



CD40-06L Sensorless Brushless Permanent Magnet Motor Controller

For Electric, Hybrid Electric, and Fuel Cell Powered Vehicles, Pumps, Fans, and Auxiliaries



A compact design that incorporates:

- **1.6kW Power Output**
- **CAN Communication**
- **Over Temperature Protection**
- **Full power @ 200-400 VDC Input**
- **Sensorless Motor Drive**



CD40-06L Inverter/Controller		
Dimensions		
Length	7.36 in	187 mm
Width	5.43 in	138 mm
Height	2.40 in	61 mm
Weight	3.5 lb	1.59 kg
Performance		
Power Output (continuous)	2.2 hp	1.6 kW
Efficiency	96%	
Operating Voltage		
Nom. input voltage	340 VDC	
Operating voltage input range	200 to 400 VDC	
Minimum voltage limit	200 VDC	
Input current limitation	6 A	
Inverter Type		
Control type – PWM, 3-phase Sensorless Brushless PM		
Maximum motor current	10 A peak	
Power device	IGBTs	
Switching frequency	20 kHz	
Standby power consumption	8 W	
Liquid Cooling System		
Minimum Coolant Flow	2 l/min (50/50 water/glycol mix)	
Maximum inlet temp of coolant	158 °F	70 °C

(All data subject to change without notice)

Key Features

- **Motor and Inverter/Controller Over Temperature Protection**
- **Velocity Feedback Control**
- **Velocity Output**
- **Liquid Cooling**
- **PWM, 3-phase Sensorless**
- **Rapid Sensorless Startup**
- **Power Output / Error Signal**
- **Direction Control**
- **Light weight and Compact**
- **Automatic Current Limiting**
- **Automatic Over Speed Control**
- **Automatic Torque Limiting**
- **CAN Communication**
- **Low Standby Power**
- **Configurable CAN Addresses, Maximum Speed, Default Speed, and Directional Bit**



CD40-06L Inverter-Controller

