

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

### Description

The OpenAir non-spring return, 24 Vac, 310 lb-in, (35 Nm), direct-coupled, electronic damper actuators, provide modulating, floating control 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	Floating	Standard	Plenum	Feedback	Dual Auxiliary Switches	Span and Offset
GIB131.1U	•		•	•				
GIB131.1P	•		•		•			
GIB132.1U	•		•	•		•		
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 2004/108/EC Low-voltage directive 2006/95/EC

**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 EN 60 529  
 Material: Die-cast aluminum alloy  
 Agency listings: UL873, cUL C22.2 No. 24-93  
 CE conformity: Electromagnetic compatibility  
 2004/108/EC  
 Low-voltage directive  
 2006/95/EC

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 Industry, Inc.

**Wiring Diagrams**

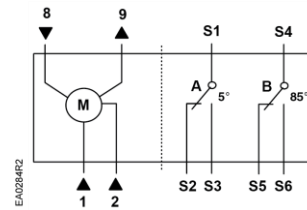


Figure 1. 0 to 10 Vdc, 24 Vac.

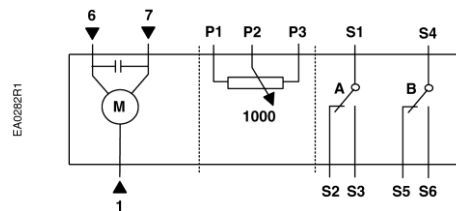


Figure 2. Floating, 24 Vac.



**CAUTION:**

It is recommended to switch off the power during two-position control when the actuator has reached the open or closed position to enhance life span and reduce power consumption.

**Dimensions**

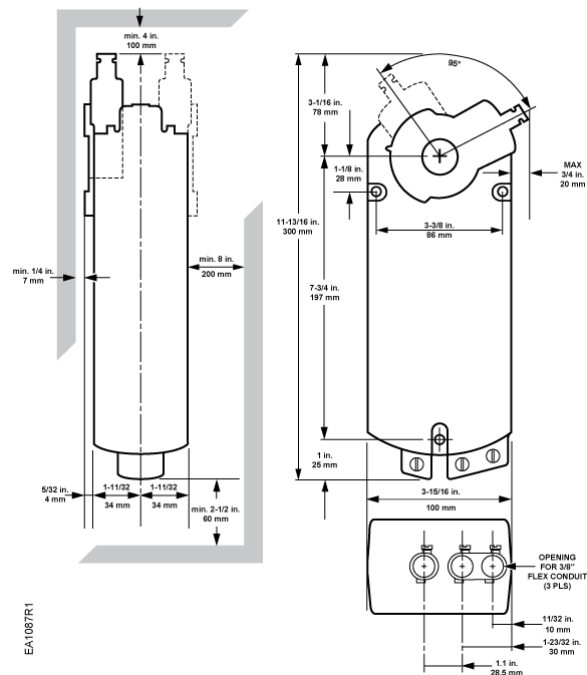


Figure 3. Dimensions in Inches (Millimeters).

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