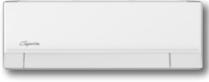
# Comfort-Cire.





# **DUCTLESS MINI-SPLIT SYSTEMS**

Product Catalog





AND EFFICIENCY.

# **SSP Series**



# AN ARTFUL COMBINATION OF ECONOMY AND PERFORMANCE:

The SSP-Series showcases energy efficiency in a streamlined, modern, whisper-quiet design

#### **FEATURES**

#### Super Efficient

Rated as high as 19 SEER2 and 10.9 EER2

#### Whisper Quiet

· High tech fan in the indoor unit delivers balanced air flow

#### **Temperature Compensation**

 Indoor unit adjusts automatically as needed to eliminate stratification between ceiling and floor temps

#### **Auto Swing**

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

#### Multiple Modes

- Cooling, dehumidification only, air circulation and heat plus:
  - Sleep mode
     24-hour timer
     Turbo mode

#### **Auto Operation**

 Automatically adjusts to maintain a constant temperature/ humidity level

#### Smartphone Compatible

• Optional 7800-208 Smartphone Control Kit available separately

#### Superior Filtration

 Nano silver air filter releases silver ions that eliminate bacteria in the air while gold fin evaporator coating prevents the breeding and spreading of bacteria

#### Auto Restart

· Reverts to the last setting following a power failure

#### Auto Defrost

 Standard on all models, along with crankcase heater and pan heater for true cold-weather performance

#### **Ambient Operating Temperature**

• Cooling 5° to 122°F, heating 5° to 72°F

# Comfort-Cire®

### **SINGLE ZONE HEAT PUMP**

115V & 208-230V 9,000 to 24,000 BTUH





Outdoor Unit



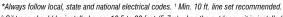




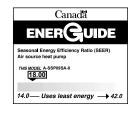


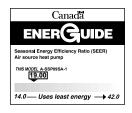
# **SSP Series**

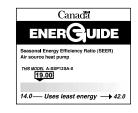
			Heat Pum	p Models			
FEATURES	SSP09SA-0	SSP09SA-1	SSP12SA-0	SSP12SA-1	SSP18SA-1	SSP24SA-1	
Power Supply	115V	208/230V	115V	208/230V	208/230V	208/230V	
Cooling Capacity (BTUH)	9,000	9,000	12,000	12,000	17,000	24,000	
SEER2/ EER2	18.0/10.1	18.0/8.8	19.0/8.8	18.0/8.8	18.3/9.9	17/9	
HSPF2	9	8.8	9.2	8.8	8.7	5	
Cooling Amps	9.4	3.7	14.1	5.9	7.6	11.4	
Dehumidification (Pts/Hr.)	2.11	2.11	2.54	2.54	3.8	5.49	
Heating Capacity (BTUH)	9,800	9,000	12,000	12,000	18,000	24,000	
Heating Amps	11.6	3.9	13.1	5.3	8.2	11	
INDOOR UNIT							
Air flow (CFM)	265/212/159	318/241/176	318/241/176	318/241/176	448/359/265	518/448/342	
Fan Speeds (Cool/Heat/Fan)	3/3/3	3/3/3	3/3/3	3/3/3	3/3/3	3/3/3	
Sound Level (dBa) H-M-L	34.5/27/19	34.5/27/19	35/27/19	34.5/26.5/19	37.5/30/19	41/31/27	
AIR DIRECTION							
Vertical Adjustment	Remote	Remote	Remote	Remote	Remote	Remote	
Horizontal (left/right)	Manual	Manual	Manual	Manual	Manual	Manual	
Auto Swing Up and Down	Standard	Standard	Standard	Standard	Standard	Standard	
INDICATOR LAMPS							
Defrost	Standard	Standard	Standard	Standard	Standard	Standard	
Temperature Setting		Remo	te Temperature S	et Range: 60°F to	90°F		
INDOOR UNIT DIMENSIONS							
Width (inches)	28 1/8	28 1/8	31 5/8	31 5/8	37 5/8	40 7/8	
Height (inches)	11 1/4	11 1/4	11 1/4	11 1/4	11 7/8	12 3/4	
Depth (inches)	7 5/8	7 5/8	7 5/8	7 5/8	8 3/8	8 5/8	
Net Wt/Shipping Wt (lbs.)	15.87/21.38	17.42/23.15	17.64/22.71	17.42/23.15	23.37/29.76	29.10/37.92	
OUTDOOR UNIT DIMENSIONS							
Width (inches)	28 3/8	28 3/8	28 3/8	28 3/8	30 1/8	35	
Height (inches)	19 1/2	19 1/2	19 1/2	19 1/2	21-7/8	26 1/2	
Depth (inches)	10 5/8	10 5/8	10 5/8	10 5/8	11 7/8	13 1/2	
Net Wt/Shipping Wt (lbs.)	53.35/58.20	51.59/56	53.79/58.42	51.59/56	62.17/67.46	96.34/104.06	
ELECTRICAL DATA OUTDOOR UNIT*							
Main Power Connection	Outdoor Unit	Outdoor Unit	Outdoor Unit	Outdoor Unit	Outdoor Unit	Outdoor Unit	
Min. Circuit Ampacity	17	10	19.5	10	15	19	
Max. Fuse/HACR	20	15	20	15	20	20	
Circuit Breaker	20	20	20	15	20	20	
Recommended Indoor/Outdoor Connecting Cable*	14 AWG / 4 conductor THHN sheilded Stranded / Rated 600V						
LINE SETS O.D. (inch)							
Liquid Connection (flare) (inch)	1/4	1/4	1/4	1/4	1/4	3/8	
Suction Connection (flare) (inch)	3/8	3/8	3/8	3/8	1/2	5/8	
Maximum Line Set Length <sup>1</sup>	82	82	82	82	98	164	
Maximum Elevation (outdoor) <sup>2</sup>	49	49	49	49	65	82	

