

# OPTIDRIVE PLUS (ODP) 110V & 220V INPUT CARD



**INVERTEK  
DRIVES**  
www.invertek.co.uk

### Part Numbers

**110 Volt Version : OPT-LOGIP-11**

**230 Volt Version : OPT-LOGIP-23**

### Important Safety Information



Indicates a potentially hazardous situation which, if not avoided, could result in injury or death.



Indicates a potentially hazardous situation which, if not avoided, could result in damage to property.

All Optidrive products and options are intended for professional incorporation into complete equipment or systems. If installed incorrectly they may present a safety hazard. Optidrives and Options may use high voltages and currents, may carry high levels of stored electrical energy, and may be used to control mechanical plant that could cause injury. Close attention should be paid to system design and electrical installation to avoid hazards in either normal operation or in the event of equipment malfunction. System design, installation, commissioning and maintenance must be carried out only by personnel who have the necessary training and experience. They must carefully read this safety information and the instructions in this Guide and follow all information regarding transport, storage, installation and use of the Optidrive, including the specified environmental limitations.



Optidrives and Options should be installed only by qualified electrical persons and in accordance with local and national regulations and codes of practice. The Optidrive has an Ingress Protection rating of IP20. For higher IP ratings, use a suitable enclosure.

Electric shock hazard! Disconnect and ISOLATE the Optidrive before attempting any work on it. High voltages are present at the terminals and within the drive for up to 10 minutes after disconnection of the electrical supply.

Where supply to the drive is through a plug and socket connector, do not disconnect until 10 minutes have elapsed after turning off the supply

### Specification

Input Voltage (AC)	OPT-LOGIP-11 : 100 – 120 + / - 10%
Ambient Temperature	OPT-LOGIP-23 : 200 – 240 + / - 10%
Approvals	Operating : 0 to 50C
	Storage : -40 to + 60C
	IP00, UL94V-0

### Description

This Option Module is designed for use with the Optidrive Plus 3GV range of drives, to allow the digital inputs of the drive to be controlled directly from a 110 Volt or 230 Volt control supply without the need for interfacing relays.

There are two versions of the module, a 110 Volt version for voltages ranging from 100 – 120 VAC, and a 230 volt version for voltages ranging from 200 – 240VAC.

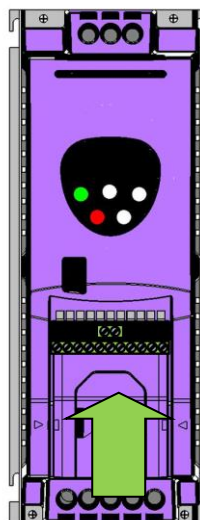
The existing analog input on the Optidrive Plus 3GV can still be used, by connecting the analog signal input on terminal 6, or alternatively a fourth 110 / 230VAC digital input can be connected via the removable plug.

All other inputs and outputs to the drive are not affected.

### Installation

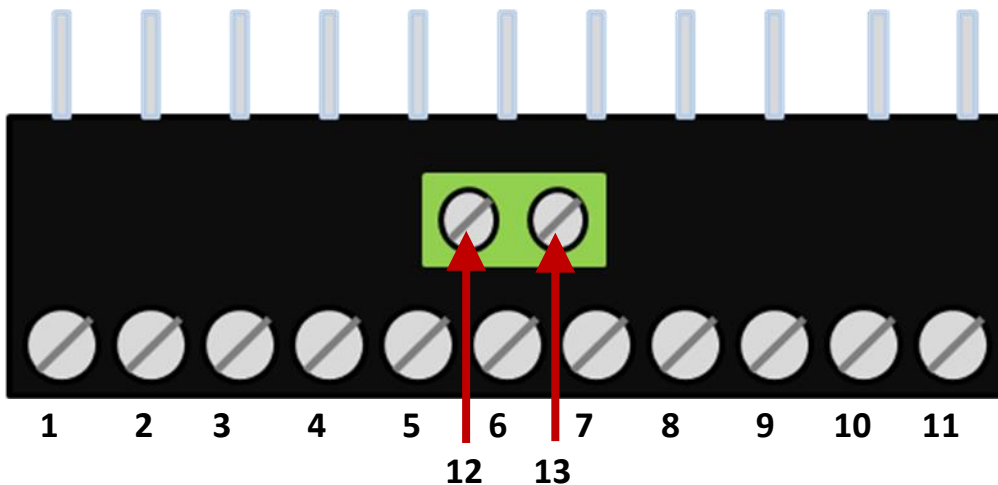
Install the Option onto the Optidrive by inserting the row of 11 pins into the terminal connector of the Optidrive, ensuring that the terminals are tightened.

