

# YORK<sup>®</sup> YVAG Air-Cooled DC Inverter Reversible Heat Pumps



Cooling capacities from 11.2 kW to 40 kW  
 Heating capacities from 12.6 kW to 42 kW

## High Efficiency

### Providing the lowest possible operating costs

Our new YORK® YVAG is designed for real world efficiency. Part load performances meet the highest efficiency values and delivers performance beyond typical heat pump efficiency levels in cooling and heating.

YORK® YVAG uses high efficiency DC inverter compressor together with advanced variable frequency drive technology which ensures stable operation across the entire operating range. Compressor frequency range goes from 15 ~ 120%, to quickly and efficiently meet the needs of residential load changes. YORK® YVAG units not only uses a high efficiency DC inverter compressor, but also dual fans equipped with high efficiency, low noise DC inverter motor which adjusts the air flow to exactly match the capacity in a more accurate and efficient way.



## Easy Installation & Operation

### Modular concept

The small packaged YORK® YVAG heat pump comes as standards with a hydronic loop circulating pump, expansion tank, water flow switch, safety valve, fill valve and wye-strainer, saving space in the room and making installations easy and fast. The pumps external head can provide up to 22m.

The units are designed for modular installations (up to 4 module combinations among all the models) to meet the needs of different residential and light commercial building demands. This permits installed capacities from 11.2-160kW.



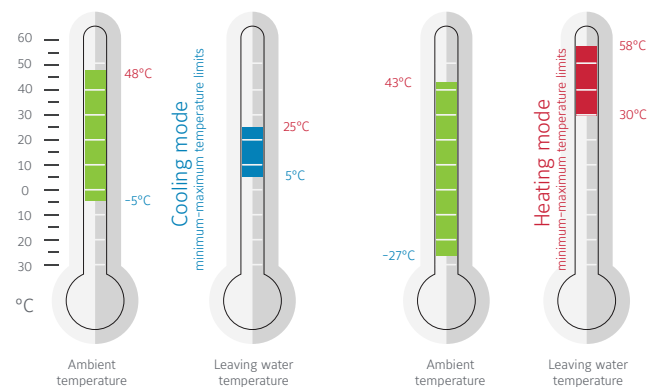
Note:  
YVAG020-040 can be combined

## Perfect Comfort in a Wide Operating Range

### Wide operating envelope with lower sound levels

With the wide operating range, YORK® YVAG is perfect for all climates. It does not matter if the ambient temperature in summer is 48°C or if in winter is -25°C, as the unit will maintain the efficiency in stable operation, to provide users with the most comfortable air conditioning experience.

With the heating outlet water temperatures up to 58°C, the unit is perfect for radiant panels.



Please note:  
 YVAG012-018 cooling operation range from 5°C to 48°C, cooling leaving water temp from 5°C to 20°C, heating operation range from -20°C to 25°C, heating leaving water temp from 30°C to 52°C.

### Low Sound Optimized

Thanks to the YORK® YVAG component design, the unit sound emissions are as low as 54 dB(A) Sound Pressure at full load, reducing to as low as 40 dB(A) at part load operation.

YORK® YVAG also has Silent Mode available, which reduces the sound level emissions by 5 dB(A) below full load levels.

## Total & Easy Control

### Exactly control at real time

YORK® YVAG unit comes with RS485 interface, through the Modbus protocol, together with easy access and user-friendly real-time control.

