

Modutrol IV Motors

M4185 Line Volt; M8185 Low Volt Two-Position Modutrol IV™ Series 2 Motors



Application Type: Electric
Fail Safe Mode: Spring Return
Control Signal: Two position, SPST
Feedback: No
Frequency: 50 Hz; 60 Hz
External Auxiliary Switches Available: Yes
Auxiliary Switch Ratings AFL - 120 Vac: 7.2A
Auxiliary Switch Ratings ALR - 120 Vac: 43.2A
Auxiliary Switch Ratings AFL - 240 Vac: 3.6A
Auxiliary Switch Ratings ALR - 240 Vac: 21.6A
Electrical Connections: Quick-connect terminals
Mounting: Foot-mounted
Motor Shafts: Dual-ended shaft
Shaft Shape: square
Shaft Dimensions: 0.375 in. (10 mm)
Shaft Rotation (upon control signal increase): Clockwise (as viewed from power end) (normally closed)
Deadweight Load on Shaft (Either End): 200 lbs.
Deadweight Load (Combined on both Shafts): 300 lbs.

Series 41 and Series 81 Modutrol IV motors are 2-position (line- and low-voltage per motor control) spring-return motors. They are used to operate dampers or valves in applications where it is necessary or desirable to have the controlled element return to the starting position in the event of power failure or interruption.

- Fixed torque throughout the entire voltage range
- Integral spring return returns motor to normal position in the event of power failure
- Integral junction box provides NEMA 3 weather protection if motor is mounted in the upright position
- Motor and circuitry operate from 24 Vac
- Quick-connect terminals are standard—screw terminal adapter is available
- Adapter bracket for matching shaft height of older motors is available
- Motors have field adjustable stroke (90 to 160 degrees)
- Motors are designed for either normally open or normally closed valves and dampers
- Integral auxiliary switches are available factory mounted, or can be field added
- Motors can operate valve linkages from the power end or auxiliary end shafts for normally closed or normally open valve applications
- All models have dual shafts (slotted and tapped on both ends)

Ambient Temperature Range: -40 F to +150 F (-40 C to +60 C)
Weight: 9.5 lb

Approvals

CE: EN55011 (Emission) EN50082-2 (Immunity) 73/23/EEC (LVD)
Underwriters Laboratories, Inc: Listed: File No. E4436, Guide No. XAPX for USA and Canada

Accessories:

