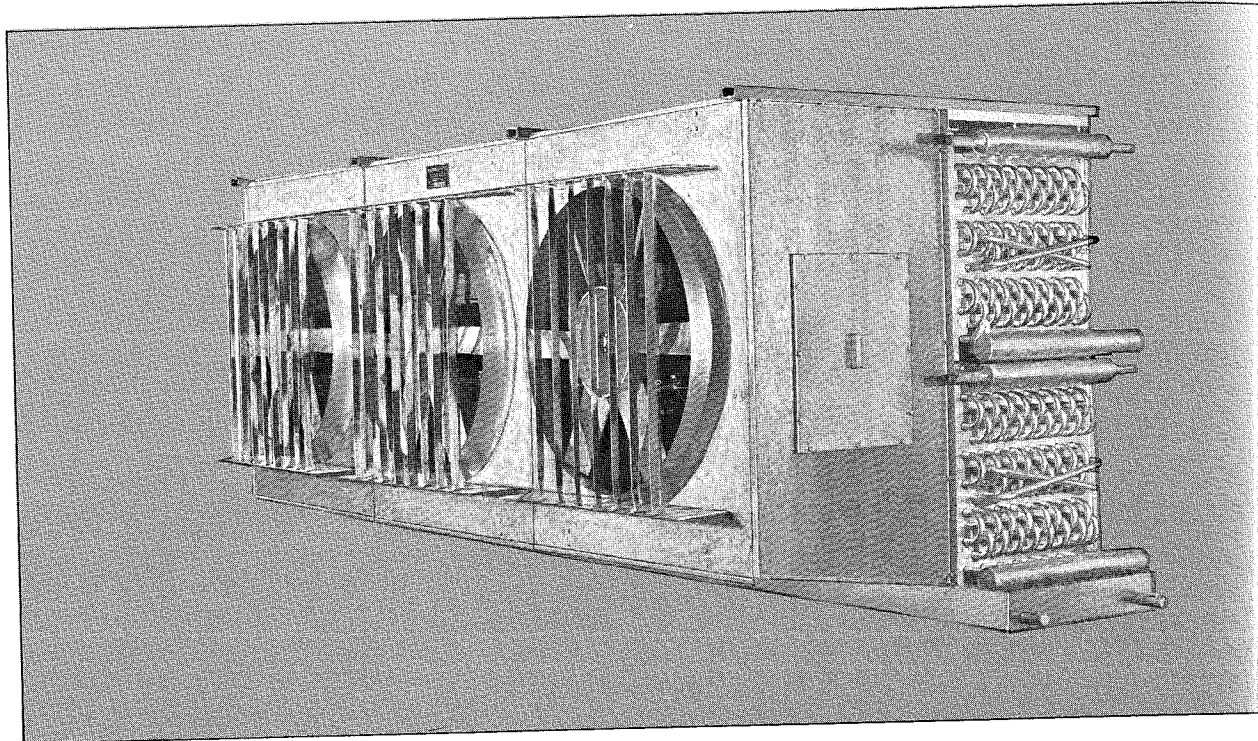




freezer units

Axial Fans



COILS: Ammonia coils are fabricated with $\frac{3}{4}$ " O.D. x 0.045" wall thickness steel tubes, or 1.05" O.D. x 0.060" wall thickness steel tubes, or $\frac{3}{4}$ " schedule 40 pipes. (Where coils are listed as 1.05" tubing, coils with $\frac{3}{4}$ " pipe may be specified at no change in price.) Tubing is welded, flash removed, pressure tested at mill, ASTM Specification A-214. Fins are die-formed steel 0.015" thick, flat continuous plate type. All fins have die-formed collars around tubing for maximum heat transfer. Headers are round or rectangular tubing, or steel pipe. Tube sheets are die punched 12 or 14 gauge steel. All joints are acetylene welded and the coils are pressure tested with 300 lbs. air while submerged in water. The entire coil is hot dip galvanized after fabrication.

Freon coils have $\frac{3}{4}$ " O.D. seamless hard drawn copper tubes. Fins are continuous flat plate type of 0.016" thick aluminum, with extruded die-formed collars. Tubes are mechanically expanded into fin collars to assure a lasting bond with high heat transfer. Headers are copper. Return bends and header joints are brazed with an alloy of copper and phosphorus at approximately 1,300°F. with no flux. The alloy is exceptionally fluid, penetrates deeply into joints, and assures gas-tight connections even with severe temperature changes.

Units with steel coils may be used with either ammonia or freons, using flooded, recirculated, or TXV operation, as listed. On smaller units, capacities for flooded or recirculated operation are shown for copper and steel coils. Larger units list flooded, recirculated, and TXV ratings for steel coils and only TXV operation for copper coils. If copper coils are required for flooded or recirculated operation, please consult Rigidbilt for data and prices.

