

# High-Performance Permanent Magnet Synchronous Motor for EVs

This high-performance motor improves torque and power density through high-quality magnetic steel. Its lightweight rotor reduces both the motor's weight and the rotor's rotary inertia.



## Overview

### High-Performance EV Propulsion

This Permanent Magnet Synchronous Motor is engineered specifically for new energy vehicle applications, focusing on maximizing torque and power density. It features a lightweight rotor design to minimize rotary inertia and utilizes advanced magnetic steel for superior performance. With an IP67 protection rating and robust thermal management, this motor ensures reliable operation in demanding automotive environments.

## Performance Metrics

### Rated Power

**18 kW**

Rated Power

**45 kW**

Peak Power

### Speed Specifications

**2000 RPM**

Rated Speed

**6000 RPM**

Peak Speed

## Technical Specifications

### Efficiency Class

IE4

### Protection Class

IP67

### Insulation Class

H

### Rated Voltage

310 VDC

## Environmental & Design

### Ambient Temperature Range

-15°C to 40°C

### Cooling Methods

IC411, IC410, IC416, Water-cooled

### Housing Material

Aluminum