   IIIII   697   900+73   900+73   900+73   900+73   1170+73	192	192	192	192	192	192	192	192	192	mm	ŀ
D   mm   447   4	1170+73	1170+73	1170+73	1170+73	900+73	900+73	900+73	900+73	697	mm	uter v
Air Flow Rate (H/M/L)         m³/h         390/372/354/ 338/318/300         500/440/350         500/440/350         640/590/520         640/590/520         870/750/630         870/750/630         950/820/710           Motor Power         W         19         50         50         70         70         100         100         110           Piping Connections         Flare-nut Connection(with Flare Nuts)           Liquid Line         mm         Φ6.35         Φ6.35         Φ6.35         Φ6.35         Φ6.35         Φ9.53	447	447	447	447	447	447	447	447	447	mm	
(H/M/L)         III III         336/318/300         500/440/350         500/440/350         640/590/520         640/590/520         870/750/630         870/750/630         950/820/710           Motor Power         W         19         50         50         70         70         100         100         110           Piping Connections         Flare-nut Connection(with Flare Nuts)           Liquid Line         mm         Φ6.35         Φ6.35         Φ6.35         Φ6.35         Φ6.35         Φ9.53	26	26	26	26	21	21	20	20	16	kg	et Weight
Piping Connections   Flare-nut Connection(with Flare Nuts)   Liquid Line   mm   46.35   46.3	950/820/710	950/820/710	870/750/630	870/750/630	640/590/520	640/590/520	500/440/350	500/440/350	390/372/354/ 336/318/300	m³/h	ir Flow Rate
Liquid Line mm Φ6.35 Φ6.35 Φ6.35 Φ6.35 Φ6.35 Φ6.35 Φ9.53	110	110	100	100	70	70	50	50		W	
40.00 40.00 40.00 40.00 40.00 40.00				are Nuts)	onnection(with Fla	Flare-nut C					ping Connections
Gas Line mm Φ12.7 Φ12.7 Φ12.7 Φ12.7 Φ12.7 Φ15.88 Φ15.88 Φ15.88	Ф9.53	Ф9.53	Ф6.35	Ф6.35	Ф6.35	Ф6.35	Ф6.35	Ф6.35	Ф6.35	mm	iquid Line
	Ф15.88	Ф15.88	Ф15.88	Ф15.88	Ф12.7	Ф12.7	Ф12.7	Ф12.7	Ф12.7	mm	as Line
Condensate Drain VP25(Outer Diameter Φ32 )				32)	Outer Diameter Φ	VP25(					ondensate Drain
External Static Pa 10(0-10-30) 10(30) 10(30) 10(30) 10(30) 10(30) 10(30) 10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(0-10-30)	Pa	
Packing Volume m³ 0.15 0.15 0.15 0.15 0.15 0.18 0.18	0.18	0.18	0.18	0.18	0.15	0.15	0.15	0.15	0.15	m³	

#### NOTES:

- 1.The nominal cooling capacity and heating capacity are based on following conditions: Cooling Operation Conditions
- Indoor Air Inlet Temperature: 27  $^{\circ}$  DB(80°F DB), 19.0  $^{\circ}$  WB(66.2°F WB) Outdoor Air Inlet Temperature: 35  $^{\circ}$  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)

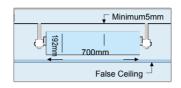
- The sound pressure level is based on following conditions: 1.5m beneath the unit.The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- When bottom air inlet is adopted, sound pressure will increase according to factors such as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

# VRF solution

## Ceiling Ducted Type (Slim Low-height)

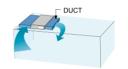
#### Installation Space-saving

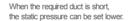
With a width of 700mm and height of 192mm may be easily installed inside narrow residential ceiling.

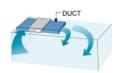


#### Adjustable Indoor Unit Static Pressure

Indoor unit can adjust static pressure automatically according to the house structure and installation condition, ensure that the indoor unit operates in the optimum exhaust state.



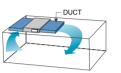




When the required duct is long, the static pressure can be set higher;

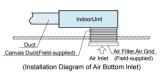
#### **Excellent Air Flow**

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



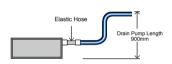
#### Satisfy Varied Requests on Installation

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



#### Drain Pump as Standard part

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



Indoor	unit			Ceiling Ducted T	ype(Slim Low-height)	
Model Power	AC1Φ ~240\	, 220 //50Hz	AVE-07UXCSGL	AVE-09UXCSGL	AVE-12UXCSGL	AVE-14UXCSGL
Supply	AC	С1Ф, //60Hz	AVE-07UX2SGL	AVE-09UX2SGL	AVE-12UX2SGL	AVE-14UX2SGL
		kW	2.2	2.8	3.6	4.3
Nominal Cooling Capacity		kcal/h	1,900	2,400	3,100	3,700
		Btu/h	7,500	9,600	12,300	14,700
		kW	2.8	3.3	4.2	4.9
Nominal Heating Capacity		kcal/h	2,400	2,800	3,600	4,200
. ,		Btu/h	9,600	11,300	14,300	16,700
Noise Level (H/M/L)		dB(A)	27-23-21	27-23-21	31-29-27	31-29-27
	н	mm	192	192	192	192
Outer Dimensions	W	mm	700+70	700+70	700+70	700+70
	D	mm	602	602	602	602
Net Weight		kg	21	21	21	21
Air Flow Rate (H/M/L)		m³/h	450/380/335	450/380/335	590/510/470	590/510/470
Motor Power		W	50	50	60	60
Piping Connections	;			Flare-nut Connection	on(with Flare Nuts)	
Liquid Line		mm	Ф6.35	Ф6.35	Ф6.35	Ф6.35
Gas Line		mm	Ф12.7	Ф12.7	Ф12.7	Ф12.7
Condensate Drai	n			VP25(Outer Dia	meter Φ32 )	
External Static Pressure		Pa	10(30)	10(30)	10(30)	10(30)
Packing Volume		m³	0.15	0.15	0.15	0.15

#### NOTES:

- 1.The nominal cooling capacity and heating capacity are based on following conditions: Cooling Operation Conditions
- Indoor Air Inlet Temperature: 27 ℂ DB(80°F DB), 19.0 ℂ WB(66.2°F WB) Outdoor Air Inlet Temperature: 35 ℂ DB(95°F DB)

Piping Length: 7.5 Meters Piping Lift: 0 Meter

Heating Operation Conditions

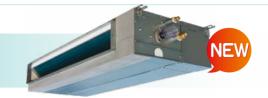
Indoor Air Inlet Temperature: 20 ℃ DB(68°F DB)

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

- 2. The sound pressure level is based on following conditions: 1.5m beneath the unit. With discharge duct (2.0m) and return duct(1.0m)
- The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- When bottom air inlet is adopted, sound pressure will increase according to factors such as installation mode and the room structure.



## **Ceiling Ducted Type (DC Low-height)**



#### Ultra-thin body design

Whit the height of 192mm and depth 447mm, effectively take advantage of narrow space to realize various kinds of air flow.



#### DC motor, efficient and energy-saving

- 1.Equipped with DC motor, efficient and energy-saving. 6fan speeds is
- 2.Éxtremly low operating noise;the lowest noise level is only 26dbB(A) (suitable for both heating,cooling and air flow)

#### Adjustable Indoor Unit Static Pressure

Indoor unit can adjust static pressure automatically according to the house structure and installation condition, ensure that the indoor unit operates in the optimum exhaust state.







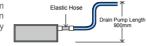
When the required duct is long,

#### Adjustable humidity for coziness

Air inlet is equipped with the humidity sensor, thus realize the humidity adjustment and control according to the indoor humidity condition

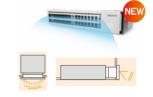
#### Drain Pump as Standard part

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



#### 3D Air-flow Panel

Fashionable Appearance Smooth panel design,easy clean LED backlight show Intelligent 3D air flow 3 wind setting type (nomal,3D,super long distance) Temperature and humidity display Wide louver working angle



Horizontal louver 0-60\*,7 angle set

Panel Model	Indoor unit	Outer Dimensions (H×W×D)	Interface Dimension (H×W×D)
HP-DB-NA	07~14	180×950×70	750×130
HP-EB-NA	17~24	180×1220×70	1020×130

						(50)					
	door unit		l	Ce	eiling Ducted Typ	e (DC Low-heigh	it)				
Model Power Supply	АС1Ф 220V~240V /50Hz/60Hz	AVE-07UXJSCL	AVE-09UXJSCL	AVE-12UXJSCL	AVE-14UXJSCL	AVE-17UXJSDL	AVE-18UXJSDL	AVE-22UXJSDL	AVE-24UXJSDL		
	kW	2.2	2.8	3.6	4.3	5	5.6	6.3	7.1		
Nominal Cooling Capacity	kcal/h	1,900	2,400	3,100	3,700	4,300	4,800	5,400	6,100		
	Btu/h	7,500	9,600	12,300	14,700	17,100	19,100	21,500	24,200		
	kW	2.8	3.3	4.2	4.9	5.6	6.5	7.5	8.5		
Nominal Heating Capacity	kcal/h	2,400	2,800	3,600	4,200	4,800	5,600	6,500	7,300		
	Btu/h	9,600	11,300	14,300	16,700	19,100	22,200	25,600	29,000		
Sound Pressure Level	dB(A)	32/30/29/2	29/27/26	34/33.5/3	3/32.5/32/32	36/35/3	33/32/32/31	40/38/36/	35/34/32		
Outer Dimensions (H×W×D)	mm		192×91	0×447			192×1,18	30×447			
Net Weight	kg		20	2	21		26	2	6		
Refrigerant				R410A(Nitrog	en-charged for co	orrosion-resistan	ce)				
Indoor Fan Air Flow Rate	m³/h	540/492/414	4/402/348/330	588/540/51	0/504/456/450	870/810/750	/690/648/600	990/900/840	780/720/660		
Motor Power	kw	0.0	33		0.033	(	0.057	0.0	)57		
Refrigerant Piping Connection				FI	are-nut Connection	on(with Flare Nut	s)				
Liquid Line	mm		Ф6.3	35		Ф6.35		Ф9.53			
Gas Line	mm		Ф12	1.7	Ф15.88 Ф15.88						
Condensate Drain					VP25 (Outer D	VP25 (Outer Diameter 32)					
External Static Pressure	Pa		10(0-1	0-30)		10(0-10-50)					
Packing Volume	m <sup>3</sup>		0.1	5		0.18					

#### NOTES

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

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

Outdoor Air Inlet Temperature: 35°C DB(95°F DB)
Piping Length: 7.5 Meters Piping Lift: 0 Meter

Heating Operation Conditions

Indoor Air Inlet Temperature: 20 C DB(68°F DB)

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

- 2. The sound pressure level is based on following conditions: 1.5m beneath the unit. With discharge duct (2.0m) and return duct(1.0m)
- The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

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

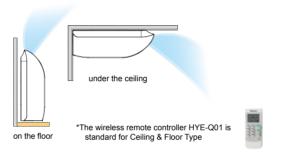
### **Ceiling & Floor Type**

#### New Fashion Design Appearance and HighQuality

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

#### Flexible Installation

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



#### Convenient Installation and Maintenance

Advanced structure design that make the unit installatioin, pipe connection, even wiring work into simple.







