



RSM

Rugged Brushless PMAC Motors

In the demanding world of construction and mobile equipment, reliable power is essential. That's why our RSM electric motor delivers industry-leading performance with efficiency, durability, and versatility. Perfect for a wide range of applications, including: Industrial equipment, Marine, Off Highway, and more.

Unmatched Reliability – Engineered for consistent performance and long-lasting durability. With advanced technology and robust construction, it ensures minimal maintenance and maximum uptime.

Energy Efficient – Featuring a permanent magnet design, RSM motors generate more power while consuming less Power, reducing operational costs.

Rugged Design – minimal moving parts and a refined build, the RSM motors ensure long-lasting performance with reduced downtime. Suitable for demanding environments with an IP54 rating

Quiet & Smooth Operation – Ideal for environments where noise reduction is crucial, it operates smoothly and quietly, ensuring a comfortable and productive work environment

Compact & Lightweight – Easy to integrate into any application. Lightweight yet powerful, it offers flexibility and ease of installation without compromising on performance

Models

RSM170-120

RSM170-170

RSM170-240





Motor Data

RSM Model Number			170-120 A	170-170 A	170-240 A	
Performance	Tq S2-2m	2 min torque	Nm	74.0	111.1	155.2
			Lb-Ft	54.6	81.9	114.5
	Tq S2-60m	60 min torque	Nm	27.2	41.0	54.2
			Lb-Ft	20.0	30.2	40.0
	Kb	Back EMF Constant (22°C)	Vrms/kRPM	12.3	12.5	13.6
			Vpk/rad/sec	0.17	0.17	0.18
Kt (loaded)	Kt (hot, 60min load)	N-m/Arms	0.18	0.18	0.21	
		Lb-Ft / Arms	0.13	0.13	0.15	
Electrical	Rm Lm	Resistance (L-L)	mΩ	7.6	4.5	3.8
		Inductance (L-L) avg	μH	143	98	87
	I(2m)	2 min current	Arms	380	560	700
	I(60m)	60 min current	Arms	150	230	265
	I(max)	Max safe intermittent current	Arms	400	560	700
Mechanical	Nmax	Max Rated Speed	RPM	4200	4200	4200
	Rth	Thermal Resistance	°C/Watt	0.356	0.302	0.24
	Poles	Number Of Motor Poles	#	8	8	8
Dimensions	Length		mm	272	322	392
	Width		mm	204	204	240
	Height		mm	217	217	217

Recommended Inmotion Motor Controller

Motor	48V	80V	96V
170-120 A	ACS48M45	ACS80M40	ACS96M40
170-170 A	ACS48M55	ACS80L60	ACS96M60
170-240 A	ACS48L90	ACS80L70	ACS96L70