

Manufacturing Inc.

BULLETIN 500

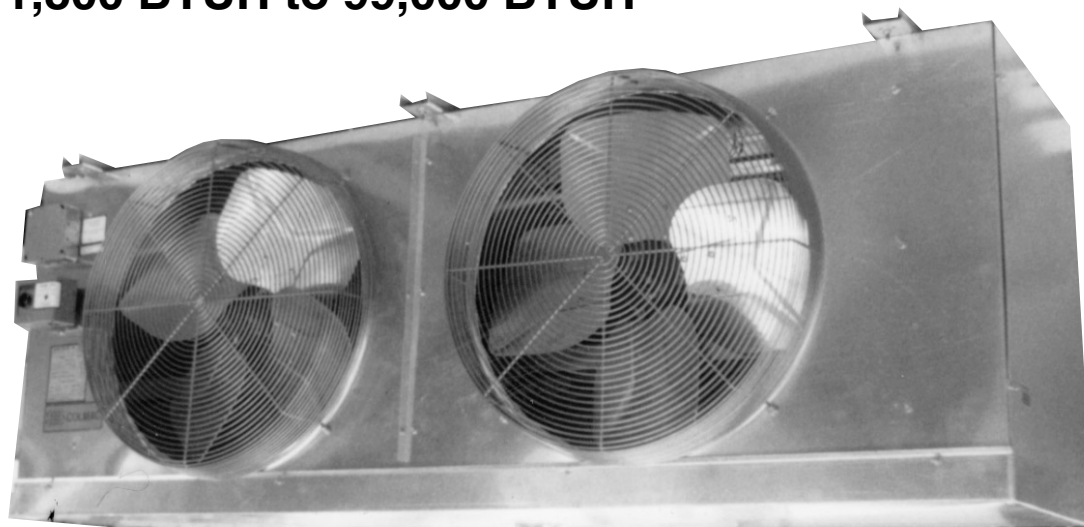
HIGH PROFILE  
UNIT COOLERS

SEPTEMBER 1, 1999  
REVISED

## HIGH PROFILE UNIT COOLERS

32 MODELS

11,800 BTUH to 99,000 BTUH



### Featuring

- Highest ratio of prime to secondary surface in the industry.
- Staggered tube in direction of air flow.
- Total accessibility to expansion valve, electrical connections, components and heaters without special tools.
- Fan motors replaceable individually without removal of drain pan.
- Drain pan pitched to center of unit to assure positive drainage.
- All units equipped with permanently lubricated, totally enclosed ball bearing motors with inherent overload protection.
- Air, electric and hot gas defrost models have 1-1/4 F.P.T. drain connection.



Marine units also available.

Colmac coils are rated in accordance with standard industry practice.

**SPECIFY COLMAC QUALITY**

- Entire unit constructed of heavy gauge, smooth, bright aluminum for ease of cleaning.
- Fan guards and all non-aluminum components coated to protect against corrosion.
- Penn termination control standard on electric, hot gas and water defrost units. Adjustable without removing end panel.
- Expansion valve compartment heated during defrost.
- Air baffles provide even air distribution across coil and prevent short cycling.
- Motor mounts isolated to minimize sound transmission and vibration.
- All electrical components completely factory pre-wired.
- Connection for external equalizer line from valve provided.
- Electric drain pan heaters standard on electric models.
- Water defrost units provided with extra deep drain pan with 2-1/2" F.P.T. fitting. All motor wiring routed to external junction box.
- Coil construction is 5/8" copper tube with .010 aluminum fins.
- 1/4 H.P. motors operate at 1075 or 1140 r.p.m. for low noise. 1/2 H.P. motors operate at 1750 r.p.m. to give higher capacities and longer airtrow. If low fan noise is a job requirement, 1/2 H.P. motors should not be used.

## Optional Features

- Insulated drain pan.
- Protective chemical coating.
- Oversize and three phase motors.
- Consult factory for Glycol and other refrigerants.

