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DS24-27-(A) — Submittal/Technical Data

06/30/22

27 lb-in. — Spring Return — On/Off — Auxiliary Switch Option

Specifications:

Power Supply AC 24 V (AC 19.2 V to 28.8 V) at 50/60 Hz: Class 2 or (SELV) (Europe), 5 VA Running, 1.6 VA Holding Position

DC 24 V (DC 21.6 V to 28.8 V): Class 2 (North America) or SELV (Europe), 2.8 W Running, 0.8 W Holding Position

Minimum Transformer Size: 6 VA per Actuator

Auxiliary Switch Rating (-A) Models) One Single-Pole, Double-Throw (SPDT), Double-Insulated Switch with Silver Contacts:

AC 24 V, 50 VA Pilot Duty

Spring Return Direction is Selectable with Mounting Position of Actuator:

Actuator Side A is away from damper or valve: CCW Spring Return Actuator Side B is away from damper or valve: CW Spring Return

Equipment Rating Class 2 or Safety Extra-Low Voltage (SELV)

Rotation Range Maximum Full Stroke: 95°

Adjustable Stop: 35 to 95° Maximum Position

Electric Stall Detection Protects from overload at all angles of rotation

Torque 27 lb·in. (3 N·m)

Time: 90° of Rotation Power On (Running) 53 to 71 Seconds for 0 to 27 lb⋅in. (3 N⋅m) Load, at Room Temperature

60 Seconds Nominal at Full Rated Load (0.25 rpm)

Power Off (Returning) 19 to 23 Seconds for 0 to 27 lb·in. (3 N·m) Load, at Room Temperature

22 Seconds Nominal at Full Rated Load

28 Seconds Maximum with 27 lb·in. (3 N·m) Load at -22°F (-30°C)

Enclosure NEMA 2 (IP54) for all mounting orientations

Ambient Conditions Standard Operating -22 to 140°F (-30 to 60°C); 90% RH Maximum, Noncondensing

Storage -40 to 185°F (-40 to 85°C); 95% RH Maximum, Noncondensing

Electrical Connections 48 in. UL 758 Type AWM Halogen-Free Cable with 18 AWG (0.85 mm²) Conductors & 0.25 in. (6 mm) Ferrule Ends

Conduit Connections Integral 1/2 in. (13 mm) Threaded Conduit Connector(s)

Mechanical Connections Round Shafts 1/4 in. to 1/2 in. (6 to 12 mm)

Square Shafts 1/4 in. to 5/16 in. (6 to 8 mm)

Life Cycle 60,000 Full stroke cycles (1,500,000 repositions) at full working load at Rated Running Torque Audible

Noise Rating Running <36 dBA at 27 lb·in. (3 N·m) Load, at a Distance of 39-13/32 in. (1 m)

Holding <20 dBA at a Distance of 39-13/32 in. (1 m)

Spring Returning <51 dBA at 27 lb·in. (3 N·m) Load, at a Distance of 39-13/32 in. (1 m)

Dimensions 6-3/8" (L) x 3-15/16" (W) x 2-1/4 (H)

Weight 2.0 lb. (2.4 lb w/ Aux. Switches)

Agency Certification UL Listed, CCN XAPX, File E27734; to UL 60730-1A: 2003-08, Ed. 3.1,

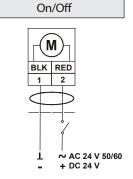
Automatic Electrical Controls for Household and Similar Use; and UL 60730-2-14: Ed. 1,

Part 2, Particular Requirements for Electric Actuators.

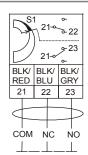
Wiring: (Cable)

IMPORTANT:

Do not install multiple DS-27 Series Actuators connected to the same mechanical load. Master-Slave application of DS-27 Series Actuators requires that each actuator be connected to independent loads.



(-A) Auxiliary Switches



NOTE: WARNING: All DS-27 Series actuators are designed for use only in conjunction with operating controls. Where an operating control failure would result in personal injury and/or loss of property, it is the responsibility of the installer to add safety devices or alarm systems that protect against, and/or warn of, control failure.