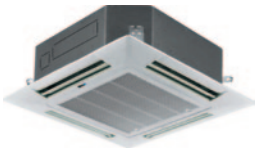
Amazon Standard Ambient VRF System

YV2V 010 to 135

Cooling capacities 9 kW to 135 kW



VRF System

- Capacities from 9 to 135 kW
- Operating range of nominal power (10% - 130 %)
- DC Inverter Scroll Compressor
- Low noise levels
- High Efficiency. EER up to 4.28
- Modular design
- Large indoor unit combinations
- Flexible and quickly installation

Comfort – Quality

- Cooling and heating
- Connection up to 64 indoor units per refrigeration circuit (3 outdoor units)
- Complete range in R410A
- Reduced space of ground
- Is appropriate particularly for existing buildings
- Cooling to -5°C to +43°C (outdoor temperature)
- Heating to -15°C to +24°C (outdoor temperature)

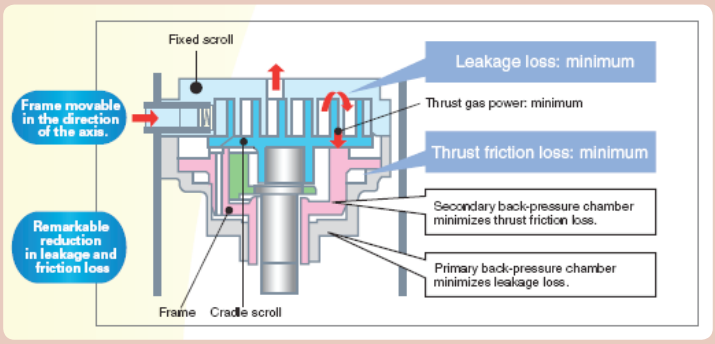
YORK
BY JOHNSON CONTROLS

Amazon Standard Ambient VRF System

YV2V 010 to 135

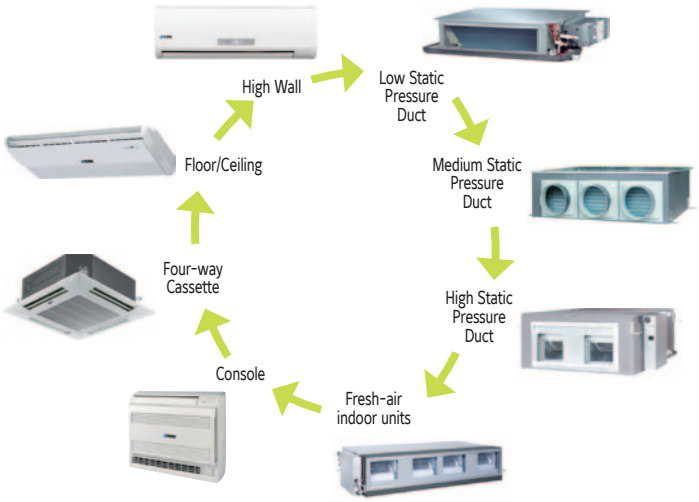
YV2V DC INVERTER VRF

The YV2V (YORK Inverter Air Conditioner) air-conditioner is the system that has variable-frequency compressor and multiple evaporators (indoor units). It is widely used in the world for high efficiency. It provides a broad range of different applications for settings such as offices, hotels and schools. With the advantage of easy installation and simple controlling system and so on, the YV2V system can better meet the demands of the air conditioning market.



Flexible indoor unit combinations

Each outdoor unit allows to connect up to 16 indoor units. This quantity varies in accordance with the model. The total capacity of the indoor units can vary between 50% and 130% from the total outdoor unit nominal capacity.



Manufacturer reserves the rights to change specifications without prior notice.

