

Inverter Rooftop Packaged Unit (380V)

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It adopts DC inverter design with capacity range from 5.5~30tons. Side supply and side return air discharge way are applied. It can be installed in rooftop and outdoor flat floor, which is applicable for shopping malls, hotels, halls, apartments, villas and other buildings.



- The whole series adopts DC inverter compressor, and the compressor will adjust the frequency intelligently. Temperature control is accurate, and energy efficiency and reliability are high.
- The outdoor side applies DC inverter motor with high back electromotive force. The efficiency is greatly improved compared with the AC motor.
- Adopt the self-innovated closed loop startup control mode to make the output torque rapidly follow the load torque, which needs small startup electricity current, reliable for startup.
- The high-efficiency fan blade adopts CFD simulation technology to optimize the matching of blade type and blade angle. In addition to the special tail-edge design, the working area of blade is effectively increased and the air volume is also greatly increased.
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- Green rooftop units are with high voltage protection, low voltage protection, overcurrent protection, discharge protection, phase sequence protection and other protections.
- Green rooftop units are with strong anti-grid fluctuations design. The performance is stable in ultra wide voltage range from 342V to 456V.
- Anti-rain startup design is used to solve the problem that the unit cannot start smoothly in the reverse operation under the high wind environment.
- The outdoor heat exchanger fins are treated with anti-corrosive golden coating to pass the 1000h neutral spray test, which has good corrosion resistance.
- The sheet metal of base is made of thick galvanized steel sheet. It is designed with forklift holes and hanging holes, so that you can choose forklifting or hanging during installation, which is flexible and convenient.
- Centralized control is available without connecting the wired controller. Maximum 36 sets of unit can be controlled at the same time.

Item	Normal operating conditions (indoor)				Operating conditions (outdoor)	
	Outdoor condition		Indoor condition		Outdoor condition	
	DB (°C)	WB (°C)	DB (°C)	WB (°C)	DB (°C)	WB (°C)
Cooling	35	24	27	19	35	24
Heating	7	5	20	15	7	-5

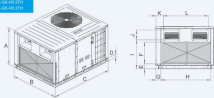
Specifications

Model		JASA-GK-05-05H	JASA-GK-06-05H	JASA-GK-07-05H	JASA-GK-10-05H	
Capacity	Cooling/Heating	kW	2.0/2.5	2.5/3.0	3.5/4.5	
	Cooling/Heating	kW	6.9/7.5	8.2/8.5	10.5/12.5	
Power supply		V/Ph/Hz	380-415V/3N-50/60Hz			
Power input	Cooling	kW	8.5	8.5	9.5	13.5
	Heating	kW	7.5	7.5	8.5	11.5
Current input	Cooling	A	15	15	16	21
	Heating	A	11.5	11.5	14.5	19
Refrigerant charge volume		kg	5	5	8	10
Air flow volume		CFM	1786	1786.5	2888	3675
Sound pressure level	dB(A)		50	50	50	50
	dB(C)		58	58	58	58
ESP	Rated	Pa	50	50	50	50
	Range	Pa	5-180	5-180	5-210	5-210
Drainage Connection Size (Outer diameter/wall thickness)		inch	3/4"(NPT)	3/4"(NPT)	3/4"(NPT)	3/4"(NPT)
Dimension (W×H×D)	Outline	mm	1400×1120×815	1400×1120×815	1400×1120×815	1400×1120×815
	Package	mm	1403×1123×880	1403×1123×880	1403×1123×880	1403×1123×880
Net weight/Gross weight		kg	265/289	265/289	340/368	1100/1150
Loading quantity	40°C	set	32	32	16	16
	40°C	set	48	48	32	32

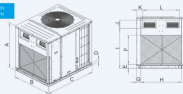
Model		JASA-GK-05-05H	JASA-GK-06-05H	JASA-GK-07-05H	JASA-GK-10-05H	
Capacity	Cooling/Heating	kW	5.0/5.5	6.5/7.0	8.5/9.0	
	Cooling/Heating	BT	14,115.0	18,011.0	24,026.0	30,036.0
Power supply		V/Ph/Hz	380-415V/3N-50/60			
Power input	Cooling	kW	21.0	26.5	32.0	40.0
	Heating	kW	18.0	23.0	30.0	38.0
Current input	Cooling	A	38.0	48.0	54.0	72.0
	Heating	A	28.0	42.0	51.0	64
Refrigerant charge volume		kg	12	15	20	24
		CFM	8004	8004	9798	11715
Air flow volume	FPM	8004	8004	9798	11715	
	cfm	8000	8000	9800	11800	
Sound pressure level	dB(A)	74	75	77	77	
		Pa	130	130	200	120
ESP	Rated	Pa	130-250	130-250	200-250	120-130
	Range	Pa	130-250	130-250	200-250	120-130
Drainage Connection Size (Outer diameter/wall thickness)		inch	3/4"(NPT)	3/4"(NPT)	3/4"(NPT)	3/4"(NPT)
Dimension (W×H×D)	Outline	mm	2280×1560×1240	2280×1560×1250	2280×1560×1250	2280×1560×1240
	Package	mm	2283×1563×1248	2283×1563×1250	2283×1563×1250	2283×1563×1248
Net weight/Gross weight		kg	600/658	600/658	1100/1224	1000/1070
Loading quantity	40°C	set	10	8	4	4
	40°C	set	20	12	8	8

