



## DCMS24-140(A) — Submittal/Technical Data

06/30/22

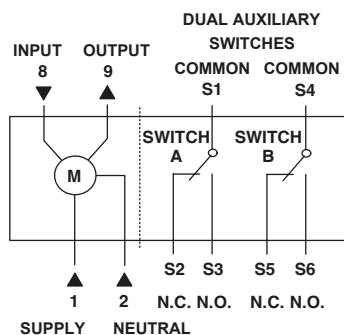
160 lb-in. — Spring Return — Modulating — Auxillary Switch Option

### Specifications:

Power Supply	24 VAC $\pm$ 20%; 24...48 VDC $\pm$ 10% at 50/60 Hz: Class 2 per UL/CSA, Running: AC: 7 VA / 5 W, DC: 4 W; Holding: AC: 5 VA / 3 W, DC: 3 W
Input Signal	0 to 10 VDC (max. 35 Vdc)
Control Input Impedance	>100K Ohms
Feedback Signal	0 to 10 VDC; maximum output current $\pm$ 1 mA
Auxiliary Switch Rating	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
Switch Range	Switch A 0° to 90° with 5° intervals; Recommended range usage 0° to 45°; Factory setting 5° Switch B 0° to 90° with 5° intervals; Recommended range usage 45° to 90°; Factory setting 85°
Switching Hysteresis	2°
Spring Return	Direction is Selectable with Mounting Position of Actuator
Rotation Range	Nominal angle of rotation 90°; Maximum angular rotation 95°
Torque	160 lb-in. (18 N·m)
Time: 90° of Rotation	Power On (Running) 90 Seconds Power Off (Returning) 15 Seconds
Enclosure	NEMA 2, IP54 per EN 60 529 - in vertical to horizontal 90°
Manual Override	Hex Head Screw
Ambient Conditions	Standard 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
Electrical Connections	36 in. (.9 m) Standard Cable with 18 AWG (0.75 mm <sup>2</sup> ) Wire Leads
Conduit Connections	Integral Connectors for 3/8 in. Flex
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)
Life Cycle	60,000 Full stroke cycles
Noise Rating	45 dBA (running)
Dimensions	11-13/16" (L) x 4-3/4" (W) x 2-7/8 (H)
Weight	4.85 lb (2.2 kg)
Agency Certification	UL listed to UL60730 (to replace UL873) cUL certified to Canadian Standard C22.2 No. 24-93

### Wiring: (Cable)

Modulating with Optional AUX Switches



Pin	Cable Labeling			Meaning
	No.	Color	Abbr.	
Actuators	1	red	RD	System potential AC 24 V / DC 24...48 V
AC 24 V	2	black	BK	System neutral
DC 24...48 V	6	purple	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	grey	GY	Pos. signal DC 0...10 V, 0...35 V
	9	pink	PK	Position indication DC 0...10 V
Actuators	3	brown	BN	Phase AC 120/230 V
AC 120/230 V	4	blue	BU	Neutral conductor
Auxiliary switch	S1	grey/red	GY RD	Switch A input
	S2	grey/blue	GY BU	Switch A normally-closed contact
	S3	grey/pink	GY PK	Switch A normally-open contact
	S4	black/red	BK RD	Switch B input
	S5	black/blue	BK BU	Switch B normally-closed contact
	S6	black/pink	BK PK	Switch B normally-open contact

**NOTE: WARNING:** All DCS-140 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.