

Feeder Disconnect and Combination Lighting Contactor Specifications

Bulletin Numbers 500FL, 500L, 500LP, 502L, 503L

Topic	Page
Electrical Ratings	2
Mechanical, Construction, and Environmental Ratings	3
Short Circuit, AC Coil, and Auxiliary Contact Ratings	4
Load-Life Curves	5
Approximate Dimensions: Open Type without Enclosures	6
Approximate Dimensions: Type 1, General Purpose	7...8
Approximate Dimensions: Type 3R/12, 4/4X	8...9
Approximate Dimensions: Type 3R, 7 & 9, Hazardous Locations	10...13

Additional Resources

These documents contain additional information concerning related products from Rockwell Automation.

Resource	Description
Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1	Provides general guidelines for installing a Rockwell Automation industrial system.
Product Certifications website, http://www.ab.com	Provides declarations of conformity, certificates, and other certification details.

You can view or download publications at <http://www.rockwellautomation.com/literature/>. To order paper copies of technical documentation, contact your local Allen-Bradley distributor or Rockwell Automation sales representative.



Electrical Ratings

NEMA Size	Load Voltage [V]	Continuous Current Rating [A]	Service Limit Current Rating [A]★	Maximum Hp Rating (Non-plugging and non-jogging duty)		Maximum Hp Rating (Plugging and jogging duty)‡		Transformer Primary Switching kVa Rating (Inrush Current ≤ 20 times Continuous Current)		Transformer Primary Switching kVa Rating (Inrush Current = 20 to 40 times Continuous Current)		Capacitor Switching kVAR§	Maximum Circuit Closing Inrush Current [A] Peak Including Offset	
				1Ø	3Ø	1Ø	3Ø	1Ø	3Ø	1Ø	3Ø			3Ø
00	115	9	11	1/3	—	1/4	—	—	—	—	—	—	87	
	200			—	1-1/2	1	—	—	—	—	—	—		
	230			1	1-1/2	1/2	1	—	—	—	—	—		
	380			—	1-1/2	—	1	—	—	—	—	—		
	460			—	2	—	1-1/2	—	—	—	—	—		
575	—	2	—	1-1/2	—	—	—	—	—	—	—			
0	115	18	21	1	—	1/2	—	0.6	—	0.3	—	—	140	
	200			—	3	1-1/2	—	1.8	—	0.9	—	—		
	230			2	3	1	1-1/2	1.2	2.1	0.6	1	—		—
	380			—	5	—	1-1/2	—	—	—	—	—		—
	460			—	5	—	2	2.4	4.2	1.2	2.1	—		—
575	—	5	—	2	3	5.2	1.5	2.6	—	—	—			
1	115	27	32	2	—	1	—	1.2	—	0.6	—	—	288	
	200			—	7-1/2	3	—	3.6	—	1.8	—	—		
	230			3	7-1/2	2	3	2.4	4.3	1.2	2.1	6		—
	380			—	10	—	5	—	—	—	—	—		—
	460			—	10	—	5	4.9	8.5	2.5	4.3	13.5		—
575	—	10	—	5	6.2	11	3.1	5.3	17	—	—			
1P	115	36	42	3	—	1-1/2	—	—	—	—	—	—	—	
	230			5	—	3	—	—	—	—	—	—	—	
2	115	45	52	3	—	2	—	2.1	—	1	—	—	483	
	200			—	10	7-1/2	—	6.3	—	3.1	—	—		
	230			7-1/2	15	5	10	4.1	7.2	2.1	3.6	12		—
	380			—	25	—	15	—	—	—	—	—		—
	460			—	25	—	15	8.3	14	4.2	7.2	25		—
575	—	25	—	15	10	18	5.2	8.9	31	—	—			
3	115	90	104	7-1/2	—	7-1/2	—	4.1	—	2	—	—	947	
	200			—	25	15	—	12	—	6.1	—	—		
	230			15	30	15	20	8.1	14	4.1	7.0	27		—
	380			—	50	—	30	—	—	—	—	—		—
	460			—	50	—	30	16	28	8.1	14	53		—
575	—	50	—	30	20	35	10	18	67	—	—			
4	115	135	156	—	—	—	—	6.8	—	3.4	—	—	1581	
	200			—	40	25	—	20	—	10	—	—		
	230			—	50	30	14	23	6.8	12	40	—		
	380			—	75	50	—	—	—	—	—	—		
	460			—	100	60	27	47	14	23	80	—		
575	—	100	60	34	59	17	29	100	—	—				
5	115	270	311	—	—	—	—	14	—	6.8	—	—	3163	
	200			—	75	60	—	41	—	20	—	—		
	230			—	100	75	27	47	14	24	80	—		
	380			—	150	125	—	—	—	—	—	—		
	460			—	200	150	54	94	27	47	160	—		
575	—	200	150	68	117	34	59	200	—	—				
6	115	540	621	—	—	—	—	27	—	14	—	—	6326	
	200			—	150	125	—	81	—	41	—	—		
	230			—	200	150	54	94	27	47	160	—		
	380			—	300	250	—	—	—	—	—	—		
	460			—	400	300	108	188	54	94	320	—		
575	—	400	300	135	234	68	117	400	—	—				
7	230	810	932	—	300	—	—	—	—	—	—	240	9470	
	460			—	600	—	—	—	—	—	—	480		
	575			—	600	—	—	—	—	—	—	600		
8	230	1215	1400	—	450	—	—	—	—	—	—	360	14205	
	460			—	900	—	—	—	—	—	—	720		
	575			—	900	—	—	—	—	—	—	900		
9	230	2250	2590	—	800	—	—	—	—	—	—	665	25380	
	460			—	1600	—	—	—	—	—	—	1325		
	575			—	1600	—	—	—	—	—	—	1670		

