

4. Main Functions

4.1 System configuration

The system can be configured for single/dual traction or pump applications.

4.2 Battery Discharge Algorithm (BDI)

Real-time evaluation of battery State of Charge (SoC) for lead acid batteries through the Coulombian current integration and Open Circuit Voltage measure.

4.3 Battery protections

Battery Under-Voltage and Over-Voltage protections can be adjusted to match battery specifics and to extend battery life.

4.4 Mains power management

External main line contactor is completely configurable, self-managed and short-circuit protected. Interlock input controls the main line contactor activation and deactivation for extra safety requirements.

4.5 Operating profiles

Three Operating Profile can be selected by switches combination or by display.

4.6 Generic outputs

System digital outputs can be used to command:

- alarm beeper (on active fault, on BDI low, on reverse direction, on forward direction, on vehicle roll-off);
- brake lights / horn;
- motor cooling FAN (PWM or ON/OFF mode);
- controller heatsink FAN (PWM or ON/OFF mode);
- motor and controller heatsink cooling FAN (PWM or ON/OFF mode);
- deceleration lights.

4.7 LIN display

The LIN display type can be selected and totally configured by user.