

First Co.

WSV SERIES

HydroTech™

WSVC • WSVX
Vertical Water Source Heat Pump

3/4 thru 5 Tons

R454B



AHRI CERTIFIED®
www.ahridirectory.org

Water Source HP
ANSI/AHRI/ASHRAE/ISO13256-1

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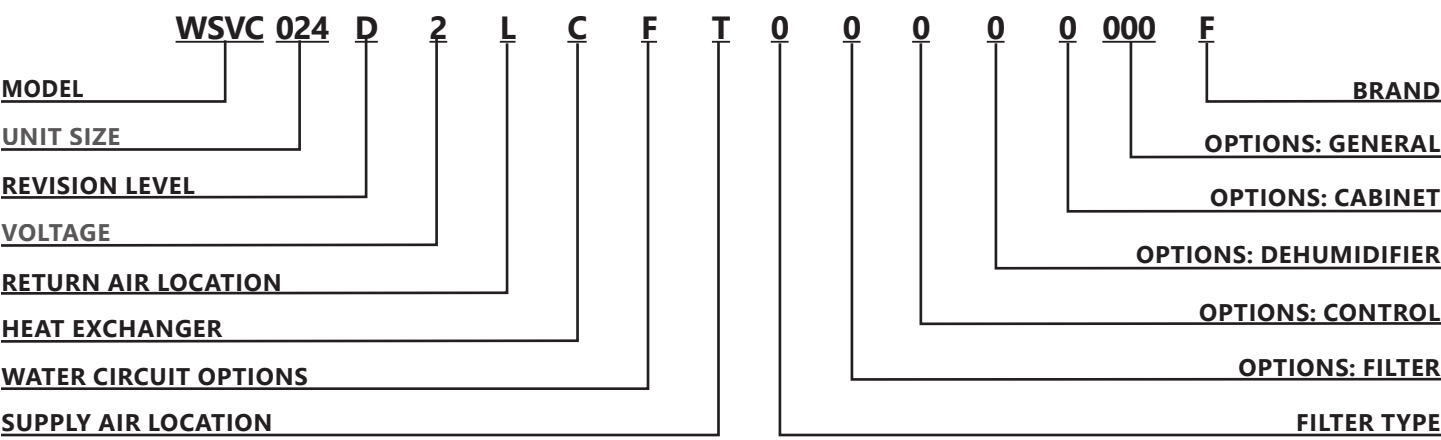
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NOMENCLATURE



In keeping with its policy of continuous progress and product improvement, First Co. reserves the right to make changes without notice.

NOMENCLATURE

OPTIONS BY MODEL

MODEL	WSVC	WSVX
WSVC VERTICAL	•	
WSVX VERTICAL ECM		•
UNIT SIZE		
009 - 9,000 BTUH	•	•
012 - 12,000 BTUH	•	•
018 - 18,000 BTUH	•	•
024 - 24,000 BTUH	•	•
030 - 30,000 BTUH	•	•
036 - 36,000 BTUH	•	•
040 - 40,000 BTUH	•	•
042 - 42,000 BTUH	•	•
048 - 48,000 BTUH	•	•
060 - 60,000 BTUH	•	•
REVISION LEVEL		
D - R454B INITIAL RELEASE	•	•
VOLTAGE		
2 - 208-230V / 1Ph / 60Hz PSC	•	•
3 - 265V / 1Ph / 60Hz PSC	•	•
6 - 208-230V / 1Ph / 60Hz ECM	•	•
7 - 265V / 1Ph / 60Hz ECM	•	•
E - 208-230V / 3Ph / 60Hz PSC		•
M - 208-230V / 3Ph / 60Hz ECM		•
RETURN AIR LOCATION		
L - LEFT HAND	•	•
R - RIGHT HAND	•	•
HEAT EXCHANGER		
C - COPPER	•	•
N - CUPRO-NICKEL	•	•
WATER CIRCUIT OPTIONS		
F - FRONT	•	•
SUPPLY AIR LOCATION		
E - END	•	•
S - SIDE	•	•
T - TOP	•	•

*Economizer with 3-way valve available with sizes 48, 60, 72 only

FILTER TYPE	WSVC	WSVX
0 - 1"+2" 2-SIDED	•	•
OPTIONS: FILTER		
0 - 1" TEMPORARY / STD	•	•
A - 2" MERV 8	•	•
B - 2" MERV 11	•	•
C - 2" MERV 13	•	•
D - 4" MERV 11	•	•
E - 4" MERV 13	•	•
F - 4" MERV 14	•	•
G - 1" MERV 8	•	•
H - 1" MERV 11	•	•
J - 1" MERV 13	•	•
K - PERMANENT + 4" MERV 11	•	•
L - PERMANENT + 4" MERV 13	•	•
M - PERMANENT + 4" MERV 14	•	•
OPTIONS: CONTROL		
0 - STD W/OUT SERVICE SWITCH	•	•
A - STD W/SERVICE SWITCH	•	•
OPTIONS: DEHUMIDIFIER		
0 - NONE	•	•
OPTIONS: CABINET		
0 - STD INSULATION	•	•
A - CLOSED CELL FOAM	•	•
B - FOIL FACED INSULATION	•	•
C - COMPRESSOR JACKET	•	•
S- CLOSED CELL + COMPRESSOR JACKET	•	•
OPTIONS: GENERAL		
000 - NONE	•	•
BRAND		
F - FIRST CO.	•	•

