

# MULTI-ZONE SYSTEMS





**AER**  **STAR**

# 3MICT

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**CRF SERIES  
HEAT RECOVERY**

**CHF SERIES**



**8~12HP**



**14~18HP**



**20~24HP**



**26~28HP**



**30~56HP**



**58~84HP**



**86~112HP**

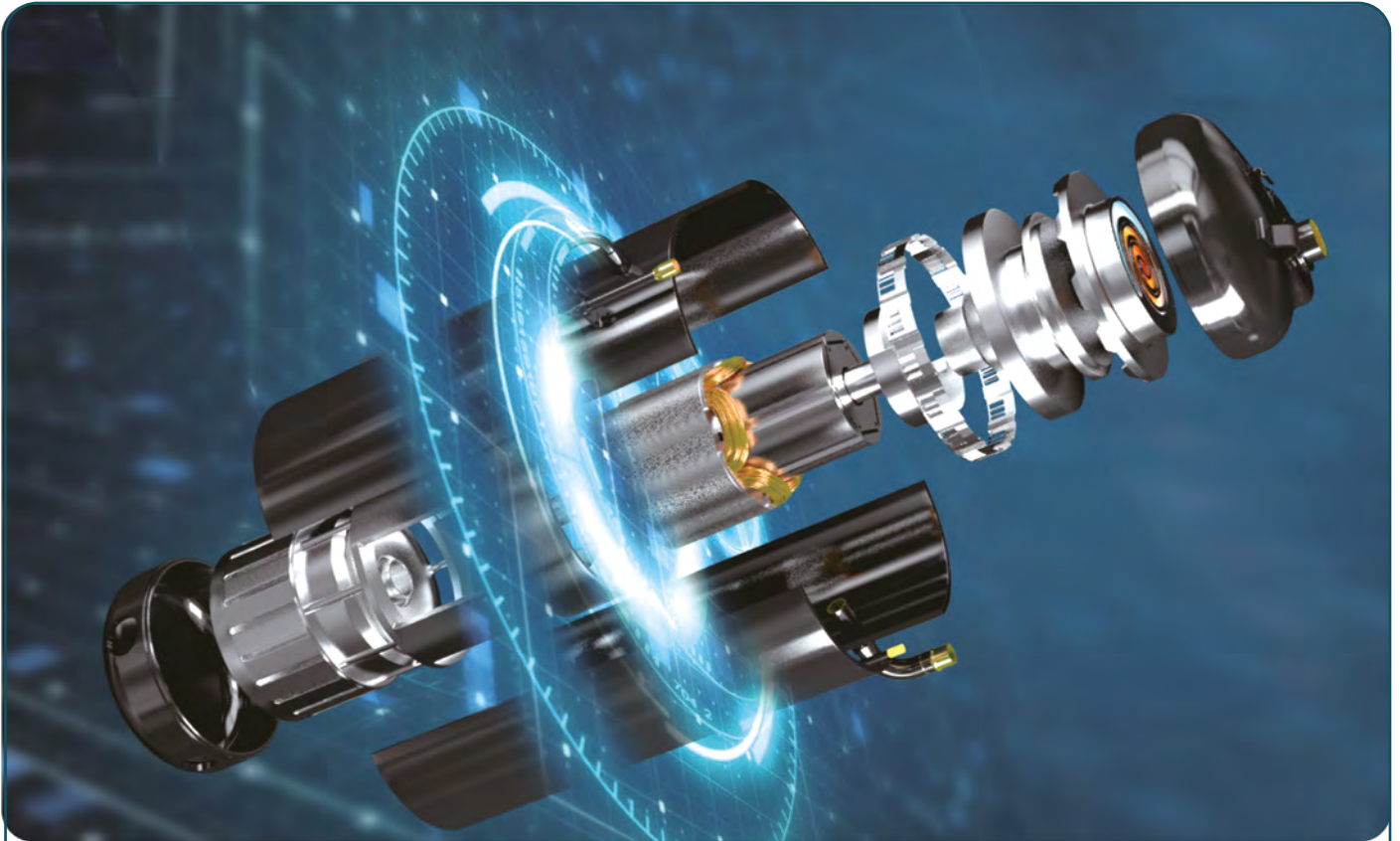
**REF SERIES**



**4/5/6HP**



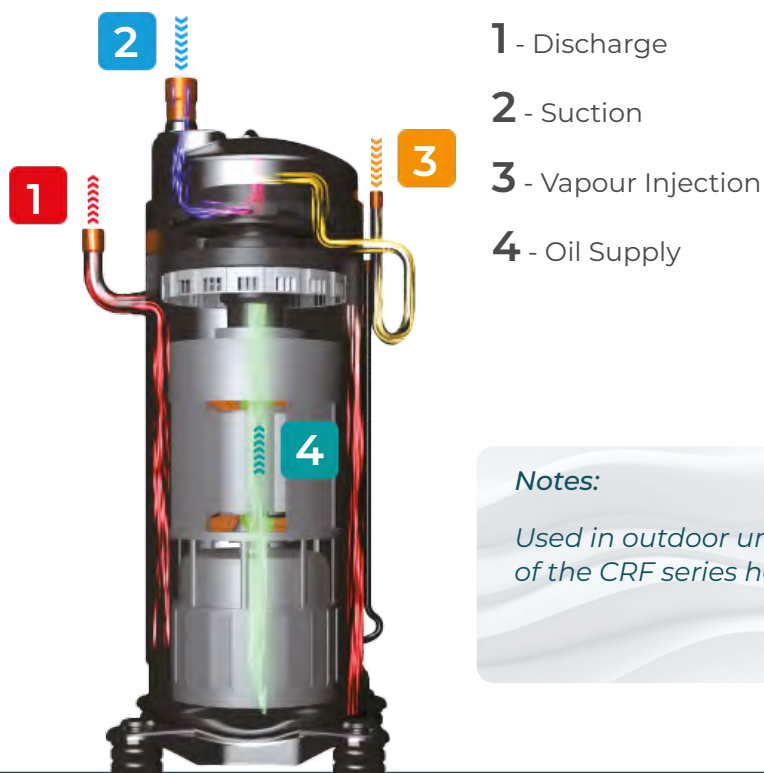
**8/10/12HP**



## REVOLUTIONARY HVAC COMPRESSOR

### Vapour injection technology

New generation scroll compressor is now patented with higher performance capability vapour injection technology, increasing capacity up to 25% compared to conventional scroll compressor with same amount of power consumed.

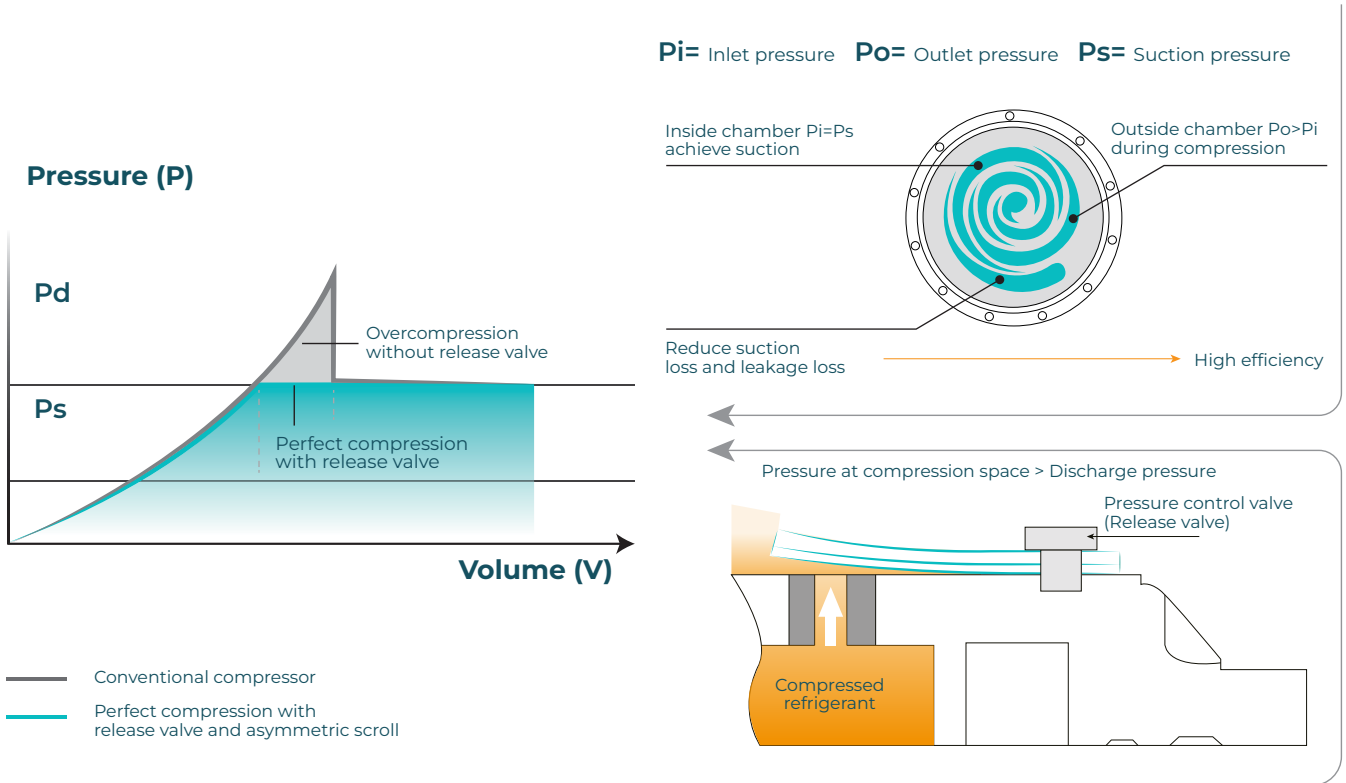


#### Notes:

*Used in outdoor units  
of the CRF series heat recovery*

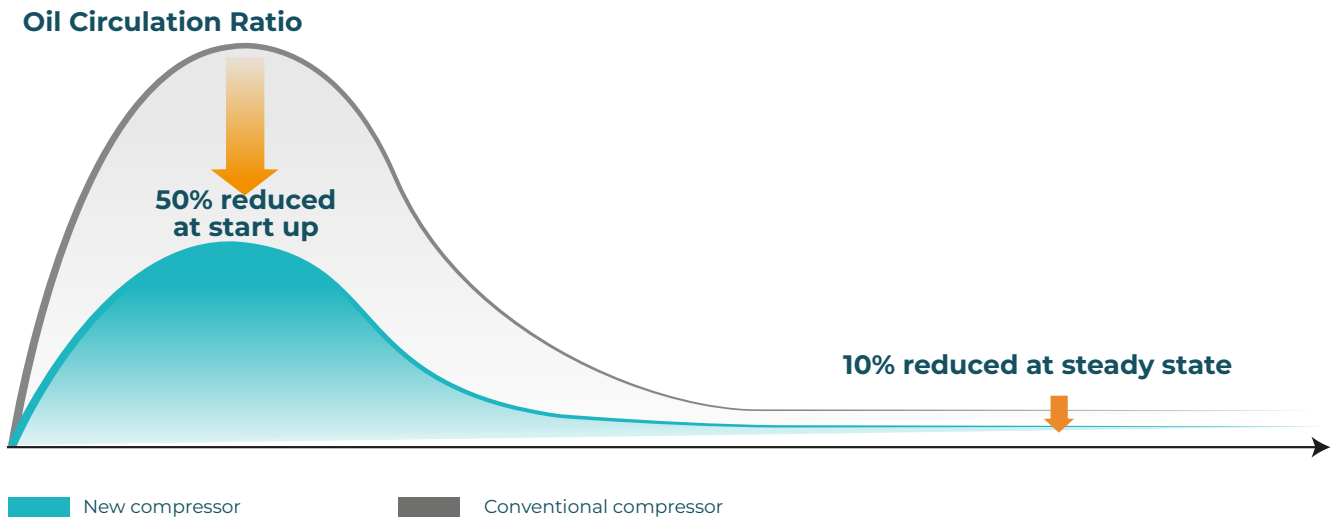
## EFFICIENT ENERGY USAGE

Wasted power is reduced by minimizing leakage and anti-overcompression while compressing refrigerant gas with asymmetric scroll and patented release valves.



## Enhanced oil level retaining capability

The new compressor has a greater improvement in reliability by enhancing the oil retaining capability with lower oil circulation ratio by 50%. The "oil cup" embedded in the compressor prevents compressor bearing failures due to lack of lubrication in the inner rotating components.



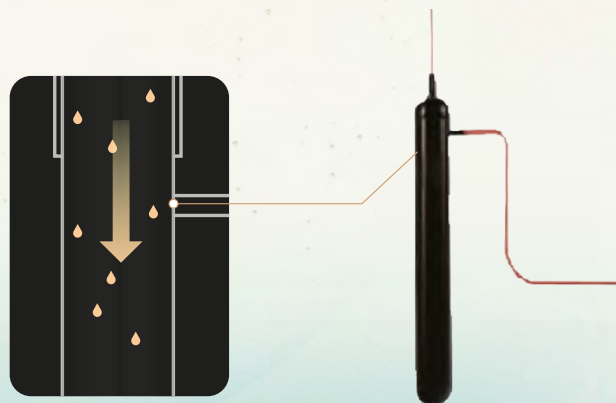


## OIL SEPARATION AND OIL RETURN

### OIL SEPARATION



First-stage Oil Separation

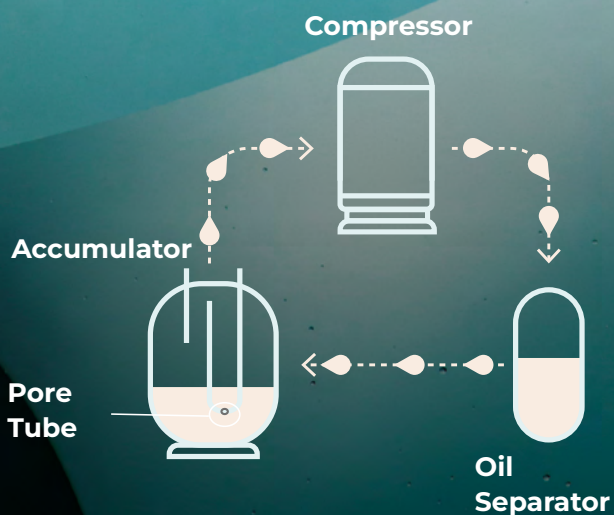


Second-stage Oil Separation

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

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

### OIL RETURN



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

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

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

Aerostar`s complete corrosion-proof is a perfect solution in seaside and chemical factory applications (sulphide contamination occasion), providing ultimate comfort without sacrificing life span and reducing maintenance cost simultaneously.



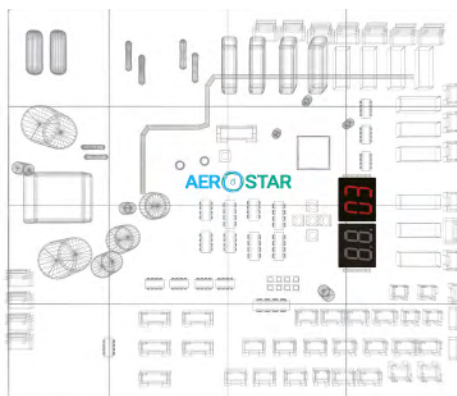
<b>1 Front Panel</b>	Galvanized steel treated with zirconium & 100µm ~ 180µm epoxy zinc rich primer + pure polyester paint coating.	
<b>2 Heat Exchanger</b>	Black fin (with epoxy resin & hydrophilic film); Cooper fin.	
<b>3 Electrical Box</b>	Galvanized steel treated with zirconium & 50µm~120µm pure polyester.	
<b>4 Fan Motor</b>	Coated with 10µm ~ 30µm Acrylic Resin coating Thickness: 10µm ~30µm	
<b>5 Top Grill</b>	<b>6 Motor Bracket</b>	<b>7 Protection Net</b>





## SELF-DIAGNOSIS & SELF-PROTECTION MEASURES

### Self-diagnosis



Operation monitoring and maintenance are made simpler by having the AC unit tells you what and where is wrong with them. Alarm codes will be flashed out when an error or breakdown occurs. Extremely helpful for installers during test run and also end-users to understand what's going on. Besides alarm codes, operating status and parameters like history temperature, pressure, compressor frequency and etc are traceable on controllers and the outdoor unit, easing service maintenance and troubleshooting.

### SELF-PROTECTION

Aerostar VRF can protect itself with algorithms embedded to make necessary protective decisions and measures by different sensor readings and parameters, including compressor protections, system protections, inverter protections and electric protections.

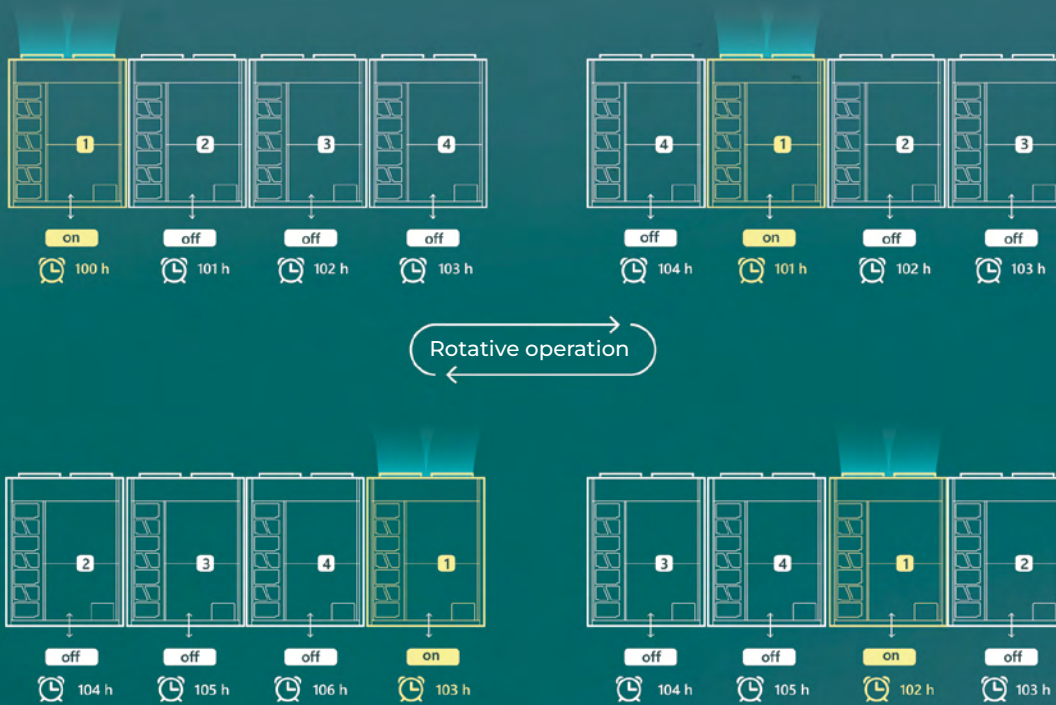




## SMART ROTATIVE OPERATION & TRIPLE BACKUP OPERATION

### SMART ROTATIVE OPERATION

Operation duties are smartly balanced in higher capacity module combinations to prevent occurrence of individual unit overworked and hence extending the overall operating life of the overall system.



### TRIPLE BACKUP OPERATION

Module backup operation

If one module in a combination system malfunctions, the other ones can still keep working to ensure an emergency operation until service and repair.



## COMPRESSOR BACKUP OPERATION

In the single module system equipped with two compressors, if one compressor malfunctions, the other one can provide emergency operation. In the combined modules, if the compressor in one module goes wrong, the other modules can provide emergency operation. Thus a stable and continuous operation can be ensured thanks to the backup of compressors.



Standby Status



Operating Status



Failed Status



Compressor Backup



Outdoor Unit Backup

## FAN BACKUP OPERATION

For the module equipped with two fans, if one fan breaks down, the other one won't be influenced, the module can still keep working.



Single Module System



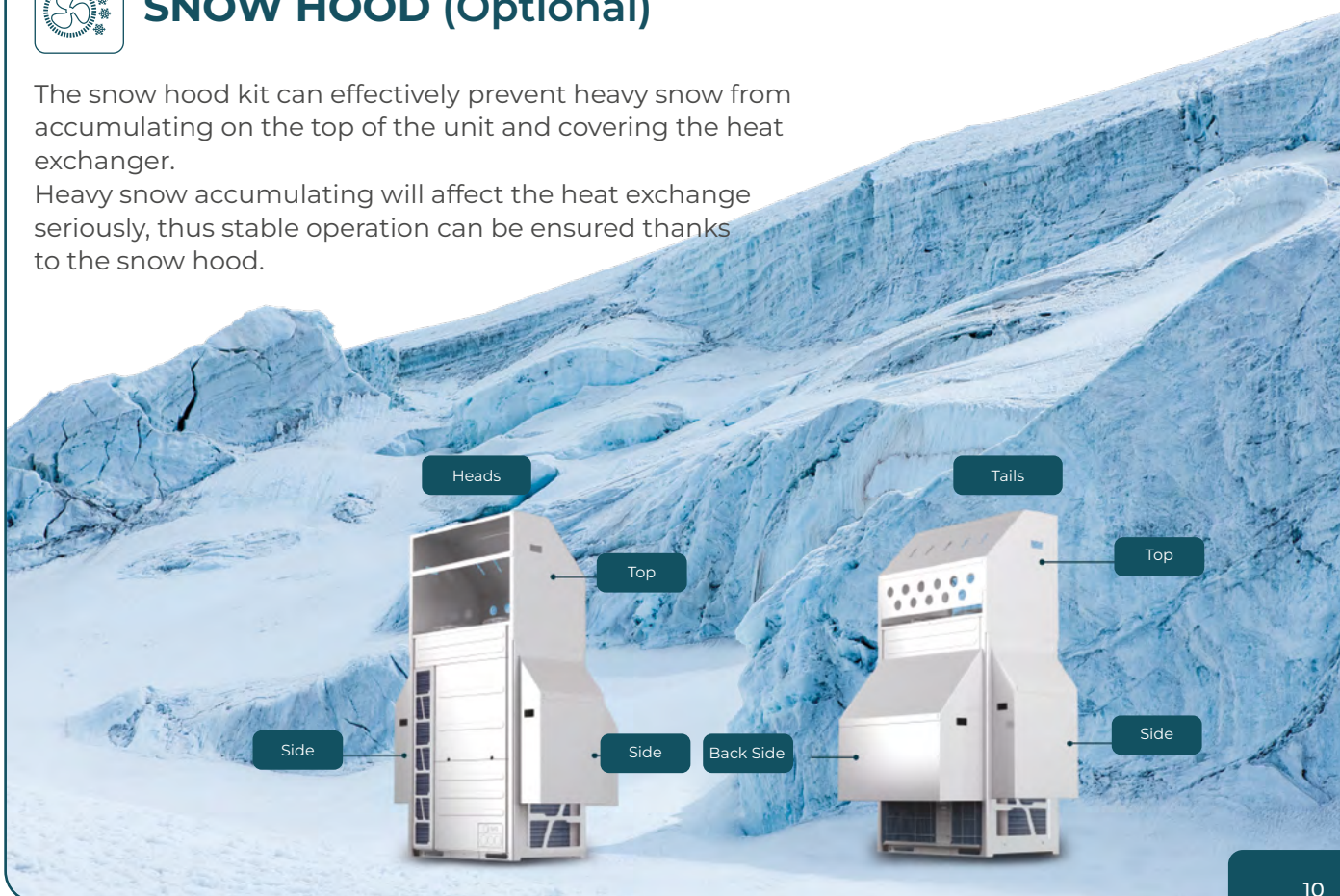
Combined Modules System



## SNOW HOOD (Optional)

The snow hood kit can effectively prevent heavy snow from accumulating on the top of the unit and covering the heat exchanger.

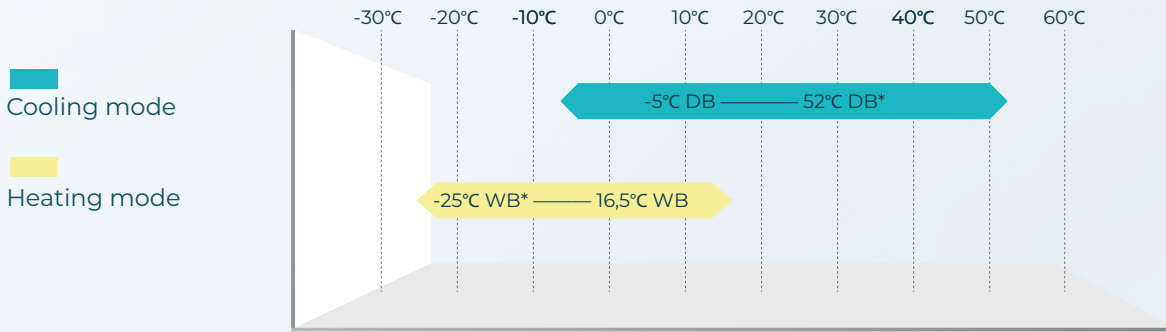
Heavy snow accumulating will affect the heat exchange seriously, thus stable operation can be ensured thanks to the snow hood.





## WIDER OPERATION RANGE

Extended operation range creates wider application potential, in cooling mode the operation range is from  $-5^{\circ}\text{C DB}$  to  $52^{\circ}\text{C DB}$  and in heating mode the operation range is from  $-25^{\circ}\text{C WB}$  to  $16.5^{\circ}\text{C WB}$ , which adapts to extreme conditions.



**Note:**

1. The dry temperature range of heating operation mode is from  $-25^{\circ}\text{C}$  to  $26^{\circ}\text{C}$ .
2. When the temperature is in  $48^{\circ}\text{C}\sim 52^{\circ}\text{C}$  and  $-20^{\circ}\text{C}\sim -25^{\circ}\text{C}$ , the module is in intermittent operation.
3. Please refer to the specification table of each series for detailed operation range.

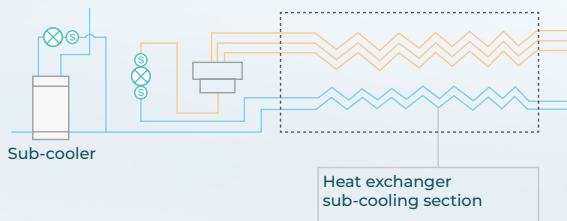
## AUTOMATIC RESTART

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

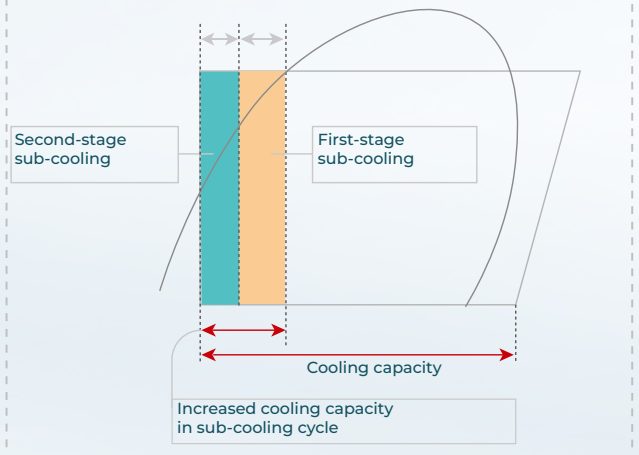
## TWO-STAGE SUBCOOLING

For the conventional VRF systems without the sub-coolers, the subcooling temperature is about  $12.5^{\circ}\text{C}$  with one-stage subcooling. However, Aerostar VRF's 2-stage subcooling technology can realize the subcooling temperature up to  $27^{\circ}\text{C}$ , distinctly improving the cooling capacity by pushing refrigerant further beyond its condensing temperature.

Two-stage sub-cooling cycle diagram



Two-stage sub-cooling pressure enthalpy diagram



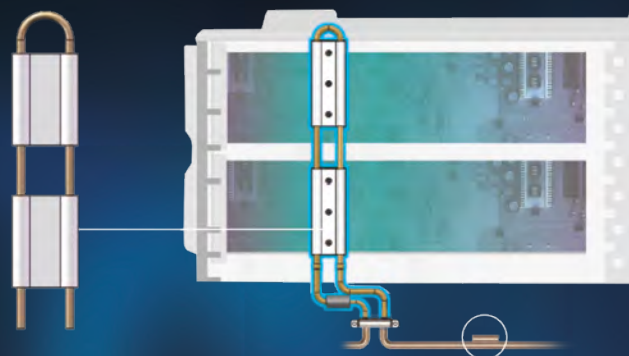


## PATENTED 360°FITTED REFRIGERANT COOLING TECHNOLOGY

Aerostar VRF uses refrigerant cooling technology to cool the electrical control box. It overcomes the poor heat dissipation and high ambient temperature issues to maintain efficient operation even at harsh environment.

Compared with air-cooled technology, the temperature inside the electrical box can be reduced by up to 20%\*.

Moreover, the refrigerant cooling kit adds a temperature sensor, which could be more precise to control the refrigerant cooling temperature and ensure the whole reliability.



Note:

- 1.\* The data is based on the CHF unit under low fan speed operation.
2. Temperature sensor is only available for CHF series.



## QUALITY ELECTRICAL & MAGNETISM PRECAUTION MEASURE

Air-conditioning unit produced by Aerostar VRF requires strict electromagnetic protection and preventive quality assurance to not allow electromagnetic wave from other devices surrounding the unit to interfere the normal operation and function of our unit and vice versa onto other equipment. Another typical damage causes of electronic and electrical failure is sudden high external power source exerted into the electronic compositions like thunder strike during a storm. As to overcome such inevitable natural phenomenon to cause damage, 4000V sudden high voltage test is infused into the long list of electromagnetism quality test in our internationally qualified test lab.



## INSECT PROTECTION DESIGN

Special design nettings are placed on insect easy-entry openings, effectively preventing unnecessary electrical component damages.



## VOLTAGE PROTECTOR RESERVED (optional)

Too low or too high voltage can easily damage the electronic components. The new generation of top flow unit has reserved the space for assembling the voltage protector, which can be an effective solution to protect outdoor units from any voltage spikes.

The power supply of outdoor unit will be automatically cut off when there is abnormal voltage, and will be restored when power supply returns to normal after 30s.

Meanwhile, it's helpful for checking the phase sequence error or phase loss according to the indicator lights, convenient for commission and maintenance.



Can bear **15000 times actions**

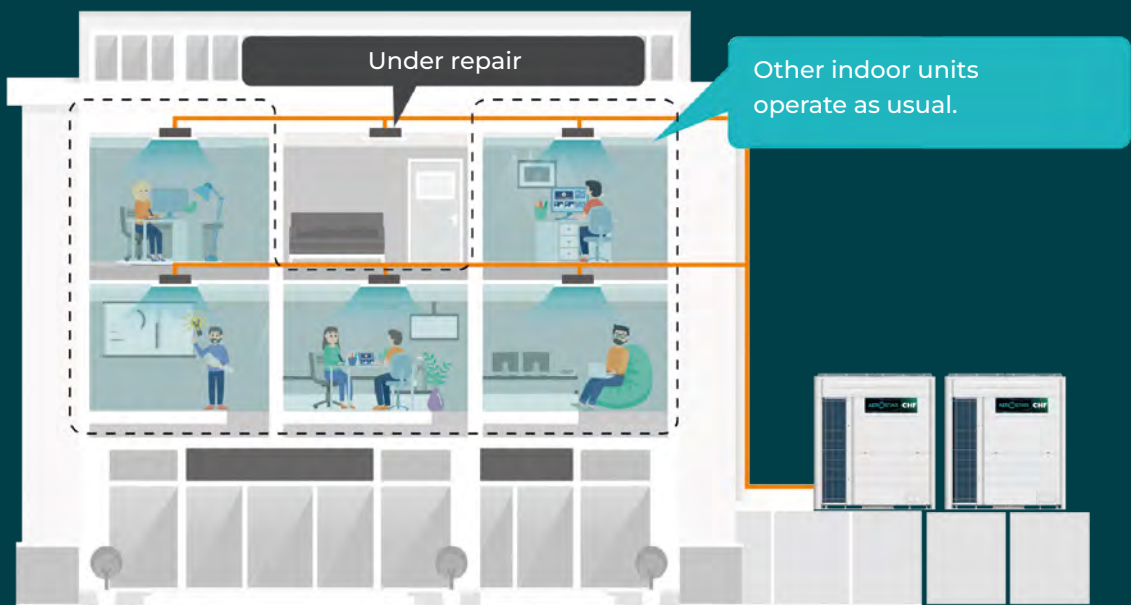
Can be installed in the factory or on site





## INDEPENDENT MAINTENANCE OF INDOOR UNIT

To maintain the whole system's continuous operation even when there is a breakdown occurring within the system, Aerostar VRF is capable to isolate the faulty unit from the others while conducting restoration and maintaining continuous operation of other units simultaneously. It's especially practical for retail shops or offices where multiple indoor units share the same system.



\*Preliminary setting is unnecessary

## Transparent drain pipe

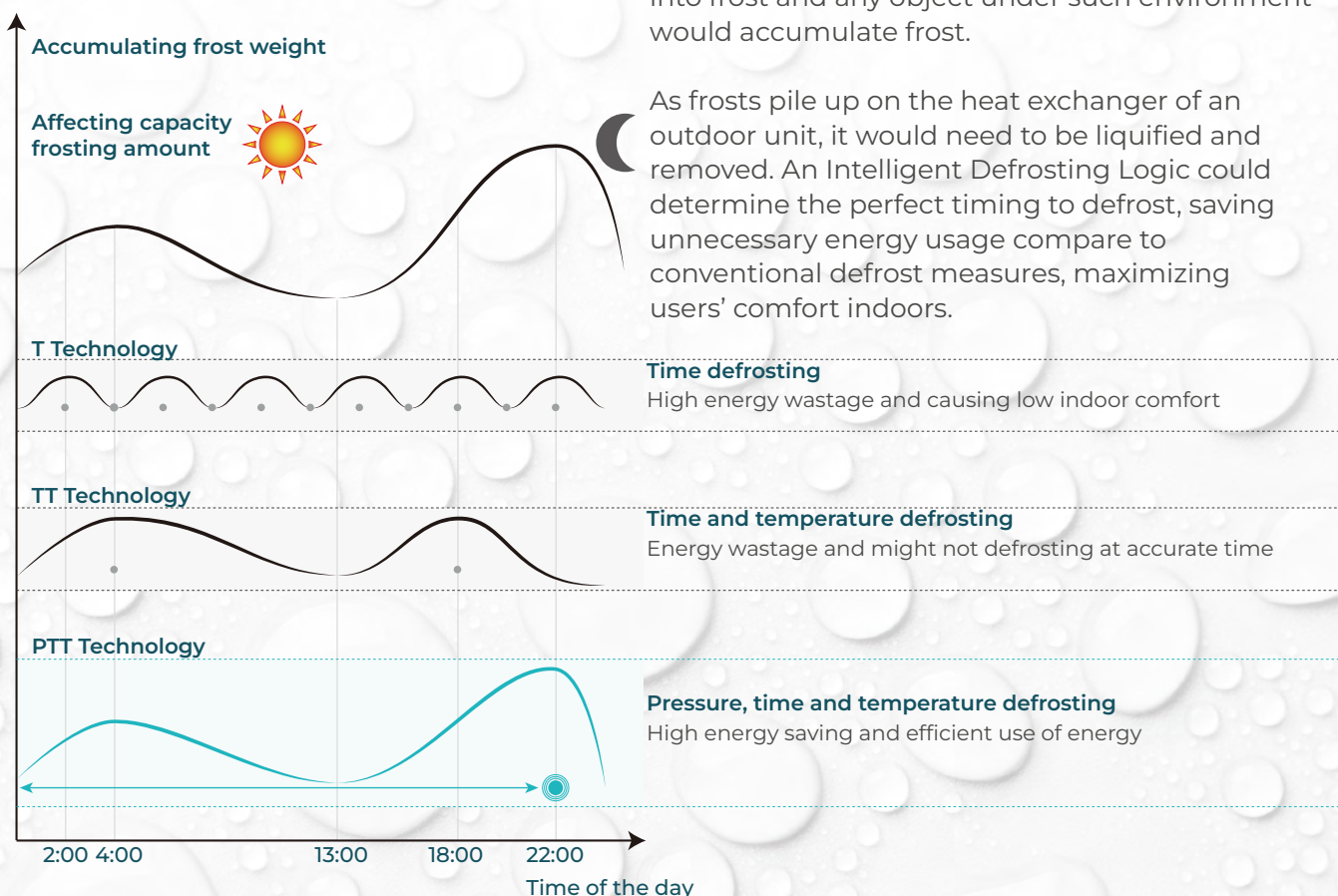
To ease drainage inspection, Aerostar indoor units adopt transparent drain hose connection.

