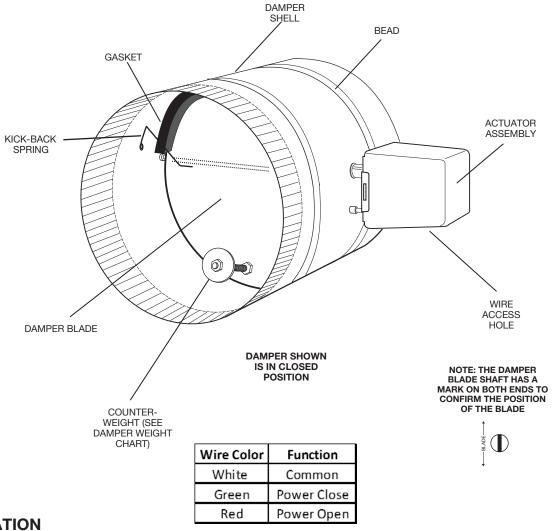
# CZRD-XX ROUND COMBINATION ZONE RELIEF DAMPER WITH AUTOMATIC PRESSURE RELIEF

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.



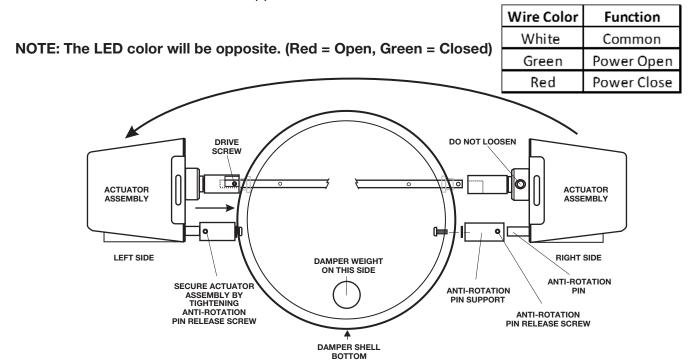
#### **INSTALLATION**

- 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 shell. 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. Relocate the damper actuator *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. Loosen the Anti-Rotation Pin Release Screw and slide the Actuator Assembly off the damper shaft.
- 5. Remove the screw and lock washer that hold the anti-rotation pin support to the damper shell and mount on the opposite side making sure that the Pin Release Screw is accessible.
- 6. With the damper blade in the closed position, align and slide the actuator assembly onto the left side of the damper shaft and secure by tightening the Anti-Rotation Pin Release Screw.
- 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:



## OPTIONAL BAROMETRIC BLADE LOCKING FEATURE

Some applications may require that the barometric blade feature be locked in place for conventional damper 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 from the factory.
- 3. Loosen the Shaft Adapter Coupling Screw until the Shaft Adapter turns freely.
- 4. Loosen the Anti-Rotation Pin Release Screw and pull the Actuator Assembly away from the damper shaft.
- 5. Rotate the Shaft Adapter until the slot lines up with the Damper Shaft Drive Screw and then push the actuator and Shaft Adapter back on to the damper shaft.
- Make sure that the damper blade is in the full closed position and then tighten the Shaft Adapter Coupling Screw and the Anti-Rotation Pin Release Screw.
- 7. 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.

