

# FAN MOTOR

## Brushless Permanent Magnet AC Type Fan Motor



### Application: BLAC

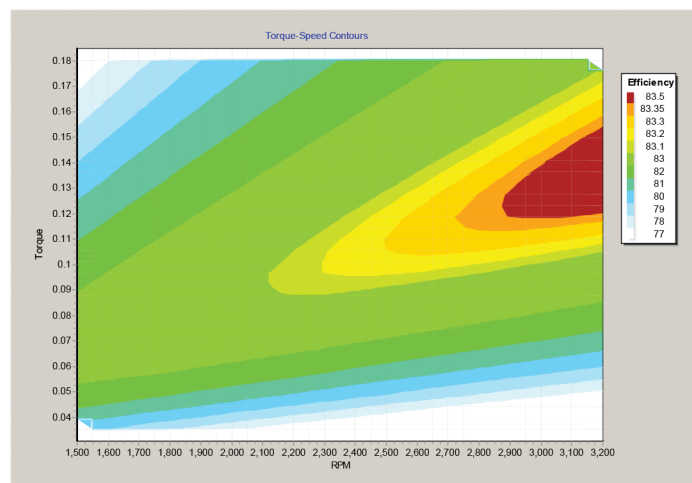
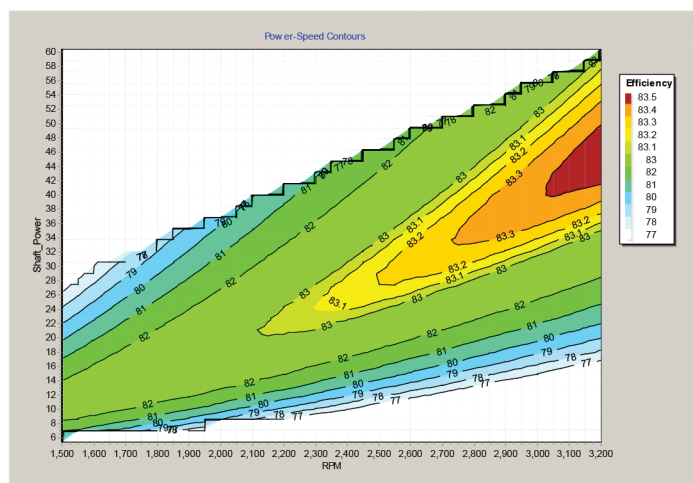
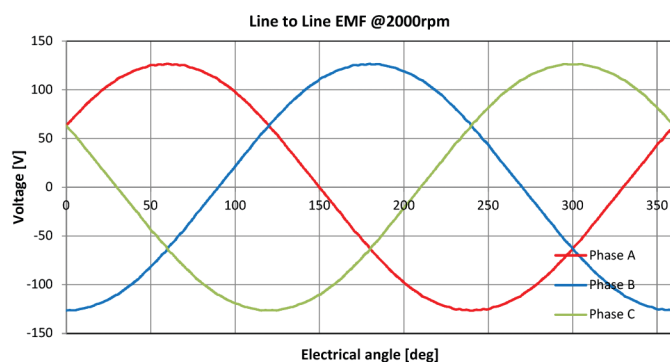
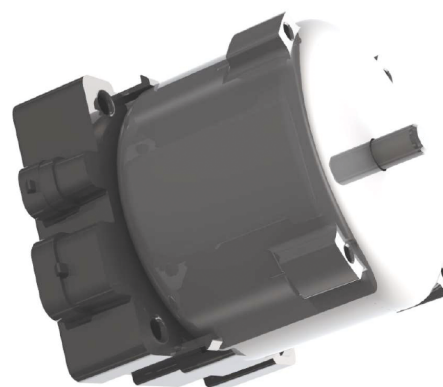
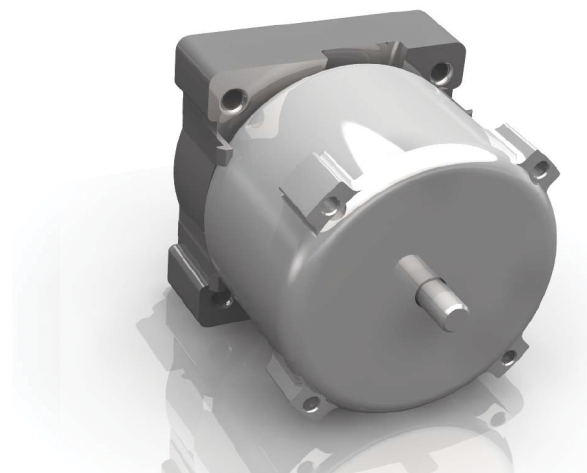
Fan motor up to 75W output power  
 Permanent ferrite magnets in rotor  
 Electronic sensorless speed controlled motor, variable speed 1000 - 3500rpm  
 Sinusoidal (FOC) drive technology (pure sine emf, THD<1%)  
 Integrated electronic  
 Self cooling  
 3 phase stator winding  
 Low noise due to 6 pole rotor and optimized lowest cogging torque  
 High efficiency, higher than %80  
 Roller Bearing  
 Running at lower voltage (min. 150V AC), high startup torque

**Rated Voltage** 220/240 V AC 50/60 Hz  
 110/120V AC 60Hz is possible  
**Isolation Class** F

**Overload Protection** Class B software (VDE)  
**Relative Humidity** Max.95%  
**Ambient Temp.** 0°C to 70°C

**Duty Cycle** Continuous

**Weight** < 2.5 kg



### Performance measurements

rpm	P <sub>out</sub> [kW]	ULL [V]	Phase current [A]	T [Nm]	Eff [%]
1250	31.25	100	0.27	0.289	72.4
1500	37.5	115	0.27	0.289	75.4
1750	43.75	131	0.27	0.289	77.7
2000	50	146	0.27	0.289	79.4
2250	56.25	162	0.27	0.289	80.7
2500	62.5	177	0.27	0.289	81.8
2750	68.75	193	0.27	0.289	82.7
<b>3000</b>	<b>75</b>	<b>208</b>	<b>0.27</b>	<b>0.289</b>	<b>83.3</b>
3250	81.25	224	0.27	0.289	83.9
3500	87.5	239	0.27	0.289	84.4

### Performance constants

Motor phase resistance@25°C 51.3 ohm  
 Motor phase self inductance 123 mH  
 Line to star d and q-axis inductance 185 mH  
 EMF constant 0.75 Vs/rad  
 Torque constant 0.91 Nm/A