Installation Instructions

Zoning Dampers

DAMPRND-B
DAMPREC-B

NOTE: Read the entire instruction manual before starting the installation.

This symbol → indicates a change since the last issue.

SAFETY CONSIDERATIONS

Installing and servicing air conditioning equipment can be hazardous due to system pressures, electrical components, and fuel gases. Only trained and qualified personnel should install, service, or repair air conditioning equipment.

Untrained personnel can perform basic maintenance functions such as cleaning coils, or cleaning and replacing filters. All other operations should be performed by trained service personnel. When working on heating & air conditioning equipment, observe precautions in the literature, on tags, and on labels attached to the unit.

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.

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 a hazard 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. NOTE is used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.

Follow all safety codes. Wear safety glasses and work gloves. Have a fire extinguisher available if needed. 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.

Before proceeding with installation, inspect thoroughly for shipping damage. Notify shipper immediately if any damage is found. Check for proper clearances of moving parts.

The qualified installer or agency must use factory-authorized kits or accessories when modifying this product. Refer to the individual instructions packaged with the kits or accessories when installing

---

⚠ **WARNING: Before performing installation, service or maintenance operations on this system turn off all main power switches and/or disconnects. There may be more than one switch or disconnect. Turn off accessory power switch(s) if applicable. Electrical shock can cause serious injury or death. TAG DISCONNECT SWITCH(S) WITH A SUITABLE WARNING LABEL.**

INTRODUCTION

→ The -B series round and rectangular dampers are designed with a more compact actuator, and are shorter in length, saving shipping, storage and installation space. The compact actuator contains a self-aligning plastic hub which slips over the shaft but is not clamped to it, reducing the possiblity of misalignment and shaft binding. Retangular dampers now use 45 degree actuators and blades - the same as round dampers.

DAMPER (-B) FEATURES

→ 1. Self-aligning shaft and actuator hub requires no adjustment.

2. Spring-loaded disengagement (quick blade release button) for momentary release of main gear and damper blade.

→ 3. Terminals recessed in plastic. No cover removal for wiring.

→ 4. Plastic hub protects actuator from condensation.

NOTE: Refer to the zoning kit Installation Instructions for application information. All dampers must be properly installed and supported according to local codes or SMACNA standards. Seal duct joints using duct tape, mastic, or other approved methods. Do not allow mastic to come in contact with actuator.

