

Product Selection

For use with Line-connected Motors



Use the SMC Estimation Wizard and SMC Thermal Estimation Wizard to confirm that the SMC controller selection meets the application requirements. See [Sizing and Selection Tools](#) for more information. For additional assistance, visit rok.auto or contact Industrial Controls Technical Support by email at raictechsupport@ra.rockwell.com or by phone at +1 440-646-5800.

Table 1 - 200/208V AC SMC-3 Controllers for Use with Line-connected Motors

Rated Voltage [V AC]	Motor Current [A] ⁽¹⁾	Max. kW, 50 Hz	Max. Hp, 60 Hz	Control Power	Open Type Cat. No.
200/208	1...3	—	0.5	100...240V AC, 50/60 Hz	150-C3NBD
		—		24V AC/DC	150-C3NBR
	3...9	—	0.75...2	100...240V AC, 50/60 Hz	150-C9NBD
		—		24V AC/DC	150-C9NBR
	5.3...16	—	1.5...3	100...240V AC, 50/60 Hz	150-C16NBD
		—		24V AC/DC	150-C16NBR
	6.3...19	—	1.5...3	100...240V AC, 50/60 Hz	150-C19NBD
		—		24V AC/DC	150-C19NBR
	8.3...25	—	3...7.5	100...240V AC, 50/60 Hz	150-C25NBD
		—		24V AC/DC	150-C25NBR
	10...30	—	3...7.5	100...240V AC, 50/60 Hz	150-C30NBD
		—		24V AC/DC	150-C30NBR
	12.3...37	—	5...10	100...240V AC, 50/60 Hz	150-C37NBD
		—		24V AC/DC	150-C37NBR
	14.3...43	—	5...10	100...240V AC, 50/60 Hz	150-C43NBD
		—		24V AC/DC	150-C43NBR
	20...60	—	7.5...15	100...240V AC, 50/60 Hz	150-C60NBD
		—		24V AC/DC	150-C60NBR
	28.3...85	—	10...25	100...240V AC, 50/60 Hz	150-C85NBD
		—		24V AC/DC	150-C85NBR
	27...108	—	20...30	100...240V AC, 50/60 Hz	150-C108NBD
		—		24V AC/DC ⁽²⁾	150-C108NBR
	34...135	—	25...40	100...240V AC, 50/60 Hz	150-C135NBD
		—		24V AC/DC ⁽²⁾	150-C135NBR
	67...201	—	40...60	100...240V AC, 50/60 Hz	150-C201NBD
		—		24V AC/DC ⁽²⁾	150-C201NBR
	84...251	—	50...75	100...240V AC, 50/60 Hz	150-C251NBD
		—		24V AC/DC ⁽²⁾	150-C251NBR
	106...317	—	60...100	100...240V AC, 50/60 Hz	150-C317NBD
		—		24V AC/DC ⁽²⁾	150-C317NBR
	120...361	—	75...125	100...240V AC, 50/60 Hz	150-C361NBD
		—		24V AC/DC ⁽²⁾	150-C361NBR
	160...480	—	100...150	100...240V AC, 50/60 Hz	150-C480NBD
		—		24V AC/DC ⁽²⁾	150-C480NBR

(1) Motor FLA rating must fall within specified current range for unit to operate properly.

(2) Separate 120V or 240V single phase is required for fan operation.

