



VRF

WNV5

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2021-2020 |



WNV5

DC Inverter Multi VRF System with its high-efficient inverter compressors has four exciting features which are different from those found on traditional inverter air conditioners: excellent energy-saving effect, more reliable and precise operation, smarter network control, providing users with the best air conditioning experience.



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WNV5



Key Features

All DC Inverter Technology to Improve Compression Efficiency

All DC inverter compressor and high-performance high pressure chamber are adopted to reduce loss of overheat and improve compression efficiency from direct intake. Compared with low pressure chamber, the compression efficiency is improved. High-efficient permasyon motor is adopted to provide better performance than traditional DC inverter compressor.

All DC Inverter Compressor

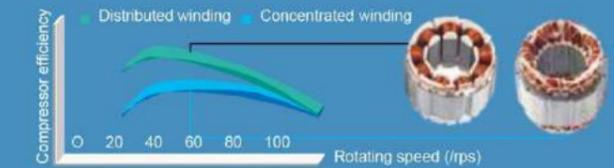
> All DC inverter compressor is used in this system. It can directly intake gas to reduce loss of overheat and improve efficiency.

> High-efficient permasyon motor is adopted to provide better performance than traditional DC inverter compressor.



HP chamber structure can raise the high and middle frequency performance

New DC motor (concentrated winding) raises the low frequency performance

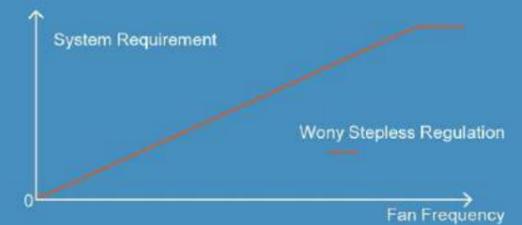
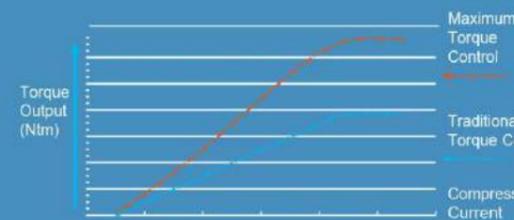


> Technology of Maximum Torque Control with Minimum Current

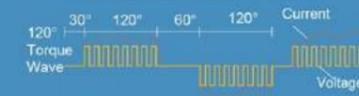
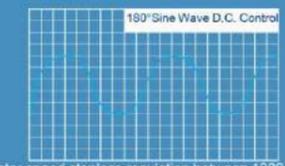
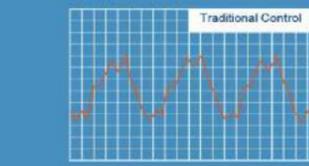
It can reduce energy loss caused by device winding so as to realize higher efficiency.

> Low-frequency Torque Control

It can directly control motor torque, through which fan motor can run at a low speed. Users will feel more comfortable while requirements of the system are also met.



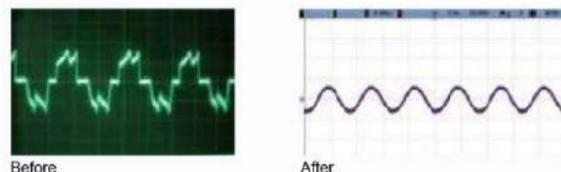
> 180° Sine Wave DC Speed Varying Technology It can satisfy various places' demands for different temperature and is able to save a great deal of electricity and provide users with utmost comfort at the same time.



Sensorless DC Inverter Fan Motor

> Stepless speed regulation ranges from 5Hz to 65Hz. Compared with traditional inverter motors, the operation is more energy-saving.

> Sensorless control technology guarantees lower noise, less vibration and steadier operation.



88HP Max. Capacity-the Largest Free Combination

Max. capacity of single outdoor unit reaches 22HP and max. combination capacity is even up to 88HP, reaching industry leading level.

Max. Combination Capacity is Extended to 88HP



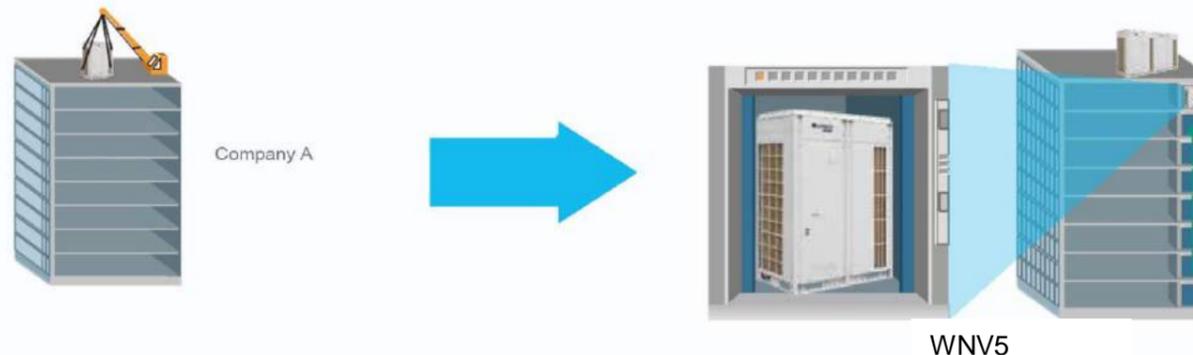
> Note: There are some differences for the appearance of some models, please refer to the actual unit.

Money Saved in System Cost and Piping



Compact Design

With compact design, the outdoor unit can be carried to the roof of building through elevator, with no need of crane. It is easier for delivery and installation.



Non-polar CAN Technology to Improve Communication Efficiency

Wony is the first one to adopt non-polar CAN communication technology in the industry. CAN communication technology provides quicker system response speed, more convenient installation debugging and more reliable communication data.

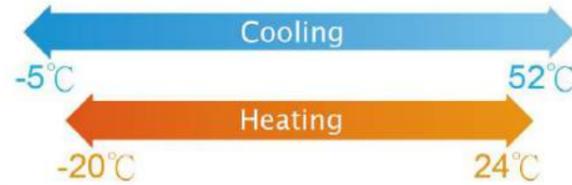
Performance Index	Company A Multi-VRF Network	WN5 DC Inverter CAN Network
Reliability	Software check	Hardware check, more reliable
	One unit's communication error may lead to breakdown of the whole network	If one unit has errors, it will exit from the network without any influence to other units.
Communication efficiency	Low utilization	High utilization
	Communication speed is about 10Kbps.	Communication speed is 20Kbps.
Compatibility	One main network, difficult to add new equipment	Multiple main networks, easy to add new equipment.
Communication distance	1000m	1500m

The non-polar CAN communication technology is applied to support flexible wiring installation, greatly reducing construction difficulties



Wide Range of Operation Condition

Outdoor operation temperature range is expanded to -5°C~52°C in cooling and -20°C~24°C in heating.



Note: The cooling operating temperature range of WN5(cooling only) series is -5°C~50°C.

Wider Applicable Location

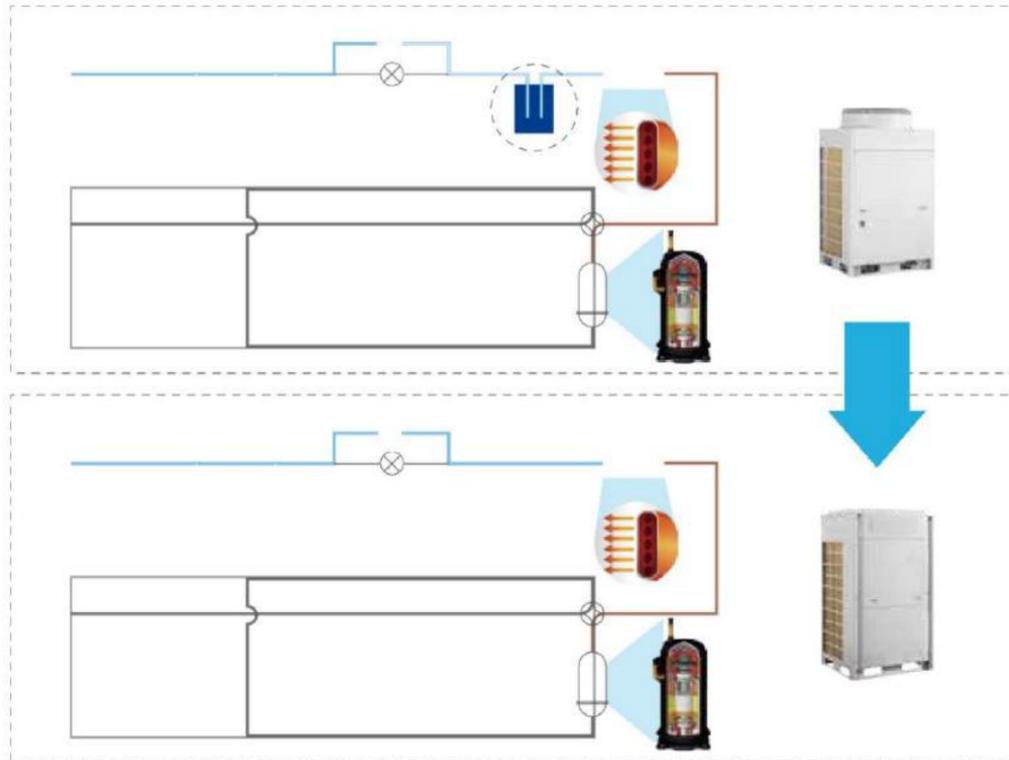
WN5 can realize a combination of 4 outdoor unit modules connecting with as many as 80 indoor units. It's especially applicable for business buildings or hotels.



Max.IDU Connection: 80 sets

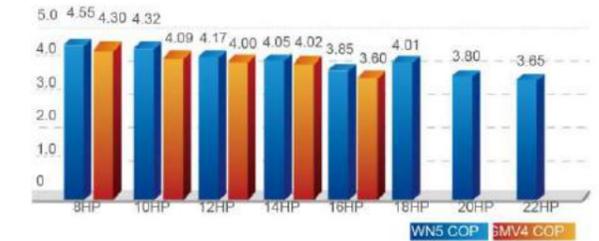
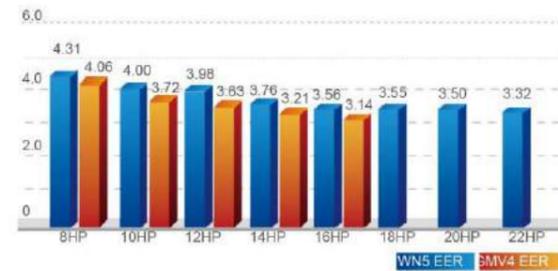
Refrigerant Storage and Distribution

WN5 system is designed without liquid receiver and the excess refrigerant is stored in the piping, which can minimize the refrigerant charging volume and enhance the control accuracy of refrigerant.



High Efficiency And More Energy Saving

Thanks to the advanced all DC inverter technology, optimized system design and accurate intelligent control technology, taking model GMV-**WM/B-X for example, EER of WN5 is up to 4.31 while COP is up to 4.55.



New Generation of Energy-saving Operation Control Technology with Energy Saving Up to 20%

WN5 system has 2 modes for energy saving, which can be chosen to meet different electricity demands.

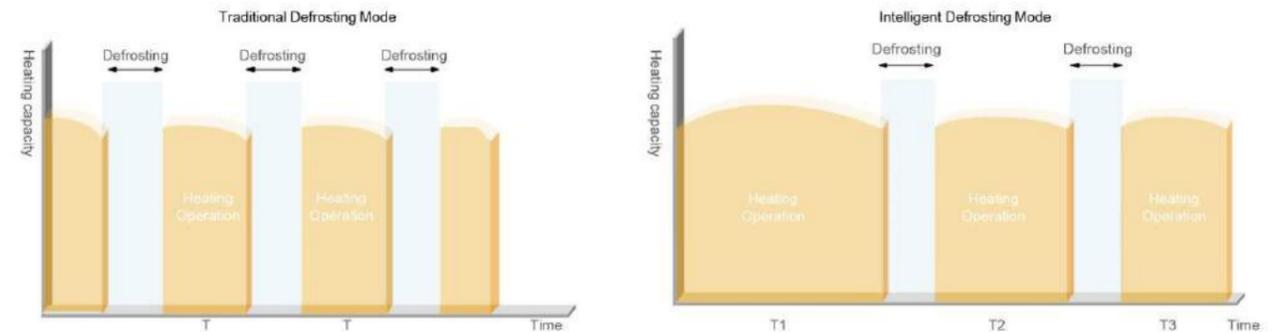
Mode 1:
In auto energy-saving mode, the system will automatically adjust parameters according to the operation status, thus to lower the cost of electricity. Up to 15% of energy can be saved.

Mode 2:
In compulsory energy-saving mode, the system will limit power output forcibly. Up to 20% of energy can be saved.



Intelligent Defrosting Control

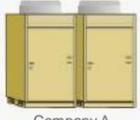
During the heating process, the frost status of the unit will be different after affecting by factors of outdoor ambient temperature, load status and operation time. Through real-time detection of operation parameters of the system, it can decide the defrosting time by intelligently estimating the thickness of frost, high pressure of system and blockage status of heat exchanger.



Note: This feature is applicable for heat pump models only.

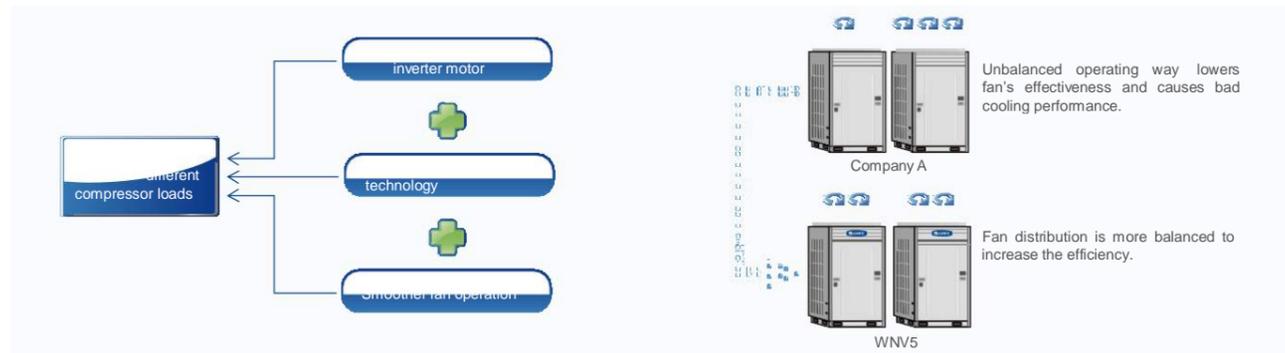
Accurate Intelligent Allocation Technology of Capacity and Output of OptimalPortion to Ensure Highest Efficiency

- > When total load demands more than 75% of a running system's capacity, one more unit will automatically start;
- > When total load demands less than 40% of a running system's capacity, one unit will automatically shut down;
- > Therefore, each unit shares 40%-75% of the total load.
- > Experiments show that an air conditioner costs the least energy when it's operating within 40%-75% of its capacity.

	 Company A	 Wony WNV
Allocation Method	10HP(full load) + 2HP(low load)	6HP(partial load) + 6HP(partial load)
Performance Compared	Unit costs more energy and may be damaged soon.	Unit costs less energy and can always be kept in good condition.

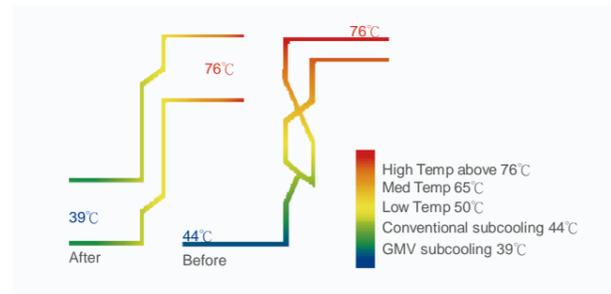
Output of Optimal Portion to Ensure Highest Efficiency

- > The best heating or cooling performance can be realized in the most energy-saving way. DC inverter compressor and DC inverter fan will also be operating in this way to ensure high efficiency.

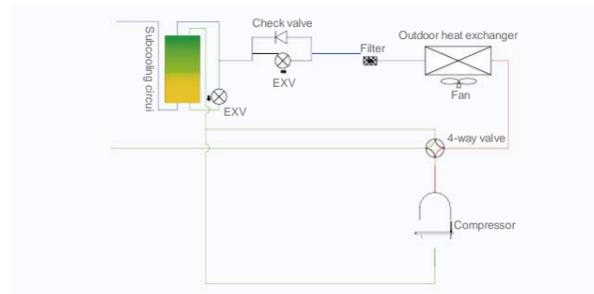


Sub-cooling Control Technology to Ensure Optimal Cooling and Heating

- > Heat exchange loop can control the first subcooling process of heat exchanger. Subcooling dewony can reach 11°C.



- > Subcooling loop can realize 9 °C second subcooling to guarantee cooling and heating performance.



Temperature Controlled by Wired Controller with Higher Efficiency and More Energy Saving

Through setting temperature lower limit in cooling or dry mode, and setting temperature upper limit in heating, 3D heating or heat supply mode, the system is able to operate in a smaller temperature range so as to achieve energy saving.

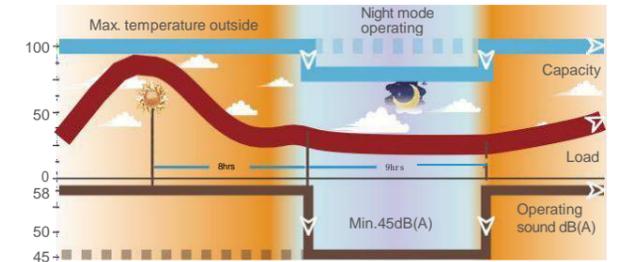
Comfortable Design for A Better Life

WNV5 system has a wide range of working conditions. Whether it's in a cool winter or a hot summer, normal operation is guaranteed with the lowest noise, making users feel more comfortable.

Outdoor Unit Quiet Mode and Quiet Control

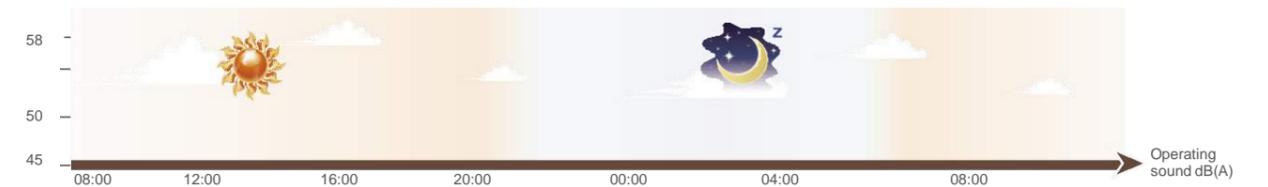
Quiet at Night

- > The system can record the highest outdoor temperature. At night, the system will automatically turn to quiet mode. There are 9 quiet modes which can be set according to actual needs.



Quiet in Compulsion

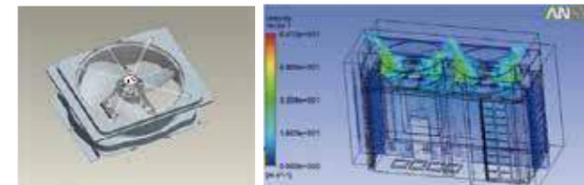
- > The system can also be set in this mode to ensure low noise as long as it is operating. Noise is as low as 45dB(A).



Quiet Control

1) Optimized Bossing Design

- > After many times of CFD tests, a new fan bossing structure has been developed to reduce vibration of fan during running. Noise can be reduced by 3dB(A).



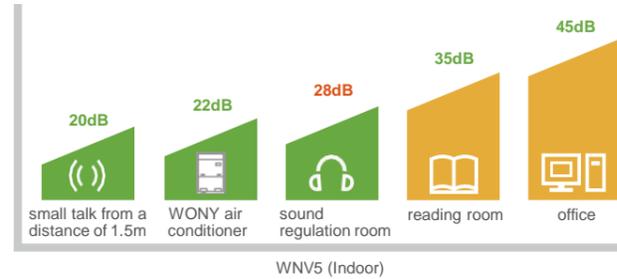
2) Aerodynamics 3D Axial Fan

- > Compared with conventional fan, it can increase air volume by 12%, improving efficiency as well as reducing noise.



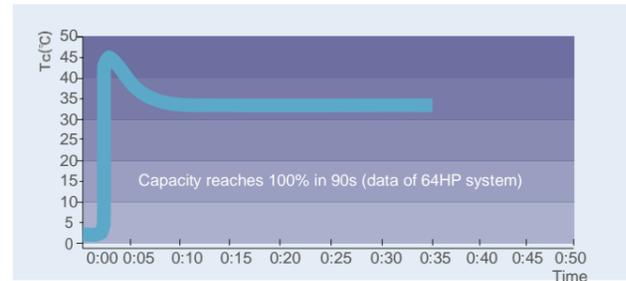
Quiet Indoor Unit

The indoor unit of WNV5 system also adopts DC inverter motors to realize stepless regulation. According to indoor temperature or people's needs, users can set this mode through wired controller. Noise is as low as 22dB(A).



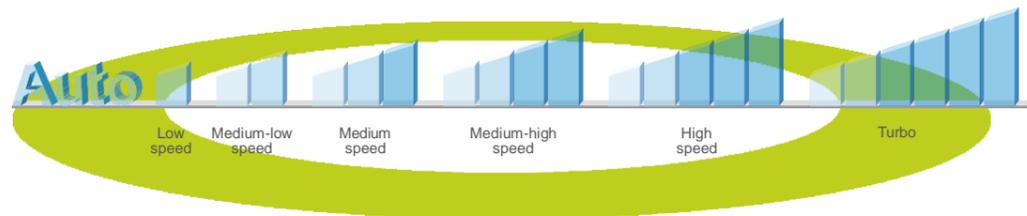
Fast Start-up in Heating

DC Compressor is first started to avoid too much electric current. Inverter compressor can operate in high frequency once starts up, so as to produce more heat.



7 Speeds Indoor Fan

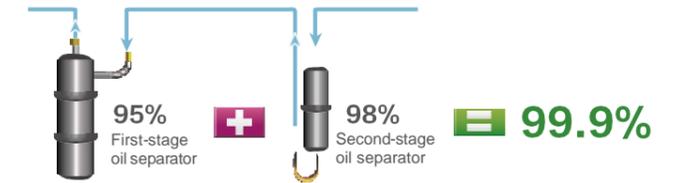
Indoor fan speed can be set in 7 levels by wired controller. They are auto, low speed, medium-low speed, medium speed, medium-high speed, high speed and turbo.



Excellent Performance Ensured by Advanced Technology

Two-stage Oil Separation Control Technology

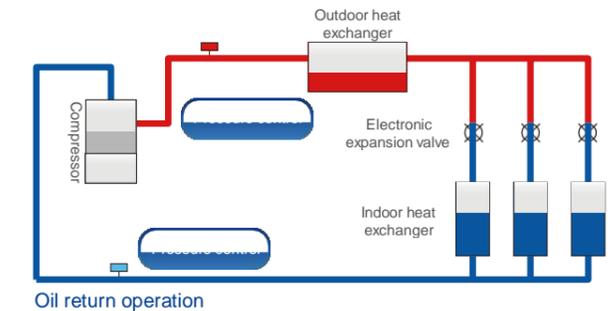
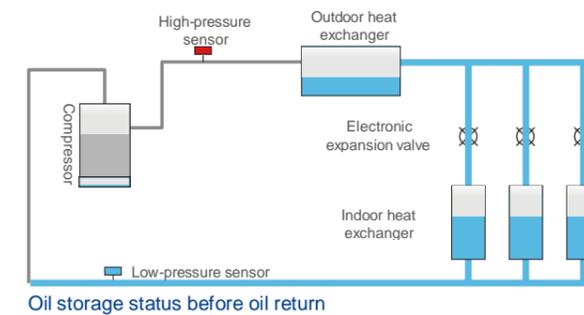
First-stage oil separator adopts a filtration expansion valve with separation efficiency of 98%; Second-stage oil separator will separate the remained 2% refrigerant oil with separation efficiency of 95%. General oil separation efficiency reaches 99.9%.



Oil Return Control Technology

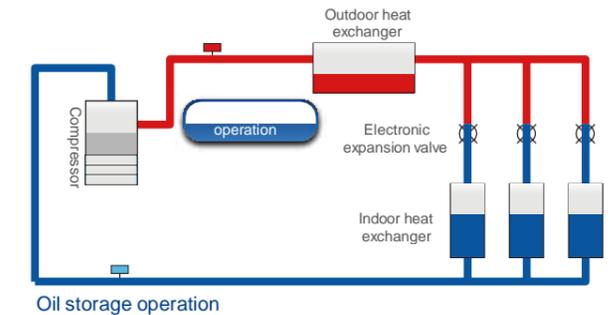
New Oil Return Control

> Wony new oil return control technology effectively controls system oil return and oil storage status of each compressor, which greatly improves the operation lifespan of compressor.



Specialized Compressor Oil Storage Control

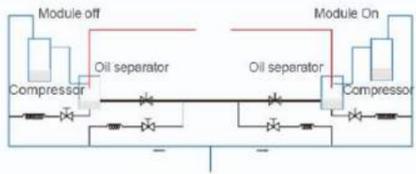
> The system applies specialized compressor oil storage technology, which can control the lowest oil level for compressor operation.



Oil Return Control Technology

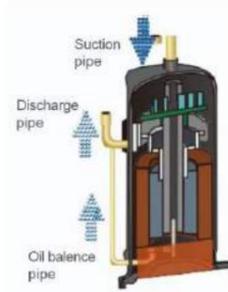
Oil Balance between Each Module

> Based on the actual status of each module and compressor, the system can regulate compressor's operation and realize oil balance of each module.



Oil Balance between Each Compressor

> Refrigerant is taken into the compressor by the suction pipe and then runs through the cooling system. It can control the oil level and minimum oil volume required by each compressor so as to realize oil balance between each compressor.



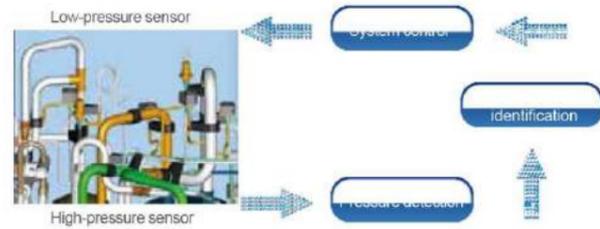
Intelligent Detection Control

Pressure Sensor Detection Control

> Pressure sensor can precisely detect system high pressure and low pressure, and adjust output of fan and compressor, so as to make sure the system can work under the most energy-saving pressure condition.

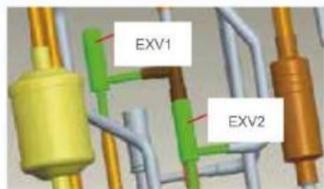
Temperature Sensor Detection Control

> Various temperature sensors are equipped to detect ambient temperature, indoor temperature and refrigerant's evaporating temperature, from which the operation status can be measured.



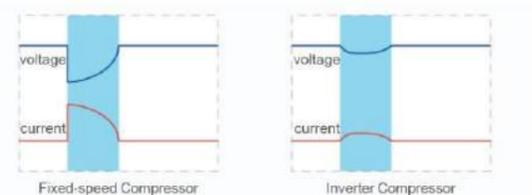
Multi Electronic Expansion Valves Control

Outdoor electronic expansion valve not only has throttling effect, but also control refrigerant flow. The system adopts multi electronic expansion valves control with total 960 grades regulated by two electronic expansion valves, so as to regulate refrigerant flow precisely and ensures reliable operation of system.



Smaller Impact to Power Grid

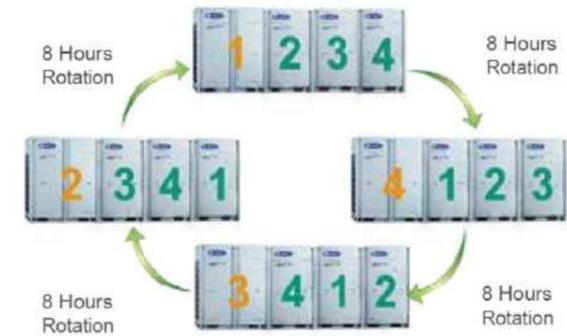
The start-up frequency of inverter compressor is gradually increased from 0Hz to the appointed operation frequency. The start-up current of compressor rotor is decreased by reducing load torque, hence impact to power grid during start-up is reduced and electromagnetic impact to compressor is reduced too.



Modules Rotation Operating to Maximize Lifespan

Modules 8h Rotation Operating

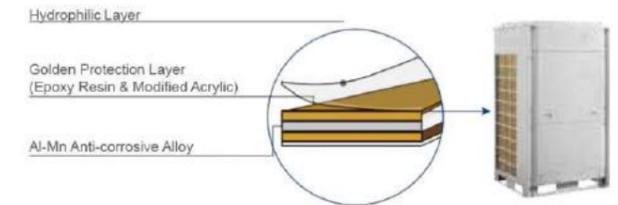
> The operating priority sequence of the outdoor unit modules will be changed without restart when the system accumulatively operates for 8 hours, which can maximize the service life of the system.



Highly Anticorrosive Golden Fins

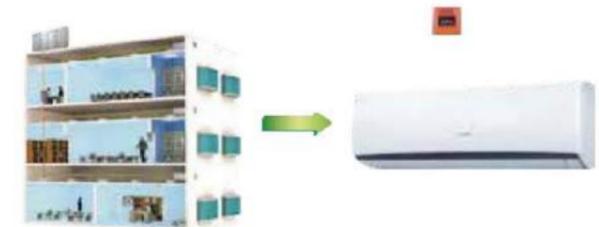
The primary material of golden fin is Al-Mn (Aluminum-Manganese) anti-rust alloy, which is coated with the golden protection layer (components: epoxy resin & modified acrylic, silicon free), the anti-corrosive performance in salt-spray testing is 200%~300% higher than normal Blue Fin*.

Note: Salt-spray testing result is from WONY materials chemistry testing laboratory.



Emergency Auto-Off Control

The outdoor unit can be linked with a fire alarm signal. In case of emergency, unit can automatically turn off to avoid risk or further loss.



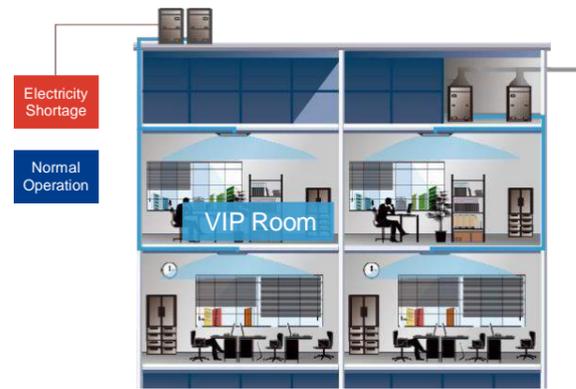
Lower Power Consumption Operation Mode

As for the area with power consumption limited time period, the maximum power consumption can be set for the operation. Basing on the power consumption of unit and user's requirement, power consumption limitation can be set according to 100%, 90% or 80% of the capacity of complete unit. In this case, user can have more selection at the power consumption limited time period.



Electricity Shortage Identification

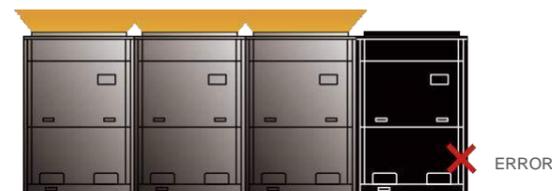
The outdoor unit can receive a power signal of electricity shortage. In some places like first-class hotels, if diesel generator is used temporarily for providing electricity, outdoor unit will send the electricity shortage signal to indoor unit. In this case, only VIP rooms can be provided with air conditioning service.



Excellent Emergency Operation Function to Ensure Reliable Operation

Emergency Function

> WNV 5 system can realize a combination of 4 outdoor unit modules. When error is occurred to one of the modules, the others will perform the emergency operation to sustain the air conditioning.



Emergency Operation of Compressor

> All the compressors in each single module are DC Inverter based. when one compressor has error, others will perform the emergency operation.



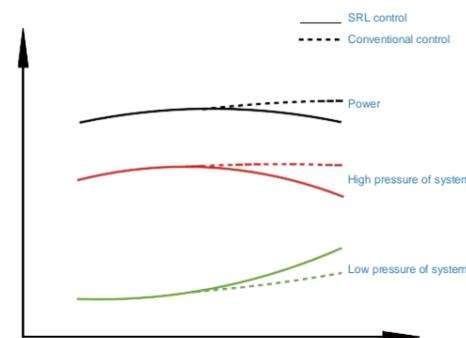
Emergency Operation of Fan

> Double-fan design fan ensures that one fan can still work even if the other one has error.



SRL (Self-reaction Load) Self-adaptive Control

SRL (Self-reaction Load) can intelligently detect and control system parameters and automatically adapt to indoor cold/heat load requirement to reducing unit's power and improve the energy efficiency.



ODU High Static Pressure Design

System has 4 levels of static pressure that can be set. Up to 82Pa pressure can be set for an outdoor unit. This design is especially useful when an outdoor unit needs to be placed indoors.

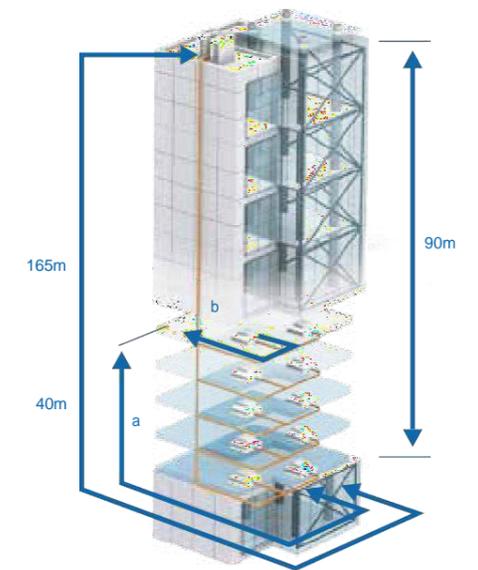


1000m Pipe Design for Flexible Installation

WNV5 system can be applied in different types of building construction. One of its advantages is the simple pipe design, which will simplify the installation and reduce installation cost.

- > Max total pipe length reaches 1000m (with limitation)
- > Actual pipe length between the outdoor unit and the farthest indoor unit: 165m
- > Max height difference between indoor unit and outdoor unit: 90m

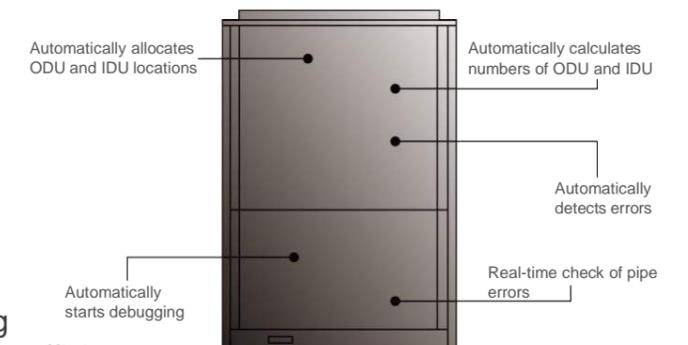
Note:
a: Distance between the first branch and the farthest indoor unit.
b: Distance between the first branch and the nearest indoor unit.
a-b≤40m



Engineering Debugging for Convenient Construction

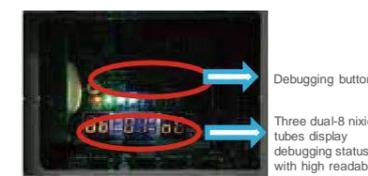
1) WNV5 has five auto debugging features:

- > Automatic allocation of IDU and ODU addresses
- > Automatic detection of IDU and ODU quantity
- > Automatic detection of errors
- > Automatic start-up of debugging
- > Real-time judgment of pipe errors



2) Diversified debugging methods for satisfying different requirements and improving debugging efficiency

- ① Button debugging of outdoor unit
- ② Special WNV debugging system
- ③ CE41-24/F(C) debugger has functions of debugging of complete unit, independent debugging of indoor unit, malfunction display, data record and so on. It's no need to connect special software and PC. Moreover, it can connect external USB storage data.



①



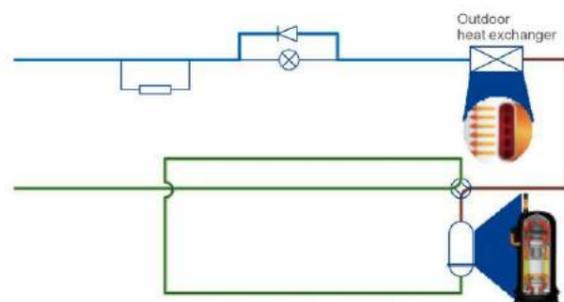
②



③

Auto-refrigerant Recovery for Easy Maintenance

When auto refrigerant recovery function is set and cut-off valve of liquid pipe is closed during maintenance, the system will automatically operate compressor, EXV, solenoid valve and fan, etc. Taking advantage of compressor power, the refrigerant is recovered at the condensing side of outdoor unit to achieve environmental effect. Meanwhile, system low pressure is displayed simultaneously during refrigerant recovery.



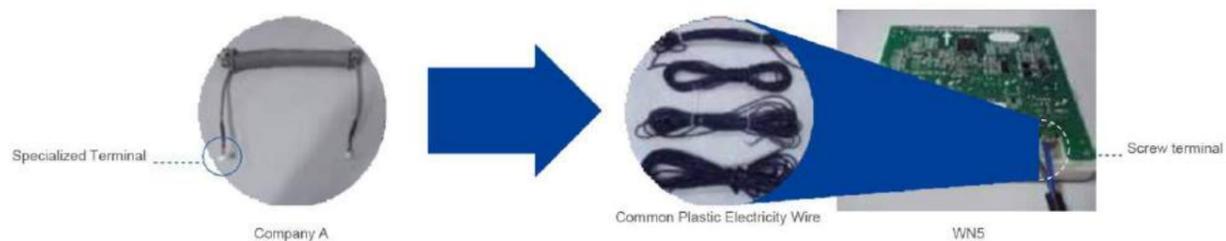
Inspection Window for Convenient Checking

Inspection window is available for quick checking of system operation status. No need to open panel for checking, which will be more time-saving and easier for maintenance.



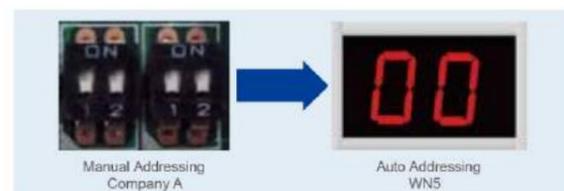
Flexible Wiring

System has 4 levels of static pressure that can be set. Up to 82Pa pressure can be set for an outdoor unit. This design is especially useful when an outdoor unit needs to be placed indoor.



Auto Addressing of Outdoor and Indoor Unit

CAN network is adopted to achieve auto addressing of outdoor and indoor unit. It can allocate IDU and ODU addresses and detect IDU and ODU quantity, which greatly improves construction efficiency.



Professional Hotel Functions

Wony WN5 provides hotels with unique season setting function and key-card control function.

Season Setting

Cooling or heating mode can be deactivated during a certain season to avoid affecting unit's normal operation due to mode conflict.

Note: This feature is fit for heat pump models only.



Key-card Control for Hotel Management

The unit can be turned on or off by inserting or removing the key-card. When the key-card is removed, the system can remember all the setting and stop operation. When the key-card is inserted back, the system will be under standby mode or operate according to the status before removing key-card. It is well suited to hotels, restaurants, etc.



SPECIFICATIONS & PARAMETERS OF OUTDOOR UNITS

WNV5 Outdoor Units Lineup (208/230V, 60Hz)

Standard Type

HP	Model	WNV-224XN/C-G	WNV-280XN/C-G	WNV-335XN/C-G	WNV-400XN/C-G	WNV-450XN/C-G	WNV-504XN/C-G	WNV-560XN/C-G	WNV-615XN/C-G
8HP	WNV-224XN/C-G	●							
10HP	WNV-280XN/C-G		●						
12HP	WNV-335XN/C-G			●					
14HP	WNV-400XN/C-G				●				
16HP	WNV-450XN/C-G					●			
18HP	WNV-504XN/C-G						●		
20HP	WNV-560XN/C-G							●	
22HP	WNV-615XN/C-G								●
24HP	WNV-680XN/C-G		●		●				
26HP	WNV-730XN/C-G		●			●			
28HP	WNV-785XN/C-G		●				●		
30HP	WNV-850XN/C-G		●					●	
32HP	WNV-900XN/C-G		●						●
34HP	WNV-960XN/C-G			●					●
36HP	WNV-1010XN/C-G				●				●
38HP	WNV-1065XN/C-G					●			●
40HP	WNV-1130XN/C-G						●		●
42HP	WNV-1180XN/C-G							●	●
44HP	WNV-1235XN/C-G							●	●
46HP	WNV-1300XN/C-G		●					●	●
48HP	WNV-1350XN/C-G		●			●		●	●
50HP	WNV-1410XN/C-G			●			●		●
52HP	WNV-1460XN/C-G		●					●	●
54HP	WNV-1515XN/C-G		●						●
56HP	WNV-1580XN/C-G			●					●
58HP	WNV-1630XN/C-G				●				●
60HP	WNV-1685XN/C-G					●			●
62HP	WNV-1750XN/C-G						●		●
64HP	WNV-1800XN/C-G							●	●
66HP	WNV-1854XN/C-G								●
68HP	WNV-1908XN/C-G		●			●		●	●
70HP	WNV-1962XN/C-G		●				●	●	●
72HP	WNV-2016XN/C-G		●				●	●	●
74HP	WNV-2072XN/C-G		●					●	●
76HP	WNV-2128XN/C-G		●						●
78HP	WNV-2184XN/C-G			●					●
80HP	WNV-2240XN/C-G				●				●
82HP	WNV-2295XN/C-G					●			●
84HP	WNV-2350XN/C-G						●		●
86HP	WNV-2405XN/C-G							●	●
88HP	WNV-2460XN/C-G								●

WNV5 Outdoor Units Lineup (380-415V, 50/60Hz)

Standard Type

HP	Model	WNV-224XN/C-Y	WNV-280XN/C-Y	WNV-335XN/C-Y	WNV-400XN/C-Y	WNV-450XN/C-Y	WNV-504XN/C-Y	WNV-560XN/C-Y	WNV-615XN/C-Y
8HP	WNV-224XN/C-Y	●							
10HP	WNV-280XN/C-Y		●						
12HP	WNV-335XN/C-Y			●					
14HP	WNV-400XN/C-Y				●				
16HP	WNV-450XN/C-Y					●			
18HP	WNV-504XN/C-Y						●		
20HP	WNV-560XN/C-Y							●	
22HP	WNV-615XN/C-Y								●
24HP	WNV-680XN/C-Y		●		●				
26HP	WNV-730XN/C-Y		●			●			
28HP	WNV-785XN/C-Y		●				●		
30HP	WNV-850XN/C-Y		●					●	
32HP	WNV-900XN/C-Y		●						●
34HP	WNV-960XN/C-Y			●					●
36HP	WNV-1010XN/C-Y				●				●
38HP	WNV-1065XN/C-Y					●			●
40HP	WNV-1130XN/C-Y						●		●
42HP	WNV-1180XN/C-Y							●	●
44HP	WNV-1235XN/C-Y							●	●
46HP	WNV-1300XN/C-Y		●			●		●	●
48HP	WNV-1350XN/C-Y		●			●		●	●
50HP	WNV-1410XN/C-Y			●			●		●
52HP	WNV-1460XN/C-Y		●					●	●
54HP	WNV-1515XN/C-Y		●						●
56HP	WNV-1580XN/C-Y			●					●
58HP	WNV-1630XN/C-Y				●				●
60HP	WNV-1685XN/C-Y					●			●
62HP	WNV-1750XN/C-Y						●		●
64HP	WNV-1800XN/C-Y							●	●
66HP	WNV-1845XN/C-Y								●
68HP	WNV-1908XN/C-Y		●			●		●	●
70HP	WNV-1962XN/C-Y		●				●	●	●
72HP	WNV-2016XN/C-Y		●					●	●
74HP	WNV-2072XN/C-Y		●					●	●
76HP	WNV-2128XN/C-Y		●						●
78HP	WNV-2184XN/C-Y			●					●
80HP	WNV-2240XN/C-Y				●				●
82HP	WNV-2295XN/C-Y					●			●
84HP	WNV-2350XN/C-Y						●		●
86HP	WNV-2405XN/C-Y							●	●
88HP	WNV-2460XN/C-Y								●

Note: The combination mode of the model series WNVL-***XN/E-V is the same as the above.