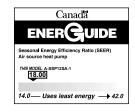


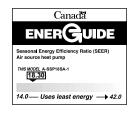
<sup>&</sup>lt;sup>2</sup> Oil traps should be installed every 16.5 to 23 feet (5-7m) when the outdoor unit is installed above the indoor unit.

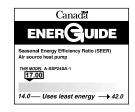












"This product complies with all California product labeling laws including, but not limited to, the Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65."

Design, specifications and performance data subject to change without notice.



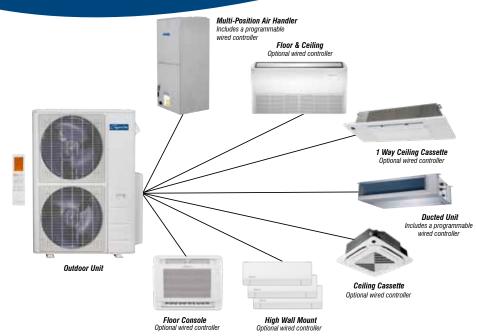


SP-1M 3/25 CA-SSP\_SPEC

# **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
- 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 Me" 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**



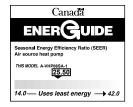


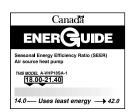
Note: See page 5 for Indoor Unit specifications

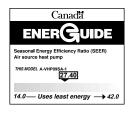
For one to one matches with all indoor "B" units.

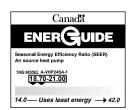
FEATURES	A-VHP06SA-1	A-VHP09SA-1	A-VHP12SA-1	A-VHP18SA-1	A-VHP24SA-1	A-VHP33SA-1	
Power Supply	208/230V,1Ph, 60Hz	208/230V,1Ph, 60Hz	208/230V,1Ph, 60Hz	208/230V,1Ph, 60Hz	208/230V,1Ph, 60Hz	208/230V,1Ph, 60Hz	
Cooling Capacity (BTUH)	6,000	9,000	12,000	18,000	24,000	33,000	
SEER2	25.5	27.4	25.4	21.4	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 2	08/230-1-60			
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 Length <sup>1</sup>	82	82	82	98	164	164	
Max. Elevation (outdoor) <sup>2</sup>	49	49	49	65	82	82	

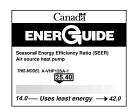
- <sup>‡</sup> Always follow local, state and national electrical codes
- <sup>1</sup> Min. 10 ft. line set recommended <sup>2</sup> Oil traps should be installed every 16.5 to 23 feet (5-7m) when the outdoor unit is installed above the indoor unit

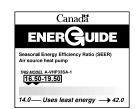






















## **UltraV Series**

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.

