

HIGH-PERFORMANCE BRUSHLESS MOTORS Ø60



36V

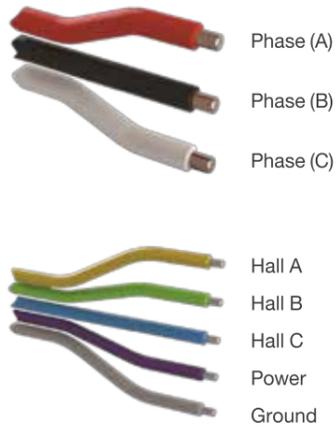
EBL74S1K12A2-36

48V

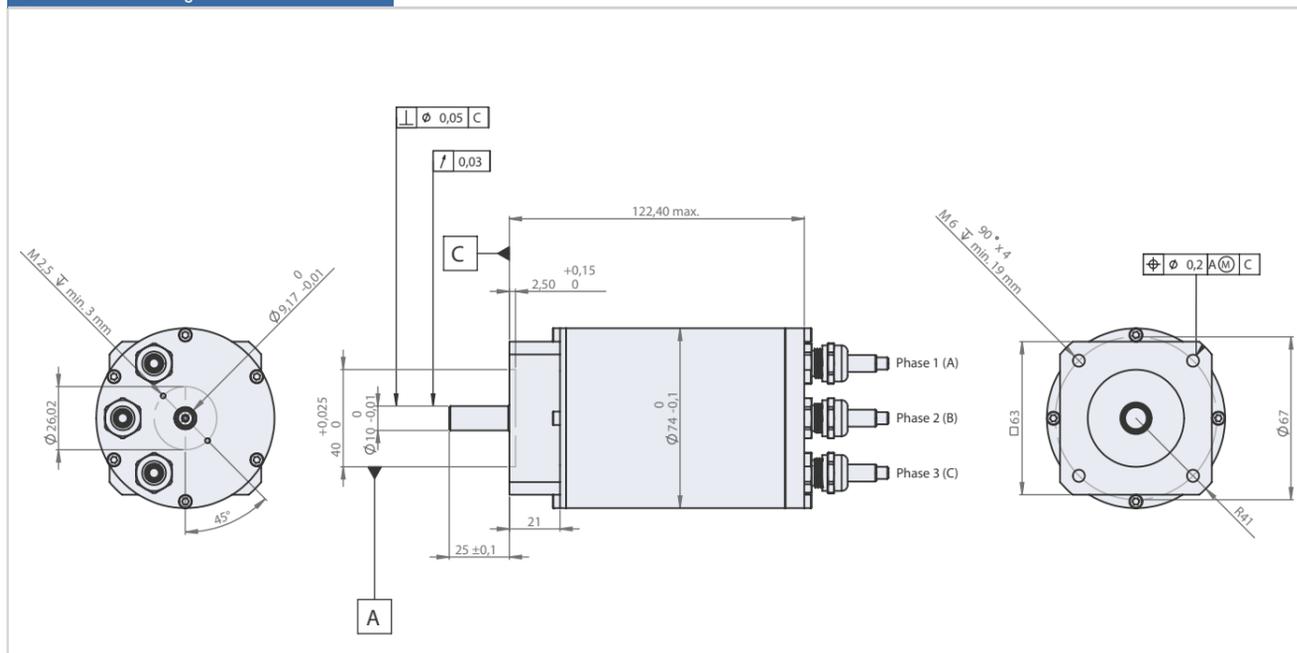
EBL74S1K12A2-48

60V

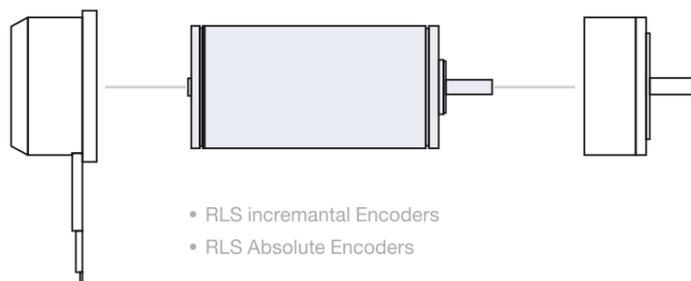
EBL74S1K12A2-60



Dimensional Drawing



Modular System



Product Adaptations

- Other dimensions
- Without housing
- Without hall sensors
- With temperture sensor
- Connector options recording to customer needs

