

INVERTER & MOTOR POWERTRAIN

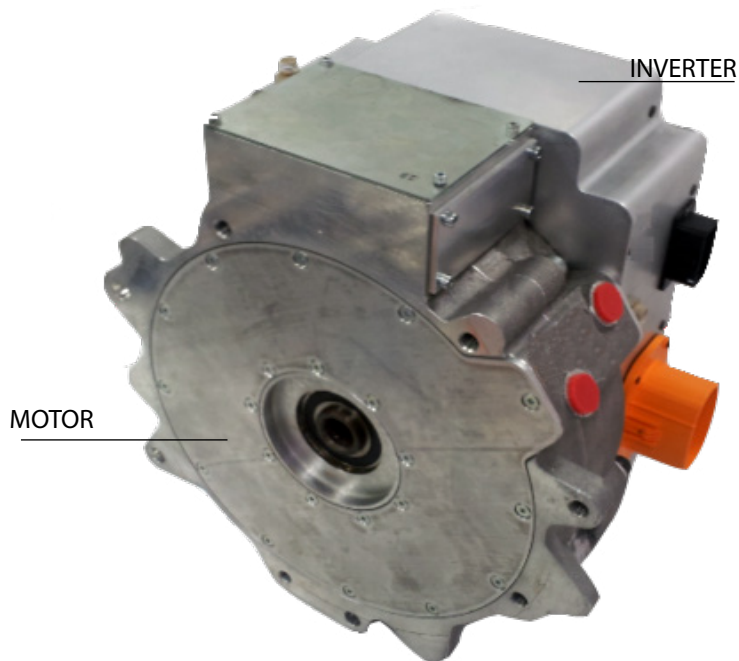
Inverter modular construction in both, hardware and software

Benefits

- The smallest powertrain in the market.
- Low weight (37,5 Kg.)
- Light solution.
- Compact: powertrain, motor and inverter integrated. All in one.
- Ruggedized housing construction, for close to wheel installation.
- Fast connectors and easy installation

Characteristics

- Based on safety dual-core MCU.
- ISO 26262 ASIL C level compliant .
- AUTOSAR (Automotive Open System Architecture) standard software used.
- Full modular software for Powertrain and car integration with different features.
- Customizing possibility available for customers.



General	
Control for motor type	PM Synchronous
Operation modes	4 quadrants Nominal@4900 rpm at E0 Nom =218 V Max. Speed@8000 rpm at E0 Nom =356 V Mechanical limit@9600 rpm at E0 Nom = 427 V
Control Model	Torque speed control
Peak power@360 Vdc (20 sec)	160 Kw
Peak Efficiency	> 97%
Controlled Speed range	0 to 8000 rpm
Switching Frequency	12 KHz
Motor position sensor	Resolver
Motor temperature sensor	PT 100
Other signals	Digital, analog
Voltage & Current	
Operating Voltage Range	100- 450 Vdc
Nominal Voltage	360 Vdc
Rated Output Current	400 Ac
Peak Output Current (30 sec)	440 Ac
Liquid Cooling	
Nominal coolant temperature	+65°C
Coolant temperature range	-40°C to +80°C
Derating allowed above	+65°C
Inverter Coolan temperature short peaks	85°C
Weight	37.5 kg (inverter + motor)
Dimensions	110 mm lenght - 300 mm diameter