MOTORS: Motors are standard NEMA frame, open type, drip proof, of reputable manufacture. Speeds are either 1,750 or 1,140 R.P.M. to suit the fan. All motors are ball bearing, with either sealed lubrication or grease fittings, with grease selected for proper air temperatures. Lubrication should be checked periodically, as suggested by motor manufacturers. Only non-corrosive, mineral base grease should be used for motors and over-lubrication should be avoided.

When required, 2-speed motors, or totally enclosed motors, or motors with special current characteristics can be furnished.

Wiring for all motors should be adequate for the nominal full horsepower listed plus about 40% to take care of overloads at varying speeds, static pressures, and air temperatures. Control devices should properly be sized after units are running at room temperatures.

FANS: Fans are cast aluminum, SS-304, or Semi-Aluminum. Fans are mounted directly on motor shafts to operate at 1,140 R.P.M.

EXTERNAL STATIC PRESSURES: Fans and motors are designed to deliver the rated CFM with light or medium frost on coil. At external static pressures, fans will deliver correspondingly reduced air volumes. Since large air volumes and air velocities are generally desirable in freezers, the absence of frost provides excellent overall performance of these units.

CABINET CONSTRUCTION: Cabinets are available with galvanized steel or with all parts hot dip galvanized after fabrication. Panels are 12 or 14 gauge steel with all edges flanged for strength.

End panels are provided with large access doors for entry to service the unit.

Bottom panels are pitched toward the rear to drain the condensate into the drain pan.

The fan section is bolted to the coil section and the two sections are rated if desired.

Heavy structural channels tie the coil section and fan section together and act as hangers for the assembled units.

On water defrost units, a galvanized steel water distribution manifold is mounted above the coil to defrost the finned section, return bends, and headers. Both the return bend end and header end are provided with covers to prevent splash off the ends.

MODEL AND DESCRIPTION	COIL		BASIC RATING		HP PER FAN	SHIP WEIGHT LBS.	LINEAL FT. TUBING	COIL VOL. CU. FT.	WATER DEFROST GPM @ 10 P.S.I.	HORIZONTAL SURGE DRUMS		
	ROWS	FINS	FL-REC	TXV						10° & HIGHER	-40° TO 10°	APPROX. TONS
AF 160 ■ 16,000 CFM ■ Two 30" Fans ■ ¾" O.D. Steel or Copper Coils	4	4	7,450	6,480	1	1700	533	1.5	13	12 x 36	14 x 48	9.5
		3	6,600	5,830								
	6	4	10,300	8,960	1	2130	800	2.2	20	14 x 48	16 x 48	13.2
		3	9,210	8,010								
8	4	13,130	11,430	1½	2550	1066	2.9	27	16 x 36	18 x 48	16.5	
	3	11,600	10,100									
10	4	14,590	12,700	2	3000	1333	3.5	34	16 x 48	18 x 48	18.5	
	3	13,130	11,420									

MODEL AND DESCRIPTION	COIL		BASIC RATING		HP PER FAN	SHIP WEIGHT LBS.	LINEAL FT. TUBING	COIL VOL. CU. FT.	WATER DEFROST GPM @ 10 P.S.I.	HORIZONTAL SURGE DRUMS		
	ROWS	FINS	FL-REC	TXV						10° & HIGHER	-40° TO 10°	APPROX. TONS
AF 210 ■ 21,000 CFM ■ Two 30" Fans ■ ¾" O.D. Steel or Copper Coils	4	4	9,930	8,640	2	2160	702	1.8	16	14 x 48	16 x 36	12.5
		3	8,775	7,640								
	6	4	13,670	11,880	2	2700	1053	2.8	24	16 x 48	18 x 48	17.0
		3	12,270	10,670								
8	4	17,190	14,970	3	3260	1408	3.7	32	16 x 60	18 x 60	21.5	
	3	15,170	13,190									
10	4	19,120	16,630	3	3800	1755	4.7	40	18 x 60	20 x 60	24.0	
	3	17,140	14,910									

MODEL AND DESCRIPTION	COIL		BASIC RATING		HP PER FAN	SHIP WEIGHT LBS.	LINEAL FT. TUBING	COIL VOL. CU. FT.	WATER DEFROST GPM @ 10 P.S.I.	HORIZONTAL SURGE DRUMS		
	ROWS	FINS	FL-REC	TXV						10° & HIGHER	-40° TO 10°	APPROX. TONS
AF 240 ■ 24,000 CFM ■ Three 30" Fans ■ ¾" O.D. Steel or Copper Coils	4	4	11,175	9,720	1	2420	800	2.1	20	14 x 48	16 x 48	14.3
		3	9,900	8,745								
	6	4	15,450	13,440	1	3040	1200	3.2	30	16 x 48	18 x 48	19.5
		3	13,815	12,015								
8	4	19,695	17,145	1½	3540	1600	4.3	40	18 x 48	20 x 60	24.5	
	3	17,400	15,150									
10	4	21,885	19,050	2	4310	2000	5.3	50	18 x 60	20 x 60	27.8	
	3	19,695	17,130									

