

HVSM-287

PERMANENT MAGNET SYNCHRONOUS MOTOR FOR HYBRID/ELECTRIC VEHICLE APPLICATIONS



Product Description

ASELSAN's HVSM-287 electric motor is a nine-phase permanent magnet motor that offers a very high power and torque density in a compact structure. Its design makes it completely suitable for hybrid and electric vehicle applications.

The HVSM-287 electric motor has low cogging torque and high efficiency. This motor also facilitates energy savings, can be controlled easily at low speed and operate up to high speed due to the flux weakening capability.

Typical Applications

- Medium to High Duty Traction Vehicles
- Trucks, Transit Buses, Highway Vehicles

Product Features

- Permanent magnet technology
- Inner rotor topology
- Low cogging torque
- Very high torque and power density
- Low electro-magnetic noise
- Nine-phase topology
- Integrated resolver for position feedback
- Four-quadrant operation
- High efficiency
- High Voltage Interlock (HVIL)
- Liquid cooling system
- High Ingress Protection (IP)

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General Specifications

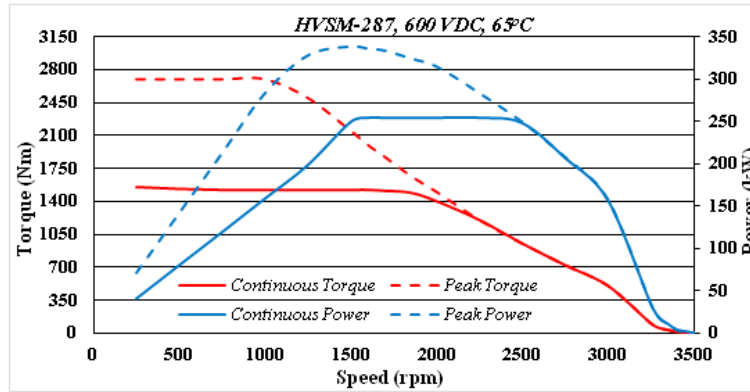
Rating

Continuous Power	: 250 kW
Peak Power (up to 60 s.)	: 275 kW
Continuous Torque	: 1500 Nm
Peak Torque (up to 60 s.)	: 2700 Nm
Base Speed	: 1600 rpm
Operating Speed Range	: 0-3400 rpm
Operating Voltage Range	: 450-750 VDC
Max. Efficiency	: 98%

Thermal & Mechanical Data

Max. Inlet Cooling Temperature	: 65 °C
Winding Insulation Temp. Class	: Class H (180 °C)
Nominal Cooling Flow	: 40 l/min
Coolant Type	: 50/50 Water-Glycol
Weight	: 340 kg
Operational Temperature	: -40 °C / +85 °C
Sealing	: IP65

Electrical Performance



Dimensions