WSV SERIES

VERTICAL WATER SOURCE HEAT PUMP

FEATURES

The WSV Series includes many standard features found only in higher priced products, plus a number of unique features including:

- Having the smallest footprint of any product in its class ensures a perfect fit when replacing older models in tight closets, even the 036 model is only 21.5 wide by 21.5 deep.
- Blower assemblies are field-reversible 180 degrees (except model 040). This option can improve airflow when the units are installed in closets with very little room for supply plenums.
- Optional Vacated Premises Control (VPC) kit with reset feature: Ensures that the unit will operate a minimum of one or two hours per day during extended periods of unoccupancy. This option also includes an automatic reset feature. If a fault occurs, the system will shut down, but then automatically reset every 24 hours. If the same fault exists each day, the unit will lockout on the fourth day and have to be manually reset.
- Superior insulation: Fully insulated with 3/4" Tuf-Skin RX™, which offers greater sound absorption and better thermal efficiency. The insulation has a special acrylic coating formulated with an EPA registered anti-microbial agent.
- Removable discharge flange: Provides additional installation clearance.
- Tool-less filter rack installation: Can be installed after the unit is in the closet, providing additional installation clearance.
- State-of-the-art Digital Control Module

ADDITIONAL STANDARD FEATURES

- 100% factory tested
- R-454B Refrigerant - All units operate with environmentally friendly R-454B refrigerant.
- Non-corrosive Thermoplastic Condensate Pan- sloped for positive drainage
- High and low pressure service ports
- Refrigerant filter-dryer
- Panel-mounted FPT water connections - No back-up wrench needed.
- Removable panels for service
- 50 VA transformer
- 1" in throwaway filter

OPTIONAL FEATURES

- Cupronickel coaxial heat exchanger
- Vacated premises control
- E-Coated air coil corrosion protection
- Compressor cover: A heavy duty, insulated, compressor cover that reduces unwanted compressor noise (must be field installed on the WSVX unit before the unit is installed in the closet).
- Part No. K3821332 (fits WSVX18-42)
- Part No. K4251 (fits WSVX48/60)
- Evaporator temperature sensor

WSV SERIES

VERTICAL WATER SOURCE HEAT PUMP

DIGITAL CONTROL MODULE

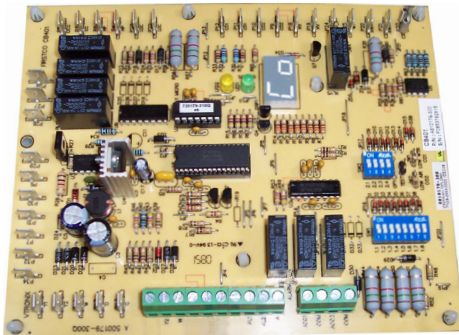
CONTROL UNIT OPERATION AND MONITORS ALL SAFETY CONTROLS. (PATENT PENDING)

STANDARD FEATURES

- Digital Diagnostic Display - A two-digit display indicates either the current operational mode or a fault code
- 24V Status LED - Green light indicates 24V power to the control module
- VPC (Vacated Premises Control) - Allows the unit to operate for one to two hours per day (total) during extended periods of unoccupancy (requires optional kit).
- Nuisance Trip Protection - Unit will attempt to start up to three times with a fault signal. If the fault continues, the unit locks out.
- Condensate overflow lockout
- High and low pressure controls
- Water coil low temperature protection
- Over / Under voltage protection
- Random re-start timer
- Anti-short cycle timer
- Test mode With LED indicator - speeds up control timers for service personnel
- Alarm relay - activated if the unit locks out
- Conformal coating (both sides) for humidity and condensation protection

DIP SWITCHES (FIELD SELECTABLE SETTINGS)

- 5 second compressor delay - blower starts before the compressor, which helps attenuate compressor start up sound.
- 45 second blower-off delay - increases cooling efficiency.
- Dehumidification mode - selects low speed fan operation for increased humidity removal.
- VPC switch - selects one or two hour daily operation (requires optional kit)
- Lower water and air coil temperature cutout options - optional 10°F. cutouts for applications where water temperature is below 50°F. (requires antifreeze solution).
- Two accessory relays - The relays can cycle with the fan or compressor. In addition, relay number one can be configured for use with slow opening water valves (60 second pre-compressor initialization) and relay number 2 can be configured for a 30 second post fan delay.



