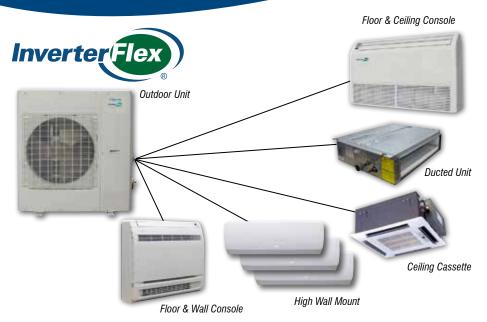
InverterFlex® Series



MULTI-ZONE HEAT PUMPS

18,000 to 42,000 BTUH

Our InverterFlex® multi-zone units let you condition one up to five rooms with just one outdoor unit (depending on model). The contractor can design a system that best meets the load requirements of each room being conditioned because indoor air handlers can be mixed and matched—all five types of units shown can be used in the same installation.

These 9,000, 12,000, 18,000, 21,000 and 24,000 BTUH indoor units can be mixed, up to the point that their combined capacity reaches the total allowable system capacity—see the chart inside. All units must operate in the same mode except "fan" only can always be selected. True zone control is possible because each air handler operates independently and has its own wireless remote.

InverterFlex® models incorporate all the advantages of twin rotary inverter compressor technology. The compressor speed is variable, depending on the load demand. Most of the time the unit runs at low frequency, saving energy while maintaining comfort, but ramping up to higher frequency when needed. Temperature fluctuations and compressor on/off cycling are eliminated, and indoor air quality is enhanced because air is constantly being pulled through the filter and dehumidified.

InverterFlex® systems are also great for larger spaces such as fellowship halls and commons areas: install multiple units for quiet, efficient, easily controlled comfort.

FEATURES

(Varies according to type of indoor unit)

- Auto Swing—Continually adjusts air direction for a gentle, breeze like effect preferred by most people
- Multiple Modes—Cooling, heating, fan only, dehumidification only, plus:
 - Sleep mode
 - 24-hour timer
 - Turbo mode
 - Auto mode
- Intelligent Pre-Heating—Enhances comfort by preventing cold air blow
- Auto Operation

 —Automatically selects the mode required to maintain a constant temperature/humidity level
- "Follow" Function—Senses temperature at the remote and adjusts air flow for comfort and efficiency at its location
- **Superior Filtration**—Air filters are designed to help enhance indoor air quality
- Auto Defrost—Defrosts only when necessary to save energy, limit downtime
- Self-Clean Mode

 Dries out indoor unit when not in use to prevent mold growth
- Low Ambient Operation





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 at 16 SEER and up to 10.2 EER
- Delivers extra heating capacity even at low ambient temperatures

OUTDOOR UNITS						
FEATURES	A-VFH18DB-1	A-VFH24TB-1	A-VFH30QB-1	A-VFH36QB-1	A-VFH42PB-1	
Power Supply	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	
System Cooling Cap. (BTUH)	18,000	24,000	29,000	34,000	39,000	
Min./Max. Cooling Cap. (BTUH)‡	7,000/21,000	7,500/33,000	8190/33,400	8,900/35,800	8,900/40,950	
SEER/EER	22.00/12.50	21.00/12.50	21.00/12.50	21.00/12.48	21.00/10.43	
HSPF	10.5	10.5	10.5	10.5	10.2	
High Heating (BTUH) @ 47°F	19,000	29,500	32,000	41,000	45,000	
Low Heating (BTUH) @ 17°F	15,600	19,860	22,500	28,700	30,000	
Min./Max. Heating Cap. (BTUH)‡	8,530/22,600	7,500/35,000	8,200/32,400	8,871/44,356	8,871/46,062	
Sound Pressure (dBA)	56	59	59	61	61	
OUTDOOR UNIT DIMENSIONS						
Width (inches)	37 5/8	38 1/2	38 1/2	42 7/8	42 7/8	
Height (inches)	27 1/2	31 1/8	31 1/8	43 3/8	43 3/8	
Depth (inches)	15 5/8	16 7/8	16 7/8	17 3/8	17 3/8	
Net Wt/Shipping Wt (lbs.)	115/125	153/164	145/154	198/216	198/216	
	ELECTRICA	L DATA OUTDO	OOR UNIT*			
Main Power Connection	Outdoor Unit					
Min. Circuit Ampacity	15A	20A	26A	28A	29A	
Max. Fuse/HACR Circuit Breaker	25A	30A	30A	35A	40A	
LINE SET LENGTHS**						
Maximum Line Set Length ¹	33 feet	65 feet	82 feet	82 feet	82 feet	
Max. Total Length All Zones	65 feet	196 feet	229 feet	246 feet	246 feet	
Maximum Elevation (outdoor) ²	32 feet	32 feet	49 feet	49 feet	49 feet	

