

Modutrol IV Motors

Modutrol IV™ Series 2 and Series 3 Family of Motors “Contractor-Friendly” design for service and retrofit



Modutrol IV™ Series 2 and Series 3 Motors replace all present generation Modutrol motors and set a new, certifiable standard for the industry. Modutrol IV™ Series 2 and Series 3 Motors retain all the features that make Honeywell Modutrol motors the most reliable produced, and go even further with many quality improvements.

Our engineers have incorporated Design for Six Sigma methodology and Electronic Excellence to re-engineer this popular product. The motor has undergone a technology update integrating the proven DCA (Direct Coupled Actuator) microprocessor based design into the existing footprint of a Mod Motor.

The Series 2 and Series 3 Motors provide these features and benefits:








- 1. Dual shafts.** Slotted and tapped at both ends. Both drive and auxiliary shafts have equal torque ratings, allowing auxiliary shaft to drive full torque loads. This provides a more flexible motor. For example, a spring-return, normally closed motor will provide normally open operation simply by using the auxiliary shaft.
- 2. NEMA 3 housing.** Modutrol IV™ motor housings protect the motor from driving rain if motor is mounted in the upright position (as shown in above photo). May be mounted outdoors without a weatherproofing kit.

- 3. Brushless DC sub motor** provides a fixed torque over the entire voltage range.
- 4. Reduced power consumption.** Motor power needs can always be satisfied with a 20 VA transformer.
- 5. Internal quality improvements.** Results in improved performance and longer life. These quality improvements include:
 - Microprocessor based technology eliminated the need for mechanical end stops.
 - Brushless DC sub motor eliminates the need for oil.
- 6. Auxiliary Switch cams.** All models have auxiliary switch cams that permit acceptance of 220736A,B Internal Auxiliary Switch Kits.
- 7. Field Adjustable stroke.** Most models are field adjustable (i.e. 90 to 160 degrees).

TRADELINER motors and appropriate accessories can be configured to replace all previous Honeywell Modutrol motors, as well as most OEM modutrol motors. The appropriate accessories are listed with the different models and in tables near the end of this section.

Modutrol IV™ Family of Motors

The following Modutrol IV™ motors can replace the old style Modutrol motors as shown below.

	Mod IV Replacement	Old Motors Replaced
Non-Spring Return	M6184 M9164 M6194 M9174 M6284 M9184 M6294 M9194 M7164 M9484 M7284 M9494 M7294 	M644 M744 M941 M944 M954 M734 M934  
Spring Return	M4185 M7685 M6285 M8185 M7285 M9185 M7286 	M445 M745 M845 M945 M955 
Medium Torque Spring Return	M9175 	M765 M865 M965 M975 

