SIEMENS

Submittal Sheet
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OpenAir™ GND Series Electronic Damper Actuators for UL Listed Fire/Smoke and Smoke Control Dampers

2-Position, 15-second Run Time, 15-second Spring Return Time

Product Number	Operating Voltage			Pack		Options	
	24 Vac ± 20%, 24 Vdc + 20%, -10%,	120 Vac ± 10%,	230 Vac ± 10%,	Single pack	Ten Pack	Two Auxiliary Switches Fixed 5° and 85°	Electric Fuse Link Connection
GND12x.1x	●			●	●	●	●
GND22x.1x		●		●	●	●	●
GND32x.1x			●	●	●	●	●

Technical Data

Torque:	53 lb-in (6 Nm) (minimum)
Stall Torque:	160 lb-in (18 Nm) (Minimum)
Run time for 90°:	15 seconds (nominal)
Spring Return:	15 seconds (nominal)
Nominal angle of rotation:	95° nominal
Operating voltage:	24 Vac ±20%/ 24Vdc+20%-10%
Power Consumption:	
Running:	20VA/12W
Holding:	8VA/6W
Operating Voltage:	120 Vac ±10%/ 230 Vac ±10%
Power Consumption:	
Running:	20 VA
Holding:	9 VA
Damper shaft size:	1/2-inch (13 mm) round
Damper shaft length, minimum:	1.4-inch (36 mm) min. length
Agency listings:	UL873 cUL C22.2 No. 24-93, AS/NZS 2064 1/2:1997 CE conformity Australian Electromagnetic Compatibility (EMC) per AS/NZS 4251.1/2:1999 (C-tick)
Ambient temperature, operating:	0°F to 140°F (-18°C to 60°C), one time 350°F (177°C)
Ambient temperature, storage/transport:	-40°F to 158°F (-40°C to 70°C)
Ambient humidity (non-condensing):	Maximum 95% rh non-condensing
Teflon® cable:	400°F (200°C)
Enclosure:	NEMA 1
Housing material:	Die cast aluminum alloy
Pre-cabled connection:	18 AWG, 3 ft 3/8-in flexible conduit connector
Dimensions (Approximate):	9-in. H × 3-1/4-in. W × 3-in. D
Weight:	≈4 lb
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 15 second opening and closing at 350°F (177°C).

Features

- Optional built-in auxiliary switches: Fixed switch points at 5° and 85° rotation.
- Optional built-in Electronic Fusible Link (EFL) capability with three temperature ratings; 165°F, 250°F, 350°F
- Reversible fail-safe spring return
- All metal housing
- Precabled Teflon® insulated lead wires
- Fifteen 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°

Electronic Fuse Link (24 Vac)

ASK79.165	165°F (74°C)
ASK79.212	212°F (100°F)
ASK79.250	250°F (121°C)
ASK79.350	350°F (177°C)

Maintenance

The National Fire Protection Association NFPA 92A Standard for Recommended Practice for Smoke-Control System and UL 864 Standard for Control Units and Accessories for Fire Alarm Systems, require weekly self-test for **dedicated** smoke control equipment used in a smoke control system. The National Fire Protection Association NFPA 72 Standard for National Fire Alarm Codes states that all life safety systems are to be functionally checked at least annually. The GND actuator is designed such that no special cycling during long-term holding is required. The GND actuator complies with the AMCA Standard 520 testing revision.

Wiring Diagrams

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

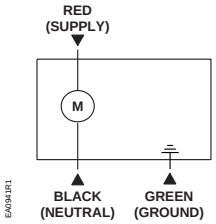


Figure 1. 24 Vac/dc.

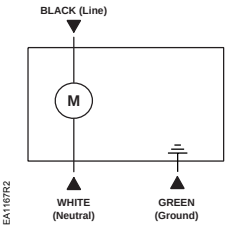
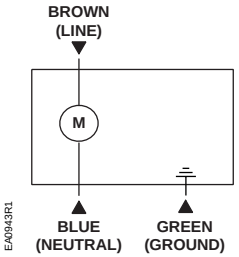
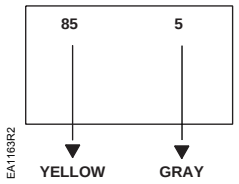


Figure 2. 120 Vac.



CAUTION:
The actuator must be wired with a 230 Vac line with respect to neutral. The ground lead must be connected for proper protection of the actuator. Any other connection, such as phase-to-phase, can damage the actuator.

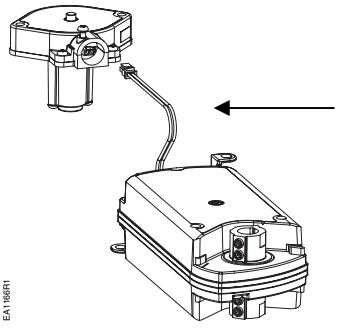
Figure 3. 230 Vac.



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

Figure 4. Dual Fixed End Switches.

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



Molex connector for use with Siemens EFL

GND actuators are ordered affixed with EFL wiring.

Figure 5. Electronic Fusible Link (EFL).