

	HP AMP	FLA Name Plate Calc/Code	125% FLA	Amp Frame	Breaker		Length	Conduit		Sets	Wires	Conductor Size	Wire Ground Size	Insulation	Ampacity	75° C 90° C		Total Number of Conductors	Total Ampacity	Drating Factor	Derated Ampacity	Breaker Difference from Wire	
					Amp Trip	% FLA 250% FLA		Sets	Size							75° C	90° C					Amps	%
MSB- 1 High Stage #4	50 HP	60 A 65 A	75 A	400 A	125 A	208.33% 150 A	20'	1	1-1/2"	1	3	2	6	THHN	115 A 130 A	75° C 90° C	3	115 A 130 A	1 0.87	115 A 113 A	10 A 12 A	8.70% 9.15%	
MSB- 2 MCC	225 HP	180 A	225 A	400 A	225 A	125.00%	20'	1	2-1/2"	1	3	300	2	THHN	285 A 320 A	75° C 90° C	3	285 A 320 A	1 0.87	285 A 278 A	-60 A -53 A	-21.05% -16.69%	
MSB- 3 Booster #3	150 HP	166 A 180 A	208 A	400 A	250 A	150.60% 415 A	80'	1	2-1/2"	1	3	4/0	2	THHN	230 A 260 A	75° C 90° C	3	230 A 260 A	1 0.87	230 A 226 A	20 A 24 A	8.70% 9.15%	
MSB- 4 Cooling Tower	90 HP 300 A	131 A	164 A	400 A	300 A	228.57%	70'	1	3"	1	3	350	4	THHN	310 A 350 A	75° C 90° C	3	310 A 350 A	1 0.87	310 A 305 A	-10 A -5 A	-3.23% -1.29%	
MSB- 5 High Stage #1	100 HP	115 A 124 A	144 A	400 A	200 A	173.91% 288 A	25'	1	2"	1	3	2/0	6	THHN	175 A 195 A	75° C 90° C	3	175 A 195 A	1 0.87	175 A 170 A	25 A 30 A	14.29% 15.56%	
MSB- 6 EDP	800 A	640 A		800 A	800 A	125.00%	25'	2	3-1/2"	2	3	500	3/0	THHN	380 A 430 A	75° C 90° C	6	760 A 860 A	1 0.87	760 A 748 A	40 A 52 A	5.26% 6.02%	
MSB- 7 High Stage #3	400 HP	470 A 477 A	588 A	800 A	800 A	170.21% 1175 A	50'	2	3"	2	3	350	1/0	THHN	310 A 350 A	75° C 90° C	6	620 A 700 A	1 0.87	620 A 609 A	180 A 191 A	29.03% 27.29%	
MSB- 8 High Stage #5	424 HP	475 A	594 A	800 A	700 A	147.37% 1188 A	50'	2	3"	2	3	350	1/0	THHN	310 A 350 A	75° C 90° C	6	620 A 700 A	1 0.87	620 A 609 A	80 A 91 A	12.90% 13.00%	
MSB- 9 High Stage #2	300 HP	330 A 361 A	413 A	800 A	500 A	151.52% 825 A	20'	2	2-1/2"	2	3	4/0	2	THHN	230 A 260 A	75° C 90° C	6	460 A 520 A	1 0.87	460 A 452 A	40 A 48 A	8.70% 9.15%	
MSB- 10 Booster #1	300 HP	330 A 361 A	413 A	800 A	500 A	151.52% 825 A	60'	1	4"	2	3	350	2	THHN	310 A 350 A	75° C 90° C	6	620 A 700 A	1 0.696	620 A 487 A	-120 A 13 A	-19.35% 1.83%	
MSB- 11 Booster # 2	300 HP	330 A 361 A	413 A	800 A	500 A	151.52% 825 A	60'	1	4"	2	3	350	2	THHN	310 A 350 A	75° C 90° C	6	620 A 700 A	1 0.696	620 A 487 A	-120 A 13 A	-19.35% 1.83%	