Installation and Maintenance Manual

Fresh Air Damper Motor Kit for ThinLine Vertical Fan Coils

This damper motor kit is set up for field installation with the corresponding fresh air damper kit for ThinLine 3G fan coils. The damper kit must be ordered separately. The damper motor is always mounted on the same end as the unit control box. The unit control box is always mounted on the opposite side of the primary coil connections. (Example: For right-hand units use left-hand damper motor kit.) Inspect the contents for shipping damage and the correct items. See Figure 1 for a list of kit components.

NOTICE

Installation and maintenance are to be performed only by qualified personnel who are familiar with and in compliance with state, local and national codes and regulations, and experienced with this type of equipment.

IM 1028

Group: Applied Air Systems

Part Number: 910103368

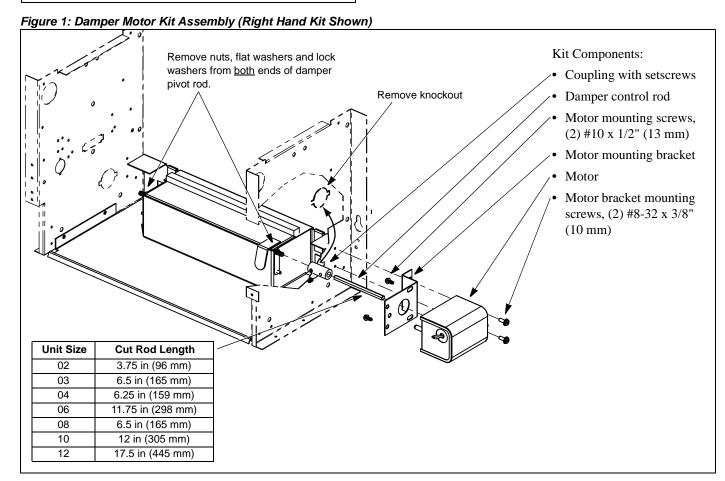
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△ CAUTION

Sharp edges! Metal edges are potential injury hazards. Wear protective gloves.

Installation Instructions

- 1 Before installing the fresh air damper kit, remove the nuts and washers from each end of the damper pivot rod. See Figure 1.
- **2** Install the fresh air damper kit according to the instructions provided in Daikin IM 1023.
- **3** Locate all damper motor kit components and remove from carton. See Figure 1 for a component list.



- 4 Install the coupling on the end of the damper pivot rod closest to the unit control box With the damper blade in the closed (up) position, secure the coupling by tightening the setscrew with the setscrew facing the front of the unit.
- Note: Suggestion: flatten the threads of the damper pivot rod where it contacts the setscrew to prevent the setscrew from slipping.
- 5 Attach the damper motor to the mounting bracket with two #8-32 x 3/8" screws.
- 6 Remove the end pocket cabinet panel from the control box side of the fan coil (remove attaching screw from tab on the bottom front of the panel and lift off panel).
- 7 Remove the knockout in the fan coil chassis that provides access for attaching the motor control rod to the damper. See Figure 1.
- **8** Cut the damper control rod to the proper length according to the chart in Figure 1.
- **9** Slide the damper control rod through the knockout hole and into the coupling you installed in Step 4. Do not tighten set screw!
- **10** Position the damper motor so that the motor control rod fits into the motor coupling (do not tighten set screw) and secure the motor bracket to the chassis using the #10 x 1/2" sheet metal screws.

Note: This is for preliminary positioning of the control rod.

- 11 Now position the rod so that the set screws on both the damper coupling and the motor coupling will grip the rod firmly. Mark the rod on the motor end.
- **12** Remove or back out the motor bracket until you are able to tighten the 1/8" Allen set screw on the motor coupling, then secure the motor coupling according to your previous mark.

- 13 Slide the rod back into the damper coupling and secure the motor bracket to the end panel, making sure the rod is centered in the knockout hole.
- **14** The damper rod should be positioned according to the earlier alignment. Tighten the setscrew on the coupling with the damper in the closed position. This requires holding the damper in the closed position while marking the proper angle.
- 15 Manually open the damper blade on the fresh air intake box and let the spring return on the damper motor close the damper blade. If necessary, loosen the setscrew on the coupling and adjust the damper blade until the spring will close the damper blade, then retighten the setscrew.
- **16** The 24 VAC air damper actuator contains 2 yellow wires. One wire connects to the air damper control's 24 VAC power wire. The other wire connects to neutral. Power consumption = 10 VA.

Figure 2: Damper Motor Kit Installed in Unit

