



# OpenAir™ Electronic Damper Actuators

More torque, greater energy efficiency, and long-lasting reliability gives you an ideal solution for all your HVAC equipment needs.

[usa.siemens.com/openair](http://usa.siemens.com/openair)

**SIEMENS**

# The right damper actuator for any HVAC application

A range that meets all of your needs. Energy-efficient, simple, flexible and reliable: your benefits are at the heart of the entire damper actuator range, from smooth installation and rapid commissioning to operation that is both efficient and convenient. Save time and costs with OpenAir™



## Spring Return Damper Actuators

A full range of spring return actuators, from 20 lb.-in. to 160 lb.-in., make OpenAir Damper Actuators the ideal OEM choice for economizer damper, roof top unit and air handling unit control. The 35 lb.-in. GPC Series actuator provides long lasting economizer control in a small footprint.



## Non-Spring Return Damper Actuators

Achieve optimum VAV box control and greater energy efficiency. The GDE, GLB and GSD Damper Actuators feature the lowest power consumption on the market and the longest life cycle rating of 100,000 full stroke cycles and 5 million repositions.



## Fast-acting Damper Actuators

The GAP and GNP are 53 lb.-in. fail-safe and fail-in-place damper actuators that are used in critical control environments such as lab and fume hood conditions. These fast-acting damper actuators operate with a runtime of two seconds, provide a wide variety of control signals with 24 VAC/DC operation and have plenum rated cabling.



## Fire and Smoke Damper Actuators

All Siemens fire/smoke actuators are UL 555S certified. The damper manufacturers carry the UL 555S certifications with their assemblies (damper plus actuator). These actuators provide 15-second open/closed operation and 30-second motor drive operation at rated torque, temperature and voltage. Both actuators are integrated with a Siemens electronic fusible link with four temperature ratings: 165°F, 212°F, 250°F and 350°F.






## Variable Air Volume (VAV) Solutions

Controlling air flow in multi-zone VAV environments has never been easier with Variable Air Volume (VAV) solutions. Transformative technology built with our globally recognized OpenAir™ damper actuators to quickly configure and commission multiple devices with the Climatix mobile app, PC and handheld tools accomplishing more with less.



Siemens offers a 5-year warranty on valves, actuators, damper actuators, sensors, thermostats and meters.