- 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:

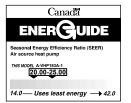
Maximum line set length varies based on number of indoor units installed. See IOM for details.

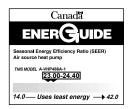
OUTDOOR UNITS							
FEATURES	A-VHP183A-1	A-VHP284A-1	A-VHP365A-1	A-VHP486A-1	A-VHP556A-1		
Cooling Capacity	19,000	27,000	36,000	47,000	51,000		
SEER2	25	23	23	23	22.2		
EER2	15	12.5	13	12	12		
HSPF4 2	10.4	10.5	10.7	11	10.5		
Heating at -22 F° Maximum capacity	10,000	14,000	22,400	24,600	17,000		
Operating Range - Cooling			-22° - 122 °F Cooli	ng			
Operating Range - Heating			-22° - 75 °F Heatir	ng			
Sound Level (dBa) H	61.5	61	65	65	65		
	01	UTDOOR UNIT DIM	ENSIONS				
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		
	ELEC	CTRICAL DATA OUT	DOOR UNIT				
Main Power Connection		Ou	tdoor 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 6	600V THNN unshield	ded stranded bare c	opper		
		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		

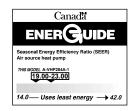




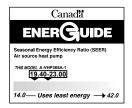












## **Advantages of Inverter Technology**

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 Me' feature on remote
- · Energy saver function
- · Smartphone compatible
- · Intelligent pre-heat
- · Self diagnostics







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							
		DIMENSI	DNS					
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"			

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



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 Me' 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 Capable
- Programmable
- · Highwall heads
  - Ducted
- · Floor/ceiling console
- Air handlers

#### WIRED PROGRAMMABLE CONTROLLER - 7800-501



- Smartphone Capable
- 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	o 86° F Heating (on remo	te)				
		A	IR 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"			

<sup>\*</sup> Unit will be available Q2



B-VHP06SA-1 to B-VHP33SA-1

- · All high wall heads come with a remote
- 'Follow Me' 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



#### **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 Me' 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				
		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				







- · 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
- · 'Follow Me' feature on remote for comfort

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 32°F - 86°F Heating		60°F - 90°F Cooling 32°F - 86°F Heating				
	A	IR 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	<b>45.19/82.45 45.19/82.45</b>		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				







## **MULTI-POSITION AIR HANDLER**

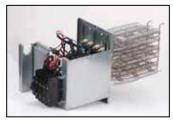
MULTI-POSITION AIR HANDLER								
FEATURES	B-VHP18AA-1	B-VHP24AA-1	B-VHP30AA-1	B-VHP36AA-1				
Cooling Capacity BTUH	18,000	23,000	33,000	36,000				
Heating Capacity BTUH	19,500	26,000	35,000	38,000				
Air Flow Range (CFM)	489-577	630-759	866-1084	866-1084				
Fan Speeds	3	3	3	3				
Sound Level Range (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				
СОР	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

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







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

# Comfort-Cire®



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.





SP-1M 3/25 CA-VHP\_SPEC

# **ZHP Series**



# AN ARTFUL COMBINATION OF EFFICIENCY AND PERFORMANCE:

The ZHP-Series showcases energy efficiency in a streamlined, modern, whisper-quiet design

#### **FEATURES**

#### Super Efficient

Rated as high as 35 SEER2 and 17.4 EER2

#### Whisper Quiet

· High tech fan in the indoor unit delivers balanced air flow

#### **Temperature Compensation**

 Indoor unit adjusts automatically as needed to eliminate stratification between ceiling and floor temps

#### **Auto Swing**

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

#### Multiple Modes

- Cooling, dehumidification only, air circulation and heat plus:
  - Sleep mode
     24-hour timer
     Turbo mode

#### **Auto Operation**

 Automatically adjusts to maintain a constant temperature/ humidity level

#### Smartphone Compatible

• Optional 7800-208 Smartphone Control Kit available separately

#### Superior Filtration

 Nano silver air filter releases silver ions that eliminate bacteria in the air while gold fin evaporator coating prevents the breeding and spreading of bacteria

#### Auto Restart

· Reverts to the last setting following a power failure

#### Auto Defrost

 Standard on all models, along with crankcase heater and pan heater for true cold-weather performance

