

# OMEGA VRF TECHNOLOGY

INVERTER  
TECHNOLOGY  
EXPERT

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

## VMEP SERIES Full DC Modular VRF Outdoor Unit (208~230V/3-Phase) Inverter Cooling Only

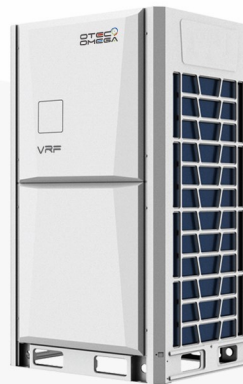
Cooling Capacity Min~Max Single Module: 42,990~250,440 BTU/h (12.6~73.4 kW)

### Product Features

- ✓ DC Inverter Technologies.
- ✓ Refrigerant-Cooled IPM Module.
- ✓ Up to 39 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.

### 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.



25.2 - 33.5 kW



40.0 - 50.0 kW



56.0 - 61.5 kW



67.0 kW

OMEGA



OTEC  
AIR CONDITIONING

A Product of  
**OMEGA**  
Environmental  
Technologies LLC.

ISO 14001 ISO 9001

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### MODULAR VRF Outdoor Unit

MODEL NO.	VMEP	008N4A -G14V252	009N4A -G16V280	010N4A -G19V335	012N4A -G23V400	014N4A -G26V450	016N4A -G29V500	018N4A -G33V560	020N4A -G36V615	022N4A -G39V670
System Cooling Indoor Unit Ratio @ 100% BTU/h (kW)		85,980 (25.2)	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)	228,605 (67.0)
EER @ 100%	BTU/h / W (W/W)	14.8 (4.33)	14.0 (4.10)	13.3 (3.91)	13.5 (3.97)	13.1 (3.83)	12.8 (3.74)	12.1 (3.56)	11.5 (3.37)	11.7 (3.42)
System Cooling Indoor Unit Ratio @ 50% BTU/h (kW)		42,990 (12.6)	47,770 (14.0)	57,320 (16.8)	68,240 (20.0)	76,770 (22.5)	85,300 (25.0)	95,535 (28.0)	105,090 (30.8)	114,300 (33.5)
System Cooling Indoor Unit Ratio @ 70% BTU/h (kW)		60,050 (17.6)	66,875 (19.6)	80,180 (23.5)	95,535 (28.0)	107,480 (31.5)	119,420 (35.0)	133,750 (39.2)	147,060 (43.1)	160,020 (46.9)
System Cooling Indoor Unit Ratio @ 130% BTU/h (kW)		94,170 (27.6)	104,750 (30.7)	125,220 (36.7)	149,445 (43.8)	168,210 (49.3)	186,980 (54.8)	209,495 (61.4)	229,970 (67.4)	250,440 (73.4)
Total Number of Outdoor Modules Connectable		4								
Max. Cooling Capacity 3 modules @ 100% BTU/h (kW)		914,420 (268)								
Coil Type		Grooved Cooper Tubes - Hydrophilic Aluminum Fin								
Fan	Type	Axial Fan								
	Qty	1	1	1	1	1	1	2	2	2
	Motor (FLA) each DC.	3.61	3.61	3.61	4.42	4.42	4.42	2.69 * 2	2.69 * 2	2.69 * 2
	R.P.M. Range (Min~Max)	0 ~ 840	0 ~ 840	0 ~ 840	0 ~ 920	0 ~ 920	0 ~ 920	0 ~ 560	0 ~ 560	0 ~ 560
	Air Flow CFM (m³/hr) (Hi)	6,180 (10,500)	6,180 (10,500)	6,475 (11,000)	7,945 (13,500)	7,945 (13,500)	7,945 (13,500)	9,710 (16,500)	9,710 (16,500)	9,710 (16,500)
	Ext. Sta. Pressure. In.W.G. (Pa)	0.00 (0) / 0.08 (20) / 0.16 (40) / 0.24 (60)								
Electrical	Noise Level Hi (dba)	58	58	60	60	61	62	63	63	63
	Voltage-Phase-Frequency	208 ~ 230V - 3Ph - N/A 3D								
	Rated Input / Cooling (kW)	5.82	6.83	8.57	10.1	11.8	13.4	15.7	18.3	19.6
	Rated Current / Cooling (A)	16.2	19.0	23.8	28.1	32.8	37.2	43.6	50.9	54.5
	Min. Circuit Amps (MCA)	34.0	34.0	34.0	40.0	40.0	59.1	60.1	60.1	60.1
Max. Fuse Amps (MOCP)	50	50	50	60	60	80	80	80	80	
Compressor	QTY	1	1	1	1	1	2	2	2	2
Refrigerant Charge R410A (oz / kgs)		282.1 / 8.0	282.1 / 8.0	282.1 / 8.0	423.2 / 12.0	423.2 / 12.0	458.5 / 13.0	493.7 / 14.0	493.7 / 14.0	529.0 / 15.0
Refrigerant Connections inches (mm)	Type	Flare								
	Liquid	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)	5/8 (15.9)	5/8 (15.9)	5/8 (15.9)	5/8 (15.9)	5/8 (15.9)	5/8 (15.9)
Suction	1 (25.4)	1 (25.4)	1 (25.4)	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)	
Farthest Indoor Pipe Length ft (m)		625 (190)								
Maximum Total Pipe Length ft (m)		3280 (1000)								
Height Difference between IDU & ODU ft (m)		360 (110) & 330 (100)						See Note (5)		
Dimensions inches (mm)	Height	68 1/2 (1740)	68 1/2 (1740)	68 1/2 (1740)	68 1/2 (1740)	68 1/2 (1740)	68 1/2 (1740)	68 1/2 (1740)	68 1/2 (1740)	68 1/2 (1740)
	Width	39 (990)	39 (990)	39 (990)	52 3/4 (1340)	52 3/4 (1340)	52 3/4 (1340)	52 3/4 (1340)	52 3/4 (1340)	52 3/4 (1340)
	Depth	33 1/8 (840)	33 1/8 (840)	33 1/8 (840)	33 1/8 (840)	33 1/8 (840)	33 1/8 (840)	33 1/8 (840)	33 1/8 (840)	33 1/8 (840)
Net Weight lbs (kgs)		458.6 (208)	458.6 (208)	458.6 (208)	573.2 (260)	573.2 (260)	634.9 (288)	652.6 (296)	652.6 (296)	674.6 (306)

- Notes:**
- 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.
  - Refrigerant metering device is installed at the indoor unit as standard.
  - Sweat fittings are provided for connecting indoor and outdoor units.
  - Insulation of both liquid and suction line is required (Heat Pump Model).
  - Total Height difference could reach 590 ft (180m) with ODU's installed above & below IDU's levels.
  - Max Capacities per Module based on 130% Indoor Loading.
  - For details of model number nomenclature, please refer to publication OGMNM-0820.

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**ISO 14001 ISO 9001**

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