It enhances installation and maintenance, making sure drain hoses are connected securely and make blockage inspections much easier.

## PTT DEFROSTING MODE

During cold freezing days where temperature is low and humid, water vapour in the air would solidifies into frost and any object under such environment would accumulate frost.

As frosts pile up on the heat exchanger of an outdoor unit, it would need to be liquified and removed. An Intelligent Defrosting Logic could determine the perfect timing to defrost, saving unnecessary energy usage compare to conventional defrost measures, maximizing users' comfort indoors.



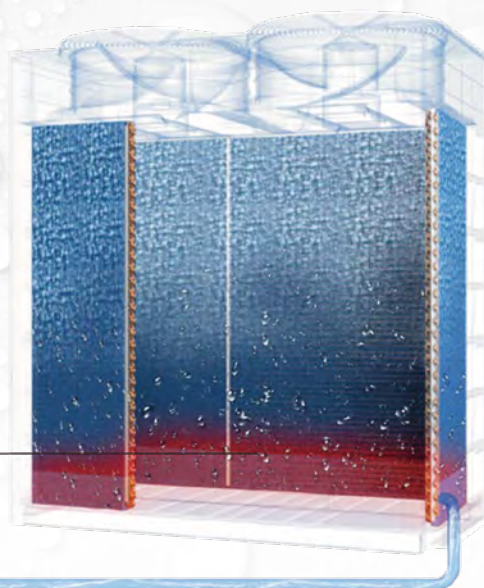
## Bottom anti-frosting structure

To ensure effective frost removal, heat exchanger circuit is extended to the bottom to make sure melted frost from the top does not solidify as it reaches to the condensate drain and hence enhances smooth discharge.

In the meantime, the heat also extends frost formation periods whereby prolongs defrost interval.

Extended heat exchange coils, keeping the bottom warm

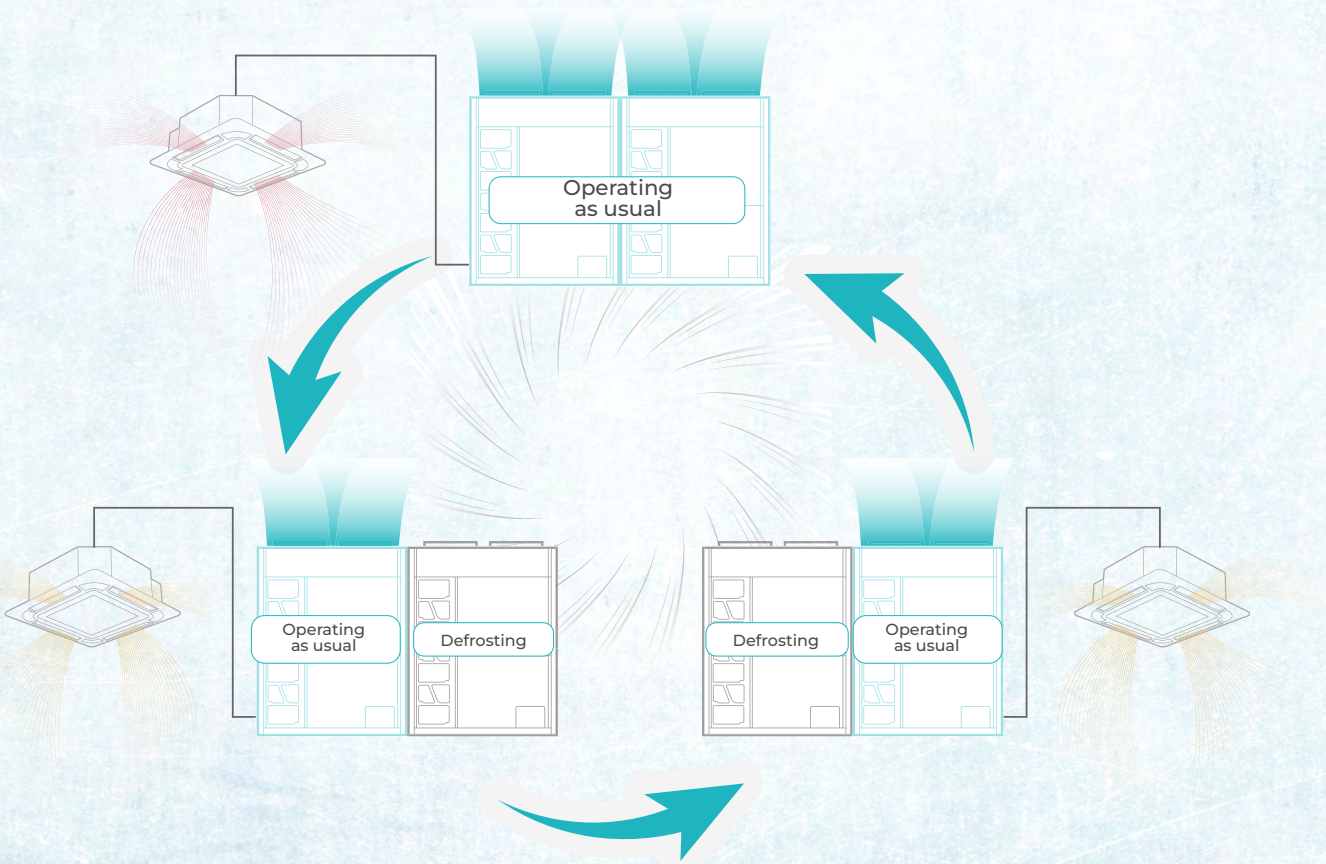
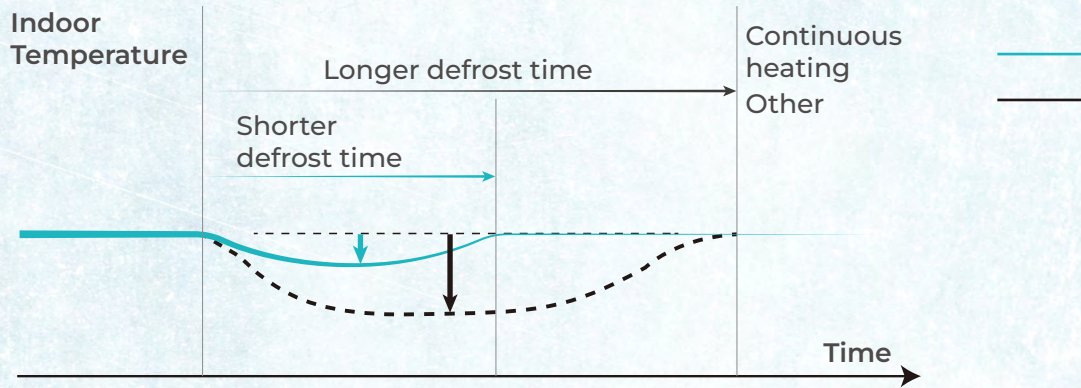
Smooth continuous condensate drainage



## CONTINUOUS HEATING DURING DEFROST

The module combination design can achieve rotation defrosting among modules for decreasing indoor temperature fluctuation, so as to improve users' comfort.

Indoor temperature fluctuation curve



**Note:**

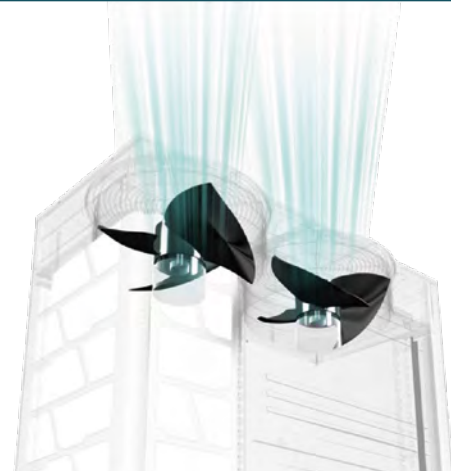
Only available for module combinations of CRF series.



## STEPLESS-SMOOTH FAN SPEED CONTROL

Inverter fan motors are now commonly used, where efficiency increase by 40%.

Whereas in Aerostar VRF, brushless DC fan motors are used, as it could further reduces power consumption and noise production than normal inverter motors.



Efficient axial fan

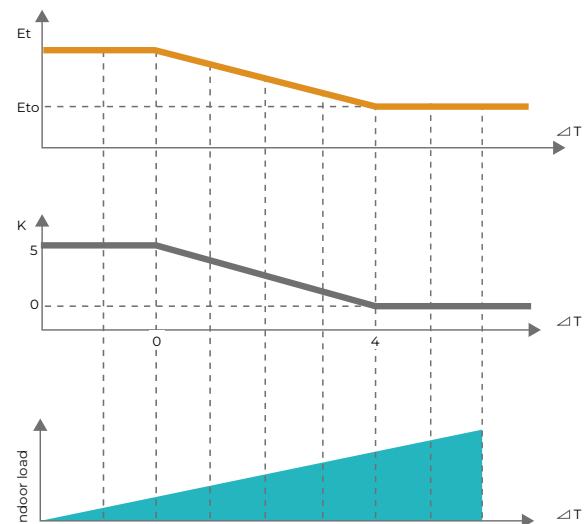
## Auto Refrigerant Temperature Control (ART)

Aerostar VRF system featured with ART technology can meet the indoor loads more accurately at a higher efficiency.

The system adjusts the evaporating temperature ( $E_t$ ) according to actual indoor loads automatically in a wide range. The  $E_t$  is raised to minimize the difference with the condensing temperature when the air-conditioning load is low, thus further improving the energy efficiency.

### Features:

1. Energy efficiency is improved without sacrificing comfort.
2. ART is particularly efficient under low-load operation.
3. The initial evaporation temperature can be adjusted between 2-11°C, which is the widest in the market.
4. Realize rapid cooling with lower evaporating temperature.
5. Avoiding cold draft with higher evaporating temperature.



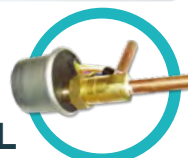
$$E_t = E_{to} + K$$

$E_t$ : Evaporation temperature

$E_{to}$ : The initial evaporation temperature

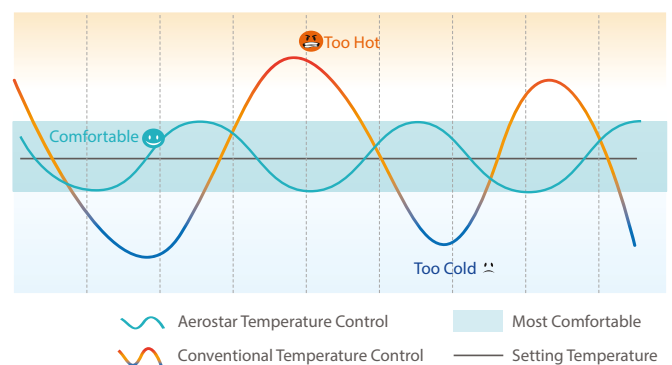
$\Delta T$ : The temperature difference between air inlet and the setting temperature

## PRECISE TEMPERATURE CONTROL



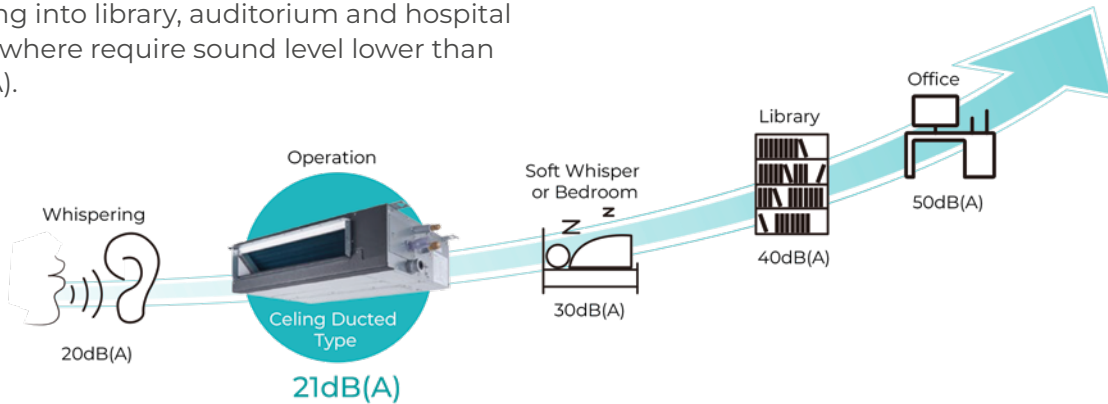
2000-step EEV

There are multiple temperature sensors equipped in the system, which will be very helpful to judge the indoor load more accurately. Also the 2000-step EEV is specially adopted to ensure precise refrigerant flow adjustment according to the actual load of indoor units, achieving a more comfortable indoor environment with small temperature fluctuation.



## LOWER NOISE FOR INDOOR UNITS

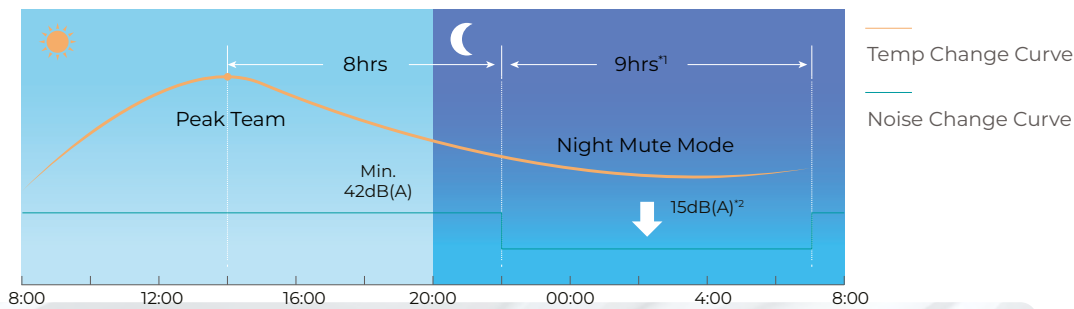
Aerostar VRF offers indoor units with sound pressure level as low as 19dB(A), perfectly blending into library, auditorium and hospital rooms where require sound level lower than 25dB(A).



*The DC ceiling ducted type (AER-CS15DLDC) can achieve the 21 dB(A) under the standard test condition.*

## OUTDOOR UNIT NOISE CONTROL Auto night quiet mode

When outdoor conditions call for special low noise requirements, like in cases where outdoor units are installed in indoor equipment rooms with poor soundproof walls or continuous night operating conditions. The night mode reduces sound pressure levels upto 30% routinely with flexible time intervals to meet different customer needs.



**Note:**

1. The night mute mode can last for 8hrs, 9hrs or 10hrs according to the setting.
2. Take the unit AER-CS280CHOU CHF series as an example.

## Low noise mode

Low noise mode can be set by operating the DIP in the PCB. There are multiple levels by set different frequencies of compressor and fan motor speed. What's more, the low noise mode can be achieved by external input signal. The noise can be reduced by up to 14dB(A)

## VIP Mode

Aerostar VRF offers VIP mode to give priority to the specific room, keeping them comfortable and satisfied as fast as possible and 5 indoor units can be set as VIP mode at the same time. Such function is exclusively practical for hotel application, where AC unit in the presidential suite is often set to VIP mode.



## Adaptive fan static pressure technology



The initial setting is 80Pa.  
Can be set to 110Pa  
from the PCB on site.

External static pressure is essential to determine the air discharge and duct connection distance.

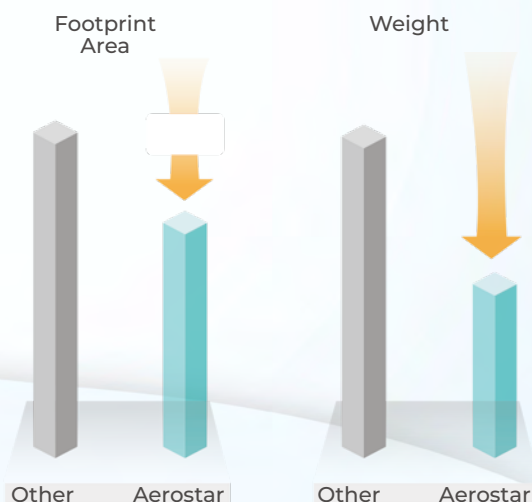
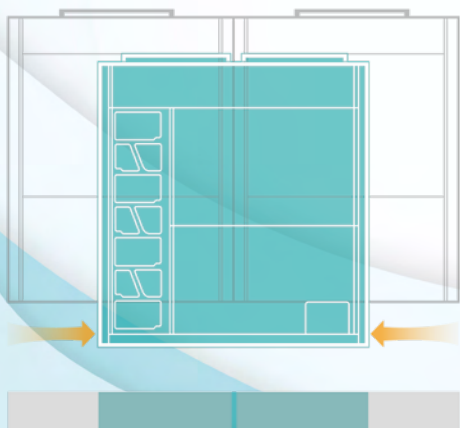
Aerostar VRF's outdoor unit external static pressure is reachable upto 110Pa compare to the conventional 80Pa.

Allowing longer ducting connection for better air discharge when are installed in the equipment platform that is not easy to exhaust.

## LARGER CAPACITY, MINIMIZING FOOTPRINT AREA

Aerostar VRF outdoor units now possess larger capacity per single module unit. Reducing the installation floor space significantly also eliminates the necessity of modules for bigger capacity.

Despite the beneficial space saving properties, same goes to the unit's weight per capacity too. Hence, offering more design and installation flexibility even in limited spaces.



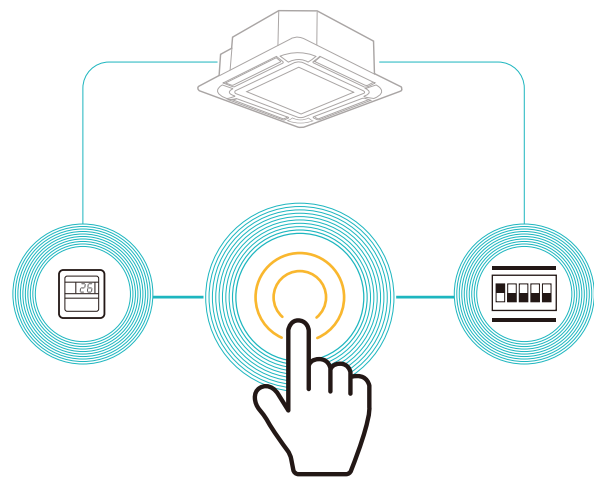
## COMPACT AND LIGHT-WEIGHT

With larger capacity per unit, Aerostar VRF outdoor units are more compact in size with the largest capacity of 28HP single module, leading capacity of a single module in the market.  
Compact yet reduced overall weight makes transportation much convenient and even fit into elevators.



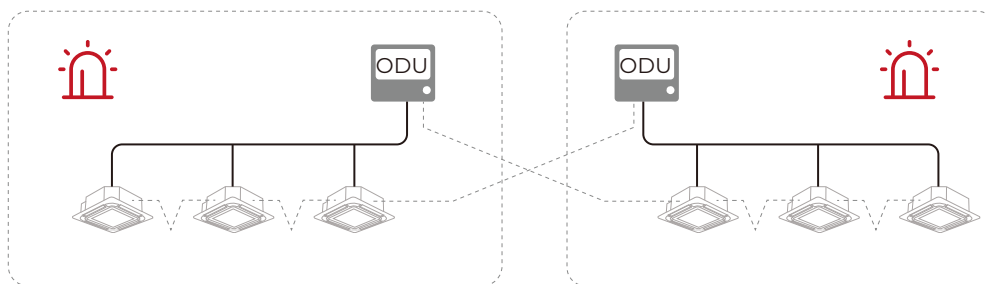
## ONE-TOUCH TEST RUN

Test run is one of the essential part in testing and commissioning to make sure the HVAC system in a building works steadily and safely before hand over or soft opening.  
To make test run as simple as possible, Aerostar VRF systems are capable to conduct test runs with just a button away wherever installers are, both indoors and outdoors.



## FLEXIBLE CONNECTION

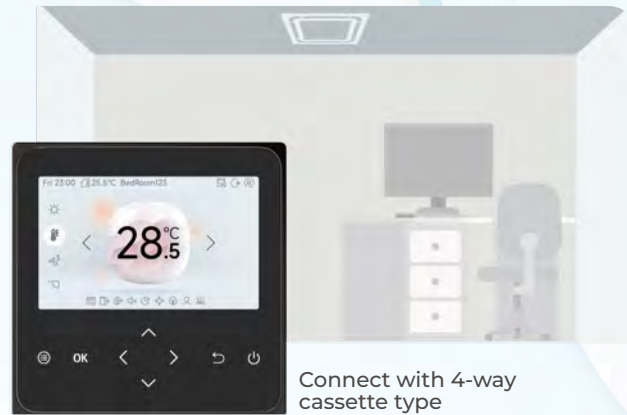
Communication line connections between outdoor unit to indoor units might be confusing when comes to long cables from the outdoors to the indoors and vice versa. It is often incorrectly connected and caused various errors affecting the end user's comfort levels. Despite of Aerostar VRF's simple wiring connection ports, the outdoor unit itself could also check on the connections and display warnings when the connections are improper.



Indoor units from different systems are connected to the incorrect outdoor unit, alarm codes flashes out warning installers to make proper corrections.

## INTELLIGENT MATCHING IDUS

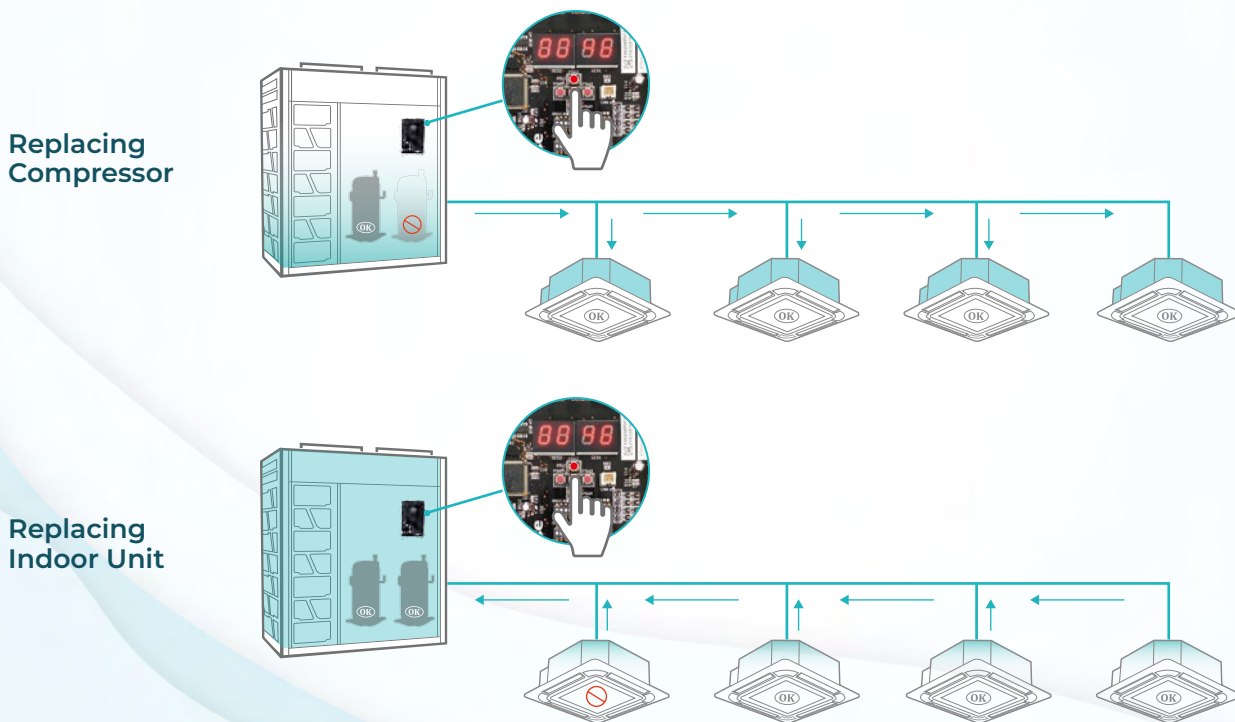
Match all kinds of Aerostar indoor units. If each air deflector can be controlled independently, the key will light. On the contrary, the key will dim and you can not click.



## ONE-TOUCH REFRIGERANT RECYCLE

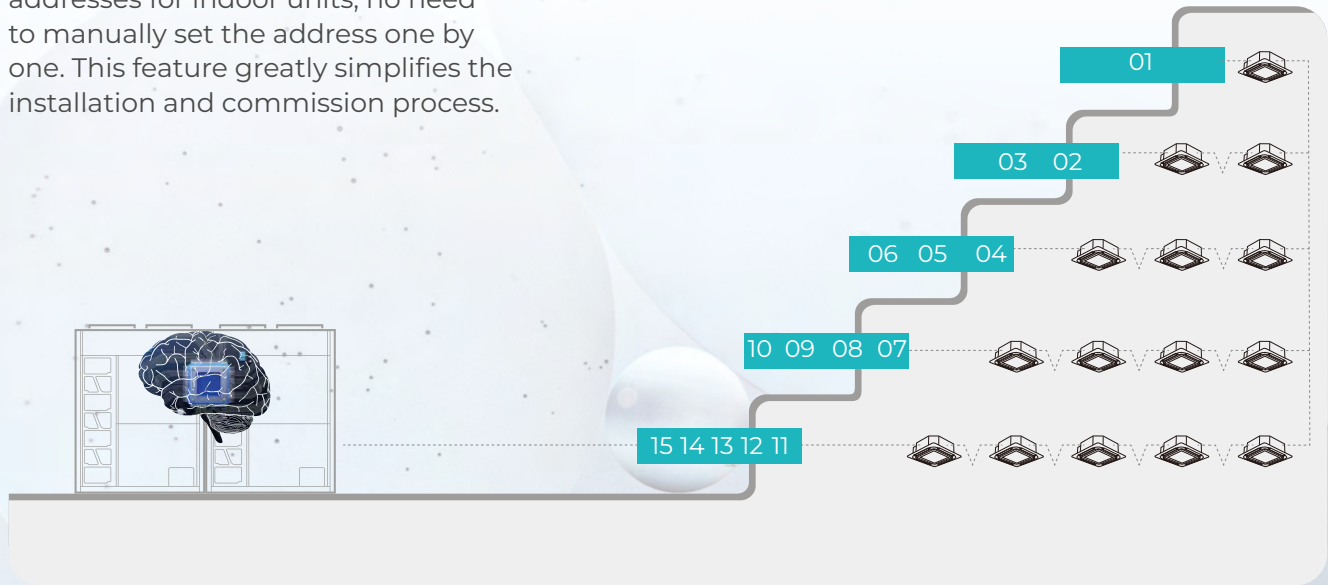
Aerostar VRF has one-touch refrigerant recycle function.

Just with a press of the button on the PCB, the refrigerant can be recycled directly, it is very helpful and convenient when the indoor units or the compressor are under repair.



## AUTOMATIC ADDRESS DISTRIBUTION

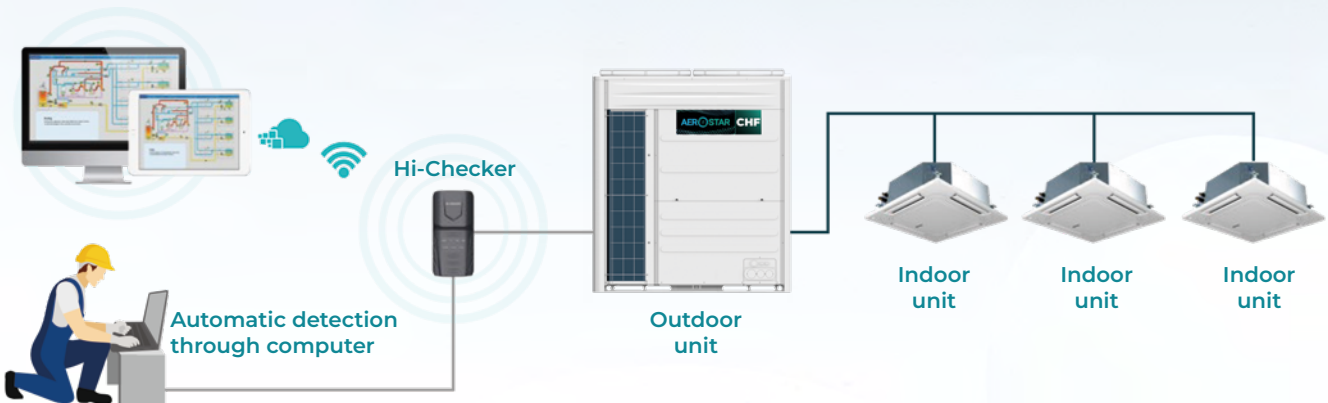
The system can automatically distribute addresses for indoor units, no need to manually set the address one by one. This feature greatly simplifies the installation and commission process.



## ACCURATE INTELLIGENT SYSTEM DIAGNOSIS

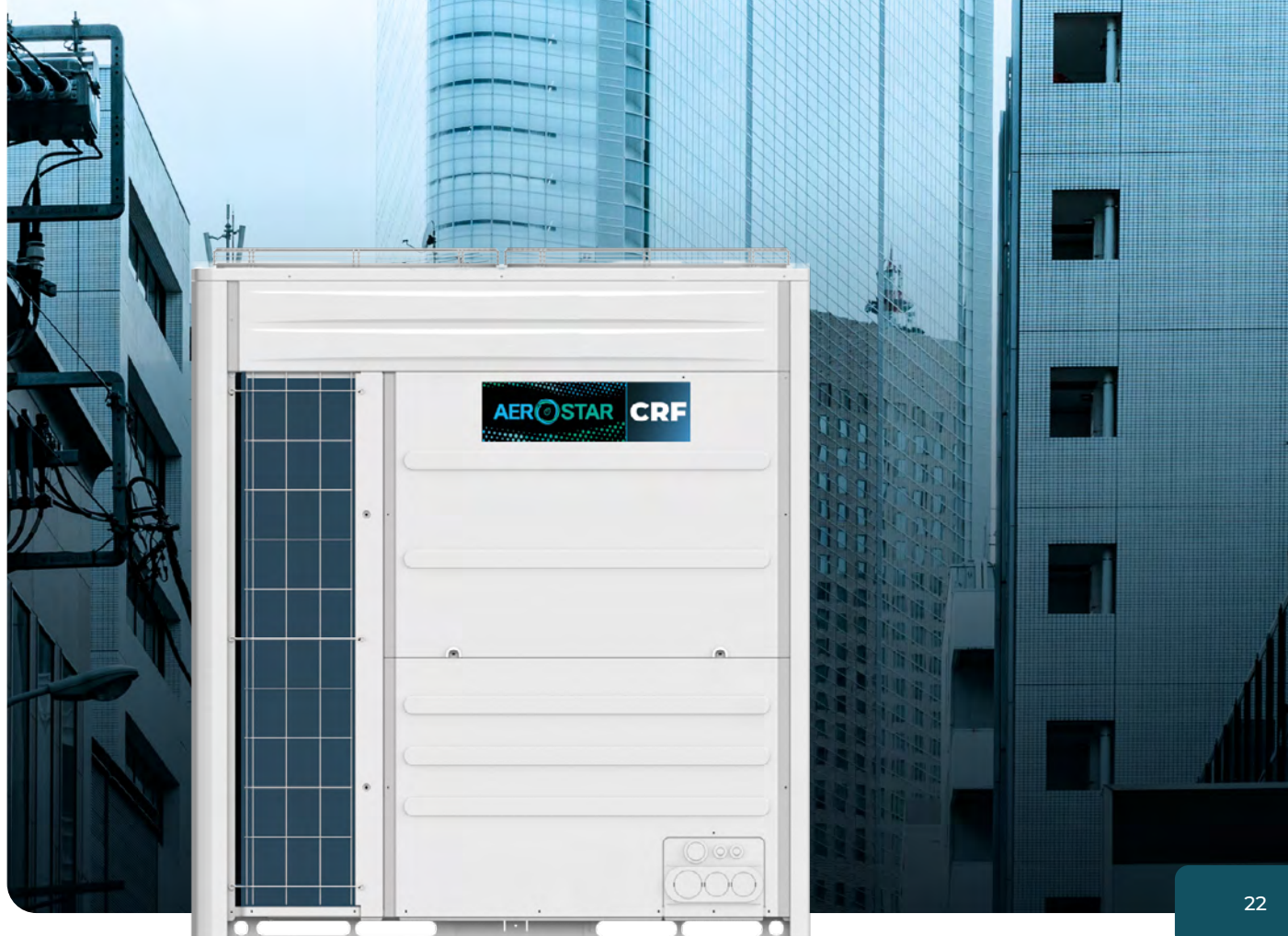
Exclusive Hi-Checker is a super intelligent service tool for system diagnosis, which can provides easy access to service parameters.

Detail operation status and recent error history can be checked and analyzed by using Hi-Checker.



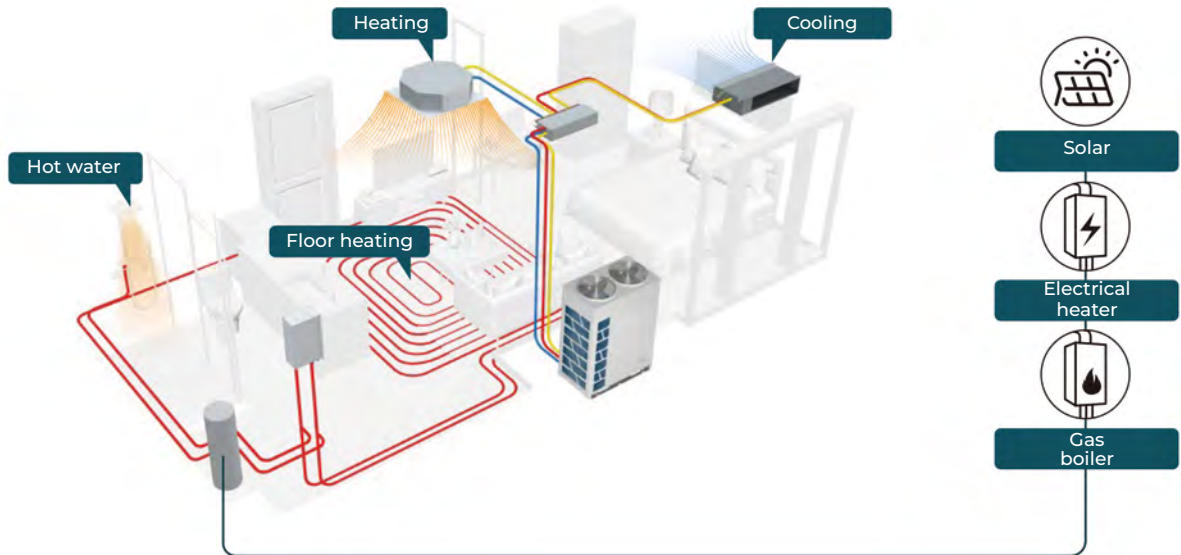
# AEROSTAR

## CRF HEAT RECOVERY SERIES



## ALL IN ONE RENEWABLE ENERGY SOLUTION

With CRF heat recovery series, cooling and heating of air can be realised simultaneously including water. During summer, it serves cool indoor rooms and warm water supply for night showers. With the same system, floor heating and fan coil unit heating and cooling can be done during season transition periods.



