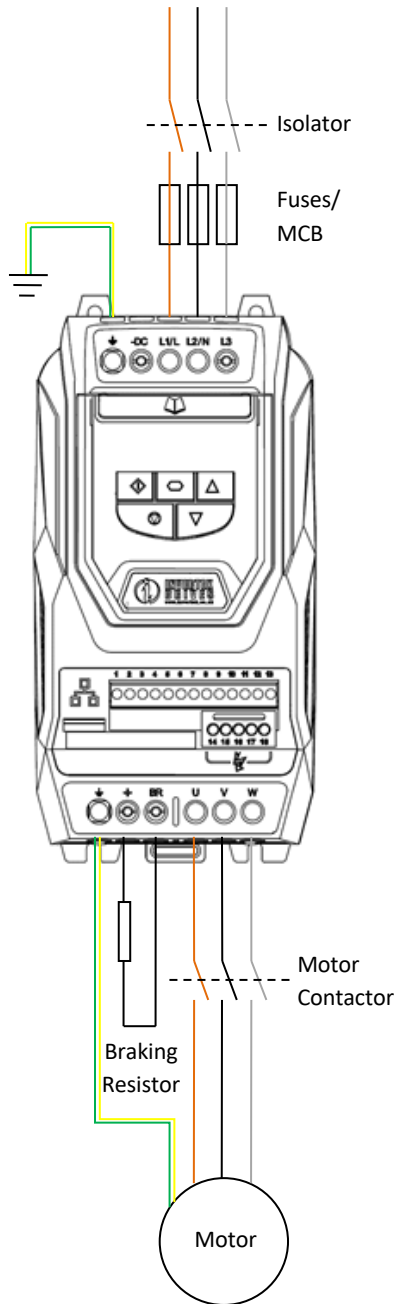


Optidrive Elevator Quick Start Guide



Control Terminal Connections

	Open	Closed
1	+24V Common	
2	Stop (Disable)	Run Up (Raise)
3	Stop (Disable)	Run Down (Lower)
4	Levelling Speed	Run Speed
5	+10 Volts	
6	Normal Operation	Inspection Speed
7	0 Volts	
8	Not Used	
9	0 Volts	
10	Normal Operation	Intermediate Speed
11	Not Used	
12	Safe Inhibit	Normal Operation
13	Safe Inhibit	Normal Operation
<i>Use safety relay NC contacts for terminal 12.</i>		
14	Motor contactor common	
15	Motor contactor NO	
16	Not Used	
17	Motor brake common	
18	Motor brake NO	

Keypad Operation

	Navigate	Used to display real-time information, to access and exit parameter edit mode and to store parameter changes
	Up	Used to increase speed in real-time mode or to increase parameter values in parameter edit mode
	Down	Used to decrease speed in real-time mode or to increase parameter values in parameter edit mode
	Reset/Stop	Used to reset a tripped drive. When in keypad mode is used to stop a running drive
	Start	When in keypad mode, used to start a stopped drive or to reverse the direction of rotation if bi-directional keypad mode is used

Performing an Auto tune

In order to set the drive up and perform a non-rotating auto-tune just follow the steps below.

Step 1: Please ensure the drive is wired as per Lester Controls drawings and all connections are tight.

Step 2: Enter the motor name plate details into the inverter as follows;

P1-07 Motor Rated Voltage- From motor name plate (Volts)

P1-08 Motor Rated Current- From motor name plate (Amps)

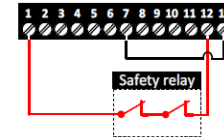
P1-09 Motor Rated Frequency- From motor name plate (Hz)

P1-10 Motor Rated Speed- From motor name plate (rpm)

Unlock the extended parameters by setting P1-14 to 101

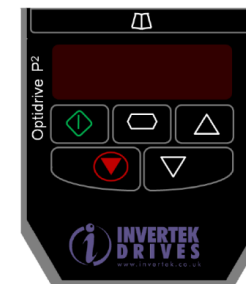
P4-05 Motor Power Factor Cos ϕ - From motor name plate (if motor power factor is unknown, use vector IM speed control instead (P4-01 to 1))

Step 3: Close Safe Torque Off input, link as shown below between terminals 1-12.



The drive should now show 'Stop', now push in the main contactors.

Step 4: Set P4-02 to a 1 and press the navigate key. During the auto-tune the drive will show 'Auto-t', continue this until the drive shows 'Stop' again.



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Related Parameters	Action	
P1-03 (Accel ramp time)	<p>Program the required ramp times per the profile diagram below.</p>	
P1-04 (Decel ramp time)		
P2-01 (Levelling Speed)		
P2-02(Run Speed)		
P2-03 (Intermediate Speed)		
P2-04 (Inspection Speed)		
P3-01 (S-ramp 1 accel start duration)		
P3-02 (S-ramp 2 accel end duration)		
P3-03 (S-ramp 3 decel start duration)		
P3-04 (S-ramp 4 decel end duration)		
P3-05 (S-ramp 5 levelling duration)		
<p>Note : Speeds can be optionally entered in elevator units e.g. m/s, see section 9.6 for further details.</p>		

Braking resistor set up

In order to utilise the on board protection for the braking resistor you need to enter the resistor details into the following:

P3-13 Brake Resistor Resistance

P3-14 Brake Resistor Power

For software protection of the connected brake resistor, enter the rated power and resistance of the resistor into the relevant parameters. The drive will then monitor the braking resistor to ensure that it does not operate outside of its designed limits.

Where an external thermal protection device is fitted, and software protection is not required. Setting these parameters to zero will disable the software protection feature.

Refer to Optidrive manual for further adjustments/additional parameters.