

VRF ULTIMA

OMEGA VRF TECHNOLOGY

INVERTER TECHNOLOGY EXPERT

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

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

Cooling Capacity Min~Max: 5,400~78,000 BTU/h (1.75~22.9 kW)
Heating Capacity Min~Max: 5,850~85,800 BTU/h (3.0~25.1 kW)

Product Features

- ✓ Cooling and Heating System
- ✓ 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 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.



3.5 ~ 7.0 kW



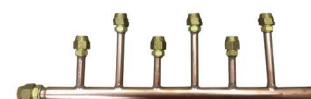
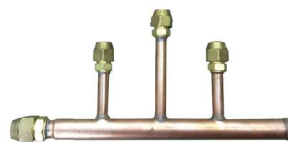
8.0 kW



10.5 ~ 14.0 kW



18.0 kW



OMEGA



DC INVERTER

ISO 14001 ISO 9001

OTEC AIR CONDITIONING

A Product of
OMEGA
Environmental
Technologies LLC.

Notes:
Design, specifications and model numbers listed is subject to change without notice.
Certifications and emblems shown are applicable to selected models only. Please contact Omega for details.

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VRF ULTIMA Outdoor Unit

MODEL NO.	BCHB	015Q0A3- DTM040	020Q0A3- DTM060	025Q0A3- DTM070	030Q0A4- DTM090	040Q0A6- DTM115	050Q0A7- DTM140	060Q0A8- DTM160	070Q0A9- DTM190	080Q0A9- DTM200	
Nominal System Cooling with Indoor Unit Ratio @ 100% BTU/h (kW)		12,000 (3.5)	18,000 (5.3)	24,000 (7.0)	28,000 (8.0)	36,000 (10.5)	42,000 (12.3)	48,000 (14.0)	56,000 (16.0)	62,000 (18.0)	
SEER @ 100% IDU	BTU/h / W (W/W)	22 (6.45)	22 (6.45)	22 (6.45)	22 (6.45)	22 (6.45)	22 (6.45)	21 (6.15)	20 (5.86)	18 (5.28)	
EER @ 100% IDU	BTU/h / W (W / W)	12.7 (3.72)	12.3 (3.61)	11.4 (3.35)	13.0 (3.81)	12.6 (3.70)	12.4 (3.62)	11.9 (3.50)	10.8 (3.16)	9.8 (2.87)	
System Maximum Cooling with Indoor Unit Ratio @ 130% BTU/h (kW)		15,600 (4.6)	23,400 (6.9)	27,300 (8.0)	36,400 (10.7)	46,800 (13.7)	54,600 (16.0)	62,400 (18.3)	72,800 (21.3)	78,000 (22.9)	
EER @ Max Cooling	BTU/h / W (W / W)	13.1 (3.85)	12.7 (3.72)	11.8 (3.47)	13.8 (4.05)	13.4 (3.93)	12.7 (3.71)	12.3 (3.61)	11.2 (3.28)	10.2 (2.98)	
System Minimum Cooling with Indoor Unit Ratio @ 45% BTU/h (kW)		5,400 (1.6)	8,00 (2.4)	9,500 (2.8)	12,600 (3.6)	16,200 (4.7)	18,900 (5.5)	21,600 (6.3)	25,200 (7.4)	27,000 (7.9)	
EER @ Minimum Cooling	BTU/h / W (W / W)	16.6 (4.86)	15.9 (4.65)	14.7 (4.31)	17.1 (5.00)	17.1 (5.00)	16.3 (4.77)	15.9 (4.67)	14.0 (4.11)	12.5 (3.67)	
Nominal System Heating with Indoor Unit Ratio @ 100% BTU/h (kW)		13,000 (3.8)	20,000 (5.9)	20,500 (6.0)	30,000 (8.8)	41,000 (12.0)	47,000 (13.8)	54,000 (15.8)	61,000 (17.9)	66,000 (19.3)	
System Maximum Heating with Indoor Unit Ratio @ 130% BTU/h (kW)		16,900 (4.9)	26,000 (7.6)	26,850 (7.8)	39,000 (11.4)	53,300 (15.6)	61,100 (17.9)	70,200 (20.5)	79,300 (23.2)	85,800 (25.1)	
