

# NEMA Full Voltage Power Devices

## NEMA Rated Full Voltage Starters - Magnetic

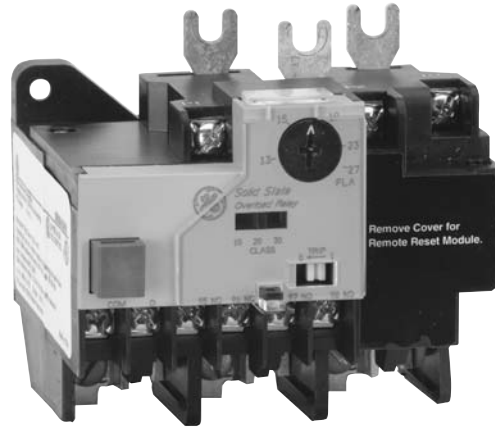
### CR324X Solid State Overload Relays

## Section 1

For Panel Mounting  
3-Pole, 600 VAC

#### Technical Features

- 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) 24 VDC or 120 VAC
- Accuracy: ± 2%
- Repeatability: ± 2%
- Self-powered @ 50% of minimum current range
- Size: 1-6 (0.40A-540A, 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 & 2



CR324X Overload Relay (Panel-Mount)

#### Solid State Overload Relays for Panel Mounting (CR324X) –

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### CR324X Solid State Overload Relays

For Panel Mounting  
3-Pole, 600 VAC

## Section 1

### Product Number Selection Instructions

1. Replace \* in product number with appropriate digit from Full Load Current Selection Table below.

### Solid State Overload Relays

| NEMA Size | Continuous Ampere Rating | Mounting Position     | Product Number           | List Price<br>GO-10GS |
|-----------|--------------------------|-----------------------|--------------------------|-----------------------|
| 1         | 27                       | Panel Mount           | CR324CX*P                | \$162.00              |
| 2         | 45                       | Panel Mount           | CR324DX*P                | \$177.00              |
| 3, 4      | 90,135                   | Panel Mount           | CR324FX*P                | \$255.00              |
| 1         | 27                       | for MRO & Replacement | CR324CX*S                | \$150.00              |
| 2         | 45                       | for MRO & Replacement | CR324DX*S                | \$165.00              |
| 3, 4      | 90,135                   | for MRO & Replacement | CR324FX*S <sup>1,2</sup> | \$255.00              |
| 5         | 270                      | for MRO & Replacement | CR324GX*S <sup>3</sup>   | \$162.00              |
| 6         | 540                      | for MRO & Replacement | CR324HX*K <sup>4</sup>   | \$750.00              |
| 6         | 540                      | for MRO & Replacement | CR324HX*S <sup>5</sup>   | \$162.00              |

<sup>1</sup>If Product No. digit "K" is selected from Full Load Current Selection Table, deduct \$55.00 from list price.

<sup>2</sup>Reset on CR324FX\*S overloads is approximately 1" longer than on equivalent bimetal overloads. For GE 300-Line enclosures, perform the actions noted below:

| Enclosure Reset Extension Type | Adjustment Required                                  |
|--------------------------------|--|
| Threaded Rod (standard)        | Cut threaded shaft 1" and adjust for 1/8" gap.       |
| "U" Style, 2 1/8" long         | Replace extension with product number 55-512811G005. |
| "U" Style, 1 1/2" long         | Replace extension with product number 55-512811G002. |

<sup>3</sup>CR324GX\*S may be used as replacement for bimetal overload on size 5 starters. Use existing CTs.

<sup>4</sup>CR324HX\*K kit must be used as solid-state replacement for bimetal overloads on size 6, since CT ratio changes, CTs included.

<sup>5</sup>CR324HX\*S may be used as a replacement for existing solid-state overload on size 6. Use existing CTs.

### Solid State Overload Relay Options

| Item                | NEMA Size | Voltage | Product Number | List Price<br>GO-10GS |
|---------------------|-----------|---------|----------------|-----------------------|
| Remote Reset        | 1-6       | 120 VAC | CR324XRRM02    | \$32.00               |
| Panel Mount Adapter | 1         | N/A     | CR324CXPMA     | \$12.00               |
|                     | 2         | N/A     | CR324DXPMA     | \$12.00               |

### 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<br>Solid State Starters | NEMA<br>Size | Fuse<br>Max. | Breaker<br>Max. | Insert Digit in<br>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            |              |                 | 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                                 |



**Publications and Reference:** See Section 17 for a complete list of additional product-related publications