CURRENT SENSING RELAY MODEL D51 (120 VOLT)

FOR INTERFACING HUMIDIFIERS OR ELECTRONIC AIR CLEANERS WITH ALL TYPES OF FORCED AIR FURNACES AND AIR CONDITIONING EQUIPMENT

ACTUAL SIZE

The Model D51 (120 volt) Current Sensing Relay has been designed for interfacing humidifiers or air cleaners with most heating and cooling systems. This type of relay is more reliable and inexpensive than using sail switches, pressure switches or other types of relays.

The Model D51 is easily installed around the common lead of the blower motor and inserted into the circuitry. (See wiring diagrams on back.) This relay does not measure voltage, it senses current.

The relay case is made from high impact plastic. The lead wire bracket is sponge packed to prevent laceration of wire and accidental contact with metal. The sponge used snug the lead wire so that it does not move around.

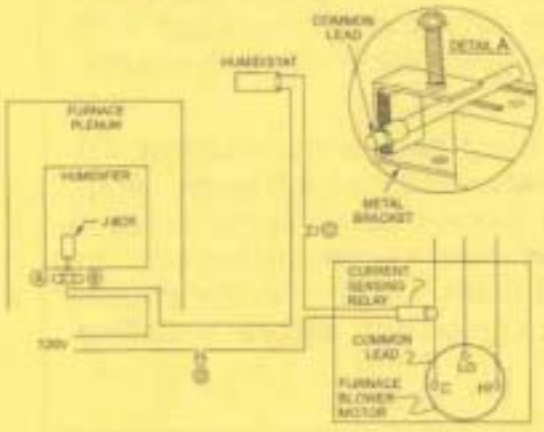
Important: The wire lead sponge bracket must carry a minimum of 4.0 amps for proper operation. If the current draw is less than 4.0 amps, wrap the lead wire around the bracket so that it passes between the bracket and relay housing two or more times. When used in conjunction with an air cleaner a rated load between 3 and 50 watts must be in the circuit. Check to make sure the Model D51 is compatible before installing humidifier or air cleaner.

Installation Instructions for Current Sensing Relay Model D51

MODEL D51 WHEN HUMIDIFER WITH LINE VOLTAGE MOTOR AND CONTROL

CAUTION : **DO NOT CONNECT THE HUMIDIFIER TO THE 120V POWER ON THE FURNACE MOTOR CIRCUIT. IT CAN BE POWERED OFF THE HOT 120V LINE BEFORE IT ENTERS THE FURNACE. NOT FOR DIRECTLY CONTROLLING MOTORS OR SAFETY RELATED APPLICATIONS.**

1. Follow the step-by-step procedure noted in the humidifiers installation manual for mounting the unit or have a trained technician install this relay. DO NOT connect the electrical, water supply or drain at this time.
2. See wiring instructions below:
   a). Turn off electrical power to the furnace. Attach the Model D51 Relay around the common lead of the furnace blower motor (see detail A). The relay must be located at least 4" from any transformer. Also the metal bracket on the relay must not touch any other metal.
   b). Connect one lead from the Model D51 Relay to one of the leads from the 120 volt humidistat with wire nut (C).(Additional wire length may be necessary.)
   c). Connect the other lead from the 120 volt humidistat to the water valve with wire nut (B).
   d). To complete the circuit, connect one lead of the 120 volt line to the water valve with wire nut (A) and the other lead from the Model D51 Relay with wire nut (D) directly to the 120 volt line.
3. Complete the installation per the instructions supplied with the humidifier.
4. All local codes must be followed, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA No. 70 and OSHA Requirements.



MODEL D51 WITH ELECTRONIC AIR CLEANER

CAUTION : **DO NOT CONNECT THE AIR CLEANER TO THE 120V POWER ON THE FURNACE MOTOR CIRCUIT. IT CAN BE POWERED OFF THE HOT 120V LINE BEFORE IT ENTERS THE FURNACE OR INSIDE THE FURNACE JUNCTION BOX. NOT FOR DIRECTLY CONTROLLING MOTORS OR SAFETY RELATED APPLICATIONS.**

1. Follow the step-by-step procedures noted in the air cleaner installation manual for mounting or have a trained technician install this relay. DO NOT connect and electrical power at this time.
2. See wiring instructions below:
   a). Turn off all electrical power to the furnace and install the air cleaner.
   b). Attach the Model D51 Relay around the common lead of the furnace blower motor(see detail A). The relay must be located at least 4" from any transformer. Also the metal bracket on the relay must not touch any other metal.
   c). Connect one lead from the Model D51 Relay to one of the leads (in series) from the 120 volt air cleaner.
   d). Connect the other lead from the 120 volt air cleaner to a separate 120 volt line or connected inside of the furnace junction box.
   e). To complete the circuit, connect the other lead from the Model D51 Relay directly to a 120 volt line or inside of the furnace junction box.
3. Complete the installation per the instructions supplied with the cleaner.
4. All local codes must be followed, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA No. 70 or OSHA Requirements.