

4.8 Service

Service time interval can be choose by OEM. When the timer expires, controller automatically sets the Service Time Expired indication.

4.9 Motor & control

Motor parameters are easy to set and compatible with IEEE equivalent model circuit.

Motor current limit/versus speed characteristic is settable by user depending on the application requirements.

It is available a motor overheat protection configurable by user.

Indirect Field Oriented Control (IFOC) produces high performance and dynamic in all speed range by decoupling rotor flux and torque producing components of stator current.

Auto-Set Of Control Parameters allows an easy and quick tuning of control PID regulators gains.

4.10 Dual traction

In the case of vehicles with dual traction motors, steering angle (from potentiometer or switches) is used to generate separate speed/torque request for left and right wheel motor. This allows the motors to operate with different speeds/torques, which assists in turning the vehicle and avoids wheels scrub.

4.11 CANopen network

Through CANopen network is possible to build complex distributed control systems over a CAN data bus and interact with other devices like displays and battery management systems (BMS).

4.12 Traction / Pump control mode

Traction control mode can be selected between SPEED or TORQUE mode to cover applications from industrial vehicles to on-highway vehicles.

Pump is controlled only in SPEED mode for hydraulic applications.

Acceleration, deceleration, braking and reversal rates can be changed depending on the vehicle desired performance.

4.13 Throttles and brakes

Traction and Pump throttles and Traction brakes are totally configurable by the user and protected from wiring disconnection.