Dimension

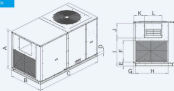
JASA-GK-05-05H
JASA-GK-06-05H



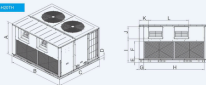
JASA-GK-07-05H
JASA-GK-10-05H



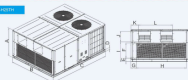
JASA-GK-11-05H



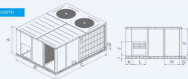
JASA-GK-H01TH



JASA-GK-H01TH



JASA-GK-H01TH



Unit: mm

Connection	A	B	C	D	E	Size of air inlet			G	I	Size of air duct			K
						F	H	J			L	M	N	
JASA-GK-H01TH	816	1126	1400	70	96	416	963	98	698	156	720	216		
JASA-GK-H02TH	816	1126	1400	70	96	416	963	98	698	156	720	216		
JASA-GK-H03TH	1216	1126	1400	70	96	698	963	98	801	156	866	142		
JASA-GK-H04TH	1216	1126	1400	70	96	698	963	98	801	156	866	142		
JASA-GK-H05TH	1546	1126	2060	80	111	898	1114	90	792	406	1067	287		
JASA-GK-H06TH	1268	2248	1860	88	116	987	2017	198	776	411	1306	306		
JASA-GK-H07TH	1276	2248	2660	90	137	990	1944	220	776	410	1306	306		
JASA-GK-H08TH	1268	2248	2860	80	111	1081	803	90	128	803	813	283		

Note: Actual dimensions may be different from actual model.

Controllers

Easy Diagnosis

The "SE" on the indoor wired controller (display board) and the main board inside the outdoor electric box will also display the operation status, error codes, etc. It's convenient for checking by users and after-sales maintenance.



Intelligent control

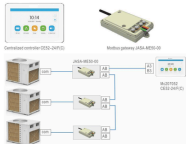
Wired controller (standard)

- Standard wired controller;
- Fashionable and compact appearance, with 8 touch buttons and moisture-proof structure;
- Support infrared remote control signal;
- 7 fan speeds;
- Switchover among auto, cooling, dry, fan and heating modes is available;
- With sleep, air, quiet, SE, E-heater, x-fan, memory, low-temperature dry, leave (heating) and filter cleaning reminder functions;
- Adopt two-core communication, low cost, easy to extend and wrong connection prevention.



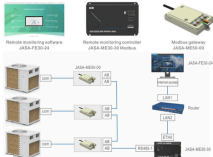
Centralized control (optional)

The unit can select Jet-Air centralized controller for the centralized control, convenient for the management. It can control maximum 30 units simultaneously. Moreover, it can control the functions such as ON/OFF, mode, fan, temperature, etc. for a single unit or a group of units and the operation is easy.



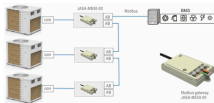
Remote monitoring (optional)

The unit can connect with remote control or building control based on requirements. One controller can connect 255 units at the most, which is very efficient and convenient for monitoring all air conditioners in a project.



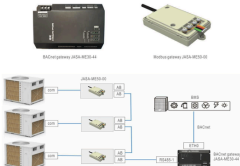
BMS building control Modbus protocol (optional)

The unit can select the optional modbus gateway, which can connect with the third party BMS system. It can connect 255 units at the most.



BMS building control Bacnet protocol (optional)

The unit can select the optional BACnet gateway, which can connect with the third party BMS system. It can connect 255 units at the most.



Features

High energy efficiency and performance

The compressor and outdoor fan can adjust the operating frequency according to different room loads, and automatically adjust the capacity output to ensure the comfort in the room. At the same time, the power consumption of the unit changes along with the capacity output and the power consumption of unit is low in low-load operation. Compared with the fixed-speed unit, its annual power consumption is lower, which is high-efficiency and power-saving.

◆ Energy-efficient compressor

The whole series adopts DC inverter compressor, and the compressor will adjust the frequency intelligently. Temperature control is accurate, energy efficiency and reliability is high.



◆ DC inverter motor

The outdoor side applies DC inverter motor with high back electromotive force. The efficiency is greatly improved compared with the AC motor.



◆ 180° sine wave DC speed change technology

The output wave of 180° current is the smooth sine wave. It contains little harmonic wave, and has small torque fluctuation and large adjustment range. The motor can operate stably to meet the requirements of different occasions, saving power and ensuring the utmost comfort of users.



◆ High-efficient fan blade

The new high-efficiency fan blade adopts CFD simulation technology to optimize the matching of blade type and blade angle. In addition to the special lead edge design, the working area of blade is effectively increased and the air volume is also greatly increased.

