

## OpenAir® GQD Series, Spring Return, 20 lb-in (2 Nm), Rotary Electronic Damper Actuators

| Product Number* | Torque   | Voltage   |         | Control Signals |          |   | Plenum Cabling | Appliance Cable | Auxiliary Switch |
|-----------------|----------|-----------|---------|-----------------|----------|---|----------------|-----------------|------------------|
|                 | 20 lb-in | 24 Vac/dc | 120 Vac | 2-Position      | Floating | Modulating<br>2 to 10 Vdc/<br>10 to 2 Vdc |                |                 |                  |
| GQD121.1P       | ●        | ●         | —       | ●               | —        | —   | ●              | —               | —                |
| GQD126.1P       | ●        | ●         | —       | ●               | —        | —   | ●              | —               | ●                |
| GQD131.1P       | ●        | ●         | —       | —               | ●        | —   | ●              | —               | —                |
| GQD136.1P       | ●        | ●         | —       | —               | ●        | —   | ●              | —               | ●                |
| GQD151.1P       | ●        | ●         | —       | —               | —        | ●   | ●              | —               | —                |
| GQD156.1P       | ●        | ●         | —       | —               | —        | ●   | ●              | —               | ●                |
| GQD221.1U       | ●        | —         | ●       | ●               | —        | —   | —              | ●               | —                |
| GQD226.1U       | ●        | —         | ●       | ●               | —        | —   | —              | ●               | ●                |

\* Add /B to part number to order a bulk pack of 10.

### Technical Data

|                                   |   |
|-----------------------------------|---|
| Torque                            | 20 lb-in (2 Nm)   |
| Runtime for 90°                   | 30 seconds  |
| Spring Return                     | 15 seconds typical  |
| Nominal angle of rotation         | 90° typical   |
| Power consumption:                |   |
|                                   | <b>Running</b> <b>Holding</b>   |
| 24 Vac ±20%/ 24 Vdc ±15%          |   |
| GQD12x                            | 6.5 VA (4.5W)    4 VA (2.5W)  |
| GQD13x                            | 4 VA (2.5W)      3 VA (1.5W)  |
| GQD15x                            | 4.5 VA (3W)      3.5 VA (2W)  |
| 120 Vac ±15%                      |   |
| GQD22x                            | 10 VA              7 VA   |
| Damper shaft size                 | 3/8-inch to 1/2-inch diameter<br>(8 mm to 13 mm)<br>1/4-inch to 7/16-inch square<br>(6 mm to 11 mm) |
| Damper shaft size, minimum        | 3/4-inch (20 mm) minimum length   |
| Agency listings                   | UL listed to UL873<br>cUL listed; CE certified<br>EMC and Low Voltage Directives                    |
| 120 Vac                           |   |
| Ambient temperature               |   |
| Operating                         | –25°F to 130°F (–32°C to 55°C)  |
| Storage/transport                 | –40°F to 158°F (–40°C to 70°C)  |
| Ambient humidity (non-condensing) | 95% rh (non-condensing)   |
| Pre-cabled connection             | 18 AWG (0.75mm <sup>2</sup> ), 3 ft (0.9m) long   |
| Enclosure                         | NEMA 1  |
| Housing material                  | Plenum rated rugged plastic   |
| Dimensions:                       |   |
| GQDxx6.1x                         | 4-23/32" × 2-22/32" × 2-15/32"<br>(120 mm × 69 mm × 63 mm)  |
| GQDxx1.1x                         | 5-1/2" × 2-22/32" × 2-15/32"<br>(138.5 mm × 69 mm × 63 mm)  |
| GQDxx6.1x w/conduit box           | 6-3/16" × 2-22/32" × 2-15/32"<br>(156.7 mm × 69 mm × 63 mm)   |
| Weight                            | 1.06 lbs (0.48 kg)  |

### Description

The OpenAir GQD Series direct-coupled, spring return rotary electronic damper actuators are 24 Vac/dc rated and available in 2-position, floating, and modulating (2 to 10 Vdc) control. The small footprint and torque make this actuator ideal for small HVAC dampers, economizers, or residential zone dampers requiring fail-safe operation.



