

505,140M
 1/2015
 Supersedes 10/2006

DAMPER ACTUATOR KIT

INSTALLATION INSTRUCTIONS FOR DAMPER ACTUATOR KIT (12W98; 100860-01) USED WITH L CONNECTION® NETWORK

Shipping and Packing List

Package 1 of 1 contains:

- 1- Damper actuator
- 1 - Envelope containing hardware

Check actuator for shipping damage. Receiving party should contact last carrier immediately if shipping damage is found.

These instructions are intended as a general guide and do not supersede local codes in any way. Authorities having jurisdiction should be consulted before installation.

Application

The damper actuator is used with L Connection® Network in zoning applications. The actuator can be used on Lennox zone dampers or supply air bypass dampers.

Zone Damper Installation

The damper will be installed in the closed position and will rotate 90 degrees to fully open at 10VDC. See figure 1.

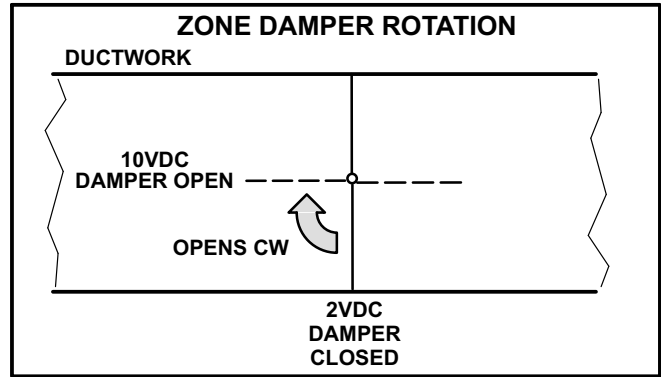


FIGURE 1

DIMENSIONS

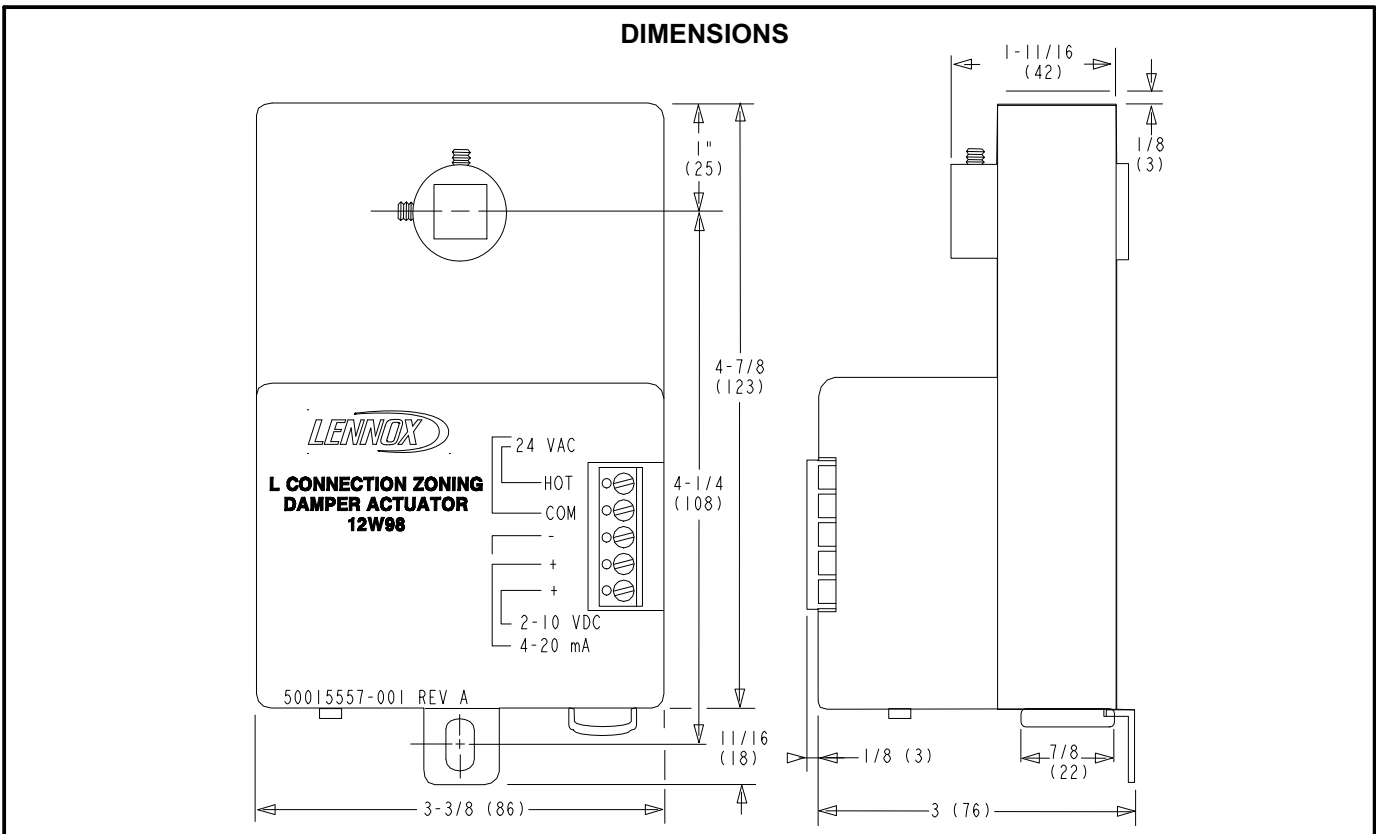


FIGURE 2

⚠️ WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a qualified installer or service agency.

⚠️ CAUTION

Electrical shock or equipment damage hazard. Can shock individuals or short equipment circuitry. Disconnect all power supplies before installation. Actuators with auxiliary switches can have more than one disconnect.

⚠️ CAUTION

Actuator damage hazard. Deteriorating vapor and acid fumes can damage the actuator metal parts. Install actuator in areas free of acid fumes and deteriorating vapors.

⚠️ WARNING

Explosion hazard. A spark from the actuator or attached accessories can result in serious injury or death. Install the actuator in areas free of escaping gas and other explosive vapors.

⚠️ CAUTION

Danger of sharp metallic edges. Can cause injury. Take care when servicing unit to avoid accidental contact with sharp edges.

- 1- Remove and retain nut and washer securing shipping bracket to damper. Discard bracket. See figure 3.
- 2- Locate the actuator clutch. See figure 4.
- 3- Press the clutch and rotate the actuator shaft to the fully counterclockwise position. See figure 5.
- 4- Move rotation direction switch on actuator to the clockwise rotation position. See figure 4.

