## **5 Bray** COMMERCIAL

Bray Controls Commercial Division 13788 West Road, Suite 200A Houston, Texas 77041 BCDSales@Bray.com Phone: 1-888-412-2729 Fax: 1-888-412-2720 www.braycommercialdivision.com



DM24-(70,140,210,280-(A)) — Submittal/Technical Data

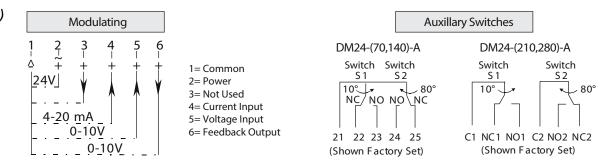
02/07/19

70,140,210,280 lb-in. — Non-Spring Return — Modulating — Auxiliary Switch Option

## **Specifications:**

Power Supply	AC 20 to 30 V at 50/60 Hz or DC 24 V $\pm$ 10%; 7.5 VA supply minimum; Class 2	
Input Signal	Modulating:	0 (2) to 10 VDC, 0 (4) to 20 VDC, or 0 (4) to 20 mA
Input Signal Adjustments	Factory Setting:	0 to 10 VDC, 0 to 20 mA, CW rotation with signal increase
	Jumper Selectable:	0 (2) to 10 VDC, 0 (4) to 20 VDC, or 0 (4) to 20 mA
	Action is jumper selectable Direct (CW) or Reverse (CCW) with signal increase.	
Control Input Impedance	205k Ohms	
Feedback Signal	0 to 10 VDC or 2 to 10 VDC for 90° (10 VDC at 1 mA) Corresponds to input signal span selection.	
Switch Contact Rating	Two SPDT (Single-Pole, Double-Throw) rated at 24 VAC 1.5A inductive, 3A resistive, 35 VA max. per switch, Class 2	
Mechanical Output	DM24-70	70 lb-in (8 Nm)
	DM24-140	140 lb-in (16 Nm)
	DM24-210	210 lb-in (24 Nm)
	DM24-280	280 lb-in (32 Nm)
Audible Noise Rating	45 dBA at 1 m	
Rotation Range	Adjustable from 0 to 90° in 5° increments, mechanically limited to 93°	
Rotation Timing	DM24-70	30 sec. at 50% rated load, 25 to 50 sec. for 0 to 70 lb-in (0 to 8 Nm)
	DM24-140	80 sec. at 50% rated load, 70 to 115 sec. for 0 to 140 lb-in (0 to 16 Nm)
	DM24-210	130 sec. at 50% rated load, 115 to 175 sec. for 0 to 210 lb-in (0 to 24 Nm)
	DM24-280	140 sec. at 50% rated load, 115 to 205 sec. for 0 to 280 lb·in (0 to 32 Nm)
Cycle Life	60,000 full stroke cycles	
Electrical Connection	Enclosed Terminal Block(s) for 22 to 14 AWG (insert a maximum of two 18, 20, or 22 AWG per terminal.)	
Mechanical Connection	3/8 to 3/4 in. (10 to 20 mm) diameter round shaft 3/8 to 5/8 in. (10 to 16 mm) square shaft	
Enclosure	NEMA 2, IP42	
Manual Override	External Push Button	
Ambient Conditions	Operating	-4 to 122°F (-20 to 50°C); 0 to 95% RH, non-condensing
	Storage	-40 to 186°F (-40 to 86°C); 0 to 95% RH, non-condensing
Dimensions (H x W x D)	7.09 x 3.94 x 2.54 in	. (180 x 100 x 64.5 mm)
Shipping Weight	2.9 lb (1.3 kg)	
Agency Compliance	United States UL 873 Listed, File E27734, CCN XAPX	
	Canada CSA C22.2 No. 139 Certified, File LR85083, Class 3221 02	
	Europe CE Mark - declares that this product is in compliance with the essential requirements and other relevant	
	provisions of the EMC Directive 2004/108/EC.	

## Wiring: (Terminal Block)



NOTE: WARNING: All D-70,140,210,280 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.

To avoid excessive wear or drive time on the motor, use a controller and/or software that provides a time-out function to remove the signal at the end of rotation (stall).

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.