WNV5 Outdoor Units Lineup (440-460V, 60Hz)

Standard Type

HP	Model	WNV-224XN/C-V	WNV-280XN/C-V	WNV-335XN/C-V	WNV-400XN/C-V	WNV-450XN/C-V
8HP	WNV-224XN/C-V	●				
10HP	WNV-280XN/C-V		●			
12HP	WNV-335XN/C-V			●		
14HP	WNV-400XN/C-V				●	
16HP	WNV-450XN/C-V					●
18HP	WNV-504XN/C-V	●	●			
20HP	WNV-560XN/C-V		●●			
22HP	WNV-615XN/C-V		●	●		
24HP	WNV-680XN/C-V		●		●	
26HP	WNV-730XN/C-V		●			●
28HP	WNV-785XN/C-V			●		●
30HP	WNV-850XN/C-V				●	●
32HP	WNV-900XN/C-V					●●
34HP	WNV-960XN/C-V		●●		●	
36HP	WNV-1010XN/C-V		●●			●
38HP	WNV-1065XN/C-V		●	●		●
40HP	WNV-1130XN/C-V		●		●	●
42HP	WNV-1180XN/C-V		●			●●
44HP	WNV-1235XN/C-V			●		●●
46HP	WNV-1300XN/C-V				●	●●
48HP	WNV-1350XN/C-V					●●●
50HP	WNV-1410XN/C-V		●●		●	●
52HP	WNV-1460XN/C-V		●●			●●
54HP	WNV-1515XN/C-V		●	●		●●
56HP	WNV-1580XN/C-V		●		●	●●
58HP	WNV-1630XN/C-V		●			●●●
60HP	WNV-1685XN/C-V			●		●●●
62HP	WNV-1750XN/C-V				●	●●●
64HP	WNV-1800XN/C-V					●●●●

WNV5E Outdoor Units Lineup (380-415V, 50/60Hz)

Standard Type

HP	Model	WNV-224XN/F-Y	WNV-280XN/F-Y (WNV-280XN/F1-Y)	WNV-335XN/F-Y	WNV-400XN/F-Y	WNV-450XN/F-Y (WNV-450XN/F1-Y)	WNV-504XN/F-Y	WNV-560XN/F-Y	WNV-615XN/F-Y
8HP	WNV-224XN/F-Y	●							
10HP	WNV-280XN/F-Y (WNV-280XN/F1-Y)		●						
12HP	WNV-335XN/F-Y			●					
14HP	WNV-400XN/F-Y				●				
16HP	WNV-450XN/F-Y (WNV-450XN/F1-Y)					●			
18HP	WNV-504XN/F-Y						●		
20HP	WNV-560XN/F-Y							●	
22HP	WNV-615XN/F-Y								●
24HP	WNV-680XN/F-Y		●		●				
26HP	WNV-730XN/F-Y		●			●			
28HP	WNV-785XN/F-Y		●				●		
30HP	WNV-850XN/F-Y		●					●	
32HP	WNV-900XN/F-Y		●						●
34HP	WNV-960XN/F-Y			●					●
36HP	WNV-1010XN/F-Y				●				●
38HP	WNV-1065XN/F-Y					●			●
40HP	WNV-1130XN/F-Y						●		●
42HP	WNV-1180XN/F-Y							●	●
44HP	WNV-1235XN/F-Y								●
46HP	WNV-1300XN/F-Y		●			●			●
48HP	WNV-1350XN/F-Y		●			●			●
50HP	WNV-1410XN/F-Y			●		●			●
52HP	WNV-1460XN/F-Y		●					●	●
54HP	WNV-1515XN/F-Y		●						●●
56HP	WNV-1580XN/F-Y			●					●●
58HP	WNV-1630XN/F-Y				●				●●
60HP	WNV-1685XN/F-Y					●			●●
62HP	WNV-1750XN/F-Y						●		●●
64HP	WNV-1800XN/F-Y							●	●
66HP	WNV-1845XN/F-Y								●
68HP	WNV-1908XN/F-Y		●			●		●	●
70HP	WNV-1962XN/F-Y		●				●	●	●
72HP	WNV-2016XN/F-Y		●					●●	●
74HP	WNV-2072XN/F-Y		●					●	●
76HP	WNV-2128XN/F-Y		●						●●●
78HP	WNV-2184XN/F-Y			●					●●●
80HP	WNV-2240XN/F-Y				●				●●●
82HP	WNV-2295XN/F-Y					●			●●●
84HP	WNV-2350XN/F-Y						●		●●●
86HP	WNV-2405XN/F-Y							●	●
88HP	WNV-2460XN/F-Y								●●●●

Note:
 1. Due to the same capacity, WNV-280XN/F1-Y model and WNV-280XN/F-Y model can replace each other for operation; WNV-450XN/F1-Y model and WNV-450XN/F-Y model can replace each other for operation.
 2. The combination models of the outdoor units are not Eurovent certified.

Specifications of Outdoor Units

WNV5 380-415V, 50/60Hz

Model		-	WNV-224XN/C-Y	WNV-280XN/C-Y	WNV-335XN/C-Y	WNV-400XN/C-Y	WNV-450XN/C-Y	WNV-504XN/C-Y	WNV-560XN/C-Y	WNV-615XN/C-Y
Capacity range		HP	8	10	12	14	16	18	20	22
Capacity	Cooling	kW	22.4	28	33.5	40	45	50.4	56	61.5
	Heating	kW	25	31.5	37.5	45	50	56.5	63	69
EER		W/W	4.31	4	3.98	3.76	3.56	3.55	3.50	3.32
COP		W/W	4.55	4.32	4.17	4.05	3.85	4.01	3.80	3.65
Power supply		V/Ph/Hz	380V-415V 3N- 50/60Hz							
Min.circuit/Max.fuse current		A	15.7/20	20.9/25	24.7/32	28.8/40	33.2/40	45.4/50	51.1/63	59.2/63
Power consumption	Cooling	kW	5.2	7	8.41	10.65	12.65	14.2	16.0	18.5
	Heating	kW	5.5	7.3	9	11.1	13	14.1	16.6	18.9
Maximum drive IDU NO.		unit	13	16	19	23	26	29	33	36
Refrigerant charge volume		kg	5.9	6.7	8.2	9.8	10.3	11.3	14.3	14.3
Sound pressure level		dB(A)	60	61	63	63	63	63	63	64
Connecting pipe	Liquid	mm	Φ9.52		Φ12.7			Φ15.9		
	Gas	mm	Φ19.05	Φ22.2	Φ25.4		Φ28.6		Φ28.6	
	Oil balance	mm	Φ9.52		Φ9.52			Φ9.52		
Dimension (WxDxH)	Outline	mm	930x765x1605		1340x765x1605			1340x765x1740		
	Package	mm	1010x840x1775		1420x840x1775			1420x840x1910		
Net weight/Gross weight		kg	225/235	225/235	285/300	360/375	360/375	360/375	385/400	385/400
Loading quantity	40' GP	unit	24	24	16	16	16	16	16	16
	40' HQ	unit	24	24	16	16	16	16	16	16

WNV5E 380-415V, 50/60Hz

Model		-	WNV-224XN/F-Y	WNV-280XN/F-Y	WNV-280XN/F1-Y	WNV-335XN/F-Y	WNV-400XN/F-Y	WNV-450XN/F-Y	WNV-450XN/F1-Y	WNV-504XN/F-Y	WNV-560XN/F-Y	WNV-615XN/F-Y
Capacity range		HP	8	10	10	12	14	16	16	18	20	22
Cooling capacity	Nom.	kW	22.4	28	28	33.5	40	45	45	50.4	56	61.5
Heating capacity	Nom.	kW	22.4	28	28	33.5	40	45	45	50.4	56	61.5
	Max.	kW	25	31.5	31.5	37.5	45	50	50	56.5	63	69
EER	Nom.	kW/kW	4.73	4.48	3.05	3.99	3.80	3.51	3.35	3.25	3.00	2.40
	cassette	kW/kW	3.27	3.05	2.66	2.80	3.03	2.80	2.58	3.40	2.90	2.10
COP	Nom.	ducted kW/kW	5.20	5.56	4.10	5.25	4.73	4.60	4.20	5.50	4.60	4.50
	cassette	kW/kW	3.54	3.66	3.24	3.64	3.62	3.56	3.27	4.20	4.00	3.80
Power consumption of cooling	Nom.	ducted kW	5.20	5.56	4.10	5.25	4.73	4.60	4.20	4.01	3.80	3.65
	cassette	kW	4.74	6.25	9.18	8.40	10.53	12.82	13.43	15.51	18.67	25.63
Power consumption of heating	Nom.	ducted kW	6.85	9.18	10.53	11.96	13.2	16.07	17.44	14.82	19.31	29.29
	cassette	kW	4.31	5.04	6.83	6.38	8.46	9.78	10.71	9.16	12.17	13.67
Power supply	Nom.	ducted kW	6.33	7.65	8.64	9.2	11.05	12.64	13.76	12.00	14.00	16.18
	Max.	cassette kW	4.81	5.67	7.68	7.14	9.51	10.86	11.90	14.10	16.60	18.90
Power supply		V/Ph/H	380V-415V 3N- 50/60Hz									
Max. Circuit/Fuse current		A	16.1/20	20.9/25	20.9/25	24.6/32	28.8/40	33.2/40	33.2/40	44.7/50	50.0/60	53.6/60
Maximum drive IDU NO.		unit	13	16	16	19	23	26	26	29	32	35
Refrigerant charge volume		kg	5.9	9	6.7	8.2	9.8	10.3	10.3	11.3	14.3	14.3
Sound pressure level(Cooling)		dB(A)	60	61	61	63	63	63	63	63	63	64
Sound power level(Cooling)	ducted	dB(A)	85	86	85	80	86	80	89	86	92	92
	cassette	dB(A)	84	86	85	82	85	89	86	85	89	91
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
	Gas	mm	Φ19.05	Φ22.2	Φ22.2	Φ25.4	Φ25.4	Φ25.4	Φ28.6	Φ28.6	Φ28.6	Φ28.6
	Oil balance	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Dimension(WxDxH)	Outline	mm	930x765x1605	930x765x1605	930x765x1605	1340x765x1605	1340x765x1605	1340x765x1740	1340x765x1605	1340x765x1740	1340x765x1740	1340x765x1740
	Package	mm	1010x840x1775	1010x840x1775	1010x840x1775	1420x840x1775	1420x840x1775	1420x840x1910	1420x840x1775	1420x840x1910	1420x840x1910	1420x840x1910
Net weight/Gross weight		kg	225/235	235/245	225/235	285/300	360/375	360/375	360/375	360/375	385/400	385/400
Loading quantity	40' GP	unit	24	24	24	16	16	16	16	16	16	16
	40' HQ	unit	24	24	24	16	16	16	16	16	16	16

WNV5 (Cooling Only) 380-415V, 50/60Hz

Model		-	WNVL-224 XN/E-V	WNVL-280 XN/E-V	WNVL-335 XN/E-V	WNVL-400 XN/E-V	WNVL-450 XN/E-V	WNVL-504 XN/E-V	WNVL-560 XN/E-V	WNVL-615 XN/E-V	
Capacity range		HP	8	10	12	14	16	18	20	22	
Capacity	Cooling	kW	22.40	28.00	33.50	40.00	45.00	50.40	56.00	61.50	
EER		W/W	4.31	4.00	3.76	3.74	3.49	3.29	3.20	3.15	
Power supply		V/Ph/Hz	380V-415V 3N- 50/60Hz								
Min.circuit/Max.fuse current		A	16.1/20	20.9/25	24.6/32	28.8/40	33.2/40	42.9/50	46.5/63	48.3/63	
Power consumption	Cooling	kW	5.2	7	8.9	10.7	12.9	15.3	17.5	19.5	
Maximum drive IDU NO.		unit	13	16	19	23	26	29	33	36	
Refrigerant charge volume		kg	5.9	6.7	7.2	8.2	8.7	8.7	10.8	11.3	
Sound pressure level		dB(A)	56	57	59	59	60	61	63	64	
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9	
	Gas	mm	Φ19.05	Φ22.2	Φ25.4	Φ25.4	Φ28.6	Φ28.6	Φ28.6	Φ28.6	
	Oil balance	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	
Dimension (WxDxH)	Outline	mm	930x765x1605			1340x765x1605			1340x765x1740		
	Package	mm	1010x840x1775			1420x840x1775			1420x840x1910		
Net weight/Gross weight		kg	211/224	211/224	211/224	325/343	325/343	325/343	354/372	354/372	
Loading quantity	40' GP	unit	14	14	14	16	16	16	16	16	
	40' HQ	unit	14	14	14	16	16	16	16	16	

WNV5 208/230V, 60Hz

Model		-	WNV-224 XN/C-G	WNV-280 XN/C-G	WNV-335 XN/C-G	WNV-400 XN/C-G	WNV-450 XN/C-G	WNV-504 XN/C-G	WNV-560 XN/C-G	WNV-615 XN/C-G
Capacity range		HP	8	10	12	14	16	18	20	22
Capacity	Cooling	kW	22.4	28	33.5	40	45	50.4	56	61.5
	Heating	kW	25	31.5	37.5	45	50	56.5	63	69
EER		W/W	4.31	4	3.98	3.76	3.56	3.55	3.50	3.32
COP		W/W	4.55	4.32	4.17	4.05	3.85	4.01	3.8	3.65
Power supply	Cooling	V/Ph/Hz	208V/230V 3N- 60Hz							
MCA		A	36	38	43	60	65	89	99	113
MOP		A	60	60	60	80	90	110	125	150
Power consumption	Cooling	kW	5.2	7	8.41	10.65	12.65	14.2	16	18.5
	Heating	kW	5.5	7.3	9.0	11.1	13	14.1	16.6	18.9
Maximum drive IDU NO.		unit	13	16	19	23	26	29	33	36

WNV5 440-460V, 60Hz

Model			WNV-224XN/C-V	WNV-280XN/C-V	WNV-335XN/C-V	WNV-400XN/C-V	WNV-450XN/C-V
Capacity range		HP	8	10	12	14	16
Capacity	Cooling	kW	22.4	28	33.5	40	45
	Heating	kW	25	31.5	37.5	45	50
EER		W/W	3.92	3.68	3.76	3.51	3.35
COP		W/W	4.17	3.91	3.91	3.91	3.68
Power supply	Cooling	V/Ph/Hz	440V-460V 3N- 60Hz				
MCA		A	19	20	24	32	35
MOP		A	30	30	35	40	40
Power consumption	Cooling	kW	5.71	7.61	8.92	11.4	13.45
	Heating	kW	6.0	8.05	9.60	11.5	13.60
Maximum drive IDU NO.		unit	13	16	19	23	26
Refrigerant charge volume		kg	6.5	6.7	8.2	9.8	10.3
Sound pressure level		dB(A)	60	61	63	63	63
Connecting pipe	Liquid	mm	Φ9.52		Φ12.7		
	Gas	mm	Φ19.05	Φ22.2	Φ25.4		Φ28.6
	Oil balance	mm	Φ9.52				
Dimension (WxDxH)	Outline	mm	930x765x1605		1340x765x1605		
	Package	mm	1010x840x1775		1420x840x1775		
Net weight/Gross weight		kg	225/235	225/235	285/300	360/375	360/375
Loading quantity	40' GP	unit	24	24	16	16	16
	40' HQ	unit	24	24	16	16	16

Specifications of ODU Combination

WNV5 380-415V, 50/60Hz

HP	Model	Power supply	Capacity		Power input		Dimension(WxDxH) mm	Airflow volume m³/h	ESP Pa	Sound pressure level dB(A)	Operation sound level dB(A)	Connecting pipe diameter			Min. circuit current A	Max. fuse current A	Weight kg
			Cooling	Heating	Cooling	Heating						Liquid	Gas	Oil balance			
			kW	kW	kW	kW						mm	mm	mm			
24HP	WMV-680XN/C-T	380-415V-3Ph-50/60Hz	68	76.5	17.65	18.4	(930×765×1605)+(1340×765×1605)	11400+14000	82	65	43	Φ15.9	Φ28.6	Φ9.52	20.9+28.8	25+40	225+360
28HP	WMV-730XN/C-T		73	81.5	19.65	20.3	(930×765×1605)+(1340×765×1605)	11400+14000	82	65	43	Φ19.05	Φ31.8	Φ9.52	20.9+33.2	25+40	225+360
28HP	WMV-785XN/C-T		78.4	88	21.2	21.4	(930×765×1605)+(1340×765×1740)	11400+16000	82	66	43	Φ19.05	Φ31.8	Φ9.52	20.9+45.4	25+50	225+360
30HP	WMV-850XN/C-T		84	94.5	23	23.9	(930×765×1605)+(1340×765×1740)	11400+16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	20.9+51.1	25+63	225+385
32HP	WMV-900XN/C-T		89.5	100.5	25.5	26.2	(930×765×1605)+(1340×765×1740)	11400+16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	20.9+59.2	25+63	225+385
34HP	WMV-960XN/C-T		95	106.5	26.91	27.9	(1340×765×1605)+(1340×765×1740)	14000+16000	82	68	43	Φ19.05	Φ31.8	Φ9.52	24.7+59.2	32+63	285+385
38HP	WMV-1010XN/C-T		101.5	114	29.15	30	(1340×765×1605)+(1340×765×1740)	14000+16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	28.8+59.2	40+63	360+385
38HP	WMV-1065XN/C-T		106.5	119	31.15	31.9	(1340×765×1605)+(1340×765×1740)	14000+16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	33.2+59.2	40+63	360+385
40HP	WMV-1130XN/C-T		111.9	125.5	32.7	33	(1340×765×1740)×2	16000×2	82	68	43	Φ19.05	Φ38.1	Φ9.52	45.4+59.2	50+63	360+385
42HP	WMV-1180XN/C-T		117.5	132	34.5	35.5	(1340×765×1740)×2	16000×2	82	69	43	Φ19.05	Φ38.1	Φ9.52	51.1+59.2	63+63	385+385
44HP	WMV-1235XN/C-T		123	138	37	37.8	(1340×765×1740)×2	16000×2	82	69	43	Φ19.05	Φ38.1	Φ9.52	59.2+59.2	63+63	385+385
48HP	WMV-1300XN/C-T		129	144.5	35.65	36.9	(930×765×1605)+(1340×765×1605)+(1340×765×1740)	11400+14000+16000	82	69	45	Φ19.05	Φ38.1	Φ9.52	20.9+33.2+51.1	25+40+63	225+360+385
48HP	WMV-1350XN/C-T		134.5	150.5	38.15	39.2	(930×765×1605)+(1340×765×1605)+(1340×765×1740)	11400+14000+16000	82	69	45	Φ19.05	Φ38.1	Φ9.52	20.9+33.2+59.2	25+40+63	225+360+385
50HP	WMV-1410XN/C-T		140	156.5	39.56	40.9	(1340×765×1605)×2+(1340×765×1740)	14000×2+16000	82	69	45	Φ19.05	Φ41.3	Φ9.52	24.7+33.2+59.2	32+40+63	285+360+385
52HP	WMV-1460XN/C-T		145.5	163.5	41.5	42.8	(930×765×1605)+(1340×765×1740)×2	11400+16000×2	82	69	45	Φ19.05	Φ41.3	Φ9.52	20.9+51.1+59.2	25+63+63	225+385×2
54HP	WMV-1515XN/C-T		151	169.5	44	45.1	(930×765×1605)+(1340×765×1740)×2	11400+16000×2	82	70	45	Φ19.05	Φ41.3	Φ9.52	20.9+59.2+59.2	25+63+63	225+385×2
58HP	WMV-1580XN/C-T		156.5	175.5	45.41	46.8	(1340×765×1605)+(1340×765×1740)×2	14000+16000×2	82	70	45	Φ19.05	Φ41.3	Φ9.52	24.7+59.2+59.2	32+63+63	285+385×2
58HP	WMV-1630XN/C-T		163	183	47.65	48.9	(1340×765×1605)+(1340×765×1740)×2	14000+16000×2	82	70	45	Φ19.05	Φ41.3	Φ9.52	28.8+59.2+59.2	40+63+63	360+385×2
60HP	WMV-1685XN/C-T		168	188	49.65	50.8	(1340×765×1605)+(1340×765×1740)×2	14000+16000×2	82	70	45	Φ19.05	Φ41.3	Φ9.52	33.2+59.2+59.2	40+63+63	360+385×2
62HP	WMV-1750XN/C-T		173.4	194.5	51.2	51.9	(1340×765×1740)×3	16000×3	82	70	45	Φ19.05	Φ41.3	Φ9.52	45.4+59.2+59.2	50+63+63	360+385×2
64HP	WMV-1800XN/C-T		179	201	53	54.4	(1340×765×1740)×3	16000×3	82	71	45	Φ19.05	Φ41.3	Φ9.52	51.1+59.2+59.2	63+63+63	385×3
66HP	WMV-1845XN/C-T		184.5	207	55.5	56.7	(1340×765×1740)×3	16000×3	82	71	45	Φ19.05	Φ41.3	Φ9.52	59.2+59.2+59.2	63+63+63	385×3
68HP	WMV-1908XN/C-T		190.5	213.5	54.15	55.8	(930×765×1605)+(1340×765×1605)+(1340×765×1740)×2	11400+14000+16000×2	82	72	47	Φ22.2	Φ44.5	Φ9.52	20.9+33.2+51.1+59.2	25+40+63+63	225+360+385×2
70HP	WMV-1962XN/C-T		195.9	220	55.7	56.9	(930×765×1605)+(1340×765×1740)×3	11400+16000×3	82	73	47	Φ22.2	Φ44.5	Φ9.52	20.9+45.4+51.1+59.2	25+50+63+63	225+360+385×2
72HP	WMV-2016XN/C-T		201.5	226.5	57.5	59.4	(930×765×1605)+(1340×765×1740)×3	11400+16000×3	82	73	47	Φ22.2	Φ44.5	Φ9.52	20.9+51.1+51.1+59.2	25+63+63+63	225+385×3
74HP	WMV-2072XN/C-T		207	232.5	60	61.7	(930×765×1605)+(1340×765×1740)×3	11400+16000×3	82	73	47	Φ22.2	Φ44.5	Φ9.52	20.9+51.1+59.2+59.2	25+63+63+63	225+385×3
76HP	WMV-2128XN/C-T		212.5	238.5	62.5	64	(930×765×1605)+(1340×765×1740)×3	11400+16000×3	82	73	47	Φ22.2	Φ44.5	Φ9.52	20.9+59.2+59.2+59.2	25+63+63+63	225+385×3
78HP	WMV-2184XN/C-T		218	244.5	63.91	65.7	(1340×765×1605)+(1340×765×1740)×3	14000+16000×3	82	74	47	Φ22.2	Φ44.5	Φ9.52	24.7+59.2+59.2+59.2	32+63+63+63	285+385×3
80HP	WMV-2240XN/C-T		224.5	252	66.15	67.8	(1340×765×1605)+(1340×765×1740)×3	14000+16000×3	82	74	47	Φ22.2	Φ44.5	Φ9.52	28.8+59.2+59.2+59.2	40+63+63+63	360+385×3
82HP	WMV-2295XN/C-T		229.5	257	68.15	69.7	(1340×765×1605)+(1340×765×1740)×3	14000+16000×3	82	74	47	Φ22.2	Φ44.5	Φ9.52	33.2+59.2+59.2+59.2	40+63+63+63	360+385×3
84HP	WMV-2350XN/C-T	234.9	263.5	69.7	70.8	(1340×765×1740)×4	16000×4	82	75	47	Φ22.2	Φ44.5	Φ9.52	45.4+59.2+59.2+59.2	50+63+63+63	360+385×3	
86HP	WMV-2405XN/C-T	240.5	270	71.5	73.3	(1340×765×1740)×4	16000×4	82	75	47	Φ22.2	Φ44.5	Φ9.52	51.1+59.2+59.2+59.2	63+63+63+63	385×4	
88HP	WMV-2460XN/C-T	246	276	74	75.6	(1340×765×1740)×4	16000×4	82	75	47	Φ22.2	Φ44.5	Φ9.52	59.2+59.2+59.2+59.2	63+63+63+63	385×4	

The above is the parameters of standard combination.

WNV5 208/230V, 60Hz

HP	Model	Power supply	Cooling capacity		Power input		Dimension(W × D × H)	Airflow volume	ESP	Noise at night		Connecting pipe diameter		Oil balance Pipe	MCA	MOP	Weight
			Cooling	Heating	Cooling	Heating				Operation noise	Liquid	Gas					
													kw				
24HP	WNV-680XN/C-G		68.0	76.5	17.65	18.40	(930 × 765 × 1605) +(1340 × 765 × 1605)	11400+14000	82	65	43	Φ28.6	Φ15.9	Φ9.52	38+60	60+80	225+360
26HP	WNV-730XN/C-G		73.0	81.5	19.65	20.30	(930 × 765 × 1605) +(1340 × 765 × 1605)	11400+14000	82	65	43	Φ31.8	Φ19.05	Φ9.52	38+65	60+90	225+360
28HP	WNV-785XN/C-G		78.4	88.0	21.20	21.40	(930 × 765 × 1605) +(1340 × 765 × 1740)	11400+16000	82	66	43	Φ31.8	Φ19.05	Φ9.52	38+89	60+110	225+360
30HP	WNV-850XN/C-G		84.0	94.5	23.00	23.90	(930 × 765 × 1605) +(1340 × 765 × 1740)	11400+16000	82	67	43	Φ31.8	Φ19.05	Φ9.52	38+99	60+125	225+385
32HP	WNV-900XN/C-G		89.5	100.5	25.50	26.20	(930 × 765 × 1605) +(1340 × 765 × 1740)	11400+16000	82	67	43	Φ31.8	Φ19.05	Φ9.52	38+113	60+150	225+385
34HP	WNV-960XN/C-G		95.0	106.5	26.91	27.90	(1340 × 765 × 1605) +(1340 × 765 × 1740)	14000+16000	82	68	43	Φ31.8	Φ19.05	Φ9.52	43+113	60+150	285+385
36HP	WNV-1010XN/C-G		101.5	114.0	29.15	30.00	(1340 × 765 × 1605) +(1340 × 765 × 1740)	14000+16000	82	68	43	Φ38.1	Φ19.05	Φ9.52	60+113	80+150	360+385
38HP	WNV-1065XN/C-G		106.5	119.0	31.15	31.90	(1340 × 765 × 1605) +(1340 × 765 × 1740)	14000+16000	82	68	43	Φ38.1	Φ19.05	Φ9.52	65+113	90+150	360+385
40HP	WNV-1130XN/C-G		111.9	125.5	32.70	33.00	(1340 × 765 × 1740)×2	16000×2	82	68	43	Φ38.1	Φ19.05	Φ9.52	89+113	110+150	2×385
42HP	WNV-1180XN/C-G		117.5	132.0	34.50	35.50	(1340 × 765 × 1740)×2	16000×2	82	69	43	Φ38.1	Φ19.05	Φ9.52	99+113	125+150	2×385
44HP	WNV-1235XN/C-G		123.0	138.0	37.00	37.80	(1340 × 765 × 1740)×2	16000×2	82	69	43	Φ38.1	Φ19.05	Φ9.52	113+113	150+150	2×385
46HP	WNV-1300XN/C-G		129.0	144.5	35.65	36.90	(930 × 765 × 1605) +(1340 × 765 × 1605) +(1340 × 765 × 1740)	11400+14000 +16000	82	69	45	Φ38.1	Φ19.05	Φ9.52	38+65+99	60+90+125	225+360+385
48HP	WNV-1350XN/C-G		134.5	150.5	38.15	39.20	(930 × 765 × 1605) +(1340 × 765 × 1605) +(1340 × 765 × 1740)	11400+14000 +16000	82	69	45	Φ38.1	Φ19.05	Φ9.52	38+65+113	60+90+150	225+360+385
50HP	WNV-1410XN/C-G		140.0	156.5	39.56	40.90	(1340 × 765 × 1605)×2 +(1340 × 765 × 1740)	11400+14000 +16000	82	69	45	Φ41.3	Φ19.05	Φ9.52	43+65+113	60+90+150	285+360+385
52HP	WNV-1460XN/C-G		145.5	163.5	39.70	41.00	(930 × 765 × 1605) +(1340 × 765 × 1740)×2	11400+16000×2	82	69	45	Φ41.3	Φ19.05	Φ9.52	38+99+113	60+125+150	225+2×385
54HP	WNV-1515XN/C-G	208/230 V-3Ph- 60Hz	151.0	169.5	44.00	45.10	(930 × 765 × 1605) +(1340 × 765 × 1740)×2	11400+16000×2	82	70	45	Φ41.3	Φ19.05	Φ9.52	38+113+113	60+150+150	225+2×385
56HP	WNV-1580XN/C-G		156.5	175.5	45.41	46.80	(1340 × 765 × 1605) +(1340 × 765 × 1740)×2	11400+16000×2	82	70	45	Φ41.3	Φ19.05	Φ9.52	43+113+113	60+150+150	285+2×385
58HP	WNV-1630XN/C-G		163.0	183.0	47.65	48.90	(1340 × 765 × 1605) +(1340 × 765 × 1740)×2	14000+16000×2	82	70	45	Φ41.3	Φ19.05	Φ9.52	60+113+113	80+150+150	360+2×385
60HP	WNV-1685XN/C-G		168.0	188.0	49.65	50.80	(1340 × 765 × 1605) +(1340 × 765 × 1740)×2	14000+16000×2	82	70	45	Φ41.3	Φ19.05	Φ9.52	65+113+113	90+150+150	360+2×385
62HP	WNV-1750XN/C-G		173.4	194.5	51.20	51.90	(1340 × 765 × 1740)×3	16000×3	82	70	45	Φ41.3	Φ19.05	Φ9.52	89+113+113	110+150+150	3×385
64HP	WNV-1800XN/C-G		179.0	201.0	53.00	54.40	(1340 × 765 × 1740)×3	16000×3	82	71	45	Φ41.3	Φ19.05	Φ9.52	99+113+113	125+150+150	3×385
66HP	WNV-1845XN/C-G		184.5	207.0	55.50	56.70	(1340 × 765 × 1740)×3	16000×3	82	71	45	Φ41.3	Φ19.05	Φ9.52	113+113+113	150+150+150	3×385
68HP	WNV-1908XN/C-G		190.5	213.5	54.15	55.80	(930 × 765 × 1605) +(1340 × 765 × 1605) +(1340 × 765 × 1740)×2	11400+14000 +16000×2	82	72	47	Φ44.5	Φ22.2	Φ9.52	38+65+99+113	60+90+125+150	225+360+2×385
70HP	WNV-1962XN/C-G		195.9	220.0	55.70	56.90	(930 × 765 × 1605) +(1340 × 765 × 1740)×3	11400+16000×3	82	73	47	Φ44.5	Φ22.2	Φ9.52	38+89+99+113	60+110+125+150	225+360+2×385
72HP	WNV-2016XN/C-G		201.5	226.5	57.50	59.40	(930 × 765 × 1605) +(1340 × 765 × 1740)×3	11400+16000×3	82	73	47	Φ44.5	Φ22.2	Φ9.52	38+99+99+113	60+125+125+150	225+3×385
74HP	WNV-2072XN/C-G		207.0	232.5	60.00	61.70	(930 × 765 × 1605) +(1340 × 765 × 1740)×3	11400+16000×3	82	73	47	Φ44.5	Φ22.2	Φ9.52	38+99+113+113	60+125+150+150	225+3×385
76HP	WNV-2128XN/C-G		212.5	238.5	62.50	64.00	(930 × 765 × 1605) +(1340 × 765 × 1740)×3	11400+16000×3	82	73	47	Φ44.5	Φ22.2	Φ9.52	38+113+113+113	60+150+150+150	225+3×385
78HP	WNV-2184XN/C-G		218.0	244.5	63.91	65.70	(1340 × 765 × 1605) +(1340 × 765 × 1740)×3	11400+16000×3	82	74	47	Φ44.5	Φ22.2	Φ9.52	43+113+113+113	60+150+150+150	285+3×385
80HP	WNV-2240XN/C-G		224.5	252.0	66.15	67.80	(1340 × 765 × 1605) +(1340 × 765 × 1740)×3	14000+16000×3	82	74	47	Φ44.5	Φ22.2	Φ9.52	60+113+113+113	80+150+150+150	360+3×385
82HP	WNV-2295XN/C-G		229.5	257.0	68.15	69.70	(1340 × 765 × 1605) +(1340 × 765 × 1740)×3	14000+16000×3	82	74	47	Φ44.5	Φ22.2	Φ9.52	65+113+113+113	90+150+150+150	360+3×385
84HP	WNV-2350XN/C-G		234.9	263.5	69.70	70.80	(1340 × 765 × 1740)×4	16000×4	82	75	47	Φ44.5	Φ22.2	Φ9.52	89+113+113+113	110+150+150+150	360+3×385
86HP	WNV-2405XN/C-G		240.5	270.0	71.50	73.30	(1340 × 765 × 1740)×4	16000×4	82	75	47	Φ44.5	Φ22.2	Φ9.52	99+113+113+113	125+150+150+150	4×385
88HP	WNV-2460XN/C-G		246.0	276.0	74.00	75.60	(1340 × 765 × 1740)×4	16000×4	82	75	47	Φ44.5	Φ22.2	Φ9.52	113+113+113+113	150+150+150+150	4×385

The above is the parameters of standard combination.

WNV5 440-460V, 60Hz

HP	Model	Power supply	Cooling capacity		Power input		Dimension(W × D × H)	Airflow volume	ESP	Noise	Noise at Night	Connecting pipe diameter			MCA	MOP	Weight
			Cooling	Heating	Cooling	Heating						Liquid	Gas	Oil balance			
18HP	WNV-504XN/C-V		50.4	56.5	13.32	14.05	2×(930×765×1605)	2×11400	0-82	64	43	Φ15.9	Φ28.6	Φ9.52	19+20	30+30	225×2
20HP	WNV-560XN/C-V		56	63	15.22	16.1	2×(930×765×1605)	2×11400	0-82	64	43	Φ15.9	Φ28.6	Φ9.52	20+20	30+30	225×2
22HP	WNV-615XN/C-V		61.5	69	16.53	17.65	(930×765×1605)+ (1340×765×1605)	11400+14000	0-82	65	43	Φ15.9	Φ28.6	Φ9.52	20+24	30+35	285+225
24HP	WNV-680XN/C-V		68	76.5	19.01	19.55	(930×765×1605)+ (1340×765×1605)	11400+14000	0-82	65	43	Φ15.9	Φ28.6	Φ9.52	20+32	30+40	225+360
26HP	WNV-730XN/C-V		73	81.5	21.06	21.65	(930×765×1605)+ (1340×765×1605)	11400+14000	0-82	65	43	Φ19.05	Φ31.8	Φ9.52	20+35	30+40	225+360
28HP	WNV-785XN/C-V		78.5	87.5	22.37	23.2	2×(1340×765×1605)	2×14000	0-82	66	43	Φ19.05	Φ31.8	Φ9.52	24+35	35+40	285+360
30HP	WNV-850XN/C-V		85	95	24.85	25.1	2×(1340×765×1605)	2×14000	0-82	66	43	Φ19.05	Φ31.8	Φ9.52	32+35	40+40	360×2
32HP	WNV-900XN/C-V		90	100	26.9	27.2	2×(1340×765×1605)	2×14000	0-82	66	43	Φ19.05	Φ31.8	Φ9.52	35+35	40+40	360×2
34HP	WNV-960XN/C-V		96	108	26.62	27.6	2×(930×765×1605) +(1340×765×1605)	2×11400+14000	0-82	67	45	Φ19.05	Φ31.8	Φ9.52	20+20+32	30+30+40	225×2+360
36HP	WNV-1010XN/C-V		101	113	28.67	29.7	2×(930×765×1605) +(1340×765×1605)	2×11400+14000	0-82	67	45	Φ19.05	Φ31.8	Φ9.52	20+20+35	30+30+40	225×2+360
38HP	WNV-1065XN/C-V	440- 460V- 3Ph- 60Hz	106.5	119	29.98	31.25	(930×765×1605)+2 x(1340×765×1605)	11400+2×14000	0-82	67	45	Φ19.05	Φ38.1	Φ9.52	20+24+35	30+35+40	225+285+360
40HP	WNV-1130XN/C-V		113	126.5	32.46	33.15	(930×765×1605)+2 x(1340×765×1605)	11400+2×14000	0-82	67	45	Φ19.05	Φ38.1	Φ9.52	20+32+35	30+40+40	225+360×2
42HP	WNV-1180XN/C-V		118	131.5	34.51	35.25	(930×765×1605)+2 x(1340×765×1605)	11400+2×14000	0-82	67	45	Φ19.05	Φ38.1	Φ9.52	20+35+35	30+40+40	225+360×2
44HP	WNV-1235XN/C-V		123.5	137.5	35.82	36.8	3×(1340×765×1605)	3×14000	0-82	68	45	Φ19.05	Φ38.1	Φ9.52	24+35+35	35+40+40	285+360×2
46HP	WNV-1300XN/C-V		130	145	38.3	38.7	3×(1340×765×1605)	3×14000	0-82	68	45	Φ19.05	Φ38.1	Φ9.52	32+35+35	35+40+40	360×3
48HP	WNV-1350XN/C-V		135	150	40.35	40.8	3×(1340×765×1605)	3×14000	0-82	68	45	Φ19.05	Φ38.1	Φ9.52	35+35+35	40+40+40	360×3
50HP	WNV-1410XN/C-V		141	158	40.07	41.2	2×(930×765×1605)+2 x(1340×765×1605)	2×11400+2×14000	0-82	69	47	Φ19.05	Φ41.3	Φ9.52	20+20+32+35	30+30+40+40	225×2+360×2
52HP	WNV-1460XN/C-V		146	163	42.12	43.3	2×(930×765×1605)+2 x(1340×765×1605)	2×11400+2×14000	0-82	69	47	Φ19.05	Φ41.3	Φ9.52	20+20+35+35	30+30+40+40	225×2+360×2
54HP	WNV-1515XN/C-V		151.5	169	43.43	44.85	(930×765×1605)+3 x(1340×765×1605)	11400+3×14000	0-82	69	47	Φ19.05	Φ41.3	Φ9.52	20+24+35+35	30+30+40+40	225+285+360×2
56HP	WNV-1580XN/C-V		158	176.5	45.91	46.75	(930×765×1605)+3 x(1340×765×1605)	11400+3×14000	0-82	69	47	Φ19.05	Φ41.3	Φ9.52	20+32+35+35	30+40+40+40	225+360×3
58HP	WNV																

WNV5E 380-415V, 50/60Hz

HP	Model	Power Supply	Capacity			Power Input			Dimension (WxDxH)	Airflow Volume	ESP	Connecting pipe diameter			Min. circuit current	Max. fuse current	Weight
			Cooling		Heating	Cooling		Heating				Liquid	Gas	Oil Balance			
			Nom.*	Nom.*	Max	Nom.*	Nom.*	Max									
24HP	WNV-680XN/F-Y	380-415V 3N-50/60Hz	68	68.0	76.5	16.78	15.18	15.18	(930x765x1605)+(1340x765x1605)	11400+14000	82	Φ15.9	Φ28.6	Φ9.52	20.9+28.8	25+40	235+360
26HP	WNV-730XN/F-Y		73	73.0	81.5	19.07	16.54	16.53	(930x765x1605)+(1340x765x1740)	11400+16000	82	Φ19.05	Φ31.8	Φ9.52	20.9+33.2	25+40	235+360
28HP	WNV-785XN/F-Y		78.4	78.4	88	21.76	14.83	19.77	(930x765x1605)+(1340x765x1740)	11400+16000	82	Φ19.05	Φ31.8	Φ9.52	20.9+44.7	25+50	235+360
30HP	WNV-850XN/F-Y		84	84.0	94.5	24.92	17.84	22.27	(930x765x1605)+(1340x765x1740)	11400+16000	82	Φ19.05	Φ31.8	Φ9.52	20.9+50	25+63	235+385
32HP	WNV-900XN/F-Y		89.5	89.5	100.5	31.88	19.34	24.57	(930x765x1605)+(1340x765x1740)	11400+16000	82	Φ19.05	Φ31.8	Φ9.52	20.9+53.6	25+63	235+385
34HP	WNV-960XN/F-Y		95	95.0	106.5	34.03	20.81	26.04	(1340x765x1605)+(1340x765x1740)	14000+16000	82	Φ19.05	Φ31.8	Φ9.52	24.6+53.6	32+63	285+385
36HP	WNV-1010XN/F-Y		101.5	101.5	114	36.16	23.18	28.41	(1340x765x1605)+(1340x765x1740)	14000+16000	82	Φ19.05	Φ38.1	Φ9.52	28.8+53.6	40+63	360+385
38HP	WNV-1065XN/F-Y		106.5	106.5	119	38.45	24.54	29.76	(1340x765x1740) x2	16000x2	82	Φ19.05	Φ38.1	Φ9.52	33.2+53.6	40+63	360+385
40HP	WNV-1130XN/F-Y		111.9	111.9	125.5	41.14	22.83	33.00	(1340x765x1740) x2	16000x2	82	Φ19.05	Φ38.1	Φ9.52	44.7+53.6	50+63	360+385
42HP	WNV-1180XN/F-Y		117.5	117.5	132	44.30	25.84	35.50	(1340x765x1740) x2	16000x2	82	Φ19.05	Φ38.1	Φ9.52	50+53.6	63+63	385x2
44HP	WNV-1235XN/F-Y		123	123.0	138	51.26	27.34	37.80	(1340x765x1740) x2	16000x2	82	Φ19.05	Φ38.1	Φ9.52	53.6+53.6	63+63	385x2
46HP	WNV-1300XN/F-Y		129	129.0	144.5	37.74	28.71	33.13	(930x765x1605)+(1340x765x1740) x2	11400+16000x2	82	Φ19.05	Φ38.1	Φ9.52	20.9+33.2+50	25+40+63	235+360+385
48HP	WNV-1350XN/F-Y		134.5	134.5	150.5	44.70	30.21	35.43	(930x765x1605)+(1340x765x1740) x2	11400+16000x2	82	Φ19.05	Φ38.1	Φ9.52	20.9+33.2+53.6	25+40+63	235+360+385
50HP	WNV-1410XN/F-Y		140	140.0	156.5	46.85	31.68	36.90	(1340x765x1605)+(1340x765x1740) x2	14000+16000x2	82	Φ19.05	Φ41.3	Φ9.52	24.6+33.2+53.6	32+40+63	285+360+385
52HP	WNV-1460XN/F-Y		145.5	145.5	163.5	50.55	31.51	41.17	(930x765x1605)+(1340x765x1740) x2	11400+16000x2	82	Φ19.05	Φ41.3	Φ9.52	20.9+50+53.6	25+63+63	235+385x2
54HP	WNV-1515XN/F-Y		151	151.0	169.5	57.51	33.01	43.47	(930x765x1605)+(1340x765x1740) x2	11400+16000x2	82	Φ19.05	Φ41.3	Φ9.52	20.9+53.6+53.6	25+63+63	235+385x2
56HP	WNV-1580XN/F-Y		156.5	156.5	175.5	59.66	34.48	44.94	(1340x765x1605)+(1340x765x1740) x2	14000+16000x2	82	Φ19.05	Φ41.3	Φ9.52	24.6+53.6+53.6	32+63+63	285+385x2
58HP	WNV-1630XN/F-Y		163	163.0	183	61.79	36.85	47.31	(1340x765x1605)+(1340x765x1740) x2	14000+16000x2	82	Φ19.05	Φ41.3	Φ9.52	28.8+53.6+53.6	40+63+63	360+385x2
60HP	WNV-1685XN/F-Y		168	168.0	188	64.08	38.21	48.66	(1340x765x1740) x3	16000x3	82	Φ19.05	Φ41.3	Φ9.52	33.2+53.6+53.6	40+63+63	360+385x2
62HP	WNV-1750XN/F-Y		173.4	173.4	194.5	66.77	36.50	51.90	(1340x765x1740) x3	16000x3	82	Φ19.05	Φ41.3	Φ9.52	44.7+53.6+53.6	50+63+63	360+385x2
64HP	WNV-1800XN/F-Y		179	179.0	201	69.93	39.51	54.40	(1340x765x1740) x3	16000x3	82	Φ19.05	Φ41.3	Φ9.52	50+53.6+53.6	63+63+63	385x3
66HP	WNV-1845XN/F-Y		184.5	184.5	207	76.89	41.01	56.70	(1340x765x1740) x3	16000x3	82	Φ19.05	Φ41.3	Φ9.52	53.6+53.6+53.6	63+63+63	385x3
68HP	WNV-1908XN/F-Y		190.5	190.5	213.5	63.37	42.38	52.03	(930x765x1605)+(1340x765x1740) x3	11400+16000x3	82	Φ22.2	Φ44.5	Φ9.52	20.9+33.2+50+53.6	25+40+63+63	235+360+385x2
70HP	WNV-1962XN/F-Y		195.9	195.9	220	66.06	40.67	55.27	(930x765x1605)+(1340x765x1740) x3	11400+16000x3	82	Φ22.2	Φ44.5	Φ9.52	20.9+44.7+50+53.6	25+50+63+63	235+360+385x2
72HP	WNV-2016XN/F-Y		201.5	201.5	226.5	69.22	43.68	57.77	(930x765x1605)+(1340x765x1740) x3	11400+16000x3	82	Φ22.2	Φ44.5	Φ9.52	20.9+50+50+53.6	25+63+63+63	235+385x3
74HP	WNV-2072XN/F-Y		207	207.0	232.5	76.18	45.18	60.07	(930x765x1605)+(1340x765x1740) x3	11400+16000x3	82	Φ22.2	Φ44.5	Φ9.52	20.9+50+53.6+53.6	25+63+63+63	235+385x3
76HP	WNV-2128XN/F-Y		212.5	212.5	238.5	83.14	46.68	62.37	(930x765x1605)+(1340x765x1740) x3	11400+16000x3	82	Φ22.2	Φ44.5	Φ9.52	20.9+53.6+53.6+53.6	25+63+63+63	235+385x3
78HP	WNV-2184XN/F-Y		218	218.0	244.5	85.29	48.15	63.84	(1340x765x1605)+(1340x765x1740) x3	14000+16000x3	82	Φ22.2	Φ44.5	Φ9.52	24.6+53.6+53.6+53.6	32+63+63+63	285+385x3
80HP	WNV-2240XN/F-Y	224.5	224.5	252	87.42	50.52	66.21	(1340x765x1605)+(1340x765x1740) x3	14000+16000x3	82	Φ22.2	Φ44.5	Φ9.52	28.8+53.6+53.6+53.6	40+63+63+63	360+385x3	
82HP	WNV-2295XN/F-Y	229.5	229.5	257	89.71	51.88	67.56	(1340x765x1740) x4	16000x4	82	Φ22.2	Φ44.5	Φ9.52	33.2+53.6+53.6+53.6	40+63+63+63	360+385x3	
84HP	WNV-2350XN/F-Y	234.9	234.9	263.5	92.40	50.17	70.80	(1340x765x1740) x4	16000x4	82	Φ22.2	Φ44.5	Φ9.52	44.7+53.6+53.6+53.6	50+63+63+63	360+385x3	
86HP	WNV-2405XN/F-Y	240.5	240.5	270	95.56	53.18	73.30	(1340x765x1740) x4	16000x4	82	Φ22.2	Φ44.5	Φ9.52	50+53.6+53.6+53.6	63+63+63+63	385x4	
88HP	WNV-2460XN/F-Y	246	246.0	276	102.52	54.68	75.60	(1340x765x1740) x4	16000x4	82	Φ22.2	Φ44.5	Φ9.52	53.6+53.6+53.6+53.6	63+63+63+63	385x4	

- The parameters are the listed data for certificate by matching with air duct unit.
- The above is the parameters of standard combination.

