

OMEGA VRF TECHNOLOGY

INVERTER
TECHNOLOGY
EXPERT

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

VNMT SERIES 380-415V/3/50-60 Hz (Full DC) MINI VRF Outdoor Unit Inverter Heat Pump

Cooling Capacity Min~Max Single Module: 21,344~121,273 BTU/h (6.25~35.5 kW)
Heating Capacity Min~Max Single Module: 23,906~135,924 BTU/h (7.0~39.8 kW)

Product Features

- ✓ Full DC Inverter Technologies.
- ✓ Up to 19 Indoor Units Can be Connected.
- ✓ Intelligent Temperature Control Technology.
- ✓ Non-polarity communication wiring.
- ✓ Factory-Tested up to 55°C/131°F Ambient.
- ✓ Ultra Long Piping Runs Up to 390 ft.
- ✓ Automatic Address Setting .
- ✓ Small Installation Space.

Outdoor Unit Features

- ✓ Low-Noise Design with DC Brushless Fan Motor.
- ✓ DC Twin-Rotary Compressor
- ✓ High Efficiency Digital PCB Control.
- ✓ Refrigerant Cooling Design
- ✓ Wider Operation Condition Range.
- ✓ Compressor Oil Storage Technology.
- ✓ Four-direction piping connection.
- ✓ Automatic Fault Detection.



12.5~18kW



20~22.4kW



26~33.5kW

OMEGA



DC INVERTER

ISO 14001 ISO 9001

OTEC
AIR CONDITIONING

A Product of
OMEGA
Environmental
Technologies LLC.

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3-PHASE MINI VRF OUTDOOR UNIT

