

VHP UltraV Series

VHP Series



SINGLE/MULTI ZONE MINI-SPLITS

6,000 to 55,000 BTUH



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 122 °F	-22° 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
- Turbo mode
- 24-hour timer
- 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

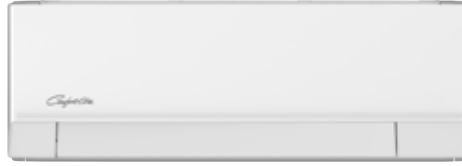
- Indoor high wall heads disassemble in 1 minute

Comfort-Aire®

Warranty—10 years on compressor, 10 years on parts
(Some limitations apply; see printed warranty for details.)

www.comfort-aire.com

SINGLE ZONE



Note: See page 5 for Indoor Unit specifications

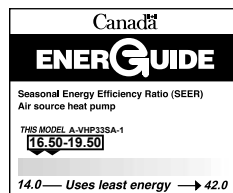
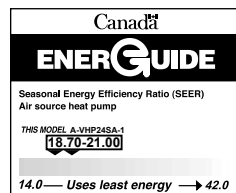
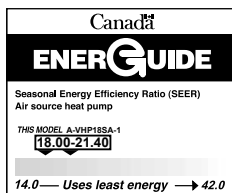
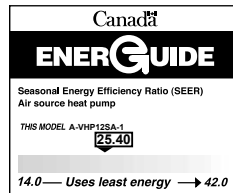
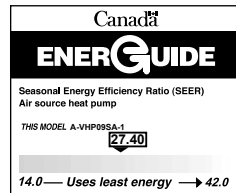
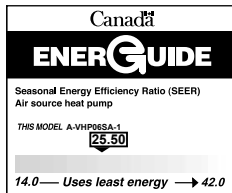
For one to one matches with all indoor "B" units.

FEATURES	A-VHP06SA-1	A-VHP09SA-1	A-VHP12SA-1	A-VHP18SA-1	A-VHP24SA-1	A-VHP33SA-1
Power Supply	208/230V,1Ph, 60Hz	208/230V,1Ph, 60Hz	208/230V,1Ph, 60Hz	208/230V,1Ph, 60Hz	208/230V,1Ph, 60Hz	208/230V,1Ph, 60Hz
Cooling Capacity (BTUH)	6,000	9,000	12,000	18,000	24,000	33,000
SEER2	25.5	27.4	25.4	21.4	21	19.5
EER2	18	15.4	13.4	12.5	13.0	12.0
HSPF2	14.8	12.5	10.5	11.0	13.5	10.5
Cooling Amps	3.1	4.1	4.0	6.4	8.3	12.7
Hi Heating Cap. (BTUH) @ -22°F	3,200	5,800	5,900	8,000	13,400	16,800
Heating Amps	4.0	4.1	4.1	7.2	11.0	13.7
OUTDOOR UNIT DIMENSIONS						
Width (inches)	30.12	31.69	31.69	35.04	37.24	37.24
Height (inches)	21.85	21.81	21.81	26.5	31.89	31.89
Depth (inches)	11.93	12.99	12.99	13.46	16.14	16.14
Net Wt/Shipping Wt (lbs.)	62.17/67.68	72.75/78.70	72.75/78.70	99.87/107.80	130.29/141.31	156.97/167.99
ELECTRICAL DATA OUTDOOR UNIT †						
Main Power Connection	Outdoor Unit 208/230-1-60					
Min. Circuit Ampacity	12	15	15	19	24.9	34
Max. Fuse/HACR Circuit Breaker	15	15	15	20	25	35
Indoor/Outdoor Connecting Cable Type	14AWG / 4 conductor 600V THHN unshielded stranded bare copper					
LINE SETS O.D. (inch)						
LINE SETS O.D. (inch)	1/4" x 3/8"	1/4" x 3/8"	1/4" x 3/8"	1/4" x 1/2"	3/8" x 5/8"	3/8" x 3/4"
Max. Line Set Length¹	82	82	82	98	164	164
Max. Elevation (outdoor)²	49	49	49	65	82	82

† Always follow local, state and national electrical codes

¹ Min. 10 ft. line set recommended

² Oil traps should be installed every 16.5 to 23 feet (5-7m) when the outdoor unit is installed above the indoor unit



MULTI ZONE

UltraV Series

Mix and match indoor units up to the maximum BTUHs allowed for each system.