### 200% CONNECTION RATIO

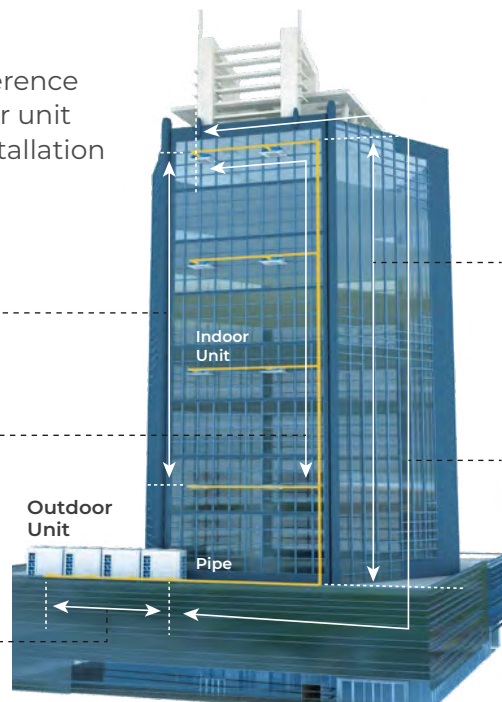
The powerful CRF heat recovery series outdoor units are connectable to indoor units up to 2 times of its own capacity with ratio of 200% for a more efficient and cost saving system.

### EXTERNAL STATIC PRESSURE

External static pressure is reachable up to 110Pa, allowing better air discharge when are installed indoors with ducting or even outdoors in poor air ventilation spaces.

### PIPING LENGTH

With extra long pipe, the height difference between the indoor unit and outdoor unit is up to 90 meters\*, which makes installation more flexible.



Maximum height difference between indoor and outdoor units:  
 when the outdoor unit is above: 50m(90m\*)  
 when the outdoor unit is below: 40m(90m\*)

Maximum actual length of a single pipe: 165m  
 Total length of pipes: 1000m

Maximum height difference of indoor units: 15m(30m\*)

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

Largest pipe length between outdoor units: 10m

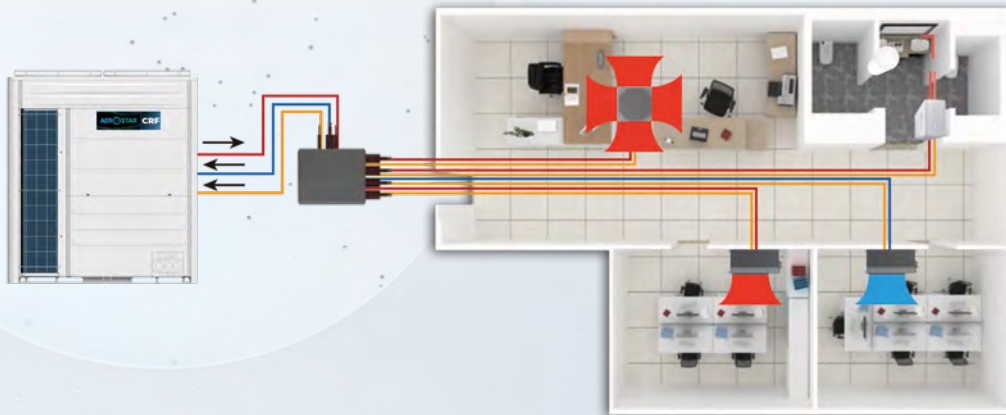
**Note:**  
 For detailed information, please contact Aerostar's technical staff.



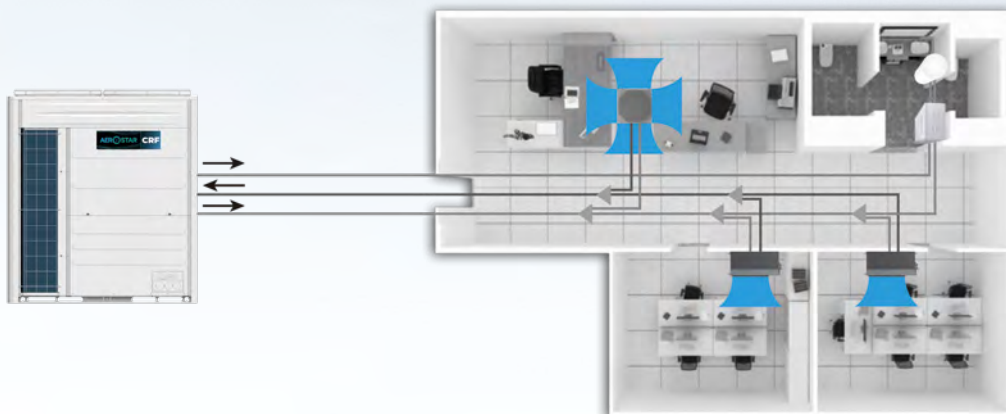
## SWITCH BOX

Блок дає змогу спростити 3-трубну систему з рекуперацією тепла за рахунок меншої кількості з'єднань і трубопроводів. Потужності до 85 кВт для більших систем і до 16 портів для під'єднання внутрішніх блоків.

### 3 Pipes Without Switch Box



### 3 Pipes Without Switch Box



# CRF Heat Recovery



HP			8HP	10HP	12HP	14HP	16HP	18HP
Model	Model		AER-CS224CROU	AER-CS280CROU	AER-CS335CROU	AER-CS400CROU	AER-CS450CROU	AER-CS500CROU
	Modules		—	—	—	—	—	—
Power Supply			AC 3Φ, 380-415V/50/60Hz					
Cooling	Capacity	kW	22.4	28.0	33.5	40.0	45.0	50.0
	Power Input	kW	4.87	6.75	8.09	10.26	12.16	14.04
	EER	kW / kW	4.60	4.15	4.14	3.90	3.70	3.56
Heating	Capacity (Max/ Nom)	kW	25.0 / 22.4	31.5 / 28.0	37.5 / 33.5	45.0 / 40.0	50.0 / 45.0	56.0 / 50.0
	Power Input (Max/ Nom)	kW	5.20 / 4.36	6.77 / 5.63	9.17 / 7.70	10.82 / 8.89	12.14 / 10.32	14.74 / 12.02
	COP (Max)	kW / kW	4.81	4.65	4.09	4.16	4.12	3.80
Ventilation	Air Flow Rate	m <sup>3</sup> /min	183	183	183	200	200	200
	Fan Quantity		1	1	1	2	2	2
Sound	Static Pressure	Pa	110	110	110	110	110	110
	Sound Pressure Level	dB(A)	59	60	62	62	62	62
Compressor	Type	-	Enhanced Vapor Injection Scroll Compressor					
	Compressor Quantity	pcs	1	1	1	1	1	2
Refrigerant	Type	-	R410A					
	Pre-charged Quantity	kg	5.60	5.90	6.00	8.80	8.80	9.20
Weight	Net Weight	kg	226	227	246	289	290	349
	Gross Weight	kg	246	247	266	311	312	371
Dimensions	External (HxWxD)	mm	1730x950x750	1730x950x750	1730x950x750	1730x1210x750	1730x1210x750	1730x1210x750
	Packing (HxWxD)	mm	1930x1015x790	1930x1015x790	1930x1015x790	1930x1275x790	1930x1275x790	1930x1275x790
Cabinet Color			Слонова кістка	Слонова кістка	Слонова кістка	Слонова кістка	Слонова кістка	Слонова кістка
Heat Recovery Operation System	Low Pressure Gas Line	mm(in.)	Φ19.05(3/4)	Φ22.20(7/8)	Φ25.40(1)	Φ25.40(1)	Φ28.60(1-1/8)	Φ28.60(1-1/8)
	High/Low Pressure Gas Line	mm(in.)	Φ15.88(5/8)	Φ19.05(3/4)	Φ22.2(7/8)	Φ22.2(7/8)	Φ22.2(7/8)	Φ22.2(7/8)
	Liquid Line	mm(in.)	Φ9.53(3/8)	Φ9.53(3/8)	Φ12.70(1/2)	Φ12.70(1/2)	Φ12.70(1/2)	Φ15.88(5/8)
Heat Pump Operation System	Gas Line	mm(in.)	Φ19.05(3/4)	Φ22.20(7/8)	Φ25.40(1)	Φ25.40(1)	Φ28.60(1-1/8)	Φ28.60(1-1/8)
	Liquid Line	mm(in.)	Φ9.53(3/8)	Φ9.53(3/8)	Φ12.70(1/2)	Φ12.70(1/2)	Φ12.70(1/2)	Φ15.88(5/8)
Connectable Indoor Units	Quantity	pcs	13	16	19	23	26	29
	Total Capacity	-	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>
Piping Design	Low pressure Gas Line	m (above)	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )
		m (below)	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )
	High Difference Between ODU & IDU	m	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>**2</sup> )	15(30 <sup>2</sup> )
	Max. Piping Length	m	165	165	165	165	165	165
Operating Range	Cooling	DB	-10°C~52°C	-10°C~52°C	-10°C~52°C	-10°C~52°C	-10°C~52°C	-10°C~52°C
	Heating	WB	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C

# CRF Heat Recovery



HP			20HP	22HP	24HP	26HP	28HP
Model	Model		AER-CS560CROU	AER-CS615CROU	AER-CS680CROU	AER-CS725CROU	AER-CS800CROU
	Modules		—	—	—	—	—
Power Supply			AC 3 $\phi$ , 380-415V/50/60Hz				
Cooling	Capacity	kW	56.0	61.5	68.0	72.5	80.0
	Power Input	kW	15.60	18.04	20.61	21.90	24.24
	EER	kW / kW	3.59	3.41	3.30	3.31	3.20
Heating	Capacity (Max/ Nom)	kW	63.0 / 56.0	69.0 / 61.5	75.0 / 68.0	80.0 / 72.5	90.0 / 80.0
	Power Input (Max/ Nom)	kW	16.54 / 13.56	18.80/15.89	21.43 / 18.38	22.35 / 19.23	26.01 / 21.92
	COP (Max)	kW / kW	3.81	3.67	3.50	3.58	3.46
Ventilation	Air Flow Rate	m <sup>3</sup> /min	267	296	296	350	350
	Fan Quantity		2	2	2	2	2
	Static Pressure	Pa	110	110	110	110	110
Sound	Sound Pressure Level	dB(A)	63	64	66	67	67
Compressor	Type	-	Enhanced Vapor Injection Scroll Compressor				
	Compressor Quantity	pcs	2	2	2	2	2
Refrigerant	Type	-	R410A				
	Pre-charged Quantity	kg	9.80	10.60	10.60	11.50	11.50
Weight	Net Weight	kg	369	377	378	400	401
	Gross Weight	kg	393	401	402	426	427
Dimensions	External (HxWxD)	mm	1730x1350x750	1730x1350x750	1730x1350x750	1730x1600x750	1730x1600x750
	Packing (HxWxD)	mm	1930x1420x790	1930x1420x790	1930x1420x790	1930x1665x790	1930x1665x790
Cabinet Color			Ivory White	Ivory White	Ivory White	Ivory White	Ivory White
Heat Recovery Operation System	Low Pressure Gas Line	mm(in.)	$\phi$ 28.60(1-1/8)	$\phi$ 28.60(1-1/8)	$\phi$ 28.60(1-1/8)	$\phi$ 31.75(1-1/4)	$\phi$ 31.75(1-1/4)
	High/Low Pressure Gas Line	mm(in.)	$\phi$ 22.2(7/8)	$\phi$ 25.4(1)	$\phi$ 25.4(1)	$\phi$ 25.4(1)	$\phi$ 28.6(1-1/8)
	Liquid Line	mm(in.)	$\phi$ 15.88(5/8)	$\phi$ 15.88(5/8)	$\phi$ 15.88(5/8)	$\phi$ 19.05(3/4)	$\phi$ 19.05(3/4)
Heat Pump Operation System	Gas Line	mm(in.)	$\phi$ 28.60(1-1/8)	$\phi$ 28.60(1-1/8)	$\phi$ 28.60(1-1/8)	$\phi$ 31.75(1-1/4)	$\phi$ 31.75(1-1/4)
	Liquid Line	mm(in.)	$\phi$ 15.88(5/8)	$\phi$ 15.88(5/8)	$\phi$ 15.88(5/8)	$\phi$ 19.05(3/4)	$\phi$ 19.05(3/4)
Connectable Indoor Units	Quantity	pcs	33	36	40	43	47
	Total Capacity	-	200%*1	200%*1	200%*1	200%*1	200%*1
Piping Design	Low pressure Gas Line	m (above)	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )
		m (below)	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )
	High Difference Between ODU & IDU	m	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )
	Max. Piping Length	m	165	165	165	165	165
Operating Range	Cooling	DB	-10°C~52°C	-10°C~52°C	-10°C~52°C	-10°C~52°C	-10°C~52°C
	Heating	WB	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C

# CRF Heat Recovery



HP			30HP	32HP	34HP	36HP	38HP
Model	Model		AER-CS850CROU	AER-CS900CROU	AER-CS950CROU	AER-CS1000CROU	AER-CS1060CROU
	Modules		AER-CS450CROU AER-CS400CROU	AER-CS450CROU AER-CS450CROU	AER-CS500CROU AER-CS450CROU	AER-CS500CROU AER-CS500CROU	AER-CS560CROU AER-CS500CROU
Power Supply			AC 3φ, 380-415V/50/60Hz				
Cooling	Capacity	кВт	85.0	90.0	95.0	101.0	106.0
	Power Input	кВт	22.41	24.32	26.20	27.75	29.64
	EER	кВт / кВт	3.79	3.70	3.63	3.64	3.58
Heating	Capacity (Max/ Nom)	кВт	95.0 / 85.0	100.0 / 90.0	106.0 / 95.0	113.0 / 101.0	119.0 / 106.0
	Power Input (Max/ Nom)	кВт	22.95 / 19.21	24.27 / 20.64	26.82 / 22.33	28.62 / 23.86	31.27 / 25.58
	COP (Max)	кВт / кВт	4.14	4.12	3.95	3.95	3.81
Ventilation	Air Flow Rate	м³/хв	400	400	400	467	467
	Fan Quantity		4	4	4	4	4
	Static Pressure	Па	110	110	110	110	110
Sound	Sound Pressure Level	дБ(А)	67	67	67	67	67
Compressor	Type	-	Enhanced Vapor Injection Scroll Compressor				
	Compressor Quantity	шт	2	2	3	3	4
Refrigerant	Type	-	R410A				
	Pre-charged Quantity	кг	8.80+8.80	8.80+8.80	8.80+9.20	8.80+9.80	9.20+9.80
Weight	Net Weight	кг	289+290	290+290	290+349	290+369	349+369
	Gross Weight	кг	311+312	312+312	312+371	312+393	371+393
Dimensions	External (HxWxD)	мм	1730x (1210+1210) x750	1730x (1210+1210) x750	1730x (1210+1210) x750	1730x (1210+1350) x750	1730x (1210+1350) x750
	Packing (HxWxD)	мм	1930x (1275+1275) x790	1930x (1275+1275) x790	1930x (1275+1275) x790	1930x (1275+1420) x790	1930x (1275+1420) x790
Cabinet Color			Ivory White	Ivory White	Ivory White	Ivory White	Ivory White
Heat Recovery Operation System	Low Pressure Gas Line	мм(дюйм)	φ31.75(1-1/4)	φ31.75(1-1/4)	φ31.75(1-1/4)	φ38.1(1-1/2)	φ38.1(1-1/2)
	High/Low Pressure Gas Line	мм(дюйм)	φ28.6(1-1/8)	φ28.6(1-1/8)	φ28.6(1-1/8)	φ28.6(1-1/8)	φ31.75(1-1/4)
	Liquid Line	мм(дюйм)	φ19.05(3/4)	φ19.05(3/4)	φ19.05(3/4)	φ19.05(3/4)	φ19.05(3/4)
Heat Pump Operation System	Gas Line	мм(дюйм)	φ31.75(1-1/4)	φ31.75(1-1/4)	φ31.75(1-1/4)	φ38.1(1-1/2)	φ38.1(1-1/2)
	Liquid Line	мм(дюйм)	φ19.05(3/4)	φ19.05(3/4)	φ19.05(3/4)	φ19.05(3/4)	φ19.05(3/4)
Connectable Indoor Units	Quantity	шт	50	53	56	59	64
	Total Capacity	-	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>
Piping Design	Low pressure Gas Line	м (вище)	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )
		м (нижче)	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )
	High Difference Between ODU & IDU	м	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )
	Max. Piping Length	м	165	165	165	165	165
Operating Range	Cooling	DB	-10°C~52°C	-10°C~52°C	-10°C~52°C	-10°C~52°C	-10°C~52°C
	Heating	WB	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C

# CRF Heat Recovery



HP			40HP	42HP	44HP	46HP	48HP
Model	Model		AER-CS1120CROU	AER-CS1180CROU	AER-CS1240CROU	AER-CS1295CROU	AER-CS1360CROU
	Modules		AER-CS560CROU AER-CS560CROU	AER-CS680CROU AER-CS500CROU	AER-CS680CROU AER-CS560CROU	AER-CS680CROU AER-CS615CROU	AER-CS680CROU AER-CS680CROU
Power Supply			AC 3 $\phi$ , 380-415V/50/60Hz				
Cooling	Capacity	kW	112.0	118.0	124.0	129.5	136.0
	Power Input	kW	31.20	34.60	36.15	38.63	41.21
	EER	kW / kW	3.59	3.41	3.43	3.35	3.30
Heating	Capacity (Max/ Nom)	kW	126.0 / 112.0	131.0 / 118.0	138.0 / 124.0	144.0 / 129.5	150.0 / 136.0
	Power Input (Max/ Nom)	kW	33.07 / 27.12	36.12 / 30.30	37.92 / 31.85	40.21 / 34.25	42.86 / 36.76
	COP (Max)	kW / kW	3.81	3.63	3.64	3.58	3.50
Ventilation	Air Flow Rate	m <sup>3</sup> /min	534	496	563	592	592
	Fan Quantity		4	4	4	4	4
	Static Pressure	Pa	110	110	110	110	110
Sound	Sound Pressure Level	dB(A)	67	67	68	68	69
Compressor	Type	-	Enhanced Vapor Injection Scroll Compressor				
	Compressor Quantity	pcs	4	4	4	4	4
Refrigerant	Type	-	R410A				
	Pre-charged Quantity	kg	9.80+9.80	9.20+10.60	9.80+10.60	10.60+10.60	10.60+10.60
Weight	Net Weight	kg	369+369	349+378	369+378	377+378	378+378
	Gross Weight	kg	393+393	371+402	393+402	401+402	402+402
Dimensions	External (HxWxD)	mm	1730x (1350+1350) x750	1730x (1210+1350) x750	1730x (1350+1350) x750	1730x (1350+1350) x750	1730x (1350+1350) x750
	Packing (HxWxD)	mm	1930x (1420+1420) x790	1930x (1275+1420) x790	1930x (1420+1420) x790	1930x (1420+1420) x790	1930x (1420+1420) x790
Cabinet Color			Ivory White	Ivory White	Ivory White	Ivory White	Ivory White
Heat Recovery Operation System	Low Pressure Gas Line	mm(in.)	$\phi$ 38.1(1-1/2)	$\phi$ 38.1(1-1/2)	$\phi$ 38.1(1-1/2)	$\phi$ 38.1(1-1/2)	$\phi$ 38.1(1-1/2)
	High/Low Pressure Gas Line	mm(in.)	$\phi$ 31.75(1-1/4)	$\phi$ 31.75(1-1/4)	$\phi$ 31.75(1-1/4)	$\phi$ 31.75(1-1/4)	$\phi$ 31.75(1-1/4)
	Liquid Line	mm(in.)	$\phi$ 19.05(3/4)	$\phi$ 19.05(3/4)	$\phi$ 19.05(3/4)	$\phi$ 19.05(3/4)	$\phi$ 19.05(3/4)
Heat Pump Operation System	Gas Line	mm(in.)	$\phi$ 38.1(1-1/2)	$\phi$ 38.1(1-1/2)	$\phi$ 38.1(1-1/2)	$\phi$ 38.1(1-1/2)	$\phi$ 38.1(1-1/2)
	Liquid Line	mm(in.)	$\phi$ 19.05(3/4)	$\phi$ 19.05(3/4)	$\phi$ 19.05(3/4)	$\phi$ 19.05(3/4)	$\phi$ 19.05(3/4)
Connectable Indoor Units	Quantity	pcs	64	64	64	64	64
	Total Capacity	-	200% <sup>*1</sup>	200% <sup>*1</sup>	200% <sup>*1</sup>	200% <sup>*1</sup>	200% <sup>*1</sup>
Piping Design	Low pressure Gas Line	m (above)	50(90 <sup>*2</sup> )	50(90 <sup>*2</sup> )	50(90 <sup>*2</sup> )	50(90 <sup>*2</sup> )	50(90 <sup>*2</sup> )
		m (below)	40(90 <sup>*2</sup> )	40(90 <sup>*2</sup> )	40(90 <sup>*2</sup> )	40(90 <sup>*2</sup> )	40(90 <sup>*2</sup> )
	High Difference Between ODU & IDU	m	15(30 <sup>*2</sup> )	15(30 <sup>*2</sup> )	15(30 <sup>*2</sup> )	15(30 <sup>*2</sup> )	15(30 <sup>*2</sup> )
	Max. Piping Length	m	165	165	165	165	165
Operating Range	Cooling	DB	-10°C~52°C	-10°C~52°C	-10°C~52°C	-10°C~52°C	-10°C~52°C
	Heating	WB	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C

# CRF Heat Recovery



HP		50HP	52HP	54HP	56HP	
Model	Model	AER-CS1405CROU	AER-CS1480CROU	AER-CS1525CROU	AER-CS1600CROU	
	Modules	AER-CS725CROU AER-CS680CROU	AER-CS800CROU AER-CS680CROU	AER-CS800CROU AER-CS725CROU	AER-CS800CROU AER-CS800CROU	
Power Supply		AC 3Φ, 380-415V/50/60Hz				
Cooling	Capacity	kW	140.5	148.0	152.5	160.0
	Power Input	kW	42.51	44.85	46.15	48.48
	EER	kW / kW	3.31	3.30	3.30	3.30
Heating	Capacity (Max/ Nom)	kW	155.0 / 140.5	165.0 / 148.0	170.0 / 152.5	180.0 / 160.0
	Power Input (Max/ Nom)	kW	43.77 / 37.60	47.44/ 40.29	48.33 / 41.13	52.02 / 43.84
	COP (Max)	kW / kW	3.54	3.48	3.52	3.46
Ventilation	Air Flow Rate	m <sup>3</sup> /min	646	646	700	700
	Fan Quantity		4	4	4	4
Sound	Static Pressure	Pa	110	110	110	110
	Sound Pressure Level	dB(A)	70	70	70	70
Compressor	Type	-	Enhanced Vapor Injection Scroll Compressor			
	Compressor Quantity	pcs	4	4	4	4
Refrigerant	Type	-	R410A			
	Pre-charged Quantity	kg	10.60+11.50	10.60+11.50	11.50+11.50	11.50+11.50
Weight	Net Weight	kg	378+400	378+401	400+401	401+401
	Gross Weight	kg	402+426	402+427	426+427	427+427
Dimensions	External (HxWxD)	mm	1730x (1350+1600) x750 1930x	1730x (1350+1600) x750 1930x	1730x (1600+1600) x750 1930x	1730x (1600+1600) x750 1930x
	Packing (HxWxD)	mm	(1420+1665) x790	(1420+1665) x790	(1665+1665) x790	(1665+1665) x790
Cabinet Color			Ivory White	Ivory White	Ivory White	Ivory White
Heat Recovery Operation System	Low Pressure Gas Line	mm(in.)	Φ38.1(1-1/2)	Φ38.1(1-1/2)	Φ38.1(1-1/2)	Φ41.3(1-5/8)
	High/Low Pressure Gas Line	mm(in.)	Φ31.75(1-1/4)	Φ31.75(1-1/4)	Φ31.75(1-1/4)	Φ38.1(1-1/2)
	Liquid Line	mm(in.)	Φ19.05(3/4)	Φ19.05(3/4)	Φ19.05(3/4)	Φ22.2(7/8)
Heat Pump Operation System	Gas Line	mm(in.)	Φ38.1(1-1/2)	Φ38.1(1-1/2)	Φ38.1(1-1/2)	Φ41.3(1-5/8)
	Liquid Line	mm(in.)	Φ19.05(3/4)	Φ19.05(3/4)	Φ19.05(3/4)	Φ22.2(7/8)
Connectable Indoor Units	Quantity	pcs	64	64	64	64
	Total Capacity	-	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>
Piping Design	Low pressure Gas Line	m (above)	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )
		m (below)	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )
	High Difference Between ODU & IDU	m	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )
	Max. Piping Length	m	165	165	165	165
Operating Range	Cooling	DB	-10°C~52°C	-10°C~52°C	-10°C~52°C	-10°C~52°C
	Heating	WB	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C

# CRF Heat Recovery



HP			58HP	60HP	62HP	64HP
Model	Model		AER-CS1615CROU	AER-CS1680CROU	AER-CS1740CROU	AER-CS1800CROU
	Modules		AER-CS615CROU AER-CS500CROU AER-CS500CROU	AER-CS680CROU AER-CS500CROU AER-CS500CROU	AER-CS680CROU AER-CS560CROU AER-CS500CROU	AER-CS680CROU AER-CS560CROU AER-CS560CROU
Power Supply			AC 3Φ, 380-415V/50/60Hz			
Cooling	Capacity	kW	161.5	168.0	174.0	180.0
	Power Input	kW	46.11	46.80	50.18	51.72
	EER	kW / kW	3.50	3.59	3.47	3.48
Heating	Capacity (Max/ Nom)	kW	181.0 / 161.5	189.0 / 168.0	194.0 / 174.0	201.0 / 180.0
	Power Input (Max/ Nom)	kW	48.27 / 39.89	49.61/ 40.68	52.64 / 43.83	54.43 / 45.37
	COP (Max)	kW / kW	3.75	3.81	3.69	3.69
Ventilation	Air Flow Rate	m <sup>3</sup> /min	696	801	763	830
	Fan Quantity		6	6	6	6
Sound	Static Pressure	Pa	110	110	110	110
	Sound Pressure Level	dB(A)	70	70	70	70
Compressor	Type	-	Enhanced Vapor Injection Scroll Compressor			
	Compressor Quantity	pcs	6	6	6	6
Refrigerant	Type	-	R410A			
	Pre-charged Quantity	kg	9.20+9.20+10.60	9.80+9.80+9.80	9.20+9.80+10.60	9.80+9.80+10.60
Weight	Net Weight	kg	349+349+377	369+369+369	349+369+378	369+369+378
	Gross Weight	kg	371+371+401	393+393+393	371+393+402	393+393+402
Dimensions	External (HxWxD)	mm	1730x (1210+1210+1350) x750 1930x	1730x (1350+1350+1350) x750 1930x	1730x (1210+1350+1350) x750 1930x	1730x (1350+1350+1350) x750 1930x
	Packing (HxWxD)	mm	(1275+1275+1420) x790	(1420+1420+1420) x790	(1275+1420+1420) x790	(1420+1420+1420) x790
Cabinet Color			Ivory White	Ivory White	Ivory White	Ivory White
Heat Recovery Operation System	Low Pressure Gas Line	mm(in.)	Φ44.5(1-3/4)	Φ44.5(1-3/4)	Φ44.5(1-3/4)	Φ44.5(1-3/4)
	High/Low Pressure Gas Line	mm(in.)	Φ41.3(1-5/8)	Φ41.3(1-5/8)	Φ41.3(1-5/8)	Φ41.3(1-5/8)
	Liquid Line	mm(in.)	Φ22.2(7/8)	Φ22.2(7/8)	Φ22.2(7/8)	Φ22.2(7/8)
Heat Pump Operation System	Gas Line	mm(in.)	Φ44.5(1-3/4)	Φ44.5(1-3/4)	Φ44.5(1-3/4)	Φ44.5(1-3/4)
	Liquid Line	mm(in.)	Φ22.2(7/8)	Φ22.2(7/8)	Φ22.2(7/8)	Φ22.2(7/8)
Connectable Indoor Units	Quantity	pcs	64	64	64	64
	Total Capacity	-	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>
Piping Design	Low pressure Gas Line	m (above)	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )
		m (below)	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )
	High Difference Between ODU & IDU	m	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )
	Max. Piping Length	m	165	165	165	165
Operating Range	Cooling	DB	-10°C~52°C	-10°C~52°C	-10°C~52°C	-10°C~52°C
	Heating	WB	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C

# CRF Heat Recovery



HP		66HP	68HP	70HP	72HP	
Модель	Модель	AER-CS1860CROU	AER-CS1920CROU	AER-CS1975CROU	AER-CS2040CROU	
	Комбінація модулів	AER-CS680CROU	AER-CS680CROU	AER-CS680CROU	AER-CS680CROU	
		AER-CS680CROU AER-CS500CROU	AER-CS680CROU AER-CS560CROU	AER-CS680CROU AER-CS615CROU	AER-CS680CROU AER-CS680CROU	
		AC 3Ф, 380-415V/50/60Hz				
Охолодження	Потужність	кВт	185.5	192.0	197.5	204.0
	Споживча потужність	кВт	54.18	56.73	59.23	61.82
	EER	кВт / кВт	3.42	3.38	3.33	3.30
Нагрів	Потужність (Макс./Номінальна)	кВт	207.0 / 185.5	213.0 / 192.0	219.0 / 197.5	225.0 / 204.0
	Споживана потужність (Макс./Номінальна)	кВт	56.72 / 47.74	59.33 / 50.20	61.63 / 52.62	64.29 / 55.14
	COP (Макс.)	кВт / кВт	3.65	3.59	3.55	3.50
Вентилятор	Витрата повітря	м³/хв	859	859	888	888
	Кількість		6	6	6	6
	Статичний тиск	Па	110	110	110	110
Звук	Рівень звукового тиску	дБ(А)	70	70	70	71
	Тип	-	EVI спіральний компресор			
Компресор	Кількість	шт	6	6	6	6
	Тип	-	R410A			
Холодоагент	Заправлена к-сть.	кг	9.80+10.60+10.60	9.80+10.60+10.60	10.60+10.60+10.60	10.60+10.60+10.60
	Вага	кг	369+377+378	369+378+378	377+378+378	378+378+378
Розміри	Брутто	кг	393+401+402	393+402+402	401+402+402	402+402+402
	Габаритні (ВхШхГ)	мм	1730x (1350+1350+1350) x750 1930x	1730x (1350+1350+1350) x750 1930x	1730x (1350+1350+1350) x750 1930x	1730x (1350+1350+1350) x750 1930x
Колір корпусу	Упаковка (ВхШхГ)	мм	(1420+1420+1420) x790	(1420+1420+1420) x790	(1420+1420+1420) x790	(1420+1420+1420) x790
	Слонова кістка		Слонова кістка	Слонова кістка	Слонова кістка	Слонова кістка
Система рекуперації тепла	Газ низького тиску	мм(дюйм)	Ф44.5(1-3/4)	Ф50.8(2)	Ф50.8(2)	Ф50.8(2)
	Газ високого / низького тиску	мм(дюйм)	Ф41.3(1-5/8)	Ф44.5(1-3/4)	Ф44.5(1-3/4)	Ф44.5(1-3/4)
	Лінія рідини	мм(дюйм)	Ф22.2(7/8)	Ф25.4(1)	Ф25.4(1)	Ф25.4(1)
Система теплового насоса	Лінія подачі газу	мм(дюйм)	Ф44.5(1-3/4)	Ф50.8(2)	Ф50.8(2)	Ф50.8(2)
	Лінія рідини	мм(дюйм)	Ф22.2(7/8)	Ф25.4(1)	Ф25.4(1)	Ф25.4(1)
Кількість вн. блоків, що підкл.	Кількість	шт	64	64	64	64
	Коефіцієнт підключення	-	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>
Проектування трубопроводів	Перепад висот між зовн. і внутр. блоками	м (вище)	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )
		м (нижче)	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )
	Перепад висот між внутрішніми блоками	м	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )
	Макс. довжина трубопроводів	м	165	165	165	165
Робочий діапазон	Охолодження	DB	-10°C~52°C	-10°C~52°C	-10°C~52°C	-10°C~52°C
	Нагрів	WB	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C



# CRF Heat Recovery



HP		74HP	76HP	78HP	80HP	
Model	Model	AER-CS2085CROU	AER-CS2130CROU	AER-CS2205CROU	AER-CS2280CROU	
	Modules	AER-CS725CROU AER-CS680CROU AER-CS680CROU	AER-CS725CROU AER-CS725CROU AER-CS680CROU	AER-CS800CROU AER-CS725CROU AER-CS680CROU	AER-CS800CROU AER-CS800CROU AER-CS680CROU	
Power Supply		AC 3Φ, 380-415V/50/60Hz				
Cooling	Capacity	kW	208.5	213.0	220.5	228.0
	Power Input	kW	63.11	64.41	66.75	69.09
	EER	kW / kW	3.30	3.31	3.30	3.30
Heating	Capacity (Max/ Nom)	kW	230.0 / 208.5	235.0 / 213.0	245.0 / 220.5	255.0 / 228.0
	Power Input (Max/ Nom)	kW	65.19 / 55.98	66.11 / 56.83	69.76 / 59.51	73.45 / 62.21
	COP (Max)	kW / kW	3.53	3.55	3.51	3.47
Ventilation	Air Flow Rate	m <sup>3</sup> /min	942	996	996	996
	Fan Quantity		6	6	6	6
Sound	Static Pressure	Pa	110	110	110	110
	Sound Pressure Level	dB(A)	71	71	71	71
Compressor	Type	-	Enhanced Vapor Injection Scroll Compressor			
	Compressor Quantity	pcs	6	6	6	6
Refrigerant	Type	-	R410A			
	Pre-charged Quantity	kg	10.60+10.60+11.50	10.60+11.50+11.50	10.60+11.50+11.50	10.60+11.50+11.50
Weight	Net Weight	kg	378+378+400	378+400+400	378+400+401	378+401+401
	Gross Weight	kg	402+402+426	402+426+426	402+426+427	402+427+427
Dimensions	External (HxWxD)	mm	1730x (1350+1350+1600) x750	1730x (1350+1600+1600) x750	1730x (1350+1600+1600) x750	1730x (1350+1600+1600) x750
	Packing (HxWxD)	mm	1930x (1420+1420+1665) x790	1930x (1420+1665+1665) x790	1930x (1420+1665+1665) x790	1930x (1420+1665+1665) x790
Cabinet Color			Ivory White	Ivory White	Ivory White	Ivory White
Heat Recovery Operation System	Low Pressure Gas Line	mm(in.)	Φ50.8(2)	Φ50.8(2)	Φ50.8(2)	Φ50.8(2)
	High/Low Pressure Gas Line	mm(in.)	Φ44.5(1-3/4)	Φ44.5(1-3/4)	Φ44.5(1-3/4)	Φ44.5(1-3/4)
	Liquid Line	mm(in.)	Φ25.4(1)	Φ25.4(1)	Φ25.4(1)	Φ25.4(1)
Heat Pump Operation System	Gas Line	mm(in.)	Φ50.8(2)	Φ50.8(2)	Φ50.8(2)	Φ50.8(2)
	Liquid Line	mm(in.)	Φ25.4(1)	Φ25.4(1)	Φ25.4(1)	Φ25.4(1)
Connectable Indoor Units	Quantity	pcs	64	64	64	64
	Total Capacity	-	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>
Piping Design	Low pressure Gas Line	m (above)	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )
		m (below)	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )
	High Difference Between ODU & IDU	m	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )
	Max. Piping Length	m	165	165	165	165
Operating Range	Cooling	DB	-10°C~52°C	-10°C~52°C	-10°C~52°C	-10°C~52°C
	Heating	WB	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C

