

GDE Series

## Non-spring Return Electric Damper Actuator

### Easily Replaces:

- Belimo LM Series



Indoor  
Environmental  
Quality

### 44 lb.-in. torque

24 Vac, Floating Control  
0 to 10 Vdc, Modulating Control



GDE Series Non-spring Return Electric Damper Actuator.

### Description

The OpenAir GDE Series Direct-coupled 24 Vac Non-spring Return Rotary Electric Actuator is designed for 0 to 10 Vdc or floating control of building HVAC dampers.

### Features

- Compact design
- Easy-to-see position indicator
- 0 to 10 V or floating models
- Self-adapting capability for maximum flexibility in damper positioning
- UL, cUL, CE listed
- Quiet, low-power operation
- Rated NEMA 2
- Assembled in the U.S.A.
- Manual override

### Options

- Independently adjustable dual auxiliary switches
- Adjustable start/span
- Standard or plenum cable
- Available in bulk packs for additional savings

### Applications

The OpenAir GDE Series Damper Actuators are used in Constant or Variable Air Volume installations for the control requiring up to 44 lb.-in. (5 Nm) torque.

Models are available with either a universal cable for wiring in conduit or a plenum-rated cable for applications where conduit is not required.

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Damper Actuators

# GDE Series Specifications

**Operating Voltage** .....24 Vac

**Frequency** .....50/60 Hz

**Power Consumption** .....2 to 3 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 10 Vdc

**Dual Auxiliary Switch**

Contact Rating ..... 4 A resistive, 2 A General Purpose

Voltage .....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 ..... 3°

**Position Feedback**

GDE132.1P ..... .0 to 1000 Ohm <10 mA

**Function**

Torque ..... 44 lb.-in.(5 Nm)

at 50 Hz ..... 108 sec.

at 60 Hz ..... 90 sec.

Nominal Angle of Rotation ..... 90°

Max. Angular Rotation ..... 95°

**Shaft Size** ..... 3/8 to 5/8-in. (8 to 16 mm) Dia. ●

1/4 to 1/2-in. (6 to 13 mm) Sq. ■

**Min. Shaft Length** ..... 3/4-in. (20 mm)

**Housing Enclosure** ..... NEMA Type 2

**Material** ..... Plenum Rated Rugged Plastic

**Temperature**

Operation ..... -25 to +130°F (-32 to +55°C)

Storage and Transport ..... -25 to +140°F (-30 to +60°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** ..... 5.4" H x 2.6" W x 2.3" D

(137 mm H x 68 mm W x 60 mm D)

**Shipping Weight** ..... 1.06 lb. (0.45 kg)

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## GDE Series Product Ordering

Input Signal	Part No.					Pre-Cabled	No Cables
	Standard	With Potentiometer	Slope/Offset Adjustable	Dual Aux. Switches & Slope/Offset Adjustable	Dual Aux. Switches Only		
0 to 10 Vdc	<b>GDE161.1P</b>	—	GDE163.1P	GDE164.1P	GDE166.1P	Plenum	—
	GDE161.1P/B (24 pk)	—	—	—	—	6 ft Plenum	—
	GDE161.1Q	—	—	—	—	—	Post Header AMP
	GDE161.1N	—	—	—	—	—	Terminal Strip
	GDE161.1N/B (24 pk)	—	—	—	—	—	—
	GDE161.1T	—	—	—	—	—	—
Floating	<b>GDE131.1U</b>	—	—	—	—	Standard	—
	GDE131.1U/B (24 pk)	—	—	—	—	—	—
	<b>GDE131.1P</b>	GDE132.1P	—	—	GDE136.1P	Plenum	—
	GDE131.1P/B (24 pk)	—	—	—	—	6 ft Plenum	—
	GDE131.1Q	—	—	—	—	—	Post Header AMP
	GDE131.1Q/B (12 pk)	—	—	—	—	—	Terminal Strip
	GDE131.1N	—	—	—	—	—	—
	GDE131.1N/B (24 pk)	—	—	—	—	—	—
GDE131.1T	—	—	—	—	—	—	
GDE131.1T/B (24 pk)	—	—	—	—	—	—	



Cables compatible with the GDE131.1N and GDE161.1N sold separately on page E-49.