Modutrol IV Motors

The Honeywell Family of Modutrol IV™ Series 2 and Series 3 Motors

Actuator	Voltage Vac			Stroke	Timing	Control Input			Torque (lb-in.)					Spring Return	Recommended Controller	
	24 ^a	120	230			On/Off	SPDT Floating	Modulating	35	60	75	150	300			
<i>*TRADELINE models.</i>																
M4185A1001/U		●		90-160	30-60	●					●				●	T775; T4031
M4185B1009/U		●		90-160	30-60	●					●				●	T775; T4031
M4185B1058/U	●	●	●	90-160	30-60	●					●				●	T775; T4031
M4185C1007/U	●	●		90-160	30-60	●					●				●	T775; T4031
M6184A1015/U	●			90-160	30-60		●					●				T775; T675; T678; T6031
M6184A1023/U		●		90-160	15-30		●					●				T775; T675; T678; T6031
M6184D1001/U	●			90-160	15-30		●					●				T775; T675; T678; T6031
*M6184D1035/U	●			90-160	30-60		●						●			T775; T675; T678; T6031
M6184D1068/U	●			90-160	120-240		●						●			T775; T675; T678; T6031
M6184F1014/U	●			90-160	30-60		●						●			T775; T675; T678; T6031
*M6194B1011/U	●			90-160	60-120		●							●		T775; T675; T678; T6031
*M6194D1017/U	●			90-160	120-240		●							●		T775; T675; T678; T6031
M6194E1006/U	●			90-160	120-240		●							●		T775; T675; T678; T6031
M6284A1055		●		90-160	30-60		●						●			T775; T675; T678; T6031
M6284A1071		●		90-160	30-60		●						●			T775; T675; T678; T6031
*M6284D1000	●			90-160	30-60		●						●			T775; T675; T678; T6031
*M6284D1026	●			90-160	30-60		●						●			T775; T675; T678; T6031
M6284F1013	●			90-160	30-60		●						●			T775; T675; T678; T6031
*M6285A1005	●			90-160	30-60		●							●		T775; T675; T678; T6031
M6285C1001	●			90-160	30-60		●							●		T775; T675; T678; T6031
*M6294D1008	●			90-160	120-240		●							●		T775; T675; T678; T6031
M7164A1017/U ^b	●			90-160	30-60				10.5-13.5 Vdc		●					T775; W7080
M7164G1030/U ^b		●		90-160	30-60				10.5-13.5 Vdc		●					T775; W7080
M7284A1004/U ^b		●		90-160	30-60				4-20 mA				●			T775, EXCEL 5000
M7284A1012/U ^b		●		90-160	30-60				4-20 mA				●			T775, EXCEL 5000
M7284A1038/U ^b		●		90-160	15-30				4-20 mA			●				T775, EXCEL 5000
M7284A1079/U ^b	●			90-160	30-60				2-10 Vdc				●			T775, EXCEL 5000
M7284C1000/U ^b		●		90-160	30-60				4-20 mA				●			T775, EXCEL 5000
M7284C1083/U	●			90	30		●		4-20 mA				●			DDC
M7284C1091/U	●			160	60		●		4-20 mA				●			DDC
M7284Q1009/U ^b		●		90-160	30-60				4-20 mA				●			T775, EXCEL 5000
M7284Q1082/U	●			90	30		●		4-20 mA				●			DDC
M7284Q1090/U	●			160	60		●		4-20 mA				●			DDC
M7285A1003/U ^b		●		90-160	30-60				4-20 mA		●			●		T775, EXCEL 5000
M7285A1045/U ^b	●			90-160	30-60				2-10 Vdc		●			●		T775, EXCEL 5000
M7285C1009/U ^b		●		90-160	30-60				4-20 mA		●			●		T775, EXCEL 5000
M7285Q1008/U ^b		●		90-160	30-60				4-20 mA		●			●		T775, EXCEL 5000
M7286G1009/U ^b	●			90-160	30-60				2-10 Vdc		●			●		T775, EXCEL 5000
M7294A1010/U ^b	●			90-160	60-120				2-10 Vdc				●			T775, EXCEL 5000
M7294Q1007/U ^b		●		90-160	60-120				4-20 mA				●			T775, EXCEL 5000
M7685A1025/U ^{b,c}	●			90-160	30-60				14-17 Vdc		●			●		T775; W7080
*M8185D1006/U	●			90-160	30-60	●					●			●		T775
M9164A1005/U		●		90-160	30-60				135 ohm		●					T775; T915; T991

^a All 24 Vac Modutrol motors have CE approval.

^b Available only through Honeywell Authorized Distributors.

^c Includes minimum position potentiometer.