WNV5 (Cooling Only) 380-415V, 50/60Hz

HP	Model	Power supply	Cooling capacity	Power input	Dimension (WxDxH)	Airflow volume	ESP	Noise	Noise at night	Connecting pipe diameter		Oil balance pipe	Min. circuit current	Max. fuse current	Weight
			Cooling	Cooling						Liquid	Gas				
			kW	kW						mm	mm				
24HP	WNVL-680XNE-V	380-415V 3N-50/60Hz	68.0	19.7	(930 x 765 x 1605)+(1340 x 765 x 1605)	11400+14000	82	65	43	Φ15.9	Φ28.6	Φ9.52	20.9+28.8	25+40	211+325
26HP	WNVL-730XNE-V		73.0	19.9	(930 x 765 x 1605)+(1340 x 765 x 1605)	11400+14000	82	65	43	Φ19.05	Φ31.8	Φ9.52	20.9+33.2	25+40	211+325
28HP	WNVL-785XNE-V		78.4	22.3	(930 x 765 x 1605)+(1340 x 765 x 1605)	11400+14000	82	66	43	Φ19.05	Φ31.8	Φ9.52	20.9+42.9	25+50	211+325
30HP	WNVL-850XNE-V		84.0	24.5	(930 x 765 x 1605)+(1340 x 765 x 1740)	11400+16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	20.9+46.5	25+63	211+354
32HP	WNVL-900XNE-V		89.5	26.5	(930 x 765 x 1605)+(1340 x 765 x 1740)	11400+16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	20.9+48.3	25+63	211+354
34HP	WNVL-960XNE-V		95.0	28.4	(930 x 765 x 1605)+(1340x 765x 1740)	11400+16000	82	68	43	Φ19.05	Φ31.8	Φ9.52	24.6+48.3	32+63	211+354
36HP	WNVL-1010XNE-V		101.5	30.2	(1340 x 765 x 1605)+(1340x 765x 1740)	14000+16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	28.8+48.3	40+63	325+354
38HP	WNVL-1065XNE-V		106.5	32.4	(1340 x 765 x 1605)+(1340x 765x 1740)	14000+16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	33.2+48.3	40+63	325+354
40HP	WNVL-1130XNE-V		111.9	34.8	(1340 x 765 x 1605)+(1340x 765x 1740)	14000+16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	42.9+48.3	50+63	325+354
42HP	WNVL-1180XNE-V		117.5	37.0	(1340x 765x 1740)x2	16000x2	82	69	43	Φ19.05	Φ38.1	Φ9.52	46.5+48.3	63+63	354+354
44HP	WNVL-1235XNE-V		123.0	39.0	(1340x 765x 1740)x2	16000x2	82	69	43	Φ19.05	Φ38.1	Φ9.52	48.3+48.3	63+63	354+354
46HP	WNVL-1300XNE-V		129.0	37.4	(930 x 765 x 1605) +(1340 x 765 x 1605)+(1340x765x 1740)	11400+14000+16000	82	69	45	Φ19.05	Φ38.1	Φ9.52	20.9+33.2+46.5	25+40+63	211+325+354
48HP	WNVL-1350XNE-V		134.5	39.4	(930 x 765 x 1605) +(1340 x 765 x 1605)+(1340x765x 1740)	11400+14000+16000	82	69	45	Φ19.05	Φ38.1	Φ9.52	20.9+33.2+48.3	25+40+63	211+325+354
50HP	WNVL-1410XNE-V		140.0	41.3	(930 x 765 x 1605)+(1340 x 765 x 1605)+(1340x765x 1740)	11400+14000+16000	82	69	45	Φ19.05	Φ41.3	Φ9.52	24.6+33.2+48.3	32+40+63	211+325+354
52HP	WNVL-1460XNE-V		145.5	44.0	(930x765x 1605)+(1340x 765x 1740)x2	11400+16000x2	82	69	45	Φ19.05	Φ41.3	Φ9.52	20.9+46.5+48.3	25+63+63	211+354+354
54HP	WNVL-1515XNE-V		151.0	46.0	(930x765x 1605)+(1340x 765x 1740)x2	11400+16000x2	82	70	45	Φ19.05	Φ41.3	Φ9.52	20.9+48.3+48.3	25+63+63	211+354+354
56HP	WNVL-1580XNE-V		156.5	47.9	(930x765x 1605)+(1340x 765x 1740)x2	11400+16000x2	82	70	45	Φ19.05	Φ41.3	Φ9.52	24.6+48.3+48.3	32+63+63	211+354+354
58HP	WNVL-1630XNE-V		163.0	49.7	(1340x765x 1605)+(1340x 765x 1740)x2	14000+16000x2	82	70	45	Φ19.05	Φ41.3	Φ9.52	28.8+48.3+48.3	40+63+63	325+354+354

High-COP Type

Model	8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP
16HP								
18HP	●	●						
20HP								
22HP		●	●					
24HP								
26HP		●						
28HP	●							
30HP								
32HP								
34HP		●						
36HP								
38HP	●							
40HP								
42HP			●					
44HP				●				
46HP			●	●				
48HP								
50HP		●	●					
52HP		●						
54HP			●					
56HP								
58HP					●			
60HP								
62HP				●				
64HP								
66HP					●			●
68HP				●				●
70HP								●
72HP								
74HP				●	●			
76HP						●		
78HP					●	●		

Remark: The above is the recommended combination method. The basic models can be freely combined. The combined parameters should be calculated according to the basic models.

Space Saving Type

Model	8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP
16HP					●			
18HP						●		
20HP							●	
22HP								●
24HP			●●					
26HP			●	●				
28HP			●		●			
30HP			●			●		
32HP			●				●	
34HP			●					●
36HP						●●		
38HP						●	●	
40HP							●●	
42HP							●	●
44HP								●●
46HP			●●					●
48HP			●			●●		
50HP			●			●	●	
52HP			●			●		●
54HP			●				●	●
56HP					●	●		●
58HP					●		●	●
60HP						●	●	●
62HP						●		●●
64HP							●	●●
66HP			●●				●	●
68HP			●●					●●
70HP			●	●				●●
72HP			●		●			●●
74HP			●			●		●●
76HP			●				●	●●

Remark: The above is the recommended combination method. The basic models can be freely combined. The combined parameters should be calculated according to the basic models.

WNV5 Mini & Slim



Key Features

All DC Inverter Technology to Improve Compression Efficiency

All DC inverter compressor and high-performance high pressure chamber are adopted to reduce loss of over-heat and improve compression efficiency from direct intake. Compared with low pressure chamber, the compression efficiency is improved. High-efficient permasyon motor is adopted to provide better performance than traditional DC inverter compressor.

All DC Inverter Compressor

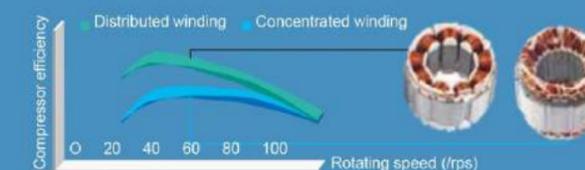
> All DC inverter compressor is used in this system. It can directly intake gas to reduce loss of overheat and improve efficiency.

HP chamber structure can raise the high and middle frequency performance

New DC motor (concentrated winding) raises the low frequency performance

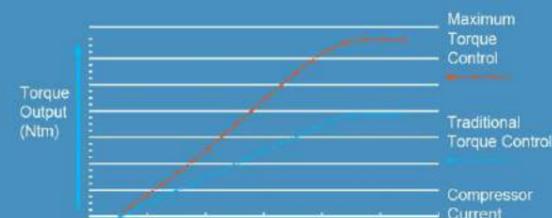


> High-efficient permasyon motor is adopted to provide better performance than traditional DC inverter compressor.



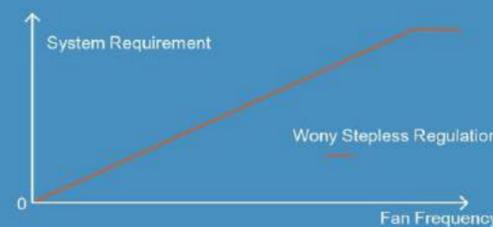
> Technology of Maximum Torque Control with Minimum Current

It can reduce energy loss caused by device winding so as to realize higher efficiency.



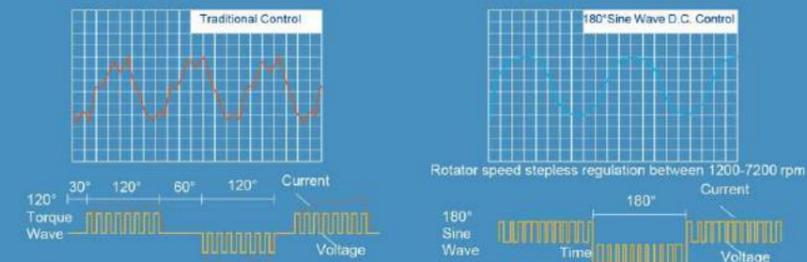
> Low-frequency Torque Control

It can directly control motor torque, through which fan motor can run at a low speed. Users will feel more comfortable while requirements of the system are also met.



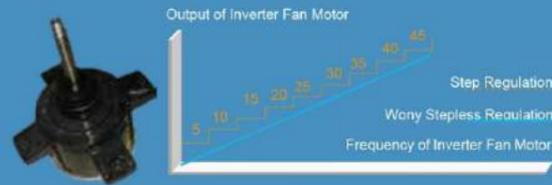
> 180° Sine Wave DC Speed Varying Technology.

It can satisfy various places' demands for different temperature and is able to save a great deal of electricity and provide users with utmost comfort at the same time.



Sensorless DC Inverter Fan Motor

> Stepless speed regulation ranges from 5Hz to 44Hz. Compared with traditional inverter motors, the operation is more energy-saving.

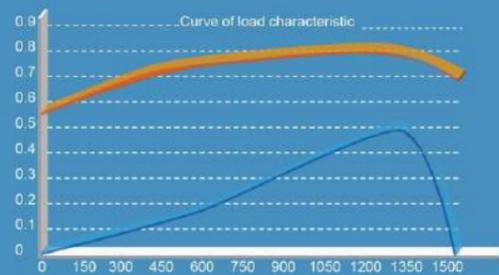


> Sensorless control technology guarantees lower noise, less vibration and steadier operation.



Sensorless DC Inverter Fan Motor

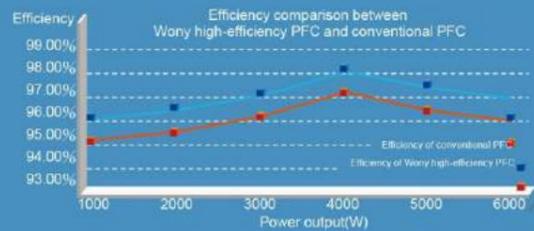
The indoor unit adopts high-efficiency brushless DC motor. Compared with conventional motor, the efficiency of brushless DC motor is improved by more than 30%. Meanwhile, the design of evaporation capacity flow is optimized through emulation software of refrigeration system and the heat exchange amount of evaporator is greatly improved.



High-efficiency Digital PFC Control *

High-efficiency PFC control technology is adopted with efficiency improved by about 1% compared with conventional PFC. For the air conditioner with rated power of 5kW, 50W of electricity can be saved every hour and 1.2kW of electricity can be saved every day.

*This feature is applicable for WN5 Mini only.



Wider Operation Condition Range

The unit adopts DC motor with more accurate high pressure control, which effectively solves the high pressure control problem in low ambient temperature cooling. So the operation range in cooling is wider.

	Company A	Wony WN5 Mini	Wony WN5 Slim
Cooling	10~48°C	-5~52°C	-5~52°C
Heating	-20~27°C	-20~27°C	-20~27°C

Comfortable and Quiet Mode

Low Noise of Outdoor Unit

> The advanced sub-cooling control technology is applied to reduce the liquid flow noise of indoor unit in cooling operation.

> Noise of outdoor unit can be as low as 45dB(A) thanks to noise optimized design or fan system and compressor system, and multiple kinds of quiet modes of outdoor unit.



Low Noise of Indoor Unit

> The pioneering and patented high-efficiency centrifugal fan blade and low-noise volute are adopted. Meanwhile, the imported silent valve is adopted to reduce noise of entire unit as low as 22dB(A).

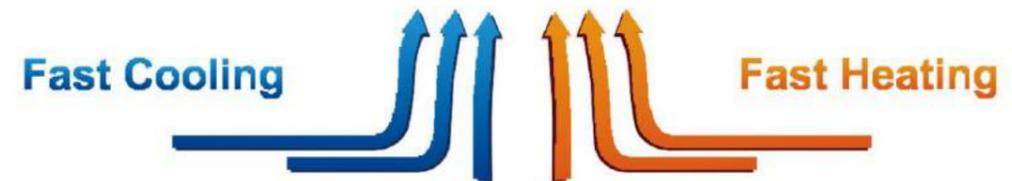
> By adopting the optimal inlet angle of centrifugal fan blade and optimal diameter ratio between internal and external circles of impeller, the air volume is increased and fan noise is decreased greatly.

> The advanced supercooling control technology and the oil-return technology under heating mode has efficiently solved the problem of liquid flow noise of indoor unit, which improved the sound quality of indoor unit.



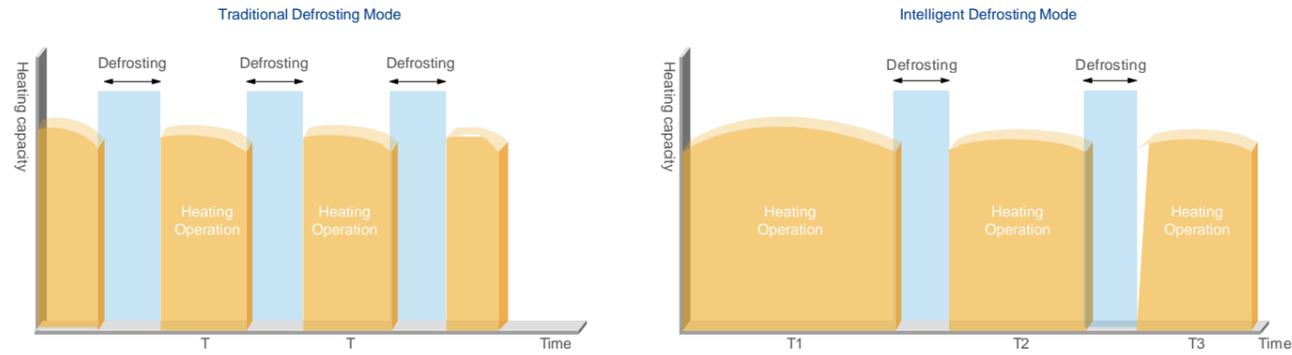
Intelligent Temperature Control Technology

Intelligent temperature control technology is adopted for super fast cooling or heating, so that indoor temperature will reach set temperature more quickly.



Intelligent Defrosting Control

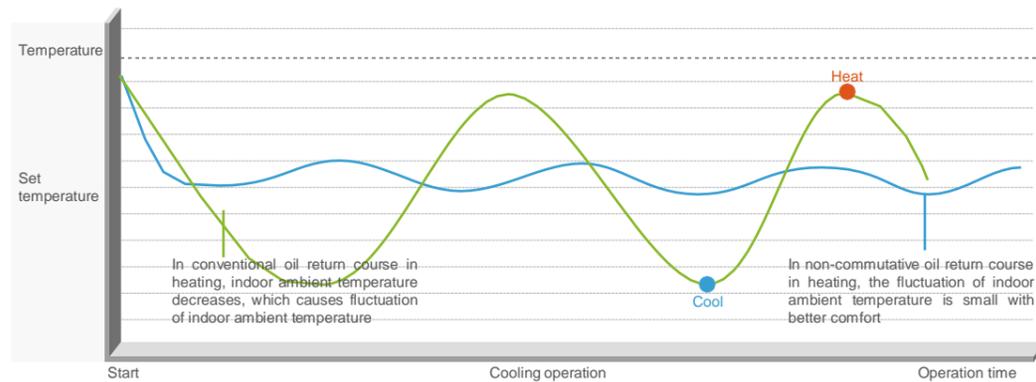
During the heating process, the frost status of the unit will be different after affecting by factors of outdoor ambient temperature, load status and operation time. Through real-time detection of operation parameters of the system, it can decide the defrosting time by intelligently estimating the thickness of frost, high pressure of system and blockage status of heat exchanger.



Note: This feature is fit for heat pump models only.

Non-commutative Oil Return Technology in Heating

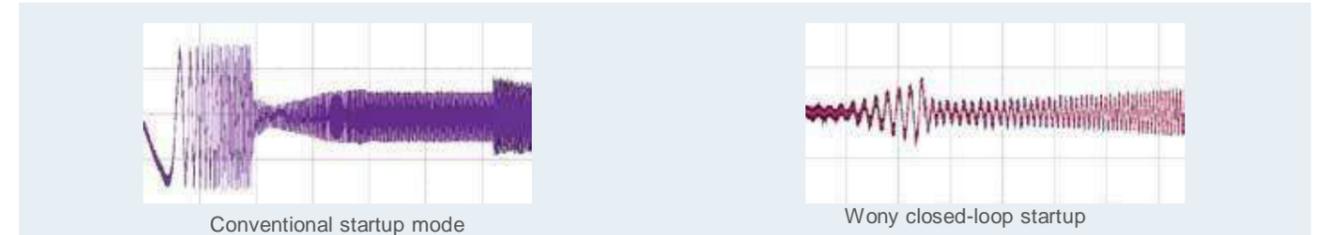
The unit can achieve non-commutative oil return in heating when outdoor ambient temperature is within 0~20°C. Thanks to this technology, indoor ambient temperature is more stable and comfort is improved in heating mode.



Reliable Operation

Compressor Closed-loop Startup Technology with More Reliable Startup

The self-innovative closed-loop startup control technology is adopted. Thanks to this technology, the startup current is small and startup is more reliable.



High Anti-interference Ability

The latest CAN bus communication technology is adopted, with non-polar communication and high anti-interference ability. Common communication wire can meet the communication demand with no need of specialized shielded wire. The customers can buy the communication wire by themselves, greatly reducing installation difficulties.



Advanced High-frequency Transformer with More Stable Voltage

- > The advanced switching power supply is adopted with lower power consumption and higher power efficiency.
- > Wide voltage-regulation range ensures stable voltage output when the voltage of grid fluctuates.
- > Compared with conventional transformer, the size of high-frequency transformer is small and the weight is light.

Refrigerant Cooling Technology

- > Usually, air-cooled fins are adopted for heat radiation. Due to large size and passive radiation, heat radiating effect is unsatisfactory; with refrigerant cooling technology, heat radiating effect is much better because of compact structure and active radiation. Module temperature is dropped from 80°C to 65°C, which will increase module life and stability.



Easy Installation And Transportation

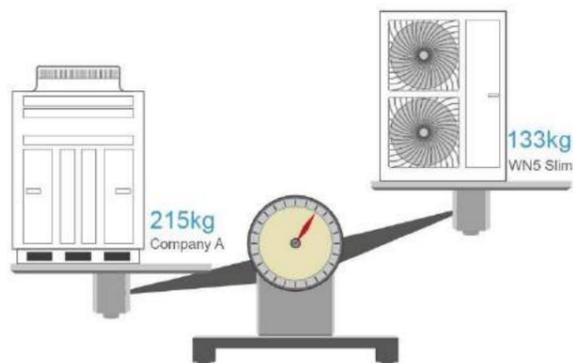
Ultra-long Connecting Pipe for More Convenient Connection

Under the subcooling control technology gained by adding subcooler, the indoor unit and outdoor unit of WN5 mini can operate reliably with longer connecting pipe.

	Company A	Wony WN5 Slim	Wony WN5 Mini
Total piping length	150m	300m	300m
Equivalent piping length	70m	150m	150m

Top Advanced Light and Compact Size

WN5 Slim adopts small and compact size design. The dimension of the unit is 1430(H)×940(W)×320(D). Compared with the normal product with the same capacity, size and weight are reduced a lot.



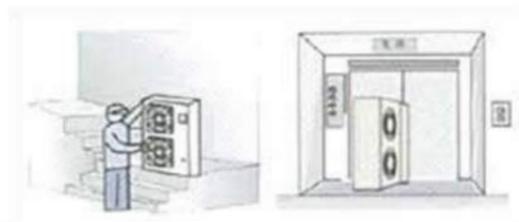
Easy Installation with Lower Construction Cost

The outdoor unit of WN5 Slim is with small size and light weight. Do not need fork lifter and crane for movement and installation



Movement by Stairs and Elevator

The outdoor unit of WN5 Slim is with compact and small size for saving space and easy movement. It can be carried by elevator or stairs.



WN5 Mini & Slim Lienup

Mini Lineup (220-240V/50Hz & 208-230V/60Hz & 380-415V/50/60Hz)

HP	Model	Product
4	WNV-120XM/B-T	
	WNV-120XM/B-X	
5	WNV-140XM/B-T	
	WNV-140XM/B-X	
	WNVL-140XM/B-T(D)	
6	WNV-160XM/B-T	
	WNV-160XM/B-X	
6.5	WNVL-160XM/B-T(D)	
	WNVL-180XM/B-T(D)	
	WNVL-180XM/B-T(D)	

Mini Lineup (220-240V/50Hz & 208-230V/60Hz)

HP	Model	Product
3	WNV-80XM/B-T	
	WNVL-80XM/B-T(D)	
3.5	WNV-100XM/B-T	
	WNVL-100XM/B-T(D)	
4	WNV-121XM/B-T	
	WNVL-120XM/B-T(D)	
5	WNV-141XM/B-T	

Slim Lineup (380-415V, 50/60Hz)

HP	Model	Product
8	WNV-224XM/B-X	
10	WNV-280XM/B-X	
12	WNV-335XM/B-X	

50Hz&60Hz (220-240V & 208-230V)

Model			WNV-80XM/D-U	WNV-100XM/D-U	WNV-121XM/D-U
Capacity range		HP	3	3.5	4
Capacity	Cooling	kW	8	10	12.1
	Heating	kW	9	11	13
EER		W/W	3.90	3.70	3.51
COP		W/W	4.74	4.40	4.81
Power supply		V/Ph/Hz	220-240/1/50 & 208-230/1/60		
Max. circuit/Fuse current		A	25	25	32
Power consumption	Cooling	kW	2.05	2.7	3.45
	Heating	kW	1.9	2.5	2.7
Maximum drive IDU NO.		unit	4	5	6
Refrigerant charge volume		kg	1.8	1.8	2
Sound pressure level		dB(A)	56	56	57
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9
Dimension(WxDxH)	Outline	mm	980x360x790	980x360x790	980x360x790
	Package	mm	1097x477x937	1097x477x937	1097x477x937
Net weight/Gross weight		kg	80/90	80/90	85/95
Loading quantity	40' GP	unit	96	96	96
	40' HQ	unit	96	96	96

Note: The ODU operation temperature range is -5~52°C in cooling and -20~27°C in heating.

Model			WNVL-80XM/D-U(E)	WNVL-100XM/D-U(E)	WNVL-120XM/D-U(E)
Capacity range		HP	3	3.5	4
Capacity	Cooling	kW	8	10	12
EER		W/W	3.90	3.70	3.51
Power supply		V/Ph/Hz	220-240/1/50 & 208-230/1/60		
Max. circuit/Fuse current		A	21.4	22.4	24
Power consumption	Cooling	kW	2.05	2.70	3.45
Maximum drive IDU NO.		unit	4	5	6
Refrigerant charge volume		kg	2.09	2.09	2.29
Sound pressure level		dB(A)	56	56	57
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9
Dimension (WxDxH)	Outline	mm	980x360x790	980x360x790	980x360x790
	Package	mm	1097x477x937	1097x477x937	1097x477x937
Net weight/Gross weight		kg	76/86	76/86	81/91
Loading quantity	40' GP	unit	96	96	96
	40' HQ	unit	96	96	96

Note: This ODU is cooling only with operation temperature range of -5~48°C in cooling.

Model			WNV-120XM/D-U	WNV-140XM/D-U	WNV-141XM/D-U	WNV-160XM/D-U
Capacity range		HP	4	5	5	6
Capacity	Cooling	kW	12.1	14	14.1	16
	Heating	kW	14	16.5	16	18
EER		W/W	3.99	3.90	3.60	3.37
COP		W/W	4.28	4.18	3.85	3.87
Power supply		V/Ph/Hz	220-240/1/50 & 208-230/1/60			
Max. circuit/Fuse current		A	32	40	40	40
Power consumption	Cooling	kW	3.03	3.59	3.92	4.75
	Heating	kW	3.27	3.95	4.16	4.65
Maximum drive IDU NO.		unit	7	8	8	9
Refrigerant charge volume		kg	3.3	3.3	3.3	3.3
Sound pressure level		dB(A)	57	58	58	58
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ19.05
Dimension(WxDxH)	Outline	mm	900x340x1345	900x340x1345	940x460x820	900x340x1345
	Package	mm	998x458x1500	998x458x1500	1023x563x973	998x458x1500
Net weight/Gross weight		kg	112/123	112/123	98/108	112/123
Loading quantity	40' GP	unit	57	57	88	57
	40' HQ	unit	57	57	88	57

Note:
 (1) The ODU operation temperature range is -5~52°C in cooling and -20~27°C in heating.
 (2) Heat radiation by refrigerant.

Model			WNVL-140XM/D-U(E)	WNVL-160XM/D-U(E)	WNVL-180XM/D-U(E)
Capacity range		HP	5	6	6.5
Capacity	Cooling	kW	14	16	18
EER		W/W	3.90	3.37	3.40
Power supply		V/Ph/Hz	220-240/1/50 & 208-230/1/60		
Max. circuit/Fuse current		A	33.7	36.3	37.5
Power consumption	Cooling	kW	3.59	4.75	5.30
Maximum drive IDU NO.		unit	8	9	10
Refrigerant charge volume		kg	3.3	3.3	3.3
Sound pressure level		dB(A)	58	58	58
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ19.05	Φ19.05
Dimension (WxDxH)	Outline	mm	900x340x1345	900x340x1345	900x340x1345
	Package	mm	998x458x1500	998x458x1500	998x458x1500
Net weight/Gross weight		kg	107/118	107/118	107/118
Loading quantity	40' GP	unit	57	57	57
	40' HQ	unit	57	57	57

Note:
 (1) This ODU is cooling only with operation temperature range of -5~48°C in cooling.

50Hz&60Hz (380-415V)

Model			WNV-120XM/D-Y	WNV-140XM/D-Y	WNV-160XM/D-Y
Capacity range		HP	4	5	6
Capacity	Cooling	kW	12.1	14	16
	Heating	kW	14	16.5	18
EER		W/W	3.99	3.90	3.37
COP		W/W	4.28	4.18	3.87
Power supply		V/Ph/Hz	380V-415V 3N- 50/60Hz		
Max. circuit/Fuse current		A	16		16
Power consumption	Cooling	kW	3.03	3.59	4.75
	Heating	kW	3.27	3.95	4.65
Maximum drive IDU NO.		unit	7	8	9
Refrigerant charge volume		kg	3.3	3.3	3.3
Sound pressure level		dB(A)	57	58	58
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ19.05
Dimension(WxDxH)	Outline	mm	900x340x1345	900x340x1345	900x340x1345
	Package	mm	998x458x1500	998x458x1500	998x458x1500
Net weight/Gross weight		kg	122/133	122/133	122/133
Loading quantity	40' GP	unit	57	57	57
	40' HQ	unit	57	57	57

Note: The ODU operation temperature range is -5~52°C in cooling and -20~27°C in heating.

Model			WNVL-224XM/D-Y(E)	WNVL-280XM/D-Y(E)	WNVL-335XM/D-Y(E)
Capacity range		HP	8	10	12
Capacity	Cooling	kW	22.4	28.0	33.5
	Heating	kW	24	30	35
EER		W/W	3.66	3.60	3.50
COP		W/W	4.90	4.90	4.90
Max. circuit/Fuse current		A	20	25	32
Power supply		V/Ph/Hz	380V-415V 3N- 50/60Hz		
Power consumption		kW	6.12	7.78	9.57
Maximum drive IDU NO.	Cooling	unit	13	17	20
	Heating	unit	13	17	20
Refrigerant charge volume		kg	5.5	7.1	8.0
Sound pressure level		dB(A)	60	62	63
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ12.7
	Gas	mm	Φ19.05	Φ22.2	Φ25.4
Dimension (WxDxH)	Outline	mm	940x320x1430	940x460x1615	940x460x1615
	Package	mm	1038x438x1580	1038x578x1765	1038x578x1765
Net weight/Gross weight		kg	133/144	166/183	177/194
Loading quantity	40' GP	unit	56	44	44
	40' HQ	unit	56	44	44

Slim

50Hz&60Hz (380-415V)

Model			WNV-224XM/D-Y	WNV-280XM/D-Y	WNV-335XM/D-Y
Capacity range		HP	8	10	12
Capacity	Cooling	kW	22.4	28.0	33.5
	Heating	kW	24	30	35
EER		W/W	3.66	3.60	3.50
COP		W/W	4.90	4.90	4.90
Max. circuit/Fuse current		A	20	25	32
Power supply		V/Ph/Hz	380V-415V 3N- 50/60Hz		
Power consumption	Cooling	kW	6.12	7.78	9.57
	Heating	kW	4.90	6.12	7.14
Maximum drive IDU NO.		unit	13	17	20
Refrigerant charge volume		kg	5.5	7.1	8.0
Sound pressure level		dB(A)	60	62	63
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ12.7
	Gas	mm	Φ19.05	Φ22.2	Φ25.4
Dimension (WxDxH)	Outline	mm	940x320x1430	940x460x1615	940x460x1615
	Package	mm	1038x438x1580	1038x578x1765	1038x578x1765
Net weight/Gross weight		kg	133/144	166/183	177/194
Loading quantity	40' GP	unit	56	44	44
	40' HQ	unit	56	44	44

Note: The ODU operation temperature range is -5~52°C in cooling and -20~27°C in heating.

WNV5C



Key Features

DC Inverter Technology to Improve Compression Efficiency

DC inverter compressor and high-performance high pressure chamber are adopted to reduce loss of overheat and improve compression efficiency from direct intake. Compared with low pressure chamber, the compression efficiency is improved. High-efficient permasyon motor is adopted to provide better performance than traditional DC inverter compressor.

DC Inverter Compressor

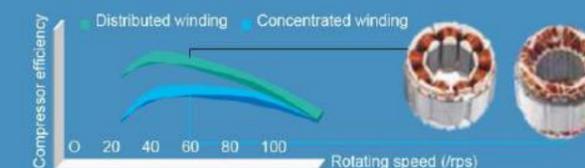
> High-performance high pressure chamber DC inverter compressor is adopted. High pressure chamber structure can directly reduce loss of overheat and improve compression efficiency, comparing with the compression efficiency of low pressure chamber.

> High-efficient permasyon motor is adopted to provide better performance than traditional DC inverter compressor.



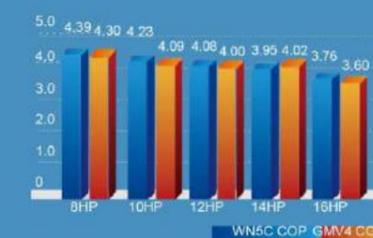
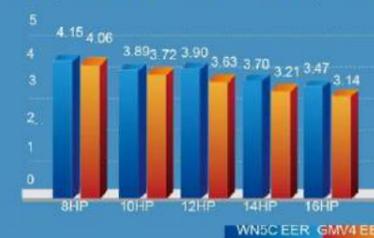
HP chamber structure can raise the high and middle frequency performance

New DC motor (concentrated winding) raises the low frequency performance



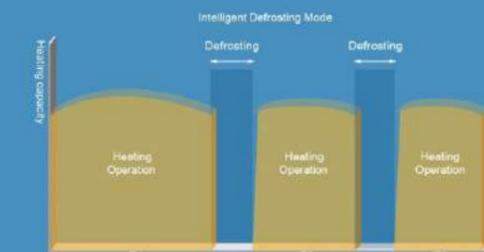
High Efficiency and More Energy Saving

Thanks to the advanced DC inverter technology, optimized system design and accurate intelligent control technology, EER of WN5C is up to 4.15 while COP is up to 4.39.



Intelligent Defrosting Control

During the heating process, the frost status of the unit will be different after affecting by factors of outdoor ambient temperature, load status and operation time. Through real-time detection of operation parameters of the system, it can decide the defrosting time by intelligently estimating the thickness of frost, high pressure of system and blockage status of heat exchanger.



Lower Power Consumption Operation Mode

As for the area with power consumption limited time period, the maximum power consumption can be set for the operation. Basing on the power consumption of unit and user's requirement, power consumption limitation can be set according to 100%, 90% or 80% of the capacity of complete unit. In this case, user can have more selection at the power consumption limited time period.

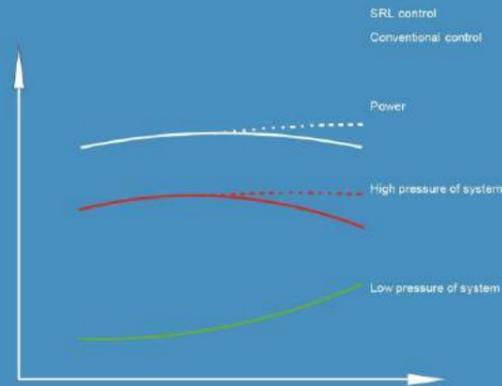


- 100%
- 90%
- 80%

Intelligent Power Consumption Limit

SRL (Self-reaction Load) Self-adaptive Control

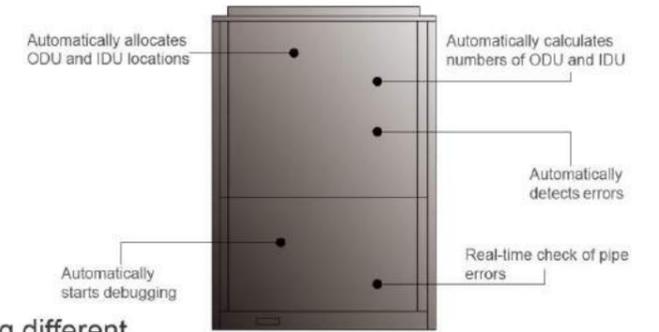
SRL (Self-reaction Load) can intelligently detect and control system parameters and automatically adapt to indoor cold/heat load requirement for reducing unit's power and improving the energy efficiency.



Engineering Debugging for Convenient Construction

1) Five Auto Debugging Features

- > Automatic allocation of IDU and ODU addresses
- > Automatic detection of IDU and ODU quantity
- > Automatic detection of errors
- > Automatic start-up of debugging
- > Real-time judgment of pipe errors



2) Diversified debugging methods for satisfying different requirements and improving debugging efficiency

- ① Button debugging of outdoor unit
- ② Special GMV debugging system
- ③ CE41-24/F(C) debugger has functions of debugging of complete unit, independent debugging of indoor unit, malfunction display, data record and so on. It's no need to connect special software and PC. Moreover, it can connect external USB storage data.



Debugging button
Three dual 8 nixie tubes display debugging status with high readability



Five-way Piping Connection

Piping and wiring are available to the front and back, left and right, and bottom.

The five-way piping connection reduces installation difficulty and cost, and improves the installation efficiency.



No Need Wired Controller for Debugging

When the project is not completed, debugging can be conducted for the system without wired controller to prevent damage to the wired controller during construction process. After the project is finished, install the wired controller, which can prevent unnecessary loss.

Model	WNV-224XN/B-N	WNV-280XN/B-N	WNV-335XN/B-N	WNV-400XN/B-N	WNV-450XN/B-N
WNV-224XN/B-N	●				
WNV-280XN/B-N		●			
WNV-335XN/B-N			●		
WNV-400XN/B-N				●	
WNV-450XN/B-N					●
WNV-504XN/B-N	●	●			
WNV-560XN/B-N		●●			
WNV-615XN/B-N		●	●		
WNV-680XN/B-N		●		●	
WNV-730XN/B-N		●			●
WNV-785XN/B-N			●		●
WNV-850XN/B-N				●	●
WNV-900XN/B-N					●●
WNV-960XN/B-N		●●		●	
WNV-1010XN/B-N		●●			●
WNV-1065XN/B-N		●	●		●
WNV-1130XN/B-N		●		●	●
WNV-1180XN/B-N		●			●●
WNV-1235XN/B-N			●		●●
WNV-1300XN/B-N				●	●●
WNV-1350XN/B-N					●●●
WNV-1410XN/B-N		●●		●	●
WNV-1460XN/B-N		●●			●●
WNV-1515XN/B-N		●	●		●●
WNV-1580XN/B-N		●		●	●●
WNV-1630XN/B-N		●			●●●
WNV-1685XN/B-N			●		●●●
WNV-1750XN/B-N				●	●●●
WNV-1800XN/B-N					●●●●

Specifications and Parameters

Model	WNV-224XN/B-N	WNV-280XN/B-N	WNV-335XN/B-N	WNV-400XN/B-N	WNV-450XN/B-N	
Capacity range	HP 8	10	12	14	16	
Capacity	Cooling	22.4	28	33.5	40	
	Heating	25	31.5	37.5	45	
EER	W/W 4.15	3.89	3.90	3.70	3.47	
COP	W/W 4.39	4.23	4.08	3.95	3.76	
Power supply	V/Ph/Hz 380V-415V 3N- 50/60Hz					
Min.circuit/Max.fuse current	A 15.7/20	20.9/25	24.7/32	29.5/40	33.8/40	
Power consumption	Cooling	5.40	7.20	8.60	10.80	12.95
	Heating	5.70	7.45	9.20	11.40	13.30
Maximum drive IDU NO.	unit 13	16	19	23	26	
Refrigerant charge volume	kg 5.9	6.7	8.2	9.8	10.3	
Sound pressure level	dB(A) 60	61	63	63	63	
Connecting pipe	Liquid	mm Φ9.52	Φ9.52	Φ12.7	Φ12.7	
	Gas	mm Φ19.05	Φ22.2	Φ25.4	Φ25.4	
Dimension (WxDxH)	Outline	mm 930x765x1605		mm 1340x765x1605		
	Package	mm 1010x840x1775		mm 1420x840x1775		
Net weight/Gross weight	kg 225/235	225/235	285/300	345/360	345/360	
Loading quantity	40' GP	unit 24	24	16	16	
	40' HQ	unit 24	24	16	16	

Specification of ODU Combination of WNV5C

Model	Power supply	Capacity		Power input		Dimension (WxDxH)	Airflow volume	ESP	Sound pressure level	sound pressure level at night	Pipe diameter			Min. circuit current	Max. fuse current	Weight
		Cooling	Heating	Cooling	Heating						Liquid	Gas	Oil balance			
		kW	kW	kW	kW	mm	m³/h	Pa	dB(A)	dB(A)	mm	mm	mm	A	A	kg
WNV-504XN/B-N	380-415V-3N-50Hz	50.4	56.5	12.60	13.15	(930x765x1605) x2	11400x2	82	64	45	Φ15.9	Φ28.6	Φ9.52	15.7+20.9	20 + 25	225x2
WNV-560XN/B-N		56	63.0	14.40	14.90	(930x765x1605) x2	11400x2	82	64	45	Φ15.9	Φ28.6	Φ9.52	20.9+20.9	25 + 25	225x2
WNV-615XN/B-N		61.5	69.0	15.80	16.65	(930x765x1605) +(1340x765x1605)	11400+14000	82	65	45	Φ15.9	Φ28.6	Φ9.52	20.9+24.7	25 + 32	285+225
WNV-680XN/B-N		68	76.5	18.00	18.85	(930x765x1605) +(1340x765x1605)	11400+14000	82	65	45	Φ15.9	Φ28.6	Φ9.52	20.9+29.5	25 + 40	225+345
WNV-730XN/B-N		73	81.5	20.15	20.75	(930x765x1605) +(1340x765x1605)	11400+14000	82	65	45	Φ19.05	Φ31.8	Φ9.52	20.9+33.8	25 + 40	225+345
WNV-785XN/B-N		78.5	87.5	21.55	22.50	(1340x765x1605) x2	14000x2	82	66	45	Φ19.05	Φ31.8	Φ9.52	24.7+33.8	40 + 40	285+345
WNV-850XN/B-N		85	95.0	23.75	24.70	(1340x765x1605) x2	14000x2	82	66	45	Φ19.05	Φ31.8	Φ9.52	29.5+33.8	40 + 40	345x2
WNV-900XN/B-N		90	100.0	25.90	26.60	(1340x765x1605) x2	14000x2	82	66	45	Φ19.05	Φ31.8	Φ9.52	33.8+33.8	40 + 40	345x2
WNV-960XN/B-N		96	108.0	25.20	26.30	(930x765x1605) x2+(1340x765x1605)	11400x2 +14000	82	67	45	Φ19.05	Φ31.8	Φ9.52	20.9+20.9+29.5	25 + 25 + 40	225x2 +345
WNV-1010XN/B-N		101	113.0	27.35	28.20	(930x765x1605) x2+(1340x765x1605)	11400x2 +14000	82	67	45	Φ19.05	Φ38.1	Φ9.52	20.9+20.9+33.8	25 + 25 + 40	225x2 +345
WNV-1065XN/B-N		106.5	119.0	28.75	29.95	(930x765x1605) +(1340x765x1605)x2	11400+14000x2	82	67	45	Φ19.05	Φ38.1	Φ9.52	20.9+24.7+33.8	25 + 40 + 40	225+285 +345
WNV-1130XN/B-N		113	126.5	30.95	32.15	(930x765x1605) +(1340x765x1605)x2	11400+14000x2	82	67	45	Φ19.05	Φ38.1	Φ9.52	20.9+29.5+33.8	25 + 40 + 40	225 +345x2
WNV-1180XN/B-N		118	131.5	33.10	34.05	(930x765x1605) +(1340x765x1605)x2	11400+14000x2	82	67	45	Φ19.05	Φ38.1	Φ9.52	20.9+33.8+33.8	25 + 40 + 40	225 +345x2
WNV-1235XN/B-N		123.5	137.5	34.50	35.80	(1340x765x1605)x3	14000x3	82	68	45	Φ19.05	Φ38.1	Φ9.52	24.7+33.8+33.8	40 + 40 + 40	285 +345x2
WNV-1300XN/B-N		130	145.0	36.70	38.00	(1340x765x1605)x3	14000x3	82	68	45	Φ19.05	Φ38.1	Φ9.52	29.5+33.8+33.8	40 + 40 + 40	345x3
WNV-1350XN/B-N		135	150.0	38.85	39.90	(1340x765x1605)x3	14000x3	82	68	47	Φ19.05	Φ38.1	Φ9.52	33.8+33.8+33.8	40 + 40 + 40	345x3
WNV-1410XN/B-N		141	158.0	38.15	39.60	(930x765x1605) x2+(1340x765x1605)x2	11400x2 +14000x2	82	69	47	Φ19.05	Φ41.3	Φ9.52	20.9+20.9 +29.5+33.8	25 + 25 + 40 + 40	225x2 +345x2
WNV-1460XN/B-N		146	163.0	40.30	41.50	(930x765x1605) x2+(1340x765x1605)x2	11400x2 +14000x2	82	69	47	Φ19.05	Φ41.3	Φ9.52	20.9+20.9 +33.8+33.8	25 + 25 + 40 + 40	225x2 +345x2
WNV-1515XN/B-N		151.5	169.0	41.70	43.25	(930x765x1605) +(1340x765x1605)x3	11400+14000x3	82	69	47	Φ19.05	Φ41.3	Φ9.52	20.9+24.7 +33.8+33.8	25 + 32 + 40 + 40	225+285 +345x2
WNV-1580XN/B-N		158	176.5	43.90	45.45	(930x765x1605) +(1340x765x1605)x3	11400+14000x3	82	69	47	Φ19.05	Φ41.3	Φ9.52	20.9+29.5 +33.8+33.8	25 + 40 + 40 + 40	225+345x3
WNV-1630XN/B-N	163	181.5	46.05	47.35	(930x765x1605) +(1340x765x1605)x3	11400+14000x3	82	69	47	Φ19.05	Φ41.3	Φ9.52	20.9+33.8 +33.8+33.8	25 + 40 + 40 + 40	225+345x3	
WNV-1685XN/B-N	168.5	187.5	47.45	49.10	(1340x765x1605)x4	14000x4	82	70	47	Φ19.05	Φ41.3	Φ9.52	24.7+33.8 +33.8+33.8	32 + 40 + 40 + 40	285+345x3	
WNV-1750XN/B-N	175	195.0	49.65	51.30	(1340x765x1605)x4	14000x4	82	70	47	Φ19.05	Φ41.3	Φ9.52	29.5+33.8 +33.8+33.8	40 + 40 + 40 + 40	345x4	
WNV-1800XN/B-N	180	200.0	51.80	53.20	(1340x765x1605)x4	14000x4	82	70	47	Φ19.05	Φ41.3	Φ9.52	33.8+33.8 +33.8+33.8	40 + 40 + 40 + 40	345x4	

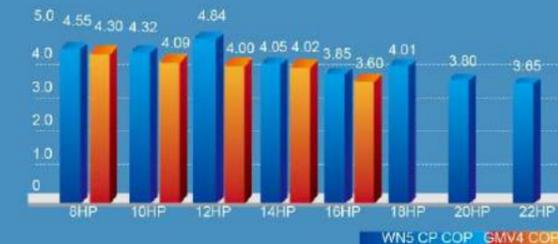
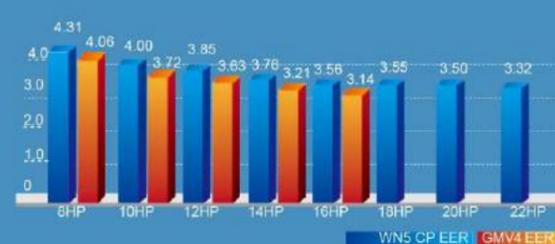
WNV5 CP



Key Features

High Efficiency and More Energy Saving

Thanks to the advanced DC inverter technology, optimized system design and accurate intelligent control technology, EER of WN5 CP is up to 4.31 while COP is up to 4.84.