Table 2 - 230V AC SMC-3 Controllers for Use with Line-connected Motors

Rated Voltage [V AC]	Motor Current [A] ⁽¹⁾	Max. kW, 50 Hz	Max. Hp, 60 Hz	Control Power	Open Type Cat. No.
230	1...3	0.55	0.5	100...240V AC, 50/60 Hz	150-C3NBD
				24V AC/DC	150-C3NBR
	3...9	2.2	0.75...2	100...240V AC, 50/60 Hz	150-C9NBD
				24V AC/DC	150-C9NBR
	5.3...16	4	1.5...5	100...240V AC, 50/60 Hz	150-C16NBD
				24V AC/DC	150-C16NBR
	6.3...19	4	2...5	100...240V AC, 50/60 Hz	150-C19NBD
				24V AC/DC	150-C19NBR
	8.3...25	5.5	3...7.5	100...240V AC, 50/60 Hz	150-C25NBD
				24V AC/DC	150-C25NBR
	10...30	7.5	5...10	100...240V AC, 50/60 Hz	150-C30NBD
				24V AC/DC	150-C30NBR
	12.3...37	7.5	5...10	100...240V AC, 50/60 Hz	150-C37NBD
				24V AC/DC	150-C37NBR
	14.3...43	11	5...15	100...240V AC, 50/60 Hz	150-C43NBD
				24V AC/DC	150-C43NBR
	20...60	15	7.5...20	100...240V AC, 50/60 Hz	150-C60NBD
				24V AC/DC	150-C60NBR
	28.3...85	22	15...30	100...240V AC, 50/60 Hz	150-C85NBD
				24V AC/DC	150-C85NBR
	27...108	30	20...40	100...240V AC, 50/60 Hz	150-C108NBD
				24V AC/DC ⁽²⁾	150-C108NBR
	34...135	37	25...50	100...240V AC, 50/60 Hz	150-C135NBD
				24V AC/DC ⁽²⁾	150-C135NBR
	67...201	55	40...75	100...240V AC, 50/60 Hz	150-C201NBD
				24V AC/DC ⁽²⁾	150-C201NBR
	84...251	75	50...100	100...240V AC, 50/60 Hz	150-C251NBD
				24V AC/DC ⁽²⁾	150-C251NBR
	106...317	90	60...125	100...240V AC, 50/60 Hz	150-C317NBD
				24V AC/DC ⁽²⁾	150-C317NBR
	120...361	110	75...150	100...240V AC, 50/60 Hz	150-C361NBD
				24V AC/DC ⁽²⁾	150-C361NBR
	160...480	132	100...200	100...240V AC, 50/60 Hz	150-C480NBD
				24V AC/DC ⁽²⁾	150-C480NBR

(1) Motor FLA rating must fall within specified current range for unit to operate properly.

(2) Separate 120V or 240V single phase is required for fan operation.

Table 3 - 380/400/415/460V AC SMC-3 Controllers for Use with Line-connected Motors

Rated Voltage [V AC]	Motor Current [A] ⁽¹⁾	Max. kW, 50 Hz	Max. Hp, 60 Hz	Control Power	Open Type Cat. No.
380/400/415 (kW) 460 (Hp)	1...3	1.1	0.5...1.5	100...240V AC, 50/60 Hz	150-C3NBD
				24V AC/DC	150-C3NBR
	3...9	4	1.5...5	100...240V AC, 50/60 Hz	150-C9NBD
				24V AC/DC	150-C9NBR
	5.3...16	7.5	5...10	100...240V AC, 50/60 Hz	150-C16NBD
				24V AC/DC	150-C16NBR
	6.3...19	7.5	5...10	100...240V AC, 50/60 Hz	150-C19NBD
				24V AC/DC	150-C19NBR
	8.3...25	11	7.5...15	100...240V AC, 50/60 Hz	150-C25NBD
				24V AC/DC	150-C25NBR
	10...30	15	7.5...20	100...240V AC, 50/60 Hz	150-C30NBD
				24V AC/DC	150-C30NBR
	12.3...37	18.5	10...25	100...240V AC, 50/60 Hz	150-C37NBD
				24V AC/DC	150-C37NBR
	14.3...43	22	10...30	100...240V AC, 50/60 Hz	150-C43NBD
				24V AC/DC	150-C43NBR
	20...60	30	15...40	100...240V AC, 50/60 Hz	150-C60NBD
				24V AC/DC	150-C60NBR
	28.3...85	45	25...60	100...240V AC, 50/60 Hz	150-C85NBD
				24V AC/DC	150-C85NBR
	27...108	55	50...75	100...240V AC, 50/60 Hz	150-C108NBD
				24V AC/DC ⁽²⁾	150-C108NBR
	34...135	75	60...100	100...240V AC, 50/60 Hz	150-C135NBD
				24V AC/DC ⁽²⁾	150-C135NBR
	67...201	95...110	75...150	100...240V AC, 50/60 Hz	150-C201NBD
				24V AC/DC ⁽²⁾	150-C201NBR
	84...251	95...132	100...200	100...240V AC, 50/60 Hz	150-C251NBD
				24V AC/DC ⁽²⁾	150-C251NBR
	106...317	95...160	125...250	100...240V AC, 50/60 Hz	150-C317NBD
				24V AC/DC ⁽²⁾	150-C317NBR
	120...361	110...200	250...300	100...240V AC, 50/60 Hz	150-C361NBD
				24V AC/DC ⁽²⁾	150-C361NBR
	160...480	160...250	300...400	100...240V AC, 50/60 Hz	150-C480NBD
				24V AC/DC ⁽²⁾	150-C480NBR

(1) Motor FLA rating must fall within specified current range for unit to operate properly.

