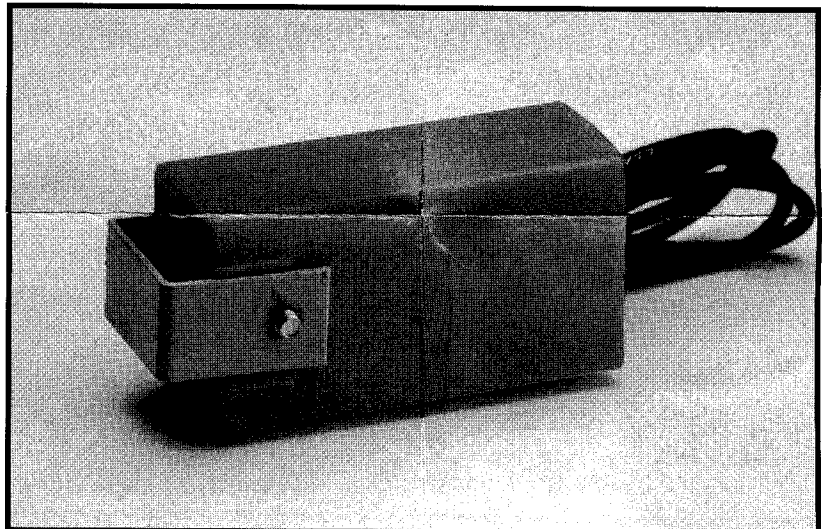
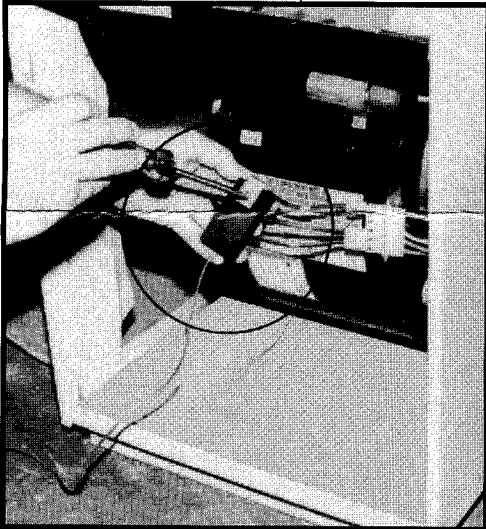


120 VOLT

CURRENT SENSING RELAY

TO INTERFACE ELECTRONIC AIR CLEANERS WITH ALL TYPES OF FORCED WARM AIR FURNACES AND AIR CONDITIONING EQUIPMENT QUICKLY, EASILY AND INEXPENSIVELY.



The Model 51 Current Sensing Relay has been specifically designed for 120 volt applications to interface electronic air cleaners with most heating and cooling systems. It is more reliable and less expensive than other interfacing equipment such as sail switches, pressure switches, tem-

perature switches and other relays. This relay can be attached to a wire carrying the sensing current without breaking the circuit or cutting the wire. The sensed current must be a minimum of 4.0 amps and the load in the switched circuit should be between 3 and 50 watts.

WARNING: Not approved for directly controlling motors or safety related applications. See complete instructions on reverse side.

SPECIFICATIONS

VOLTAGE RANGE: 100-125 VAC, 50-60 HZ

SENSING CURRENT: Minimum of 4.0 amps required to close the relay

OPERATING AMBIENT TEMPERATURE RANGE: 40-104° F.

DIMENSIONS: 1 X 1 $\frac{3}{8}$ X 2 $\frac{3}{4}$ "

LOAD RATINGS: Maximum (50 watts) .42 amps/Minimum (3 watts) .025 amps

UNDERWRITERS LABORATORIES RECOGNIZED COMPONENT 

Installation Instructions for CURRENT SENSING RELAY MODEL 51 with ELECTRONIC AIR CLEANERS

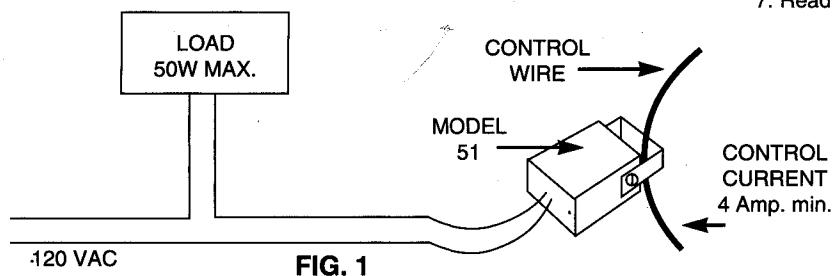
WARNING: Disconnect Power Before Installing Or Servicing. Do Not Connect Relay Without Load In Series (See Fig. 1).

