

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

| Product Number | Operating Voltage | Control | | Pre-Cabled | | | No Cables | | Built-in Control Options | | | Bulk Pack | |
|----------------|----------------------|-------------|------------------|------------|-----------------------------|------------------------------|----------------|-------------|--------------------------|---------------|-------------------------|------------------|-----------|
| | 24 Vac +20%, -15% | 0 to 10 Vdc | Floating Control | Standard | Plenum, 18 AWG, 3 ft (0.9m) | Plenum, 18 AWG, 6 ft (1.8 m) | Terminal Strip | Post Header | Feedback | Potentiometer | Dual Auxiliary Switches | Slope and Offset | 24 pieces |
| GDE131.1U | • | | • | • | | | | | | | | | |
| GDE131.1U/B | • | | • | • | | | | | | | | • | |
| GDE131.1N | • | | • | | | | | • | | | | | |
| GDE131.1N/B | • | | • | | | | | • | | | | • | |
| GDE131.1P | • | | • | | • | | | | | | | | |
| GDE131.1P/B | • | | • | | • | | | | | | | • | |
| GDE131.1Q | • | | • | | | • | | | | | | | |
| GDE131.1Q/B | • | | • | | | • | | | | | | | • |
| GDE131.1T | • | | • | | | | • | | | | | | |
| GDE131.1T/B | • | | • | | | | • | | | | | • | |
| GDE132.1P | • | | • | | • | | | | • | | | | |
| GDE136.1P | • | | • | | • | | | | | • | | | |
| GDE161.1N | • | • | | | | | | • | | | | | |
| GDE161.1N/B | • | • | | | | | | • | | | | • | |
| GDE161.1P | • | • | | | • | | | | • | | | | |
| GDE161.1P/B | • | • | | | • | | | | • | | | • | |
| GDE161.1Q | • | • | | | | • | | | • | | | | |
| GDE161.1T | • | • | | | | | • | | | | | | |
| GDE161.1T/B | • | • | | | | | • | | | | | • | |
| GDE163.1P | • | • | | | • | | | | • | | • | | |
| GDE164.1P | • | • | | | • | | | | • | • | • | | |
| GDE166.1P | • | • | | | • | | | | • | • | | | |

Description

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



Features

- Compact, lightweight design
- Models available with dual independently adjustable auxiliary switches
- Modulating models available with built-in feedback (Exception: GDE161.1N and GDE161.1T do not provide 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
- Synchronous motor technology
- UL873 and cUL (C22.2 No. 24-93) listed
- **CE** certified plenum only
- Connection cables for GDExx.1N models sold separately.

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 |
| GDExxx.1N and GDExxx.1T: | NEMA 1 |
| Material: | Durable plastic |
| Agency listings: | UL873, cUL C22.2 No. 24-93 |
| CE Conformity: | Plenum only |
| Electromagnetic compatibility (EMC) | 2004/108/EC |
| Emissions Standards | EN61000-6-3 |
| Immunity standards | EN61000-6-2 |
| Gear Lubrication: | Silicone-free |
| Weight | 1.06 lb (0.48 kg) |
| Country of Origin | USA |

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 non-spring return actuators shall hold position in the event of a power failure. All modulating 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 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 60,000 full stroke cycles at the actuators rated torque and temperatures. Actuators shall be as manufactured by Siemens Industry, Inc.

Dimensions

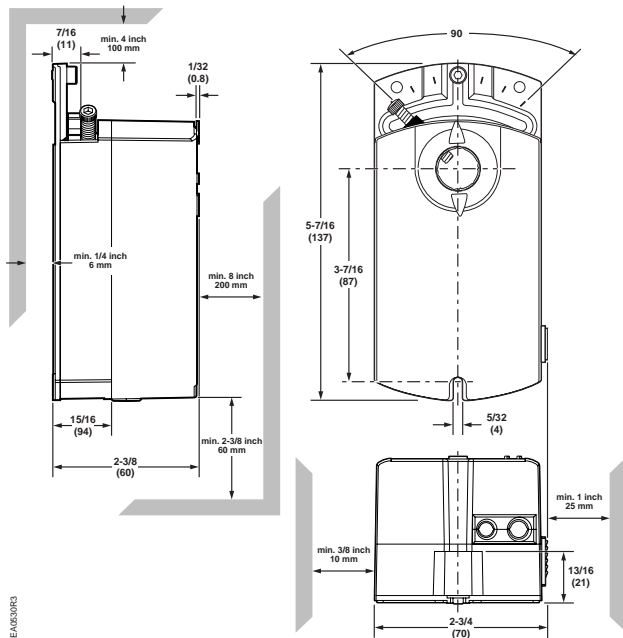
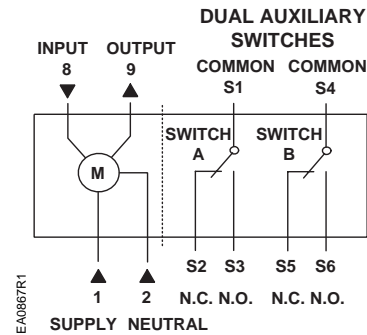


Figure 1. GDE/GLB Dimensions in Inches (mm).

Wiring Diagrams

0 to 10 Vdc Modulating, 24 Vac:



Floating, 24 Vac:

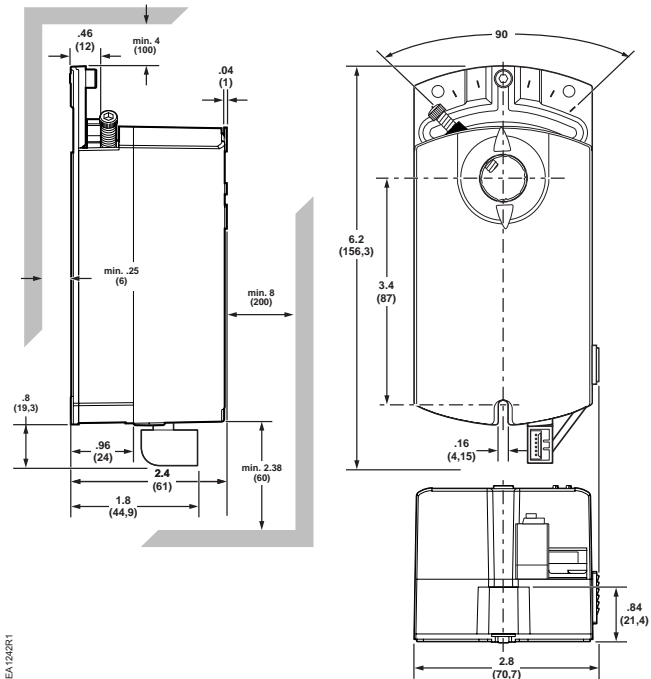
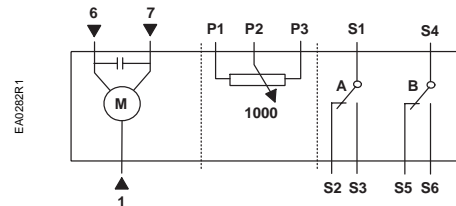


Figure 2. GDE Terminal Strip Model/Post Header AMP Model in Inches (mm).

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