(2) Separate 120V or 240V single phase is required for fan operation.

Table 4 - 500/575V AC SMC-3 Controllers for Use with Line-connected Motors

Rated Voltage [V AC]	Motor Current [A] ⁽¹⁾	Max. kW, 50 Hz	Max. Hp, 60 Hz	Control Power	Open Type Cat. No.
500 (kW) 575 (Hp)	1...3	1.5	0.75...2	100...240V AC, 50/60 Hz	150-C3NCD
				24V AC/DC	150-C3NCR
	3...9	5.5	3...7.5	100...240V AC, 50/60 Hz	150-C9NCD
				24V AC/DC	150-C9NCR
	5.3...16	7.5	5...10	100...240V AC, 50/60 Hz	150-C16NCD
				24V AC/DC	150-C16NCR
	6.3...19	11	7.5...15	100...240V AC, 50/60 Hz	150-C19NCD
				24V AC/DC	150-C19NCR
	8.3...25	15	7.5...20	100...240V AC, 50/60 Hz	150-C25NCD
				24V AC/DC	150-C25NCR
	10...30	18.5	10...25	100...240V AC, 50/60 Hz	150-C30NCD
				24V AC/DC	150-C30NCR
	12.3...37	22	15...30	100...240V AC, 50/60 Hz	150-C37NCD
				24V AC/DC	150-C37NCR
	14.3...43	22	15...40	100...240V AC, 50/60 Hz	150-C43NCD
				24V AC/DC	150-C43NCR
	20...60	37	20...50	100...240V AC, 50/60 Hz	150-C60NCD
				24V AC/DC	150-C60NCR
	28.3...85	55	30...75	100...240V AC, 50/60 Hz	150-C85NCD
				24V AC/DC	150-C85NCR
	27...108	75	60...100	100...240V AC, 50/60 Hz	150-C108NCD
				24V AC/DC ⁽²⁾	150-C108NCR
	34...135	90	75...125	100...240V AC, 50/60 Hz	150-C135NCD
				24V AC/DC ⁽²⁾	150-C135NCR
	67...201	75...132	100...200	100...240V AC, 50/60 Hz	150-C201NCD
				24V AC/DC ⁽²⁾	150-C201NCR
	84...251	90...160	125...250	100...240V AC, 50/60 Hz	150-C251NCD
				24V AC/DC ⁽²⁾	150-C251NCR
	106...317	100...200	200...300	100...240V AC, 50/60 Hz	150-C317NCD
				24V AC/DC ⁽²⁾	150-C317NCR
	120...361	132...250	200...350	100...240V AC, 50/60 Hz	150-C361NCD
				24V AC/DC ⁽²⁾	150-C361NCR
	160...480	200...315	250...500	100...240V AC, 50/60 Hz	150-C480NCD
				24V AC/DC ⁽²⁾	150-C480NCR

(1) Motor FLA rating must fall within specified current range for unit to operate properly.

(2) Separate 120V or 240V single phase is required for fan operation.

For use with Delta-connected Motors



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Table 5 - 200/208V AC SMC-3 Controllers for Use with Delta-connected Motors

