



VVEA 3-pipes energy recovery VRF range

- ▶ New range, new structure, new selection boxes.
- ▶ Just like the version of our VVTA range, the new VVEA 3-tube energy recovery VRF features the new structure of the range, as well as the **4-way heat exchanger** for a performance always at the highest level.
- ▶ Offering a wide range of capacity with mono-modules with a capacity of 61.5 kW and a possible coupling of 4 outdoor units, the new VVEA will meet all hotel, office and tertiary application needs.



Stores



Hotels



Offices

COMPATIBLE

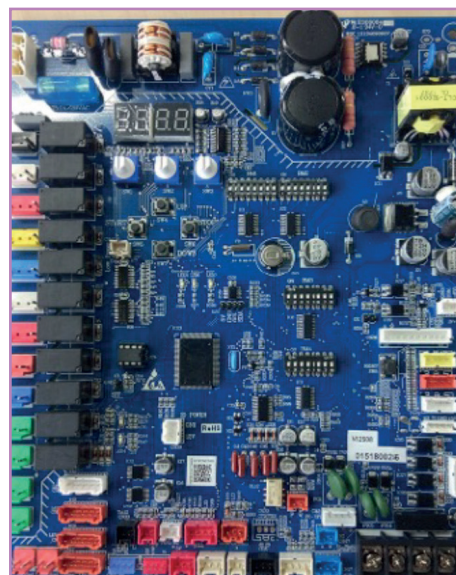


COMPATIBLE



▶ Modbus output included

No need for a gateway anymore to use a centralized controller or integrate the system with a BMS. An addressable and configurable Modbus output is directly available on the outdoor unit.

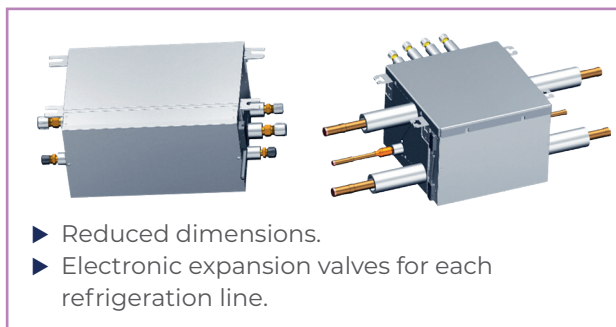


THE AIRWELL VRF SOLUTION

► New selection boxes

They incorporate **electronic expansion valves** replacing the old slide valves for much **quieter** operation and regulation perfectly suited to the needs of the connected indoor units.

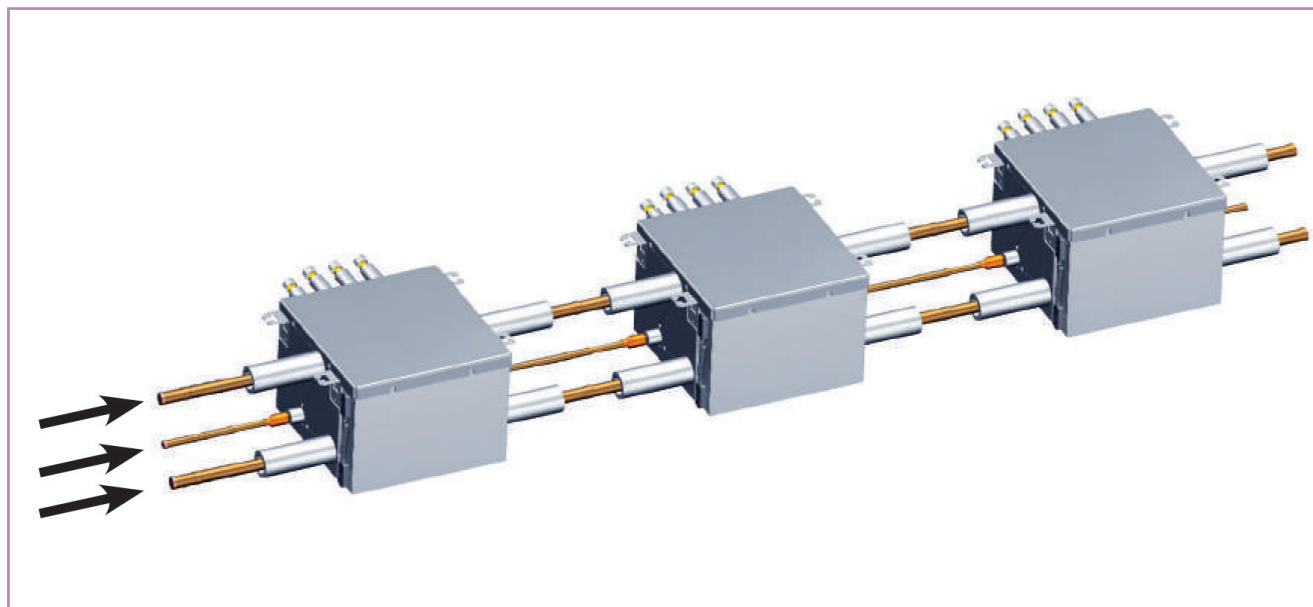
In addition, the new selection boxes are equipped with **3 additional tubes** at the output, allowing it to be put in series for unprecedented modularity. This is valid for boxes with 4 outlets.



