

# ARV 6 Series



## VER Technology

### Variable Energy-efficiency Regulation

Evaporating and condensing temperature makes strong effect to the cooling and heating performance and energy-efficiency ratio of AC system.

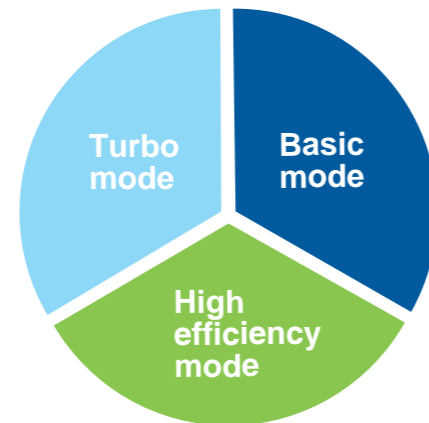
Thanks to VER technology, ARV6 series has various modes with different refrigerant temperature which lead the system to different performance and energy-efficiency ratio.

**Cooling:** 3 modes with different evaporating temperature.  
**Heating:** 3 modes with different condensing temperature.

**Turbo mode**  
 High cooling and heating performance, cool down or warm up the room rapidly.

**Basic mode**  
 Default mode, balance the reaction speed and efficiency.

**High efficiency mode**  
 Satisfy the lowest capacity requirement and low the energy consumption.



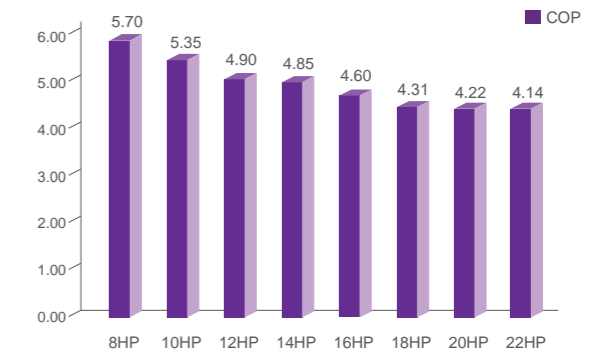
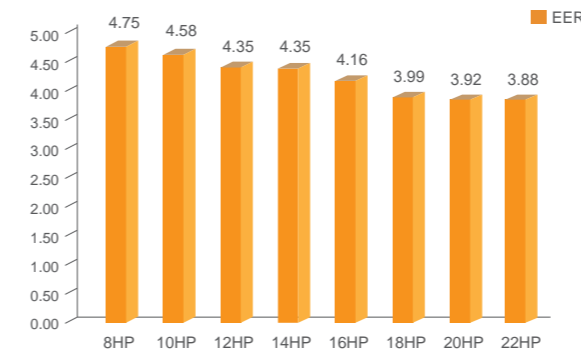
Users can choose a certain mode according to the actual need in different area and climate, so that the system can satisfy various requirement, and the seasonal efficiency can be optimized.

## High Efficiency and Energy Saving

### High Eer And Cop

ARV 6 Series achieves the industry's top class energy efficiency in cooling and heating by utilizing all DC inverter compressors, and Enhanced vapor injection.

The cooling EER is up to 4.75 and the heating COP is up to 5.70 in the 8HP category.



### All DC Inverter

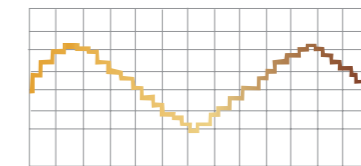
New generation DC inverter compressor, high efficiency, large capacity and wide operation range.

DC fan motor, optimized designed fan blade and wind scooper, enhance the air flow volume and reduce the noise.

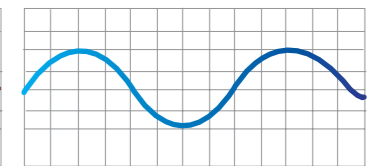


### 180° Sine Wave Control

DC inverter compressor users 180° sine wave vector control technique makes motor operate smooth and increases the efficiency. significantly compared with traditional sawtooth wave. It also can lower the noise level.



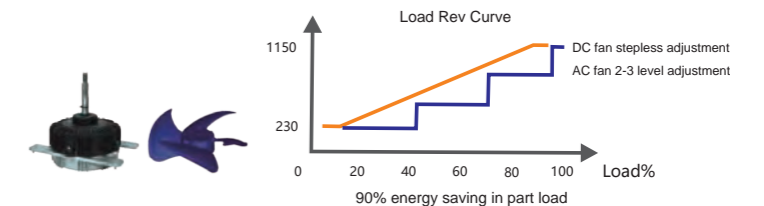
Traditional Control



180° Sine Wave DC Control

### DC Brushless Fan Motor

DC brushless motor adjusts the fan speed according to the system pressure, and running load to enhance the efficiency by 45%. The super aero fan provides a larger air volume and higher static pressure.



## Enhanced Vapor Injection DC Inverter Compressor

### EVI-Enhanced vapor injection

Heating condition, reducing the outlet temperature, increasing the compressor capacity, improving the heating performance.

### Optimize the asymmetric vortex design

Heating condition, reducing the outlet temperature, increasing the compressor capacity, improving the heating performance.

### Dynamic oil balance structure

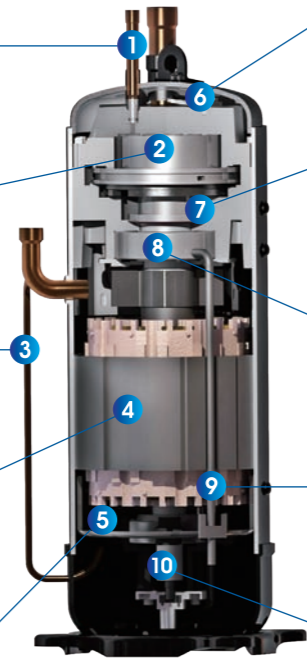
Oil balance tube implementation parallel compressor and oil quantity dynamic equilibrium, ensuring the reliability of several paralleled compressors.

### High efficiency motor configuration

Using high quality material concentrated stator, cooperate with neodymium magnet rotor, having outstanding efficiency.

### High pressure cavity structure

Large exhaust buffer volume, reducing the air flow noise and vibration of the runtime.



### Pressure relief valve structure

Improving the partial load efficiency, adapt to the transformer ratio working condition, improving the compressor performance.

### The intermediate pressure servo mechanism

According to the operation pressure among dynamic adjusting middle pressure, has realized the axial flexible, optimization of dynamic vortex disk meshing, improve product performance.

### High reliability of the bearing

Adopt cylinder bearing and self-aligning ball bearing bearing group, improving the reliability of the compressor.

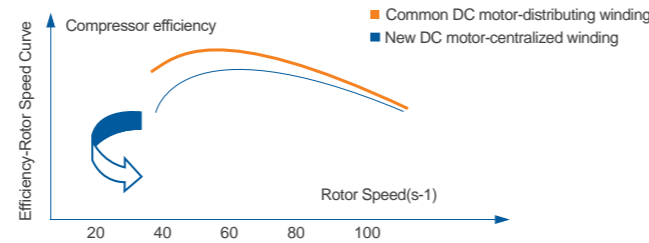
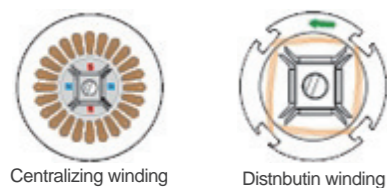
### Internal oil circulation structure

Lubricating oil to achieve internal circulation, reducing heat loss, decreasing the rate of spitting oil, improve the efficiency and reliability.

