

OpenAir™ GEB Series

Electronic Damper Actuator Non-Spring Return

177 lb-in Torque
24Vac/Vdc or 100 to 240 Vac

Combined On/Off & Floating Control and
Modulating 0 to 10 Vdc or 2 to 10 Vdc Control



Enhanced GEB Series Electronic Damper Actuator

Description

The OpenAir direct-coupled, 24 Vac/Vdc, Non-Spring Return Electronic Damper Actuators are designed for modulating and combined on/off and floating control of building HVAC dampers.

Features

- Brushless motor technology with stall protection
- Unique self-centering shaft coupling
- Manual override button built-in
- 177 lb-in (20 Nm) torque
- 5° preload as shipped from factory
- 5 Year warranty
- Mechanical adjustable span between 0 and 90 degrees
- Operating voltage 24 Vac/Vdc; or 100 to 240 Vac
- UL and cUL listed, CE Certified

Options

- Optional built-in Auxiliary Switches: fixed switch points at 5° and 85° rotation

Applications

The OpenAir GEB Series Damper Actuators are ideal for Constant or Variable Air Volume installations for the control of return air, mixed air, exhaust, and face and bypass.

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Damper Actuators

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* Intelligent VAV actuators offer a 2-year warranty.

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Specifications

Operating Voltage	24Vac +20%
	24 Vdc +20%
	100 to 240 Vac +10%
Frequency	50/60 Hz
Power Consumption	24Vac/Vdc
On/Off & Floating	
Running	2.3 VA / 1.1 W
Holding	0.5 W
Modulating	
Running	2.5 VA / 1.2 W
Holding	0.65 W
Power Consumption	100 to 240 Vac
On/Off & Floating	
Running	4 VA / 1.6 W
Holding	0.9 W
Modulating	
Running	3.4 VA / 1.3 W
Holding	0.6 W
Torque	
Running	177 lb-in (20 Nm)
Minimum Stall.....	310 lb-in (35 Nm)
Runtime for 90°	
Nominal Runtime for 90° opening or closing	150 seconds nominal
Nominal Angle of Rotation	90°
Maximum Angle of Rotation	95° +/- 2°
Life Expectancy	50,000 full stroke cycles
Damper Shaft Size	1/4-inch to 3/4-inch (6.4 mm to 20.5 mm) round 1/4-inch to 1/2-inch (6.4 mm to 13 mm) square Min. Shaft Length 3/4-inch (20 mm)
Housing	
Enclosure	NEMA 1/IP54 according to EN 60 529
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	Maximum 95% rh non-condensing

Dual Auxiliary Switch

Contact Rating	
AC Rating	24 to 250 Vac AC 6A Resistive AC 2A General Purpose
DC Rating.....	12 to 30 Vdc DC 2A
Voltage	
Standard Cable	24Vac/Vdc; 24 to 250 Vac
Plenum Cable.....	24 Vac/ Vdc
Switch Range	
Switch A.....	0 to 90° with 5° intervals
Recommended Range	0 to 45°
Switch B	0 to 90°
Recommended Range	45° to 90°
Switching Hysteresis	2°

Position Feedback

GEB16x Models	
	Voltage Output 0 to 10 Vdc Maximum output current ±mA
Feedback Potentiometer	
	GEB142.1U0 to 1000 ohm <10 mA
	Agency Certifications UL60730 cUL CAN/CSA E60730
	CE Conformity for Residential, Commercial and Industrial Environments Low Voltage Directive 2006/95/EC EN 60 730-2-14 (type 1) EMC 2004/108/EC Emmissions EN 61000-6-3
Pre-cabled Connection	18 GA, 3 ft (0.9m) length
Dimensions	7.56-in H x 3.23-in W x 2.36-in D (192 mm H x 82 mm W x 60 mm D)

Shipping Weight

Non-Switch Models	2.4 lbs (1.0 kg)
Switch Models	2.9 lbs (1.3 kg)

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Damper Actuators

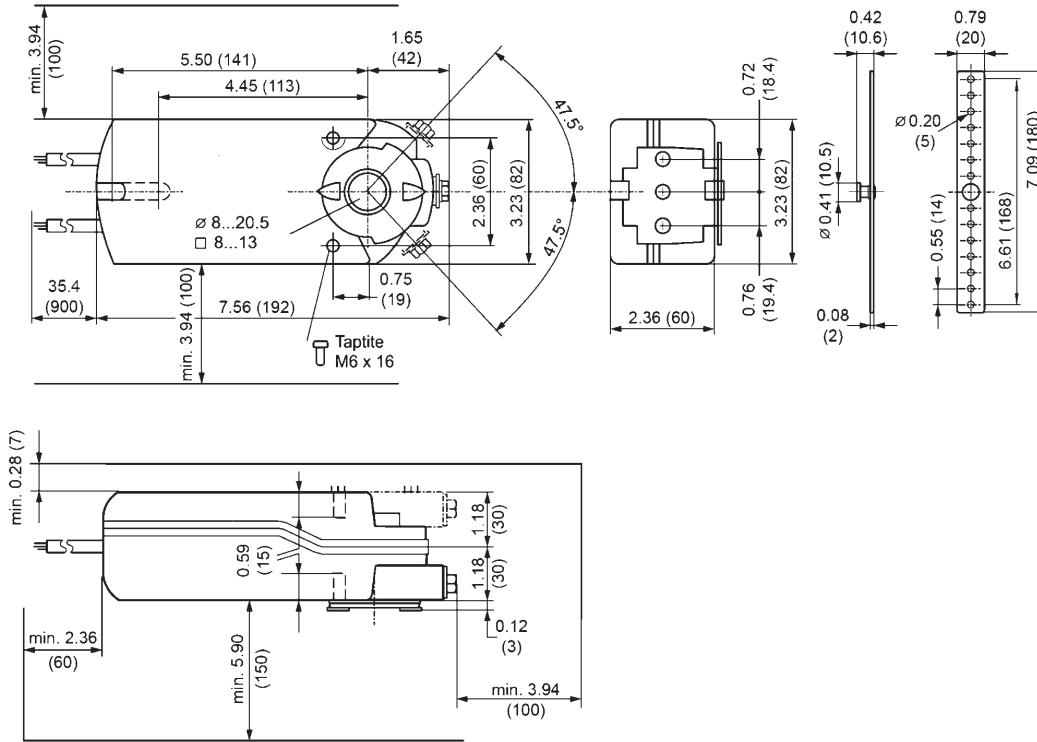
Product Ordering

Voltage	Description	Cabling	Part No.			
			Standard	Dual Aux. Switches Only	Dual Aux. Switches & Offset/ Span Only	Feedback Potentiometer
24 Vac/Vdc	On/Off & Floating Control	Plenum Cable	GEB141.1P	—	—	GEB142.1U
		Standard	GEB141.1U	GEB146.1U	—	—
	Modulating Control 0 (2) to 10 Vdc	Plenum Cable	GEB161.1P	—	—	—
		Standard	GEB161.1U	GEB166.1U	GEB164.1U	—
100 to 240 Vac	On/Off & Floating Control	Plenum Cable	GEB341.1U	—	—	—
	Modulating Control 0 (2) to 10 Vdc	Standard	GEB361.1U	—	—	—

Accessories & Service Kits

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GEB Series OpenAir Damper Actuators



Dimensions shown in inches (mm).

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