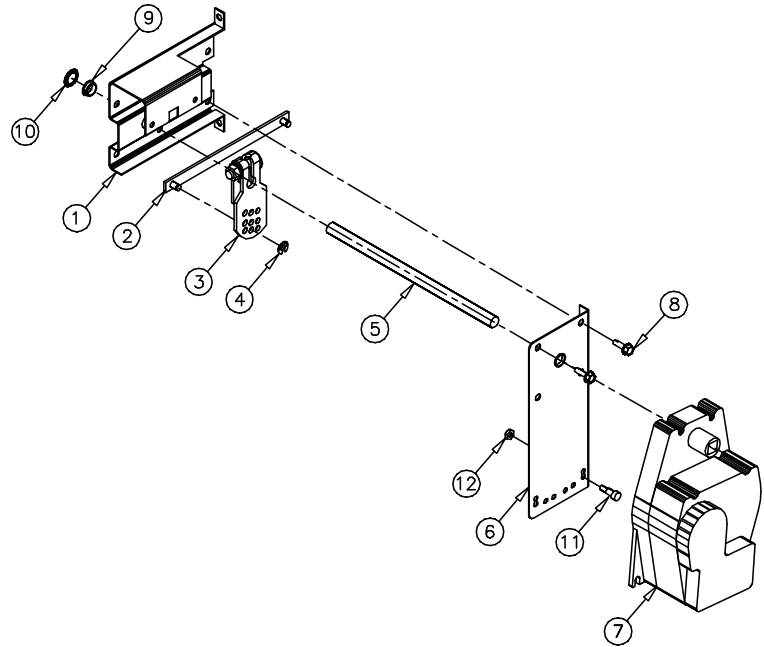


These instructions apply to the internal field replacement of the Honeywell, FATPA Series, actuators on Greenheck models VCD control dampers, when they are duct mounted or sleeved.



FAIL OPEN DAMPERS	PART #
ML4302F1008 120V	383261
ML8302F1004 24V	383265
MS8309F1001 24V	382734
MS4309F1005 120V	382732
ML4802F1007 230V	383263
MS4809F1012 230V	382736

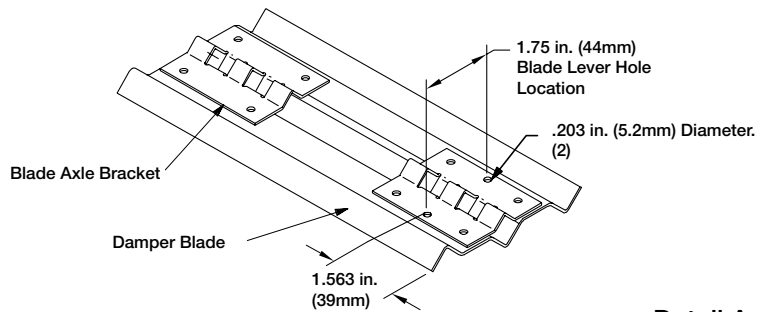
FAIL CLOSED DAMPERS	PART #
ML4202F1000 120V	383260
ML8202F1006 24V	383264
MS8209F1003 24V	382733
MS4209F1007 120V	382731
ML4702F1009 230V	383262
MS4709F1014 230V	382735

ITEM #	QTY	PART #	DESCRIPTION
1	1	723981	INTERNAL ACTUATOR BRKT
2	1	839475	DRIVE LINK ASSEMBLY
3	1	829206	1/2" CRANKARM ASSEMBLY
4	1	451588	1/4" E-RING
5	1	593831	6.5" JACKSHAFT, 1/2" DIA.
6	1	846591	ANTI-ROTATION BRACKET ASM
7	1	SEE CHART	ACTUATOR
8	2	415264	1/4-20x1/2 TCS
9	1	370159	1/2" SNAP IN BEARING
10	1	416179	RETAINING RING 1/2"
11	1	416048	10-24X375 SHOULDER BOLT
12	1	415934	10-24 NYLOC NUT

**Figure 1:** Honeywell FATPA Series internal mount (exploded view).

**Tools Required:**

- Wrenches:** (1) 7/16 in., (1) 3/8 in., (1) 9/16 in.  
 (1) Ratchet with 3/8, 7/16, 9/16 in. deepwell socket  
 (1) 1/8 in. Allen wrench,  
 (1) Drill with 3/8 in. nut driver,  
 (1) .203 dia. drill bit



**Detail A**



**WARNING**

Equipment Damage or Electrical Power Hazard. Line voltage can cause death or serious injury and short equipment circuitry. Disconnect power supply before installation.



