Unit Heater

Hot Water & Steam

TECHNICAL AND CAPACITY DATA

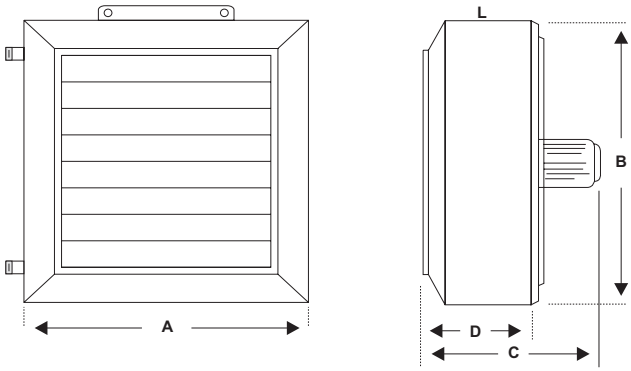


TABLE 1- TECHNICAL AND CAPACITY DATA

MODEL	CAPACITY BTU/HR		C.F.M	MOTOR			PIPING INCHES			DIMENSIONS CM				Approx. WEIGHT Kg
	180 °F WATER AND 60 °F AIR ENTERING TEMP.	ENTERING STEAM 30 PSI AND AIR 60 °F		WATT	R.P.M	PH	INLET OUTLET WATER	INLET STEAM	OUTLET STEAM	A	B	C	D	
1 OU 40	40000	60000	800	80	1400	SINGLE PHASE (3 Phases are on request)	1 ¼	1	3 /4	60	60	55	42	45
1 OU 50	50000	75000	1300	100			1 ¼	1	3 /4	60	60	55	42	47
1 OU 80	80000	120000	2000	120			1 ½	1 ¼	1	66.5	66.5	55	42	70
1 OU 140	140000	210000	3000	160			2	1 ½	1 ¼	60	60	52	42	80
1 OU 180	180000	270000	3800	180			2	1 ½	1 ¼	66.5	66.5	55	42	90
2 OU 280	280000	420000	6000	2×160			2 ½	2	1 ½	120	60	55	42	170
2 OU 360	360000	540000	7600	2×180			2 ½	2	1 ½	133	66.5	55	42	180
1 OU 30	30000	45000	450	DEPENDS ON MARKET AVAILABILITY	900	SINGLE PHASE	1 ¼	1	3 /4	60	60	55	42	45
1 OU 35	35000	50000	650				1 ¼	1	3 /4	60	60	55	42	47
1 OU 55	55000	80000	1000				1 ½	1 ¼	1	66.5	66.5	55	42	70
1 OU 100	100000	145000	1700				2	1 ½	1 ¼	60	60	55	42	80
1 OU 130	130000	160000	2300				2	1 ½	1 ¼	66.5	66.5	55	42	90
2 OU 200	200000	290000	3400				2 ½	2	1 ½	120	60	55	42	170
2 OU 260	260000	320000	4600				2 ½	2	1 ½	133	66.5	55	42	180

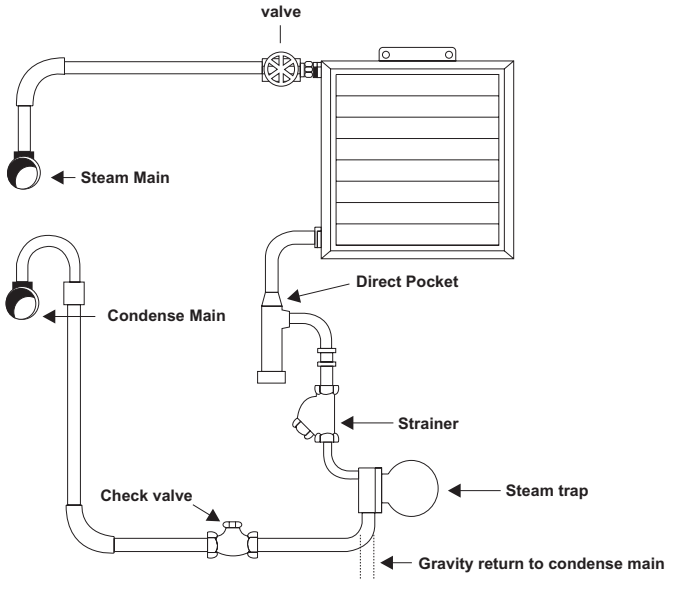
Subject to modifications without notice.