Actuators for HVAC Applications	Control Signal	Operating Voltage	Standard Model	Pre-Cabled Terminal Strip (T); Extended 6 ft. Cable (Q)	Potentiometer (1 kOhm)	Adjustable Start Span	Adj. Start / Span + Two Auxiliary Switches	Two auxiliary switches	Bulk Pack Available	Dimensions, Damper Shaft Round / Square (inch)		
<b>Spring Return Damper Actuators</b>												
	<b>GQD Series</b> 20 lb-in (2 Nm) 30 s Runtime 15 s Spring Return	<b>On/Off</b> 2-Position	24 VAC/DC	GQD121.1P	—	—	—	—	GQD126.1P	GQD121.1P/B	R: 3/8" ... 1/2" Sq: 1/4" ... 7/16"	
			120 VAC	GQD221.1U	—	—	—	—	GQD226.1U	GQD221.1U/B		
		<b>Floating</b> 3-Position	24 AC/DC	GQD131.1P	—	—	—	—	GQD136.1P	GQD131.1P/B		
		<b>Modulating</b> 0(2)-10 VDC / 10 - 0(2) DC	24 VAC/DC	GQD151.1P	—	—	—	GQD156.1P	GQD151.1P			
	<b>GPC Series</b> 35 lb-in (4 Nm) 60 s Runtime 15 s Spring Return	<b>On/Off</b> 2-Position	24 VAC/DC	GPC121.1P	—	—	—	—	GPC126.1P	—	R: 3/8" ... 1/2" Sq: 1/4" ... 7/16"	
			100 to 240 VAC	GPC321.1U	—	—	—	—	GPC326.1P	—		
		<b>Floating</b> 3-Position	24 VAC/DC	GPC131.1P	—	—	—	—	GPC136.1P	—		
		<b>Modulating</b> 0(2)-10 VDC / 10 - 0(2) VDC	24 VAC/DC	GPC161.1P	—	—	—	GPC166.1P	—			
	<b>GMA Series</b> 62 lb-in (7 Nm) 90 s Runtime 15 s Spring Return	<b>On/Off</b> 2-Position	24 VAC/DC	GMA121.1U	—	—	—	—	GMA126.1U	—	R: 1/4" ... 3/4" Sq: 1/4" ... 1/2"	
			120 VAC	GMA221.1U	—	—	—	—	GMA226.1U	—		
		<b>Floating</b> 3-Position	24 VAC/DC	GMA131.1U	—	GMA132.1U	—	—	GMA136.1U	—		
				GMA131.1P	—	—	—	—	—	—		
		<b>Modulating</b> 2 - 10 VDC	24 VAC/DC	GMA151.1U	—	—	—	—	GMA156.1U	—		
				GMA151.1P	—	—	—	—	GMA156.1P	—		
<b>Modulating</b> 0 - 10 VDC	24 VAC/DC	GMA161.1U	—	—	GMA163.1U	—	GMA166.1U	—				
		GMA161.1P	—	—	GMA163.1P	—	GMA166.1P	—				
	<b>GCA Series</b> 160 lb-in (18 Nm) 90 s Runtime 15 s Spring Return	<b>On/Off</b> 2-Position	24 VAC/DC	GCA121.1U	—	—	—	—	GCA126.1U	—	R: 3-8" ... 1" Sq: 1/4" ... 3/4"	
			120 VAC	GCA221.1U	—	—	—	—	GCA226.1U	—		
		<b>Floating</b> 3-Position	24 VAC/DC	GCA131.1U	—	GCA132.1U	—	—	GCA136.1U	—		
				GCA131.1P	—	—	—	—	GCA136.1P	—		
		<b>Modulating</b> 0(2) - 10 VDC	24 VAC/DC	GCA151.1U	—	—	—	—	GCA156.1U	—		
				GCA151.1P	—	—	—	—	GCA156.1P	—		
<b>Modulating</b> 0 - 10 VDC	24 VAC/DC	GCA161.1U	—	—	GCA163.1U	GCA164.1U	GCA166.1U	—				
		GCA161.1P	—	—	GCA163.1P	GCA164.1P	GCA166.1P	—				
<b>Non-Spring Return Damper Actuators</b>												
	<b>GSD Series</b> 20 lb-in (2 Nm) 30 s Runtime	<b>On/Off &amp; Floating</b> 2-Position & 3-Position	24 VAC/DC	GSD141.1P	—	—	—	—	GSD146.1P	—	R: 3/8" ... 1/2" Sq: 1/4" ... 7/16"	
			100 to 240 VAC	GSD341.1U	—	—	—	—	GSD346.1U	—		
		<b>Modulating</b> 0(2) - 10 VDC	24 VAC/DC	GSD161.1P	—	—	—	—	GSD166.1P	—		
	<b>GDE Series</b> 44 lb-in (5 Nm) 90 s Runtime	<b>On/Off &amp; Floating</b> 2-Position & 3-Position	24 VAC	GDE141.1U	GDE141.1Q	—	—	—	—	GDE141.1U/B	R: 3/8" ... 5/8" Sq: 1/4" ... 1/2"	
			100 to 240 VAC	GDE341.1U	—	GDE142.1P	—	—	—	GDE146.1P		GDE141.1P/B
		<b>Floating</b> 3-Position	24 VAC	GDE131.1U	—	—	—	—	—	GDE131.1U/B		
				GDE131.1P	—	GDE132.1P	—	—	GDE136.1P	GDE131.1P/B		
<b>Modulating</b> 0(2) - 10 VDC	24 VAC/DC	GDE161.1P	GDE161.1Q	—	GDE163.1P	GDE164.1P	GDE166.1P	GDE161.1P/B				
	<b>GLB Series</b> 88 lb-in (10 Nm) 150 s Runtime	<b>On/Off &amp; Floating</b> 2-Position & 3-Position	24 VAC/DC	GLB141.1P	GLB141.1Q	—	—	—	GLB146.1P	—	R: 3/8" ... 5/8" Sq: 1/4" ... 1/2"	
			100 to 240 VAC	GLB341.1U	—	—	—	—	GLB346.1U	—		
		<b>Modulating</b> 0(2) - 10 VDC	24 VAC/DC	GLB161.1P	GLB161.1Q	—	—	—	GLB166.1P	—		
	<b>GEB Series</b> 132 lb-in (15 Nm) 125 s Runtime	<b>Floating</b> 3-Position	24 VAC	GEB131.1U	—	GEB132.1U	—	—	GEB136.1U	—	R: 1/4" ... 3/4" Sq: 1/4" ... 1/2"	
				GEB131.1P	—	—	—	—	—	—		
		<b>Modulating</b> 0(2) - 10 VDC	24 VAC	GEB161.1U	—	—	—	GEB164.1U	—			
				GEB161.1P	—	—	—	—	—			
	<b>GBB Series</b> 221 lb-in (25 Nm) 125 s Runtime	<b>Modulating</b> 0(2) - 10 VDC	24 VAC	GBB161.1U	—	—	GBB163.1U	GBB164.1U	GBB166.1U	—	R: 3/8" ... 1" Sq: 1/4" ... 5/8"	
				GBB161.1P	—	—	GBB163.1P	GBB164.1P	GBB166.1P	—		
	<b>GIB Series</b> 310 lb-in (35 Nm) 125 s Runtime	<b>Modulating</b> 0(2) - 10 VDC	24 VAC	GIB161.1U	—	—	GIB163.1U	GIB164.1U	GIB166.1U	—	R: 3/8" ... 1" Sq: 1/4" ... 5/8"	
				GIB161.1P	—	—	GIB163.1P	GIB164.1P	GIB166.1P	—		

