Bray Controls Commercial Division 13788 West Road, Suite 200A Houston, Texas 77041

BCDSales@Bray.com Phone: 1-888-412-2729

www.braycommercialdivision.com

DS24-70-T(A) — Submittal/Technical Data

06/30/22

70 lb-in. — Spring Return — On/Off or Floating — 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, 7.9 VA Running, 5.5 VA Holding Position

DC 24 V (DC 21.6 V to 28.8 V): Class 2 or SELV, 3.5 W Running, 1.9 W Holding Position

Minimum Transformer Size: 8 VA per Actuator

Input Signal AC 19.2 to 28.8 V at 50/60 Hz or DC 24 V +20%/-10%. Class 2 or SELV. Minimum Pulse Width: 500 ms

Auxiliary Switch Rating (-A) Models) Two Single-Pole, Double-Throw (SPDT), Double-Insulated Switches with Gold over 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 70 lb·in. (8 N·m)

Time: 90° of Rotation Power On (Running) 150 Seconds Constant for 0 to 70 lb·in (8·N m) Load, At All Operating Conditions

Power Off (Spring Returning) 17 to 25 Seconds for 0 to 70 lb⋅in (8 N⋅m) Load, at Room Temperature

22 Seconds Nominal at Full Rated Load, 94 Seconds Maximum with 70 lb·in (8 N·m) Load, at -40°F (-40°C)

Enclosure NEMA 2 (IP54) for all mounting orientations

Manual Override Hex Head Screw

Ambient Conditions Standard Operating -40 to 140°F (-40 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 Connectors for 3/8 in. (10 mm) Flexible Metal Conduit

Mechanical Connections Round Shafts 5/16 to 5/8 in. (8 to 16 mm)

Square Shafts 1/4 to 1/2 in. (6 to 12 mm)

Life Cycle 60,000 Full Stroke Cycles with 70 lb·in. (8 N·m) Load — 1,500,000 Repositions with 70 lb·in. (8 N·m) Load

Noise Rating Running < 35 dBA at 70 lb⋅in (8 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)

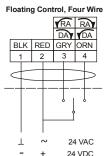
Spring Returning <52 dBA at 70 lb·in. (8 N·m) Load - (All at a Distance of 39-13/32 in. (1 m))

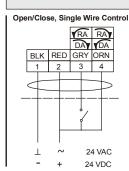
Dimensions 6.33 (L) x 3.90 (W) x 2.26 (H) Weight 3.43 lb. (3.8 lb. w/ Aux. Switches)

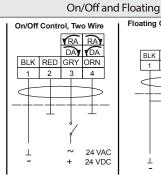
Agency Certification UL Listed, CCN XAPX, File E27734; to UL 60730-1A: 2003-08, Ed. 3.1, Automatic Electrical Controls for Household

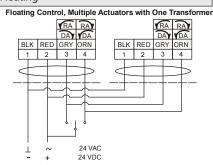
and Similar Use; and UL 60730-2-14: 2002-02, Ed. 1, Part 2, Particular Requirements for Electric Actuators.

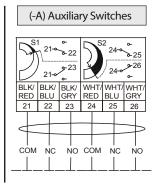
Wiring: (Cable)











NOTE: WARNING: All DS-70 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.