### CAPACITY CORRECTION FACTORS FOR LOW TEMPERATURE OPERATION

SUCTION	5° TD	10° TD	15° TD	20° TD
°F				
0	1.01	1.00	1.00	1.00
-10	1.00	.99	.98	.98
-20	.98	.97	.96	.96
-30	.96	.94	.94	.94
-40	.93	.89	.87	.85

# CAPACITY

MODEL	Capacity BTUH Std. Motors		Capacity BTUH Oversize Motors		Coil Face Area
	10° T.D.	12° T.D.	10° T.D.	12° T.D.	
4HP1-118	11800	14160	12980	15576	4.25
4HP1-148	14800	17760	16280	19536	4.25
4HP2-236	23600	28320	25960	31152	8.50
4HP2-295	29500	35400	32450	38940	8.50
4HP3-353	35300	42360	38830	46596	12.70
4HP3-440	44000	52800	48400	58080	12.70
4HP4-472	47200	56640	51920	62304	17.00
4HP4-590	59000	70800	64900	77880	17.00
5HP1-147	14700	17640	16170	19404	4.25
5HP1-184	18400	22080	20240	24288	4.25
5HP2-294	29400	35280	32340	38808	8.50
5HP2-367	36700	44040	40370	48444	8.50
5HP3-440	44000	52800	48400	58080	12.70
5HP3-550	55000	66000	60500	72600	12.70
5HP4-590	59000	70800	64900	77880	17.00
5HP4-735	73500	88200	80850	97020	17.00
6HP1-175	17500	21000	19250	23100	4.25
6HP1-219	21900	26280	24090	28908	4.25
6HP2-350	35000	42000	38500	46200	8.50
6HP2-437	43700	52440	48070	57684	8.50
6HP3-525	52500	63000	57750	69300	12.70
6HP3-655	65500	78600	72050	86460	12.70
6HP4-700	70000	84000	77000	92400	17.00
6HP4-875	87500	105000	96250	115500	17.00
8HP1-198	19800	23760	<b>Not Available*</b>		4.25
8HP1-247	24700	29640			4.25
8HP2-396	39600	47520			8.50
8HP2-495	49500	59400			8.50
8HP3-592	59200	71040			12.70
8HP3-740	74000	88800			12.70
8HP4-790	79000	94800			17.00
8HP4-990	99000	118800			17.00

\*Use of oversize motors on applications above freezing will result in condensate blow through.

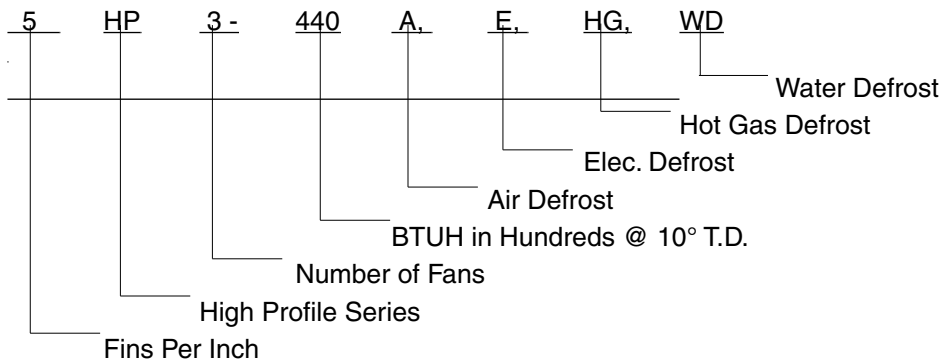
All expansion valves must be externally equalized.

Recommend pressure limit valves be used on all defrost units.

Air Throw 1/4 H.P. 50'; 1/2 H.P. 75'.

