

OpenAir™ GNP/GAP Series, Fail-Safe/Fail-in-Place, 53 lb-in (6 Nm) Rotary, Electronic Damper Actuators

Description

The OpenAir direct-coupled fail-safe/fail-in-place electronic actuators are designed for modulating, two-position, and floating control of laboratory fume hoods, constant or variable volume installations for the control of supply and exhaust air and terminal units.



Product Numbers

Product Number	Auxiliary Switch	Fail-safe	Fail-in-Place
GNP191.1P		•	
GNP196.1P	•	•	
GAP191.1P			•
GAP196.1P	•		•

Features

- Fast operation, 2 second runtime
- One model performing all control signals
 - 2-position control
 - Floating control
 - Accepts Siemens FHC/LRC pulsed control signal
 - Modulating control (0(2) to 10Vdc; 4 to 20 mA)
- Feedback is standard on all models
- Highly accurate positioning
 - Repositioning resolution 0.4%
- Brushless DC motor technology with stall protection.
- Unique self-centering shaft coupling
- 53 lb-in 6 (Nm) torque
- UL and cUL listed, CE certified
- 24 Vac/dc compatible
- Manual override capability

Technical Data

Running torque:	53 lb-in (6 Nm)
Maximum torque:	142 lb-in (16 Nm)
Runtime for 90°:	2 sec. operating
Frequency:	50/60 Hz
Run time for 90°:	2 sec
Fail-safe on power loss (GNP19x only)	
Power consumption:	24 Vac/dc supply
Running:	28 VA/19W
Holding:	8 VA/5W

Equipment rating (24 Vac): Class 2 per UL/CSA
 Angle of rotation: 90° nominal, 95° max.
 Shaft dimensions: 1/4 to 3/4-inch (6.4 to 20.5 mm) dia.
 1/4 to 1/2-inch (6.4 to 13 mm) sq.
 Minimum shaft length: 3/4-inch (20 mm)

Operating temperature: 0°F to 122°F (-18°C to 50°C)
 Storage temperature: -40°F to 158°F (-40°C to 70°C)
 Transport temperature: -26°F to 158°F (-32°C to 70°C)

Ambient humidity: 95% rh (non-condensing)

Enclosure: NEMA 1
 Precabled connection: 18 AWG, 3 ft (0.9 m) long

Agency listings:
 UL listed UL 873
 cUL listed C22.2 No. 24.93

NOTE: These devices were approved for installation in plenum areas by Underwriters Laboratories, Inc. (UL) per UL 1995.

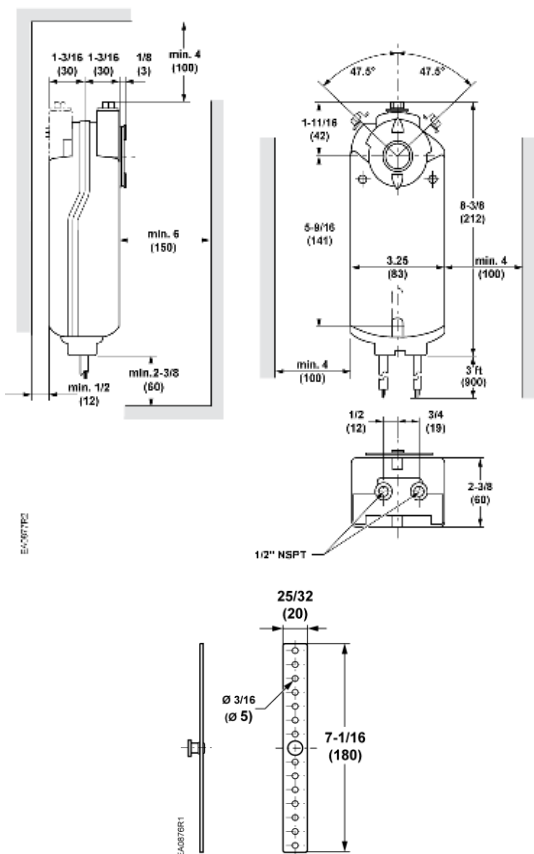
Electromagnetic compatibility (EMC) 2004/108/EC

Material: Die-cast aluminum alloy
 Gear lubrication: Silicone-free
 Dimensions: 8-3/8" H x 3-1/4" W x 2-3/8" D
 (212 mm H x 83 mm W x 60 mm D)
 Shipping weight: 3 lbs 6 oz

Typical Specifications

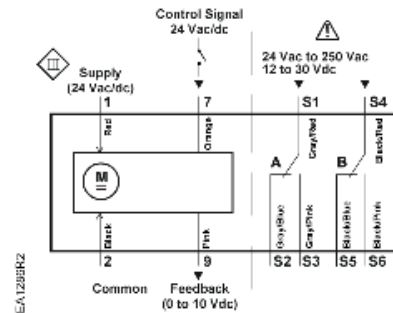
Fail-safe and fail-in-place damper actuators shall be the direct-coupled type that requires no connecting linkages. Feedback shall be standard on all models. These actuators shall be able to perform all control signals (2-position, floating and modulating [0(2) to 10 Vdc and 4 to 40 mA]). These actuators shall have a self-centering damper shaft coupling that assures concentric alignment of the actuator's output coupling with the damper shaft for 53 lb-in torque and be capable of direct mounting to a shaft up to a 3/4-inch in diameter both round and square shafts. Actuators shall provide stall protection throughout the full range of rotation. All actuators shall be capable of both clockwise and counterclockwise fail-safe and fail-in-place operation that returns the actuator to a fail-safe position in <2 seconds in response to a loss of power. All actuators shall provide a means of manually positioning the output coupling in the absence of power. Dual, independently adjustable auxiliary switches are available for these actuators. All actuators must be pre-cabled and provide an easily readable position indicator. All actuators shall be CE conforming; UL60730 (to replace UL873) and CSA22.2 listed and manufactured under ISO 9002 and ISO 14000 procedures. Actuators shall be as manufactured by Siemens Industry, Inc.

Dimensions in Inches (Millimeters)

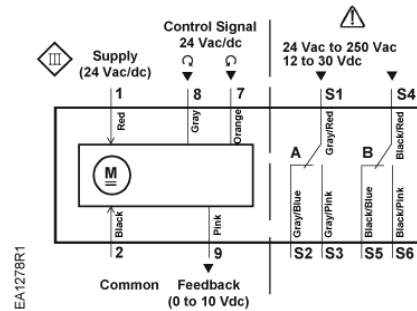


Wiring Diagrams

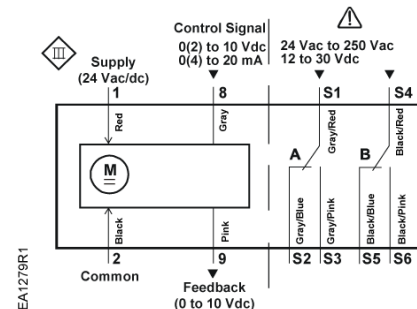
2-Position



Floating



Modulating; 0(2) to 10 Vdc, 4 to 20 mA.



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