Amazon Standard Ambient VRF System

YV2V 010 to 045

YV2V Technical features - Mini-VRF outdoor unit

Model		YV2VYH010KAR	YV2VYH015KAR	YV2VYH015KAS	YV2VYH018KAS
Cooling capacity	kW	9.0	15.0	15.0	18.0
EER		2.98	3.33	3.06	2.84
Heating capacity	kW	11.0	17.0	17.0	20.0
COP		4.20	3.78	3.95	3.37
Air flow	m^3/h	3 500	6 500	6 500	6 500
Sound Pressure Level at 1 m	dB(A)	58	59	59	60
Electrical features					
Power supply		1/N/ 230V 50Hz		3/N/ 400V 50Hz	
Power input "cooling"	kW	3.02	4.50	4.90	6.33
Power input "heating"	kW	2.62	4.50	4.30	5.93
Compressor	Type	Rotary	Rotary	Rotary	Rotary
Dimensions and Weight					
Height x Width x Length	mm	830 x 960 x 380	1 250 x 960 x 380	1 250 x 960 x 380	1 250 x 960 x 380
Weight	kg	74	120	120	120
Piping connections					
Gas		5/8"	3/4"	3/4"	3/4"
Liquid		3/8"	3/8"	3/8"	3/8"
Refrigerant charge	Type	R410A			
	kg	2.6	3.6	4	4
Piping length / Height difference					
Max. piping length	m	50	100	100	100
Max. height difference	m	30	30	30	30
Max. number of indoor units		4	8	8	9

YV2V Technical features - Single module outdoor unit

Model		YV2VYH022KAS	YV2VYH028KAS	YV2VYH033KAS	YV2VYH040KAS	YV2VYH045KAS
Cooling capacity	kW	22.6	28.0	33.5	40.0	45.0
EER		4.28	3.80	3.35	3.51	3.36
Heating capacity	kW	25.0	31.5	37.5	45.0	50.0
COP		4.24	3.95	3.75	3.88	3.70
Air flow	m^3/h	11.100	11.100	14.100	14.100	14.100
Sound Pressure Level at 1 m	dB(A)	57	57	60	60	60
Electrical features						
Power supply		3/N/ 400V 50Hz				
Power input "cooling"	kW	5.27	7.36	10.00	11.40	13.40
Power input "heating"	kW	5.89	7.97	10.00	11.60	13.50
Compressor	Type	DC Inverter Scroll		DC Inverter Scroll + Standard Scroll		
Dimensions and Weight						
Height x Width x Length	mm	1 808 x 990 x 750	1 808 x 990 x 751	1 808 x 1 390 x 750	1 808 x 1 390 x 751	1 808 x 1 390 x 752
Weight	kg	240	240	360	360	368
Piping connections						
Gas		3/4"	7/8"	1"	1"	1 1/8"
Liquid		3/8"	3/8"	1/2"	1/2"	1/2"
Refrigerant charge	Type	R410A				
	kg	10	10	10	10	10
Piping length / Height difference						
Max. piping length	m	175				
Max. height difference	m	50				
Max. number of indoor units		13	16	19	23	26

Amazon Standard Ambient VRF System

YV2V 050 to 135

YV2V Technical features – Outdoor units with two module combinations

Model		YV2VYH050KAS	YV2VYH056KAS	YV2VYH061KAS	YV2VYH068KAS	YV2VYH073KAS	YV2VYH078KAS	YV2VYH085KAS	YV2VYH090KAS
Module combinations		1x YV2VYH022 1x YV2VYH028	2x YV2VYH028	1x YV2VYH028 1x YV2VYH033	1x YV2VYH028 1x YV2VYH040	1x YV2VYH028 1x YV2VYH045	2x YV2VYH040	1x YV2VYH040 1x YV2VYH045	2x YV2VYH045
Cooling capacity	kW	50.6	56.0	61.5	68.0	73.0	78.5	85.0	90.0
Heating capacity	kW	56.5	63.0	69.0	76.5	81.5	90.0	95.0	100.0
Noise level at 1 m	dB(A)	60	60	61	61	61	62	62	62
Electrical features									
Power supply		3/N/ 400V 50Hz							
Power input "cooling"	kW	12.63	14.72	17.36	18.76	20.76	22.80	24.80	26.80
Power input "heating"	kW	13.86	15.94	17.97	19.57	21.47	23.20	25.10	27.00
Dimensions and Weight									
Height x Width x Length	mm	1808 x 1980 x 1501	1808 x 1980 x 1502	1808 x 2380 x 1501	1808 x 2380 x 1502	1808 x 2380 x 1503	1808 x 2780 x 1502	1808 x 2780 x 1503	1808 x 2780 x 1504
Weight	kg	480	480	600	600	608	720	728	736
Piping size between the outdoor unit and the first branch									
Gas		1 1/8"				1 3/8"			
Liquid		5/8"				3/4"			
Refrigerant piping									
Max. piping length	m	175							
Max. height difference	m	50							
Connection between modules (out. groups)		HZG - 20A							
Max. number of indoor units		29	33	36	39	43	46	50	53