### Positive displacement gear oil pump

Positive displacement gear oil pump to ensure the high and low frequency can satisfy the oil supply, improving the reliability of the compressor.

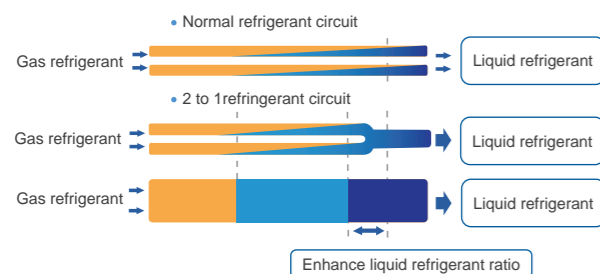
High-efficient permanent magnetic motors are installed, giving better performance than traditional DC inverter compressors.



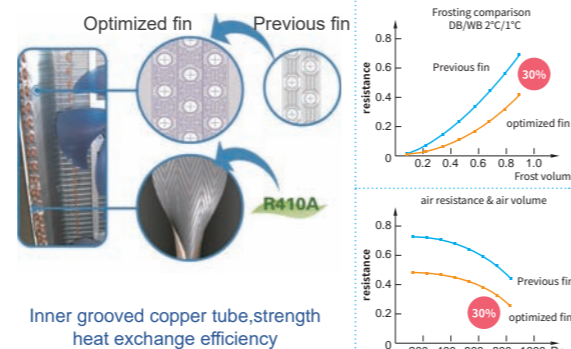
Powerful magnets provide high torque and efficiency and achieve 70% reduction in volume.

## High Efficient Heat Exchanger

Optimized 2 to 1 refrigerant circuit design, increase the heat exchanging efficiency and enhance the ratio of liquid which flow to the evaporator.

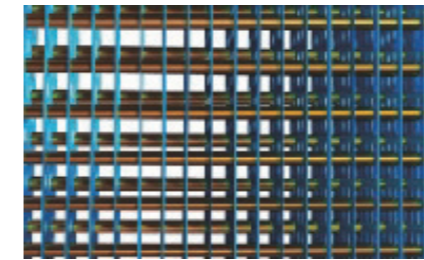
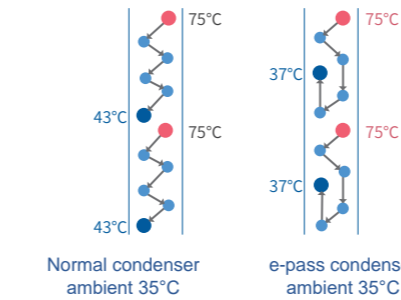


Optimized fin design, reduces the water resistance and wind resistance.



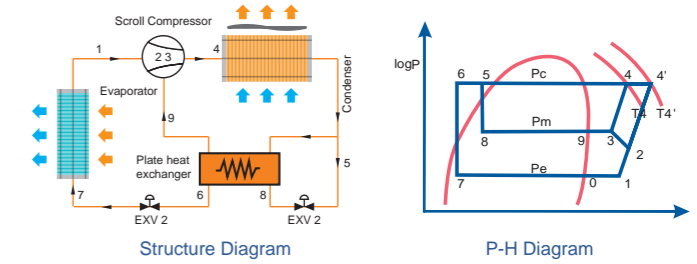
## 3-step Sub-cooling Technology

Optimize the design of the condenser 12°C sub-cooling by optimized refrigerant circuit and "Inverse fin type" window fin design.



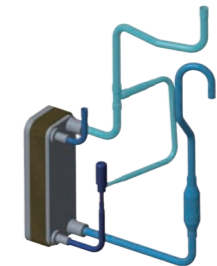
"Inverse fin type" window fin design

5.5°C sub-cooling by special plate heat exchanger further reduce the refrigerant temperature flowing into the indoor unit.



14.5°C sub-cooling by dual EXV with a special and effective plate heat exchanger.

- Low cold
- Mid cold
- High cold
- Super cold



## 4-times Anticipation Energy-saving Control Technology

### Module anticipation energy-saving control technology

In partial load, intelligent judgment single operation and the efficiency of the module keep the minimum power consumption.



### Compressor anticipation energy-saving adjustment technology

Control compressors quantity and operating frequency, to get higher energy efficiency ratio in partial load. Compressor parallel technology.



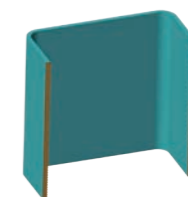
### Fan anticipation energy-saving adjustment technology

Control running quantity and operating frequency, obtain higher energy efficiency ratio under partial load.



### Refrigerant anticipation energy-saving technology adjustment

Adjust the opening of the electronic expansion valve, to improve the effect of condenser heat transfer, to get higher energy efficiency ratio under partial load.



# Wide Application Range

## Large Capacity & Free Combination

8 basic models from 8HP to 22HP.  
Maximum combination: 88HP(246kW), top level in industry.  
Less quantity of system, space saving, easy installation and low cost.



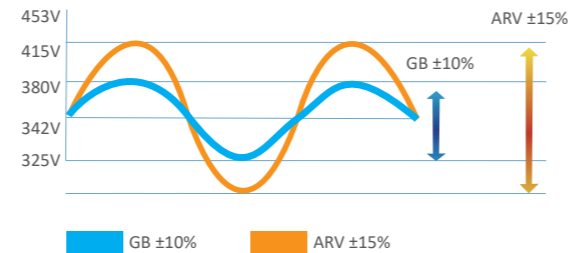
## Wide Operation Range

No matter in hot summer or cold winter, ARV6 can supply comfortable environment for users.



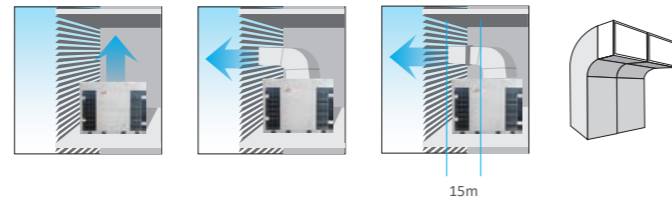
## Wide Voltage Design

In Country with unstable voltage, ARV system still could run stably.



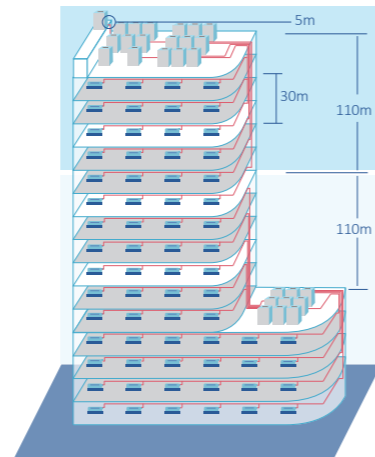
## Changeable ESP

Optimized fan provide outdoor unit up to 110Pa static pressure. Outdoor units can be installed in the service floor or facility room.



## Long Piping Length

Thanks to the DC inverter control technology and sub-cooling circuit technology, it is possible to design a system with longer piping and elevation difference which make it easier to design and installation.



- Max. Total piping length — 1000m
- Max. Actual piping length — 240m
- Max. piping length from 1st indoor branch to the farthest indoor unit — 40m/90m\*
- Max. Level difference between outdoor units — 5m
- Max. Level difference between indoor units — 30m
- Max. Level difference between ODU and IDU units — 110m

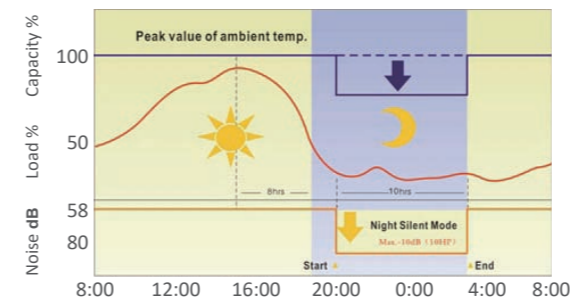
\*The longest length after first branch is 40m as standard can be extended to up to 90m under certain conditions. Please contact your local dealer for further information.