Order outdoor and indoor units separately: "A" indicates outdoor unit and "B" indicates indoor units.



Ambient Operating Temperature Range:
22° - 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 shielded stranded bare copper, not to exceed 115 feet between indoor and outdoor units.

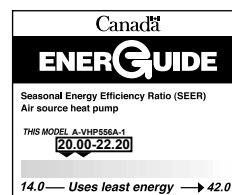
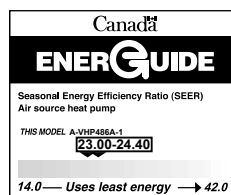
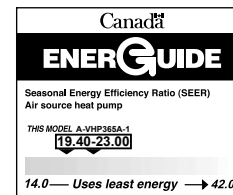
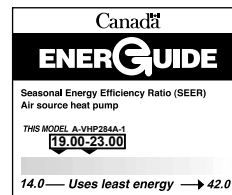
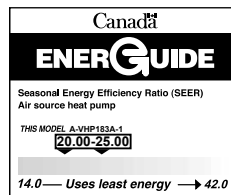
- 1 For single indoor unit installation; min. 10 ft. line set length required.
- 2 Oil traps should be installed every 16.5 to 23 feet (5-7m) when the outdoor unit is installed above the indoor unit.

NOTE:

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

OUTDOOR UNITS					
FEATURES	A-VHP183A-1	A-VHP284A-1	A-VHP365A-1	A-VHP486A-1	A-VHP556A-1
Cooling Capacity	19,000	27,000	36,000	47,000	51,000
SEER2	25	23	23	23	22.2
EER2	15	12.5	13	12	12
HSPF4 2	10.4	10.5	10.7	11	10.5
Heating at -22 F° Maximum capacity	10,000	14,000	22,400	24,600	17,000
Operating Range - Cooling	-22° - 122 °F Cooling				
Operating Range - Heating	-22° - 75 °F Heating				
Sound Level (dBa) H	61.5	61	65	65	65
OUTDOOR UNIT DIMENSIONS					
Width (inches)	37.24	37.24	38.58	37.48	37.48
Height (inches)	31.89	31.89	38.39	52.48	52.48
Depth (inches)	16.14	16.14	16.34	16.34	16.34
Net Wt/Shipping Wt (lbs.)	37.35/148.15	168.43/179.67	211.86/244.31	246.47/276.68	246.47/276.68
ELECTRICAL DATA OUTDOOR UNIT					
Main Power Connection	Outdoor Unit 208/230-1-60				
Min. Circuit Ampacity	17.5	30	37	37	39.5
Max Fuse/HACR. Circuit Breaker	20	35	40	40	40
Indoor/Outdoor Connecting Cable Type	14 awg/ 4 conductor 600V THNN unshielded stranded bare copper				
LINE SETS O.D. (inch)					
Liquid Connection (flare) (in.)	3 x 1/4"	4 x 1/4"	5 x 1/4"	6 x 1/4"	6 x 1/4"
Suction Connection (flare) (in.)	3 x 3/8"	3 x 3/8" x 1 x 1/2"	3 x 3/8" 2 x 1/2"	4 x 3/8" 2 x 1/2"	4 x 3/8" 2 x 1/2"
Max. length for all rooms	196	262	262	262	262
Max. length for one indoor unit	98	114	114	114	114
Max. height difference between indoor units (ft.)	49	49	49	49	49

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



MULTI ZONE

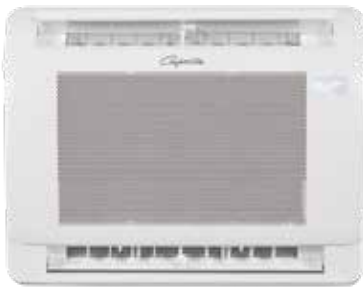
Advantages of Inverter Technology

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 25 SEER2 and 15 EER2
- Delivers extra heating capacity even at low ambient temperatures
- Has internal Pan Heater