88HP Max. Capacity-the Largest Free Combination

Max. capacity of single outdoor unit reaches 22HP and max. combination capacity is even up to 88HP, reaching industry leading level.

Max. combination capacity is extended to 88HP



High Corrosion Resistant

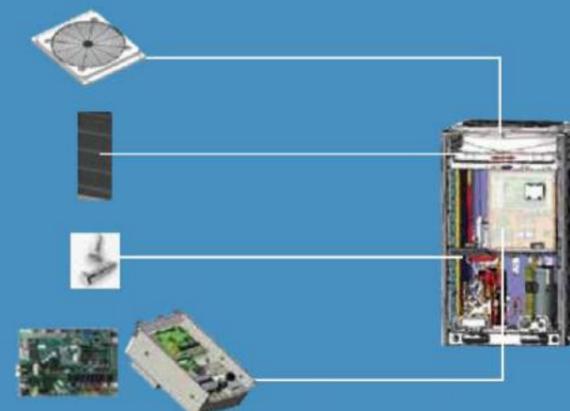
The WN5 CP unit adopts corrosion-resistance materials on both metal and electronic parts, which enables it to be installed near the sea.

The plastic planting grille protects against salt. All panel parts are corrosion resistant to protect against brine.

Corrosion resistant heat-exchange fins are suitable for seaside areas and exposed to acidic substances.

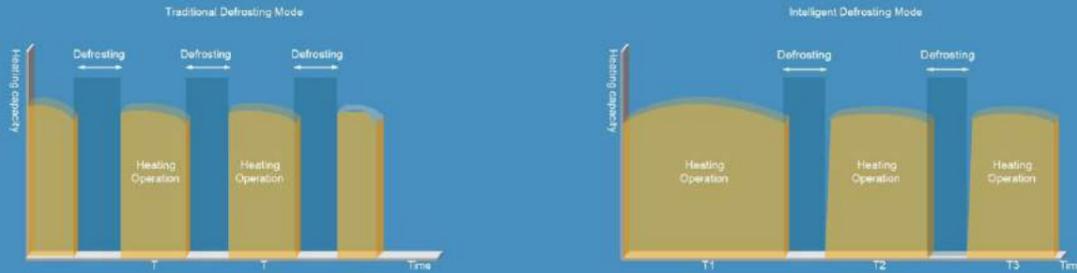
All screws are anti-rust.

All PCB parts in the unit are coated with three proofing glue. The outer side of the control box metal cover is the spray-painted.



Intelligent Defrosting Control

During the heating process, the frost status of the unit will be different after affecting by factors of outdoor ambient temperature, load status and operation time. Through real-time detection of operation parameters of the system, it can decide the defrosting time by intelligently estimating the thickness of frost, high pressure of system and blockage status of heat exchanger.



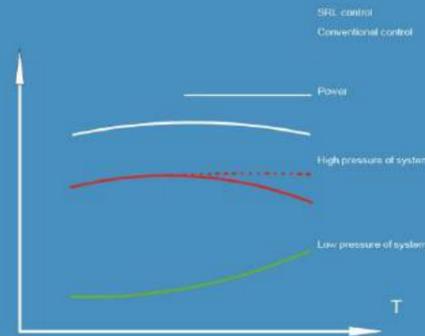
Lower Power Consumption Operation Mode

As for the area with power consumption limited time period, the maximum power consumption can be set for the operation. Basing on the power consumption of unit and user's requirement, power consumption limitation can be set according to 100%, 90% or 80% of the capacity of complete unit. In this case, user can have more selection at the power consumption limited time period.



SRL (Self-reaction Load) Self-adaptive Control

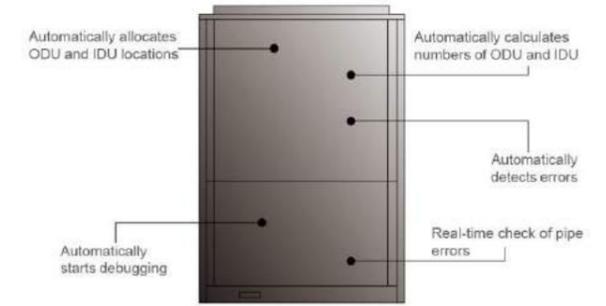
SRL (Self-reaction Load) can intelligently detect and control system parameters and automatically adapt to indoor cold/heat load requirement for reducing unit's power and improving the energy efficiency.



Engineering Debugging for Convenient Construction

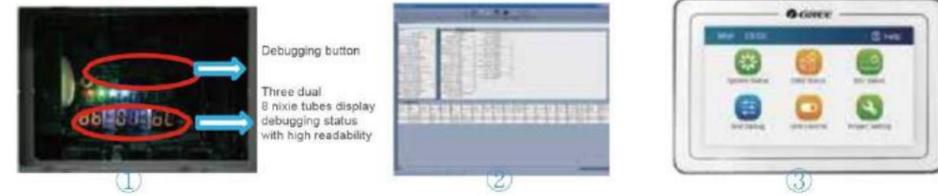
Five Auto Debugging Features

- > Automatic allocation of IDU and ODU addresses
- > Automatic detection of IDU and ODU quantity
- > Automatic detection of errors
- > Automatic start-up of debugging
- > Real-time judgment of pipe errors



2) Diversified debugging methods for satisfying different requirements and improving debugging efficiency

- ① Button debugging of outdoor unit
- ② Special GMV debugging system
- ③ CE41-24/F(C) debugger has functions of debugging of complete unit, independent debugging of indoor unit, malfunction display, data record and so on. It's no need to connect special software and PC. Moreover, it can connect external USB storage data.



Five-way Piping Connection

Piping and wiring are available to the front and back, left and right, and bottom.

The five-way piping connection reduces installation difficulty and cost, improving the installation efficiency.



No Need Wired Controller for Debugging

When the project is not completed, debugging can be conducted for the system without wired controller to prevent damage to the wired controller during construction process. After the project is finished, install the wired controller, which can prevent unnecessary loss.

Model	WNV-224XN/C1-Y	WNV-280XN/C1-Y	WNV-335XN/C1-Y	WNV-400XN/C1-Y	WNV-450XN/C1-Y	WNV-504XN/C1-Y	WNV-560XN/C1-Y	WNV-615XN/C1-Y
WNV-224XN/C1-Y	●							
WNV-280XN/C1-Y		●						
WNV-335XN/C1-Y			●					
WNV-400XN/C1-Y				●				
WNV-450XN/C1-Y					●			
WNV-504XN/C1-Y						●		
WNV-560XN/C1-Y							●	
WNV-615XN/C1-Y								●
WNV-680XN/C1-Y		●		●				
WNV-730XN/C1-Y		●			●			
WNV-785XN/C1-Y		●				●		
WNV-850XN/C1-Y		●					●	
WNV-900XN/C1-Y		●						●
WNV-960XN/C1-Y			●					●
WNV-1010XN/C1-Y				●				●
WNV-1065XN/C1-Y					●			●
WNV-1130XN/C1-Y						●		●
WNV-1180XN/C1-Y							●	●
WNV-1235XN/C1-Y								●●
WNV-1300XN/C1-Y		●			●		●	●
WNV-1350XN/C1-Y		●			●			●
WNV-1410XN/C1-Y			●		●			●
WNV-1460XN/C1-Y		●					●	●
WNV-1515XN/C1-Y		●						●●
WNV-1580XN/C1-Y			●					●●
WNV-1630XN/C1-Y				●				●●
WNV-1685XN/C1-Y					●			●●
WNV-1750XN/C1-Y						●		●●
WNV-1800XN/C1-Y							●	●●
WNV-1854XN/C1-Y								●●●
WNV-1908XN/C1-Y		●			●		●	●
WNV-1962XN/C1-Y		●				●	●	●
WNV-2016XN/C1-Y		●					●●	●
WNV-2072XN/C1-Y		●					●	●●
WNV-2128XN/C1-Y		●						●●●
WNV-2184XN/C1-Y			●					●●●
WNV-2240XN/C1-Y				●				●●●
WNV-2295XN/C1-Y					●			●●●
WNV-2350XN/C1-Y						●		●●●
WNV-2405XN/C1-Y							●	●●●
WNV-2460XN/C1-Y								●●●●

HP	Model	Product
8HP	WNV-224XN/C1-Y	
10HP	WNV-280XN/C1-Y	
12HP	WNV-335XN/C1-Y	
14HP	WNV-400XN/C1-Y	
16HP	WNV-450XN/C1-Y	
18HP	WNV-504XN/C1-Y	
20HP	WNV-560XN/C1-Y	
22HP	WNV-615XN/C1-Y	

Specifications and Parameters

Model		WNV-224XN/C1-Y	WNV-280XN/C1-Y	WNV-335XN/C1-Y	WNV-400XN/C1-Y
Capacity range	HP	8	10	12	14
Capacity	Cooling	kW	22.4	28	33.5
	Heating	kW	25	31.5	37.5
EER	W/W	4.31	4.00	3.85	3.76
COP	W/W	4.55	4.32	4.84	4.05
Power supply	V/Ph/Hz	380V-415V 3N- 50/60Hz			
Min.circuit/Max.fuse current	A	15.7/20	20.9/25	22.5/32	28.8/40
Power consumption	Cooling	kW	5.2	7	8.7
	Heating	kW	5.5	7.3	7.75
Maximum drive IDU NO.	unit	13	16	19	23
Refrigerant charge volume	kg	5.9	6.7	9	9.8
Sound pressure level	dB(A)	60	61	61	63
Connecting pipe	Liquid	mm			
	Gas	mm			
	Oil balance	mm			
Dimension (WxDxH)	Outline	mm	930x765x1605	930x765x1605	930x765x1605
	Package	mm	1010x840x1775	1010x840x1775	1010x840x1775
Net weight/Gross weight	kg	225/235	225/235	235/250	360/375
Loading quantity	40' GP	unit	24	24	24
	40' HQ	unit	24	24	24

Model		WNV-450XN/C1-Y	WNV-504XN/C1-Y	WNV-560XN/C1-Y	WNV-615XN/C1-Y
Capacity range	HP	16	18	20	22
Capacity	Cooling	kW	45	50.4	56
	Heating	kW	50	56.5	63
EER	W/W	3.56	3.55	3.50	3.32
COP	W/W	3.85	4.01	3.80	3.65
Power supply	V/Ph/Hz	380V-415V 3N- 50/60Hz			
Min.circuit/Max.fuse current	A	33.2/40	45.4/50	51.1/63	59.2/63
Power consumption	Cooling	kW	12.65	14.2	16
	Heating	kW	13	14.1	16.6
Maximum drive IDU NO.	unit	26	29	33	36
Refrigerant charge volume	kg	10.3	11.3	14.3	14.3
Sound pressure level	dB(A)	63	63	63	64
Connecting pipe	Liquid	mm			
	Gas	mm			
	Oil balance	mm			
Dimension (WxDxH)	Outline	mm	1340x765x1605	1340x765x1740	1340x765x1740
	Package	mm	1420x840x1775	1420x840x1910	1420x840x1910
Net weight/Gross weight	kg	360/375	360/375	385/400	385/400
Loading quantity	40' GP	unit	16	16	16
	40' HQ	unit	16	16	16

Specifications of ODU Combination of WNV5 CP

Model	Power supply	Capacity		Power input		Dimension(WxDxH)	Airflow volume	Sound pressure level	Operation sound pressure level at night	Connecting pipe diameter			Min.circuit current	Max. fuse current	Weight	
		Cooling	Heating	Cooling	Heating					Liquid	Gas	Oil				
		KW	KW	KW	KW	m ³	kg									
WNV-680XNC1-Y	380 - 415V /3Ph /50 /60Hz	68.0	76.5	17.7	18.4	(930x765x1605) +(1340x765x1605)	11400+ 14000	82	65	43	Φ15.9	Φ28.6	Φ9.52	20.9+28.8	25 + 40	225+360
WNV-730XNC1-Y		73.0	81.5	19.7	20.3	(930x765x1605) +(1340x765x1605)	11400+ 14000	82	65	43	Φ19.05	Φ31.8	Φ9.52	20.9+33.2	25 + 40	225+360
WNV-785XNC1-Y		78.4	88.0	21.2	21.4	(930x765x1605) +(1340x765x1740)	11400+ 16000	82	66	43	Φ19.05	Φ31.8	Φ9.52	20.9+45.4	25 + 50	225+360
WNV-850XNC1-Y		84.0	94.5	23.0	23.9	(930x765x1605) +(1340x765x1740)	11400+ 16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	20.9+51.1	25 + 63	225+385
WNV-900XNC1-Y		89.5	100.5	25.5	26.2	(930x765x1605) +(1340x765x1740)	11400+ 16000	82	67	43	Φ19.05	Φ31.8	Φ9.52	20.9+59.2	25 + 63	225+385
WNV-960XNC1-Y		95.0	106.5	27.2	26.7	(930x765x1605) +(1340x765x1740)	11400 +16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	22.5+59.2	32 + 63	235+385
WNV-1010XNC1-Y		101.5	114.0	29.2	30.0	(1340x765x1605) +(1340x765x1740)	14000+ 16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	28.8+59.2	40 + 63	360+385
WNV-1065XNC1-Y		106.5	119.0	31.2	31.9	(1340x765x1605) +(1340x765x1740)	14000+ 16000	82	68	43	Φ19.05	Φ38.1	Φ9.52	33.2+59.2	40 + 63	360+385
WNV-1130XNC1-Y		111.9	125.5	32.7	33.0	(1340x765x1740) x2	16000x2	82	68	43	Φ19.05	Φ38.1	Φ9.52	45.4+59.2	50 + 63	360+385
WNV-1180XNC1-Y		117.5	132.0	34.5	35.5	(1340x765x1740) x2	16000x2	82	69	43	Φ19.05	Φ41.3	Φ9.52	51.1+59.2	63 + 63	385x2
WNV-1235XNC1-Y		123.0	138.0	37.0	37.8	(1340x765x1740) x2	16000x2	82	69	43	Φ19.05	Φ41.3	Φ9.52	59.2+59.2	63 + 63	385x2
WNV-1300XNC1-Y		129.0	144.5	35.7	36.9	(930x765x1605)+(1340x765x1605) +(1340x765x1740)	11400+14000 +16000	82	69	45	Φ19.05	Φ41.3	Φ9.52	20.9+33.2+51.1	25 + 40 + 63	225+360 +385
WNV-1350XNC1-Y		134.5	150.5	38.2	39.2	(930x765x1605)+(1340x765x1605) +(1340x765x1740)	11400+14000 +16000	82	69	45	Φ19.05	Φ41.3	Φ9.52	20.9+33.2+59.2	25 + 40 + 63	225+360 +385
WNV-1410XNC1-Y		140.0	156.5	39.9	39.7	(930x765x1605)+(1340x765x1605) +(1340x765x1740)	11400+14000 +16000	82	69	45	Φ19.05	Φ41.3	Φ9.52	22.5+33.2+59.2	32 + 40 + 63	235+360 +385
WNV-1460XNC1-Y		145.5	163.5	41.5	42.8	(930x765x1605) +(1340x765x1740) x2	11400+ 16000x2	82	69	45	Φ19.05	Φ41.3	Φ9.52	20.9+51.1+59.2	25 + 63 + 63	225+385x2
WNV-1515XNC1-Y		151.0	169.5	44.0	45.1	(930x765x1605) +(1340x765x1740) x2	11400+ 16000x2	82	70	45	Φ19.05	Φ41.3	Φ9.52	20.9+59.2+59.2	25 + 63 + 63	225+385x2
WNV-1580WM/B1-X		156.5	175.5	45.7	45.6	(930x765x1605) +(1340x765x1740) x2	11400+ 16000x2	82	70	45	Φ22.2	Φ44.5	Φ9.52	22.5+59.2+59.2	32 + 63 + 63	235+385x2
WNV-1630XNC1-Y		163.0	183.0	47.7	48.9	(1340x765x1605) +(1340x765x1740) x2	14000+ 16000x2	82	70	45	Φ22.2	Φ44.5	Φ9.52	28.8+59.2+59.2	40 + 63 + 63	360+385x2
WNV-1685XNC1-Y		168.0	188.0	49.7	50.8	(1340x765x1605) +(1340x765x1740) x2	14000+ 16000x2	82	70	45	Φ22.2	Φ44.5	Φ9.52	33.2+59.2+59.2	40 + 63 + 63	360+385x2
WNV-1750XNC1-Y		173.4	194.5	51.2	51.9	(1340x765x1740) x3	16000x3	82	70	45	Φ22.2	Φ44.5	Φ9.52	45.4+59.2+59.2	50 + 63 + 63	360+385x2
WNV-1800XNC1-Y		179.0	201.0	53.0	54.4	(1340x765x1740) x3	16000x3	82	71	45	Φ22.2	Φ44.5	Φ9.52	51.1+59.2+59.2	63 + 63 + 63	385x3
WNV-1854XNC1-Y		184.5	207.0	55.5	56.7	(1340x765x1740) x3	16000x3	82	71	45	Φ22.2	Φ44.5	Φ9.52	59.2+59.2+59.2	63+63+63	385x3
WNV-1908XNC1-Y		190.5	213.5	54.2	55.8	(930x765x1605)+(1340x765x1605) +(1340x765x1740) x2	11400+14000 +16000x2	82	72	47	Φ22.2	Φ44.5	Φ9.52	20.9+33.2+51.1+59.2	25+40+63+63	225+360 +385x2
WNV-1962XNC1-Y		195.9	220.0	55.7	56.9	(930x765x1605) +(1340x765x1740) x3	11400+ 16000x3	82	73	47	Φ22.2	Φ44.5	Φ9.52	20.9+45.4+51.1+59.2	25+50+63+63	225+360 +385x2

WNV5 MAX



Key Features

DC Inverter Technology to Improve Compression Efficiency

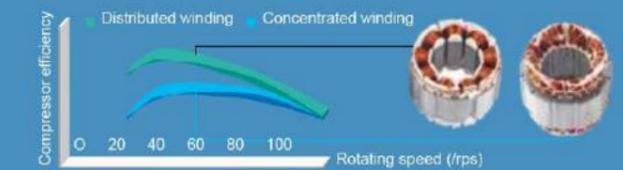
DC inverter compressor and high-performance high pressure chamber are adopted to reduce loss of overheat and improve compression efficiency from direct intake. Compared with low pressure chamber, the compression efficiency is improved. High-efficient permasyon motor is adopted to provide better performance than traditional DC inverter compressor.

DC Inverter Compressor

> High-performance high pressure chamber DC inverter compressor is adopted. High pressure chamber structure can directly reduce loss of overheat and improve compression efficiency, comparing with the compression efficiency of low pressure chamber.

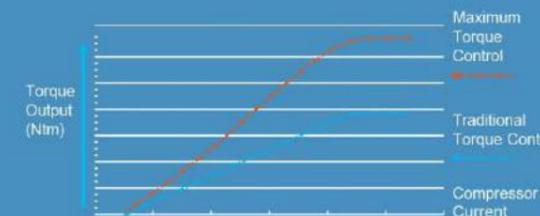


> High-efficient permasyon motor is adopted to provide better performance than traditional DC inverter compressor.



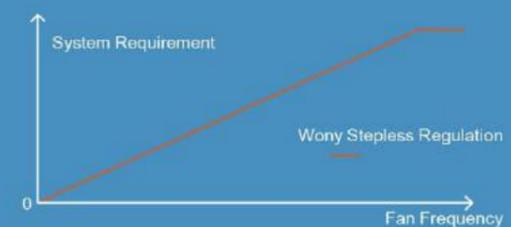
> Technology of Maximum Torque Control with Minimum Current

It can reduce energy loss caused by device winding so as to realize higher efficiency.



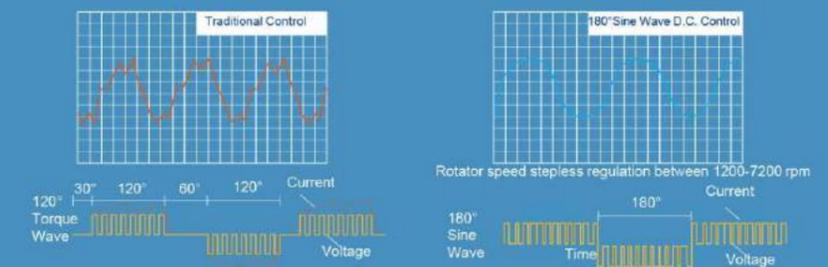
> Low-frequency Torque Control

It can directly control motor torque, through which fan motor can run at a low speed. Users will feel more comfortable while requirements of the system are also met.



> 180° Sine Wave DC Speed Varying Technology

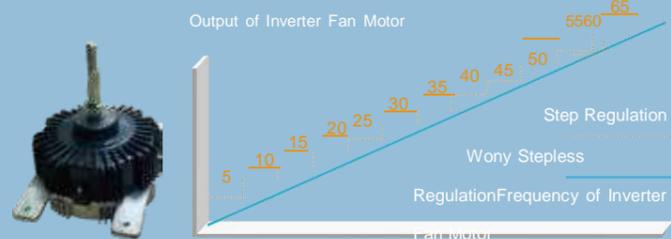
It can satisfy various places' demands for different temperature and is able to save a great deal of electricity and provide users with utmost comfort at the same time.



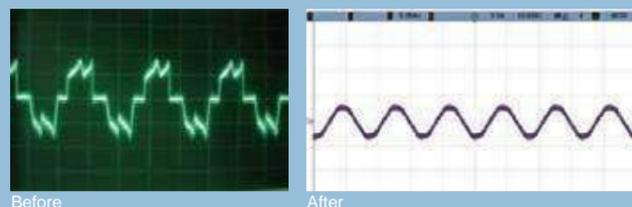
Sensorless DC Inverter Fan Motor

> Stepless speed regulation ranges from 5Hz to 65Hz. Compared with traditional inverter motors, the

operation is more energy-saving.



> Sensorless control technology guarantees lower noise, less vibration and steadier operation.



Wide Range of Operation Condition

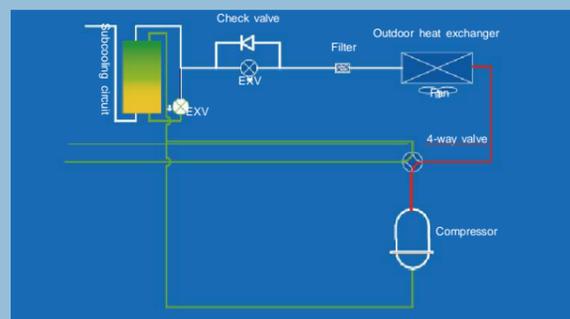
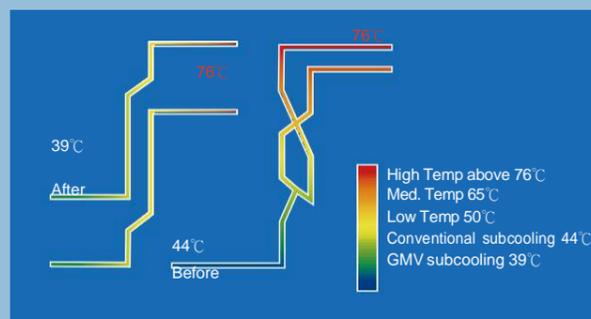
Outdoor operation temperature range is expanded to -5°C~52°C in cooling and -20°C~24°C in heating.



Sub-cooling Control Technology to Ensure Optimal Cooling and Heating

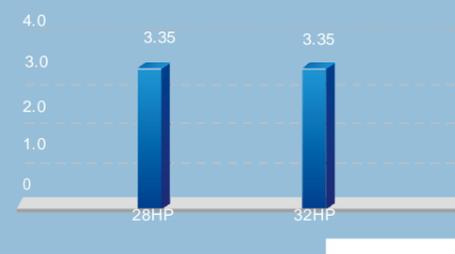
Heat exchange loop can control the first subcooling process of heat exchanger. Subcooling dewony can reach 11°C.

Subcooling loop can realize 9 °C second subcooling to guarantee cooling and heating performance.



High Efficiency and More Energy Saving

Thanks to the advanced DC inverter compressor and DC fan, optimized system design and accurate intelligent control technology, EER of WNV5 Max is up to 3.25 while COP is up to 3.82.



Energy-saving Operation Control Technology

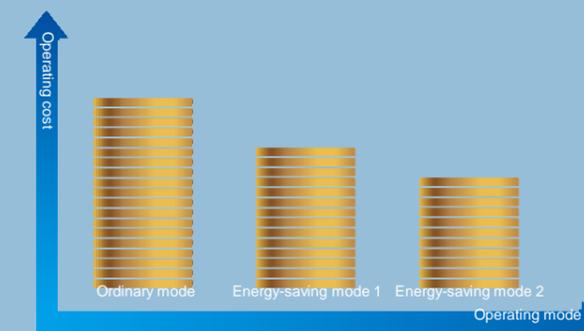
The WNV5 MAX system has 2 modes for energy saving, which can be chosen to meet different electricity demands.

Mode 1:

When unit is set in auto energy-saving mode, it will automatically adjust the parameters of control targets according to running status so as to achieve lower power consumption.

Mode 2:

When unit is set in compulsory energy-saving mode, it will limit system power output in a compulsory way.



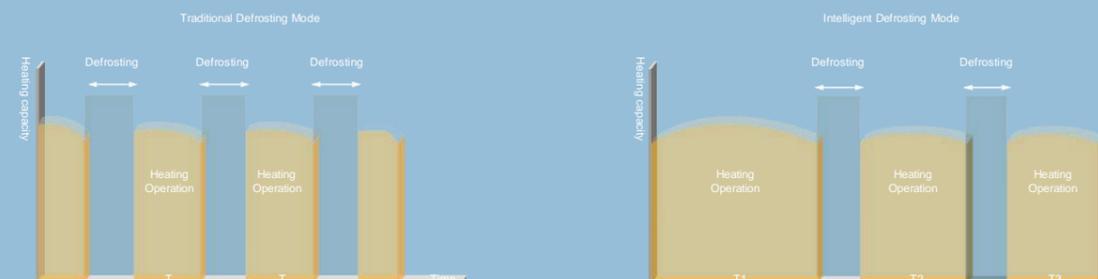
G-type Heat Exchanger

G-type heat exchanger fully utilizes the turning angle and vertical space to ensure sufficient heat exchange area. Stream heat exchange features high control precision and efficient heat exchange to guarantee satisfactory cooling and heating performance.



Intelligent Defrosting Control

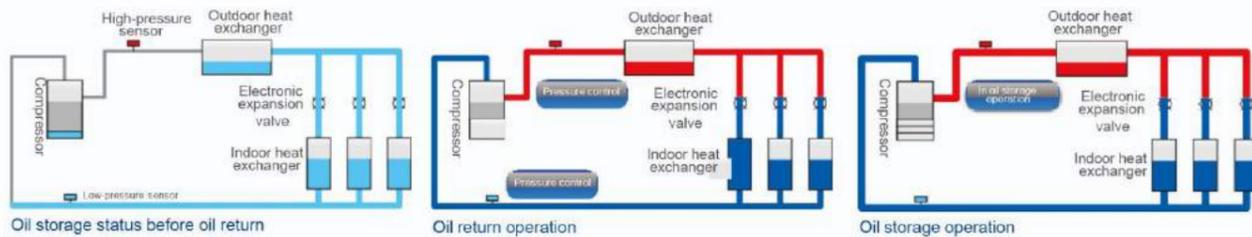
During the heating process, the frost status of the unit will be different after affecting by factors of outdoor ambient temperature, load status and operation time. Through real-time detection of operation parameters of the system, it can decide the defrosting time by intelligently estimating the thickness of frost, high pressure of system and blockage status of heat exchanger.



Oil Return Control Technology

New Oil Return Control

> Wony new oil return control technology effectively controls system oil return and oil storage status of each compressor, which greatly improves the operation lifespan of compressor.

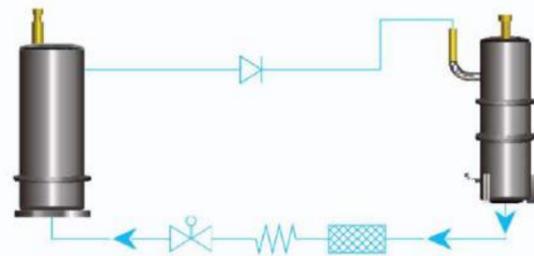


Specialized Compressor Oil Storage Control

> The system applies specialized compressor oil storage technology, which can control the lowest oil level for compressor operation.

Oil Circuit Malfunction Detection for Real-time Judgment and Protection

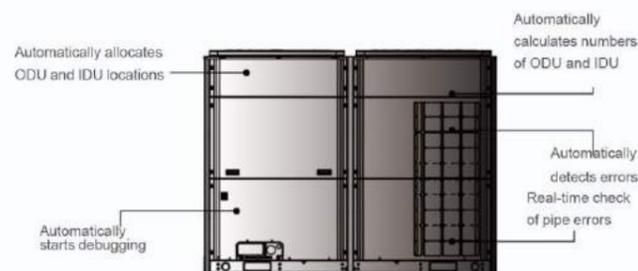
> For WN5 MAX, detection sensor is designed for the oil supply circuit of each compressor. This is to realize real-time judgment and detection for the oil supply circuit. When the compressor oil supply circuit is malfunctioning, shutdown protection will be enabled immediately to avoid further damage to the compressor. Maintenance cost for the system is reduced.



Engineering Debugging for Convenient Construction

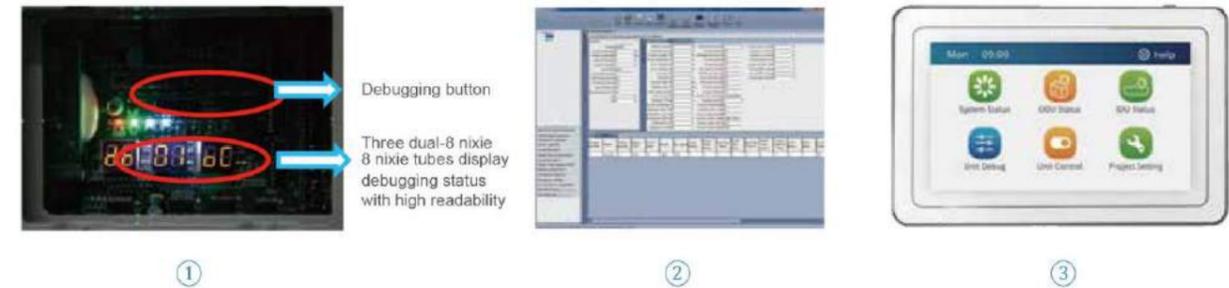
1) Five Auto Debugging Features

- > Automatic allocation of IDU and ODU addresses
- > Automatic detection of IDU and ODU quantity
- > Automatic detection of errors
- > Automatic start-up of debugging
- > Real-time judgment of pipe errors



2) Diversified debugging methods for satisfying different requirements and improving debugging efficiency

- ① Button debugging of outdoor unit
- ② Special GMV debugging system
- ③ CE41-24/F(C) debugger has functions of debugging of complete unit, independent debugging of indoor unit, malfunction display, data record and so on. It's no need to connect special software and PC. Moreover, it can connect external USB storage data.



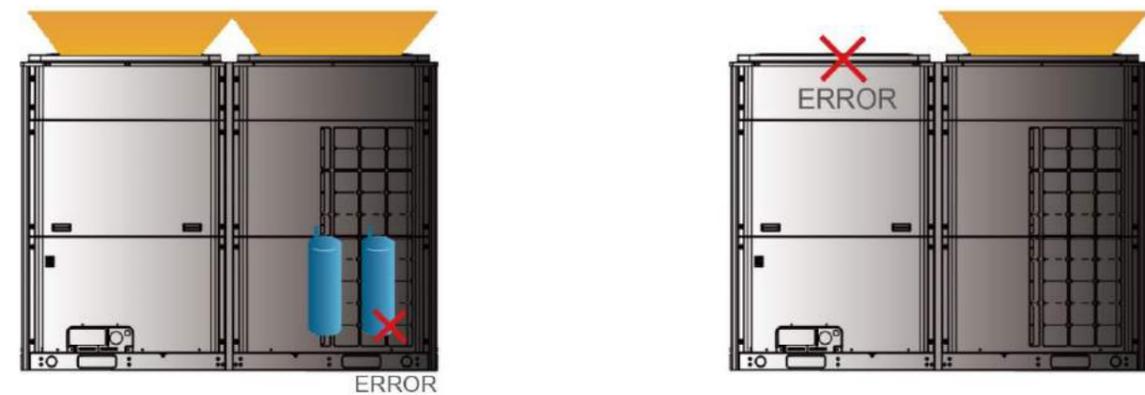
Excellent Emergency Operation Function to Ensure Reliable Operation

Emergency Operation of Compressor

> All the compressors in each single module are DC inverter based. when one compressor has error, others will perform the emergency operation.

Emergency Operation of Fan

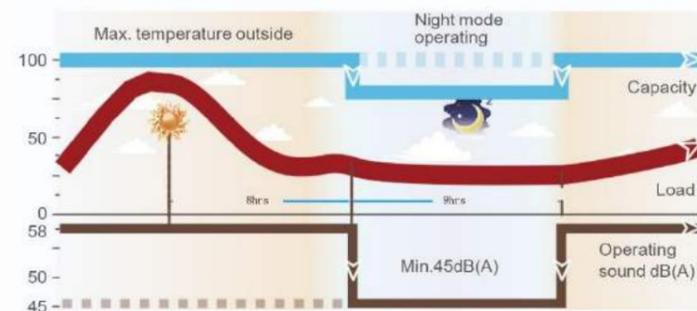
> Double-fan design ensures that one fan can still work even if the other one has error.



Outdoor Unit Quiet Mode and Quiet Control

Quiet at Night

> The system can record the highest outdoor temperature. At night, the system will automatically turn to quiet mode. There are 9 quiet modes which can be set according to actual needs.



Quiet in Compulsion

> The system can also be set in this mode to ensure low noise as long as it is operating. Noise is as low as 45dB(A).



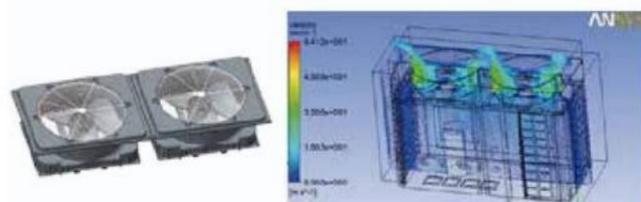
Quiet Control

1) Optimized Bossing Design

> After many times of CFD tests, a new fan bossing structure has been developed to reduce vibration of fan during running. Noise can be reduced by 3dB(A).

2) Aerodynamics 3D Axial Fan

> Compared with conventional fan, it can increase air volume by 12%, improving efficiency as well as lowering noise.



WN5 MAX Lineup

HP	Model	Product
28	WNW-785X/C-Y	
32	WNW-900 X/C-Y	

Specifications and Parameters

Model		WNV-785W/B-X		WNV-900W/B-X		
Capacity range	HP	28		32		
Capacity	Cooling	kW	78.5	90		
	Heating	kW	87.5	100		
EER	W/W	3.35		3.35		
COP	W/W	3.80		3.85		
Power supply	V/Ph/Hz	380V-415V 3N- 50/60Hz				
Min.circuit/Max.fuse current	A	55.4/63		71.5/80		
Power consumption	Cooling	kW	23.4	26.9		
	Heating	kW	23	26		
Maximum drive IDU NO.	unit	46		53		
Refrigerant charge volume	kg	18.9		24		
Sound pressure level	dB(A)	65		65		
Connecting pipe	Liquid	mm	Φ19.05		Φ19.05	
	Gas	mm	Φ31.8		Φ31.8	
Dimension (WxDxH)	Outline	mm	2200x880x1675		2200x880x1675	
	Package	mm	2267x952x1867		2267x952x1867	
Net weight/Gross weight	kg	500/535		535/565		
Loading quantity	40'GP	unit	12		12	
	40'HQ	unit	12		12	

WNV5 Heat Recovery

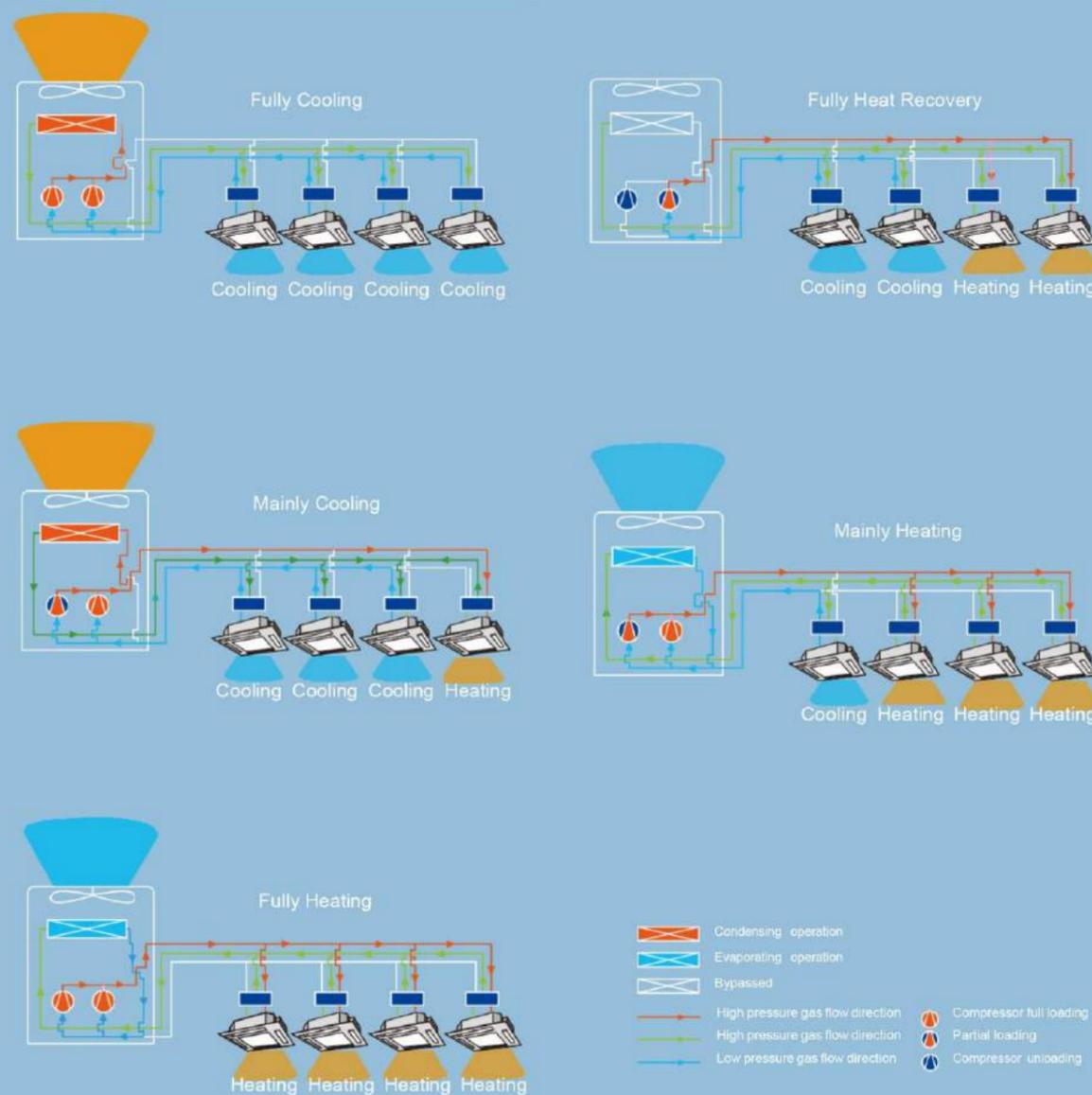


Key Features

High Efficiency

WN5 Heat Recovery System embodies the excellent features of WN5 (DC inverter technology, DC fan linkage control, precise control of capacity output, balancing control of refrigerant, original oil balancing technology with high pressure chamber, high-efficiency output control, low-temperature operation control technology, super heating technology, high adaptability for project, environmental refrigerant). Its energy efficiency is improved by 78% compared with conventional multi VRF.

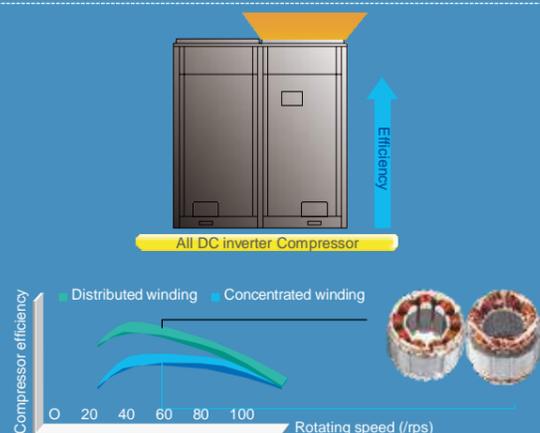
Five Efficient Operation Modes



All DC Inverter Technology to Improve Compression Efficiency

> All DC inverter compressor is used in this system. It can directly intake gas to reduce loss of overheat and improve efficiency.

> High-efficient permasyon motor is adopted to provide better performance than traditional DC inverter compressor.



High Pressure Chamber Design What's high pressure chamber?

The low-temperature and low-pressure refrigerant gas inhaled from the suction inlet of compressor will change to high-temperature and high-pressure gas after compression by scroll plate. Then the gas will go out from the exhaust at the center of fixed scroll and get into the lower chamber of compressor, so that the chamber of compressor is in high temperature and high pressure.

What's the benefits of high pressure chamber?

High pressure chamber compressor inhales directly to reduce overheat suction loss and improve compression efficiency.



HP chamber structure can raise the high and middle frequency performance

New DC motor (concentrated winding) raises the low frequency performance



Wider Applicable Location

WNV5 can realize a combination of 4 outdoor unit modules connecting with as many as 80 indoor units. It's especially applicable for business buildings or hotels.

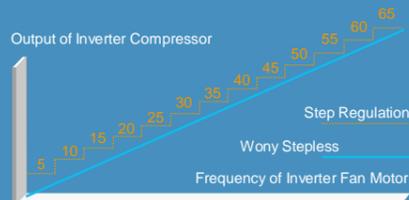


Max. IDU Connection: 80 sets

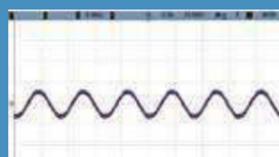
Sensorless DC Inverter Fan Motor

Stepless speed regulation ranges from 5Hz to 65Hz. Compared with traditional inverter motors, the operation is more energy-saving.

Sensorless control technology guarantees lower noise, less vibration and steadier operation.



Before



After



Comfortable Design for a Better Life

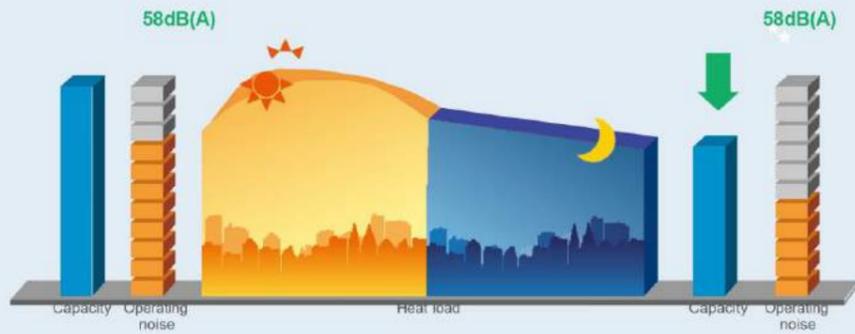
WNS

WNS

Intelligent Quiet Function at Night

Quiet at Night

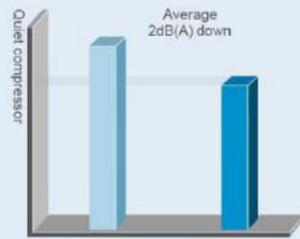
> Intelligently adjustment of outdoor fan control can minimize the noise during night time. Up to 8dB(A) can be reduced and operation noise at night is as low as 50dB(A).



> Low Noise Design

HP chamber compressor has lower exhaust pressure fluctuation so that noise is lower

The optimized design of condensing fan blade reduces the air flow turbulence among blades, so that the noise is lower.



Individual Control for More Energy Saving

> The set temperature of each room may vary by the individual thermostat control of each indoor unit. The cooling and heating operation can be performed at the same time.

- 13°C
- 15°C
- 20°C
- 22°C
- 26°C
- OFF



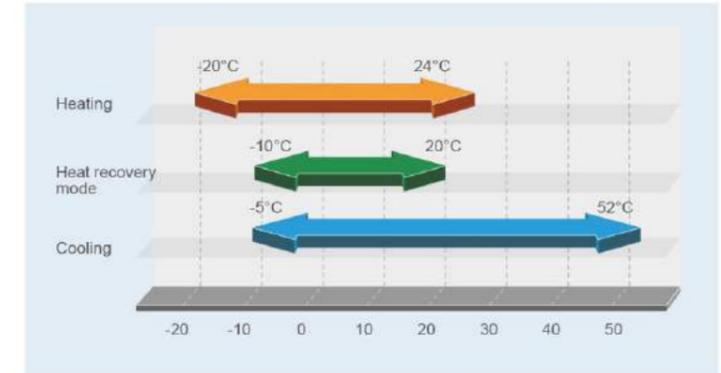
Wide Operation Range

The unit can operate in wide range, greatly reducing the ambient temperature limitation.

