

# NEMA Full Voltage Power Devices

## NEMA Rated Full Voltage Starters - Magnetic

### CR306, CR386 Magnetic Starters

Nonreversing, Non-combination  
 NEMA Sizes 00-9 with Thermal Overload Relay  
 600 Volts Maximum 50/60 Hertz

#### Application

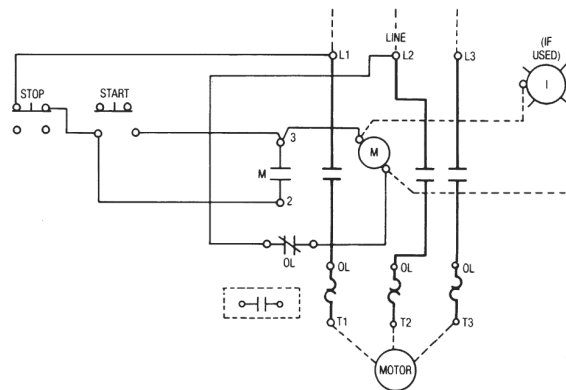
GE's magnetic motor starters listed here may be used for starting full-voltage, nonreversing, single-speed ac motors up to 1600 horsepower, 600 Volts maximum, providing protection to the motor against running or stalled overloads. Their compact size and ease of wiring make them especially suitable for motor control centers, custom-type control panels, and switchgear equipment. Refer to page 1-9 for features of basic starter.



Typical CR306 Size 4 magnetic motor starter

#### Product Number Selection Instructions

- Specify starter by complete Product Number.  
 Example: CR306C103 is a Size 1 starter with 230-240-Volt, 60-Hertz coil and in Type 1 general-purpose enclosure @ **\$246.00, GO-10G.**
- The final letter of the Product Number denotes extra auxiliary contacts (sometimes referred to as auxiliary interlocks). Order the desired extra auxiliary contacts by replacing the final letter with one from first column of auxiliary interlock table (see page 1-136).  
 Example: CR306C103AAB is Size 1 starter with one extra normally open, auxiliary contact @ **\$312.00, GO-10G.**
- Starter forms are available with coils of other ratings than those shown on pages 1-11 to 1-12. Refer to coil suffix table, page 1-8 for information. To order forms with other coil ratings, insert suffix from coil table in place of fifth and sixth numbers of listed starter Product Number shown on pages 1-11 to 1-12. (Contact your nearest GE Energy Representative for other available starter coils not shown in table.) Example: A CR306C102 NEMA Size 1, three-pole starter in Type 1 enclosure with 24-Volt, 60-Hertz coil becomes a CR306C124 Product Number.
- For continuous rated motors with a service factor of 1.15 to 1.25 select the heater with maximum motor Amperes equal to or immediately greater than the actual full-load current taken directly from the nameplate of motor. Order heaters by complete Product Number from appropriate heater tables on pages 1-155 to 1-161. **List Price \$9.00 each, GO-10H.** Packaged in quantities of three; must be ordered in multiples of three.
- Order special modifications or forms not listed by complete description using a listed Product Number as reference.  
 Example: Similar to CR306C104 except with 480/120-Volt control transformer and red indicating light in cover.  
**Total List Price . . . . . \$483.00, GO-10G.**
- Two-phase, four-wire forms are available. Contact nearest GE Energy Representative for pricing and ordering information.
- Standard Coil Ratings**  
 Standard Voltages (60 Hertz): 24, 115-120, 200-208, 230-240, 265-277, 460-480 and 575-600  
 Standard Voltages (50 Hertz): 110, 220, 380, 440 and 550  
 For price adders on special voltage and/or frequency coils, refer to page 1-128.
- 50-Hertz Starters**  
 Pricing of starters for use on 50 Hertz at standard voltages is the same as shown in table for 60 Hertz. Refer to page 1-6 for three-phase horsepower ratings at 380 Volts, 50 Hertz.