# Comfortable And Healthy Environment

## Silence Operation

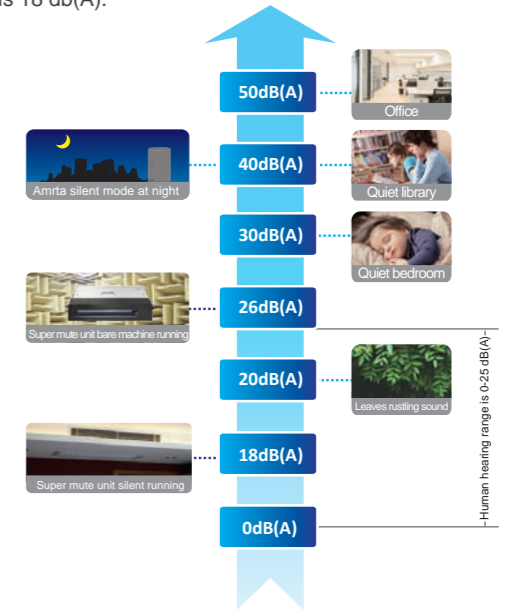
### Outdoor Unit Quiet Mode

By using optimized fan blades and the CFD (computational Fluid Dynamics) technology, the product is equipped with the night low-noise operation function. Provide more quiet operation during the night. Minimum operation noise only 45dB(A)



### Indoor Unit Quiet Mode

Innovative centrifugal fan for large diameter and a new design of the spiral duct system equipped with high-quality motor at the same time, making the air supply more quietly and smoothly. The lowest noise is 18 db(A).

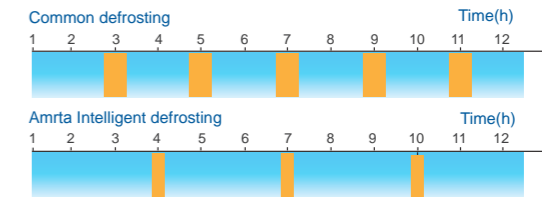


## Intelligent Defrosting

Variable parameters defrost through temperature and pressure sensors, to grasp time accurately which can defrost or heat normally.

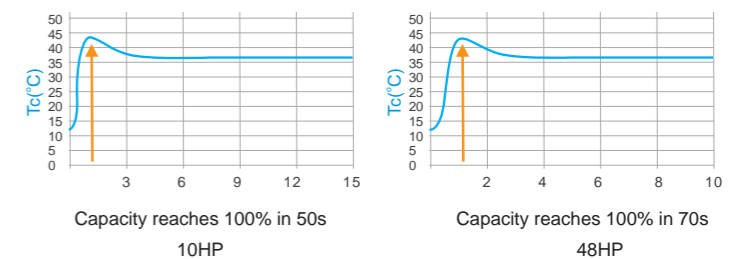
Base on the main unit and at the end of the EXV control the output, fast bolt in liquid refrigerant system, unit operation is more stable; Through the dry run, defrosting exhaust temperature higher, more complete, more conventional. The defrosting time less 3 min than others at least.

Refrigerant pipeline design to ensure outdoor heat exchanger bottom no frost during heating and ice water mixture discharge smoothly when defrosting.



## Fast Warm Up And Cool Down

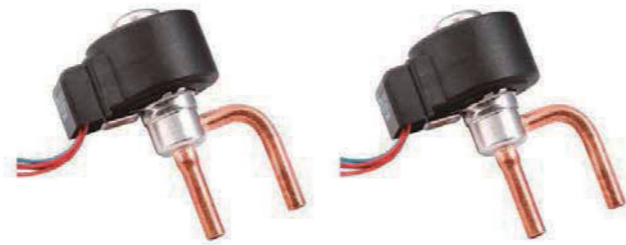
The DC Inverter Compressor system reaches full load rapidly providing less temperature fluctuation and an improved living environment, bring great user experience.





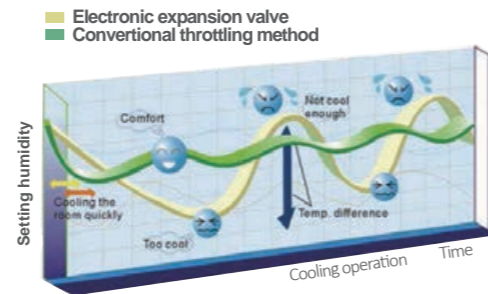
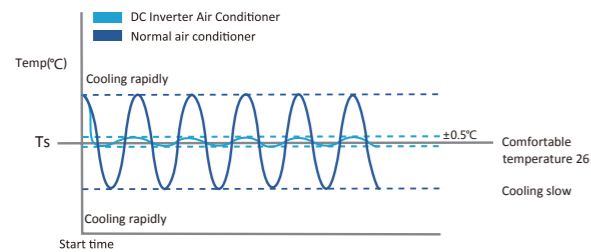
### Precise Temperature Control

Double EXVs Control  
 Double EXVs in one system ,each EXV part achieves 480 Plus rate to precisely adjust refrigerant flow.



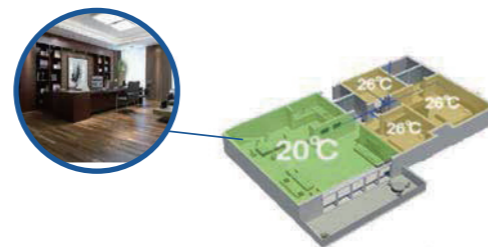
Amrta composite temperature control technology, through the indoor/outdoor operation condition detection, adjust outdoor power output, optimize the indoor air distribution, achieve the high precision adjustment of 0.5°C.

The unit uses PI calculation principle to calculate the percentage of indoor capacity demand according to indoor temperature fluctuations, to perform real-time control to the compressor operating frequency and through the double EXV adjustment, precision up to level 1000, accurately control the refrigerant flow, assure indoor comfort.

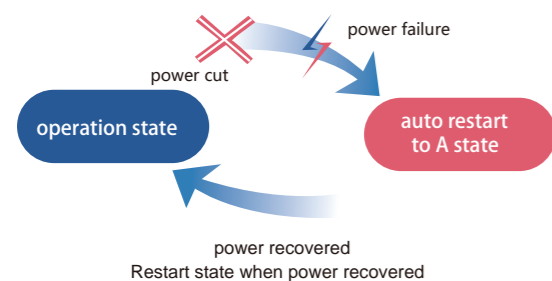


### Humanization Design

**VIP Function**  
 Special VIP control function, the VIP room will decide the whole system operation mode, prior to other mode or economic locking function, ensure the priority of the important room.



**Auto Restart Function**  
 The AC can automatically memorize the operation setting when power is cut off accidentally. It can return to previous setting when power resumes. Recover the former operation state when power is restored , no need restart the unit manually



**Economic Locking Function**  
 Special design economic locking function, through outdoor PCB switch setting. If work in economic lock, AC lowest work cooling temperature will keep in 26°C and highest heating temperature keep 20°C.



## Easy Installation & Maintenance

### Saving Installation Space

Less quantity of system, space saving, easy installation and low cost.