Basic Motor Parameters

		EBL74S1K12A2-36	EBL74S1K12A2-48	EBL74S1K12A2-60
Nominal Speed	RPM	10740	14674	12083
Nominal Power	W	1500	1500	1500
Maximum Continuous Torque	Nm	1.33	0.97	1.18
Nominal Current	A	37	22	22
No-Load Speed	RPM	11750	15677	13064
Efficiency	%	91	89	90
Stall Torque	Nm	25.34	27.28	27.24
Stall Current	A	2815	3754	2481

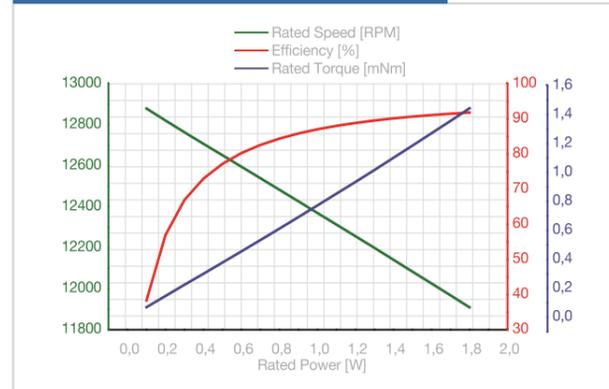
Electrical Characteristics

		EBL74S1K12A2-36	EBL74S1K12A2-48	EBL74S1K12A2-60
Number of Phases		3	3	3
Number of Poles		4	4	4
Operating Temperature	°C	-55 >> +85	-55 >> +85	-55 >> +85
Phase-to-Phase Resistance	mΩ	12.76 ± 10%	12.76 ± 10%	25.12 ± 10%
Phase-to-Phase Inductance	mH	0.023 ± 10%	0.022 ± 10%	0.050 ± 10%
Rated-Torque Constant	mNm/A	29.17 ± 10%	27.74 ± 10%	42.98 ± 10%
Back -EMF Constant	Vs/rad	29.49 ± 10%	29.94 ± 10%	44.23 ± 10%
Dielectric Strength at 1000V	MΩ	500 (min.)	500 (min.)	500 (min.)

Physical Characteristics

		EBL74S1K12A2-36	EBL74S1K12A2-48	EBL74S1K12A2-60
Service Life	h	18000	17000	17500
Weight	g	2795 ± 10%	2795 ± 10%	2795 ± 10%
Length	mm	189 (max.)	189 (max.)	120 (max.)
Outer Diameter	mm	74 (max.)	74 (max.)	48 (max.)
Shaft Diameter	mm	10	10	10
Bearing		NSK Ball Bearing	NSK Ball Bearing	NSK Ball Bearing

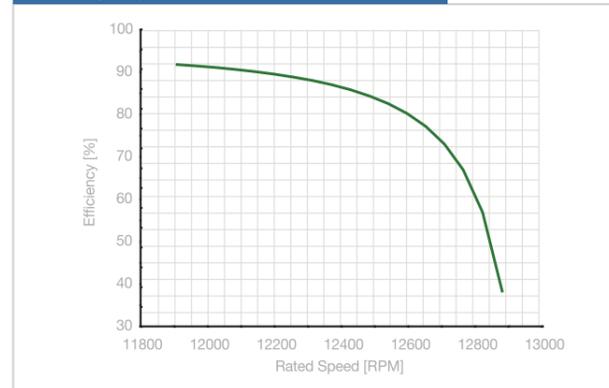
Performance Chart @48V



Torque – Speed Chart @48V



Efficiency – Speed Chart @48V



Power – Speed Chart @48V