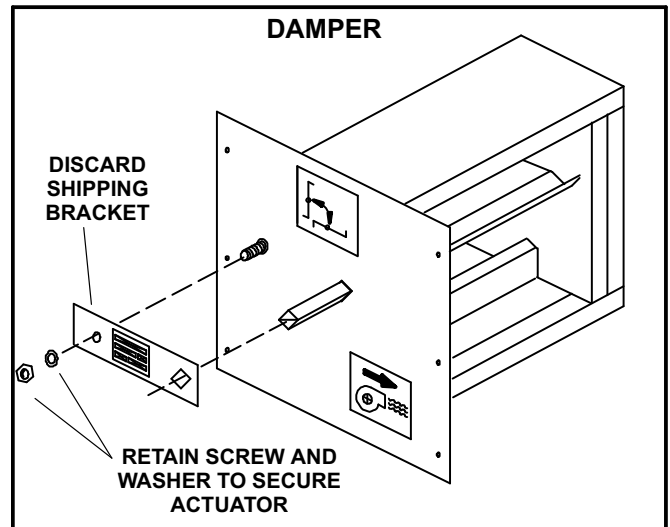


FIGURE 3

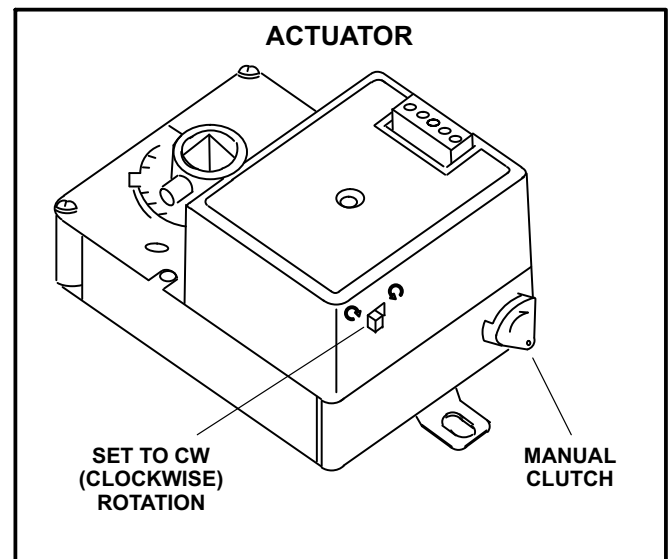


FIGURE 4

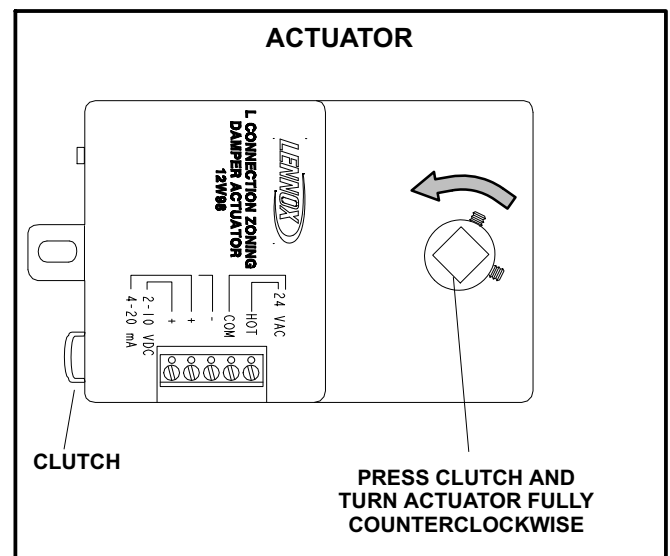


FIGURE 5

- 5- Rotate the damper shaft fully counterclockwise. The dampers will be completely closed. See figure 6. The slot on the end of the damper shaft will indicate the position of the damper.

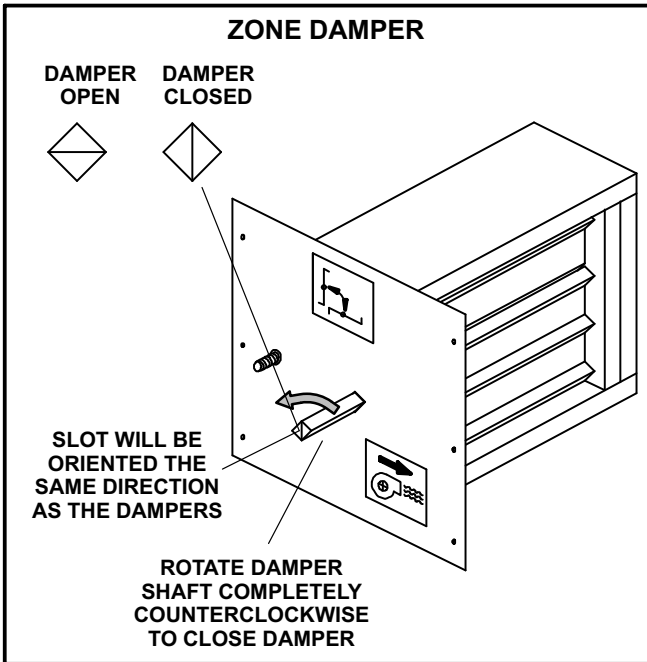


FIGURE 6

- 6- Loosen two set screws on actuator shaft.
- 7- Slide actuator shaft onto damper shaft and actuator tab onto threaded stud on damper. See figure 7.
- 8- Tighten retained washer and nut onto threaded stud.
- 9- Tighten set screws on actuator shaft.

