

# Reversing Contactor Kit for Non-Regenerative FlexPak Plus DC Drives

Model Number 14C293

Instruction Manual D2-3293-2



**ATTENTION:** Only qualified electrical personnel familiar with the construction and operation of this equipment and the hazards involved should install, adjust, operate, or service this equipment. Read and understand this manual and other applicable manuals in their entirety before proceeding. Failure to observe this precaution could result in severe bodily injury or loss of life.

## Product Description

Installation of the Reversing Contactor enables a single-phase, non-regenerative FlexPak™ Plus DC drive to provide both forward and reverse motor control. The standard factory-shipped drive offers unidirectional motor control only.

When the Reversing Contactor kit is installed, the drive's M-contactor functions as the forward contactor. Motor direction is manually selected using the forward/reverse switch on the operator's control station (M/N 9C300). See FlexPak Plus drive instruction manual D-3900 for information on the control station.

The Reversing Contactor is pre-assembled at the factory and includes all of the necessary jumper wires and mounting hardware. The contents of the kit are listed in table 1.

Table 1 – Contents of the Reversing Contactor Kit

Description	Quantity	Part Number
Reversing Contactor	1	69326-30R
Mounting Screw, 8-32 x 3/8	3	601741-62C
Mounting Bracket	1	608878-90A
Mounting Screw, 8-32 x 3/4	2	601741-62F
Control Wire Harness with Connector	1	700867-63S
Wire Harness A1/A2	1	700867-67X
Jumper 45	1	608808-90TJ
Jumper 47	1	608808-90TK
Insulating Mounting Plate	1	608867-10R
Capacitor Assembly	1	608870-21S
Insulator Sheet	1	410296-37A
Instruction Manual	1	D2-3293

## Installing the Reversing Contactor



**ATTENTION:** Do not install modification kits with power applied to the drive. Disconnect, lock out, and tag all sources of incoming AC power to the drive before attempting such installation. Verify that no voltage is present at the drive's AC input terminals, L1 and L2. Failure to observe this precaution could result in severe bodily injury or loss of life.

**ATTENTION:** The user is responsible for conforming with all applicable local, national, and international codes. Failure to observe this precaution could result in damage to, or destruction of, the equipment.

Refer to figure 1 and to instruction manual D-3900 to identify drive terminals and connectors. To install the Reversing Contactor in your non-regenerative FlexPak Plus DC drive:

- Step 1. Disconnect, lock out, and tag input power to the drive.
- Step 2. Remove the drive cover and verify that no voltage is present at the drive's AC input terminals, L1 and L2.
- Step 3. Remove the auxiliary mounting bracket from the drive by removing the four mounting screws on each side. Lift the bracket up and out of the way so you can access the mounting area.
- Step 4. Mount the Reversing Contactor's mounting bracket on the back of the auxiliary panel to the right of the M-contactor and below the Dynamic Braking kit (if installed). The mounting bracket should have two legs down and one leg up when mounted correctly. The panel is pre-drilled for the three 8-32 x 3/8 screws provided with the Reversing Contactor kit.
- Step 5. Remove the two 8-32 x 3/4 screws from the Reversing Contactor's mounting bracket.
- Step 6. Make sure gray jumper wire 67 is connected to Reversing Contactor terminal 2.
- Step 7. Make sure orange jumper wire 139 is connected to Reversing Contactor terminal 1.
- Step 8. Place the L-shaped insulator sheet (labeled 410296-37A) between the Reversing Contactor and the insulating mounting plate. Position the sheet to insulate the contactor from the auxiliary panel.
- Step 9. Mount the reversing contactor, insulator sheet, and insulating mounting plate on top of the mounting bracket with the insulating mounting plate on the bottom. Fasten the assembly using the two 8-32 x 3/4 screws removed in step 5.
- Step 10. Remove J9 from the Regulator board (located below the REV connector near the top of the board).
- Step 11. Connect the Reversing Contactor's four power terminals to the four power terminals on the drive's M-contactor, as shown in figure . The armature connections, A1 and A2, between the contactors are reversed (terminals 3 to 4 and 4 to 3).
- Step 12. **Drives with Dynamic Braking Kits Installed:** Connect the Dynamic Braking kit between the two corresponding normally-closed (NC) contacts on the M-Contactor and the Reversing Contactor. Refer to instruction manual D2-3378 for information on installing the Dynamic Braking kit.

