# **SIEMENS**

Submittal Sheet Document No. 154-072

June 20, 2008



# OpenAir<sup>™</sup> GQD Series, Spring Return, Rotary, Electronic Damper Actuators 20 lb-in (2 Nm)

Product Number*	Voltage		Control Signals			ס
	24 Vac/dc	120 Vac	2-Position	Floating	Modulating 2 to 10 Vdc/ 10 to 2 Vdc	Plenum Cabling
GQD121.1P	•	_	•	_	_	•
GQD131.1P	•	_	_	•	_	•
GQD151.1P	•	_	_	_	•	•
GQD221.1U	_	•	•	_	_	_

<sup>\*</sup> Add /B to part number to order a bulk pack of 10 each.

## **Technical Data**

Torque 20 lb-in (2 Nm)
Runtime for 90° 30 seconds
Spring Return 15 seconds typical
Nominal angle of rotation 90° typical

Holding:

Nominal angle of rotation Power consumption:

24 Vac ±20%/ 24 Vdc ±15%, Running:

> GQD121.1P 6.5 VA (4.5W) GQD131.1P 4 VA (2.5W) GQD151.1P 4.5 VA (3W)

GQD151.1P 4.5 VA (3W)

GQD121.1P 4 VA (2.5W) GQD131.1P 3 VA (1.5W) GQD151.1P 3.5 VA (2W)

120 Vac ±15%

GQD221.1U

Running 10 VA Holding 7 VA

Damper shaft size 3/8-inch to 1/2-inch round

(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

120 Vac EMC and Low Voltage Directives

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: 4-23/32" × 2-22/32" × 2-15/32"

4-23/32" × 2-22/32" × 2-15/32" (120 mm × 69 mm × 63 mm ) GQD221.1U (only) 5.5" × 2-22/32" × 2-15/32"

D221.1U (only) 5.5" × 2-22/32" × 2-15/32" (138.5 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 or residential zone dampers requiring fail-safe operation.

#### **Features**

- Bi-directional, fail-safe spring return
- Pre-cabled
- Plenum rated models available
- 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
- Low voltage models are 24 Vac/dc compatible
- 120 Vac, 1/2" NPT conduit, model available

# **Wiring Diagrams**

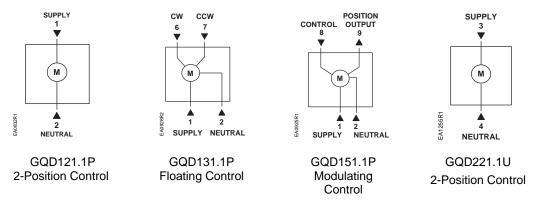


Figure 1. Wiring Diagrams.

### **Dimensions**

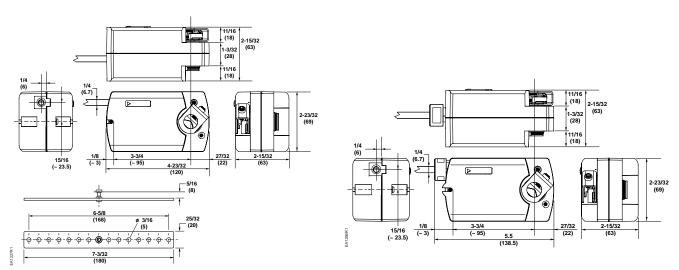


Figure 2. GQD Actuator and Mounting Bracket Dimensions in Inches (Millimeters).

Figure 3. GQD 221.1U Actuator Only, Dimensions in Inches (Millimeters).

Information in this publication is based on current specifications. The company reserves the right to make changes in specifications and models as design improvements are introduced. OpenAir is a registered trademark of Siemens Building Technologies. Product or company names mentioned herein may be the trademarks of their respective owners. © 2008 Siemens Building Technologies, Inc.