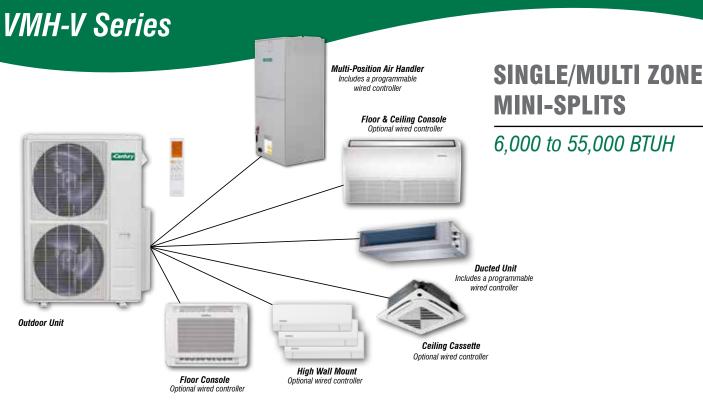
VMH UltraV Series



Our UltraV Series will heat or cool when outdoor temperatures reach -22 °F. Multi-zone units run at 100% capacity at 5 °F. Single zones maintain 100% capacity at 0 °F!

This makes these units well suited to installations requiring year 'round conditioning, both residential and light commercial. Operating range:

	Single-Zone	Multi-Zone
Cooling=	-22° to 75°F	5° to 122 °F
Heating=	-22° to 75°F	-22° to 75 °F

Advanced inverter technology means the room will reach the preset temperature quickly and that the temperature will be constant without the fluctuations that occur in other systems due to on-off cycling. Energy usage is kept to a minimum as units run at low frequency most of the time. However, when required the unit ramps up automatically to reach and maintain the comfort level.



FEATURES

Multiple Modes

- · Cooling, dehumidification only, and heating
 - Sleep mode
- 24-hour timer
- Turbo mode
- · Auto mode

Auto Swing

 Continually adjusts air flow direction for a gentle, breeze-like effect

Remote Control

Makes it easy to program and operate the unit

Enhanced Filtration

· Gold fin filter delivers improved indoor air quality

Defrost Control

 Longer defrost cycle effectively removes any frost accumulation on the coil as needed

"Follow" Feature

 Remote senses temperature where occupant is, automatically adjusts to maintain setpoint

Rotary Compressor

· Designed for wide operating range and minimal vibration

Easy Repair & Maintenance

· Indoor high wall heads disassemble in 1 minute

SINGLE ZONE





Note: See page 5 for Indoor Unit specifications



For one to one matches with all indoor "B" units.

