# **SIEMENS**

#### **Submittal Sheet**

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# OpenAir® GDE Series, Enhanced Non-spring Return, 44 lb-in, Direct Coupled, Electronic Damper Actuators

Product Number	Operating Voltage		Control		Pre-Cabled			Built-in Control Options				Bulk Pack
	24 Vac/dc +/-20%	100 to 240 Vac	0(2) to 10 Vdc	2-Position/Floating	Standard, 18 AWG, 3 ft (0.9 m)	Plenum, 18 AWG, 3 ft (0.9 m)	Plenum, 18 AWG, 6 ft (1.8 m)	Feedback	Potentiometer	Dual Auxiliary Switches	Slope and Offset	24 pieces
GDE141.1U	•			•	•							
GDE141.1U/B	•			•	•							•
GDE141.1P	•			•		•						
GDE141.1P/B	•			•		•						•
GDE141.1Q	•			•			•					
GDE142.1P	•			•		•			•			
GDE146.1P	•			•		•				•		
GDE341.1U		•		•	•							
GDE346.1U	•	•		•	•					•		
GDE161.1P	•		•			•		•				
GDE161.1P/B	•		•			•		•				•
GDE161.1Q	•		•				•	•				
GDE163.1P	•		•			•		•			•	
GDE164.1P	•		•			•		•		•	•	
GDE166.1P	•		•			•		•		•		

#### **Technical Data**

Torque: 44 lb-in (5 Nm)

Runtime for 90°: 90 seconds at 60 Hz opening and closing 125 seconds at 50 Hz opening and closing

Frequency: 50/60 Hz

 Power consumption:
 VA
 Watt

 GDE14x
 2.5
 1

 GDE34x
 5
 1.6

 GDE16x
 2.1
 1.2

Equipment rating (24 Vac): Class 2 per UL/CSA Noise level: <28 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:

-25°F to 130°F (-32°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
(Not with cable-up mounting orientation)

Material: Durable plastic
Agency listings: UL listed to UL60730,

cUL certified to Canadian Standard C22.2 No. 24-93

Plenum areas per UL 1995 EN60730-1, EN60730-2-14

€:EN60730-1, EN6Gear Lubrication:Silicone-freeWeight1.35 lb (0.61 kg)With packaging1.91 lb (0.87 kg)

Country of Origin USA

# **Description**

The OpenAir, non-spring return, direct-coupled, electronic damper actuators provide 2-position/floating and modulating control of building HVAC dampers.



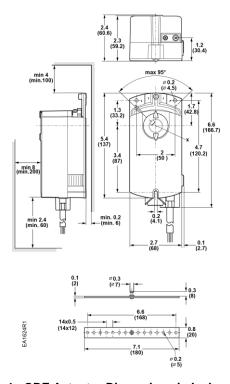
#### **Features**

- Selectable modulating control signal (0 to 10 Vdc or 2 to 10 Vdc).
- 24 Vac/dc compatible.
- New line voltage (34x models) for 100 to 240 Vac twoposition/floating control.
- Integral 1/2-inch conduit connection.
- Manual override.
- Low energy consumption
- Quiet operation
- Independently adjustable dual auxiliary switches available.
- UL60730 and cuL listed; € certified

## **Typical Specifications**

Non-spring return damper actuators shall be the directcoupled type that requires no connecting linkages. The nonspring 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 UL60730 and CSA22.2 listed, CE certified, and manufactured under ISO 9002 and ISO 14000 procedures. Actuators shall be designed for a minimum of 100,000 full stroke cycles, 5,000,000 repositions at the actuators rated torque and temperatures. Actuators shall be as manufactured by Siemens Industry, Inc.

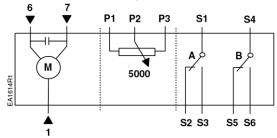
#### **Dimensions**



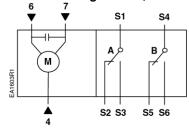
## Figure 1. GDE Actuator Dimensions in Inches (mm).

Wiring Diagrams

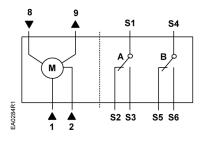
GDE14x, 2-Position/Floating Control, 24 Vac/dc:



GDE34x, 2-Position/Floating Control, 100 to 240 Vac:



GDE16x, 0(2) to 10 Vdc Modulating, 24 Vac/dc:



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