

CR306, CR386 magnetic starters

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

NEMA sizes 00–6 with thermal overload relay
600 volts maximum 50/60 Hz

Standard features

Includes a holding interlock, pressure terminals for the line and load connections, plus a 3-leg block type ambient compensated overload relay with manual reset. All enclosures include external reset. NO/NC contacts on the overload relay are provided. To order, add suffix LAA to product numbers (size 00–5) listed in table. Three heaters should be ordered as separate items. See pages 1-134 to 1-140.

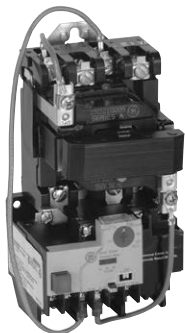
CR306, three-phase magnetic starters

NEMA size	Continuous ampere rating ¹	Voltage	Horsepower	Open type	NEMA type 1	NEMA type 3R	NEMA type 12	NEMA type 4/4X
				Product number CR306	Product number CR306	Product number CR306	Product number CR306	Product number CR306
00	9	Separate control—115–120 V		A002	A102	Use NEMA size 0	Use NEMA size 0	Use NEMA size 0
00	9	200–208	1½	A023	A123	Use NEMA size 0	Use NEMA size 0	Use NEMA size 0
00	9	230–240	1½	A003	A103	Use NEMA size 0	Use NEMA size 0	Use NEMA size 0
00	9	460–480	2	A004	A104	Use NEMA size 0	Use NEMA size 0	Use NEMA size 0
00	9	575–600	2	A005	A105	Use NEMA size 0	Use NEMA size 0	Use NEMA size 0
0	18	Separate control—115–120 V		B002	B102	B602	B202	B402
0	18	200–208	3	B023	B123	B623	B223	B423
0	18	230–240	3	B003	B103	B603	B203	B403
0	18	460–480	5	B004	B104	B604	B204	B404
0	18	575–600	5	B005	B105	B605	B205	B405
1	27	Separate control—115–120 V		C002	C102	C602	C202	C402
1	27	200–208	7½	C023	C123	C623	C223	C423
1	27	230–240	7½	C003	C103 ²	C603	C203	C403
1	27	460–480	10	C004	C104	C604	C204	C404
1	27	575–600	10	C005	C105	C605	C205	C405
2	45	Separate control—115–120 V		D002	D102	D602	D202	D402
2	45	200–208	10	D023	D123	D623	D223	D423
2	45	230–240	15	D003	D103	D603	D203	D403
2	45	460–480	25	D004	D104	D604	D204	D404
2	45	575–600	25	D005	D105	D605	D205	D405
3	90	Separate control—115–120 V		E002	E102	E602	E202	E402
3	90	200–208	25	E023	E123	E623	E223	E423
3	90	230–240	30	E003	E103	E603	E203	E403
3	90	460–480	50	E004	E104	E604	E204	E404
3	90	575–600	50	E005	E105	E605	E205	E405
4	135	Separate control—115–120 V		F002	F102	F602	F202	F402
4	135	200–208	40	F023	F123	F623	F223	F423
4	135	230–240	50	F003	F103	F603	F203	F403
4	135	460–480	100	F004	F104	F604	F204	F404
4	135	575–600	100	F005	F105	F605	F205	F405
5	270	Separate control—115–120 V		G002	G102	G602	G202	G402
5	270	200–208	75	G023	G123	G623	G223	G423
5	270	230–240	100	G003	G103	G603	G203	G403
5	270	460–480	200	G004	G104	G604	G204	G404
5	270	575–600	200	G005	G105	G605	G205	G405
6	540	Separate control—115–120 V		HH002	HH102	HH602	HH202	HH402
6	540	200–208	150	HH023	HH123	HH623	HH223	HH423
6	540	230–240	200	HH003	HH103	HH603	HH203	HH403
6	540	460–480	400	HH004	HH104	HH604	HH204	HH404
6	540	575–600	400	HH005	HH105	HH605	HH205	HH405

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

CR306 magnetic starters

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



CR306 size 1 motor starter with solid-state overload relay installed

NEMA sizes 1–6 with solid state overload relay 600 volts maximum 50/60 Hz

Product number selection instructions

1. 50 Hz starters
50 Hz forms (at standard voltages) are the same as shown in table for 60 Hz. See page 1-7 for 380–415 volt horsepower ratings.
2. Product notes
Motor full-load current should not exceed continuous ampere rating of starter.
3. Note: Reversing, two speed, and combination starters are also available with solid-state overload relays. Contact your ABB Representative for more information.
4. Units are individually boxed and poly-packed six per carton as standard.
5. External reset not included on standard listed forms (NEMA Type 12).
6. For additional details on the solid state overload relay, see pages 1-141 to 1-146.

Technical features — solid-state overload

- 2:1 adjustable full load amps with tactile feedback dial
- Selectable 10/20/30 protection class
- Ambient insensitive within the stated operating temperature range of -20 ° to +70 °C
- Built-in thermal memory to prevent hot motor restarts
- Protection against complete phase current loss
- Manual reset (standard) and remote reset (optional) 120 V AC
- Accuracy: $\pm 2\%$
- Repeatability: $\pm 2\%$
- Self-powered at 50% of minimum current range
- Size: 1–6 (0.40–540 A, 600 V, 50/60 Hz)
- Unbalance trip signal for PLC operation
- Manual trip
- Visual trip indication
- Standard isolated 1 NO and 1 NC aux. contact (A600, Q600)
- Built-in line/load straps
- Fits with existing 300-line starters
- Power factor correction terminals (sizes 1–4)
- DIN rail mountable sizes 1 and 2

Reference publications

Instructions	
NEMA size	Publication number
00, 0, 1	1SQC912006M0201
2	1SQC912001M0201
3	1SQC912003M0201
4	1SQC912004M0201
5	1SQC912028M0201
6	1SQC912029M0201

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

NEMA sizes 00–6 with thermal overload relay
600 volts maximum 50/60 Hz

Standard features

Includes a holding interlock. One heater (per starter) for sizes 00–2 and two heaters (per starter) for size 3 should be ordered as separate items. See pages 1-134 to 1-140.

CR306, single-phase magnetic starters

NEMA size	Continuous ampere rating ¹	Voltage	Horsepower	Open type	NEMA type 1	NEMA type 3R	NEMA type 12	NEMA type 4/4X
				Product number CR306	Product number CR306	Product number CR306	Product number CR306	Product number CR306
00	9	115-120	$\frac{1}{3}$	H002	H102	Use NEMA size 0	Use NEMA size 0	Use NEMA size 0
00	9	230-240	1	H003	H103	Use NEMA size 0	Use NEMA size 0	Use NEMA size 0
0	18	115-120	1	J002	J102	J602	J202	J402
0	18	230-240	2	J003	J103	J603	J203	J403
1	27	115-120	2	K002	K102	K602	K202	K402
1	27	230-240	3	K003	K103	K603	K203	K403
1P	36	115-120	3	K002BMA	K102BKA	K602BKA	K202BKA	K402BKA
1P	36	230-240	5	K003BMA	K103BKA	K603BKA	K203BKA	K403BKA
2	45	115-120	3	L002	L102	L602	L202	L402
2	45	230-240	7½	L003	L103	L603	L203	L403
3	90	115-120	7½	M002	M102	M602	M202	M402
3	90	230-240	15	M003	M103	M603	M203	M403
3	90	460-480	25	M004	M104	M604	M204	M404
3	90	575-600	25	M005	M105	M605	M205	M405

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