- Reduced dimensions.
- Electronic expansion valves for each refrigeration line.

MODEL	PART NUMBER	MAXIMUM CONNECTABLE CAPACITY (kW)	POWER SUPPLY	MAXIMUM NUMBER OF CONNECTABLE INDOOR UNITS (same operation mode)	DIMENSIONS (mm)
VVEA HR 112 KIT	7ACELH028	< 11.2	1P/220-240V/50-60Hz	5	388x200x277
VVEA HR 180 KIT	7ACELH029	< 18	1P/220-240V/50-60Hz	8	388x200x277
VVEA HR 280 KIT	7ACELH030	< 28	1P/220-240V/50-60Hz	8	388x200x277
VVEA HR 450 KIT (4 outlets)	7ACELH031	< 45	1P/220-240V/50-60Hz	20	405x300x421
	Total for 4 outlets		Total by outlet		
	Total capacity of indoor units	Quantity of indoor units	Total capacity of indoor units	Quantity of indoor units	
	≤ 45 kW	≤ 20	≤ 11,2 kW	≤ 5	

The limit of the input power of a series is 71 kW maximum*.





VRF
Outdoor units



COMPATIBLE



COMPATIBLE



+ PRODUCT

- Capacity from 22.4 to 246 kW
- Combination of 4 outdoor units possible
- New selection boxes
- New 4-way heat exchanger
- Modbus outlet



RWV06 (optional)



RWV09 (optional)

FEATURES

TECHNOLOGY



DC INVERTER



BLUE FIN TREATMENT

INSTALLER FUNCTIONS



SELF DIAGNOSTIC



BMS COMPATIBLE



SERVICE MONITOR TOOL

CERTIFICATION

- AIRWELL participates in the ECP programme for AC1. Check ongoing validity of certificate:

www.eurovent-certification.com



VVEA

3-pipes with heat recovery



VVEA 250-450



VVEA 504-735

THE + “SUSTAINABLE DEVELOPMENT”

- > Heat recovery between units, for better energy efficiency.

THE + “USER”

- > Simultaneous operating in heating and cooling modes.
- > New even quieter selection box, thanks to their electronic expansion valve.

THE + “INSTALLER”

- > New improved accessibility, thanks to the service door.
- > Up to 1000 m of refrigeration network and 110 m of height difference.
- > Modbus outlet for easy BMS integration.
- > Access to all operating parameters, thanks to the HMI (Human Machine Interface).

THE + “TECHNOLOGY”

- > New 4-way selection boxes in series with reversible orientation.
- > Automatic oil balance, no need for a balance tube.
- > Reinforced anti-corrosion treatment.
- > Compatible with AirConnect Pro and AirConnect Smart.

ACCESSORIES

ACCESSORY	PART NUMBER	REF.	PHOTO	FUNCTION	COMMENT
Gather pipe kit for 2 outdoor groups	7ACELH041	TBS20HR		• Refrigerant gathering	• For 2 outdoor groups
Gather pipe kit for 3 outdoor groups	7ACELH042	TBS30HR		• Refrigerant gathering	• For 3 outdoor groups
Gather pipe kit for 4 outdoor groups	7ACELH043	TBS40HR		• Refrigerant gathering	• For 4 outdoor groups
Manifold pipe (gas + liquid)	7ACFHH007	TAU335HR		• Refrigerant gathering	• 33.5 kW > Total IDU power
	7ACFHH008	TAU506HR		• Refrigerant gathering	• 33.5 kW ≤ Total IDU power < 50.6 kW
	7ACFHH009	TAU730HR		• Refrigerant gathering	• 50.6 kW ≤ Total IDU power < 73 kW
	7ACFHH010	TAU1350HR		• Refrigerant gathering	• 73 kW ≤ Total IDU power < 135 kW
	7ACELH044	TAU2040HR		• Refrigerant gathering	• 135 kW ≤ Total IDU power
Maintenance tool	7ACELH014	TD02		• Working parameters monitoring and recording tool	
Smart Wi-Fi module	7ACEL1869	-		• Remote control by the smart Wi-Fi module and controlled by the AirConnect Smart application	• Module dimensions: 86x86x12 mm.