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



ENERGY STAR



FLOOR MOUNT INDOOR UNITS			
FEATURES	B VHP09WA-1	B VHP12WA-1	B VHP18WA-1
Cooling Capacity BTUH	9,000	12,000	16,000
Heating Capacity BTUH	9,000	12,000	17,000
Air Flow Range (CFM)	189-377	189-377	324-442
Fan Speeds	3	3	3
Dehumidification (Pts/Hr)	0.50	4.22	4.60
Sound Level Range (dBA)	26-41	27-41	31-44
Temperature Setting On Remote or Wired Wall Controller:	60°F - 90°F Cooling 32°F - 86°F Heating	60°F - 90°F Cooling 32°F - 86°F Heating	60°F - 90°F Cooling 32°F - 86°F Heating
AIR DIRECTION			
Modulating	Top/Bottom	Top/Bottom	Top/Bottom
DIMENSIONS			
Width (inches)	31.26	31.26	31.26
Height (inches)	24.45	24.45	24.45
Depth (inches)	7.87	7.87	7.87
Net Wt/Shipping Wt (lbs)	32.85/41.89	32.85/41.89	32.85/41.89
Liquid-Suction (flare)	1/4" x 3/8"	1/4" x 1/2"	1/4" x 1/2"

DUCTED INDOOR UNITS					
FEATURES	B VHP09DA-1	B VHP12DA-1	B VHP18DA-1	B VHP24DA-1	B VHP36DA-1
Cooling Capacity BTUH	9,000	12,000	17,500	24,000	36,000
Heating Capacity BTUH	9,900	12,000	19,500	26,000	42,000
Air Flow Range (CFM)	122-289	136-351	442-618	501-787	766-1060
Fan Speeds	3	3	3	3	3
Dehumidification (Pts/Hr)	1.97	3.97	3.97	5.81	8.58
Sound Level Range (dBA)	26-30	26-33	28-36	30-40	31-45
ESP in. WG	0-0.8	0-0.8	0-0.8	0-0.8	0-0.8
Temperature Setting On Remote or Wired Wall Controller:	60°F - 90°F Cooling 32°F - 86°F Heating	60°F - 90°F Cooling 32°F - 86°F Heating	60°F - 90°F Cooling 32°F - 86°F Heating	60°F - 90°F Cooling 32°F - 86°F Heating	60°F - 90°F Cooling 32°F - 86°F Heating
DIMENSIONS					
Width (inches)	27.56	27.56	39.37	39.37	47.24
Height (inches)	9.65	9.65	9.65	9.65	11.81
Depth (inches)	29.53	29.53	29.53	29.53	29.53
Net Wt/Shipping Wt (lbs)	64.15/73.85	64.15/73.85	78.81/91.27	80.47/91.93	106.26/120.37
Liquid -Suction (flare)	1/4" x 3/8"	1/4" x 3/8"	1/4" x 1/2"	3/8" x 5/8"	3/8" x 3/4"

Features

- Multiple modes: auto, turbo, sleep, fan only
- 24 Hour timer
- Intelligent pre-heat
- Self diagnostics



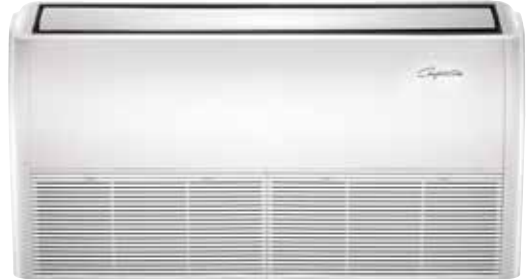
MULTI ZONE

FLOOR/CEILING MOUNT INDOOR UNITS

FEATURES	B VHP18UA-1	B VHP24UA-1
Cooling Capacity BTUH	17,000	22,000
Heating Capacity BTUH	19,000	26,000
Air Flow Range (CFM)	421-548	454-707
Fan Speeds	3	3
Dehumidification (Pts/Hr)	4.92	7.80
Sound Level Range (dBA)	31-43	34-49
Modulating	YES	YES
Temperature Setting On Remote or Wired Controller:	60°F - 90°F Cooling 32°F - 86°F Heating	60°F - 90°F Cooling 32°F - 86°F Heating
DIMENSIONS		
Width (inches)	42.05	42.05
Height (inches)	26.57	26.57
Depth (inches)	9.25	9.25
Net Wt/Shipping Wt (lbs)	58.42/70.55	61.29/73.19
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