System Minimum Heating with Indoor Unit Ratio @ 45% BTU/h (kW)		5,850 (1.7)	9,000 (2.6)	9,225 (2.7)	13,500 (3.9)	18,450 (5.4)	21,150 (6.2)	24,300 (7.1)	27,450 (8.0)	29,700 (8.7)	
Maximum Indoor Units Connectable per Module		3	3	3	4	6	7	8	9	9	
Coil Type		Grooved Copper Tubes - Hydrophilic Aluminum Fin									
DC Fan Motor	Type	Axial Fan - Direct Drive									
	Qty	1	1	1	1	1	1	1	1	1	
	Motor (FLA) each	0.53	0.53	0.53	1.0	1.52	1.52	1.52	1.52	1.52	
	Air Flow CFM (m ³ /hr) (Hi)	1470 (2500)	1588 (2700)	1588 (2700)	2205 (3750)	2352 (4000)	2941 (5000)	3058 (5200)	2941 (5000)	3117 (5300)	
Electrical	Noise Level Hi (dB(A))	53	54	55	54	54	56	56	56	57	
	Voltage-Phase	208-230V - 1Ph									
	Frequency	N/A - 3D									
	Rated Input / Cooling (kW)	0.94	1.47	1.85	2.10	2.66	3.39	3.97	4.87	6.12	
	Rated Input / Heating (kW)	0.88	1.35	1.41	2.04	3.15	3.64	3.98	4.82	5.57	
	Rated Current / Cooling (A)	4.5	7.1	8.9	10.1	12.8	16.3	19.1	23.4	29.4	
	Comp. Rated Load Amps (RLA)	8.0	13.0	13.0	17.0	23.0	28.0	32.0	32.0	32.0	
	Compressor Power Input (W)	860	1390	1770	1930	2490	3220	3800	4700	5950	
Minimum Circuit Amps (MCA)	10.0	16.3	16.3	21.3	28.8	35.0	40.0	40.0	40.0		
Maximum Fuse Amps (MOCP)	15	20	20	25	32	40	40	40	40		
Refrigerant Charge R410A (oz / kgs)		51.1 / 1.45	51.1 / 1.45	51.1 / 1.45	59.9 / 1.7	91.7 / 2.6	112.8 / 3.2	109.5 / 3.1	126.9 / 3.6	162.26 / 4.6	
Refrigerant Connections inches (mm)	Type	Flare									
	Liquid	1/4 (6.35)	1/4 (6.35)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)	3/8 (9.53)	
Suction	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)	3/4 (19.1)	3/4 (19.1)	
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 (6*)									
Dimensions inches (mm)	Height	21 7/8 (555)	21 7/8 (555)	21 7/8 (555)	28 (712)	28 (712)	33 (840)	33 (840)	33 (840)	34 (865)	
	Width	31 5/16 (795)	31 5/16 (795)	31 5/16 (795)	35 13/16 (910)	35 13/16 (910)	37 3/8 (950)	37 3/8 (950)	37 3/8 (950)	41 (1040)	
	Depth	14 3/8 (365)	14 3/8 (365)	14 3/8 (365)	16 3/4 (426)	16 3/4 (426)	17 5/16 (440)	17 5/16 (440)	17 5/16 (440)	20 1/2 (523)	
Net Weight Lbs (kgs)		77 (35)	77 (35)	77 (35)	108 (49)	115 (52.5)	137 (62.5)	165 (75)	171 (77.5)	201 (91)	

Applicable Indoor Units



BEWM



BECS



BECW



BECM



BE (LP-MP)



BEHP



Wired Controller
VAECR-R001 (Standard)



Deluxe Wired Controller
VAECD-D001 (Optional)



Centralized Controller
VAECC-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 OGMNG-0921.

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