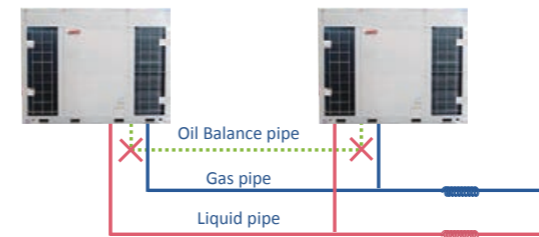
22HP: Required Space Reduced by 44%



88HP: Required Space Reduced by 36%

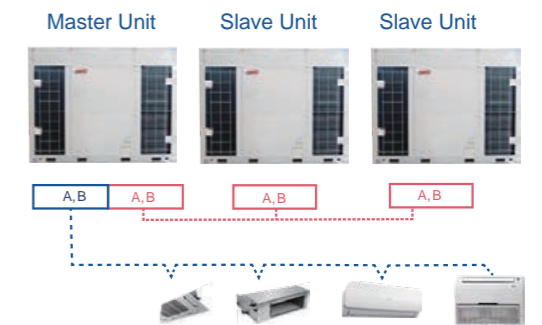
### No Oil Balance Pipe Between ODUS

High efficient oil/gas separating tech,make the system oil balance between compressors without oil balance pipe.



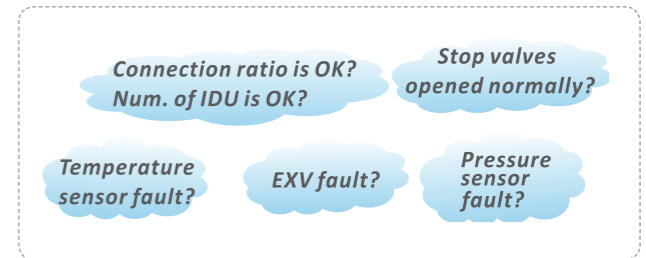
### Non-Polar Communication

No polar in communication wire ,easy installation and commissioning.



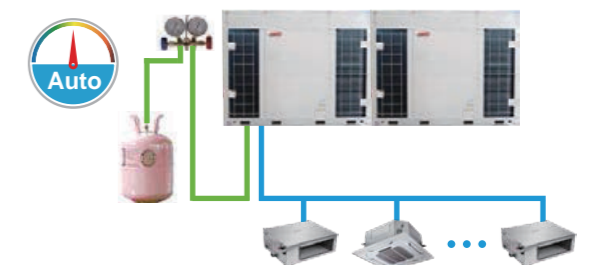
### Auto Commissioning

When commissioning, the outdoor mainboard can check the operation state and show the corresponding error code in engineering mode. Find out the faults when commissioning, enhance the reliability of the system.



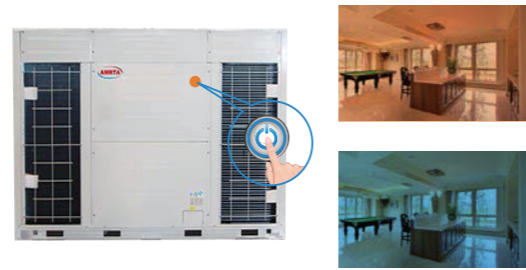
### Auto Refrigerant Recycling &Auto Refrigerant Charging

Refrigerant can be recycled to the outdoor units or indoor units when maintenance is need. The outdoor unit can adjust the refrigerant amount according to the operation parameters such as pressure and temperature, and remind the installation personnel to stop charging.



### One Button Test Run

Press the button lightly once in the motherboard outdoor, to realize the cooling and heating test run, don't need to open indoor machine one by one.



### Auto Dust Removal & Auto Snow-Blowing

The outdoor fan can blow away covered snow every 30 minutes(or other given time) without manual cleaning, especially suitable for cold areas.

The outdoor fan can rotate in reverse direction to remove dust on heat exchanger to ensure the heat exchange performance.

### Rotatable Electric Control Box

Rotating electric control box design, using the new rotating electric control box, humanized design makes maintenance more convenient, without disassembling control box.



### Black BOX Function

Using aviation grade Black BOX technique, memorizing operation parameters before the failure, finding fault information quickly, as an accurate, efficient maintenance services to provide valuable information, maintenance more convenient.



### 360° Pipe-connecting Mode

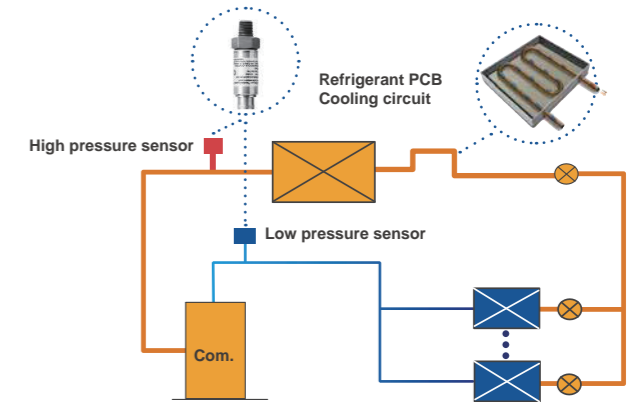
ARV-6 series can be on the front, left side, right side to choose pipe-connecting direction freely, it's easy to install.



## Reliable & Stable

### Refrigerant PCB Cooling System

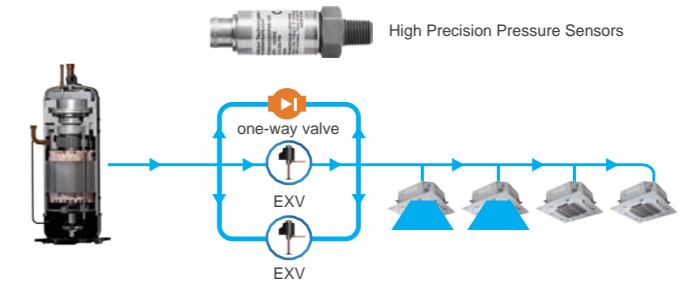
The PCB is well cooled by the refrigerant, ensuring the system operate steadily even in tropical area. Frequency limit of inverter compressor can be relaxed, so that the output capacity of ODU can be higher than conventional products.



### Precise Refrigerant Control

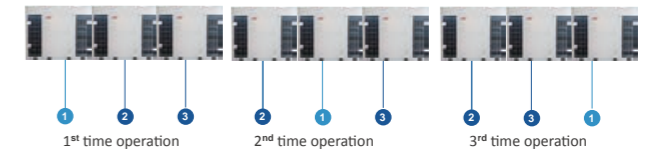
Real-time monitoring the discharge and suction pressure of the system.

The output of compressors and the EXV open degree can be regulated precisely to optimize the compression ratio. Ensuring the compression ratio always in safety zone.



### Module Alternate Operation

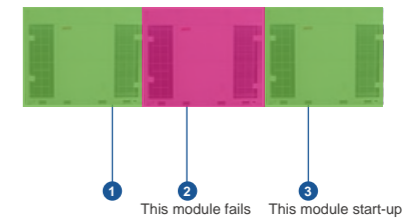
In one combination system, any module could run as the master unit according to the running time. Balance the life of the outdoor units in one system.



### Back-Up Operation Technology

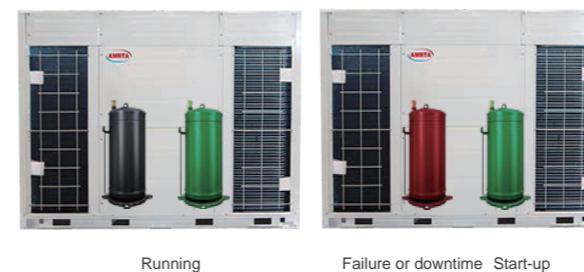
#### Module Back-Up Technology

As one module breaks down, the rest of modules in the same refrigerant system start-up urgently.