GENERAL INFORMATION

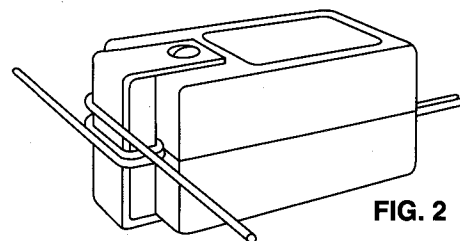
1. NOT APPROVED for directly controlling motors or safety related applications.
2. Read these instructions and labels carefully.
3. Always disconnect power before working on the Current Sensing Relay or its connected load.
4. Follow all local electrical and safety codes, the national Electrical Code (NEC) and the OSHA requirements.
5. The Current Sensing Relay is rated to work with a minimum load of 3 watts and a maximum of 50 watts powered from 120 VAC. Check the product ratings to make sure it is compatible with the Model 51.
6. Installation should be done by a trained technician.
7. Be sure to check out the installation using the procedure following these instructions.

GENERAL CONTROL INSTALLATION PROCEDURE

1. Disconnect power before installing.
2. The Model 51 must be located at least 4" from any transformer.
3. Remove the screw from the bracket and place the common wire that will activate the relay between the bracket and the plastic case. (Fig. 1)



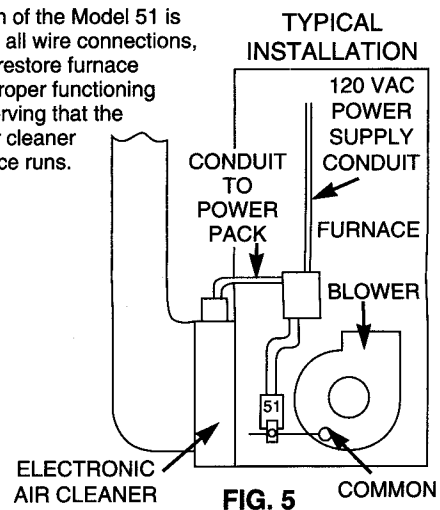
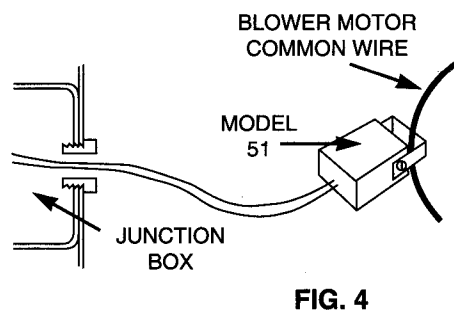
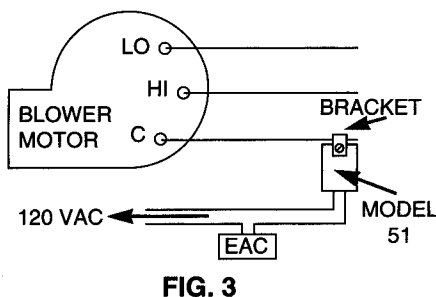
4. If the control current is less than 4 amps, wrap the common wire one or more additional turns around the metal bracket. (Fig. 2)
5. Replace the metal screw in the bracket.
6. Complete the wiring as shown in Figure 1.
7. Read the checkout procedure.



TYPICAL ELECTRONIC AIR CLEANER INSTALLATION

1. Shut off all power to the heating/cooling system.
2. Install the air cleaner according to the manufacturer's instructions.
3. Open the blower compartment and locate the furnace blower motor's common wire.
4. Remove the metal horseshoe bracket from the Model 51 Relay and slip it over the common wire. Reassemble the bracket to the yellow relay box by replacing the screw. This bracket cannot touch any metal, and the relay itself must be at least 4" from any transformer. (Fig. 3)
5. Open the main power junction box on the side of the furnace. Run the twin leads of the Model 51 relay into the junction box from the motor compartment. (Fig. 4)

6. Connect the leads of the Model 51 Relay in series with one of the electronic air cleaner leads. The 120 VAC source **must** be independent of the blower motor. (Fig. 3)
7. The electrical installation of the Model 51 is now complete. Recheck all wire connections, close junction box, and restore furnace to working order. Test proper functioning of the Model 51 by observing that the indicator lamp on the air cleaner turns on when the furnace runs.



CHECKOUT PROCEDURE

1. Replace all safety devices.
2. Turn on the 120 V power to the load.
3. Turn on the motor that will supply the power to the control wire.
4. Check the load for operation — it should now be operating properly (check indicating lamp or other condition showing the load is receiving power.)
5. Remove the power passing through the control wire by switching off the unit. The power to the load should shut off.

6. If the load is activated properly and turn off when the power through the control wire is removed, installation is complete.
7. If the load is not powered when the control wire is energized then:
 - a. Recheck all wiring.
 - b. Check line fuses.
 - c. Confirm that four (4) or more amps is flowing through the control wire. Wrap additional turns around the bracket if necessary.