

Field-installed contactor modification kits

Auxiliary contacts

For CR305 contactors

Auxiliary contact kits

NEMA size	Contact configuration	Block design	Product number
0,1	1 NO	Basic	CR305X100A
0,1	1 NC	Basic	CR305X100B
0,1	1 NO-1 NC	Basic	CR305X100C
2	1 NO	Basic	CR305X200A
2	1 NC	Basic	CR305X200B
2	1 NO-1 NC	Basic	CR305X200C
3, 4	1 NO	Basic	CR305X300A
3, 4	1 NC	Basic	CR305X300B
3, 4	1 NO-1 NC	Basic	CR305X300C
5, 6	1 NO	Basic	CR305X500A
5, 6	1 NC	Basic	CR305X500B
5, 6	1 NO-1 NC	Basic	CR305X500C

Auxiliary contact kits — adder blocks

NEMA size	Contact configuration	Block design	Product number
0-6	1 NO	Adder	CR305X100D ¹
0-6	1 NC	Adder	CR305X100E ¹

Logic reed switch auxiliary contacts

NEMA size	Contact configuration	Product number
00, 0, 1	1 NO-0 NC	CR305X100RA
00, 0, 1	0 NO-1 NC	CR305X100RB
00, 0, 1	1 NO-1 NC	CR305X100RC
2	1 NO-0 NC	CR305X200RA
2	0 NO-1 NC	CR305X200RB
2	1 NO-1 NC	CR305X200RC
3, 4	1 NO-0 NC	CR305X300RA
3, 4	0 NO-1 NC	CR305X300RB
3, 4	1 NO-1 NC	CR305X300RC
5, 6	1 NO-0 NC	CR305X500RA
5, 6	0 NO-1 NC	CR305X500RB
5, 6	1 NO-1 NC	CR305X500RC

¹First adder block must be mounted to a basic block. A second adder block can be added to the first adder block on size 2 through size 9 starters.

Four extra auxiliary contacts (not blocks) is the maximum that can be added to either a NEMA size 0 or 1 starter while five is the maximum extra auxiliary contacts that can be added to NEMA size 2 through 6 devices.

Open/enclosed non-combination magnetic starters

CR309 reversing with thermal overload relay

NEMA sizes 00–7 with thermal overload relay
600 volts maximum 50/60 Hz

Includes a holding interlock, mechanical and cross-electrical interlock on each contactor, pressure terminals for the line and load connections, plus a 3-leg block type overload relay (manual reset). One NO isolated contact on the overload relay is available. To order, add suffix LAA to product numbers listed in table for enclosed types and open forms.