> Note:

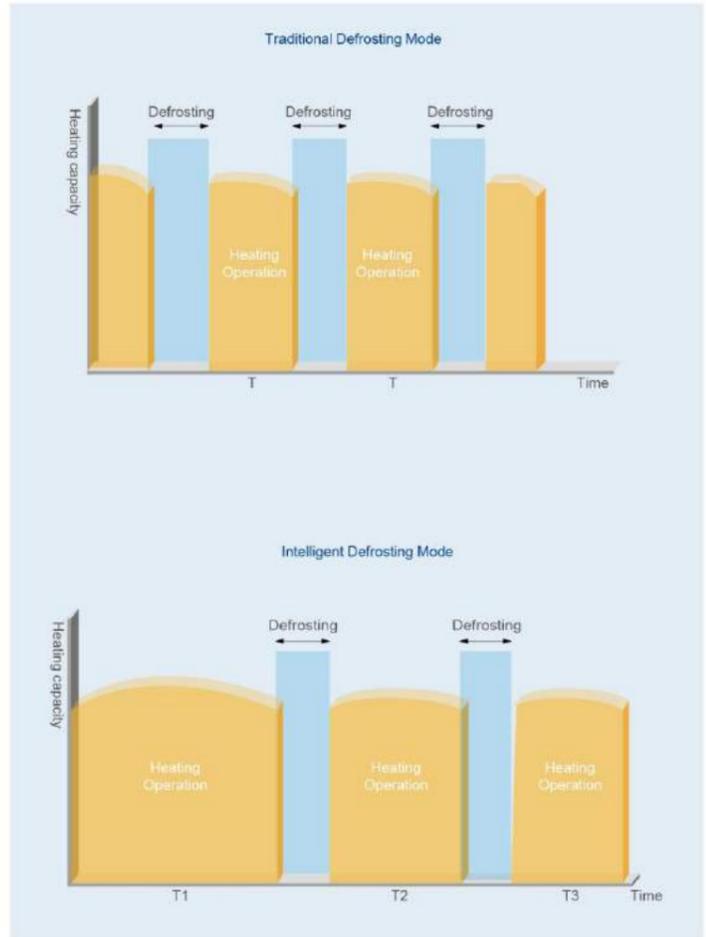
If the required capacity of indoor units is 50% higher than that outdoor units, cooling range may be lower to -15°C

If the required capacity of indoor units is 50% higher than that outdoor units, cooling range may be up to -5°C



Intelligent Defrosting Control

> During the heating process, load status and operation time. Through real-time detection of operation parameters of the system, it can decide the defrosting time by intelligently estimating the thickness of frost, high pressure of system and blockage status of heat exchanger. The frost status of the unit will be different after affecting by factors of outdoor ambient



**Modules Rotation Operating
 to Maximize Lifespan**

Modules 8h Rotation Operating

> The operating priority sequence of the outdoor unit modules will be changed without restart when the system accumulatively operates for 8 hours, which can maximize the service life of the system.



**Excellent Emergency Operation Function to
 Ensure Reliable Operation**

Emergency Function

> The GMV 5 system can realize a combination of 4 outdoor unit modules. When error is occurred to one of the modules, the others will perform the emergency operation to sustain the air conditioning.



Emergency Operation of Compressor

> All the compressors in each single module are DC inverter based. when one compressor has error, others will perform the emergency operation.



Emergency Operation of Fan

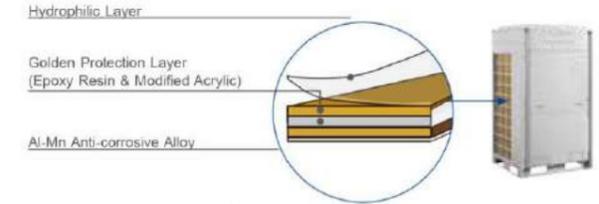
> Double-fan design ensures that one fan can still work even if the other one has error.



**Highly Anticorrosive
 Golden Fins**

Modules 8h Rotation Operating

> The primary material of golden fin is Al-Mn (Aluminum-Manganese) anti-rust alloy, which is coated with the golden protection Layer (components: epoxy resin & modified acrylic, silicon free). The anti-corrosive performance in salt-spray testing is 200%~300% higher than normal blue fin*.

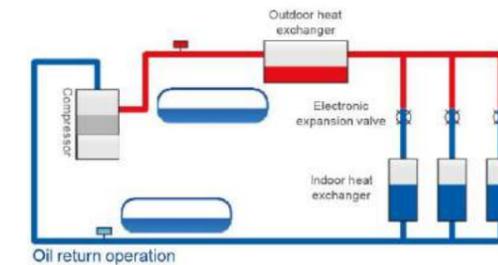
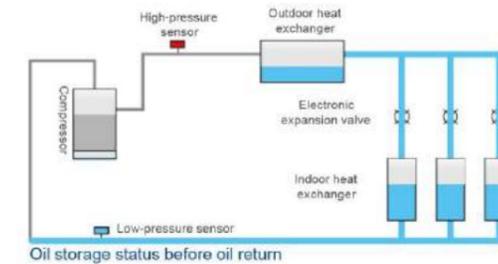


Note: Salt-spray testing result is from WONY materials chemistry testing laboratory.

**Oil Return Control
 Technology**

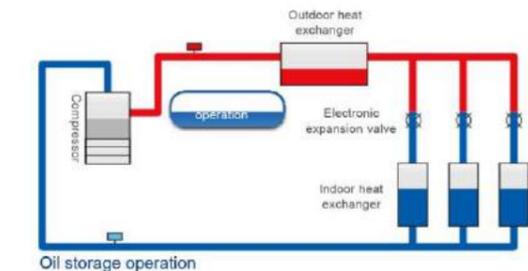
New Oil Return Control

> Wony new oil return control technology effectively controls system oil return and oil storage status of each compressor, which greatly improves the operation lifespan of compressor.



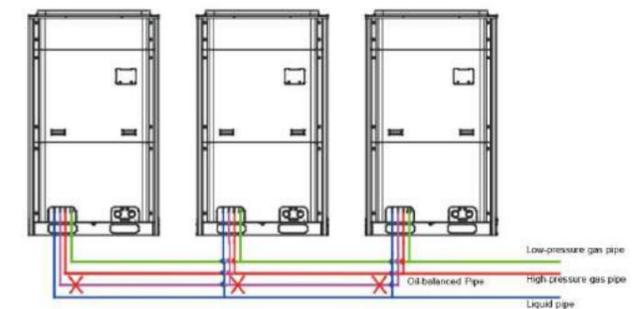
Specialized Compressor Oil Storage Control

> The system applies specialized compressor oil storage technology, which can control the lowest oil level for compressor operation.



**Without External
 Oil-balanced Pipe Design**

> The unit is without external oil-balanced pipe design, reducing system pipeline connection and easy for engineering installation. The system will allocate lubricating oil of each module according to its demand, which is more intelligent, more efficient and more equal.



Compact Design

> With compact design, the outdoor unit can be carried to the roof of building through elevator, with no need of crane. It is easier for delivery and installation.



Easy Transportation

Optimized base frame

> Optimized base frame, the locating and fixing of the outdoor unit during installation is more convenient and reliable.

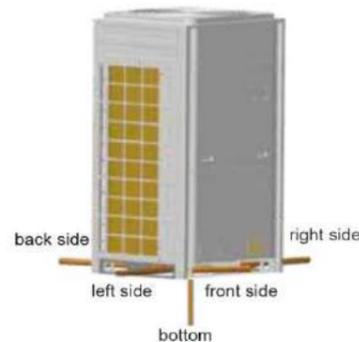


Transportable by forklift



Five-way Piping Connection

> Piping and wiring are available to the front and back, left and right, and bottom. The five-way piping connection reduces installation difficulty and cost, and improves the installation efficiency.



Easy Maintenance

> Inspection window is available for quick checking of system operation status. No need to open panel for checking, which will be more time-saving and easier for maintenance.



Error Display & Self-diagnostic Function

> Through LED display (different combinations of ON, OFF, or BLINK) on the main board, the malfunction can be judged.



H	Model	Product
8HP	WNV-R224XN/F-Y	
10HP	WNV-R280XN/F-Y	
12HP	WNV-R335XN/F-Y	
14HP	WNV-R400XN/F-Y	
16HP	WNV-R450XN/F-Y	

Specifications and Parameters

50/60Hz

Model		WNV -R224XN/F-Y	WNV -R280XN/F-Y	WNV -R335XN/F-Y	WNV -R400XN/F-Y	WNV -R450XN/F-Y		
Capacity range	HP	8	10	12	14	16		
Cooling capacity	Nom.	kW	22.4	28	33.5	40	45	
	Max.	kW	22.4	28/31.5 *	33.5	40	45	
Heating capacity	Nom.	kW	22.4	28/31.5 *	33.5	40	45	
	Max.	kW	25	31.5	37.5	45	50	
EER	Nom.	ducted	W/W	4.09	3.44	4.04	3.36	3.04
		cassette	W/W	3.10	2.53	2.47	2.52	2.64
COP	Nom.	ducted	W/W	4.75	4.32	4.87	4.50	3.94
		cassette	W/W	3.37	3.48	3.46	3.07	2.79
Power consumption of cooling	Nom.	ducted	kW	4.75	4.32	4.87	4.50	3.94
		cassette	kW	5.48	8.14	8.29	11.90	14.80
Power consumption of heating	Nom.	ducted	kW	7.23	11.07	13.56	15.87	17.05
		cassette	kW	4.72	6.48	6.88	8.89	11.42
Power supply	V/Ph/Hz	Max.	kW	6.65	9.05	9.68	13.03	16.13
		Max.	kW	5.26	7.29	7.70	10.00	12.69
Min.circuit/Max.fuse current	A	380V-415V 3N- 50/60Hz						
Maximum drive IDU NO.	unit	16.3/20	20.9/25	24.7/32	28.8/40	33.2/40		
Refrigerant charge volume	kg	13	16	19	23	26		
Sound pressure level(Cooling)	dB(A)	6.2	7.1	9.6	11.1	11.6		
Sound power level(Cooling)	ducted	dB(A)	60	61	63	63	63	
	cassette	dB(A)	84	84	80	86	89	
Connecting pipe	Liquid	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	
	High Pressure Gas	mm	Φ15.9	Φ19.05	Φ19.05	Φ22.2	Φ22.2	
	Low Pressure Gas	mm	Φ19.05	Φ22.2	Φ25.4	Φ25.4	Φ28.6	
Dimension (W*D*H)	Outline	mm	930x765x1605	930x765x1605	1340x765x1605	1340x765x1605	1340x765x1605	
	Package	mm	1010x840x1775	1010x840x1775	1420x840x1775	1420x840x1775	1420x840x1775	
Net weight/Gross weight	kg	233/243	233/243	302/317	346/361	346/361		
Loading quantity	40' GP	unit	24	24	16	16	16	
	40' HQ	unit	24	24	16	16	16	

Model	Product
MDIT1D	
MDIT2D	
MDIT4D	
MDIT8D	

Model		MDIT1D	MDIT2D	MDIT4D	MDIT8D	
Max.IDU branches	unit	1	2	4	8	
No. of connectable IDU of each branch	unit	8	8	8	8	
Total connectable IDU	unit	8	16	32	8	
Max. capacity of each branch	kW	14.2	14.2	14.2	14.2	
Max.capacity of connectable IDUPower supply	kW	14.2	28	45	68	
supply	V/Ph/Hz	220-240V 1Ph 50/60Hz				
Power consumption	W	28				
Max. branch quantity of connecting IDU	unit	2				
Outdoor unit piping connection	mm	8	Φ9.52	44	80	
	mm	1		4	8	
	mm	Φ9.52		Φ12.7	Φ15.9	
Indoor unit piping connection	Gas(Low pressure)	Φ22.2				
	Gas(High pressure)	Φ28.6				
Dimensions (WxDxH)	Liquid	mm	Φ15.9	Φ19.05	Φ22.2	Φ22.2
	Gas	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Dimensions (WxDxH)	Outline	kg	Φ15.9	Φ15.9	Φ15.9	Φ15.9
	Package	kg	388x302x225	468x377x225	587x399x225	987x488x225
Net weight/Gross weight	kg	805x403x305	946x646x365	1123x676x345	1524x861x315	
	kg	9/12.2	15.6/23.4	18.6/24.6	37/46.6	

ODU Combination Lineup-WNV5 HR*

Model	WNV-R224XN/F-Y	WNV-R280XN/F-Y	WNV-R335XN/F-Y	WNV-R400XN/F-Y	WNV-R450XN/F-Y
WNV-R224XN/F-Y	●				
WNV-R280XN/F-Y		●			
WNV-R335XN/F-Y			●		
WNV-R400XN/F-Y				●	
WNV-R450XN/F-Y					●
WNV-R504XN/F-Y	●	●			
WNV-R560XN/F-Y					
WNV-R615XN/F-Y		●	●		
WNV-R680XN/F-Y		●		●	
WNV-R730XN/F-Y		●			●
WNV-R785XN/F-Y			●		●
WNV-R850XN/F-Y				●	●
WNV-R900XN/F-Y					●●
WNV-R960XN/F-Y				●	
WNV-R1010XN/F-Y					●
WNV-R1065XN/F-Y		●	●		●
WNV-R1130XN/F-Y		●		●	●
WNV-R1180XN/F-Y		●			●●
WNV-R1235XN/F-Y			●		●●
WNV-R1300XN/F-Y				●	●●
WNV-R1350XN/F-Y					●●
WNV-R1410XN/F-Y				●	●
WNV-R1460XN/F-Y					●●
WNV-R1515XN/F-Y		●	●		●●
WNV-R1580XN/F-Y		●		●	●●
WNV-R1630XN/F-Y		●			
WNV-R1685XN/F-Y			●		
WNV-R1750XN/F-Y				●	●●●
WNV-R1800XN/F-Y					●●●●

Note*: The combination models of the outdoor units are not Eurovent certified.

Specification of ODU Combination of WNV5 HR*

Model	Power Supply	Capacity			Power Input			Dimension (WxDxH) mm	Airflow Volume m ³ /h	ESP Pa	Connecting pipe diameter			Min. circuit current A	Max. fuse current A	Weight kg
		Cooling		Heating	Cooling		Heating				Liquid	High Pressure Gas	Low Pressure Gas			
		Nom.* kW	Nom.* kW	Max kW	Nom.* kW	Nom.* kW	Max kW				mm	mm	mm			
WNV-R504XN/F-Y	380-415V 3N-50/60 Hz	50.4	50.4	56.5	13.62	11.2	12.55	(930x765x1605) x2	11400x2	82	Φ15.9	Φ25.4	Φ28.6	16.3+20.9	20+25	233+233
WNV-R560XN/F-Y		56	56	63	16.58	12.96	14.58	(930x765x1605) x2	11400x2	82	Φ15.9	Φ25.4	Φ28.6	20.9+20.9	25+25	233+233
WNV-R615XN/F-Y		61.5	61.5	69	16.43	13.36	14.99	(930x765x1605) + (1340x765x1605)	11400+14000	82	Φ15.9	Φ25.4	Φ28.6	20.9+24.7	25+32	233+302
WNV-R680XN/F-Y		68	68	76.5	20.04	15.37	17.29	(930x765x1605) + (1340x765x1605)	11400+14000	82	Φ15.9	Φ25.4	Φ28.6	20.9+28.8	25+40	233+346
WNV-R730XN/F-Y		73	73	81.5	22.94	17.9	19.98	(930x765x1605) + (1340x765x1605)	11400+14000	82	Φ19.05	Φ28.6	Φ31.8	20.9+33.2	25+40	233+346
WNV-R785XN/F-Y		78.5	78.5	87.5	23.09	18.3	20.39	(1340x765x1605)x2	14000x2	82	Φ19.05	Φ28.6	Φ31.8	24.7+33.2	32+40	302+346
WNV-R850XN/F-Y		85	85	95	26.7	20.31	22.69	(1340x765x1605)x2	14000x2	82	Φ19.05	Φ28.6	Φ31.8	28.8+33.2	40+40	346+346
WNV-R900XN/F-Y		90	90	100	29.6	22.84	25.38	(1340x765x1605)x2	14000x2	82	Φ19.05	Φ28.6	Φ31.8	33.2+33.2	40+40	346+346
WNV-R960XN/F-Y		96	96	108	28.18	21.85	24.58	(930x765x1605) x2+ (1340x765x1605)	11400x2+14000	82	Φ19.05	Φ28.6	Φ31.8	20.9+20.9+28.8	25+25+40	233+233+346
WNV-R1010XN/F-Y		101	101	113	31.08	24.38	27.27	(930x765x1605) x2+ (1340x765x1605)	11400x2+14000	82	Φ19.05	Φ31.8	Φ38.1	20.9+20.9+33.2	25+25+40	233+233+346
WNV-R1065XN/F-Y		106.5	106.5	119	31.23	24.78	27.68	(930x765x1605) + (1340x765x1605) x2	11400+14000x2	82	Φ19.05	Φ31.8	Φ38.1	20.9+24.7+33.2	25+32+40	233+302+346
WNV-R1130XN/F-Y		113	113	126.5	34.84	26.79	29.98	(930x765x1605) + (1340x765x1605) x2	11400+14000x2	82	Φ19.05	Φ31.8	Φ38.1	20.9+28.8+33.2	25+40+40	233+346+346
WNV-R1180XN/F-Y		118	118	131.5	37.74	29.32	32.67	(930x765x1605) + (1340x765x1605) x2	11400+14000x2	82	Φ19.05	Φ31.8	Φ38.1	20.9+33.2+33.2	25+40+40	233+346+346
WNV-R1235XN/F-Y		123.5	123.5	137.5	37.89	29.72	33.08	(1340x765x1605) x3	14000x3	82	Φ19.05	Φ31.8	Φ38.1	24.7+33.2+33.2	32+40+40	302+346+346
WNV-R1300XN/F-Y		130	130	145	41.5	31.73	35.38	(1340x765x1605) x3	14000x3	82	Φ19.05	Φ31.8	Φ38.1	28.8+33.2+33.2	40+40+40	346+346+346
WNV-R1350XN/F-Y		135	135	150	44.4	34.26	38.07	(1340x765x1605) x3	14000x3	82	Φ19.05	Φ31.8	Φ38.1	33.2+33.2+33.2	40+40+40	346+346+346
WNV-R1410XN/F-Y		141	141	158	42.98	33.27	37.27	(930x765x1605) x2+ (1340x765x1605) x2	11400x2+14000x2	82	Φ19.05	Φ38.1	Φ41.3	20.9+20.9+28.8+33.2	25+25+40+40	233+233+346+346
WNV-R1460XN/E-X		146	146	163	45.88	35.8	39.96	(930x765x1605) x2+ (1340x765x1605) x2	11400x2+14000x2	82	Φ19.05	Φ38.1	Φ41.3	20.9+20.9+33.2+33.2	25+25+40+40	233+233+346+346
WNV-R1515XN/E-X		151.5	151.5	169	46.03	36.2	40.37	(930x765x1605) + (1340x765x1605) x3	11400+14000x3	82	Φ19.05	Φ38.1	Φ41.3	20.9+24.7+33.2+33.2	25+32+40+40	233+302+346+346
WNV-R1580XN/E-X		158	158	176.5	49.64	38.21	42.67	(930x765x1605) + (1340x765x1605) x3	11400+14000x3	82	Φ19.05	Φ38.1	Φ41.3	20.9+28.8+33.2+33.2	25+40+40+40	233+346+346+346
WNV-R1630XN/F-Y	163	163	181.5	52.54	40.74	45.36	(930x765x1605) + (1340x765x1605) x3	11400+14000x3	82	Φ19.05	Φ38.1	Φ41.3	20.9+33.2+33.2+33.2	25+40+40+40	233+346+346+346	
WNV-R1685XN/F-Y	168.5	168.5	187.5	52.69	41.14	45.77	(1340x765x1605) x4	14000x4	82	Φ19.05	Φ38.1	Φ41.3	24.7+33.2+33.2+33.2	32+40+40+40	302+346+346+346	
WNV-R1750XN/F-Y	175	175	195	56.3	43.15	48.07	(1340x765x1605) x4	14000x4	82	Φ19.05	Φ38.1	Φ41.3	28.8+33.2+33.2+33.2	40+40+40+40	346+346+346+346	
WNV-R1800XN/F-Y	180	180	200	59.2	45.68	50.76	(1340x765x1605) x4	14000x4	82	Φ19.05	Φ38.1	Φ41.3	33.2+33.2+33.2+33.2	40+40+40+40	346+346+346+346	

The parameters are the listed data for certificate by matching with air duct unit.

WNV5 HOME



WN5 Home is a new generation of multi VRF system developed by Wony, integrating "central air conditioning + hotwater + floor heating".

Outdoor Unit



Water Tank

TYE200MD
KX/D1-K²

Hydro Box

Hot water
converter*1



Golden fin
condenser



Inner groove
copper



Compact
design



High
efficiency



Wide voltage
range



Easier
maintainability

> High efficiency and energy savings. The self-developed DC inverter technology stimulates the intelligence and integration of the system. In full heat recovery mode of "cooling + hot water"; DC inverter water pump is adopted, which has apparent advantages in energy savings, flow-lift regulating range and performance curve.

> Optional quiet modes. The system has got night quiet mode and forced quiet mode, with operation noise as low as 45dB(A).

> Unique comfort functions. The system has got auto heat recovery function in cooling; the heat is recovered automatically for heating water; water heating and floor heating can be available simultaneously; 3D heat supply provides more comfort; the optimized defrosting reduces the fluctuation of indoor temperature.



Item	Nominal operating condition(temperature)					
	Outdoor condition		Indoor condition		Water	
	DB(°C)	WB(°C)	DB(°C)	WB(°C)	Start(°C)	End(°C)
Cooling	35	24	27	19	/	/
Heating	7	6	20	15	/	/
Hot water	20	15	/	/	15	52

Operation range	Mode	Outdoor condition(°C)
	Cooling	-5~50
	Heating	-15~24
	Water heating	-15~43
	Cooling and water heating	-5~43
Heating and water heating	-15~24	

Outdoor Unit

Model		WNV-T120XM/B-T	WNV-T140XM/B-T	WNV-T160XM/B-T	WNV-T224X/B-Y	WNV-T280X/B-Y
Capacity	Cooling	12.1	14	16	22.40	28.00
	Heating	14	16.5	18.5	25.00	31.50
Power supply	V/Ph/Hz	220V-240V ~ 50/60Hz			380V-415V 3N~ 50/60Hz	
Refrigerant charge volume	kg	5	5	5	10.50	11.00
Rated power input	Cooling	3.05	3.98	4.85	5.35	7.70
	Heating	3.30	4.10	4.67	5.80	7.60
	Water heating	/	/	/	5.00	5.20
Airflow volume	m³/h	6000	6300	6600	14000	14000
	CFM	3531	3708	3884	8239	8239
Sound pressure level	dB(A)	55	56	58	57	58
Connecting pipe diameter	Gas	Φ15.9	Φ15.9	Φ19.05	Φ19.05	Φ22.2
	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas (high pressure)	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.9
Dimension (WxDxH)	Outline	900x340x1345	900x340x1345	900x340x1345	1340x765x1605	1340x765x1605
	Package	mm	998x458x1500	998x458x1500	998x458x1500	1420x840x1775
Net weight/Gross weight	kg	113/123	113/123	113/123	295/310	295/310
Loading quantity	40' GP	unit	57	57	57	16
	40' HQ	unit	57	57	57	16

Water Tank

Model		TYXE200MDK2/B-L	TYXE300MDK2/B-L
Tank volume	L	200	300
Max. working pressure	Mpa	0.7	0.7
Auxiliary electrical heater power input	kW	3.0	3.0
Power supply	V/Ph/Hz	220V-240V ~ 50Hz	
Dimension	Thickness(inner)	mm	1.5
	Thickness(external)	mm	50
	Outline diameter	mm	540
	Outline height	mm	1595
	Package(WxDxH)	mm	625x1620x630
Net/Gross weight	kg	68/77	82/92
Outer diameter	Circular pipe	mm	DN20
	Cold water pipe	mm	DN15
	Hot water pipe	mm	DN15

Model		TYXE200MDK2/B-L	TYXE300MDK2/B-L
Tank volume	L	200	300
Max. working pressure	Mpa	0.7	0.7
Auxiliary electrical heater power input	kW	3.0	3.0
Power supply	V/Ph/Hz	220V-240V ~ 50Hz	
Dimension	Thickness(inner)	mm	1.5
	Thickness(external)	mm	50
	Outline diameter	mm	540
	Outline height	mm	1595
	Package(WxDxH)	mm	625x1620x630
Net/Gross weight	kg	71/80	87/97
Outer diameter	Circular pipe	mm	DN20
	Cold water pipe	mm	DN15
	Hot water pipe	mm	DN15
Loading quantity	40'GP/40'HQ	unit	78/104
			63/63

Hydro Box

Model		OSRE16H/B-T	
Heating capacity	kW	4.5(3.6-16)	
Dimension (WxDxH)	Outline	mm	
	Package	mm	
Power supply	V/Ph/Hz	220V-240V ~ 50/60Hz	
Connecting pipe diameter	to ODU	Gas	mm
		Liquid	mm
	to water tank	Gas(high pressure)	mm
			mm
Water pump	Type	—	
	Power input	kW	
	Water flow	L/h	
		GPM	
Delivery lift	m		
Net weight/Gross weight	kg	56/62	
Loading quantity	40'GP/40'HQ	unit	1058/1196

Hot Water Converter

Model		OSA16H/B-T	
Heating capacity	kW	4.5(2.8-5.6)	
Dimension (WxDxH)	Outline	mm	
	Package	mm	
Power supply	V/Ph/Hz	220V-240V ~ 50/60Hz	
Connecting pipe diameter	to ODU	Gas	mm
		Liquid	mm
		Gas(high pressure)	mm
Net weight/Gross weight	kg	8.5/13.5	
Loading quantity	40'GP	unit	660/880

Water Tank

Model		TYXE200MDK2/B-L
Capacity	L	185
Power supply for electric heater	-	220V-240V~50Hz
Input power for electric heater	W	1500
Outline dimensions(WxDxH)	mm	545x545x1919
Package dimensions(WxDxH)	mm	2009x656x625
Water tank gross/net weight	kg	60/52
Outer size of connection pipe	mm	Φ6, Φ9.52

Note :

* 1: The hot water converter is only matched with the outdoor unit model of WNV-S(120-160)WL/A-S.

* 2: The hot water converter is only matched with the water tank model of SXD200LCJW/C1-K.

WNVWater



GMV Water combines the features of water source system with DC Inverter Multi VRF Units. It inherits the energy efficiency of water-cooled system and the comfortable and flexible characteristics of VRF units, which will provide a new air conditioning solution for high buildings, villas, hotels, comprehensive halls, etc. GMV Water can be divided into two parts: water system that exchanges energy between outdoor units and water/ground source; VRF refrigerating system from outdoor units to indoor units.

Key Features

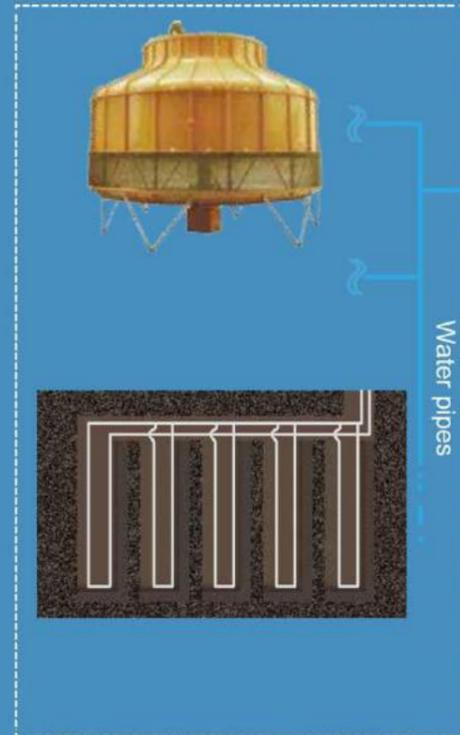
Utilization of Renewable Resources

The water source of GMV Water can be a cooling tower, boiler or renewable resources: surface water (river, lake and sea), ground water, soil, solar power, industrial waste heat or domestic waste water.

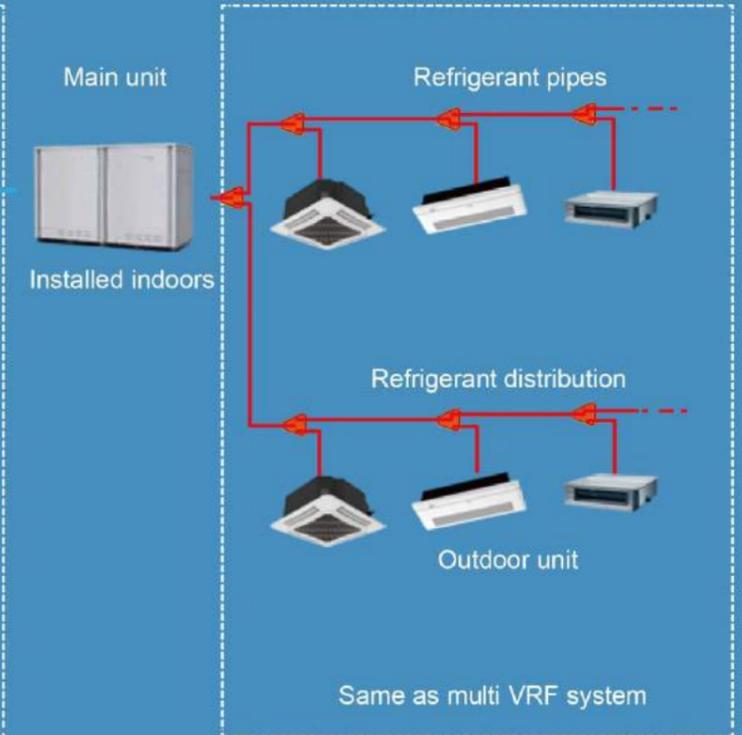
Regenerated Energy Resources



Water system



Refrigerant system

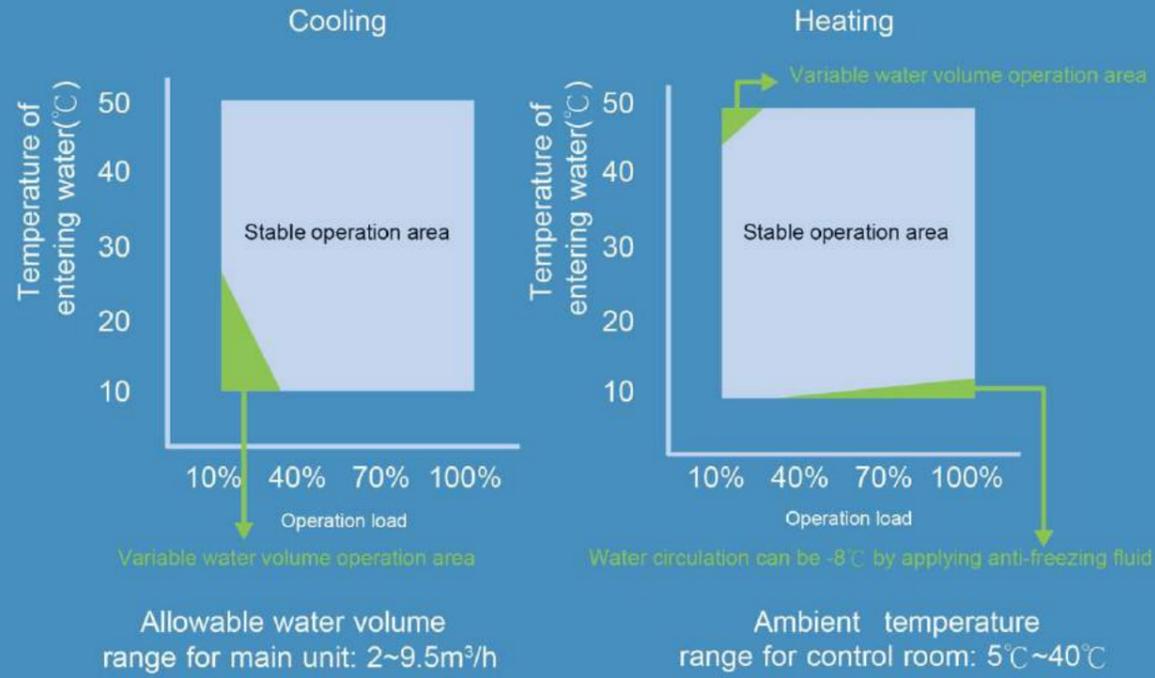


Wide Operating Range

Wide range for water entering the water side heat exchanger: 10~50°C; Water flow range of the main unit: 2~9.5m³/h, suitable in most of the places across the nation.

Temperature range

Wide temperature range of entering cooling water: 10°C~50°C

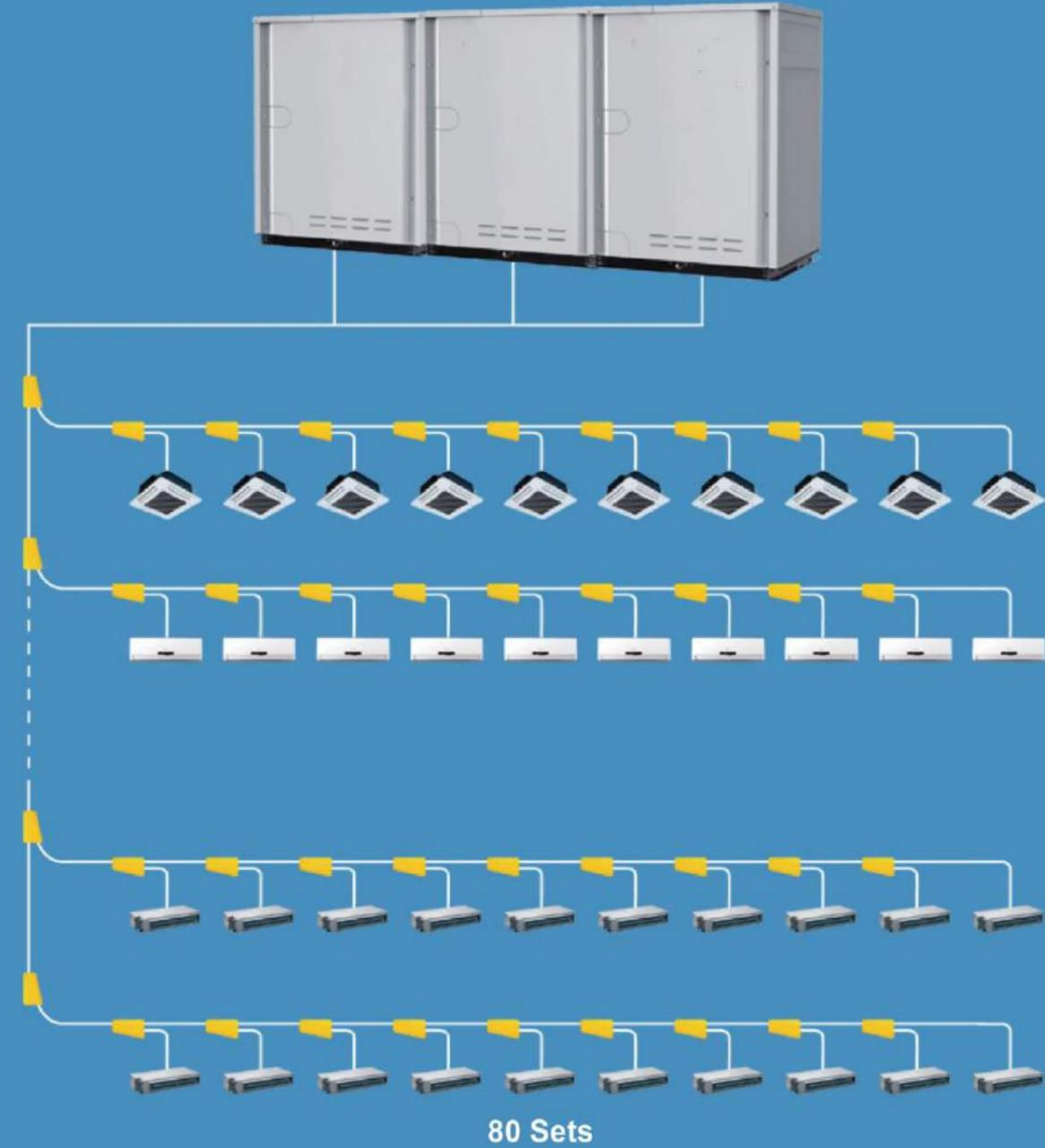


Large Capacity Design

The combination of basic modules can have 4 modules at most, with maximum capacity of 134kW. The wide range of capacity can satisfy different construction demands.



Up to 80 indoor units can be connected.



Operating in Turns, for Longer Service Life

> Each module starts up in sequence and operates in turn, which will effectively extend the units' service life.



Water-cooled System, No Need of Defrosting

> The set temperature of each room may vary by the individual thermostat control of each indoor unit. The cooling and heating operation can be performed at the same time.



Air-cooled GMV



GMV Water

Completely New CAN Network Control

> Same as WN5, GMV Water adopts CAN communication, which has greatly improved the networking performance. It can be used in perfect combination with WN5 indoor units.



> Independent control on a single unit: every indoor unit can have an independent controller to realize independent control and management.

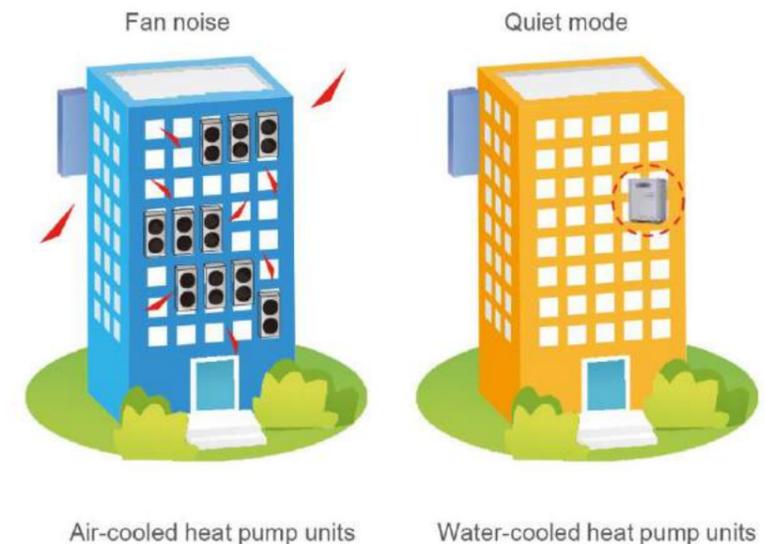
> Centralized control on multiple indoor units: multiple indoor units can be connected to one wired controller to realize centralized control. One wired controller can control up to 16 indoor units.

> Multiple control points for a single unit: one indoor unit can be connected to multiple wired controllers, which will together control one indoor unit.

> Joint control by remote controller and wired controller: remote controller is convenient for use and wired controller is with complete functions. With Wony's unique control logic, user can use both remote controller and wired controller to control a same indoor unit.

Fully Closed Design, Low Noise

> Wony GMV Water System has a totally enclosed design. Unlike traditional outdoor units, this system has low noise, which is especially suitable for places where quietness is needed.



Air-cooled heat pump units

Water-cooled heat pump units

No Weather Influence

> GMV Water exchange heat with water source and ground source without regard to the weather influence. Especially in winter, when it is running in heat mode, the outdoor unit will not generate frost like the air-cooled outdoor unit. There's no need to run defrosting mode, thus ensuring reliable heating performance.



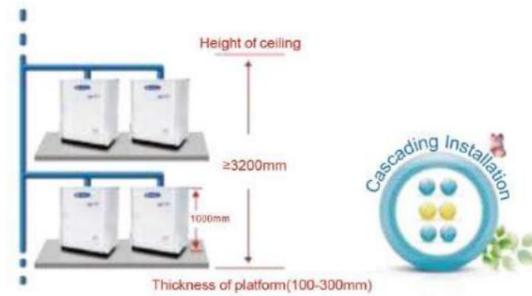
Stable operation under all kinds of weather

Compact Size, Easy for Transportation and Installation

> Products of this series are all compact in size, It can be transported in common passenger elevators, which will help save transportation cost and the project time.



> Compared with air-cooled VRF units, GMV Water require less floor space and lower installation height and are lightweight. Units can be installed one on top of the other, which is efficient in space utilization.



No Impact on Construction Appearance

> Air-cooled air conditioners must be installed outdoors so that they can exchange heat with the air. However, outdoor installation space is limited and for the sake of preserving the construction beauty, more and more outdoor units are placed indoors. In order to ensure normal operation, there must have large quantities of grilles. As for GMV Water, there's no need to exchange heat with the air, therefore, the installation position is very flexible and can be coordinated with the construction design, having no impact on the construction appearance.



