

BCSF SERIES

208-230V/1/50-60 Hz (Full DC)
MINI VFR Outdoor Unit
Whit Anti-Corrosion Protection

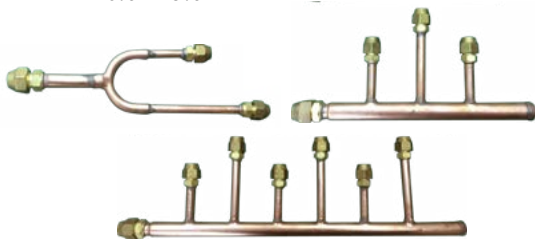
Cooling Capacity Min~Max: 13,650~70,970 BTU/h (4.0~20.8kW)



9.0 - 14.0 kW



16.0 - 19.0 kW



COMPATIBILITY



VRF Cloud Gateway

The new VRF Cloud Gateway by Cool Automation seamlessly integrates VRF systems with smart phones, tablets, or any similar wireless device as well as home automation control systems.



ISO 14001 ISO 9001



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.

Outdoor Unit Features

- Low-Noise Desing with Single DC Fan Motor.
- Precise Oil Control Technology.
- Refrigerant-Cooled PCB Board.
- Hight-Efficiency Digital PCF 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.

Coolmasternet Cloudbox



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)
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)	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 (m ³ /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 Input / Heating (kW)	1.95	2.97	3.45	3.85	4.65
	Rated Current / Cooling (A)	9.3	11.3	15.3	17.0	18.6
	Crankcase Heater (W)	25	25	25	25	25
	Comp. Rated Load Amps (RLA)	8.90	9.27	18.0	18.0	18.0
	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				
	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	34 (862)	34 (862)	34 (862)	34 (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



BE (LP-MP)



BEHP



BECS

Controllers



Wired Controller
VAECR-D001 (Standard)



Deluxe Wired Controller
VAECD-D001 (Optional)



Wireless
Controller
VAEWD-D001
(Optional)



Wireless
Controller
VAEWR-D001
(Optional)



Centralized Controller
VAECC-D064T (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.