

OpenAir® GVD/GKD Series Electronic Damper Actuators for UL Listed Fire/Smoke and Smoke Control Dampers 2-Position, 30-second Run Time, 15-second Spring Return Time

Product Number	Operating Voltage			3-ft Plenum Cable	EFL Capability	Two Fixed Auxiliary Switches
	24 Vac ± 20%	120 Vac ± 10%	230 Vac ± 10%			
GxD121.1U	•			•	•	
GxD126.1U	•			•	•	•
GxD221.1U		•		•	•	
GxD226.1U		•		•	•	•
GxD321.1U			•	•	•	
GxD326.1U			•	•	•	•

Technical Data

Running Torque:	80 lb-in GKD (9 Nm) (minimum) 200 lb-in GVD (23 Nm) (minimum)
Stall Torque:	130 lb-in GKD (14.6 Nm) (minimum) 280 lb-in GVD (32 Nm) (minimum)
Run time for 90°:	30 seconds (nominal)
Spring Return:	15 seconds (maximum)
Nominal angle of rotation:	95°
Operating voltage:	24 Vac ±20% 120 Vac ±10%/ 230 Vac ±10%

CAUTION:

Continuous use at voltages above the recommended tolerances may damage the actuator.

Power Consumption:	GKD (80 lb/in) Run/Hold	GVD (200 lb-in) Run/Hold
GxD12x.1U	26 VA/8 VA	35 VA/9 VA
GxD22x.1U	26 VA/8 VA	35 VA/9 VA
GxD32x.1U	26 VA/8 VA	35 VA/9 VA
Damper shaft size:	1/2-inch (12.7 mm) to 1" (25 mm) round	
Damper shaft length, minimum:	3-inch (76.2 mm)	
Agency listings:	UL60730, cUL CSA 60730 CE conformity for Residential, Commercial, and Industrial environments. Australian RCM conformity China-RoHS with Environmental Protection Use Period	
Ambient temperature, operating:	0°F to 140°F (-18°C to 60°C), 350°F (177°C) one time per UL555S	
Ambient temperature, storage/transport:	-40°F to 158°F (-40°C to 70°C)	
Ambient humidity (non-condensing):	Maximum 95% rh non-condensing	
Plenum-rated cable:	400°F (200°C)	
Enclosure:	NEMA 1/IP40	
Housing material:	Plenum-rated plastic	
Pre-cabled connection:	3 ft (0.9m) 19/30 strand 18 GA	
Dimensions	10.7" H × 3.4" W × 3.8" D (272.8 mm H × 101.5 mm W × 96.4 mm D)	
Weight:	~4 lbs. (1.8 kg)	
Country of Origin	USA	

Description

The OpenAir direct-coupled, 2-position, spring return electronic damper actuators are UL listed for smoke control dampers or for combination fire/smoke rated dampers. Actuators are designed to operate reliably in smoke control systems requiring Underwriter's Laboratories, Inc. UL555/555S rating when tested as an assembly with the damper and will meet requirements of UBC for 30-second opening and 15-second closing at 350°F (177°C).



Features

- Optional built-in auxiliary switches with fixed switch points at 5° and 85° rotation.
- Built-in Electronic Fusible Link (EFL) capability with four temperature ratings; 165°F, 212°F, 250°F, and 350°F
- Reversible, fail-safe spring return
- Plenum-rated
- Pre-cabled
- 30-second operation at rated torque, temperature, and voltage
- Fixed Dual End Switches
24 Vdc, 24 Vac to 250 Vac
6A resistive
2FLA/12 LRA
SPST
Fixed 5° and 85°

Accessories

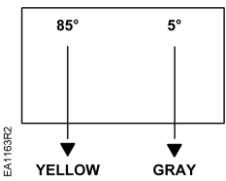
Electronic Fusible Link (24 Vac)

ASK791.165	165°F (74°C)
ASK791.212	212°F (100°F)
ASK791.250	250°F (121°C)
ASK791.350	350°F (177°C)

Maintenance



CAUTION:
The GVD/GKD actuators do not require any periodic cycling to function properly as an integral part of an active smoke control damper system. **The National Fire Alarm Code NFPA 72 states that all life safety systems are to be functionally checked at least annually.** Check the smoke control damper/actuator every time you functionally check your smoke detectors, emergency lights, and/or power generators for operation.



NOTE:
Both sets of contacts are open when the actuator is between 5° and 85°

Switch	Wire Color	Switch Makes	Switch Breaks
5°	Gray	< 5°	> 5°
85°	Yellow	> 85°	< 85°

Wiring Diagrams

NOTE: Actuators may be connected in parallel. Power consumption must be observed.

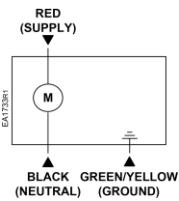


Figure 1.
24 Vac.

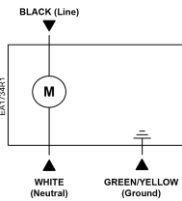


Figure 2
120 Vac.

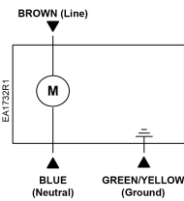


Figure 3.
230 Vac.

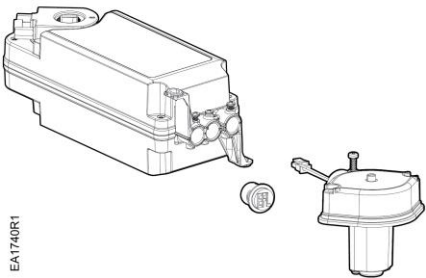


Figure 4. GVD/GKD Actuator and EFL.

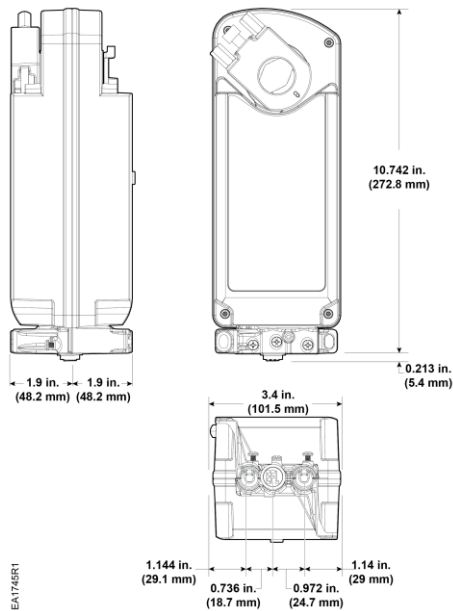


Figure 5. GVD/GKD Series Damper Actuator and Mounting Bracket Dimensions in Inches (Millimeters).

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