SIEMENS

Submittal Sheet
Document No. A6V14174654_en_a
August 15, 2024

GIB Series, Enhanced Non-spring Return, 310 lb-in, Direct Coupled, Electronic Damper Actuators

Product Number	Operating Voltage	Control		Pre-Cabled		Built-in Control Options			
	24 Vac/dc +/-20%	0(2) to 10 Vdc	2-Position/Floating	Standard, 18 AWG, 3 ft (0.9 m)	Plenum, 18 AWG, 3 ft (0.9 m)	Feedback	Potentiometer	Dual Auxiliary Switches	Span and Offset
GIB141.1U	●		●	●					
GIB141.1P	●		●		●				
GIB142.1U	●		●	●			●		
GIB146.1U	●		●	●				●	
GIB146.1P	●		●		●			●	
GIB161.1U	●	●		●		●			
GIB161.1P	●	●			●	●			
GIB163.1U	●	●		●		●			
GIB163.1P	●	●			●	●			
GIB164.1U	●	●		●		●			●
GIB164.1P	●	●			●	●			●
GIB166.1U	●	●		●		●		●	
GIB166.1P	●	●			●	●		●	

Technical Data

Torque:	310 lb-in (35 Nm)			
Runtime for 90°:	150 seconds opening and closing			
Frequency:	50/60 Hz			
Power consumption:	**Running**		**Holding**	
	VA	**Watt**	**VA**	**Watt**
GIB14x	2.1	1.4	.08	0.5
GIB16x	2.0	1.5	0.9	0.6
Equipment rating (24 Vac):	Class 2 per UL/CSA			
Noise level:	<45 dBA (running)			
Angle of rotation:	90° nominal, 95° maximum			
Shaft dimensions:	3/8…1 in. (8…25.6 mm) dia., 3/4 to 5/8 in. square 3/4 in. (20 mm) min. length			
Operating temperature:	-25°F…130°F (-32°C…55°C)			
Storage temperature:	-40°F…158°F (-40°C…70°C)			
Ambient humidity:	95% rh (non-condensing)			
Enclosure:	NEMA 2, IP54 per EN60529 (Not with cable-up mounting orientation)			
Material:	Die-cast aluminum alloy			
Agency listings:	UL listed to UL60730			
CE: conformity	Electromagnetic compatibility 2014/30/EU Low-voltage directive 2014/35/EU CSA E60730			
Gear Lubrication:	Silicone-free			
Weight	4.8 lb (2.22 kg)			
With switches	5.2 lb (2.35 kg)			
Country of Origin	USA			

Description

Non-spring return, direct-coupled, electronic damper actuators provide 2-position/floating and modulating control of building HVAC dampers.



c UL us LISTED CE

Features

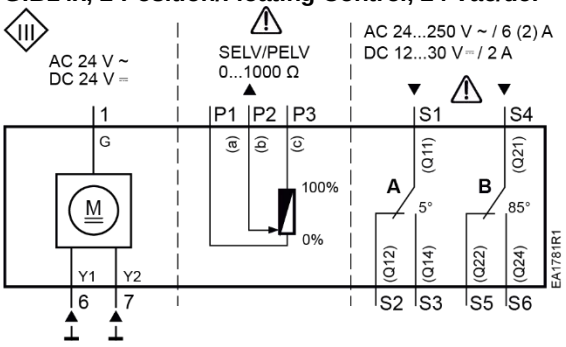
- Selectable modulating control signal (0…10 Vdc or 2…10 Vdc).
- 24 Vac/dc compatible.
- Two-position and floating control with motor shut off at end of stroke.
- 250% reduction in power consumption.
- Self-centering shaft coupling
- Integral 1/2-inch conduit connection.
- Manual override.
- Low energy consumption.
- Quiet operation.
- Independently adjustable dual auxiliary switches available.
- UL60730 and cuL listed; CE-certified.
- Feedback potentiometer UL/cUL-Class 2 (SELV/PELV for CE)
- EN61000-6-3 Emissions for all models
- EMC 2004/108/EC
- 2006/95 Low voltage directive

