

OpenAir® GJD Series Electronic Damper Actuator Designed for UL Listed Fire/Smoke and Smoke Control Dampers

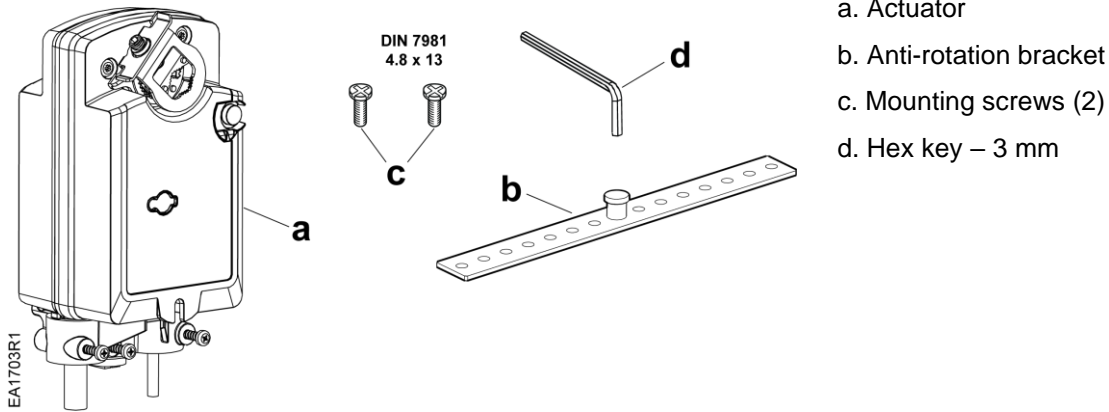


Figure 1. GJD Actuator Parts.

Product Description

Step-by-step description for direct-coupled mounting of the OpenAir GJD fast-acting, spring return, two-position rotary electronic damper actuator. Actuator is intended for control of approved fire and smoke leakage-rated HVAC dampers.

Product Numbers

- GJD121.1U
- GJD126.1U
- GJD221.1U
- GJD226.1U
- GJD321.1U
- GJD326.1U

Required Tools

- 3 mm hex wrench (provided)
- No. 2 Phillips screwdriver
- Marker or pencil
- Small, needle-nose pliers (for EFL installation)

Prerequisites



WARNING:
Do not open the actuator housing.

CAUTION:
Continuous use at voltages above the recommended tolerances may damage the actuator.

Warning/Caution Notations

WARNING:		Personal injury or loss of life may occur if you do not follow a procedure as specified.
CAUTION:		Equipment damage or loss of data may occur if you do not follow a procedure as specified.

Installation

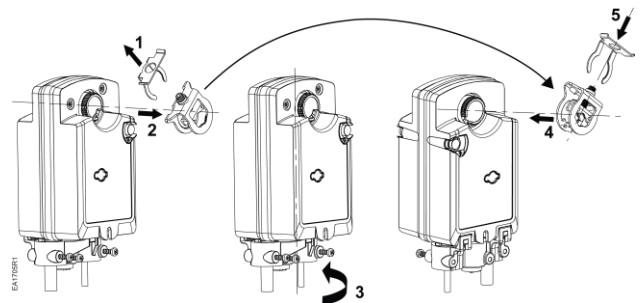


Figure 2. Actuator Mounting Orientation.

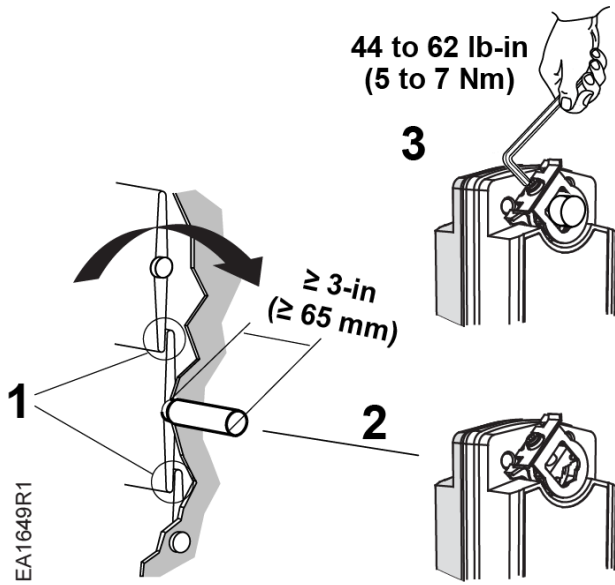


Figure 3. Shaft Length and Proper Shaft Adapter Location.

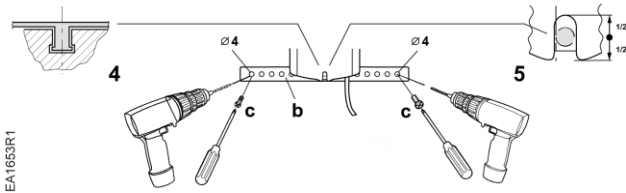


Figure 4. Anti-Rotation Bracket.