TECHNICAL DATA

MODEL		VVEA-335R-01T32	VVEA-400R-01T32	VVEA-450R-01T32	VVEA-504R-01T32	VVEA-560R-01T32	VVEA-615R-01T32
Part number		7VF150012	7VF150013	7VF150014	7VF150015	7VF150016	7VF150017
Phase		Three phases					
Power	HP	12	14	16	18	20	22
COOLING MODE							
Rated power*	kW	33.50	40.00	45.00	50.00	56.00	60.00
Rated power input	kW	9.94	12.31	13.93	16.13	17.23	20.00
Max. power input	kW	18.20	19.20	25.10	28.50	32.00	33.00
Rated current	A	16.43	20.33	23.01	26.64	28.46	33.03
Max. current	A	30.06	31.71	41.45	47.07	52.85	54.50
EER		3.37	3.25	3.23	3.10	3.25	3.00
SEER		6.46	6.37	6.86	6.48	5.90	5.63
Seasonal operating limits		255.40	251.80	271.40	256.20	233.00	222.20
HEATING MODE							
Rated power*	kW	33.50	40.00	45.00	50.00	56.00	60.00
Rated power input	kW	8.77	10.53	11.39	13.70	15.77	17.91
Max. power input	kW	17.40	18.40	22.70	25.50	29.40	30.40
Rated current	A	14.48	17.38	18.81	22.62	26.05	29.58
Max. current	A	28.74	30.39	37.49	42.11	48.55	50.21
COP		3.82	3.80	3.95	3.65	3.55	3.35
SCOP		3.99	3.86	4.21	3.99	3.93	3.50
Seasonal operating limits		156.60	151.40	165.40	156.60	154.20	137.00
POWER SUPPLY							
Phase/Voltage/Frequency		3P/380-415V/50-60Hz					
PERFORMANCE							
Airflow (HS)	m ³ /h	13500	13500	17000	17000	19000	19000
Sound pressure (HS)	dB(A)	60	61	62	63	63	64
INSTALLATION							
Outline dimensions (WxHxD)		mm 980x1690x750			mm 1410x1690x750		
Package dimensions (WxHxD)		mm 1070x1858x850			mm 1515x1858x850		
Net weight/Gross weight		kg 257/282			kg 366/395		kg 375/404
Compressor	Type	Scroll DCI					
	Brand	Mitsubishi Electric					
	Number of compressors	1			2		
Refrigerant/GWP		R410A/2088					
Charge	kg	10					
Liquid pipe diameter	inches	1/2"			5/8"		
Suction pipe diameter	inches	1"			1 1/8"		
Suction pipe diameter haut	inches	7/8"			1"		
Max. length	m	1000					
Max. length (equivalent/actual)	m	260/220					
Max. height between indoor and outdoor units (ODU down/up) ⁽¹⁾	m	110/90					
Standard height between indoor and outdoor units (ODU down/up) ⁽²⁾	m	50/40					
Max. height between indoor units ⁽³⁾	m	30					
Standard height between indoor units ⁽⁴⁾	m	18					
External static pressure	Pa	110					
Indoor/outdoor unit power ratio (min./max.)	%	50-130					
Maximum number of connectable indoor units	quantity	20	24	27	30	33	36
OPERATING LIMITS							
Cooling mode (min./max.)	°C	-5~50					
Heating mode (min./max.)	°C	-23~21					

(1) If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.

(2) Standard design and production in the factory.

(3) If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.

(4) Standard design and production in the factory.

* All the specifications are tested under nominal condition as per Eurovent conditions (in cooling mode: indoor temperature is 27°C DB/19°C WB, outdoor temperature 35°C DB/24°C WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°C WB).