# CRF Heat Recovery



HP		82HP	84HP	86HP	88HP	
Model	Model	AER-CS2325CROU	AER-CS2400CROU	AER-CS2415CROU	AER-CS2480CROU	
	Modules	AER-CS800CROU AER-CS800CROU AER-CS725CROU	AER-CS800CROU AER-CS800CROU AER-CS800CROU	AER-CS680CROU AER-CS615CROU AER-CS560CROU AER-CS560CROU	AER-CS680CROU AER-CS680CROU AER-CS560CROU AER-CS560CROU	
Power Supply		AC 3Φ, 380-415V/50/60Hz				
Cooling	Capacity	kW	232.5	240.0	241.5	248.0
	Power Input	kW	70.39	72.73	69.76	72.29
	EER	kW / kW	3.30	3.30	3.46	3.43
Heating	Capacity (Max/ Nom)	kW	260.0 / 232.5	270.0 / 240.0	270.0 / 241.5	276.0 / 248.0
	Power Input (Max/ Nom)	kW	74.33 / 63.05	78.03 / 65.75	73.24 / 61.26	75.83 / 63.69
Ventilation	COP (Max)	kW / kW	3.50	3.46	3.69	3.64
	Air Flow Rate	m <sup>3</sup> /min	1050	1050	1126	1126
Sound	Fan Quantity		6	6	8	8
	Static Pressure	Pa	110	110	110	110
Compressor	Sound Pressure Level	dB(A)	72	72	72	72
	Type	-	Enhanced Vapor Injection Scroll Compressor			
Refrigerant	Compressor Quantity	pcs	6	6	8	8
	Type	-	R410A			
Weight	Pre-charged Quantity	kg	11.50+11.50+11.50	11.50+11.50+11.50	9.80+9.80+10.60+10.60	9.80+9.80+10.60+10.60
	Net Weight	kg	400+401+401	401+401+401	369+369+377+378	369+369+378+378
Dimensions	Gross Weight	kg	426+427+427	427+427+427	393+393+401+402	393+393+402+402
	External (HxWxD)	mm	1730x (1600+1600+1600) x750	1730x (1600+1600+1600) x750	1730x (1350+1350+1350+1350) x750	1730x (1350+1350+1350+1350) x750
Cabinet Color	Packing (HxWxD)	mm	1930x (1665+1665+1665) x790	1930x (1665+1665+1665) x790	1930x (1420+1420+1420+1420) x790	1930x (1420+1420+1420+1420) x790
	Low Pressure Gas Line	mm(in.)	Ivory White	Ivory White	Ivory White	Ivory White
Heat Recovery Operation System	High/Low Pressure Gas Line	mm(in.)	Φ50.8(2)	Φ50.8(2)	Φ50.8(2)	Φ50.8(2)
	Liquid Line	mm(in.)	Φ44.5(1-3/4)	Φ44.5(1-3/4)	Φ44.5(1-3/4)	Φ44.5(1-3/4)
Heat Pump Operation System	Gas Line	mm(in.)	Φ25.4(1)	Φ25.4(1)	Φ25.4(1)	Φ25.4(1)
	Liquid Line	mm(in.)	Φ50.8(2)	Φ50.8(2)	Φ50.8(2)	Φ50.8(2)
Connectable Indoor Units	Quantity	pcs	Φ25.4(1)	Φ25.4(1)	Φ25.4(1)	Φ25.4(1)
	Total Capacity	-	64	64	64	64
Piping Design	Low pressure Gas Line	m (above)	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>
		m (below)	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )
	High Difference Between ODU & IDU	m	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )
	Max. Piping Length	m	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )
Operating Range	Cooling	DB	165	165	165	165
	Heating	WB	-10°C~-52°C	-10°C~-52°C	-10°C~-52°C	-10°C~-52°C
			-25°C~-16.5°C	-25°C~-16.5°C	-25°C~-16.5°C	-25°C~-16.5°C

# CRF Heat Recovery



HP		90HP	92HP	94HP	96HP	
Model	Model	AER-CS2535CROU	AER-CS2600CROU	AER-CS2655CROU	AER-CS2720CROU	
	Modules	AER-CS680CROU	AER-CS680CROU	AER-CS680CROU	AER-CS680CROU	
		AER-CS680CROU	AER-CS680CROU	AER-CS680CROU	AER-CS680CROU	
		AER-CS615CROU AER-CS560CROU	AER-CS680CROU AER-CS560CROU	AER-CS680CROU AER-CS560CROU	AER-CS680CROU AER-CS615CROU	AER-CS680CROU AER-CS680CROU
Power Supply		AC 3Φ, 380-415V/50/60Hz				
Cooling	Capacity	kW	253.5	260.0	265.5	272.0
	Power Input	kW	74.77	77.33	79.83	82.42
	EER	kW / kW	3.39	3.36	3.33	3.30
Heating	Capacity (Max/ Nom)	kW	282.0 / 253.5	288.0 / 260.0	294.0 / 265.5	300.0 / 272.0
	Power Input (Max/ Nom)	kW	78.12 / 66.09	80.75 / 68.56	83.06 / 71.00	85.71 / 73.51
	COP (Max)	kW / kW	3.61	3.57	3.54	3.50
Ventilation	Air Flow Rate	m <sup>3</sup> /min	1155	1155	1184	1184
	Fan Quantity		8	8	8	8
Sound	Static Pressure	Pa	110	110	110	110
	Sound Pressure Level	dB(A)	72	72	72	72
Compressor	Type	-	Enhanced Vapor Injection Scroll Compressor			
	Compressor Quantity	pcs	8	8	8	8
Refrigerant	Type	-	R410A			
	Pre-charged Quantity	kg	9.80+10.60+10.60+10.60	9.80+10.60+10.60+10.60	10.60+10.60+10.60+10.60	10.60+10.60+10.60+10.60
Weight	Net Weight	kg	369+377+378+378	369+378+378+378	377+378+378+378	378+378+378+378
	Gross Weight	kg	393+401+402+402	393+402+402+402	401+401+402+402	402+402+402+402
Dimensions	External (HxWxD)	mm	1730x (1350+1350+1350+1350) x750	1730x (1350+1350+1350+1350) x750	1730x (1350+1350+1350+1350) x750	1730x (1350+1350+1350+1350) x750
	Packing (HxWxD)	mm	1930x (1420+1420+1420+1420) x790	1930x (1420+1420+1420+1420) x790	1930x (1420+1420+1420+1420) x790	1930x (1420+1420+1420+1420) x790
Cabinet Color			Ivory White	Ivory White	Ivory White	Ivory White
Heat Recovery Operation System	Low Pressure Gas Line	mm(in.)	φ50.8(2)	φ50.8(2)	φ50.8(2)	φ50.8(2)
	High/Low Pressure Gas Line	mm(in.)	φ44.5(1-3/4)	φ44.5(1-3/4)	φ44.5(1-3/4)	φ44.5(1-3/4)
	Liquid Line	mm(in.)	φ25.4(1)	φ25.4(1)	φ25.4(1)	φ25.4(1)
Heat Pump Operation System	Gas Line	mm(in.)	φ50.8(2)	φ50.8(2)	φ50.8(2)	φ50.8(2)
	Liquid Line	mm(in.)	φ25.4(1)	φ25.4(1)	φ25.4(1)	φ25.4(1)
Connectable Indoor Units	Quantity	pcs	64	64	64	64
	Total Capacity	-	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>
Piping Design	Low pressure Gas Line	m (above)	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )
		m (below)	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )
	High Difference Between ODU & IDU	m	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )
	Max. Piping Length	m	165	165	165	165
Operating Range	Cooling	DB	-10°C~52°C	-10°C~52°C	-10°C~52°C	-10°C~52°C
	Heating	WB	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C

# CRF Heat Recovery



HP		98HP	100HP	102HP	104HP	
Model	Model	AER-CS2765CROU	AER-CS2840CROU	AER-CS2885CROU	AER-CS2960CROU	
	Modules	AER-CS725CROU	AER-CS800CROU	AER-CS800CROU	AER-CS800CROU	
		AER-CS680CROU	AER-CS680CROU	AER-CS725CROU	AER-CS800CROU	
		AER-CS680CROU	AER-CS680CROU	AER-CS680CROU	AER-CS680CROU	
Power Supply		AC 3Φ, 380-415V/50/60Hz				
Cooling	Capacity	kW	276.5	284.0	289.5	296.0
	Power Input	kW	83.72	86.06	87.10	89.70
	EER	kW / kW	3.30	3.30	3.32	3.30
Heating	Capacity (Max/ Nom)	kW	305.0 / 276.5	315.0 / 284.0	324.0 / 289.5	330.0 / 296.0
	Power Input (Max/ Nom)	kW	86.62 / 74.36	90.29 / 77.05	92.19 / 78.05	94.87 / 80.59
	COP (Max)	kW / kW	3.52	3.49	3.51	3.48
Ventilation	Air Flow Rate	m³/min	1238	1238	1292	1292
	Fan Quantity		8	8	8	8
Sound	Static Pressure	Pa	110	110	110	110
	Sound Pressure Level	dB(A)	72	72	72	73
Compressor	Type	Enhanced Vapor Injection Scroll Compressor				
	Compressor Quantity	pcs	8	8	8	8
Refrigerant	Type	R410A				
	Pre-charged Quantity	kg	10.60+10.60+10.60+11.50	10.60+10.60+10.60+11.50	10.60+10.60+11.50+11.50	10.60+10.60+11.50+11.50
Weight	Net Weight	kg	378+378+378+400	378+378+378+401	377+378+401+401	378+378+401+401
	Gross Weight	kg	402+402+402+426	402+402+402+427	401+402+427+427	402+402+427+427
Dimensions	External (HxWxD)	mm	1730x (1350+1350+1350+1600) x750 1930x	1730x (1350+1350+1350+1600) x750 1930x	1730x (1350+1350+1600+1600) x750 1930x	1730x (1350+1350+1600+1600) x750 1930x
	Packing (HxWxD)	mm	(1420+1420+1420+1665) x790	(1420+1420+1420+1665) x790	(1420+1420+1665+1665) x790	(1420+1420+1665+1665) x790
Cabinet Color		Ivory White	Ivory White	Ivory White	Ivory White	
Heat Recovery Operation System	Low Pressure Gas Line	mm(in.)	φ50.8(2)	φ50.8(2)	φ50.8(2)	φ50.8(2)
	High/Low Pressure Gas Line	mm(in.)	φ44.5(1-3/4)	φ44.5(1-3/4)	φ44.5(1-3/4)	φ44.5(1-3/4)
	Liquid Line	mm(in.)	φ25.4(1)	φ25.4(1)	φ25.4(1)	φ25.4(1)
Heat Pump Operation System	Gas Line	mm(in.)	φ50.8(2)	φ50.8(2)	φ50.8(2)	φ50.8(2)
	Liquid Line	mm(in.)	φ25.4(1)	φ25.4(1)	φ25.4(1)	φ25.4(1)
Connectable Indoor Units	Quantity	pcs	64	64	64	64
	Total Capacity	-	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>
Piping Design	Low pressure Gas Line	m (above)	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )
		m (below)	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )
	High Difference Between ODU & IDU	m	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )
	Max. Piping Length	m	165	165	165	165
Operating Range	Cooling	DB	-10°C~-52°C	-10°C~-52°C	-10°C~-52°C	-10°C~-52°C
	Heating	WB	-25°C~-16.5°C	-25°C~-16.5°C	-25°C~-16.5°C	-25°C~-16.5°C

# CRF Heat Recovery



HP			106HP	108HP	110HP	112HP
Model	Model		AER-CS3005CROU	AER-CS3080CROU	AER-CS3125CROU	AER-CS3200CROU
	Modules		AER-CS800CROU	AER-CS800CROU	AER-CS800CROU	AER-CS800CROU
			AER-CS800CROU	AER-CS800CROU	AER-CS800CROU	AER-CS800CROU
			AER-CS725CROU	AER-CS800CROU	AER-CS800CROU	AER-CS800CROU
		AER-CS680CROU	AER-CS680CROU	AER-CS725CROU	AER-CS800CROU	
	Power Supply	AC 3Φ, 380-415V/50/60Hz				
Cooling	Capacity	kW	300.5	308.0	312.5	320.0
	Power Input	kW	90.99	93.33	94.63	96.97
	EER	kW / kW	3.30	3.30	3.30	3.30
Heating	Capacity (Max/ Nom)	kW	335.0 / 300.5	345.0 / 308.0	350.0 / 312.5	360.0 / 320.0
	Power Input (Max/ Nom)	kW	95.76 / 81.42	99.46 / 84.13	100.34 / 84.96	104.05 / 87.67
	COP (Max)	kW / kW	3.50	3.47	3.49	3.46
Ventilation	Air Flow Rate	m <sup>3</sup> /min	1346	1346	1400	1400
	Fan Quantity		8	8	8	8
	Static Pressure	Pa	110	110	110	110
Sound	Sound Pressure Level	dB(A)	73	73	73	73
Compressor	Type	-	Enhanced Vapor Injection Scroll Compressor			
	Compressor Quantity	pcs	8	8	8	8
Refrigerant	Type	-	R410A			
	Pre-charged Quantity	kg	10.60+11.50+11.50+11.50	10.60+11.50+11.50+11.50	11.50+11.50+11.50+11.50	11.50+11.50+11.50+11.50
Weight	Net Weight	kg	378+400+401+401	378+401+401+401	400+401+401+401	401+401+401+401
	Gross Weight	kg	402+426+427+427	402+427+427+427	426+427+427+427	427+427+427+427
Dimensions	External (HxWxD)	mm	1730x (1350+1600+1600+1600) x750 1930x	1730x (1350+1600+1600+1600) x750 1930x	1730x (1600+1600+1600+1600) x750 1930x	1730x (1600+1600+1600+1600) x750 1930x
	Packing (HxWxD)	mm	(1420+1665+1665+1665) x790	(1420+1665+1665+1665) x790	(1665+1665+1665+1665) x790	(1665+1665+1665+1665) x790
Cabinet Color			Ivory White	Ivory White	Ivory White	Ivory White
Heat Recovery Operation System	Low Pressure Gas Line	mm(in.)	φ50.8(2)	φ50.8(2)	φ50.8(2)	φ50.8(2)
	High/Low Pressure Gas Line	mm(in.)	φ44.5(1-3/4)	φ44.5(1-3/4)	φ44.5(1-3/4)	φ44.5(1-3/4)
	Liquid Line	mm(in.)	φ25.4(1)	φ25.4(1)	φ25.4(1)	φ25.4(1)
Heat Pump Operation System	Gas Line	mm(in.)	φ50.8(2)	φ50.8(2)	φ50.8(2)	φ50.8(2)
	Liquid Line	mm(in.)	φ25.4(1)	φ25.4(1)	φ25.4(1)	φ25.4(1)
Connectable Indoor Units	Quantity	pcs	64	64	64	64
	Total Capacity	-	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>	200% <sup>1</sup>
Piping Design	Low pressure Gas Line	m (above)	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )	50(90 <sup>2</sup> )
		m (below)	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )	40(90 <sup>2</sup> )
	High Difference Between ODU & IDU	m	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )	15(30 <sup>2</sup> )
	Max. Piping Length	m	165	165	165	165
Operating Range	Cooling	DB	-10°C~-52°C	-10°C~-52°C	-10°C~-52°C	-10°C~-52°C
	Heating	WB	-25°C~-16.5°C	-25°C~-16.5°C	-25°C~-16.5°C	-25°C~-16.5°C

## CRF Heat Recovery



### Notes::

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.

\*1: If you have any questions, please contact our professional engineer.

\*2: For detailed information, please contact with Aerostar technical service.

# SWITCH BOX

Used for heat recovery systems to achieve simultaneous cooling and heating in a system, it is very important to realize installation flexibility and reduce costs.

## Advantage:

- Enrich the products (1,4,8,12,16) .
- Maximize capacity to 16kW or more.
- Require no drain pipes or drainage connections.
- Combine between single branch and multi-branch flexibility.
- Enable fewer connections, hooks and service parts for easy installation.

Other



Switch Box Aerostar



Model			Single Branch		Multi Branch						
			HRB-N06XA	HRB-N10XA	HRBM-N04XA	HRBM-N08XA	HRBM-N12XA	HRBM-N16XA			
Appearance											
Electrical			AC 10, 220-240V/50/60Hz								
Power Supply			-								
Power Input			5	5	11.2	22.4	33.6	44.8			
Maximum Total Capacity Index			16	28	44.8	85	85	85			
Maximum Capacity Index			16	28	44.8	85	85	85			
Number of Branches			1	1	4	8	12	16			
Maximum Capacity Index per Branch			-	-	16	16	16	16			
Maximum Connectable Indoor Units per Branch			8	8	8	8	6	6			
Dimensions (H x W x D)			191×301×214	191×301×214	260×303×352	260×543×352	260×783×352	260×1023×352			
Refrigerant			R410A								
Refrigerant Piping			Outdoor Unit Side		Indoor Unit Side						
			Gas Line (High and Low Pressure Side)		mm (in.)	Φ15.88(5/8)	Φ15.88(5/8)	Φ22.20(7/8)	Φ22.20(7/8)	Φ25.40(1)	Φ28.58(1-1/8)
			Gas Line (Suction Gas)		mm (in.)	Φ19.05(3/4)	Φ19.05(3/4)	Φ25.40(1)	Φ28.58(1-1/8)	Φ28.58(1-1/8)	Φ31.75(1-1/4)
			Liquid Line		mm (in.)	Не передбачено	Не передбачено	Φ12.70(1/2)	Φ12.70(1/2)	Φ15.88(5/8)	Φ19.05(3/4)
			Gas Line		mm (in.)	Φ15.88(5/8)	Φ19.05(3/4)	Φ15.88(5/8)	Φ15.88(5/8)	Φ15.88(5/8)	Φ15.88(5/8)
			Liquid Line		mm (in.)	Не передбачено	Не передбачено	Φ9.52(3/8)	Φ9.52(3/8)	Φ9.52(3/8)	Φ9.52(3/8)
Net Weight			kg	6.3	6.4	14.1	25.2	35.5	46.7		
Noise Level			Sound Pressure Level		dB (A)						
			Max Sound		33	33	31	31	34	34	
					dB (A)						
			46	46	43	46	48	49			

# HYDRO BOX

## SPECIFICATION FOR HYDRO BOX

Model			AER-CS80HB	AER-CS160HB
Power Supply			AC 1Φ, 220~240V/50Hz AC 1Φ, 220V/60Hz	
Cooling Capacity (A 35/24°C /W 12-7°C)			7.5	12.5
Heating Capacity (A 7/6°C /W 30-35°C)			8	16
Power Input			0.08(3.08)	0.14(3.14)
Dimensions H×W×D			890×520×320	890×520×320
Packing Dimensions H×W×D			1120×595×462	1120×595×462
Weight			55	58
			72	75
Heat Exchanger			Plate Heat Exchanger	
Heating			20 to 55	20 to 55
Water Production			35 to 75	35 to 75
Cooling			5 to 20	5 to 20
Sound Pressure			33	33
Sound Power			46	46
Piping Connections			Φ15.88	Φ15.88
Gas			Φ9.53	Φ9.53
Liquid				
Water Pump			DC Inverter Control	
Type				
Speed				
Pumping Head			12.5	12.5
Pumping Head for Water Circuit			5	5
Power Input			100	160
Booster Heating			3	3
Water Filter			0.85	0.85
Diameter Perforations			Hpb59-1	Hpb59-1
Material			G1-1/4"	G1-1/4"
Piping Connections Diameter				
Shut off Valve			+	+
Water Circuit			+	+
Drain Valve			3	3
Safety Valve			+	+
Air Purge Valve				
Nominal Water			1.38	2.75
m³/h				
Expansion Vessel			8	8
Volume			3	3
Max. Water Pressure				
Bar				

## OPERATION RANGE

### Indoor Unit Cooling

	Maximum	Minimum
Indoor	32°C DB / 23°C WB	21°C DB / 15°C WB
Outdoor	52°C DB*	-10°C DB

### Indoor Unit Heating

	Maximum	Minimum
Indoor	27°C DB	15°C DB
Outdoor	16.5°C WB	-25°C WB**

### Hydro Box Cooling

	Maximum	Minimum
Inlet Water	25°C	10°C
Outdoor	48°C DB	10°C DB

### Hydro Box Heating

	Maximum	Minimum
Inlet Water	54°C	10°C
Outdoor	16.5°C WB	-25°C WB**

### Hydro Box Heating (DHW)

	Maximum	Minimum
Inlet Water	54°C	10°C
Outdoor	43°C WB	-25°C WB**

DB: Dry Bulb  
WB: Wet Bulb  
(\*): 48°C DB ~ 52°C DB, Operation Control Range  
(\*\*): -20°C WB ~ -25°C WB, Operation Control Range





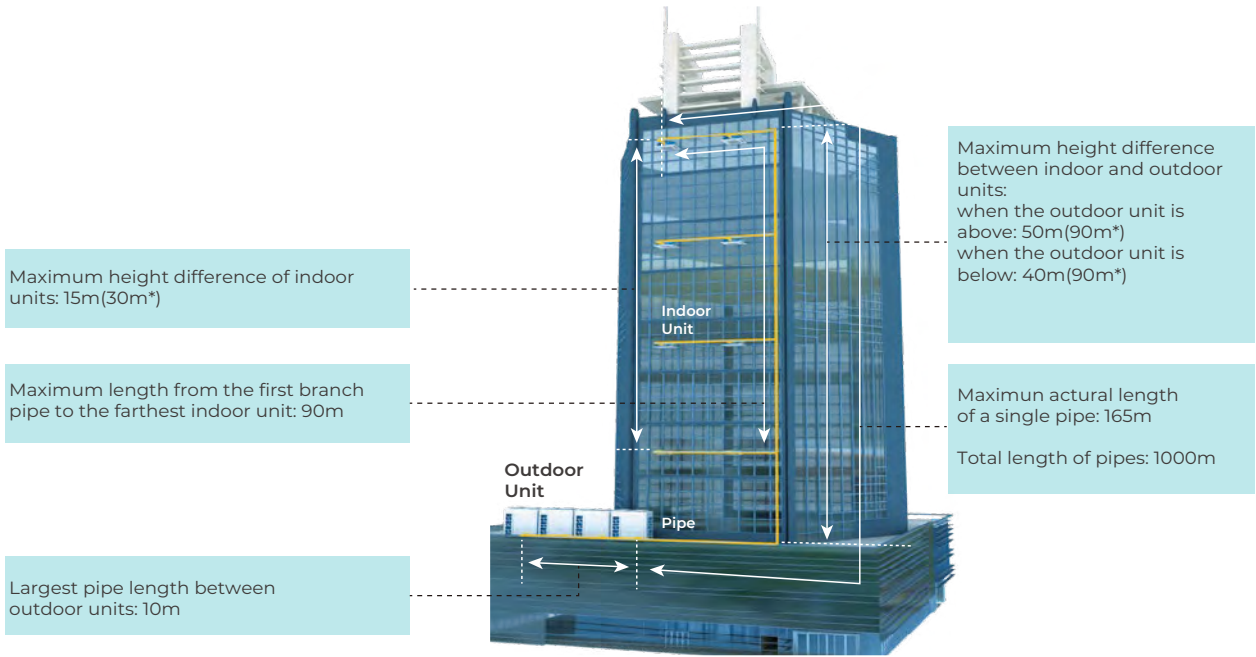
# AEROSTAR

**CHF series**



## EXTRA LONG PIPE DESIGN

With extra long pipe, the height difference between the indoor unit and outdoor unit is up to 90 meters\*, which makes installation more flexible.

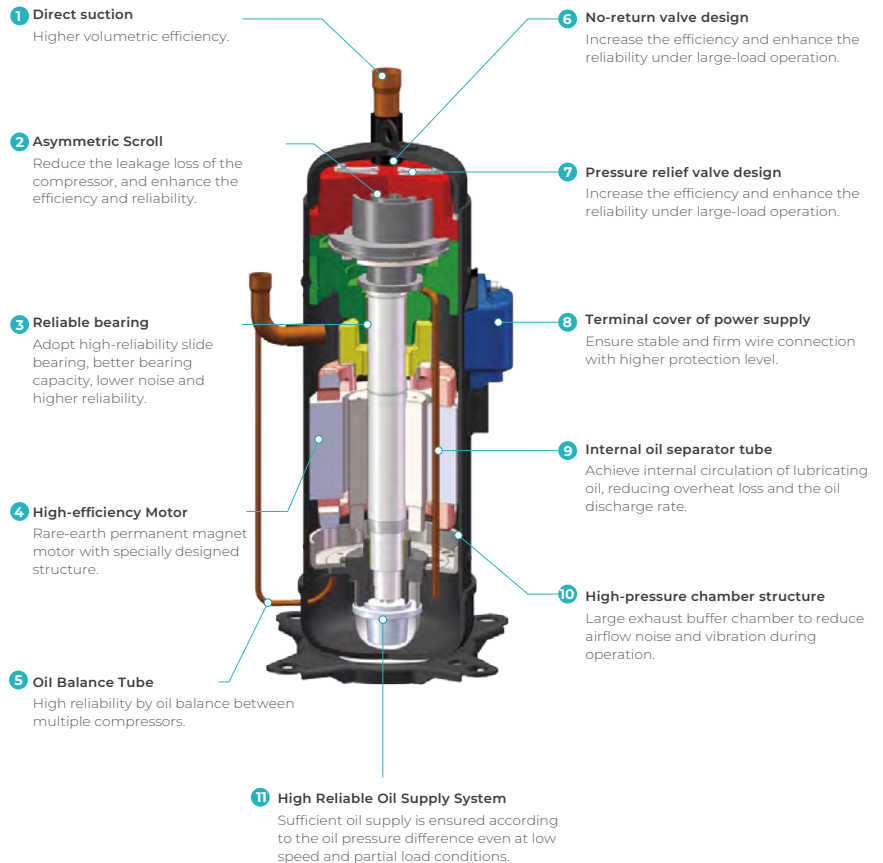


**Note:**

For detailed information, please contact Aerostar's technical staff.

## HIGH-EFFICIENCY COMPRESSOR

CHF series adopts a new generation of scroll compressor, and it has an excellent mechanism called as FCM (Frame Compliant Mechanism) which will optimally increase the performance of the whole compressor, especially for operation under low load.



# CHF Series



HP		8HP	10HP	12HP	14HP	16HP	18HP	
Model	Model	AER-CS224CHOU	AER-CS280CHOU	AER-CS335CHOU	AER-CS400CHOU	AER-CS450CHOU	AER-CS500CHOU	
Model	Modules	—	—	—	—	—	—	
	Power Supply	AC 3Φ, 380-415V/50/60Hz						
Cooling	Capacity	kW	22.4	28.0	33.5	40.0	50.0	
	Power Input	kW	4.79	6.60	7.96	10.34	12.26	14.04
	EER	kW / kW	4.68	4.24	4.21	3.87	3.67	3.56
Heating	Capacity	kW	25.0	31.5	37.5	45.0	50.0	56.0
	Power Input	kW	5.13	6.79	8.50	10.84	12.20	14.81
	COP	kW / kW	4.87	4.64	4.41	4.15	4.10	3.78
Ventilation	Air Flow Rate	m <sup>3</sup> /min	183	183	183	200	200	200
	Fan Quantity		1	1	1	2	2	2
	Static Pressure	Pa	110	110	110	110	110	110
Sound Pressure Level	Normal Mode	dB(A)	56	57	59	59	60	61
	Night Shift Mode	dB(A)	41	42	44	44	45	46
Compressor	Type	-	Scroll Compressor					
	Compressor Quantity	pcs	1	1	1	1	1	1
Refrigerant	Type	-	R410A					
	Pre-charged Quantity	kg	5.3	5.3	6.2	8.0	8.0	9.6
Weight	Net Weight	kg	217	219	223	272	273	296
	Gross Weight	kg	246	248	252	306	307	330
Dimensions	External (HxWxD)	mm	1730x950x750	1730x950x750	1730x950x750	1730x1210x750	1730x1210x750	1730x1210x750
	Packing (HxWxD)	mm	1950x1015x790	1950x1015x790	1950x1015x790	1950x1275x790	1950x1275x790	1950x1275x790
Cabinet Color		Ivory White	Ivory White	Ivory White	Ivory White	Ivory White	Ivory White	
Ref. Piping	Gas	mm	Φ19.05	Φ22.20	Φ25.40	Φ25.40	Φ28.60	Φ28.60
		inch	3/4	7/8	1	1	1-1/8	1-1/8
	Liquid	mm	Φ9.53	Φ9.53	Φ12.70	Φ12.70	Φ12.70	Φ15.88
		inch	3/8	3/8	1/2	1/2	1/2	5/8
Connectable Indoor Units	Quantity	pcs	13	16	19	23	26	29
	Total Capacity	-	50%-150%	50%-150%	50%-150%	50%-150%	50%-150%	50%-150%
Piping Design	Height Difference Between ODU and IDU	m (above)	50(90")	50(90")	50(90")	50(90")	50(90")	50(90")
		m (below)	40(90")	40(90")	40(90")	40(90")	40(90")	40(90")
	Height Difference Between IDUs	m	30	30	30	30	30	30
	Max. Piping Length	m	1000	1000	1000	1000	1000	1000
Operation Range <sup>2</sup>	Cooling	DB	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C
	Heating	WB	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C

# CHF Series



HP			20HP	22HP	24HP	26HP	28HP
Model	Model		AER-CS560CHOU	AER-CS615CHOU	AER-CS680CHOU	AER-CS725CHOU	AER-CS800CHOU
	Modules		—	—	—	—	—
Power Supply			AC 3Φ, 380-415V/50/60Hz				
Cooling	Capacity	kW	56.0	61.5	68.0	72.5	80
	Power Input	kW	15.38	17.83	19.88	20.83	24.10
	EER	kW / kW	3.64	3.45	3.42	3.48	3.32
Heating	Capacity	kW	63.0	69.0	75.0	80.0	90.0
	Power Input	kW	16.36	18.70	20.72	21.98	25.57
	COP	kW / kW	3.85	3.69	3.62	3.64	3.52
Ventilation	Air Flow Rate	m <sup>3</sup> /min	267	296	296	350	350
	Fan Quantity		2	2	2	2	2
	Static Pressure	Pa	110	110	110	110	110
Sound Pressure Level	Normal Mode	dB(A)	62	63	63	64	64
	Night Shift Mode	dB(A)	47	48	48	49	49
Compressor	Type	-	Scroll Compressor				
	Compressor Quantity	pcs	1	2	2	2	2
Refrigerant	Type	-	R410A				
	Pre-charged Quantity	kg	10.3	12.2	12.2	12.0	12.0
Weight	Net Weight	kg	316	363	365	391	392
	Gross Weight	kg	347	400	402	433	434
Dimensions	External (HxWxD)	mm	1730x1350x750	1730x1350x750	1730x1350x750	1730x1600x750	1730x1600x750
	Packing (HxWxD)	mm	1950x1420x790	1950x1420x790	1950x1420x790	1950x1665x790	1950x1665x790
Cabinet Color			Ivory White	Ivory White	Ivory White	Ivory White	Ivory White
Ref. Piping	Gas	mm	Φ28.60	Φ28.60	Φ28.60	Φ31.75	Φ31.75
		inch	1-1/8	1-1/8	1-1/8	1-1/4	1-1/4
	Liquid	mm	Φ15.88	Φ15.88	Φ15.88	Φ19.05	Φ19.05
		inch	5/8	5/8	5/8	3/4	3/4
Connectable Indoor Units	Quantity	pcs	33	36	40	43	47
	Total Capacity	-	50%-150%	50%-150%	50%-150%	50%-150%	50%-150%
Piping Design	Height Difference Between ODU and IDU	m (above)	50(90")	50(90")	50(90")	50(90")	50(90")
		m (below)	40(90")	40(90")	40(90")	40(90")	40(90")
	Height Difference Between IDUs	m	30	30	30	30	30
	Max. Piping Length	m	1000	1000	1000	1000	1000
Operation Range <sup>2</sup>	Cooling	DB	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C
	Heating	WB	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C

# CHF Series



HP		30HP	32HP	34HP	36HP	
Model	Model	AER-CS850CHOU	AER-CS900CHOU	AER-CS950CHOU	AER-CS1000CHOU	
	Modules	AER-CS450CHOU AER-CS400CHOU	AER-CS450CHOU AER-CS450CHOU	AER-CS500CHOU AER-CS450CHOU	AER-CS500CHOU AER-CS500CHOU	
Power Supply		AC 3Φ, 380-415V/50/60Hz				
Cooling	Capacity	kW	85.0	90.0	95.0	100.0
	Power Input	kW	22.66	24.25	26.31	28.09
	EER	kW / kW	3.76	3.67	3.61	3.56
Heating	Capacity	kW	95.0	100.0	106.0	112.0
	Power Input	kW	23.04	24.39	27.01	29.63
	COP	kW / kW	4.12	4.10	3.92	3.78
Ventilation	Air Flow Rate	m <sup>3</sup> /min	400	400	400	400
	Fan Quantity		4	4	4	4
	Static Pressure	Pa	110	110	110	110
Sound Pressure Level	Normal Mode	dB(A)	64	64	64	64
	Night Shift Mode	dB(A)	49	49	49	49
Compressor	Type	-	Scroll Compressor			
	Compressor Quantity	pcs	2	2	2	2
Refrigerant	Type	-	R410A			
	Pre-charged Quantity	kg	8.0+8.0	8.0+8.0	8.0+9.6	9.6+9.6
Weight	Net Weight	kg	272+273	273+273	273+296	296+296
	Gross Weight	kg	306+307	307+307	307+330	330+330
Dimensions	External (HxWxD)	mm	1730x (1210+1210) x750 1950x	1730x (1210+1210) x750 1950x	1730x (1210+1210) x750 1950x	1730x (1210+1210) x750 1950x
	Packing (HxWxD)	mm	(1275+1275) x790	(1275+1275) x790	(1275+1275) x790	(1275+1275) x790
Cabinet Color		Ivory White	Ivory White	Ivory White	Ivory White	
Ref. Piping	Gas	mm	Φ31.75	Φ31.75	Φ38.10	Φ38.10
		inch	1-1/4	1-1/4	1-1/2	1-1/2
	Liquid	mm	Φ19.05	Φ19.05	Φ19.05	Φ19.05
		inch	3/4	3/4	3/4	3/4
Connectable Indoor Units	Quantity	pcs	49	52	55	59
	Total Capacity	-	50%-150%	50%-150%	50%-150%	50%-150%
Piping Design	Height Difference Between ODU and IDU	m (above)	50(90")	50(90")	50(90")	50(90")
		m (below)	40(90")	40(90")	40(90")	40(90")
	Height Difference Between IDUs	m	30	30	30	30
	Max. Piping Length	m	1000	1000	1000	1000
Operation Range <sup>2</sup>	Cooling	DB	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C
	Heating	WB	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C

# CHF Series



HP		38HP	40HP	42HP	44HP	46HP	
Model	Model	AER-CS1060CHOU	AER-CS1120CHOU	AER-CS1180CHOU	AER-CS1240CHOU	AER-CS1295CHOU	
	Modules	AER-CS560CHOU AER-CS500CHOU	AER-CS560CHOU AER-CS560CHOU	AER-CS680CHOU AER-CS500CHOU	AER-CS680CHOU AER-CS560CHOU	AER-CS680CHOU AER-CS615CHOU	
Power Supply		AC 3Φ, 380-415V/50/60Hz					
Cooling	Capacity	kW	106.0	112.0	118.0	124.0	129.5
	Power Input	kW	29.43	30.77	33.93	35.27	37.71
	EER	kW / kW	3.60	3.64	3.48	3.52	3.43
Heating	Capacity	kW	119.0	126.0	131.0	138.0	144.0
	Power Input	kW	31.18	32.73	35.53	37.08	39.42
	COP	kW / kW	3.82	3.85	3.69	3.72	3.65
Ventilation	Air Flow Rate	m <sup>3</sup> /min	467	496	496	563	592
	Fan Quantity		4	4	4	4	4
	Static Pressure	Pa	110	110	110	110	110
Sound Pressure Level	Normal Mode	dB(A)	65	65	65	66	66
	Night Shift Mode	dB(A)	50	50	50	51	51
Compressor	Type	-	Scroll Compressor				
	Compressor Quantity	pcs	2	2	3	3	4
Refrigerant	Type	-	R410A				
	Pre-charged Quantity	kg	9.6+10.3	10.3+10.3	9.6+12.2	10.3+12.2	12.2+12.2
Weight	Net Weight	kg	296+316	316+316	296+365	316+365	363+365
	Gross Weight	kg	330+347	347+347	330+402	347+402	400+402
Dimensions	External (HxWxD)	mm	1730x (1210+1350) x750 1950x	1730x (1210+1350) x750 1950x	1730x (1210+1350) x750 1950x	1730x (1350+1350) x750 1950x	1730x (1350+1350) x750 1950x
	Packing (HxWxD)	mm	(1275+1420) x790	(1275+1420) x790	(1275+1420) x790	(1420+1420) x790	(1420+1420) x790
Cabinet Color			Ivory White	Ivory White	Ivory White	Ivory White	Ivory White
Ref. Piping	Gas	mm	φ38.10	φ38.10	φ38.10	φ38.10	φ41.30
		inch	1-1/2	1-1/2	1-1/2	1-1/2	1-5/8
	Liquid	mm	φ19.05	φ19.05	φ19.05	φ19.05	φ22.20
		inch	3/4	3/4	3/4	3/4	7/8
Connectable Indoor Units	Quantity	pcs	62	64	64	64	64
	Total Capacity	-	50%-150%	50%-150%	50%-150%	50%-150%	50%-150%
Piping Design	Height Difference Between ODU and IDU	m (above)	50(90")	50(90")	50(90")	50(90")	50(90")
		m (below)	40(90")	40(90")	40(90")	40(90")	40(90")
	Height Difference Between IDUs	m	30	30	30	30	30
	Max. Piping Length	m	1000	1000	1000	1000	1000
Operation Range <sup>2</sup>	Cooling	DB	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C
	Heating	WB	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C