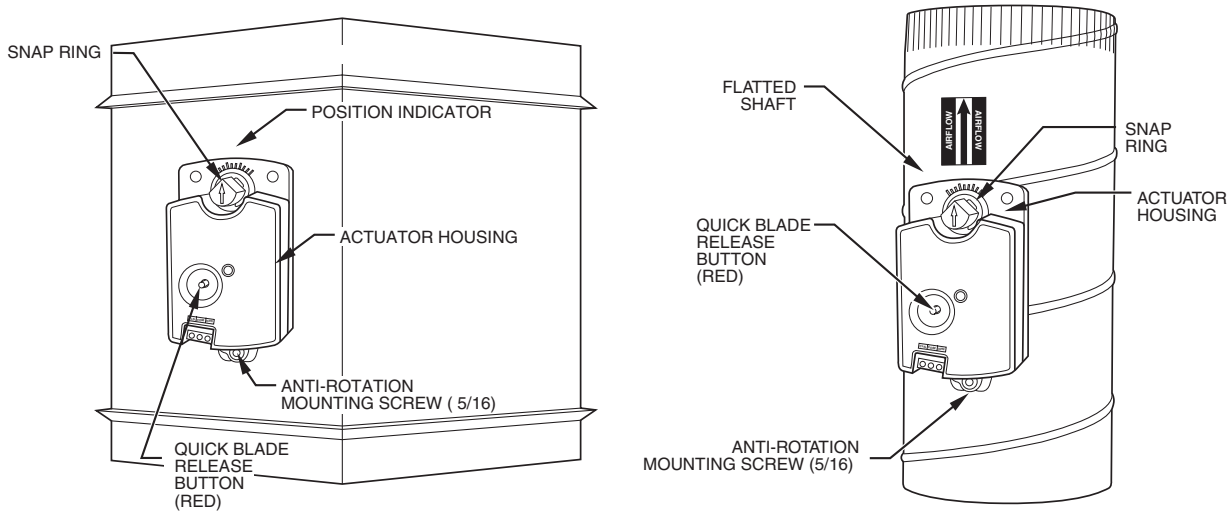
INSTALLATION

1. Install damper so actuator is visible for inspection and accessible in the event it would ever need servicing. The arrow on end of damper shaft represents damper blade position.

→ 2. To wire damper, connect to OPN, COM, and CLS terminals as indicated. It is good practice to provide a wiring strain relief to protect the connections from wire movement.

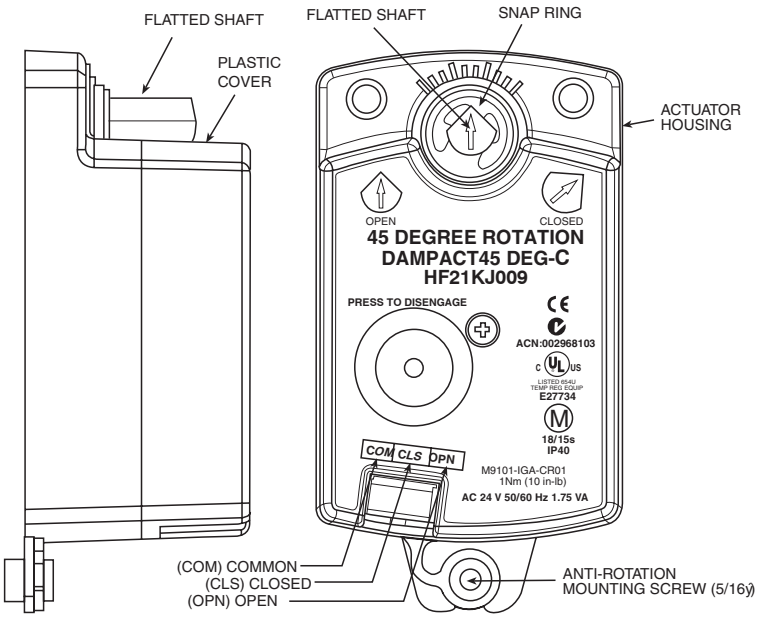
→ 3. If the damper is in an unconditioned space, insulate the damper using 1-1/2 inches insulation (check local codes). In areas where excessive condensation may occur, a transparent plastic cover (order number: DAMPACTCXXCOV) is available which will eliminate the possibility of actuator condensation. Make sure insulation does not interfere with operation of actuator.

Catalog No.: IM-DAMP-17 Cancels: IM-DAMP-14 Printed in U.S.A. 8-05, revised 6/21



A05164

→ **Fig. 1– Rectangular and Round Damper**



A05169A

Fig. 2–Actuator Detail (45° round shown)

→

⚠ **CAUTION: Before proceeding, verify that all wiring is correct per factory approved schematic.**

4. After installation is complete, check dampers and verify they are all operating properly. When 24-vac is applied between common and open, the damper should go full open in approximately 15 sec. If damper is used in a 50 hz application, time will increase to approximately 18 sec. Power damper and cycle open/closed several times.
5. Residential dampers are designed in such a way that if the damper jams or stalls it will not damage the damper or motor. If for any reason the damper should jam, it will usually be related to twisting or bending of the damper body during installation, or tension on the damper shaft. After you correct any bending or twisting problems, the damper should operate properly. If in an emergency it becomes necessary to force a damper open manually, press in the disengagement button (quick blade release) with 1 hand and turn mounting hub to reposition damper shaft. Release disengagement button to hold damper shaft in new position.