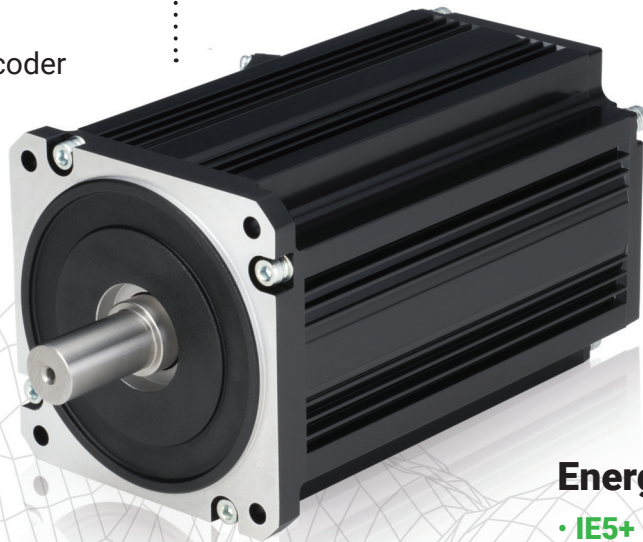


EM-A series

Mitsubishi Electric Sensorless Servo

High performance

- Accurate speed control
- Positioning without encoder



Downsizing

- Volume ratio reduced by around 50%
- Reduced mass

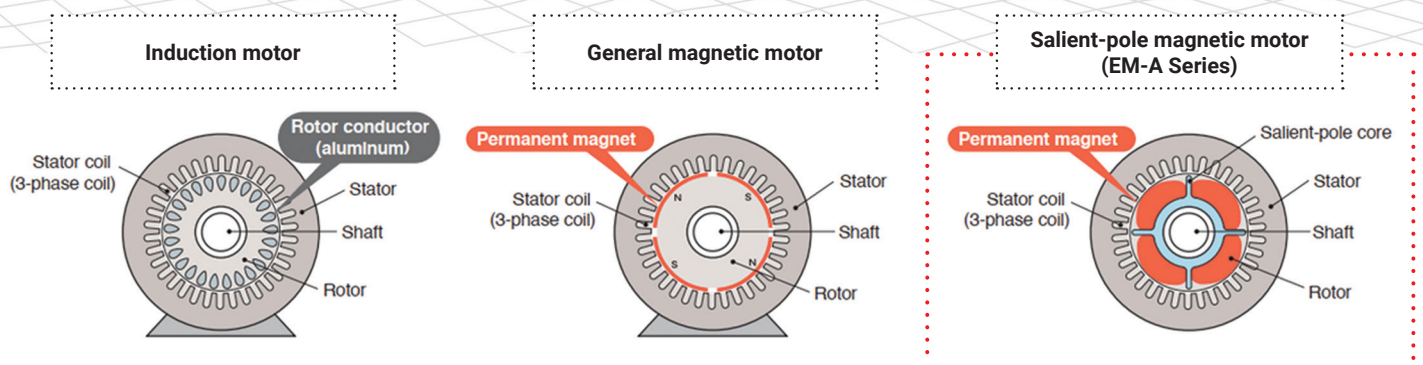
Energy saving

- **IE5+** efficiency class
- Reduced Energy consumption
- Reduced CO2 emission

EM-AMF **B** **K** **W** **0.2KW**

Symbol	Brake	Symbol	Shaft type	Symbol	Protection	Symbol	Output
-	Without brake	-	Without key	-	IP44	0.1 KW	Motor power
B	With brake	K	With key	W	IP65	0.2 KW	
						0.4 KW	
						0.75 KW	
						1.5 KW	
						2.2 KW	

Motor structure (sectional view)



FR-E800 + EM-A series motor - benefits

- Highly efficient drive system (IE5+)
- Precise speed control comparable to that by servo motors
- Positioning control without encoder
- Servo lock function
- Compact design and low weight



Drive system example sets:

Power	Inverter			Motor	
100W	504752	FR-E820S-0008EPB-60	+	679074	EM-AMF 0.1KW 130V 100HZ
200W	504753	FR-E820S-0015EPB-60	+	679082	EM-AMF 0.2KW 135V 100HZ
400W	504754	FR-E820S-0030EPB-60	+	679090	EM-AMF 0.4KW 160V 100HZ
750W	504755	FR-E820S-0050EPB-60	+	679098	EM-AMF 0.75KW 165V 100HZ
1,5kW	504756	FR-E820S-0080EPB-60	+	679106	EM-AMF 1.5KW 170V 150HZ
2,2kW	504757	FR-E820S-0110EPB-60	+	679114	EM-AMF 2.2KW 165V 150HZ



Output [kW]		0.1	0.2	0.4	0.75	1.5	2.2
Number of Poles		4P				6P	
Compatible drive unit: FR-E820S-[]		0008	0015	0030	0050	0080	0110
Rated motor rotation speed [r/min]		3000					
Max. Motor rotation speed [r/min]		4000					
Motor rated voltage(V)		135	135	160	165	170	165
Motor rated current(A)		0,55	1,1	1,8	3,3	6,1	9,3
Motor rated torque(Nm)		0,32	0,64	1,27	2,39	4,78	7
Motor max. torque(%)		200					
Positioning accuracy(p/rev)		200					
Rating		Continuous					
Allowable output shaft overhang load(N)*3		392		490		686	
Allowable output shaft thrust load(N)		196		294		490	
Heat resistance class		130(B)					
Moment of inertia J(×10 ⁻⁴ kg·m ²)	Without brake	1,51	1,51	3,72	5,43	11,4	16,5
	With brake	1,53	1,53	4,03	5,74	12,2	17,3
Recommended moment of load inertia ratio		10× or less					
Enclosure rating		Indoor type (IP44)*1, Dust and waterproof type (IP65)*1 *2					
Enclosure structure		Totally-enclosed self-cooling type					
Ambient temperature/relative humidity		0 to +40°C / RH 90% or less					
Altitude		Up to 1000 m above sea level					
Vibration		Constant 4.9 m/s ² , instantaneous 9.8 m/s ² or less					
Brake type		DC spring holding type (IP44: 90 V DC, IP65: 24 V DC) (Brake torque 150% or more/allowable number of braking operations 1000 times/mechanical life 1,000,000 times)					
Paint color		Black (equivalent to Munsell N1.5)					
Weight(kg)	Without brake	2,9	2,9	4,9	6,4	9,5	11,7
	With brake	3,9	3,9	6,7	8,2	12,2	14,4

*1: Excludes part where shaft passes through.

*2: With EM-AMF[]W

*3: Load position is at center of output shaft

Interested? contact us!

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