# CHF Series



HP		48HP	50HP	52HP	54HP	56HP	
Model	Model	AER-CS1360CHOU	AER-CS1405CHOU	AER-CS1480CHOU	AER-CS1525CHOU	AER-CS1600CHOU	
	Modules	AER-CS680CHOU AER-CS680CHOU	AER-CS725CHOU AER-CS680CHOU	AER-CS800CHOU AER-CS680CHOU	AER-CS800CHOU AER-CS725CHOU	AER-CS800CHOU AER-CS800CHOU	
Power Supply		AC 3Φ, 380-415V/50/60Hz					
Cooling	Capacity	kW	136.0	140.5	148.0	152.5	160.0
	Power Input	kW	39.77	40.72	43.98	44.93	48.19
	EER	kW / kW	3.42	3.45	3.37	3.39	3.32
Heating	Capacity	kW	150.0	155.0	165.0	170.0	180.0
	Power Input	kW	41.44	42.70	46.29	47.55	51.14
	COP	kW / kW	3.62	3.63	3.56	3.58	3.52
Ventilation	Air Flow Rate	m <sup>3</sup> /min	592	646	646	700	700
	Fan Quantity		4	4	4	4	4
	Static Pressure	Pa	110	110	110	110	110
Sound Pressure Level	Normal Mode	dB(A)	66	67	67	67	67
	Night Shift Mode	dB(A)	51	52	52	52	52
Compressor	Type	-	Scroll Compressor				
	Compressor Quantity	pcs	4	4	4	4	4
Refrigerant	Type	-	R410A				
	Pre-charged Quantity	kg	12.2+12.2	12.2+12.0	12.2+12.0	12.0+12.0	12.0+12.0
Weight	Net Weight	kg	365+365	365+391	365+392	391+392	392+392
	Gross Weight	kg	402+402	402+433	402+434	433+434	434+434
Dimensions	External (HxWxD)	mm	1730x (1350+1350) x750 1950x	1730x (1350+1600) x750 1950x	1730x (1350+1600) x750 1950x	1730x (1600+1600) x750 1950x	1730x (1600+1600) x750 1950x
	Packing (HxWxD)	mm	(1420+1420) x790	(1420+1665) x790	(1420+1665) x790	(1665+1665) x790	(1665+1665) x790
Cabinet Color			Ivory White	Ivory White	Ivory White	Ivory White	Ivory White
Ref. Piping	Gas	mm	Φ41.30	Φ41.30	Φ41.30	Φ41.30	Φ41.30
		inch	1-5/8	1-5/8	1-5/8	1-5/8	1-5/8
	Liquid	mm	Φ22.20	Φ22.20	Φ22.20	Φ22.20	Φ22.20
		inch	7/8	7/8	7/8	7/8	7/8
Connectable Indoor Units	Quantity	pcs	64	64	64	64	64
	Total Capacity	-	50%-150%	50%-150%	50%-150%	50%-150%	50%-150%
Piping Design	Height Difference Between ODU and IDU	m (above)	50(90")	50(90")	50(90")	50(90")	50(90")
		m (below)	40(90")	40(90")	40(90")	40(90")	40(90")
	Height Difference Between IDUs	m	30	30	30	30	30
	Max. Piping Length	m	1000	1000	1000	1000	1000
Operation Range <sup>2</sup>	Cooling	DB	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C
	Heating	WB	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C

# CHF Series



HP		58HP	60HP	62HP	64HP	
Model	Model	AER-CS1615CHOU	AER-CS1680CHOU	AER-CS1740CHOU	AER-CS1800CHOU	
	Modules	AER-CS615CHOU AER-CS500CHOU AER-CS500CHOU	AER-CS680CHOU AER-CS500CHOU AER-CS500CHOU	AER-CS680CHOU AER-CS560CHOU AER-CS500CHOU	AER-CS680CHOU AER-CS560CHOU AER-CS560CHOU	
Power Supply		AC 3Φ, 380-415V/50/60Hz				
Cooling	Capacity	kW	161.5	168.0	174.0	180.0
	Power Input	kW	45.92	47.97	49.31	50.65
	EER	kW / kW	3.52	3.50	3.53	3.55
Heating	Capacity	kW	181.0	187.0	194.0	201.0
	Power Input	kW	48.33	50.35	51.90	53.45
	COP	kW / kW	3.75	3.71	3.74	3.76
Ventilation	Air Flow Rate	m <sup>3</sup> /min	696	696	763	792
	Fan Quantity		6	6	6	6
	Static Pressure	Pa	110	110	110	110
Sound Pressure Level	Normal Mode	dB(A)	67	67	67	67
	Night Shift Mode	dB(A)	52	52	52	52
Compressor	Type	-	Scroll Compressor			
	Compressor Quantity	pcs	4	4	4	4
Refrigerant	Type	-	R410A			
	Pre-charged Quantity	kg	9.6+9.6+12.2	9.6+9.6+12.2	9.6+10.3+12.2	10.3+10.3+12.2
Weight	Net Weight	kg	296+296+363	296+296+365	296+316+365	316+316+365
	Gross Weight	kg	330+330+400	330+330+402	330+347+402	347+347+402
Dimensions	External (HxWxD)	mm	1730x (1210+1210+1350) x750 1950x	1730x (1210+1210+1350) x750 1950x	1730x (1210+1350+1350) x750 1950x	1730x (1210+1350+1350) x750 1950x
	Packing (HxWxD)	mm	(1275+1275+1420) x790	(1275+1275+1420) x790	(1275+1420+1420) x790	(1275+1420+1420) x790
Cabinet Color			Ivory White	Ivory White	Ivory White	Ivory White
Ref. Piping	Gas	mm	Φ44.5	Φ44.5	Φ44.5	Φ44.5
		inch	1-3/4	1-3/4	1-3/4	1-3/4
	Liquid	mm	Φ22.2	Φ22.2	Φ22.2	Φ22.2
		inch	7/8	7/8	7/8	7/8
Connectable Indoor Units	Quantity	pcs	64	64	64	64
	Total Capacity	-	50%-150%	50%-150%	50%-150%	50%-150%
Piping Design	Height Difference Between ODU and IDU	m (above)	50(90")	50(90")	50(90")	50(90")
		m (below)	40(90")	40(90")	40(90")	40(90")
	Height Difference Between IDUs	m	30	30	30	30
	Max. Piping Length	m	1000	1000	1000	1000
Operation Range <sup>2</sup>	Cooling	DB	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C
	Heating	WB	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C



# CHF Series



HP		66HP	68HP	70HP	72HP	74HP	
Model	Model	AER-CS1860CHOU	AER-CS1920CHOU	AER-CS1975CHOU	AER-CS2040CHOU	AER-CS2085CHOU	
	Modules	AER-CS680CHOU	AER-CS680CHOU	AER-CS680CHOU	AER-CS680CHOU	AER-CS725CHOU	
		AER-CS680CHOU AER-CS500CHOU	AER-CS680CHOU AER-CS560CHOU	AER-CS680CHOU AER-CS615CHOU	AER-CS680CHOU AER-CS680CHOU	AER-CS680CHOU	AER-CS680CHOU
Power Supply		AC 3Φ, 380-415V/50/60Hz					
Cooling	Capacity	kW	186.0	192.0	197.5	204.0	208.5
	Power Input	kW	53.81	55.15	57.59	59.65	60.60
	EER	kW / kW	3.46	3.48	3.43	3.42	3.44
Heating	Capacity	kW	206.0	213.0	219.0	225.0	230.0
	Power Input	kW	56.25	57.80	60.14	62.15	63.41
	COP	kW / kW	3.66	3.69	3.64	3.62	3.63
Ventilation	Air Flow Rate	m <sup>3</sup> /min	792	859	888	888	942
	Fan Quantity		6	6	6	6	6
	Static Pressure	Pa	110	110	110	110	110
Sound Pressure Level	Normal Mode	dB(A)	67	67	68	68	68
	Night Shift Mode	dB(A)	52	52	53	53	53
Compressor	Type	-	Scroll Compressor				
	Compressor Quantity	pcs	5	5	6	6	6
Refrigerant	Type	-	R410A				
	Pre-charged Quantity	kg	9.6+12.2+12.2	10.3+12.2+12.2	12.2+12.2+12.2	12.2+12.2+12.2	12.2+12.2+12.0
Weight	Net Weight	kg	296+365+365	316+365+365	363+365+365	365+365+365	365+365+391
	Gross Weight	kg	330+402+402	347+402+402	400+402+402	402+402+402	402+402+433
Dimensions	External (HxWxD)	mm	1730x (1210+1350+1350) x750	1730x (1350+1350+1350) x750	1730x (1350+1350+1350) x750	1730x (1350+1350+1350) x750	1730x (1350+1350+1600) x750
	Packing (HxWxD)	mm	1950x (1275+1420+1420) x790	1950x (1420+1420+1420) x790	1950x (1420+1420+1420) x790	1950x (1420+1420+1420) x790	1950x (1420+1420+1665) x790
Cabinet Color			Ivory White	Ivory White	Ivory White	Ivory White	Ivory White
Ref. Piping	Gas	mm	Φ44.5	Φ50.8	Φ50.8	Φ50.8	Φ50.8
		inch	1-3/4	2	2	2	2
	Liquid	mm	Φ22.2	Φ25.4	Φ25.4	Φ25.4	Φ25.4
		inch	7/8	1	1	1	1
Connectable Indoor Units	Quantity	pcs	64	64	64	64	64
	Total Capacity	-	50%-150%	50%-150%	50%-150%	50%-150%	50%-150%
Piping Design	Height Difference Between ODU and IDU	m (above)	50(90")	50(90")	50(90")	50(90")	50(90")
		m (below)	40(90")	40(90")	40(90")	40(90")	40(90")
	Height Difference Between IDUs	m	30	30	30	30	30
	Max. Piping Length	m	1000	1000	1000	1000	1000
Operation Range <sup>2</sup>	Cooling	DB	-5°C~-52°C	-5°C~-52°C	-5°C~-52°C	-5°C~-52°C	-5°C~-52°C
	Heating	WB	-25°C~-16.5°C	-25°C~-16.5°C	-25°C~-16.5°C	-25°C~-16.5°C	-25°C~-16.5°C

# CHF Series



HP		76HP	78HP	80HP	82HP	84HP	
Model	Model	AER-CS2130CHOU	AER-CS2205CHOU	AER-CS2280CHOU	AER-CS2325CHOU	AER-CS2400CHOU	
	Modules	AER-CS725CHOU	AER-CS800CHOU	AER-CS800CHOU	AER-CS800CHOU	AER-CS800CHOU	
		AER-CS725CHOU	AER-CS725CHOU	AER-CS800CHOU	AER-CS800CHOU	AER-CS800CHOU	
AER-CS680CHOU		AER-CS680CHOU	AER-CS680CHOU	AER-CS725CHOU	AER-CS800CHOU		
Power Supply		AC 3Φ, 380-415V/50/60Hz					
Cooling	Capacity	kW	213.0	220.5	228.0	232.5	240.0
	Power Input	kW	61.55	64.81	68.08	69.03	72.29
	EER	kW / kW	3.46	3.40	3.35	3.37	3.32
Heating	Capacity	kW	235.0	245.0	255.0	260.0	270.0
	Power Input	kW	64.67	68.26	71.85	73.11	76.70
	COP	kW / kW	3.63	3.59	3.55	3.56	3.52
Ventilation	Air Flow Rate	m <sup>3</sup> /min	996	996	996	1050	1050
	Fan Quantity		6	6	6	6	6
	Static Pressure	Pa	110	110	110	110	110
Sound Pressure Level	Normal Mode	dB(A)	68	68	68	69	69
	Night Shift Mode	dB(A)	53	53	53	54	54
Compressor	Type	-	Scroll Compressor				
	Compressor Quantity	pcs	6	6	6	6	6
Refrigerant	Type	-	R410A				
	Pre-charged Quantity	kg	12.2+12.0+12.0	12.2+12.0+12.0	12.0+12.0+12.2	12.0+12.0+12.0	12.0+12.0+12.0
Weight	Net Weight	kg	365+391+391	365+391+392	392+392+365	392+392+391	392+392+392
	Gross Weight	kg	402+433+433	402+433+434	434+434+402	434+434+433	434+434+434
Dimensions	External (HxWxD)	mm	1730x (1350+1600+1600) x750 1950x	1730x (1350+1600+1600) x750 1950x	1730x (1600+1600+1350) x750 1950x	1730x (1600+1600+1600) x750 1950x	1730x (1600+1600+1600) x750 1950x
	Packing (HxWxD)	mm	(1420+1665+1665) x790	(1420+1665+1665) x790	(1665+1665+1420) x790	(1665+1665+1665) x790	(1665+1665+1665) x790
Cabinet Color			Ivory White	Ivory White	Ivory White	Ivory White	Ivory White
Ref. Piping	Gas	mm	φ50.8	φ50.8	φ50.8	φ50.8	φ50.8
		inch	2	2	2	2	2
	Liquid	mm	φ25.4	φ25.4	φ25.4	φ25.4	φ25.4
		inch	1	1	1	1	1
Connectable Indoor Units	Quantity	pcs	64	64	64	64	64
	Total Capacity	-	50%-150%	50%-150%	50%-150%	50%-150%	50%-150%
Piping Design	Height Difference Between ODU and IDU	m (above)	50(90")	50(90")	50(90")	50(90")	50(90")
		m (below)	40(90")	40(90")	40(90")	40(90")	40(90")
	Height Difference Between IDUs	m	30	30	30	30	30
	Max. Piping Length	m	1000	1000	1000	1000	1000
Operation Range <sup>2</sup>	Cooling	DB	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C
	Heating	WB	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C

# CHF Series



HP		86HP	88HP	90HP	92HP
Model	Model	AER-CS2415CHOU	AER-CS2480CHOU	AER-CS2535CHOU	AER-CS2600CHOU
	Modules	AER-CS680CHOU AER-CS615CHOU AER-CS560CHOU AER-CS560CHOU	AER-CS680CHOU AER-CS680CHOU AER-CS560CHOU AER-CS560CHOU	AER-CS680CHOU AER-CS680CHOU AER-CS615CHOU AER-CS560CHOU	AER-CS680CHOU AER-CS680CHOU AER-CS680CHOU AER-CS560CHOU
Power Supply		AC 3Φ, 380-415V/50/60Hz			
Cooling	Capacity	241.5	248.0	253.5	260.0
	Power Input	68.48	70.54	72.98	75.03
	EER	3.53	3.52	3.47	3.47
Heating	Capacity	270.0	276.0	282.0	288.0
	Power Input	72.14	74.16	76.50	78.52
	COP	3.74	3.72	3.69	3.67
Ventilation	Air Flow Rate	1126	1126	1155	1155
	Fan Quantity	8	8	8	8
	Static Pressure	110	110	110	110
Sound Pressure Level	Normal Mode	69	69	69	69
	Night Shift Mode	54	54	54	54
Compressor	Type	Scroll Compressor			
	Compressor Quantity	6	6	7	7
Refrigerant	Type	R410A			
	Pre-charged Quantity	10.3+10.3+12.2+12.2	10.3+10.3+12.2+12.2	10.3+12.2+12.2+12.2	10.3+12.2+12.2+12.2
Weight	Net Weight	316+316+363+365	316+316+365+365	316+363+365+365	316+365+365+365
	Gross Weight	347+347+400+402	347+347+402+402	347+400+402+402	347+402+402+402
Dimensions	External (HxWxD)	1730x (1350+1350+1350+1350) x750 1950x	1730x (1350+1350+1350+1350) x750 1950x	1730x (1350+1350+1350+1350) x750 1950x	1730x (1350+1350+1350+1350) x750 1950x
	Packing (HxWxD)	(1420+1420+1420+1420) x790	(1420+1420+1420+1420) x790	(1420+1420+1420+1420) x790	(1420+1420+1420+1420) x790
Cabinet Color		Ivory White	Ivory White	Ivory White	Ivory White
Ref. Piping	Gas	mm	Φ50.8	Φ50.8	Φ50.8
		inch	2	2	2
	Liquid	mm	Φ25.4	Φ25.4	Φ25.4
		inch	1	1	1
Connectable Indoor Units	Quantity	64	64	64	64
	Total Capacity	-	50%-150%	50%-150%	50%-150%
Piping Design	Height Difference Between ODU and IDU	m (above)	50(90")	50(90")	50(90")
		m (below)	40(90")	40(90")	40(90")
	Height Difference Between IDUs	m	30	30	30
	Max. Piping Length	m	1000	1000	1000
Operation Range <sup>2</sup>	Cooling	DB	-5°C~52°C	-5°C~52°C	-5°C~52°C
	Heating	WB	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C

# CHF Series



HP		94HP	96HP	98HP	100HP	102HP	
Model	Model	AER-CS2655CHOU	AER-CS2720CHOU	AER-CS2765CHOU	AER-CS2840CHOU	AER-CS2885CHOU	
	Modules	AER-CS680CHOU	AER-CS680CHOU	AER-CS725CHOU	AER-CS800CHOU	AER-CS800CHOU	
		AER-CS680CHOU	AER-CS680CHOU	AER-CS680CHOU	AER-CS680CHOU	AER-CS725CHOU	
		AER-CS680CHOU	AER-CS680CHOU	AER-CS680CHOU	AER-CS680CHOU	AER-CS680CHOU	
	AER-CS615CHOU	AER-CS680CHOU	AER-CS680CHOU	AER-CS680CHOU	AER-CS680CHOU		
Power Supply		AC 3Φ, 380-415V/50/60Hz					
Cooling	Capacity	kW	265.5	272.0	276.5	284.0	288.5
	Power Input	kW	77.48	79.53	80.48	83.75	84.70
	EER	kW / kW	3.43	3.42	3.44	3.39	3.41
Heating	Capacity	kW	294.0	300.0	305.0	315.0	320.0
	Power Input	kW	80.85	82.87	84.13	97.72	88.98
	COP	kW / kW	3.64	3.62	3.63	3.59	3.60
Ventilation	Air Flow Rate	m <sup>3</sup> /min	1184	1184	1238	1238	1292
	Fan Quantity		8	8	8	8	8
	Static Pressure	Pa	110	110	110	110	110
Sound Pressure Level	Normal Mode	dB(A)	69	69	69	70	70
	Night Shift Mode	dB(A)	54	54	54	55	55
Compressor	Type	-	Scroll Compressor				
	Compressor Quantity	pcs	8	8	8	8	8
Refrigerant	Type	-	R410A				
	Pre-charged Quantity	kg	12.2+12.2+12.2+12.2	12.2+12.2+12.2+12.2	12.2+12.2+12.2+12.0	12.2+12.2+12.2+12.0	12.2+12.2+12.0+12.0
Weight	Net Weight	kg	363+365+365+365	365+365+365+365	365+365+365+391	365+365+365+392	365+365+391+392
	Gross Weight	kg	400+402+402+402	402+402+402+402	402+402+402+433	402+402+402+434	402+402+433+434
Dimensions	External (HxWxD)	mm	1730x (1350+1350+1350+1350) x750	1730x (1350+1350+1350+1350) x750	1730x (1350+1350+1350+1600) x750	1730x (1350+1350+1350+1600) x750	1730x (1350+1350+1600+1600) x750
	Packing (HxWxD)	mm	1950x (1420+1420+1420+1420) x790	1950x (1420+1420+1420+1420) x790	1950x (1420+1420+1420+1665) x790	1950x (1420+1420+1420+1665) x790	1950x (1420+1420+1665+1665) x790
Cabinet Color			Ivory White	Ivory White	Ivory White	Ivory White	Ivory White
Ref. Piping	Gas	mm	Φ50.8	Φ50.8	Φ50.8	Φ50.8	Φ50.8
		inch	2	2	2	2	2
	Liquid	mm	Φ25.4	Φ25.4	Φ25.4	Φ25.4	Φ25.4
		inch	1	1	1	1	1
Connectable Indoor Units	Quantity	pcs	64	64	64	64	64
	Total Capacity	-	50%-150%	50%-150%	50%-150%	50%-150%	50%-150%
Piping Design	Height Difference Between ODU and IDU	m (above)	50(90")	50(90")	50(90")	50(90")	50(90")
		m (below)	40(90")	40(90")	40(90")	40(90")	40(90")
	Height Difference Between IDUs	m	30	30	30	30	30
	Max. Piping Length	m	1000	1000	1000	1000	1000
Operation Range <sup>2</sup>	Cooling	DB	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C
	Heating	WB	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C

# CHF Series



HP		104HP	106HP	108HP	110HP	112HP	
Model	Model	AER-CS2960CHOU	AER-CS3005CHOU	AER-CS3080CHOU	AER-CS3125CHOU	AER-CS3200CHOU	
	Modules	AER-CS800CHOU	AER-CS800CHOU	AER-CS800CHOU	AER-CS800CHOU	AER-CS800CHOU	
		AER-CS800CHOU	AER-CS800CHOU	AER-CS800CHOU	AER-CS800CHOU	AER-CS800CHOU	
		AER-CS680CHOU	AER-CS725CHOU	AER-CS800CHOU	AER-CS800CHOU	AER-CS800CHOU	
	AER-CS680CHOU	AER-CS680CHOU	AER-CS680CHOU	AER-CS725CHOU	AER-CS800CHOU		
Power Supply		AC 3Φ, 380-415V/50/60Hz					
Cooling	Capacity	kW	296.0	300.5	308.0	312.5	320.0
	Power Input	kW	87.96	88.91	92.17	93.12	96.39
	EER	kW / kW	3.37	3.38	3.34	3.36	3.32
Heating	Capacity	kW	330.0	335.0	345.0	350.0	360.0
	Power Input	kW	92.57	93.83	97.42	98.68	102.27
	COP	kW / kW	3.56	3.57	3.54	3.55	3.52
Ventilation	Air Flow Rate	m <sup>3</sup> /min	1292	1346	1346	1400	1400
	Fan Quantity		8	8	8	8	8
	Static Pressure	Pa	110	110	110	110	110
Sound Pressure Level	Normal Mode	dB(A)	70	70	70	70	70
	Night Shift Mode	dB(A)	55	55	55	55	55
Compressor	Type	-	Scroll Compressor				
	Compressor Quantity	pcs	8	8	8	8	8
Refrigerant	Type	-	R410A				
	Pre-charged Quantity	kg	12.2+12.2+12.0+12.0	12.2+12.0+12.0+12.0	12.2+12.0+12.0+12.0	12.0+12.0+12.0+12.0	12.0+12.0+12.0+12.0
Weight	Net Weight	kg	365+365+392+392	365+391+392+392	365+392+392+392	391+392+392+392	392+392+392+392
	Gross Weight	kg	400+402+434+434	402+433+434+434	402+434+434+434	433+434+434+434	434+434+434+434
Dimensions	External (HxWxD)	mm	1730x (1350+1350+1600+1600) x750	1730x (1350+1600+1600+1600) x750	1730x (1350+1600+1600+1600) x750	1730x (1600+1600+1600+1600) x750	1730x (1600+1600+1600+1600) x750
	Packing (HxWxD)	mm	1950x (1420+1420+1665+1665) x790	1950x (1420+1665+1665+1665) x790	1950x (1420+1665+1665+1665) x790	1950x (1665+1665+1665+1665) x790	1950x (1665+1665+1665+1665) x790
Cabinet Color		Ivory White	Ivory White	Ivory White	Ivory White	Ivory White	
Ref. Piping	Gas	mm	φ50.8	φ50.8	φ50.8	φ50.8	φ50.8
		inch	2	2	2	2	2
	Liquid	mm	φ25.4	φ25.4	φ25.4	φ25.4	φ25.4
		inch	1	1	1	1	1
Connectable Indoor Units	Quantity	pcs	64	64	64	64	64
	Total Capacity	-	50%-150%	50%-150%	50%-150%	50%-150%	50%-150%
Piping Design	Height Difference Between ODU and IDU	m (above)	50(90")	50(90")	50(90")	50(90")	50(90")
		m (below)	40(90")	40(90")	40(90")	40(90")	40(90")
	Height Difference Between IDUs	m	30	30	30	30	30
	Max. Piping Length	m	1000	1000	1000	1000	1000
Operation Range <sup>2</sup>	Cooling	DB	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C	-5°C~52°C
	Heating	WB	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C	-25°C~16.5°C

## CHF Series



### Notes:

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°CWB, pipe length: 7.5m, pipe height difference: 0m.

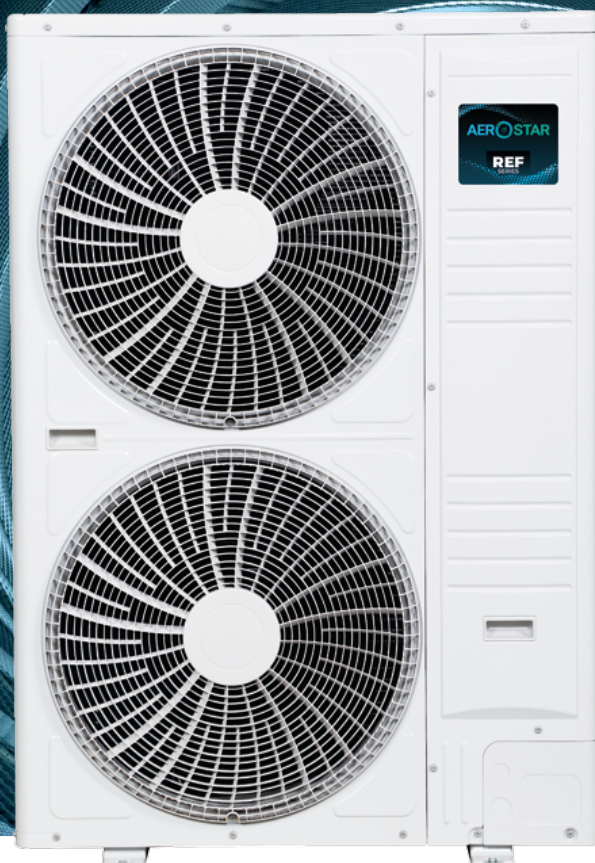
2. The above noise values are measured in the anechoic chamber without reflected echo, therefore the impact of the reflected echo must be included at the scene.

3. The final appearance of outdoor units is subject to the actual products. If you have any questions, please contact our professional engineer.

For detailed information, please contact with Aerostar technical service.

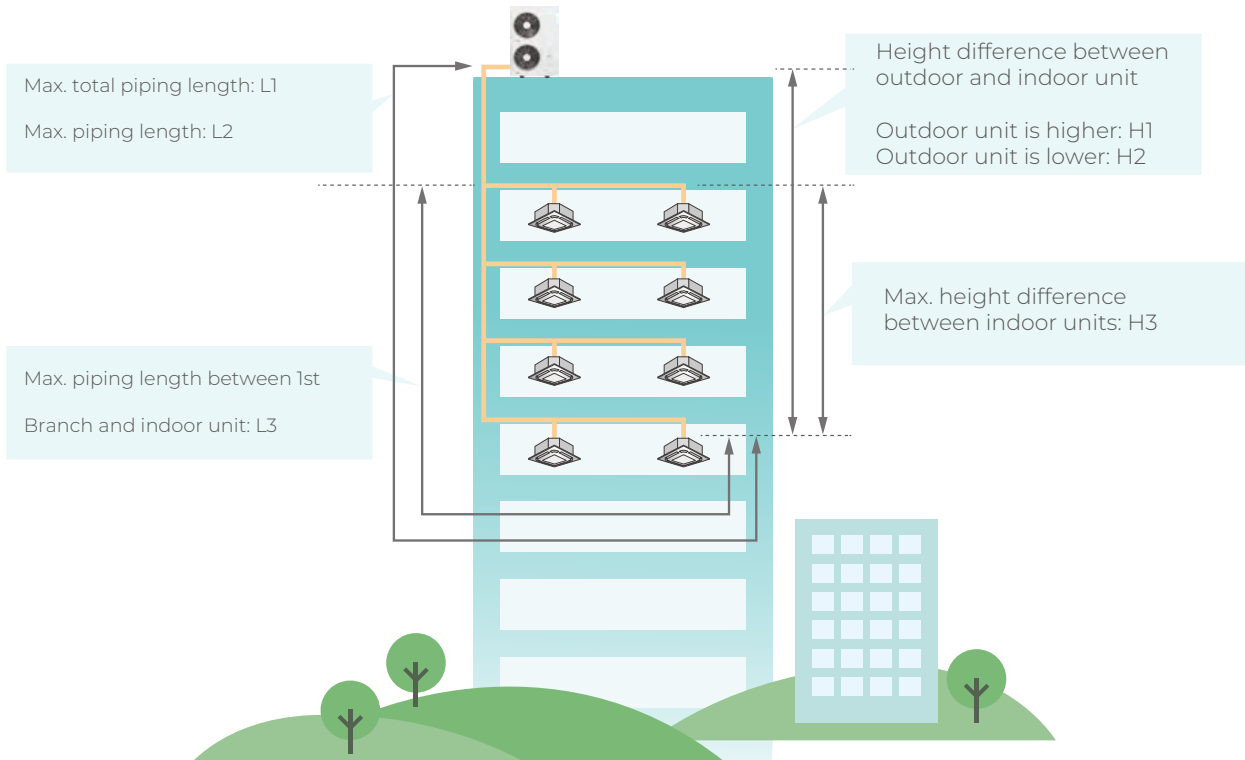
# AEROSTAR



REF series



## EXCELLENT PIPING LENGTH

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



Power supply	AC 1Φ, 220-240V/ 50/60Hz	AC 3Φ, 380-415V/ 50/60Hz	AC 3Φ, 380-415V/ 50/60Hz
HP	4/5/6HP	8HP	10/12HP
			
Max. total piping length L1	120	150	250
Max. piping length L2	75	100	100
Max. length between the first branch pipe and the farthest indoor unit L3	30	30	40
Height difference between ODU & IDU	Outdoor unit is higher H1	30	50
	Outdoor unit is lower H2	30	40
Height difference between IDUs H3	10	15	15



# REF Series



HP			4HP	5HP	6HP
	Model		AER-CS112REOUV	AER-CS140REOUV	AER-CS155REOUV
	Power Supply		AC 1φ, 220-240V/50/60Hz		
Cooling	Capacity	kW	11.2	14.0	15.5
	Power Input	kW	2.60	3.46	4.21
	EER	kW / kW	4.31	4.05	3.68
Heating	Capacity	kW	12.5	16.0	18.0
	Power Input	kW	2.78	3.71	4.47
	COP	kW / kW	4.50	4.31	4.03
Ventilation	Air Flow Rate	m <sup>3</sup> /min	90.0	90.0	100.0
Sound	Sound Pressure Level (Cooling/ Heating)	dB(A)	50/52	52/54	53/55
Compressor	Type	-	Twin Rotary		
Refrigerant	Type	-	R410A	R410A	R410A
	Pre-charged Quantity	kg	3.8	3.8	4.1
Weight	Net Weight	kg	93	95	97
	Gross Weight	kg	111	111	111
Dimensions	External(HxWxD)	mm	1380x950x370	1380x950x370	1380x950x370
	Packing(HxWxD)	mm	1531x1070x515	1531x1070x515	1531x1070x515
Cabinet Color			Ivory White	Ivory White	Ivory White
Ref. Piping	Gas	mm	φ15.88	φ15.88	φ15.88
		inch	5/8	5/8	5/8
	Liquid	mm	φ9.53	φ9.53	φ9.53
		inch	3/8	3/8	3/8
Connectable Indoor Units	Quantity	pcs	9	11	11
	Total Capacity	-	50%-150%	50%-150%	50%-150%
Piping Design	Height Difference Between ODU & IDU	m	30	30	30
		m	30	30	30
	Height Difference Between IDUs	m	10	10	10
	Max. Piping Length	m	75	75	75
Operation Range	Cooling	DB	-5°C~46°C	-5°C~46°C	-5°C~46°C
	Heating	WB	-20°C~15.5°C	-20°C~15.5°C	-20°C~15.5°C

**Notes:**

*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.*

*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.*

# REF Series



HP			8HP	10HP	12HP
	Model		AER-CS224REOU	AER-CS280REOU	AER-CS335REOU
	Power Supply		AC 3φ, 380-415V/50/60Hz		
Cooling	Capacity	kW	22.4	28.0	33.5
	Power Input	kW	6.37	7.75	10.30
	SEER	kW / kW	6.62	6.85	6.29
	EER	kW / kW	3.52	3.61	3.25
Heating	Capacity	kW	25.0	31.5	37.5
	Power Input	kW	5.84	7.00	10.00
	SCOP	kW / kW	4.10	4.21	3.98
	COP	kW / kW	4.28	4.50	3.75
Ventilation	Air Flow Rate	m <sup>3</sup> /min	127.0	150.0	163.0
Sound	Sound Pressure Level (Cooling/ Heating)	dB(A)	57/58	58/59	59/60
Compressor	Type	-	Twin Rotary		
Refrigerant	Type	-	R410A	R410A	R410A
	Pre-charged Quantity	kg	5.63	5.50	6.50
Weight	Net Weight	kg	124	145	158
	Gross Weight	kg	139	161	175
Dimensions	External(HxWxD)	mm	1380x950x370	1650x1100x390	1650x1100x390
	Packing(HxWxD)	mm	1531x1070x515	1806x1185x530	1806x1185x530
Cabinet Color			Ivory White	Ivory White	Ivory White
Ref. Piping	Gas	mm	Φ19.05	Φ22.2	Φ25.4
		inch	3/4	7/8	1
	Liquid	mm	Φ9.53	Φ12.7	Φ12.7
		inch	3/8	1/2	1/2
Connectable Indoor Units	Quantity	pcs	15	17	19
	Total Capacity	-	50%-150%	50%-150%	50%-150%
Piping Design	Height Difference Between ODU & IDU	m	50	50	50
		m	40	40	40
	Height Difference Between IDUs	m	15	15	15
	Max. Piping Length	m	100	100	100
	Total Piping Length	m	150	250	250
Operation Range	Cooling	DB	-5°C~50°C	-5°C~50°C	-5°C~50°C
	Heating	WB	-20°C~15.5°C	-20°C~15.5°C	-20°C~15.5°C



## INDOOR UNIT

4-Way Cassette Type /  
Mini 4-Way Cassette Type

1-Way Cassette Type

2-Way Cassette Type

Console Type

Ceiling Ducted Type AC/DC

Ceiling Ducted Type  
(High/Low Static Pressure)

Wall Mounted Type

Ceiling & Floor Type

AHU Connection KIT

kBtu/h		5	7	9	12	14	15	17	19	22	24	27	30	38	48	54	76	96	
kW		1.7	2.2	2.8	3.6	4	4.5	5	5.6	6.3	7.1	8	9	11.2	14	16	22.4	28	
4-Way Cassette Type				●	●		●		●	●	●	●	●	●	●	●			
Mini 4-Way Cassette Type		●	●	●	●		●	●	●										
1-Way Cassette Type			●	●	●	●					●								
2-Way Cassette Type			●	●	●	●					●	●	●	●	●	●			
Console Type		●	●	●	●		●	●											
Ceiling Ducted Type AC		●	●	●	●		●	●	●	●	●								
Ceiling Ducted Type DC		●	●	●	●		●		●		●								
Ceiling Ducted Type (High Static Pressure)			●	●	●		●		●	●	●	●	●	●	●	●	●	●	●
Ceiling Ducted Type (Low Static Pressure)			●	●	●		●		●	●	●	●	●	●	●	●			
Wall Mounted Type		●	●	●	●		●				●	●							
Ceiling & Floor Type								●		●	●	●	●	●	●				

**Note:**

For more details, check each unit's respective pages.

