



5  
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Warranty

## DS24-180-(A) — Submittal/Technical Data

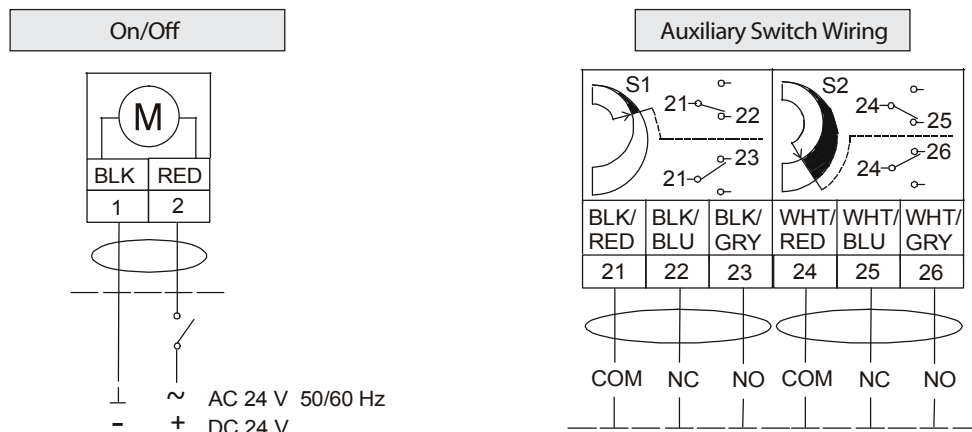
06/30/22

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

### Specifications:

Power Supply	AC 24 V (19.2 to 30 V) at 50/60 Hz: Class 2, 24.6 VA Running, 7.7 VA Holding Position; DC 24 V (21.6 to 26.4 V): Class 2, 17.6 W Running, 2.8 W Holding Position	
Auxiliary Switch Rating	Two Single-Pole, Double-Throw (SPDT), Double-Insulated Switches with Gold Flash Contacts: AC 24 V, 50 VA Pilot Duty;	
Transformer Sizing	25 VA Minimum per Actuator	
Spring Return	Direction is Selectable with Mounting Position of Actuator: Side A, Actuator Face Away for CCW Spring Return; Side B, Actuator Face Away for CW Spring Return	
Rotation Range	Adjustable from 30 to 90° CW or CCW with Optional Adjustable Stop Kit; Mechanically Limited to 90°	
Electric Stall Detection	Protects from overload at all angles of rotation	
Torque	177 lb-in. (20 N·m)	
Time: 90° of Rotation	Power On (Running) 24 to 57 Seconds for 0 to 177 lb-in (0 to 20 N·m) at All Operating Conditions; 35 Seconds Nominal at Full Rated Load Power Off (Returning) 11 to 15 Seconds for 0 to 177 lb-in (0 to 20 N·m) at Room Temperature; 35 Seconds Maximum for 0 to 177 lb-in (0 to 20 N·m) at -22°F (-30°C) 130 Seconds Maximum for 0 to 177 lb-in (0 to 20 N·m) at -40°F (-40°C)	
Enclosure	NEMA 2, IP54 - for all mounting directions	
Manual Override	Hex Head Screw	
Ambient Conditions	Standard Operating	-40 to 131°F (-40 to 55°C); 90% RH Maximum, Noncondensing
	Storage	-85 to 185°F (-65 to 85°C); 95% RH Maximum, Noncondensing
Electrical Connections	48 in. (1.2 m) Halogen-Free Cable with 18 AWG (0.75 mm <sup>2</sup> ) Wire Leads	
Conduit Connections	Integral Connectors for 3/8 in. Flexible Metal Conduit	
Mechanical Connections	Round Shafts	1/2 to 3/4 in. or 12 to 19 mm
	Square Shafts	3/8 and 1/2 in. or 10, 12, and 14 mm
Life Cycle	60,000 Full stroke cycles (1,500,000 repositions)	
Noise Rating	Running	< 66 dBA at 39-13/32 in. (1 m)
	Holding	< 18 dBA at 39-13/32 in. (1 m)
	Returning	< 66 dBA at 39-13/32 in. (1 m)
Dimensions	10" (L) x 4" (W) x 3-3/16 (H)	
Weight	6.4 lb (2.9 kg)	
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-180 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.

The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications, consult the nearest Bray office. Bray controls shall not be liable for damages resulting from misapplication or misuse of its products.