

AQUA THERM AIR HANDLER

MAX-HW Series

Vertical / Horizontal Air Handler

DX cooling / Hot water heating

1-1/2 through 5 tons, up to 150,700 BTUH Heating

P-1/2/92
USM coil



Description :

The MAX-HW series air handler is the first of its kind to offer high efficiency cooling as well as high efficiency heating for single family homes. Today's higher efficiency condensing units demand larger cooling coils for efficient operation. Optional field installed expansion valves are also available for optimum performance.

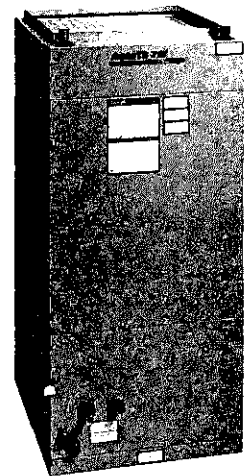
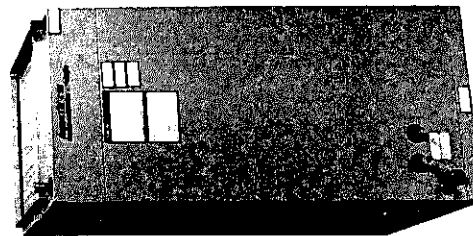
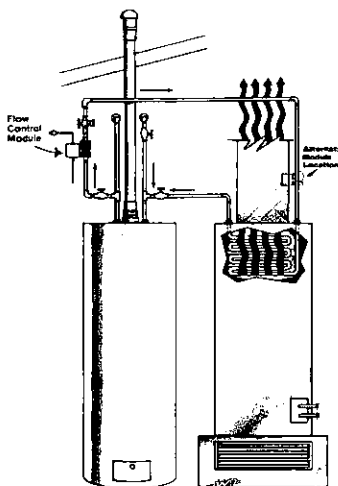
Each air handler includes a cooling coil, a separate hot water coil, blower door safety switch (except 60MAX-HW), 120V blower/motor, throwaway filter, and 24V control.

This air handler is compatible with all sources of hot water not exceeding 180 degree F.

Water heater application - When connected to a standard gas or oil - fired water heater, this air handler converts it to a highly efficient, multi - purpose appliance that can heat an apartment, condominium, or home in addition to providing domestic hot water.

A U.L. listed "flow control module" is an optional accessory which consists of a circulating pump, pump relay, check valve, air purge valve, and a 6 foot plug-in line cord. The module is designed to circulate a precise amount of hot water between the hot water source and the air handler. Flow control modules are shipped separate for field installation. If the module is not needed, order the air handler "less module".

When the source of hot water is a boiler, the "flow control module" is not normally required.



FEATURES:

1. Piston-type metering device on cooling coil
2. Optional expansion valve kit for cooling coil (field installed)
3. Blower door safety switch (except 60MAX-HW)
4. Slide out hot water coil assembly for easier service
5. Copper tube heating and cooling coils
6. Compatible with all properly sized gas or oil-fired water heaters and boilers
7. Compatible with most major brands of split con-
densing units
8. Factory installed filter
9. Factory installed horizontal drain pan (right to left airflow)
10. Primary and secondary drain connections on cooling coil
11. Attractive baked on finish
12. Optional freeze protector for hot water coil is part # 941-1 (brings pump on below 38 degrees - field installed)
13. Manual air vent on hot water coil
14. Flow Control Module for 18-48MAX-HW - # 940-3 CV
Flow Control Module for 60MAX-HW - # 940-2 CV

