

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 50/60Hz) Inverter Heat Pump

Cooling Capacity Min~Max Single Module: 42,990~306,000 Btu/h (12.6~89.7 kW)
Heating Capacity Min~Max Single Module: 46,700~421,330 Btu/h (13.7~123.4 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.



25.2 ~ 33.5 kW



40.0 ~ 50.0 kW

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.



56.0 ~ 61.5 kW



67.0 ~ 85.0kW



Branch Pipe Kit

OMEGA



ISO 14001 ISO 9001

OTEC
AIR CONDITIONING

A Product of
OMEGA
Environmental
Technologies LLC.

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MODULAR VRF Outdoor Unit

MODEL NO.	VMEP	008Q7A -G14V252	009Q7A -G16V280	010Q7A -G19V335	012Q7A -G23V400	014Q7A -G26V450	016Q7A -G29V500	018Q7A -G33V560	020Q7A -G36V615	022Q7A -G39V670	024Q7A -G43V730	026Q7A -G46V785	028Q7A -G50V850	
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)	228,615 (67.0)	249,100 (73.0)	267,800 (78.5)	290,000 (85)	
System Heating Indoor Unit Ratio @ 100% BTU/h (kW)		93,500 (27.4)	107,500 (31.5)	128,000 (37.5)	153,500 (45.0)	170,600 (50.0)	191,600 (56.0)	214,900 (63.0)	235,400 (69.0)	255,900 (75.0)	278,100 (81.5)	298,600 (87.5)	324,100 (95)	
EER @ 100%	BTU/h / W (W/W)	14.7 (4.30)	14.1 (4.12)	12.5 (3.65)	13.0 (3.80)	12.6 (3.68)	11.3 (3.31)	10.9 (3.18)	10.3 (3.02)	10.2 (3.00)	10.6 (3.11)	10.1 (2.98)	9.7 (2.88)	
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)	95,540 (28.0)	105,090 (30.8)	114,300 (33.5)	124,550 (36.5)	133,900 (39.25)	145,000 (42.5)	
System Cooling Indoor Unit Ratio @ 70% BTU/h (kW)		60,050 (17.6)	66,880 (19.6)	80,180 (23.5)	95,540 (28.0)	107,480 (31.5)	119,420 (35.0)	133,750 (39.2)	147,060 (43.1)	160,000 (46.9)	174,370 (51.1)	187,460 (54.9)	203,000 (59.5)	
System Cooling Indoor Unit Ratio @ 130% BTU/h (kW)		90,760 (26.6)	101,000 (29.6)	120,780 (35.4)	143,990 (42.2)	162,070 (47.5)	180,150 (52.8)	201,650 (59.1)	221,440 (64.9)	250,440 (73.4)	263,000 (77.1)	283,000 (82.9)	306,000 (89.7)	
Total Number of Outdoor Modules Connectable		4												
Max. Cooling Capacity 3 modules @ 100% BTU/h (kW)		839,380 (246)												
Coil Type		Grooved Cooper Tubes - Hydrophilic Aluminum Fin												
Fan	Type	Axial Fan												
	Qty	1	1	1	1	1	1	2	2	2	2	2	2	
	Motor (FLA) each	3.95	3.95	3.95	4.84	4.84	4.84	2.95*2	2.95*2	2.95*2	3.95*2	3.95*2	4.84*2	
	R.P.M. Range (Min~Max)	0 ~ 750	0 ~ 750	0 ~ 750	0 ~ 920	0 ~ 920	0 ~ 920	0 ~ 560	0 ~ 560	0 ~ 560	0 ~ 750	0 ~ 750	0 ~ 920	
	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)	14,125 (24,000)	14,125 (24,000)	15,303 (26,000)	
	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	58	60	61	62	63	63	65	66	66	67	
	Voltage-Phase-Frequency	380/415V - 3Ph - 50/60Hz												
	Rated Input / Cooling (kW)	5.86	6.79	9.18	10.5	12.2	15.1	17.6	20.4	22.3	23.5	26.3	29.8	
	Rated Current / Cooling (A)	24.0	24.0	24.5	30.2	30.2	31.0	46.6	47.5	51.0	53.0	53.0	63.0	
	Min. Circuit Amps (MCA)	24	24.5	24.7	29.7	30.3	45	45.5	46	57	57.8	58.3	58.8	
	Max. Fuse Amps (MOCP)	30	30	30	40	40	50	50	50	60	60	60	60	
Refrigerant Charge R410A (oz / kgs)		352.7 / 10.0	352.7 / 10.0	352.7 / 10.0	440.8 / 12.5	440.8 / 12.5	440.8 / 12.5	581.9 / 16.5	581.9 / 16.5	634.8 / 18.0	705.5 / 20.0	705.5 / 20.0	881.8 / 25.0	
Connections inches (mm)	Refrigerant 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)	5/8 (15.9)	5/8 (15.9)	5/8 (15.9)	7/8 (22.2)
Suction	7/8 (22.2)	7/8 (22.2)	7/8 (22.2)	1 1/8 (28.6)	1 1/8 (28.6)	1 1/8 (28.6)	1 1/8 (28.6)	1 1/8 (28.6)	1 1/8 (28.6)	1 1/8 (28.6)	1 1/8 (28.6)	1 1/8 (28.6)	1 3/8 (35)	
Farthest Indoor Pipe Length ft (m)		720 (220)												
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)	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)	52 3/4 (1340)	78 11/32 (1990)	78 11/32 (1990)	78 11/32 (1990)
	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)	33 1/8 (840)	33 1/8 (840)	33 1/8 (840)	33 1/8 (840)
Net Weight lbs (kgs)		463.0 (210)	463.0 (210)	463.0 (210)	573.2 (260)	573.2 (260)	573.2 (260)	657.0 (298)	657.0 (298)	674.6 (306)	789.3 (358)	789.3 (358)	904.0 (410)	

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 OMGNM-0820.

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