ODU Combination Lineup

380-415V, 50/60Hz

Model	WNV-X224XN/B-Y	WNV-X280XN/B-Y	WNV-X335XN/B-Y
WNV-X448XN/B-Y	●●		
WNV-X504XN/B-Y	●	●	
WNV-X560XN/B-Y		●●	
WNV-X615XN/B-Y		●	●
WNV-X670XN/B-Y			●●
WNV-X728XN/B-Y	●●	●	
WNV-X784XN/B-Y	●	●●	
WNV-X840XN/B-Y		●●●	
WNV-X895XN/B-Y		●●	●
WNV-X950XN/B-Y		●	●●
WNV-X1005XN/B-Y			●●●
WNV-X1064XN/B-Y	●	●●●	
WNV-X1120XN/B-Y		●●●●	
WNV-X1175XN/B-Y		●●●	●
WNV-X1230XN/B-Y		●●	●●
WNV-X1285XN/B-Y		●	●●●
WNV-X1340XN/B-Y			●●●●

208/230V, 60Hz

Model	WNV-X224XN/B-G	WNV-X280XN/B-G	WNV-X335XN/B-G
WNV-X448XN/B-G	●●		
WNV-X504XN/B-G	●	●	
WNV-X560XN/B-G		●●	
WNV-X615XN/B-G		●	●
WNV-X670XN/B-G			●●
WNV-X728XN/B-G	●●	●	
WNV-X784XN/B-G	●	●●	
WNV-X840XN/B-G		●●●	
WNV-X895XN/B-G		●●	●
WNV-X950XN/B-G		●	●●
WNV-X1005XN/B-G			●●●
WNV-X1064XN/B-G	●	●●●	
WNV-X1120XN/B-G		●●●●	
WNV-X1175XN/B-G		●●●	●
WNV-X1230XN/B-G		●●	●●
WNV-X1285XN/B-G		●	●●●
WNV-X1340XN/B-G			●●●●

Outdoor Unit

380-415V, 50/60Hz

Model			WNV-W224XN/B-Y	WNV-W280XN/B-Y	WNV-W335XN/B-Y
Capacity	Cooling	kW	22.4	28	33.5
	Heating	kW	25	31.5	37.5
Sound pressure level		dB(A)	50	52	52
Power supply		V/Ph/Hz	380V-415V 3N- 50/60Hz		
Water flow volume		m ³ /h	4.8	6	7.2
Water pressure drop		kPa	16	24	45
Rated power input	Cooling	kW	3.9	5.7	7.9
	Heating	kW	4	5.4	7.35
Refrigerant connecting pipe diameter	Gas	mm	Φ22.2	Φ22.2	Φ25.4
	Liquid	mm	Φ9.52	Φ9.52	Φ12.7
Dimension(WxDxH)	Outline	mm	780x550x1000	780x550x1000	780x550x1000
	Package	mm	833x599x1160	833x599x1160	833x599x1160
Net weight/Gross weight		kg	162/175	162/175	162/175
Loading quantity	40' GP	unit	108	108	108
	40' HQ	unit	108	108	108

208/230V, 60Hz

Model			WNV-W224WM/A-F	WNV-W280WM/A-F	WNV-W335WM/A-F
Capacity	Cooling	kW	22.4	28	33.5
	Heating	kW	25	31.5	37.5
Sound pressure level		dB(A)	50	52	52
Power supply		V/Ph/Hz	208V/230V 3- 60Hz		
Water flow volume		m ³ /h	4.8	6	7.2
Water pressure drop		kPa	16	24	45
Rated power input	Cooling	kW	3.9	5.7	7.9
	Heating	kW	4	5.4	7.35
Refrigerant connecting pipe diameter	Gas	mm	Φ22.2	Φ22.2	Φ25.4
	Liquid	mm	Φ9.52	Φ9.52	Φ12.7
Dimension(WxDxH)	Outline	mm	780x550x1000	780x550x1000	780x550x1000
	Package	mm	833x599x1160	833x599x1160	833x599x1160
Net weight/Gross weight		kg	162/175	162/175	162/175
Loading quantity	40' GP	unit	108	108	108
	40' HQ	unit	108	108	108

Specifications of ODU Combination

380-415V, 50/60Hz

Model	Power supply V/Ph/Hz	Capacity		Power input		Dimension (WxDxH) mm	Water flow volume m ³ /h	Connecting pipe diameter		Min.circuit current A	Max. fuse current A	Weight kg
		Cooling kW	Heating kW	Cooling kW	Heating kW			Liquid mm	Gas mm			
WNV-W448XN/B-Y	380V-415V 3N-50/60Hz	44.8	50.0	3.9x2	4.0x2	(780x550x1000)x2	4.8x2	Φ12.7	Φ28.6	16.1x2	20x2	162x2
WNV-W504XN/B-Y		50.4	56.5	3.9+5.7	4.0+5.4	(780x550x1000)x2	4.8+6.0	Φ15.9	Φ28.6	16.1+19.7	20x2	162x2
WNV-W560XN/B-Y		56.0	63.0	5.7x2	5.4x2	(780x550x1000)x2	6.0x2	Φ15.9	Φ28.6	19.7x2	20x2	162x2
WNV-W615XN/B-Y		61.5	69.0	5.7+7.9	5.4+7.35	(780x550x1000)x2	6.0+7.2	Φ15.9	Φ28.6	19.7+26.8	20x32	162x2
WNV-W670XN/B-Y		67.0	75.0	7.9x2	7.35x2	(780x550x1000)x2	7.2x2	Φ15.9	Φ28.6	26.8x2	32x2	162x2
WNV-W728XN/B-Y		72.8	81.5	3.9x2+5.7	4.0x2+5.4	(780x550x1000)x3	4.8x2+6.0	Φ19.05	Φ31.8	16.1x2+19.7	20x3	162x3
WNV-W784XN/B-Y		78.4	88.0	3.9+5.7x2	4.0+5.4x2	(780x550x1000)x3	4.8+6.0x2	Φ19.05	Φ31.8	16.1+19.7x2	20x3	162x3
WNV-W840XN/B-Y		84.0	94.5	5.7x3	5.4x3	(780x550x1000)x3	6.0x3	Φ19.05	Φ31.8	19.7x3	20x3	162x3
WNV-W895XN/B-Y		89.5	100.5	5.7x2+7.9	5.4x2+7.35	(780x550x1000)x3	6.0x2+7.2	Φ19.05	Φ31.8	19.7x2+26.8	20x2+32	162x3
WNV-W950XN/B-Y		95.0	106.5	5.7+7.9x2	5.4+7.35x2	(780x550x1000)x3	6.0+7.2x2	Φ19.05	Φ31.8	19.7+26.8x2	20+32x2	162x3
WNV-W1005XN/B-Y		100.5	112.5	7.9x3	7.35x3	(780x550x1000)x3	7.2x3	Φ19.05	Φ38.1	26.8x3	32x3	162x3
WNV-W1064XN/B-Y		106.4	119.5	3.9+5.7x3	4.0+5.4x3	(780x550x1000)x4	4.8+6.0x3	Φ19.05	Φ38.1	16.1+19.7x3	20x4	162x4
WNV-W1120XN/B-Y		112.0	126.0	5.7x4	5.4x4	(780x550x1000)x4	6.0x4	Φ19.05	Φ38.1	19.7x4	20x4	162x4
WNV-W1175XN/B-Y		117.5	132.0	5.7x3+7.9	5.4x3+7.35	(780x550x1000)x4	6.0x3+7.2	Φ19.05	Φ38.1	19.7x3+26.8	20x3+32	162x4
WNV-W1230XN/B-Y		123.0	138.0	5.7x2+7.9x2	5.4x2+7.35x2	(780x550x1000)x4	6.0x2+7.2x2	Φ19.05	Φ38.1	19.7x2+26.8x2	20x2+32x2	162x4
WNV-W1285XN/B-Y		128.5	144.0	5.7+7.9x3	5.4+7.35x3	(780x550x1000)x4	6.0+7.2x3	Φ19.05	Φ38.1	19.7+26.8x3	20+32x3	162x4
WNV-W1340XN/B-Y		134.0	150.0	7.9x4	7.35x4	(780x550x1000)x4	7.2x4	Φ19.05	Φ38.1	26.8x4	32x4	162x4

208/230V, 60Hz

Model	Power supply V/Ph/Hz	Capacity		Power Input		Dimension (WxDxH) mm /h	Water flow volume m ³	Connecting		Min.circuit current A	Max. fuse current A	Weight kg
		Cooling kW	Heating kW	Cooling kW	Heating kW			Liquid mm	Gas mm			
WNV-W448WM/A-F	208V/ 230V 3-60Hz	44.8	50.0	3.9x2	4.0x2	(780x550x1000)x2	4.8x2	Φ12.7	Φ28.6	32.3x2	50x2	162x2
WNV-W504WM/A-F		50.4	56.5	3.9+5.7	4.0+5.4	(780x550x1000)x2	4.8+6.0	Φ15.9	Φ28.6	32.3+34.2	50+60	162x2
WNV-W560WM/A-F		56.0	63.0	5.7x2	5.4x2	(780x550x1000)x2	6.0x2	Φ15.9	Φ28.6	34.2x2	60x2	162x2
WNV-W615WM/A-F		61.5	69.0	5.7+7.9	5.4+7.35	(780x550x1000)x2	6.0+7.2	Φ15.9	Φ28.6	34.2+45.1	60+80	162x2
WNV-W670WM/A-F		67.0	75.0	7.9x2	7.35x2	(780x550x1000)x2	7.2x2	Φ15.9	Φ28.6	45.1x2	80x2	162x2
WNV-W728WM/A-F		72.8	81.5	3.9x2+5.7	4.0x2+5.4	(780x550x1000)x3	4.8x2+6.0	Φ19.05	Φ31.8	32.3x2+34.2	50x2+60	162x3
WNV-W784WM/A-F		78.4	88.0	3.9+5.7x2	4.0+5.4x2	(780x550x1000)x3	4.8+6.0x2	Φ19.05	Φ31.8	32.3+34.2x2	50+60x2	162x3
WNV-W840WM/A-F		84.0	94.5	5.7x3	5.4x3	(780x550x1000)x3	6.0x3	Φ19.05	Φ31.8	34.2x3	60x3	162x3
WNV-W895WM/A-F		89.5	100.5	5.7x2+7.9	5.4x2+7.35	(780x550x1000)x3	6.0x2+7.2	Φ19.05	Φ31.8	34.2x2+45.1	60x2+80	162x3
WNV-W950WM/A-F		95.0	106.5	5.7+7.9x2	5.4+7.35x2	(780x550x1000)x3	6.0+7.2x2	Φ19.05	Φ31.8	34.2+45.1x2	60+80x2	162x3
WNV-W1005WM/A-F		100.5	112.5	7.9x3	7.35x3	(780x550x1000)x3	7.2x3	Φ19.05	Φ38.1	45.1x3	80x3	162x3
WNV-W1064WM/A-F		106.4	119.5	3.9+5.7x3	4.0+5.4x3	(780x550x1000)x4	4.8+6.0x3	Φ19.05	Φ38.1	32.3+34.2x3	50+60x3	162x4
WNV-W1120WM/A-F		112.0	126.0	5.7x4	5.4x4	(780x550x1000)x4	6.0x4	Φ19.05	Φ38.1	34.2x4	60x4	162x4
WNV-W1175WM/A-F		117.5	132.0	5.7x3+7.9	5.4x3+7.35	(780x550x1000)x4	6.0x3+7.2	Φ19.05	Φ38.1	34.2x3+45.1	60x3+80	162x4
WNV-W1230WM/A-F		123.0	138.0	5.7x2+7.9x2	5.4x2+7.35x2	(780x550x1000)x4	6.0x2+7.2x2	Φ19.05	Φ38.1	34.2x2+45.1x2	60x2+80x2	162x4
WNV-W1285WM/A-F		128.5	144.0	5.7+7.9x3	5.4+7.35x3	(780x550x1000)x4	6.0+7.2x3	Φ19.05	Φ38.1	34.2+45.1x3	60+80x3	162x4
WNV-W1340WM/A-F		134.0	150.0	7.9x4	7.35x4	(780x550x1000)x4	7.2x4	Φ19.05	Φ38.1	45.1x4	80x4	162x4



High Static Pressure Duct Type Indoor Unit

High Static Pressure Design

> Static pressure can be up to 150Pa, especially suitable for places in need of long distance airflow.

Easy Maintenance

> The system has maintenance port for easy maintenance.

Convenient Installation

> You can choose circular air duct or rectangular air duct according to actual needs. Or you can choose different ways of air return.

Protection Function

> Anti-freezing protection, fan motor overload protection, and temperature sensor malfunction protection



Low Static Pressure Duct Type Unit

Highly Efficient & Energy-saving

> efficiency is improved by over 30% compared with common motor. Evaporator flow path adopts simulating optimized design via the refrigeration system simulation software, which has greatly increased the heat exchange capacity of evaporator.

Slim & Small

> The unit is only 200mm' s thick and 462mm' s deep. Suspended ceiling doesn' t have to be very high. It is suitable for ordinary rooms.

Wiring of Electric Control Box

> Mounting board of electric control box elements are arranged at both sides of the mounting board of fan motor. There is a wire-cross notch on each side so that wiring at both sides of the mounting board of fan motor is convenient and efficient. Strong and weak current are also separated to ensure the effectiveness of weak current signal transmission.

Protection Functions

> Anti-freezing protection, fan motor built-in over load protection, and temperature sensor error protection.

Ultra-quiet

> High-efficiency centrifugal fan and ultralow noise volute are developed with ANSYS and Fluent. Mean while, inlet mute valve is adopted so that noise of the complete unit is greatly reduced.

Fast & Strong

> Intelligent temperature control technology is adopted. Cooling/ heating function is fast and strong so that room temperature can quickly reach set temperature.

Flexible Installation

> Based on the requirements of building and utilization, different ways of air return and different air supply static pressure can be selected.

CAN Bus Communication Technology

> System response speed is faster and communication is more reliable. Auto addressing, non-polar communication, free wire matching

Convenient Operation & Maintenance

> Electric control box is attached independently so that it can be detached as a whole, which is convenient for maintenance. The installation and maintenance of fan and motor is also convenient.

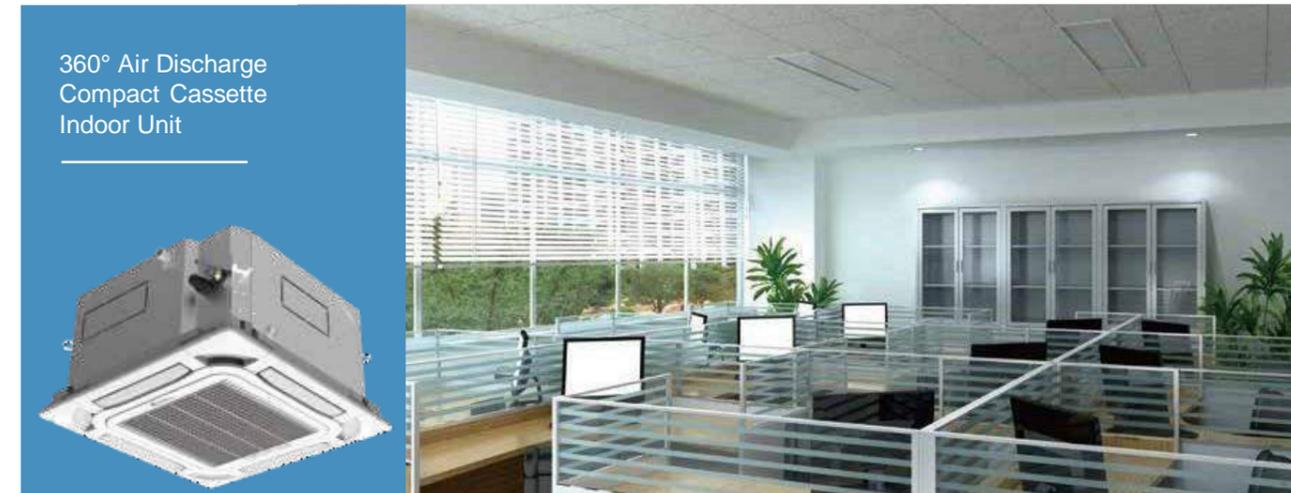


Fresh air quality

> The fresh air device operates by matching with 4-way cassette indoor unit, supplying indoor side with outdoor fresh air to improve indoor air quality and then let users enjoy the fresher air.

Beautiful Appearance

> With beautiful and elegant outlook, it can match with 4-way cassette.



360° Air Supply

> 360° air supply design for balanced temperature distribution, which provides more comfortable experience.

Ultra-low Noise Operation

> DC inverter motor can realize stepless speed regulation to lower noise indoor unit, it can be set to work under auto quiet mode via wired controller.

Independent Swing Control

> 4 swing blades can be controlled independently and maximum 626 air supply angle combinations can be realized for free and humanized control, avoiding direct blow to people.

Intelligent Drainage Device

> Water height difference up to 1.2m, which can effectively drain out condensing water and save space.



360° Air
Discharge
Cassette Indoor Unit

360° Air Supply

> 360° air supply design to make indoor air flow more even and temperature distribution more comfortable to avoid any blind angle.

Individual Swing Control

> Individual swing control of four air guide louvers to set fixed supply air or swing supply air in different angles individually, satisfying the user's
> individualized requirements on temperature and air flow distribution in different indoor locations, thus enhancing comfort.

Lifting Water Pump of Condensate

> With direct current drainage pump, the operation noise is lower and the lift reaches 1,200mm.

Fresh Air Function

> With the healthy fresh air accessories, it can bring in 8%~10% of fresh outdoor air effectively, improving air quality of indoor unit.

Smart sensor Technology*

> The advanced Smart sensor technology can detect human indoor activities at real time and realize intelligent control to the operation status of the indoor unit, thus reaching a higher energy conservation level.
Note: * This function is custom-made.



2-way
Cassette
Indoor Unit

Beautiful Appearance

> With beautiful and elegant front panel, it is suitable for indoor surroundings.

Intelligent Drainage Device

> Water height difference up to 1.0m, which can effectively drain out condensing water and save space.

Two-way Air Flow Design

> Two-way air outlet, to stretch air outlet distance and solve air supply problem of elongated room

Multiple Protections

> Anti-freezing protection, temperature malfunction protection, fan motor overload and humidity sensor protection.



1-way
Cassette
Indoor Unit

Small Installation Space

> With 185mm ultrathin design, unit can be installed in the ceiling of 19cm deep.

Detachable Grille and Long Service Life for Filter

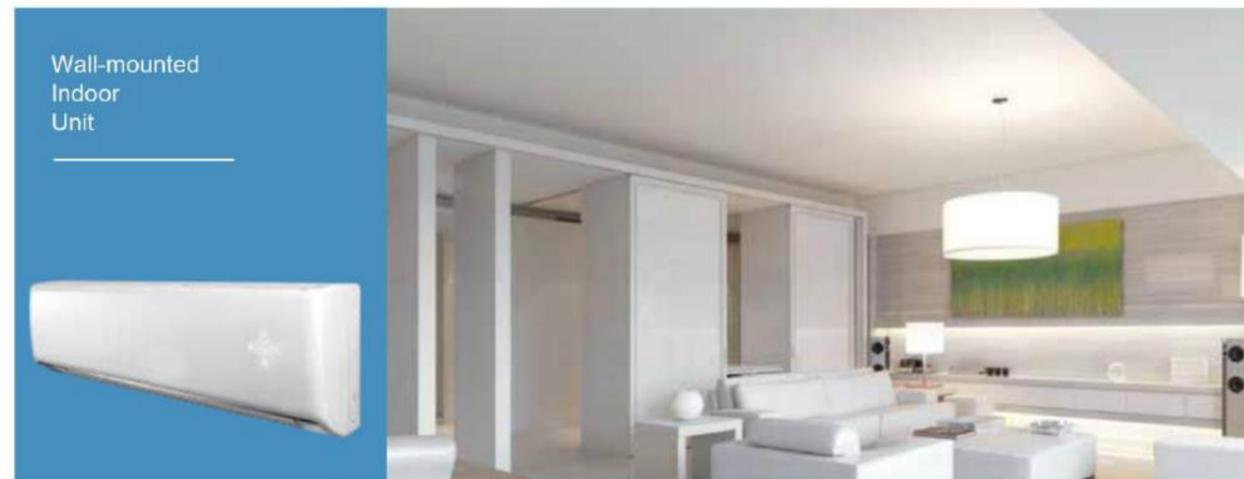
> Grille is detachable for easy cleaning. With durable filter, cleaning cycle is 20 times longer.

High Drain Pump Lift

> Drain pump lift reaches 1.0m, which can effectively drain out water.

Protection Function

> Water overflow protection, anti-freezing protection, fan motor overload protection, and temperature sensor malfunction protection



Wall-mounted
Indoor
Unit

Comfortable And Balanced Airflow, Up&down Air Outlet

> Up air outlet: In cooling, cool air blows out horizontally and then gradually drops. Down air swing: In heating, warm air blows downward and then gradually climbs up.

Triple Defenders For Better Purification

> Mildew-proof filter, electrostatic fibre and anti-biotic fibre adopted to remove dust, smell, bacteria and mildew.

Cold Air Prevention Design

> During heating in winter, cold air prevention function is enabled so that air won't be blown out until it's warm.

Multiple Protections

> Anti-freezing protection, temperature sensor malfunction protection, fan motor overload protection.



Floor Ceiling
Type Indoor
Unit

Hoisted or Seated, Flexible Installation

> Unit can be hoisted or seated. When seated, suspended ceiling is not needed.

Protection Function

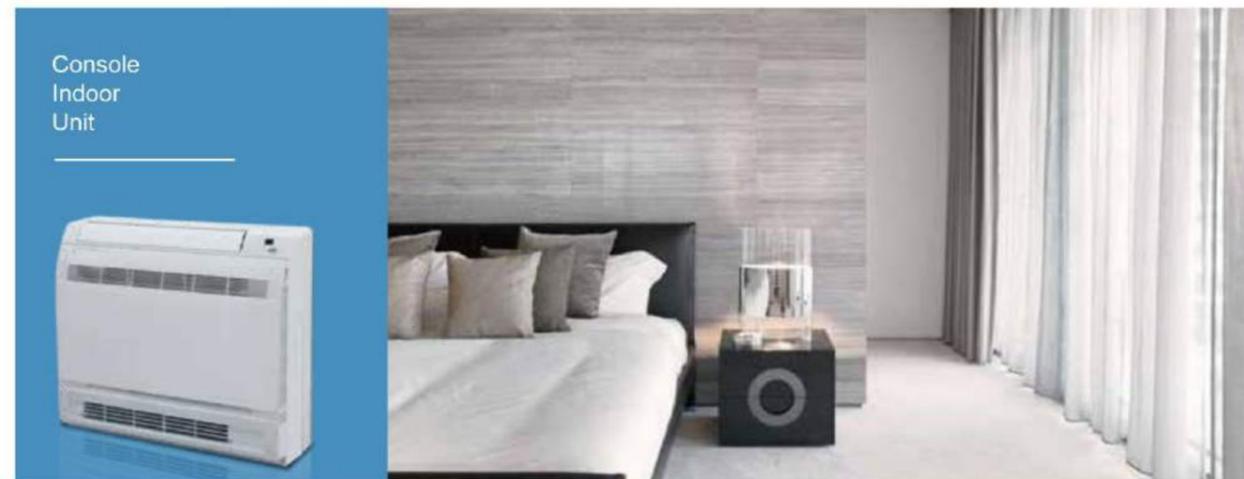
> Anti-freezing protection, temperature sensor malfunction protection, fan motor overload protection.

Beautiful Appearance

> With beautiful and elegant front panel, it is suitable for the indoor surroundings.

Horizontal and Vertical Air Swing

> Wider air swing range for your comfortable working and living environment.



Console
Indoor
Unit

Detachable Grille and Long Service Life for Filter

> Grille is detachable for easy cleaning. With long life filter, cleaning cycle is 20 times longer.

Multiple Fan Speed

> The fan can operate at multiple speeds and satisfy different air flow volume requirements.

Floor Standing Indoor Unit



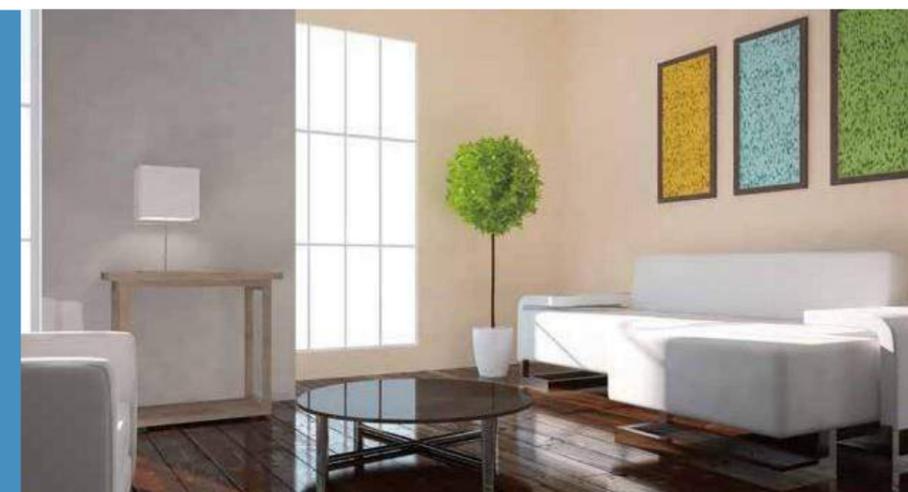
Wide Application

> It can be widely adopted in hotels, restaurants, offices, etc.

Auto Clean To Ensure a Healthy Life

> After turning off the unit, the indoor fan will keep running at a low speed for a moment to dry the inner components and parts, in order to prevent mildew and keep user healthy.

Concealed Floor Standing Type



Wide Capacity Range

> Wide capacity range from 2.2kW to 7.1kW.

DC Motor

> DC motor is adopted, which is more efficient. All units are only 200mm's thick, saving space while offering highly efficient performance.

Easy Installation

> High ESP allows installation with air ducts. The low altitude design allows installation under a window. It is applicable for hotels, schools and office buildings. Three different height choices* of ex-factory supporter satisfy users' different installation needs. *Note: This is an optional function. Please state specifically if you want to order.

Fresh Air Processing Indoor Unit

> Airflow volume: 1200~4000m³/h
 Applicable range: Residential houses, villas, business buildings, hotels, apartments, etc.



One System, Two Functions

> Adopted with DC inverter technology, Fresh Air DC Inverter Multi VRF System features air conditioning function and fresh air function.



Enjoy Fresh Air

> Airflow volume: 1200~4000m³/h; cooling capacity: 14-45kW Applicable for all kinds of structure. > Direct evaporative cooling adopted, air conditioning fresh air can be realized accurately. > DC inverter technology adopted, constant humidity is enabled with less power consumption. > Integrated system control with WONY WVM Multi VRF System



Air Conditioning and Fresh Air, 2-in-1

Less investment

> Fresh Air DC Inverter Multi VRF System can be combined with Wony WNV5. For a same room, if the same amount of fresh air is to be taken, then the cost of WNV5+Fresh Air Unit is equivalent to the cost of WNV+Air Exchange Fan.



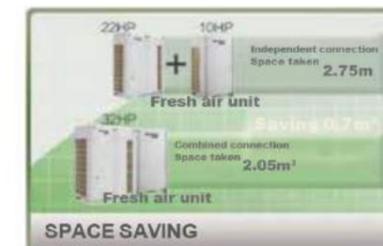
Less operation cost

> Unit can control refrigerant output according to actual needs to ensure constant airflow temperature. By adjusting power output, light-load but high power operation can be avoided. Thus, operation cost can be greatly reduced.



Less Installation Space

> Save installation space for outdoor units. Especially suitable for places that have restricted installation space.



AHU-KIT

- > Multiple installation methods, convenient for engineering design.
- > Independent design, convenient for installation.
- > Wide capacity range, applicable to most occasions.
- > Malfunction signal access, safe and reliable operation.
- > VRF outdoor unit as the cold/heat source, no need of additional cold/heat source.
- > Connected to variable refrigerant control system, with DC inverter control technology.
- > Run together with VRF indoor units in the same system.



Indoor Units Lineup

Specifications of Indoor Units

Type of indoor unit	Specification	22	25	28	32	36	40	45	50	56	63	71	72	80	90	100	112	125	140	160	224	250	280	450	660
High Static Pressure Duct Type Unit		•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•		
Low Static Pressure Duct Type Unit		•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•					
360° Air Discharge Cassette Indoor Unit				•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•					
360° Air Discharge Compact Cassette Indoor Unit		•	•	•	•	•	•	•	•	•															
2-way Cassette Indoor Unit				•	•	•	•	•	•	•	•	•													
1-way Cassette Unit		•	•	•	•	•	•	•	•	•															
Wall-mounted		•	•	•	•	•	•	•	•	•	•	•		•	•	•									
Floor Ceiling Type Indoor Unit			•	•	•	•	•	•	•	•	•	•		•		•	•	•	•	•					
Console Indoor Unit		•	•	•	•	•	•	•	•																
Floor Standing Type Indoor Unit																•			•						
Fresh Air Processing Indoor Unit																		•	•		•	•	•	•	
AHU KIT					•							•							•				•		•
Concealed Floor Standing Type		•	•	•	•	•	•	•	•	•	•	•													

High Static Pressure Duct Type Indoor Unit

50/60 Hz

Model		WNV-OE22 QIT/C-U	WNV-OE25 QIT/C-U	WNV-OE28 QIT/C-U	WNV-OE32 QIT/C-U	WNV-OE36 QIT/C-U	WNV-OE40 QIT/C-U	
Capacity	Cooling	kW	2.2	2.5	2.8	3.2	3.6	4.0
	Heating	kW	2.5	2.8	3.2	3.6	4.0	4.5
Power supply	V/Ph/Hz	220-240/1/50 & 208-230/1/60						
Power consumption	W	55	55	55	65	65	85	
Airflow volume(H/M/L)	m³/h	550/480/400	550/480/400	550/480/400	600/500/420	600/500/420	850/700/600	
Rated current	Cooling	A	0.5	0.5	0.5	0.5	0.5	0.5
	Heating	A	0.5	0.5	0.5	0.5	0.5	0.5
	Water heating	A	/	/	/	/	/	/
ESP	Pa	60/0~150	60/0~150	60/0~150	60/0~150	60/0~150	60/0~150	
Sound pressure level(H/M/L)	dB(A)	33/30/28	33/30/28	33/30/28	33/31/29	33/31/29	36/34/32	
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	
	Gas	mm	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ12.7	
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	
Dimension (WxDxH)	Outline	mm	700x700x300	700x700x300	700x700x300	700x700x300	700x700x300	
	Package	mm	897x808x360	897x808x360	897x808x360	897x808x360	897x808x360	
Net weight/Gross weight	kg	32/38	32/38	32/38	32/38	32/38	34/40	
Loading quantity	40' GP	unit	168	168	168	168	168	
	40' HQ	unit	196	196	196	196	196	

Model		WNV-OE45 QIT/C-U	WNV-OE50 QIT/C-U	WNV-OE56 QIT/C-U	WNV-OE63 QIT/C-U	WNV-OE71 QIT/C-U	WNV-OE80 QIT/C-U	
Capacity	Cooling	kW	4.5	5.0	5.6	6.3	7.1	8.0
	Heating	kW	5.0	5.6	6.3	7.1	8.0	9.0
Power supply	V/Ph/Hz	220-240/1/50 & 208-230/1/60						
Power consumption	W	85	85	90	90	100	100	
Airflow volume(H/M/L)	m³/h	850/700/600	850/700/600	1000/800/700	1000/800/700	1250/1050/950	1250/1050/950	
Rated current	Cooling	A	0.5	0.5	0.8	0.8	0.8	0.8
	Heating	A	0.5	0.5	0.8	0.8	0.8	0.8
	Water heating	A	/	/	/	/	/	/
ESP	Pa	60/0~150	60/0~150	90/0~200	90/0~200	90/0~200	90/0~200	
Sound pressure level(H/M/L)	dB(A)	36/34/32	36/34/32	37/35/33	37/35/33	38/36/34	38/36/34	
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	
	Gas	mm	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9	
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	
Dimension (WxDxH)	Outline	mm	700x700x300	700x700x300	1000x700x300	1000x700x300	1000x700x300	
	Package	mm	897x808x360	897x808x360	1205x813x360	1205x813x360	1205x813x360	
Net weight/Gross weight	kg	34/40	34/40	43/49	43/49	43/49	43/49	
Loading quantity	40' GP	unit	168	168	138	138	138	
	40' HQ	unit	196	196	161	161	161	

Model		WNV-OE90 QIT/C-U	WNV-OE100 QIT/C-U	WNV-OE112 QIT/C-U	WNV-OE125 QIT/C-U	WNV-OE140 QIT/C-U	WNV-OE160 QIT/C-U	WNV-OE224 QI/B-U	WNV-OE280 QI/B-U
Capacity	Cooling	kW	9.0	10.0	11.2	12.5	14.0	16.0	22.4
	Heating	kW	10.0	11.2	12.5	14.0	16.0	18.0	25.0
Power supply	V/Ph/Hz	220-240/1/50 & 208-230/1/60							
Power consumption	W	140	140	160	160	220	230	800	900
Airflow volume(H/M/L)	m³/h	1800/1450/1250	1800/1450/1250	2000/1600/1400	2000/1600/1400	2350/1900/1650	2500/2000/1750	4000/3600/3200	4400/4000/3600
Rated current	Cooling	A	1.1	1.1	1.1	1.1	2.0	2.0	3.7
	Heating	A	1.1	1.1	1.1	1.1	2.0	2.0	3.7
	Water heating	A	/	/	/	/	/	/	/
ESP	Pa	90/0~200	90/0~200	90/0~200	90/0~200	90/0~200	90/0~200	100/50~200	100/50~200
Sound pressure level(H/M/L)	dB(A)	40/37/35	40/37/35	40/38/36	40/38/36	42/39/37	44/41/38	54/52/49	55/52/50
Connecting pipe diameter	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ19.05	Φ19.05	Φ22.2
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.0	2.0
Dimension (WxDxH)	Outline	mm	1400x700x300	1400x700x300	1400x700x300	1400x700x300	1400x700x300	1483x791x385	1686x870x450
	Package	mm	1601x813x365	1601x813x365	1601x813x365	1601x813x365	1678x808x365	1678x808x365	1578x883x472
Net weight/Gross weight	kg	57/64	57/64	57/64	57/64	58/67	58/67	82/104	105/140
Loading quantity	40' GP	unit	84	84	84	84	84	52	52
	40' HQ	unit	98	98	98	98	98	65	65

Low Static Pressure Duct Type Unit

50/60 Hz

Model		WNV-OE22QMT/D	WNV-OE25QMT/D-U	WNV-OE8QMT/D-	WNV-OE32QMT/D-	WNV-OE36QMT/D-
Capacity	Cooling	kW	2.2	2.8	3.2	3.6
	Heating	kW	2.5	2.8	3.2	4.0
Power supply	V/Ph/Hz	220-240/1/50 & 208-230/1/60				
Power consumption	W	28	28	28	37	37
Airflow volume (H/M/L)	m³/h	450/350/200	450/350/200	450/350/200	550/400/300	550/400/300
Rated current	Cooling	A	0.2	0.2	0.2	0.3
	Heating	A	0.2	0.2	0.2	0.3
ESP	Pa	15/0~30	15/0~30	15/0~30	15/0~30	15/0~30
Sound pressure level(H/M/L)	dB(A)	30/25/22	30/25/22	30/25/22	31/27/25	31/27/25
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas	mm	Φ9.52	Φ9.52	Φ9.52	Φ12.7
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5
Dimension (WxDxH)	Outline	mm	710x462x200	710x462x200	710x462x200	710x462x200
	Package	mm	1008x568x275	1008x568x275	1008x568x275	1008x568x275
Net weight/Gross weight	kg	18.5	18.5	18.5	19	19
Loading quantity	40' GP	unit	386	386	386	386
	40' HQ	unit	430	430	430	430

Model		WNV-OE40QMT/D-U	WNV-OE45QMT/D-U	WNV-OE50QMT/D-U	WNV-OE50QMT/D-U /	WNV-OE63QMT/D-	WNV-OE71QMT-	
Capacity	Cooling	kW	4	4.5	5.0	5.6	6.3	7.1
	Heating	kW	4.5	5.0	5.6	6.3	7.1	8.0
Power supply	V/Ph/Hz	220-240/1/50 & 208-230/1/60						
Power consumption	W	40	40	55	55	55	55	
Airflow volume (H/M/L)	m³/h	750/550/400	750/550/400	850/700/550	850/700/550	850/700/550	1100/850/650	
Rated current	Cooling	A	0.3	0.3	0.4	0.4	0.4	0.5
	Heating	A	0.3	0.3	0.4	0.4	0.4	0.5
ESP	Pa	15/0~30	15/0~30	15/0~30	15/0~30	15/0~30	15/0~50	
Sound pressure level(H/M/L)	dB(A)	33/29/27	33/29/27	35/31/29	35/31/29	35/31/29	37/32/30	
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	
	Gas	mm	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	
Dimension (WxDxH)	Outline	mm	1010x462x200	1010x462x200	1010x462x200	1010x462x200	1310x462x200	

Model			WNV-OE80QMT/D	WNV-OE90QMT/D	WNV-OE100QMT/D	WNV-OE112QMT/D	WNV-OE125QMT/D	WNV-OE140QMT/D
Capacity	Cooling	kW	8	9	10	11.2	12.5	14
	Heating	kW	9	10	11.2	12.5	14	16
Power supply	V/Ph/Hz	220-240V ~ 50Hz & 208/230V ~ 60Hz						
Power consumption	W	110	130	130	130	170	170	
	(H/M/L)	m ³ /h	1250/1100/900	1500/1250/900	1500/1350/1000	1700/1500/1100	2000/1700/1400	2000/1700/1400
Rated current	Cooling	A	0.53	0.63	0.63	0.63	0.8	0.8
	Heating	A	0.53	0.63	0.63	0.63	0.8	0.8
ESP	Pa	50/0-80	50/0-80	50/0-80	50/0-80	50/0-80	50/0-80	50/0-80
Sound pressure level(H/M/L)	dB(A)	37/34/31	40/36/32	40/36/32	40/36/32	42/40/37	42/40/37	
Connecting pipe diameter	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5
Dimension (WxDxH)	Outline	mm	1200x655x260	1340x655x260	1340x655x260	1340x655x260	1340x655x260	1340x655x260
	Package	mm	1448x858x315	1588x858x315	1588x858x315	1588x858x315	1588x858x315	1588x858x315
Net weight/Gross weight	kg	39.0/48.0	45.5/54.5	45.5/54.5	45.5/54.5	46.5/55.5	46.5/55.5	
Loading quantity	40'GP	unit	154	105	105	105	105	105
	40'HQ	unit	176	120	120	120	120	120

360° Air Discharge Cassette Indoor Unit

50/60 Hz

Model			WNV-OE28U/D-U*	WNV-OE36U/D-U*	WNV-OE45U/D-U*	WNV-OE50U/D-U*	WNV-OE56U/D-U*
Capacity	Cooling	kW	2.8	3.6	4.50	5.00	5.60
	Heating	kW	3.2	4	5.00	5.60	6.30
Power supply	V/Ph/Hz	220-240 /1/50 & 208-230 /1/60					
Power consumption	W	25	25	26	28	35	
Airflow volume (H/M/L)	m ³ /h	800 /700 /600	800 /700 /600	800 /700 /600	900 /800 /700	950 /850 /750	
Input Current	Cooling	A	0.2	0.2	0.2	0.2	0.2
	Heating	A	0.2	0.2	0.2	0.2	0.2
Sound pressure level (H/M/L)	dB (A)	33/30/28	33/30/28	33/30/28	35/32/29	36/33/30	
Connecting pipe diameter	Liquid	mm	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9
	Gas	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5
Main Body	Dimension (WxDxH)	Outline	mm	840 x 840 x 240	840 x 840 x 240	840 x 840 x 240	840 x 840 x 240
		Package	mm	963 x 963 x 325	963 x 963 x 325	963 x 963 x 325	963 x 963 x 325
	Net weight /Gross weight	kg	28 /36	28 /36	28 /36	29 /37	29 /37
Panel	Dimension (WxDxH)	Outline	mm	950 x 950 x 65	950 x 950 x 65	950 x 950 x 65	950 x 950 x 65
		Package	mm	1033 x 1038 x 112	1033 x 1038 x 112	1033 x 1038 x 112	1033 x 1038 x 112
	Net weight /Gross weight	kg	6.0 /9.5	6.0 /9.5	6.0 /9.5	6.0 /9.5	6.0 /9.5
Loading quantity	40'GP	unit	168	168	168	168	168
	40'HQ	unit	192	192	192	192	192

Model			WNV-OE63T/C-T	WNV-OE71T/C-T	WNV-OE80T/C-T	WNV-OE90T/C-T
Capacity	Cooling	kW	6.30	7.10	8.00	9.00
	Heating	kW	7.10	8.00	9.00	10.00
Power supply	V/Ph/Hz	220-240 /1/50 & 208-230 /1/60				
Power consumption	W	60	60	80	80	
Airflow volume (H/M/L)	m ³ /h	1150 /950 /850	1150 /950 /850	1250 /1000 /900	1250 /1000 /900	
Input Current	Cooling	A	0.4	0.4	0.4	0.4
	Heating	A	0.4	0.4	0.4	0.4
Sound pressure level (H/M/L)	dB (A)	37 /34 /31	37 /34 /31	39 /37 /34	39 /37 /34	
Connecting pipe diameter	Liquid	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9
	Gas	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5
Main Body	Dimension (WxDxH)	Outline	mm	840 x 840 x 240	840 x 840 x 240	840 x 840 x 240
		Package	mm	963 x 963 x 325	963 x 963 x 325	963 x 963 x 325
	Net weight / Gross weight	kg	28 /36	28 /36	29 /37	29 /37
Panel	Dimension (WxDxH)	Outline	mm	950 x 950 x 65	950 x 950 x 65	950 x 950 x 65
		Package	mm	1033 x 1038 x 112	1033 x 1038 x 112	1033 x 1038 x 112
	Net weight / Gross weight	kg	6.0 /9.5	6.0 /9.5	6.0 /9.5	6.0 /9.5
Loading quantity	40'GP	unit	120	120	120	120
	40'HQ	unit	140	140	140	140

360° Air Discharge Compact Cassette Indoor Unit

50/60Hz

Model			WNV-OE100U/E-U	WNV-OE112 U/E-U	WNV-OE125 U/E-U	WNV-OE140 U/E-U	
Capacity	Cooling	kW	10 .00	11 .20	12 .50	14 .00	
	Heating	kW	11 .20	12 .50	14 .00	16 .00	
Power supply	V / Ph / Hz		220 -240 / 1 / 50 & 208 -230 / 1 / 60				
Power consumption	W		80	115	115	115	
Airflow volume (H / M / L)	m³/h		1250 /1000 /900	1650 /1300 /1100	1650 /1300 /1100	1650 /1300 /1100	
Input Current	Cooling	A	0 .4	0 .6	0 .6	0 .6	
	Heating	A	0 .4	0 .6	0 .6	0 .6	
Sound pressure level (H / M / L)	dB (A)		39 /37 /34	43 /41 /39	43 /41 /39	43 /41 /39	
Connecting pipe diameter	Liquid	mm	Φ 15 .9	Φ 15 .9	Φ 15 .9	Φ 15 .9	
	Gas	mm	Φ 9 .52	Φ 9 .52	Φ 9 .52	Φ 9 .52	
Drain pipe	External dia .	mm	Φ 25	Φ 25	Φ 25	Φ 25	
	Thickness	mm	2 .5	2 .5	2 .5	2 .5	
Main Body	Dimension (WxDxH)	Outline	mm	840 x 840 x 240	840 x 840 x 290	840 x 840 x 290	840 x 840 x 290
		Package	mm	963 x 963 x 325	960 x 960 x 379	960 x 960 x 379	960 x 960 x 379
	Net weight /Gross weight	kg	29 /37	33 /42	33 /42	33 /42	
Panel	Dimension (WxDxH)	Outline	mm	950 x 950 x 65	950 x 950 x 65	950 x 950 x 65	950 x 950 x 65
		Package	mm	1033 x 1038 x 112	1033 x 1038 x 112	1033 x 1038 x 112	1033 x 1038 x 112
	Net weight /Gross weight	kg	6 .0 /9 .5	6 .0 /9 .5	6 .0 /9 .5	6 .0 /9 .5	
Loading quantity	40 'GP	unit	120	120	120	120	
	40 'HQ	unit	140	140	140	140	

This product is under development. Please confirm the final specification with sales representatives.

Fresh Air Ventilation Kit

Model			XF150A-T*
Fresh Air Intake Volume	%		10
Dimension (WxDxH)	Outline	mm	834x834x60
	Package	mm	873x873x180
Dimension of the connrction	mm		150
	Pcs		2
Net weight/Gross weight	kg		2.7/7.7

*This model can be matched with 360° Air Discharge Cassette Indoor Units of WNV-OE**T/C-T series only.