A-VMH06SV-1	A-VMH09SV-1	A-VMH12SV-1	A-VMH18SV-1	A-VMH24SV-1	A-VMH33SV-1*
208/230V,1Ph, 60Hz	208/230V,1Ph, 60Hz	208/230V,1Ph, 60Hz	208/230V,1Ph, 60Hz	208/230V,1Ph, 60Hz	208/230V,1Ph, 60Hz
6,000	9,000	12,000	18,000	24,000	33,000
26.5	28.1	25.5	21.5	21.5	19.5
15.8	16.2	14	12.5	13	12
13.6	11.5	10.4	11.3	11.4	10
3.3	2.5	3.72	6.3	8.1	18.1
8,500	9,500	10,100	15,000	21,200	28,800
3.92	4.1	4.1	7.3	10.9	20.5
30.12	31.69	31.69	35.04	37.24	37.24
21.85	21.81	21.81	26.5	31.89	31.89
11.93	12.99	12.99	13.46	16.14	16.14
63.71	74.07	73.63	100.97	134.48	134.48
		Outdoor Unit 2	08/230-1-60		
13	15	15	20	25	36
15	15	15	25	35	40
14AWG / 4 conductor 600V THHN unshielded stranded bare copper					
1/4 x 3/8	1/4 x 3/8	1/4 x 1/2	1/4 x 1/2	3/8 x 5/8	3/8 x 3/4
82	82	82	98	164	164
32	32	32	65	82	82
	208/230V,1Ph, 60Hz 6,000 26.5 15.8 13.6 3.3 8,500 3.92 30.12 21.85 11.93 63.71	208/230V,1Ph, 60Hz 60Hz 60Hz 6,000 9,000 26.5 28.1 15.8 16.2 13.6 11.5 3.3 2.5 8,500 9,500 3.92 4.1 31.69 21.85 21.81 11.93 12.99 63.71 74.07	208/230V,1Ph, 60Hz 208/230V,1Ph, 60Hz 208/230V,1Ph, 60Hz 6,000 9,000 12,000 26.5 28.1 25.5 15.8 16.2 14 13.6 11.5 10.4 3.3 2.5 3.72 8,500 9,500 10,100 3.92 4.1 4.1 30.12 31.69 31.69 21.85 21.81 21.81 11.93 12.99 12.99 63.71 74.07 73.63 Outdoor Unit 2 13 15 15 15 15 15 14AWG / 4 conductor 600V THHN 1/4 x 3/8 1/4 x 1/2 82 82 82	208/230V,1Ph, 60Hz 208/230V,1Ph, 60Hz 208/230V,1Ph, 60Hz 208/230V,1Ph, 60Hz 208/230V,1Ph, 60Hz 6,000 9,000 12,000 18,000 26.5 28.1 25.5 21.5 15.8 16.2 14 12.5 13.6 11.5 10.4 11.3 3.3 2.5 3.72 6.3 8,500 9,500 10,100 15,000 3.92 4.1 4.1 7.3 30.12 31.69 31.69 35.04 21.85 21.81 21.81 26.5 11.93 12.99 12.99 13.46 63.71 74.07 73.63 100.97 Outdoor Unit 208/230-1-60 13 15 15 25 14AWG / 4 conductor 600V THHN unshielded stranded 1/4 x 3/8 1/4 x 1/2 1/4 x 1/2 82 82 82 98	208/230V,1Ph, 60Hz 208/230V,1Ph, 10Hz 208/230

Always follow local, state and national electrical codes
 Min. 10 ft. line set recommended
 Oil traps should be installed every 16.5 to 23 feet (5-7m) when the outdoor unit is installed above the indoor unit











*Coming Soon 2nd QTR

UltraV Series

Mix and match indoor units up to the maximum BTUHs allowed for each system—see chart for possible combinations.

Order outdoor and indoor units separately:

"A" indicates outdoor unit and "B" indicates indoor units.

Advantages of Inverter Technology

The inverter on a mini-split is like the cruise control on a vehicle. The inverter-driven compressor automatically adjusts its speed to quickly reach and then maintain the set point. When maximum capacity is not needed, the compressor speed decreases-and with it the power output also decreases, resulting in improved energy efficiency. Once the set point is reached, the system "cruises along," keeping the temperature constant, but responding if the demand changes.

- Reaches the desired temperature quickly
- Provides precise temperature control and continuous dehumidification (cooling mode)
- Extends component life by eliminating on-off cycling
- · Operates at ultra-quiet level
- Saves energy by matching the compressor speed to the demand; rated up to 23 SEER2 and 13.6 EER2
- Delivers extra heating capacity even at low ambient temperatures
- · Has internal Pan Heater