#### Compressor Back-Up Technology

As one fan motor breaks down, the rest of fan in the outdoor unit start-up, ensure the outdoor unit is normal operation.



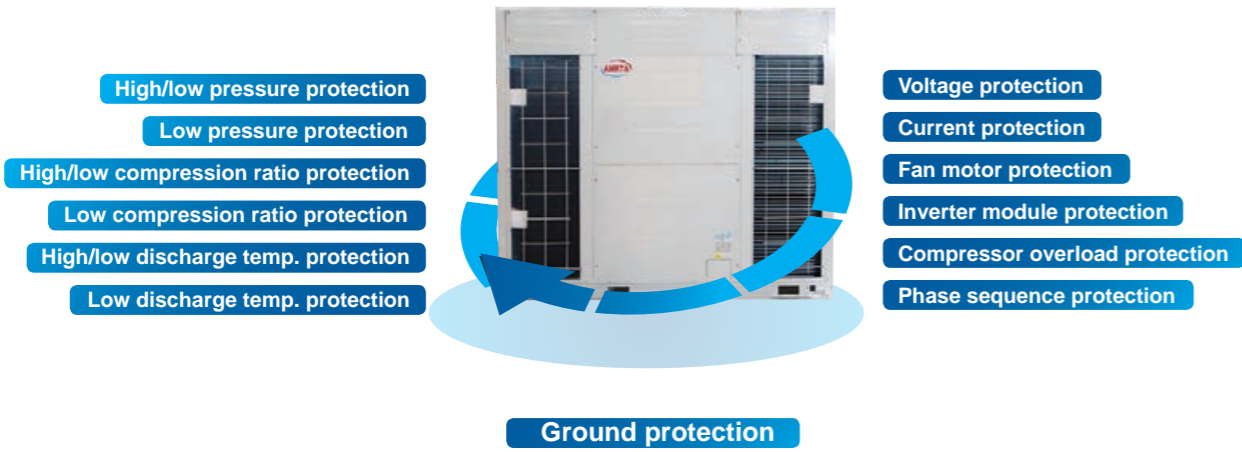
#### Fan Motor Back-Up Technology

As one fan motor breaks down, the rest of fan in the outdoor unit start-up, ensure the outdoor unit is normal operation.



# Reliable & Stable

## All-round Protection

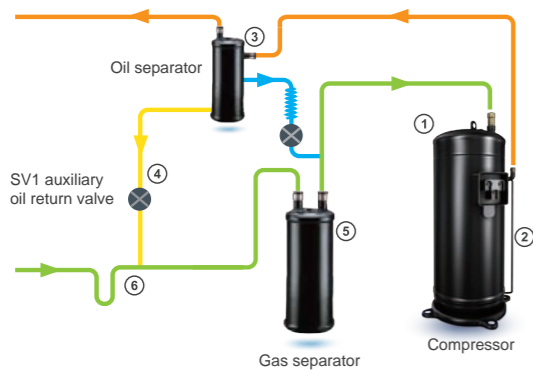


## Oil Return Control Technology

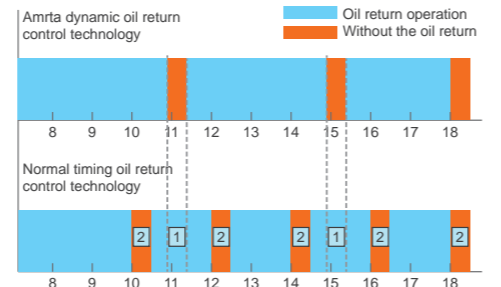
**Dynamic Oil Return Control Technology**  
 Monitor compressor running state and running time, computing system reasonable oil return time.

**6-Step Oil Separating Technology**  
 Completely solve the problem of oil, the system more stable and reliable

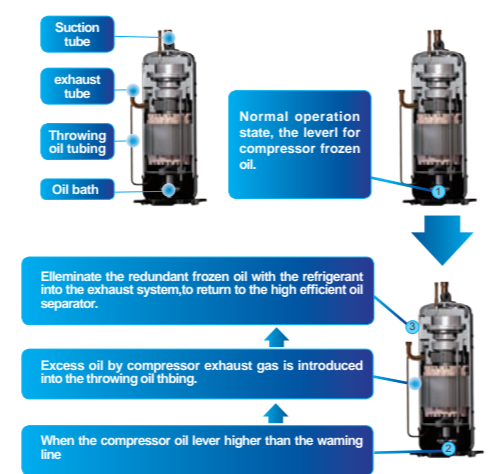
**Compressor Throwing Oil Technology**  
 When the compressor oil level higher than the warning line, system through tubing eliminate redundant frozen oil, keep the oil balance between compressor.



- ① Compressor with oil mist separation
- ② Oil self balancing control design
- ③ High efficient oil separator
- ④ Emergency oil circuit design
- ⑤ Gas-liquid separator oil return
- ⑥ System with oil return design



- 1 Need oil return but there was no oil return operation, which can't guarantee the system stability and reliability.
- 2 Without oil return operation is to carry on the oil return operation, which cause unnecessary waste.



# ARV 6 Series



kW	HP	Flexible Outdoor Unit Combination							
		8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP
25.2	8	★							
28.0	10		★						
33.5	12			★					
40.0	14				★				
45.0	16					★			
50.4	18						★		
56.0	20							★	
61.5	22								★
67.0	24			★★					
73.0	26		★			★			
78.5	28			★		★			
84.0	30		★					★	
89.5	32		★						★
95.0	34			★					★
101.5	36				★				★
106.5	38					★			★
111.9	40						★		★
117.5	42							★	★
123.0	44								★★
128.5	46			★★					★
134.5	48		★			★			★
140.0	50			★		★			★
145.5	52		★					★	★
151.0	54		★						★★
156.5	56			★					★★
163.0	58				★				★★
168.0	60					★			★★
173.4	62						★		★★
179.0	64							★	★★
184.5	66								★★★
190.0	68			★★					★★
196.0	70		★			★			★★
201.5	72			★		★			★★
207.0	74		★					★	★★
212.5	76		★						★★★
218.0	78			★					★★★
224.5	80				★				★★★
229.5	82					★			★★★
234.9	84						★		★★★
240.5	86							★	★★★
246.0	88								★★★★

\*The above combination types are factory-recommended type. The combined type also can be combined at will.



## ARV 6 Series 380~415V-50/60Hz

HP			8	10	12	14
Model			ARV-H250/SR1MV	ARV-H280/SR1MV	ARV-H330/SR1MV	ARV-H400/SR1MV
Combination	HP		8	10	12	14
Capacity	Cooling	kW	25.2	28	33.5	40
	Heating	kW	28	31.5	37.5	45
Electric Data	Power supply	V-,Hz,Ph	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3
	Cooling input	kW	5.31	6.11	7.70	9.20
	EER	W/W	4.75	4.58	4.35	4.35
	Heating input	kW	4.91	5.89	7.65	9.28
	COP	W/W	5.70	5.35	4.90	4.85
Performance	Air Flow Volume	m <sup>3</sup> /h	12000	12000	12000	14000
	Sound Pressure level	dB(A)	≤58	≤58	≤58	≤61
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		1	1	1	1
Fan motor	Type		DC motor	DC motor	DC motor	DC motor
	Quantity		1	1	1	2
Max. No. of Indoor Units	unit		13	16	20	23
Connection Ratio	%		50~200	50~200	50~200	50~200
Dimension (WxDxH)	Net	mm	990×765×1635	990×765×1635	990×765×1635	1340×765×1635
	Packing	mm	1050×815×1805	1050×815×1805	1050×815×1805	1400×815×1805
Weight	Net	kg	215	215	230	265
	Gross	kg	225	225	240	280
Pipe Diameter	Liquid Side	mm	12.7	12.7	12.7	15.88
	Gas Side	mm	22.2	22.2	22.2	28.6
Operation Range	Cooling	°C	-15~52	-15~52	-15~52	-15~52
	Heating	°C	-25~24	-25~24	-25~24	-25~24
Stuffing Quantity	20/40/40H	unit	14/28/28	14/28/28	14/28/28	11/22/22