**VRF** solution

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

space for pipe connection provide convenience for pipe installation

Set DIP switch be opening electric be cover, simple and convenience.

#### Intelligent 3D Air Flow

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





Indoor u					Ceiling	& Floor Type			
Model Power	AC1Φ 220V~240V /50Hz	AVV-17URSCA	AVV-18URSCA	AVV-22URSCA	AVV-24URSCA	AVV-27URSCB	AVV-30URSCB	AVV-38URSCB	AVV-48URSCC
Supply	АС1Ф 220V/60Hz	AVV-17UR2SA	AVV-18UR2SA	AVV-22UR2SA	AVV-24UR2SA	AVV-27UR2SA	AVV-30UR2SB	AVV-38UR2SB	AVV-48UR2SC
Nominal Cooling	kW	5	5.6	6.3	7.1	8.4	9	11.2	14.2
Capacity	Btu/h	17.100	19,107	21,500	24,225	28,661	30,708	38,214	48,450
Nominal Heating	kW	5.6	6.5	7.5	8.5	9.6	10	13	16.3
Capacity	Btu/h	19,100	22,178	25,600	29,002	32,755	34,120	44,356	55,616
Motor Power	W	40	40	70	70	70	80	130	160
Air Flow Rate (H/M/L)	m³/h	780/660/520	780/660/540	966/840/678	966/840/678	1,110/912/732	1,176/978/798	1,488/1230/978	1,980/1,680/1,380
Noise Level (Ceiling)	dB(A)	39/35/30	39/34/29	45/41/37	44/41/36	42/38/32	44/39/35	50/44/39	50/46/41
Noise Level (Floor)	dB(A)	43/38/35	43/38/35	48/44/40	48/44/40	46/41/37	48/43/39	54/49/43	55/50/46
Outer Dimensions	mm	990x680x230	990x680x230	990x680x230	990x680x230	1,285x680x230	1,285×680×230	1,285×680×230	1,580x680x230
Net Weight	kg	31	31	32	32	39	40	41	47
Gross Weight	kg	38	38	39	39	46	47	48	56
Refrigerant					R410A(Nitrogen-ch	arged for Corrosion-	resistance)		
Piping Connections					Flare-nut Co	nnection(with Flare N	luts)		
Liquid Line	mm	Ф6.35	Ф6.35	Ф9.53	Ф9.53	Ф9.53	Ф9.53	Ф9.53	Ф9.53
Gas Line	mm	Ф15.88	Ф15.88	Ф15.88	Ф15.88	Ф15.88	Ф15.88	Ф15.88	Ф15.88
Condensate Drain					VP25(C	Duter Diameter Φ32)			
Packing Dimensions	mm		1,110x8	30x340			1,400x830x340		1,690x830x340
Speed-up Setting HH1	m³/h	852	852	1,068	1,068	1,188	1,272	1,620	2,160
Speed-up Setting HH2	m³/h	960	960	1,200	1,200	1,338	1,410	1,752	2,244

#### NOTES:

- 1.The nominal cooling capacity and heating capacity are based on following condations: Cooling Operation Condations
- Indoor Air Inlet Temperature: 27 C DB (80°F DB) 19 C WB (66.2°F DB)

Outdoor Air Inlet Temperature: 35 C DB (95°F DB)
Piping Length: 5.0Meter Piping Lift: 0Meter

Heating Operation Condations

Indoor Air Inlet Temperature: 20 °C DB (68°F DB)

Outdoor Air Inlet Temperature:7  $^{\circ}$ C DB (45 $^{\circ}$ F DB) 6  $^{\circ}$ C DB (43 $^{\circ}$ F DB)

- 2. The sound pressure level is based on following condations:
- 1.0m beneath the unit,1.0m from Discharge Grille.

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



### **Wall Mounted Type**



## Elegant Smooth Panel Design with Hidden LED Display

The quality of "elegance" is additionally provided to meet contemporary needs. Features a simple, smooth form that harmonizes with any interior style. Smooth panel design can be cleaned easily.

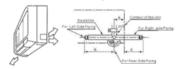


#### Anti-mold Filter

Anti-mold filter is equipped as standard accessory.

#### Free Installation

Water drain pipe can be set either left or right sides of the unit Connection pipe can be set in left, right or back side of the unit



#### Compact and Light Weight, Allowing Easy Installation

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

#### Sleep Mode Bring You Comfortable Temperature for Good Sleep

Sleep mode can be kept for 8 hours. The setting temperature will be adjusted automatically for your comfortable.

#### Quiet Operation for Super Low Sound Level

One touch quiet operation can set system work in super low speed and you will get very low noise level to 28 dB(A)



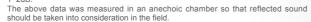
\*The wireless remote controller HYE-L01 is standard for New Wall Mounted Type

Indoor ur	nit				Wall Mo	ounted Type									
Model Power	AC1Φ220V ~240V/50Hz	AVS-07URCSABA	AVS-09URCSABA	AVS-12URCSABA	AVS-14URCSABA	AVS-17URCSABA	AVS-18URCSBBA	AVS-22URCSBBA	AVS-24URCSBBA						
Supply	AC1Φ220V/ 60Hz	AVS-07UR2SABA	AVS-09UR2SABA	AVS-12UR2SABA	AVS-14UR2SABA	AVS-17UR2SABA	AVS-18UR2SBBA	AVS-22UR2SBBA	AVS-24UR2SBBA						
Nominal Cooling	kW	2.2	2.8	3.6	4.0	5.0	5.6	6.3	7.1						
Capacity	kcalh	1,900	2,400	3,100	3,450	4,300	4,816	5,418	6,106						
	Btu/h	7,500	9,500	12,300	13,600	17,000	19,100	21,500	24,200						
Nominal Heating	kW	2.5	3.3	4.0	4.5	5.6	6.3	7.1	8						
Capacity	kcalh	2,150	2,800	3,450	3,900	4,800	5,418	6,106	6,880						
	Btu/h	8,500	11,100	13,600	15,300	19,100	21,500	24,200	27,300						
ndoor Fan Air Flow Rate High/Medium/Low/Mute)	m³/h	660/590/520/460	660/590/520/460	830/660/520/460	830/660/520/460	900/750/590/460	893/782/671/582	1,006/893/716/621	1,122/984/804/649						
Sound Pressure Level High/Medium/Low/Mute)	dB(A)	39/34/32/28	39/34/32/28	43/39/32/28	43/39/32/28	45/40/34/29	41/37/34/30	44/41/36/31	46/43/38/33						
Net Weight	kg			13.5				16.0							
Gross Weight	kg			17.0				20.0							
Refrigerant			R410A(Nitrogen-charged for Corrosion-resistance) 50 50 60 60 65 62 72												
Motor Power	W	50	50	60	60	65	62	72	82						
Connections Refrigerant Piping				FI	are-nut Connection(v	vith Flare Nuts)									
Liquid Line	mm			Ф6.35				Ф9.53							
Gas Line	mm			Ф12.7				Ф15.88							
Condensate Drain						VP16									
Outer Dimensions (H×W×D)	mm			315×960×230				315×1,120×230							
Packing Outer Dimensions(H×W×D)	mm			445×1,080×355				438/1,238/349							
Approximate Packing Measuremen	m³	0.17 0.19													
Wireless Remote Controller/Receiver		HYE-L01+Receiver													
Wired Remote Controller		Option													
Fan motor		PG Fan motor													
Drain Pump		PG Fan motor NO													

#### NOTES:

- 1.The nominal cooling capacity and heating capacity are based on following conditions: Cooling Operation Conditions
- Indoor Air Inlet Temperature: 27 °C DB(80°F DB), 19.0 °C WB(66.2°F WB)
- Outdoor Air Inlet Temperature: 35 C DB(95°F DB)
  Piping Length: 7.5 Meters Piping Lift: 0 Meter
- Heating Operation Conditions
- Indoor Air Inlet Temperature: 20 © 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:
- 1.0m beneath the unit and 1.0m from inlet grille.

  Voltage of the power source for the indoor fan motor is 220V.
- In case of the power sourse of 240V, the sound pressure level increases by about
- 1~2dB.





## **Floor Concealed Type**

#### Compact design fitting into a tiny space

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



#### **Outdoor Unit Specifications**

Indoor unit			Floor Concealed Type		
Madal Day and Grad	АС1Ф, 220~240V/50Hz	AVH-09UXCSAA	AVH-14UXCSAA	AVH-18UXCSBA	AVH-24UXCSBA
Model Power Supply	АС1Ф, 220V/60Hz	AVH-09UX2SAA	AVH-14UX2SAA	AVH-18UX2SBA	AVH-24UX2SBA
	kW	2.8	4.3	5.6	7.1
Nominal Cooling Capacity	kcal/h	2,400	3,700	4,800	6,100
	Btu/h	9,600	14,700	19,100	24,200
	kW	3.3	4.9	6.5	8.5
Nominal Heating Capacity	kcal/h	2,800	4,200	5,600	7,300
	Btu/h	11,300	16,700	22,200	29,000
Noise Level (H/M/L)	dB(A)	34-31-27	40-36-34	41-36-32	44-40-36
Cabinet Color			Silky White		
	H-mm	620	620	620	620
Outer Dimensions	W-mm	948+139	948+139	1218+139	1218+139
	D-mm	202	202	202	202
Net Weight	kg	18	22	26	27
Air Flow Rate (H/M/L)	m³/h	510/450/380	620/540/480	890/740/630	980/830/710
Motor Power	W	50	80	90	120
Piping Connections		Fla	re-nut Connection(with Flare N	luts)	
iquid Line	mm	Ф6.35	Ф6.35	Ф6.35	Ф9.53
Gas Line	mm	Ф12.7	Ф12.7	Ф15.88	Ф15.88
Condensate Drain		VP25	VP25	VP25	VP25
Packing Volume	m³	0.19	0.19	0.23	0.23

#### NOTES:

- 1.The nominal cooling capacity and heating capacity are based on following conditions:
  Cooling Operation Conditions
  Indoor Air Inlet Temperature: 27 ℃ DB(80°F DB), 19.0 ℃ WB(66.2°F WB)
  Outdoor Air Inlet Temperature: 35 ℃ DB(95°F DB)
  Piping Length: 7.5 Meters Piping Lift: 0 Meter
  Heating Operation Conditions
- Indoor Air Inlet Temperature: 20 C DB(68°F DB)
  Outdoor Air Inlet Temperature: 7 C DB(45°F DB), 6 C WB(43°F WB)
- 2.The sound pressure level is based on following conditions:
   1.5m 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 (For G/M/R Series)



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

#### Higher External Static Pressure

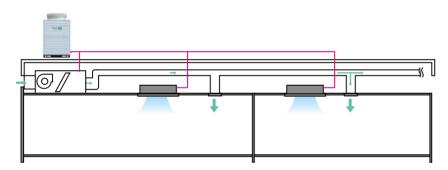
Better installation flexibility at site, longer duct can be connected.