Digital Control Module



Optional
Vacated Premises Selector Switch
(Kit# 9WS01)



Thermoplastic Drain Pan

ELECTRICAL DATA

Model	Voltage	Compressor		Blower		MIN. CIRCUIT AMPACITY	MAX. CIRCUIT PROTECTION
		RLA	LRA	FLA	HP		
WSVC009*	208/230V-1-60	3.97	22	0.6	1/12	6	15
	265V-1-60	3.97	23	0.6	1/12	6	15
WSVC012*	208/230V-1-60	4.7	25	0.7	1/10	7	15
	265V-1-60	3.91	21	0.7	1/10	6	15
WSVC018*	208/230V-1-60	6.6	36	0.9	1/8	10	15
	265V-1-60	5.45	36	0.9	1/8	8	15
WSVC024*	208/230V-1-60	7.7	43	1.6	1/6	12	15
	265V-1-60	8.09	45	1.4	1/6	12	15
WSVC030*	208/230V-1-60	12.8	71	3.1	1/2	20	30
	265V-1-60	10.4	68	2.7	1/2	16	25
WSVC036*	208/230V-1-60	15.5	86	3.1	1/2	23	35
	265V-1-60	10.26	55	2.7	1/2	16	25
	208/230V-3-60	21.84	70	3.1	1/2	31	50
	460V-3-60	7.1	39	1.6	1/2	11	15
WSVC042*	208/230V-1-60	17.3	96	3.1	1/2	25	40
	208/230V-3-60	23.2	90	3.1	1/2	33	50
	460V-3-60	6.5	36	1.6	1/2	10	15
WSVC048*	208/230V-1-60	19.3	102	3.5	1/2	28	45
	208/230V-3-60	22.1	123	3.5	1/2	32	50
	460V-3-60	10.7	60	1.4	1/2	15	25
WSVC060*	208/230V-1-60	26.6	148	5.7	3/4	39	60
	208/230V-3-60	16.7	93	5.7	3/4	27	40
	460V-3-60	6.6	60	2.4	3/4	11	15

PERFORMANCE DATA

PERFORMANCE DATA - AT STANDARD OPERATING CONDITIONS						
MODEL	NOM. CFM	GPM	WATER LOOP (Entering Water Temperature)			
			85°F		70°F	
			COOLING	EER	HEATING	COP
WSVC009D	300	2.6	8,500	13.3	12,000	4.3
WSVC012D	340	3.0	11,000	13.3	12,500	4.3
WSVC018D	650	4.5	17,100	13.0	15,500	4.3
WSVC024D	680	6.0	22,000	13.0	27,000	4.3
WSVC030D	930	7.5	26,000	13.0	32,000	4.3
WSVC036D	950	9.0	33,400	13.0	39,000	4.3
WSVC042D	1250	10.7	39,000	13.0	49,500	4.3
WSVC048D	1350	12.0	47,000	13.6	57,000	4.3
WSVC060D	1640	15.0	56,000	13.2	68,500	4.3

Note:

Tabulated performance data is at noted entering water temperature, entering air conditions of 80.6°F DB / 66.2°F WB for cooling and entering air conditions of 68°F DB / 59°F WB for Heating at 208V CFM

PERFORMANCE DATA						
MODEL	NOM. CFM	GPM	GROUND WATER (Entering Water Temperature)			
			86°F		68°F	
			COOLING	EER	HEATING	COP
WSVC009D	300	2.6	10,000	19.0	9,500	3.6
WSVC012D	340	3.0	13,000	19.0	10,500	3.6
WSVC018D	650	4.5	20,200	18.0	22,000	3.8
WSVC024D	680	6.0	25,000	18.0	22,400	3.6
WSVC030D	930	7.5	29,800	18.0	26,000	3.6
WSVC036D	950	9.0	38,000	18.0	33,000	3.6
WSVC042D	1250	10.7	43,500	18.0	40,000	3.6
WSVC048D	1350	12.0	53,000	19.0	46,000	3.7
WSVC060D	1640	15.0	62,000	18.8	55,000	3.7

Note:

Tabulated performance data is at noted entering water temperature, entering air conditions of 80.6°F DB / 66.2°F WB for cooling and entering air conditions of 68°F DB / 59°F WB for Heating at 208V CFM