Actuators for HVAC Applications	Volumetric Flow Type	Communication	Operating Voltage	Standard Model	Pre-Cabled Terminal Strip	Pressure Sensor	Room Sensor / Thermostat	Commissioning Tool Type	PC Tool	Handheld Tool	Dimensions, Damper Shaft Round / Square
Variable Air Volume Damper Actuators						Sensor		Commissioning Tools			
	<b>GDB Series</b> 44lb-in (5NM) 150 s runtime 0-300Pa	VAV	BACnet/MSTP	24 VAC	—	0..500 Pa	—	PC / Handheld Tool	ACS931	AST20	R:3/8...5/8" Sq:1/4...1/2"
	—	GDB181.1P/BA			—						
	<b>GLB Series</b> 88lb-in (10NM) 150 s runtime 0-300Pa	VAV	BACnet/MSTP	24 VAC	—	0..500 Pa	—	PC / Handheld Tool	ACS931	AST20	R:3/8...5/8" Sq:1/4...1/2"
	—	GLB181.1P/BA			—						
	<b>DXR1 Series</b> 88lb-in (10 NM) 150 sec run time 0-500Pa	VAV	BACnet/IP	24 VAC	DXR1. E10PL-112/US	Plug-in Terminal Blocks	0..500 Pa	Mobile Commissioning / Climatix App	—	—	R:3/8...5/8" R: 3/8...7/16" (with centering insert) Sq:1/4...1/2"
	Fan Powered Box	DXR1. E10PL-113/US									

Actuators for HVAC Applications	Control Signal	Operating Voltage	Standard Model	Pre-Cabled Terminal Strip (T); Extended 6 ft. Cable (Q)	Potentiometer (1 kOhm)	Adjustable Start Span	Adj. Start / Span + Two Auxiliary Switches	Two auxiliary switches	Bulk Pack Available	Dimensions, Damper Shaft Round / Square (inch)	
Fast-Acting Damper Actuators											
	<b>GNP Series</b> Fail-Safe 53 lb-in (6 Nm) 2 s Runtime 2 s Spring Return	On/Off 2-Position Floating 3-Position Modulating 0 (2) - 10 VDC 4 to 20 mA	24 VAC/DC	GNP191.1P	—	—	—	—	GNP196.1P	—	R: 1/4" ... 3/4" Sq: 1/4" ... 1/2"
	<b>GAP Series</b> Fail-In-Place 53 lb-in (6 Nm) 2 s Runtime	On/Off 2-Position Floating 3-Position Modulating 0 (2) - 10 VDC 4 to 20 mA	24 VAC/DC	GAP191.1P	—	—	—	—	GAP196.1P	—	R: 1/4" ... 3/4" Sq: 1/4" ... 1/2"
Fire and Smoke Damper Actuators											
	<b>GJD Series</b> 20 lb-in (2 Nm) 30 s Runtime <=15 s Spring Return	On/Off 2-Position	24 VAC/DC	GJD121.1U	—	—	—	—	GJD126.1U	—	R: 1/2"
			120 VAC	GJD221.1U	—	—	—	—	GJD226.1U	—	
			230 VAC	GJD321.1U	—	—	—	—	GJD326.1U	—	
	<b>GRD Series</b> 30 lb-in (3.4 Nm) 30 s Runtime <=15 s Spring Return	On/Off 2-Position	24 VAC/DC	GRD121.1U	—	—	—	—	GRD126.1U	—	R: 1/2"
			120 VAC	GRD221.1U	—	—	—	—	GRD226.1U	—	
			230 VAC	GRD321.1U	—	—	—	—	GRD326.1U	—	
	<b>GKD Series</b> 80 lb-in (9 Nm) 30 s Runtime <= 15 s Spring Return	On/Off 2-Position	24 VAC	GKD121.1U	—	—	—	—	GKD126.1U	—	R: 1/2"
			120 VAC	GKD221.1U	—	—	—	—	GKD226.1U	—	
			230 VAC	GKD321.1U	—	—	—	—	GKD326.1U	—	
	<b>GVD Series</b> 200 lb-in (23 Nm) 30 s Runtime <= 15 s Spring Return	On/Off 2-Position	24 VAC	GVD121.1U	—	—	—	—	GVD126.1U	—	R: 1/2"
			120 VAC	GVD221.1U	—	—	—	—	GVD226.1U	—	
			230 VAC	GVD321.1U	—	—	—	—	GVD326.1U	—	
Fire and Smoke Damper Accessories											
	<b>Electronic Fusible Link (EFL)</b>	165 °F Temperature Limit	ASK791.165								
		212 °F Temperature Limit	ASK791.212								
		250 °F Temperature Limit	ASK791.250								
		350 °F Temperature Limit	ASK791.350								