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



Ambient Operating Temperature Range:

0° - 118.5° F (cooling) (all models); -4° - 75° F (heating) (18DB-24TB)

-4° - 86° F (heating) (30QB-42PB)

- * 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.

Recommended Indoor/Outdoor Connecting Cable (SJOW)— 14 AWG / 4 conductor 600V THHN unshielded stranded bare copper, not to exceed 98 feet between indoor and outdoor units.

- ¹ For single indoor unit installation; min. 10 ft. line set length recommended.
- 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.







FLOOR/CEILING MOUNT INDOOR UNITS						
FEATURES	B-VFH09UA-1	B-VFH12UA-1	B-VFH18UA-1	B-VFH24UA-1		
Cooling Capacity BTUH	8,500	11,900	17,000	22,800		
Heating Capacity BTUH	9,500	13,100	18,700	27,400		
Air Flow Range (CFM)	383/324/265	383/324/265	559/412/294	736/530/412		
Fan Speeds	4	4	4	3		
Dehumidification (Pts/Hr)	1.69	2.96	3.80	5.28		
Sound Level Range (dBA)	36 to 50	36 to 50	40 to 55	44 to 58		
Temperature Setting	On Remote: 61°F - 86°F					
DIMENSIONS						
Width (inches)	48	48	48	48		
Height (inches)	275/16	275/16	275/16	275/16		
Depth (inches)	87/8	87/8	87/8	87/8		
Net Wt/Shipping Wt (lbs)	88.2/110.2	88.2/110.2	88.2/110.2	99.2/119.1		
Liquid-Suction (flare)**	1/4" - 3/8"	1/4" - 3/8"	1/4" - 1/2"	3/8" - 5/8"		

Features

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



Features

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











FLOOR MOUNT INDOOR UNITS						
FEATURES	B-VFH09FA-1	B-VFH12FA-1	B-VFH18FA-1			
Cooling Capacity BTUH	9,000	12,000	18,000			
Heating Capacity BTUH	9,500	13,000	19,800			
Air Flow Range (CFM)	383 - 188	441 - 206	494 - 241			
Fan Speeds	5	5	5			
Dehumidification (Pts/Hr)	1.69	2.96	3.80			
Sound Level Range (dBA)	25 to 50	27 to 53	33 to 58			
Temperature Setting On Remote or Wired Wall Thermostat: 61°F to 86°F						
AIR DIRECTION						
Vertical Modulating	Yes	Yes	Yes			
	DIMENSIONS					
Width (inches)	27 ⁹ /16	279/16	279/16			
Height (inches)	235/8	235/8	235/8			
Depth (inches)	8 ⁷ /16	8 ⁷ /16	8 ⁷ /16			
Net Wt/Shipping Wt (lbs)	24.25/30.9	24.25/30.9	24.25/30.9			
Liquid-Suction (flare)**	1/4" - 3/8"	1/4" - 3/8"	1/4" - 1/2"			

DUCTED INDOOR UNITS					
FEATURES	B-VFH09DA-1	B-VFH12DA-1	B-VFH18DA-1	B-VFH21DA-1	B-VFH24DA-1
Cooling Capacity BTUH	8,500	11,900	15,300	20,400	23,800
Heating Capacity BTUH	9,500	13,100	18,700	22,600	27,400
Air Flow Range (CFM)	265/177/147	324/235/177	412/353/294	589/441/324	589/441/324
Fan Speeds	3	3	3	3	3
Dehumidification (Pts/Hr)	1.69	2.96	3.80	4.23	5.28
Sound Level Range (dBA)	31 to 47	32 to 49	33 to 51	34 to 52	34 to 52
Temperature Setting		On Remote: 61°F - 86°F			
		DIMENSION	IS		
Width (inches)	27 ⁹ /16	279/16	35 ⁷ /16	435/16	435/16
Height (inches)	77/8	77/8	77/8	77/8	77/8
Depth (inches)	24 ³ /16	243/16	243/16	24 ³ /16	24 ³ /16
Net Wt/Shipping Wt (lbs)	48.5/59.5	50.7/63.9	59.5/79.4	68.3/90.4	68.3/90.4
Liquid-Suction (flare)**	1/4" - 3/8"	1/4" - 3/8"	1/4" - 1/2"	3/8" - 5/8"	3/8" - 5/8"

