

GEH-4763 Installation Instructions For NEMA Sizes 00, 0, & 1

# **Push Button & Selector Switch Kits**

300- Line Starters & Contactors

Caution: Before installing in a nuclear application, determine that the product is intended for such use.

Warning: Disconnect power before installing or servicing.

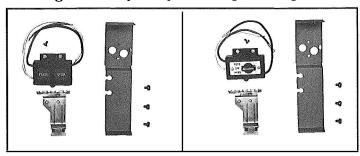


Figure 1. Component parts of push button kit (left) and selector switch kit (right).

## Flexibility of Kits

The START-STOP push button kit and HAND-OFF-AUTO selector switch kit are designed for use in Sizes 00, 0, and 1 magnetic contactors and starters—CR305/306/307/308/360L and 387. These kits enable you to mount a pilot device in the cover of a Type 1 enclosed starter, the result—one single, compact, and economical unit. The component parts of these kits are shown in Figure 1.

### **Installation** (Push Button Kit CR305X120N/P)

The push button kit comes complete with necessary hardware and ready for installation on the control device. The following steps are used for installing a push button on CR305/306/360L devices only.

- 1. Remove power from device.
- 2. Loosen mounting screws and remove device from enclosure.
- 3. Begin disassembly of contactor by pressing slightly on coil and pulling up on coil retainers; motion also being away from coil.
- Withdraw spring clip from movable position of magnet assembly.
- Remove movable magnet portion and coil from starter (or contactor).

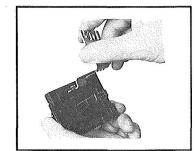


Figure 2. Installation of mounting bracket used on CR305, 306, & 360L.

- 6. Insert dove-tail bracket into keyed slot at top of the molded cover as shown in Figure 2. Reassemble starter (or contactor).
- 7. Loosen the push button mounting clip by turning the two mounting screws counterclockwise. Do not completely remove screws from the clip.
- 8. Slide the push button onto the mounting bracket as shown in Figure 4, using the circular slots of the bracket.
- 9. Install 3 wires per wiring diagram in Figure 7.



Figure 3. CR305X120N Installed.

- 10. Re-install device in enclosure and tighten mounting screws.
- 11. Remove large rectangular knockout from enclosure cover by applying force with a screwdriver from front side of cover.
- 12. Adjust push button on its mounting bracket to line up with hole in cover. Tighten push button mounting screws.

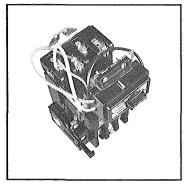
### Installation (Selector Switch Kit CR305X130L, N, P)

The selector switch kit comes complete with necessary hardware, ready to install on the control device. The following steps are used for installing a selector switch on CR305/306/360L devices only.

- Follow steps 1 through 8 in push button kit instructions for CR305/306/360L devices.
- Remove and discard wire running from terminal marked
  "3" on top of contactor to coil terminal.
- Install wires per wiring diagram shown in Figures 8 or 9.
- 4. Remount device in enclosure and tighten mounting screws.
- Remove large rectangular knockout from enclosure cover by applying force with a screwdriver from front side of cover.
- Adjust selector switch on its mounting bracket to line up hole in enclosure cover. Tighten selector switch mounting screws.



Figure 4. Installation of push button or selector switch.



. Figure 5. CR305X130N Installed.

# Push Button Installation on CR307/308/387 Combination Forms

The following steps are used for installing the CR305X120N/P push button kit on CR307/308/387 devices only.

- 1. Remove power from device.
- 2. Open enclosure door and remove it by lifting up and disengaging it from slot type hinges.
- 3. Loosen mounting screws and remove device from enclosure.
- Fasten stepped bracket to flange of enclosure (step will be toward bottom of case) with three screws provided in kit.
- 5. Remove the white tape from the 2% inch x 1 % inch urethane gasket and place it over the front of the push button.
- 6. Install 3 wires per wiring diagram, Figure 7.

- 7. Remount device in enclosure and tighten mounting screws.
- 8. Slide push button onto mounting bracket as shown in Figure 6.
- Remove large rectangular knockout from enclosure cover by applying force with a screwdriver from front side of cover.
- 10. Adjust push button on its mounting bracket up to line up with hole in cover. Tighten push button mounting screws.

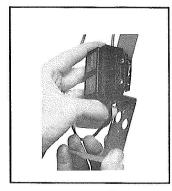
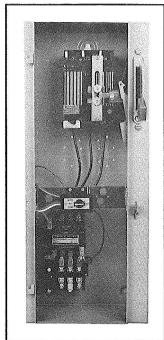


Figure 6. Push button and stepped bracket,

# Selector Switch Installation on CR307/308/387 Combination Forms

The following steps are used for installing the CR305X130L, N, P selector switch kit on CR307/308/387 devices only.

- 1. Remove power from device.
- 2. Open enclosure door and remove it by lifting up and disengaging it from slot type hinges.
- 3. Loosen mounting screws and remove device from enclosure.
- Fasten stepped bracket to flange of enclosure (step will be toward bottom of case) with three screws provided in kit.
- 5. Remove the white tape from the 2<sup>7</sup>/<sub>8</sub> inch x 1<sup>3</sup>/<sub>4</sub> inch urethane gasket and place it over the front of the selector switch.
- 6. Remove and discard wire running from terminal marked "3" on top of contactor to coil terminal.
- 7. Install wires per wiring diagram, Figure 8 or 9.



- 8. Remount device in enclosure and tighten mounting screws.
- Slide the selector switch onto the mounting bracket in same manner as shown for push button in Figure 6.
- Remove large rectangular knockout from enclosure cover by applying force with a screwdriver from front side of cover.
- Adjust selector switch on its mounting bracket to lint up with hole in cover. Tighten selector switch mounting screws.

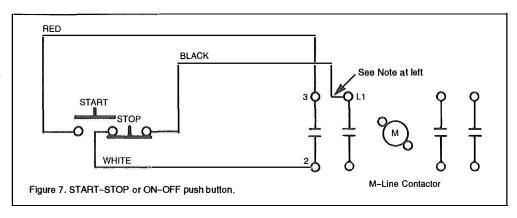
Figure 10, Combination starter with selector switch installed,

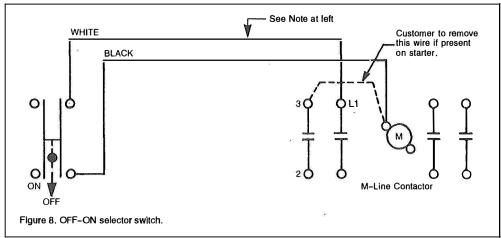
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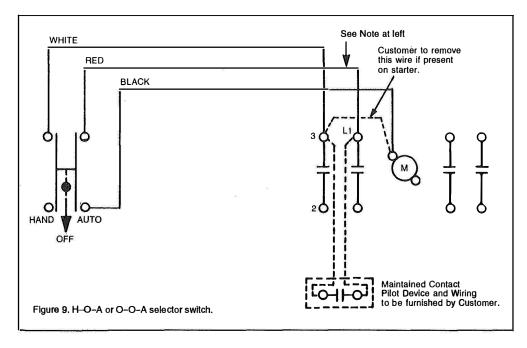
# **Connection Diagrams**

Connections are for three-phase enclosed contactors, across-the-line starters, and combination starters.

NOTE: For line voltage control, connect wire to L1 as shown. For separate control (where coil voltage and motor voltage are different) connect this wire to the separate control source.







These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation, operation, or mainte-nance. Should particular problems arise which are not covered sufficiently for the Purchaser's purposes, the matter should be referred to the nearest ABB sales office.