

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 2 to 10 Vdc/ 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:	Running	Holding
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 (8 mm to 13 mm) 1/4-inch to 7/16-inch square (6 mm to 11 mm)	
Damper shaft size, minimum	3/4-inch (20 mm) minimum length	
Agency listings	UL listed to UL873 cUL listed; CE certified 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 ²), 3 ft (0.9m) long	
Enclosure	NEMA 1	
Housing material	Plenum rated rugged plastic	
Dimensions:	4-23/32" x 2-22/32" x 2-15/32" (120 mm x 69 mm x 63 mm)	
GQD221.1U (only)	5-1/2" x 2-22/32" x 2-15/32" (138.5 mm x 69 mm x 63 mm)	
GQDxx6 w/conduit adapter	6-3/16" x 2-22/32" x 2-15/32" (156.7 mm x 69 mm x 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
- 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

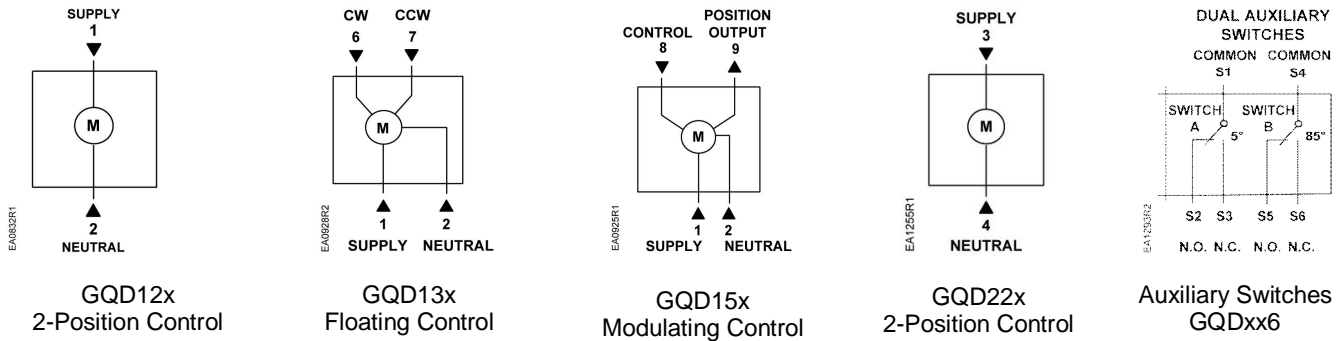


Figure 1. Wiring Diagrams.

Dimensions in Inches (Millimeters)

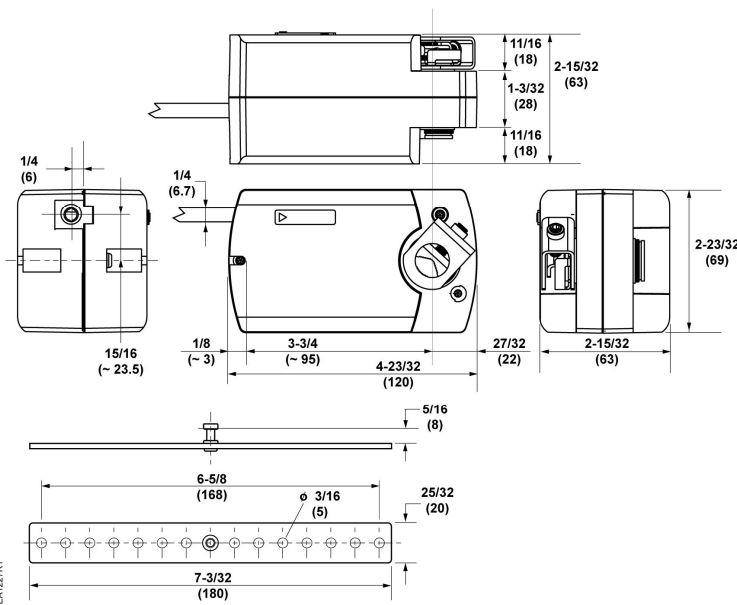


Figure 2. GQD1x1 Actuator and Mounting Bracket.

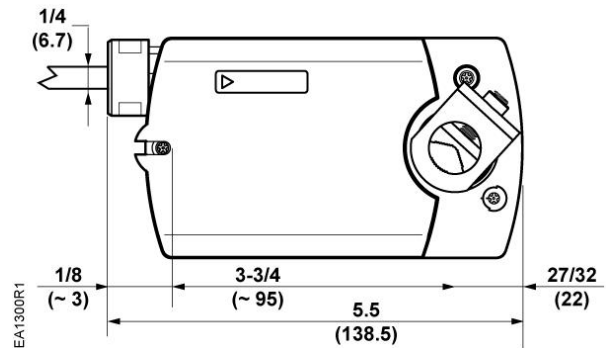


Figure 3. GQD221.1U Actuator Only.

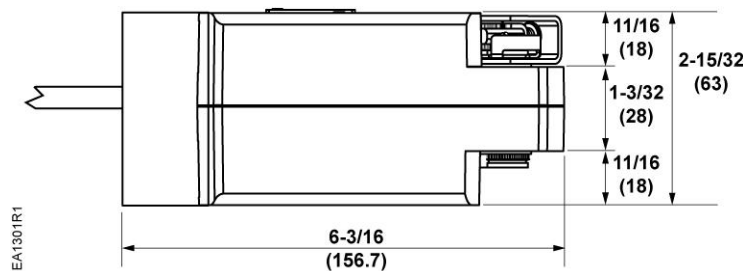


Figure 4. GQDxx6 with Conduit Adapter.

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