Features

- · 'Follow' feature on remote for comfort
- · Multiple modes: auto, turbo, sleep, fan only
- 24 Hour timer
- · Intelligent pre-heat
- Wireless remote and wired thermostat
- Self diagnostics
- Includes water pump



Wired thermostat



HIGH WALL MOUNT INDOOR UNITS					
FEATURES	B-VFH09MB-1	B-VFH12MB-1	B-VFH18MB-1	B-VFH24MB-1	
Cooling Capacity BTUH	9,000	12,000	18,000	20,800	
Heating Capacity BTUH	9,800	13,000	19,000	21,500	
Air Flow Range (CFM)	224 - 430	224 - 453	282 - 588	459-736	
Fan Speeds	5	5	5	5	
Dehumidification (Pts/Hr)	1.69	2.96	3.80	5.28	
Sound Level Range (dBA)	21 to 52	22 to 53	33 to 61	37 to 62	
Temperature Setting	On Remote: 61°F to 86°F				
AIR DIRECTION					
Horiz./Vert. Modulating	Yes	Yes	Yes	Yes	
Four-Way Modulating	Yes	Yes	Yes	Yes	
DIMENSIONS					
Width (inches)	341/16	341/16	40 ¹ /16	463/8	
·					
Height (inches)	11 ¹ / ₂	11 ¹ / ₂	12 9/16	12 ⁷ /8	
Height (inches) Depth (inches)	11 ¹ / ₂ 8 ¹ / ₄	11 ¹ / ₂ 8 ¹ / ₄	12 ⁹ / ₁₆	12 ⁷ /8 10 ³ /8	
, ,			<u>'</u>		

Features

- 'Follow' feature on remote for comfort
- Multiple modes: auto, turbo, sleep, fan only
- 24 Hour timer
- · Intelligent pre-heat
- · Automatic louver swing
- · Wireless remote
- · Silver ion filtration
- · Self diagnostics



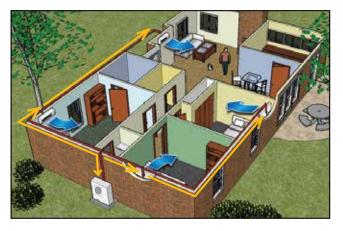




Features

- · 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 and wired wall thermostat
- · 'Follow' feature on remote for comfort
- Fits 24" x 24" ceiling tile opening

CEILING CASSETTES					
FEATURES	B-VFH12CA-1	B-VFH18CA-1	B-VFH24CA-1		
Cooling Capacity BTUH	12,000	14,400	22,800		
Heating Capacity BTUH	13,000	16,000	27,400		
Air Flow Range (CFM)	265-294-353	265-294-353	500-559-694		
Fan Speeds	4	4	3		
Dehumidification (Pts/Hr)	2.96	3.80	5.28		
Sound Level Range (dBA)	42/44/46	42/44/46	35/37/39		
Temperature Setting	Temperature Setting On Remote or Wired Wall Thermostat: 61°F to 86°F				
AIR DIRECTION					
Horiz./Vert. Modulating	No	No	No		
Four-Way Modulating	Yes	Yes	Yes		
DIMENSIONS					
Width (inches)	227/16	227/16	331/16		
Length (inches)	227/16	22 ⁷ /16	33 ¹ /16		
Height (inches)	91/16	91/16	9 ⁷ /16		
Net Wt/Shipping Wt (lbs)	39.6/ 50.7	39.6/ 50.7	61.7/ 77.2		
Decorative Cover Panel Panel Dimensions (inches)	Panel Part#: C-VFH1218CA 25 ⁵ /8 x 25 ⁵ /8 x 2		Panel Part#: C-VFH24CA 33 ¹ / ₁₆ x 33 ¹ / ₁₆ x 2 ³ / ₈		
Liquid-Suction (flare)**	1/4" - 3/8"	1/4" - 1/2"	3/8" - 5/8"		



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 82' (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.