MODEL AND DESCRIPTION	COIL		BASIC RATING		HP PER FAN	SHIP WEIGHT LBS.	LINEAL FT. TUBING	COIL VOL. CU. FT.	WATER DEFROST GPM @ 10 P.S.I.	HORIZONTAL SURGE DRUMS		
	ROWS	FINS	FL-REC	TXV						10° & HIGHER	-40° TO 10°	APPROX. TONS
AF 250 ■ 25,000 CFM ■ Two 30" Fans ■ ¾" O.D. Steel or Copper Coils	4	4	11,700	10,170	3	2200	828	2.2	20	14 x 48	16 x 48	15.0
		3	10,350	9,000								
	6	4	16,160	14,060	3	2720	1242	3.3	30	16 x 48	18 x 48	20.0
		3	14,460	12,570								
8	4	20,600	17,910	3	3260	1656	4.4	40	18 x 48	20 x 60	25.0	
	3	18,180	15,820									
10	4	22,900	19,920	3	3780	2070	5.4	50	18 x 60	20 x 60	28.8	
	3	20,600	17,910									
AF 251 ■ 25,000 CFM ■ Two 30" Fans ■ 1.05" O.D. Steel Coils	4	4	14,600		3	2690	828	4.5	30	18 x 48	18 x 60	18.5
		3	12,900									
	6	4	19,900		3	3460	1242	6.8	45	20 x 48	20 x 72	25.0
3		17,900										
8	4	24,500		3	4210	1656	9.1	60	20 x 72	20 x 72	30.6	
	3	22,300										

MODEL AND DESCRIPTION	COIL		BASIC RATING		HP PER FAN	SHIP WEIGHT LBS.	LINEAL FT. TUBING	COIL VOL. CU. FT.	WATER DEFROST GPM @ 10 P.S.I.	HORIZONTAL SURGE DRUMS		
	ROWS	FINS	FL-REC	TXV						10° & HIGHER	-40° TO 10°	APPROX. TONS
AF 310 ■ 31,000 CFM ■ Two 36" Fans ■ ¾" O.D. Steel or Copper Coils	4	4	14,400	12,550	3	3110	1013	2.7	20	16 x 48	18 x 48	18.0
		3	12,780	11,100								
	6	4	19,920	17,330	3	3585	1520	4.0	30	18 x 48	20 x 48	25.0
		3	17,850	15,540								
8	4	25,400	22,100	5	4425	2026	5.2	40	18 x 60	20 x 48	32.0	
	3	22,450	19,530									
10	4	28,300	24,600	5	5210	2533	6.7	50	20 x 60	20 x 60	36.0	
	3	25,400	22,100									
AF 311 ■ 31,000 CFM ■ Two 36" Fans ■ 1.05" O.D. Steel Coils	4	4	18,000		3	3520	1013	5.5	30	18 x 48	20 x 60	22.5
		3	15,900									
	6	4	24,600		5	4720	1520	8.3	45	20 x 60	20 x 72	31.0
3		22,100										
8	4	30,200		5	5870	2026	11.3	60	20 x 72	24 x 60	38.0	
	3	27,600										

MODEL AND DESCRIPTION	COIL		BASIC RATING		HP PER FAN	SHIP WEIGHT LBS.	LINEAL FT. TUBING	COIL VOL. CU. FT.	WATER DEFROST GPM @ 10 P.S.I.	HORIZONTAL SURGE DRUMS		
	ROWS	FINs	FL-REC	TXV						10° & HIGHER	-40° TO 10°	APPROX. TONS
AF 350 ■ 35,000 CFM ■ Two 36" Fans ■ ¾" O.D. Steel or Copper Coils	4	4 3	16,270 14,400	14,150 12,500	3	3080 2780	1152	3.0	24	FOR FLOODED OPERATION USE AF 351		
	6	4 3	22,450 20,150	19,530 17,530	3	3980 3540	1728	4.4	36			
	8	4 3	28,700 25,300	24,970 22,000	5	4940 4350	2304	5.9	48			
	10	4 3	31,850 28,700	27,700 24,970	5	5770 5030	2880	7.3	60			
AF 351 ■ 35,000 CFM ■ Two 36" Fans ■ 1.05" O.D. Steel Coils	4	4 3	20,300 18,000		3	3900 3460	1152	6.1	36	18 x 60	20 x 72	25.0
	6	4 3	27,700 24,900		5	5250 4590	1728	9.4	54	20 x 72	20 x 72	35.0
	8	4 3	34,100 31,200		5	6560 5680	2304	13.0	72	24 x 48	24 x 72	42.5