YV2V Technical features – Outdoor units with three module combinations

Model		YV2VYH096KAS	YV2VYH101KAS	YV2VYH106KAS	YV2VYH113KAS	YV2VYH118KAS	YV2VYH123KAS	YV2VYH130KAS	YV2VYH135KAS
Module combinations		2x YV2VYH028 1x YV2VYH040	2x YV2VYH028 1x YV2VYH045	1x YV2VYH028 2x YV2VYH040	1x YV2VYH028 1x YV2VYH040 1x YV2VYH045	1x YV2VYH028 2x YV2VYH045	1x YV2VYH033 2x YV2VYH045	1x YV2VYH040 2x YV2VYH045	3x YV2VYH045
Cooling capacity	kW	96.0	101.0	106.5	113.0	118.0	123.5	130.0	135.0
Heating capacity	kW	108.0	113.0	121.5	126.5	131.5	137.5	145.0	150.0
Noise level at 1 m	dB(A)	63	63	63	63	63	64	64	64
Electrical features									
Power supply		3/N/ 400V 50Hz							
Power input "cooling"	kW	26.12	28.12	30.16	32.16	34.16	36.80	38.20	40.20
Power input "heating"	kW	27.54	29.44	31.17	33.07	34.97	37.00	38.60	40.50
Dimensions and Weight									
Height x Width x Length	mm	1808 x 3370 x 2253	1808 x 3370 x 2254	1808 x 3770 x 2253	1808 x 3770 x 2254	1808 x 3770 x 2255	1808 x 4170 x 2254	1808 x 4170 x 2255	1808 x 4170 x 2256
Weight	kg	840	848	960	968	976	1 096	1 096	1 104
Piping size between the outdoor unit and the first branch									
Gas		1 3/8"							
Liquid		3/4"							
Refrigerant piping									
Max. piping length	m	175							
Max. height difference	m	50							
Connection between modules (out. groups)		HZG - 30A							
Max. number of indoor units		56	59	63	64	64	64	64	64

Johnson Controls

VRF Heat recovery system

YV2V 024 to 045

YV2V 3 Pipes Technical features - Single module outdoor unit

Model		YV2VYT024KAS-D-X	YV2VYT029KAS	YV2VYT035KAS	YV2VYT042KAS	YV2VYT045KAS
Cooling capacity	kW	23.9	29.3	35.1	41.7	45.0
EER		4.02	3.84	3.82	3.42	3.23
Heating capacity	kW	26.5	32.8	39.2	46.8	50.7
COP		4.3	4.1	4.2	4.1	3.8
Air flow	m^3/h	11.100	11.100	14.100	14.100	14.100
Sound Pressure Level at 1 m	dB(A)	57	57	60	60	60
Electrical features						
Power supply		3/N/ 400V 50Hz				
Power input "cooling"	kW	6.0	7.6	9.2	12.2	14.0
Power input "heating"	kW	6.2	8.0	9.2	11.4	13.4
Compressor	Type	DC Inverter Scroll		DC Inverter Scroll + Standard Scroll		
Dimensions and Weight						
Height x Width x Length	mm	1 808 x 990 x 750	1 808 x 990 x 750	1 808 x 1 390 x 750	1 808 x 1 390 x 750	1 808 x 1 390 x 750
Weight	kg	240	240	368	368	368
Piping connections						
Gas		3/4" / 3/4"	7/8" / 3/4"	1" / 7/8"	1" / 7/8"	1 1/8" / 1"
Liquid		3/8"	3/8"	1/2"	1/2"	1/2"
Refrigerant charge	Type	R410A				
	kg	10	10	10	10	10
Piping length / Height difference						
Max. piping length	m	175				
Max. height difference	m	50				
Max. number of indoor units		13	16	19	23	26