## Selection Guide

Square footage is approximate, based on 4 lb-in/ ft<sup>2</sup>

Application	Electronic																		Pneumatic*		
	Spring Return									Non-Spring Return									Spring Return		
	GQD	GJD	GRD	GPC	GNP	GMA	GKD	GCA	GVD	GSD	GDE	GDB	GAP	GLB	GEB	GBB	GIB	DXR1	No. 3	No. 4	No. 6
5ft <sup>2</sup>	5ft <sup>2</sup>	8ft <sup>2</sup>	9ft <sup>2</sup>	12ft <sup>2</sup>	16ft <sup>2</sup>	20ft <sup>2</sup>	40ft <sup>2</sup>	50ft <sup>2</sup>	5ft <sup>2</sup>	11ft <sup>2</sup>	11ft <sup>2</sup>	12ft <sup>2</sup>	22ft <sup>2</sup>	32ft <sup>2</sup>	55ft <sup>2</sup>	77ft <sup>2</sup>	22ft <sup>2</sup>	12ft <sup>2</sup>	16ft <sup>2</sup>	24ft <sup>2</sup>	
Terminal Units	•			•		•				•	•	•		•				•	•		
Fan Powered Box (FPB)																		•			
Face and Bypass											•			•						•	
Multi-Zone Mixing Boxes								•			•			•		•	•				
Bypass Dampers											•			•							
Makeup Air Damper											•			•							
Outside Air Dampers	•			•		•		•		•					•	•	•				
Small Rooftop Units (RTU)	•			•		•				•					•						
Economizer Dampers	•			•		•															
Rooftop Units (RTU)								•								•	•		•		
Zone Isolation Dampers	•			•		•		•		•					•	•	•				
Vortex Dampers								•								•	•				
Inlet Vane Dampers								•								•	•				•
Return Air Dampers	•			•		•		•		•					•	•	•				
Unit Ventilators	•			•		•				•											
Central VAV Fans								•												•**	
Fire/Smoke Dampers		•	•				•		•											•***	•***
Fume Hoods/Supply and Exhaust Dampers					•								•								

\* Estimates for pneumatic actuators are based on the maximum stroke of the actuator and the 90° damper rotation

\*\* LC Model

\*\*\* See data sheets for specific types

## OpenAir global leadership in electronic damper actuators



**40+ Years**  
Innovating control actuators



**25%**  
Lower power consumption



**20%**  
More torque than the competition



**100%**  
Factory tested



**5 Million**  
Repositions at rated torque and temperature



**1.5 Million**  
Full stroke cycles at rated torque and temperature

### Legal Manufacturer

#### Siemens Industry, Inc.

Building Products  
1000 Deerfield Parkway  
Buffalo Grove, IL 60089-4513  
USA  
Tel. 847-215-1000

#### Siemens Canada Limited Headquarters

1577 North Service Road East  
Oakville, ON L6H 0H6  
Canada  
Tel. 905-465-8000

All rights reserved. Printed in USA 153-280 (12/21)

©2021 Siemens Industry, Inc.

Information in this publication is based on current specifications. The company reserves the right to make changes in specifications and models as design improvements are introduced.

OpenAir is a trademark of Siemens Industry, Inc.