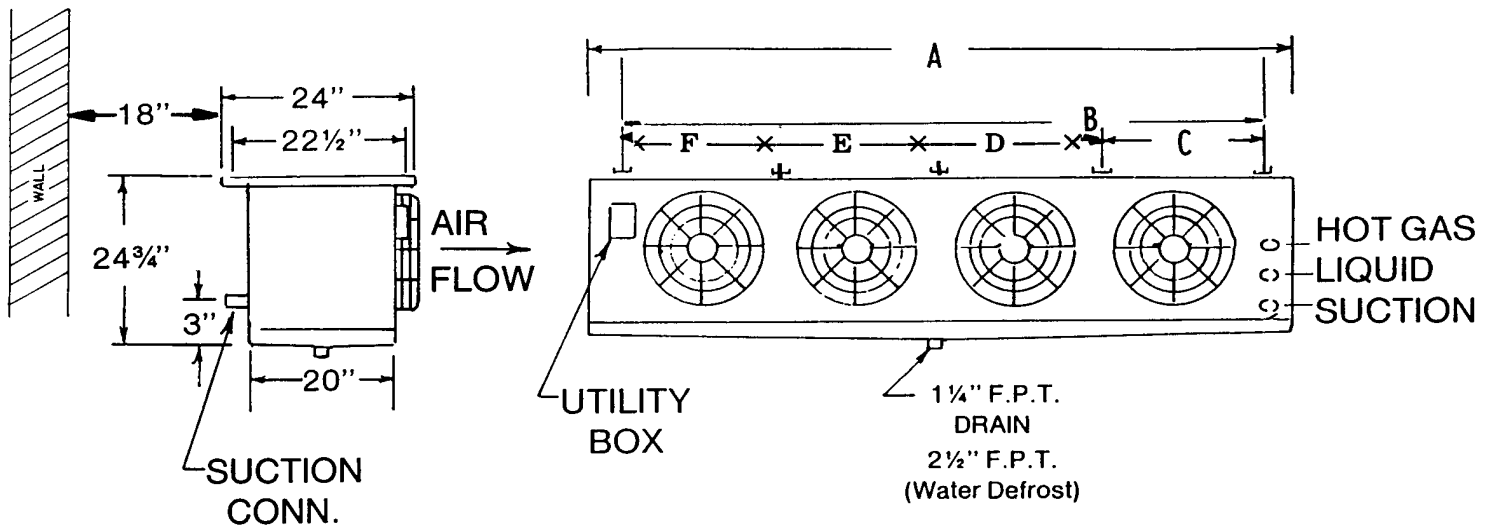
Fan Data 20" Dia. [All Models]			Motor Data Full Load Amps								Electric Defrost Heater Including Drain Pan Heater					
No.	C.F.M. 1/4 H.P. 1/2 H.P. Motor Motor		Standard 1/4 H.P. 115/1 230/1 230/3 460/3				Oversize 1/2 H.P. 115/1 230/1 230/3 460/3				Amps Watts 208/1 230/1 208/3 230/3 460/3					
	1	3000	3630	3.7	1.7	1.6	.8	8.0	4.0	2.2	1.1	3440	13.5	15.0	7.8	8.7
1	2600	3380	3.7	1.7	1.6	.8	8.0	4.0	2.2	1.1	3440	13.5	15.0	7.8	8.7	4.4
2	6000	7260	7.4	3.4	3.2	1.6	16.0	8.0	4.4	2.2	6890	27.0	30.0	15.6	17.3	8.7
2	5200	6760	7.4	3.4	3.2	1.6	16.0	8.0	4.4	2.2	6890	27.0	30.0	15.6	17.3	8.7
3	9000	10890	11.1	5.1	4.8	2.4	24.0	12.0	6.6	3.3	10330	40.5	45.0	23.4	25.9	13.0
3	7800	10140	11.1	5.1	4.8	2.4	24.0	12.0	6.6	3.3	10330	40.5	45.0	23.4	25.9	13.0
4	12000	14520	14.8	6.8	6.4	3.2	32.0	16.0	8.8	4.4	13800	54.3	60.0	31.4	34.6	17.3
4	10400	13520	14.8	6.8	6.4	3.2	32.0	16.0	8.8	4.4	13800	54.3	60.0	31.4	34.6	17.3
1	2950	3600	3.7	1.7	1.6	.8	8.0	4.0	2.2	1.1	3440	13.5	15.0	7.8	8.7	4.4
1	2550	3330	3.7	1.7	1.6	.8	8.0	4.0	2.2	1.1	3440	13.5	15.0	7.8	8.7	4.4
2	5900	7200	7.4	3.4	3.2	1.6	16.0	8.0	4.4	2.2	6890	27.0	30.0	15.6	17.3	8.7
2	5100	6660	7.4	3.4	3.2	1.6	16.0	8.0	4.4	2.2	6890	27.0	30.0	15.6	17.3	8.7
3	8850	10800	11.1	5.1	4.8	2.4	24.0	12.0	6.6	3.3	10330	40.5	45.0	23.4	25.9	13.0
3	7650	9990	11.1	5.1	4.8	2.4	24.0	12.0	6.6	3.3	10330	40.5	45.0	23.4	25.9	13.0
4	11800	14400	14.8	6.8	6.4	3.2	32.0	16.0	8.8	4.4	13800	54.3	60.0	31.4	34.6	17.3
4	10200	13320	14.8	6.8	6.4	3.2	32.0	16.0	8.8	4.4	13800	54.3	60.0	31.4	34.6	17.3
1	2900	3570	3.7	1.7	1.6	.8	8.0	4.0	2.2	1.1	3440	13.5	15.0	7.8	8.7	4.4
1	2500	3300	3.7	1.7	1.6	.8	8.0	4.0	2.2	1.1	3440	13.5	15.0	7.8	8.7	4.4
2	5800	7140	7.4	3.4	3.2	1.6	16.0	8.0	4.4	2.2	6890	27.0	30.0	15.6	17.3	8.7
2	5000	6600	7.4	3.4	3.2	1.6	16.0	8.0	4.4	2.2	6890	27.0	30.0	15.6	17.3	8.7
3	8700	10710	11.1	5.1	4.8	2.4	24.0	12.0	6.6	3.3	10330	40.5	45.0	23.4	25.9	13.0
3	7500	9900	11.1	5.1	4.8	2.4	24.0	12.0	6.6	3.3	10330	40.5	45.0	23.4	25.9	13.0
4	11600	14280	14.8	6.8	6.4	3.2	32.0	16.0	8.8	4.4	13800	54.3	60.0	31.4	34.6	17.3
4	10000	13200	14.8	6.8	6.4	3.2	32.0	16.0	8.8	4.4	13800	54.3	60.0	31.4	34.6	17.3
1	2730	*Not	3.7	1.7	1.6	.8	<b>USE ON ROOMS 35 DEGREES AND HIGHER</b>									
1	2350	Available	3.7	1.7	1.6	.8										
2	5460		7.4	3.4	3.2	1.6										
2	4700		7.4	3.4	3.2	1.6										
3	8190		11.1	5.1	4.8	2.4										
3	7050		11.1	5.1	4.8	2.4										
4	10920		14.8	6.8	6.4	3.2										
4	9400		14.8	6.8	6.4	3.2										