MODEL NO.	VNMT	003Q7A -G07V125	004Q7A -G08V140	005Q7A -G09V160	006Q7A -G10V180	007Q7A -G11V200	007Q7A -G11V224	008Q7A -G15V260	009Q7A -G16V280	010Q7A -G19V335	
System Cooling with Indoor Unit Ratio @ 100% Btuh (kW)		42,000 (12.5)	47,800 (14.0)	54,000 (16.0)	61,000 (18.0)	68,200 (20.0)	76,400 (22.4)	88,700 (26.0)	95,500 (28.0)	114,300 (33.5)	
System Heating with Indoor Unit Ratio @ 100% Btuh (kW)		47,000 (14.0)	54,000 (16.0)	61,000 (18.0)	68,000 (20.0)	75,000 (22.0)	81,800 (24.0)	97,200 (28.5)	107,500 (31.5)	128,000 (37.5)	
EER @ 100% IDU	Btuh/W (W/W)	12.64 (3.70)	12.57 (3.68)	12.06 (3.53)	11.85 (3.47)	11.54 (3.38)	11.34 (3.32)	11.78 (3.45)	11.51 (3.37)	12.09 (3.54)	
COP @ 100% IDU	Btuh/W (W/W)	14.65 (4.29)	13.76 (4.03)	13.35 (3.91)	13.59 (3.98)	14.04 (4.11)	14.58 (4.27)	14.38 (4.21)	13.15 (3.85)	14.24 (4.17)	
System Cooling with Indoor Unit Ratio @ 50% Btuh (kW)		21,344 (6.25)	23,906 (7.0)	27,321 (8.0)	30,736 (9.0)	34,151 (10.0)	38,250 (11.2)	44,397 (13.0)	47,812 (14.0)	57,375 (16.8)	
System Cooling with Indoor Unit Ratio @ 70% Btuh (kW)		29,862 (8.75)	33,468 (9.8)	38,250 (11.2)	43,031 (12.6)	47,812 (14.0)	53,618 (15.7)	62,156 (18.2)	66,937 (19.6)	80,256 (23.5)	
System Cooling with Indoor Unit Ratio @ 130% Btuh (kW)		45,251 (13.25)	50,681 (14.84)	57,921 (16.96)	65,161 (19.08)	72,401 (21.20)	81,076 (23.74)	94,122 (27.56)	101,362 (29.68)	121,273 (35.51)	
Maximum of Indoor Unit Connectable per Module		7	8	9	10	11	11	15	16	19	
Coil Type		Grooved Cooper Tubes - Aluminum Blue Slit Fin									
DC Fan Motor	Type	Axial Fan - Direct Drive									
	Qty	2	2	2	2	2	2	2	2	2	
	Motor (FLA)	0.52	0.52	0.52	0.52	0.52	0.52	0.94	0.94	0.94	
	Air Flow CFM (m³/hr) (Hi)	3,529 (6,000)	3,529 (6,000)	3,529 (6,000)	3,529 (6,000)	4,705 (8,000)	4,705 (8,000)	5,882 (10,000)	5,882 (10,000)	5,882 (10,000)	
	Noise Level Hi (dba)	56	56	56	58	58	58	60	60	60	
Electrical	Voltage-Phase	380~415V-3Ph									
	Frequency	50-60Hz									
	Rated Input / Cooling (kW)	3.5	4.0	4.5	5.2	5.7	6.4	7.4	8.0	9.5	
	Rated Input / Heating (kW)	4.0	4.5	5.2	5.7	6.3	6.8	8.1	9.0	10.7	
	Rated Current / Cooling (A)	10.0	10.0	11.0	12.5	15.8	17.0	19.0	22.5	24.0	
	Crankcase Heater (W)	35	35	35	35	35	35	35	35	35	
	Minimum Circuit Amps (MCA)	10.0	10.0	11.0	12.5	15.8	17.0	19.0	22.5	24.0	
Maximum Fuse Amps (MOCP)	20	20	20	30	30	30	30	40	40		
Refrigerant Charge R410A (oz / kgs)		121.7 / 3.45	134.0 / 3.80	134.0 / 3.80	148.2 / 4.20	186.9 / 5.30	186.9 / 5.30	215.2 / 6.1	282.2 / 8.00	282.2 / 8.00	
Refrigerant Connections inches (mm)	Type	Flare									
	Liquid	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	1/2 (12.7)	1/2 (12.7)	
	Suction	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)	
Farthest Indoor Pipe Length ft (m)		230 (70)					390 (120)				
Maximum Total Pipe Length ft (m)		328 (100)					390 (120)				
Height Difference between IDU & ODU ft (m)		98.4 (30) & 65.6 (20) see note (5*)									
Unit Dimensions inches (mm)	Height	52 1/2 (1335)	52 1/2 (1335)	52 1/2 (1335)	52 1/2 (1335)	56 1/4 (1430)	56 1/4 (1430)	61 (1549)	61 (1549)	61 (1549)	
	Width	38 3/8 (975)	38 3/8 (975)	38 3/8 (975)	38 3/8 (975)	40 (1015)	40 (1015)	44 (1120)	44 (1120)	44 (1120)	
	Depth	15 3/4 (400)	15 3/4 (400)	15 3/4 (400)	15 3/4 (400)	17 3/4 (450)	17 3/4 (450)	20 3/4 (528)	20 3/4 (528)	20 3/4 (528)	
Packing Dimensions inches (mm)	Height	56 7/8 (1445)	56 7/8 (1445)	56 7/8 (1445)	56 7/8 (1445)	60 7/8 (1545)	60 7/8 (1545)	67 (1703)	67 (1703)	67 (1703)	
	Width	39 3/4 (1010)	39 3/4 (1010)	39 3/4 (1010)	39 3/4 (1010)	43 1/8 (1095)	43 1/8 (1095)	50 1/4 (1278)	50 1/4 (1278)	50 1/4 (1278)	
	Depth	16 3/8 (415)	16 3/8 (415)	16 3/8 (415)	16 3/8 (415)	19 (485)	19 (485)	22 (560)	22 (560)	22 (560)	
Net Weight Lbs (kgs)		190.5 (86.6)	190.5 (86.6)	198.2 (90.1)	208.3 (94.7)	247.9 (112.7)	247.9 (112.7)	286.0 (130)	316.8 (144)	316.8 (144)	
Gross Weight Lbs (kgs)		212.1 (96.4)	212.1 (96.4)	220 (100.0)	229.7 (104.4)	278.9 (126.8)	278.9 (126.8)	356.4 (162)	382.8 (174)	382.8 (174)	

- Notes:**
- Nominal capacities are based on ARI standards 210/240-89, air entering the indoor coil operating at high fan speed for 220V-240V 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.

- Insulation of both liquid and suction line is required (Heat Pump Model).
- ODU's installed above IDU's 98 ft (30m) & ODU's installed below IDU's 66 ft (20m).
- Refer to individual indoor unit spec sheets for details.
- For details of model number nomenclature, please refer to publication OGMNM-0520.

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