#### **Ambient Operating Temperature**

• Cooling -22° to 122°F, heating -22° to 75°F

# Comfort-Cire®

#### **SINGLE ZONE HEAT PUMP**

208-230V 6,000 to 24,000 BTUH





Outdoor Unit









# **ZHP Series**

FEATURES	ZHP06SA-1	ZHP09SA-1	ZHP12SA-1	ZHP15SA-1	ZHP18SA-1	ZHP24SA-1
Power Supply	208/230V	208/230V	208/230V	208/230V	208/230V	208/230V
Cooling Capacity (BTUH)	6,000	9,000	12,000	17,000	17,000	24,000
SEER2/ EER2	35/17.4	33.3/17.0	29.4/14.2	25.6/15	25.6/15	25/13.1
HSPF2	30.0	22.0	14.5	16.2	16.2	TBD
Cooling Amps	2.1	3.1	3.7	5.5	5.5	TBD
Dehumidification (Pts/Hr.)	1.06	1.06	1.06	2.32	2.32	TBD
Heating Capacity (BTUH)	9,000	12,000	12,000	20,000	20,000	TBD
Heating Amps	3.9	4.3	4.3	5.9	5.9	TBD
INDOOR UNIT		•	•	•	*	
Air flow (CFM)	153-424	153-424	153-424	318-618	318-618	TBD
Fan Speeds (Cool/Heat/Fan)	3	3	3	3	3	3
Sound Level (dBa) H-M-L	19-42	19-42	19-42	16-44	16-44	TBD
AIR DIRECTION						
Vertical Adjustment	Remote	Remote	Remote	Remote	Remote	Remote
Auto Swing Up and Down	Standard	Standard	Standard	Standard	Standard	Standard
INDICATOR LAMPS						
Defrost	Standard	Standard	Standard	Standard	Standard	Standard
Temperature Setting			60°F - 90°F Cooling	32°F - 86°F Heating		
INDOOR UNIT DIMENSIONS						
Width (inches)	40.31	40.31	40.31	47.13	47.13	TBD
Height (inches)	12.64	12.64	12.64	14.61	14.61	TBD
Depth (inches)	9.69	9.69	9.69	11.02	11.02	TBD
Net Wt/Shipping Wt (lbs.)	28.22/36.82	28.22/36.82	28.22/36.82	43.65/55.56	43.65/55.56	TBD
OUTDOOR UNIT DIMENSIONS						
Width (inches)	35.04	35.04	35.04	37.24	37.24	TBD
Height (inches)	26.50	26.50	26.50	31.89	31.89	TBD
Depth (inches)	13.46	13.46	13.46	16.14	16.14	TBD
Net Wt/Shipping Wt (lbs.)	99.65/107.80	99.65/107.80	99.65/107.80	130.29/141.31	130.29/141.31	TBD
ELECTRICAL DATA OUTDOOR UNIT*						
Main Power Connection	Outdoor Unit	Outdoor Unit	Outdoor Unit	Outdoor Unit	Outdoor Unit	Outdoor Unit
Min. Circuit Ampacity	16	16	16	24.9	24.9	TBD
Max. Fuse/HACR	20	20	20	25	25	TBD
Recommended Indoor/Outdoor Connecting Cable*		14 AW	G / 4 conductor THHN s	sheilded Stranded / Rat	ed 600V	
LINE SETS O.D. (inch)						
Liquid Connection (flare) (inch)	1/4	1/4	1/4	3/8	3/8	3/8
Suction Connection (flare) (inch)	3/8	3/8	3/8	5/8	5/8	5/8
Maximum Line Set Length <sup>1</sup>	82	82	82	164	164	164
Maximum Elevation (outdoor) <sup>2</sup>	49	49	49	82	82	82

<sup>\*</sup>Always follow local, state and national electrical codes. <sup>1</sup> Min. 10 ft. line set recommended.

Design, specifications and performance data subject to change without notice

\*15K & 24K finalized specs are still pending

"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."





 $<sup>^{2}</sup>$  Oil traps should be installed every 16.5 to 23 feet (5-7m) when the outdoor unit is installed above the indoor unit.

## MINI-SPLIT COMPONENTS

#### **Installation Components**

#### **MARS HVAC Surge Protective Device**

The MARS SPD is designed to protect your HVAC equipment from power spikes, surges and transients. Power spikes and surges can damage compressors, control boards, sensors and ECM motors resulting in costly repairs and down time. The MARS SPD utilizes Thermally Protected MOV technology to provide safe and reliable surge protection.

