

# MHE-HW Series

Vertical / Horizontal Air Handler

Chilled water / Hot water (4-Pipe System)

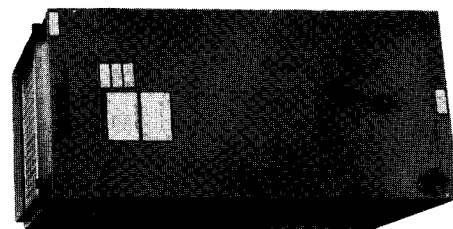
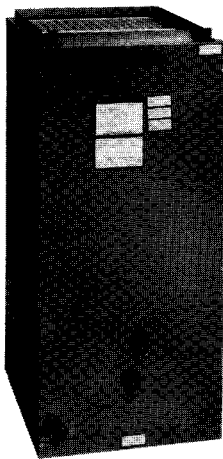
2 through 5 tons, up to 157,800 BTUH Heating



## Description :

The **MHE-HW** series air handler is a very competitive alternative to the typical belt drive 4-pipe air handler.

Each **MHE-HW** air handler comes with a 4-row cooling coil, 2, 3, or 4 row heating coil, 120V blower / motor, horizontal drain pan, throwaway filter, and 24V control. Each cabinet is made of galvanized steel, fully insulated, and coated with baked on epoxy paint. Motors are 2-speed but wired to operate on high speed for both cooling and heating.



## FEATURES:

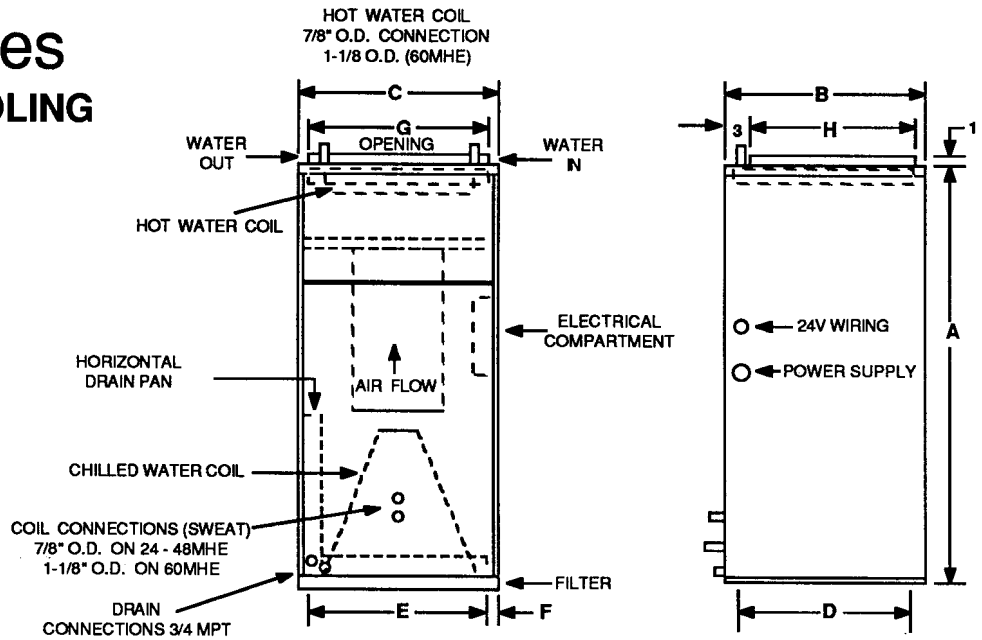
1. Copper tube heating and cooling coils
2. All cooling coils are 4 row
3. Factory installed filter
4. Factory installed horizontal drain pan  
(right to left airflow)
5. Primary and secondary drain connections on cooling coil
6. Attractive baked on finish
7. Manual air vent on hot water coil

# MHE-HW Series

## CHILLED WATER COOLING HOT WATER HEATING



All technical specifications subject to change without notice.



