

OPTRAC-610

MOTOR CONTROL UNIT
FOR HYBRID/ELECTRIC VEHICLE APPLICATIONS



Product Description

ASELSAN's OPTRAC Series is a family of motor control units in different power levels developed from a unique technology platform.

The OPTRAC-610 is a high performance and a high intelligence motor control unit suitable with either permanent magnet synchronous or induction motor.

Typical Applications

- Low to Medium Duty Traction Drives
- Ancillary Control of Pumps and Fans
- Range Extender Inverter

Product Features

- Advanced flux vector control
- User selectable torque/speed control
- Regenerative braking
- J1939 or CANopen interface options
- Resolver interface
- Analogue inputs and discrete IOs
- Redundant active/passive discharge
- Overvoltage, overcurrent and overtemperature protection
- Galvanic isolation between HV and LV
- High Voltage Interlock (HVIL)
- Functional safety based on ISO26262
- Complies with all EMC requirements
- Fully automated self test at start-up
- Automotive qualified components
- High IP protection

OPTRAC-610

MOTOR CONTROL UNIT FOR HYBRID/ELECTRIC VEHICLE APPLICATIONS

General Specifications

Rating

Operating Voltage Range	: 450-750 VDC
Nominal Voltage	: 600 VDC
Peak Power (30 sec)	: 100 kW
Continuous Power	: 80 kW
Switching Frequency	: Up to 12 kHz
Efficiency	: 97 %
Control Voltage Range	: 9-36VDC

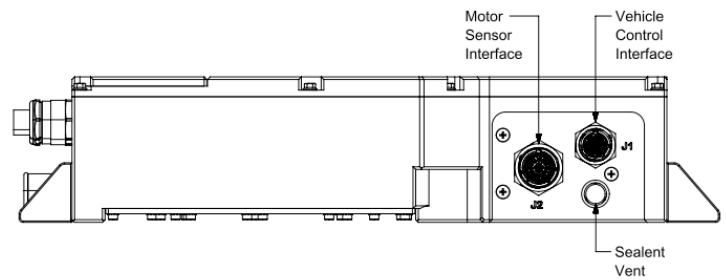
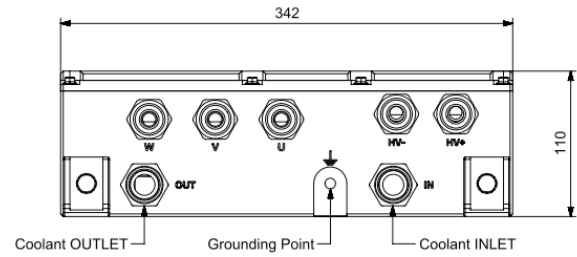
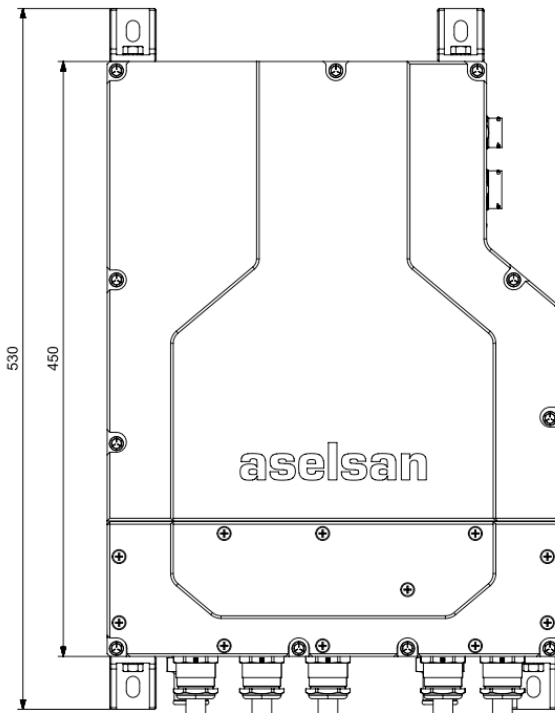
Standards

Automotive Components	: AEC-Q100 / Q101 / Q200
Electromagnetic Compatibility	: Automotive Standards
Functional Safety	: Based on ISO26262

Thermal & Mechanical Data

Max inlet Cooling Temperature	: 60°C
Nominal Cooling Flow	: 10 l/min
Coolant Type	: 50/50 Water-Glycol
Weight	: 19 kg
Operational Temperature	: -40°C / +85°C
Storage Temperature	: -40°C / +125°C
Sealing	: IP65

Dimensions



Specifications are subject to change without any notice. | All tolerances are within $\pm 10\%$.