Type	Accessories								
	Drain Pump (built-in)	3D Airflow Panel	Filter	Humidity Sensor	AirPure Kit	Motion Sensor (built-in)	Hi-Motion	Outlet Air Temp Sensor	Float Switch
4-Way Cassete Type	●	×	●	○	○	○	○	●	●
Mini 4-Way Cassete Type	●	×	●	○	○	○	○	×	●
1-Way Cassete Type	●	×	●	×	×	×	○	●	●
2-Way Cassete Type	●	×	●	×	×	×	○	●	●
Console Type	×	×	●	○	○	×	○	×	×
Celling Ducted Type AC	●	×	●	○	○	×	○	×	●
Celling Ducted Type DC	●	×	●	○	○	×	○	×	●
Celling Type DC (BCT) CS22D~CS160D	○	×	●	○	○	×	○	×	●
Celling Type DC (BCT) CS224D – CS280D	×	×	○	×	×	×	○	●	●
Celling Type (HCT) CS22D~CS160D	○	×	●	○	○	×	○	×	●
Wall Mounted Type	×	×	●	○	×	×	○	●	×
Celling & Floor Type	×	×	●	×	×	×	○	●	×

Remarks: Standart: ● Optional: ○ Incompatible: ×

Type	Features										
	Dry Contact Input	Windows Linkage	Dry Contact Output	Fresh Air Intake	Sleep Mode	Quiet Mode	ECO	Individual Louver Control	Breeze Mode	Self Cleaning	Auto Fan Speed
4-Way Cassete Type	●	×	●	●	●	●	●	●	●	×	×
Mini 4-Way Cassete Type	●	×	●	●	●	●	●	●	●	×	×
1-Way Cassete Type	●	×	●	●	●	●	●	×	×	×	●
2-Way Cassete Type	●	×	●	●	●	×	×	●	×	×	●
Console Type	●	×	●	●	●	●	●	×	×	×	×
Celling Ducted Type AC	●	●	●	●	●	●	●	×	×	×	×
Celling Ducted Type DC	●	●	●	●	●	●	●	×	×	×	×
Celling Type (BCT) CS22D~CS160D	●	●	●	●	×	×	●	×	×	×	×
Celling Type (BCT) CS224D – CS280D	●	×	●	×	●	×	●	×	×	×	×
Celling Type (HCT) CS22D~CS160D	●	●	●	●	×	×	●	×	×	×	×
Wall Mounted Type	●	●	●	×	●	●	●	×	×	●	●
Celling & Floor Type	●	×	●	×	×	×	×	×	×	×	×

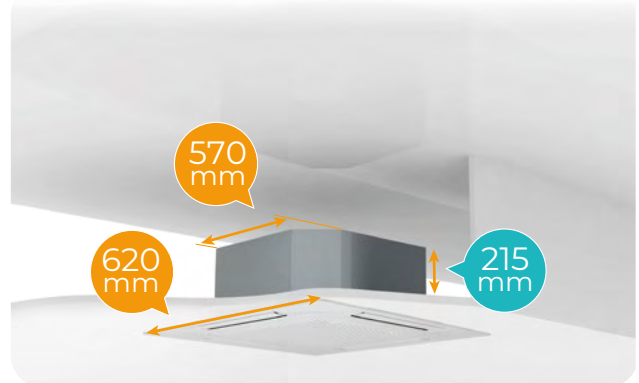
Remarks: Standart: ● Optional: ○ Incompatible: ×

## COMPACT AND CLASSY DESIGN

The 4-way cassette is as slim as 238mm, and the mini 4-way cassettes are only 215mm, making them suitable for narrow ceiling spaces. And the newly designed panel seamlessly integrates with indoor aesthetics.



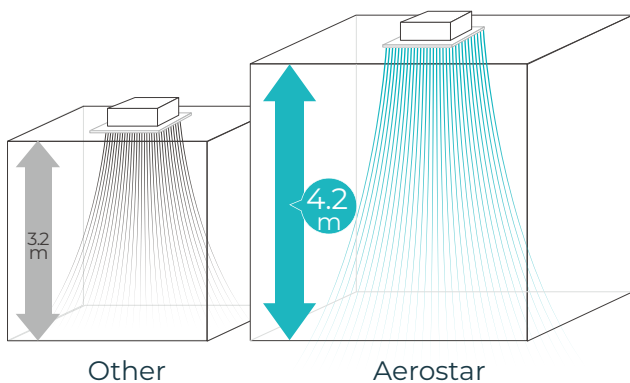
4-way Cassette Type



Mini 4-way Cassette Type

## HIGHER INSTALLATION

Air from the cassette can flow down from ceiling heights as high as 4.2m. And it's suitable for working with motion sensors.

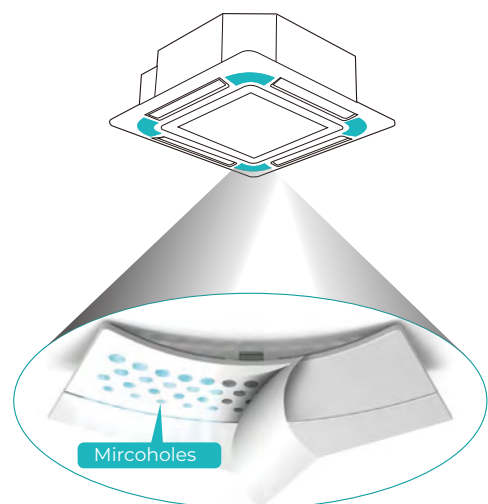


Other

Aerostar

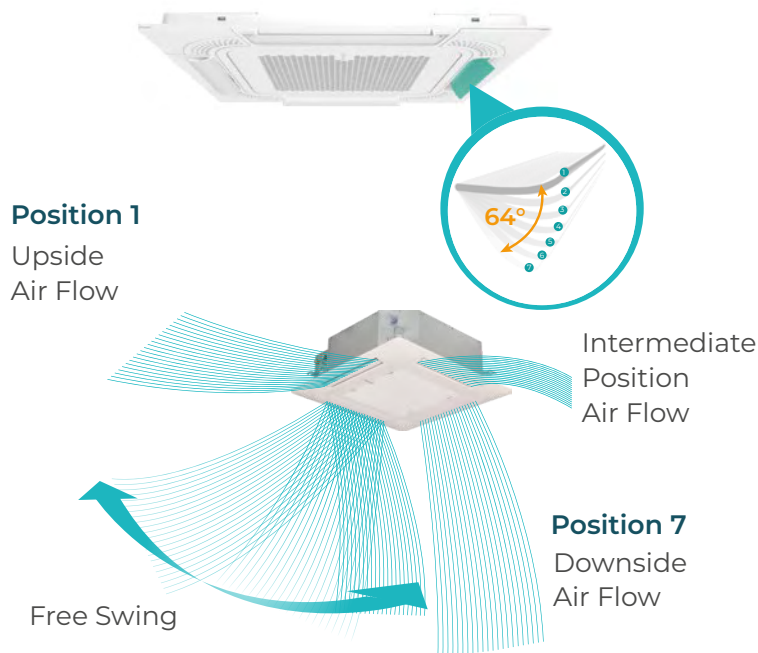
## BREEZE MODE

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



## INDIVIDUAL LOUVERS CONTROL

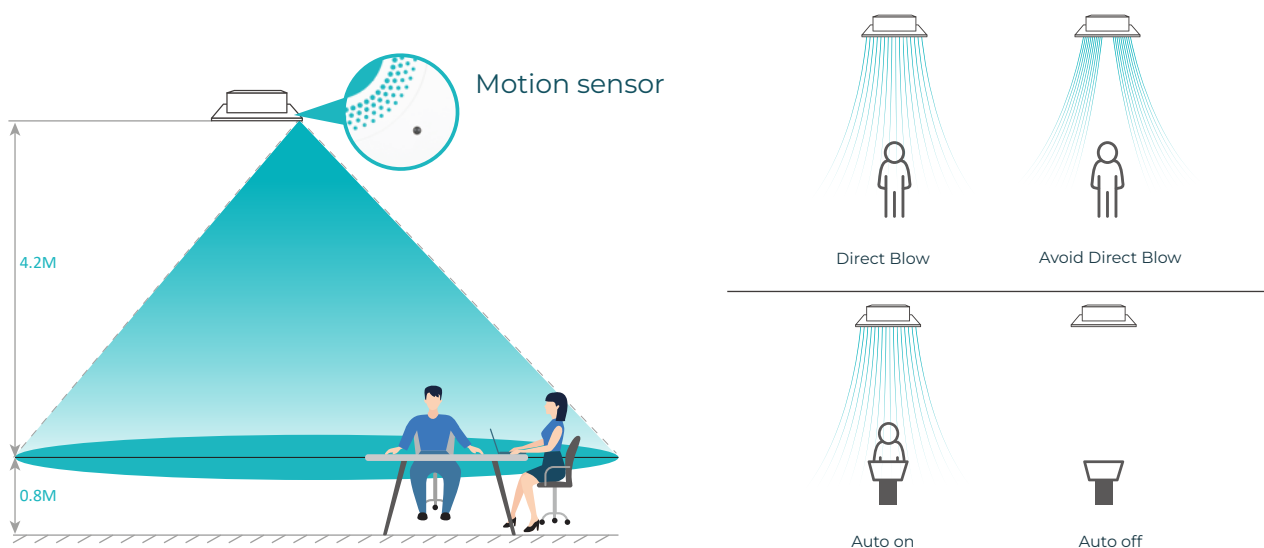
4-way cassettes louvers are now capable of individual control to freely choose how you want your AC unit supplies air according to different needs, applications and installation layout. Each louvers have 7 angle settings and maximum angle reach at 65°



## MOTION SENSOR

The sensor senses the presence of people to automatically turn the cassette unit on or off and whether to direct airflow towards or avoiding humans depend settings set on the controller.

During crowded times, the setting temperature is automatically lowered down and vice versa.





## 4-Way Cassette Type



Model			AER-CS28 CT4W	AER-CS36 CT4W	AER-CS45 CT4W	AER-CS56 CT4W	AER-CS63 CT4W	AER-CS71 CT4W	AER-CS80 CT4W	AER-CS90 CT4W	AER-CS112 CT4W	AER-CS140 CT4W	AER-CS160 CT4W	
Power supply			AC 1φ, 220-240V/50Hz/60Hz											
Capacity	Cooling	kW	2.8	3.6	4.5	5.6	6.3	7.1	8.0	9.0	11.2	14.0	16.0	
	Heating	kW	3.2	4.0	5.0	6.3	7.1	8.0	9.0	10.0	12.5	16.0	18.0	
Power Input	Cooling	W	20	30	40	50	50	60	70	70	80	130	130	
	Heating	W	20	30	40	50	50	60	70	70	80	130	130	
Sound Pressure		dB(A)	30/28/28/ 27/26/26	32/29/29/ 28/27/26	33/31/29/ 29/27/26	34/31/30/ 28/28/26	36/33/32/ 31/29/28	36/33/32/ 31/29/28	37/36/35/ 33/31/30	37/36/35/ 33/31/30	42/40/38/ 36/34/33	46/44/40/ 38/36/34	46/44/41/ 40/38/36	
Air Flow Rate		m <sup>3</sup> /min	15.0/12.8/ 12.0/10.8/ 10.0/8.8	17.0/14.0/ 12.8/11.8/ 10.8/9.1	19.0/15.0/ 13.9/12.6/ 11.8/10.5	19.0/15.0/ 13.9/12.6/ 11.8/10.5	26.0/20.0/ 18.3/17.0/ 15.1/13.0	27.0/21.1/ 19.1/18.0/ 15.8/14.7	25.0/21.1/ 19.6/17.9/ 16.1/14.7	25.0/22.3/ 20.3/18.3/ 16.9/15.3	31.0/29.5/ 28.7/26.0/ 23.5/20.5	37.0/33.5/ 29.6/27.2/ 24.5/22.4	37.0/34.0/ 30.7/28.9/ 25.6/23.8	
Piping	Connection Type	—	Flare-nut Connection (with Flare Nuts)											
	Liquid	mm	φ6.35	φ6.35	φ6.35	φ6.35	φ6.35	φ9.53	φ9.53	φ9.53	φ9.53	φ9.53	φ9.53	φ9.53
		inch	1/4	1/4	1/4	1/4	1/4	3/8	3/8	3/8	3/8	3/8	3/8	3/8
	Gas	mm	φ12.7	φ12.7	φ12.7	φ12.7	φ12.7	φ15.88	φ15.88	φ15.88	φ15.88	φ15.88	φ15.88	φ15.88
		inch	1/2	1/2	1/2	1/2	1/2	5/8	5/8	5/8	5/8	5/8	5/8	5/8
Condensate Drain	mm	O.D.32												
Weight	Net Weight	kg	20	20	20	20	21	21	23	23	26	26	26	
	Gross Weight	kg	24	24	24	24	25	25	27	27	31	31	31	
Dimensions	External	H mm	238	238	238	238	238	238	238	238	288	288	288	
		W mm	840	840	840	840	840	840	840	840	840	840	840	
		D mm	840	840	840	840	840	840	840	840	840	840	840	
	Packaging	H mm	292	292	292	292	292	292	342	342	342	342	342	
		W mm	945	945	945	945	945	945	945	945	945	945	945	
		D mm	945	945	945	945	945	945	945	945	945	945	945	
Decoration Panel	Model	—	AP-GNK											
	Color	—	Neutral White											
	Body Dimensions	H mm	47	47	47	47	47	47	47	47	47	47	47	47
		W mm	950	950	950	950	950	950	950	950	950	950	950	950
	Packaging Dimensions	D mm	950	950	950	950	950	950	950	950	950	950	950	950
		H mm	100	100	100	100	100	100	100	100	100	100	100	100
	Net Weight	W mm	1022	1022	1022	1022	1022	1022	1022	1022	1022	1022	1022	1022
		D mm	1022	1022	1022	1022	1022	1022	1022	1022	1022	1022	1022	1022
	Net Weight	kg	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	
	Gross Weight	kg	8	8	8	8	8	8	8	8	8	8	8	

### Notes:

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

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB, 19.0°C WB

Outdoor Air Inlet Temperature: 35°C DB

Piping Length: 7.5 Meters Piping Lift: 0 Meter

Heating Operation Conditions

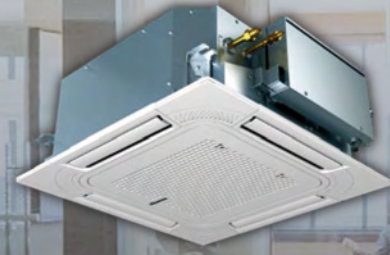
Indoor Air Inlet Temperature: 20°C DB

Outdoor Air Inlet Temperature: 7°C DB, 6°C WB

2. The sound pressure level is based on following conditions: 1.5m beneath the unit.

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

# Mini 4-Way Cassette Type



Model			AER-CS15 CM4W	AER-CS22 CM4W	AER-CS28 CM4W	AER-CS36 CM4W	AER-CS45 CM4W	AER-CS50 CM4W	AER-CS56 CM4W
Power supply			AC 1ϕ, 220-240V/50Hz/60Hz						
Capacity	Cooling	kW	1.5	2.2	2.8	3.6	4.5	5.0	5.6
	Heating	kW	2.0	2.5	3.3	4.2	5.0	5.6	6.3
Power Input	Cooling	W	14	14	14	16	22	30	40
	Heating	W	14	14	14	16	22	30	40
Sound Pressure		dB(A)	30/29/ 28/26	30/29/ 28/26	32/30/ 28/26	34/32/ 29/26	38/36/ 31/28	42/39/ 36/31	45/42/ 38/34
Air Flow Rate		m <sup>3</sup> /min	7.2/6.5/ 6.2/5.6	7.2/6.5/ 6.2/5.6	7.8/7.2/ 6.5/5.8	7.8/7.2/ 6.5/5.8	9.3/8.7/ 7.1/6.7	11.0/9.5/ 8.7/7.1	12.5/10.8/ 9.3/8.0
Piping	Connection Type	—	Flare-nut Connection (with Flare Nuts)						
	Liquid	mm	ϕ6.35	ϕ6.35	ϕ6.35	ϕ6.35	ϕ6.35	ϕ6.35	ϕ6.35
		inch	1/4	1/4	1/4	1/4	1/4	1/4	1/4
	Gas	mm	ϕ12.7	ϕ12.7	ϕ12.7	ϕ12.7	ϕ12.7	ϕ12.7	ϕ12.7
		inch	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Condensate Drain	mm	O.D.32							
Weight	Net Weight	kg	14.5	14.5	14.8	14.8	15.8	15.8	15.8
	Gross Weight	kg	17.3	17.3	17.6	17.6	18.6	18.6	18.6
Dimensions	External	B mm	215	215	215	215	215	215	215
		Ш mm	570	570	570	570	570	570	570
		Г mm	570	570	570	570	570	570	570
	Packaging	B mm	292	292	292	292	292	292	292
		Ш mm	668	668	668	668	668	668	668
		Г mm	730	730	730	730	730	730	730
Decoration Panel	Model	—	AP-DNK						
	Color	—	Neutral White						
	Body Dimensions	B mm	37	37	37	37	37	37	37
		Ш mm	620	620	620	620	620	620	620
		Г mm	620	620	620	620	620	620	620
	Packaging Dimensions	B mm	115	115	115	115	115	115	115
		Ш mm	680	680	680	680	680	680	680
		Г mm	680	680	680	680	680	680	680
	Net Weight	kg	2.7	2.7	2.7	2.7	2.7	2.7	2.7
	Gross Weight	kg	4.0	4.0	4.0	4.0	4.0	4.0	4.0

### Notes:

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

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB, 19.0°C WB

Outdoor Air Inlet Temperature: 35°C DB

Piping Length: 7.5 Meters Piping Lift: 0 Meter

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB

Outdoor Air Inlet Temperature: 7°C DB, 6°C WB

2. The sound pressure level is based on following conditions: 1.5m beneath the unit.

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

## CHIC AESTHETICS

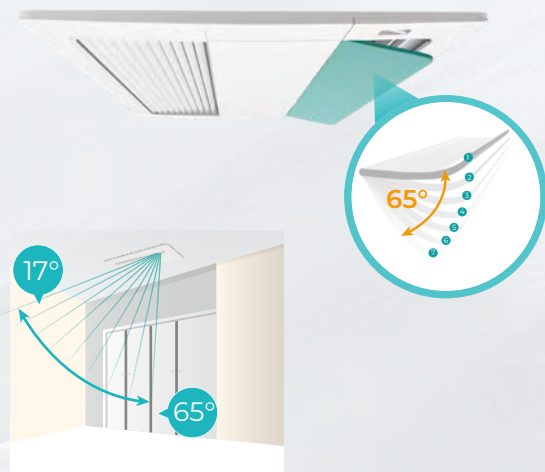
Inspired from ceiling concealed ducted units and integrated with the design of cassette units to present 1 way cassette. High class appearance blends into common white plaster ceilings and practical solution for cornered floor layouts, hotel rooms and residential applications.



## EVEN AIR SUPPLY

Louvers are consist of horizontal and vertical flaps to supply air evenly to the edges of any rooms.

Wider opening angle from 17° to 65° supplies air further and lower down to floor needed during heating modes.



## SPACE SAVING

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



## EASIER MAINTAIN

The electric box of the cassette is designed and placed beneath the panel.

When operate on PCB, it just needs to open the panel and the cover of box. It's easy to take the service, maintenance and commissioning.



# 1-Way Cassette Type



Model			AER-CS22 CTIW	AER-CS28 CTIW	AER-CS36 CTIW	AER-CS45 CTIW	AER-CS56 CTIW	AER-CS71 CTIW
Power supply			AC 1ϕ, 220-240V/50Hz/60Hz					
Capacity	Cooling	kW	2.2	2.8	3.6	4.0	5.6	7.1
	Heating	kW	2.5	3.2	4.0	4.5	6.3	8.0
Power Input	Cooling	W	14	14	24	34	34	74
	Heating	W	14	24	34	44	44	94
Sound Pressure		dB(A)	33/32/31/ 30/29/28	35/34/32/ 31/29/28	40/36/35/ 33/30/29	40/36/35/ 33/30/29	41/39/36/ 35/33/31	48/46/43/ 40/37/33
Air Flow Rate		m <sup>3</sup> /min	6.2/5.9/5.6/ 5.1/4.8/4.6	6.6/6.2/5.6/ 5.1/4.8/4.6	8.3/7.3/6.8/ 6.2/5.6/5.1	8.3/7.3/6.8/ 6.2/5.6/5.1	12.1/9.9/8.8/ 8.2/7.8/6.6	15.6/12.6/11.2/ 9.9/8.4/7.1
Piping	Connection Type	—	Flare-nut Connection (with Flare Nuts)					
	Liquid	mm	ϕ6.35	ϕ6.35	ϕ6.35	ϕ6.35	ϕ6.35	ϕ9.53
		inch	1/4	1/4	1/4	1/4	1/4	3/8
	Gas	mm	ϕ12.7	ϕ12.7	ϕ12.7	ϕ12.7	ϕ12.7	ϕ15.88
		inch	1/2	1/2	1/2	1/2	1/2	5/8
Condensate Drain	mm	I.D.32						
Weight	Net Weight	kg	19	19	20	20	24	24
	Gross Weight	kg	23	23	24	24	29	29
Dimensions	External	H mm	192	192	192	192	192	192
		W mm	910	910	910	910	1180	1180
		D mm	470	470	470	470	470	470
	Packaging	H mm	268	268	268	268	268	268
		W mm	1136	1136	1136	1136	1406	1406
		D mm	574	574	574	574	574	574
Decoration Panel	Model	—	AP-DNA	AP-DNA	AP-DNA	AP-DNA	AP-ENA	AP-ENA
	Color	—	Neutral White					
	Body Dimensions	H mm	55	55	55	55	55	55
		W mm	1100	1100	1100	1100	1370	1370
		D mm	550	550	550	550	550	550
	Packaging Dimensions	H mm	130	130	130	130	130	130
		W mm	1160	1160	1160	1160	1430	1430
		D mm	610	610	610	610	610	610
	Net Weight	kg	5	5	5	5	6	6
	Gross Weight	kg	8	8	8	8	10	10

**Notes:**

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

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB, 19.0°C WB

Outdoor Air Inlet Temperature: 35°C DB

Piping Length: 7.5 Meters Piping Lift: 0 Meter

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB

Outdoor Air Inlet Temperature: 7°C DB, 6°C WB

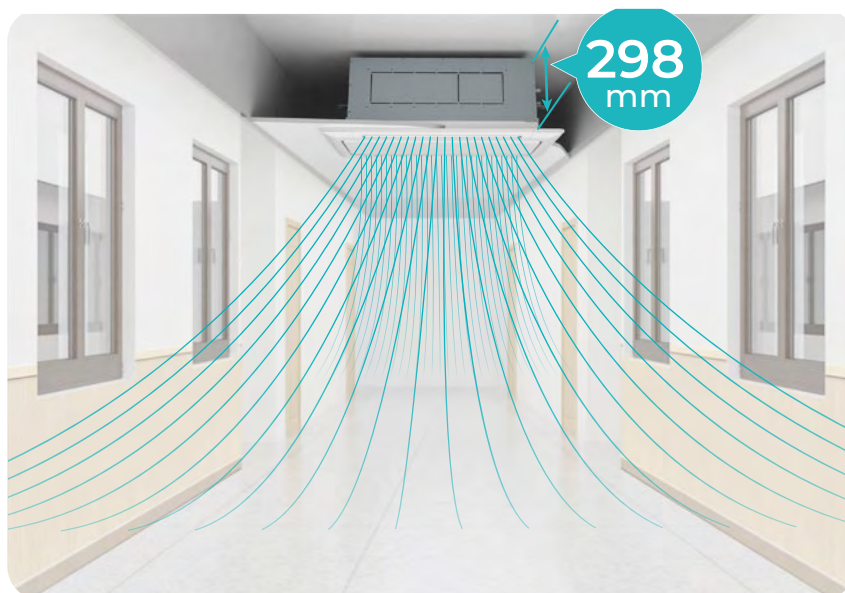
2. The sound pressure level is based on following conditions: 1.5m beneath the unit.

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

## COMPACT AND CLASSY DESIGN

The slim structure of the cassette having height as low as 298mm can be installed in ceiling spaces with a minimum of 310mm.

Narrow corridors or zoned spaces are best fitted with 2 way cassette due to its compact design.



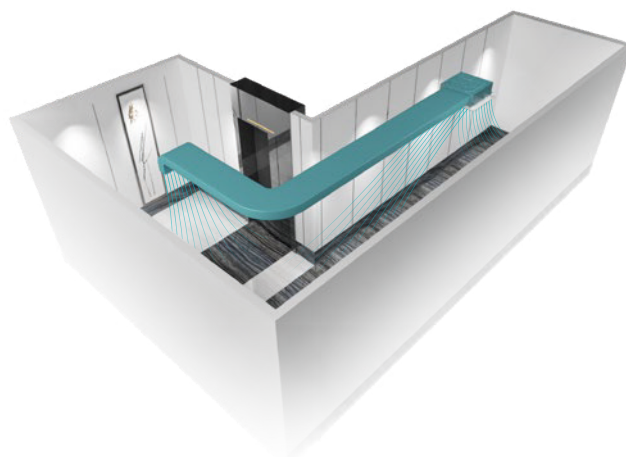
## INDEPENDENT LOUVERS CONTROL

Куті відкриття кожної жалюзі контролюються індивідуально за допомогою 8 варіантів вибору, з кутом розкриття від 27° до 84° для задоволення потреб вузьких довгих коридорів з високими стелями та ефективної подачі теплого повітря в зимову пору року.



## BRANCH DISCHARGE OPTIO

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



# 2-Way Cassette Type



Model			AER-CS22 CT2W	AER-CS28 CT2W	AER-CS36 CT2W	AER-CS45 CT2W	AER-CS56 CT2W	AER-CS71 CT2W	AER-CS80 CT2W	AER-CS90 CT2W	AER-CS112 CT2W	AER-CS140 CT2W	AER-CS160 CT2W	
Power supply			AC 1Φ, 220-240V/50Hz/60Hz											
Capacity	Cooling	kW	2.2	2.8	3.6	4.3	5.6	7.1	8.4	9.0	11.2	14.0	16.0	
	Heating	kW	2.8	3.3	4.0	4.9	6.5	8.0	9.0	10.0	13.0	16.0	18.0	
Power Input	Cooling	W	14	14	14	24	34	44	64	74	84	104	114	
	Heating	W	14	14	14	24	34	44	64	74	84	104	114	
Sound Pressure		dB(A)	32/30/ 29/27	33/30/ 29/28	34/31/ 30/28	40/37/ 34/32	42/39/ 36/33	45/42/ 40/36	47/44/ 40/36	49/46/ 42/37	46/44/ 40/38	48/45/ 42/38	49/46/ 43/40	
Air Flow Rate		m³/min	10.0/8.5/ 7.2/6.0	11.0/9.4/ 8.2/6.6	12.0/10.5/ 8.9/7.5	15.0/13.2/ 11.5/9.9	17.0/14.9/ 13.0/11.2	19.0/16.4/ 14.3/12.3	21.0/18.4/ 15.6/12.6	22.0/19.3/ 16.3/13.1	30.0/26.4/ 23.1/19.8	35.0/30.8/ 26.9/21.1	37.0/32.5/ 28.4/24.1	
Piping	Connection Type	—	Flare-nut Connection (with Flare Nuts)											
	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53	Φ9.53
		inch	1/4	1/4	1/4	1/4	1/4	3/8	3/8	3/8	3/8	3/8	3/8	3/8
	Gas	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ15.88
		inch	1/2	1/2	1/2	1/2	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8
Condensate Drain	mm	I.D.32												
Weight	Net Weight	kg	22	22	22	24	24	24	24	24	39	39	39	
	Gross Weight	kg	28	28	28	30	30	30	30	30	47	47	47	
Dimensions	External	H mm	298	298	298	298	298	298	298	298	298	298	298	
		W mm	860	860	860	860	860	860	860	860	1420	1420	1420	
		D mm	630	630	630	630	630	630	630	630	630	630	630	
	Packaging	H mm	350	350	350	350	350	350	350	350	350	350	350	
		W mm	1070	1070	1070	1070	1070	1070	1070	1070	1630	1630	1630	
		D mm	710	710	710	710	710	710	710	710	710	710	710	
Decoration 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	
	Color	—	Neutral White											
	Body Dimensions	H mm	30	30	30	30	30	30	30	30	30	30	30	30
		W mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1660	1660	1660
		D mm	710	710	710	710	710	710	710	710	710	710	710	710
		H mm	160	160	160	160	160	160	160	160	160	160	160	160
	Packaging Dimensions	W mm	1170	1170	1170	1170	1170	1170	1170	1170	1170	1710	1710	1710
		D mm	740	740	740	740	740	740	740	740	740	740	740	740
	Net Weight	kg	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	10.5	10.5	10.5
	Gross Weight	kg	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	17.8	17.8	17.8

**Notes:**

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

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB, 19.0°C WB

Outdoor Air Inlet Temperature: 35°C DB

Piping Length: 7.5 Meters Piping Lift: 0 Meter

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB

Outdoor Air Inlet Temperature: 7°C DB, 6°C WB

2. The sound pressure level is based on following conditions: 1.5m beneath the unit.

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

# AEROSTAR

**CONSOLE TYPE**



## STYLISH DESIGN

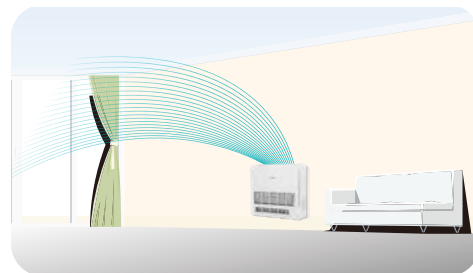
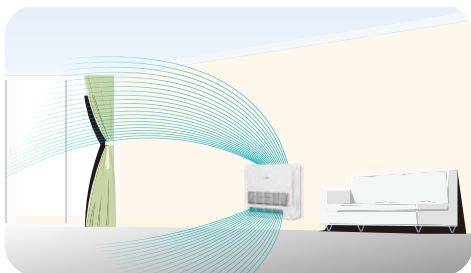
With smooth white cover, LED shown and temperature display, the console unit is a super stylish air-conditioning, which is suitable for the residential or commercial applications which need an unit installed on or close to the floor.



## MULTIPLE BLOWING TYPES

### Cooling Mode

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



### Heating Mode

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



**Note:**

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



## FLEXIBLE INSTALLATION OPTIONS

The unit can stand directly on the floor, or be hanged on the wall. According to the interior decoration style, the machine can choose surface mounted, embedded mounted, concealed mounted.



Standing on the floor



Hanging on the wall



Surface mounted



Embedded mounted

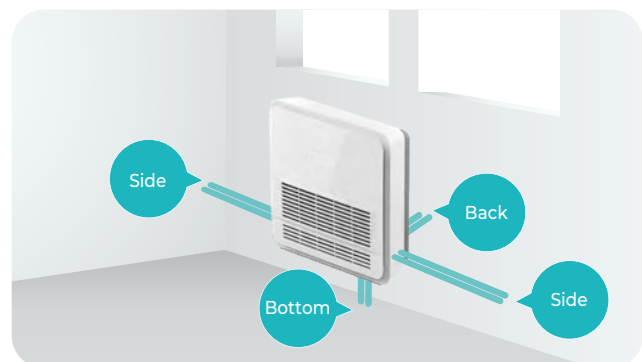


Concealed mounted

## FLEXIBLE PIPING CONNECTION

Both refrigerant and drainage pipings are freely to connect in any direction including two sides (L or R) and bottom and back.

An additional direction to the back of the unit suitable for pipes which passing through walls.



## Console Type



Model			AER-CS15 CWM	AER-CS22 CWM	AER-CS28 CWM	AER-CS36 CWM	AER-CS45 CWM	AER-CS50 CWM
Power supply			AC 1ϕ, 220-240V/50Hz/60Hz					
Capacity	Cooling	kW	1.5	2.2	2.8	3.6	4.5	5.0
	Heating	kW	2.0	2.5	3.3	4.2	5.0	5.6
Power Input	Cooling	W	10	11	12	14	18	23
	Heating	W	10	11	12	14	18	23
Sound Peassure		dB(A)	32/30/29/ 28/26/24	34/32/31/ 29/27/26	36/35/32/ 31/29/27	39/36/34/ 31/29/27	41/39/37/ 35/33/32	44/43/41/ 39/37/36
Air Flow Rate		m <sup>3</sup> /min	6.0/5.7/5.3/ 5.1/4.7/4.5	7.4/7.0/6.4/ 6.0/5.6/5.3	8.0/7.4/7.0/ 6.4/6.0/5.6	8.2/7.6/6.8/ 6.2/5.7/5.3	9.0/8.5/7.8/ 7.2/6.6/6.4	10.1/9.7/9.0/ 8.5/7.9/7.3
Panel Colour			Neutral White					
Piping	Connection Type		Flare-nut Connection (with Flare Nuts)					
	Liquid	mm	ϕ6.35	ϕ6.35	ϕ6.35	ϕ6.35	ϕ6.35	ϕ6.35
		inch	1/4	1/4	1/4	1/4	1/4	1/4
	Gas	mm	ϕ12.7	ϕ12.7	ϕ12.7	ϕ12.7	ϕ12.7	ϕ12.7
		inch	1/2	1/2	1/2	1/2	1/2	1/2
Condensate Drain	mm	O.D.18						
Weight	Net Weight	kg	16.1	16.1	16.1	17.4	17.4	17.4
	Gross Weight	kg	20.6	21.1	21.1	21.5	21.5	21.5
Dimensions	External	H mm	630	630	630	630	630	630
		W mm	700	700	700	700	700	700
		D mm	225	225	225	225	225	225
	Packaging	H mm	725	725	725	725	725	725
		W mm	790	790	790	790	790	790
		D mm	315	315	315	315	315	315

**Notes:**

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

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB, 19.0°C WB

Outdoor Air Inlet Temperature: 35°C DB

Piping Length: 7.5 Meters Piping Lift: 0 Meter

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB

Outdoor Air Inlet Temperature: 7°C DB, 6°C WB

2. The sound pressure level is based on following conditions: 1.5m beneath the unit.

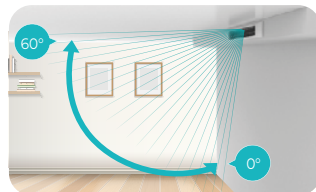
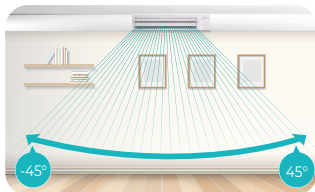
The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

### SPACE SAVING

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

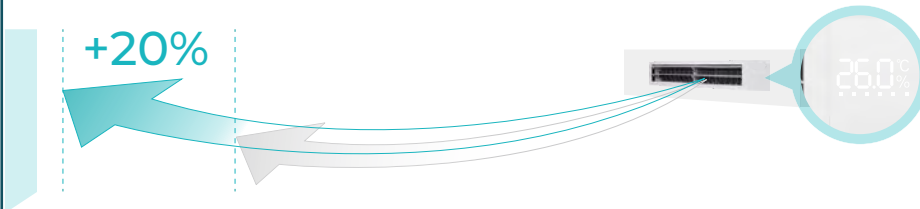


### 3D AIR FLOW



Classy air discharge louver panel with LED temperature and humidity display is available as an optional accessory for the AC/DC Low Height Ducted Units.

The 3D louvers on the panel offer wide air flow coverage to keep every corners of your room cool or warm in any seasons of the year.



