

## OpenAir™ GDE Series, 24 Vac, 44 lb-in, Non-spring Return, Direct Coupled Electronic Damper Actuators

Product Number	Operating Voltage	Control			Cables			Built-in Control Options				Bulk Pack	
	24 Vac +20%, -15%	0 to 10 Vdc	3-position	Standard	Plenum, 18 AWG, 3 ft (0.9m)	Plenum, 18 AWG, 6 ft (1.8 m)	Terminal Strip	Feedback	Potentiometer	Dual Auxiliary Switches	Slope and Offset	24 pieces	12 pieces
GDE131.1U	•		•	•									
GDE131.1U/B	•		•	•								•	
GDE131.1P	•		•		•								
GDE131.1Q	•		•			•							
GDE131.1P/B	•		•		•								
GDE131.1Q/B	•		•			•							•
GDE131.1T	•		•				•						
GDE131.1T/B	•		•				•					•	
GDE132.1P	•		•		•			•					
GDE136.1P	•		•		•				•				
GDE161.1P	•	•			•			•					
GDE161.1Q	•	•				•		•					
GDE161.1T	•	•					•						
GDE161.1T/B	•	•					•					•	
GDE163.1P	•	•			•			•					
GDE164.1P	•	•			•			•		•			
GDE166.1P	•	•			•			•		•			

### Description

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



### Features

- Compact, lightweight design
- Models available with dual independently adjustable auxiliary switches
- All modulating models offer built-in feedback
- Floating control models available with feedback potentiometer
- Manual override
- Mechanical range adjustment capability
- Easily visible position indicator
- Precabled 18 AWG, 3 ft (0.9 m), or 6-ft (1.8 m) long
- Plenum cable available
- Synchronous motor technology
- UL873 and cUL (C22.2 No. 24-93) listed
- **CE** certified plenum only

### Technical Data

Torque:	44 lb-in (5 Nm)
Runtime for 90°:	90 seconds at 60 Hz opening and closing 108 seconds at 50 Hz opening and closing
Frequency:	50/60 Hz
Power consumption:	3.3 VA (modulating), 2.3 VA (three-position)
Equipment rating (24 Vac):	Class 2 per UL/CSA
Noise level:	<35 dBA (running)
Angle of rotation:	90° nominal, 95° maximum
Shaft dimensions:	3/8 to 5/8-in. (8 to 16 mm) dia., 3/4-in. (20 mm) min. length
Operating temperature:	-22°F to 130°F (-30°C to 55°C)
Storage temperature:	-40°F to 158°F (-40°C to 70°C)
Ambient humidity:	95% rh (non-condensing)
Enclosure:	NEMA 2, IP54 per EN60529
Material:	Durable plastic
Agency listings:	UL873, cUL C22.2 No. 24-93
<b>CE</b> Conformity:	Plenum only
Electromagnetic compatibility (EMC)	89/336/EEC
Emissions Standards	EN 50081-1
Immunity standards	EN 50082-2
Gear Lubrication:	Silicone free
Weight:	1.06 lb (0.48 kg)

## Typical Specifications

Non-spring return damper actuators shall be the direct-coupled type that requires no connecting linkages. The non-spring return actuators under 100 lb-in shall be capable of direct mounting to a shaft up to a 5/8-inch 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 actuators shall hold position in the event of a power failure. All 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 be precabled and provide an easily readable high contrast yellow on black position indicator. All actuators shall be UL873 and CSA22.2 listed, CE certified, and manufactured under ISO 9002 and ISO 14000 procedures. Actuators shall be designed for a minimum of 50,000 full stroke cycles at the actuators rated torque and temperatures. Actuators shall be as manufactured by Siemens Building Technologies, Inc.

## Dimensions

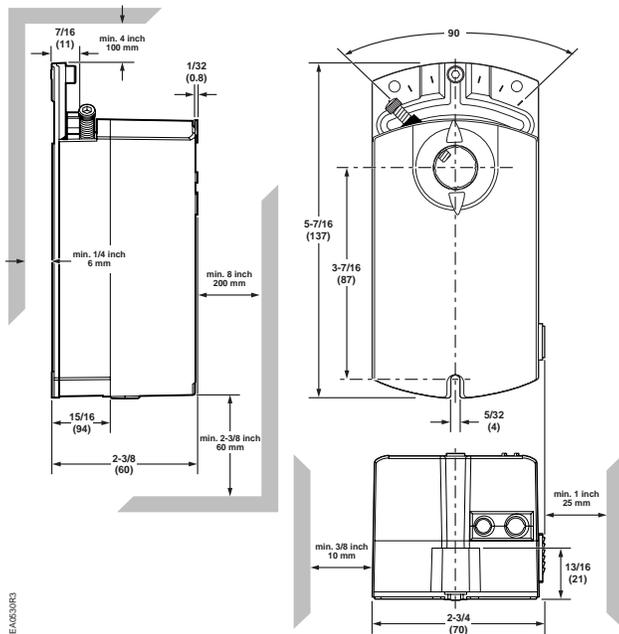
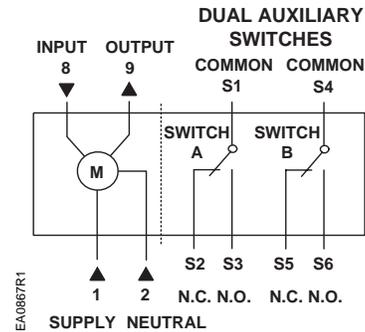


Figure 1. GDE/GLB Dimensions in Inches (mm).

## Wiring Diagrams

### 0 to 10 Vdc Modulating, 24 Vac:



### 3-Position, 24 Vac:

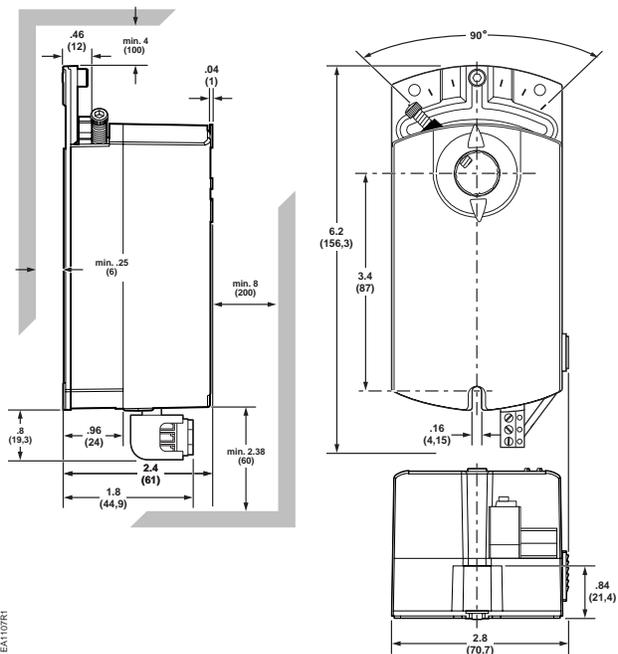
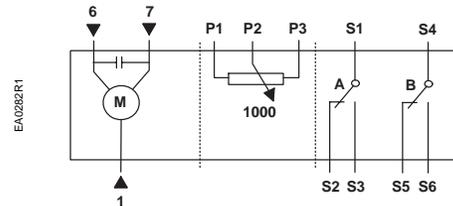


Figure 2. GDE Terminal Strip Model in Inches (mm).

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