VVEA

3-pipes with heat recovery

VRF
Outdoor units

TECHNICAL DATA FOR TWO COMBINATIONS

MODEL		VVEA-670R	VVEA-735R	VVEA-800R	VVEA-850R
COMBINATIONS		VVEA-335R	VVEA-335R	VVEA-400R	VVEA-400R
		7VF150012	7VF150012	7VF150013	7VF150013
		VVEA-335R	VVEA-400R	VVEA-400R	VVEA-450R
		7VF150012	7VF150013	7VF150013	7VF150014
Phase		Three phases			
Power	HP	24	26	28	30
COOLING MODE					
Rated power*	kW	67.00	73.50	80.00	85.00
Rated power input	kW	19.88	22.25	24.62	26.24
Max. power input	kW	36.40	37.40	38.40	44.30
Rated current	A	32.83	36.74	40.65	43.33
Max. current	A	60.11	61.77	63.42	73.16
EER		3.37	3.30	3.25	3.24
SEER		6.46	6.37	6.37	6.37
Seasonal operating limits		255.40	251.80	251.80	251.80
HEATING MODE					
Rated power*	kW	67.00	73.50	80.00	85.00
Rated power input	kW	17.54	19.30	21.05	21.92
Max. power input	kW	34.80	35.80	36.80	41.10
Rated current	A	28.97	31.87	34.77	36.20
Max. current	A	57.47	59.12	60.78	67.88
COP		3.82	3.81	3.80	3.88
SCOP		3.99	3.86	3.86	3.86
Seasonal operating limits		156.60	151.40	151.40	151.40
POWER SUPPLY					
Phase/Voltage/Frequency		3P/380-415V/50-60Hz			
PERFORMANCE					
Airflow (HS)	m ³ /h	27000	27000	27000	30500
Sound pressure (HS)	dB(A)	63	64	64	65
INSTALLATION					
Outline dimensions (WxHxD)	mm	980x1690x750 + 980x1690x750			980x1690x750 + 980x1410x750
Package dimensions (WxHxD)	mm	1070x1858x850 + 1070x1858x850			1070x1858x850 + 1070x1480x850
Net weight/Gross weight	kg	246/271 + 246/271			246/271 + 366/395
Compressor	Type	Scroll DCI			
	Brand	Mitsubishi Electric			
	Number of compressors	2			3
Refrigerant/GWP					
Charge	kg	R410A/2088			
Liquid pipe diameter	inches	5/8"			3/4"
Suction pipe diameter	inches	1 1/8"			1 1/4"
Suction pipe diameter haut	inches	1"			1 1/8"
Max. length	m	1000			
Max. length (equivalent/actual)	m	260/220			
Max. height between indoor and outdoor units (ODU down/up) ⁽¹⁾	m	110/90			
Standard height between indoor and outdoor units (ODU down/up) ⁽²⁾	m	50/40			
Max. height between indoor units ⁽³⁾	m	30			
Standard height between indoor units ⁽⁴⁾	m	18			
External static pressure	Pa	110			
Indoor/outdoor unit power ratio (min./max.)	%	50-130			
Maximum number of connectable indoor units	quantity	40	43	47	50
OPERATING LIMITS					
Cooling mode (min./max.)	°C	-5~-50			
Heating mode (min./max.)	°C	-23~-21			

(1) If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.

(2) Standard design and production in the factory.

(3) If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.

(4) Standard design and production in the factory.

* All the specifications are tested under nominal condition as per Eurovent conditions (in cooling mode: indoor temperature is 27°C DB/19°C WB, outdoor temperature 35°C DB/24°C WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°C WB).

TECHNICAL DATA FOR TWO COMBINATIONS

MODEL		VVEA-900R	VVEA-954R	VVEA-1008R	VVEA-1064R	VVEA-1120R	VVEA-1175R	VVEA-1230R	
COMBINATIONS		VVEA-450R	VVEA-450R	VVEA-504R	VVEA-504R	VVEA-560R	VVEA-560R	VVEA-615R	
		7VF150014	7VF150014	7VF150015	7VF150015	7VF150016	7VF150016	7VF150017	
		VVEA-450R	VVEA-504R	VVEA-504R	VVEA-560R	VVEA-560R	VVEA-615R	VVEA-615R	
		7VF150014	7VF150015	7VF150015	7VF150016	7VF150016	7VF150017	7VF150017	
Phase		Three phases							
Power	HP	32	34	36	38	40	42	44	
COOLING MODE									
Rated power*	kW	90.00	95.00	100.00	106.00	112.00	116.00	120.00	
Rated power input	kW	27.86	30.06	32.26	33.36	34.46	37.23	40.00	
Max. power input	kW	50.20	53.60	57.00	60.50	64.00	65.00	66.00	
Rated current	A	46.02	49.65	53.27	55.09	56.91	61.49	66.06	
Max. current	A	82.91	88.52	94.14	99.92	105.70	107.35	109.00	
EER		3.23	3.16	3.10	3.18	3.25	3.12	3.00	
SEER		6.86	6.48	6.48	5.90	5.90	5.63	5.63	
Seasonal operating limits		271.40	256.20	256.20	233.00	233.00	222.20	222.20	
HEATING MODE									
Rated power*	kW	90.00	95.00	100.00	106.00	112.00	116.00	120.00	
Rated power input	kW	22.78	25.09	27.40	29.47	31.54	33.68	35.82	
Max. power input	kW	45.40	48.20	51.00	54.90	58.80	59.80	60.80	
Rated current	A	37.63	41.44	45.25	48.67	52.09	55.62	59.16	
Max. current	A	74.98	79.60	84.23	90.67	97.11	98.76	100.41	
COP		3.95	3.79	3.65	3.60	3.55	3.44	3.35	
SCOP		4.21	3.99	3.99	3.93	3.93	3.50	3.50	
Seasonal operating limits		165.40	156.60	156.60	154.20	154.20	137.00	137.00	
POWER SUPPLY									
Phase/Voltage/Frequency		3P/380-415V/50-60Hz							
PERFORMANCE									
Airflow (HS)	m ³ /h	34000	34000	34000	36000	38000	38000	38000	
Sound pressure (HS)	dB(A)	65	66	66	66	66	67	67	
INSTALLATION									
Outline dimensions (WxHxD)	mm	1410x1690x750 + 1410x1690x750							
Package dimensions (WxHxD)	mm	1515x1858x850 + 1515x1858x850							
Net weight/Gross weight	kg	366/395 + 366/395			366/395 + 375/404		375/404 + 375/404		
Compressor	Type	Scroll DCI							
	Brand	Mitsubishi Electric							
	Number of compressors	4							
Refrigerant/GWP		R410A/2088							
Charge	kg	20							
Liquid pipe diameter	inches	3/4"							
Suction pipe diameter	inches	1 1/4			1 1/2				
Suction pipe diameter haut	inches	1 1/8			1 3/8				
Max. length	m	1000							
Max. length (equivalent/actual)	m	260/220							
Max. height between indoor and outdoor units (ODU down/up) ⁽¹⁾	m	110/90							
Standard height between indoor and outdoor units (ODU down/up) ⁽²⁾	m	50/40							
Max. height between indoor units ⁽³⁾	m	30							
Standard height between indoor units ⁽⁴⁾	m	18							
External static pressure	Pa	110							
Indoor/outdoor unit power ratio (min./max.)	%	50-130							
Maximum number of connectable indoor units	quantity	53	56	59	63	64	64	64	
OPERATING LIMITS									
Cooling mode (min./max.)	°C	-5~-50							
Heating mode (min./max.)	°C	-23~-21							