BLOWER DATA

MODEL NUMBER	FAN SPEED	CFM VS EXTERNAL STATIC PRESSURE (INCHES OF WATER)					
		0.1	0.2	0.3	0.4	0.5	0.6
WSVC009D	HIGH	440	390	310	---	---	---
	MED	330	300	220	---	---	---
WSVC012D	HIGH	490	460	430	400	---	---
	MED	370	350	330	310	---	---
WSVC018D	HIGH	835	790	730	670	610	540
	MED	710	670	620	560	510	---
	LOW	580	535	490	---	---	---
WSVC024D	HIGH	910	860	800	730	650	560
	MED	800	770	720	660	590	---
	LOW	650	620	590	550	490	---
WSVC030D	MED - HIGH	1160	1100	1030	950	870	780
	MED - LOW	1080	1030	960	890	820	---
	LOW	1000	950	890	830	760	---
WSVC036D	HIGH	1300	1230	1160	1090	1010	930
	MED - HIGH	1220	1160	1100	1040	960	---
	MED - LOW	1100	1060	1010	950	890	---
WSVC042D	HIGH	1750	1720	1680	1620	1550	1460
	MED - HIGH	1530	1510	1480	1450	1390	---
	MED - LOW	1260	1250	1230	1220	1200	---
WSVC048D	HIGH	1810	1780	1740	1660	1580	1490
	MED	1680	1660	1640	1590	1530	---
	LOW	1560	1550	1540	1510	1460	---
WSVC060D	HIGH	2160	2090	2010	1940	1830	1730
	MED	2030	1970	1900	1830	1750	---
	LOW	1830	1800	1740	1680	1610	---

BLOWER DATA (CONT'D)

MODEL NUMBER	SPEED vs. 0.1 EXT. STATIC H2O	DUCTED DISCHARGE						
		OCTAVE BAND FREQUENCY, Hz						
		125	250	500	1000	2000	4000	8000
WSVC018D*	High Speed	40.8	45.3	56.5	59.1	52.8	52.3	44
	Med. Speed	37.4	43.6	52.7	55.2	49.1	48.3	38.7
	Low Speed	33.1	40.8	47.6	50.2	44.3	42.2	31.3
WSVC024D*	High Speed	46.7	49.2	59.7	63.7	58.4	57.8	50.3
	Med. Speed	46.1	46.8	56.6	60.2	55	54.1	46
	Low Speed	42.4	43.5	51.6	55	49.8	48.5	38.7
WSVC030D*	High Speed	48.5	56.7	64.5	72.2	65.9	65.2	58.6
	Med. High Speed	48.3	53.9	64.2	71.2	64.9	64	57.5
	Med. Low Speed	46.8	52.2	63	68.9	63	62.2	55.7
	Low Speed	44.6	50.1	61.3	65.5	60.1	59.2	52.3
WSVC036D*	High Speed	50.6	58	67.1	73.2	68.9	67.2	60.4
	Med. High Speed	49.6	56.2	66.1	71.5	67.2	65.7	58.8
	Med. Low Speed	47.6	53.4	63.8	68.9	64.6	62.9	55.8
	Low Speed	44.7	50.3	61	64.9	60.6	58.8	51.5
WSVC042D*	High Speed	47.2	54.5	62.5	69.5	65	64.7	59
	Med. High Speed	41.2	48.9	57.2	62.3	58.2	57.5	51.2
	Med. Low Speed	37.3	44.5	51.7	55.9	52	50.7	43
	Low Speed	33.5	42.3	47.2	51.6	47.4	45.5	36.4

CASE RADIATED						
OCTAVE BAND FREQUENCY, Hz						
125	250	500	1000	2000	4000	8000
46.4	44.6	54.6	47.2	42.2	38.8	31.6
45.6	42.5	51	43.5	38.7	35.2	27.4
42.3	39.3	44.6	38.5	34.1	30.2	23.5
55.8	47.9	55.3	52.8	48.2	43.5	36.4
55.4	43.8	50	46.6	41.9	37.4	30.2
57.6	42.1	49.8	44	39.7	34.9	26.5
52.6	55.3	58.4	59.6	55.3	51.2	44.6
51.9	52.2	58	58.8	54.2	50.2	43.6
51.6	50.5	57	56.6	52.3	48.3	41.8
50.1	48.1	55.8	53.4	49.5	45.5	38.7
54.4	54.8	61.3	60.2	57.4	52.7	45.7
52.8	51.7	57.5	56.2	53.2	48.3	41.7
53.5	50.5	57.5	55.4	52.4	47.4	40.8
52.9	47.4	55.1	52.4	49.3	44.5	37.1
51.7	52	58.6	58	53.6	48.2	44
52.1	47.4	54.2	51.1	46.6	41.1	36.7
47.8	43.5	49.1	44.8	40.5	34.9	29.7
46.6	41.2	44.7	40.3	36.5	31.1	24.9

DIMENSIONAL DATA

MODEL NUMBER	DIMENSIONS – REFERENCE/DESCRIPTION								
	A	B	C	D	E	F	G	H	J
	Width	Depth	Height		Duct			Duct	
WSVC009D*	21.50	21.50	28.25	9.38	8.00	4.25	4.38	13.00	4.25
WSVC012D*	21.50	21.50	28.25	9.38	8.00	4.25	4.38	13.00	4.25
WSVC018D*	21.50	21.50	36.25	5.50	13.75	2.25	3.63	16.25	1.75
WSVC024D*	21.50	21.50	36.25	5.50	13.75	2.25	3.63	16.25	1.75
WSVC030D*	21.50	21.50	39.25	5.50	13.75	2.25	3.63	16.25	1.75
WSVC036D*	21.50	21.50	39.25	5.50	13.75	2.25	3.63	16.25	1.75
WSVC042D*	21.50	26.00	43.25	5.00	15.75	0.75	5.00	16.25	4.75
WSVC048D*	26.00	26.00	43.25	7.12	17.88	1.00	5.00	17.88	3.13
WSVC060D*	26.00	26.00	43.25	7.12	17.88	1.00	5.00	17.88	3.13