#### Flexible Line-up to Hi-FLEXi Series

All fresh air indoor units are applicable to Hi-FLEXi G+, G, X, M and R series outdoor units. General indoor units and all fresh air indoor units can be used together in Hi-FLEXi G, M and R series system.

#### Advanced Contol

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



Indoor unit				All Fresh Ai	r Indoor Unit				
Model		АС1Ф, 220~ 240V/50Hz	AVA-30 UXCSCH-70	AVA-48 UXCSQH-108	AVA-76 UXCSRH-168	AVA-96 UXCSRH-210			
Power Supply		АС1Ф, 220 V/60Hz			AVA-76 UX2SRH-168	AVA-96 UX2SRH-210			
Combined Outdoor Unit	Model			Hi-FLEXi G	/M/R Series				
Nominal Cooling Cap	acity	kW	9.0	14 .0	22.4	28.0			
Norminal Cooling Cap	uoity	Btu/h	30,700	47,800	76,500	95,600			
Nominal Heating Cap	acity	kW	8.6	13.7	21.9	24.5			
Tronman Floating Cap	uoity	Btu/h	29,400	46,800	74,700	83,600			
Motor Power		W	150	330	490	510			
	Н	mm	370	370	486	486			
Outer Dimensions	W	mm	920	1,320	1,270	1,270			
	D	mm	800	800	1,069	1,069			
Noise Level		dB(A)	32	43	45	46			
Net Weight		Kg	46	60	97	97			
Refrigerant			·	R410A(Nitrogen-charg	ged for Corrosion-resistance	)			
Air Flow Rate		m³/h	660	1,080	1,680	2,100			
External Static Pressu	ıre	Pa	60 (120)	200	220	220			
Air Inlet Size		mm	833×306	1233×306	1,100×415	1,100×415			
Air Outlet Size		mm	803×220	1203×220	1,106×338	1,106×338			
Drain Pipe Size				VP25, Outer D	iameter: Φ32mm				
Refrigerant Liquid Lin	е	mm	Ф9.53	Ф9.53	Ф9.53	Ф9.53			
Refrigerant Gas Line		mm	Ф15.88	Ф15.88	Ф19.05	Ф22.2			
7			Φ15.88 Φ19.05 Φ22.3  Cooling: 20 °C ~43 °C , Heating: -7 °C ~15 °C						



#### **All Fresh Air Indoor Unit**



Indoor unit				All Fresh	Air Indoor Unit	
Model		АС3Ф, 380~ 415V/50Hz	AVA-114 UX6SRH-300	AVA-154 UX6SSH-400	AVA-190 UX6STH-500	AVA-190 UX6STH-600
Power Supply		АС3Ф, 380V/60Hz	AVA-114 UX7SRH-300	AVA-154 UX7SSH-400	AVA-190 UX7STH-500	AVA-190 UX7tSTH-600
Combined Outdoor Unit	Model			Hi-FLEXi	G/M/R Series	
Cooling Capacity		kW	33.5	45.0	56.0	56.0
ocog capacity		Btu/h	114,300	153,600	191,100	191,100
Heating Capacity		kW	26.8	36.0	44.8	44.8
3 7		Btu/h	91,500	122,900	152,900	152,900
Motor Power		W	740	1120	1330	1620
	Н	mm	486	635	735	735
Outer Dimensions	W	mm	1,270	1,950	1,950	1,950
	D	mm	1,069	805	805	805
Sound Pressurd Level		dB(A)	56	61	64	66
Net Weight		Kg	97	196	222	222
Refrigerant				R41	0A	
Indoor Fan Air Flow Ra	ate	m <sup>3</sup> /h	3,000	4,000	5,000	6,000
External Static Pressu	re	Pa	220	300	320	300
Air Inlet Size		mm	1,100×415	1,522×522	1,522×622	1,522×622
Air Outlet Size		mm	1,106×338	850×272	850×272	850×272
Drain Pipe Size			VP25,Outer Diameter: Φ32mm		RC1(Internal Screw)	
Refrigerant Liquid Line	Size	mm	Ф12.7	Ф12.7	Ф15.88	Ф15.88
Refrigerant Gas Line S	Size	mm	Ф25.4	Ф25.4	Ф28.6	Ф28.6
Drain Pipe Size Refrigerant Liquid Line Size Refrigerant Gas Line Size Temperature Range of Fresh Air Drawn				Cooling: 20 ℃ ~43 ℃ ,	Heating: -7℃ ~15℃	

- 1.The nominal cooling capacity and heating capacity are based on following conditions Cooling operation conditions: 33  $^{\circ}$  DB, 28  $^{\circ}$  WB, piping length: 7.5m, piping lift: 0m
- Heating operation conditions: 0°C DB, -9°C WB, piping length: 7.5m, piping lift: 0m
- (Heating capacity is tested when defrosting is not available )
- 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. When the resistance of the filed-supplied duct is small, it may cause abnormal stop, malfunction, spraying water, etc. Due to excessive air flow. And the duct, which is to be connected to this unit, shall be insulation for dew protection.
- 5.All fresh air indoor unit is for processing fresh air load and not for stabilizing the room temperature. For adjusting the air conditioning load of the room, the additional
- 6.This unit shall be connected to Hi-FLEXi G, M and R series outdoor units. In case of connecting this unit with other indoor units in the same refrigerant cycle,calculate the capacity of this unit as 46.1KBtu/h(30.7KBtu/h), 71.7KBtu/h(47.8KBtu/h), 143.3KBtu/h(95.6KBtu/h).
- 7. When Hi-Flexi outdoor unit connected to only with all fresh air indoor unit, the configuration rate is 100% (Recommended )
- 8.Under cooling mode, when outdoor temperature is lower than 20 °C, the system will automatically shift to ventilation operation; Under heating mode, when outdoor temperature is higher than 15 C the system will automatically shift to ventilation operation; In case inlet temperature is below -7 C all fresh air unit will stop.





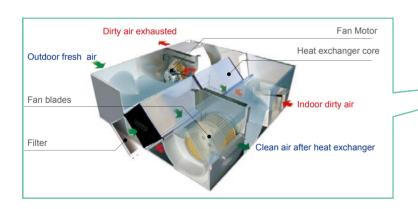
# Heat Recovery Ventilator

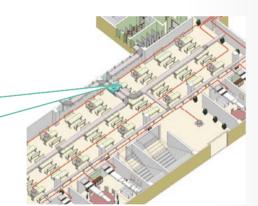


Build a More Comfortable, Healthy and Energy-saving Living Space, Hisense High-performance Heat Recovery Ventilator

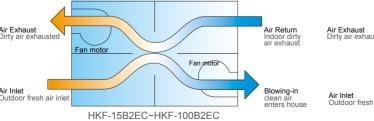
Hisense heat recovery ventilator adopts efficient convective transfer material to effectively recycle the heat losses due to ventilation, reduces the fresh air load, achieves the purpose of energy saving and lower running cost of air conditioning unit, fresh air is supplied to indoors continuously which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

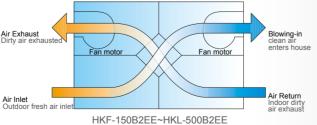
## Basic Structure and Operation Principle





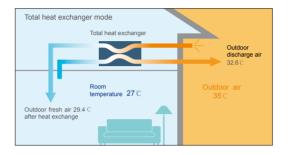
## **Airflow System**





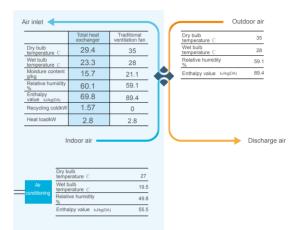
## **Energy Saving Analysis**

## Summer Energy Saving Analysis

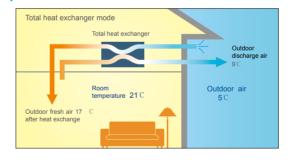


In summer operation, when the cold energy of 27  $^{\circ}$ C air discharged from indoor pass through the heat exchanger, the 35  $^{\circ}$ C outdoor hot air is pre-cooled to 29. 4  $^{\circ}$ C fresh air and supplied to indoors, as shown above, the air conditioner only needs to cool the air by 2.4  $^{\circ}$ C to maintain a comfortable room temperature and fresh air. In this process, the discharge air pre-cools the fresh air by HRV, The temperature recovery efficiency in cooling is 70% max, and enthalpy exchange efficiency is 57% max.

## VS ordinary ventilation fan

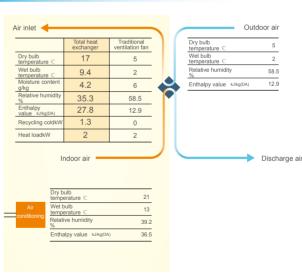


## Winter Energy Saving Analysis



In winter operation, when the heat energy of  $27\mathbb{C}$  air discharged from indoor pass through the heat exchanger, the  $5\mathbb{C}$  outdoor cold air is pre-heated to  $17\mathbb{C}$  fresh air and supplied to indoors, as shown above, when outdoor  $5\mathbb{C}$  air and indoor  $21\mathbb{C}$  air pass through the HRV, the fresh air supplied to indoors is about  $17\mathbb{C}$ , the air conditioner only needs to heat the air by  $5\mathbb{C}$  to maintain a comfortable room temperature and fresh air. The temperature recovery efficiency in heating is 75% max, and enthalpy exchange efficiency is 63% max.