★ **Service-Limit Current Ratings** — The service-limit current ratings shown represent the maximum rms current, in amperes, which the controller shall be permitted to carry for protracted periods in normal service. At service-limit current ratings, temperature rises shall be permitted to exceed those obtained by testing the controller at its continuous current rating. The current rating of overload relays or the trip current of other motor protective devices used shall not exceed the service-limit current rating of the controller.

‡ **Plugging or Jogging Service** — The listed horsepower ratings are recommended for those applications requiring repeated interruption of stalled motor current encountered in rapid motor reversal in excess of five openings or closings per minute and shall not be more than ten in a ten minute period.

§ If maximum available current (at capacitor terminals) is greater than 3000 A, please contact your local Rockwell Automation sales office, Allen-Bradley distributor, or NEMA ICS-2 Standard.

Mechanical Ratings

NEMA Size	Mechanical Life (Millions of Operations)	Maximum Number of Auxiliary Contacts	Operating Time [ms]	
			Pick-up (Average)	Drop-out (Average)
00	10	5	20	16
0	10	8	21	16
1	10	8	22	14
2	10	8	27	13
3	5	8	37	20
4	5	8	27	20
5	5	8	25	18
6	5	4	25...79	10...22
7	—	8	88	40
8	—	8	88	45
9	—	8	118	84

Construction

NEMA Size	Wire Size for Power Terminals	Required Torque on Power Terminal Wire Clamps and Pressure Connectors or Lugs	Type of Power Terminal	Contact Material		Requirements for Sizing of Wire
				Power Contacts	Auxiliary Contacts	
00	#16...10 AWG	9 lb•in	Pressure terminals	Silver alloy	Silver	All wire rated 167 °F (75 °C) or higher must be sized per the local Electrical Code for 167°F (75 °C) wire.
0	#14...10 AWG	20 lb•in	Saddle or wire clamps			
1	#14...8 AWG	20 lb•in				
2	#14...4 AWG	45 lb•in	Pressure terminals			
3	#8...1/0 AWG	150 lb•in				
4	#6...4/0 AWG	275 lb•in				
5	#4 AWG...500 MCM	375 lb•in				
6	Lugs sold separately. See page 1-111.					
7						
8						
9	Direct bus connections only.					

Environmental

NEMA Size	Operating Position	Operating Temperature Range	Altitude	Corrosion-Resistance
00	Horizontal	Starters with eutectic alloy Overload relay -13...+149 °F (-25...+65 °C) Starters with SMP Overload relay -13...+131 °F (-25...+55 °C) (provided condensation is prevented)	10 000 feet before derating	All metal parts are treated for corrosion-resistance
0	Vertical			
1				
2				
3				
4				
5	Horizontal			
6	Vertical			
7				
8				
9				