(1) If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.

(2) Standard design and production in the factory.

(3) If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.

(4) Standard design and production in the factory.

* All the specifications are tested under nominal condition as per Eurovent conditions (in cooling mode: indoor temperature is 27°C DB/19°C WB, outdoor temperature 35°C DB/24°C WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°C WB).

VVEA

3-pipes with heat recovery

VRF
Outdoor units

TECHNICAL DATA FOR THREE COMBINATIONS

MODEL		VVEA-1300R	VVEA-1350R	VVEA-1404R	VVEA-1458R	VVEA-1512R	VVEA-1568R
COMBINATIONS		VVEA-400R	VVEA-450R	VVEA-450R	VVEA-450R	VVEA-504R	VVEA-504R
		7VF150013	7VF150014	7VF150014	7VF150014	7VF150015	7VF150015
		VVEA-450R	VVEA-450R	VVEA-450R	VVEA-504R	VVEA-504R	VVEA-504R
		7VF150014	7VF150014	7VF150014	7VF150015	7VF150015	7VF150015
		VVEA-450R	VVEA-450R	VVEA-504R	VVEA-504R	VVEA-504R	VVEA-560R
		7VF150014	7VF150014	7VF150015	7VF150015	7VF150015	7VF150016
Phase		Three phases					
Power	HP	46	48	50	52	54	56
COOLING MODE							
Rated power*	kW	130.00	135.00	140.00	145.00	150.00	156.00
Rated power input	kW	40.17	41.80	43.99	46.19	48.39	49.49
Max. power input	kW	69.40	75.30	78.70	82.10	85.50	89.00
Rated current	A	66.34	69.03	72.65	76.28	79.91	81.73
Max. current	A	114.61	124.36	129.97	135.59	141.20	146.98
EER		3.24	3.23	3.18	3.14	3.10	3.15
SEER		6.37	6.86	6.48	6.48	6.48	5.90
Seasonal operating limits		251.80	271.40	256.20	256.20	256.20	233.00
HEATING MODE							
Rated power*	kW	130.00	135.00	140.00	145.00	150.00	156.00
Rated power input	kW	33.31	34.18	36.48	38.79	41.10	43.17
Max. power input	kW	63.80	68.10	70.90	73.70	76.50	80.40
Rated current	A	55.01	56.44	60.25	64.06	67.87	71.29
Max. current	A	105.37	112.47	117.09	121.72	126.34	132.78
COP		3.90	3.95	3.84	3.74	3.65	3.61
SCOP		3.86	4.21	3.99	3.99	3.99	3.93
Seasonal operating limits		151.40	165.40	156.60	156.60	156.60	154.20
POWER SUPPLY							
Phase/Voltage/Frequency		3P/380-415V/50-60Hz					
PERFORMANCE							
Airflow (HS)	m ³ /h	47500	51000	51000	51000	51000	53000
Sound pressure (HS)	dB(A)	66	67	67	67	68	68
INSTALLATION							
Outline dimensions (WxHxD)	mm	980x1690x750 + 1410x1690x750 + 1410x1690x750		1410x1690x750 + 1410x1690x750 + 1410x1690x750			
Package dimensions (WxHxD)	mm	1070x1858x850 + 1515x1858x850 + 1515x1858x850		1515+1858+850 + 1515+1858+850 + 1515+1858+850			
Net weight/Gross weight	kg	257/282 + 366/395 + 366/395		366/395 + 366/395 + 366/395			366/395 + 366/395 + 375/404
Compressor	Type	Scroll DCI					
	Brand	Mitsubishi Electric					
	Number of compressors	5			6		
Refrigerant/GWP		R410A/2088					
Charge	kg	30					
Liquid pipe diameter	inches	3/4"					
Suction pipe diameter	inches	1"1/2					
Suction pipe diameter haut	inches	1"3/8					
Max. length	m	1000					
Max. length (equivalent/actual)	m	260/220					
Max. height between indoor and outdoor units (ODU down/up) ⁽¹⁾	m	110/90					
Standard height between indoor and outdoor units (ODU down/up) ⁽²⁾	m	50/40					
Max. height between indoor units ⁽³⁾	m	30					
Standard height between indoor units ⁽⁴⁾	m	18					
External static pressure	Pa	110					
Indoor/outdoor unit power ratio (min./max.)	%	50-130					
Maximum number of connectable indoor units	quantity	64					
OPERATING LIMITS							
Cooling mode (min./max.)	°C	-5~50					
Heating mode (min./max.)	°C	-23~21					