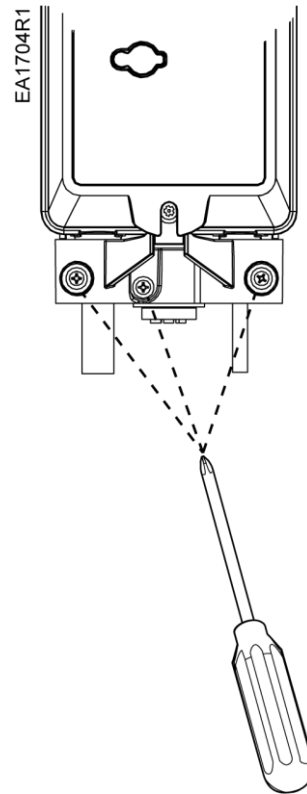
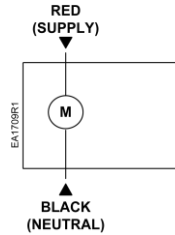


Figure 5. If using flexible conduit, insert the conduit into the proper opening and then tighten the conduit screws using a No. 2 Phillips Screwdriver.

Wiring Diagrams

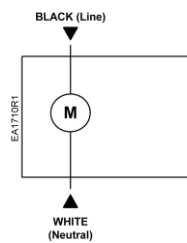
NOTE: All wiring must conform to NEC and local codes and regulations.

24 Vac/dc



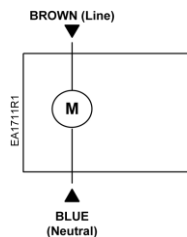
Function	Color
Supply	Red
Neutral	Black

120 Vac



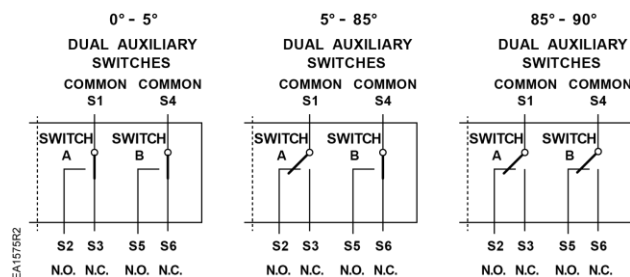
Function	Color
Line	Black
Neutral	White

230 Vac



Function	Color
Line	Brown
Neutral	Blue

Auxiliary Switches



Actuator Position	Switch A Common S1 Connected to	Switch B Common S4 Connected to
0° to 5°	S3	S6
5° to 85°	S2	S6
85° to 90°	S2	S5



CAUTION:

Mixed switch operation to the switching outputs of both dual end switches (5° and 85°) is not permitted.

Either AC line voltage from the same phase must be applied to all six outputs of the fixed dual end switches, or UL-Class 2 voltage must be applied to all six outputs.

Wiring, Continued

Electronic Fusible Link (EFL)

All GJD Electronic Damper Actuators are EFL-capable. EFLs are purchased separately. See Table 1.

Table 1. Electronic Fusible Link Product Numbers.

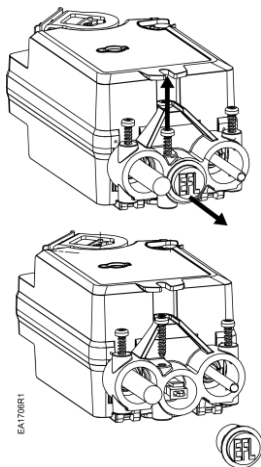
Part Number	Operation
ASK791.165	165°F (74°C)
ASK791.212	212°F (100°C)
ASK791.250	250°F (121°C)

NOTE:

All EFLs are low voltage and do not need to be wired in conduit.

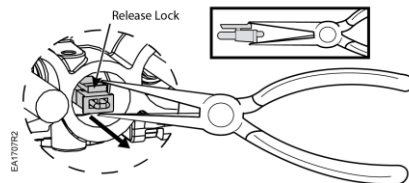
To install an EFL, do the following:

1. Remove and discard the cover marked **EFL**.

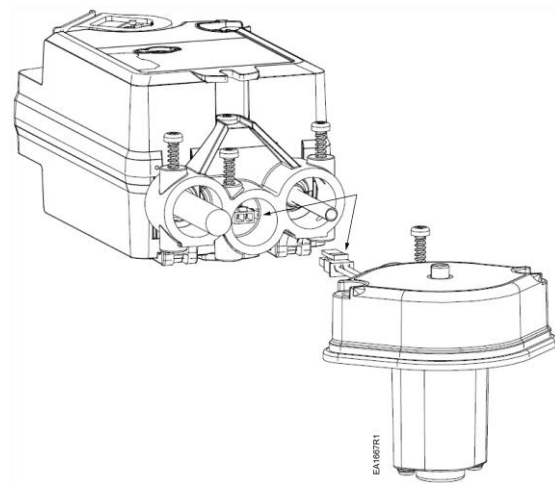


2. Use a small, needle-nose pliers to squeeze the release lock of the jumper plug and remove the jumper plug.

NOTE: Remove the entire jumper plug, including the wire loop.