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

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
24MHE-2HW	1/5	5.1	930	900	840	750	660	560
			870	840	770	700	620	530
24MHE-3HW	1/5	5.1	910	880	820	740	650	550
			850	820	750	690	610	520
30MHE-3HW	1/5	5.1	1110	1080	1030	970	900	780
			930	910	870	820	760	670
36MHE-3HW	1/2	8.5	1370	1340	1280	1200	1130	1050
			1190	1160	1100	1040	980	900
48MHE-4HW	3/4	10.7	1870	1840	1780	1700	1620	1540
			1660	1640	1590	1530	1460	1370
60MHE-4HW	1	11.5	-----	-----	2170	2100	2030	1940
			-----	-----	1870	1820	1770	1700

- NOTES:**
- Motors are 120V (2 speed) but operate on high speed for both heating and cooling.
  - Approved for installation with 0" clearance to combustibles materials.
  - Heat BTUH is at 70 degree entering air temperature.
  - Valves must install outside of cabinet.

HOT WATER COIL PERFORMANCE DATA						
UNIT MODEL	(1) CFM	GPM (HTG.)	P.D. (FT. WTR.)	HEATING BTUH (1000) AT ENTERING WATER TEMPERATURE		
				120° F	140° F	180° F
24MHE-2HW	840 (HIGH)	1	0.13	13.6	19.1	30.0
		2	0.51	17.6	24.7	38.8
		3	1.13	19.4	27.2	42.7
	770 (LOW)	1	0.13	13.4	18.8	29.5
		2	0.51	17.0	23.8	37.4
		3	1.13	18.6	26.0	40.9
24MHE-3HW	820 (HIGH)	1	0.22	17.4	24.4	38.3
		2	0.83	22.4	31.3	49.2
		3	1.83	24.5	34.3	53.9
	750 (LOW)	1	0.22	17.0	23.8	37.4
		2	0.83	21.4	29.9	47.0
		3	1.83	23.3	32.6	51.2
30MHE-3HW	1030 (HIGH)	2	1.04	26.3	36.8	57.8
		4	3.64	31.3	43.8	68.8
		6	7.55	33.4	46.8	73.5
	870 (LOW)	2	1.04	24.3	34.0	53.4
		4	3.64	28.3	39.6	62.2
		6	7.55	30.0	42.0	66.0
36MHE-3HW	1280 (HIGH)	2	1.10	28.4	39.7	62.4
		4	3.64	35.5	49.7	78.1
		6	7.55	38.3	53.6	84.2
	1100 (LOW)	2	1.10	26.9	37.6	59.1
		4	3.64	32.6	45.6	71.7
		6	7.55	34.9	48.9	76.8
48MHE-4HW	1780 (HIGH)	4	1.40	51.0	71.4	112.2
		6	2.89	56.4	78.9	124.0
		8	4.83	59.7	83.6	131.4
	1590 (LOW)	4	1.40	47.6	66.7	104.8
		6	2.89	52.4	73.4	115.3
		8	4.83	55.3	77.4	121.6
60MHE-4HW	2170 (HIGH)	5	1.86	62.6	87.7	137.8
		7	3.33	68.1	95.3	149.8
		9	5.15	71.7	100.4	157.8
	1870 (LOW)	5	1.86	57.3	80.2	126.0
		7	3.33	61.9	86.6	136.1
		9	5.15	64.9	90.8	142.7