Model			WNV-OE 22 U/F-U	WNV-OE28 U/F-U	WNV-OE36 U/F-U	WNV-OE45 U/F-U	WNV-OE 50 U/F-U	WNV-OE 56 U/F-U
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5	5.6
	Heating	kW	2.5	3.2	4	5	5.6	6.3
Power supply	V/Ph /Hz		220 -240 /1/50 & 208 -230 /1/60					
Power consumption	W		30	30	30	45	45	45
Airflow volume (H/M/L)	m³/h		500 /460 /370	570 /480 /420	620 /550 /480	730 /650 /560	730 /650 /560	730 /650 /560
Input Current	Cooling	A	0.15	0.15	0.15	0.23	0.23	0.23
	Heating	A	0.15	0.15	0.15	0.23	0.23	0.23
Sound pressure level (H/M/L)	dB (A)		36 /31 /25	36 /33 /28	39 /37 /35	43 /41 /39	43 /41 /39	43 /41 /39
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9
Drain pipe	External dia .	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5
Main Body	Dimension (WxDxH)	Outline	mm	570 x570 x265	570 x570 x265	570 x570 x265	570 x570 x265	570 x570 x265
		Package	mm	653 x698 x295	653 x698 x295	653 x698 x295	653 x698 x295	653 x698 x295
	Net weight /Gross weight	kg	17 .5/22 .5	17 .5/22 .5	17 .5/22 .5	17 .5/22 .5	17 .5/22 .5	17 .5/22 .5
Panel	Dimension (WxDxH)	Outline	mm	620 x620 x47 .5	620 x620 x47 .5	620 x620 x47 .5	620 x620 x47 .5	620 x620 x47 .5
		Package	mm	701 x701 x125	701 x701 x125	701 x701 x125	701 x701 x125	701 x701 x125
	Net weight /Gross weight	kg	3.0/4.5	3.0/4.5	3.0/4.5	3.0/4.5	3.0/4.5	3.0/4.5
Loading quantity	40 'GP	unit	378	378	378	378	378	378
	40 'HQ	unit	432	432	432	432	432	432

2-way Cassette Indoor Unit

50/60 Hz

Model U		WNV-OE28UT/B-U	WNV-OE36 UT/B-U	WNV-OE45UT/B-U	WNV-OE50UT/B-U	WNV-OE56UT/B-U	WNV-OE63UT/B-U	WNV-OE71UT/B-U	
Capacity	Cooling	kW	2.8	3.6	4.5	5.0	5.6	6.3	7.1
	Heating	kW	3.2	4.0	5.0	5.6	6.3	7.1	8.0
Power supply	V/Ph/Hz		220-240/1/50 & 208-230/1/60						
Power consumption	W		55.0	55.0	55.0	55.0	103.0	103.0	103.0
Airflow volume(H/M/L)	m³/h		830/660/580	830/660/580	830/660/580	830/660/580	1100/900/750	1100/900/750	1100/900/750
	CFM		490/390/340	490/390/340	490/390/340	490/390/340	650/530/440	650/530/440	650/530/440
Rated current	Cooling	A	0.4	0.4	0.4	0.4	0.7	0.7	0.7
	Heating	A	0.4	0.4	0.4	0.4	0.7	0.7	0.7
	Water heating	A	/	/	/	/	/	/	/
Sound pressure level(H/M/L)	dB(A)		35/32/29	35/32/29	35/32/29	35/32/29	39/36/33	39/36/33	39/36/33
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	25	25	25	25	25	25	25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Main body	Dimension (WxDxH)	Outline	mm	1200x520x315	1200x520x315	1200x520x315	1200x520x315	1200x520x315	1200x520x315
	Package	mm	1523x658x430	1523x658x430	1523x658x430	1523x658x430	1523x658x430	1523x658x430	1523x658x430
	Net weight/Gross weight	kg	43/54	43/54	43/54	43/54	46/56	46/56	46/56
Panel	Dimension (WxDxH)	Outline	mm	1416x630x33	1416x630x33	1416x630x33	1416x630x33	1416x630x33	1416x630x33
	Package	mm	1578x768x120	1578x768x120	1578x768x120	1578x768x120	1578x768x120	1578x768x120	1578x768x120
	Net weight/Gross weight	kg	7.0/11.0	7.0/11.0	7.0/11.0	7.0/11.0	7.0/11.0	7.0/11.0	7.0/11.0
Loading quantity	40'GP	unit	90	90	90	90	90	90	90
	40'HQ	unit	105	105	105	105	105	105	105

1-way Cassette Indoor Unit

50/60 Hz

Model		WNV-OE22UE/B-U	WNV-OE28UE/B-U	WNV-OE36UE/B-U	WNV-OE45UE/B-U	WNV-OE50UE/B-U	WNV-OE56UE/B-U	
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.0	5.6
	Heating	kW	2.5	3.2	4.0	5.0	5.6	6.3
Power supply	V/Ph/Hz		220-240/1/50 & 208-230/1/60					
Power consumption	W		30	30	30	45	45	45
Airflow volume(H/M/L)	m³/h		600/500/450	600/500/450	600/500/450	830/600/500	830/600/500	890/667/564
	CFM		353/294/265	353/294/265	353/294/265	488/353/294	488/353/294	524/393/332
Rated current	Cooling	A	0.2	0.2	0.2	0.3	0.3	0.3
	Heating	A	0.2	0.2	0.2	0.3	0.3	0.3
	Water heating	A	/	/	/	/	/	/
Sound pressure level(H/M/L)	dB(A)		36/32/28	36/32/28	36/32/28	40/35/30	40/35/30	41/38/35
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9
Drain pipe	External dia.	mm	25	25	25	25	25	25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5
Main body	Dimension (WxDxH)	Outline	mm	987x385x178	987x385x178	987x385x178	987x385x178	987x385x178
	Package	mm	1307x501x310	1307x501x310	1307x501x310	1307x501x310	1307x501x310	1307x501x310
	Net weight/Gross weight	kg	20.0/27.0	20.0/27.0	20.0/27.0	21.0/28.5	21.0/28.5	21/28.5
Panel	Dimension (WxDxH)	Outline	mm	1200x460x55	1200x460x55	1200x460x55	1200x460x55	1200x460x55
	Package	mm	1265x536x121	1265x536x121	1265x536x121	1265x536x121	1265x536x121	1265x536x121
	Net weight/Gross weight	kg	4.2/6.0	4.2/6.0	4.2/6.0	4.2/6.0	4.2/6.0	4.2/6.0
Loading quantity	40'GP	unit	138	138	138	138	138	138
	40'HQ	unit	138	138	138	138	138	138

Wall-mounted Type Indoor Unit

Model		WNV-OE22G/B4B-T ¹	WNV-OE28G/B4B-T ¹	WNV-OE36G/B4B-T ¹	WNV-OE45G/B4B-T ¹	WNV-OE50G/B4B-T ¹	
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5
	Heating	kW	2.5	3.2	4	5	5.6
Power supply	V/Ph/Hz		220-240/1/50 & 208-230/1/60				
Power consumption	W		20	20	25	35	35
Airflow volume (H/M/L)	m³/h		500/440/300	500/440/300	630/460/320	850/580/500	850/580/500
Rated current	Cooling	A	0.1	0.1	0.12	0.17	0.17
	Heating	A	0.1	0.1	0.12	0.17	0.17
Sound pressure level(H/M/L)	dB(A)		35/33/30	35/33/30	38/35/31	43/40/37	43/40/37
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7
Drain pipe	External dia.	mm	Φ20	Φ20	Φ20	Φ20	Φ20
	Thickness	mm	1.5	1.5	1.5	1.5	1.5
Dimension (WxDxH)	Outline	mm	845x289x209			970x300x224	
	Package	mm	976x379x281			1096x383x320	
Net weight/Gross weight	kg		10.5/12.5			12.5/15.5	
Loading quantity	40'GP	unit	576			448	
	40'HQ	unit	576			512	

Model		WNV-OE56G/B4B-T ¹	WNV-OE63G/B4B-T ¹	WNV-OE71G/B4B-T ¹	WNV-OE80G/B4B-T ¹	WNV-OE90G/B4B-T ¹	WNV-OE100G/B4B-T ¹	
Capacity	Cooling	kW	5.6	6.3	7.1	8.0	9.0	9.5
	Heating	kW	6.3	7.1	7.5	9.0	10.0	10.5
Power supply	V/Ph/Hz		220-240/1/50 & 208-230/1/60					
Power consumption	W		50	50	65	80	80	100
Airflow volume (H/M/L)	m³/h		1100/850/650	1100/850/650	1200/850/650	1550/1050/800	1550/1050/800	1650/1100/900
Rated current	Cooling	A	0.24	0.24	0.31	0.41	0.41	0.41
	Heating	A	0.24	0.24	0.31	0.41	0.41	0.41
Sound pressure level(H/M/L)	dB(A)		43/41/37	43/41/37	44/41/37	49/46/40	49/46/40	52/48/40
Connecting pipe diameter	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ20	Φ20	Φ20	Φ20	Φ20	Φ20
	Thickness	mm	1.5	1.5	1.5	1.5	1.5	1.5
Dimension (WxDxH)	Outline	mm	1078x325x246			1350x258x326		
	Package	mm	1203x413x350			1496x421x369		
Net weight/Gross weight	kg		16/19			18.5/23.5		
Loading quantity	40'GP	unit	282			228		
	40'HQ	unit	329			266		

Model			WNV-OE22H/E2C-U	WNV-OE28H/E2C-U	WNV-OE36H/E2C-U	WNV-OE45H/E2C-U
Capacity	Cooling	kW	2.2	2.8	3.60	4.50
	Heating	kW	2.5	3.20	4.00	5.00
Power supply	V/Ph/Hz		220V-240V ~ 50Hz & 208V-230V ~ 60Hz			
Power consumption	W		20	20	25	35
Airflow volume(H/M/L)	m³/h		500/440/300	500/440/300	630/460/320	850/580/500
Rated current	Cooling	A	0.1	0.1	0.12	0.17
	Heating	A	0.1	0.1	0.12	0.17
Sound pressure level(H/M/L)	dB(A)		35/33/30	35/33/30	38/35/31	43/40/37
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7
Drain pipe	External dia.	mm	Φ20	Φ20	Φ20	Φ20
	Thickness	mm	1.5	1.5	1.5	1.5
Dimension (WxDxH)	Outline	mm	845x209x289	845x209x289	845x209x289	970x300x224
	Package	mm	976x281x379	976x281x379	976x281x379	1096x383x320
Net weight/Gross weight	kg		10.5/12.5	10.5/12.5	10.5/12.5	12.5/15.5
Loading quantity	40' GP	unit	576	576	576	448
	40' HQ	unit	576	576	576	512

Fresh Air Processing Indoor Unit

50/60 Hz

Model			WNV-OEX125Q/B-U*	WNV-OEX140 Q/B-U *	WNV-OEX224 Q/B-U *	WNV-OEX250 Q/B-U *	WNV-OEX280 Q/B-U *	WNV-OY450Q/B(X4.0)-N
Capacity	Cooling	kW	12.5	14.0	22.4	25.0	28.0	45.0
	Heating	kW	8.5/10	10/12	16/20	18/20	20/22	32/35
Power supply	V/Ph/Hz		220-240V/1/50 & 208-230/1/60					
Power consumption	W		200/350	200/350	400/760	520/860	520/860	1240
Airflow volume(Default/Range)	m³/h		1200/1000-2000	1200/1000-2000	2000/1500-3000	2500/2000-3500	2500/2000-3500	4000
Input Current	Cooling	A	1.5/2.0	1.5/2.0	2.5/4.3	3.1/4.9	3.1/4.9	3.4
	Heating	A	1.5/2.0	1.5/2.0	2.5/4.3	3.1/4.9	3.1/4.9	3.4
ESP	Pa		150/50-200	150/50-200	200/50-300	200/50-300	200/50-300	200
Sound pressure level(Default/Range)	dB(A)		46/40-50	46/40-50	45/45-54	47/47-54	47/47-54	58
Connecting pipe diameter	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ12.7
	Gas	mm	Φ15.9	Φ15.9	Φ19.05	Φ22.2	Φ22.2	Φ28.6
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ33
	Thickness	mm	2.5	2.5	2.0	2.0	2.0	3.0
Dimension (WxDxH)	Outline	mm	1400x700x300	1400x700x300	1483x791x385	1483x791x385	1483x791x385	1700x1100x650
	Package	mm	1601x813x365	1601x813x365	1578x883x472	1578x883x472	1578x883x472	1893x1463x838
Net weight/Gross weight	kg		54/61	54/61	82/104	82/104	82/104	208/266
Loading quantity	40' GP	unit	84	84	52	52	52	16
	40' HQ	unit	98	98	65	65	65	16

Note:

- The external static pressure and air volume of WNV-OEX*** units can be adjusted.
- The marked power and current are the factory rated value and maximum value, and the marked air volume and noise are the factory rated value and range.
- This series can be matched with WNV5,WNV5E,WNV5 CP,WNV5 MAX,WNV5 HR (Top discharge outdoor unit)

Console Indoor Unit

50/60 Hz

Model			WNV-OE50H/E2C-U	WNV-OE56H/E2C-U	WNV-OE63H/E2C-U	WNV-OE71H/E2C-U
Capacity	Cooling	kW	5.00	5.60	6.30	7.10
	Heating	kW	5.60	6.30	7.10	7.50
Power supply	V/Ph/Hz		220V-240V ~ 50Hz & 208V-230V ~ 60Hz			
Power consumption	W		35	50	50	65
Airflow volume(H/M/L)	m³/h		850/580/500	1100/850/650	1100/850/650	1200/850/650
Rated current	Cooling	A	0.17	0.24	0.24	0.31
	Heating	A	0.17	0.24	0.24	0.31
Sound pressure level(H/M/L)	dB(A)		43/40/37	43/41/37	43/41/37	44/41/37
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ12.7	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ20	Φ30	Φ30	Φ30
	Thickness	mm	1.5	1.5	1.5	1.5
Dimension (WxDxH)	Outline	mm	970x300x224	1078x325x246	1078x325x246	1078x325x246
	Package	mm	1096x383x320	1203x413x350	1203x413x350	1203x413x350
Net weight/Gross weight	kg		12.5/15.5	16/19	16/19	16/19
Loading quantity	40' GP	unit	448	282	282	282
	40' HQ	unit	512	329	329	329

Model			WNV-OE22D/B-U	WNV-OE28D/B-U	WNV-OE36D/B-U	WNV-OE45D/B-U	WNV-OE50D/B-U
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.0
	Heating	kW	2.5	3.2	4.0	5.0	5.5
Power supply	V/Ph/Hz		220-240/1/50 & 208-230/1/60				
Power consumption	W		15	15	20	40	40
Airflow volume(H/M/L)	m³/h		400/320/270	400/320/270	480/400/310	680/600/500	680/600/500
Rated current	Cooling	A	0.17	0.17	0.25	0.4	0.4
	Heating	A	0.17	0.17	0.25	0.4	0.4
	Water heating	A	/	/	/	/	/
ESP	Pa		0	0	0	0	0
Sound pressure level(H/M/L)	dB(A)		38/33/27	38/33/27	40/37/32	46/43/39	46/43/39
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ6.35
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7
Drain pipe	External dia.	mm	28	28	28	28	28
	Thickness	mm	1	1	1	1	1
Dimension (WxDxH)	Outline	mm	700/215/600	700/215/600	700/215/600	700/215/600	700/215/600
	Package	mm	788x283x777	788x283x777	788x283x777	788x283x777	788x283x777
Net weight/Gross weight	kg		16/19	16/19	16/19	16/19	16/19
Loading quantity	40' GP	unit	348	348	348	348	348
	40' HQ	unit	348	348	348	348	348

Floor Ceiling Type Indoor Unit

50/60 Hz

Model			WNV-OE28 AE/B-U	WNV-OE36 AE/B-U	WNV-OE50 AE/B-U	WNV-OE56 AE/B-U	WNV-OE63 AE/B-U	
Capacity	Cooling	kW	2.8	3.6	5.0	5.6	6.3	
	Heating	kW	3.2	4.0	5.6	6.3	7.1	
Power supply	V/Ph/Hz		220-240/1/50 & 208-230/1/60					
Power consumption	W		40	40	50	50	75	
Airflow volume(H/M/L)	m³/h		650/580/500	650/580/500	950/850/700	950/850/700	1400/1150/1000	
Rated current	Cooling	A	0.3	0.3	0.4	0.4	0.6	
	Heating	A	0.3	0.3	0.4	0.4	0.6	
	Water heating	A	/	/	/	/	/	
Sound pressure level(H/M/L)	dB(A)		36/34/32	36/34/32	42/38/33	42/38/33	44/42/39	
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	
	Gas	mm	Φ9.52	Φ12.7	Φ12.7	Φ15.9	Φ15.9	
Drain pipe	External dia.	mm	Φ17	Φ17	Φ17	Φ17	Φ17	
	Thickness	mm	1.75	1.75	1.75	1.75	1.75	
Dimension (WxDxH)	Outline	mm	1220x700x225				1420x700x245	
	Package	mm	1343x823x315				1548x828x345	
Net weight/Gross weight	kg		40/49	40/49	40/49	40/49	50/58	
Loading quantity	40' GP	unit	145	145	145	145	90	
	40' HQ	unit	158	158	158	158	98	

Model			WNV-OE71 AE/B-U	WNV-OE90 AE/B-U	WNV-OE112 AE/B-U	WNV-OE125 AE/B-U	WNV-OE140 AE/B-U	WNV-OE160 AE/B-U
Capacity	Cooling	kW	7.1	9.0	11.2	12.5	14.0	16.0
	Heating	kW	8.0	10.0	12.5	14.0	16.0	18.0
Power supply	V/Ph/Hz		220-240/1/50 & 208-230/1/60					
Power consumption	W		75	140	160	160	160	200
Airflow volume(H/M/L)	m³/h		1400/1150/1000	1600/1400/1200	2000/1800/1450	2000/1800/1450	2000/1800/1450	2300/2100/1900
Rated current	Cooling	A	0.6	1.1	1.4	1.4	1.4	1.9
	Heating	A	0.6	1.1	1.4	1.4	1.4	1.9
	Water heating	A	/	/	/	/	/	/
Sound pressure level(H/M/L)	dB(A)		44/42/39	50/47/43	51/47/42	52/49/45	52/49/45	52/49/45
Connecting pipe diameter	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ19.05
Drain pipe	External dia.	mm	Φ17	Φ17	Φ17	Φ17	Φ17	Φ17
	Thickness	mm	1.75	1.75	1.75	1.75	1.75	1.75
Dimension (WxDxH)	Outline	mm	1420x700x245			1700x700x245		
	Package	mm	1548x828x345			1828x828x345		
Net weight/Gross weight	kg		50/58	50/58	60/68	60/68	60/68	60/68
Loading quantity	40' GP	unit	90	90	84	84	84	84
	40' HQ	unit	98	98	98	98	98	98

Model			WNV-OE28 AE/C-U*1	WNV-OE36 AE/C-U*1	WNV-OE50 AE/C-U*1	WNV-OE56 AE/C-U*1	WNV-OE63 AE/C-U*1	WNV-OE71*1
Capacity	Cooling	kW	2.8	3.6	5.0	5.6	6.3	7.1
	Heating	kW	3.2	4.0	5.6	6.3	7.1	8.0
Power supply	V/Ph/Hz		220-240/1/50 & 208-230/1/60					
Power consumption	W		40	40	50	75	75	75
Airflow volume (SL/H/M/L)	m³/h		650/610/530/460	650/610/530/460	850/800/700/600	850/800/700/600	1300/1220/1090/940	1300/1220/1090/940
Rated current	Cooling	A	0.3	0.3	0.4	0.6	0.6	0.6
	Heating	A	0.3	0.3	0.4	0.6	0.6	0.6
Sound pressure level(H/M/L)	dB(A)		36/32/28	36/32/28	42/39/36	44/41/38	44/41/38	44/41/38
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ9.52	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ17	Φ17	Φ17	Φ17	Φ17	Φ17
	Thickness	mm	1.75	1.75	1.75	1.75	1.75	1.75
Dimension (WxDxH)	Outline	mm	870x665x235	870x665x235	870x665x235	870x665x235	1200x665x235	1200x665x235
	Package	mm	1033x770x300	1033x770x300	1033x770x300	1033x770x300	1363x770x300	1363x770x300
Net weight/Gross weight	kg		25.0/30.0	25.0/30.0	26.0/31.0	31.0/37.0	31.0/37.0	31.0/37.0
Loading quantity	40' GP	unit	144	144	144	144	98	98
	40' HQ	unit	166	166	166	166	113	113

Note: *1 This product model is under development. Please confirm the final specifications with sales representatives.

Model			WNV-OE90ZD/B-T*1	WNV-OE100ZD/B-T*1	WNV-OE112ZD/B-T*1	WNV-OE125ZD/B-T*1	WNV-OE140ZD/B-T*1	WNV-OE160ZD/B-T*1
Capacity	Cooling	kW	9.0	10.0	11.2	12.5	14.0	16.0
	Heating	kW	10.0	11.2	12.5	14.0	16.0	17.0
Power supply	V/Ph/Hz		220-240/1/50 & 208-230/1/60					
Power consumption	W		140	140	160	160	160	200
Airflow volume (SL/H/M/L)	m³/h		1500/1380/1200/1020	1600/1500/1350/1260	1800/1700/1540/1400	1800/1700/1540/1400	2100/2000/1800/1480	2300/2200/1870/1590
Rated current	Cooling	A	1.1	1.1	1.4	1.4	1.4	1.9
	Heating	A	1.1	1.1	1.4	1.4	1.4	1.9
Sound pressure level(H/M/L)	dB(A)		47/43/39	47/43/39	47/44/42	47/44/42	50/48/44	53/49/45
Connecting pipe diameter	Liquid	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ19.05
Drain pipe	External dia.	mm	Φ17	Φ17	Φ17	Φ17	Φ17	Φ17
	Thickness	mm	1.75	1.75	1.75	1.75	1.75	1.75
Dimension (WxDxH)	Outline	mm	1200x665x235	1200x665x235	1570x665x235	1570x665x235	1570x665x235	1570x665x235
	Package	mm	1363x770x300	1363x770x300	1729x770x300	1729x770x300	1729x770x300	1729x770x300
Net weight/Gross weight	kg		31.0/37.0	31.0/37.0	40.0/47.0	40.0/47.0	42.0/49.0	42.0/49.0
Loading quantity	40' GP	unit	98	98	53	53	53	53
	40' HQ	unit	113	113	64	64	64	64

Note: *1 This product model is under development. Please confirm the final specifications with sales representatives.

Concealed Floor Standing Type

50/60 Hz

Model			WNV-OE22 AB/B-U	WNV-OE28 AB/B-U	WNV-OE36 AB/B-U	WNV-OE45 AB/B-U	WNV-OE56 AB/B-U	WNV-OE63 AB/B-U	WNV-OE71
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	6.3	7.1
	Heating	kW	2.5	3.2	4	5	6.3	7.1	8
Power supply	V/Ph/Hz		220-240V ~ 50Hz/208-230V ~ 60Hz						
Power consumption	W		35	35	43	45	80	80	90
Airflow volume(H/M/L)	m³/h		450/350/250	450/350/250	550/450/350	650/500/400	900/750/600	900/750/600	1100/900/700
Rated current	Cooling	A	0.18	0.18	0.22	0.23	0.41	0.41	0.46
	Heating	A	0.18	0.18	0.22	0.23	0.41	0.41	0.46
ESP	Pa		10/0~40	10/0~40	10/0~40	15/0~60	15/0~60	15/0~60	15/0~60
Sound pressure level(H/M/L)	dB(A)		30/28/25	30/28/25	33/31/28	33/31/28	35/33/30	35/33/30	37/35/33
Connecting pipe diameter	Liquid	mm	Φ6.35	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52
	Gas	mm	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9
Drain pipe	External dia.	mm	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25	Φ25
	Thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Dimension (WxDxH)	Outline	mm	700x615x200	700x615x200	700x615x200	900x615x200	1100x615x200	1100x615x200	1100x615x200
	Package	mm	893x743x305	893x743x305	893x743x305	1123x743x305	1323x743x305	1323x743x305	1323x743x305
Net weight/Gross weight	kg		23/30	23/30	23/30	27/36	32/41	32/41	32/41
Loading quantity	40' GP	unit	273	273	273	217	175	175	175
	40' HQ	unit	312	312	312	248	200	200	200

Floor Standing Type

50/60 Hz

Model		WNV-OE100M/B-U		WNV-OE140M/B-U			
Capacity	Cooling	kW	10	14			
	Heating	kW	11	15			
Power supply	V/Ph/Hz 220-240/1/50 & 208-230/1/60						
Power consumption	W 200						
Airflow volume(H/M/L)	m³/h		1850/1600/1400		1850/1600/1400		
	CFM		1089/942/824		1089/942/824		
Rated current	Cooling	A	1.5		1.5		
	Heating	A	1.5		1.5		
	Water heating	A	/		/		
ESP	Pa	0		0			
Sound pressure level(H/M/L)	dB(A)	50/48/46		50/48/46			
Connecting pipe diameter	Liquid	mm	Φ9.52		Φ9.52		
	Gas	mm	Φ15.9		Φ15.9		
Drain pipe	External dia.	mm	31		31		
	Thickness	mm	4.5		4.5		
Dimension (WxDxH)	Outline	mm	1870x580x400				
	Package	mm	2083x738x545				
Net weight/Gross weight	kg	54/74		57/77			
Loading quantity	40' GP	unit	67		67		
	40' HQ	unit	67		67		

Model (Combined)		WNV-O560 V/D-T +WNV-O140 U/C- T	WNV-O560 V/D-T +WNV-O280 U/C- T	WNV-O560 V/D-T +WNV-O560 V/D-T	WNV-O560 V/D-T +WNV-O560 V/D-T +WNV-O140 V/D-T	WNV-O560 V/D-T +WNV-O560 V/D-T +WNV-O280 V/D-T	WNV-O560 V/D-T +WNV-O560 V/D-T +WNV-O560 V/D-T	WNV-O560 V/D-T +WNV-O560 V/D-T +WNV-O560 V/D-T	
Capacity		840 +140	840 +280	840 +560	840 +840	840 +840 +140	840 +840 +280	840 +840 +560	840 +840 +840
Cooling	kW	98	112	140	168	182	196	224	252
Heating	kW	110.5	126	157.5	189	204.5	220.5	252	283.5
Power input	W	8+8	8+8	8+8	8+8	8+8+8	8+8+8	8+8+8	8+8+8
Power Supply	V/Ph/Hz	220 -240 /1/50 & 208 -230 /1/60	220 -240 /1/50 & 208 -230 /1/60	220 -240 /1/50 & 208 -230 /1/60	220 -240 /1/50 & 208 -230 /1/60	220 -240 /1/50 & 208 -230 /1/60	220 -240 /1/50 & 208 -230 /1/60	220 -240 /1/50 & 208 -230 /1/60	220 -240 /1/50 & 208 -230 /1/60
Size of connection pipe	Air handling unit	Liquid pipe	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ19.05	Φ22.2	Φ22.2
		Gas pipe	Φ38.1	Φ38.1	Φ41.3	Φ41.3	Φ41.3	Φ44.5	Φ44.5
Outline dimension (WxDxH)	EXV box	mm	246 x500 x120 +203 x326 x85		(246 x500 x120)x2		(246 x500 x120)x2 +203 x326 x85		(246 x500 x120)x3
	Control box	mm	(334 x284 x111)x2		(334 x284 x111)x2		(334 x284 x111)x3		(334 x284 x111)x3
Net weight	kg	13.0+10.5	13.0+10.5	13.0+13.0	13.0+13.0+10.5	13.0+13.0+10.5	13.0+13.0+10.5	13.0+13.0+10.5	13.0+13.0+10.5

AHU KIT

Model		WNV-O36V/D-U		WNV-O71V/D-U		WNV-O140V/D-U			WNV-O280V/D-U				WNV-O560V/D-U					
Capacity	Cooling	kW	36	71	140	280				560								
	Heating	kW	3.6	7.1	14	28				56								
Defaulted capacity of exfactory	Capacity	kW	28	36	45	56	71	90	112	140	224	280	335	400	450	504	560	840
	Heating	kW	2.8	3.6	4.5	5.6	7.1	9	11.2	14	22.4	28	33.5	40	45	50.4	56	84
Adjustable capacity	Heating	kW	3.2	4	5	6.3	8	10	12.5	16	25	31.5	37.5	45	50	56.5	63	94.5
Power input	W	8		8	8	8				8								
Power Supply	V/Ph/Hz 220-240/1/50 & 208-230/1/60																	
AHU-KIT(ex-factory pipe size)	mm	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ15.9	Φ15.9	Φ15.9
Size of connection	Liquid pipe	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ19.05
Air handling unit	Gas pipe	mm	Φ9.52	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ15.9	Φ19.05	Φ22.2	Φ25.4	Φ25.4	Φ28.6	Φ28.6	Φ28.6	Φ31.8
Outline dimension (WxDxH)	EXV box	mm	203x326x85		203x326x85		203x326x85			203x326x85				246x500x120				
	Control box	mm	334x284x111		334x284x111		334x284x111			334x284x111				334x284x111				
Packing size (WxDxH)	mm	539x461x247		539x461x247		539x461x247			539x461x247				759x645x180					
Net weight	kg	10		10.5	10.5	10.5				13								
Gross weight	kg	13		13.5	13.5	13.5				17.5								
	40' GP	set	981		981	981				702								
Loading	40' HP	set	1090		1090	1090				756								

Control System



> Model selection system is a necessary tool for the sales of VRF system in overseas market. In order to meet the demand of overseas market for model selection system, improve the competitive strength of Wony products in overseas market, Wony provides clients with intelligent, fast and multivariate model selection system.

Intelligent Model Selection

1) The system will take multiple aspects into consideration to provide clients with the optimal plan by combining performance, noise, comfort, reliability, cost, etc.

3) Using habit and using standard differs in different regions. The intelligent model selection system will conduct special process according to metric/inch system, unit parameters, different language system in different regions.

4) It will conduct automatic checking for the whole system, if anyone of the conditions cannot satisfy the user demand, the software will automatically calculate to find the suitable unit and pipe arrangement.

2) It can calculate according to user demand, ambient temperature, using location, static pressure, etc. to recommend the suitable IDU, ODU and pipe arrangement. It will check by combining the collocation rate, pipe arrangement, etc. of the whole system, and automatically adjust the unit model to get the optimal model selection plan.



Fast Model Selection

> The software can provide user with audio-visual model building experience via visible modeling method. Through the intelligent fast connection, multiple parts of VRF can be correctly and fast linked, which can greatly improve the modeling efficiency of user.

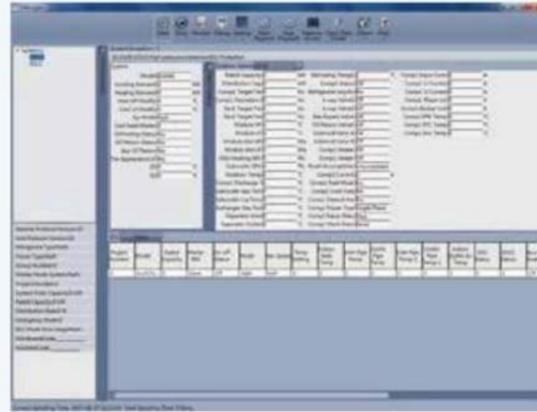


Intelligent Debugging Software

> WN5 offers an intelligent debugging software to the end-users for faster construction needs.

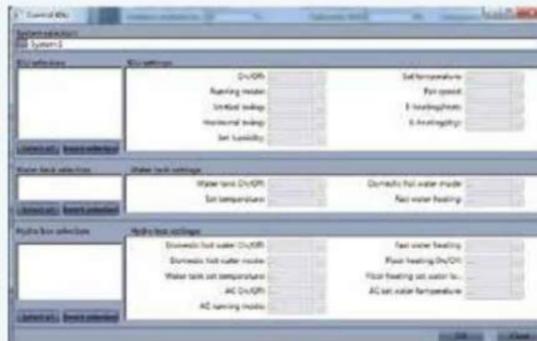
Monitoring Functions

- > Fully control the operation status of each device of the system;
- > Hover the mouse over the parameter to display its remarks.
- > The online devices will be displayed in a tree structure;
- > Display the information of air conditioner in divided regions;
- > Each display region can be moved or concealed;
- > Display updated status of units in real time;



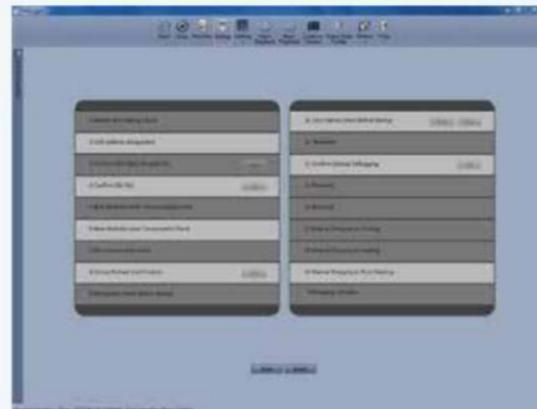
Control Functions

- > Control the operation of unit as you like;
- > Comprehensive control of outdoor unit, indoor unit, water tank, hydro box, etc.;
- > Real-time display of current status or status after being controlled;
- > Both single control and group control are available.



Project Debugging Functions

- > One-click and automatic project debugging;
- > Project debugging is arranged step by step from left to right;
- > Manual intervention and skipping of some debugging phases are available.
- > Wonyyn icons will be displayed for the items finishing debugging; red icons will be displayed for the items having debug exception; light yellow icons display debugging information;



Auto Data-Saving Function

> Data will be saved automatically. Database saving path can be changed or data document can be generated repeatedly.



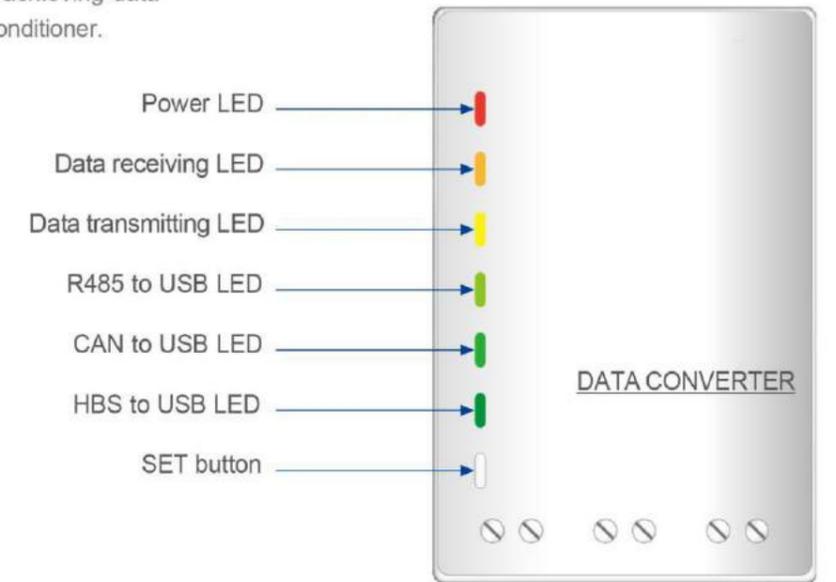
Step 1 : Change Database Saving Path



Step 2 : Database Save Setting

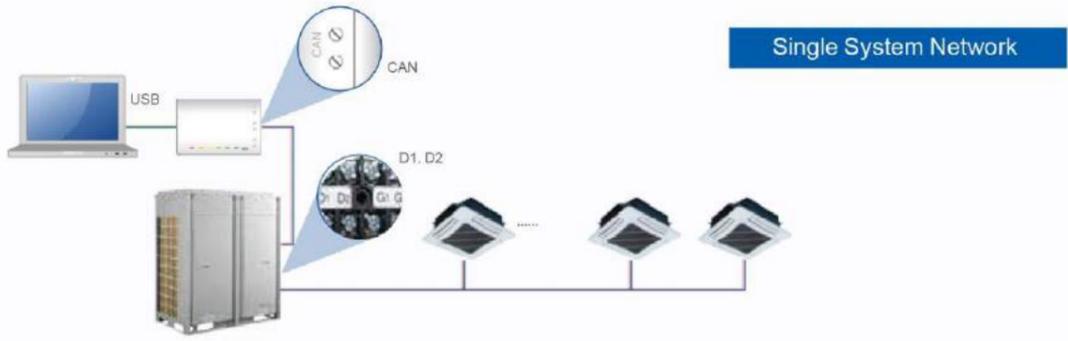
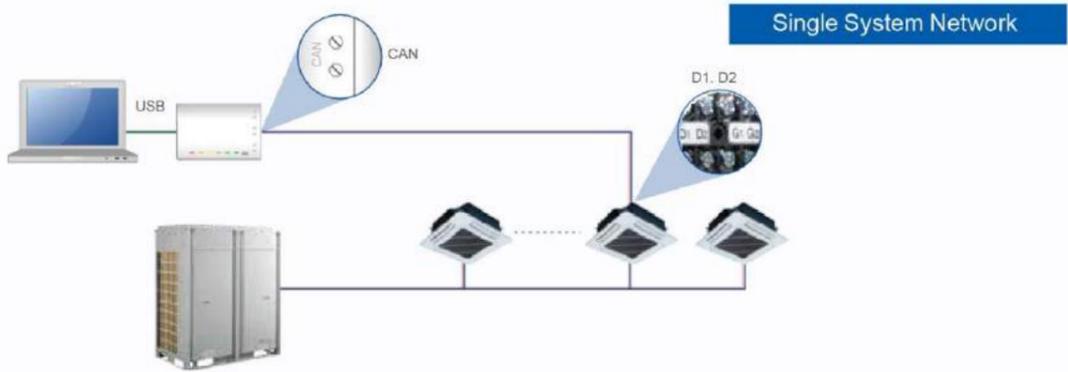
USB Data Converter

> Users can use USB data converter to freely convert CAN/HBS/RS485 data into USB data, achieving data interchange between computer and air conditioner.



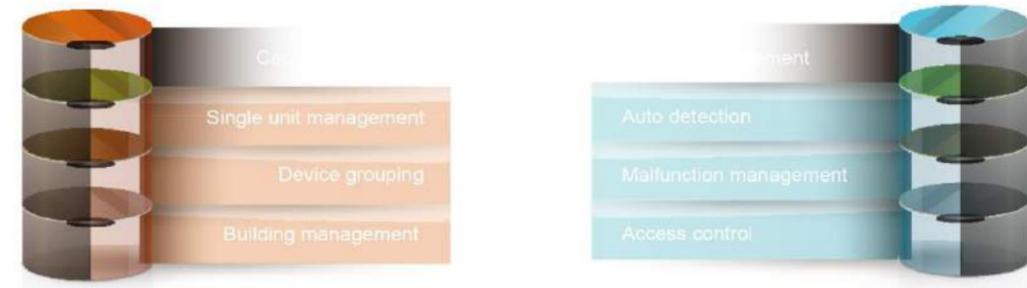
Auto Direction of Connection Way

> The wiring diagram will direct connection way automatically, so that the user can get the connection way quickly.



Intelligent Remote Eudemon

> With the design philosophy of to be intelligent, smart, inclusive and compatible, Wony developed the Intelligent Remote Eudemon System for VRF units, providing users with a distributed remote monitoring system for VRF units. By adopting the latest technologies and combining the features of engineering construction and debugging, this system is more compatible while less difficult to be installed and debugged. It can be widely used in industrial parks, shopping centers, office buildings, apartment blocks, villa clusters or other commercial or residential occasions, satisfying the demands of large-scale or cross-city networking.



5 Key Functions

Device monitoring

> It can monitor and control the parameters of every air conditioning device within the system, for example, on/off, running mode, set temperature, ambient temperature, etc., presenting the communication and malfunction data of air conditioners in a visual way.

Remote control

> Administrator can log in the control system through web browser on any kinds of terminals (from a long distance). Based on user's property management payment or energy-saving needs, you can control the on/off, temperature, running mode or other controllable parameters of any indoor unit from a long distance.

Malfunction alarm

> When an air conditioning device is malfunctioning, the system will report in real time and display malfunction details to users or after-sales service staff for the convenience of locating malfunction and timely maintenance.

Property management

> Visual management: It provides three viewing and control modes in regard to devices, engineering and grouping. You can set "alias" for indoor units, change the details according to structural alteration and view clearly the condition of devices in each area, which is convenient for management.

Schedule management

> It provides customized schedule preset mode and auto switch between "workday mode" and "holiday mode", satisfying different scheduling demands of commercial buildings, workplaces, family units, etc.

5 Key Features

Distributed design for balancing the load

> With distributed structure, the gateway has independent logical memory capability and can perform data processing for the first time, reducing the pressure on server (Intelligent Remote Eudemon). Once customized preset is made, each gateway can work independently, no need to keep connecting to the software.

Adopt WEB technology based on HTML5, control the system anywhere

> The software adopts B/S structure. With system's core functions installed on the server side, the front end adopts HTML5 technology and the web browser is the client side. You can control the system on different platforms and terminals.

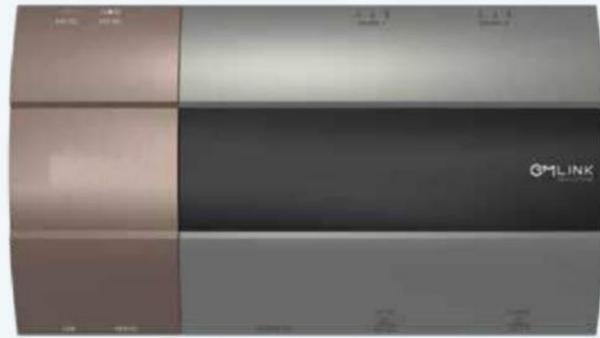
Design according to the project, increase interactive experience for convenient debugging and use

> It adopts visual interactive design, supports one-button import of details, engineering information, and so on, making the modification and debugging more convenient, and the operation more visualized and reliable. On the basis of Ethernet, the building's local network can be utilized directly without the need to build an air conditioning network, saving materials and construction time.

Fast, reliable and in real time

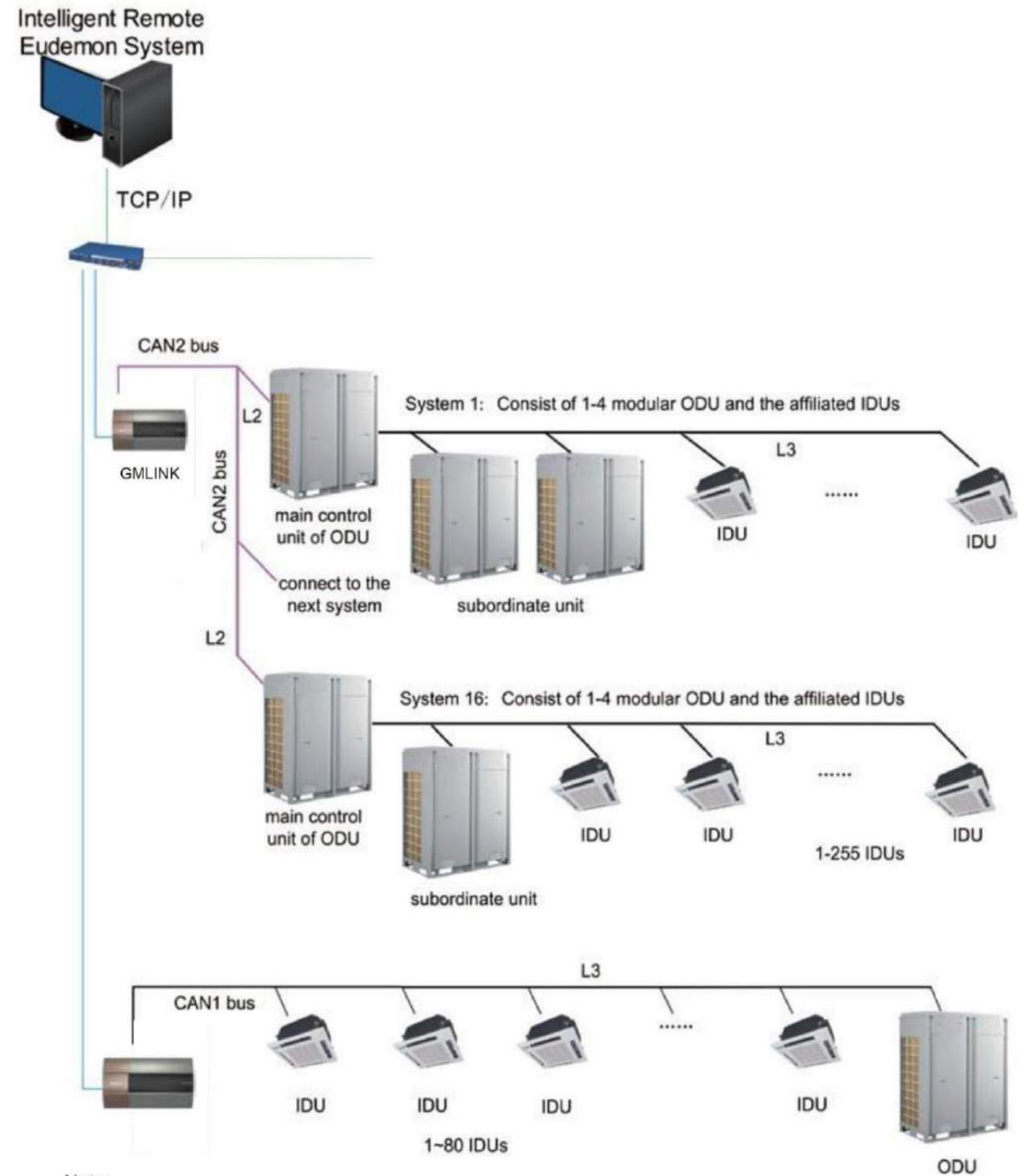
> Instead of using RS485 communication method, it adopts "CAN+Ethernet", which features high efficiency and large data volume. You can view units' condition in real time and control over 4,000 air conditioners in seconds.

Intelligent Multi-function Gateway



Dimension
229×119×61mm

Distributed Structure

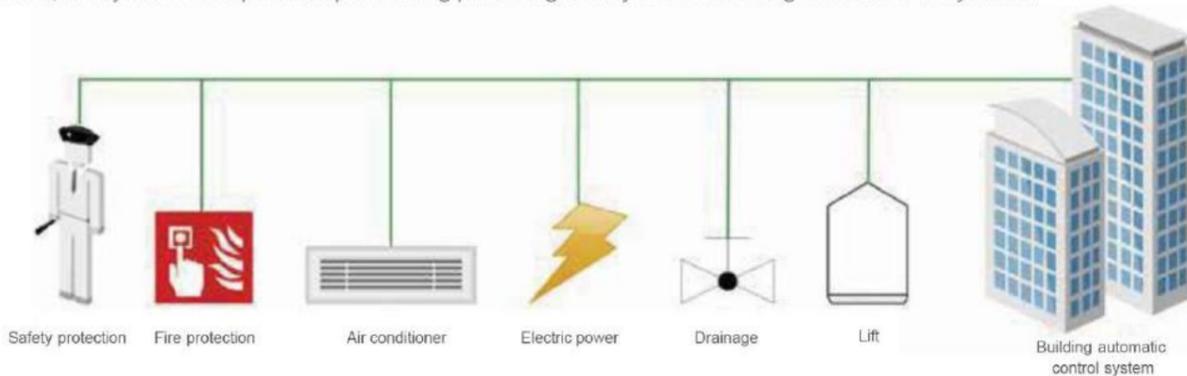


Note:

- (1) 16 systems or 255 indoor units can be connected to one GMLINK.
- (2) 16 GMLINK can be connected to one set of Intelligent Remote Eudemon (customized order is available).

Building Protocol Gateway

> Air conditioner is a kind of indispensable equipment in the building, which has higher and higher requirement of automation and intelligence. In order to meet the demand of users solve the problems of air conditioner monitoring and automatic control, Wony has developed multiple building protocol gateways for connecting different BAS systems.



BACnet Gateway

Functional Features

Large network capacity

> One BACnet Gateway can support 16 systems or 255 sets of IDU at most.

Group control function

BACnet Gateway supports group control ON/OFF of units.

Long distance monitor

> BACnet Gateway supports the remote control of ON/OFF of unit, temperature setting, mode setting, fan speed setting, and shielding function, etc., and can achieve real-time monitor of operating status (ambient temperature, ON/OFF status of unit, etc.), error status (communication error, operational error, different sensor error of unit, etc.).

Easy control

> BACnet Gateway supports collocating gateway IP and related data for embedded webpage, thus user can self-define the gateway IP according to actual situation.

Strong Points

Provide standard BACnet/IP protocol interface, open the table of protocol point

> BACnet Gateway provides standard BACnet/IP protocol interface, open the table of BACnet protocol point (unit parameter example No.), for the integration of the building of user.

Adopt HTML5 technology, adapt to different environment

> BACnet Gateway embedded webpage is developed by adopting HTML5 technology, which can set the gateway IP and related information in Windows system, Linux system, or Mac OS system.

With ETL and CE certificates

> BACnet Gateway has been rewarded with the north America ETL and EU CE safety certificates.

Modbus Gateway(Pro)



The final design sketch is based on the actual product.

Dimension
229×119×61mm

Functional Features

Large network capacity

> One Modbus Gateway (Pro) can support 16 systems or 255 sets of IDU at most.

Group control function

> Modbus Gateway (Pro) supports group control of ON/OFF of unit, temperature setting, mode setting, fan speed setting, and locking functions.

Long distance monitor

> Modbus Gateway (Pro) supports the remote control of ON/OFF of unit, temperature setting, mode setting, fan speed setting, and shielding function, etc., and can achieve real-time monitor of operating status (ambient temperature, ON/OFF status of unit, etc.), error status (communication error, operational error, different sensor error of unit, etc.).

Strong Points

1 gateway can monitor 255 indoor units

Linkable with other networks

> 5 ways of digital input and output enables flexible connection to other networks.

Fire alarm interface for auto stop

> When fire alarm goes off, units can be automatically turned off through the fire alarm interface, which will lower the risk of damage for the units.

Provide standard Modbus RTU protocol interface, open the table of protocol point

> Modbus Gateway (Mini) provides standard Modbus RTU protocol interface, open the table of Modbus protocol point (unit parameter example No.), for the integration of the building of user.

With ETL and CE certification

> Modbus Gateway(Mini) has acquired the north America ETL and EU CE safety certification.

KNX Gateway

> KNX gateway can convert HBS protocol data of indoor unit of multi VRF unit into KNX protocol data. It's mainly used in hotels, homes and other environments to achieve the connection with room control unit or smart home;

> Standard KNX device, convenient for installation and configuration;

> Bus power supply and carrier wave communication;

> With multiple scene modes and support user self-editing;

> Monitor device status and error information;

> CE · ETL and KNX certificates.



KNX gateway



H2M gateway

H2M Gateway

Compact size, easy for installation

> H2M gateway's size is 90*55*20mm. It can be placed at any places where complies with the operation conditions (indoor environment) and it can be fixed with only 2 screws;

Provide standard Modbus RTU protocol interface and

> H2M Gateway provides standard Modbus RTU protocol interface, for building integration;

ETL and CE certificates

> H2M Gateway has obtained North American ETL and EU CE safety certificates;

Indoor unit connection

> H2M gateway has realized the direct open communication protocol for indoor unit to realize the direct control for single and multiple indoor units;

Modbus Gateway(Mini)



Dimension
90x55x20mm

Functional Strong Points

Network capacity

> One Modbus Gateway (Mini) can support 16 systems or 128 sets of IDU at most;

Group control function

> Modbus Gateway (Mini) supports group control of ON/OFF of unit, temperature setting, mode setting, fan speed setting, and locking functions.