Combination of modular outdoor units

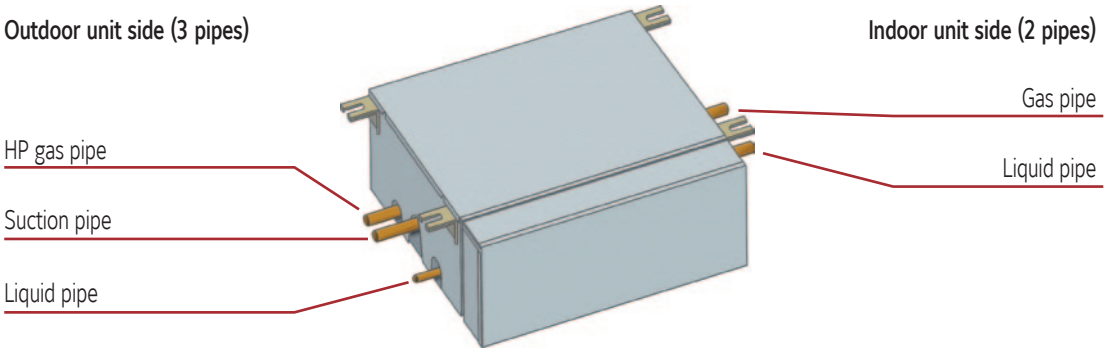
	HP	8	10	12	15	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
Capacity	Coolin kW	23.9	29.3	35.1	41.7	45.0	53.2	58.6	64.4	71.0	74.3	83.4	86.7	90.0	100.3	103.6	112.7	116.0	119.3	125.1	131.7	135.0
	Heating kW	26.5	32.8	39.2	46.8	50.7	59.3	65.6	72.0	79.6	83.5	93.6	97.5	101.4	112.4	116.3	126.4	130.3	134.2	140.6	148.2	152.1
Maximum indoor units		13	16	19	23	26	29	33	36	39	43	46	50	53	56	59	63	64	64	64	64	64
Appearance																							

Technical features - Heat recovery valve box

Model		VB1-112A	VB1-180A	VB1-280A
Capacity				
Power supply		3/N/ 400V 50Hz		
Total Capacity Index of Indoor Units	kW	≤ 11.2	> 11.2 & ≤ 18.0	> 18.0 & ≤ 28.0
Number of Connectable Indoor Units		Max. 5	Max. 8	Max. 8
Piping connection				
Liquid pipe - Connect to indoor unit	mm	3/8"	3/8"	3/8"
Gas pipe -Connect to indoor unit	mm	5/8"	5/8"	7/8"
Liquid pipe-Connect to outdoor unit	mm	3/8"	3/8"	3/8"
Suction pipe-Connect to outdoor unit	mm	5/8"	5/8"	1"
High pressure gas pipe-Connect to outdoor unit	mm	1/2"	5/8"	3/4"
Dimensions & Weight				
Height x Width x Length	mm	180 x 400 x 300	180 x 400 x 300	180 x 400 x 300
Weight	kg	12	12	13