- NOTES:**
- Contact factory for capacities at other conditions

## CHILLED WATER COIL PERFORMANCE DATA

UNIT MODEL	CFM	GPM	P.D. FT. WTR.	45°F ENTERING WATER						42°F ENTERING WATER					
				80°F DB/67°F WB ENT. AIR			75°F DB/63°F WB ENT. AIR			80°F DB/67°F WB ENT. AIR			75°F DB/63°F WB ENT. AIR		
				TOTAL MBH	SENS. MBH	TEMP. RISE	TOTAL MBH	SENS. MBH	TEMP. RISE	TOTAL MBH	SENS. MBH	TEMP. RISE	TOTAL MBH	SENS. MBH	TEMP. RISE
24MHE	820 (HIGH)	3.0	2.5	21.5	16.9	14.4	16.4	14.9	11.0	23.5	17.6	15.7	17.9	15.5	12.0
		4.5	5.5	26.2	18.6	11.6	20.0	16.3	8.9	28.5	19.5	12.7	21.8	17.0	9.7
		6.0	9.5	28.9	19.7	9.7	22.1	17.1	7.4	31.5	20.7	10.5	24.1	17.9	8.0
	750 (LOW)	3.0	2.5	21.0	16.0	14.0	16.0	14.1	10.7	22.9	16.7	15.3	17.5	14.7	11.7
		4.5	5.5	25.2	17.6	11.2	19.2	15.3	8.5	27.4	18.4	12.2	21.0	16.0	9.3
		6.0	9.5	27.7	18.5	9.2	21.1	16.1	7.1	30.2	19.5	10.1	23.0	16.9	7.7
30MHE	1030 (HIGH)	3.0	1.5	24.3	20.4	16.2	20.4	20.4	13.6	26.4	21.2	17.6	20.2	18.7	13.5
		4.5	3.0	30.5	22.7	13.6	23.3	19.9	10.4	33.2	23.7	14.8	25.4	20.7	11.3
		6.0	4.8	34.6	24.2	11.5	26.4	21.1	8.8	37.7	25.4	12.6	28.8	22.0	9.6
	870 (LOW)	3.0	1.5	22.8	18.2	15.2	17.4	16.1	11.6	24.9	19.0	16.6	19.0	16.7	12.7
		4.5	3.0	28.3	20.3	12.6	21.6	17.7	9.6	30.9	21.2	13.7	23.6	18.5	10.5
		6.0	4.8	31.9	21.6	10.6	24.3	18.8	8.1	34.7	22.7	11.6	26.5	19.7	8.8
36MHE	1280 (HIGH)	4.0	2.4	31.2	25.3	15.6	23.8	22.4	11.9	34.0	26.3	17.0	26.0	23.2	13.0
		6.0	4.8	38.1	27.8	12.7	29.1	24.4	9.7	41.6	29.1	13.9	31.8	25.4	10.6
		8.0	7.9	42.4	29.4	10.6	32.4	27.7	8.1	46.2	30.9	11.6	35.3	26.8	8.8
	1100 (LOW)	4.0	2.4	29.3	22.9	14.6	22.3	20.2	11.2	31.9	23.8	16.0	24.4	21.0	12.2
		6.0	4.8	35.6	25.2	11.9	27.2	22.0	9.1	38.7	26.4	12.9	29.6	23.0	9.9
		8.0	7.9	39.4	26.7	9.8	30.1	23.2	7.5	42.9	28.0	10.7	32.8	24.3	8.2
48MHE	1780 (HIGH)	5.0	2.4	40.5	34.5	16.2	34.5	34.5	13.8	44.2	35.8	17.7	33.8	31.7	13.5
		7.0	4.3	49.6	37.8	14.2	37.8	33.3	10.8	54.0	39.4	15.4	41.3	34.6	11.8
		9.0	6.6	55.9	40.1	12.4	42.7	35.1	9.5	60.9	42.0	13.5	46.5	36.6	10.3
	1590 (LOW)	5.0	2.4	39.7	32.3	15.9	30.3	28.6	12.1	43.3	33.6	17.3	33.1	29.7	13.2
		7.0	4.3	47.8	35.3	13.7	36.5	31.0	10.4	52.1	36.9	14.9	39.8	32.2	11.4
		9.0	6.6	53.3	37.4	11.9	40.7	32.6	9.1	58.1	39.2	12.9	44.4	34.1	9.9
60MHE	2170 (HIGH)	7.0	4.3	52.7	42.5	15.1	40.3	37.7	11.5	57.5	44.3	16.4	43.9	39.0	12.5
		10.0	7.9	63.5	46.5	12.7	48.5	40.8	9.7	69.2	48.6	13.8	52.9	42.5	10.6
		13.0	12.5	70.3	49.0	10.8	53.7	42.8	8.3	76.7	51.4	11.8	58.5	44.7	9.0
	1870 (LOW)	7.0	4.3	50.3	38.9	14.4	38.4	34.3	11.0	54.8	40.5	15.7	41.8	35.6	12.0
		10.0	7.9	59.5	42.3	11.9	45.5	37.0	9.1	64.9	44.3	13.0	49.6	38.6	9.9
		13.0	12.5	65.3	44.5	10.0	49.8	38.7	7.7	71.1	46.7	10.9	54.3	40.5	8.4

**NOTES:**

1. All chilled water coils are 4 row
2. Contact factory for capacities at other conditions



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Catalog No. MHE-HW492 (Replaces MHE-HW391)