

Turrtide Gen5- Size 9 Inverter

The Gen5-S9 motor inverter is well-matched to satisfy low volume prototype requirements for On and Off-highway Electric and Hybrid Vehicles. It is specifically aimed at vehicle OEMs and system integrators to offer them a compact, lightweight, robust and cost-effective product for traction, hybridisation, power generation and sub-system electrification.

Benefits

Can be paired with Turntide's high power density AXM motors, ideal for applications with a limited space envelope.

Quality and reliability - Our products are used by some of the worlds leading automotive and industrial companies in several innovative and demanding applications. The same quality and reliability is designed into each and every Turntide product.



Features

- Supports AC Permanent Magnet synchronous motor and AC Induction motors
- Highly efficient advanced flux vector motor control
- Operates with a nominal 350VDC voltage
- Up to 400A_{rms} peak power output
- Up to 200A_{rms} continuous power output
- 12V or 24V supply

Specifications

Voltage and current range	
100% Derating (VDC)	450VDC
Nominal (VDC)	350VDC
Min Battery Voltage (V)	128V
Peak current (2 min)(A_{rms})	400A _{rms}
Continuous (60 min)(A_{rms})	200A _{rms}

I/O	All I/O protected to 40V operation with 12V or 24V 4 analogue inputs 0-10V 4 digital inputs 3 power supplies 10V (2x100mA and 1x200mA) 2 digital outputs PWM 2A (2 high side 2 low side) 2 PT1000 / KTY84 thermocouple input
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Control Method	CAN slave Electrical isolation of CAN port
Communications	CAN 2.0B
Communications protocol	CANOpen H-Protocol (J1939)

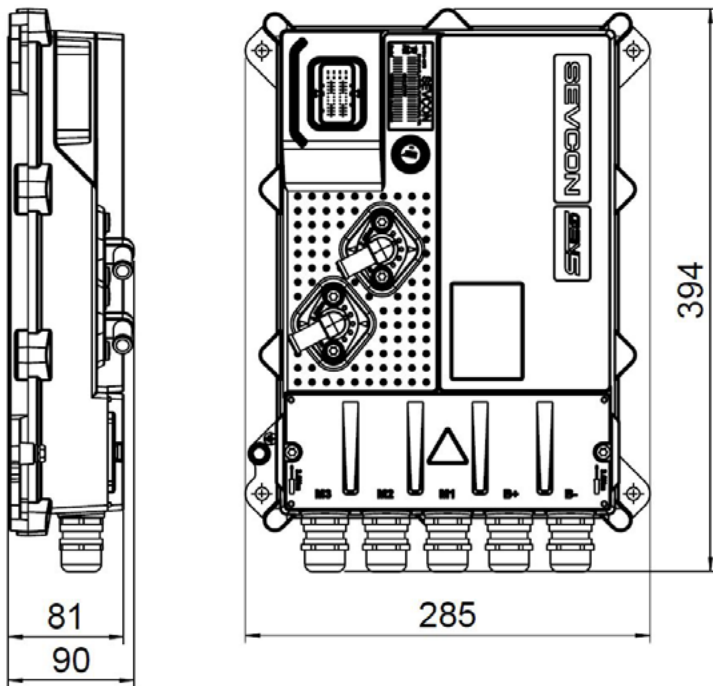
Encoders	Absolute UVW encoder input Absolute Sin/Cos encoder input Incremental AB encoder input Resolver automatic gain
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Electrical Safety	IEC60664 UL840 ISO6469 HV interlock on the I/O connector
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For further information please contact our team of experts at electrificationsales@turntide.com

Environmental	
IP rating	IP6k9k
Temperature	Ambient temperature -40°C to +85°C Automatic derating above 65°C
Flow Rate	10l/min
Coolant temperature	-40°C to +85°C (with 60:40 Glycol Water mix) Automatic derating above 55°C
Configuration	Turntide offer a Windows-based PC tool for configuration of the inverter. The tool provides a simple yet powerful means of accessing the CANOpen bus for diagnostics or parameter adjustment. Communication is through CAN, an IXXAT CAN-to-USB dongle is required.
Dimensions (all dimensions in millimeters)	
Weight	6kg


TURNTIDE TECHNOLOGIES

Our breakthrough technologies accelerate electrification and sustainable operations for energy-intensive industries

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