## VS ordinary ventilation fan



## **Very Low Noise**

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

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







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

#### Controller

#### LCD Wired Remote Controller - Standard

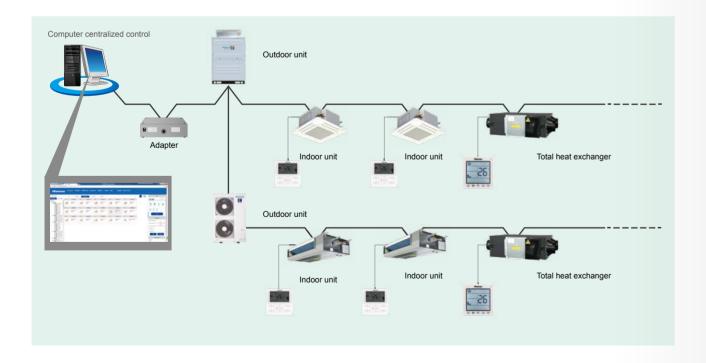
- Large LCD screen interface, elegant appearance
- Can display room temperature, fan speed and so on
- Air volume setting function, the user can choose high, medium and low fan speed
- Product dimension:86\*86mm



HYXE-G01H

## **Centralized Control System**

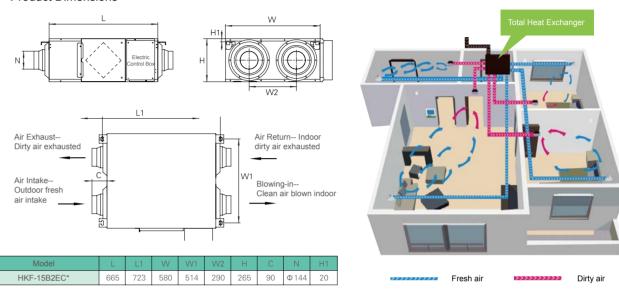
Hisense centralized control type total heat exchanger products can be connected to the centralized control system of Hisense air conditioning\*, achieve the linkage with air conditioning system and centralized control, so the operation is more convenient and more intelligent!



#### HKF-15B2EC



#### **Product Dimensions**



#### **Technical Parameters**

Model	Air Vo	lume n	n³/h	Enthal (Sumn	py Effic ner) η	ciency i	Entha (Winte	lpy Effic er) η i	ciency	Extern Pressu	al Station	С	Power	Inp	ut Curre	nt A	lr	nput Power	KW	Nois Leve		B(A)	Weight
ooo.	High	Middle	Low	High	Middle	Low	High	Middle	Low	High	Middle	Low	Supply	High	Middle	Low	High	Middle	Low	High	Middle	Low	kg
HKF-15B2EC*	150	150	110	58	58	60	65	65	69	85	70	65	220-240V	0.38	0.36	0.31	2×0.041	2×0.038	2 × 0.029	30	29	28	25

<sup>\*: 220</sup>V/60Hz HKF-15B2E2

## **Product Feature**

#### Compact Machine, Convenient Installation.

The thickness of machine is not more than 270mm that can be easily installed in the narrow residential ceiling. The width of the machine whose volume is under 300 m $^{9}$ /h is less than 600mm, which is particularly suitable for very narrow spaces in the ceiling, and can save the space of installation and ceiling, it is more convenient for construction.

#### Adjustable Air Volume, Quiet Operation.

The air volume can be adjusted at a range of high, medium, or low level, the lowest noise in low level is only 28 dB(A) (HKF-15B1(2)EC in low level ), which reaches the lowest level in the industry.



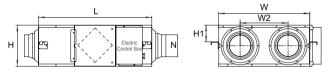


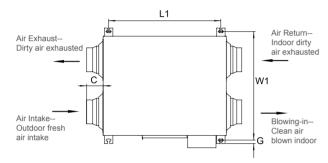
# VRF Solution

#### HKF-25B2EC~HKF-100B2EC



#### **Product Dimensions**





Model	L	L1	W	W1	W2	Н	С	G	N	H1
HKF-25B2EC*	745	675	600	656	315	270	90	19	Ф144	110
HKF-35B2EC*	745	675	805	861	480	270	90	19	Ф144	110
HKF-50B2EC*	825	755	905	961	500	270	96	19	Ф 194	110
HKF-65B2EC*	1115	1050	885	941	430	390	80	19	Ф242	175
HKF-80B2EC*	1115	1050	1135	1191	675	390	80	19	Ф242	175
HKF-100B2EC*	1115	1050	1135	1191	675	390	80	19	Ф242	175

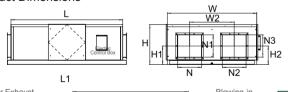
#### **Technical Parameters**

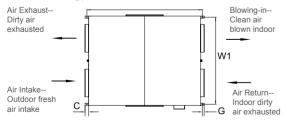
Model	Air V	'olume	e m³/h		lpy Effi mer)η i	ciency	Entha (Winte	lpy Effi er)η İ	ciency		ernal S ssureP		Power		ut Curre	ent A	Inp	ut Powerk\	Ν	Nois Leve		(A)	Weight
Model	High	Middle	Low	High	Middle	Low	High	Middle	Low	High	Middle	Low	Supply	High	Middle	Low	High	Middle	Low	High	Middle	Low	kg
HKF-25B2EC*	250	250	190	57	57	59	63	63	68	85	65	60		0.66	0.56	0.52	2×0.069	2×0.055	2×0.049	32	31	28	30
HKF-35B2EC*	350	350	270	55	55	57	62	62	65	100	75	65		0.76	0.75	0.71	2×0.083	2×0.079	2×0.075	34	33	31	35
HKF-50B2EC*	500	500	400	56	56	58	63	63	65	130	110	100	220~240V	1.82	1.71	1.52	2×0.189	2×0.157	2×0.124	39	38	36	40
HKF-65B2EC*	650	650	550	57	57	59	63	63	68	130	100	100	/50Hz	1.75	1.62	1.51	2×0.193	2×0.178	2×0.164	40	38	35	62
HKF-80B2EC*	800	800	650	58	58	59	66	66	68	130	100	90		1.98	1.88	1.75	2×0.211	2×0.196	2×0.18	42	40	37	72
HKF-100B2EC*	1000	1000	700	56	56	58	63	63	66	165	120	60	1	4.68	4.18	3.47	2×0.510	2×0.450	2×0.363	44	42	38	79

<sup>\*: 220</sup>V/60Hz HKF-25B2E2~HKF-100B2E2

#### HKF-150B2EE~HKF-200B2EE

#### **Product Dimensions**





A	
40	

Model	L	L1	W	W1	W2	Н	H1
HKF-150B2EE*	1500	1550	1200	1170	600	540	250
HKF-200B2EE*	1550	1600	1400	1370	700	540	250

Model	С	G	N	N1	N2	N3	H2
HKF-150B2EE*	50	25	320	300	320	300	250
HKF-200B2EE*	50	25	320	300	320	300	250

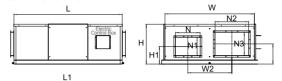
#### Technical Parameters

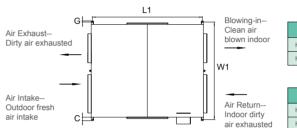
Model	Air Volume m³/h	Enthalpy Efficiency (Summer) η i	Enthalpy Efficiency (Winter)η i	External Static PressurePa	Power Supply	Input Current A	Input Power	Noise Level dB(A)	Weight kg
HKF-150B2EE*	1500	55	63	180	200 445\//50   -	2.78	2×0.41	48	151
HKF-200B2EE*	2000	54	62	160	380~415V/50Hz	2.89	2×0.52	49	172

<sup>\*:</sup> AC3Ф220V/60Hz HKF-150B2E9 HKF-200B2E9 AC3Ф380V/60Hz HKF-150B2EF HKF-200B2EF

#### HKF-250B2EE~HKF-300B2EE

#### **Product Dimensions**





Model	L	L1	W	W1	W2	Н	H1
HKF-250B2EE*	1610	1580	1330	1400	655	600	265

Model	С	G	N	N1	N2	N3	H2
HKF-250B2EE*	50	15	365	275	500	350	300
HKF-300B2EE*	50	15	365	275	500	350	309

1500 1570

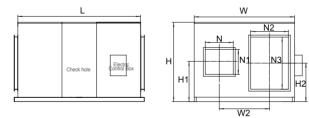
#### **Technical Parameters**

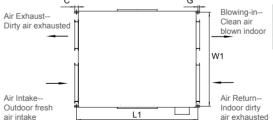
Model	Air Volume m³/h	Enthalpy Efficiency (Summer) <sup>¶</sup>	Enthalpy Efficiency (Winter)η i	External Static PressurePa	Power Supply	Input Current A	Input PowerkW	Noise Level dB(A)	Weight kg
HKF-250B2EE*	2500	54	62	180	380~415V/50Hz	3.86	2×0.72	53	185
HKF-300B2EE*	3000	55	63	200	4107700112	5.12	2×1.16	56	222

<sup>\*:</sup> AC3Φ220V/60Hz HKF-250B2E9 HKF-300B2E9 AC3Φ380V/60Hz HKF-250B2EF HKF-300B2EF

#### HKL-400B2EE~HKL-500B2EE

#### **Product Dimensions**





W2	H2							
Blowing-in	Model	L	L1	W	W1	W2	Н	
Clean air blown indoor	HKL-400B2EE*	1625	1675	1330	1300	665	1050	
-	HKL-500B2EE*	1625	1675	1330	1300	665	1050	

Model	С	G	N	N1	N2	N3	H2
HKL-400B2EE*	50	25	370	330	500	690	475
HKL-500B2EE*	50	25	370	330	500	690	475

490

490

#### **Technical Parameters**

Model	Air Volume m³/h	Enthalpy Efficiency (Summer) <sup>1</sup>	Enthalpy Efficiency (Winter)η İ	External Static PressurePa	Power Supply	Input Current A	Input PowerkW	Noise Level dB(A)	Weight kg
HKL-400B2EE*	4000	55	63	220	380~415V/50Hz	5.89	2×1.71	57	312
HKL-500B2EE*	5000	53	61	240	380~415V/50HZ	8.78	2×2.2	58	321

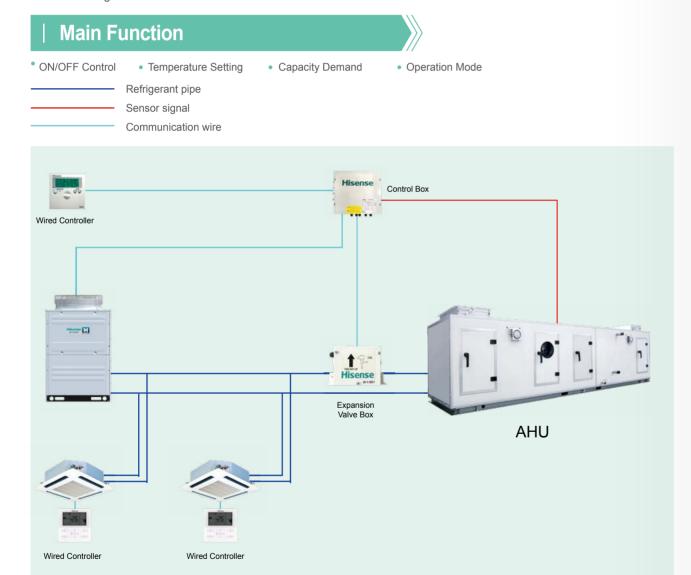
<sup>\*:</sup> AC3Ф220V/60Hz HKF-400B2E9 HKF-500B2E9 AC3Ф380V/60Hz HKF-400B2EF HKF-500B2EF





## AHU Connection KIT

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



Multi combination with AHU and standard indoor unit, only for HZX-2.0  $\sim$  6.0AEC (2-6HP). Single combination with only AHU, for HZX-10.0AEC (8-10HP) and HZX-20.0AEC(12-20HP). AHU-KIT multi connection for one big AHU (22-54HP).

