

# OMEGA VRF TECHNOLOGY

INVERTER  
TECHNOLOGY  
EXPERT

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

## VNMC-SC SERIES 208-230V/1/50-60 Hz (Full DC) MINI VRF Outdoor Unit With Anti-Corrosion Protection Inverter Heat Pump

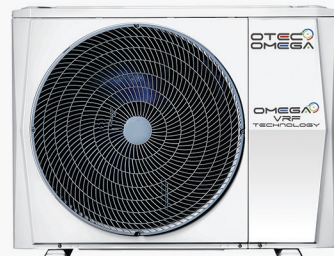
Cooling Capacity Min~Max Single Module: 13,650~55,955 BTU/h (4.0~16.4 kW)  
Heating Capacity Min~Max Single Module: 15,710~79,840 BTU/h (4.5~23.4 kW)

### Product Features

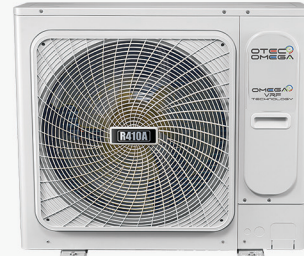
- ✓ Full DC Inverter Technologies.
- ✓ Up to 9 Indoor Units can be Connected.
- ✓ Intelligent Defrosting Technology.
- ✓ Non-polarity communication wiring.
- ✓ Factory-Tested up to 55°C/131°F Ambient.
- ✓ Ultra-Long Piping Runs Up to 330 ft.
- ✓ Automatic Address Setting .
- ✓ Small Installation Space.



8.0 kW



10.0, 12.0 kW



14.0, 16.0 kW

### Outdoor Unit Features

- ✓ Low-Noise Design with Single DC Fan Motor.
- ✓ Precise Oil Control Technology.
- ✓ Refrigerant-Cooled PCB Board.
- ✓ High-Efficiency Digital PFC Control.
- ✓ Wider Operation Condition Range.
- ✓ Compressor Oil Storage Technology.
- ✓ Four-Direction Piping Connection.
- ✓ Automatic Fault Detection.

### Anti-Corrosion Protection (\*\*)

- ✓ Anti-Corrosion Coating on the Casing.
- ✓ Anti-Corrosion BLUE FIN Condenser.
- ✓ Anti-Corrosion Coating on Motor Bracket.
- ✓ Anti-Corrosion Coating for Electronic Control Box.
- ✓ Dacromet-Coated Screws.
- ✓ Conformal PCB Coating for Corrosion Protection.

(\*\*) Available on VNMC Models

OMEGA



DC INVERTER

ISO 14001 ISO 9001

OTEC  
AIR CONDITIONING

A Product of  
OMEGA  
Environmental  
Technologies LLC.