#### Protects:

- · Compressors
- · Heat Pumps
- Ideal for
- **Ductless Systems**
- Sensors Inverter Boards

· ECM Motors

Relays

Control Boards

Transformers

#### Features:

- Easy Installation to Disconnect
- Weatherproof 4X Enclosure
- 18" Pre-stripped Leads
- Green & Red LED Status Indicators
- Thermally Protected MOVs
- 120/240V Single (Split) Phase 50/60Hz
- Short Circuit Current Rating o 22,000 Amps
- MCOV L-G 150V / L-L 300V
- Voltage Protection Rating o L-G 700V / L-L 1200V
- UL 1449 4th Edition
- Type 1 or 2 Surge Protection Rating
- 3 Year Warranty
- \$7.500 Connected **Equipment Warranty**



#### **MARS HVAC Surge Protective Device**

The MARS 83904 SPD is designed specifically for 120V furnace and air handler applications. The furnace and air handler contain components that must be protected from surges such as, ECM motors, Control Boards, Transformers. The MARS Surge utilizes thermally protected MOV technology for safe and reliable protection of equipment. The 120V Surge Device is easy to install with only 2 wires

#### Protects:

- Ideal for 120V Ductless Systems
- Furnace & Air Handlers
- Inverter Boards
- **FCM Motors**
- Control Boards
- Transformers
- Relays

#### Sensors Features:

- Easy 2 Wire Installation
- 10" Pre-stripped Leads
- Green LED Status Indicator
- Thermally Protected MOVs
- 120V Single Phase 50/60Hz Short Circuit Current Rating o 10.000 Amps
- MCOV L-G 150V
- Voltage Protection Rating o L-G 700V
- UL 1449 4th Edition
- Type 1 or 2 Surge Protection Rating
- 3 Year Warranty

83904

\$7,500 Connected Equipment Warranty



	MOV surge technology				
MC	OV	ENCLOSURE	UL 1449		

M <i>A</i>	ARS IO.	VOLTAGE	WIRE CONFIGURATION	SPD TYPE	MCOV	ENCLOSURE	UL 1449 4TH EDITION
83	905	120/240	L-L, L-G	1 or 2	150/300	Type 4X	cULus

#### MARS 60 Amp Non-Fused Disconnect with Internal Surge

**MARS Surge Protective devices** 

utilize Thermally Protective MOV surge technology

MARS Disconnect with integrated surge protector provides a unitized design for quick and clean installation. The metal weatherresistant enclosure provides additional robustness and security. MARS Surge Protectors provide the performance necessary to protect critical components in high efficiency mini-split and unitary HVAC equipment.

#### Features:

- Side open disconnect
- Integrated internal surge protector
- Thermally Protected MOV's
- · Metal-weather resistant enclosure
- External Green & Red LED Status Indicators
- · 3 Year Warranty

83910

\$7,500 Connected Equipment Warranty

#### Specifications Disconnect:

- · Single phase 240V
- 10.000 Amp rating
- · NEMA 3R enclosure
- · Weather proof enclosure
- · Available in fused and non-fused

#### No. 83910 Surge Protector:

- 120/240V Single (Split) Phase 50/60Hz
- · Short Circuit Current Rating o 22,000 Amps
- MCOV L-G 150V / L-L 300V
- · Voltage Protection Rating o L-G 700V / L-L 1200V
- · UL 1449 4th Edition
- Type 1 or 2 Surge Protection Rating

#### Protects:

- · Compressors
- · Heat Pumps
- Ideal for **Ductless System**

L-G

1 or 2

- Inverter Boards
- **ECM Motors**
- Control Boards
- Transformers
- Relavs
- Sensors

MARS NO.	DESCRIPTION	ENCLOSURE	INCLUDES SURGE PROTECTOR
83915	60 Amp Non-Fused w/Surge Module	NEMA 3R, Rainproof	MARS NO. 83910
83916	30 Amp Fused w/Surge Module	NEMA 3R, Rainproof	MARS NO. 83910
83917	60 Amp Fused w/Surge Module	NEMA 3R, Rainproof	MARS NO. 83910
MADO			