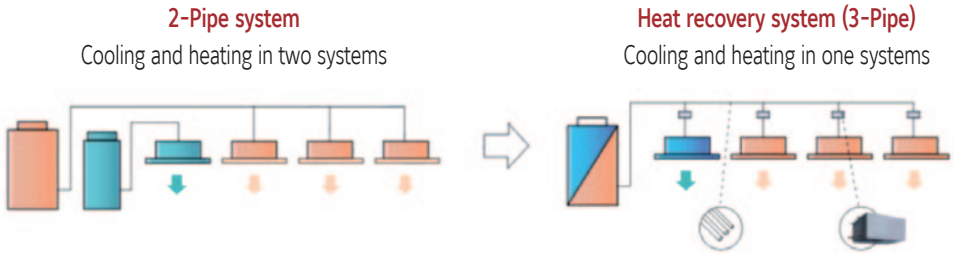
VRF Heat recovery system

Heat recovery valve box scheme



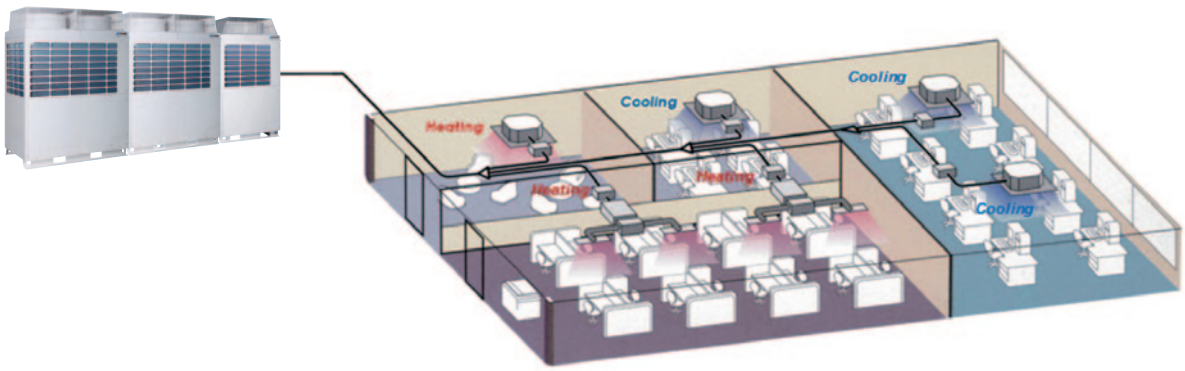
Cooling and heating synchronously in one system

Heat recovery system can achieve cooling and heating synchronously in one system by valve box device.



Heat Recovery, More Energy-saving

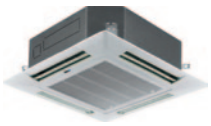
The surplus heat of some indoor units' condensation can be used for other indoor units for evaporation. Comparing with traditional Air Conditioning system, save at least 15% energy.



VRF Technical features indoor units

High wall (EXV integrated)

Model			YVHVXH022	YVHVXH028	YVHVXH036	YVHVXH045	YVHVXH056	YVHVXH071
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	kW	2.5	3.2	4.0	5.0	6.3	8.0
	Air flow	m³/h	600				800	
Noise level at 1 m	H / M / L	dB(A)	37 / 33 / 31	37 / 34 / 31	41 / 36 / 33	41 / 36 / 33	43 / 39 / 34	48 / 39 / 37
Electrical features	Power supply	V/Ph/Hz	230 / 1 / 50 + N + E					
	Current	A	0.31				0.41	
Dimensions and Weight	H x W x D	mm	265 x 938 x 187				299 x 1 046 x 239	
	Weight	kg	10.9				13	
Piping	Gas		1/2"				5/8"	
	Liquid		1/4"				3/8"	



Cassette

Model			YVKVXH028	YVKVXH036	YVKVXH045	YVKVXH056	YVKVXH071	YVKVXH080	YVKVXH090	YVKVXH112	YVKVXH140
Capacity	Cooling	kW	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0
	Heating	kW	3.2	4.0	5.0	6.3	8.0	9.0	10.0	12.5	16.0
	Air flow	m³/h	700	650		1 200			1 800		
Noise level at 1 m	H / M / L	dB(A)	32 / 30 / 29	32 / 30 / 29	33 / 30 / 29	34 / 32 / 30	35 / 34 / 31	37 / 35 / 31	37 / 35 / 31	37 / 35 / 31	44 / 40 / 36
Electrical features	Power supply	V/Ph/Hz	230 / 1 / 50 + N + E								
	Current	A	0.47			0.67			0.76		
Dimensions and Weight	H x W x D	mm	260 x 570 x 570			240 x 840 x 840			295 x 840 x 840		
	Weight	kg	17			30			38		
Panel	H x W x D	mm	60 x 700 x 700			80 x 950 x 950					
	Weight	kg	2.8			6					
Piping	Gas		3/8"	1/2"			5/8"				
	Liquid		1/4"	1/4"			3/8"				

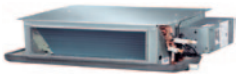
Convertible console floor/ceiling

Model			YVFVXH028	YVFVXH036	YVFVXH045	YVFVXH056	YVFVXH071	YVFVXH112	YVFVXH140
Capacity	Cooling	kW	2.8	3.6	4.5	5.6	7.1	11.2	14.0
	Heating	kW	3.2	4.0	5.0	6.3	8.0	12.5	16.0
	Air flow	m³/h	800					2 040	
Noise level at 1 m	H / M / L	dB(A)	48 / 46 / 44					50 / 48 / 46	53 / 51 / 49
Electrical features	Power supply	V/Ph/Hz	230 / 1 / 50 + N + E						
	Current	A	0.3					1.8	
Dimensions and Weight	H x W x D	mm	655 x 990 x 199					700 x 1 580 x 240	
	Weight	kg	38.3					54	
Piping	Gas		3/8"	1/2"			5/8"		
	Liquid		1/4"	1/4"			3/8"		

