

Installation Instruction

Interface Relay Kit
Electronic Air Cleaner
FK4C, FV4A
PF1MNA071

KFAIR0201ACR

NOTE: Read the entire instruction manual before starting the installation
This symbol → indicates a change since the last issue.

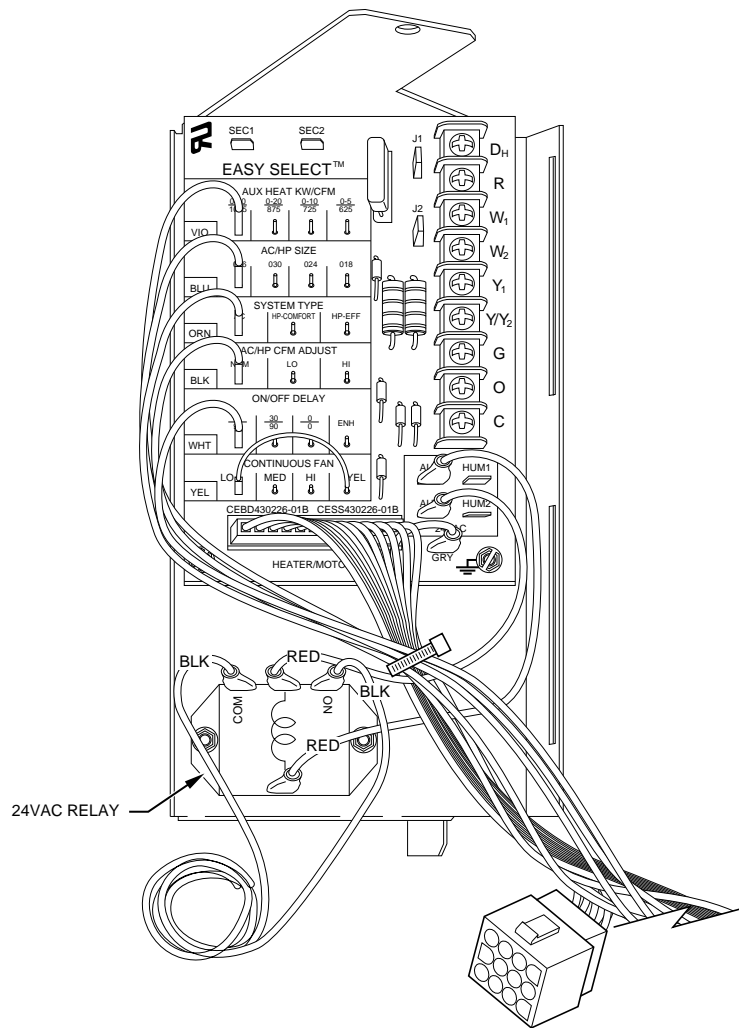



Fig. 1—Accessory Air Cleaner Relay Mounted on PCB Bracket

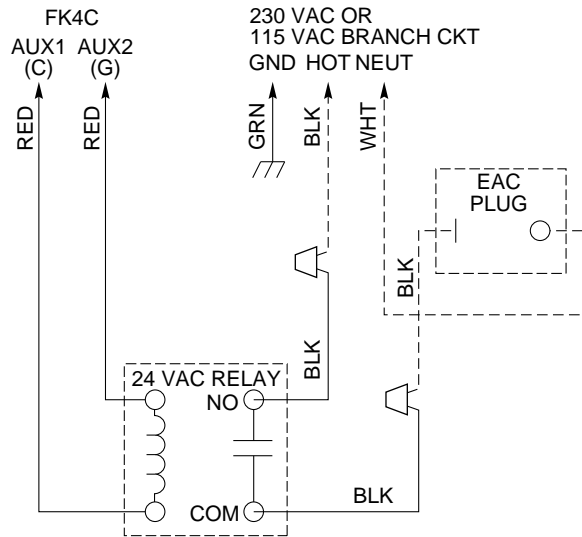
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SAFETY CONSIDERATIONS

Improper installation, adjustment, alteration, service, maintenance, or use can cause explosion, fire, electrical shock, or other conditions which may cause personal injury or property damage. Consult a qualified installer, service agency, or your distributor or branch for information or assistance. The qualified installer or agency must use factory authorized kits or accessories. Refer to the individual instructions packaged with the kits or accessories when installing.

Follow all safety codes. Wear safety glasses and work gloves. Read these instructions thoroughly and follow all warnings or cautions attached to the unit. Consult local building codes and National Electrical Code (NEC) for special requirements.

Recognize safety information. This is the safety-alert symbol . When you see this symbol on the unit and in instructions or manuals, be alert to the potential for personal injury as a result of improper installation.



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Fig. 2—EAC Relay Wiring Schematic

Understand the signal words DANGER, WARNING, and CAUTION. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies hazards which **could** result in personal injury or death. CAUTION is used to identify unsafe practices, which **would** result in minor personal injury or product and property damage.

→ INTRODUCTION

The ICM2 blower motor used in the FK4C, FV4A and PF1 fan coil is controlled by low-voltage signals. The familiar 230-vac electronic air cleaner power signal is not available. This signal is replaced by a 24-vac signal which is provided at printed circuit board (PCB) terminals AUX1 and AUX2. (See Fig. 1.) This 24-vac signal is present whenever G thermostat signal is present (heat pump heating, cooling, and continuous blower modes). When the fan coil is installed with an electronic air cleaner (EAC), use EAC relay kit KFAIR0201ACR or a field-supplied 24-vac relay.

