

XVAQ Series

Vertical / Horizontal / Counterflow
Hot Water Heating / No Cooling
Up to 77,800 BTUH Heating



Description :

The **XVAQ** series air handler converts a properly sized natural gas, L.P., or oil-fired water heater into a highly efficient space heating appliance. The **XVAQ** series is ideal for providing space heat for room additions, public housing projects, or any other applications where forced air cooling is not required.

Each air handler includes a hot water coil, circulating pump, air purge valve, hot water check valve, flue gas door switch, 120V blower motor, throw away filter (bottom return only), and 24V transformer.

No special water heater is required! Contact the factory for assistance in sizing.

When space heating is needed, the wall thermostat energizes the circulating pump which circulates hot water (135-140°F) from the water heater to the hot water coil in the air handler. As the fan motor forces cool return air from the home over the hot water coil, the air absorbs heat from the hot water. This warm air (105-110°F) is then circulated throughout the duct system and into the home. The water leaving the hot water coil is then returned to the water heater to be reheated.



(Water heater not provided by First Co.)

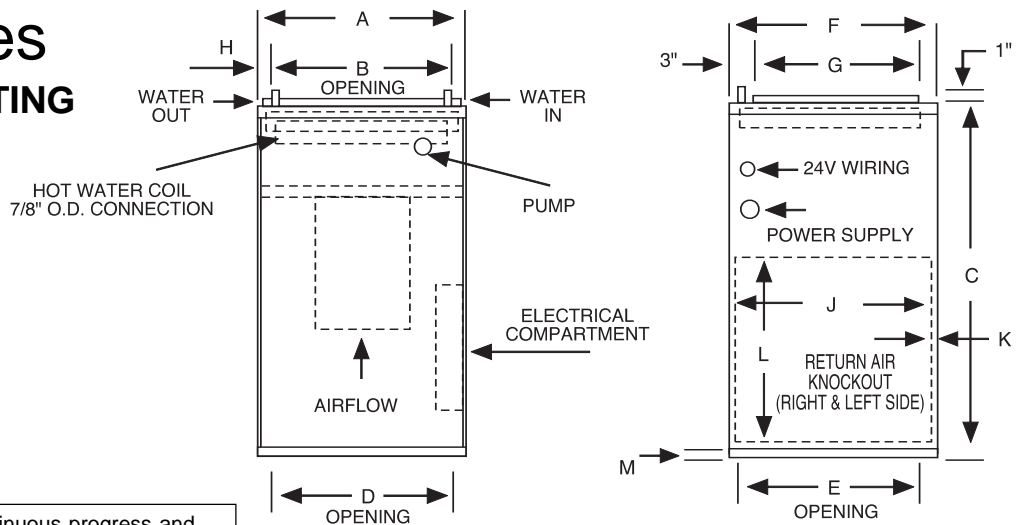


FEATURES:

1. Built-in **circulating pump**, **air purge valve**, and easy access hot water **check valve**
2. Compatible with all properly sized gas or oil-fired **water heaters**
3. Flue gas **door switch** - This device will not allow the blower motor to operate without the service door in place. Therefore products of combustion from the water heater flue cannot be delivered through the duct system and into the living space
4. **Copper tube** heating coil
5. **3 speed motor** for accurate CFM control
6. **Compact** size - only 27 inches high (largest model)
7. **Left or right side return air** - an external filter rack must be field-supplied when using side entry return air
8. Galvanized steel, fully **insulated cabinet**
9. Optional **freeze protector** for hot water coil turns on pump when temperature falls below 38 degrees (Part no. **941-1**, field installed)

XVAQ Series

HOT WATER HEATING



In keeping with its policy of continuous progress and product improvement, First Operations reserves the right to make changes without notice. Maintenance for all First Co. products is available under "Product Maintenance" at www.firstco.com.

ELECTRICAL DATA					
UNIT MODEL	MOTOR HP (120V)	AMPS		MIN. CIR. AMPACITY	MAX. HACR BREAKER
		MOTOR	PUMP		
XVAQ22-2	1/5	6.0	0.57	9	15
XVAQ30-3	1/3	6.5	0.57	9	15
XVAQ50-3	1/2	8.5	0.57	12	15

KNOCKOUT DIMENSIONS				
UNIT MODEL	J	K	L	M
XVAQ22-2	12	1.5	14	1.5
XVAQ30-3	12	1.5	14	1.5
XVAQ50-3	16	1.0	16	1.5

PHYSICAL DIMENSIONS									
UNIT MODEL	A	B	C	D	E	F	G	H	FILTER SIZE
XVAQ22-2	14	12 1/2	25	10	18	20	15 3/4	1	14 X 20 X 1
XVAQ30-3	14	12 1/2	25	10	18	20	15 3/4	1	14 X 20 X 1
XVAQ50-3	20	18 1/8	27	17	20	23	19	1	20 X 22 X 1

PERFORMANCE DATA						BLOWER DATA					
UNIT MODEL	GPM (HEATING)	P.D. (FT. WATER) (COIL ONLY)	BTUH (1000) (1) AT ENTERING WATER TEMPERATURE			MOTOR SPEED	CFM vs. EXTERNAL STATIC PRESSURE				
			120°F	140°F	180°F		0.10	0.20	0.30	0.40	0.50
XVAQ22-2	3	3.8	15.7	22.0	34.3	HIGH	830	790	750	690	620
						MED.	720	670	620	570	510
						MED. LOW	550	510	470	430	390
XVAQ30-3	3	5.0	21.4	30.0	47.1	MED. HIGH	1050	1000	960	900	860
						MED. LOW	910	860	820	760	690
						LOW	730	690	650	600	550
XVAQ50-3	3.5	5.0	35.4	50.0	77.8	HIGH	1660	1590	1500	1420	1320
						MED.	1520	1460	1400	1330	1240
						LOW	1350	1310	1270	1210	1100

(1) BTUH calculated at nominal CFM.

- NOTES:**
- Motors are 120V and multi-speed.
 - Heating output will not exceed output of water heater.
 - Approved for installation with 0" clearance to combustible materials.
 - Heat BTUH is at 70°F entering air temperature.