Long distance monitor

> Modbus Gateway (Mini) supports the remote control of ON/OFF of unit, temperature setting, mode setting, fan speed setting, and shielding function, etc., and can achieve real-time monitor of operating status (ambient temperature, ON/OFF status of unit, etc.), error status (communication error, operational error, different sensor error of unit, etc.);

Strong Points

Compact size, easy installation

> Dimension of Modbus Gateway (Mini) is 90*55*20mm, which can be placed in anywhere satisfies the using conditions, which can be fixed with only two screws;

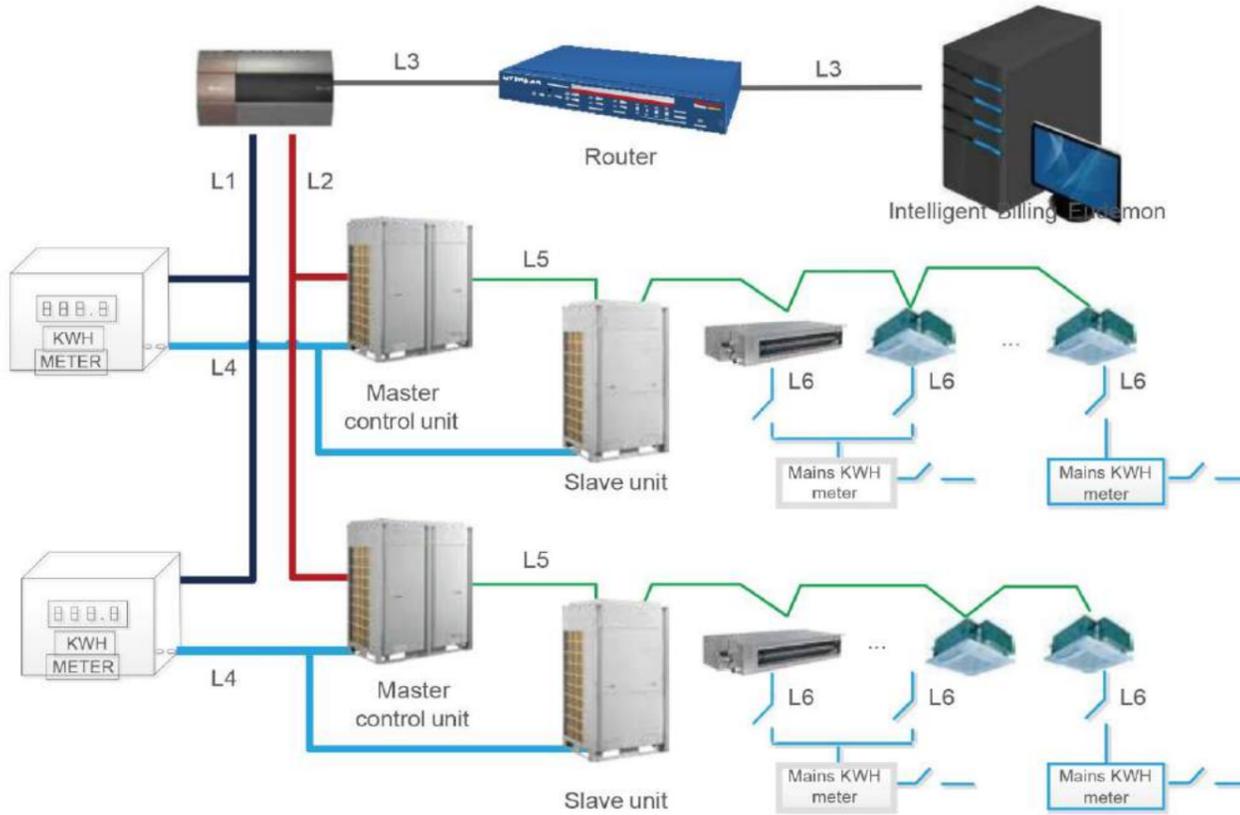
Provide standard Modbus RTU protocol interface, open the table of protocol point

> Modbus Gateway (Mini) provides standard Modbus RTU protocol interface, open the table of Modbus protocol point (unit parameter example No.), for the integration of the building of user;

With ETL and CE certification

> Modbus Gateway(Mini) has acquired the North America ETL and EU CE safety certificates;

> Wony Intelligent Billing System is a solution to power consumption calculation and billing specialized for VRF units. This system adopts Wony's unique calculation method that makes the billing more reasonable. In design, it's tailored to the features of engineering construction, making the installation less difficult. It can be widely applied in shopping centers, apartment blocks, villa clusters or other commercial or residential occasions in different sizes and for different purposes.



L1: RS485 bus for communication between WNLINK and KWH meter; L2: CAN2 bus for communication between WNLINK and unit; L3: Cable; L4: ODU power supply cord; L5: CAN1 bus for communication between IDU and ODU; L6: IDU power supply cord;

Note:

- (1) 15 systems or 255 indoor units can be connected to one WNLINK;
- (2) 16 WNLINK can be connected to one set of Intelligent Billing Eudemon;
- (3) One multi VRF system should be configured with one KWH meter.

5 Key Functions

Billing management

> Properly distribute the electricity automatically according to ON/OFF time, mode, set temperature, indoor ambient temperature, outdoor ambient temperature, etc. provide detailed bill, operational details, etc.

Long-distance control

> The administrator can log in the system via browser of any terminals, and conduct long-distance control for ON/OFF of IDU, temperature, mode and related controllable parameters according to billing or using situation. Meanwhile, it supports management of logging of multiple users.

Property management

> Achieve visible management, you may name the project, floors, tenants, and even set "alias" for indoor units. Details can be imported by one button, convenient for building management.

4 Highlights

Distributed design for balancing the load and reducing the risk

> With distributed structure, the logical operation for billing is built inside the gateway. The software provides centralized management. Each device runs independently, so failure of a certain device will not affect the stability of the entire system.

Design according to the project, increase interactive experience for convenient debugging and use

> It adopts visual interactive design, supports one-button import of details, engineering information, and so on, making the modification and debugging more convenient, and the operation more visualized and reliable.

Compatible to different electric meters

No.	Manufacturer	Electric Meter Model	Country of Origin	Satisfactory Regions (reference)
1	ENTES	EPR-04S-96	Turkey	Turkey, Middle East
2	WattNode	WNC-3D-240-MB	America	North America, Latin America
3	Siemens	PAC3200	Germany	Russia, Europe, Asia Pacific
4	Schneider	iEM3255	France	Australia, Europe
5	Wasion	DTS343	China	China

Note:

The billing eudemon is compatible to the above mentioned electric meters; either one of the electric meter can be adopted after being confirmed by the local dealer; the "Satisfactory Regions" in the list are only for reference.

Arrearage shutdown

> When the air conditioner is not available due to overdue bill or other reasons, the shielding function can limit the operation of some of IDU or deactivate some of the functions such as ON/OFF of unit, operating mode, fan speed, etc.

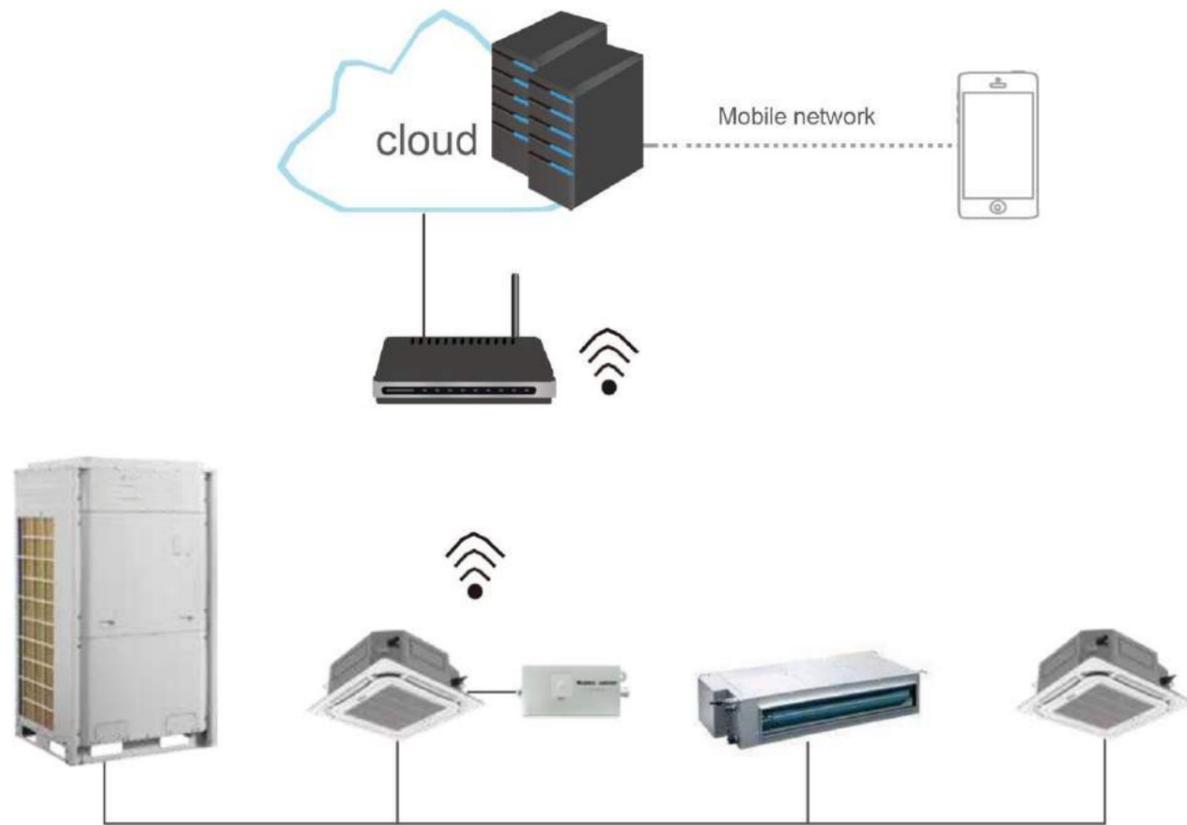
Error alarm

> When the air conditioning equipment is faulted, the system will report in real time, and display the detailed information of error, and at the same time record to the system database as one of the billing basis.

Adopt WEB technology based on HTML5, control the system anywhere

> The software adopts B/S structure. With system's core functions installed on the server side, the front end adopts HTML5 technology and the web browser is the client side. You can control the system on different platforms and terminals.

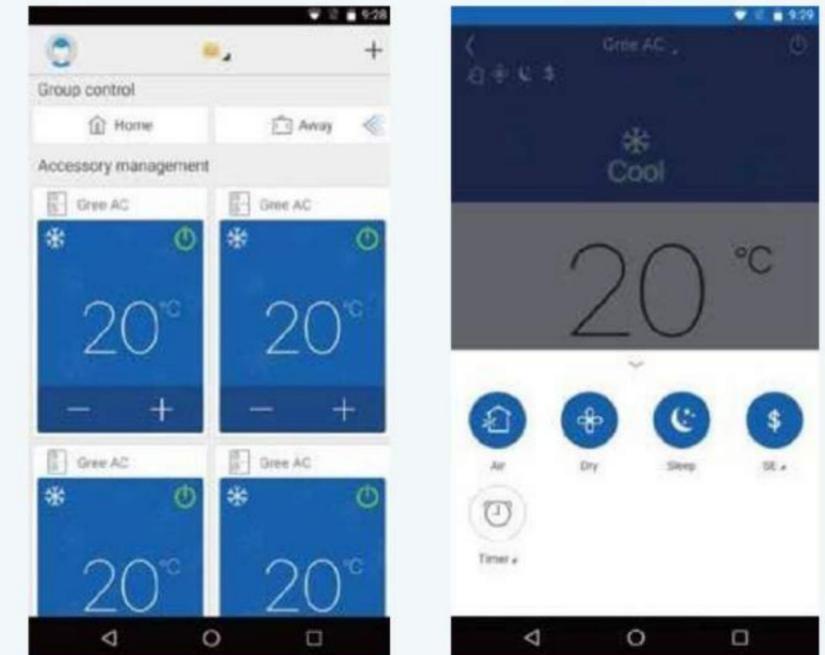
> G-Cloud is a new generation WIFI smart controller of Wony commercial units. It adopts a way of operation different from remote control or wired control. It can display air conditioner running status directly to users, who can conduct point-to-point control over air conditioners through an APP. It is an important part of Wony smart home. G-Cloud is designed for intelligent home control, such as preset control, long-distance control, scene management, malfunction reminding and family accessmanagement.



CAN1 network, multi VRF cloud control supports 80 indoor units in a single system, to realize long-distance control

System Chart

APP operation chart



Lightweight

> Compact and easy to install, no need of external power source; power supplied by equipment, available for use right after connection; a shielded wire of 4 cores is required for connection; easy operation; WONY+APP easy user configuration; quick guidance is provided, with simple and clear display;

Capability

> Multi VRF cloud control; one set of device is capable of controlling up to 80 sets of indoor units in a single system; applicable to villas, office buildings, shopping malls, hotels, etc;

Smart and Long-Distance Control

> User can set the running status of the cooling system based on a set of rules; long-distance control allows you to master your home appliances at any time;

Sensitive

> Monitor the units and detect errors.

Wired Controller And Remote Controller

> There are two kinds of controllers: wired controller and remote controller. The system provides various controls for users, such as cooling, heating, dehumidifying and fan etc., users can select it flexibly according to their own using methods.

Wired Controller YL46

- > LCD with black background and white words; touch buttons;
- > Clock can be displayed and set; 24 hours timer setting for on/off;
- > 7 levels of fan speed, up & down swing and left & right swing;
- > Can be switched in auto, cooling, dehumidifying, fan, heating, floor heating, 3D heating and space heating operation modes;
- > Master and slave wired controllers can be set; simultaneous control over several IDUs is available;
- > Available functions: sleep, ventilation, quiet/auto quiet, light, energy saving, auxiliary heating, drying, memory, low-temperature dehumidifying, absence in heating, controllable auxiliary heating in dehumidifying, filter cleaning reminder, etc.;
- > Detect ambient temperature; receive infrared remote controller signal;
- > With project parameters viewing and setting functions.

Wired Controller YL79 (FOR HOTEL)

- > Small and fashionable appearance with thickness only of 12mm and back lighting LCD with black background and white words;
- > Eight touch buttons;
- > Clock can be displayed and set in countdown and clock timer;
- > Besides normal functions, other functions such as low-temperature dehumidifying, absence in heating, controllable auxiliary heating in dehumidifying and filter cleaning reminder can also be set;
- > Door control system can be connected.



Remote Controller ZBQ1G

- > Can be switched in auto, cooling, dehumidifying, fan and heating operation modes;
- > Besides turbo, 6 levels of fan speed can be set;
- > Available functions: child lock, drying, health, ventilation, turbo, sleep, light, absence, I-feel and timer;
- > Clock display and indoor/outdoor ambient temperature viewing functions;
- > Up & down swing and left & right swing.



Remote Controller ZX1M1

- > Back lighting LCD;
- > Can be switched in auto, cooling, dehumidifying, fan, heating, floor heating, 3D heating and space heating operation modes;
- > 7 levels of fan speed, up & down swing and left & right swing;
- > Available functions: child lock, energy saving, drying, health, ventilation, quiet/auto quiet, sleep, light, absence, low-temperature dehumidifying, I-feel and timer;
- > With clock display, system parameters viewing and setting functions.



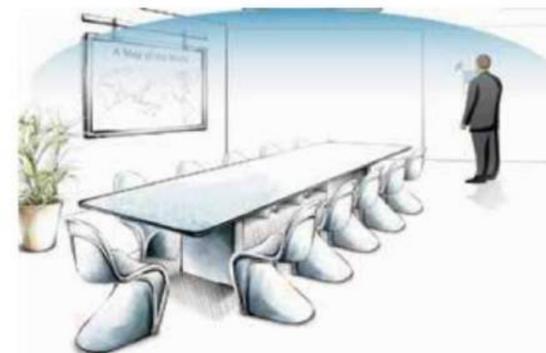
Wired Controller XE70-33H

- > Elegant and concise appearance;
- > Touch buttons with back lighting LCD;
- > Chinese and English display can be switched;
- > With weekly timer function;
- > Complete system functions with each function implemented in an individual page;
- > Detect ambient temperature precisely;
- > With service hotline inquiry and after-sales phone number record functions.



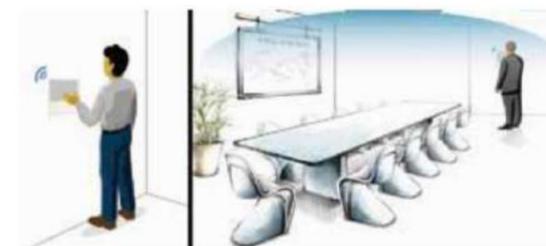
Single Control of One Unit

- > Each indoor unit has an independent controller.



Multiple Control of One Unit

- > One indoor unit can be controlled by several wired controllers at different places.



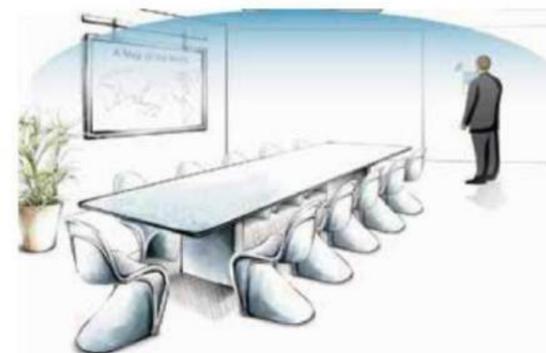
Central Control of Several Indoor Units

- > One wired controller can control as many as 16 indoor units.



Joint Control of Remote Controller And Wired Controller

- > Users can control one unit with two types of controllers: a remote controller which is convenient and flexible; or a wired controller which includes every function of an air conditioner.



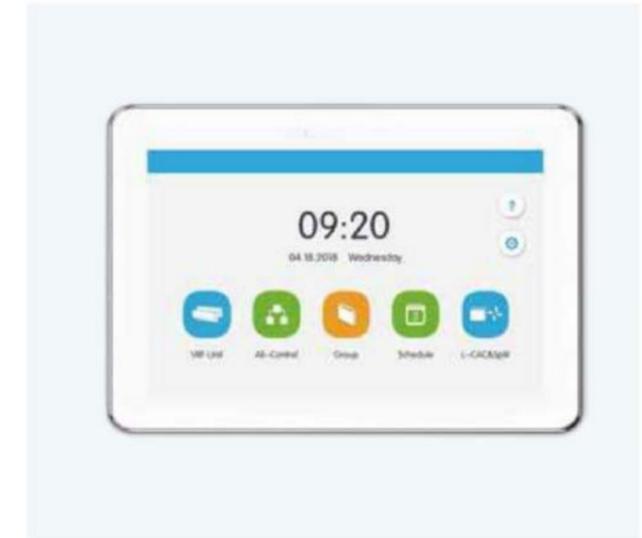
E-Smart Zone Controller CE54-24/F(C)

- > Adopt built-in type installation; the exposed part is only 11mm;
- > High resolution colorful LCD;
- > 4.3 inch capacitive touch screen for easy operation;
- > With single indoor unit control(including general functions and advanced functions), group indoor units control(including general functions and advanced functions), group management(supporting DIY group), single indoor unit and group indoor units timer functions (general function: ON/OFF, Mode, Set, Fan, Swing, etc; advance functions: Save, Sleep, Absence, Quiet, Turbo, etc.);
- > With long-distance shield function (shield on/off, mode, set, etc) for single unit, group and all indoor units;
- > Support denomination for indoor units, and icon selection, realizing individuation management;
- > Support maximum 32 indoor units, with powerful function;
- > Indoor or outdoor unit network can be connected, simple and flexible;
- > 100~240V super wide voltage for independent power supply, stable and reliable;
- > With functions of engineering setting, parameters view, malfunction view and authority management, easy for debugging and maintenance.



Central Controller CE52-24/F(C)

- > High-resolution color LCD;
- > 7 inch capacitive touch screen for easy operation;
- > With project setting, parameter viewing, malfunction record and access management functions.
- > With various functions: centralized control(control all indoor units), group management(support DIY grouping), schedule management(setting of several schedules) and single unit control(on/off, mode, temp setting, fan speed, quiet, swing control, etc.);
- > Shielding function of single unit, group and all IDUs (shielding on/off, mode, temp setting, etc.);
- > Provide naming of indoor units, selection of icons and personalized settings(setting background, backlight, etc.);
- > Up to 255 units can be centrally controlled;
- > Elegant and fashionable appearance;
- > Embedded installation in wall with projecting thickness only of 11mm;
- > Connectable with network of indoor units or outdoor units;
- > Independent power supply in 100~240V wide voltage range;



Controlling systems		Outdoor series	WN5	WN5 MINI	WN5 SLIM	WN5C	WN5 MAX	WN5 HR	GMV Water
Long-distance monitor	Intelligent remote eudemon	GF30-24/EG(C)	○	○	○	○	○	○	
		NF30-24/EGC							
	Gateway of building protocol	NF30-24-F5(N)	○	○	○	○	○	○	○
		NF30-24/F6(N)	○	○	○	○	○	○	○
		NF30-24E(C)	○	○	○	○	○	○	○
		NF31-33/F11(N)	○	○	○	○	○	○	○
		GR30-24G1(K)	○	○	○	○	○	○	○
Intelligent billing eudemon	GF11-24/E4(C)	○	○	○	○	○	○		
	NF11-24D(C)								
G-Cloud	NF31-00/D3	○	○	○	○	○	○		
Other modules	Optoelectronic isolated converter	HE02	○	○	○	○	○	○	
	Optoelectronic isolated signal mutliplier	ST485-X	○	○	○	○	○	○	

Controlling system	Indoor series	Cassette type	(High ESP · Low ESP · Slim ducted) Duct type	Fresh air processing	Wall mounted type	Floor ceiling type	Console type	Floor standing type	Concealed floor standing type
Wireless controller	ZBQ1G	●	○	○	●	●	●	●	○
	ZW1M1	○	○	○	○	○	○	○	○
Wired controller	YL46	○	●	●	○	○	○	○	●
	YL79	○	○	○	○	○	○	○	○
	YF70-33I	○			○	○	○	○	○
	KTPT(receiver)		○	○					○
Central controller	DFT2-24/G(D)	○	○	○	○	○	○	○	○
E-Smart zone controller	DF54-24/G(D)	○	○	○	○	○	○	○	○

Note : ● means standard, ○ means optional.

www.wonygroup.com

Branching Joint
(For WN5 units)

For Indoor & Outdoor Units

Model	Total capacity (xkW)	Appearance	
		Gas pipe	Liquid pipe
GR1B/B	$X < 20$		
GR1C/B	$20 \leq X \leq 30$		
GR02/B	$30 < X \leq 70$		
GR03/B	$70 < X \leq 135$		
GR04/B	$135 < X$		

For Outdoor Units

Model	Appearance	
	Gas pipe	Liquid pipe
NM01/B		

Branching Joint (For WNV5 units)

For Indoor Units

Model	Sort	blueprint
GR14/H1	Gas pipe	
	Liquid pipe	
GR18/H1	Gas pipe	
	Liquid pipe	
GR18/H2	Gas pipe	
	Liquid pipe	

Total rated capacity of downstream indoor units \times (kW)	Upstream connecting pipe dimension		Model of manifold pipe
	Gas pipe(mm)	Liquid pipe(mm)	
X≤40.0	≤Φ25.4	≤Φ12.7	GR14/H1
X≤68.0	≤Φ28.6	≤Φ15.9	GR18/H1
68.0<X	≥Φ31.8	≥Φ19.05	GR18/H2

Branching Joint (For WNV5 Home Hydro box to IDU)

Model	Appearance	
	Gas Pipe	Liquid Pipe
FQ01B/A		

Branching Joint (For WNV5 Home Hydro box)

Model	Appearance	
	Gas Pipe	Liquid Pipe
FQ02W/A		

Branching Joint (For WNV5 HR)

For Outdoor Units and Mode Exchanger

Model	Total capacity of the downstream indoor unit X(KW)	Appearance		
		High-pressure gas pipe	Low-pressure gas pipe	Liquid pipe
GR01 Ob/B	X≤5.0			
GR02 Ob/B	5.0<X≤22.4			
GR03 Ob/B	22.4<X≤28.0			
GR04 Ob/B	28.0<X≤68			
GR05 Ob/B	68<X≤96			
GR06 Ob/B	96<X≤135			
GR07Ob/B	135.0<X			

For Indoor & Mode Exchanger

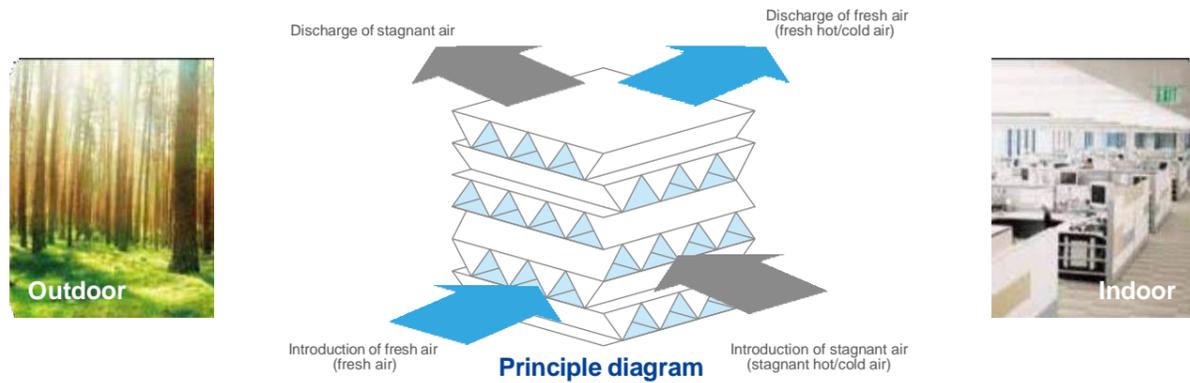
Model	Total capacity of the indoor units X(KW)	Appearance		
		Gas pipe	Liquid pipe	
GR01A/A	X≤14.2			
GR01B/A	14.2<X≤28.0			

For Outdoor Units

Model	Module's capacity X(KW)	Appearance		
		High-pressure gas pipe	Low-pressure gas pipe	Liquid pipe
ML01R	50.4≤X≤96			
ML02R	96<X			

Adopt Advanced Heat Exchange Core

> ERV adopts cross flow plate exchanger with air volume below 3000m³/h. Fresh air will be supplied and internal leakage is low, which effectively prevent pollution to fresh air.

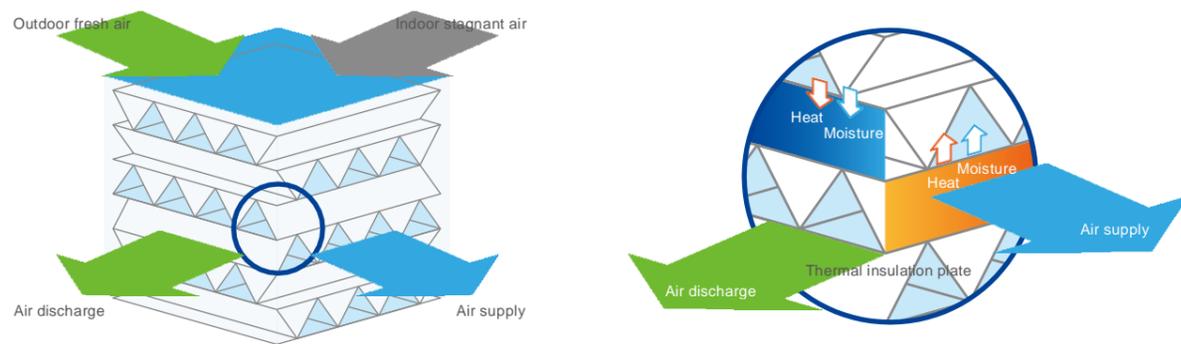


Double-way Ventilation for Fresh Air

> ERV can not only introduce lots of fresh air, but also discharge the stagnant air at the same time, which effectively minimizes the toxic air from the inner and other materials. The ventilation effect is very obvious, ensuring enough supply of fresh air to the indoor space.

No Cross Contamination for Ensuring Healthy Fresh Air

> The unique cross-flow heat exchange valve sub-assy is adopted. There is only energy exchange between indoor air and outdoor air with little exchange of air, which effectively prevents cross contamination and "air-condition" disease.



Pretreatment of Fresh Air for Energy-saving

> When fresh air is supplied, its temperature and humidity will be exchanged with the discharged warm air. As the fresh air is preheated and humidified, energy is saved and load of unit is reduced.

Energy Recovery Ventilation(ERV)

Model			GICR-E8-L	GICR-E10-L	GICR-E15-N	GICR-E20-N	GICR-E30-N
Air flow volume	H/M/L	m ³ /h	800	1000	1500	2000	3000
ESP	H/M/L	Pa	90	100	150	150	220
Temperature exchange efficiency	H/M/L	%	68	73	73	71	70
Enthalpy exchange efficiency(H/M/L)	Heating	%	63	66	65	62	62
	Cooling	%	60	62	60	58	58
Power supply		Ph/V/Hz	1/220/50	1/220/50	3/380/50	3/380/50	3/380/50
Power input		kW	0.37	0.44	0.80	0.95	2.80
Sound pressure level		dB(A)	45	46	48	50	54
Dimension (WxDxH)	Outline	mm	832x1016x380	832x1016x380	1210x1215x452	1210x1215x452	1340x1550x572
	Package	mm	1087x1320x400	1087x1320x400	1540x1550x470	1540x1550x470	1610x1710x700
Net weight		kg	57.0	57.0	110.0	110.0	215.0
Gross weight		kg	66.5	66.5	130.0	130.0	236.0
Loading quantity	40'GP	unit	85	85	37	37	24
	40'HQ	unit	104	104	44	44	24
Standard wired controller			Z4E35M	Z4E35M	Z4E35M	Z4E35M	/

Model			GICR-E8-D*1	GICR-E10-D	GICR-E15-D*1	GICR-E20-D*1
Air flow volume	H/M/L	m ³ /h	800	1000	1500	2000
ESP	H/M/L	Pa	100	110	150	150
Temperature exchange efficiency	H/M/L	%	70	75	73	71
Enthalpy exchange efficiency(H/M/L)	Heating	%	63	66	65	58
	Cooling	%	60	62	60	62
Power supply		Ph/V/Hz	1/208-230/60	1/208-230/60	3/208-230/60	3/208-230/60
Power input		kW	0.50	0.50	1.10	1.45
Sound pressure level		dB(A)	50	53	60	61
Dimension (WxDxH)	Outline	mm	832x1016x380	832x1016x380	1210x1215x452	1210x1215x452
	Package	mm	1087x1320x400	1087x1320x400	1540x1550x470	1540x1550x470
Net weight		kg	57	57	110	110
Gross weight		kg	67	67	130	130
Loading quantity	40'GP	unit	85	85	37	37
	40'HQ	unit	104	104	44	44
Standard wired controller			Z4E35M	Z4E35M	Z4E35M	Z4E35M

Note:
*1:This product only gets CB certification.

Control System Lineup

Control System	Model	Image	Standard
Wired controller	Z4E35M		●
Interface of the main board	BMS		●
Optoelectronic isolated converter	RS232-RS422\485		○
Optoelectronic isolated signal multiplier	RS-422\485		○

Note : ● means standard, ○ means optional.

Energy Recovery Ventilation(ERV)

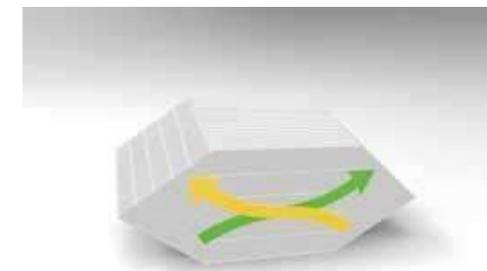


Wony Energy Recovery Ventilation System is designed especially for providing healthy and fresh indoor air, constant air volume and comfortable temperature and humidity with less power consumption. With F7-grade filter, it can effectively remove PM10, PM2.5 and other particles in the air;

Through the total heat exchange core that is made of high-polymer material, the air led from the outside will have efficient heat exchange with the discharged air. Heat exchange efficiency is up to 78%. It is applicable to houses, villas, banks, office buildings and other places with fresh air demand.

Adopts Hexahedral Total Heat Exchange Core

> It adopts hexahedral total heat exchange core, which provides reverse ventilation passage for fresh air and discharged air while preventing the mixture of fresh air and discharged air. Temperature exchange efficiency is 78% at most.



Air Volume Multi-selection Control

> 5 selections of air volume are available. Each selection differs obviously from another. It can satisfy different fresh air requirements under different housing areas and different pipe dimensions.

350 m ³ /h	High
300 m ³ /h	Medium high
250 m ³ /h	Medium
200 m ³ /h	Medium low
150 m ³ /h	Low

Note: The above air volume data is tested base on model GICRHM-E3.5DA-S.



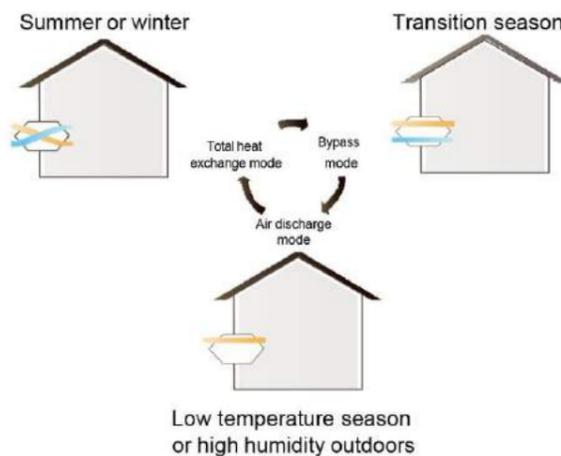
Constant Fresh Air Volume

> System adopts DC motor and constant air volume control to realize air provision that will not be attenuated under certain range of static pressure. It can maintain sufficient supply of fresh air during operation, providing users with super comfortable experience.

> The right diagram shows the air volume/static pressure curve of common AC motor. We can see that as the static pressure increases (filter gets more dirty), the volume of fresh air is attenuated correspondingly. As the operation goes on and on, fresh air volume may not be able to satisfy the design requirement.

Comfortable Temperature and Humidity

> Temperature and humidity change a lot in different seasons. The system can automatically switch into bypass mode, air discharge mode, or total heat exchange mode during operation based on the detected temperature and humidity both indoors and outdoors, so you will enjoy comfortable air supply regardless of the seasons.

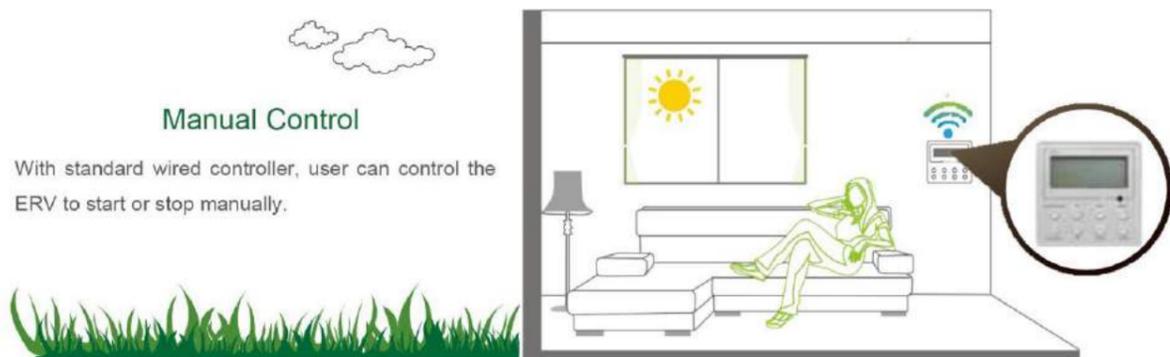


Intelligent Control

> System has manual control, linked control and auto control functions. When you connect the ERV with Multi VRF units, it can realize linked control; when you connect the ERV with air quality detection module, it can realize auto control function.

Manual Control

With standard wired controller, user can control the ERV to start or stop manually.



Linked Control

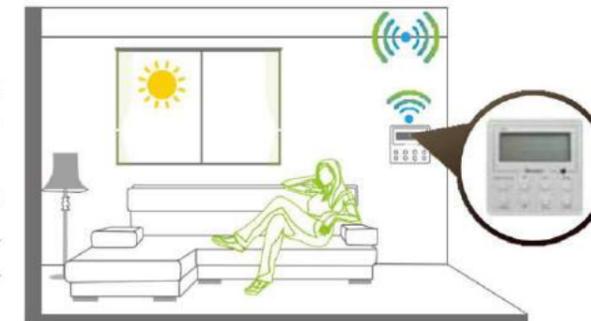
By connecting the ERV system with WN5 DC Inverter Multi VRF system through communication line, user can set linked control.



Auto Control

With the air quality detection box independently developed by Wony, user can set auto control.

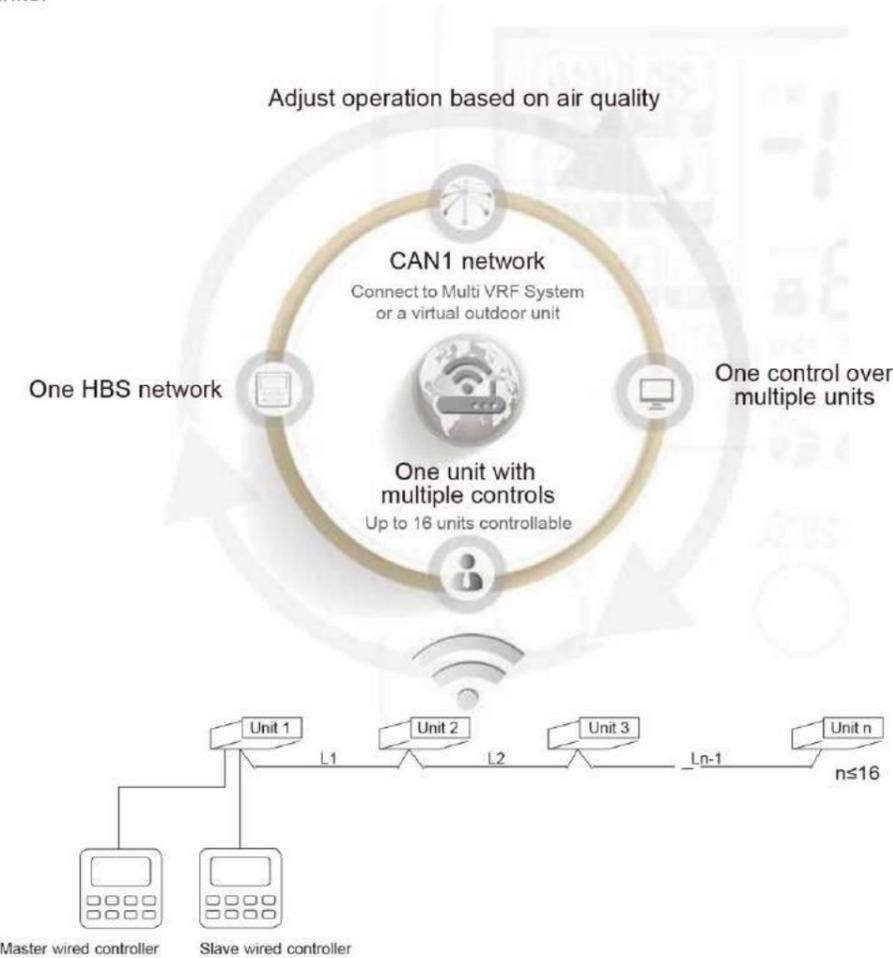
- When the air quality detection box detects that indoor air quality is bad, the ERV system will start up automatically and introduce fresh air into the room;
- When the air quality detection box detects that indoor air quality is good, the ERV system will be shut off automatically. You can enjoy fresh air at any time without manual operation.



Note on auto control function: when you use the air quality box, it can display indoor air quality grade, CO2 and PM2.5 value, as well as the indoor temperature and humidity.

“One Unit With Multiple Controls” and “One Control Over Multiple Units”

> System can be connected with two wired controllers, i.e. master controller and slave controller. Both of them can control the system at the same time. When the Multi VRF System or a virtual outdoor unit is connected, one HBS network can control up to 16 units.



Smart Structural Design

> The maintenance window adopts clasp design and hinge design, which is convenient for the maintenance of filter, total heat exchange core and the motor. The thickness of the device is only 220/240mm. It occupies less ceiling space, which is convenient for ceiling installation.



Specifications

Model		GICRHM-E1.5DA-S ^{*1}	GICRHM-E2.5DA-S ^{*1}	GICRHM-E3.5DA-S ^{*1}	GICRHM-E5DA-S ^{*1}		
Rated voltage	V	220~240	220~240	220~240	220~240		
Rated frequency	Hz	50/60	50/60	50/60	50/60		
Power input	kW	0.05	0.1	0.15	0.3		
Current input	A	0.35	0.7	1	1.9		
Indoor unit	Air flow volume	CFM	88	147	206	294	
		m ³ /h	150	250	350	500	
	ESP	Rated	Pa	100	100	100	100
	Thermal exchange efficiency	%	78	75	65	75	
	Sound power level	dB(A)	39	44	49	55	
	Dimension (WxDxH)	Outline	mm	1160x700x220	1160x700x220	1200x785x240	1385x785x240
		Package	mm	1468x873x285	1468x873x285	1528x973x305	1711x973x305
Net Weight/Gross weight	kg	50/58.5	50/58.5	60/70.5	71.5/82.5		
Ventiduct	Outer diameter	mm	160	160	160	200	
Loading quantity	20'GP/40'GP/40'HQ	unit	82/172/195	82/172/195	57/121/140	54/117/131	

Note: *1 This ERV model is without coil.

Model		GICRHM-E1.5DA-T	GICRHM-E2.5DA-T	GICRHM-E3.5DA-T	GICRHM-E5DA-T	
Air flow volume	m ³ /h	150	250	350	500	
ESP	Pa	100	100	100	100	
Temperature exchange efficiency	%	80	75	76	73	
Power supply	V/Ph/Hz	208V-230V~60Hz 220V-240V~50Hz	208V-230V~60Hz 220V-240V~50Hz	208V-230V~60Hz 220V-240V~50Hz	208V-230V~60Hz 220V-240V~50Hz	
Power input	kW	0.050	0.105	0.155	0.250	
Sound pressure level	dB	43	50	55	57	
Dimension (WxDxH)	Outline	mm	1160x700x220	1160x700x220	1200x785x240	1385x785x240
	Package	mm	1468x873x285	1468x873x285	1528x973x305	1711x973x305
Net weight/Gross weight	kg	50/58.5	50/58.5	60/70.5	71.5/82.5	
Loading quantity	40'GP/40'HQ	unit	172/195	121/140	117/131	
Standard wired remote controller		XK112	XK112	XK112	XK112	

Control System Lineup

Product series			ERV
Control system			
Wired controller	XK112		●
Centralized controller	CE53-24F(C)		○

Note : ● means standard, ○ means optional.

> This series are fresh air units with evaporators, which means they have total heat exchangers and evaporators. When it's used with outdoor units, they can deliver fresh air without increasing the indoor load. They have multiple operation modes and are widely applicable.



5~10.5kW



Memory function



°C/°F switch



Child lock



Easier maintainability



Weekly timer



Centralized control

> High-efficiency HR module: They are built with heat exchange chips for efficient energy recovery on the air discharge side. When they are in use, other air conditioning equipment will consume less power.

> Constant air volume: Units adopt constant air volume control technology so that they can maintain constant air volume within a specific range of pipeline resistance.

> Free cooling: When outdoor temperature is lower than the set temperature, units can automatically introduce the fresh outdoor air to make the room cooler.

> Multiple air supply modes: Positive pressure air supply: Different air flow volume can be set for the fresh air side and air discharge side to keep the indoor side under minor positive pressure, which will help guarantee room cleanliness; Negative pressure air supply: Different air flow volume can be set for the fresh air side and air discharge side to keep the indoor side under minor negative pressure, which will help prevent leakage of indoor pollutants. Balanced air supply: The fresh air side and air discharge side can be set with the same air flow volume (default).

> Linked control: Units can be connected to other indoor units in the same CAN and HBS networks for linked control.

> Cooling and heating functions: With fan coils, they have cooling and heating functions like common air conditioners.

> Multiple operation modes: Total heat exchange mode: The fresh air side and air discharge side can have heat exchange for efficient energy recovery. By-pass mode: Ventilation without heat exchange. Air discharge mode: Only air discharge side is turned on for ventilation.

Note*: This product series is under development. Wony reserves the right to modify the specifications without prior notice. Please confirm the final specifications with sales representative.



Specifications

Model		GMV-VDR5PH/A-S ¹	GMV-VDR8PH/A-S ¹	GMV-VDR10PH/A-S ¹		
Rated voltage	V	220-240				
Rated frequency	Hz	50/60				
Cooling capacity	kW	8.5	12.0	14.5		
Heating capacity	kW	4.0	10.6	12.0		
Power input	kW	0.27	0.44	0.64		
Current input	A	1.85	2.73	3.86		
Indoor unit		CFM	294	471	589	
		m ³ /h	500	800	1000	
	ESP	Rated	Pa	150	150	150
	Thermal exchange efficiency		%	73	74	73
	Sound power level		dB(A)	55	59	62
	Dimension (W×D×H)	Outline	mm	1700×880×340	1800×1185×390	1800×1185×390
		Package	mm	1988×1138×535	2110×1440×567	2110×1440×567
Net weight/Gross weight		kg	120/175	158/225	158/225	
Ventiduct	Outer diameter	mm	200	250	250	
Loading quantity	20'GP/40'GP/40'HQ	set	20/44/44	16/32/32	16/32/32	
Standard wired controller			Z6L351R			

Note:*1 This product model is with coil and is under development.



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