Console

Model			YV5VXH022	YV5VXH028	YV5VXH036	YV5VXH056
Capacity	Cooling	kW	2.2	2.8	3.6	5.0
	Heating	kW	2.5	3.2	4.0	6.0
	Air flow	m³/h	460		520	580
Noise level at 1 m	H / M / L	dB(A)	43 / 39 / 36			48 / 46 / 42
Electrical features	Power supply	V/Ph/Hz	230 / 1 / 50 + N + E			
	Current	A	0.44			
Dimensions and Weight	H x W x D	mm	640 x 720 x 255			
	Weight	kg	18			
Piping	Gas		1/2"			
	Liquid		1/4"			

VRF Technical features indoor units



Low and Medium Static Pressure Duct

Model			Low Static Pressure						Medium Static Pressure					
			YVDVXH022	YVDVXH028	YVDVXH036	YVDVXH045	YVDVXH056	YVDVXH071	YVEVXH056	YVEVXH071	YVEVXH080	YVEVXH090	YVEVXH112	YVEVXH114
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1	5.6	7.1	8.0	9.0	11.2	14.0
	Heating	kW	2.5	3.2	4.0	5.0	6.3	8.0	7.1	8.0	9.0	10.0	12.5	16.0
	Air flow	m³/h	400		500	850	1 250		1 200			1 900		2 100
Noise level at 1 m	H / M / L	dB(A)	35 / 32 / 30				39 / 37 / 35		43 / 37 / 35					44 / 40 / 36
External static presure		Pa	0 ~ 20						50 ~ 96			80 ~ 120		
Electrical features	Power supply	V/Ph/Hz	230 / 1 / 50 + N + E											
	Current	A	0.27			0.38	0.55		1.1			2.2		
Dimensions and Weight	H x W x D	mm	220 / 610 / 500			220 / 1 105 / 500			300 / 1 180 / 743			270 / 1 135 / 742		
	Weight	kg	15		16	25	28		39			50		
Piping	Gas		3/8"		1/2"			5/8"	1/2"	5/8"				
	Liquid		1/4"		1/4"			3/8"	1/4"	3/8"				

High Static Pressure Duct

Model			YVGVXH056	YVGVXH071	YVGVXH080	YVGVXH090	YVGVXH112	YVGVXH140	YVGVXH226	YVGVXH280
Capacity	Cooling	kW	5.6	7.1	8.0	9.0	11.2	14.0	22.6	28.0
	Heating	kW	6.3	8.0	9.0	10.0	12.5	16.0	25.0	31.6
	Air flow	m³/h	1 500			1 560	1 600	2 100	4 050	
Noise level at 1 m	H / L	dB(A)	42 / 40			45 / 40			54 / 49	
External static presure		Pa	100							
Electrical features	Power supply	V/Ph/Hz	230 / 1 / 50 + N + E							
	Current	A	2.05			2.55			5.05	
Dimensions and Weight	H x W x D	mm	360 x 970 x 875			360 x 1 350 x 875			360 x 1 610 x 840	
	Weight	kg	48			62			92	
Piping	Gas		1/2"	5/8"					1"	
	Liquid		1/4"	3/8"					3/8"	

Fresh Air Unit

Model			YV4VXH140	YV4VXH226	YV4VXH280
Capacity	Cooling	kW	14.0	22.6	28.0
	Heating	kW	8.9	15.2	17.8
	Air flow	m³/h	1 600	2 300	2 800
Noise level at 1 m	High speed	dB(A)	48	55	
External static presure		Pa	100		
Electrical features	Power supply	V/Ph/Hz	230 / 1 / 50 + N + E		
Dimensions and Weight	H x W x D	mm	360 x 1 350 x 875	360 x 1 750 x 840	
	Weight	kg	62	120	
Piping	Gas		5/8"	1"	
	Liquid		3/8"	3/8"	