If the Option is being used with Frame Size 1 Optidrive, care should be taken to support the Option when the terminal screws of the Option are being tightened or loosened.



82-LOGHV-IN\_V1.02

### Option Module Control Terminals



Terminal 1 Neutral Must **not** be connected to 0 volts  
 Terminal 2 Digital input 1 80 to 250VAC, 68kΩ impedance  
 Terminal 3 Digital input 2 80 to 250VAC, 68kΩ impedance  
 Terminal 4 Digital input 3 80 to 250VAC, 68kΩ impedance

Terminals 5 to 11 Connect as standard directly to drive

Terminal 12 Neutral Not to be connected to 0 volts  
 Terminal 13 Digital input 4 80 to 250VAC, 68kΩ impedance

The digital input terminals are optically isolated from the remaining terminals and the drive terminals.

### Operation

**Applications requiring 3 digital inputs and 1 analog input:**

This is the default setting of the drive. The analog input is connected to terminal 6 of the Option Module and this connects straight to the drives' analog input and works as standard.

**Applications requiring 4 digital inputs:**

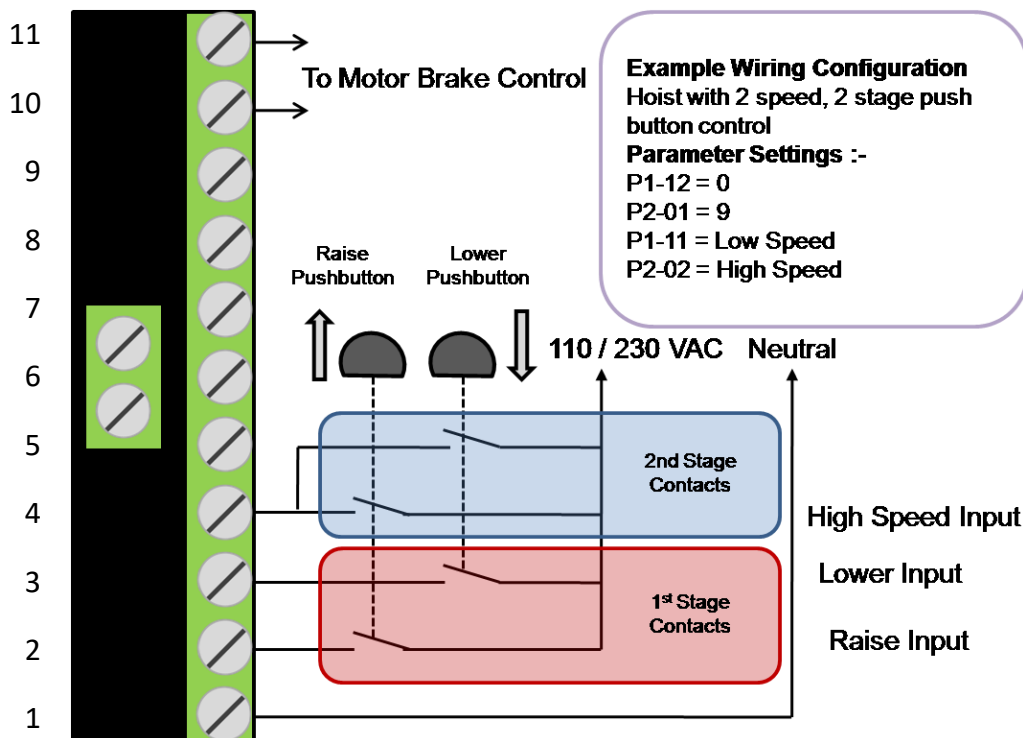
The drive needs to be set up for 4 digital inputs, see Pr 2-01 in the drive's user guide.

- The 4<sup>th</sup> digital input is activated by either
- applying 0 to 10 volts to terminal 6
  - OR
  - applying 110VAC to terminal 13

Terminals 1 and 12 are connected internally together and must **not** be connected to 0 volts.

Unintentionally setting up the drive incorrectly or applying both the analog and the digital input will not damage the Optidrive.

### Example Configuration



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