OMEGA VRF TECHNOLOGY

INVERTER TECHNOLOGY EXPERT

Engineered to elevate **efficiency and comfort** .....
..... to the next level!

VMEP SERIES

Full DC Modular VRF Outdoor Unit
(380~415V/3 Phase)
3D Inverter Cooling Only

Cooling Capacity Min~Max Single Module: 38,215~305,375 BTU/h (11.2~89.5 kW)

Product Features

- DC Inverter Technologies.
- Up to 50 Indoor Units Could be Connected per System.
- Intelligent Temperature Control Technology.
- Oil Balance Control Technology.
- Network Connection Technology.
- Factory Tested up to 50°C/122°F Ambient.
- Ultra Long Piping Run up to 3280 ft.
- Automatic Address Setting.
- Anticorrosive Hydrophilic Coated Fins.
- Modules Rotation Operating to Improve Lifetime.

008 - 016 HP

018 - 022 HP

Outdoor Unit Features

- Low Noise Design with Sensorless Inverter DC Fan Motor.
- Advance Torque Control Technology.
- Multi Electronic Expansion Valves Control.
- High Efficiency Digital PFC Control.
- Wider Operation Condition Range.
- Compressor Oil Storage Technology.
- Two Stage Oil Separation Technology.
- Automatic Fault Detection.

Branch Pipe Kit

024 - 028 HP

OMEGA

eco FRIENDLY R410A REFRIGERANT

CE

DC INVERTER

ISO 14001 ISO 9001

OTEC AIR CONDITIONING

A Product of OMEGA Environmental Technologies LLC.

Notes:
Design, specifications and model numbers listed is subject to change without notice.
Certifications and emblems shown are applicable to selected models only. Please contact Omega for details.

