

# Modutrol IV Motors

## M6284; M6294 Floating Modutrol IV™ Motors, for Slaving Applications only



These Series 62 Modutrol IV™ Motors non-spring return floating control motors are used with controllers that provide a switched SPDT or floating output to operate dampers or valves. These motors also have an internal electrically isolated feedback potentiometer that provides indication of the motor shaft position. Some models can be used for slaving Series 90 Motors.

**Application:** Electric

**Control Signal:** Floating

**Frequency:** 50 Hz; 60 Hz

**Fail Safe Mode:** Non-Spring Return

**Auxiliary Switch Ratings:** AFL - 120 Vac – 7.2A; ALR - 120 Vac – 43.2A; AFL - 240 Vac – 3.6A; ALR - 240 Vac – 21.6A

**Shaft Rotation (upon control signal increase):** Dependent on wiring (normally closed)

**External Auxiliary Switches Available:** Yes

**Mounting:** Foot-mounted

**Power Consumption:** Driving – 15 VA

**Feedback:** Yes

**Shaft Dimensions:** 0.375 in. Square (10 mm Square)

**Motor Shafts:** 2; Dual-ended shaft

**Deadweight Load on Shaft:** Either End – 200 lbs.; Combined on both Shafts – 300 lbs.

**Approximate, Dimensions:** 6 7/16 in. high x 5 1/2 in. wide x 7 5/16 in. deep (164 mm high x 140 mm wide x 185 mm deep)

**Ambient Temperature Range:** -40°F to +150°F (-40°C to +60°C)

**Approvals, Underwriters Laboratories Inc.:** Listed: File No. E4436, Guide No. XAPX for USA and Canada

- 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)
- Integral auxiliary switches are available factory mounted, or can be field added
- All models have dual shafts (slotted and tapped on both ends)
- All models have auxiliary switch cams
- Fixed torque throughout the entire voltage range
- Motors are designed for either normally open or normally closed valves and dampers
- Include electrically isolated feedback potentiometer that provides shaft position indication
- -S models with non-linear feedback are for slaving applications only

**Approvals, CE:** EN55011 (Emission) EN50082-2 (Immunity) 73/23/EEC (LVD)

**Approvals, RoHS:** 2011/65/ES

**Comments:** non-linear feedback, for slaving applications only

### Accessories:

**220736A/U** – Internal Auxiliary Switch Assembly - 1 Switch

**220736B/U** – Internal Auxiliary Switch Assembly - 2 Switches

**220738A/U** – Adapter Bracket. Adjusts shaft height to match Modutrol III motors

**220741A2-62/U** – Screw Terminal Adapter Kit for Series 62 Modutrol IV Series 2 motors - Converts quick-connect terminals to screw terminals

**221455A/U** – Infinitely adjustable Motor Crank Arm

**4074ERU/U** – Weatherproofing kit. Protects motor from driving rain when mounted in any position. Not needed if motor is mounted upright.

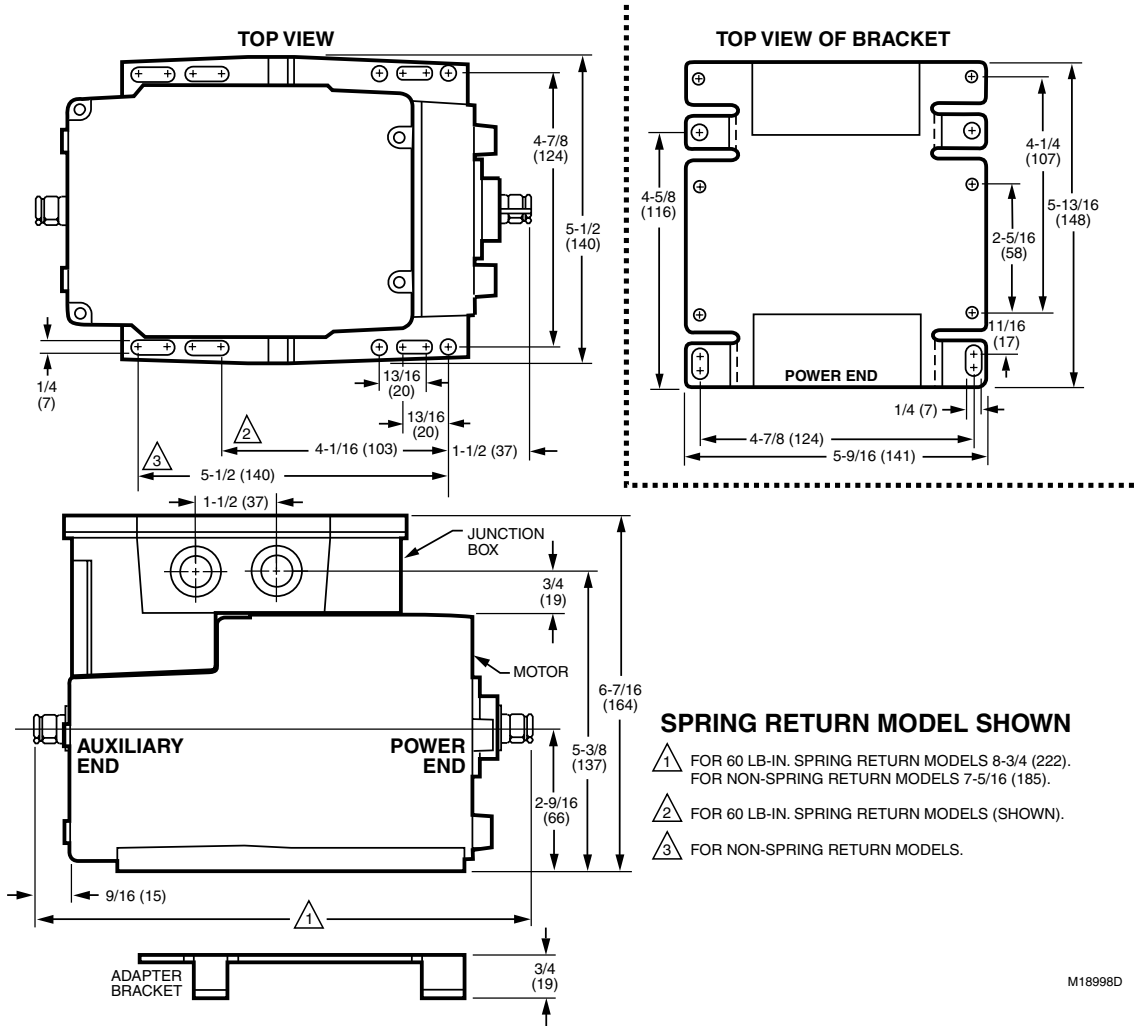
**50017460-001/U** – 24/120/230 Vac Internal Transformers for Series 2 Motors