Optimized fan to limit air flow division and increase air volume



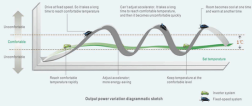
◆ High-efficiency heat exchanger

The heat exchanger adopts window opening and inner groove copper pipe structure, with high heat exchange efficiency.



◆ Precise temperature control technology

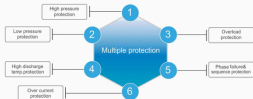
Jet AIR intelligent inverter control delivers the required capacity according to the load variation from 10% to 120% and maintains the room temperature fluctuation 1°C of set temperature.



High reliability

◆ High-efficiency heat exchanger

Jet-Air rooftop units are with high voltage protection, low voltage protection, overcurrent protection, discharge protection, phase sequence protection and other protections. It can effectively protect key components such as compressors and motors.



◆ Strong and weak current separated for protection

The ports of all weak current load wire and strong single-phase load wire are integrated at the main board, while the strong current and weak current are separated. All terminals are distinguished by color and series number, and the wiring port on the main board can only connect with the corresponding wiring terminal of load, convenient for after-sales maintenance and wiring.



◆ Automatic adjustment of throttling

Electronic expansion valve adjusts the opening degree automatically. It ensures that the system parameters are within a reasonable range when the unit operates under all working conditions, to improve the operation reliability and service life of the unit.



◆ Excellent grid adaptability

Jet-Air rooftop units are with strong anti-grid fluctuations design. Performance is stable in ultra wide voltage range from 90% to 110%, which is perfectly adapted to the power grid fluctuation during peak hours or other conditions.



◆ Wide temperature range for operation

DC inverter motor is adopted. With precise control on system pressure, the temperature range of unit operating is much wider.



◆ Anti-wind design of outdoor fan

Adopt anti-wind startup design to solve the problem that the unit cannot start smoothly in the reverse operation under the high wind environment. The anti-wind startup design allows the unit to adapt to the harsh windy environment and start reliably. The outdoor fan runs smoothly, which is safer and more reliable.

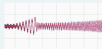


◆ Compressor closed loop startup technology

Adopt the self-innovated closed loop startup control mode to make the output torque rapidly follow the load torque, which needs small startup electricity current, reliable for startup.



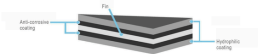
Traditional startup method



Gieve closed loop startup method

◆ Anti-corrosive heat exchanger

The outdoor heat exchanger fins are treated with anti-corrosive golden coating to pass the 1000h neutral spray test, which is with good corrosion resistance.



◆ High anticorrosion outer case

All external sheet metals adopt spraying treatment, which can bear 500h of neutral salt spray test, while the general sheet metal can only withstand 200h of salt spray test; the durability has been improved by 250%. All built use stainless steel materials, with high corrosion resistance.



◆ Mothproof electric box

Unsealed electric box (two kinds of structures): The electric box is added with a heat dissipation window with a 30-mesh metal filter or $\Phi 30\text{mm}$ circular heat radiation hole, which can effectively prevent insects.



More convenient and comfortable

◆ Control of dual wired controllers

In order to provide convenient operation to users, we have developed the control function of dual wired controllers. In this case, the user can install the wired controller in different places for convenient operation.



◆ Power-off memory function

The user can set power-off memory function. If this function is activated, the unit will automatically operate in previous setting mode when power recovers after power failure.

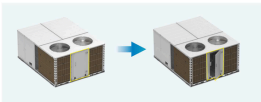
◆ Cold air prevention function

When the unit just starts heating or the outdoor unit just finishes defrosting, the temperature of indoor evaporator is quite low. If the indoor fan operates in this case, cold air will blow out. Our products are optimized in design to prevent cold air so as to improve user's comfort.

Maintenance and installation

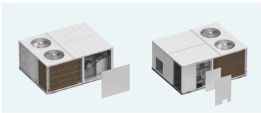
Convenient for disassembly and assembly (outdoor case)

- > The outdoor cavity has a hinge type access door. The access door can be opened and closed so need to remove screws (bolts).
- > The width of the access door is 840mm (only applicable for 30 tons of heat pump unit). The after-sales person can get into the outdoor cavity for maintenance.
- > It's convenient to check and replace the compressor, outdoor motor, four-way valve, etc.



Convenient for disassembly and assembly (indoor case)

- The case panels at the fan side of indoor cavity and electric box side are easy for disassembly, convenient for electric wiring and bolt maintenance.



Detection port for high/low pressure

All units are designed with outdoor detection port for high/low pressure, which can measure the high/low pressure even if the unit is still working, convenient for the after-sales person to check the system pressure, vacuum pump and add refrigerant.



Adjustable static pressure of indoor fan

The indoor fan is with five static pressure modes for flexible selection based on different installation requirements, with high engineering adaptability. Static pressure can be set by the wired controller, convenient for operation.



Note: Only for 10tons or below units.

Flexible transformation

The sheet metal of base is made by thick galvanized stainless steel and it's with the holes for forklift and hoisting. Therefore, forklift or hoisting can be selected for transportation, flexible and convenient.