WIRED PROGRAMMABLE CONTROLLER - 7800-500



- Smartphone cCapable
- Programmable
- Highwall heads
- Ducted
- Floor/ceiling console
- Air handlers

WIRED PROGRAMMABLE CONTROLLER - 7800-501



- Smartphone cCapable
- Programmable
- Highwall heads
- Ducted
- Floor/ceiling console
- Air handlers
- Air handlers
- Color touch screen
- Sold separately VHP, ZHP Series

HIGH WALL MOUNT INDOOR UNITS

FEATURES	B VHP06SA-1	B VHP09SA-1	B VHP12SA-1	B VHP18SA-1	B VHP24SA-1	B VHP33SA-1*
Cooling Capacity BTUH	6,000	9,000	12,000	18,000	24,000	33,000
Heating Capacity BTUH	7,000	12,000	12,000	18,000	29,000	36,000
Air Flow Range (CFM)	177-324	177-324	177-324	295-500	318-618	424-736
Fan Speeds	3	3	3	3	3	3
Sound Level Range (dBA)	37/33/22	38/33/21	37/33/22	45/38/32	44/39/27	53/47/36
Temperature Setting	60° to 90° F Cooling; 32° to 86° F Heating (on remote)					
AIR DIRECTION						
Horiz./Vert. Modulating	Yes	Yes	Yes	Yes	Yes	Yes
DIMENSIONS						
Width (inches)	33.74	33.74	33.74	40.31	47.13	47.13
Height (inches)	11.81	11.81	11.81	12.64	14.61	14.61
Depth (inches)	9.09	9.09	9.09	9.69	11.02	11.02
Net Wt/Shipping Wt (lbs)	22.93/29.32	23.37/29.98	22.93/29.32	27.34/36.80	143.65/55.60	143.65/55.60
Liquid-Suction (flare)	1/4" - 3/8"	1/4" - 3/8"	1/4" - 3/8"	1/4" - 1/2"	3/8" - 5/8"	3/8" - 3/4"

* Unit will be available Q2



B-VHP06SA-1 to B-VHP33SA-1



Features

- All high wall heads come with a remote
- '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

MULTI ZONE



B-VHP24CA-1

B-VHP09, 12, 18CA-1

Features

- 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

CEILING CASSETTES				
FEATURES	B VHP09CA-1	B VHP12CA-1	B VHP18CA-1	B VHP24CA-1
Cooling Capacity BTUH	9,000	12,000	16,000	23,500
Heating Capacity BTUH	10,000	12,000	19,000	25,000
Air Flow Range (CFM)	147-553	147-418	147-448	400-766
Fan Speeds	3	3	3	3
Dehumidification (Pts/Hr)	2.82	3.08	6.16	7.04
Sound Level Range (dBA)	24-42	26-46	28-48	28-48
Temperature Setting On Remote or Wired Wall Thermostat:	60°F - 90°F Cooling 32°F - 86°F Heating	60°F - 90°F Cooling 32°F - 86°F Heating	60°F - 90°F Cooling 32°F - 86°F Heating	60°F - 90°F Cooling 32°F - 86°F Heating
AIR DIRECTION				
Modulating	YES	YES	YES	YES
DIMENSIONS				
Width (inches)	22.44	22.44	22.44	32.68
Height (inches)	9.65	9.65	9.65	8.07
Depth (inches)	22.44	22.44	22.44	32.68
Net Wt/Shipping Wt (lbs)	35.27/41.88	35.27/41.88	39.68/46.3	47.18/59.08
Refrigerant Line Connections	1/4" X 3/8" Flare	1/4" X 3/8" Flare	1/4" X 1/2" Flare	3/8" X 5/8" Flare
Decorative Cover Panel*	C-VHP91218CA-1	C-VHP91218CA-1	C-VHP91218CA-1	C-VHP24CA-1
Panel Dimensions (inches)	25.47x25.47x1.97	25.47x25.47x1.97	25.47x25.47x1.97	36.68x35.68x1.97
Net Wt/Shipping Wt (lbs)	5.51/9.92	5.51/9.92	5.51/9.92	7.52/11.32



