APPENDIX C

SIZING AN SR35 SOFT STARTER

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SR35 Soft Starter Selection Steps

SR35				
Step 1 - Select the application from the list and follow that column down.	*Typical Applications*	Standard Duty	Medium Duty	Heavy Duty
		Agitator	Compressor - Centrifugal	Crusher
		Compressor - Rotary Vane	Compressor - Reciprocating	Shredder
		Compressor - Unloaded	Compressor - Rotary Screw	Wood Chipper
		Bow Thruster - Zero Pitch	Ball Mill	Fan - High Inertia or >85A
		Fan - Low Inertia or <85A	Bow Thruster - Loaded	-
		Feeder - Screw	Conveyor - Loaded	-
		Lathe Machines	Grinder	-
		Mixer - Unloaded	Hammer Mill	-
		Molding Machine	Mills - Flour etc.	-
		Plastic and Textile Machines	Mixer - Loaded	-
		Pump - Submersible; Centrifugal	Pelletizers	-
		Pump - Submersible; Rotodynamic	Press, Flywheel	-
		Saw - Band	Positive Displacement Pump; Reciprocating	-
		Transformers	Positive Displacement Pump; Rotary	-
		Voltage Regulators	Pump Jack	-
		-	Rolling Mill	-
		-	Roots Blower	-
		-	Saw - Circular	-
		-	Screen - Vibrating	-
		-	Tumblers	-

SR35												
Step 2 - Confirm the rated starting capability of the soft starter against the application.	***Trip Class***									Trip Class 10	Trip Class 20	Trip Class 30
	Rated Starting Capability									3x Motor Current - 23s 3.5x Motor Current - 17s	4x Motor Current - 19s	4x Motor Current - 29s
	Max Starts per Hour									5 starts/hour	5 starts/hour	5 starts/hour
	Max Starts per Hour w/Optional Cooling Fan									40 starts/hour	40 starts/hour	40 starts/hour
Step 3 - Consider the operating environment and make the model selection on a higher amp rating.	***Height Above Sea Level***									Standard operating height is 1000m, for every 100m increase motor Amps/kW by 1% up to 2000m. Example: For a 20A motor at 1500m, make model selection based on 21A (5% higher).		
	Operating Temperatures									Standard operating temperature is 40degC, for every 1°C above, increase motor Amps/kW by 2%, up to 60°C. Example: For a 20A motor at 50°C make model selection based on 24A (20% higher).		
	Increased Starts per Hour									Fit optional fan to increase maximum up to 40 starts per hour.		
Step 4 - Select your motor Voltage and Horsepower/kW and select model.	***Motor Rating***									***Select Model 5 starts/hour @ 40°C***	***Select Model 5 starts/hour @ 40°C***	***Select Model 5 starts/hour @ 40°C***
	I_e A	***kW***			***FLA A***	***Hp***						
		230V	***400V***	***500V***		***200V***	***208V***	***220–240V***	***440–480V***	***550–600V***		
	17	4	7.5	7.5	***17***	3	5	5	10	15	SR35-017	SR35-022	SR35-027
	22	5.5	11	11	***22***	5	5	7.5	15	20	SR35-022	SR35-027	SR35-034
	29	7.5	15	15	***27***	7.5	7.5	7.5	20	25	SR35-027	SR35-034	SR35-041
	35	7.5	18.5	22	***34***	10	10	10	25	30	SR35-034	SR35-041	SR35-052
	41	11	22	22	***41***	10	10	10	30	40	SR35-041	SR35-052	SR35-065
	55	15	30	37	***52***	15	15	15	40	50	SR35-052	SR35-065	SR35-077
	66	18.5	37	45	***65***	20	20	20	50	60	SR35-065	SR35-077	SR35-100
	80	22	45	55	***77***	20	25	25	60	75	SR35-077	SR35-100	SR35-125
	106	30	55	75	***100***	30	30	30	75	100	SR35-100	SR35-125	SR35-156
	132	37	75	90	***125***	40	40	40	100	125	SR35-125	SR35-156	SR35-192
	160	45	90	110	***156***	50	50	60	125	150	SR35-156	SR35-192	SR35-242*
	195	55	110	132	***192***	60	60	60	150	200	SR35-192	SR35-242*	SR35-302*
	242	75	132	160	***242***	75	75	75	200	250	SR35-242*	SR35-302*	SR35-361*
	302	90	160	200	***302***	100	100	100	250	300	SR35-302*	SR35-361*	-
	361	110	200	250	***361***	125	125	150	300	350	SR35-361*	-	-
**SR35-242, 302 and 361, 3 starts/hour @ 40°C*												