### SMART & PRECISE TEMPERATURE CONTROL

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



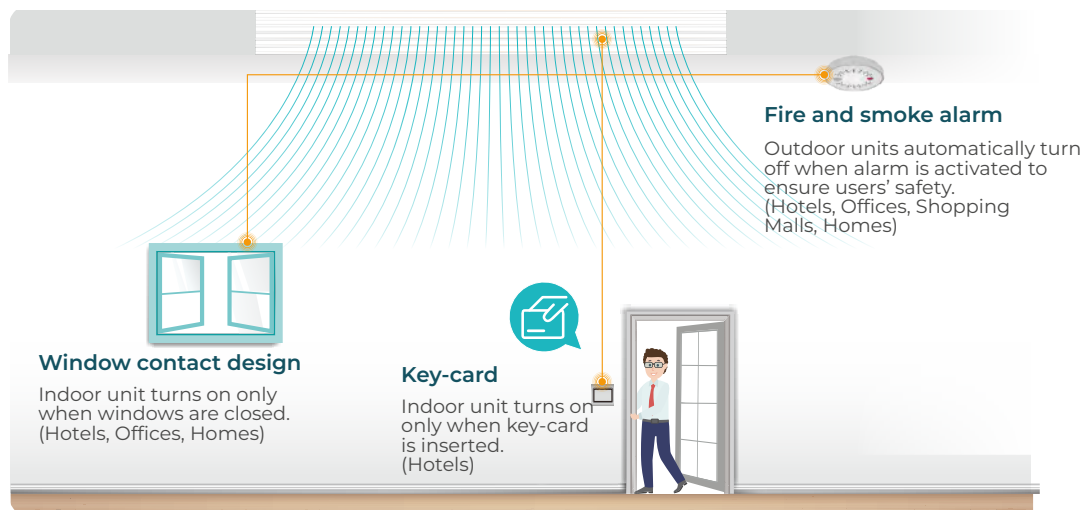
Aerostar VRF



Other

### VARIOUS DEVICE CONNECTION OPTIONS

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



## Ceiling Ducted Type (AC Low Height)



Model			AER-CS15 DLC	AER-CS22 DLC	AER-CS28 DLC	AER-CS36 DLC	AER-CS45 DLC	AER-CS50 DLC	AER-CS56 DLC	AER-CS63 DLC	AER-CS71 DLC	
Power Supply			AC 1ϕ, 220-240V/50Hz									
Capacity	Cooling	kW	1.7	2.2	2.8	3.6	4.5	5.0	5.6	6.3	7.1	
	Heating	kW	1.9	2.5	3.2	4.0	5.0	5.6	6.3	7.1	8.0	
Power Input	Cooling	kW	50	50	70	70	80	80	100	120	120	
	Heating	W	50	50	70	70	80	80	100	120	120	
Sound Pressure		dB(A)	29/24/22	29/24/22	35/25/23	35/25/23	36/25/23	36/25/23	35/25/23	39/26/25	39/26/25	
Airflow Rate		m <sup>3</sup> /min	7/5.5/4.7	7/5.5/4.7	9/5.7/4.8	9/5.7/4.8	12/6.3/5.5	12/6.3/5.5	13.5/8/7.7	18/9.3/8.7	18/9.3/8.7	
External Static Pressure		Pa	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	10(30)	
Piping	Connection Type	—	Flare-nut Connection (with Flare Nuts)									
	Liquid	mm	ϕ6.35	ϕ6.35	ϕ6.35	ϕ6.35	ϕ6.35	ϕ6.35	ϕ6.35	ϕ6.35	ϕ9.53	ϕ9.53
		inch	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	3/8	3/8
	Gas	mm	ϕ12.7	ϕ12.7	ϕ12.7	ϕ12.7	ϕ12.7	ϕ12.7	ϕ12.7	ϕ15.88	ϕ15.88	ϕ15.88
		inch	1/2	1/2	1/2	1/2	1/2	1/2	1/2	5/8	5/8	5/8
Condensate Drain	mm	I.D.32										
Weight	Net Weight	kg	16	16	17	17	21	21	25	26	26	
	Gross Weight	kg	19	19	20	20	24	24	29	29	29	
Dimensions	External	H mm	192	192	192	192	192	192	192	192	192	
		W mm	700	700	700	700	910	910	1180	1180	1180	
		D mm	447	447	447	447	447	447	447	447	447	
	Packaging	H mm	270	270	270	270	270	270	270	270	270	
		W mm	925	925	925	925	1136	1136	1406	1406	1406	
		D mm	574	574	574	574	574	574	574	574	574	

### Notes:

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

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB, 19.0°C WB

Outdoor Air Inlet Temperature: 35°C DB

Piping Length: 7.5 Meters Piping Lift: 0 Meter

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB

Outdoor Air Inlet Temperature: 7°C DB, 6°C WB

2. The sound pressure level is based on following conditions: 1.5m beneath the unit.

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

## Ceiling Ducted Type (DC Low Height)



Model			AER-CS15 DLDC	AER-CS22 DLDC	AER-CS28 DLDC	AER-CS36 DLDC	AER-CS45 DLDC	AER-CS56 DLDC	AER-CS71 DLDC
Power Supply			AC 1 $\phi$ , 220-240V/50Hz/60Hz						
Capacity	Cooling	kW	1.7	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	kW	1.9	2.5	3.2	4.0	5.0	6.3	8.0
Power Input	Cooling	W	30	30	50	50	60	60	90
	Heating	W	30	30	50	50	60	60	90
Sound Pressure		dB(A)	28/27/26/ 24/23/21	28/27/26/ 24/23/21	35/32/32/ 30/26/23	35/32/32/ 30/26/23	35/32/32/ 30/26/23	35/32/30/ 28/25/23	38/36/35/ 33/31/24
Airflow Rate		m <sup>3</sup> /min	7.0/6.5/6.1/ 5.7/5.3/4.8	7.0/6.5/6.1/ 5.7/5.3/4.8	9.0/8.1/7.3/ 6.7/5.9/5.2	9.0/8.1/7.3/ 6.7/5.9/5.2	12/10.8/9.4/ 8.1/6.8/5.5	13.5/12.5/11.2/ 10.0/8.8/7.7	18/16.3/14.3/ 12.3/10.5/8.7
External Static Pressure		Pa	10(10-30-50)						
Piping	Connection Type	—	Flare-nut Connection(with Flare Nuts)						
	Liquid	mm	$\Phi$ 6.35	$\Phi$ 6.35	$\Phi$ 6.35	$\Phi$ 6.35	$\Phi$ 6.35	$\Phi$ 6.35	$\Phi$ 9.53
		inch	1/4	1/4	1/4	1/4	1/4	1/4	3/8
	Gas	mm	$\Phi$ 12.7	$\Phi$ 12.7	$\Phi$ 12.7	$\Phi$ 12.7	$\Phi$ 12.7	$\Phi$ 15.88	$\Phi$ 15.88
		inch	1/2	1/2	1/2	1/2	1/2	5/8	5/8
Connection Drain	mm	I.D.32							
Weight	Net Weight	kg	16	16	17	17	20	24	24
	Gross Weight	kg	19	19	20	20	24	29	29
Dimensions	External	H mm	192	192	192	192	192	192	192
		W mm	700	700	700	700	910	1180	1180
		D mm	447	447	447	447	447	447	447
	Packaging	H mm	270	270	270	270	270	270	270
		W mm	925	925	925	925	1136	1406	1406
		D mm	574	574	574	574	574	574	574

### Notes:

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

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB, 19.0°C WB

Outdoor Air Inlet Temperature: 35°C DB

Piping Length: 7.5 Meters Piping Lift: 0 Meter

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB

Outdoor Air Inlet Temperature: 7°C DB, 6°C WB

2. The sound pressure level is based on following conditions: 1.5m beneath the unit.

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

## **FLEXIBLE AIR DUCT LAYOUT**



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

## **NEW IMPROVED BENDABLE FILTERS**



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

## Ceiling Ducted Type (High Static Pressure)



Model			AER-CS 22 DH	AER-CS 28 DH	AER-CS 36 DH	AER-CS 45 DH	AER-CS 56 DH	AER-CS 63 DH	AER-CS 71 DH	AER-CS 80 DH	AER-CS 90 DH	AER-CS 112 DH	AER-CS 140 DH	AER-CS 160 DH	AER-CS 224 DHD	AER-CS 280 DHD	
Power Supply			AC 10, 220~240V/50Hz													AC 30, 380~415V/50Hz	
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	6.3	7.1	8.0	9.0	11.2	14.0	16.0	22.4	28.0	
	Heating	kW	2.5	3.2	4.0	5.0	6.3	7.1	8.0	9.0	10.0	12.5	16.0	18.0	25.0	31.5	
Power Input	Cooling	kW	0.10	0.10	0.13	0.13	0.14	0.19	0.19	0.25	0.25	0.25	0.34	0.43	1.08	1.34	
	Heating	kW	0.10	0.10	0.13	0.13	0.14	0.19	0.19	0.25	0.25	0.25	0.34	0.43	1.08	1.34	
Sound Pressure	220-240V/50Hz	dB(A)	32/27/25	32/27/25	35/32/26	35/32/26	36/35/30	39/32/25	39/32/25	42/39/34	42/39/34	42/39/34	43/40/35	46/40/35	52	54	
	208V/60Hz	dB(A)	33/28/24	33/28/24	37/34/29	37/34/29	37/35/29	39/32/25	39/32/25	42/38/33	42/38/33	42/38/33	44/39/34	45/40/34	52	54	
	230V/60Hz	dB(A)	37/33/28	37/33/28	40/38/33	40/38/33	42/40/34	43/37/30	43/37/30	44/42/37	44/42/37	44/42/37	47/43/38	46/42/38	52	54	
Air Flow	(Hi./Me./Lo.)	m <sup>3</sup> /min	9/7/6	9/7/6	12/10/8.5	12/10/8.5	15/13/10	19/14/10	19/14/10	28/24/19.5	28/24/19.5	28/24/19.5	35.5/29/24	39/31/24	58	77.5	
External Static Pressure	220-240V/50Hz 208V/60Hz	Pa	50(80)	50(80)	50(80)	50(80)	50(80)	50(80)	50(80)	120(90)	120(90)	120(90)	120(90)	120(90)	220	220	
	230V/60Hz	Pa	80(105)	80(105)	90(115)	90(115)	90(115)	90(115)	90(115)	170(150)	170(150)	170(150)	170(150)	170(150)	—	—	
Piping	Connection Type	—	Flare-nut Connection(with Flare Nuts)												Brazing		
	Liquid	mm	φ6.35	φ6.35	φ6.35	φ6.35	φ6.35	φ9.53	φ9.53	φ9.53	φ9.53	φ9.53	φ9.53	φ9.53	φ9.53	φ9.53	φ9.53
		inch	1/4	1/4	1/4	1/4	1/4	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
	Gas	mm	φ12.70	φ12.70	φ12.70	φ12.70	φ15.88	φ15.88	φ15.88	φ15.88	φ15.88	φ15.88	φ15.88	φ15.88	φ19.05	φ22.20	
		inch	1/2	1/2	1/2	1/2	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	3/4	7/8	
Condensate Drain	mm	I.D.32															
Weight	Net Weight	kg	25	25	25	25	30	30	30	45	45	45	53	53	94	106	
	Gross Weight	kg	31	31	31	31	36	37	37	52	52	52	61	61	106	111	
Dimensions	External	H	mm	270	270	270	270	270	270	300	300	300	300	300	470	470	
		W	mm	650+75	650+75	650+75	650+75	900+75	900+75	900+75	1100+75	1100+75	1100+75	1400+75	1400+75	1060	1250
		D	mm	720	720	720	720	720	720	720	800	800	800	800	800	1120	1120
	Packaging	H	mm	385	385	385	385	385	385	385	415	415	415	415	415	546	546
		W	mm	895	895	895	895	1140	1140	1140	1345	1345	1640	1640	1640	1276	1466
		D	mm	870	870	870	870	870	870	870	950	950	950	950	950	1345	1345

### Notes:

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

Cooling Operation Conditions

Indoor Air Inlet Temperature: 27°C DB, 19.0°C WB

Outdoor Air Inlet Temperature: 35°C DB

Heating Operation Conditions

Indoor Air Inlet Temperature: 20°C DB

Outdoor Air Inlet Temperature: 7°C DB, 6°C WB

Piping Length: 7.5 Meters Piping Lift: 0 Meter

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

1.5m below the unit; With 2.0m discharge duct and 1.0m return duct

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

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

\*1: For AER-CS224/280DHD, the filter is not standard.

# Ceiling Ducted Type (Low Static Pressure)



Model			AER-CS 22 DLS	AER-CS 28 DLS	AER-CS 36 DLS	AER-CS 45 DLS	AER-CS 56 DLS	AER-CS 63 DLS	AER-CS 71 DLS	AER-CS 80 DLS	AER-CS 90 DLS	AER-CS 112 DLS	AER-CS 140 DLS	AER-CS 160 DLS	
Power Supply			AC 1ϕ, 220~240V/50Hz												
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	6.3	7.1	8.0	9.0	11.2	14.0	16.0	
	Heating	kW	2.5	3.2	4.0	5.0	6.3	7.1	8.0	9.0	10.0	12.5	16.0	18.0	
Power Input	Cooling	kW	60	60	110	110	90	160	160	240	240	240	290	360	
	Heating	kW	60	60	110	110	90	160	160	240	240	240	290	360	
Sound Pressure		dB(A)	27/23/21	27/23/21	34/30/25	34/30/25	32/30/26	35/28/24	35/28/24	38/33/30	38/33/30	38/33/30	41/38/33	44/39/33	
Air Flow Rate	(Hi./Me./Lo.)	m <sup>3</sup> /min	9/7/6	9/7/6	12/10/8.5	12/10/8.5	15/13/10	19/14/10	19/14/10	28/24/19.5	28/24/19.5	28/24/19.5	35.5/29/24	39/31/24	
External Static Pressure	230V/60Hz	Pa	30	30	30	30	30	30	30	60	60	60	60	60	
Piping	Connection Type	—	Flare-nut Connection (with Flare Nuts)												
	Liquid	mm	ϕ6.35	ϕ6.35	ϕ6.35	ϕ6.35	ϕ6.35	ϕ9.53	ϕ9.53	ϕ9.53	ϕ9.53	ϕ9.53	ϕ9.53	ϕ9.53	ϕ9.53
		inch	1/4	1/4	1/4	1/4	1/4	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
	Gas	mm	ϕ12.70	ϕ12.70	ϕ12.70	ϕ12.70	ϕ15.88	ϕ15.88	ϕ15.88	ϕ15.88	ϕ15.88	ϕ15.88	ϕ15.88	ϕ15.88	ϕ15.88
		inch	1/2	1/2	1/2	1/2	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8
Condensate Drain	mm	I.D.32													
Weight	Net Weight	kg	25	25	25	25	30	30	30	45	45	45	52	52	
	Gross Weight	kg	31	31	31	31	36	37	37	52	52	52	61	61	
Dimensions	External	H	mm	270	270	270	270	270	270	270	300	300	300	300	300
		W	mm	650+75	650+75	650+75	650+75	900+75	900+75	900+75	1100+75	1100+75	1100+75	1400+75	1400+75
		D	mm	720	720	720	720	720	720	720	800	800	800	800	800
	Packaging	H	mm	385	385	385	385	385	385	385	415	415	415	415	415
		W	mm	895	895	895	895	1140	1140	1140	1345	1345	1345	1640	1640
		D	mm	870	870	870	870	870	870	870	950	950	950	950	950

**Notes:**

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

- Cooling Operation Conditions
- Indoor Air Inlet Temperature: 27°C DB, 19.0°C WB
- Outdoor Air Inlet Temperature: 35°C DB
- Heating Operation Conditions
- Indoor Air Inlet Temperature: 20°C DB.
- Outdoor Air Inlet Temperature: 7°C DB, 6°C WB
- Piping Length: 7.5 Meters Piping Lift: 0 Meter

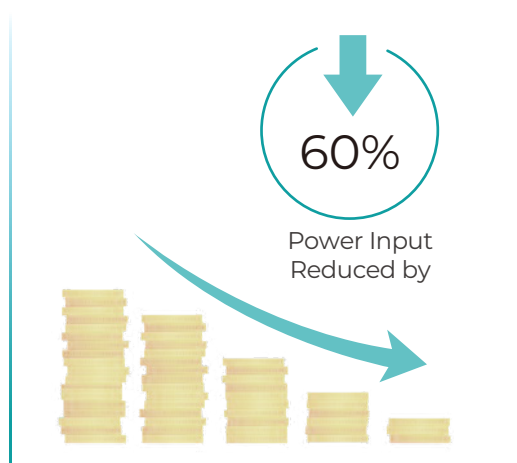
2. The sound pressure level is based on following conditions.  
1.5m below the unit; With 2.0m discharge duct and 1.0m return duct  
The above data were measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

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



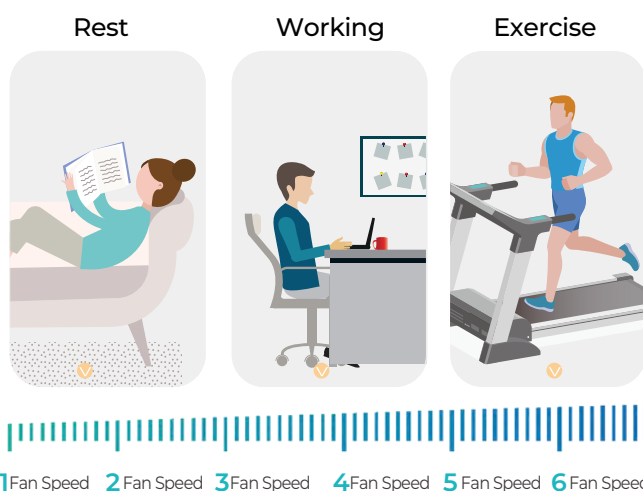
## HIGH-EFFICIENCY DC FAN MOTOR

Equipped with a DC fan motor, the unit significantly reduces the power consumption by 60% compared to conventional AC products, ensuring low-cost operation.



## 6 FAN SPEED

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



## OPTIMIZED NOISE CONTROL

The low-noise inverter fan motor, anti-vibration insulation on the expansion tube and EEV ensure quieter operation. In addition, Aerostar's special intelligent noise reduction technology effectively reduces operating noise. When operating in high airflow mode, the maximum noise level is reduced by 5 dB(A)\* compared to the previous generation.

What's more, sleep and quiet modes are also available for users to enjoy the quiet.

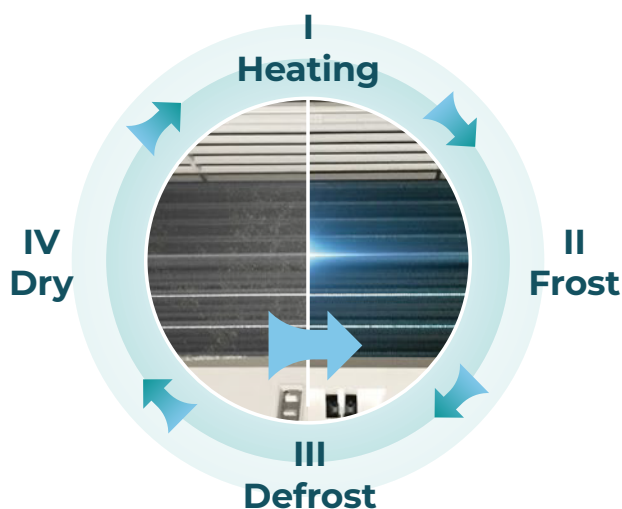
\* Reduced noise performance, AER-CS45 unit is used as an example



## SELF-CLEANING OF INDOOR UNITS

The indoor units feature an intelligent self-cleaning function that efficiently clears the heat exchangers without manual intervention, saving your valuable time and cost.

### 4 processes for deep cleaning



## Wall Mounted Type



Model			AER-CS 17WT1	AER-CS 22WT1	AER-CS 28WT1	AER-CS 36WT1	AER-CS 45WT1	AER-CS 56WT1	AER-CS 71WT1	AER-CS 84WT1	
Power Supply			AC 1φ, 220-240V/50Hz; 220V/60Hz								
Capacity	Cooling	kW	1.7	2.2	2.8	3.6	4.5	5.6	7.1	8.4	
	Heating	kW	2.0	2.5	3.3	4.0	5.0	6.3	8.0	8.4	
Споживана потужність	Cooling	W	20	20	20	30	20	30	50	80	
	Heating	W	20	20	20	30	30	30	70	80	
Power Input		dB(A)	33/32/32/ 30/30/28	36/35/33/ 32/30/28	36/35/33/ 32/30/28	38/35/33/ 32/30/28	38/37/36/ 32/31/29	40/38/36/ 35/33/31	45/42/41/ 38/35/31	50/48/45/ 41/36/33	
Air Flow Rate		m <sup>3</sup> /min	8.7/8.3/ 8.2/7.5/ 7.2/7.0	9.8/9.2/ 8.7/8.2/ 7.5/7.0	9.8/9.2/ 8.7/8.2/ 7.5/7.0	10.3/9.2/ 8.7/8.2/ 7.5/7.0	11.5/11.0/ 10.3/9.0/ 8.7/8.0	16.2/15.0/ 14.2/13.3/ 12.2/11.5	20.0/18.0/ 17.0/15.0/ 13.3/11.7	23.3/22.0/ 20.0/17.0/ 14.2/12.2	
Panel Colour		—	White								
Piping	Connection Type	—	Flare-nut Connection (with Flare Nuts)								
	Liquid	mm	φ6.35	φ6.35	φ6.35	φ6.35	φ6.35	φ9.53	φ9.53	φ9.53	
		inch	1/4	1/4	1/4	1/4	1/4	3/8	3/8	3/8	
	Gas	mm	φ9.53	φ9.53	φ9.53	φ9.53	φ12.7	φ15.88	φ15.88	φ15.88	
		inch	3/8	3/8	3/8	3/8	1/2	5/8	5/8	5/8	
Condensate Drain	mm	O.D.18									
Weight	Net Weight	kg	9.0	9.0	9.0	9.0	13.0	14.5	14.5	14.5	
	Gross Weight	kg	13.4	13.4	13.4	13.4	17.8	19.8	19.8	19.8	
Dimensions	External	H	mm	270	270	270	270	315	315	315	315
		W	mm	845	845	845	845	960	1120	1120	1120
		D	mm	203	203	203	203	230	230	230	230
	Packaging	H	mm	375	375	375	375	430	430	430	430
		W	mm	943	943	943	943	1058	1223	1223	1223
		D	mm	310	310	310	310	328	328	328	328

### Notes:

1. The rated capacity is based on the following conditions:

Cooling conditions: indoor air inlet temperature: 27°C DB, 19°C WB, outdoor air inlet temperature: 35°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 an anechoic chamber so that reflected sound should be taken into consideration during actual operation.  
The above noise values are measured under the fan mode operation, and measured at a point 1m in front of the unit and 0.8m below the unit.

## SLEEK SMOOTH DESIGN

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



## FLEXIBLE INSTALLATION

The unit can be installed to be standing on floors or hanging on ceilings.

Whereby interior walls maximized to display items, can hang the unit on the ceiling.



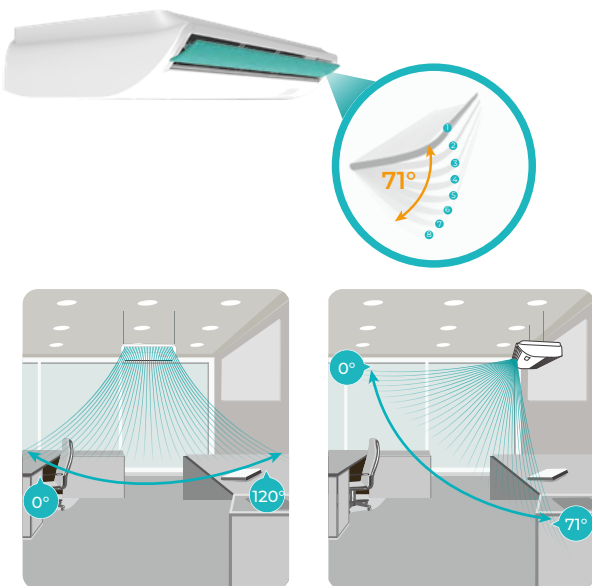
Hanging on the wall

Standing on the floor

## WIDE AIR SUPPLY

Louvers are consist of horizontal and vertical flaps to cover larger coverage area to the edges of any rooms.

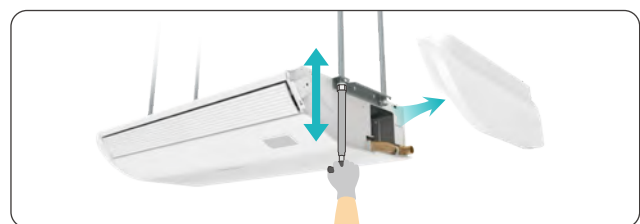
Wider opening angle from up to 120° for vertical louvers and up to 71° for horizontal louvers supplies air further and lower down to floor.



## CONVENIENT INSTALLATION AND MAINTENANCE

Adjust the ceiling or wall mounting height by just opening the side panels without the need to access the internal parts.

Service manholes are unnecessary due to the strategic repositioning of piping connections and electrical box behind the air return panel.



## Ceiling & Floor Type



Model			AER-CS 50 CF	AER-CS 56 CF	AER-CS 63 CF	AER-CS 71 CF	AER-CS 84 CF	AER-CS 90 CF	AER-CS 112 CF	AER-CS 142 CF
Power Supply			AC 1ϕ, 220-240V/50Hz; 220V/60Hz							
Capacity	Cooling	kW	5.0	5.6	6.3	7.1	8.4	9.0	11.2	14.2
	Heating	kW	5.6	6.5	7.5	8.5	9.6	10.0	13.0	16.3
Power Input	Cooling	W	40	40	70	70	70	80	130	160
	Heating	W	40	40	70	70	70	80	130	160
Sound Pressure	Ceiling	dB(A)	39/35/30	39/35/30/	45/41/37	45/41/37	43/39/34	45/40/36	51/46/40	50/46/42
	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
Airflow Rate		m <sup>3</sup> /min	13.0/11.0/ 9.0	13.0/11.0/ 9.0	16.1/14.0/ 11.3	16.1/14.0/ 11.3	18.2/15.2/ 12.2	19.4/16.3/ 13.3	24.8/20.5/ 16.3	33.0/28.0/ 23.0
Speed-up Setting HH1		m <sup>3</sup> /min	14.2	14.2	17.8	17.8	19.8	21.2	27.0	36.0
Speed-up Setting HH2		m <sup>3</sup> /min	16.0	16.0	20.0	20.0	22.3	23.5	29.2	37.4
Panel Colour		—	White							
Piping	Connection Type	—	Flare-nut Connection (with Flare Nuts)							
	Liquid	mm	ϕ6.35	ϕ6.35	ϕ9.53	ϕ9.53	ϕ9.53	ϕ9.53	ϕ9.53	ϕ9.53
		inch	1/4	1/4	3/8	3/8	3/8	3/8	3/8	3/8
	Gas	mm	ϕ15.88	ϕ15.88	ϕ15.88	ϕ15.88	ϕ15.88	ϕ15.88	ϕ15.88	ϕ15.88
		inch	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8
Condensate Drain	mm	I.D.18								
Weight	Net Weight	kg	31	31	32	32	39	40	41	47
	Gross Weight	kg	38	38	39	39	46	47	48	56
Dimensions	External	H	mm	230	230	230	230	230	230	230
		W	mm	990	990	990	990	1285	1285	1285
		D	mm	680	680	680	680	680	680	680
	Packaging	H	mm	340	340	340	340	340	340	340
		W	mm	1110	1110	1110	1110	1400	1400	1400
		D	mm	830	830	830	830	830	830	830

### Notes:

1. The rated capacity is based on the following conditions:

Cooling conditions: indoor air inlet temperature: 27°C DB, 19°C WB, outdoor air inlet temperature: 35°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 sound pressure level is based on the following conditions:

1.0m beneath the unit, 1.0m from Discharge Grille.

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

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

The Aerostar AHU-kit integrates external heat exchangers of Air-handling units (AHU) into a Aerostar VRF system to provide more flexible air conditioning solutions.

## MAIN FUNCTION

- ON/OFF Control
  - Temperature Setting
  - Capacity Demand
  - Operation Mode
- Communication wire
  Sensor signal
  Refrigerant pipe



*\*The wired controller WRC-VA01A is standard.*

## Ceiling & Floor Type

Capacity Control Mode	Set Temperature by Remote Controller	Set ODU Capacity Range
Inlet Air (room air) Temperature Control	Cooling: 16~32°C Heating: 16~32°C	—
Outlet Air Temperature Control		
Duty Signal Control (0~10V or 0~5V or 4-20mA)	—	15%~100%

AHU Connection KIT			ACK-2BEJ	ACK-4BEJ	ACK-6BEJ	ACK-10BEJ	ACK-20BEJ					ACK-30BEJ					
Power Supply			AC 1Φ, 220V~240V/50Hz/60Hz														
Capacity (H/M/L)	Cooling	kW	5.6	11.2	16.0	22.4	28.0	33.5	40.0	45.0	50.0	56.0	61.5	69.0	73.0	80.0	85.0
		kW	5.0	9.0	14.0	20.0	25.0	30.0	35.0	43.0	48.0	52.0	58.0	65.0	71.0	76.0	82.0
		kW	4.0	7.1	11.2	16.0	20.0	28.0	33.5	40.0	45.0	50.0	56.0	61.5	69.0	73.0	80.0
	Heating	kW	7.1	12.5	18.0	25.0	31.5	37.5	45.0	50.0	56.0	63.0	69.0	77.5	82.5	90.0	95.0
		kW	5.6	10.0	16.0	22.4	28.0	33.5	40.0	47.5	53.0	60.0	66.0	75.0	79.0	86.0	92.0
		kW	4.5	8.0	12.5	17.9	22.4	31.5	37.5	45.0	50.0	56.0	63.0	69.0	77.5	82.5	90.0
Heat Exchanger Volume	Min	dm <sup>3</sup>	0.57	1.03	1.92	2.92	3.89	4.76	5.85	6.79	7.57	8.47	9.04	9.50	10.39	11.39	12.36
	Max	dm <sup>3</sup>	1.16	2.37	2.92	3.89	4.76	5.91	6.89	8.00	8.92	9.97	11.13	12.34	12.89	13.86	14.73
Weight	Net Weight	kg	7.1			7.1					7.2				9.2		
	Gross Weight	kg	11.7			11.8					11.9				15.4		
Package Dimension	(HxWxD)	mm	350x510x450										460x510x450				
Control Box	Model		ACK-BEJ/1														
	Outer Dimension(HxWxD)		349x419x112														
Expansion Valve Box	Model		ACK-2 BEJ/2	ACK-4 BEJ/2	ACK-6 BEJ/2	ACK-10 BEJ/2		ACK-20 BEJ/2					ACK-20BEJ/2 (2 sets)				
	Outer Dimension(H×W×D)		166x437x61										166x437x61 (2 sets)				

Operation conditions		Cooling	Heating
Indoor air inlet temperature	DB	27.0°C	20.0°C
	WB	19.0°C	—
Outdoor air inlet temperature	DB	35.0°C	7.0°C
	WB	—	6.0°C



## CONTROL SYSTEM

Individual Control

Centralized Control





Intelligent Control









Model	Wired Controller WRC-VA01A	Wired Controller WRC-VG01	Wired Controller WRC-M01H	Wireless Controller RC-LH8QE
Picture				
Max. connectable indoor units	16	16	16	—
Power supply	15V	15V	15V	3V
Dimension(mm)	120x120	120x120	120x70	180x48x22.15
Cool/Heat/Fan/Auto/Dry	●	●	●	●
Auto dehumidification (humidity sensor)	●	●	●	×
Fan speed	●	●	●	●
Louver setting	●	●	●	●
Temperature setting	●	●	●	●
Operation monitoring	●	●	●	×
Timer	●	●	●	●
7-day timer	×	●	×	×
Holiday setting	×	●	×	×
Main-sub connection	●	×	×	×
Main-sub control	×	●	×	×
Change indoor address	●	●	×	×
Check function	●	●	●	×
Option setting	●	●	●	×
Air filter cleaning reminding	●	●	●	×
Error code display	●	●	●	×
Auto test run	●	●	●	●
Indoor/outdoor PCB checking	●	●	●	×
Self diagnostic function	●	●	●	
Back light	●	●	●	●
Built-in temperature sensor	●	●	×	×
Wireless control available	×	●	×	—
Individual louver control	●	●	×	●
Breeze mode	●	●	×	×
Motion sensor	●	●	×	×
Health(Airpure)	●	●	×	●
High-temp sterilization	×	●	×	×
Hi-Motion	×	●	×	×
ECO	●	●	×	●
Quiet (Indoor unit)	●	●	●	●
Sleep(Indoor unit)	●	●	×	●
Window interlock	●	●	×	×
Key card	●	●	×	×
3D-air flow	●	●	×	●
Child lock	×	●	×	×
Self cleaning	●	●	×	●
Auto changeover	×	●	×	×
Dynamic ESP	×	●	×	×
Outlet air temp limit	×	●	×	×

Remarks: Available: ● Unavailable: ×



Type	Wired Controller			Wireless Controller	
Model	WRC-VG01	WRC-VA01A	WRC-M01H	RC-LH8QE	
Picture					
Indoor Unit	4-Way Cassette	○	○	○	
	Mini 4-Way Cassette	○	○	○	
	1-Way Cassette	○	○	×	
	2-Way Cassette	○	○	×	
	Ceiling Ducted Type (AC/DC)	○	○	○	
	Ceiling Ducted Type (High/Low)	○	○	○	
	Console	○	○	○	●
	Wall Mounted Type	○	○	○	●
	Ceiling & Floor Type	○	○	○	●
AHU Kit	○	●	×	×	

Type	Receiver Kit				Centralized Controller	ON/OFF	
Model	RK-V02H	RK-Z01H	RK-T03H	RK-X01H	CS-RA10D	CS-J01H	
Picture							
Indoor Unit	4-Way Cassette	×	×	○	×	○	
	Mini 4-Way Cassette	×	○	×	×	○	
	1-Way Cassette	×	×	×	○	○	
	2-Way Cassette	○	×	×	×	○	
	Ceiling Ducted Type (AC/DC)	○	×	×	×	○	
	Ceiling Ducted Type (High/Low)	○	×	×	×	○	
	Console	○	×	×	×	○	○
	Wall Mounted Type	○	×	×	×	○	○
Ceiling & Floor Type	○	×	×	×	○	○	

Remarks: Standart: ● Optional: ○ Incompatible: ×

## WRC-VG01



### Features

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

- Size: 120mm×120mm
- Max. connectable indoor units: 16
- Touch button
- Language  
Supports 10 languages: English, French, German, Italian, Spanish, Dutch, Portuguese, Polish, Turkish, Arabic

## WRC-VG01



### Features

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

- Size: 120mm×120mm
- Max. connectable indoor units: 16
- Touch button
- Language  
Supports 10 languages: English, French, German, Italian, Spanish, Dutch, Portuguese, Polish, Turkish, Arabic



## DIVERSE DISPLAY COLORS

The colors displayed on the controller are based on the operation mode of indoor units, making it easier for users to get the current information of indoor units at a quick glance.



## BRAND-NEW AUTO CHANGEOVER

Auto changeover allows the indoor unit to keep indoor temperature within a certain range by automatically switching the unit operation mode. No need for manual adjustments, our units does it all for you to ensure optimal indoor comfort at all times.



## REFRIGERANT LEAKAGE ALARM

When the refrigerant leaks, an alarm will pop up and the buzzer will sound to make the operation safe and reliable.



## WRC-VA01A



### Features

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

Mode	Охолодження/нагрів/авто/вентилятор/осушення
Timer	72-години
Maintenance	Error code/Parameter check/Auto test run/ Indoor&Outdoor PCB checking/Self diagnostic function
Louver	Налаштування жалюзі/ Індивідуальне керування жалюзі/ 3D-потік повітря
Special function	Breeze mode/Motion sensor/Health/ECO/Quiet/ Sleep/Self-cleaning
Fan speed	6
Temperature setting	0.5 °C
Main-sub control	•
Air filter cleaning reminding	•
Back light	•
Built-in temperature sensor	•

## Wireless Controller

## RC-LH8QE



### Features

- Size: 180mm x 48mmx22.15mm
- LCD display with back light

Mode	Cool/Heat/Auto/Fan/Dry
Timer	24-hour timer
Maintenance	Auto test run/ Identification of adjacent receiver
Louver	3D-air flow/ Louver setting
Special function	ECO/Quiet/Sleep/Self-cleaning
Temperature setting	1 °C accuracy/Display the setting temp. or room temp.

## RECEIVER KIT FOR WIRELESS CONTROL-OPTIONAL (optional)

Auto switching allows the indoor unit to keep the room temperature within a defined range by automatically switching the operating mode.