3. Insert the quick connect plug from the EFL and ensure that the cable is secure.



NOTE:

If you are not using an EFL, do not modify the actuator. An EFL or jumper plug must be installed for actuator to work properly.

Maintenance



CAUTION:

The GJD actuator does not require any periodic cycling to function properly as an integral part of an active smoke control damper system. **The National Fire Alarm Code NFPA 72 states that all life safety systems are to be functionally checked at least annually.** Check the smoke control damper/actuator every time you functionally check your smoke detectors, emergency lights, and/or power generators for operation.

Dimensions

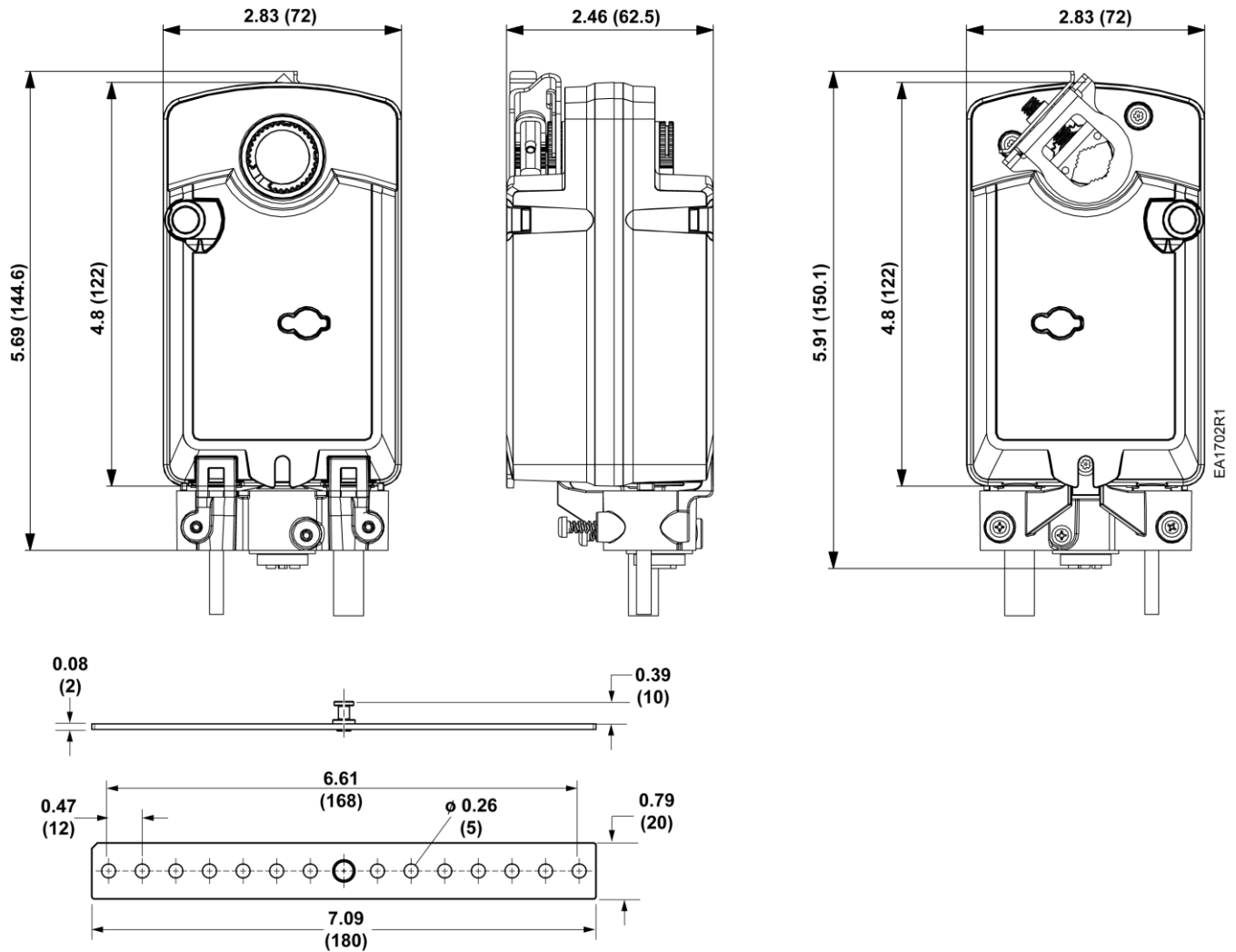


Figure 6. Dimensions of GJD OpenAir Actuator in Inches (mm).

References

Technical Instructions
 OpenAir Electric Damper Actuator Designed
 for UL Listed Fire/Smoke and Smoke Control
 Dampers

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