# NX Technologies

#### **ELECTRIC MOTOR CONTROLLER**

**P**5

The P5 is a high-power-density traction inverter for 12 to 72V applications that delivers up to 5kW continuous power in a very small package.



### **MAIN FEATURES**

- Configurable power stage to adjust to application requirements
- Microcontroller with redundancy through a CPLD device functionality for safety-critical functions
- · Real-time parameter calibration and monitoring
- PC-based set up and programming tools available
- Application software enables sensors auto-calibration functions
- Customizable control algorithms for each application
- Self-protection features
- Position sensor types: Absolute Encoder, Incremental Encoder, xMR, BLDC sensorless capability
- Current sensor: hall
- Torque, Speed, Id/Iq Control
- · Auxiliar interfaces for throttle and cadence sensor
- CAN, RS232, UART communication protocols
- CAN database available (.dbc)
- Control all type of Synchronous electric motors (PMSM, ACIM, BLDC)
- Possibility of liquid cooled cooling plate
- Integrated 25W 12V DCDC converter

#### **ELECTRICAL DATA**

Nominal DC link voltage	12 - 72	VDC
Max Operational Voltage	75	VDC
Max Current	105	Arms
Continuous Power @75V	5	kW
Switching Frequency	5 - 50	kHz

## **MECHANICAL DATA**

Temperature	-40°C to 85°C
Cooling	Natural Air / Cooling Plate
Volume	0.34 l
Dimensions	108 x 80 x 30 mm
Mass	0.7 kg



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