

SERENITY VERTICAL STACK WATER SOURCE HEAT PUMP WITH WITH OUTSIDE AIR DAMPER (OAI) AND ECM MOTOR

CONCEALED, MASTER AND SLAVE

MODELS: 44VHB AND 44VCB • UNIT SIZES 9 – 36

MODEL: 44VHB Concealed (default) (Stand-alone) M Master S Slave

Cabinet Options:

- SSS Standard (default)
 (Chassis ships separately)
- SWC Standard (Shipped with Chassis)
- ☐ MODEL: 44VCB

(Heat Pump Chassis only)

STANDARD FEATURES:

- · 20 ga. (1.0) galvanized steel casing.
- Outside Air Damper (right location is illustrated).
- Removable chassis allows staged installation and ease of maintenance.
- ECM Ultra-high efficiency fan motor with overload protection.
- High-efficiency rotary & scroll compressors.
- Stainless steel braided hose kits for connection from piping risers to chassis.
- · TXV metering device.
- 1/2" (13) dual density insulation, exposed edges coated to prevent air erosion.
- 1" (25) throwaway filter.
- · Stainless steel insulated drain pans.
- · Factory installed P-Trap.
- Integrated drain pan with condensate overflow sensor.
- Multiple supply air discharge options, factory or field configurable.
- Unique double isolation compressor mounting for quiet operation.
- Front return panel with AW Appliance White powder coat finish.
- Exceeds ASHRAE 90.1 efficiencies.

RISER BACK RISER LEFT RISER RIGHT TOP SUPPLY AIR OPENING 3" (76)→ ** RISER CENTERLINE FOR 3" (76) DIA. AND LARGER. CONTACT FACTORY. 3" (76) → **↓** 1 1/2" $\oplus \oplus \oplus$ 3 5/8" (92)** 3 5/8" (92)** SUPPLY SUPPLY SUPPLY DRAIN RETURN RETURN RETURN \odot DH DΉ **↑** 3" (76) DRAIN DRAIN 0 ELECTRICAL 0 0 DW DW DW KNOCK-OUT DW SUPPLY ППГ 3" (76) STD. AIR FRAME DΗ DH **(** CONTROLS UPPER CONTROLS ENCLOSURE AND ELECTRICAL **ENCLOSURE POWER** CONNECTION FAN STANDARD AIR FILTER 67 3/4" FL00R (1715)TO FLOOR **MODEL 44VCB** + 2" (51) HEAT PUMP OPTIONAL (OUTSIDE AIR DAMPER) 40" 4" (102) DÍA LOWER CONTROLS (1016)ENCLOSURE 11 5/8 (295)(102) 6 1/2" (151)* -2 1/8' P TRAP *DRYWALL DIMENSION. (54)6 1/8 REQUIRED SLAB TO BOTTOM (156) OF RETURN PANEL (NOT SHOWN) CLEARANCE IS 3/4 " (19) A - 1 3/4" (44)

Dimensional Data

Unit Size	Footprint A x B	Supply Grille Nominal DW x DH	Cabinet SSS/SWC H	Filter Size
9, 12	17 x 17 (432 x 432)	15 x 10 (281 x 254)		14 x 24 (356 x 610)
15, 19	20 x 20 (508 x 508)	18 x 10 (457 x 254)	88 (2236)	16 x 25 (406 x 635)
24	24 x 24 (610 x 610)	22 x 10 (559 x 254)		20 x 25 (508 x 635)
30, 36	24 x 24 (610 x 610)	22 x 10 (559 x 254)		20 x 30 (508 x 762)





30, 30 24 x 24 (010 x 010) 22 x 10 (339 x 234) 20 x 30 (300 x	102)			
SCHEDULE TYPE:	Page 1 of 2.			
PROJECT:	Dimensions are in inches (mm).			
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.
CONTRACTOR:	2 - 17 - 25	44	NEW	44VHB-2



SERENITY VERTICAL STACK WATER SOURCE HEAT PUMP WITH ECM MOTOR

CONCEALED, MASTER AND SLAVE

MODEL SERIES: 44VHB • MODEL: 44VCB

UNIT SIZES 9 – 36

GENERAL INFORMATION

Unit Size	CFM	GPM	Cooling		Heating		Compressor		Charge (a=)
			Capacity (btuh)	EER	Capacity (btuh)	СОР	Qty.	Туре	Charge (oz)
9	325	3	10000	15.1	12000	5.2	1	Rotary	27
12	425	3.5	12000	15.3	14800	5.1	1	Rotary	26
15	500	4.5	14800	15.8	18200	5.3	1	Rotary	37
19	625	5.5	19000	16	24000	5.0	1	Scroll	36
24	800	7	24500	15.8	27800	4.6	1	Scroll	62
30	1000	8	29400	16.2	31500	4.7	1	Scroll	62
36	1200	9	35500	16.1	38200	4.6	1	Scroll	62

ELECTRICAL DATA

Unit Size	Voltage	Horsepower - RPM	Blower FLA	Compressor RLA / LRA	Total FLA	МСА	Breaker Size
9	208/1	1/4	1.1	4.0 / 22	5.1	6.1	15
	265/1	1/4	1.0	4.0 / 23	5	6.0	15
12	208/1	1/4	1.4	4.6 / 25	6	7.2	15
	265/1	1/4	1.2	3.9 / 21	5.1	6.1	15
15	208/1	1/3	1.8	5.2 / 26	7.0	8.3	15
	265/1	1/3	1.6	4.7 / 21	6.3	7.5	15
19	208/1	1/3	1.8	8.3 / 45.1	10.1	12.2	20
	208/1	1/3	2.4	10.3 / 60.2	12.7	15.3	25
24	265/1	1/3	2.1	10.3 / 60.5	12.4	15.0	25
30	208/1	1/3	3.2	11.9 / 67.8	15.1	18.1	30
	265/1	1/3	2.9	10.9 / 71.7	13.8	16.5	25
	208/1	1/2	3.7	13.5 / 82.5	17.2	20.6	35
36	265/1	1/2	3.3	12.2 / 83	15.5	18.6	30

OPTIONS:

OF HONG.		
☐ 1" (25) MERV 8 pleated filter.	☐ Cabinet stand.	Voltage:
☐ 2" (51) MERV 8 pleated filter.	☐ Tamper proof fasteners.	Single phase, 60 Hz.
☐ Plaque return panel with optional finishes.	☐ Condensate pump.	□ 208V/230V
☐ Full riser chase.	☐ Insulated heat exchanger.	☐ 265V
☐ Factory provided risers.	☐ Thermostat/Controls (by Engineered Comfort).	
☐ Stainless steel drain pans.		
☐ Toggle disconnect switch.	☐ Special features:	

NOTES:

- Wiring from electrical entry knock-out to controls enclosure is furnished and field installed by others.
- 2. Risers available from 3/4" (19) to 3" (76) dia..

☐ Door interlocking type disconnect switch.

- 3. Max. riser length is 120" (3048), 100" (2540) min.
- 4. Back riser location shown.
- 5. For indoor use only.

SCHEDULE TYPE:]		2 of 2.		
PROJECT:	Dimensions are in inches (mm).				
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.	
CONTRACTOR:	2 - 17 - 25	44	NEW	44VHB-2	