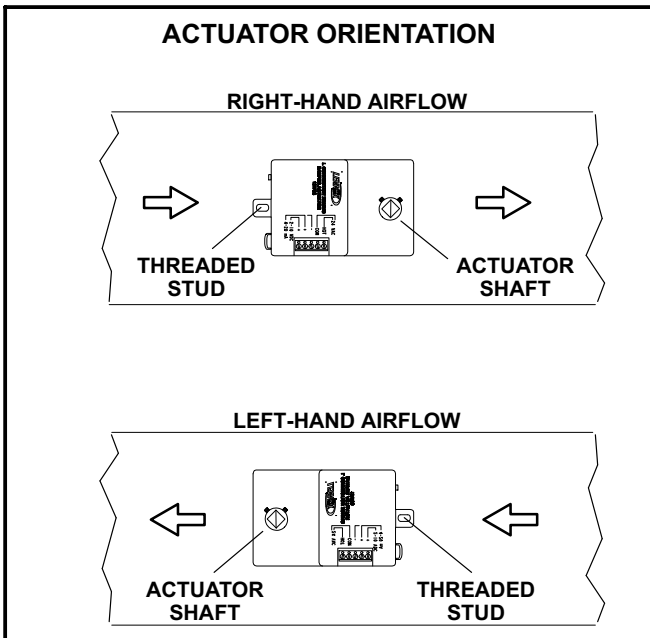


FIGURE 7

Bypass Damper Installation

The damper will be installed in the open position and rotate counterclockwise 90 degrees to fully closed at 10VDC. See figure 8.

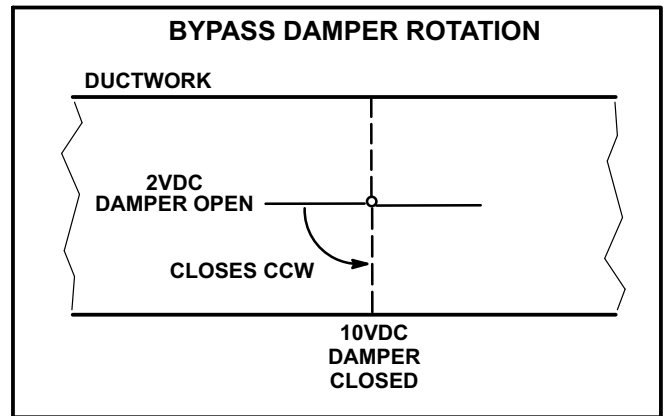


FIGURE 8

- 1- Install the actuator in a location that allows clearance for servicing. See dimensions in figure 2.
- 2- Remove and retain nut and washer securing shipping bracket to damper. Discard bracket. See figure 3.

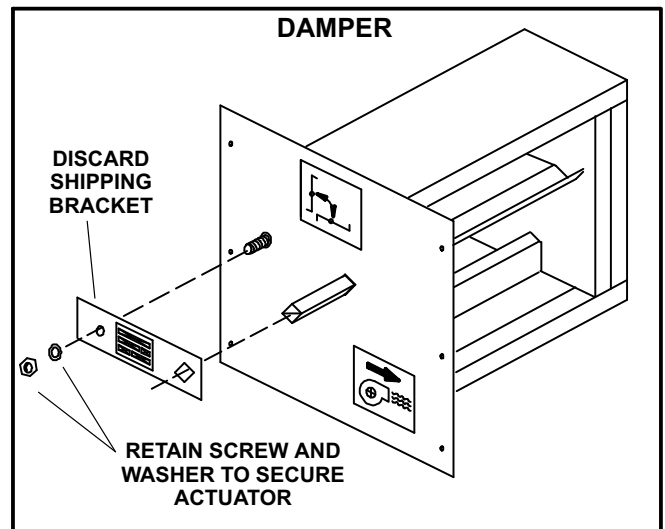


FIGURE 9

- 3- Locate the actuator clutch. See figure 10.
- 4- Press the clutch and rotate the actuator shaft to the fully clockwise position. See figure 11.
- 5- Move rotation direction switch on actuator to the counterclockwise rotation position. See figure 10.
- 6- Rotate the damper shaft to the open or horizontal position. The slot on the end of the shaft will be oriented the same direction as the dampers. See figure 12.

