

## OPTIDRIVE PLUS 3<sup>GV</sup>

### Compact

*Dedicated OEM product*

AC variable speed drive  
0.75 - 1.5kW



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The Optidrive Plus 3GV Compact is a revolutionary new variable speed drive designed for OEM users who require a simple module in a compact package which can be easily and efficiently integrated into an overall system.

Utilising the very latest technology and manufacturing techniques, the Optidrive Plus 3GV Compact offers unrivalled durability and performance. The mechanical design has been specifically designed to allow the OEM to mount the unit simply on any metallic surface allowing efficient heat sinking for optimum ease of installation.

The inverter specification is based on the successful Optidrive Plus 3GV range and offers the same class leading Open Loop Vector high performance motor control, providing optimum control of motor speed and torque. Commissioning can be carried out using the optional Optiport Plus remote keypad and display, or using Invertek's Optiwand PDA software package for Pocket PC's. The onboard Infra Red interface allows multiple modules to be quickly commissioned or cloned without the need for cables or interface leads.

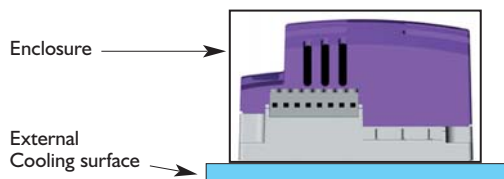
Pluggable terminals are fitted for control connections, to ease wiring, whilst an onboard 24 Volt DC Power supply can be used for external control circuits. The Optidrive Plus 3GV Compact can optionally be supplied with an internal RFI filter, to allow compliance with the latest directives where required.

### Key Features and Benefits

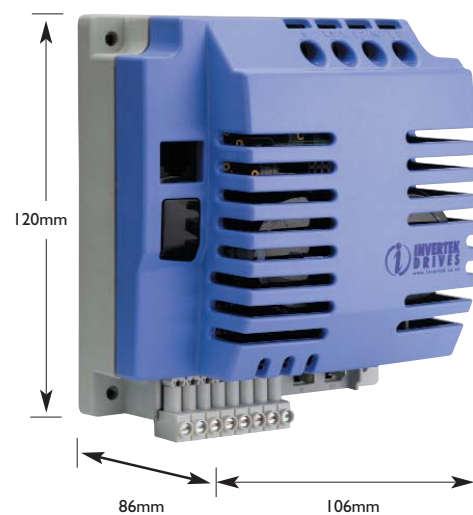
- Lightweight, compact 'Flat PLate' design for easy OEM integration
- Extremely robust with high vibration resistance
- Full Open Loop Vector motor control for optimum motor performance in demanding applications
- Excellent thermal management
- Pluggable control terminals
- Fast-on power terminals

### Designed for compact enclosures

Unique design enables the drive to be mounted into small enclosures transferring heat through the rear face for dissipation