## Selection and Limitation of Heat Exchanger of AHU

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

AHU Connection KIT			HZX-2.0AEC	HZX-4.0AEC	HZX-6.0AEC	HZX-10	0.0AEC			HZX-20.0AEC	;	
Model Power Supply				220~240V/50Hz, 220~240V/60Hz								
Nominal Capacity of AHU		HP	2	4	6	8	10	12	14	16	18	20
		KW	4.0	7.1	11.2	16.0	20.0	28.0	33.5	40.0	45.0	50.0
	Cooling	KW	5.0	9.0	14.0	20.0	25.0	30.0	35.0	43.0	48.0	52.0
Allowed Heat Exchanger		KW	5.6	11.2	16.0	22.4	28.0	33.5	40.0	45.0	50.0	56.0
Capacity (H/M/L)		KW	4.5	8.0	12.5	17.9	22.4	31.5	37.5	45.0	50.0	56.0
	Heating	KW	5.6	10.0	16.0	22.4	28.0	33.5	40.0	47.5	53.0	60.0
		KW	7.1	12.5	18.0	25.0	31.5	37.5	45.0	50.0	56.0	63.0
Heat Exchanger	Min	dm³	0.57	1.03	1.92	2.92	3.89	4.76	5.85	6.79	7.57	8.47
Volume	Max	dm³	1.16	2.37	2.92	3.89	4.76	5.91	6.89	8	8.92	9.97
Equivalent Indoor U	nit Capacity	HP	2	4	6	8	10	12	14	16	18	20
Control Box Mode	I						HZX-AE	C/1				
Expansion Valve E	Box Model		HZX-2.0 AEC/2	HZX-4.0 AEC/2	HZX-6.0 AEC/2	HZX- AE	-10.0 EC/2			HZX-20.0 AEC/2		

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

Operation conditions		Cooling	Heating
	DB	27.0℃	20.0℃
Indoor air inlet temperature	WB	19.0℃	_
Outdoor air inlet temperature	DB	35.0 ℃	7.0℃
Oddoor all mot temperature	WB	_	6.0℃

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





## **Wired Controller**

## HYXE-J01H

#### Features:

4 inch large LCD screen with a resolution of 320×185.

Functions are displayed in iconic form, more intuitive.

Operation navigation, more convenient.

It can be used in main-auxiliary control mode or in concert with wireless receiver.

Various displaying settings: backlit control, contrast ratio setting, backlit displaying time setting, keytone setting, indicator light brightness setting, clock setting, language switch (Between Chinese, English, Spanish, Italian, German.)

Max.16 indoor units can be connected.

Various Control Solutions



#### Main Functions

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

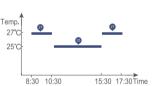
Address Setting

Mode Lock

#### Weekly Timer Setting

Five different schedule timers can be set for each day of the week

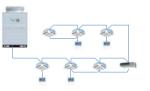
⊙Da	aily Schedule	Setting	(Tue)	Fri 09:36
1	<b>8</b> :30	~	10:30	27℃
2	10:30	~	15:30	25℃
3	15:30	~	17:30	27℃
4	-:-	~	:	℃
5	-:-	~	:	℃
00	Select 🔷	Adjust	⊻	OK GBack



### Indoor Unit Address Change

In the process of installation work, indoor unit address can be changed through wired controller HYXE-J01H.

l	01-01	02-01	03-01	04-01
	01-02	02-02	03-02	04-02
ĺ	01-03	02-03	03-03	04-03
ĺ	01-04	02-04	03-04	04-04



## HYXE-A01H

#### Main Functions

- Max.16 indoor units can be connected.
- Cooling/Heating/Dry/Fan/Auto
- Fan Speed/Swing Louver
- Timer

- Test Run
- Air Filter Cleaning Reminder
- Check
- Temperature Setting
   Error Code Display







### HYXE-F01H

#### Feature:

Fashion appearance with crystal panel and keys Large LCD backlit screen

Max.16 indoor units can be connected.



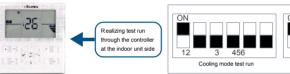
#### Main Functions

One Touch Test Run

- Cooling/Heating/Dry/Fan/Auto
- ◆ Fan Speed/Swing Louver
- Air Filter Cleaning Reminder
- Temperature Setting
- Timer
- Error Code Display Check

#### One-touch Test Run

The one-touch test run can be operated at the outdoor unit side, and it can also be operated at the indoor unit side. which makes it much easier for the commissioning.





## HYXE-G01H

#### Features:

Compact structure with a size of 86×86mm.

Large LCD backlit screen, simple appearance.

Built-in wireless receiver under the panel, two kinds of control mode for selection.



Timer

#### Main Functions

- Cooling/Heating/Dry/Fan/Auto • Built-in Wireless Receiver
- ◆ Fan Speed/Swing Louver

Air Filter Cleaning Reminder

- ◆ Temperature Setting
- Error Code Display
- Check

#### Compact structure design









## **Wired Controller**

## HYXE-M01H

#### Features:

Streamline appearance design, white highlight shell

Large LCD screen, humanized operation interface

Touch key control, easy and convenient

White backlight; operation indicator light

Infrared remote control is acceptable, realizing two control method: wired control and remote control

#### Main Functions

- 86×86mm smart size
- Multiple speed/Swing louver
- · Air filter cleaning reminding
- Inserting

Check

- Temperature setting
  - Error Code Display
- Cooling/Heating/Dry/Fan/Auto Backlight
- 72-hour Timer Control Max.6 indoor units
  - Dehumidification

### **Wireless Controller**

## HYE-W01

#### Features:

Different colors of common used keys White backlight, convenient for night operation

Multi-functional, intelligent and humanized

#### Main Functions

- Cooling/Heating/Dry/Fan/Auto
  - Temperature setting
- 6 Fan speed/Swing louver
  - Quiet mode setting
- Sleep mode setting
- Dehumidification

## **HYE-L01 / HYE-Q01**

#### Feature:

• 24-hour

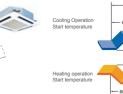
Latest wireless controller with fashionable look. Newly extended sleep mode and quiet mode.

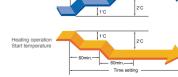
#### Main Functions

- Cooling/Heating/Dry/Fan/Auto
- One Touch Test Run
- ◆ Sleep Mode Setting (HYE-L01)
- Fan Speed/Swing Louver
- Air Filter Cleaning Reminder
- Quiet Mode Setting (HYE-L01) ◆ Temperature Setting ◆ Timer
- Error Code Display
   Check

## Newly Extended Sleep Mode and Quiet Mode









Wide Control Angle





## **Receiver Kit for Wireless Control - Optional**



### **Centralized Controller**

## Centralized ON/OFF Controller: HYJ-J01H

#### Features:

Large size touch-key control design.

Slim design with a thickness of 13mm

It can control up to 16 wired controller groups, realizing centralized ON/OFF control.

Max.128 indoor units can be connected.

#### Main Functions

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

### Compact Structure Design

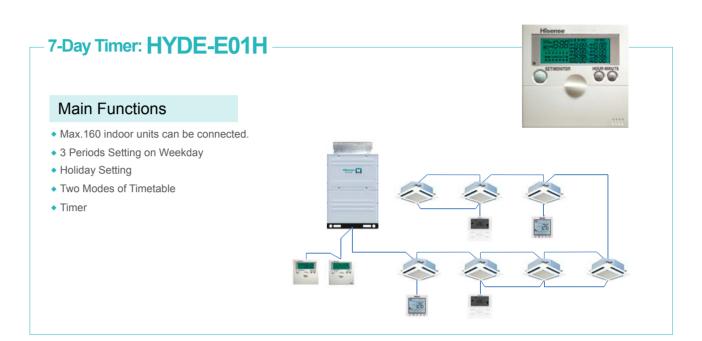


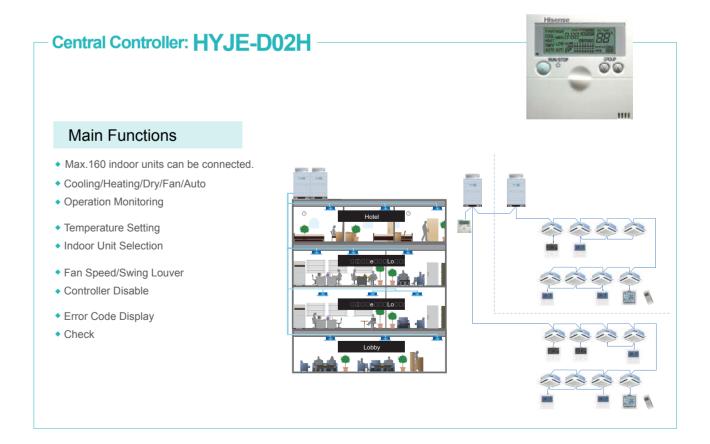
#### Centralized ON/OFF Control

13 14 15 16



### **Centralized Controller**

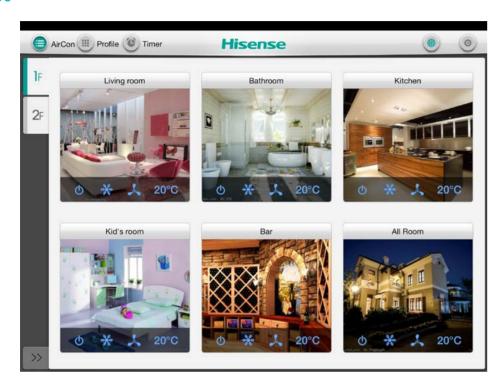






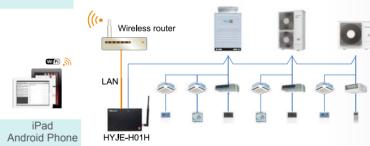


## Hi-Mit



#### Main Functions

- ON/OFF control, operation mode, temperature.
- Setting, air flow setting.
- Operate according to a schedule.
- Display the alarm code.
- Contextual model function can be set, e.g.
- Off Home model and Energy-Saving model.
- Max.32 indoor units can be controlled.
- Dimension: 215\*137\*38cm.