	OUTDOOR UNITS						
FEATURES	A-VMH18DV-1	A-VMH28TV-1	A-VMH36QV-1	A-VMH36QV-1A*	A-VMH48PV-1	A-VMH55PV-1*	
Cooling Capacity	19,000	28,000	36,000	36,000	48,000	55,000	
SEER2	22	23	22.2	22.4	21.8	18.8	
EER2	12.5	12.5	13.6	12.5	11.7	10.5	
HSPF4 2	9.8	10.6	10.3	10.9	9.8	9.3	
Heating at 5 F°-15°C° Maximum capacity	19,000	24,000	36,000	37,000 48,000		46,000	
Operating Range - Cooling		5° - 122 °F		-22° - 122 °F	5° - 1	122 °F	
Operating Range - Heating		-22° - 75 °F		-22° - 75 °F	-22° ·	- 75 °F	
Sound Level (dBa) H-M-L	61	63	63	65	65	61	
OUTDOOR UNIT DIMENSIONS							
Width (inches) 37.24 37.24		37.24	37.48	38.58	37.48	37.48	
Height (inches)	(inches) 31.89 31.89 52		52.48	38.39	52.48	52.48	
Depth (inches)	16.14	16.14 16.14 1		16.34	16.34	16.34	
Net Wt/Shipping Wt (lbs.)	Wt/Shipping Wt (lbs.) 138.23/149.03 167.99/179.67 223.11/253.97		213.85/246.92	238.32/269.84	233.03/265.87		
ELECTRICAL DATA OUTDOOR UNIT*							
Main Power Connection			Outdoor Un	it 208/230-1-60			
Min. Circuit Ampacity	20	25	40	40	40	40	
Max Fuse/HACR. Circuit Breaker	25 40 60		60	60	60	60	
Indoor/Outdoor Connecting Cable Type		14 awg/ 4 c	onductor 600V TH	NN unshielded stran	ded bare copper		
		LINE S	ETS O.D. (inch)				
Liquid Connection (flare) (in.)	2 x 1/4"	3 x 1/4"	4 x 1/4"	4 x 1/4"	5 x 1/4"	5 x 1/4"	
Suction Connection (flare) (in.)	2 x 3/8"	3 x 3/8"	3 x 3/8" 1 x 1/2"	3 x 3/8" 1 x 1/2"	3 x 3/8" 2 x 1/2"	3 x 3/8" 2 x 1/2"	
Max. length for all rooms	131	197	262	262	262	262	
Max. length for one indoor unit	82	98	115	115	115	115	
Max. height difference between indoor units 33 33 33 33		33	33	33			

‡Actual performance will vary based on the application, including the size(s) and mix of indoor units installed.



A-VMH18DV-1

Ambient Operating Temperature Range:

5° - 122 °F (cooling) -22° - 75 °F (heating)

- *Always follow local, state and national electrical codes. Main power connection is 208-230V.
- **See the IOM regarding various adapters and fittings which may be included with outdoor and/or indoor models for making connections.

Required Indoor/Outdoor Connecting Cable (SJOW)—14 AWG / 4 conductor 600V THHN unshielded stranded bare copper, not to exceed 115 feet between indoor and outdoor units.

- ¹ For single indoor unit installation; min. 10 ft. line set length required.
- Oil traps should be installed every 16.5 to 23 feet (5-7m) when the outdoor unit is installed above the indoor unit.

NOTE: Maximum line set length varies based on number of indoor units installed. See IOM for details.

MULTI ZONE

FLOOR/CEILING MOUNT INDOOR UNITS								
FEATURES	B-VMH18UU-1	B-VMH24UU-1						
Cooling Capacity BTUH	18,000	24,000						
Heating Capacity BTUH	18,000	24,000						
Air Flow Range (CFM)	666/595/525	880/770/650						
Fan Speeds	3	3						
Dehumidification (Pts/Hr)	6.16	7.04						
Sound Level Range (dBA)	47/44/39	58.5/55/52						
Modulating	YES	YES						
Temperature Setting On Remote or Wired Controller:	62~86	62~86						
	DIMENSIONS							
Width (inches)	42.05	42.05						
Height (inches)	26.57	26.57						
Depth (inches)	9.25	9.25						
Net Wt/Shipping Wt (lbs)	55.12/65.48	55.12/66.14						
Liquid-Suction (flare)	1/4" x 1/2"	3/8" x 5/8"						