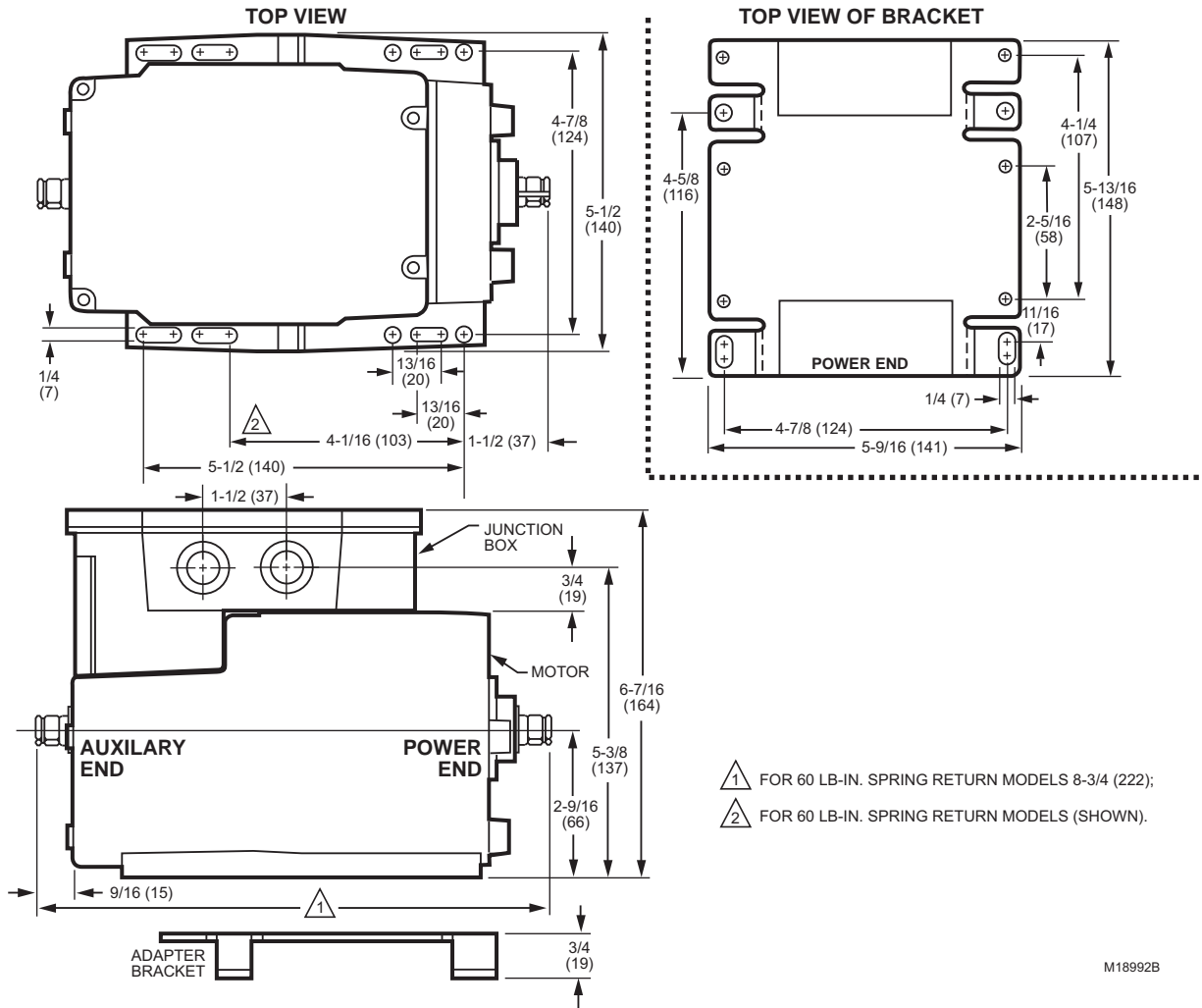
- 4074ERU-**Weatherproofing kit. Protects motor from driving rain when mounted in any position
- 220736A-**Internal Auxiliary Switch Assembly - 1 Switch
- 220736B-**Internal Auxiliary Switch Assembly - 2 Switches
- 220738A-**Adapter Bracket. Adjusts shaft height to match Modutrol III
- 220741A2-TP-**Screw Terminal Adapter Kit for 2 position Modutrol IV Series 2 motors - Converts quick-connect terminals to screw terminals
- 221455A-**Infinitely adjustable Motor Crank Arm
- 50017460-001-**24/120/230 Vac Internal Transformers for Series 2 and 3 Motors
- 50017460-003-**120 Vac Internal Transformers for Series 2 and 3 Motors

Product Number	Torque/Force		Voltage	Nominal Timing (sec)	Internal Auxiliary Switch	Factory Stroke Setting	Stroke	Includes	Internal Transformer
	lb-in., lb	Nm, N							
M4185A1001/U	60 lb-in.	6.8 Nm	120V	30-60 sec	0	160 degrees	Adjustable; 90 to 160 degrees, Asymmetrical	Transformer	50004263-003
M4185B1009/U	60 lb-in.	6.8 Nm	120V	30-60 sec	1	160 degrees	Adjustable; 90 to 160 degrees, Asymmetrical	Transformer	50004263-003
M4185B1058/U	60 lb-in.	6.8 Nm	24/120/230V	30-60 sec	1	90 degrees	Adjustable; 90 to 160 degrees, Asymmetrical	Transformer	50004263-001
M4185C1007/U	60 lb-in.	6.8 Nm	120V	30-60 sec	2	90 degrees	Adjustable; 90 to 160 degrees, Asymmetrical	Transformer	50004263-003
* M8185D1006/U	60 lb-in.	6.8 Nm	24V	30-60 sec	0	160 degrees	Adjustable; 90 to 160 degrees, Asymmetrical	—	None

* TRADELINE models • SUPER TRADELINE models

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Dimensions in inches (millimeters)



M18992B