Step 13. Route the Reversing Contactor's 5-wire control harness behind the front bar of the auxiliary mounting bracket. Connect the harness to the pins marked "REV" at the top center of the drive's Regulator board. Orient the connector so that the blue wire (66) connects to the pin labeled "BLU." Refer to figure 1.

Step 14. Replace the auxiliary mounting bracket removed in step 3.

Step 15. Verify the wiring of the Reversing Contactor and that all connectors are securely fastened.

Step 16. Reattach the cover to the drive.

Step 17. Apply power and test the reversing capability of the drive.

This completes installation of the Reversing Contactor kit.

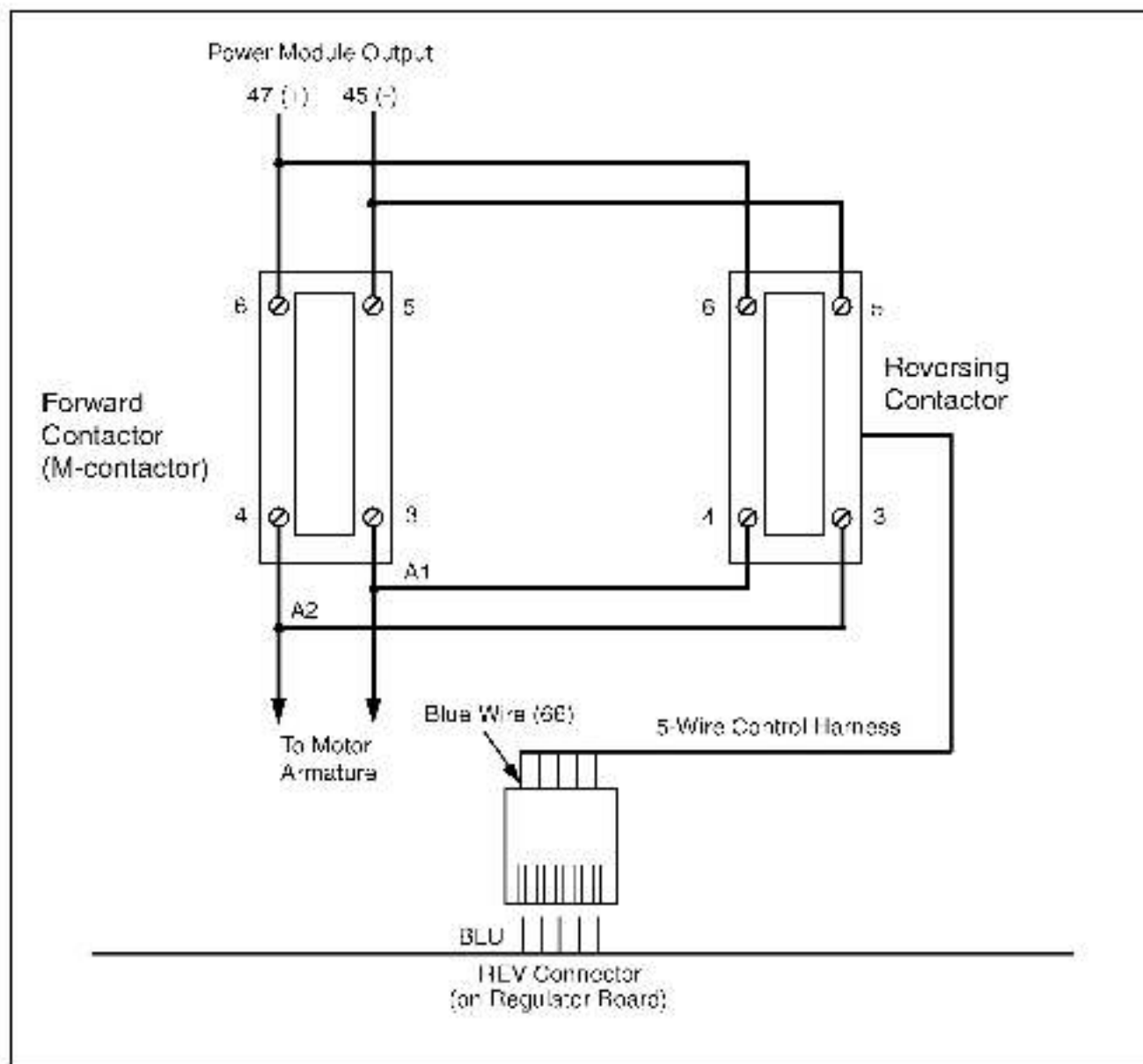


Figure 1 – Power and Control Wiring

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