

## OpenAir™ GIB Series, 24V, 310 lb-in, Non-spring Return, Direct-Coupled Electronic Damper Actuators

### Description

The OpenAir direct-coupled, non-spring return electronic damper actuators provide modulating, three-position and electronic tandem control of building HVAC dampers.

Product Number	Operating Voltage	Control		Cables		Built-in Control Options		
	24 Vac ± 20%	0 to 10 Vdc	3-position	Standard	Plenum	Feedback	Dual Auxiliary Switches	Span and Offset
GIB131.1U	•		•	•				
GIB131.1P	•		•	•	•			
GIB132.1U	•		•	•		•		
GIB132.1P	•		•		•	•		
GIB136.1U	•		•	•			•	
GIB136.1P	•		•		•		•	
GIB161.1U	•	•		•		•		
GIB161.1P	•	•			•	•		
GIB163.1U	•	•		•		•		•
GIB163.1P	•	•			•	•		•
GIB164.1U	•	•		•		•	•	•
GIB164.1P	•	•			•	•	•	•
GIB166.1U	•	•		•		•	•	
GIB166.1P	•	•			•	•	•	



### Features

- Unique self-centering shaft coupling
- Models available with dual independently adjustable auxiliary switches
- All modulating models offer built-in feedback
- Floating control models available with feedback potentiometer
- All metal housing
- Manual override
- 5° preload as shipped from factory
- Mechanical range adjustment capability
- Easily visible position indicator
- Precabled
- UL873 and C-UL (C22.2 No. 24-93) listed
- CE conformity: Electromagnetic compatibility 89/336/EEC Low-voltage directive 73/23/EEC

**Technical Data**

Torque: 310 lb-in (35 Nm)  
 Runtime for 90°: 150 sec, 50 Hz/ 125 sec, 60 Hz  
 Frequency: 50/60 Hz  
 Power consumption: 13x 16x  
 7 VA 8 VA  
 Equipment rating (24 Vac): Class 2 per UL/CSA  
 Noise level: <45 dBA (running)  
 Angle of rotation: 90° nominal, 95° max.  
 Shaft dimensions: 3/8 to 1-in. (8 to 25.6 mm) dia.  
 or  
 1/4 to 3/4-in. (6 to 18 mm) sq.,  
 3/4-in. (20 mm) min. length  
 Operating temperature: -25°F to 130°F (-32°C to 55°C)  
 Storage temperature: -40°F to 158°F (-40°C to 70°C)  
 Ambient humidity: 95% rh (non-condensing)  
 Pre-cabled connection: 18 AWG, 3 ft (0.9 m) long  
 Enclosure: NEMA 2, IP54 per EN60529  
 Material: Die cast aluminum alloy

**Wiring Diagrams**

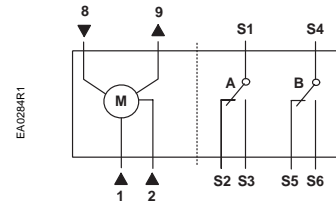
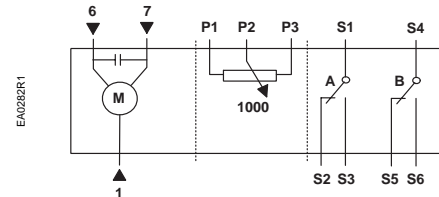


Figure 1. 0 to 10 Vdc, 24 Vac.



continued Figure 2. Three-Position, 24 Vac.

**Technical Data, continued**

Agency listings: UL873, C-UL C22.2 No. 24-93  
 CE conformity: Electromagnetic compatibility  
 89/336/EEC  
 Low-voltage directive  
 73/23/EEC  
 Gear Lubrication: Silicone-free  
 Weight: 4.4 lbs (2 kg)

**Typical Specifications**

Non-spring return damper actuators shall be the direct-coupled type that requires no connecting linkages. The non-spring return actuators shall have a self-centering damper shaft coupling that assures concentric alignment of the actuator's output coupling with the damper shaft and be capable of direct mounting to a shaft up to a 1-inch diameter. Actuators shall provide stall protection throughout the full range of rotation. All non-spring return actuators shall be capable of both clockwise and counterclockwise operation. All actuators shall hold position in the event of a power failure. All actuators shall return to the 0 position in the event only the control signal is lost. All actuators shall provide a means of manually positioning the output coupling in the absence of power. Dual independently adjustable auxiliary switches must be integral to the actuator. All actuators must be precabled and provide an easily readable high contrast yellow on black position indicator. All actuators shall be UL873, CE and CSA22.2 listed and manufactured under ISO 9002 and ISO 14000 procedures. Actuators shall be designed for a minimum of 60,000 full stroke cycles at the actuators rated torque and temperatures. Actuators shall be as manufactured by Siemens Building Technologies.

**Dimensions**

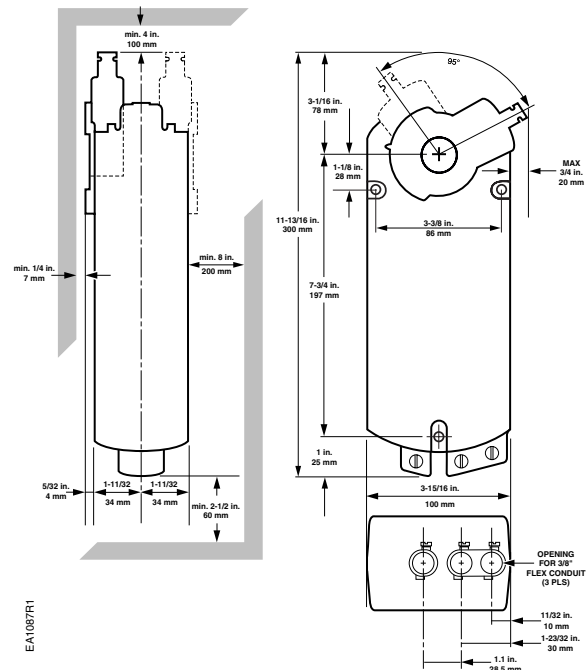


Figure 3. Dimensions in Inches (Millimeters)

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