

# 3SDBR2300 AND 3SDBR2500 REVERSING OPTION WITH DYNAMIC BRAKING

## DESCRIPTION

This option consists of a small component board mounted on a bracket with 3 prewired contactors and a power resistor. With this option properly installed, the Statotrol\* II controller provides controlled torque plug reversing and dynamic braking. The 3SDBR2300 is for use on 3 HP drives and the 3SDBR2500 is for use on 5 HP drives.

## INSTALLATION

For proper mounting location and orientation, refer to Figure 2 in instruction book GEK-36391. Hardware for securing the bracket to the controller chassis is provided with the option.

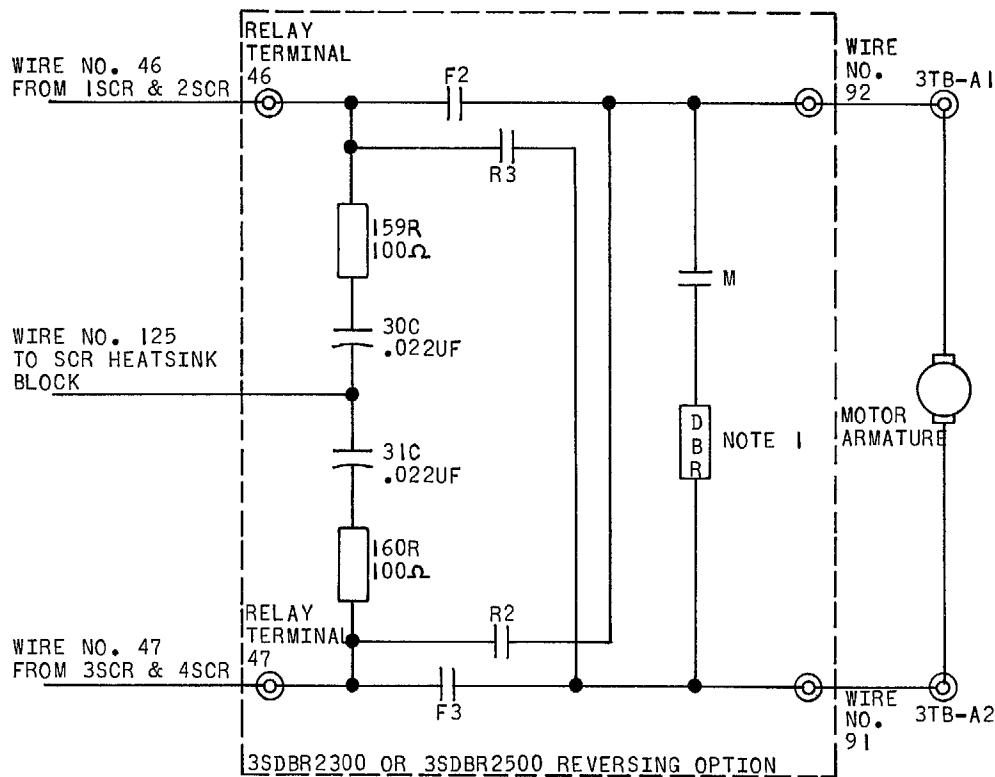
## ELECTRICAL CONNECTIONS

### Relay Coil Connections

The relay coil wiring is terminated in 2 connectors. The connector marked "REV" must be mated with the male connector marked "REV. CONN." and located on the controller main component board. The connector marked "M" must be mated with the male connector marked "M CONN." and located on the controller main component board.

### Power Circuit Connections

The motor armature circuit must be connected as shown in Figure 1. Refer to Figure 2 for terminal locations on the contactors. After the option has



NOTE 1: THE DYNAMIC BRAKING RESISTOR VALUE CHANGES WITH HORSEPOWER.

Figure 1. Motor Armature Circuit with Option Installed

\*Registered trademark of General Electric Company, USA

*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 maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to General Electric Company.*

been mounted, proceed with the following connection sequence.

1. Locate wire number 46 (AWG 12) which runs from the SCR's to terminal 3TB-A1. NOTE: ON 3 HP UNITS, WIRE 46 RUNS FROM THE SCR'S TO THE INSULATED STAND-OFF AND THEN TO 3TB-A1. Disconnect this wire from 3TB-A1 and connect it to contactor terminal 46 on the reversing option (see Figure 2).

2. Locate wire number 47 (AWG 12) which runs from the SCR's to terminal 3TB-A2. Disconnect this wire from 3TB-A2 and connect it to contactor terminal 47 on the reversing option (see Figure 2).

3. Locate wire number 92 (AWG 12) which is factory connected to the reversing option. Connect the free end of wire number 92 to terminal 3TB-A1.