Typical Schematic Diagram for CR306 Starter (NEMA Sizes 00-6)

#### 9. Product Notes

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

#### Reference Publications

Instructions	Publication Number
NEMA Size 00, 0, 1	GEH-5190
2	GEH-4774
3	GEH-4806
4	GEH-4807
5	GEH-4839
6	GEH-5198
7-9	GEH-5108

#### CR306, CR386 Magnetic Starters - Contents

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Other Coil Voltages: See page 1-8  
 Factory Installed Modifications: See pages 1-126 to 1-133

Field Installed Modifications: See pages 1-134 to 1-140  
 Extra Auxiliary Contacts: See pages 1-134 to 1-136  
 Heater Selection Tables: See pages 1-155 to 1-161

# NEMA Full Voltage Power Devices

## NEMA Rated Full Voltage Starters - Magnetic

### CR306, CR386 Magnetic Starters

Nonreversing, Non-combination, Open, NEMA Type 1, 3R, 12, 4/4X  
 NEMA Sizes 00-9 with Thermal Overload Relay  
 600 Volts Maximum 50/60 Hertz

Check Speedi Configurator for product availability and premium through GE Fastrac Program.

#### Three-Phase

List Price includes a holding interlock, pressure terminals for the line and load connections, plus a 3-leg block type overload relay (manual reset). External reset not included in standard listed enclosed forms. One NO isolated contact on the overload relay is available as an option at **\$24.00, GO-10G**. To order add suffix LAA to Product Numbers (Size 00-5) listed in table.

Three heaters should be ordered as separate items. See pages 1-155 to 1-161 for selection. List price **\$9.00 each, GO-10H**.

#### CR306, Three-Phase Magnetic Starters

NEMA Size	Continuous Ampere Rating <sup>1</sup>	Voltage	Horsepower	Open Type		NEMA Type 1		NEMA Type 3R		NEMA Type 12		NEMA Type 4/4X	
				Product Number CR306	List Price GO-10G	Product Number CR306	List Price GO-10G	Product Number CR306	List Price GO-10G	Product Number CR306	List Price GO-10G	Product Number CR306	List Price GO-10G
00	9	Separate Control—115-120 V		A002	\$162.00	A102	\$174.00	Use NEMA Size 0		Use NEMA Size 0		Use NEMA Size 0	
00	9	200-208	1 1/2	A023	\$162.00	A123	\$174.00	Use NEMA Size 0		Use NEMA Size 0		Use NEMA Size 0	
00	9	230-240	1 1/2	A003	\$162.00	A103	\$174.00	Use NEMA Size 0		Use NEMA Size 0		Use NEMA Size 0	
00	9	460-480	2	A004	\$162.00	A104	\$174.00	Use NEMA Size 0		Use NEMA Size 0		Use NEMA Size 0	
00	9	575-600	2	A005	\$162.00	A105	\$174.00	Use NEMA Size 0		Use NEMA Size 0		Use NEMA Size 0	
0	18	Separate Control—115-120 V		B002	\$204.00	B102	\$216.00	B602	\$288.00	B202	\$288.00	B402	\$426.00
0	18	200-208	3	B023	\$204.00	B123	\$216.00	B623	\$288.00	B223	\$288.00	B423	\$426.00
0	18	230-240	3	B003	\$204.00	B103	\$216.00	B603	\$288.00	B203	\$288.00	B403	\$426.00
0	18	460-480	5	B004	\$204.00	B104	\$216.00	B604	\$288.00	B204	\$288.00	B404	\$426.00
0	18	575-600	5	B005	\$204.00	B105	\$216.00	B605	\$288.00	B205	\$288.00	B405	\$426.00
1	27	Separate Control—115-120 V		C002	\$234.00	C102	\$246.00	C602	\$318.00	C202	\$318.00	C402	\$462.00
1	27	200-208	7 1/2	C023	\$234.00	C123	\$246.00	C623	\$318.00	C223	\$318.00	C423	\$462.00
1	27	230-240	7 1/2	C003	\$234.00	C103 <sup>2</sup>	\$246.00	C603	\$318.00	C203	\$318.00	C403	\$462.00
1	27	460-480	10	C004	\$234.00	C104	\$246.00	C604	\$318.00	C204	\$318.00	C404	\$462.00
1	27	575-600	10	C005	\$234.00	C105	\$246.00	C605	\$318.00	C205	\$318.00	C405	\$462.00
2	45	Separate Control—115-120 V		D002	\$426.00	D102	\$486.00	D602	\$618.00	D202	\$618.00	D402	\$918.00
2	45	200-208	10	D023	\$426.00	D123	\$486.00	D623	\$618.00	D223	\$618.00	D423	\$918.00
2	45	230-240	15	D003	\$426.00	D103	\$486.00	D603	\$618.00	D203	\$618.00	D403	\$918.00
2	45	460-480	25	D004	\$426.00	D104	\$486.00	D604	\$618.00	D204	\$618.00	D404	\$918.00
2	45	575-600	25	D005	\$426.00	D105	\$486.00	D605	\$618.00	D205	\$618.00	D405	\$918.00
3	90	Separate Control—115-120 V		E002	\$690.00	E102	\$810.00	E602	\$966.00	E202	\$966.00	E402	\$1422.00
3	90	200-208	25	E023	\$690.00	E123	\$810.00	E623	\$966.00	E223	\$966.00	E423	\$1422.00
3	90	230-240	30	E003	\$690.00	E103	\$810.00	E603	\$966.00	E203	\$966.00	E403	\$1422.00
3	90	460-480	50	E004	\$690.00	E104	\$810.00	E604	\$966.00	E204	\$966.00	E404	\$1422.00
3	90	575-600	50	E005	\$690.00	E105	\$810.00	E605	\$966.00	E205	\$966.00	E405	\$1422.00
4	135	Separate Control—115-120 V		F002	\$1578.00	F102	\$1830.00	F602	\$2346.00	F202	\$2346.00	F402	\$2874.00
4	135	200-208	40	F023	\$1578.00	F123	\$1830.00	F623	\$2346.00	F223	\$2346.00	F423	\$2874.00
4	135	230-240	50	F003	\$1578.00	F103	\$1830.00	F603	\$2346.00	F203	\$2346.00	F403	\$2874.00
4	135	460-480	100	F004	\$1578.00	F104	\$1830.00	F604	\$2346.00	F204	\$2346.00	F404	\$2874.00
4	135	575-600	100	F005	\$1578.00	F105	\$1830.00	F605	\$2346.00	F205	\$2346.00	F405	\$2874.00
5	270	Separate Control—115-120 V		G002	\$3855.00	G102	\$4317.00	G602	\$5637.00	G202	\$5637.00	G402	\$5637.00
5	270	200-208	75	G023	\$3855.00	G123	\$4317.00	G623	\$5637.00	G223	\$5637.00	G423	\$5637.00
5	270	230-240	100	G003	\$3855.00	G103	\$4317.00	G603	\$5637.00	G203	\$5637.00	G403	\$5637.00
5	270	460-480	200	G004	\$3855.00	G104	\$4317.00	G604	\$5637.00	G204	\$5637.00	G404	\$5637.00
5	270	575-600	200	G005	\$3855.00	G105	\$4317.00	G605	\$5637.00	G205	\$5637.00	G405	\$5637.00
6	540	Separate Control—115-120 V		HH002	\$9165.00	HH102	\$12165.00	HH602	\$13785.00	HH202	\$13785.00	HH402	\$15165.00
6	540	200-208	150	HH023	\$9165.00	HH123	\$12165.00	HH623	\$13785.00	HH223	\$13785.00	HH423	\$15165.00
6	540	230-240	200	HH003	\$9165.00	HH103	\$12165.00	HH603	\$13785.00	HH203	\$13785.00	HH403	\$15165.00
6	540	460-480	400	HH004	\$9165.00	HH104	\$12165.00	HH604	\$13785.00	HH204	\$13785.00	HH404	\$15165.00
6	540	575-600	400	HH005	\$9165.00	HH105	\$12165.00	HH605	\$13785.00	HH205	\$13785.00	HH405	\$15165.00