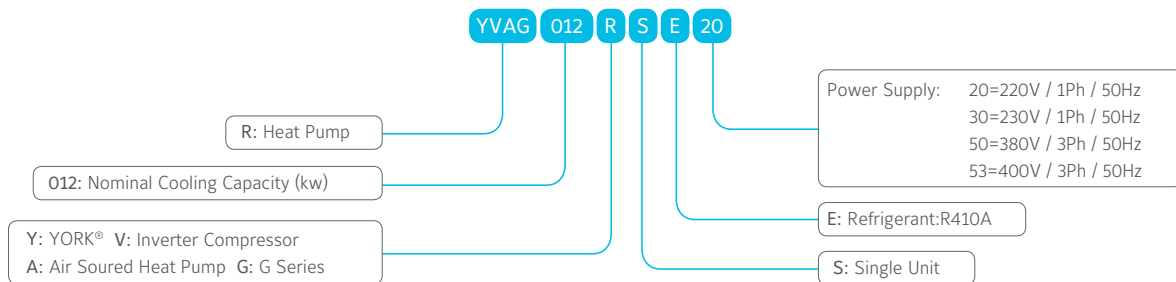


## Technical features

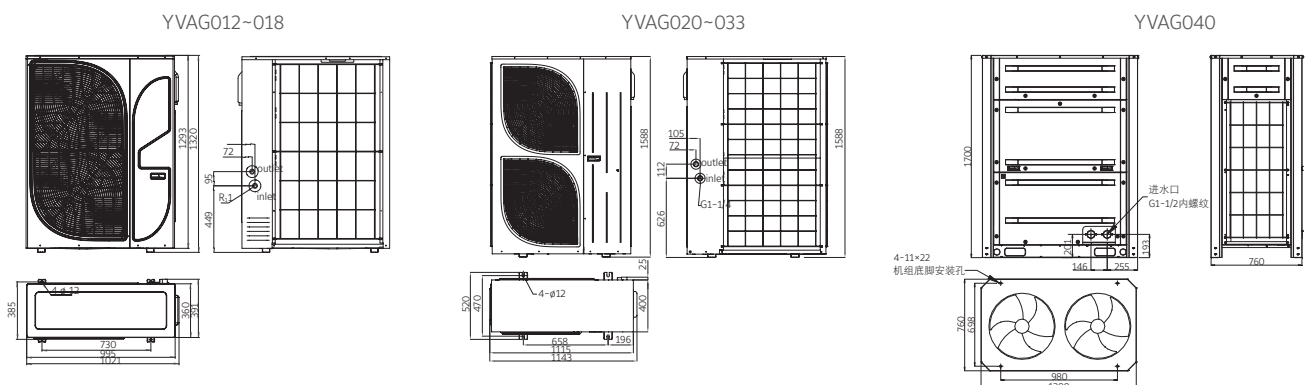
Model			YVAG 012	YVAG 014	YVAG 016	YVAG 018	YVAG 020RSE	YVAG 022RSE	YVAG 025RSE	YVAG 028RSE	YVAG 033RSE	YVAG 040RSE		
Performance	Nominal Cooling Capacity	kW	11.2	14	15.5	18	20	22	25	28	32	40		
	Cooling Power Input	kW	3.8	4.7	5.2	6.5	5.5	6.4	7.8	8.4	10.6	13.3		
	EER		2.95	2.98	2.98	2.77	3.63	3.43	3.2	3.33	3.01	3		
	Nominal Heating Capacity	kW	12.6	16.1	18	19.5	22	24	27	30	34	42		
	Heating Power Input	kW	3.8	4.9	5.4	6.5	5.9	6.5	7.6	8.5	10.3	12.7		
	COP		3.32	3.29	3.33	3.00	3.73	3.69	3.55	3.53	3.30	3.3		
	Sound Pressure Level	dB(A)	54	55	55	57	56	56.5	57	57	59	62		
Compressor	Type		Rotary DC Inverter				EVI DC Inverter							
	Quantity	#	1	1	1	1	1	1	1	1	1	1		
Air side heat exchanger	Fan motor type		Brushless DC Fan Motor											
	Fans quantity	#	2	2	2	2	2	2	2	2	2	2		
	Airflow	m <sup>3</sup> /h	2500-6600	2500-6600	2500-6600	2500-6600	2500-10500	2500-10500	2500-10500	2500-10500	2500-10500	2500-15000		
Water side heat exchanger	Type		Brazen Plate Heat Exchanger											
	Pump Type		Multiple-stage centrifugal pump											
	Nominal water flow	m <sup>3</sup> /h	1.93	2.41	2.67	3.10	3.44	3.78	4.30	4.82	5.50	6.88		
	Unit external head	m	15	13	12	11	22	21	19	18	14	14		
Dimensions & Weight	Height	mm	1320				1588				1700			
	Width	mm	995				1100				1300			
	Depth	mm	360				400				760			
	Operating weight	kg	126	128	141	141	210	210	210	215	215	350		
Electrical	Power supply	V/ph/Hz	220/1/50 230/1/50				380/3/50 400/3/50							

Nominal conditions:  
Cooling capacities in kW given for 12/7°C water leaving temperature and 35°C ambient temperature  
Heating capacities in kW given for 40/45°C water leaving temperature and 7°C ambient temperature

## Nomenclature



## Dimensions



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## About Johnson Controls Building Technologies & Solutions

Johnson Controls Building Technologies & Solutions is making the world safer, smarter and more sustainable – one building at a time. Our technology portfolio integrates every aspect of a building – whether HVAC&R, controls, security systems or fire suppression – to ensure that we exceed customer expectations at all times. We operate in more than 150 countries through our unmatched network of branches and distribution channels, helping building owners, operators, engineers and contractors enhance the full lifecycle of any facility. Our arsenal of brands includes some of the most trusted names in the industry, such as Tyco®, YORK®, Metasys®, Ruskin®, Trion®, Titus®, Frick®, PENN®, Sabroe®, Simplex®, Ansul®, Software House® and Sensormatic®.

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