## ARV 6 Series 380~415V-50/60Hz

HP			16	18	20	22
Model			ARV-H450/SR1MV	ARV-H500/SR1MV	ARV-H560/SR1MV	ARV-H610/SR1MV
Combination	HP		16	18	20	22
Capacity	Cooling	kW	45	50.4	56	61.5
	Heating	kW	50	55.5	63	69
Electric Data	Power supply	V-,Hz,Ph	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3
	Cooling input	kW	10.82	12.63	14.29	15.85
	EER	W/W	4.16	3.99	3.92	3.88
	Heating input	kW	10.87	12.88	14.93	16.67
	COP	W/W	4.60	4.31	4.22	4.14
Performance	Air Flow Volume	m <sup>3</sup> /h	14000	16000	16000	16000
	Sound Pressure level	dB(A)	≤61	≤63	≤63	≤63
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		1	2	2	2
Fan motor	Type		DC motor	DC motor	DC motor	DC motor
	Quantity		2	2	2	2
Max. No. of Indoor Units	unit		26	30	33	36
Connection Ratio	%		50~200	50~200	50~200	50~200
Dimension (WxDxH)	Net	mm	1340×765×1635	1340×765×1635	1340×765×1635	1340×765×1635
	Packing	mm	1400×815×1805	1400×815×1805	1400×815×1805	1400×815×1805
Weight	Net	kg	265	330	330	330
	Gross	kg	280	345	345	345
Pipe Diameter	Liquid Side	mm	15.88	15.88	15.88	15.88
	Gas Side	mm	28.6	28.6	28.6	28.6
Operation Range	Cooling	°C	-15~52	-15~52	-15~52	-15~52
	Heating	°C	-25~24	-25~24	-25~24	-25~24
Stuffing Quantity	20/40/40H	unit	11/22/22	11/22/22	11/22/22	11/22/22

Notes:

- Cooling Capacity: Indoor temperature 27°C DB/19°C WB; Outdoor temperature:35°C DB/ 24°C WB.
- Heating Capacity: Indoor temperature 20°C DB; Outdoor temperature: 7°C DB/ 6°C WB.
- Piping Length: Equivalent piping length: 7.5m, level difference: 0m.
- We can guarantee the operation only within 130% Combination. If you want to connect more than 130% combination, please contact us and discuss the requirement.
- Anechoic chamber conversion value, measured in test room. During actual operation. These values are normally somewhat higher as a result of ambient conditions.
- The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.
- Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.
- The above combined types are factory-recommended type. The combined type also can be combined at will.

## ARV 6 Series 380~415V-50/60Hz

HP			24	26	28	30
Model			ARV-H670/SR1MV	ARV-H730/SR1MV	ARV-H780/SR1MV	ARV-H840/SR1MV
Combination	HP		12+12	10+16	12+16	10+20
Capacity	Cooling	kW	67	73	78.5	84
	Heating	kW	75	81.5	87.5	94.5
Electric Data	Power supply	V-,Hz,Ph	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3
	Cooling input	kW	15.40	16.93	18.52	20.40
	EER	W/W	4.35	4.31	4.24	4.12
	Heating input	kW	15.30	16.76	18.52	20.82
	COP	W/W	4.90	4.86	4.72	4.54
Performance	Air Flow Volume	m <sup>3</sup> /h	12000x2	12000+14000	12000+14000	12000+16000
	Sound Pressure level	dB(A)	≤58	≤61	≤61	≤63
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		2	2	2	3
Fan motor	Type		DC motor	DC motor	DC motor	DC motor
	Quantity		2	3	3	3
Max. No. of Indoor Units	unit		40	42	46	49
Connection Ratio	%		50~200	50~200	50~200	50~200
Dimension (WxDxH)	Net	mm	(990×765×1635)×2	990×765×1635+1340×765×1635	990×765×1635+1340×765×1635	990×765×1635+1340×765×1635
	Packing	mm	(1050×815×1805)×2	1050×815×1805+1400×815×1805	1050×815×1805+1400×815×1805	1050×815×1805+1400×815×1805
Weight	Net	kg	230×2	215+265	230+265	215+330
	Gross	kg	240×2	225+280	240+280	225+345
Pipe Diameter	Liquid Side	mm	15.88(5/8)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Gas Side	mm	28.6(9/8)	34.93(11/8)	34.93(11/8)	34.93(11/8)
Operation Range	Cooling	°C	-15~52	-15~52	-15~52	-15~52
	Heating	°C	-25~24	-25~24	-25~24	-25~24

## ARV 6 Series 380~415V-50/60Hz

HP			32	34	36	38
Model			ARV-H890/SR1MV	ARV-H950/SR1MV	ARV-H1010/SR1MV	ARV-H1060/SR1MV
Combination	HP		10+22	12+22	14+22	16+22
Capacity	Cooling	kW	89.5	95	101.5	106.5
	Heating	kW	100.5	106.5	114	119
Electric Data	Power supply	V-,Hz,Ph	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3
	Cooling input	kW	21.96	23.55	25.05	26.67
	EER	W/W	4.07	4.03	4.05	3.99
	Heating input	kW	22.56	24.32	25.95	27.54
	COP	W/W	4.46	4.38	4.39	4.32
Performance	Air Flow Volume	m <sup>3</sup> /h	12000+16000	12000+16000	14000+16000	14000+16000
	Sound Pressure level	dB(A)	≤63	≤63	≤63	≤63
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		3	3	3	3
Fan motor	Type		DC motor	DC motor	DC motor	DC motor
	Quantity		3	3	4	4
Max. No. of Indoor Units	unit		52	56	59	62
Connection Ratio	%		50~200	50~200	50~200	50~200
Dimension (WxDxH)	Net	mm	990×765×1635+1340×765×1635	990×765×1635+1340×765×1635	(1340×765×1635)×2	(1340×765×1635)×2
	Packing	mm	1050×815×1805+1400×815×1805	1050×815×1805+1400×815×1805	(1400×815×1805)×2	(1400×815×1805)×2
Weight	Net	kg	215+330	230+330	265+330	265+330
	Gross	kg	225+345	240+345	280+345	280+345
Pipe Diameter	Liquid Side	mm	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Gas Side	mm	34.93(11/8)	34.93(11/8)	41.3(13/8)	41.3(13/8)
Operation Range	Cooling	°C	-15~52	-15~52	-15~52	-15~52
	Heating	°C	-25~24	-25~24	-25~24	-25~24

Notes:

- Cooling Capacity: Indoor temperature 27°C DB/19°C WB; Outdoor temperature:35°C DB/ 24°C WB.
- Heating Capacity: Indoor temperature 20°C DB; Outdoor temperature: 7°C DB/ 6°C WB.
- Piping Length: Equivalent piping length: 7.5m, level difference: 0m.
- We can guarantee the operation only within 130% Combination. If you want to connect more than 130% combination, please contact us and discuss the requirement.
- Anechoic chamber conversion value, measured in test room. During actual operation. These values are normally somewhat higher as a result of ambient conditions.
- The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.
- Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.
- The above combined types are factory-recommended type. The combined type also can be combined at will.