(1) If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.

(2) Standard design and production in the factory.

(3) If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.

(4) Standard design and production in the factory.

* All the specifications are tested under nominal condition as per Eurovent conditions (in cooling mode: indoor temperature is 27°C DB/19°C WB, outdoor temperature 35°C DB/24°C WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°C WB).

TECHNICAL DATA FOR THREE COMBINATIONS

MODEL		VVEA-1624R	VVEA-1680R	VVEA-1735R	VVEA-1790R	VVEA-1845R
COMBINATIONS		VVEA-504R	VVEA-560R	VVEA-560R	VVEA-560R	VVEA-615R
		7VF150015	7VF150016	7VF150016	7VF150016	7VF150017
		VVEA-560R	VVEA-560R	VVEA-560R	VVEA-615R	VVEA-615R
		7VF150016	7VF150016	7VF150016	7VF150017	7VF150017
		VVEA-560R	VVEA-560R	VVEA-615R	VVEA-615R	VVEA-615R
		7VF150016	7VF150016	7VF150017	7VF150017	7VF150017
Phase		Three phases				
Power	HP	58	60	62	64	66
COOLING MODE						
Rated power*	kW	162.00	168.00	172.00	176.00	180.00
Rated power input	kW	50.59	51.69	54.46	57.23	60.00
Max. power input	kW	92.50	96.00	97.00	98.00	99.00
Rated current	A	83.55	85.37	89.94	94.52	99.09
Max. current	A	152.76	158.54	160.20	161.85	163.50
EER		3.20	3.25	3.16	3.08	3.00
SEER		5.90	5.90	5.63	5.63	5.63
Seasonal operating limits		233.00	233.00	222.20	222.20	222.20
HEATING MODE						
Rated power*	kW	162.00	168.00	172.00	176.00	180.00
Rated power input	kW	45.24	47.31	49.45	51.59	53.73
Max. power input	kW	84.30	88.20	89.20	90.20	91.20
Rated current	A	74.71	78.13	81.67	85.20	88.74
Max. current	A	139.22	145.66	147.31	148.97	150.62
COP		3.58	3.55	3.48	3.41	3.35
SCOP		3.93	3.93	3.50	3.50	3.50
Seasonal operating limits		154.20	154.20	137.00	137.00	137.00
POWER SUPPLY						
Phase/Voltage/Frequency		3P/380-415V/50-60Hz				
PERFORMANCE						
Airflow (HS)	m ³ /h	55000	57000	57000	57000	57000
Sound pressure (HS)	dB(A)	68	68	68	68	69
INSTALLATION						
Outline dimensions (WxHxD)	mm	1410x1690x750 + 1410x1690x750 + 1410x1690x750+				
Package dimensions (WxHxD)	mm	1515+1858+850 + 1515+1858+850 + 1515+1858+850				
Net weight/Gross weight	kg	366/395 + 375/404 + 375/404	375/404 + 375/404 + 375/404			
Compressor	Type	Scroll DCI				
	Brand	Mitsubishi Electric				
	Number of compressors	6				
Refrigerant/GWP						
Charge	kg	R410A/2088				
Liquid pipe diameter	inches	3/4"				
Suction pipe diameter	inches	1"5/8				
Suction pipe diameter haut	inches	1"1/2				
Max. length	m	1000				
Max. length (equivalent/actual)	m	260/220				
Max. height between indoor and outdoor units (ODU down/up) ⁽¹⁾	m	110/90				
Standard height between indoor and outdoor units (ODU down/up) ⁽²⁾	m	50/40				
Max. height between indoor units ⁽³⁾	m	30				
Standard height between indoor units ⁽⁴⁾	m	18				
External static pressure	Pa	110				
Indoor/outdoor unit power ratio (min./max.)	%	50-130				
Maximum number of connectable indoor units	quantity	64				
OPERATING LIMITS						
Cooling mode (min./max.)	°C	-5-50				
Heating mode (min./max.)	°C	-23-21				

(1) If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.

