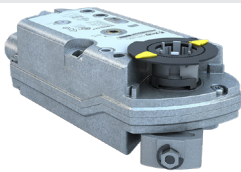
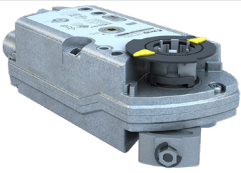


Spring Return Commercial Actuators - DCS-140 Series



Technical Specifications - DCS-140 Series Actuator				
Type	DCS24-140-(A)	DCS24-140-T-(A)	DCMS24-140-(A)	DCS120-140-(A)
Actuator Models	Spring Return On/Off Opt. Auxillary Switches (-A)	Spring Return Floating Opt. Auxillary Switches (-A)	Spring Return Modulating Opt. Auxillary Switches (-A)	Spring Return On/Off Opt. Auxillary Switches (-A)
Torque	160 lb-in. (18 Nm)			
Operating Voltage	24 VAC ±20%; 24..48 24 VDC ±10% at 50/60 Hz			120 VAC ±10% at 50/60 Hz
Power Consumption	VAC - 7 VA Running, 5 VA Holding VDC - 4 W Running, 3 W Holding			Running: 8 VA; Holding: 6 VA
Control Input Impedance	N/A	N/A	>100K Ohms	N/A
Control Signal	N/A	N/A	2 to 10 VDC or 0 to 10 VDC	N/A
Feedback Signal	N/A	0 to 1000 Ohms <10 mA	0 to 10 VDC; maximum output current ±1 mA	N/A
Auxillary Switch Rating (-A Models Only)	AC Rating 24 VAC to 250 VAC; AC 6 A Resistive, AC 2A FLA, 12 LRA DC Rating 12 VDC to 30 VDC; DC 2A			AC Rating AC 6 A Resistive, AC 2A FLA, 12 LRA
Switching Hysteresis (-A Models Only)	2°			
Equipment Rating	Class 2 per UL/CSA			N/A
Electrical Connection	36 in. (.9 m) Standard Cable with 18 AWG (0.75 mm ²) Wire Leads			
Conduit Connections	Integral Connectors for 3/8 in. Flex			
Manual Override	Hex Head Screw			
Spring Return	Direction is Selectable with Mounting Position of Actuator			
Rotation Range	Nominal angle of rotation 90°; Maximum angular rotation 95°			
Runtime for 90° of Rotation	Power On (Running) 90 Seconds Power Off (Returning) 15 Seconds			
Cycle Life	60,000 Full stroke cycles (1,500,000 repositions)			
Mechanical Connections	Round Shafts - 3/8-in to 1-in (8 to 25.6 mm) Square Shafts - 1/4-in to 3/4-in (6 to 18 mm)			
Enclosure	NEMA 2, IP54 per EN 60 529 - in vertical to horizontal 90°			
Ambient Conditions (Non-Condensing)	Operating — -25°F to 130°F (-32°C to 55°C); 95% RH Maximum, Noncondensing Storage — -40°F to 158°F (-40°C to 70°C); 95% RH Maximum, Noncondensing			
Audible Noise Rating	45 dBA			
Dimensions	11-13/16" (L) x 4-3/4" (W) x 2-7/8" (H)			
Weight	4.85 lb (2.2 kg)			
Agency Certifications	UL listed to UL60730 (to replace UL873) cUL certified to Canadian Standard C22.2 No. 24-93			
Warranty	5 Years limited from time of shipment.			

Spring Return Commercial Actuators - DCS-140 Series Wiring



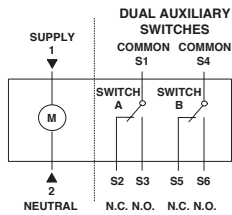
KEY		
Cable		Function
No.	Color	
1	Red (RD)	System potential AC 24 V / DC 24...48 V
2	Black (BK)	System neutral
6	Violet (VT)	Pos. signal AC 0 V / AC 24 V / DC 24...48 V, "open"
7	Orange (OG)	Pos. signal AC 0 V / AC 24 V / DC 24...48 V, "close"
8	Gray (GY)	Pos. signal DC 0...10 V, 0...35 V
9	Pink (PK)	Position indication DC 0...10 V
3	Brown (BN)	Phase AC 120/230 V
4	Blue (BU)	Neutral conductor

Auxiliary Switch - Factory Installed			
S1	S1	Gray/Red (GY RD)	Switch A Input
S2	S2	Gray/Blue (GY BU)	Switch A - N.C.
S3	S3	Gray/Pink (GY PK)	Switch A - N.O.
S4	S4	Black/Red (BK RD)	Switch B Input
S5	S5	Black/Blue (BK BU)	Switch B - N.C.
S6	S6	Black/Pink (BK PK)	Switch B - N.O.

DCS24-140-(A)

STANDARD CABLE

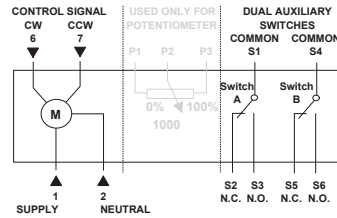
On/Off with Optional AUX Switches



DCS24-140-T(A)

STANDARD CABLE

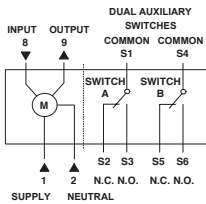
Floating with Optional AUX Switches



DCMS24-140-(A)

STANDARD CABLE

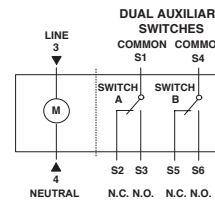
Modulating with Optional AUX Switches



DCS120-140-(A)

STANDARD CABLE

120 V On/Off with Optional AUX Switches



Warning - These 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.

Disclaimer - 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.