## ARV 6 Series 380~415V-50/60Hz

HP			40	42	44	46
Model			ARV-H1120/SR1MV	ARV-H1170/SR1MV	ARV-H1230/SR1MV	ARV-H1280/SR1MV
Combination	HP		18+22	20+22	22+22	12x2+22
Capacity	Cooling	kW	111.9	117.5	123	128.5
	Heating	kW	124.5	132	138	144
Electric Data	Power supply	V-,Hz,Ph	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3
	Cooling input	kW	28.48	30.14	31.70	31.25
	EER	W/W	3.93	3.90	3.88	4.11
	Heating input	kW	29.54	31.60	33.33	31.97
	COP	W/W	4.21	4.18	4.14	4.50
Performance	Air Flow Volume	m <sup>3</sup> /h	16000x2	16000x2	16000x2	12000x2+16000
	Sound Pressure level	dB(A)	≤63	≤63	≤63	≤63
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		4	4	4	4
Fan motor	Type		DC motor	DC motor	DC motor	DC motor
	Quantity		4	4	4	4
Max. No. of Indoor Units	unit		64	64	64	64
Connection Ratio	%		50~200	50~200	50~200	50~200
Dimension (WxDxH)	Net	mm	(1340x765x1635)x2	(1340x765x1635)x2	(1340x765x1635)x2	(990x765x1635)x2+1340x765x1635
	Packing	mm	(1400x815x1805)x2	(1400x815x1805)x2	(1400x815x1805)x2	(1050x815x1805)x2+1400x815x1805
Weight	Net	kg	330x2	330x2	330x2	230x2+330
	Gross	kg	345x2	345x2	345x2	240x2+345
Pipe Diameter	Liquid Side	mm	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Gas Side	mm	41.3(13/8)	41.3(13/8)	41.3(13/8)	41.3(13/8)
Operation Range	Cooling	°C	-15~52	-15~52	-15~52	-15~52
	Heating	°C	-25~24	-25~24	-25~24	-25~24

## ARV 6 Series 380~415V-50/60Hz

HP			48	50	52	54
Model			ARV-H1340/SR1MV	ARV-H1400/SR1MV	ARV-H1450/SR1MV	ARV-H1510/SR1MV
Combination	HP		10+16+22	12+16+22	10+20+22	10+22x2
Capacity	Cooling	kW	134.5	140	145.5	151
	Heating	kW	150.5	156.5	163.5	169.5
Electric Data	Power supply	V-,Hz,Ph	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3
	Cooling input	kW	32.78	34.37	36.25	37.81
	EER	W/W	4.10	4.07	4.01	3.99
	Heating input	kW	33.43	35.19	37.49	39.22
	COP	W/W	4.50	4.45	4.36	4.32
Performance	Air Flow Volume	m <sup>3</sup> /h	12000+14000+16000	12000+14000+16000	12000+16000x2	12000+16000x2
	Sound Pressure level	dB(A)	≤63	≤63	≤63	≤63
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		4	4	5	5
Fan motor	Type		DC motor	DC motor	DC motor	DC motor
	Quantity		5	5	5	5
Max. No. of Indoor Units	unit		64	64	64	64
Connection Ratio	%		50~200	50~200	50~200	50~200
Dimension (WxDxH)	Net	mm	990x765x1635+(1340x765x1635)x2	990x765x1635+(1340x765x1635)x2	990x765x1635+(1340x765x1635)x2	990x765x1635+(1340x765x1635)x2
	Packing	mm	1050x815x1805+(1400x815x1805)x2	1050x815x1805+(1400x815x1805)x2	1050x815x1805+(1400x815x1805)x2	1050x815x1805+(1400x815x1805)x2
Weight	Net	kg	215+265+330	230+265+330	215+330x2	215+330x2
	Gross	kg	225+280+345	240+280+345	225+345x2	225+345x2
Pipe Diameter	Liquid Side	mm	19.05(3/4)	19.05(3/4)	22.2(7/8)	22.2(7/8)
	Gas Side	mm	41.3(13/8)	41.3(13/8)	47.6(15/8)	47.6(15/8)
Operation Range	Cooling	°C	-15~52	-15~52	-15~52	-15~52
	Heating	°C	-25~24	-25~24	-25~24	-25~24

Notes:

- Cooling Capacity: Indoor temperature 27°C DB/19°C WB; Outdoor temperature:35°C DB/ 24°C WB.
- Heating Capacity: Indoor temperature 20°C DB; Outdoor temperature: 7°C DB/ 6°C WB.
- Piping Length: Equivalent piping length: 7.5m, level difference: 0m.
- We can guarantee the operation only within 130% Combination. If you want to connect more than 130% combination, please contact us and discuss the requirement.
- Anechoic chamber conversion value, measured in test room. During actual operation. These values are normally somewhat higher as a result of ambient conditions.
- The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.
- Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.
- The above combined types are factory-recommended type. The combined type also can be combined at will.

## ARV 6 Series 380~415V-50/60Hz

HP			56	58	60	62
Model			ARV-H1560/SR1MV	ARV-H1630/SR1MV	ARV-H1680/SR1MV	ARV-H1730/SR1MV
Combination	HP		12+22x2	14+22x2	16+22x2	18+22x2
Capacity	Cooling	kW	156.5	163	168	173.4
	Heating	kW	175.5	183	188	193.5
Electric Data	Power supply	V-,Hz,Ph	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3
	Cooling input	kW	39.40	40.90	42.52	44.33
	EER	W/W	3.97	3.99	3.95	3.91
	Heating input	kW	40.98	42.61	44.20	46.21
	COP	W/W	4.28	4.29	4.25	4.19
Performance	Air Flow Volume	m <sup>3</sup> /h	12000+16000x2	14000+16000x2	14000+16000x2	16000x3
	Sound Pressure level	dB(A)	≤63	≤63	≤63	≤63
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		5	5	5	6
Fan motor	Type		DC motor	DC motor	DC motor	DC motor
	Quantity		5	6	6	6
Max. No. of Indoor Units	unit		64	64	64	64
Connection Ratio	%		50~200	50~200	50~200	50~200
Dimension (WxDxH)	Net	mm	990x765x1635+(1340x765x1635)x2	(1340x765x1635)x3	(1340x765x1635)x3	(1340x765x1635)x3
	Packing	mm	1050x815x1805+(1400x815x1805)x2	(1400x815x1805)x3	(1400x815x1805)x3	(1400x815x1805)x3
Weight	Net	kg	230+330x2	265+330x2	265+330x2	330x3
	Gross	kg	240+345x2	280+345x2	280+345x2	345x3
Pipe Diameter	Liquid Side	mm	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)
	Gas Side	mm	47.6(15/8)	47.6(15/8)	47.6(15/8)	47.6(15/8)
Operation Range	Cooling	°C	-15~52	-15~52	-15~52	-15~52
	Heating	°C	-25~24	-25~24	-25~24	-25~24

