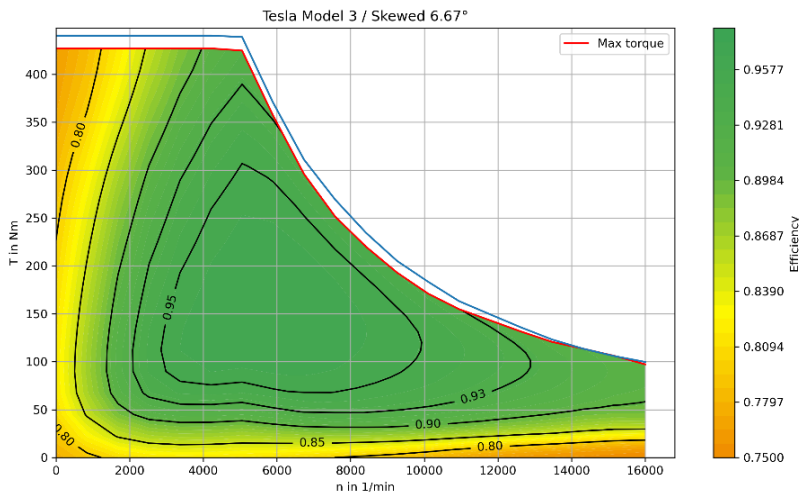


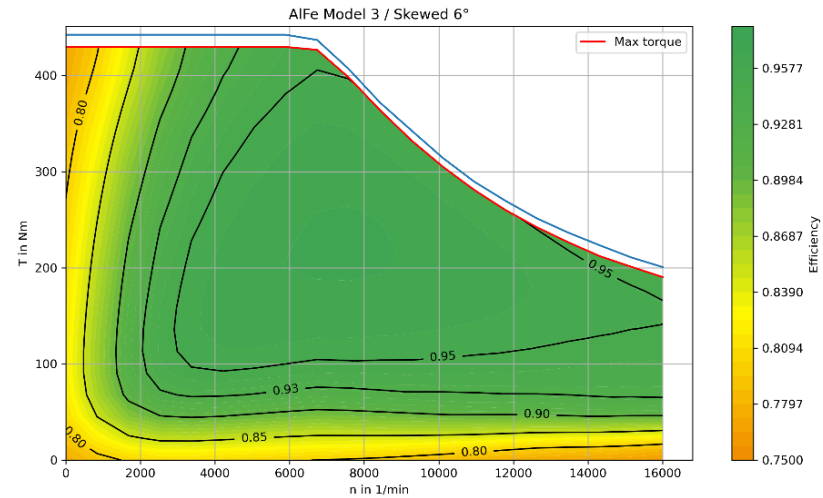


USE OF FERRITE MAGNETS AND ALUMINIUM WINDING FOR **LIGHT WEIGHT LOW COST** LIQUID COOLED EV MOTORS

An AlFe motor with similar performance to the Tesla Model 3 motor proves the effectiveness of the AlFe technology to save cost and weight, improve high speed power and performance and avoid supply chain uncertainty.



TESLA MODEL 3



AlFe MODEL T3

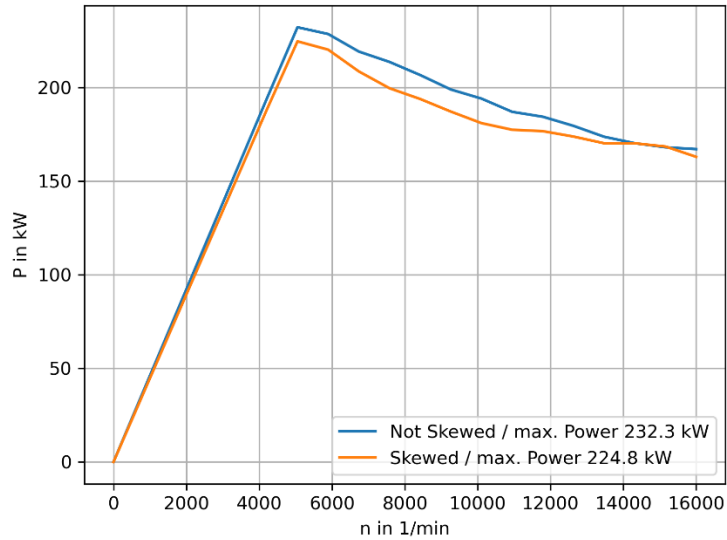
COST AND WEIGHT OF ACTIVE MATERIALS

Copper windings	\$129.30
Silicon steel including waste	\$82.50
Rare Earth magnets	\$176.40
TOTAL	\$388.20

Aluminium windings	\$18.80
Silicon steel including waste	\$35.00
Ferrite magnets	\$44.00
Carbon fibre sleeve and encapsulation	\$10.00
TOTAL	\$107.80

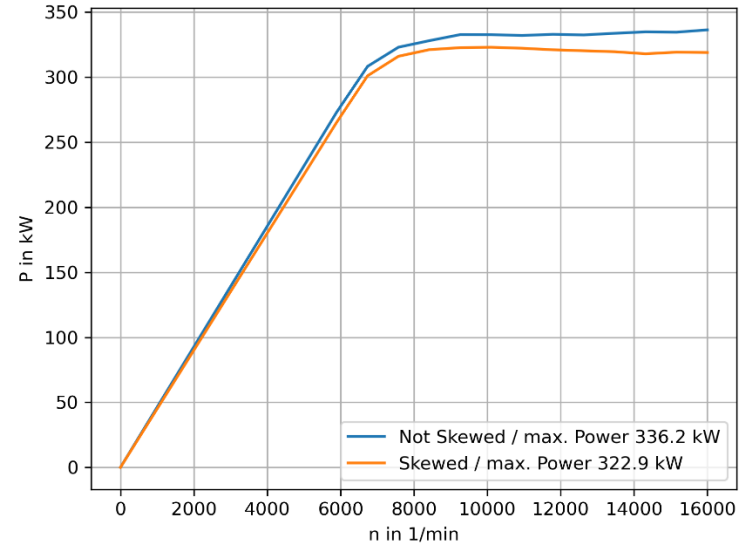
PERFORMANCE

MODEL 3 MOTOR



Peak torque	425 Nm
Peak power	225 kW
Active material weight	43.14 kg
Active materials power density	5.33kW/kg
0-100 kph acceleration	5.5 seconds
0-200 kph acceleration	18 seconds
100 – 140 kph acceleration	2.4 seconds
Top speed	220 kph
WLTP range with 60kWh battery	520kms

AlFe MOTOR



Peak torque	430Nm
Peak power	336kW
Active material weight	36.76kg
Active materials power density	8.16kW/kg
0-100 kph acceleration	5 seconds
0-200 kph acceleration	12 seconds
100 – 140 kph acceleration	1.2 seconds
Top speed	220kph
WLTP range with 60kWh battery	515kms