(2) Standard design and production in the factory.

(3) If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.

(4) Standard design and production in the factory.

* All the specifications are tested under nominal condition as per Eurovent conditions (in cooling mode: indoor temperature is 27°C DB/19°C WB, outdoor temperature 35°C DB/24°C WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°C WB).

VVEA

3-pipes with heat recovery

VRF
Outdoor units

TECHNICAL DATA FOR FOUR COMBINATIONS

MODEL		VVEA-1908R	VVEA-1962R	VVEA-2016R	VVEA-2072R	VVEA-2128R	VVEA-2184R
COMBINATIONS		VVEA-450R	VVEA-450R	VVEA-504R	VVEA-504R	VVEA-504R	VVEA-504R
		7VF150014	7VF150014	7VF150015	7VF150015	7VF150015	7VF150015
		VVEA-450R	VVEA-504R	VVEA-504R	VVEA-504R	VVEA-504R	VVEA-560R
		7VF150014	7VF150015	7VF150015	7VF150015	7VF150015	7VF150016
		VVEA-504R	VVEA-504R	VVEA-504R	VVEA-504R	VVEA-560R	VVEA-560R
		7VF150015	7VF150015	7VF150015	7VF150015	7VF150016	7VF150016
		VVEA-504R	VVEA-504R	VVEA-504R	VVEA-560R	VVEA-560R	VVEA-560R
	7VF150015	7VF150015	7VF150015	7VF150016	7VF150016	7VF150016	
Phase		Three phases					
Power	HP	68	70	72	74	76	78
COOLING MODE							
Rated power*	kW	190.00	195.00	200.00	206.00	212.00	218.00
Rated power input	kW	60.12	62.32	64.52	65.62	66.72	67.82
Max. power input	kW	107.20	110.60	114.00	117.50	121.00	124.50
Rated current	A	99.29	102.92	106.55	108.37	110.19	112.01
Max. current	A	177.04	182.66	188.27	194.05	199.83	205.61
EER		3.16	3.13	3.10	3.14	3.18	3.21
SEER		6.48	6.48	6.48	5.90	5.90	5.90
Seasonal operating limits		256.20	256.20	256.20	233.00	233.00	233.00
HEATING MODE							
Rated power*	kW	190.00	195.00	200.00	206.00	212.00	218.00
Rated power input	kW	50.18	52.49	54.79	56.87	58.94	61.01
Max. power input	kW	96.40	99.20	102.00	105.90	109.80	113.70
Rated current	A	82.88	86.68	90.49	93.91	97.34	100.76
Max. current	A	159.21	163.83	168.45	174.89	181.34	187.78
COP		3.79	3.72	3.65	3.62	3.60	3.57
SCOP		3.99	3.99	3.99	3.93	3.93	3.93
Seasonal operating limits		156.60	156.60	156.60	154.20	154.20	154.20
POWER SUPPLY							
Phase/Voltage/Frequency		3P/380-415V/50-60Hz					
PERFORMANCE							
Airflow (HS)	m ³ /h	68000	68000	68000	70000	72000	74000
Sound pressure (HS)	dB(A)	69	69	69	69	69	69
INSTALLATION							
Outline dimensions (WxHxD)	mm	1410x1690x750 + 1410x1690x750 + 1410x1690x750 + 1410x1690x750					
Package dimensions (WxHxD)	mm	1515+1858+850 + 1515+1858+850 + 1515+1858+850 + 1515+1858+850					
Net weight/Gross weight	kg	366/395 + 366/395 + 366/395 + 366/395			366/395 + 366/395 + 366/395 + 375/404	366/395 + 366/395 + 375/404 + 375/404	366/395 + 375/404 + 375/404 + 375/404
Compressor	Type	Scroll DCI					
	Brand	Mitsubishi Electric					
	Number of compressors	8					
Refrigerant/GWP		R410A/2088					
Charge	kg	40					
Liquid pipe diameter	inches	7/8"					
Suction pipe diameter	inches	1"3/4					
Suction pipe diameter haut	inches	1"5/8					
Max. length	m	1000					
Max. length (equivalent/actual)	m	260/220					
Max. height between indoor and outdoor units (ODU down/up) ⁽¹⁾	m	110/90					
Standard height between indoor and outdoor units (ODU down/up) ⁽²⁾	m	50/40					
Max. height between indoor units ⁽³⁾	m	30					
Standard height between indoor units ⁽⁴⁾	m	18					
External static pressure	Pa	110					
Indoor/outdoor unit power ratio (min./max.)	%	50~130					
Maximum number of connectable indoor units	quantity	64					
OPERATING LIMITS							
Cooling mode (min./max.)	°C	-5~50					
Heating mode (min./max.)	°C	-23~21					

(1) If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.