STEAM CONVERSION FACTORS

TABLE 2 - STEAM CONVERSION FACTORS

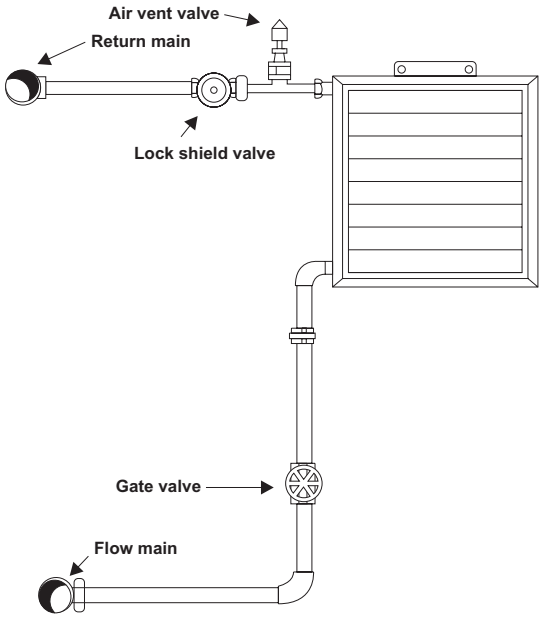
ENTERING AIR TEMP. °F	STEAM PRESSURE (PSI)									
	0	2	5	10	15	20	30	40	50	60
0	.99	1.02	1.06	1.11	1.16	1.20	1.27	1.33	1.38	1.43
10	.94	.97	1.01	1.07	1.11	1.16	1.23	1.29	1.34	1.38
20	.89	.92	.96	1.02	1.07	1.11	1.18	1.24	1.29	1.34
30	.84	.88	.92	.97	1.02	1.06	1.13	1.19	1.25	1.29
40	.80	.83	.87	.93	.97	1.02	1.09	1.15	1.20	1.24
45	.77	.81	.85	.90	.95	.99	1.06	1.12	1.18	1.22
50	.75	.78	.82	.88	.93	.97	1.04	1.10	1.15	1.20
55	.73	.76	.80	.86	.90	.95	1.02	1.08	1.13	1.17
60	.70	.74	.78	.83	.88	.92	1.00	1.05	1.10	1.15
65	.68	.71	.75	.81	.86	.90	.97	1.03	1.08	1.13
70	.66	.69	.73	.79	.83	.88	.93	1.01	1.06	1.10
75	.63	.67	.71	.76	.81	.85	.92	.98	1.04	1.08
80	.61	.64	.68	.74	.79	.83	.90	.96	1.01	1.06
85	.59	.62	.66	.72	.76	.81	.88	.94	.99	1.03
90	.56	.60	.64	.69	.74	.78	.86	.91	.96	1.01
100	.52	.55	.59	.65	.69	.73	.81	.87	.92	.96

To determine heating capacity of unit heaters of various entering steam pressure and entering air temperature , multiply rated on table - 1 by above table



STEAM HEATING SYSTEM

HOT WATER CONVERSION FACTORS



HOT WATER HEATING SYSTEM

TABLE 3 - HOT WATER CONVERSION FACTORS

ENTERING AIR TEMP. °F	ENTERING WATER TEMPERATURE °F										
	150	160	170	180	190	200	210	220	230	240	250
30	1.03	1.11	1.21	1.29	1.38	1.46	1.54	1.64	1.72	1.81	1.89
40	.94	1.02	1.10	1.19	1.27	1.36	1.44	1.53	1.62	1.70	1.78
50	.84	.93	1.05	1.09	1.17	1.26	1.34	1.43	1.51	1.60	1.69
60	.74	.83	.92	1.00	1.08	1.16	1.24	1.32	1.40	1.50	1.58
70	.65	.74	.82	.90	.98	1.07	1.15	1.23	1.31	1.39	1.48
80	.57	.65	.73	.81	.89	.98	1.06	1.14	1.22	1.30	1.38
90	.47	.56	.64	.72	.80	.88	.96	1.05	1.13	1.21	1.28
100	.39	.47	.56	.71	.79	.87	.95	1.03	1.10	1.11	1.18

To determine heating capacity of unit heaters of various entering water and air temperature , multiply rated capacity on table - 1 by factor from above table .

SELECTION PROCEDURE EXAMPLE

Design heating load = 170000 Btu/hr

Entering air temperature = 50 °F

Entering water temperature = 200 °F

From table 3 , we get that the conversion factor = 1.26

From table 1 , the real capacity of unit heater model 1 OU 140 = 140000 × 1.26 = 176400 Btu/hr

So the model 1 OU 140 will be selected.

All data and specification subject to change without notice .

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