

NEMA Full Voltage Power Devices

NEMA Rated Full Voltage Starters - Magnetic

CR306 Magnetic Starters

Nonreversing, Non-combination, Open, NEMA Type 1, 3R, 12, 4/4X

NEMA Sizes 1-6 with Solid State Overload Relay
600 Volts Maximum 50/60 Hertz

Product Number Selection Instructions

1. 50 Hertz Starters

Pricing for 50-Hertz forms (at standard voltages) is the same as shown in table for 60 Hertz. Listed prices for 460-480 Volt also apply to 380-415 Volt, 50 Hertz. See page 1-4 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 nearest GE Representative for more information.

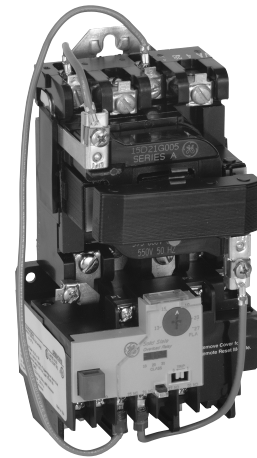
4. Units are individually boxed and poly-packed six per carton as standard.

5. External reset not included on standard listed forms (NEMA Type 12).

6. For additional details on the Solid State Overload Relay, see pages 1-160 through 1-163.

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 VAC
- Accuracy: ± 2%
- Repeatability: ± 2%
- Self-powered @ 50% of minimum current range
- Size: 1-6 (0.40A-540A, 600V, 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 & 2



CR306 Size 1 Motor Starter with Solid-State Overload Relay installed

Reference Publications

Instructions	Publication Number
NEMA Size	
00, 0, 1	GEH-5190
1-6	DEP-058
2	GEH-4774
3	GEH-4806
4	GEH-4807
5	GEH-4839
6	GEH-5198
7-9	GEH-5108

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NEMA Sizes 1-6 with Solid State Overload Relay

600 Volts Maximum 50/60 Hertz

List price includes a holding interlock, pressure terminals for the line and load connections, plus a solid-state overload relay (manual reset). Standard isolated 1NO and 1NC auxiliary contact (A600, Q600).

Select current range from Full Load Current Selection Table. Insert letter (C, D, E, F, etc.) from table in Product Number to replace *.

Refer to Coil Table, page 1-6 for other available starter coils and suffixes (sizes 1-6).

CR306, Three-Phase Magnetic Starters

NEMA Size	Continuous Ampere Rating ¹	Voltage	Horsepower	Open Type	NEMA Type 1	NEMA Type 3R	NEMA Type 12 ²	NEMA Type 4/4X
				Product Number CR306	Product Number CR306	Product Number CR306	Product Number CR306	Product Number CR306
1	27	Separate Control — 115-120V	7 1/2	CX*002	CX*102	CX*602	CX*202 ¹	CX*402
1	27			200-208	CX*023	CX*123	CX*623	CX*223 ¹
1	27	230-240	7 1/2	CX*003	CX*103 ²	CX*603	CX*203 ¹	CX*403
1	27			460-480	CX*004	CX*104	CX*604	CX*204 ¹
1	27	575-600	10	CX*005	CX*105	CX*605	CX*205 ¹	CX*405
2	45			Separate Control — 115-120V	DX*002	DX*102	DX*602	DX*202 ¹
2	45	200-208	10	DX*023	DX*123	DX*623	DX*223 ¹	DX*423
2	45			230-240	DX*003	DX*103	DX*603	DX*203 ¹
2	45	460-480	25	DX*004	DX*104	DX*604	DX*204 ¹	DX*404
2	45			575-600	DX*005	DX*105	DX*605	DX*205 ¹
3	90	Separate Control — 115-120V	25	EX*002	EX*102	EX*602	EX*202 ¹	EX*402
3	90			200-208	EX*023	EX*123	EX*623	EX*223 ¹
3	90	230-240	30	EX*003	EX*103	EX*603	EX*203 ¹	EX*403
3	90			460-480	EX*004	EX*104	EX*604	EX*204 ¹
3	90	575-600	50	EX*005	EX*105	EX*605	EX*205 ¹	EX*405
4	135			Separate Control — 115-120V	FX*002	FX*102	FX*602	FX*202 ¹
4	135	200-208	40	FX*023	FX*123	FX*623	FX*223 ¹	FX*423
4	135			230-240	FX*003	FX*103	FX*603	FX*203 ¹
4	135	460-480	100	FX*004	FX*104	FX*604	FX*204 ¹	FX*404
4	135			575-600	FX*005	FX*105	FX*605	FX*205 ¹
5	270	Separate Control — 115-120V	75	GX*002	GX*102	GX*602	GX*202 ¹	GX*402
5	270			200-208	GX*023	GX*123	GX*623	GX*223 ¹
5	270	230-240	100	GX*003	GX*103	GX*603	GX*203 ¹	GX*403
5	270			460-480	GX*004	GX*104	GX*604	GX*204 ¹
5	270	575-600	200	GX*005	GX*105	GX*605	GX*205 ¹	GX*405
6	540			Separate Control — 115-120V	HX*002	HX*102	HX*602	HX*202 ¹
6	540	200-208	150	HX*023	HX*123	HX*623	HX*223 ¹	HX*423
6	540			230-240	HX*003	HX*103	HX*603	HX*203 ¹
6	540	460-480	400	HX*004	HX*104	HX*604	HX*204 ¹	HX*404
6	540			575-600	HX*005	HX*105	HX*605	HX*205 ¹

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

²External reset not included on standard listed forms.

Full Load Current Selection Table

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 motor full-load current (provides a maximum of 125 percent protection). For continuous rated motors with no service factor, multiply the full-load current of the motor by 0.90 and use this value to select the heater.

Overload Range for Solid State Starters	NEMA Size	Fuse Max.	Breaker Max.	Insert Digit in Product Number
0.4-0.85	00-1	3	15	C
0.8-1.7	00-1	6	15	D
1.6-3.4	00-1	12	15	E
3.2-6.8	00-1	25	25	F
6.5-13.5	00-1	50	50	G
13-27	00-1	100	100	H
6.5-13.5	2	50	50	G
13-27	2	100	100	H
25-50	2	200	200	J
17-35	3 & 4	125	125	K
35-70	3 & 4	250	250	L
65-135	3 & 4	500	400	M
35-70	5	500	400	N
65-135	5	500	400	P
130-270	5	600	800	Q
130-270	6	1200	800	S
260-540	6	1200	800	T



Other Coil Voltages: See page 1-6
 Factory Installed Modifications: See pages 1-124 to 1-131
 Field Installed Modifications: See pages 1-132 to 1-138