Heat Recovery Ventilator

Model			YV6VXH015	YV6VXH026	YV6VXH080	YV6VXH100
Air flow		m³/h	150	200	800	1 000
External static presure		Pa	50	60	80	100
Power supply		V/Ph/Hz	230 / 1 / 50 + N + E			
Dimensions and Weight	H x W x D	mm	276x940x685	276x940x686	387x1227x1115	387x1227x1116
	Weight	kg	28.7		85.5	

Controllers & BMS

YR-H71 Wireless Controller

Elegant and slim design, LCD display, 4 Operation modes (Cool/Dry/Heat/Fan),
Timer ON/OFF setting up to 24 Hr., Temperature control range, Fan speed selection.
Standard for High Wall and Console, optional for Duct, Cassette and Floor Ceiling.

YR-E14 Wired Controller

Exclusive design, Big LCD display, 4 Operation modes (Cool/Dry/Heat/Fan),
Temperature setting, Timer setting,Fan speed selection, Group controller up to 16 indoor units.
Standard for Duct, Cassette and Floor Ceiling. **No optional** for High Wall and Console.

YCZ-A003 Touch Screen Central Controller

Max. 128 indoor units control.
Single or all query and control, such as ON/OFF/Mode setting/Temp setting/ Fan setting ect.
Mode lock function, Blue light background, LCD display screen.

HCM-01 Central Controller With Monitor Software

Max. 128 indoor units control.
Single or all query and control, such as ON/OFF/Mode setting/Temp setting/ Fan setting ect.
Mode lock function, Blue light background, Software Monitoring on any PC.

IGU05 Touch Screen Central Controller Translator

Translating protocol between home bus and RS485.
Connecting with one outdoor (combination model also regard as one) system.
Work with Touch Screen Central Controller

IGU02 BacNet/IP Translator

Translating protocol between home bus and RS485.
Connecting with one outdoor (combination model also regard as one) system.
Work with Central Controller with Monitor Software and BacNet/IP Converter.

IGU06 LonWorks Translator

Translating protocol between home bus and RS485.
Connecting with one outdoor (combination model also regard as one) system.
Work with LonWorks Converter.