**CAUTION**

Device Malfunction Hazard. Improper set screw tightening causes device malfunction. Tighten set screws with proper torque to prevent damper shaft slippage.

Fail Close Dampers	Part #
ML4202F1000 120V	383260
ML8202F1006 24V	383264
MS8209F1003 24V	382733
MS4209F1007 120V	382731
ML4702F1009 230V	383262
MS4709F1014 230V	382735

Fail Open Dampers	Part #
ML4302F1008 120V	383261
ML8302F1004 24V	383265
MS8309F1001 24V	382734
MS4309F1005 120V	382732
ML4802F1007 230V	383263
MS4809F1012 230V	382736

# INSTRUCTIONS

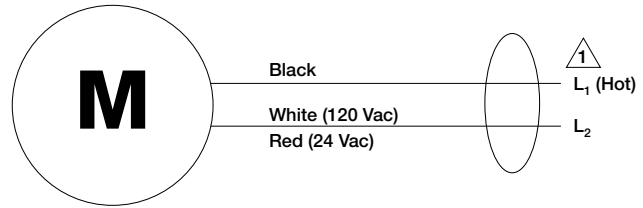
# FATPA DIRECT DRIVE SERIES

These installation instructions assume a damper is already mounted in a duct or sleeve. Have damper blades in the fail position.

1. Drill [2] .203 inch holes in the third blade from bottom, at location shown in detail "A".
2. Attach blade drive lever to blade using [2] ¼ in. - 20 x ½ in. thread cutting screws, self drilling screws or ¼ -20 x 1¼ in. bolts.
3. Fasten actuator bracket (item 1) to the left jamb of damper frame using [2] thread cutting screws. Note: the 0.563 in. hole in the bracket (item 1) that the 6 1/2 in. jackshaft (item 5) goes through must be centered with the centerline of the blade. Snap bearing (item 9) into internal actuator bracket (item 1).
4. Snap bearing (item 9) into anti-rotation bracket (item 6) and attach the anti-rotation bracket assembly (item 6) to the internal mount bracket (item #1) using [2] thread cutting screws (item 8).
5. Slide ½ in. diameter rod (item 5) slightly through the anti rotation bracket (item 6). Install crankarm (item 3) and drive link (item 2) onto the ½ in. diameter rod (item 5) and install retaining clip (item 10) to lock drive link onto the crankarm.
6. Install 10-24 x .375 shoulder bolt (item 11) to the anti rotation bracket (item #6) using #10 Nylock nut (item 12).
7. Attach actuator (item #7) to anti-rotation bracket assembly (item 6). Tighten the actuator onto the shaft.
8. Connect drive link to blade drive lever using e-clip. With blades closed and the actuator in its fail position, position the blades in their fail position and tighten the crankarm to the 1/2 in. shaft.
9. Connect all electrical leads to the actuator. Apply power to the actuator. The damper blades should power position and return to the fail position when power is disconnected.

## IMPORTANT

For actuators with a product date code before 0527 a power break of less than two seconds can cause the actuator to spring-return 5 degrees or less and remain in place until a power break of longer duration. For actuators with a product date code of 0527 or after, a power break of any duration will cause the actuator to spring-return and be able to drive immediately when power is reapplied.



Power supply. Provide disconnect and means of overload protection.

**Figure 2:** FATPA series wiring illustration.

Power Consumption			
Model	Volts	Running	Holding
ML4XXX	120	18W	9W
MS4209 MS4309	120	23W	7W
ML8XXX	24	16W	8W
MS8209 MS8309	24	23W	7W

## Actuator Weight

5 lb. (2.3 kg).

## Noise Rating

Driving Open: Maximum 65 dBA at 1m.

Holding: Maximum 20 dBA at 1m (no audible noise).

## Temperature Ratings

Ambient: 0°F to 130°F (-18°C to 55°C)

Shipping and Storage: -40°F to 140°F (-40°C to 60°C)

## Humidity Ratings

5% to 95% RH non-condensing.

## Environmental Protection Ratings

NEMA 1

IP42

## Approvals

Underwriters Laboratories Inc. UL 873 plenum rating, and cUL: File #E4436: Guide #XAPX.

## Direction of Spring Return

Counterclockwise (see **Figure 1**, Note 3)

MS4309, ML4302

MS8309, ML8302

Clockwise (see **Figure 1**, Note 3)

MS4209, ML4202

MS8209, ML8202

## Actuator Timing (Under Load)

Drive Open: 15 seconds.

Spring Close: 15 seconds.

