

ELECTRIC MOTOR CONTROLLER

W90

The W90 is an ISO26262 ASIL-D capable and cybersecurity ISO21434 ready high-power-density traction inverter for 400V applications that delivers up to 90kW continuous power.



MAIN FEATURES

- Sixth gen. IGBT powerpack, up to 750V/650A peak phase current
- ASIL D triple core microcontroller @300Mhz
- Redundancy functions for safety-critical applications
- Self-protection features
- Real time parameter calibration and monitoring
- PC based set up and programming tools available
- Application software enables sensors auto-calibration functions
- Position sensor types: Resolver, XMR, Absolut Encoder, Incremental Encoder, BiSS
- Current sensor: hall
- Temperature sensor: NTC (10k) / PTC (PT1000, KTY81_210, KTY83_122, KTY84_130). Accuracy with other sensors can be evaluated.
- Torque, Speed, Id/Iq Control
- 2x CAN Communication channels (ECU communication & calibration with DevelinkSTUDIO tool)
- CAN database available (.dbc)
- 3 phase PMSM, ACIM and BLDC motors

ELECTRICAL DATA

Nominal DC link voltage	48 - 450	VDC
First Over Voltage Protection	465	VDC
Max Current	410	Arms
Continuous Power @400V	90	kW
Switching Frequency	5 - 15	kHz
LV Supply	12 - 24	VDC

MECHANICAL DATA

Working Temperature	-40°C to 85°C
Cooling	Water-Glycol 50:50
Volume	2,8 l
Dimensions	270 x 160 x 65 mm
Mass	3,14 kg
Flow rate coolant	6 - 10 l/m
Compatible HV cables	25, 35 mm ²
Ingress Protection	IP67*

*When connectors & cables assembled correctly

