

VRF ULTIMA

OMEGA VRF TECHNOLOGY

INVERTER TECHNOLOGY EXPERT

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

BCSF SERIES 208-230V/1/50-60 Hz (Full DC) MINI VRF Outdoor Unit With Anti-Corrosion Protection

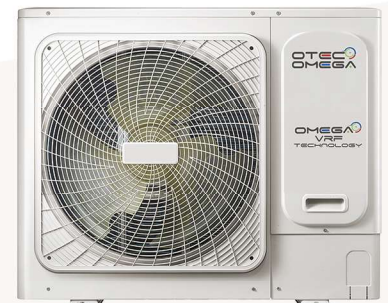
Cooling Capacity Min~Max: 13,650~70,970 BTU/h (4.0~20.8 kW)

Product Features

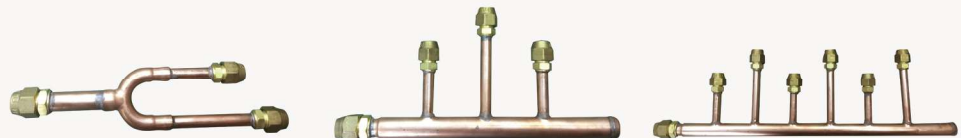
- ✓ Full DC Inverter Technologies.
- ✓ Full Flare Branch Pipe Kits (2 to 6 Ports).
- ✓ Up to 9 Indoor Units can be Connected.
- ✓ Non-polarity communication wiring.
- ✓ Factory-Tested up to 55°C/131°F Ambient.
- ✓ Ultra-Long Piping Runs Up to 330 ft.
- ✓ Automatic Address Setting .
- ✓ Small Installation Space.



9.0 - 14.0 kW



16.0, 19.0 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.

OMEGA



DC INVERTER

OTEC
AIR CONDITIONING

A Product of
OMEGA
Environmental
Technologies LLC.

ISO 14001 ISO 9001

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VRF Outdoor Unit

MODEL NO.	BCSF	030N0A4- DTM090	040N0A6- DTM115	050N0A7- DTM140	060N0A8- DTM160	070N0A9- DTM190
Nominal System Cooling with Indoor Unit Ratio @ 100% BTU/h (kW)		30,708 (9.0)	37,530 (11.0)	47,770 (14.0)	54,590 (16.0)	64,830 (19.0)
EER @ 100% IDU	BTU/h / W (W / W)	14.9 (4.37)	12.9 (3.78)	11.5 (3.37)	12.0 (3.52)	12.6 (3.69)
System Maximum Cooling with Indoor Unit Ratio @ 100% BTU/h (kW)		35,485 (10.4)	44,355 (13.0)	53,230 (15.6)	62,100 (18.2)	70,970 (20.8)
EER @ Max Cooling	BTU/h / W (W / W)	12.2 (3.58)	12.8 (3.75)	11.2 (3.28)	11.7 (3.43)	12.3 (3.60)
System Minimum Cooling with Indoor Unit Ratio @ 45% BTU/h (kW)		13,650 (4.0)	17,060 (5.0)	20,470 (6.0)	23,885 (7.0)	27,295 (8.0)
EER @ Minimum Cooling	BTU/h / W (W / W)	19.5 (5.72)	20.1 (5.89)	18.0 (5.28)	18.8 (5.51)	19.6 (5.74)
Maximum Indoor Units Connectable per Module		4	5	6	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	1.0	1.0	1.0	1.7	1.7
	Air Flow CFM (m³/hr) (Hi)	2000 (3,400)	2000 (3,400)	2000 (3,400)	3000 (5,100)	3000 (5,100)
	Noise Level Hi (dBa)	54	54	54	55	55
Electrical	Voltage-Phase	208-230V - 1Ph				
	Frequency	N/A - 3D				
	Rated Input / Cooling (kW)	1.94	2.35	3.18	3.54	3.86
	Rated Current / Cooling (A)	9.3	11.3	15.3	17.0	18.6
	Crankcase Heater (W)	25	25	25	25	25
	Compressor Power Input (W)	1760	2170	3000	3140	3460
	Minimum Circuit Amps (MCA)	23.0	23.0	23.0	33.0	33.0
	Maximum Fuse Amps (MOCP)	30	30	30	40	40
Refrigerant Charge R410A (oz / kgs)		49.3 / 1.40	49.3 / 1.40	49.3 / 1.40	91.6 / 2.60	91.6 / 2.60
Refrigerant Connections inches (mm)	Type	Branch Header				
	Suction	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)
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	34 (862)	34 (862)	34 (862)	34 1/8 (865)	34 1/8 (865)
	Width	38 3/4 (973)	38 3/4 (973)	38 3/4 (973)	41 (1040)	41 (1040)
	Depth	14 (355)	14 (355)	14 (355)	20 5/8 (523)	20 5/8 (523)
Net Weight Lbs (kgs)		127.9 (58.0)	127.9 (58.0)	127.9 (58.0)	187.4 (85.0)	187.4 (85.0)

Applicable Indoor Units



BECW



BEWM



BECM



BECS



BE (LP-MP)



BEHP



Wired Controller VAECR-R001 (Standard)



Deluxe Wired Controller VAECD-D001 (Optional)



Centralized Controller VAECD-D064T (Optional)



Wireless Controller VAEWR-R001 (Standard)



Wireless Controller VAEWD-D001 (Optional)



Sweat 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.
 - EER 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.

- 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 OMGNM-0921.
- (**) Anti-Corrosion Protection is optional, please refer to sales representative for more information.