MODEL AND DESCRIPTION	COIL		BASIC RATING		HP PER FAN	SHIP WEIGHT LBS.	LINEAL FT. TUBING	COIL VOL. CU. FT.	WATER DEFROST GPM @ 10 P.S.I.	HORIZONTAL SURGE DRUMS		
	ROWS	FINs	FL-REC	TXV						10° & HIGHER	-40° TO 10°	APPROX. TONS
AF 410 ■ 41,000 CFM ■ Two 42" Fans ■ ¾" O.D. Steel or Copper Coils	4	4 3	19,000 16,800	16,500 14,600	5	3880 3530	1344	3.6	24	FOR FLOODED OPERATION USE AF 411		
	6	4 3	25,800 23,200	22,500 20,200	5	4930 4410	2016	5.5	36			
	8	4 3	31,600 28,800	27,500 25,000	5	6030 5340	2688	7.2	48			
	10	4 3	35,700 33,100	31,300 28,800	5	7020 6160	3350	9.0	60			
AF 411 ■ 41,000 CFM ■ Two 42" Fans ■ 1.05" O.D. Steel Coils	4	4 3	23,300 20,900		5	4850 4330	1344	7.3	36	20 x 60	24 x 48	29.5
	6	4 3	31,800 29,000		5	6350 5580	2016	11.1	54	24 x 60	24 x 60	40.0
	8	4 3	39,400 36,200		5	7880 6850	2688	14.6	72	24 x 60	24 x 72	49.5

MODEL AND DESCRIPTION	COIL		BASIC RATING		HP PER FAN	SHIP WEIGHT LBS.	LINEAL FT. TUBING	COIL VOL. CU. FT.	WATER DEFROST GPM @ 10 P.S.I.	HORIZONTAL SURGE DRUMS		
	ROWS	FINs	FL-REC	TXV						10° & HIGHER	-40° TO 10°	APPROX. TONS
AF 470 ■ 47,000 CFM ■ Three 36" Fans ■ ¾" O.D. Steel or Copper Coils	6	4 3	30,000 27,100	26,100 23,400	3	5980 5380	2352	6.0	36	FOR FLOODED OPERATION USE AF 471		
	8	4 3	36,700 33,400	31,850 29,000	5	7300 6500	3136	8.1	48			
	10	4 3	41,800 38,700	36,200 33,500	5	8600 7600	3920	9.1	60			
AF 471 ■ 47,000 CFM ■ Three 36" Fans ■ 1.05" O.D. Steel Coils	4	4 3	27,500 24,400		3	5860 5260	1568	8.5	36	20 x 60	20 x 72	34.5
	6	4 3	37,600 33,800		5	7780 6900	2352	12.9	54	24 x 48	24 x 72	47.0
	8	4 3	46,400 42,200		5	9550 8340	3136	17.3	72	24 x 72	24 x 96	58.0

MODEL AND DESCRIPTION	COIL		BASIC RATING		HP PER FAN	SHIP WEIGHT LBS.	LINEAL FT. TUBING	COIL VOL. CU. FT.	WATER DEFROST GPM @ 10 P.S.I.	HORIZONTAL SURGE DRUMS		
	ROWS	FINs	FL-REC	TXV						10° & HIGHER	-40° TO 10°	APPROX. TONS
AF 540 ■ 54,000 CFM ■ Three 36" Fans ■ ¾" O.D. Steel or Copper Coils	6	4 3	34,400 30,800	30,000 26,800	5	6550 5900	2688	6.8	36	FOR FLOODED OPERATION USE AF 541		
	8	4 3	42,000 38,200	36,600 33,200	5	8130 7230	3584	9.0	48			
	10	4 3	47,700 44,200	41,600 38,500	5	9580 8380	4480	11.5	60			
AF 541 ■ 54,000 CFM ■ Three 36" Fans ■ 1.05" O.D. Steel Coils	4	4 3	31,500 27,900		5	6500 5850	1792	9.8	36	24 x 48	24 x 84	38.5
	6	4 3	43,000 38,600		5	8680 7640	2688	14.5	54	24 x 60	24 x 84	52.5
	8	4 3	53,000 48,200		7½	10,680 9380	3584	18.6	72	24 x 84	Two 24 x 60	64.0