300-Line

Application Information and Technical Data

Description	NEMA Size										
	00	0	1	2	3	4	5	6	7	8	9
Normal Starting Duty HP Rating ①											
Single Phase											
115V 60Hz	⅓	1	2	3	7½	NA	NA	NA	NA	NA	NA
230V 60Hz	1	2	3	7½	15	NA	NA	NA	NA	NA	NA
Three Phase											
200V 60Hz	1½	3	7½	10	25	40	75	150			
230V 60Hz	1½	3	7½	15	30	50	100	200	300	450	800
380-415V 50Hz	1½	5	10	25	50	75	150	300	500	750	1350
460V 60Hz	2	5	10	25	50	100	200	400	600	900	1600
575V 60Hz	2	5	10	25	50	100	200	400	600	900	1600
Plugging or Jogging HP Rating ①											
Single Phase											
115V 60Hz	NA	½	1	2	5	NA	NA	NA	NA	NA	NA
230V 60Hz	NA	1	2	5	10	NA	NA	NA	NA	NA	NA
Three Phase											
200V 60Hz	NA	1½	3	7½	15	25	60	125	NA	NA	NA
230V 60Hz	NA	1½	3	10	20	30	75	150	NA	NA	NA
380-415V 50Hz	NA	1½	5	15	30	50	125	250	NA	NA	NA
460V 60Hz	NA	2	5	15	30	60	150	250	NA	NA	NA
575V 60Hz	NA	2	5	15	30	60	150	250	NA	NA	NA
Continuous Current Max											
Starters and Enclosed Contactors	9	18	27	45	90	135	270	540	810	1215	2250
Open Contactors	10	20	30	50	100	150	300	600	900	1350	2500
Coil Burden (VA)											
Inrush 2-Pole	151	151	151	528	1152	1248	2580	3360	1600	1500	2900
Holding 2-Pole	24	24	24	60	83	87	191	255	210	140	300
Inrush 3-Pole	151	151	151	528	1152	1248	2580	3360	1600	2900	3600
Holding 3-Pole	24	24	24	60	83	87	191	255	210	300	400
Inrush 4- and 5-Pole	151	151	151	576	1248	1356	3600	NA	NA	NA	NA
Holding 4- and 5-Pole	24	24	24	75	87	95	276	NA	NA	NA	NA
Control Power Transformer VA (Min)	50	50	50	100	200	250	500②	500②	1000②	1500②	1501②
Coil Operating Voltage											
% Minimum Pickup	65	85	85	85	85	85	85	85	85	85	85
% Maximum Dropout	63	63	63	68	65	65	65	65	50	50	50
Switching Delay 3-Pole											
Pickup Typical (Milliseconds)	15-30	15-30	15-30	20-40	20-45	20-45	30-50	30-50	60-90	80-125	80-125
Dropout Typical (Milliseconds)	7-15	7-15	7-15	7-15	7-15	7-15	15-25	15-25	100-150	25-100	25-100
Mechanical Life Millions Nominal	20	20	20	10	5	5	5	1	1	1	0.5
Weight (Less Carton)											
Contactor (Pounds)	2¾	2¾	2¾	6½	15	14¾	48	48	79	203	302
Starter (Pounds)	3¾	3¾	3¾	7½	17¾	17½	53	75	106	268	365
Power Terminals											
Wire Size Range (75 DEG) AWG	14-8	14-8	14-8	14-4	10-1/0	8-3/0	1/0-500kcmil	2 2/0-500kcmil	3 2-600kcmil	4 2-600kcmil	NA
Torque (Pounds-Inches)	20	20	20	50	150	200	300	375	500	500	NA
Max. Noise (DBA)	50	50	50	50	50	50	65	65	65	65	65

① When operation of the controller requires jogging (inching) or plug stopping or when normal operation requires continued operation in excess of 5 operations per minute or 10 operations in a 10-minute period, the plugging or jogging horsepower ratings must be followed.

② In lieu of a 500 to 1500 VA control transformer, a 50 VA unit in conjunction with a control relay can be used as follows:
1. Wire control relay coil in control circuit on secondary side of control transformer.
2. Wire two poles of control relay in series with contactor coil at line voltage.

Mounting Position

Devices must be mounted to a sturdy vertical surface with the line side terminals up. No other orientations are permitted.

Operating Temperature

Equipment is designed for ambient temperature outside of equipment enclosures to be −25° to 40°C. When contactor is energized, temperatures will be above outside ambient in equipment enclosures. Temperature rises inside the enclosures should be limited so that internal air temperature does not exceed 65° for sizes 00 to 6 and 60°C for sizes 7 to 9. If condensing moisture is present, space heater kits should be used to prevent condensation when contactor is not energized.

Storage temperature should be −30° to 65°C. If equipment is stored over 1 week, it may be necessary to cover the equipment and provide a source of heat to prevent condensation.