MODEL NUMBER	DIMENSIONS – REFERENCE/DESCRIPTION								
	K	M	N	P	Q	R	CONDENSER WATER CONNEC-TIONS	CONDEN-SATE CONNEC-TIONS	NOM. FILTER SIZE
	WATER IN	CONDEN-SATE DRAIN	WATER OUT	R/A DUCT FLANGE WIDTH	R/A DUCT FLANGE HEIGHT	FILTER RACK HEIGHT			
WSVC009D*	21.75	7.25	12.75	17.50	8.25	10.25	3/4" F.P.T	3/4" F.P.T	10 X 18 X 1
WSVC012D*	21.75	7.25	12.75	17.50	8.25	10.25	3/4" F.P.T	3/4" F.P.T	10 X 18 X 1
WSVC018D*	21.75	7.25	12.75	17.50	16.00	18.00	3/4" F.P.T	3/4" F.P.T	18 X 20 X 1
WSVC024D*	21.75	7.25	12.75	17.50	16.00	18.00	3/4" F.P.T	3/4" F.P.T	18 X 20 X 1
WSVC030D*	21.75	7.25	12.75	17.50	18.00	20.00	3/4" F.P.T	3/4" F.P.T	20 X 20 X 1
WSVC036D*	21.75	7.25	12.75	17.50	18.00	20.00	3/4" F.P.T	3/4" F.P.T	20 X 20 X 1
WSVC042D*	21.75	7.25	12.75	22.00	22.00	24.00	3/4" F.P.T	3/4" F.P.T	24 X 24 X 1
WSVC048D*	21.75	6.25	10.75	22.00	28.00	30.00	1" F.T.P	3/4" F.P.T	24 X 30 X 1
WSVC060D*	21.75	6.25	10.75	22.00	28.00	30.00	1" F.T.P	3/4" F.P.T	24 X 30 X 1

Note:

1. Right Hand and Left Hand return air is determined by facing the front of the unit.

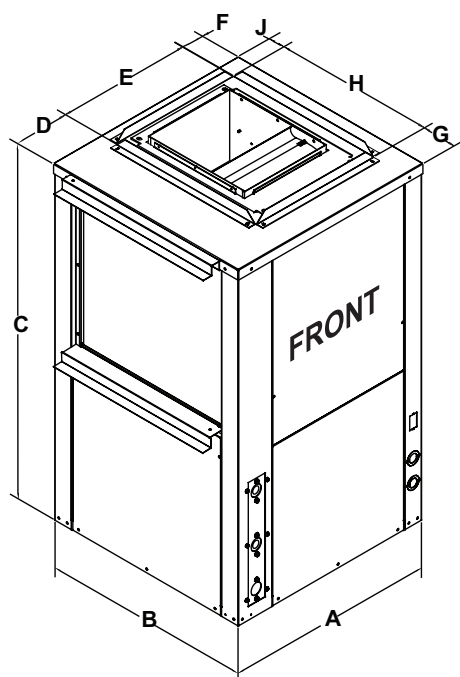
WSV SERIES

VERTICAL WATER SOURCE HEAT PUMP

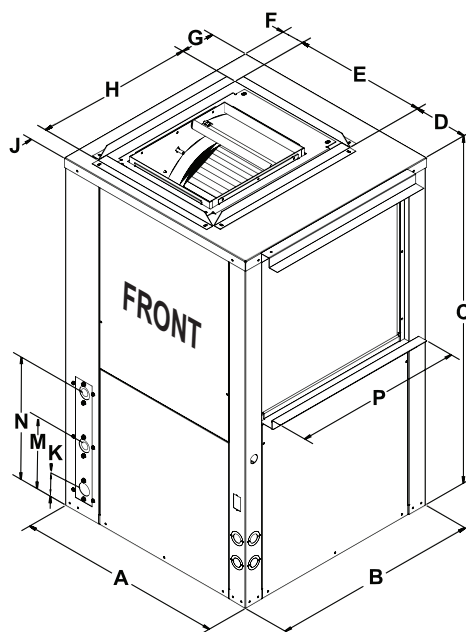
WSVC

DATA TABLES

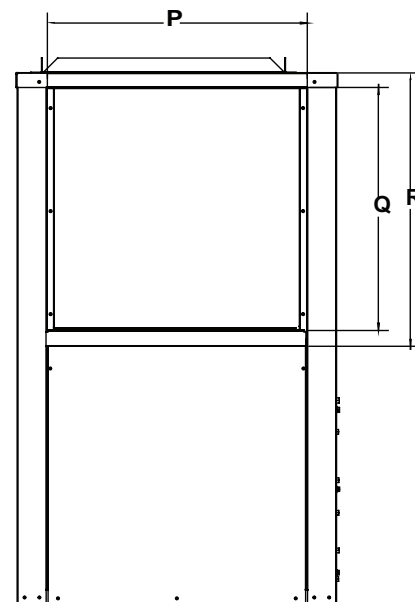
DIMENSIONAL DATA (CONT'D)