**Model Nomenclature**



● **ORDERING INFORMATION**

1. Model number
2. Type of refrigerant
3. Suction temperature
4. Type of defrost
5. Motor electrical characteristics
6. Defrost electrical characteristics
7. Liquid Temp @ TXV
8. Design tons



## DIMENSIONS

Inches

No. of Fans	No. of Hangers	A	B	C	D	E	F
1	2	40	30	30	0	0	0
2	3	69	59	29 1/2	0	0	29 1/2
3	4	98	88	29 1/2	29	0	29 1/2
4	5	127	117	29 1/2	29	29	29 1/2

NOTE: Long airthrow adapters are optional (PN D91514)

## SPECIFICATIONS

Model	Liquid Conn.	Suction OD Sweat	Net Weight	Model	Liquid Conn.	Suction OD Sweat	Net Weight
4HP1-118	1/2" Flare	1-1/8	140	6HP1-175	1/2" Flare	1-1/8	150
4HP1-148	" "	1-1/8	160	6HP1-219	" "	1-1/8	170
4HP2-236	" "	1-3/8	275	6HP2-350	" "	1-3/8	280
4HP2-295	" "	1-3/8	310	6HP2-437	1-1/8" ODS	1-5/8	320
4HP3-353	7/8" ODS	2-1/8	465	6HP3-525	" "	1-5/8	440
4HP3-440	1-1/8" ODS	2-1/8	480	6HP3-655	1-3/8" ODS	2-1/8	490
4HP4-472	" "	2-1/8	553	6HP4-700	" "	2-1/8	520
4HP4-590	" "	2-1/8	620	6HP4-875	" "	2-1/8	640
5HP1-147	1/2" Flare	1-1/8	145	8HP1-198	1/2" Flare	1-1/8	170
5HP1-184	" "	1-1/8	165	8HP1-247	" "	1-1/8	190
5HP2-294	" "	1-3/8	277	8HP2-396	" "	1-3/8	310
5HP2-367	7/8" ODS	1-5/8	315	8HP2-495	7/8" ODS	1-3/8	350
5HP3-440	1-1/8" ODS	1-5/8	430	8HP3-592	" "	1-5/8	472
5HP3-550	" "	2-1/8	485	8HP3-740	1-1/8" ODS	2-1/8	530
5HP4-590	" "	2-1/8	558	8HP4-790	" "	2-1/8	604
5HP4-735	1-3/8" ODS	2-1/8	630	8HP4-990	1-3/8" ODS	2-1/8	680

Colmac reserves the right to change specifications without notice.

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