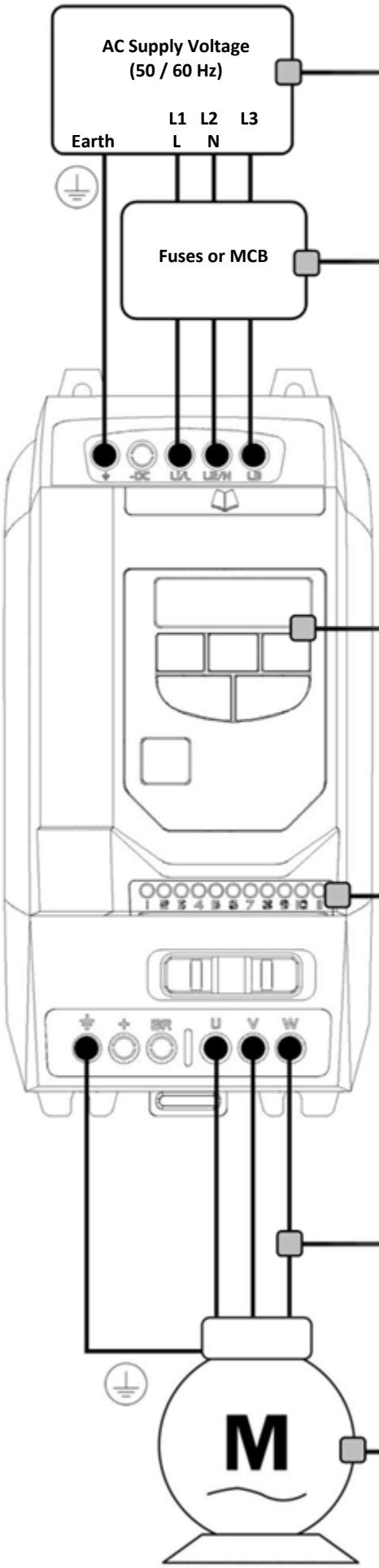
OPTIDRIVE E2 Easy Start Up Guide



Supply Voltage
- 110 – 115, 200 – 240, 400 – 480 VAC + / - 10%
- 1 or 3 Phase

Check the drive rating information on page 26

Fuses or MCB
- Fuse Ratings given on page 26
- Recommended cable sizes shown on page 26

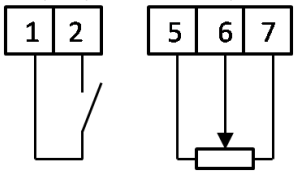
Mechanical Mounting
- Information can be found on page 10

Keypad operation can be found on page 16

Control Terminals

Based on the factory default (out of box) settings
- Connect a Start / Stop switch between terminals 1 & 2
- Close the switch to Start (Enable) the drive
- Open the switch to Stop (Disable) the drive

- Connect a potentiometer (5kΩ minimum) between terminals 5, 6 and 7 as shown below to vary the speed from minimum (0Hz) to maximum (50 / 60 Hz)



Motor Cable Information
- Check the rating information on page 26 for sizing information
- For EMC compliance, use a shielded type cable

Motor Connections
- Check for Star or Delta connection according to the motor nameplate and voltage rating (See page 13)

Motor Nameplate Details

OPTIDRIVE

IP66 / NEMA 4X

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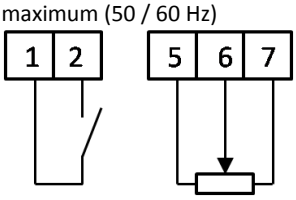

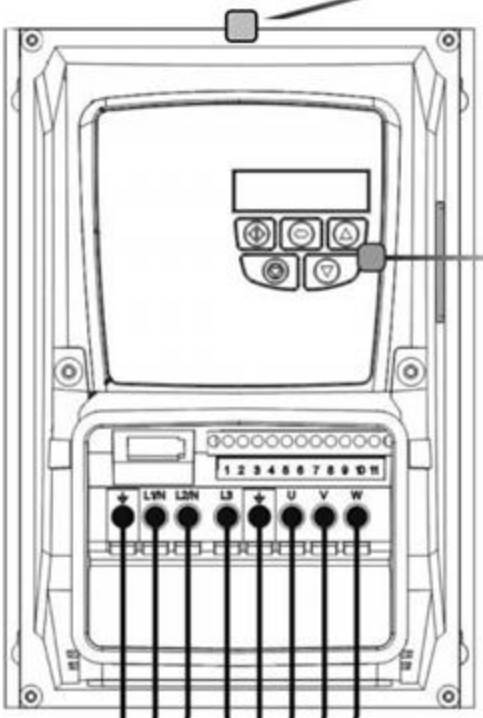

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Always follow local and national codes of practice