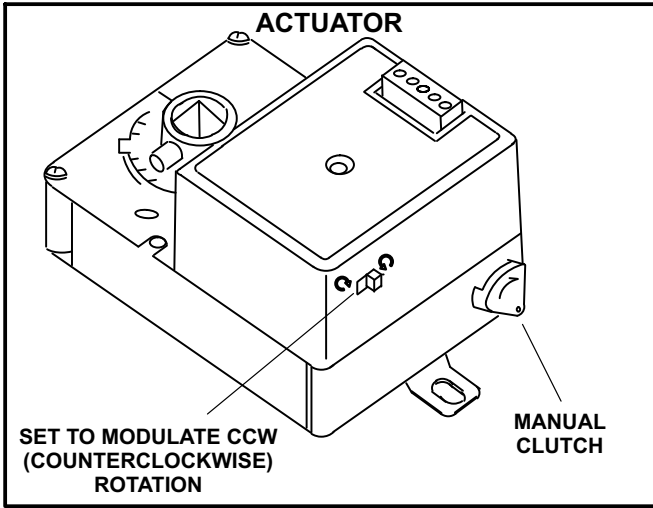


FIGURE 10

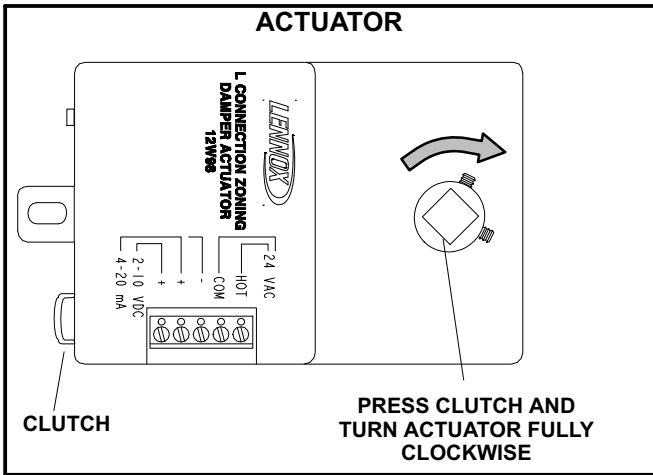


FIGURE 11

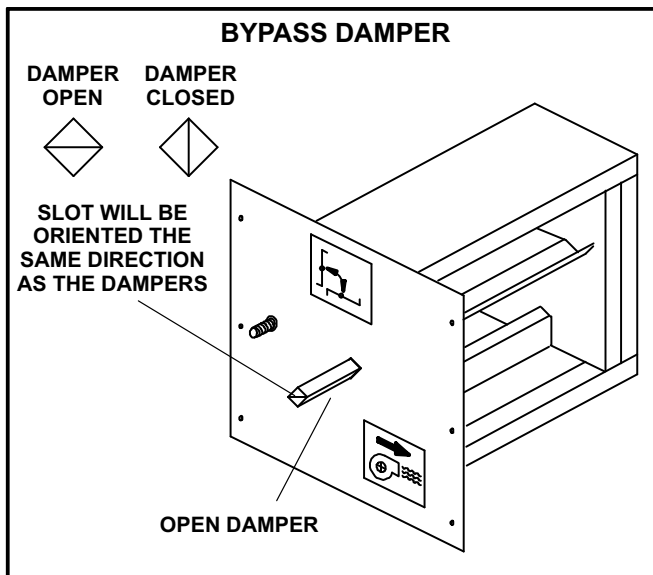


FIGURE 12

8- Slide actuator shaft onto damper shaft and actuator tab onto threaded stud on damper. See figure 13

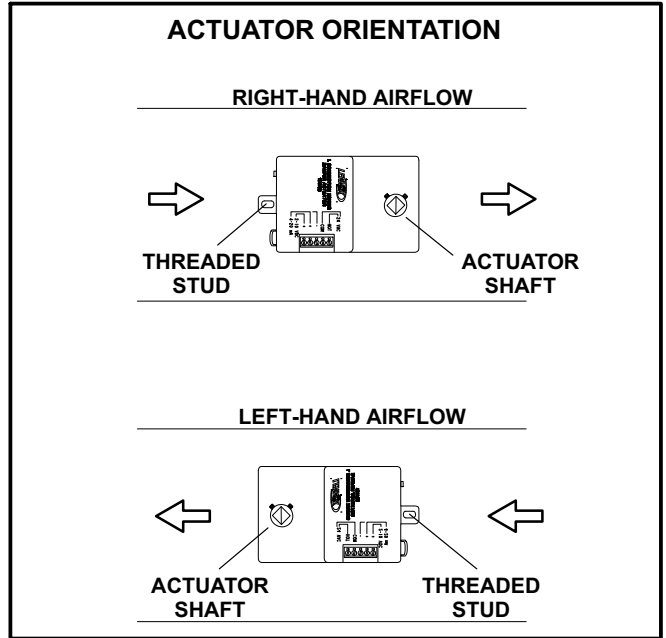


FIGURE 13

Wiring

See figure 14 to wire actuators installed on zone dampers and figure 15 or 18 to wire actuators installed on bypass dampers. Also refer to 505,090M, Zone Link (ZL) - L Connection® Network (1127) for further details concerning setup and wiring.