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### MINI VRF Outdoor Unit

MODEL NO.	VN-	MC002 Q0A-D04V080	MC253 Q0A-D06V100	MC003 Q0A-D07V120	SC004 Q0A-D08V140	SC345 Q0A-D09V160
System Cooling with Indoor Unit Ratio @ 100% BTU/h (kW)		27,295 (8.0)	34,120 (10.0)	40,945 (12.0)	47,770 (14.0)	52,885 (15.5)
System Heating with Indoor Unit Ratio @ 100% BTU/h (kW)		30,710 (9.0)	40,945 (12.0)	47,770 (14.0)	54,590 (16.0)	61,415 (18.0)
SEER @ 100% IDU	BTU/h / W (W/W)	22 (6.45)	22 (6.45)	22 (6.45)	21 (6.15)	20 (5.86)
EER @ 100% IDU	BTU/h / W (W/W)	13.6 (4.00)	13.4 (3.92)	13.2 (3.87)	12.7 (3.73)	11.0 (3.23)
COP @ 100% IDU		4.62	4.04	4.06	4.16	3.87
System Cooling with Indoor Unit Ratio @ 50% BTU/h (kW)		13,650 (4.0)	17,060 (5.0)	20,470 (6.0)	23,885 (7.0)	26,615 (7.8)
System Cooling with Indoor Unit Ratio @ 70% BTU/h (kW)		19,110 (5.6)	23,885 (7.0)	28,660 (8.4)	33,440 (9.8)	37,190 (10.9)
System Cooling with Indoor Unit Ratio @ 130% BTU/h (kW)		29,000 (8.5)	36,165 (10.6)	43,330 (12.7)	50,495 (14.8)	55,955 (16.4)
Maximum of Indoor Unit Connectable per Module		4	6	7	8	9
Coil Type	Grooved Cooper Tubes - Hydrophilic Aluminum Fin					
DC Fan Motor	Type	Axial Fan - Direct Drive				
	Qty	1	1	1	1	1
	Motor (FLA) each	1.00	1.52	1.52	1.52	1.52
	Air Flow CFM (m <sup>3</sup> /hr) (Hi)	2,180 (3,700)	3,060 (5,200)	2,940 (5,000)	3,180 (5,400)	3,060 (5,200)
	Noise Level Hi (dba)	54	54	56	56	56
Electrical	Voltage-Phase	208-230V - 1Ph				
	Frequency	50 - 60 Hz				
	Rated Input / Cooling (kW)	2.00	2.55	3.10	3.75	4.80
	Rated Input / Heating (kW)	1.95	2.97	3.45	3.85	4.65
	Rated Current / Cooling (A)	9.6	12.3	14.9	18.0	23.1
	Crankcase Heater (W)	20	20	25	25	25
	Compressor Power Input (W)	2,085	2,085	3,365	3,365	3,365
	Minimum Circuit Amps (MCA)	21.3	28.8	35.0	40.0	40.0
	Maximum Fuse Amps (MOCP)	25	32	40	40	40
Refrigerant Charge R410A (oz / kgs)	77.5 / 2.20	82.8 / 2.35	105.7 / 3.00	119.8 / 3.40	133.9 / 3.80	
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)
	Suction	5/8 (15.9)	5/8 (15.9)	5/8 (15.9)	5/8 (15.9)	5/8 (15.9)
Farthest Indoor Pipe Length ft (m)		195 (60)				
Maximum Total Pipe Length ft (m)		330 (100)				
Height Difference between IDU & ODU ft (m)		98.4 (30) & 65.6 (20) see note (5*)				
Dimensions inches (mm)	Height	28 (712)	33 1/8 (840)	33 1/8 (840)	34 1/8 (865)	34 1/8 (865)
	Width	35 7/8 (910)	37 3/8 (950)	37 3/8 (950)	41 (1040)	41 (1040)
	Depth	13 5/8 (345)	14 1/8 (360)	14 1/8 (360)	16 1/8 (410)	16 1/8 (410)
Net Weight Lbs (kgs)		116.8 (53.0)	157.6 (71.5)	184.0 (83.0)	199.3 (90.4)	199.3 (90.4)

### Applicable Indoor Units



VECW



VECT



VECM



VECS



VEFC



VEFA



VE (LP-MP)



VE (HP-HA)



Wired Controller  
VAECD-D001 (Standard)



Deluxe Wired Controller  
VAECD-D001 (Optional)



Centralized Controller  
VAECC-D064T (Optional)



Wireless Controller  
VAEWD-D001 (Optional)



Wireless Controller  
VAEWR-D001 (Optional)



Branch Pipe Kit

- 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.
  - SEER figures are estimate subject to indoor units installed.
  - Refrigerant metering device is installed at the indoor unit as standard.
  - Flare fittings are provided as standard ( 006 size only ).

- ODU's installed above IDU's 98 ft (30m) & ODU's installed below IDU's 66 ft (20m).
- Insulation of both liquid and suction line is required (Heat Pump Model).
- Refer to individual indoor unit spec sheets for details.
- For details of model number nomenclature, please refer to publication OMGNM-0821.



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ISO 14001 ISO 9001

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