

OpenAir™ GEB Series, 24 Vac, 132 lb-in, Non-spring Return, Direct-Coupled Electronic Damper Actuators

Product Number	Operating Voltage	Control		Cable	Built-in Control Options			
		Modulating (0 to 10 Vdc)	3-position		Position Feedback	Dual Auxiliary Switches	Offset and Span	Input Signal Selectable 0 – 10 Vdc or 2-10 Vdc
GEB131.1U	•	–	•	–	–	–	–	–
GEB132.1U	•	–	•	–	•	–	–	–
GEB136.1U	•	–	•	–	–	•	–	–
GEB161.1U	•	•	–	–	•	–	–	•
GEB164.1U	•	•	–	–	•	•	•	–

Technical Data

Torque:	132 lb-in (15 Nm)
Frequency:	50/60 Hz
Runtime for 90°:	125 seconds (60 Hz) 150 seconds (50 Hz)
Power consumption	GEB161x
Running:	5 VA/4W
Holding:	1 VA/1W
Power consumption	GEB131x
Running:	3 VA/3W
Equipment rating (24 Vac):	Class 2 per UL/CSA
Angle of rotation:	90° nominal, 95° max.
Shaft dimensions:	1/4 to 3/4-in. (6 to 20.5 mm) diameter 1/4 to 1/2-in. (6.4 to 13 mm) square 3/4-in. (20 mm) min. length
Operating temperature:	-25 to 130°F (-32 to 55°C)
Storage temperature:	-40 to 158°F (-40 to 70°C)
Ambient humidity:	95% rh (non-condensing)
Pre-cabled connection:	18 AWG, 3 ft (0.9 m) long
Enclosure:	NEMA 1
Material:	Die cast aluminum alloy
Agency listings:	UL60730 (to replace UL873) C-UL C22.2 No. 24-93
CE Conformity:	
Electromagnetic compatibility (EMC)	89/336/EEC
Emissions Standards	EN 5008-1
Immunity Standards	EN 50082-2
Gear Lubrication:	Silicone free
Dimensions: Inches (mm)	8-3/8 H × 3-1/4 W × 2-2/3 D (212 H × 83 W × 68 D)
Weight:	2.2 lb (1 kg)

Description

The OpenAir direct-coupled, non-spring return electronic damper actuator provides modulating and three-position control of building HVAC dampers.



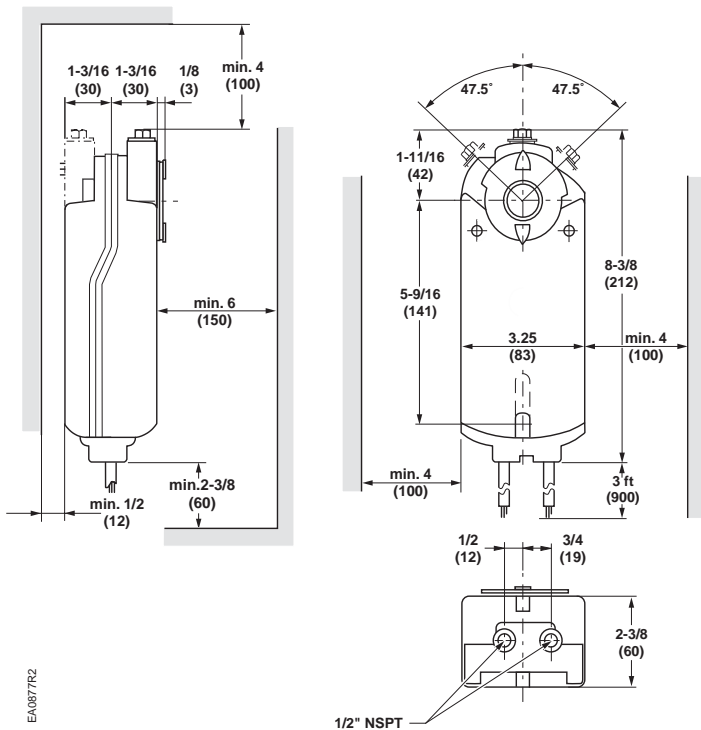
Features

- Brushless motor technology
- Unique self-centering shaft coupling
- Models available with dual independently adjustable auxiliary switches
- Floating control models available with feedback potentiometer
- All modulating control models include built-in feedback capability
- All metal housing
- Manual override
- Mechanical range adjustment capability
- Easily visible position indicator
- Pre-cabled
- UL60730 (to replace UL873) and C-UL (C22.2 No. 24-93) listed, CE certification
- Small actuator footprint with 132 lb.-in. of torque

Typical Specifications

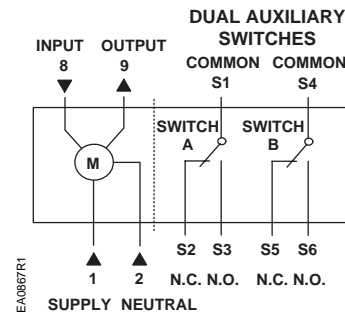
All non-spring return damper actuators shall be direct-coupled and require no connecting linkages. The non-spring return actuators have a self-centering damper shaft coupling that assures concentric alignment of the actuator's output coupling with the damper shaft. It is capable of direct mounting to a shaft up to 3/4-inch diameter. Actuators shall provide stall protection throughout the full range of rotation. These non-spring return actuators are capable of both clockwise and counterclockwise operation. Actuators shall hold position in the event of a power failure. The actuator returns to the 0 position when so commanded or when the control signal of the modulating actuator is zero. Actuator shall provide a means of manually positioning the output coupling in the absence of power. Dual, independent, adjustable auxiliary switches are available. The actuators are pre cabled and provide an easy, readable high contrast yellow on black position indicator. Actuators are UL60730 (to replace UL873) and CSA22.2 listed, CE certified and manufactured under ISO 9002 and ISO 14000 procedures. Actuators shall be as manufactured by Siemens Building Technologies.

Dimensions in Inches (Millimeters)

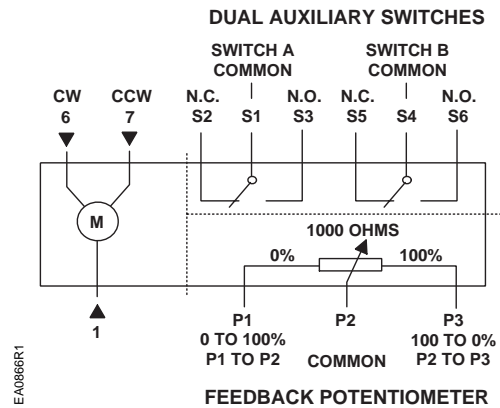


Wiring Diagrams

Modulating (0 to 10 Vdc), 24Vac



Three-Position, 24 Vac:



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