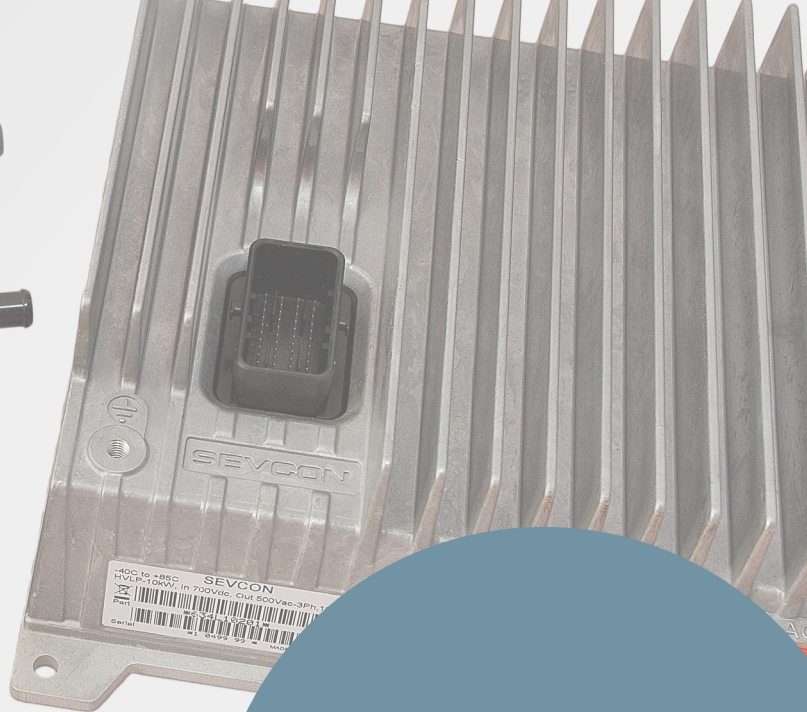


SEVCON®

Electrification Partner



HVLP Inverter

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.

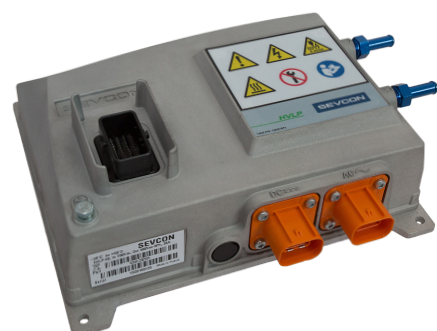
A compact, rugged and cost effective design, Sevcon's HVLP Inverter range is well suited for OEMs, hybrid/ electric bus & truck conversions, Agricultural OEMs and EV system integrators. The high voltage range is fully operational from 200V up to 800VDC, matched to the needs of the automotive/commercial transport markets as well as the AEF led Agricultural Electrification. The same hardware platform handles both AC Induction and Permanent Magnet AC synchronous motor technologies.



Air Cooled HVLP-10

Features

- 200V to 800VDC battery voltage
- Up to 53A peak current (HVLP-20)
- Up to 33A continuous current (HVLP-20)
- Advanced flux vector control
- 12V or 24V nominal supply
- High Voltage Interlock (HVIL)
- CAN J1939 compatible
- AC Permanent Magnet synchronous motor
- AC Induction motor
- Resolver and Sin/Cos position sensors
- Induction motor control without position sensor



Liquid Cooled HVLP-20

Key Parameters

HVLP-20 (liquid cooled)

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

HVLP-10 (air cooled)

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

Common Parameters

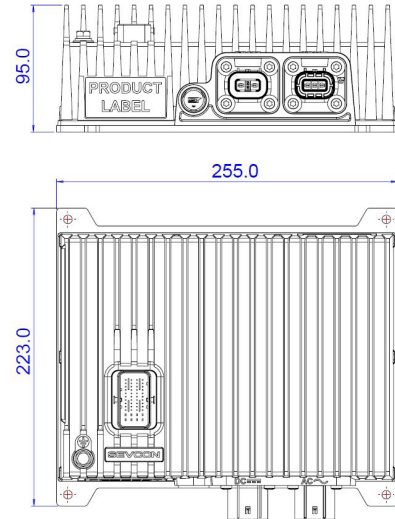
- Safety:
 - o HVIL (High Voltage Interlock H/W & S/W)
 - o Designed to meet the electrical isolation of electrically propelled vehicles ISO 6469
- Environmental:
 - o IP6k9k and IP67 protection
- 12V or 24V nominal supply

Integrated I/O

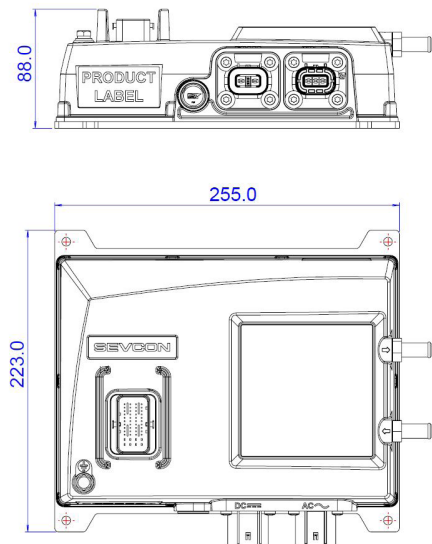
HVLP includes a fully-integrated set of inputs and outputs (I/O) designed to handle a wide range of requirements. This reduces the need for additional external I/O modules or vehicle controllers and connectors.

- All I/O protected to 40V
- 4 analogue inputs 0-10V
- 4 digital inputs
- 2 power supplies 5-10V (100mA & 200mA)
- 2 digital outputs

Air Cooled HVLP-10



Liquid Cooled HVLP-20



All dimensions in mm.