Features

- · 'Follow' feature on remote
- Multiple modes: auto, turbo, sleep, fan only, dehumidify only, 24 Hour timer
- · Intelligent pre-heat
- · Self diagnostics



Optional wired controllers: **7800-206** - non-programmable, **17317100001195** - programmable (must order separate)

FLOOR MOUNT INDOOR UNITS

Features

- · Auto operation
- Multiple modes: turbo, sleep, fan only, dehumidification only, 24 Hour timer
- · 'Follow' feature on remote
- · Energy saver function
- · Smartphone compatible
- · Intelligent pre-heat
- · Self diagnostics



FEATURES	B-VMH12FV-1
Cooling Capacity BTUH	12,000
Heating Capacity BTUH	12,000
Air Flow Range (CFM)	265/324/377
Fan Speeds	3
Dehumidification (Pts/Hr)	3.07
Sound Level Range (dBA)	25/39/42
Temperature Setting On Remote or Wired Wall Controller:	62-86
AIR DIRECTION	
Modulating	Top/Bottom
DIMENSIONS	
Width (inches)	31.26
Height (inches)	24.45
Depth (inches)	7.87
Net Wt/Shipping Wt (lbs)	32.85/41.45
Liquid-Suction (flare)	1/4" x 1/2"

DUCTED INDOOR UNITS						
FEATURES	B-VMH09DU-1	B-VMH12DU-1	B-VMH18DU-1	B-VMH24DU-1		
Cooling Capacity BTUH	9,000	12,000	18,000	24,000		
Heating Capacity BTUH	9,000	12,000	18,000	24,000		
Air Flow Range (CFM)	353/283/177	353/283/177	530/450/371	776/694/435		
Fan Speeds	3	3	3	3		
Dehumidification (Pts/Hr)	2.82	3.08	6.16	7.04		
Sound Level Range (dBA)	38/25/32	38/26/33.5	39/37/35	44//		
ESP in. WG	0-0.16	0-0.16	0-0.40	0-0.64		
Temperature Setting On Remote or Wired Wall Controller:	62~86	62~86	62~86	62~86		
DIMENSIONS						
Width (inches)	27.56	27.56	34.65	43		
Height (inches)	7.87	7.87	8.27	10		
Depth (inches)	17.72	17.72	28.53	30		
Net Wt/Shipping Wt (lbs)	37.5/48.3	37.5/48.3	54/66	87/103		
Liquid -Suction (flare)	1/4" x 3/8"	1/4" x 1/2"	1/4" x 1/2"	3/8" x 5/8"		

Features

- Multiple modes: auto, turbo, sleep, fan only
- 24 Hour timer
- · Intelligent pre-heat
- Wired programmable controller 17317100A36321
- · Self diagnostics



Features

- · All high wall heads come with a remote
- Optional #17317100001195 wired programmable controller (must order separate)
- · 'Follow' feature on remote for comfort
- Multiple modes: auto, turbo, sleep, fan only
- 24 Hour timer
- · Intelligent pre-heat
- · Automatic louver swing
- · Self diagnostics
- · Smartphone compatible
- · Easy to repair & maintain high wall heads disassemble in 1 minute







B-VMH06SV-1 to B-VMH24SV-1



B-VMH30SG-1 & B-VMH36SG-1

(for multi-zone units only)