## **Adapter Specifications**

Model name	HYJE-H01H	Operating temperature	0℃~40℃
Input voltage	AC 110~240V 50/60Hz	Maximum operating current	10mA (220 V)

\*The standard parts of this system includes the converter HYJE-H01H and the client control software HRM-G01 ( it can be downloaded and installed in the APP STORE ), The IPAD is the registered trademark of Apple Inc.

	Туре		Wired Co	ontroller		W	/ireless Controlle	r
	Model	HYXE-F01H	HYXE-G01H	HYXE-J01H	HYXE-M01H	HYE-Q01	HYE-L01	HYE-W01
	Picture	(20 mg/s)	. 26	26	NEW NEW		<b>(</b>	NEW
	Duct Type	0	0	0	0	0	0	0
	4-Way Cassette	0	0	0	0	0	0	0
	4-Way Cassette (compact)	0	0	0	0	0	0	0
	1-Way Cassette	×	×	×	0	×	×	0
Suit for indoor unit	2-Way Cassette	0	×	0	0	0	0	0
	Ceiling&Floor	0	0	0	0	0	0	0
	Wall Mounted	0	0	0	0	<b>V</b>	<b>V</b>	0
	Floor Conocealed	0	0	0	0	0	0	0
	DC Low Height	0	0	Δ	0	0	0	Δ
	All Fresh Air Indoor Unit	0	0	0	0	0	0	0
	Total heating exchanger	×	0	×	0	0	0	0
	3D Air-flow Panel	×	×	×	0	×	×	0

	Туре			Receiver Kit		7 Day Timer	Centralized	d Controller	ON/OFF
	Model	HYRE-V02H	HYRE-T01H	HYRE-T02H	HYRE-X01H	HYDE-E01H	HYJE-D01H	HYJE-D02H	HYJ-J01H
	Picture	NEW			NEW NEW	*connect HYJE-D02H	OF 60	000	1 2 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
	Duct Type	0	×	×	×	0	0	0	0
	4-Way Cassette	×	0	0	×	0	0	0	0
	4-Way Cassette (compact)	×	×	×	×	0	0	0	0
	1-Way Cassette	×	×	×	0	0	0	0	0
Suit for	2-Way Cassette	0	×	×	×	0	$\circ$	$\circ$	0
indoor unit	Ceiling&Floor	0	×	×	×	0	0	$\circ$	0
	Wall Mounted	0	×	×	×	0	0	0	0
	Floor Conocealed	0	×	×	×	0	0	0	0
	DC Low Height	0	×	×	×	0	0	0	0
	All Fresh Air Indoor Unit	0	×	×	×	0	0	0	0
	Total heating exchanger	×	×	×	×	0	0	0	0
	3D Air-flow Panel	0	×	×	×	×	×	×	×

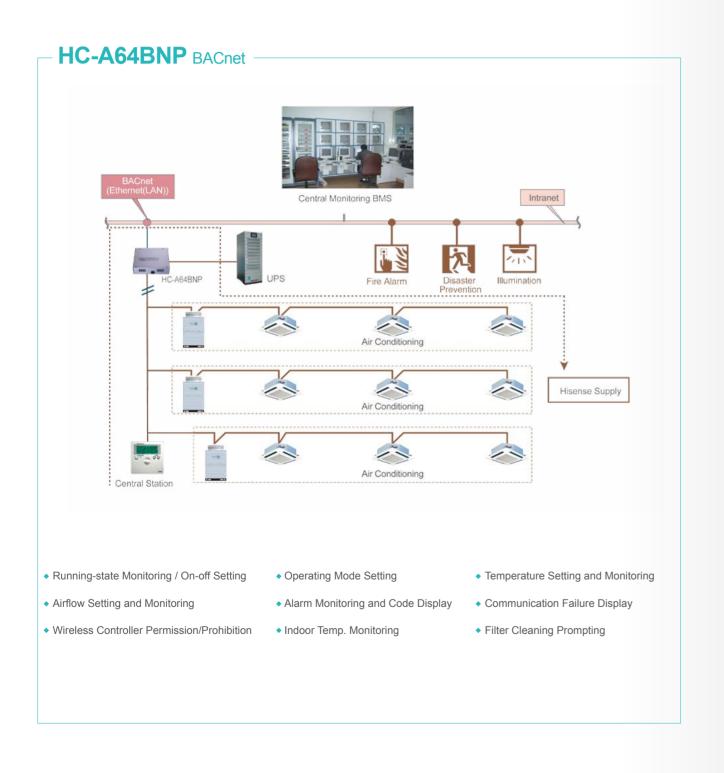


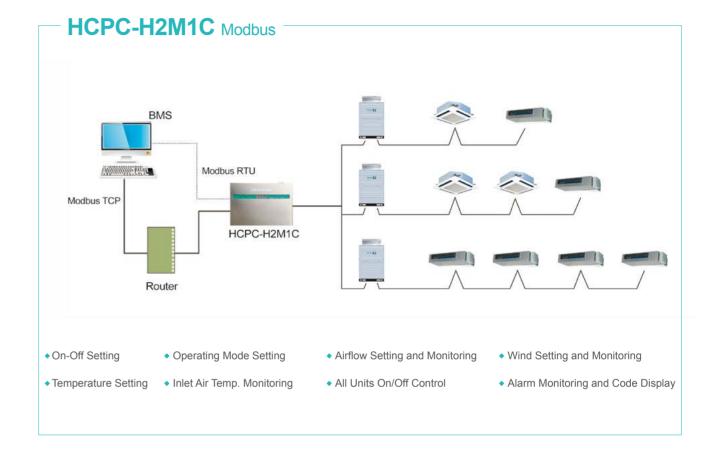


## **Building Management System**

Compatible to multiple communication protocol of BACnet, MODBUS etc. Connectible to BMS or Smart Home System via HC-A64BNP or HCPC-H2M1C all of which can connect to Max. 64 indoor units.

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





	HC-A64BNP	HCPC-H2M1C
Converter	1555 1556	ACCESSES.
BMS connection	BACnet	Modbus
Power supply	AC100~240V±10%(50/60Hz)	AC100~240V±10%(50/60Hz)
Connectable central controller	HYJE-D02H	Hi-Dom, HYJ-J01H
MAX.number of connectable indoor units	64	64
Dimension (LxWxH)	240mm×204mm×70mm	220mm×140mm×50mm





## **Hi-Dom Air Conditioning Management System**

### **Centralized Control**

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

#### Main Functions

- · Running-state Monitoring
- Determine the Temperature Limit
- Running Records Display
- Controller Prohibition Function

- Access Control
- Automatic Operation According to Settings
- Multifunction Alarm
- Service Monitoring



All the indoor units and outdoor units connected with one adapter comprise one communication BUS system . Max.128 indoor units can be connected to a BUS system.

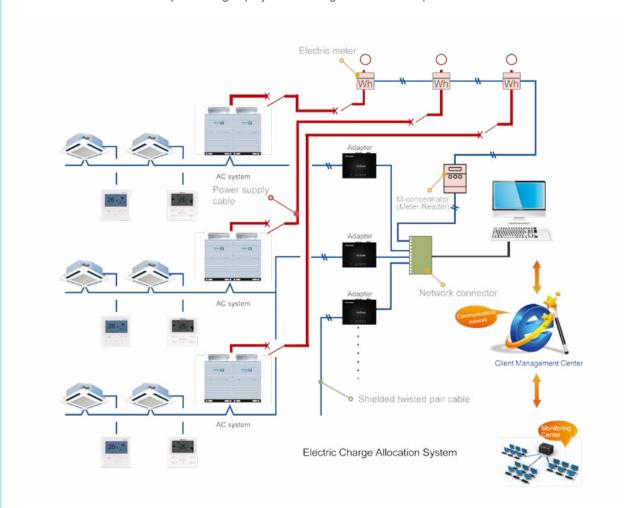
Max.32 adapters can be controlled by one computer.

Max.4096 indoor units are under control.