Indoor Unit Mix 'n' Match Possibilities

The total capacity for ALL indoor units cannot exceed 150% of the stated condenser capacity. For best performance, the indoor units' total capacity should be 100% or less of the condenser capacity. When a system is sized beyond 100% of the condenser capacity, the compressor may not provide full capacity for all indoor units: sizing above 100% is generally specified when one or more of the indoor units will not be in use most of the time. Also, the total capacity for ALL indoor units cannot be less than 50% of the condenser's capacity.

Zones	Indoor Units*	Total BTUH
Lones	9K	9,000
A-VFH18DB 1-2 Units	12K	12,000
	12K 18K	
	21K	18,000
i-£ Jillio	9K + 9K	21,000
		18,000
	9K + 12K	21,000
	12K	12,000
	18K	18,000
	21K	21,000
	24K	24,000
	9K + 9K	18,000
	9K + 12K	21,000
A-VFH24TB	9K + 18K	27,000
1, 2 or 3	9K + 21K	30,000
Units	12k + 12K	24,000
	12K + 18K	30,000
	12K + 21K	33,000
	18K + 18K	36,000
	9K + 9K + 9K	27,000
	9K + 9K + 12K	30,000
	9K + 12K + 12K	33,000
	9K + 9K +18K	36,000
	18K	18,000
	21K	21,000
	24K	24,000
	9K + 9K	18,000
	9K + 12K	21,000
	9K + 18K	27,000
	9K + 21K	30,000
	12k + 12K	24,000
	12K + 18K	30,000
	18K + 18K	36,000
A-VFH30QB	18K + 21K	39,000
1, 2, 3 or 4 Units	9K + 9K + 9K	27,000
50	9K + 9K + 12K	30,000
	9K + 12K + 12K	33,000
	9K + 9K +18K	36,000
	9K + 9K + 21K	39,000
	9K + 12K + 18K	39,000
	12K + 12K + 12K	36,000
	12K + 12K + 18K	42,000
	9K + 9K + 9K + 9K	36,000
	9K + 9K + 9K + 12K	39,000
	9K + 9K + 12K + 12K	42,000
	18K	18,000
A VEUSCOR	21K	21,000
A-VFH36QB 1, 2, 3, 4 or	24K	24,000
5 Units	9K + 24K	33,000
	9K + 9K	18,000
	JK I VK	.0,000

Zones	Indoor Units*	Total BTUH
	9K + 12K	21,000
	9K + 18K	27,000
	12k + 12K	24,000
	12K + 18K	30,000
	12K + 24K	36,000
	18K + 18K	36,000
	18K + 24K	42,000
	24K + 24K	48,000
	9K + 9K + 9K	27,000
	9K + 9K + 12K	30,000
	9K + 9K + 18K	36,000
	9K + 9K + 24K	42,000
	9K + 12K + 12K	33,000
	9K + 12K + 18K	39,000
	9K + 12K + 24K	45,000
	9K + 18K + 18K	45,000
	9K + 18K + 24K	51,000
A-VFH36QB	12K + 12K + 12K	36,000
1, 2, 3, 4 or	12K + 12K + 18K	42,000
5 Units	12K + 12K + 24K	48,000
	12K + 12K + 24K	
	18K + 18K + 18K	48,000
		54,000
	9K + 9K + 9K + 9K	36,000
	9K + 9K + 9K + 12K	39,000
	9K + 9K + 9K + 18K	45,000
	9K + 9K + 9K + 24K	51,000
	9K + 9K + 12K + 12K	42,000
	9K + 9K + 12K + 18K	48,000
	9K + 12K + 12K + 12K	45,000
	9K + 12K + 12K + 18K	51,000
	12K + 12K + 12K + 12K	48,000
	9K+9K+9K+9K+9K	45,000
	9K+9K+9K+9K+12K	48,000
	9K+9K+9K+9K+18K	54,000
	9K+9K+9K+12K+12K	51,000
	9K+9K+12K+12K+12K	54,000
	21K	21,000
	24K	24,000
	9K + 12K	21,000
	9K + 18K	27,000
	9K + 21K	30,000
A 1/F1: 405-	9K + 24K	33,000
A-VFH42PB 1, 2, 3, 4 or	12K + 12K	24,000
5 Units	12K + 18K	30,000
	12K + 21K	33,000
	12K + 24K	36,000
	18K + 18K	36,000
	18K + 24K	42,000
	24K + 24K	48,000
	9K + 9K + 9K	27,000