1 WAY CEILING CASSETTES				
FEATURES	B VHP061A-1	B VHP091A-1	B VHP121A-1	B VHP181A-1
Cooling Capacity BTUH	6,500	9,000	12,000	16,700
Heating Capacity BTUH	7,400	10,900	12,500	20,000
Air Flow Range (CFM)	236-342	236-342	248-353	207-401
Fan Speeds	3	3	3	3
Dehumidification (Pts/Hr)	0.97	2.81	4.84	5.85
Sound Level Range (dBA)	24-47	24-38	24-41	26-44
Temperature Setting On Remote or Wired Wall Thermostat:	60°F - 90°F Cooling 32°F - 86°F Heating	60°F - 90°F Cooling 32°F - 86°F Heating	60°F - 90°F Cooling 32°F - 86°F Heating	60°F - 90°F Cooling 32°F - 86°F Heating
AIR DIRECTION				
Modulating	YES	YES	YES	YES
DIMENSIONS				
Width (inches)	50.31	50.31	50.31	50.31
Height (inches)	8.98	8.98	8.98	8.98
Depth (inches)	13.19	13.19	13.19	13.19
Net Wt/Shipping Wt (lbs)	45.19/82.45	45.19/82.45	45.19/82.45	45.19/82.45
Refrigerant Line Connections	1/4" X 3/8" Flare	1/4" X 3/8" Flare	1/4" X 3/8" Flare	1/4" X 1/2" Flare

Features

- Ideal for new construction
- Smartphone compatible
- Fits in 16" on center joist or I beams
- Built in condensate pump
- Easy filter access
- 1 Way throw



Comfort-Cire®

MULTI-POSITION AIR HANDLER

MULTI-POSITION AIR HANDLER				
FEATURES	B VHP18AA-1	B VHP24AA-1	B VHP30AA-1	B VHP36AA-1
Cooling Capacity BTUH	18,000	23,000	33,000	36,000
Heating Capacity BTUH	19,500	26,000	35,000	38,000
Air Flow Range (CFM)	489-577	630-759	866-1084	866-1084
Fan Speeds	3	3	3	3
Sound Level Range (dBA)	30-43	26-44	35-48	31-47
Volts / Hz / Phase	208/230, 1, 60	208/230, 1, 60	208/230, 1, 60	208/230, 1, 60
Voltage Range	187-253	187-253	187-253	187-253
Cooling Input Power (W)	1500	1916	2820	3080
Cooling Rated Current (A)	9.1	8.7	12.5	13.4
Heating Input Power (W)	1570	2180	2800	3289
Heating Rated Current (A)	9.5	9.7	12.3	14.3
Min. Circuit Ampacity	3.5	4	6	6
Max. Fuse	15	15	15	15
COP	3.64	3.5	3.66	3.39
Wireless Remote Control	YES	YES	YES	YES
Wired Programmable Control	YES	YES	YES	YES
Smart Phone Capable	YES	YES	YES	YES
Width (inches)	17.52	17.52	21.02	21.02
Height (inches)	45	45	49.02	49.02
Depth (inches)	21.02	21.02	21.02	21.02
NET WT / Shipping Wt. (lbs)	108.72/125.66	108.72/125.66	127.87/153.10	127.87/153.10
Liquid / Suction Size (inches)	1/4" x 1/2"	3/8" x 5/8"	3/8" x 3/4"	3/8" x 3/4"



Multi-Position Air Handler
Includes a programmable
wired controller



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
Optional Electric Heater	EXP3KW	YES	NO	1	208/230V	14A/16A	-	15A/20A	-
	EXP5KW	YES	YES	1	208/230V	23A/27A	-	25A/30A	-
	EXP8KW	YES	YES	1	208/230V	37A/42A	-	40A/45A	-
	EXP10KW	YES	YES	1	208/230V	46A/53A	-	50A/60A	-
	EXP15KW	NO	YES	2	208/230V	23A/27A	46A/53A	25A/30A	50A/60A



Wired programmable control



PLENUM SIZES

SUPPLY AIR	18+24K= 12"D x 16"W
RETURN AIR	24+36K= 20"D x 16"W

Comfort-Aire®



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.

"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.