Rated Voltage [V AC]	Motor Current [A] ⁽¹⁾	Max. kW, 50 Hz	Max. Hp, 60 Hz	Control Power	Open Type Cat. No.
200/208	1.7...5.1	—	1	100...240V AC, 50/60 Hz	150-C3NBD
		—		24V AC/DC	150-C3NBR
	5.1...16	—	1.5...3	100...240V AC, 50/60 Hz	150-C9NBD
		—		24V AC/DC	150-C9NBR
	9.1...27.6	—	3...7.5	100...240V AC, 50/60 Hz	150-C16NBD
		—		24V AC/DC	150-C16NBR
	10.9...32.8	—	3...10	100...240V AC, 50/60 Hz	150-C19NBD
		—		24V AC/DC	150-C19NBR
	14.3...43	—	3...10	100...240V AC, 50/60 Hz	150-C25NBD
		—		24V AC/DC	150-C25NBR
	17.3...52	—	5...10	100...240V AC, 50/60 Hz	150-C30NBD
		—		24V AC/DC	150-C30NBR
	21...64	—	7.5...20	100...240V AC, 50/60 Hz	150-C37NBD
		—		24V AC/DC	150-C37NBR
	25...74	—	7.5...20	100...240V AC, 50/60 Hz	150-C43NBD
		—		24V AC/DC	150-C43NBR
	34.6...104	—	15...30	100...240V AC, 50/60 Hz	150-C60NBD
		—		24V AC/DC	150-C60NBR
	50...147	—	15...40	100...240V AC, 50/60 Hz	150-C85NBD
		—		24V AC/DC	150-C85NBR
	47...187	—	20...60	100...240V AC, 50/60 Hz	150-C108NBD
		—		24V AC/DC ⁽²⁾	150-C108NBR
	59...234	—	20...75	100...240V AC, 50/60 Hz	150-C135NBD
		—		24V AC/DC ⁽²⁾	150-C135NBR
	116...348	—	75...100	100...240V AC, 50/60 Hz	150-C201NBD
		—		24V AC/DC ⁽²⁾	150-C201NBR
	145...435	—	100...150	100...240V AC, 50/60 Hz	150-C251NBD
		—		24V AC/DC ⁽²⁾	150-C251NBR
	183...549	—	100...200	100...240V AC, 50/60 Hz	150-C317NBD
		—		24V AC/DC ⁽²⁾	150-C317NBR
	208...625	—	125...200	100...240V AC, 50/60 Hz	150-C361NBD
		—		24V AC/DC ⁽²⁾	150-C361NBR
	277...831	—	200...300	100...240V AC, 50/60 Hz	150-C480NBD
		—		24V AC/DC ⁽²⁾	150-C480NBR

(1) Motor FLA rating must fall within specified current range for unit to operate properly.

(2) Separate 120V or 240V single phase is required for fan operation.

Table 6 - 230V AC SMC-3 Controllers for Use with Delta-connected Motors

Rated Voltage [V AC]	Motor Current [A] ⁽¹⁾	Max. kW, 50 Hz	Max. Hp, 60 Hz	Control Power	Open Type Cat. No.
230	1.7...5.1	0.25...1.1	1	100...240V AC, 50/60 Hz	150-C3NBD
				24V AC/DC	150-C3NBR
	5.1...16	1.1...4	1...5	100...240V AC, 50/60 Hz	150-C9NBD
				24V AC/DC	150-C9NBR
	9.1...27.6	2.2...7.5	3...7.5	100...240V AC, 50/60 Hz	150-C16NBD
				24V AC/DC	150-C16NBR
	10.9...32.8	2.2...7.5	3...10	100...240V AC, 50/60 Hz	150-C19NBD
				24V AC/DC	150-C19NBR
	14.3...43	4...11	3...15	100...240V AC, 50/60 Hz	150-C25NBD
				24V AC/DC	150-C25NBR
	17.3...52	4...15	5...15	100...240V AC, 50/60 Hz	150-C30NBD
				24V AC/DC	150-C30NBR
	21...64	5.5...18.5	7.5...20	100...240V AC, 50/60 Hz	150-C37NBD
				24V AC/DC	150-C37NBR
	25...74	5.5...22	7.5...25	100...240V AC, 50/60 Hz	150-C43NBD
				24V AC/DC	150-C43NBR
	34.6...104	7.5...30	15...40	100...240V AC, 50/60 Hz	150-C60NBD
				24V AC/DC	150-C60NBR
	50...147	15...45	20...50	100...240V AC, 50/60 Hz	150-C85NBD
				24V AC/DC	150-C85NBR
	47...187	55	20...60	100...240V AC, 50/60 Hz	150-C108NBD
				24V AC/DC ⁽²⁾	150-C108NBR
	59...234	75	25...75	100...240V AC, 50/60 Hz	150-C135NBD
				24V AC/DC ⁽²⁾	150-C135NBR
	116...348	110	75...125	100...240V AC, 50/60 Hz	150-C201NBD
				24V AC/DC ⁽²⁾	150-C201NBR
	145...435	132	100...150	100...240V AC, 50/60 Hz	150-C251NBD
				24V AC/DC ⁽²⁾	150-C251NBR
	183...549	160	125...200	100...240V AC, 50/60 Hz	150-C317NBD
				24V AC/DC ⁽²⁾	150-C317NBR
	208...625	200	150...250	100...240V AC, 50/60 Hz	150-C361NBD
				24V AC/DC ⁽²⁾	150-C361NBR
	277...831	250	200...300	100...240V AC, 50/60 Hz	150-C480NBD
				24V AC/DC ⁽²⁾	150-C480NBR

(1) Motor FLA rating must fall within specified current range for unit to operate properly.

(2) Separate 120V or 240V single phase is required for fan operation.