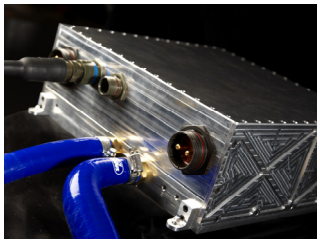
PROVECTOR



Outline Specification – 610 Series Automotive Inverter

Versions	PM Motor drive
	PM Generator interface (additional DC-side filtering and engine start capability)
	High ambient, normal ambient
Package	344mm x 320mm x 120mm
Functions	Motor drive or generator inverter, both 4 quadrant
	Three-phase PWM output
	Sophisticated control algorithms
	Resolver feedback
	CAN used for control inputs and status outputs – with additional hardware interlocks
	Complete system node, includes contactors/pre-charge
Rating	Up to 610V DC link voltage (nominal)
	Up to 30kW continuous in 100°C ambient @ 610V DC voltage
	Up to 50kW continuous in 50°C ambient @ 610V DC voltage
Cooling	Water/glycol (¾" BSPP threads)
Control	Torque/speed control as a motor drive
	Voltage control as a generator with real-time load share control of parallel units
	Real-time switching between modes and motor drive/generator
	Flexible multi-variable limiting
	Dynamic derating
	Real-time parameter update
Status outputs	Actual torque, RPM, machine angle
	Actual DC link voltage and current
	Operational state
	Machine and inverter temperatures
	Top level fault and warning flags
	DC positive and negative rail voltages to chassis
	Hardware status
	Extended data sets on demand
	Separate diagnostic CAN
Interface to higher-level controller	CAN
	Hardware enable
	Dual status lines
	Configuration interlock
	12V/24V DC main supply
	12V/24V DC contactor supply
	Loopback
Interface to electrical machine	3-phases
	Resolver
	6 thermistors
	Loopback
Connectors	Options include flying leads, Deutsch industrial, D38999 series 3
Support	PC Monitoring tool with comprehensive data display and logging functionality
	Excel macros to plot logged data