## **Electric Charge Allocation**

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

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



## Hi-Dom System Specifications

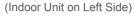
Adapter	Model name	Power Supply	Dimension(mm)	Charging Function
	HCCS-H128H2C1YM	DC 12V	180×110×40	With charging function
(Hi-Dom)	HCCS-H128H2C1NM	DC 12V	180×110×40	Without charging function

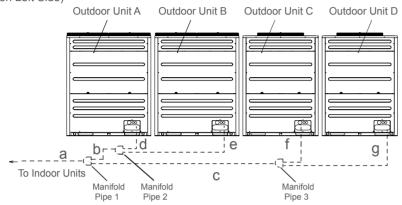


# Optional Parts

## **Piping Connection Kit**

## Manifold Pipe (For outdoor unit)





#### For G+ Seris Heat Pump System

Outdoor Unit	AVWT-232UKSZA	AVWT-250~420UKSZA	AVWT-438~630UKSZA	AVWT-649~840UKSZA
Manifold Pipe1	HFQ-M22F	HFQ-M32F	HFQ-M462F	HFQ-M682F
Manifold Pipe2			HFQ-M32F	HFQ-M32F
Manifold Pipe3				HFQ-M32F

#### For G Series Heat Pump System

Outdoor Unit	AVWT-190~232UE(7)SZG1	AVWT-250~340UE(7)SZG	AVWT-364~510UE(7)SZG
Manifold Pipe 1			HFQ-M32F
Manifold Pipe 2	HFQ-M22F	HFQ-M32F	HFQ-M32F

#### For X Series Heat Pump System

Outdoor Unit	AVWT-480~AVWT-620
Outdoor Branch Pipe1	HFQ-M46F
Outdoor Branch Pipe2	HFQ-M32F
Outdoor Branch Pipe3	HFQ-M22F

#### For M Series Heat Pump System

Outdoo	or Unit	AVWT-182~232U6(7)SZ	AVWT-250~307U6(7)SZ	AVWT-328~386U6(7)SZ	AVWT-402~460U6(7)SZ	
Manifo	old Pipe 1	<del></del>		HFQ-M32F	HFQ-M32F	
Manifo	old Pipe 2	HFQ-M22F	HFQ-M32F	HFQ-M22F	HFQ-M32F	

### For R Series 2-Pipe Heat Pump System

Outdoor Unit	AVWT-190~232FE(7)SZ	AVWT-250~340FE(7)SZ	AVWT-364~510FE(7)SZ
Manifold Pipe 1			HFQ-M32F
Manifold Pipe 2	HFQ-M22F	HFQ-M32F	HFQ-M32F

#### For R Series Heat Recovery System

Outdoor Unit	AVWT-190~232FE(7)SZ	AVWT-250~340FE(7)SZ	AVWT-364~510FE(7)SZ
Manifold Pipe 1			HFQ-M302F
Manifold Pipe 2	HFQ-M202F	HFQ-M212F	HFQ-M302F

### Branch Pipe (For indoor unit)

### First Branch Pipe

#### For G+ Series 2-Pipe Heat Pump System

Outdoor Unit Hp	8 and 10	12 to 16	18 to 24	26 to 54	46 to 66	68 to 88
Branch Pipe	HFQ-102F	HFQ-162F	HFQ-242F	HFQ-302F	HFQ-462F	HFQ-682F

#### For G/X/M/R Series 2-Pipe Heat Pump System

Outdoor Unit Hp	8 and 10	12 to 16	18 to 24	26 to 54
Branch Pipe	HFQ-102F	HFQ-162F	HFQ-242F	HFQ-302F

#### For R Series Heat Recovery System

Outdoor Unit Hp 8 and 10		12 to 16	18 to 24	26 to 54	38 to 54	
Branch Pipe	HFQ-M282F	HFQ-M452F	HFQ-M582F	HFQ-M892F	HFQ-M902F	

### First Branch Pipe~ Last Branch Pipe

#### For G+ Series 2-Pipe Heat Pump System

Total Indoor Unit HP	Lower than 6	6 to8.99	9 to11.99	12 to15.99	16 to17.99	18 to25.99	26 to35.99	34 to45.99	46 to57.99	58 to67.99	68
Gas (Φmm)	Ф15.88	Ф19.05	Ф22.2	Ф25.4	Ф28.6	Ф28.6	Ф31.75	Ф38.1	Ф41.3	Ф44.5	Ф50.8
Liquid (Φmm)	Ф9.53	Ф9.53	Ф9.53	Ф12.7	Ф12.7	Ф15.88	Ф19.05	Ф19.05	Ф22.2	Ф22.2	Ф25.4
Branch Pipe		HFQ-102F		HFQ-	162F	HFQ-242F	HFQ-	302F	HFQ	-462F	HFQ-682F

#### For G/X/M/R Series 2-Pipe Heat Pump System

Total Indoor Unit HP	Lower than 6	6 to 8.99	9 to 11.99	12 to 15.99	16 to 17.99	18 to 25.99	26 to 35.99	Over 36
Gas (Φmm)	Ф15.88	Ф19.05	Ф22.2	Ф25.4	Ф28.6	Ф28.6	Ф31.75	Ф38.1
Liquid (Φmm)	Ф9.53 Ф9.53 Ф9.53		Ф9.53	Ф12.7	Ф12.7	Ф15.88	Ф19.05	Ф19.05
Branch Pipe	HFQ-102F		HFQ-162F		HFQ-242F HFQ-3		302F	

#### For R Series Heat Recovery System

Total Indoor Unit HP	Lower than 6	6 to 8.99	9 to 11.99	12 to 15.99	16 to 17.99	18 to 21.99	22 to 25.99	26 to 35.99	Over 36
Low Pressure Gas (Φmm)	Ф15.88	Ф19.05	Ф22.2	Ф25.4	Ф28.6	Ф28.6	Ф28.6	Ф31.75	Ф38.1
High Pressure Gas (Фmm)	Ф12.7	Ф15.88	Ф19.05	Ф22.2	Ф22.2	Ф22.2	Ф25.4	Ф28.6	Ф31.75
Liquid (Φmm)	Ф9.53	Ф9.53	Ф9.53	Ф12.7	Ф12.7	Ф15.88	Ф15.88	Ф19.05	Ф19.05
Branch Pipe	HFQ-M142F	HFQ-M282F		HFQ-M452F	HFQ-M562F		HFQ-M692F		HFQ-M902F

## First Branch Pipe~ Last Branch Pipe

lada a Hait	Pipe Siz	Many Limited Direct country	
Indoor Unit	Gas Pipe	Liquid Pipe	Max. Liquid Pipe Length
7kBtu/h~14kBtu/h	12.7	6.53	15
17kBtu/h~18kBtu/h	15.88	6.35*1	15
22kBtu/h~54kBtu/h	15.88	9.53	40
76kBtu/h	19.05	9.53	40
96kBtu/h	22.2	9.53	40

Notes 1. When liquid pipe length of indoor unit(07 18kBtu/h) is more than 15m, please change the liquid pipe dimension from Φ6.35 into Φ9.53.





## Manifold Pipe Parameter



Model	Gas Line	Liquid Line	Reducer for Gas Line	Reducer for Liquid Line
HFQ-M22F	D 25.4 D 28.6 D 25.4 O 22.2 D 22.2 D 19.05	D 9.53   D 12.7   D 15.88   D 19.05   D 19.05   D 15.88   D 10.58   D 6.35	ID 25.4 ID 15.88 ID 12.7 ID 19.05	
HFQ-M32F	ID 38.1 ID 38.1 ID 38.1 ID 38.1 ID 28.6 ID 28.6	D 22.2 ID 15.83 ID 19.05   ID 12.7   ID 15.88   ID 19.05   ID 15.88   ID 19.05   ID 12.7   ID 15.88   ID 19.05   ID 10.22   ID 10.22   ID 10.23   ID 10.25   003175   10222 10288   10254   Ony:1 10254   101588 00285   101727 10222   101905   Ony:1 0038:1		
HFQ-M462F	D41.3   D31.75   D28.6 D22.2   D44.5   D38.1   D25.4   D0222   D0 53   D15.88   D19.55   D15.88   D25.4   D25.4   D15.88   D25.4   D15.88			
HFQ-M682F	D50.8   D31.75   D28.6   D22.2      D53.98   D38.1   D35.81   D25.4   D25.4     o 50.842.2   D33.175   D28.6   D22.2     o 50.842.2   D33.175   D28.6   D22.2     o 50.842.2   D33.175   D28.6   D22.2     D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1   D33.1   D33.1   D33.1   D33.1   D33.1   D33.1   D33.1   D33.1     D33.1	© 28.6×11.9  © 28.6×11.9  © 25.4×11.45  © 1019.05  © 1022.2  © 1019.05  © 1019.05  © 1019.05		

Model	Low Pressure Gas Line	High Pressure Gas Line	Liquid Line	Reducer for Low Pressure Gas Line	Reducer for High Pressure Gas Line	Reducer for Liquid Line
HFQ-M202F	ID 28.6 ID 28.6 ID 25.4 ID 25.4 ID 25.4 ID 25.4 ID 25.4 ID 25.4 ID 25.4 ID 19.05 ID 19.05	ID 28.6 ID 28.6 ID 25.4 Ø22.2 ID 19.05 ID 15.88 ID 19.05	D 9.53   D 12.7   D 15.88   O 25.4   Ø 19.05   D 15.88   D 9.53   D 15.88   D 6.35	ID 25.4 ID 15.88 OD 28.6 ID 12.7 ID 22.2 ID 19.05	ID 25.4 ID 15.88 OD 28.4 ID 12.7 ID 22.2 ID 19.05 Oty: 2	
HFQ-M212F	ID 38.1 ID 38.1 ID 38.1 ID 38.1 Ø31.75 Ø28.6	ID 25.4 ID 28.6 ID 28.6 ID 25.4 ID 25.4 ID 25.4 ID 25.4 ID 15.88 ID 12.7	ID 28.6 ID 28.6 ID 28.6 ID 25.4 Ø22.2 ID 22.2 ID 19.05 ID 12.7	D 25.4 ID 15.88 D 28.6 ID 12.7 ID 12.7 ID 19.05 Qry: 1	ID 25.4 ID 15.88 OD 28.6 ID 12.7 ID 22.2 ID 19.05 O'ty: 2	
HFQ-M302F	ID 31.75 ID 32.0 O31.75 O28.6 ID 28.6	ID 31.75 ID 32.0 Ø31.75 Ø31.75 Ø28.6	D 22.2   D 9.53   D 15.88   D 19.05   D 19.05   D 15.88   D 19.05   D 15.88   D 19.05   D 15.88   D 15.88   D 15.88   D 15.88   D 15.88   D 15.88   D 16.35   OD 31.75 ID 22.2  ID 28.6 Qty:1  ID 25.4 Qty:1  ID 25.4 ID 15.88  OD 28.6 D12.7  ID 22.2 ID 19.05  OY:1  OD 34.92  Qty:1	OD 31.75 ID 22.2  ID 28.6 ID 25.4 O'ty:1  ID 25.4 ID 15.88 OD 28.6 ID 12.7 ID 19.05 O'ty:1		

