



AMMONIA, BOOSTER, 3550 R.P.M.

R-717
AMMONIA
BOOSTER
MODELS
255B
AND
270B

NOTE:

*Inches of mercury below one standard atmosphere (29.92")
 Refrigeration capacity based on a saturated suction and refrigerant liquid cooled to a temperature corresponding with intermediate pressure. Decrease compressor capacity 1% for each 5°F. increase in liquid temperature above this level. B.H.P. remains unchanged.

Ratings include use of FES "SOC" oil cooling systems.

Model 255B

INTERMEDIATE PRESS. P.S.I.G. AND CORRESPONDING TEMP. °F		SUCTION TEMPERATURE °F AND CORRESPONDING PRESSURE PSIG						
		-70 *21.9	-60 *18.6	-50 *14.3	-40 *8.7	-30 *1.6	-20 3.6	-10 9.0
-10 9.0	T.R.	27.3	40.4	58.6	78.8			
	B.H.P.	55.1	56.1	57.1	58.1			
0 15.7	T.R.	25.8	39.4	56.6	76.8	103.0		
	B.H.P.	65.3	66.8	67.3	68.9	71.4		
+10 23.8	T.R.		38.4	54.5	74.7	101.0	133.3	
	B.H.P.		77.5	77.5	79.6	81.6	81.6	
+20 33.5	T.R.			53.5	72.7	99.0	130.3	171.7
	B.H.P.			87.7	89.8	91.8	92.8	96.4
+30 45.0	T.R.				70.7	97.0	127.3	165.6
	B.H.P.				100.0	102.0	104.0	106.1

Model 270B

INTERMEDIATE PRESS. P.S.I.G. AND CORRESPONDING TEMP. °F		SUCTION TEMPERATURE °F AND CORRESPONDING PRESSURE PSIG						
		-70 *21.9	-60 *18.6	-50 *14.3	-40 *8.7	-30 *1.6	-20 3.6	-10 9.0
-10 9.0	T.R.	30.6	45.0	63.6	87.3			
	B.H.P.	60.8	62.0	63.4	64.9			
0 15.7	T.R.	29.8	43.9	62.1	85.5	114.8		
	B.H.P.	71.8	73.0	74.4	76.0	77.7		
+10 23.8	T.R.		42.9	60.8	83.7	112.5	148.3	
	B.H.P.		84.1	85.5	87.1	88.8	90.7	
+20 33.5	T.R.			59.4	81.9	110.1	145.2	188.3
	B.H.P.			96.6	98.7	99.9	101.8	103.9
+30 45.0	T.R.				80.0	107.6	142.0	184.3
	B.H.P.				109.3	111.1	113.0	115.0



TABLE 1 — PHYSICAL DATA

Model	Shipping Weight**		Connections			Oil Charge Gals.		HP of Standard Oil Pump		*Compr. Inertia WR ² lb-ft ²	*Min. Cap. Torque Ft.-Lbs.	Compr. Displ. CFM
	Less Motor	With Motor Approx.	Suc-tion	Dis-charge	"SOC" Valve Conns.	Units With Water Cooled Oil Coolers	"SOC" Cooled Units	High Stage	Booster			
65	4000	4800	4"	2"	½"	25	20	2	—	5.1	40.0	208
95	4100	5000	4"	3"	¾"	45	40	3	3	6.9	57.9	278
100	4100	5000	4"	3"	¾"	45	40	3	3	7.2	60.9	292
135	4300	5500	5"	3"	¾"	45	40	3	3	9.4	77.7	398
140	4300	5500	5"	3"	¾"	45	40	3	3	10.4	85.7	439
175	5000	6500	5"	3"	¾"	75	65	5	3	19.6	124	544
180	5000	6500	5"	3"	¾"	75	65	5	3	20.6	131	571
255	5200	6900	6"	4"	¾"	75	65	5	3	27.6	168	776
270	5400	7100	6"	4"	¾"	75	65	5	3	30.3	185	853
305	5400	8100	6"	4"	¾"	75	65	5	3	33.1	201	932
350	9400	12100	6"	4"	1"	142	130	7½	5	65.5	271	1061
385	9500	12200	6"	4"	1"	142	130	7½	5	68.5	283	1110
420	9700	13200	6"	4"	1"	148	130	7½	5	78.0	322	1264
500	10400	15000	8"	5"	1"	148	130	7½	5	87.9	341	1516
550	10800	15800	8"	5"	1"	148	130	7½	5	96.7	375	1668
575	11000	16000	8"	5"	1"	148	130	7½	5	96.8	398	1670
775	13500	18600	8"	5"	1¼"	170	150	10	7½	202	611	2236
1160	14000	20400	10"	6"	1¼"	196	176	10	7½	296	849	3337

NOTE: * Refer to Selection Guide, Page 8.

** Shipping weights are estimated and include stop valves, oil, spare set of filters, and skid.

TABLE 2 — OPERATING LIMITATIONS

Maximum High Pressure Cutout Setting, psig, Ammonia 225, . . . R-22	275
Maximum Design Discharge Pressure, psig, Ammonia 250, R-22	300
Maximum Operating Differential, psi	275
Maximum Suction Pressure, psig	100
Maximum Discharge Temperature °F.	212
Maximum Oil Temperature °F.	145
Maximum Design Saturated Discharge Temperature °F.	
R-717 (Ammonia)	126
R-22	130
Minimum Ambient Temperature °F.	40
Maximum Superheat °F.—Suction gas superheats above 40 °F. — refer to York for design check.	