CR309 three-phase magnetic reversing starters

NEMA size	Continuous ampere rating ¹	Voltage (60 Hz)	hp	Open type w/ vertical mechanical interlock	Open type w/ horizontal mechanical interlock	NEMA type 1	NEMA type 3R	NEMA type 12 ³	NEMA type 4/4X
				Product number	Product number	Product number	Product number	Product number	Product number
00	9	Separate control — 115–120 V		—	CR309A002	CR309A102	—	—	—
00	9	200–208	1½	—	CR309A023	CR309A123	—	—	—
00	9	230–240	1½	—	CR309A003	CR309A103	—	—	—
00	9	460–480	2	—	CR309A004	CR309A104	—	—	—
00	9	575–600	2	—	CR309A005	CR309A105	—	—	—
0	18	Separate control — 115–120 V		CR309B002CAA	CR309B002	CR309B102	CR309B602	CR309B202	CR309B402
0	18	200–208	3	CR309B023CAA	CR309B023	CR309B123	CR309B623	CR309B223	CR309B423
0	18	230–240	3	CR309B003CAA	CR309B003	CR309B103	CR309B603	CR309B203	CR309B403
0	18	460–480	5	CR309B004CAA	CR309B004	CR309B104	CR309B604	CR309B204	CR309B404
0	18	575–600	5	CR309B005CAA	CR309B005	CR309B105	CR309B605	CR309B205	CR309B405
1	27	Separate control — 115–120 V		CR309C002CAA	CR309C002	CR309C102	CR309C602	CR309C202	CR309C402
1	27	200–208	7½	CR309C023CAA	CR309C023	CR309C123	CR309C623	CR309C223	CR309C423
1	27	230–240	7½	CR309C003CAA	CR309C003	CR309C103	CR309C603	CR309C203	CR309C403
1	27	460–480	10	CR309C004CAA	CR309C004	CR309C104	CR309C604	CR309C204	CR309C404
1	27	575–600	10	CR309C005CAA	CR309C005	CR309C105	CR309C605	CR309C205	CR309C405
2	45	Separate control — 115–120 V		CR309D002AMA	CR309D002	CR309D102	CR309D602	CR309D202	CR309D402
2	45	200–208	10	CR309D023AMA	CR309D023	CR309D123	CR309D623	CR309D223	CR309D423
2	45	230–240	15	CR309D003AMA	CR309D003	CR309D103	CR309D603	CR309D203	CR309D403
2	45	460–480	25	CR309D004AMA	CR309D004	CR309D104	CR309D604	CR309D204	CR309D404
2	45	575–600	25	CR309D005AMA	CR309D005	CR309D105	CR309D605	CR309D205	CR309D405
3	90	Separate control — 115–120 V		CR309E002AMA	CR309E002	CR309E102	CR309E602	CR309E202	CR309E402
3	90	200–208	25	CR309E023AMA	CR309E023	CR309E123	CR309E623	CR309E223	CR309E423
3	90	230–240	30	CR309E003AMA	CR309E003	CR309E103	CR309E603	CR309E203	CR309E403
3	90	460–480	50	CR309E004AMA	CR309E004	CR309E104	CR309E604	CR309E204	CR309E404
3	90	575–600	50	CR309E005AMA	CR309E005	CR309E105	CR309E605	CR309E205	CR309E405
4	135	Separate control — 115–120 V		CR309F002AMA	CR309F002	CR309F102	CR309F602	CR309F202	CR309F402
4	135	200–208	40	CR309F023AMA	CR309F023	CR309F123	CR309F623	CR309F223	CR309F423
4	135	230–240	50	CR309F003AMA	CR309F003	CR309F103	CR309F603	CR309F203	CR309F403
4	135	460–480	100	CR309F004AMA	CR309F004	CR309F104	CR309F604	CR309F204	CR309F404
4	135	575–600	100	CR309F005AMA	CR309F005	CR309F105	CR309F605	CR309F205	CR309F405
5	270	Separate control — 115–120 V		CR309G002AMA	CR309G002	CR309G102	CR309G602	CR309G202	CR309G402
5	270	200–208	75	CR309G023AMA	CR309G023	CR309G123	CR309G623	CR309G223	CR309G423
5	270	230–240	100	CR309G003AMA	CR309G003	CR309G103	CR309G603	CR309G203	CR309G403
5	270	460–480	200	CR309G004AMA	CR309G004	CR309G104	CR309G604	CR309G204	CR309G404
5	270	575–600	200	CR309G005AMA	CR309G005	CR309G105	CR309G605	CR309G205	CR309G405

¹Motor full load current should not exceed continuous ampere rating of the starter.

²Order by description giving complete data on motor being controlled, control circuit voltage, enclosure type and modifications desired.

³External reset not included on standard listed forms.

Open/enclosed non-combination magnetic starters

CR309 2-speed starters

Two-speed, two-winding, 3-3 pole

Non-combination, open, NEMA type 1, 3R, 12, 4/4X

NEMA sizes 0–5 with thermal overload relay

600 volts maximum 50/60 hertz

Three-phase

Includes a holding interlock, mechanical and cross-electrical interlock, pressure terminals for the line and load connections, plus a 3-leg block type overload relay (manual reset) for each speed. All enclosures include external reset. One NO isolated contact on each overload relay is available as an option. To order, change suffix AKA to LKA for product numbers listed in table. Six heaters should be ordered as separate items. The product numbers listed are starters suitable for wye or closed delta connected motor windings.