## ARV 6 Series 380~415V-50/60Hz

HP			64	66	68	70
Model			ARV-H1790/SR1MV	ARV-H1840/SR1MV	ARV-H1900/SR1MV	ARV-H1960/SR1MV
Combination	HP		20+22x2	22x3	12x2+22x2	10+16+22x2
Capacity	Cooling	kW	179	184.5	190	196
	Heating	kW	201	207	213	219.5
Electric Data	Power supply	V-,Hz,Ph	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3	380~415,50/60,3
	Cooling input	kW	45.99	47.55	47.10	48.63
	EER	W/W	3.89	3.88	4.03	4.03
	Heating input	kW	48.26	50.00	48.63	50.09
	COP	W/W	4.16	4.14	4.38	4.38
Performance	Air Flow Volume	m <sup>3</sup> /h	16000x3	16000x3	12000x2+16000x2	12000+14000+16000x2
	Sound Pressure level	dB(A)	≤63	≤63	≤63	≤63
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		6	6	6	6
Fan motor	Type		DC motor	DC motor	DC motor	DC motor
	Quantity		6	6	6	7
Max. No. of Indoor Units	unit		64	64	64	64
Connection Ratio	%		50~200	50~200	50~200	50~200
Dimension (WxDxH)	Net	mm	(1340x765x1635)x3	(1340x765x1635)x3	(990x765x1635)x2+(1340x765x1635)x2	990x765x1635+(1340x765x1635)x3
	Packing	mm	(1400x815x1805)x3	(1400x815x1805)x3	(1050x815x1805)x2+(1400x815x1805)x2	1050x815x1805+(1400x815x1805)x3
Weight	Net	kg	330x3	330x3	230x2+330x2	215+265+330x2
	Gross	kg	345x3	345x3	240x2+345x2	225+280+345x2
Pipe Diameter	Liquid Side	mm	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)
	Gas Side	mm	47.6(15/8)	47.6(15/8)	47.6(15/8)	47.6(15/8)
Operation Range	Cooling	°C	-15~52	-15~52	-15~52	-15~52
	Heating	°C	-25~24	-25~24	-25~24	-25~24

Notes:

- Cooling Capacity: Indoor temperature 27°C DB/19°C WB; Outdoor temperature:35°C DB/ 24°C WB.
- Heating Capacity: Indoor temperature 20°C DB; Outdoor temperature: 7°C DB/ 6°C WB.
- Piping Length: Equivalent piping length: 7.5m, level difference: 0m.
- We can guarantee the operation only within 130% Combination. If you want to connect more than 130% combination, please contact us and discuss the requirement.
- Anechoic chamber conversion value, measured in test room. During actual operation. These values are normally somewhat higher as a result of ambient conditions.
- The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.
- Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.
- The above combined types are factory-recommended type. The combined type also can be combined at will.



## ARV 6 Series 380~415V-50/60Hz

HP			72	74	76	78
Model			ARV-H2010/SR1MV	ARV-H2070/SR1MV	ARV-H2120/SR1MV	ARV-H2180/SR1MV
Combination	HP		12+16+22×2	10+20+22×2	10+22×3	12+22×3
Capacity	Cooling	kW	201.5	207	212.5	218
	Heating	kW	225.5	232.5	238.5	244.5
Electric Data	Power supply	V-,Hz,Ph	380~415, 50/60, 3	380~415, 50/60, 3	380~415, 50/60, 3	380~415, 50/60, 3
	Cooling input	kW	50.22	52.10	53.67	55.25
	EER	W/W	4.01	3.97	3.96	3.95
	Heating input	kW	51.85	54.15	55.89	57.65
	COP	W/W	4.35	4.29	4.27	4.24
Performance	Air Flow Volume	m <sup>3</sup> /h	12000+14000+16000×2	12000+16000×3	12000+16000×3	12000+16000×3
	Sound Pressure level	dB(A)	≤63	≤63	≤63	≤63
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		6	7	7	7
Fan motor	Type		DC motor	DC motor	DC motor	DC motor
	Quantity		7	7	7	7
Max. No. of Indoor Units	unit		64	64	64	64
Connection Ratio	%		50~200	50~200	50~200	50~200
Dimension (WxDxH)	Net	mm	990×765×1635+(1340×765×1635)×3	990×765×1635+(1340×765×1635)×3	990×765×1635+(1340×765×1635)×3	990×765×1635+(1340×765×1635)×3
	Packing	mm	1050×815×1805+(1400×815×1805)×3	1050×815×1805+(1400×815×1805)×3	1050×815×1805+(1400×815×1805)×3	1050×815×1805+(1400×815×1805)×3
Weight	Net	kg	230+265+330×2	215+330×3	215+330×3	230+330×3
	Gross	kg	240+280+345×2	225+345×3	225+345×3	240+345×3
Pipe Diameter	Liquid Side	mm	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)
	Gas Side	mm	47.6(15/8)	47.6(15/8)	47.6(15/8)	47.6(15/8)
Operation Range	Cooling	°C	-15~52	-15~52	-15~52	-15~52
	Heating	°C	-25~24	-25~24	-25~24	-25~24

## ARV 6 Series 380~415V-50/60Hz

HP			80	82	84	86	88
Model			ARV-H2240/SR1MV	ARV-H2290/SR1MV	ARV-H2350/SR1MV	ARV-H2400/SR1MV	ARV-H2460/SR1MV
Combination	HP		14+22×3	16+22×3	18+22×3	20+22×3	22×4
Capacity	Cooling	kW	224.5	229.5	234.9	240.5	246
	Heating	kW	252	257	262.5	270	276
Electric Data	Power supply	V-,Hz,Ph	380~415, 50/60, 3	380~415, 50/60, 3	380~415, 50/60, 3	380~415, 50/60, 3	380~415, 50/60, 3
	Cooling input	kW	56.75	58.37	60.18	61.84	63.40
	EER	W/W	3.96	3.93	3.90	3.89	3.88
	Heating input	kW	59.28	60.87	62.88	64.93	66.67
	COP	W/W	4.25	4.22	4.17	4.16	4.14
Performance	Air Flow Volume	m <sup>3</sup> /h	14000+16000×3	14000+16000×3	16000×4	16000×4	16000×4
	Sound Pressure level	dB(A)	≤63	≤63	≤63	≤63	≤63
Compressor	Type		DC inverter	DC inverter	DC inverter	DC inverter	DC inverter
	Quantity		7	7	8	8	8
Fan motor	Type		DC motor	DC motor	DC motor	DC motor	DC motor
	Quantity		8	8	8	8	8
Max. No. of Indoor Units	unit		64	64	64	64	64
Connection Ratio	%		50~200	50~200	50~200	50~200	50~200
Dimension (WxDxH)	Net	mm	(1340×765×1635)×4	(1340×765×1635)×4	(1340×765×1635)×4	(1340×765×1635)×4	(1340×765×1635)×4
	Packing	mm	(1400×815×1805)×4	(1400×815×1805)×4	(1400×815×1805)×4	(1400×815×1805)×4	(1400×815×1805)×4
Weight	Net	kg	265+330×3	265+330×3	330×4	330×4	330×4
	Gross	kg	280+345×3	280+345×3	345×4	345×4	345×4
Pipe Diameter	Liquid Side	mm	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)
	Gas Side	mm	47.6(15/8)	47.6(15/8)	47.6(15/8)	47.6(15/8)	47.6(15/8)
Operation Range	Cooling	°C	-15~52	-15~52	-15~52	-15~52	-15~52
	Heating	°C	-25~24	-25~24	-25~24	-25~24	-25~24

### Notes:

- 1.Cooling Capacity: Indoor temperature 27°C DB/19°C WB; Outdoor temperature:35°C DB/ 24°C WB.
- 2.Heating Capacity: Indoor temperature 20°C DB; Outdoor temperature: 7°C DB/ 6°C WB.
- 3.Piping Length: Equivalent piping length: 7.5m, level difference: 0m.
- 4.We can guarantee the operation only within 130% Combination. If you want to connect more than 130% combination, please contact us and discuss the requirement.
- 5.Anechoic chamber conversion value, measured in test room. During actual operation.These values are normally somewhat higher as a result of ambient conditions.
- 6.The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.
- 7.Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.
- 8.The above combined types are factory-recommended type. The combined type also can be combined at will.