Zones	Indoor Units*	Total BTUH
201100	9K + 9K + 12K	30,000
	9K + 9K + 18K	36,000
	9K + 9K + 21K	39,000
	9K + 9K + 24K	42,000
	9K + 12K + 12K	33,000
	9K + 12K + 18K	39,000
	9K + 12K + 24K	45,000
	9K + 18K + 18K	45,000
	9K + 18K + 24K	51,000
	9K + 24K + 24K	57,000
	12K + 12K + 12K	36,000
	12K + 12K + 18K	42,000
	12K + 12K + 24K	48,000
	12K + 18K + 18K	48,000
	12K + 18K + 21K	51,000
	12K + 18K + 24K	54,000
	12K + 24K + 24K	60,000
	18K + 18K + 18K	54,000
	18K + 18K + 24K	60,000
	9K + 9K + 9K + 9K	36,000
	9K + 9K + 9K + 12K	39,000
	9K + 9K + 9K + 18K	45,000
	9K + 9K + 9K + 21K	48,000
	9K + 9K + 9K + 24K	51,000
A-VFH42PB	9K + 9K + 12K + 12K	42,000
1, 2, 3, 4 or 5 Units	9K + 9K + 12K + 18K	48,000
o omis	9K + 9K + 12K + 24K	54,000
	9K + 9K + 18K + 18K	54,000
	9K + 9K + 18K + 24K	60,000
	9K + 12K + 12K + 12K	45,000
	9K + 12K + 12K + 18K	51,000
	9K + 12K + 12K + 24K	57,000
	9K + 12K + 18K + 18K	57,000
	9K + 18K + 18K + 18K	63,000
	12K + 12K + 12K + 12K	48,000
	12K + 12K + 12K + 18K	54,000
	12K + 12K + 12K + 24K	60,000
	12K + 12K + 18K + 18K	60,000
	9K+9K+9K+9K+9K	45,000
	9K+9K+9K+9K+12K	48,000
	9K+9K+9K+9K+18K	54,000
	9K+9K+9K+9K+24K	60,000
	9K+9K+9K+12K+12K	51,000
	9K+9K+9K+12K+18K	57,000
	9K+9K+9K+18K+18K	63,000
	9K+9K+12K+12K+12K	54,000
	9K+9K+12K+12K+18K	60,000
	9K+12K+12K+12K+12K	57,000
	9K+12K+12K+12K+18K	63,000
	12K+12K+12K+12K+12K	60,000



WHAT DO WE MEAN BY ENERGY EFFICIENCY?

In recent years, heating and cooling manufacturers have made significant advances in the efficiency of systems in terms of energy usage. This is an especially important purchase consideration as fuel prices continue to rise.

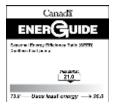
Cooling efficiency is measured by a Seasonal Energy Efficiency Ratio (SEER) rating. The higher the number, the more efficient the equipment. Our Comfort-Aire UltraV systems are rated up to 25.0 SEER.

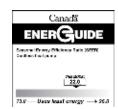
Heating efficiency is shown by a Heating Season Performance Factor (HSPF). This is an estimate calculated by dividing the seasonal heating output by the seasonal power consumption in watts. UltraV units are rated as high as 14.5, which is considered very good.

All heating and cooling equipment comes with an Energy Guide label which shows the estimated energy usage—you can use these labels to compare equipment efficiency. Your dealer can help you determine which system is best for you, taking into account a number of factors including the average number of yearly cooling and heating days in your area of the country, in addition to your individual needs.

READY TO BUY? SOME THINGS TO CONSIDER

When you buy Comfort-Aire products, you're purchasing the peace of mind that comes from dealing with a company that has a long track record of success. We have a well-deserved reputation not only for quality products, but also for standing behind these products with excellent warranty and support programs. Also, you'll find our web site is a convenient resource: owners' manuals can be downloaded and your installer can access technical information and service manuals.





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.

"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."

