





Customizable Non Fail-Safe actuator for controlling dampers in typical commercial HVAC applications.

- Torque motor 180 in-lb [20 Nm]
- Nominal voltage AC/DC 24 V
- Control On/Off, Floating point
- NEMA 4X





5-year warranty





Please note: Due to a supplier issue, certain NEMA 4 actuator covers will be supplied in gray instead of orange until further notice. This change ensures uninterrupted shipping and the same protective properties and product specifications.

Technical data

| Electrical data | Nominal voltage | AC/DC 24 V | |
|-----------------|------------------------------------|--|--|
| | Nominal voltage frequency | 50/60 Hz | |
| | Nominal voltage range | AC 19.228.8 V / DC 21.628.8 V | |
| | Power consumption in operation | 2.5 W | |
| | Power consumption in rest position | 0.5 W | |
| | Transformer sizing | 5.5 VA | |
| | Electrical Connection | Screw terminal (for 2614 AWG wire), 1/2" NPT conduit connector | |
| | Overload Protection | electronic throughout 095° rotation | |
| Functional data | Torque motor | 180 in-lb [20 Nm] | |
| | Direction of motion motor | selectable with switch 0/1 | |
| | Manual override | external push button | |
| | Angle of rotation | Max. 95° | |
| | Angle of rotation note | adjustable with mechanical stop | |
| | Running Time (Motor) | 90 s / 90° | |
| | Running time motor note | constant, independent of load | |
| | Running time motor variable | 90 or 150 s | |
| | Noise level, motor | 45 dB(A) | |
| | Position indication | pointer | |
| Safety data | Power source UL | Class 2 Supply | |
| | Degree of protection NEMA/UL | NEMA 4X | |
| | Housing | UL Enclosure Type 4X | |
| | Agency Listing | cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1, CSA C22.2 No 24-93, CE acc. to 89/336/EC | |
| | Quality Standard | ISO 9001 | |
| | Ambient humidity | Max. 100% RH | |
| | Ambient temperature | -22122°F [-3050°C] | |
| | Ambient temperature note | -40122°F [-4050°C] for actuator with integrated heating | |
| | Storage temperature | -40176°F [-4080°C] | |
| | Servicing | maintenance-free | |
| Weight | Weight | 1.9 lb [0.87 kg] | |
| Materials | Housing material | UL94-5VA | |



Product features

Application

For on/off and floating point control of dampers in HVAC systems. Actuator sizing should be done in accordance with the damper manufacturer's specifications. The actuator is mounted directly to a damper shaft up to ¾" in diameter by means of its universal clamp, self-centered default.

Operation

The actuator is not provided with and does not require any limit switches, but is electronically protected against overload. The anti-rotation strap supplied with the actuator will prevent lateral movement.

The AMB24-3-T N4 provides 95° of rotation and a visual indicator indicates position of the actuator. When reaching the damper or actuator end position, the actuator automatically stops. The gears can be manually disengaged with a button on the actuator cover.

The AMB24-3-T N4 actuator uses a sensorless brushless DC motor, which is controlled by an Application Specific Integrated Circuit (ASIC). The ASIC monitors and controls the actuator's rotation and provides a digital rotation sensing (DRS) function to prevent damage to the actuator in a stall condition. Power consumption is reduced in holding mode.

Add-on auxiliary switches or feedback potentiometers are easily fastened directly onto the actuator body for signaling and switching functions.

For low ambient temperatures, the optional supplemental (-H) Heater add-on is available.

Typical specification

Floating point, on/off control damper actuators shall be electronic direct-coupled type, which require no crank arm and linkage and be capable of direct mounting to shaft up to ¾" diameter. Actuators shall have brushless DC motor technology and be protected from overload at all angles of rotation. Actuators shall have reversing switch and manual override on the cover. If required, actuators needing auxiliary switches, can be provided as an add-on accessory. Actuators with auxiliary switches must be constructed to meet the requirements for double insulation so an electrical ground is not required to meet agency listings. Run time shall be constant and independent of torque. Actuators shall be cULus listed, have a 5-year warranty, and be manufactured under ISO 9001 International Quality Control Standards. Actuators shall be as manufactured by Belimo.

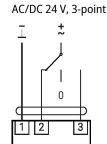
Accessories

| Electrical accessories | Description | Туре |
|----------------------------|---|------------|
| | Auxiliary switch 2x SPDT add-on | S2A |
| | Terminal-strip cover for NEMA 2 rating (-T models). | ZS-T |
| Factory add-on option only | Description | Туре |
| | Heater, with adjustable thermostat | ACT_PACK_H |

Electrical installation

AC/DC 24 V, on/off





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Dimensions

PC