The EAC relay kit consists of a 24-vac relay which mounts directly on the PCB bracket inside the fan coil using factory punched screw holes, 2 mounting screws, 2 pre-terminated wires for connection of relay coil to AUX1 and AUX2 terminals, 2 No. 16 AWG stripped leads for connection of relay contacts for control of power to the EAC, wire nuts and wiring instructions. (See Fig. 2.)

NOTE: Review EAC Installation and Start-Up Instructions for proper usage. These units require 120-vac to operate properly. A 240-v conversion kit Part No. KEAVC0101240 is available if required.

INSTALLATION

To install interface relay kit Part No. KFAIR0201ACR:

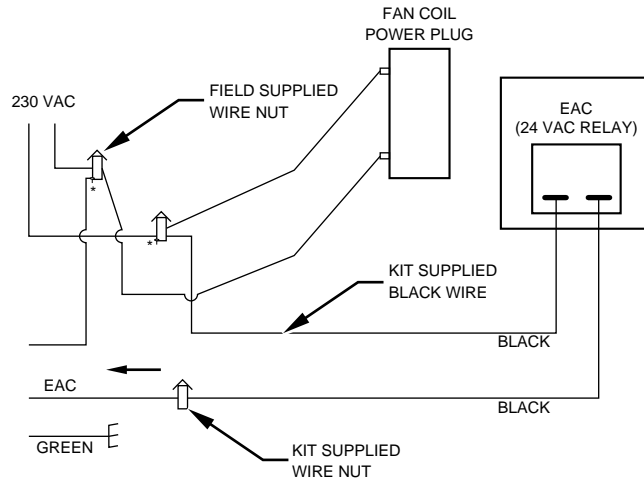
1. Turn off electrical supply to both fan coil and electronic air cleaner.
2. Remove fan coil upper door.
3. Match factory punched screw wholes below PCB on sheet metal bracket to relay screw slots. Mount 24-vac relay using 2 sheet metal screws to secure relay to bracket. (See Fig. 1.)
4. Connect AUX1 and AUX2 terminals on fan coil PCB to the 2 relay coil terminals using 2 pre-terminated red wires.

IMPORTANT: Use 3/16-in. quick connects at relay coil terminals and 1/4-in. quick connects at PCB AUX1 and AUX2. (See Fig. 1.)

5. Connect 2 black wires to NO and COM terminals of relay using 3/16 in quick connects.
6. Use wire nuts to connect stripped black leads to incoming EAC power wires. (See Fig. 2.)
7. Follow wire routing for 230-vac EAC power connection (See Fig. 3.), or wire routing for 120-vac EAC power connection. (See Fig. 4.)

⚠ CAUTION: Be sure to consult local building codes and the National Electric Code (NEC) for special requirements.

8. Reinstall the upper door.
9. Turn on electrical supply to both fan coil and EAC.



***NOTE:** IN CASE OF ELECTRICAL HEAT WITH FUSE OR C.B. WIRE DIRECTLY TO POWER LUGS.

Fig. 3—Wire Routing for 230vac to EAC Power Connection

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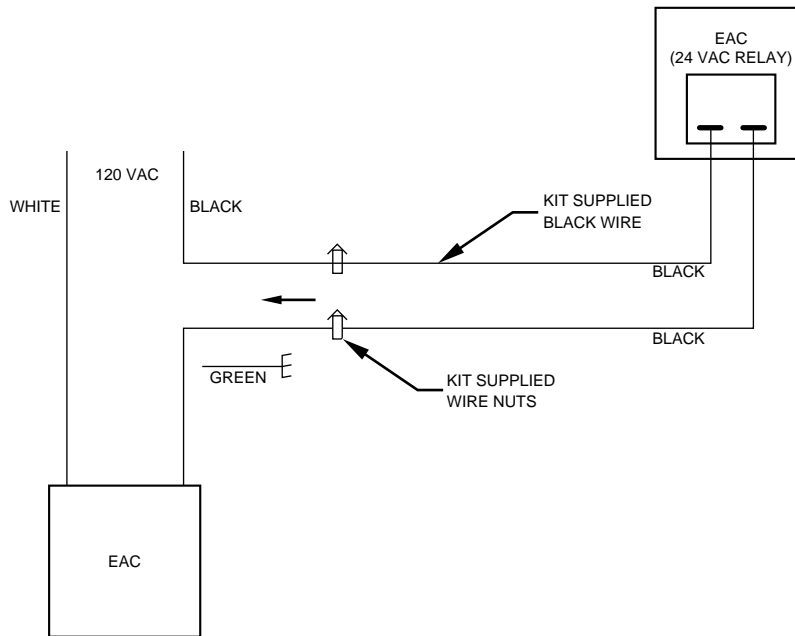


Fig. 4—Wire Routing for 120vac to EAC Power Connection

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SERVICE TRAINING

Packaged Service Training programs are an excellent way to increase your knowledge of the equipment discussed in this manual, including:

- Unit Familiarization
- Maintenance
- Installation Overview
- Operating Sequence

A large selection of product, theory, and skills programs is available, using popular video-based formats and materials. All include video and/or slides, plus companion book.

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