

6.0 REFERENCE DATA

6.1 TABLE 1 CAPACITY SELECTION CHART (MAX SCFM @ APPROACH)

INLET TEMP °F		150				200				250				300				350			
APPROACH TEMP °F		5	10	15	20	5	10	15	20	5	10	15	20	5	10	15	20	5	10	15	20
AFTERCOOLER SYSTEM MODEL NUMBER	ACS 250	191	250	275	300	117	160	200	250	96	120	165	200	87	117	151	191	81	104	129	159
	ACS 400	210	384	520	605	175	375	430	500	160	300	400	464	135	250	340	396	125	235	305	355
	ACS 750	355	650	890	1025	308	560	760	880	290	545	725	840	245	450	605	701	225	410	540	625
	ACS 950	480	871	1178	1360	415	754	1020	1180	390	712	950	1100	320	588	785	910	280	520	690	780
	ACS 1200	600	1090	1475	1710	520	950	1290	1460	490	900	1200	1380	405	735	980	1130	355	650	865	990
	ACS 1600	790	1440	1950	2260	710	1290	1720	1950	660	1200	1600	1860	530	965	1290	1480	460	840	1135	1300
	ACS 2000	980	1790	2420	2800	870	1580	2140	2460	820	1490	2000	2300	660	1210	1595	1840	572	1040	1400	1610
ACS 2500	1220	2200	3000	3470	1090	1980	2680	3100	1035	1880	2500	2870	784	1426	1980	2270	705	1290	1725	1980	

Above specifications are based on 80 to 125 psig operating pressures. Maximum pressure drop, less than 3 psi.

6.2 TABLE 2 AFTERCOOLER ELECTRIC MOTOR, AIR MOTOR & FAN DATA

		ELECTRIC MOTOR							AIR MOTOR			
MODEL NO.	FAN CFM	HP	VOLTAGE	PHASE	FULL LOAD AMPS 230V	HZ	RPM	NEMA FRAME	THERMAL OVERLOAD	INLET NPT	PSI (1)	CFM (2)
ACS 250	1325	1/2	115/230 208-230/460	1 3	8.0/4.0 1.8/0.9	50 50	3450	56C	NO	1/2	25	30
ACS 400	2200 1825/2200	1.0	115/208-230 208-230/460	1 3	6.0 3.6/3.2	60 50/60	3450 2850/3450			1/4	60	50
ACS 750	3600 3025/3600	1.5	115/208-230 208-230/460	1 3	8.5 4.8/4.2	60 50/60	3450 2850/3450			85	45	
ACS 950	4700	1.5	115/208-230 208-230/460	1 3	8.6 4.6	60	1740	145TC		1/2	60	55
ACS 1200	7000	5.0	230	1	23.0			184TC			70	100
ACS 1600		3.0	208-230/460	3	8.8			182TC		1	100	180
ACS 2000	9700	5.0	208-230/460	3	13.4			184TC			1-1/4	90
ACS 2500	14000	7.5	230/460		19.6	213TC						

All motors shown are TEFC. Published electrical ratings are approximate, and may vary because of motor brand. Actual ratings are on motor nameplate. Fan motors **must not** be cycled. Outdoor applications must be protected from direct weather. If ductwork or additional static resistance is added to the cooler airstream, an auxiliary air mover may be required.

- Air inlet to the air motor must be regulated to this pressure.
- CFM (Free Air) consumption of the air motor. Lubrication = One drop of oil for every 50-75 cfm of air passing through the air motor.

6.3 TABLE 3 TROUBLE SHOOTING GUIDE FOR AIR MOTORS

REASON	SYMPTOM				
	LOW TORQUE	LOW SPEED	WON'T RUN AT ALL	RUNS HOT	RUNS GOOD THEN SLOWS DOWN
DIRT OR FOREIGN MATERIAL	X	X	X		
INTERNAL RUST	X	X	X		
MISALIGNMENT	X	X	X	X	X
INSUFFICIENT AIR PRESSURE	X	X			
AIR SUPPLY LINE TOO SMALL		X			
RESTRICTED EXHAUST		X			X
POOR LUBRICATION	X	X	X	X	
JAMMED MACHINE	X	X	X		X
AIR COMPRESSOR TOO SMALL		X			X
AIR COMPRESSOR TOO FAR FROM UNIT		X			X