

Electronic Damper Actuator Non-spring Return

Easily Replaces:

- Belimo GM Series



310 lb.-in. Torque

0 to 10 Vdc, Modulating Control
Floating Control



GIB Series Non-spring Return Electronic Damper Actuator.

Description

The OpenAir GIB Series Direct-coupled 24 Vac Non-spring Return Electronic Actuators are designed for modulating and floating control of building HVAC dampers.

Features

- Visible position indication
- Unique self-centering shaft coupling
- Rugged all metal housing
- Shaft diameters up to 1-inch (25 mm)
- All modulating types include built-in feedback
- Brushless motor technology
- Assembled in the U.S.A.
- Manual Override
- Tandem mount capability with standard GIB actuators
- Modulating actuators contain built-in feedback

Options

- Independently adjustable dual auxiliary switches
- Adjustable offset and span
- Potentiometer built in for floating control

Applications

The OpenAir GIB Series Damper Actuators are used in constant or variable air volume installations for the control of return air, mixed air, exhaust, and face and bypass dampers requiring up to 310 lb.-in. (35 Nm) torque.

Models are available with either an appliance cable for wiring in conduit or a plenum-rated cable for applications where conduit is not required.

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Damper Actuators



GIB Series Specifications

Operating Voltage (1–2) 24 Vac ±20%

Frequency 50/60 Hz

Power Consumption

0 to 10 Vdc 8 VA

Floating 7 VA

Input signal (8–2)

Voltage-Input 0 to 10 Vdc

Input Resistance 100K Ohms

Position Output Signal (9–2)

Voltage-Output 0 to 10 Vdc

Max. Output Current 1 mA

Equipment Rating for Operating Voltage, Input Signal, and Position Output Signal Class 2

Control Signal Adjustment

Offset (Start Point) Between 0 to 5 Vdc

Factory Setting 0 V

Span Between 2 to 30 Vdc

Dual Auxiliary Switch

Contact Rating

Standard Cable 6 A resistive, 2 A General Purpose

Plenum Cable 4 A resistive, 2 A General Purpose

Voltage

Standard Cable 24 to 250 Vac

Plenum Cable 24 Vac

Switch Range

Switch A 0 to 90° with 5° intervals

Recommended Range Usage 0 to 45°

Factory Setting 5°

Switch B 0 to 90° with 5° intervals

Recommended Range Usage 45 to 90°

Factory Setting 85°

Switching Hysteresis 2°

Position Feedback 0 to 1000 Ohm <10 mA

Function

Torque 310 lb.-in. (35 Nm)

Runtime for 90° Opening or Closing

60 Hz 125 sec

50 Hz 150 sec

Nominal Angle of Rotation 90°

Max. Angular Rotation 95°

Noise Level <45 dBA

Shaft Dimensions 3/8 to 1-in. (8 to 26 mm) Dia. ●

1/4 to 5/8-in. (6 to 16 mm) Sq. ■

Min. Shaft Length 3/4-in. (20 mm)

Housing

Enclosure NEMA 2*

Material Die-cast Aluminum alloy

Temperature

Operation -25 to +130°F (-32 to +55°C)

Storage and Transport -40 to +158°F (-40 to +70°C)

Humidity 95% RH, non-condensing

Agency Approvals UL873

cUL C22.2 No. 24-93

CE

Pre-cabled Connection AWG 18

Cable Length 3 ft. (0.9 m)

Dimensions 12" H x 4.75" W x 2.88" D

(305 mm H x 121 mm W x 73 mm D)

Shipping Weight 4.4 lb. (2.0 kg)

*Refer to the Installation Instructions for acceptable mounting positions.

Refer to page B-13 for Dimensions.

GIB Series Product Ordering

Input Signal	Cabling	Part No.				
		Standard	Span/Offset Adjustable	Dual Aux. Switches & Span/Offset Adjustable	Dual Aux. Switches Only	Position Feedback
0 to 10 Vdc	Standard	GIB161.1U	GIB163.1U	GIB164.1U	GIB166.1U	—
	Plenum Cable	GIB161.1P	GIB163.1P	GIB164.1P	GIB166.1P	—
Floating	Standard	GIB131.1U	—	—	GIB136.1U	GIB132.1U
	Plenum Cable	GIB131.1P	—	—	GIB136.1P	GIB132.1P

Accessories & Service Kits

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