# **GVI** Generation II

# Mobile Inverter for Traction and Work Function Applications



## **Description**

With functional safety at its very core, the second generation GVI mobile inverter provides a motor control solution for both traction and work function applications, on and offroad.

Suitable for battery systems between 100 and 750 Vdc, with continuous output current ratings and high output frequency capability, the GVI offers OEMs a superb combination of power, performance, and functionality.

Partnered with the Parker GVM range of highly efficient PMAC mobile motors, the GVI's robust and proven IGBT platform and intelligent control software provides optimum performance and efficiency across the speed range.



## **Applications**

- · Construction equipment
- Mining
- · Material handling
- · Trucks
- Bus and coach
- Agriculture
- Military
- · Other off highway vehicles
- Electrohydraulic Pump Control (EHP)

### **Product Features**

- · ISO26262 ASIL D compliant
- · IEC13849 PLd Safe Torque Off
- · High efficiency liquid cooled
- · Rugged IP67 / IP6K9K
- Integrated I/O (EHP)
- Intuitive software tools
- · Internal EMI filter

- J1939-76 and CAN Open
- Pluggable connections
- Flexible installation mountings
- High Voltage Interlock Loop (HVIL)
- · BEMF overvoltage protection
- Wide operating voltage range



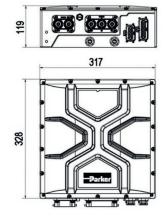
## **Technical Specifications**

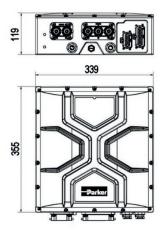
Model	GVI075	GVI125	GVI250
Output Power - Continuous (kW)	75	125	250
Output Current - Continuous (A rms)	108	180	361
Peak Current S2 Duty (A rms)	140 (60s)	235 (60s)	470 (60s)
Peak Current (A rms)	162 (3s)	324 (1s)	650 (1s)
Power Connectors	PowerLok™ 300	PowerLok™ 300	PowerLok™ 500
Nominal Input Voltage	650V DC		
Operating Voltage Range	100-800 VDC		
Cooling	WEG 50:50 65°C		
Switching Frequency	1-10kHz, 4kHz nominal		
Maximum output frequency	1400Hz (limited to 599Hz)		
Ambient Operating Range	-40° C - 80° C		
Motor type	Permanent magnet (PMAC)		
Conformance	ISO26262 ASIL 'D', IEC13849 PLd, IATF16949, CISPR 25, UN UCE R10, UN UCE R100, ISO6469, ISO16750, IEC60068, RoHS, REACH		

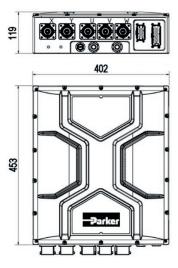
Power ratings at 400VAC output voltage, 4kHz switching and  $65^{\circ}$ C coolant inlet temperature 800VDC operation for limited time only

#### **Dimensions**

GVI075 GVI125 GVI250







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