

SYMAX PERMANENT MAGNET AC MOTORS

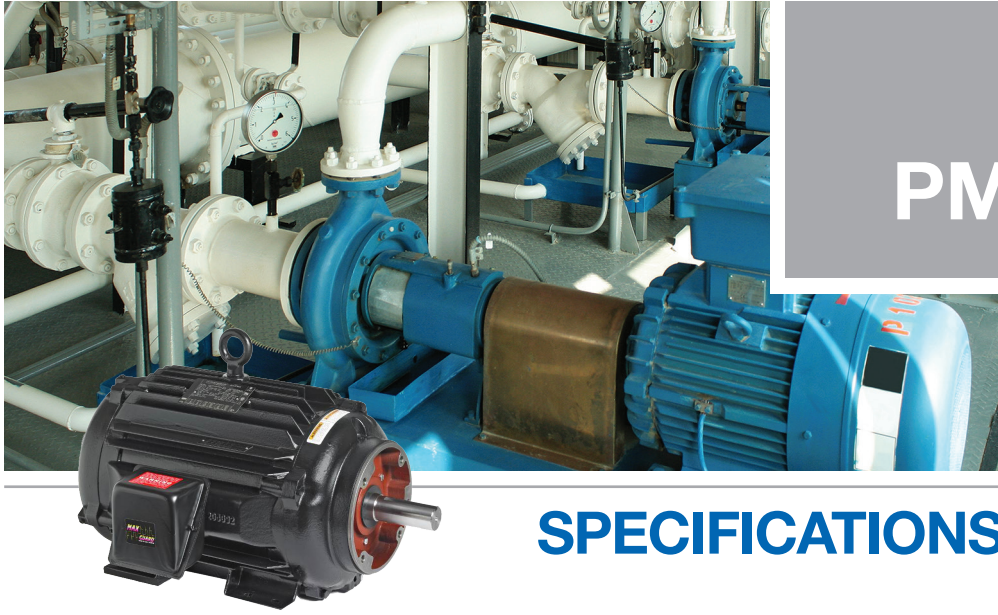
PERMANENT MAGNET MOTORS 1/2 TO 30 HP, 1800 RPM

Marathon Electric has built on our legacy of innovation by combining magnetics and motors into a single leading technology. The use of Magnology™ has led to the development of the next generation of technology in motor efficiency and performance, the SyMAX® motor. The SyMAX permanent magnet AC motors offer unique solutions for today's demanding applications. This product's unparalleled power density, unprecedented performance and unmatched efficiency is another industry first.

FEATURES

- "Ultra-Efficient™ - Significant energy savings over AC Induction
- Max Guard® insulation system
- Normal form factor (NEMA or IEC mounting and dimensions)
- High Power Factor
- Reduced operating temperature
- Low vibration
- Sound levels exceed requirements in IEEE841 specification
- Low cogging torque
- Optimized Back EMF
- Full torque at zero speed (Infinity:1)
- Normal form factor (NEMA or IEC mounting and dimensions)
- Terminal block connections
- LowCog™ design
- Wide speed range (up to 2000:1 constant torque)
- WorryFree™ bearing system
- Design-Ready to accept internally mounted AEGIST™ SGR
- Interior Permanent Magnet topology
- Wide air gap
- Precision balanced to < 0.08 in/s vibrational velocity
- Low inertia rotor
- High torque per amp
- Comprehensive nameplate
- UL Recognized, CSA Certified
- CE Mark

SyMAX® motors are inherently more efficient due to the elimination of rotor conductor losses. With more of its electrical power converted to useful work, and less waste energy in the form of heat, SyMAX® operates much cooler than traditional NEMA Premium® induction motors, resulting in longer life.



SYMAX PM MOTORS

SPECIFICATIONS

HP	RPM	Volts	NEMA Frame	Full Load Amps	Approx. Shipping Weight (lb)	Model No.	Footnotes
1/2	1800	230/460	56C	1.86/0.93	13	MTRSY001	1
1	1800	230/460	56C	3.55/1.78	18	MTRSY003	1
1.5	1800	230/460	56C	5.48/2.74	23	MTRSY004	1
2	1800	230/460	56C	6.32/3.16	28	MTRSY005	1
3	1800	460	182TC	3.8	99	MTRSY006	2
5	1800	460	184TC	6.4	108	MTRSY007	2
7.5	1800	460	213TC	9.4	152	MTRSY008	2
10	1800	460	215TC	11.8	166	MTRSY009	2
15	1800	460	254TC	18.5	204	MTRSY010	2
20	1800	460	256TC	22.9	253	MTRSY011	2
25	1800	460	284TC	28.1	396	MTRSY012	2
30	1800	460	286TC	33.7	416	MTRSY013	2

1: Totally Enclosed, Non-Ventilated

2: Cast iron construction

OPTIONS

Add the following to the end of the model number for each option

- F2: F2-F2 mount conduit box
- D: Dynapar HS35 1024ppr encoder
- A1: Avtron HS35A 1024ppr encoder
- L: Lakeshore / Northstar SL56 1024ppr encoder
- M1: Avtron AV56 1024ppr encoder

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