Typical Specifications

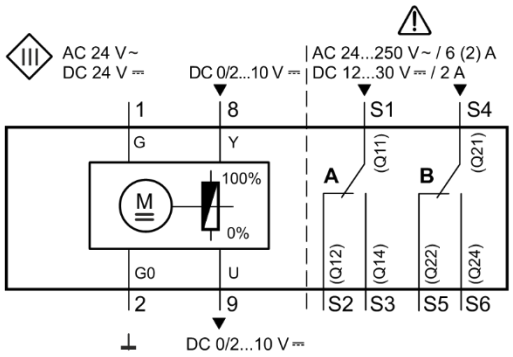
- Non-spring return damper actuators shall be the direct-coupled type that requires no connecting linkages.
- The non-spring return actuators shall have a self-centering damper shaft coupling that ensures concentric alignment of the actuator's output coupling with the damper shaft and be capable of direct mounting to a shaft up to a 1-inch (25 mm) 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 non-spring return actuators shall hold position in the event of a power failure.
- All modulating 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 provide an easily readable high contrast yellow on black position indicator.
- All actuators shall be UL60730 UL 2043, CAN/CSA E60730, 2006/95/EC low voltage directive, EN 60 730-2-14 (type 1), EMC 2004/108/EC, EN61000-6-3 Emissions for all models and manufactured under ISO 9002 and ISO 14000 procedures.
- Actuators shall be designed for a minimum of 60,000 full stroke cycles, 5,000,000 repositions at the actuators rated torque and temperatures.
- Actuators shall be as manufactured by Siemens Industry, Inc.

Wiring Diagrams

GIB14x, 2-Position/Floating Control, 24 Vac/dc:



GIB16x, 0(2) to 10 Vdc Modulating, 24 Vac/dc:



Dimensions

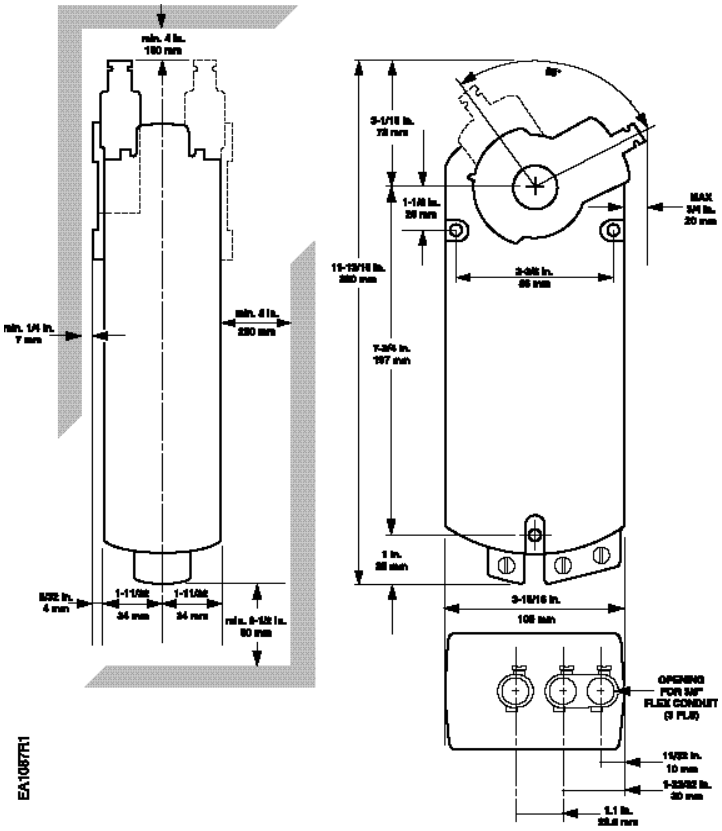


Figure 1. GIB Actuator Dimensions in Inches (mm).

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. Product or company names mentioned herein may be the trademarks of their respective owners. © 2024 Siemens.

Siemens Industry, Inc.
Smart Infrastructure
1000 Deerfield Parkway
Buffalo Grove, IL 60089
USA
Tel. + 1 847-215-1000

Your feedback is important to us. If you have comments about this document, please send them to sbt_technical.editor.us.sbt@siemens.com