#### CR386 Three-Phase Magnetic Starters

NEMA Size	Continuous Ampere Rating <sup>1</sup>	Voltage	Horsepower	Control Circuit Voltage	Open Type	
					Product Number CR386	List Price GO-10G
7	810	Separate Control—115-120 V			J002AA1A	\$13167.00
7	810	220-240	300	230	J003AA1A	\$13167.00
7	810	440-480	600	460	J004AA1A	\$13167.00
7	810	550-600	600	575	J005AA1A	\$13167.00
8	1215	Separate Control—115-120 V			K002AA1A	\$19455.00
8	1215	220-240	450	230	K003AA1A	\$19455.00
8	1215	440-480	900	460	K004AA1A	\$19455.00
8	1215	550-600	900	575	K005AA1A	\$19455.00
9	2250	Separate Control—115-120 V			L002AA1A	\$31983.00
9	2250	220-240	800	230	L003AA1A	\$31983.00
9	2250	440-480	1600	460	L004AA1A	\$31983.00
9	2250	550-600	1600	575	L005AA1A	\$31983.00

<sup>1</sup>Motor full load current should not exceed continuous ampere rating of the starter.

<sup>2</sup>Units are individually boxed and "Poly-Packed" six per carton as standard.



Enclosure Descriptions: See Section 13