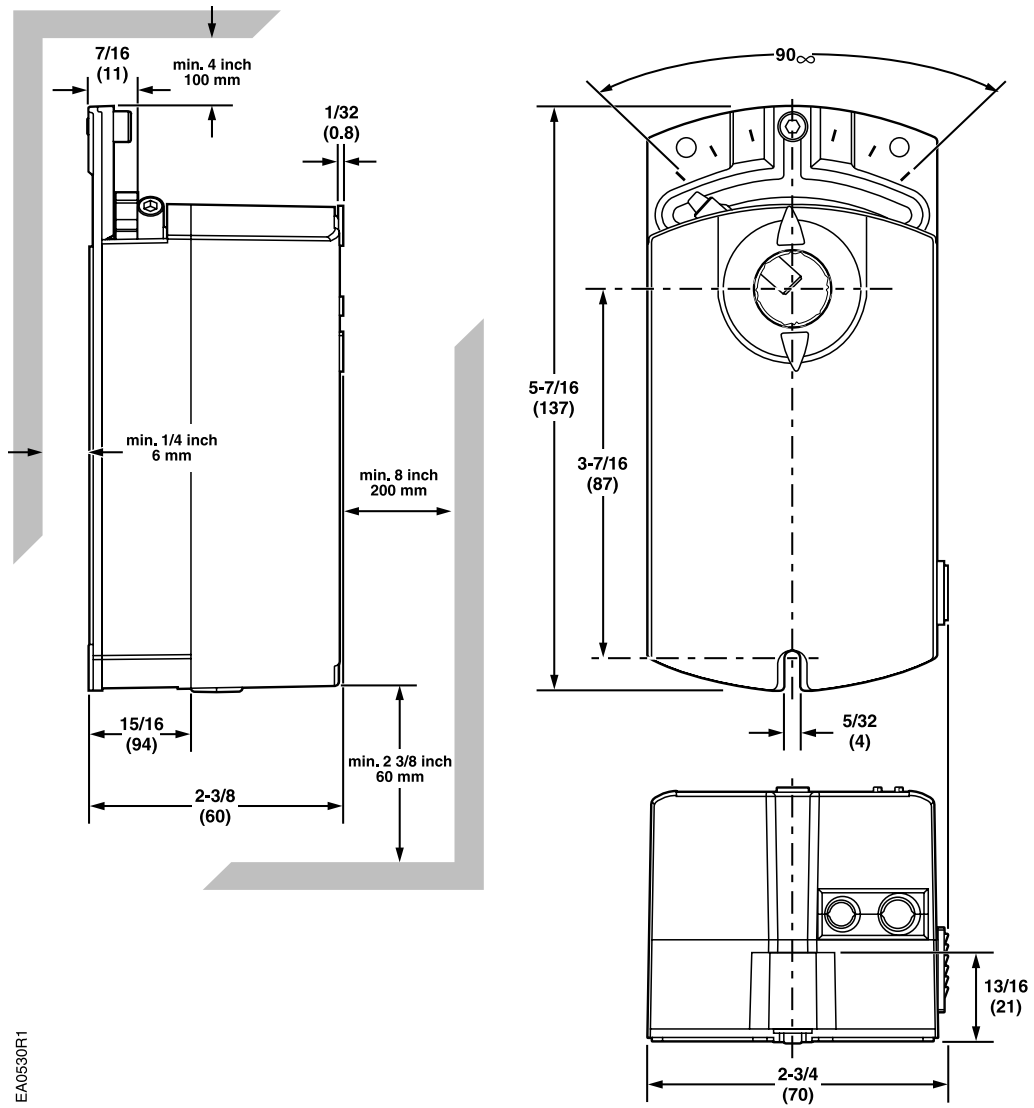


Part No. in black box Ships same day when requested through Rapid Response™ shipping. See inside back cover for details.

**SIEMENS**

# GDE Series Dimensions

## GDE/GLB Series OpenAir Electric Damper Actuator



EA0530R1

Dimensions shown in inches (mm).

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Accessories & Service Kits

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