LEFT HAND UNIT



RIGHT HAND UNIT



SIDE VIEW

TECHNICAL DATA

MODEL – WSVc		SIZE								
		009	012	018	024	030	036	042	048	060
Compressor (1 Each)	1 EACH									
Refrigerant Type	R454B									
Factory Charge	lb [kg]	1.3 [0.59]	1.6 [0.73]	1.48 [0.67]	1.72 [0.78]	2.64 [1.2]	2.2 [1]	3.38 [1.53]	4.34 [1.97]	4.7 [2.13]
A2L Sensor and Mitigation	YES/NO	NO	NO	NO	NO	NO	NO	NO	YES	YES
Minimum Room Area	Ft²[m²]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	65 [6.05]	117 [199]
Minimum Air Flow	CFM [m³/hr]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	65 [6.05]	127 [216]
Motor	Type	PSC								
	Speeds	4								
	HP	1/10	1/10	1/8	1/6	1/2	1/2	1/2	1/2	3/4
Blower Wheel (Dia x W)	Size	6.75 x 5.50		9x7	9x7	9x7	9x8	9x8	10x10	10x10
Water Connection	(FPT)	1/2		3/4					1	
Condensate Connection	(FPT)	1/2		3/4					1	
Standard TA Filter 1”	Size/Qty	10x18 (1)		12x16 (2)	12x17 (2)		14x19 (2)		19x19 (2)	
Operating Weight	CONTACT FACTORY									
Shipping Weight										

WSV SERIES

VERTICAL WATER SOURCE HEAT PUMP

WSVX

DATA TABLES

ELECTRICAL DATA

Model	Voltage	Compressor		Blower		MCA	MOP
		RLA	LRA	FLA	HP		
WSVX018*	208/230V-1-60	6.6	36	2.8	1/3	12	15
	265V-1-60	5.45	36	2.6	1/3	10	15
WSVX024*	208/230V-1-60	7.7	43	2.8	1/3	13	20
	265V-1-60	8.09	45	2.6	1/3	13	20
WSVX030*	208/230V-1-60	12.8	71	4.6	1/2	21	30
	265V-1-60	10.4	68	3.6	1/2	17	25
WSVX036*	208/230V-1-60	15.5	86	4.6	1/2	24	35
	265V-1-60	10.26	55	3.6	1/2	17	25
	208/230V-3-60	21.84	70	4.6	1/2	32	50
	460V-3-60	7.1	39	2.1	1/2	11	15
WSVX042*	208/230V-1-60	17.3	96	4.6	1/2	27	40
	208/230V-3-60	23.2	90	4.6	1/2	34	50
	460V-3-60	6.5	36	4.6	1/2	13	15
WSVX048*	208/230V-1-60	19.3	102	4.6	1/2	29	50
	208/230V-3-60	22.1	123	2.1	1/2	30	50
	460V-3-60	10.7	60	7.6	1	21	25
WSVX060*	208/230V-1-60	26.6	148	7.6	1	41	60
	208/230V-3-60	16.7	93	4	1	25	45
	460V-3-60	6.6	60	7.6	1	16	15

PERFORMANCE DATA

PERFORMANCE DATA - AT STANDARD OPERATING CONDITIONS						
MODEL	CFM	GPM	WATER LOOP (Entering Water Temperature)			
			85°F		70°F	
			COOLING	EER	HEATING	COP
WSVX018*	550	5.0	17,000	14	18,800	19.5
WSVX024*	750	6.1	23,400	14.2	25,400	19.8
WSVX030*	930	9.0	28,000	14	30,400	19.7
WSVX036*	950	10.0	33,000	14	35,000	18.4
WSVX042*	1280	10.5	40,500	14	44,500	19.9
WSVX048*	1400	12.5	47,000	14	49,000	19.6
WSVX060*	1760	15.5	57,000	14	59,000	19.4

Note:

Tabulated performance data is at noted entering water temperature and entering air conditions of 80.6°F DB / 66.2°F WB for cooling and 68°F DB/ 59°F WB for heating at 208V CFM.