Replacement Surge Module For 83915, 83916 and 83917



# **MINI-SPLIT COMPONENTS**

## **Installation Components**

#### **Mini-Split Wire**



MARS NO.	DESCRIPTION	DIA. (in.)		
COMP	ACT 600 CABLE: 600V, UL, UV RATED, DIRECT BI	JRIAL		
84473	14/4 Solid THHN Compact 600 – 50' Roll	0.336		
84474	14/4 Solid THHN Compact 600 – 250' Reel	0.336		
84479	14/4 Stranded THHN Compact 600V – 50' Roll	0.352		
84480	14/4 Stranded THHN Compact 600V – 250' Reel	0.352		
SHIELDED	LOW VOLTAGE CABLE: 300V, NEC 725/800, ETL,	CMR/CL3R		
84485	16/2 Stranded Shielded – 50' Roll	0.191		
84484	16/2 Stranded Shielded – 250' Roll	0.191		
84491	16/4 Stranded Shielded – 50' Reel	0.212		
84483	18/4 Stranded BC Shielded – 500' Reel	0.180		
EZ-IN™ CABLE: 600V, UL, ALL PURPOSE, UV RATED, DIRECT BURIEL				
84486	14/4 Stranded E-Z In, 600V, 50' Roll	0.553		
84487	14/4 Stranded E-Z In, 600V, 250' Reel	0.553		

#### **MARS Mini-Split Run Capacitors**

MARS mini-split motor run capacitors are epoxy/resin sealed and widely used as the start-up and/or run capacitor for your motor. They feature very small dissipation factor and inherent temperature rise, high insulation resistance, and stable capacitance.

#### **Technical Specification:**

- Ambient temperature: 70° C
- Rated voltage: 450 VAC
- Capacitance tolerance: ±5
- 50/60 Hz
- Standard: IEC252-2001



MARS	DESCRIPTION	DIMENSIONS
NO.	DESCRIPTION	H D W
12380	1 MFD X 450V	1-1/2 X 1/2 X 1
12381	1.5 MFD X 450V	1-1/2 X 1/2 X 1
12382	2 MFD X 450V	1-1/2 X 1/2 X 1
12383	2.5 MFD X 450V	1-1/2 X 3/4 X 1-1/4
12384	3 MFD X 450V	1-1/2 X 3/4 X 1-1/4
12385	3.5 MFD X 450V	1-7/8 X 3/4 X 1-3/8
12386	4 MFD X 450V	1-7/8 X 3/4 X 1-3/8
12388	5 MFD X 450V	1-7/8 X 7/8 X 1-3/8
12390	6 MFD X 450V	1-7/8 X 1 X 1-1/2

# MARS Universal Remote Control for Mini-Split Units

MARS Universal Remote will operate with virtually any mini-split produced in any region of the world. Programming is accomplished by inputing your mini-split brand code or use the easy and intuitive self learn mode to set-up the remote to operate your Mini-Split. Operates with 2 AAA batteries.

- · One touch function with LCD display
- · Celsius or fahrenheit display
- Clock display
- 24 Hr. on/off timer for energy savings
- · Displays room temperature
- Energy saver feature
- Automatically determines heat or cool mode



MARS NO.	DESCRIPTION	MARS PACK
65775	Mini-Split Universal Remote	1

#### **MARS Putty**

MARS Putty is non-hardening, non-toxic and can be shaped by hand to any form, and reused if necessary, for plugging openings through foundations, sealing around electrical boxes, refrigeration tube entry and so much more.



MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
93520	1 lb. Slug - Boxed	1	50
93521	5 lb. Slug - Boxed	1	10
93522	2 lb. Slug - Boxed	1	24

# MARS Corrugated Condensate Drain Line

- · Ideal for Ductless Mini-Split
- 5/8" Diameter, 20 Ft. Long
- · Flexible Ivory
- · Corrugated non-kink



MARS NO.	DESCRIPTION	MARS PACK
79127	5/8" Diameter x 20 ft long, Condensate Drain Line	1

# MINI-SPLIT COMPONENTS

## **Installation Components**

# **Mini-Split Components**

#### MARS A/C Whips

- · Assembly UL listed
- Extra long wire for easy hook up
- Bagged individually



**Fittings** 

# Non-Metallic Fittings

MARS NO.	DESCRIPTION	MARS NO.
84131	4' x 1/2" x 10 gauge	84132
84133	4' x 3/4" x 8 gauge	84134
84135	6 x 1/2 x 10 gauge	84136
84137	6' x 3/4" x 8 gauge	84138
84139	8' x 1/2" x 10 gauge	-
84141	8' x 3/4" x 8 gauge	-
84143	10' x 3/4" x 8 gauge	-

# MARS Bulk Packaged A/C Whips, Non-Metallic Fittings

Non-metallic conduit with non-metallic fittings. These are individually packaged. Assembled with UL approved components.

