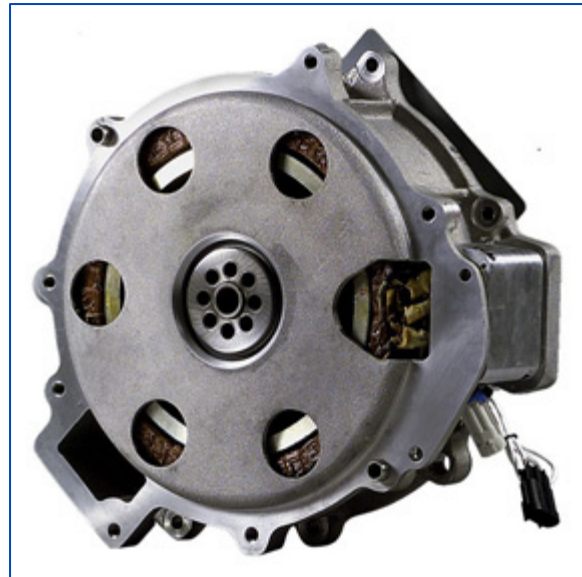


Delphi 42-Volt Integrated Starter Generator System

▶ Description

Delphi's 42-Volt Integrated Starter Generator System (ISG) is composed of a crankshaft-mounted starter generator, traction inverter, DC/DC converter, controller and battery pack. The system provides stop/start, regenerative braking and launch-assist to reduce fuel consumption and emissions. The ISG system also provides drive-line torque smoothing and on-board electrical power generation that result in a smoother ride and efficient on-board power generation.



Crankshaft-Mounted Electric Machine

▶ Minimum Order Quantity

- 5000

▶ Benefits

- Reduced fuel consumption from engine off at idle and regenerative braking
- Reduces engine emissions, helping improve air quality
- Provides 5-10kW of on-board electrical power, enabling new customer features
- Fast, quiet starts: engine starts five times faster than today's conventional starters
- Battery management helps increase battery life

Delphi 42-Volt Integrated Starter Generator System

► Features

- Integrated power electronics and controller increase vehicle packaging flexibility
- Liquid cooling from engine that allows elimination of second coolant loop in some applications
- CAN communications
- Enables hybrid functionality including:
 - Engine stop/start
 - Regenerative braking
 - Torque smoothing
 - Launch assist
 - High power generation



Integrated Power Electronics and Controller

- Traction Inverter
- DC/DC Converter
- Motor/Energy Controller