PERFORMANCE DATA						
MODEL	CFM	GPM	GROUND WATER (Entering Water Temperature)			
			86°F		68°F	
			COOLING	EER	HEATING	COP
WSVX018*	550	5.0	17,500	4.3	13,500	3.6
WSVX024*	750	6.1	32,000	4.3	23,000	3.5
WSVX030*	930	9.0	35,400	4.3	26,600	3.7
WSVX036*	950	10.0	39,500	4.3	31,800	3.65
WSVX042*	1280	10.5	47,500	4.4	39,000	4.0
WSVX048*	1400	12.5	54,000	4.3	47,000	3.7
WSVX060*	1760	15.5	70,000	4.3	51,500	3.7

Note:

Tabulated performance data is at noted entering water temperature, entering air conditions of 80.6 degree DB / 66.2°F WB for cooling and entering air conditions of 68°F DB / 59 degree WB for Heating at 208V CFM.

BLOWER DATA

MODEL NUMBER	FAN SPEED	MOTOR TERMINAL NO.	CFM vs EXTERNAL STATIC PRESSURE (inches of water)					
			0.1	0.2	0.3	0.4	0.5	0.6
WSVX018	HIGH STATIC	4	---	---	720	690	640	580
	HIGH	3	620	590	540	500	460	---
	LOW	2	540	490	450	390	360	---
WSVX024	HIGH STATIC	4	---	---	1000	930	850	750
	HIGH	3	790	760	720	690	650	---
	LOW	2	630	590	540	500	460	---
WSVX030	HIGH STATIC	4	---	---	1050	960	890	---
	HIGH	3	970	950	920	890	850	---
	LOW	2	820	780	750	720	690	---
WSVX036	HIGH STATIC	4	---	---	1040	970	910	---
	HIGH	3	1050	1020	990	940	870	---
	LOW	2	920	890	860	830	790	---
WSVX040	HIGH STATIC	4	---	---	1140	1110	1080	---
	HIGH	3	1080	1050	1030	990	960	---
	LOW	2	950	920	890	860	820	---
WSVX042	HIGH STATIC	4	---	---	1460	1430	1400	1340
	HIGH	3	1370	1340	1310	1280	1250	---
	LOW	2	1060	1030	1000	960	920	---
WSVX048	HIGH STATIC	4	---	---	1840	1820	1790	1740
	HIGH	3	1530	1500	1470	1440	1410	---
	LOW	2	1190	1160	1130	1100	1070	---
WSVX060	HIGH STATIC	4	---	---	1950	1920	1890	1840
	HIGH	3	1880	1860	1840	1820	1790	---
	LOW	2	1530	1500	1470	1440	1410	---

All models factory wired for speed taps 1, 2 and 3.

Note:

For superior dehumidification in the summer, all models operate at a slightly lower speed for a maximum of ten minutes before shifting to a higher speed. An optional "High" speed is available for higher static applications.

WSV SERIES

VERTICAL WATER SOURCE HEAT PUMP

WSVX

DATA TABLES

DIMENSIONAL DATA

Reference/ Description		MODEL NUMBER							
		WSVX018	WSVX024	WSVX030	WSVX036	WSVX040	WSVX042	WSVX048	WSVX060
A	Width	21.50	21.50	21.50	21.50	21.50	21.50	26.00	26.00
B	Depth	21.50	21.50	21.50	21.50	21.50	26.00	26.00	26.00
C	Height	36.25	36.25	39.25	39.25	39.25	43.25	43.25	43.25
D		5.62	5.62	5.62	5.62	5.62	5.00	7.12	7.12
E	Duct	13.75	13.75	13.75	13.75	13.75	15.75	17.75	17.75
F		2.25	2.25	2.25	2.25	2.25	.75	1.25	1.25
G		3.63	3.63	3.63	3.63	3.63	5.00	6.25	6.25
H	Duct	16.25	16.25	16.25	16.25	16.25	16.25	17.75	17.75
J		1.75	1.75	1.75	1.75	1.75	4.75	2.12	2.12
K	Water In	2.50	2.50	2.50	2.50	2.50	2.50	2.75	2.75
M	Condensate Drain	7.00	7.00	7.00	7.00	7.00	7.00	6.25	6.25
N	Water Out	12.50	12.50	12.50	12.50	12.50	12.50	10.75	10.75
P	R/A Duct Flange Width	17.50	17.50	17.50	17.50	17.50	22.00	22.00	22.00
Q	R/A Duct Flange Height	16.00	16.00	18.00	18.00	18.00	22.00	28.00	28.00
R	Filter Rack Height	18.00	18.00	20.00	20.00	20.00	24.00	28.00	28.00
	Condenser Water Connections	3/4" F. P. T.	3/4" F. P. T.	3/4" F. P. T.	3/4" F. P. T.	3/4" F. P. T.	3/4" F. P. T.	1" F. P. T.	1" F. P. T.
	Condensate Connections	3/4" F. P. T.	3/4" F. P. T.	3/4" F. P. T.	3/4" F. P. T.	3/4" F. P. T.	3/4" F. P. T.	3/4" F. P. T.	3/4" F. P. T.
	Nom. Filter Size	18 x 20 x 1	18 x 20 x 1	20 x 20 x 1	20 x 20 x 1	20 x 20 x 1	24 x 24 x 1	24 x 30 x 1	24 x 30 x 1
	Ship WT.	205	215	230	230	250	265	305	325

Note:

1. Right Hand and Left Hand return air is determined by facing the front of the unit.

Data is subject to change. Please verify current information on www.firstco.com.