There is no need for manual adjustments, our units do everything for you to ensure optimal indoor comfort at all times.



# Centralized Control

## Smart Touch II CS-RA10D



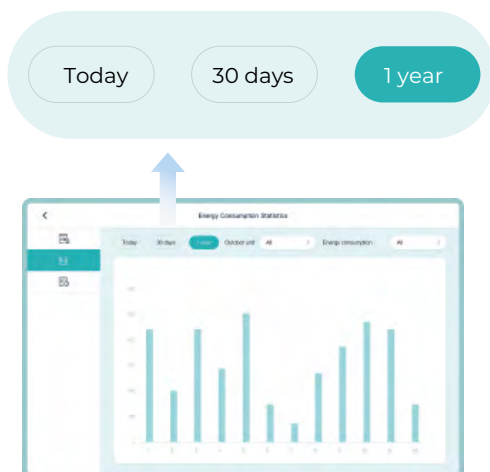
### Features

Cool/Heat/Auto/Fan/Dry
Remote control with web access
Support rotation operation setting
Weekly/Holiday timer
Error reminder email
External input/Output function
ECO/Health/Self-cleaning/Quiet mode setting of the outdoor unit

- 10 inch colorful touch screen
- 1280×800 High Resolution
- Size: 170mm×252mm×37mm
- Connected quantity:  
160 indoor units, 64 outdoor units
- 13 different languages:  
English, French, Spanish, German, Italian, Dutch, Polish, Turkish, Arabic, Portuguese, Vietnamese, Thai, Chinese

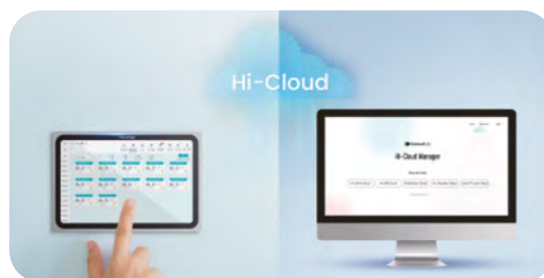
## ENERGY MANAGEMENT

Visualized energy management is available through the Smart Touch II, enabling quick access to electricity consumption data and analysis. Utilizing big data analytics, it also provides energy-saving solutions to help you optimize energy usage efficiently.



## ACCESS REMOTELY WITH EASE

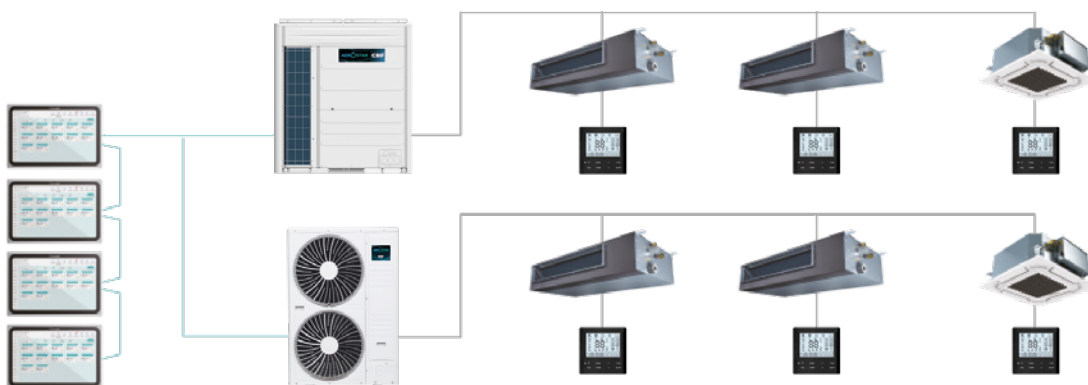
Users have the flexibility to control the air-conditioning system using either the local Smart Touch II or remote web access.



## FREE CONNECTION

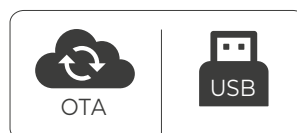
Max. 4 Smart Touch controllers can be used in one system.

One controller can be connected to max. 160 IDUs, 64 ODU's



## FUTURE-PROOF

Ensure you stay up to date with both remote OTA updates and local USB updates.



### Ideal for:

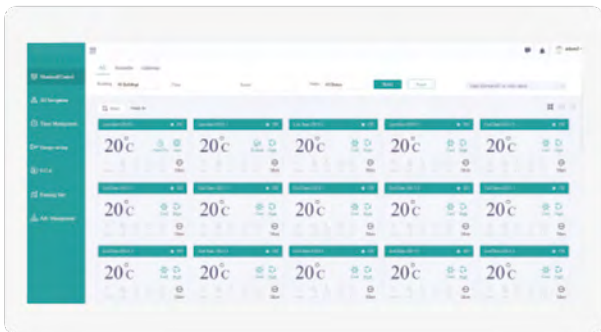
Offices, Schools, Factories, Hospitals, Hotels, Restaurants.





Humanized interaction interface and comfortable user experience.

The electricity consumption allocation makes it easy for users to allocate total electricity consumption among building occupants. Both segmented tariff and single tariff are available.



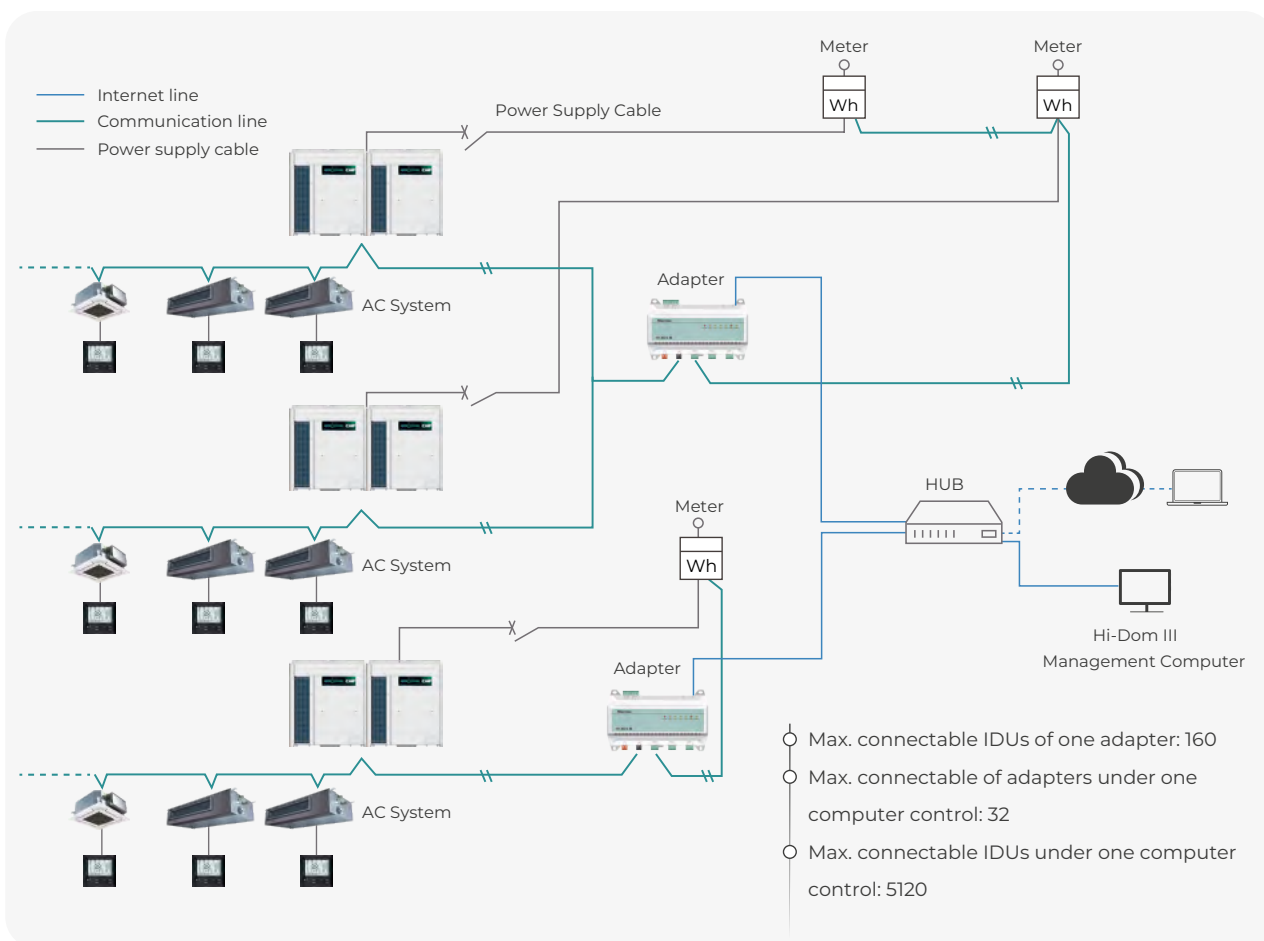
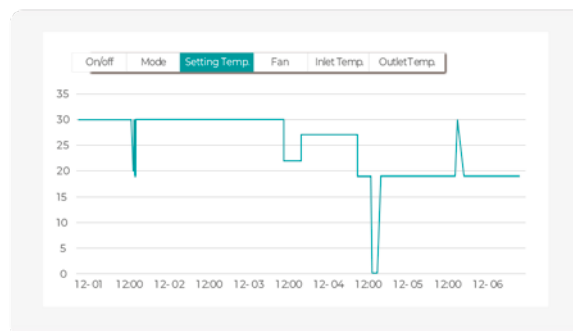
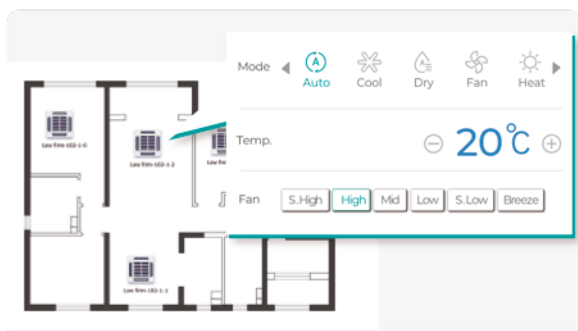
Zone	Building	Floor	Room	Appl. Name	1 P & S	Cost	2 P & S	Cost	3 P & S	Cost	4 P & S	Cost	5 P & S	Cost	Subtotal	Total
Smith build...	2F	401	Low Rise 10...	0.96	3.33	0.32	0.32	11.90	14.37	44.19	28.73	61.87	38.94	125.84	73.49	
Smith build...	2F	402	Low Rise 10...	0.96	3.33	0.32	0.32	11.90	14.37	44.19	28.73	61.87	38.94	125.84	73.49	
Smith build...	2F	403	Low Rise 10...	0.96	3.33	0.32	0.32	11.90	14.37	44.19	28.73	61.87	38.94	125.84	73.49	
Smith build...	2F	404	Low Rise 10...	0.96	3.33	0.32	0.32	11.90	14.37	44.19	28.73	61.87	38.94	125.84	73.49	
Smith build...	2F	405	Low Rise 10...	0.96	3.33	0.32	0.32	11.90	14.37	44.19	28.73	61.87	38.94	125.84	73.49	
Smith build...	2F	406	Low Rise 10...	0.96	3.33	0.32	0.32	11.90	14.37	44.19	28.73	61.87	38.94	125.84	73.49	
<b>Total Electricity (kWh): 1000.00</b>																



Thanks to the 2D navigation, users can import floor plans and place indoor units in the corresponding rooms, creating a tailored system schematic. Thus all the indoor units can be monitored and controlled intuitively.

Support operation history data record like the below picture.

Also the operation data can be exported to excel format, convenient for customers to read.



### Specifications

Model	Power Supply	Dimension (LxWxD)
DSM-H160H2C3YM	DC 12V	180x115.4x64.5mm



## INTELLIGENT SERVICE TOOL, IMPROVES YOUR SERVICE

Hi-Checker is a plug and play service tool, with which service engineers can access the system and monitor operation status or data, very convenient for system communication and maintenance. Besides, it features cloud-based management, easy to access operation status remotely.



Small and Portable Body



Remote Access



Black Box Function



Powerful Charts



OTA Update

## EASY TO UNDERSTAND

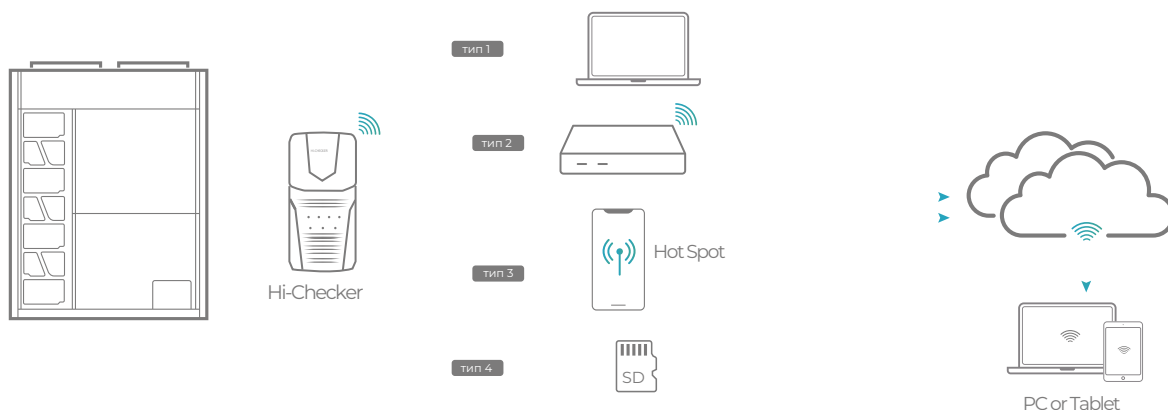
- Compact size which allows high portability and space saving.
- Capable to slot in a 32G memory card for data collection and storage. Also the memory card and card reader are standard with Hi-Checker.
- Multiple choices of power supply types. It can be powered by the standard adapter (DC 5V), computer or power bank.
- Support OTA update, ensuring the software is always up to date.



## EASY TO ACCESS

### 4 Ways to Access the Operation Data

- Conventional connection type. The simplest and reliable way by just connecting the Hi-Checker to your computer directly through USB.
- Internet connection type. Be connected to a stable Wi-Fi signal to achieve operation data and status monitoring anytime and anywhere.
- Hotspot connection type. Be connected to a temporary hotspot signal from the smartphone, allowing the Hi-Checker to remotely monitor the operation data when there is no stable Wi-Fi signal on site.
- SD card storage type. Hi-Checker equipped with SD card can be connected to the air conditioning system all the time, so that all the operation data can be stored in the card for later analysis.



## EASY TO UNDERSTAND

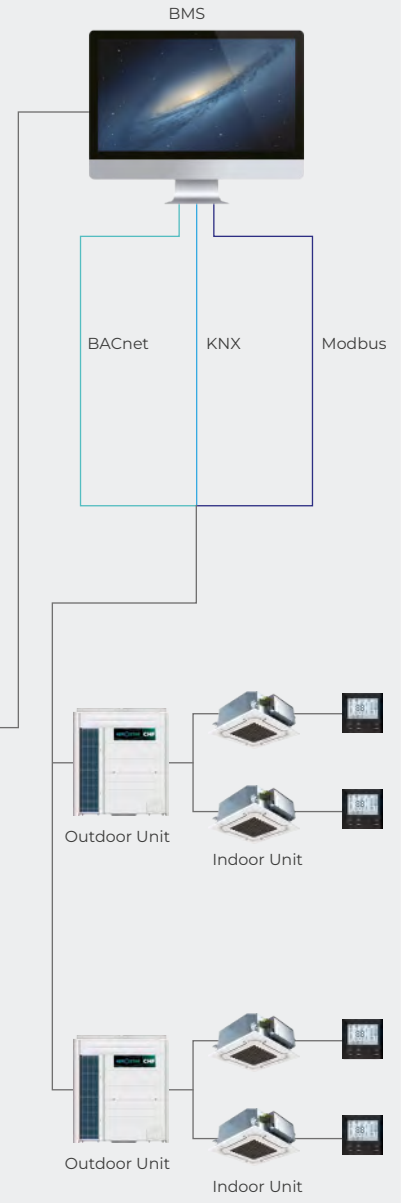
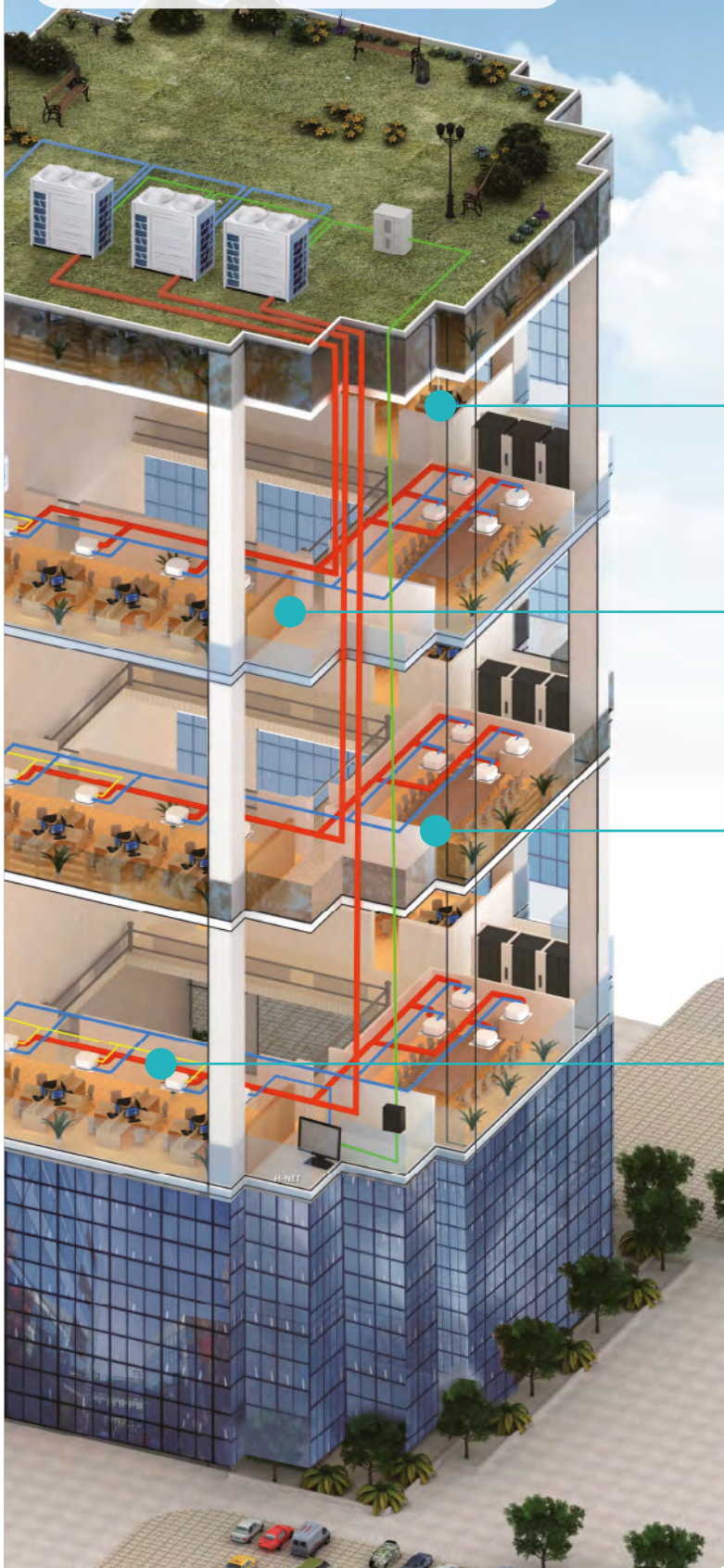
- Powerful and detailed chart analysis on the operation data, allowing users to determine the system condition easily. Together with the smart system diagram, it is interesting and easier for maintenance.
- Users can export the professional report either in .csv or .pdf format, very user-friendly.



## Specifications

Model	Size (LxWxH) mm	Net Weight (g)	Power Supply	Connectable IDUs
SD-H64H2C2M	138x68x28	130	5V=500mA	160

# BUILDING MANAGEMENT SYSTEM



## Modbus®



Modbus gateway	BMS-H2M4C
Power Supply	DC, 12V
Max. Number of Connectable Indoor Units	160
Dimension (H×W×D)	50×170×220 mm
<b>Features</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> On-Off setting</li> <li><input type="checkbox"/> Temperature setting</li> <li><input type="checkbox"/> Operating mode setting</li> <li><input type="checkbox"/> Inlet air temperature monitoring</li> <li><input type="checkbox"/> Airflow setting and monitoring</li> <li><input type="checkbox"/> All units On-Off control</li> <li><input type="checkbox"/> Alarm monitoring and code display</li> <li><input type="checkbox"/> Alarm monitoring and code display</li> <li><input type="checkbox"/> Humidity control</li> </ul>

## Mini Modbus®



MiniModbus gateway	BMS-H2M5C
Power Supply	DC, 12V
Max. Number of Connectable Indoor Units	32
Dimension (H×W×D)	27×75×100 mm
<b>Features</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> On-Off setting</li> <li><input type="checkbox"/> Temperature Setting (0.5 °C adjustment)</li> <li><input type="checkbox"/> Airflow Setting ( Auto/3 or 6 fan speed)</li> <li><input type="checkbox"/> Humidification control</li> <li><input type="checkbox"/> Operating Mode Setting</li> <li><input type="checkbox"/> Inlet Air Temp. Monitoring</li> <li><input type="checkbox"/> All Units On/Off Control</li> <li><input type="checkbox"/> Alarm Monitoring and Code Display</li> </ul>

## BACnet® & KNX®



BACnet & KNX gateway	BMS-H1KB16	BMS-H1KB64
Power Supply	DC, 12~36V / 3W or AC, 24V/0.2A/50-60Hz or DC, 24V (Recommended)	
Max. Number of Connectable Indoor Units	16	64
Dimension (H×W×D)	100x115x100 mm	100x115x100 mm
<b>Features</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Central control of all indoor units</li> <li><input type="checkbox"/> Indoor unit data monitoring</li> <li><input type="checkbox"/> Heat/Dry/Fan/Cool/Auto mode</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Control-vane position swing control</li> <li><input type="checkbox"/> Function prohibition of wired controller</li> </ul>

Note: Bacnet® is a registered trademark of American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE).

Modbus® is a registered trademark of Schneider Electric.

KNX® is a registered trademark of Konnex.

# AEROSTAR

## ACCESSORIES

### ACCESSORIES & ENGINEERING TOOLS


#### Accessories

First Name	Last Name
<input type="text"/>	<input type="text"/>
NO.	
<input type="text"/>	<input type="text"/>
Name of Item	Quantity
<input type="text"/>	<input type="text"/>


#### Engineering Tools

Part Name	
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NO.	Quantity
<input type="text"/>	<input type="text"/>
Quantity	Unit
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Quantity	Unit
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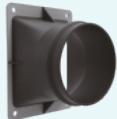
## Hi-Motion

Model	Applicable Models	Picture
HM-S01E	All types of indoor units	


## Motion Sensor

Model	Applicable Models	Picture
MS-MACN	Mini 4-Way Cassette Type	
HM-01E	4-Way Cassette Type	




## Fresh Air Duct Adapter

Model	Applicable Models	Зображення
DA-56CSA	4-Way Cassette Type and Mini 4-Way Cassette Type	

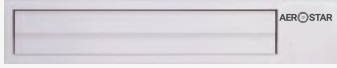
## Humidity Sensor

Model	Applicable Models	Picture
HSR-S01E	4-Way Cassette Type, Console, Ceiling Ducted Type	

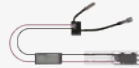

## Drain Pump

Model	Applicable Models	Power Supply	Picture		
DPK-133	AER-CS22~71DH/AER-CS22~71DLS	220-240V/50Hz			
DPK-363	AER-CS80~160DH/AER-CS80~160DLS				
DPK-151	All the High/Low Static Pressure Ceiling Ducted Units and All Fresh Air	220-240V/50/60Hz			
DPK-8103	AER-CS224~280DHD	220-240V/50/60Hz			

### 3D Air-flow Panel

Model	Applicable Models	Outer Dimensions (H×W×D)	Picture
APD-CBNA	Ceiling ducted type ( AC low-height ) AER-CS15/22/28/36DLDC	180×740×70 mm	
APD-DBNA	Ceiling ducted type ( AC low-height ) AER-CS45/50DLC	180×950×70 mm	
APD-EBNA	Ceiling ducted type ( AC low-height ) AER-CS56/63/71DLC	180×1220×70 mm	

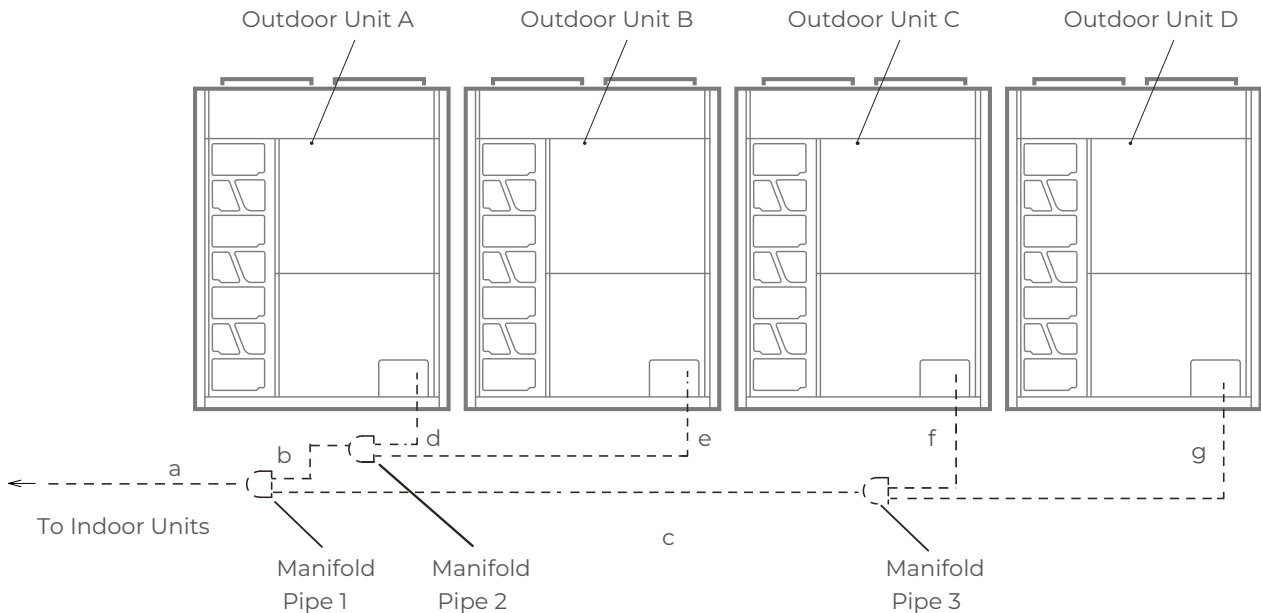
### AirPure Kit

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

## PIPING CONNECTION KIT

### MANIFOLD PIPE (FOR OUTDOOR UNIT)

(Indoor Unit on Left Side)





### For CRF Series 2 Pipes System

Outdoor Unit	AER-CS950-1525CROU	AER-CS1600CROU	AER-CS1615-1855CROU	AER-CS1920-2325CROU	AER-CS2400CROU	AER-CS2415-2840CROU	AER-CS2895-3125CROU	AER-CS3200CROU
Manifold Pipe1	M32FO	M462FO	M462FO	M682FO	M682FO	M682FO	M682FO	M682FO
Manifold Pipe2	-	-	M32FO	M32FO	M462FO	M32FO	M462FO	M462FO
Manifold Pipe3	-	-	-	-	-	M32FO	M32FO	M462FO

### For CRF Series 3 Pipes System

Outdoor Unit	AER-CS850-1010CROU	AER-CS1060-1525CROU	AER-CS1600CROU	AER-CS1615CROU	AER-CS1680-1855CROU	AER-CS1920-2325CROU	AER-CS2400CROU	AER-CS2415-2840CROU	AER-CS2895-3125CROU	AER-CS3200CROU
Manifold Pipe1	M212FO	M302FO	M462XFO	M462XFO	M462XFO	M682XFO	M682XFO	M682XFO	M682XFO	M682XFO
Manifold Pipe2	-	-	-	M212FO	M302FO	M302FO	M462XFO	M302FO	M462XFO	M462XFO
Manifold Pipe3	-	-	-	-	-	-	-	M302FO	M302FO	M462XFO

### For CHF Series System

Outdoor Unit	AER-CS950-1240CHOU	AER-CS1295-1600CHOU	AER-CS1615-1860CHOU	AER-CS1920-2040CHOU	AER-CS2085-2400CHOU	AER-CS2415-2600CHOU	AER-CS2655-3200CHOU
Manifold Pipe1	M32FO	M462FO	M462FO	M682FO	M682FO	M682FO	M682FO
Manifold Pipe2	-	-	M32FO	M32FO	M462FO	M462FO	M462FO
Manifold Pipe3	-	-	-	-	-	M32FO	M462FO

## Branch Pipe (For indoor unit)

### First Branch Pipe

#### For CRF Series 2 Pipes System

Outdoor Unit HP	8 to 10	12 to 16	18 to 24	26 to 54	56 to 66	68 to 112
Branch Pipe	B102FI	B162FI	B242FI	B302FI	B462XFI	B682FI

#### For CRF Series 3 Pipes System

Outdoor Unit HP	8 to 10	12 to 16	18 to 24	26 to 36	38 to 54	56 to 66	68 to 112
Branch Pipe	BM282FI	BM452FI	BM562FI	BM692FI	BM902FI	B462FI	B682XFI

#### For CHF Series

Outdoor Unit HP	8 to 10	12 to 16	18 to 24	26 to 44	46 to 66	68 to 112
Branch Pipe	B102FI	B162FI	B242FI	B302FI	B462FI	B682FI

## First Branch Pipe~Last Branch Pipe

For CRF Series 2 Pipes 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	36 to 55.99	56 to 57.99	58 to 67.99	Over 68
Gas (mm)	15.88	19.05	22.2	25.4	28.6	28.6	31.75	38.1	41.3	44.5	50.8
Liquid (mm)	9.53	9.53	9.53	12.7	12.7	15.88	19.05	19.05	22.2	22.2	25.4
Branch Pipe	B102FI	B102FI	B102FI	B162FI	B162FI	B242FI	B302FI	B302FI	B462FI	B462FI	B682FI

For CRF Series

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	36 to 55.99	56 to 57.99	58 to 67.99	Over 68
Low Pressure Gas (mm)	15.88	19.05	22.2	25.4	28.6	28.6	28.6	31.75	38.1	41.3	44.5	50.8
High/Low Pressure Gas (mm)	12.7	15.88	19.05	22.2	22.2	22.2	25.4	28.6	31.75	38.1	41.3	44.5
Liquid (mm)	9.53	9.53	9.53	12.7	12.7	15.88	15.88	19.05	19.05	22.2	22.2	25.4
Branch Pipe	BM142FI	BM282FI	BM282FI	BM452FI	BM562FI	BM562FI	BM692FI	BM692FI	BM902FI	B462FI	B462FI	B462FI

For CHF Series

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 33.99	34 to 45.99	46 to 58.99	59 to 68.99	Over 69
Gas (mm)	15.88	19.05	22.2	25.4	28.6	28.6	31.75	38.1	41.3	44.5	50.8
Liquid (mm)	9.53	9.53	9.53	12.7	12.7	15.88	19.05	19.05	22.2	22.2	25.4
Branch Pipe	B102FI	B102FI	B102FI	B162FI	B162FI	B242FI	B302FI	B302FI	B462FI	B462FI	B682FI

## Last Branch Pipe~Indoor Unit

Indoor Unit	Pipe Size (Ømm)		Max. Liquid Pipe Length
	Gas Pipe	Liquid Pipe	
2.2 кВт~4 kW	12.70	6.35 <sup>*1</sup>	40
5 кВт~5.6 kW	15.88	6.35 <sup>*1</sup>	40
6.3 кВт~16 kW	15.88	9.53	40
22.4 kW	19.05	9.53	40
28 kW	22.20	9.53	40

Note: 1. When liquid pipe length of indoor unit (2.2~5.6 kW) is more than 15m, please change the liquid pipe dimension from Ø6.35 into Ø9.53.

## Manifold Pipe Parameter

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

Модель	Газовий трубопровід	Рідинний трубопровід	Редуктор для газового трубопроводу	Редуктор для рідинного трубопроводу
M22FO M22FOS				—
M32FO M32FOS			<p>Q'ty: 1</p>	—
			<p>Q'ty: 1</p>	—

# Manifold Pipe Parameter

Model	Gas Line	Liquid Line	Reducer for Gas Line	Reducer for Liquid Line
M462FO M462FOS				
M682FO M682FOS				

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
M202FO						
M212FO						
M302FO						
M462XFO						
M682XFO						

## Branch Pipe Parameter

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
BM142FI				—	—	 Qty: 2
BM282FI				—	—	 Qty: 2
BM452FI				 Qty: 1	 Qty: 2	 Qty: 1
BM562FI				 Qty: 1	 Qty: 2	 Qty: 1
BM692FI				 Qty: 1	 Qty: 1	 Qty: 1
BM902FI				 Qty: 1	 Qty: 1	 Qty: 1
B462XF1				 Qty: 1	 Qty: 1	 Qty: 1
B682XF1				 Qty: 1	 Qty: 1	 Qty: 2
				 Qty: 2	 Qty: 2	 Qty: 1
				 Qty: 2	 Qty: 2	 Qty: 1
				 Qty: 1	 Qty: 1	 Qty: 2

## Branch Pipe Parameter

Model	Gas Line	Liquid Line	Reducer for Gas Line	Reducer for Liquid Line
B52FI			_____	_____
B102FI			_____	
B162FI				
B242FI				
B302FI				
B462FI				
B682FI				

# AEROSTAR GROUP

RECOGNIZED LEADER IN THE VENTILATION EQUIPMENT MARKET



18 249 m<sup>2</sup> of production space  
+7000 clients from all over the world

490 employees

Domestic market share: 26%  
Imported manufacturers: 50%  
Other domestic producers: 24%

Productive capacity:

3840 air treatment units

4350 tons of metal

## AS A COMPANY WE OFFER:

### RELIABLE PRODUCTS.

Aerostar is the first Ukrainian manufacturer to receive an international certificate Eurovent.

We improve our performance every year and confirm the status of a "reliable manufacturer".



CERTIFICATE N° 19.04.077



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*"Products are of the same quality as German and Italian"*  
Vasyl Khmelnytsky,  
"K.Fund"



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70% of the range are systems developed by our Research & Design Center for the implementation of complex engineering projects.

**WE PROVIDE TECHNICAL SERVICE**

After installing the systems, our specialists teach the operation department how to operate the equipment. The service department provides feedback to the client. Service centers in all regions allow you to quickly respond to requests.



**WE CREATE SMART SYSTEMS**

The equipment is designed to achieve maximum efficiency from work and reduce energy consumption.

**AUTOMATION AND DISPATCHING**

For the convenience of managing engineering systems, we suggest using a dispatch system that can combine ventilation, air conditioning, heating, water supply, gas supply, lighting, and elevator control systems and other equipment. The dispatch system provides key advantages of facility management:

- constant centralized control of the operation of engineering systems;
- reducing the influence of the human factor;
- control without the constant presence of an operator and duty personnel



**LEAN CONCEPT**

We use the lean manufacturing principle in organizing processes. All systems are aimed at obtaining the greatest results with small resources. This allows us to continually improve quality without increasing costs.



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The presence of a large amount of ready-made equipment in the warehouse makes it possible to quickly provide the production facility

**Using quality components from**

Germany, Switzerland, Slovakia, Italy, Finland, France, Slovenia.

**24/7 SUPPORT SERVICE.**

On-line in a convenient way for you (by calling, contact via application, or by writing by email).

**Equipping installations with energy-saving technologies,**

which allows you to save up to 90% energy and reduce operating costs.







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Allows you to control it from anywhere in the world at any time:

- monitor equipment operation parameters
- adjust settings
- receive notifications about emergencies
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Individual settings

Personal schedule

Instant notifications of emergencies

All equipment on one screen

Reports

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**FOR ANDROID DEVICES**



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