

OPTRAC-603D

DUAL OUTPUT 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-603D is designed as a modular electrical automotive drive system and same housing with HVDC-5K6 DC/DC converter. All solutions are scalable, as well as being easy and safe to handle. It is a compact, high performance and high intelligence liquid-cooled motor control unit suitable with either permanent magnet synchronous or induction motors.

Typical Applications

- Dual output auxiliary inverter; Ancillary Control of Pumps and Fans

Product Features

- Advanced flux vector control
- User selectable torque/speed control
- V/f control option for asynchronous motors
- J1939 or CANopen interface options
- Resolver and encoder interfaces
- Analogue inputs and discrete IOs
- Active/passive discharge
- Overvoltage, overcurrent and over temperature protection
- Galvanic isolation between HV and LV
- High Voltage Interlock (HVIL)
- Complies with all EMC requirements
- Fully automated test at start-up
- Automotive qualified components
- High IP protection

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Specifications

Operating Voltage Range	: 450-750 VDC
Nominal Voltage	: 600 VDC
Peak Power (30 sec)	: 2 x 40 kW
Continuous Power	: 2 x 30 kW
Switching Frequency	: Up to 12 kHz
Efficiency	: % 97
Control Voltage Range	: 9-36 VDC

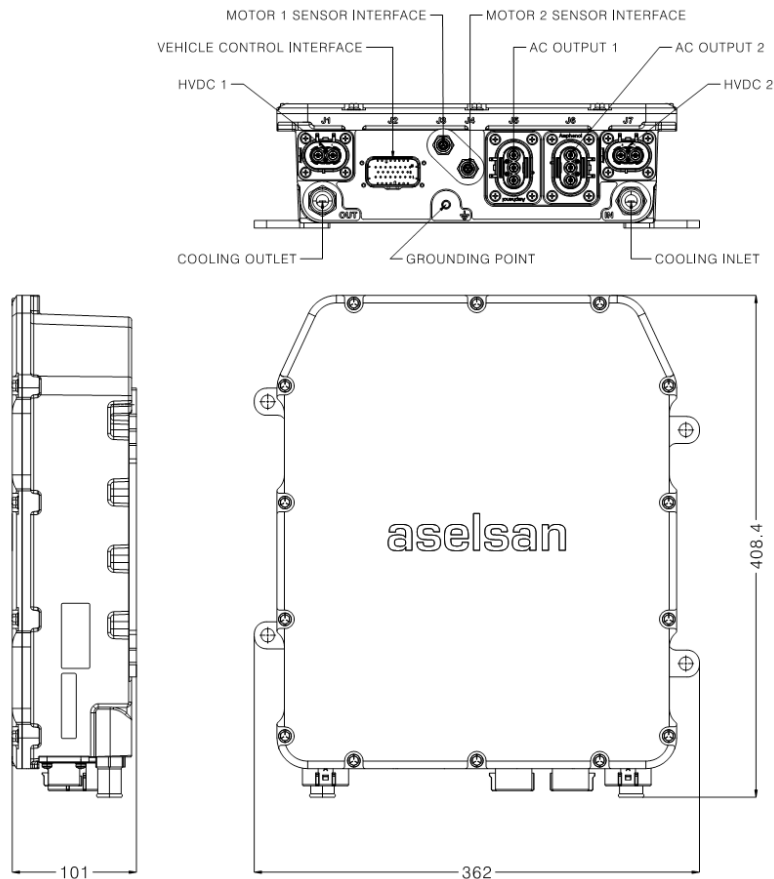
Standards

Automotive Components	: AEC-Q100 / Q101 / Q200
Electromagnetic Compatibility (EMC)	: ECE R10, Rev. 4

Thermal & Mechanical Data

Max inlet cooling temperature	: 65 °C
Nominal cooling flow	: 10 lt/min
Coolant type	: 50/50 Water-Glycol
Weight	: 11 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 $\pm 10\%$.