4. Locate wire number 91 (AWG 12) which is factory connected to the reversing option. Connect the free end of the wire number 91 to terminal 3TB-A2.

5. Locate wire number 125 (AWG 18) which is factory connected to the reversing option. Connect the free end of wire number 125 to terminal 125 on the SCR heat sink block as shown in Figure 2.

When the reversing option is properly connected and when motor leads and controller terminals are connected A1 to A1, A2 to A2, F1 to F1, and F2 to F2, the motor will rotate CCW as viewed from the opposite shaft end when the control station button marked "FWD" is pressed.

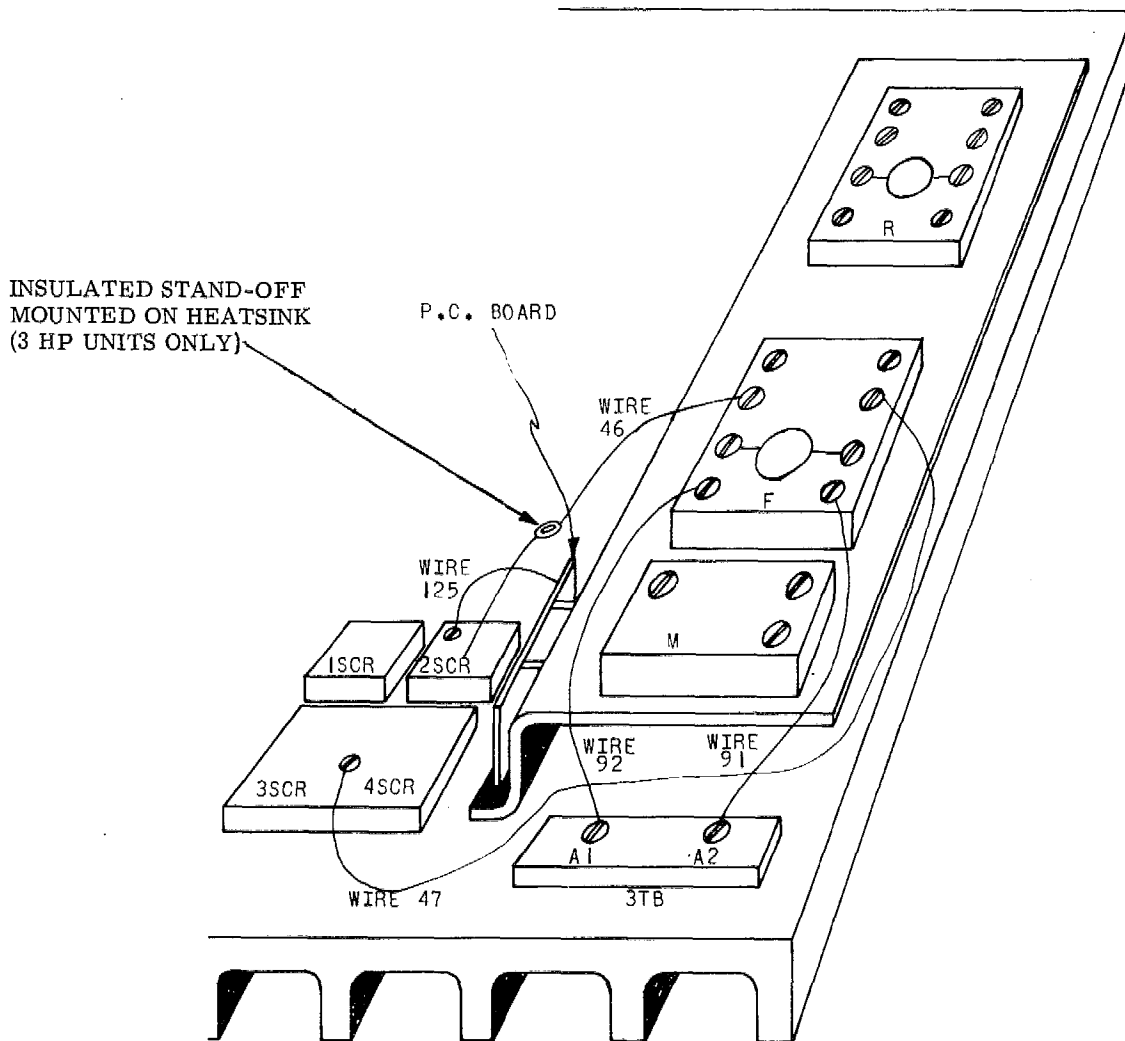


Figure 2. Customer Connection Diagram for 3SDBR2300 and 3SDBR2500 Reversing Options

9-73 (1M)

Control Devices Operation and Speed Variator Products Department,  
General Electric Company, Waynesboro, Virginia 22980