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

## Branch Pipe Paramet



Model	Gas Line	Liquid Line	Reducer for Gas Line	Reducer for Liquid Line
HFQ-052F	Ø15.88Xt1.2  Ø15.88Xt1.2  Ø15.88Xt1.2  Ø15.88Xt1.2	ID 9.7 Ø9.53Xt0.8 ID 6.5 ID 9.7 ID 9.7 ID 9.7 ID 6.5		
HFQ-102F	ID 22.2 ID 19.05 ID 15.88 Ø25.4 Ø19.05 ID 15.88 ID 19.05 ID 22.2 Ø22.2	Ø9.53   ID 6.35   ID 9.53   ID 6.35   Ø9.53   Ø9.53		ID 9.53 OD 6.35
HFQ-162F	Ø 22.2 Ø 25.4 Ø 22.2 ID 28.6 Ø 20.2 ID 19.05 ID 15.88 ID 15.88	Ø 12.7    D 12.7    Ø 9.53    D 12.7    ID 9.53    D 0.35    D 12.7    D 12.7	ID 25.4 OD 28.6 ID 15.88 ID 12.7 ID 19.05 Q'ty: 1	ID 9.53 OD 6.35
HFQ-242F	D 25.4   D 28.6   D 28.6   D 25.4   D 25.4   D 25.4   D 25.4   D 12.7   D	Ø 25.4 ID 9.53 ID 12.7 ID 15.88 ID 19.05 ID 15.88 ID 19.05 ID 19.05 ID 9.53 ID 6.35	ID 25.4 OD 28.6 ID 15.88 ID 12.7 ID 19.05	ID 9.53 OD 6.35
HFQ-302F	Ø31.75  ID 32.0  ID 38.1  Ø31.75  Ø28.6	Ø25.4 ID 19.05 ID 15.88 ID 19.05 ID 15.88 ID 19.05 ID 15.88 ID 15.88 ID 15.88 ID 15.88 ID 15.87 ID 9.53 ID 6.35	D 23.75  D 22.2  D 25.4  O 379:1  D 25.4  D 10.25.4  D 10.12.7  D	ID 9.53 OD 6.35
HFQ-682F	0D31.75 ID28.6 ID22.2 ID53.98 ID38.1 ID31.95 ID28.6 ID22.2 ID25.4 ID25.4 ID25.4 ID25.4 ID25.4 ID25.4 ID25.4 ID25.4 ID25.4 ID26.6 ID22.2 ID28.6 ID28.6 ID22.2 ID28.6 ID22.2 ID28.6 ID22.2 ID28.6 ID22.2 ID28.6 ID28.6 ID22.2 ID28.6 ID22.2 ID28.6 ID28.6 ID22.2 ID28.6 ID28.6 ID28.6 ID22.2 ID28.6	ID28.6 ID15.88 ID19.05 ID22.2 ID25.4 ID25.4 ID19.05 ID22.2 ID19.05 ID15.88		



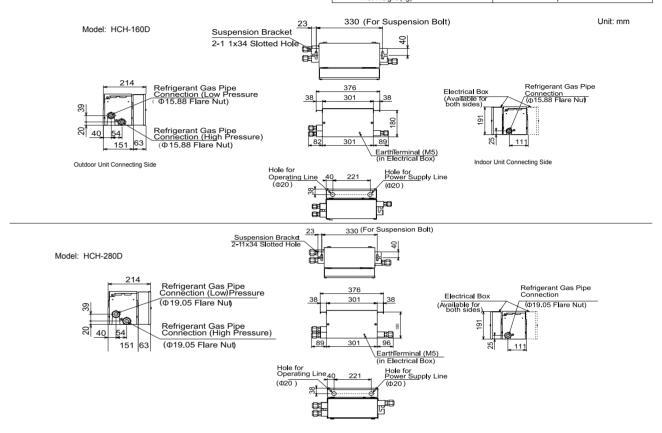
## Branch Pipe Parameter

Low Pressure Gas Line	High Pressure Gas Line	Liquid Line	Reducer for Low Pressure Gas Line	Reducer for High Pressure Gas Line	Reducer for Liquid Line
ID15.88   ID15.88   ID15.88   ID12.7   ID22.2   ID19.05   ID22.2   ID15.88   ID12.7   ID12.8   ID12.7   ID12.7   ID12.8   ID12.7   ID12.7   ID12.8   ID12.7   ID12.7   ID12.8   ID12.8   ID12.7   ID12.8   ID12.7   ID12.8   ID12.7   ID12.8   ID12.7   ID12.8   ID12.8   ID12.7   ID12.8   ID12.	Ø12.7 ID12.7 Ø9.53 ID12.7 ID9.53 ID12.7 ID9.53	Ø12.7 ID9.53 ID9.53 ID6.35		_	ID9.53 OD6 35 Q'ty :2
ID15.88   ID15.88   ID15.88   ID12.7   ID22.2   ID19.05   ID22.2   ID15.88   ID12.7   ID12.7   ID12.7   ID12.7   ID12.7   ID12.7   ID12.7   ID15.88   ID12.7   ID12	ID15.88   ID15.88   ID12.7   ID12.7   ID19.05   ID22.2   ID19.05   ID15.88   ID12.7   ID15.88   ID12.7   ID12.7   ID12.7   ID15.88   ID12.7   ID12.7   ID15.88   ID12.7   ID12.7   ID15.88   ID12.7   ID15.88   ID12.7   ID15.88   Ø12.7 ID9.53 ID9.53 ID9.53 ID6.35			ID9.53 OD6 35 Q'ty :2	
ID25.4   ID28.6   ID28.6   ID25.4   Ø25.4   Ø22.2   Ø22.2   ID22.2   ID15.88   ID12.7	ID25.4   ID28.6   ID25.4   I	Ø12.7 ID12.7 Ø 9.53 ID12.7 ID9.53 ID12.7 ID6.35	ID25.4	ID25.4   ID15.88 OD28.6   ID12.7 ID22.2   ID19.05 Q'ty :2	ID9.53 OD6 35 Q'ty :1
ID25.4   ID28.6   ID25.4   I	D25.4   D28.6   D25.4   D25.4   D25.4   D25.4   D25.2   D15.88   D19.05   D12.7	D15.88   D12.7   D15.88   D15	ID25.4 ID15.88 OD28.6 ID12.7 ID22.2 ID19.05 Q'ty :1	ID25.4 ID15.88 OD28.6 ID12.7 ID19.05	OD6 35 Q'ty :1
ID38.1 ID38.1 ID38.1 Ø31.75 Ø28.6 ID28.6	D25.4    D28.6    D25.4	ID22.2   ID15.88   ID19.05   ID19.05   ID12.7   ID22.2   ID15.88   ID12.7   ID9.53   ID6.35   ID6.35	ID25.4   ID15.88   ID12.7   ID22.2   ID19.05   Q'ty :1   ID22.2   ID25.4   Q'ty :1   ID25.4   Q'ty :1   ID25.4   Q'ty :1   ID25.4   Q'ty :1   ID25.4   ID2	ID25.4 ID15.88 OD28.6 ID12.7 ID22.2 ID19.05 Q'ty :1	OD6 35
ID38.1 ID31.75 ID38.1 Ø31.75 Ø28.6 ID28.6	ID38.1 ID31.75 ID38.1 Ø31.75 Ø28.6 ID28.6	ID22.2   ID9.53   ID19.05   ID19.0	OD31.75 ID22.2 ID28.8 ID25.4 O'ty :1 ID22.2 ID15.88 OD28.5 ID15.8 OD28.5 ID16.05 O'ty :1 OD28.5 OD38.1 OD38.75 OD38.1 OD38.75 OD38.1	ID25.4 ID15.88 OD28.6 ID12.7 ID22.2 ID19.05	OD6 35
	D15.88   D15.88   D12.7   D19.05   D1	D15.88	Cas Line  Cas Li	Gas Line  Gas Line  Cas Line  Liquid Line  Low Pressure Gas Line Low Pressure Gas Line  Low Pressure Gas Line  Low Pressure Gas Line Low Press Gas Line Low Pressure Gas Line Low Press Gas Line Low Press Gas Line Low Press Gas Line Gas Line Gas Line Gas Line Gas Line Gas Line Gas Line Gas Line Gas Line Gas Line Gas Line Gas Line Gas	Cas Line   Cas Line



## | Switch Box

Model	HCH-160D	HCH-280D
Power Supply	АС1Ф 220~240V/50Hz,220V/60Hz	
Refrigerant	R410A	
Input (W)		
Connectable Indoor UnitTotal Capacity	less than 54kBtu/h	55 to 96kBtu/h
Number of ConnectableIndoor Unit	1 to 7	1 to 8
Net Weight (kg)	7	,



## Filter

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

Model	Applicable models	Picture
AVD-76*	HF-224L-FE	
AVD-96*	HF-280L-FE	

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

Model	Applicable models	Picture
AVD-76*	HF-224L-FE	
AVD-96*	HF-280L-FE	

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

Model	Applicable models	Picture			
AVE-07~14*	KW-AC2Q				
AVE-17~24*	KW-BC2Q	<i>!!</i>			

#### Ceiling Ducted Type(Slim)

Model	Applicable models	Picture
AVE-07~14*	HF-40L-ZFE	

## Drain Pump—Optional

Model	Power supply	Consumption	MAX. Lift (mm)	Applicable models	HPS-132/HPS-162	HPS-151
HPS-132	AC 220~240V(50/60Hz)	9±1.5 W	900	For Ceiling ducted type(0.8 2.5Hp)	4	
HPS-162	AC 220~240V(50/60Hz)	9±1.5 W	900	For Ceiling ducted type(3.0 6.0Hp)	G	A COMMANDER
HPS-151	AC 220~240V(50/60Hz)	9±1.5 W	600	External type,for general purpose(0.8 10Hp)	GI	

#### Technology

We are passionate about technology and making it accessible to the world.

We believe that for technology to be truly innovative, it has to be accessible. It's not about what it is; it's about what it does. Technology connects us to our passion. It should make our world a better place. It should make what we want to do, where we want to go, and what we want to learn easier. And, it should be easy to use and available to everyone. Our mission is to develop technological innovations that improve the lives of others. We want our customers to happily exclaim, "Life is better with Hisense."

#### Warranty

We are passionate about standing behind our products.

We believe that products should perform so well that customers shouldn't need a warranty, but unexpected things happen. Therefore, all our products come with a warranty to provide peace of mind that, should something go wrong, we will stand behind our products.

#### Quality & Value

We are passionate about building dependable, easy-to-use, affordable products.

We believe the best things in life exceed expectations and that everyone should be able to enjoy the benefits of state-of-the-art technology. We take pride in the quality of our products. Our stringent Quality Improvement Process helps ensure we offer products that we're proud to sell and that you are proud to own. We want you to feel confident when buying Hisense, because we're a reliable brand that you can trust. Our "best value for your money" commitment gives our customers assurance that buying Hisense is the smart choice.

#### Service

We are passionate about making our customers happy.

We believe that manufactures need to be there after the sale. Technology changes rapidly and sometimes you need a little guidance along the way. Our service team is here to help. And, if you should have a problem, we want to help get it solved as fast as possible. Additionally, our service team works side-by-side with R&D, engineering, sales and marketing to ensure companywide understanding of our customers and how our products are performing.