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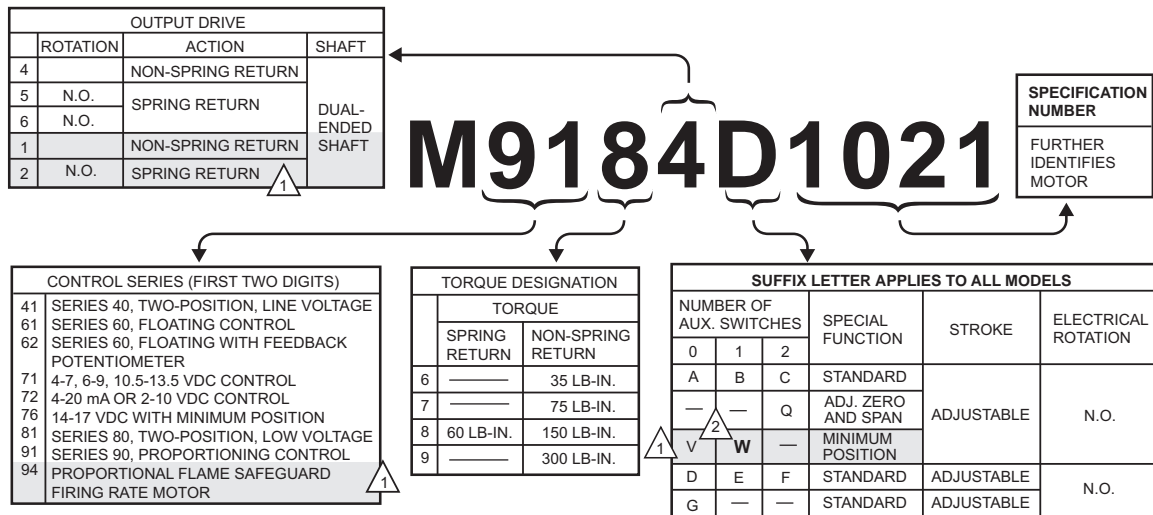
Actuator	Voltage Vac			Stroke	Timing	Control Input			Torque (lb-in.)					Spring Return	Recommended Controller
	24 ^a	120	230			On/Off	SPDT Floating	Modulating	35	60	75	150	300		
*TRADELINE models.															
M9164A1013/U	●	●	●	90-160	30-60			135 ohm	●						T775; T915; T991
M9164A1070/U	●			90-160	30-60			135 ohm	●						T775; T915; T991
M9164C1001/U	●			90-160	30-60			135 ohm	●						T775; T915; T991
M9164C1068/U		●		90-160	30-60			135 ohm	●						T775; T915; T991
*M9164D1009/U	●			90-160	30-60			135 ohm	●						T775; T915; T991
M9174B1027/U		●		90-160	30-60			135 ohm			●				T775; T915; T991
M9174C1025/U		●		90-160	30-60			135 ohm			●				T775; T915; T991
M9174C1033/U		●		90-160	30-60			135 ohm			●				T775; T915; T991
*M9174D1007/U	●			90-160	30-60			135 ohm			●				T775; T915; T991
M9184A1019/U	●			90-160	30-60			135 ohm				●			T775; T915; T991
M9184C1031/U	●			90-160	30-60			135 ohm				●			T775; T915; T991
M9184D1005/U	●			90-160	15-30			135 ohm			●				T775; T915; T991
*M9184D1021/U	●			90-160	30-60			135 ohm				●			T775; T915; T991
M9184F1034/U	●			90-160	30-60			135 ohm				●			T775; T915; T991
M9185A1018/U	●			90-160	30-60			135 ohm		●			●		T775; T915; T991
M9185C1006/U	●			90-160	30-60			135 ohm		●			●		T775; T915; T991
*M9185D1004/U	●			90-160	30-60			135 ohm		●			●		T775; T915; T991
M9185E1019/U	●			90-160	30-60			135 ohm		●			●		T775; T915; T991
*M9194D1003/U	●			90-160	120-240			135 ohm					●		T775; T915; T991
M9194E1000/U	●			90-160	120-240			135 ohm					●		T775; T915; T991

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^c Includes minimum position potentiometer.

Modutrol IV™ Series 2 and Series 3 Motor Order Number Guide



1 MODEL NUMBERS IN SHADED AREAS ARE AVAILABLE SPECIAL ORDER ONLY. CONTACT YOUR HONEYWELL SALES REPRESENTATIVE.

2 SUFFIX LETTERS IN BOLD ARE OBSOLETE.

M13696A