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High Voltage Low Power Motor Controller
for Commercial Vehicles

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High Voltage Low Power Motor Controller

A new range of low power AC motor controllers/inverters designed primarily for ancillary control of pumps and fans on hybrid and electric buses, agricultural implements, tractors and other high voltage vehicles. There are two models in the range, which cover both liquid cooled and air cooled designs.

Key Parameters

Gen4 HVLP-10 (air cooled)
- Operating voltage range at full current 200 V to 800 V
- Output motor phase current:
  - 24 A rms (1 min)
  - 19 A rms (Continuous)
- Ambient -40°C up to +45°C full operation
- Weight: Air Cooled = 3.7 kg

Gen4 HVLP-20 (liquid cooled)
- Operating voltage range at full current 200 V to 800 V
- Output motor phase current:
  - 53 A rms (1 min)
  - 33 A rms (Continuous)
- Water/Glycol coolant
  - Full operation up to 70°C inlet temperature and at 6/1 min flow
- Weight: Liquid Cooled = 2.3 kg (dry)

Common Parameters
- Safety:
  - HVIL (High Voltage Interlock H/W & S/W)
  - Designed to meet the electrical isolation of electrically propelled vehicles ISO 6469
- Environmental:
  - IP6k9k and IP67 protection
  - 12 V or 24 V nominal supply

Integrated I/O

HVLP includes a fully-integrated set of inputs and outputs (I/O) designed to handle a wide range of requirements. This reduces the need for additional external I/O modules or vehicle controllers and connectors.
- All I/O protected to 40 V
- 4 analogue inputs 0 - 10 V
- 4 digital inputs
- 2 power supplies 5 - 10 V (100 mA & 200 mA)
- 2 digital outputs