CR309, three-phase two-winding magnetic starters

NEMA size	Continuous ampere rating ¹	Voltage (60 Hz)	hp	Open type	NEMA type 1	NEMA type 3R	NEMA type 12	NEMA type 4/4X
				Product number	Product number	Product number	Product number	Product number
0	18	Separate control—115-120 V		CR309B002AKA	CR309B102AKA	CR309B602AKA	CR309B202AKA	CR309B402AKA
0	18	200-208	3	CR309B023AKA	CR309B123AKA	CR309B623AKA	CR309B223AKA	CR309B423AKA
0	18	230-240	3	CR309B003AKA	CR309B103AKA	CR309B603AKA	CR309B203AKA	CR309B403AKA
0	18	460-480	5	CR309B004AKA	CR309B104AKA	CR309B604AKA	CR309B204AKA	CR309B404AKA
0	18	575-600	5	CR309B005AKA	CR309B105AKA	CR309B605AKA	CR309B205AKA	CR309B405AKA
1	27	Separate control—115-120 V		CR309C002AKA	CR309C102AKA	CR309C602AKA	CR309C202AKA	CR309C402AKA
1	27	200-208	7 1/2	CR309C023AKA	CR309C123AKA	CR309C623AKA	CR309C223AKA	CR309C423AKA
1	27	230-240	7 1/2	CR309C003AKA	CR309C103AKA	CR309C603AKA	CR309C203AKA	CR309C403AKA
1	27	460-480	10	CR309C004AKA	CR309C104AKA	CR309C604AKA	CR309C204AKA	CR309C404AKA
1	27	575-600	10	CR309C005AKA	CR309C105AKA	CR309C605AKA	CR309C205AKA	CR309C405AKA
2	45	Separate control—115-120 V		CR309D002AKA	CR309D102AKA	CR309D602AKA	CR309D202AKA	CR309D402AKA
2	45	200-208	10	CR309D023AKA	CR309D123AKA	CR309D623AKA	CR309D223AKA	CR309D423AKA
2	45	230-240	15	CR309D003AKA	CR309D103AKA	CR309D603AKA	CR309D203AKA	CR309D403AKA
2	45	460-480	25	CR309D004AKA	CR309D104AKA	CR309D604AKA	CR309D204AKA	CR309D404AKA
2	45	575-600	25	CR309D005AKA	CR309D105AKA	CR309D605AKA	CR309D205AKA	CR309D405AKA
3	90	Separate control—115-120 V		CR309E002AKA	CR309E102AKA	CR309E602AKA	CR309E202AKA	CR309E402AKA
3	90	200-208	25	CR309E023AKA	CR309E123AKA	CR309E623AKA	CR309E223AKA	CR309E423AKA
3	90	230-240	30	CR309E003AKA	CR309E103AKA	CR309E603AKA	CR309E203AKA	CR309E403AKA
3	90	460-480	50	CR309E004AKA	CR309E104AKA	CR309E604AKA	CR309E204AKA	CR309E404AKA
3	90	575-600	50	CR309E005AKA	CR309E105AKA	CR309E605AKA	CR309E205AKA	CR309E405AKA
4	135	Separate control—115-120 V		CR309F002AKA	CR309F102AKA	CR309F602AKA	CR309F202AKA	CR309F402AKA
4	135	200-208	40	CR309F023AKA	CR309F123AKA	CR309F623AKA	CR309F223AKA	CR309F423AKA
4	135	230-240	50	CR309F003AKA	CR309F103AKA	CR309F603AKA	CR309F203AKA	CR309F403AKA
4	135	460-480	100	CR309F004AKA	CR309F104AKA	CR309F604AKA	CR309F204AKA	CR309F404AKA
4	135	575-600	100	CR309F005AKA	CR309F105AKA	CR309F605AKA	CR309F205AKA	CR309F405AKA
5	270	Separate control—115-120 V		CR309G002AKA	CR309G102AKA	CR309G602AKA	CR309G202AKA	CR309G402AKA
5	270	200-208	75	CR309G023AKA	CR309G123AKA	CR309G623AKA	CR309G223AKA	CR309G423AKA
5	270	230-240	100	CR309G003AKA	CR309G103AKA	CR309G603AKA	CR309G203AKA	CR309G403AKA
5	270	460-480	200	CR309G004AKA	CR309G104AKA	CR309G604AKA	CR309G204AKA	CR309G404AKA
5	270	575-600	200	CR309G005AKA	CR309G105AKA	CR309G605AKA	CR309G205AKA	CR309G405AKA

¹Motor full load current should not exceed continuous ampere rating of the starter.