

# BRUSHLESS ELECTRIC VEHICLE MOTORS Ø275-90



**48V**

EHUB275K9A1-48

**72V**

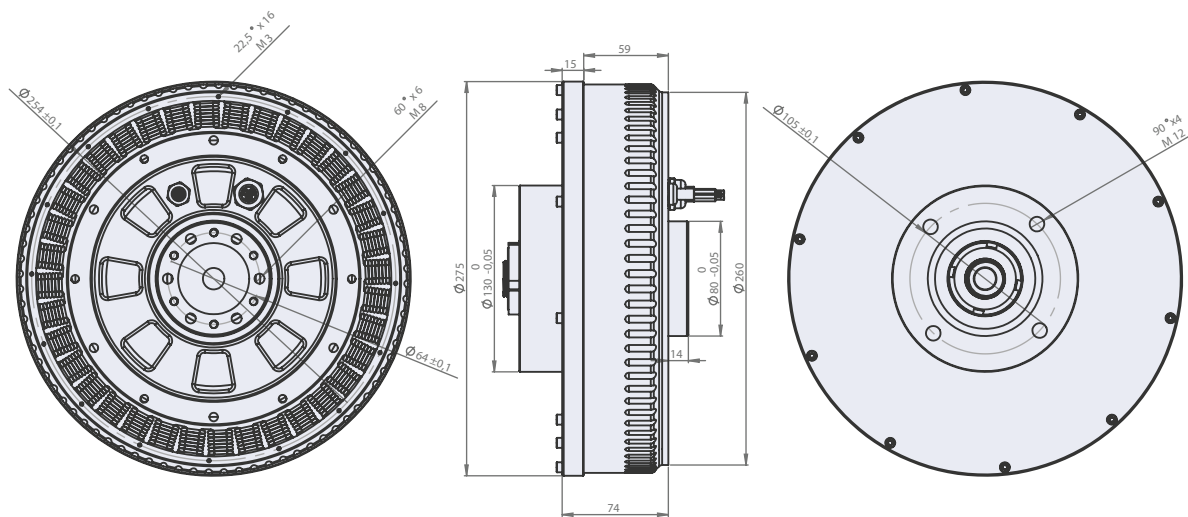
EHUB275K9A1-72

**96V**

EHUB275K9A1-96



## 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

		EHUB275K9A1-48	EHUB275K9A1-72	EHUB275K9A1-96
Nominal Speed	RPM	888	785	740
Nominal Power	W	2500	2500	2500
Maximum Continuous Torque	Nm	26.86	30.39	32.24
Nominal Current	A	48.71	33.04	25.03
No-Load Speed	RPM	1029	926	882
Efficiency	%	91.5	92	92
Stall Torque	Nm	741	722	702
Stall Current	A	2507	1419	955

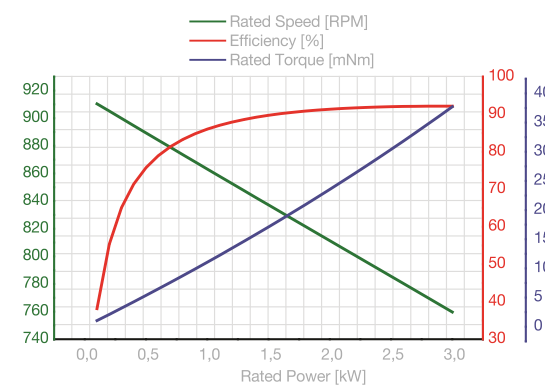
## Electrical Characteristics

		EHUB275K9A1-48	EHUB275K9A1-72	EHUB275K9A1-96
Number of Phases		3	3	3
Number of Poles		32	32	32
Operating Temperature	°C	-55 >> +85	-55 >> +85	-55 >> +85
Phase-to-Phase Resistance	mΩ	19.10 ± 10%	50.64 ± 10%	100.3 ± 10%
Phase-to-Phase Inductance	mH	0.096 ± 10%	0.26 ± 10%	0.52 ± 10%
Rated-Torque Constant	mNm/A	0.47 ± 10%	0.80 ± 10%	1.13 ± 10%
Back -EMF Constant	Vs/rad	0.44 ± 10%	0.74 ± 10%	1.04 ± 10%
Dielectric Strength at 1000V	MΩ	500 (min.)	500 (min.)	500 (min.)

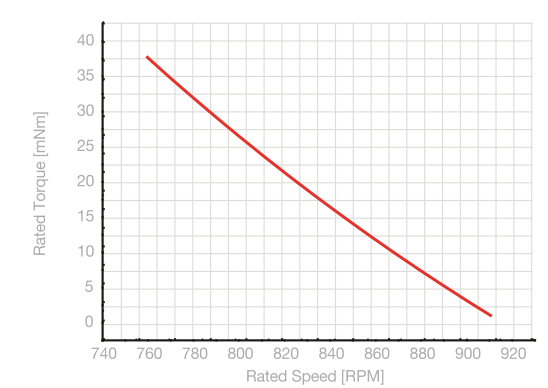
## Physical Characteristics

		EHUB275K9A1-48	EHUB275K9A1-72	EHUB275K9A1-96
Service Life	h	20000	20000	20000
Weight	g	13 ± 10%	13 ± 10%	13 ± 10%
Length	mm	75 (max.)	75 (max.)	75 (max.)
Outer Diameter	mm	275 (max.)	275 (max.)	275 (max.)
Shaft Diameter	mm	Hub	Hub	Hub
Bearing		NSK Ball Bearing	NSK Ball Bearing	NSK Ball Bearing

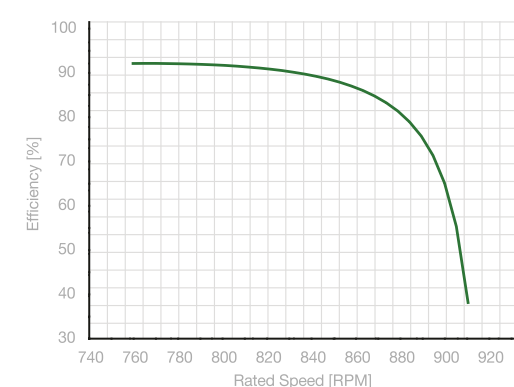
## Performance Chart @48V



## Torque – Speed Chart @48V



## Efficiency – Speed Chart @48V



## Power – Speed Chart @48V

