



# Solid State Overload Relay

## NEMA Sizes 3 & 4

**WARNING:** Disconnect all power from the starter and overload relay before installing, modifying, or servicing.

**AVERTISSEMENT:** Couper l'alimentation avant installation, modification, ou entretien.

**CAUTION:** Before installing this product in a nuclear application, determine if it is intended for such use.

**ATTENTION:** Avant d'installer le produit dans une application nucléaire, vérifier si cela est permis.

### Introduction

The GE Solid State Overload Relay, NEMA Sizes 3 & 4, is shown in Figure 1. The catalog numbers and electrical specifications are listed in Table 1.

### Replacement Installation

The following instructions describe the installation of a Solid State Overload Relay as a replacement for an existing overload relay on a 300-Line starter.

1. Disconnect all sources of power to the starter.
2. Disconnect all control and power wiring from the load side of the existing overload relay.
3. Loosen, but do not remove, the power terminal screws located between the top of the overload relay and the contactor.
4. Remove and save the overload relay mounting screw, located at the bottom right and left corners of the overload relay housing.
5. Remove the overload relay from the starter baseplate.
6. Place the Solid State Overload Relay on the starter baseplate and secure it with the mounting screw.

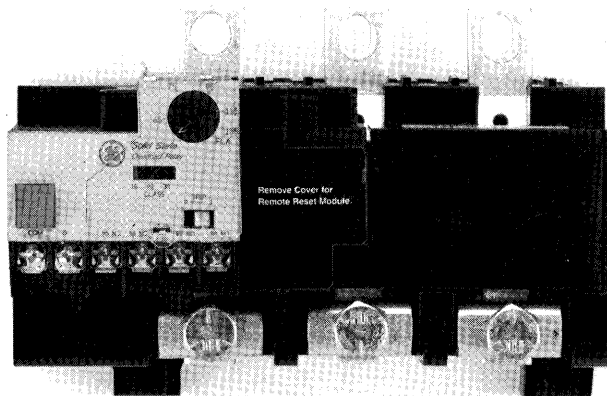


Figure 1. Solid State Overload Relay.

7. Torque the power terminal screws, between the top of the Solid State Overload Relay and the contactor, to 30 lb-in to complete the electrical connections.
8. Connect the control and power wiring to the terminals on the load side of the Solid State Overload Relay, shown in Figure 2.
9. If the Solid State Overload Relay is replacing an existing thermal overload relay and the enclosure has an external reset button, the following adjustments to the external reset button are necessary for proper operation:
  - Screw-type extension – Cut 1 inch off the screw and adjust the knob for a 0.075–0.125 inch gap between the reset button on the Overload Relay and the reset plunger.
  - U-shaped extension – Measure the existing extension length, then order the corresponding GE replacement part, as given in Table 2.

Catalog Number		NEMA Size	Current Range, amps	Wire Size (75° C, Cu only) AWG #	Max Fuse Size, amps (Class T,H,J,L,R,K)	Max Breaker Rating, amps	Use with GE Contactor
Starter Mount	Panel Mount						
CR324FXKS	CR324FXKP	3 & 4	17–35	10–3/0	125	125	CR306E/F
CR324FXLS	CR324FXLP	3 & 4	35–70	10–3/0	250	250	CR306E/F
CR324FXMS	CR324FXMP	3 & 4	65–135*	10–3/0	500	400	CR306E/F

NOTE: Maximum fuse and breaker sizes are intended as guidelines. Refer to NEC and local codes for proper fuse and breaker selection.

\* Size 3 not to exceed 90 amperes.

Table 1. Solid State Overload Relay, NEMA Sizes 3 & 4, catalog numbers and electrical specifications.