

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

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°F to 130°F (-32°C to 55°C)
Storage and Transport	-40°F to 158°F (-40°C 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.

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Refer to page B-17 for Dimensions.

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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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