	HIGH WALL MOUNT INDOOR UNITS							
FEATURES	B-VMH06SV-1	B-VMH09SV-1	B-VMH12SV-1	B-VMH18SV-1	B-VMH24SV-1	B-VMH33SV-1*	B-VMH30SG-1	B-VMH36SG-1
Cooling Capacity BTUH	6,000	9,000	12,000	18,000	24,000	33,000	30,000	36,000
Heating Capacity BTUH	6,000	9,000	12,000	18,000	24,000	35,000	30,000	36,000
Air Flow Range (CFM)	168/318	177/336	177/336	306/524	319/612	424/894	383/647	383/640
Fan Speeds	3	3	3	3	3	3	3	3
Sound Level Range (dBA)	45/36/27	46/36/27	48/39/29	50/45/39	46/39/25	52/46/35	46/41/33	48/42/36
Temperature Setting			62° t	o 90° F Cooling; 62°	° to 86° F Heating (on	remote)		
			А	IR DIRECTION				
Horiz./Vert. Modulating	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
				DIMENSIONS				
Width (inches)	31.30	31.30	31.30	39.63	44.88	44.88	44.88	44.88
Height (inches)	11.61	11.61	11.61	12.56	14.57	14.57	14.57	14.57
Depth (inches)	8.86	8.86	8.86	9.41	10.83	10.83	10.83	10.83
Net Wt/Shipping Wt (lbs)	22.71/28.88	22.71/28.88	22.93/28.88	27.12/35.71	43.65/54.89	43.43/55.11	43.65/54.89	43.65/54.89
Liquid-Suction (flare)	1/4" - 3/8"	1/4" - 3/8"	1/4" - 1/2"	1/4" - 1/2"	3/8" - 5/8"	3/8" - 3/4"	3/8" - 5/8"	3/8" - 5/8"
* Unit will be available 02								

^{*} Unit will be available Q2



WIRED NON-PROGRAMMABLE CONTROLLER

· Ceiling Cassettes

7800-206

- High Wall SD & SG Series
- Ducted Indoor Units



WIRED PROGRAMMABLE CONTROLLER

- · High Wall SV Series
- eries 17317100001195
- · Ducted Indoor Units

MULTI ZONE



- Auto operation, 24-hour timer
- Multiple modes: turbo, sleep, fan only, dehumidification only
- · Intelligent pre-heat
- · Washable air filter
- Automatic louver swing
- · Self diagnostics
- · Wireless remote
- · 'Follow' feature on remote for comfort
- 9, 12, 18 fit 24" x 24" ceiling tile opening
- · Condensate removal pump
- Optional wired controller 7800-206 (must order separate)

CEILING CASSETTES*								
FEATURES	TURES B-VMH09CU-1		B-VMH18CU-1	B-VMH24CV-1**				
Cooling Capacity BTUH	9,000	12,000	18,000	24,000				
Heating Capacity BTUH	9,000	12,000	18,000	24,000				
Air Flow Range (CFM)	low Range (CFM) 600/520/460		956/825/746	1400/1250/1000				
Fan Speeds	nn Speeds 3		3	3				
Dehumidification (Pts/Hr)	2.82	3.08	6.16	7.04				
Sound Level Range (dBA)	41/39/37	41/38/35	46/43/41	51/47/43				
Temperature Setting On Remote or Wired Wall Thermostat:	Remote or Wired Wall 62~86		62~86	62~86				
AIR DIRECTION								
Modulating	YES	YES	YES	YES				
	DIMENSIONS							
Width (inches)	22.44	22.44	22.44	33.07				
Height (inches)	Height (inches) 10.24		10.24	8.07				
Depth (inches)	22.44	22.44	22.44	33.07				
Net Wt/Shipping Wt (lbs)	35.27/41.88	35.27/41.88	39.68/46.3	45.19/52.91				
REFRIGERANT LINE CONNECTIONS	1/4" X 3/8" Flare	1/4" X 1/2" Flare	1/4" X 1/2" Flare	3/8" X 5/8" Flare				
Decorative Cover Panel*	C-VMH91218CU-1	C-VMH91218CU-1	C-VMH91218CU-1	C-VMH24CU-1				
Panel Dimensions (inches)	25.47x25.47x1.97	25.47x25.47x1.97	25.47x25.47x1.97	37.4x37.4x2.17				
Net Wt/Shipping Wt (lbs)	5.51/9.92	5.51/9.92	5.51/9.92	11.02/17.64				

^{*}Ceiling cassettes require the use of a decorative cover panel.