### Features

- Bi-directional, fail-safe spring return
- Pre-cabled
- Plenum rated models available
- Optional built-in auxiliary switches with fixed switch points at 5° and 85° rotation
- Fast run time
- Signal inversion capability on modulating type (2 to 10 Vdc or 10 to 2 Vdc)
- Small footprint for installation flexibility
- UL and cUL listed; CE certified
- These devices were approved for installation in plenum areas by Underwriters Laboratories, Inc. per UL 1995.
- Low voltage models are 24 Vac/dc compatible
- All models without auxiliary switches are equipped with a conduit adapter.
- 120 Vac, 1/2" NPT conduit, model available
- Fixed Dual End Switches
  - 24 Vdc, 24 Vac to 250 Vac
  - 6A resistive
  - 2FLA/12 LRA
  - SPST
  - Fixed 5° and 85°

### Wiring Diagrams

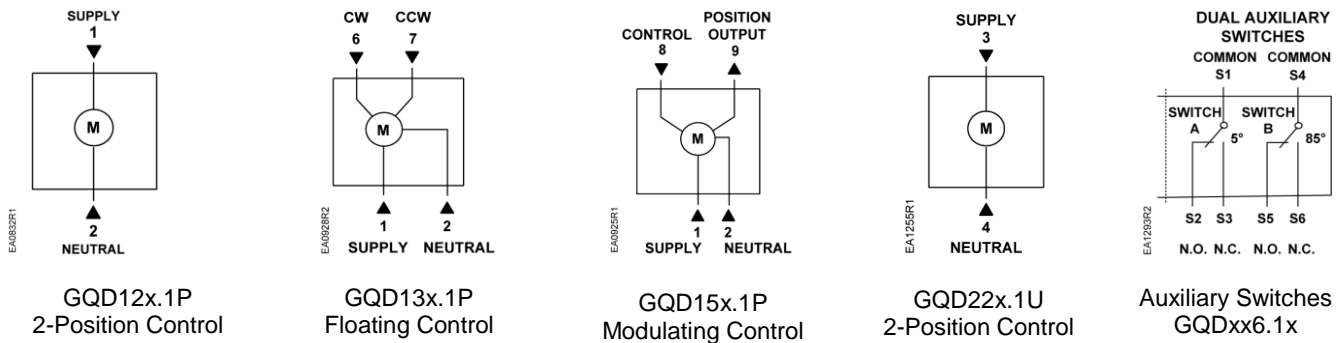
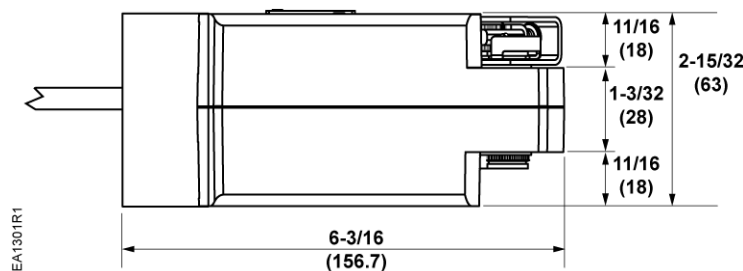
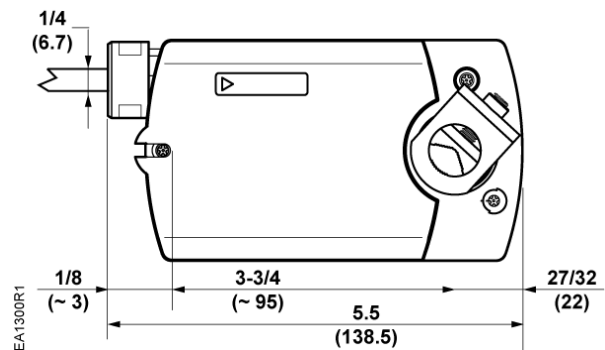
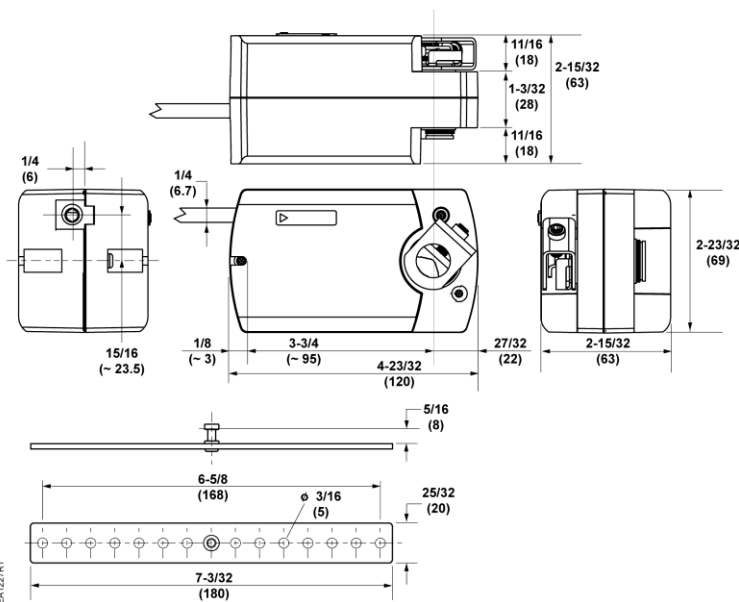


Figure 1. Wiring Diagrams.

### Dimensions in Inches (Millimeters)



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