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MODULAR VRF Outdoor Unit

MODEL NO.	VMEP	007N7A -D13V224	009N7A -D16V280	010N7A -D20V335	012N7A -D23V400	014N7A -D26V450	016N7A -D29V500	018N7A -D33V560	020N7A -D36V615	022N7A -D39V670	024N7A -D43V730	026N7A -D46V785	028N7A -D50V850
System Cooling Indoor Unit Ratio @ 100% BTU/h (kW)		76,430 (22.4)	95,540 (28.0)	114,305 (33.5)	136,485 (40.0)	153,545 (45.0)	170,610 (50.0)	190,080 (56.0)	209,845 (61.5)	228,615 (67.0)	249,080 (73.0)	267,840 (78.5)	290,020 (85.0)
EER @ 100%	BTU/h / W (W/W)	14.8 (4.33)	13.4 (4.11)	12.8 (3.67)	12.9 (3.78)	12.5 (3.67)	11.5 (3.36)	10.8 (3.17)	10.4 (3.04)	11.1 (3.24)	10.6 (3.12)	10.3 (3.01)	9.83 (2.88)
System Cooling Indoor Unit Ratio @ 50% BTU/h (kW)		38,215 (11.2)	47,770 (14.0)	57,325 (16.8)	68,245 (20.0)	76,775 (22.5)	85,305 (25.0)	95,540 (28.0)	105,095 (30.8)	114,310 (33.5)	124,540 (36.5)	134,090 (39.3)	145,010 (42.5)
System Cooling Indoor Unit Ratio @ 70% BTU/h (kW)		53,570 (15.7)	66,880 (19.6)	80,185 (23.5)	95,540 (28.0)	107,480 (31.5)	119,425 (35.0)	133,755 (39.2)	147,065 (43.1)	160,030 (46.9)	174,350 (51.1)	187,660 (55.0)	203,015 (59.5)
System Cooling Indoor Unit Ratio @ 130% BTU/h (kW)		80,865 (23.7)	100,995 (29.6)	120,445 (35.3)	143,985 (42.2)	161,390 (47.3)	180,495 (52.9)	201,990 (59.2)	221,100 (64.8)	241,570 (70.8)	263,405 (77.2)	282,170 (82.7)	305,375 (89.5)
Total Number of Outdoor Modules Connectable		3											
Max. Cooling Capacity 3 modules @ 100% BTU/h (kW)		870,060 (255)											
Coil Type		Grooved Cooper Tubes - Hydrophilic Aluminum Fin											
Fan	Type	Axial Fan											
	Qty	1	1	1	1	1	2	2	2	2	2	2	2
	Motor (FLA) each	2.1	2.1	2.1	2.5	2.5	2.2	2.2	2.2	5.1	5.1	5.1	5.1
	R.P.M. Range (Min~Max)	0 ~ 950	0 ~ 950	0 ~ 950	0 ~ 950	0 ~ 950	0 ~ 950	0 ~ 950	0 ~ 950	0 ~ 950	0 ~ 950	0 ~ 950	0 ~ 950
	Air Flow CFM (m³/hr) (Hi)	6,120 (10,400)	6,120 (10,400)	6,360 (10,800)	6,830 (11,600)	6,830 (11,600)	7,060 (12,000)	7,180 (12,200)	7,180 (12,200)	11,540 (19,600)	11,540 (19,600)	12,130 (20,600)	12,130 (20,600)
	Ext. Sta. Pressure. In.W.G. (Pa)	0.08 (20)											
	Noise Level Hi (dbA)	57	58	60	60	61	62	63	63	64	64	64	64
Electrical	Voltage-Phase-Frequency	380/415V - 3Ph - N/A (3D)											
	Rated Input / Cooling (kW)	5.17	6.81	9.13	10.6	12.3	14.9	17.7	20.2	20.7	23.4	26.1	29.5
	Rated Current / Cooling (A)	13.6	17.9	24.0	27.9	32.4	39.2	46.6	53.2	54.5	61.6	68.7	77.6
	Min. Circuit Amps (MCA)	24.0	24.5	24.7	29.7	30.3	45.0	45.5	46.0	57.0	57.8	58.3	58.8
	Max. Fuse Amps (MOCP)	32	32	32	40	40	50	50	50	63	63	63	63
Refrigerant Charge R410A (oz / kgs)		282.1 / 8.0	282.1 / 8.0	282.1 / 8.0	387.9 / 11	387.9 / 11	458.5 / 13	458.5 / 13	458.5 / 13	670.0 / 19	670.0 / 19	670.0 / 19	670.0 / 19
Refrigerant Connections inches (mm)	Type	Flare											
	Liquid	1/2 (12.7)	1/2 (12.7)	5/8 (15.9)	5/8 (15.9)	5/8 (15.9)	5/8 (15.9)	3/4 (19.1)	3/4 (19.1)	3/4 (19.1)	7/8 (22.2)	7/8 (22.2)	7/8 (22.2)
	Suction	1 1/8 (25.4)	1 1/8 (25.4)	1 1/8 (28.6)	1 1/4 (31.8)	1 1/4 (31.8)	1 1/4 (31.8)	1 1/4 (31.8)	1 1/4 (31.8)	1 1/4 (31.8)	1 1/4 (31.8)	1 1/4 (31.8)	1 1/2 (38.1)
Farthest Indoor Pipe Length Ft. (m)		655 (200)											
Maximum Total Pipe Length Ft. (m)		3280 (1000)											
Height Difference between IDU & ODU Ft. (m)		360 (110) See Note (5)											
Dimensions inches (mm)	Height	63 5/8 (1615)	63 5/8 (1615)	63 5/8 (1615)	63 5/8 (1615)	63 5/8 (1615)	63 5/8 (1615)	63 5/8 (1615)	63 5/8 (1615)	63 5/8 (1615)	63 5/8 (1615)	63 5/8 (1615)	63 5/8 (1615)
	Width	37 7/8 (960)	37 7/8 (960)	37 7/8 (960)	37 7/8 (960)	37 7/8 (960)	49 1/2 (1250)	49 1/2 (1250)	49 1/2 (1250)	62 3/8 (1585)	62 3/8 (1585)	62 3/8 (1585)	62 3/8 (1585)
	Depth	30 1/8 (765)	30 1/8 (765)	30 1/8 (765)	30 1/8 (765)	30 1/8 (765)	30 1/8 (765)	30 1/8 (765)	30 1/8 (765)	30 1/8 (765)	30 1/8 (765)	30 1/8 (765)	30 1/8 (765)
Net Weight lbs (kgs)		414.5 (188)	414.5 (188)	414.5 (188)	434.3 (197)	434.3 (197)	612.9 (278)	612.9 (278)	612.9 (278)	745.2 (338)	745.2 (338)	745.2 (338)	745.2 (338)

Notes:

1. Nominal capacities are based on ARI standards 210/240-89, air entering the indoor coil operating at high fan speed for 208V-230V setting. Cooling: 80/67° F (27/19° C) DB/WB indoor & 95° F (35° C) outdoor ambient temperature.
2. Refrigerant metering device is installed at the indoor unit as standard.
3. Sweat fittings are provided for connecting indoor and outdoor units.
4. Insulation of both liquid and suction line is required (Heat Pump Model).
5. Total Height difference could reach 590 ft (180m) with ODU's installed above & below IDU's levels.
6. Max Capacities per Module based on 130% Indoor Loading.

OMEGA ENVIRONMENTAL TECHNOLOGIES LLC.
Showroom & Technology Center
11380 Interchange Circle North
Miramar, FL 33025 . USA
Tel: 305 731 2140, 888 840 7550
Fax: 954 212 8280
info@otecomega.com
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