You can see how one outdoor condenser is used in conjunction with multiple indoor air handlers in a single structure. Air handlers can be installed up to 115' (depending on model) from the condenser, so you can place the condenser in the best location for your landscaping.

A hole approximately 3" in diameter is drilled through the exterior wall to accommodate the lines carrying refrigerant. Also, a communication wire runs between each indoor unit and the condenser, and a drain line from each indoor unit carries condensate away. Power is supplied by the outdoor unit so there are no cords or plugs visible on the interior.



^{**}Unit is Smartphone Compatible

MULTI-POSITION AIR HANDLER

Ducted Units						
FEATURES	B-VMH18AV-1	B-VMH24AV-1				
Cooling Capacity BTUH	18,000	23,000				
Heating Capacity BTUH	19,000	26,000				
Air Flow Range (CFM)	489 - 577	630 - 759				
Fan Speeds	3	3				
Sound Level Range (dBA)	35 / 37 / 39	38 / 39.5 / 41				
Volts / Hz / Phase	208 / 230, 1, 60	208 / 230, 1, 60				
Voltage Range	187 - 253	187 - 253				
Cooling Input Power (W)	1440	1840				
Cooling Rated Current (A)	9.1	9				
Heating Input Power (W)	1540	2130				
Heating Rated Current (A)	9.3	10				
Min. Circuit Ampacity	3	4				
Max. Fuse	15	15				
СОР	3.62	3.58				
Wireless Remote Control	YES	YES				
Wired Programmable Control	YES	YES				
Smart Phone Capable	YES	YES				
Width (inches)	21.02	21.02				
Height (inches)	45	45				
Depth (inches)	17.52	17.52				
NET WT / Shipping Wt. (lbs)	106.70 / 127.21	106.70 / 127.21				
Liquid / Suction Size (inches)	1/4" X 1/2"	3/8" X 5/8"				





Features

- Aluminum-alloy traditional fin-and-tube coil construction for maximum durability and corrosion resistance
- · Efficient and quiet ECM blower motor
- Accepts traditional 24VAC thermostats for convenience and advanced control options
- Optional electric resistance heat kits (up to 15kW) provides auxiliary heat source for comfort during the worst conditions
- Beautiful and durable gloss enameled-steel construction with insulated construction provides less than 2% cabinet leakage
- Built-in return filter rack for 20"x 20"x 1" Filter
- · Wired programmable control included

	Auxiliary Heat Kits								
	Power of Electric Heater	1.5 ton / 18K	2 ton / 24K	Number of Circuits	Voltage	Circuit 1 MCA	Circuit 2 MCA	Circuit 1 Max. Fuse	Circuit 2 Max. Fuse
	ECD3KW	YES	NO	1	208/230V	14A/16A	-	15A/20A	-
Optional	ECD5KW	YES	YES	1	208/230V	23A/27A	-	25A/30A	-
Electric	ECD8KW	YES	YES	1	208/230V	37A/42A	-	40A/45A	-
Heater	ECD10KW	YES	YES	1	208/230V	46A/53A	-	50A/60A	-
	ECD15KW	NO	YES	2	208/230V	23A/27A	46A/53A	25A/30A	50A/60A









PLENU	PLENUM SIZES				
SUPPLY AIR	18+24K= 12"D x 16"W				
RETURN AIR	18+24K= 20"D x 16"W				



"This product complies with all California product labeling laws including, but not limited to, the Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65."

Due to ongoing product improvements, specifications and dimensions are subject to change and correction without notice or incurring obligations. Determining the application and suitability for use of any product is the responsibility of the installer. Additionally, the installer is responsible for verifying dimensional data on the actual product prior to beginning any installation preparations. Third party incentive and rebate programs have precise requirements as to product performance and certification. All products meet applicable regulations in effect on date of manufacture; however, certifications are not necessarily granted for the life of a product. Therefore, it is the responsibility of the applicant to determine whether a specific model qualifies for these incentive/rebate programs.



