CZRD-XXXX RECTANGULAR COMBINATION ZONE RELIEF DAMPER WITH AUTOMATIC PRESSURE RELIEF

PATENTED DESIGN

INSTALLATION INSTRUCTIONS

INTRODUCTION

The CZRD Combination Zone Relief Damper™ operates like any standard zone control damper but also has a built-in static pressure relief mechanism that eliminates the need to install a bypass damper. If the static pressure reaches the factory preset setting, all dampers that are in the closed position will start to open slightly to bleed a small amount of air into the non-calling zone. This maintains the static pressure of the system at an acceptable level.

INSTALLATION

1. The damper can be mounted in either a horizontal air flow or vertical up-flow position.

2. The airflow must be in the direction of the arrow found on the damper end plate. When the damper is mounted in the horizontal air flow position, the damper counter-weight must always be located on the bottom as illustrated below.

3. Each damper comes from the factory with the correct number of counter-weights attached to the barometric blade for horizontal air flow installation. If the damper is mounted in the vertical up-flow position, make sure the proper number of weights are removed from the blade as shown on the included Damper Weight Chart.

4. The damper actuator is Power Open/Power Close. The motor is rated at 24Vac, 1.2VA.
RELOCATING THE DAMPER ACTUATOR

1. Changing the damper actuator position should be done before the damper is installed in the duct.
2. The actuator assembly is factory mounted on the right side of the damper. (Refer to illustration below)
3. **Apply 24V power to the White and Red leads until the Damper LED turns Green. (Damper open)**
4. Remove the 6 screws holding the Damper End Plate to the Damper Frame and remove with Actuator Assembly intact.
5. With the damper blade in the **closed** position, align the Damper End Plate and slide the actuator assembly onto the left side of the damper shaft.
6. Reattach the Damper End Plate using the 6 screws.
7. Check the damper blade to assure that it rotates freely to the open position.
8. When the actuator is relocated on the opposite side, the wire colors are reversed:

<table>
<thead>
<tr>
<th>Wire Color</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>Common</td>
</tr>
<tr>
<td>Green</td>
<td>Power Open</td>
</tr>
<tr>
<td>Red</td>
<td>Power Close</td>
</tr>
</tbody>
</table>

NOTE: The LED color will be opposite. (Red = Open, Green = Closed)

OPTIONAL BAROMETRIC BLADE LOCKING FEATURE

Some applications may require that the barometric blade feature be locked for conventional 2-position operation.

1. Locking the barometric blade should be done prior to installing the damper in the duct.
2. Confirm that the damper is in the closed position as shipped form the factory.
3. Remove the 6 screws holding the Damper End Plate in place and remove with actuator assembly intact.
4. Loosen the Shaft Adapter Coupling Screw until the Shaft Adapter can be pulled out of the coupling.
5. Slide the Slotted hole over the Damper Shaft Drive Screw.
6. Reattach the Damper End Plate using the 6 screws.
7. Make sure the damper blade is in the closed position and then tighten the Shaft Adapter Coupling Screw.
8. Apply 24V power to the White and Green leads to assure that the damper blade drives fully open and then power the damper closed (White and Red) before installation.