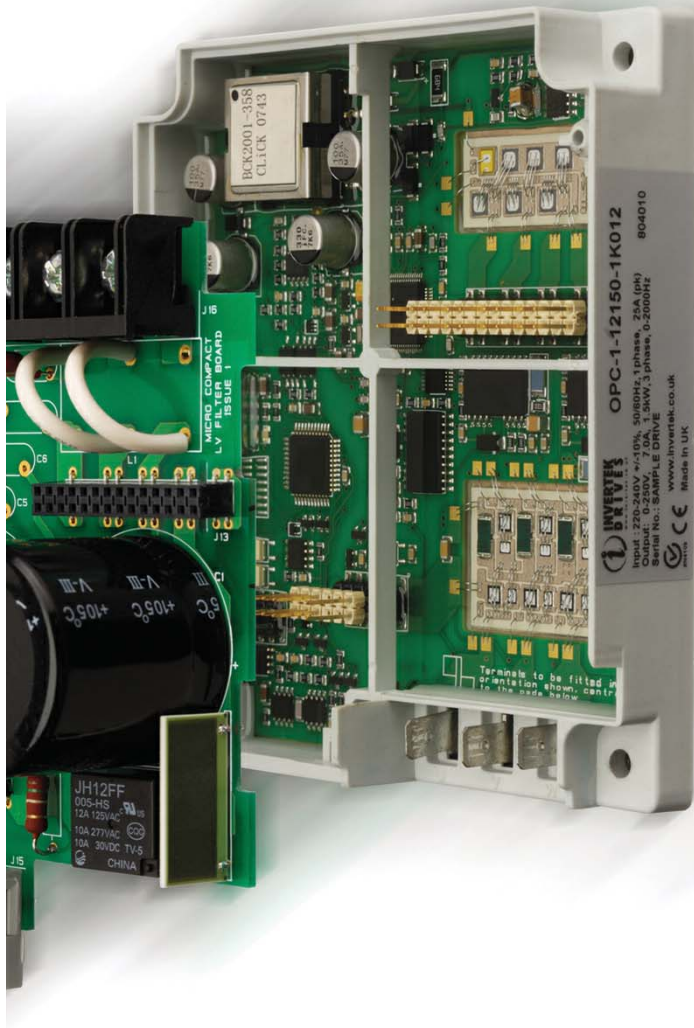


### Specifications & Dimensions



#### Control terminals

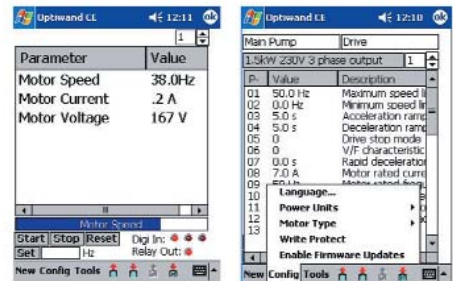
1. 24V out
2. Digital input 1
3. Digital input 2
4. Analog input 1
5. Analog input 2
6. 0V
7. Relay output
8. Relay output



## Optiwand PDA



Hand held remote programming tool, Optiwand PDA operates on a Windows Mobile based pocket PC with Optidrive Plus 3GV Compact for programming and commissioning using the IrDA interface.



Parameters can be quickly monitored and adjusted, with online help and plain text parameter descriptions. The complete parameter set can then be uploaded or downloaded, allowing fast and accurate back up storage and commissioning for multiple drives.

Control Connections



RJ11 Connector

Power Input Terminals



Infra Red Interface

Motor Output Terminals



Mounting holes in corners.  
4.3mm diameter,  
2.5Nm Max



< design without compromise >





Inverterk  
Global  
Solutions...

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Specification		OPTIDRIVE PLUS 3 <sup>GV</sup> Compact	
<b>Output ratings</b>	Power Ratings Available	0.75kW & 1.5kW	
	Overload Capacity	150% for 60 secs 175% for 2 secs	
	Output Frequency Range	0...2000Hz	
<b>Input Ratings</b>	Supply Frequency	48 - 62Hz	
	Supply Voltage	200 - 240V +/- 10% 1 Phase (0.75 - 1.5kW / 1 - 2HP) 380 - 480V +/- 10% 3 Phase (0.75 - 1.5kW / 1 - 2HP)	
<b>Ambient Conditions</b>	Temperature	Ambient & Heatsink Temperature : -10 to 60°C	
	Altitude	0 - 2000m, derate 1% per 100m above 1000m	
	Ingress Protection	IP00	
<b>Programming</b>	Optional External Keypad	Yes	
	Pocket PC / PDA	Yes	
<b>Control Specification</b>	Control Method	V / F 3 <sup>GV</sup> Sensorless Vector	
	V/Hz ratio	Linear (1 adjustment point)	
	Boost	Automatic after autotune	
	Stop Mode	Coast / Ramp / DC Brake	
	Skip Frequency	One point, adjustable frequency band	
	Frequency setpoint control		0...10 VDC
			+/- 10 VDC
			0...24 VDC
			4...20mA
			0..20mA
		Digital - Keypad RS485 (Master Slave)	
	Pre-set speeds	8	
	PID Control	Yes	
Spin Start	Yes		
Acceleration	0..3000 sec		
Deceleration	(2 ramps) 0..3000 sec		
<b>Programmable I/O</b>	Input 1	Programmable Digital Input	
	Input 2	Programmable Digital Input	
	Input 3	Programmable Digital / Analog Input	
	Input 4	Programmable Bipolar Analog / Digital Input	
	Relay 1	1 Relay Output (30 VDC SA, 250 VAC, 6A)	
<b>Keypad Display</b>	Remote mount	Optional Optiport Plus remote mounting keypad	
<b>Protective Functions</b>	Inverter Trip	Over voltage	
		Over current	
Under voltage			
External trip			
Motor overload			
Over temperature			
Short circuited			
Earth Fault			
Under Voltage			
Memory	Last 4 Trips stored		
<b>Compliance with Standards</b>	EN 61800-3:2004	Adjustable speed electrical power drive systems. EMC requirements	
<b>Additional Features Standards</b>		Built in Master - Slave Operation Mode PID 'Sleep' Mode Energy Optimising Function	



Over 60 sales partners  
around the World

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