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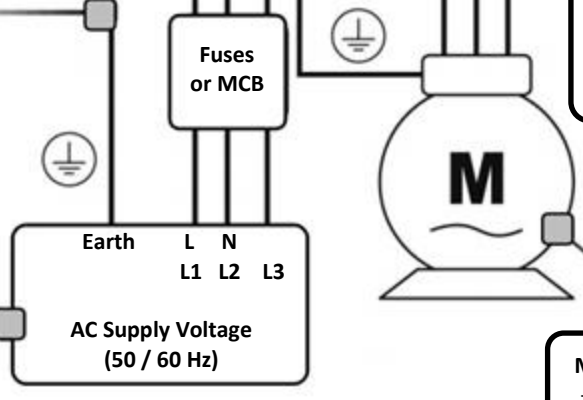

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- 1 or 3 Phase

Check the drive rating information on page 26

Motor Connections
- Check for Star or Delta connection according to the motor nameplate and voltage rating (See page 13)

Motor Nameplate Details
- Enter the motor rated voltage in P-07
- Enter the motor rated current in P-08
- Enter the motor rated frequency in P-09

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Local Speed Potentiometer
The local speed potentiometer will adjust the output frequency from minimum (Parameter P-02, default setting = 0Hz) to maximum (Parameter P-01, default setting = 50 / 60 Hz)

Run Reverse / Off / Run Forward Switch
With the factory parameter settings, this switch allows the drive to be started in the forward and reverse operating directions. Alternative switch functions can be programmed, such as Local / Remote, Hand / Auto, see page 15

Mains Disconnect / Isolator

Fuses or MCB
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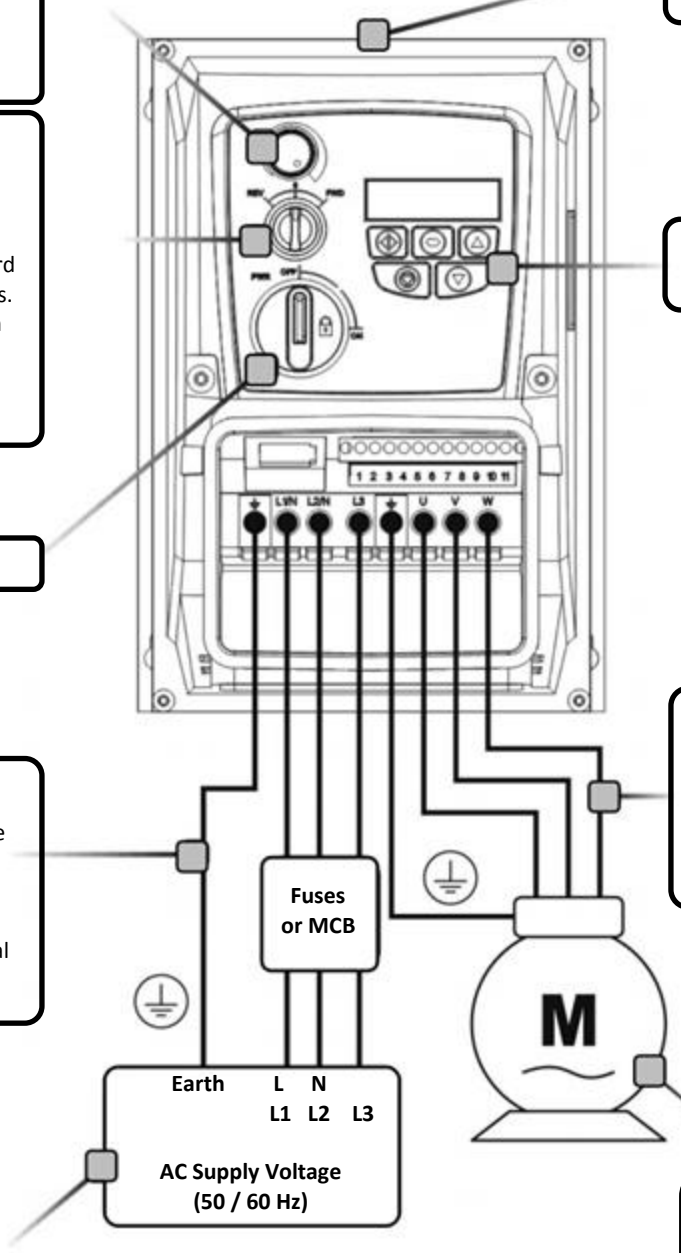