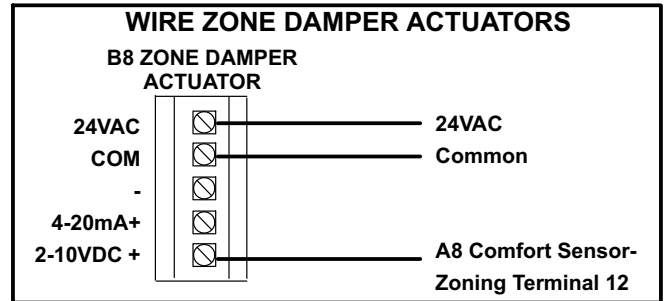


FIGURE 14

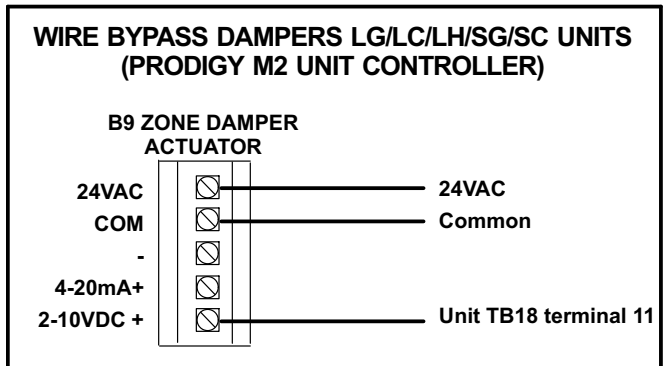


FIGURE 15

7- Loosen two set screws on actuator shaft.

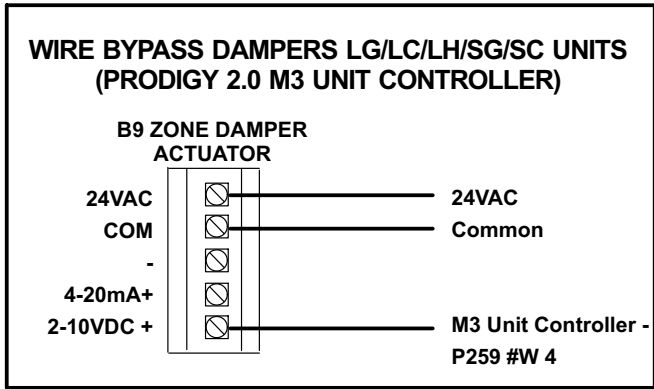


FIGURE 16

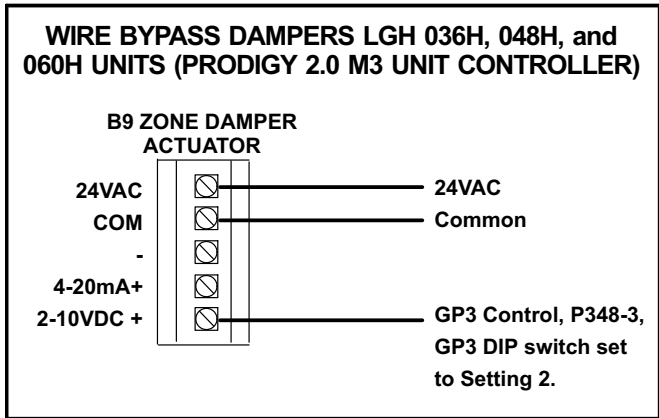


FIGURE 17

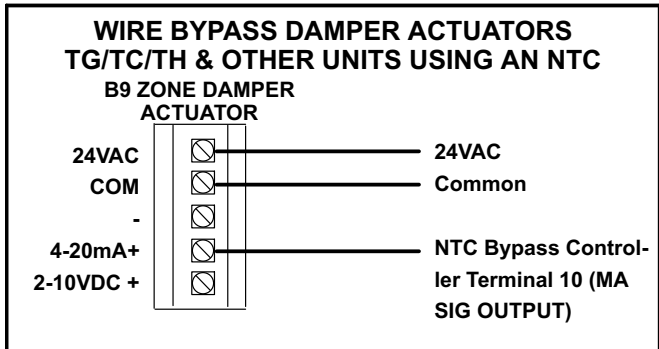


FIGURE 18