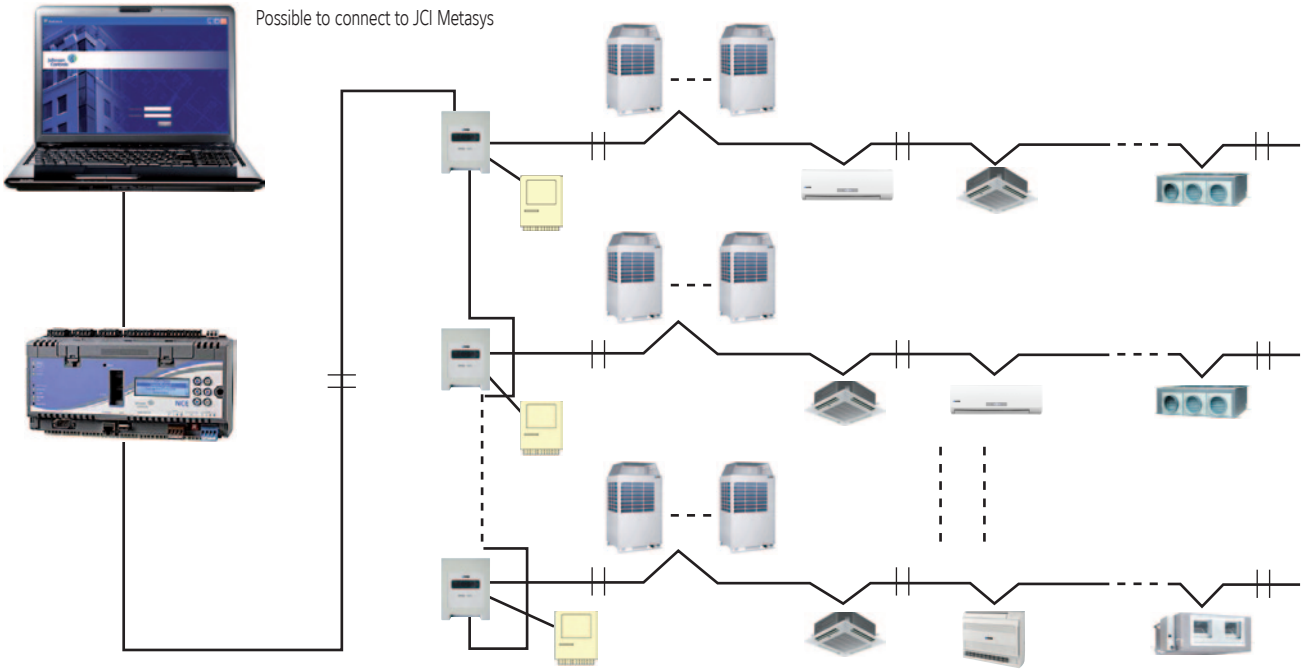
HCM-03 BacNet/IP Converter

Max. 72 indoor units control.
Connect A/C system to BMS by BacNet/IP protocol.

IGU07 LonWorks Converter

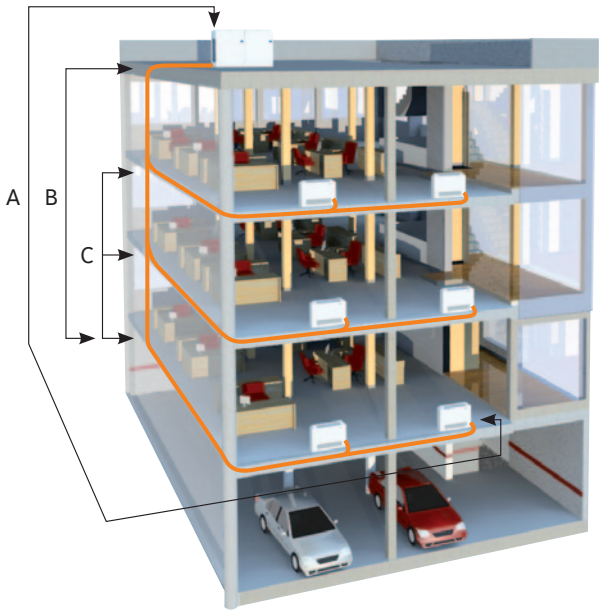
Max. 32 indoor units control.
Connect A/C system to BMS by LONWORKS protocol.

VRF System – System Diagram



Piping accessories

Model	System	Name	Function	Application
FQG-B335A	2 pipes	Indoor mainfold pipe	Refrigerant distribution	Total indoor units capacity < 33.5 kW
FQG-B506A	2 pipes	Indoor mainfold pipe	Refrigerant distribution	33.5 kW ≤ Total indoor units capacity < 50.6 kW
FQG-B730A	2 pipes	Indoor mainfold pipe	Refrigerant distribution	50.6 kW ≤ Total indoor units capacity < 72 kW
FQG-B1350A	2 pipes	Indoor mainfold pipe	Refrigerant distribution	73 kW ≤ Total indoor units capacity
HZG-20A	2 pipes	Outdoor branch pipe	Refrigerant gathering	2 module combinations
HZG-30A	2 pipes	Outdoor branch pipe	Refrigerant gathering	3 module combinations
FQG-R335A	3 pipes	Indoor mainfold pipe	Refrigerant distribution	Total indoor units capacity < 33.5 kW
FQG-R506A	3 pipes	Indoor mainfold pipe	Refrigerant distribution	33.5 kW ≤ Total indoor units capacity < 50.6 kW
FQG-R730A	3 pipes	Indoor mainfold pipe	Refrigerant distribution	50.6 kW ≤ Total indoor units capacity < 72 kW
FQG-R1350A	3 pipes	Indoor mainfold pipe	Refrigerant distribution	73 kW ≤ Total indoor units capacity
HZG-R20A	3 pipes	Outdoor branch pipe	Refrigerant gathering	2 module combinations
HZG-R30A	3 pipes	Outdoor branch pipe	Refrigerant gathering	3 module combinations



YORK VRF System

The YORK system with DC Inverter Scroll is working like the VRF principle and offers you economical air-conditioning system for projects, which are requiring more capacity than the normal split and multi split solutions.

The lengths for the connecting tubes between the indoor and outdoor have been prolonged, which brings you more flexible solutions for complex air-conditioning projects.

A – Maximum single way pipe length : 175 m.

B – Maximum difference in height : 50 m.

C – Maximum difference in height between 2 indoor units : 15 m.

Johnson Controls