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Declaration of Conformity

Invertek Drives Ltd hereby states that the Optidrive ODE-2 product range conforms to the relevant safety provisions of the Low Voltage Directive 2006/95/EC and the EMC Directive 2004/108/EC and has been designed and manufactured in accordance with the following harmonised European standards:

EN 61800-5-1: 2003	Adjustable speed electrical power drive systems. Safety requirements. Electrical, thermal and energy.
EN 61800-3 2nd Ed: 2004	Adjustable speed electrical power drive systems. EMC requirements and specific test methods
EN 55011: 2007	Limits and Methods of measurement of radio disturbance characteristics of industrial, scientific and medical (ISM) radio-frequency equipment (EMC)
EN60529 : 1992	Specifications for degrees of protection provided by enclosures

Electromagnetic Compatibility

All Optidrives are designed with high standards of EMC in mind. All versions suitable for operation on Single Phase 230 volt and Three Phase 400 volt supplies and intended for use within the European Union are fitted with an internal EMC filter. This EMC filter is designed to reduce the conducted emissions back into the supply via the power cables for compliance with the above harmonised European standards.
It is the responsibility of the installer to ensure that the equipment or system into which the product is incorporated complies with the EMC legislation of the country of use. Within the European Union, equipment into which this product is incorporated must comply with the EMC Directive 2004/108/EC. When using an Optidrive with an internal or optional external filter, compliance with the following EMC Categories, as defined by EN61800-3:2004 can be achieved:

Drive Type / Rating	**EMC Category**		
	Cat C1	**Cat C2**	**Cat C3**
1 Phase, 230 Volt Input ODE-2-x2xxx-1xBxx	No additional filtering required Use shielded motor cable		
3 Phase, 400 Volt Input ODE-2-x4xxx-3xAxx	Use External Filter OPT-2—E3xxxx	No additional filtering required	
	Use shielded motor cable		
Note	Compliance with EMC standards is dependent on a number of factors including the environment in which the drive is installed, motor switching frequency, motor, cable lengths and installation methods adopted.		
	For shielded motor cable lengths greater than 100m and up to 200m, an output dv / dt filter must be used (please refer to the Invertek Stock Drives Catalogue for further details) Compliance with EMC directives is achieved with the factory default parameter settings		

All Invertek Optidrive units carry a 2 year warranty against manufacturing defects from the date of manufacture. The manufacturer accepts no liability for any damage caused during or resulting from transport, receipt of delivery, installation or commissioning. The manufacturer also accepts no liability for damage or consequences resulting from inappropriate, negligent or incorrect installation, incorrect adjustment of the operating parameters of the drive, incorrect matching of the drive to the motor, incorrect installation, unacceptable dust, moisture, corrosive substances, excessive vibration or ambient temperatures outside of the design specification.

The local distributor may offer different terms and conditions at their discretion, and in all cases concerning warranty, the local distributor should be contacted first.

This user guide is the "original instructions" document. All non-English versions are translations of the "original instructions".

The contents of this User Guide are believed to be correct at the time of printing. In the interest of a commitment to a policy of continuous improvement, the manufacturer reserves the right to change the specification of the product or its performance or the contents of the User Guide without notice.

This User Guide is for use with version 1.20 Firmware.
User Guide Revision 3.30

Invertek Drives Ltd adopts a policy of continuous improvement and whilst every effort has been made to provide accurate and up to date information, the information contained in this User Guide should be used for guidance purposes only and does not form the part of any contract.