(2) Standard design and production in the factory.

(3) If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.

(4) Standard design and production in the factory.

* All the specifications are tested under nominal condition as per Eurovent conditions (in cooling mode: indoor temperature is 27°C DB/19°C WB, outdoor temperature 35°C DB/24°C WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°C WB).

TECHNICAL DATA FOR FOUR COMBINATIONS

MODEL		VVEA-2240R	VVEA-2295R	VVEA-2350R	VVEA-2405R	VVEA-2460R
COMBINATIONS		VVEA-560R	VVEA-560R	VVEA-560R	VVEA-560R	VVEA-615R
		7VF150016	7VF150016	7VF150016	7VF150016	7VF150017
		VVEA-560R	VVEA-560R	VVEA-560R	VVEA-615R	VVEA-615R
		7VF150016	7VF150016	7VF150016	7VF150017	7VF150017
		VVEA-560R	VVEA-560R	VVEA-615R	VVEA-615R	VVEA-615R
		7VF150016	7VF150016	7VF150017	7VF150017	7VF150017
		VVEA-560R	VVEA-615R	VVEA-615R	VVEA-615R	VVEA-615R
		7VF150016	7VF150017	7VF150017	7VF150017	7VF150017
Phase		Three phases				
Power	HP	80	82	84	86	88
COOLING MODE						
Rated power*	kW	224.00	228.00	232.00	236.00	240.00
Rated power input	kW	68.92	71.69	74.46	77.23	80.00
Max. power input	kW	128.00	129.00	130.00	131.00	132.00
Rated current	A	113.83	118.40	122.97	127.55	132.12
Max. current	A	211.39	213.04	214.70	216.35	218.00
		3.25	3.18	3.12	3.06	3.00
SEER		5.90	5.63	5.63	5.63	5.63
Seasonal operating limits		233.00	222.20	222.20	222.20	222.20
HEATING MODE						
Rated power*	kW	224.00	228.00	232.00	236.00	240.00
Rated power input	kW	63.08	65.22	67.36	69.50	71.64
Max. power input	kW	117.60	118.60	119.60	120.60	121.60
Rated current	A	104.18	107.71	111.25	114.78	118.31
Max. current	A	194.22	195.87	197.52	199.17	200.82
		3.55	3.50	3.44	3.40	3.35
SCOP		3.93	3.50	3.50	3.50	3.50
Seasonal operating limits		154.20	137.00	137.00	137.00	137.00
POWER SUPPLY						
Phase/Voltage/Frequency		3P/380-415V/50-60Hz				
PERFORMANCE						
Airflow (HS)	m ³ /h	76000	76000	76000	76000	76000
Sound pressure (HS)	dB(A)	69	69	70	70	70
INSTALLATION						
Outline dimensions (WxHxD)	mm	1410x1690x750 + 1410x1690x750 + 1410x1690x750 + 1410x1690x750				
Package dimensions (WxHxD)	mm	1515x1858x850 + 1515x1858x850 + 1515x1858x850 + 1515x1858x850				
Net weight/Gross weight	kg	375/404 + 375/404 + 375/404 + 375/404				
Compressor	Type	Scroll DCI				
	Brand	Mitsubishi Electric				
	Number of compressors	8				
Refrigerant/GWP						
Charge	kg	R410A/2088 40				
Liquid pipe diameter	inches	7/8"			1"	
Suction pipe diameter	inches	1"3/4			2"	
Suction pipe diameter haut	inches	1"5/8			1"3/4	
Max. length	m	1000				
Max. length (equivalent/actual)	m	260/220				
Max. height between indoor and outdoor units (ODU down/up) ⁽¹⁾	m	110/90				
Standard height between indoor and outdoor units (ODU down/up) ⁽²⁾	m	50/40				
Max. height between indoor units ⁽³⁾	m	30				
Standard height between indoor units ⁽⁴⁾	m	18				
External static pressure	Pa	110				
Indoor/outdoor unit power ratio (min./max.)	%	50-130				
Maximum number of connectable indoor units	quantity	64				
OPERATING LIMITS						
Cooling mode (min./max.)	°C	-5~-50				
Heating mode (min./max.)	°C	-23~-21				

(1) If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.

(2) Standard design and production in the factory.

(3) If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.

(4) Standard design and production in the factory.

* All the specifications are tested under nominal condition as per Eurovent conditions (in cooling mode: indoor temperature is 27°C DB/19°C WB, outdoor temperature 35°C DB/24°C WB; in heating mode: indoor temperature is 20°C DB, outdoor temperature is 7°C DB/6°C WB).