**50017460-003/U** – 120 Vac Internal Transformers for Series 2 Motors

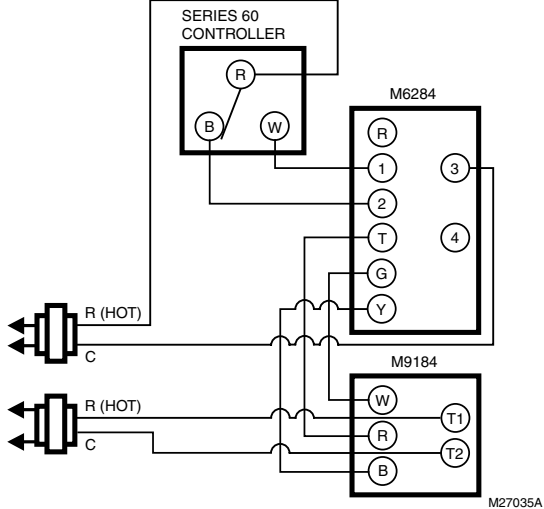
Material Number	Torque Rating (lb-in.)	Torque Rating (Nm)	Supply Voltage	Timing, Nominal	Internal Auxiliary Switch	Electrical Connections	Internal Transformer	Weight	Includes	Tradeline Value	Factory Stroke Setting	Stroke
M6284A1055-S/U	150 lb-in.	17 Nm	120V	30 - 60 sec	0	Quick-connect terminals	50004263-003	7.5 lb	Transformer		90 degrees	Adjustable; 90 to 160 degrees, Symmetrical
M6284A1071-S/U	150 lb-in.	17 Nm	120V	30 - 60 sec	0	Screw terminals	50004263-002	7.5 lb	Transformer		90 degrees	Adjustable; 90 to 160 degrees, Symmetrical
M6284A1089-S/U	75 lb-in.	8.5 Nm	120V	15 - 30 sec	0	Screw terminals	50004263-002	7.5 lb	Transformer		90 degrees	Adjustable; 90 to 160 degrees, Symmetrical
M6284A1097-S/U	150 lb-in.	17 Nm	24V	30 - 60 sec	0	Quick-connect terminals	None	6.5 lb			90 degrees	Adjustable; 90 to 160 degrees, Symmetrical
M6284C1010-S/U	150 lb-in.	17 Nm	24V	30 - 60 sec	2	Screw terminals	None	6.5 lb	Bag Assembly		90 degrees	Adjustable; 90 to 160 degrees, Symmetrical
M6284D1000-S/U	150 lb-in.	17 Nm	24V	30 - 60 sec	0	Quick-connect terminals	None	6.5 lb		Tradeline	160 degrees	Adjustable; 90 to 160 degrees, Symmetrical
M6284D1026-S/U	150 lb-in.	17 Nm	24V	30 - 60 sec	0	Quick-connect terminals	None	6.5 lb	220741A2-62 Screw Terminal Adapter Kit	Tradeline	90 degrees	Adjustable; 90 to 160 degrees, Symmetrical
M6284D4004-S/U	150 lb-in.	17 Nm	24V	30 - 60 sec	0	Quick-connect terminals	None	6.5 lb		Tradeline	160 degrees	Adjustable; 90 to 160 degrees, Symmetrical
M6284F1013-S/U	150 lb-in.	17 Nm	24V	30 - 60 sec	2	Quick-connect terminals	None	6.5 lb			160 degrees	Adjustable; 90 to 160 degrees, Symmetrical
M6284F1062-S/U	150 lb-in.	17 Nm	24V; 120V; 230V	30 - 60 sec	2	Quick-connect terminals	50004263-001	7.5 lb	Transformer		90 degrees	Adjustable; 90 to 160 degrees, Asymmetrical

Material Number	Torque Rating (lb-in.)	Torque Rating (Nm)	Supply Voltage	Timing, Nominal	Internal Auxiliary Switch	Electrical Connections	Internal Transformer	Weight	Includes	Tradeline Value	Factory Stroke Setting	Stroke
M6294D1008-S/U	300 lb-in.	34 Nm	24V	120 - 240 sec	0	Quick-connect terminals	None	6.5 lb		Tradeline	160 degrees	Adjustable; 90 to 160 degrees, Symmetrical

Dimensions in inches (millimeters)



**Series 60 and Series 90 motors in slaving application**



**Typical wiring for Series 62 motors**