MAX-HW Series

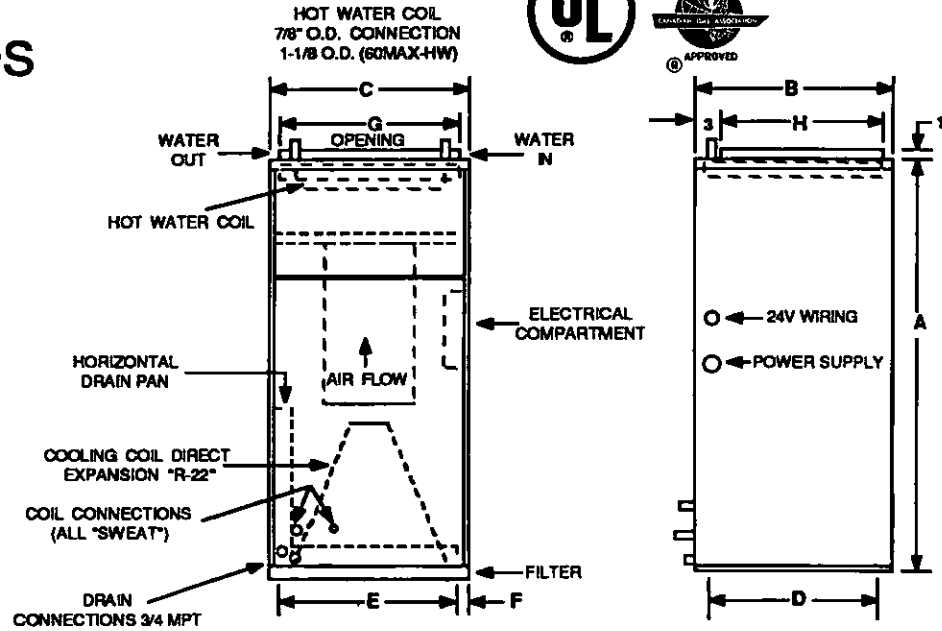
DX COOLING HOT WATER HEATING



EXPANSION VALVE KIT (Field Installed)	
KIT NUMBER	FITS
978-5	18/24MAX
978-6	30/36MAX
978-7	48MAX
978-8	60MAX

NOTE: Valves are external equalizing, internal bleed type (non Heat Pump)

COIL CONNECTIONS	LIQUID	SUCTION
18/24	3/8	5/8
30/36	3/8	3/4
48/60	1/2	7/8



PHYSICAL DIMENSIONS									
UNIT MODEL	A	B	C	D	E	F	G	H	FILTER SIZE
18MAX	40	20	20	18-1/2	16	2	18	16	18 x 20 x 1
24MAX									
30MAX	42	23	20	21-1/2	16	2	18	19	20 x 22 x 1
36MAX									
48MAX	48	28	21-1/4	26-1/4	17-1/4	2	18	24	20 x 25 x 1
60MAX	52	28	25-1/4	26-1/2	21-1/4	2	22	24	14 x 24 x 1 (2 required)

UNIT MODEL	NOMINAL COOLING BTUH	GPM (HTG.)	P.D. (FT. WTR.)	HEATING BTUH (1000) AT ENTERING WATER TEMPERATURE		
				120°F	140°F	180°F
18MAX-2HW	18,000	3	1.13	18.5	25.9 (1)	40.7
		2	0.51	16.9	23.7	37.2
		1	0.13	13.6	19.0	29.9
18MAX-3HW	18,000	3	1.83	23.6	33.0 (1)	51.9
		2	0.83	21.6	30.2	47.5
		1	0.22	17.3	24.2	38.0
24MAX-2HW	24,000	3	1.13	19.1	26.8 (1)	42.1
		2	0.51	17.5	24.5	38.5
		1	0.13	13.8	19.3	30.3
24MAX-3HW	24,000	3	1.83	24.5	34.3 (1)	53.9
		2	0.83	22.4	31.3	49.2
		1	0.22	17.6	24.6	38.7
30MAX-3HW	30,000	6	7.55	34.2	47.9	75.3
		4	3.64	32.0	44.8 (1)	70.4
		2	1.04	26.9	37.6	59.1
36MAX-3HW	36,000	6	7.55	39.5	55.3	88.9
		4	3.64	36.5	51.1 (1)	80.3
		2	1.04	29.1	40.8	64.1
48MAX-4HW	42,000	6	2.85	52.3	73.2	115.0
		4	1.45	47.6	66.7 (1)	104.8
		2	0.40	36.4	51.0	80.1
	48,000	6	2.85	56.4	78.9	124.0
		4	1.45	51.1	71.5 (1)	112.4
		2	0.40	38.4	53.8	84.5
60MAX-4HW	60,000	9	5.15	68.5	95.9	150.7
		7	3.33	65.0	91.0 (1)	143.0
		5	1.86	60.0	84.0	132.0

BLOWER DATA									
UNIT MODEL	MOTOR H.P. (120V)	MOTOR AMPS (120V)	CFM vs. EXTERNAL STATIC PRESSURE						
			0.05	0.10	0.20	0.30	0.40	0.50	
18MAX-2HW	1/5	2.8	900	860	790	710	630	550	
18MAX-3HW	1/5	2.8	880	840	770	700	620	540	
24MAX-2HW	1/5	5.1	930	900	840	750	660	560	
24MAX-3HW	1/5	5.1	910	880	820	740	650	550	
30MAX-3HW	1/5	5.1	1110	1080	1030	970	900	780	
36MAX-3HW	1/2	8.5	1370	1340	1280	1200	1130	1050	
48MAX-4HW ⁽⁵⁾	3/4	10.7	1660	1640	1590	1530	1460	1370	
			1870	1840	1780	1700	1620	1540	
60MAX-4HW	1	11.5	---	---	2170	2100	2030	1940	

NOTES:

- Motors are 120V (2 speed) but operate on high speed for both heating and cooling.
- Heating output of fan coil will not exceed net output of water heater.
- Approved for installation with 0" clearance to combustible materials.
- Heat BTUH is at 70 degree entering air temperature.
- Use 48MAX-HW for 3.5 ton applications and field-convert fan motor to low speed.
- 120 degree and 180 degree data is supplied for boiler applications.

NOTE:

- (1) Use these capacities when First Co. "Flow Control Module" is used.

All technical specifications subject to change without notice.

Catalog No. MAX-HW1291 (Replaces MAX-HW791)



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