- Packaged gaylord style
- Bulk box for easy access



MARS NO.		DESCRIPTION	MARS PACK
84181	4' x 1/2"	#10 ga. non-metallic whip UL	90
84183	4' x 3/4"	#8 ga. non-metallic whip UL	60
84185	6' x 1/2"	#10 ga. non-metallic whip UL	60
84187	6' x 3/4"	#8 ga. non-metallic whip UL	45

#### 3 Pole Mini-Split Safety Disconnect Switch



MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY
84711	30A-600V 3 Pole 3Ph AC Motor Switch(Bulk)	1	100

Local codes require a disconnect switch to safely shut off power for indoor mini-split AC and Heat Pumps. The disconnect switch will break both power lines L1 and L2 along with the high voltage communicating line to meet local code requirements.

• UL 30 amp rated motor disconnect • 3 pole • 600V max

#### MARS Disconnect Boxes Side Open Pullout



MARS NO	DESCRIPTION	STD. PACK
80315	60 amp non-fused	6
80316	30 amp fused	6
80317	60 amp fused	6

#### Front Open Pullout



- Market leader
- High quality box
- · UL & CUL
- NEMA 3R, rainproof
- · Single phase
- Pullout type

#1 Best Seller!

MARS NO.	DESCRIPTION	MARS PACK
83315	60 amp non fused	6
83316	30 amp fused	6
83317	60 amp fused	6
83396	Compact 30 amp fused	6



MARS No. 83335

Description:
Generic brand 60 amp
non-fused
MARS Pk: 6

# **Line Set Covers**

Attractive and durable line set cover for protecting and concealing refrigerant tubing/insulation, control wire, and drains. Ideal for ductless and all other applications requiring exposed refrigeration line sets. All connectors have front and back plates which fasten together with two screws.

- · Vulnerable components are protected from solar/environmental exposure
- · Aesthetically conceals mechanicals in architectural-grade, paintable plastic duct
- Two (2) separate cover sizes to choose from 3" and 4" duct widths - provide ample room for multiple line sets and larger tonnage equipment
- · Easy, flexible configuration for new or retrofit applications



#### 93728 3" Line Set Cover Kit:

- 4 x 93729 3.25' Straight Duct
- 1 x 93731 90° Wall Corner 1 x 93732 90° Corner
- 1 x 93733 Plane Corner 3 x 93734 Duct Connector
- 1 x 93735 End Cap
- 1 x 93736 Flexible Duct

Case Qty: 1





#### 93737 4" Line Set Cover Kit:

- 4 x 93738 3.25' Straight Duct
- 1 x 93740 90° Wall Corner
- 1 x 93741 90° Corner
- 1 x 93742 Plane Corner
- 3 x 93743 Duct Connector
- 1 x 93744 Flexible Duct

Case Qtv: 1







93729 3.25' Straight Duct, 3" Case Qty: 8



93738 3.25' Straight Duct, 4" Case Qty: 6

93729



93730 Wall Cover, 3" Case Qty: 5



93739 Wall Cover, 4" Case Qty: 5



93731 90° Wall Corner, 3" Case Qty: 10



93740 90° Wall Corner. 4" Case Qty: 5



93732 90° Corner, 3" Case Qty: 5



93741 90° Corner, 4" Case Qty: 5



93733 Plane Corner, 3" Case Qty: 10



93742 Plane Corner, 4" Case Qty: 5



93734 Duct Connector, 3" Case Qty: 10



93743 Duct Connector, 4" Case Qty: 5



93735 End Cap, 3" Case Qty: 5



93744 Flexible Duct. 4" Case Qty: 5



93736 Flexible Duct, 3" Case Qty: 10

MARNING: Cancer and Reproductive Harm www.P65Warnings.ca.gov

# **NOTES**

# **NOTES**



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 installate is responsible for verifying dimensional data on the actual product prior to begaining 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."