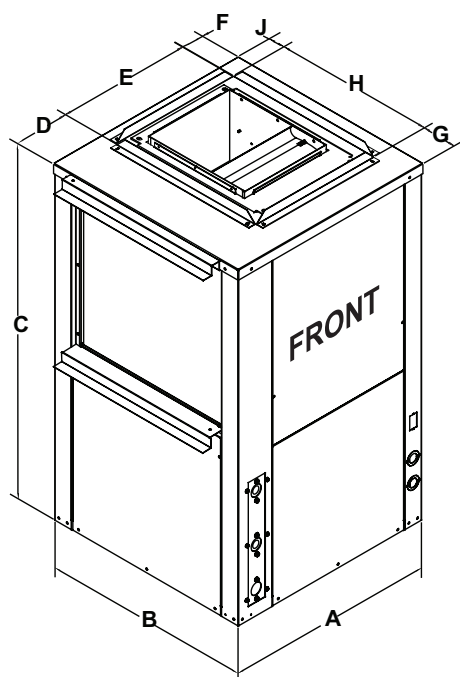
WSV SERIES

VERTICAL WATER SOURCE HEAT PUMP

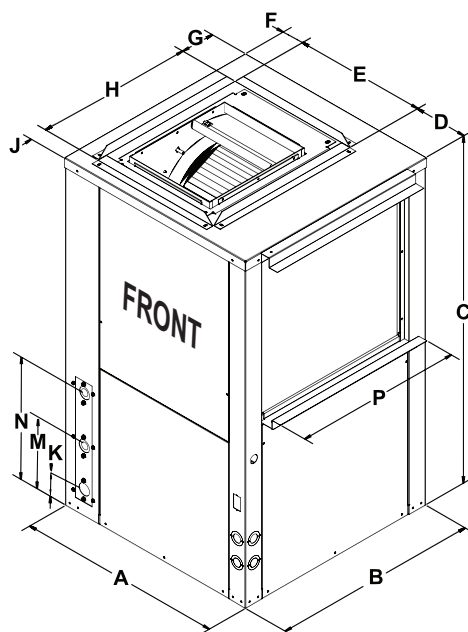
WSVX

DATA TABLES

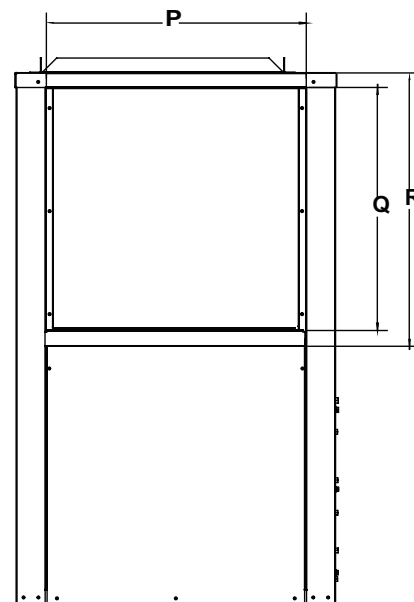
DIMENSIONAL DATA (CONT'D)



LEFT HAND UNIT



RIGHT HAND UNIT



SIDE VIEW

TECHNICAL DATA

MODEL – WSVX		SIZE						
		018	024	030	036	042	048	060
Compressor (1 Each)	1 EACH							
Refrigerant Type	R454B							
Factory Charge	lb [kg]	1.48 [0.67]	1.72 [0.78]	2.64 [1.2]	2.2 [1]	3.38 [1.53]	4.34 [1.97]	4.7 [2.13]
A2L Sensor and Mitigation	YES/NO	NO	NO	NO	NO	NO	YES	YES
Minimum Room Area	Ft²[m²]	N/A	N/A	N/A	N/A	N/A	65 [6.05]	117 [199]
Minimum Air Flow	CFM [m³/hr]	N/A	N/A	N/A	N/A	N/A	65 [6.05]	127 [216]
Motor	Type	ECM						
	Speeds	3						
	HP	1/8	1/6	1/2	1/2	1/2	1/2	3/4
Blower Wheel (Dia x W)	Size	9x7	9x7	9x7	9x8	9x8	10x10	10x10
Water Connection	(FPT)	3/4					1	
Condensate Connection	(FPT)	3/4					1	
Standard TA Filter 1”	Size/Qty	12x16 (2)	12x17 (2)		14x19 (2)		19x19 (2)	
Operating Weight	CONTACT FACTORY							
Shipping Weight								



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