

# OPTRAC-625

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-625 is a high performance and a high intelligence motor control unit suitable with either permanent magnet synchronous or induction motor.

## Typical Applications

- Medium to Heavy Duty Traction Drives
- Hydraulic Pumps
- Electro-Hydraulic Actuator Drive
- 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

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### General Specifications

#### Rating

Operating Voltage Range	: 450-750 VDC
Nominal Voltage	: 600 VDC
Peak Power (60 sec)	: 275 kW
Continuous Power	: 250 kW
Switching Frequency	: Up to 12 kHz
Efficiency	: 97 %
Control Voltage Range	: 9-36VDC

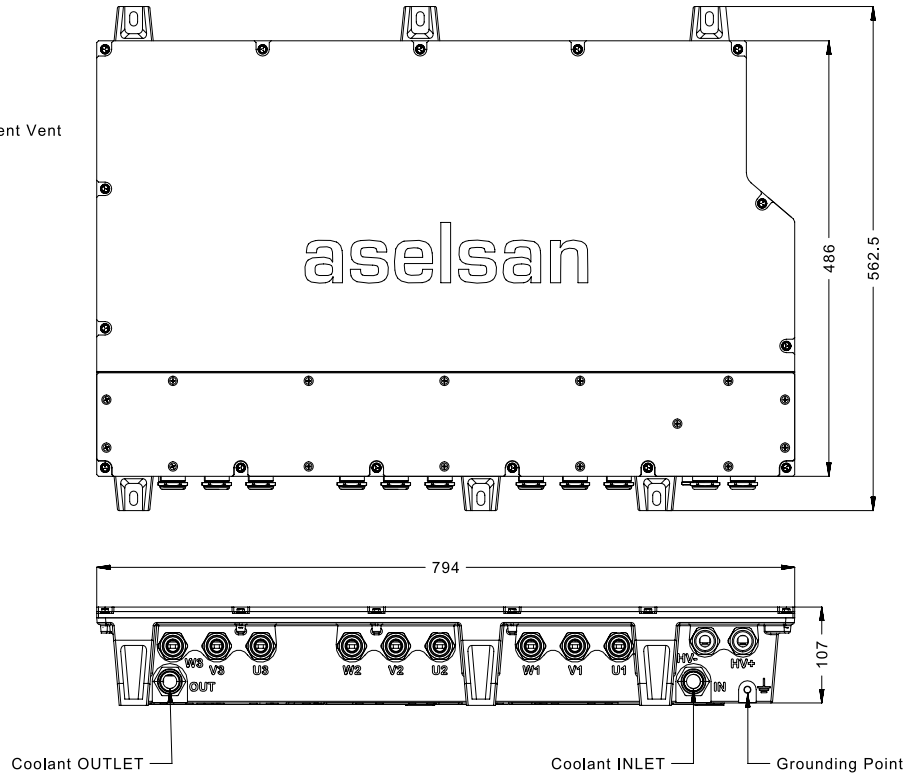
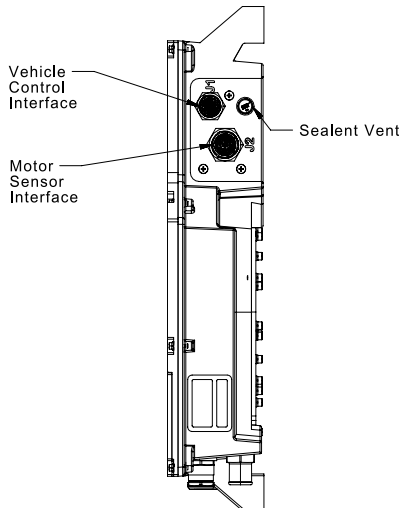
#### Standards

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

#### Thermal & Mechanical Data

Max Inlet Cooling Temperature	: 65 °C
Nominal Cooling Flow	: 20 l/min
Coolant Type	: 50/50 Water-Glycol
Weight	: 40 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  $\pm 10\%$ .