



OPTIDRIVE™ eleVator

AC Variable Speed Drive

Compact Elevator Drive
Suitable for geared & gearless systems



0.75kW – 37kW / 1HP – 50HP
200–480V Single & 3 Phase Input

Compact Elevator Drive

Dedicated drive for geared and gearless lift applications

Optidrive Elevator is the 2nd generation dedicated elevator drive from Invertek Drives, designed to provide smooth, reliable carriage control in all elevator applications.

The compact external dimensions simplify installation, whilst optional incremental, EnDat & SinCos encoder feedback interfaces allow compatibility with a wide range of motors.

Invertek's renowned motor control capability ensures maximum ride comfort under all conditions, with five independent S-Ramps and dedicated motor holding brake control algorithm allowing fine tuning of the system.

Optidrive Elevator also incorporates Safe Torque Off* as standard, and a range of key elevator features including Rescue Mode with light load detection and short floor operation.



Optipad Multi Language OLED Display



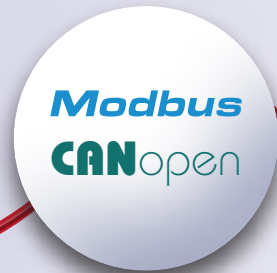
EnDat, SinCos Encoder modules



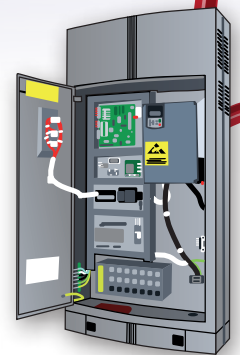
Pluggable control terminals



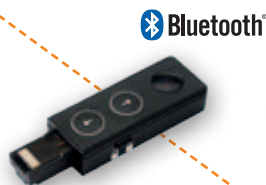
Long life, low noise cooling fans



Modbus RTU & CANopen on-board



Elevator Controller



Bluetooth

Optistick Fast & accurate repeat drive programming



Free PC Commissioning & Diagnostics Software



Reliable,
Fast Setup
& Long Life.

Elevator Motor

- Gearless Permanent Magnet Motors (Open/Closed Loop)
- Geared Motors (Open/Closed Loop)

Elevator Encoder - Optional feedback

- Incremental Encoders
- EnDat Rotary Encoders (EnDat 2.1 & 2.2) with simulated encoder output.
- SinCos Rotary Encoder with simulated Encoder output.

Flexibility

- Control of IM and PM motors in a single product, geared or gearless systems
- Open loop or Closed loop vector (with incremental encoder) control of standard IM motors.
- Open loop or Closed loop (with Incremental/EnDat encoder) control of PM motors.

Comfortable Ride

- Includes 5 independent S-Ramps allowing fine tuning of ride performance and jerk free travel.
- Short floor operation reduces carriage travel time.
- High motor switching frequency (max 32kHz) for quiet motor operation.
- Dedicated motor brake control algorithm for safe and smooth operation of the motor brake.

Advanced Features

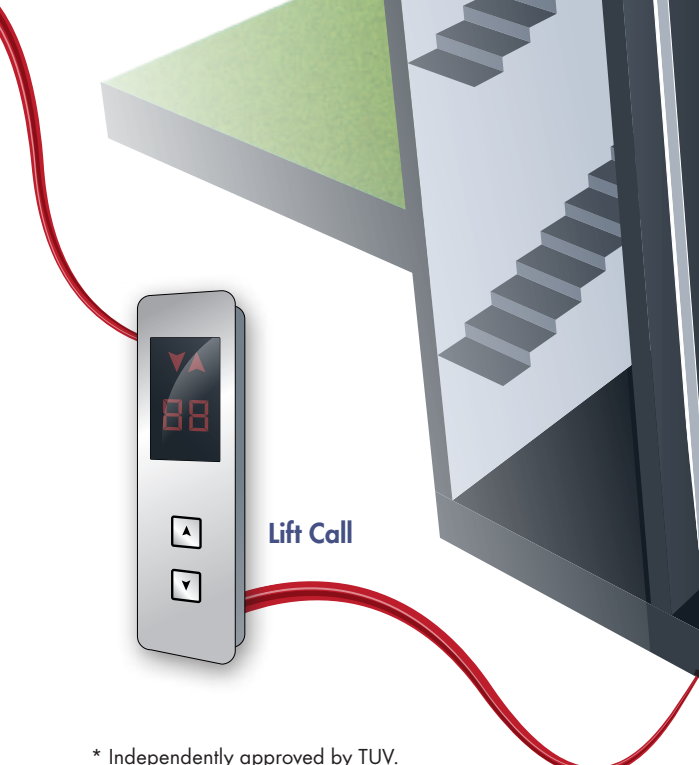
- Anti-Rollback (with encoder).
- Rescue mode operation possible with external UPS
- On-board simple PLC function allows custom application programs to be written and interfacing with a wide variety of control systems
- Modbus RTU and CANopen as standard
- Full load operation up to 50° with no de-rating
- Safe Torque Off function built in as standard
- Output contactor control for SIL 3 compliance

Easy to Use

- Dedicated elevator drive with logical parameter and function groups
- Factory parameter settings suited to simple elevator applications for fast start up
- Drive setup using familiar elevator units
- Standstill motor autotune – no shaft rotation – no rope removal required
- Wireless parameterisation (using Optistick with OptiTools studio)

* Independently approved by TUV.

The Safe Torque Off function complies with the definition of Safe Torque Off as defined by EN 61800-5-2:2007, EN 61508 SIL 2, EN 62061 SILCL 2, IEC60204-1 Stop category 0.



kW	HP	Amps	Size	kW Model Code										HP Model Code									
				Product Family	Generation	Frame Size	Voltage Code	Power Rating Code	Supply Phases	EMC Filter	Brake Transistor	Enclosure	Display	PCB Coating	Product Family	Generation	Frame Size	Voltage Code	Power Rating Code	Supply Phases	EMC Filter	Brake Transistor	Enclosure
200-240V ± 10% 1 Phase Input	0.75	1	4.3	2	ODL-2-2-2-075-1-K-F-4	2-S-#	ODL-2-2-2-010-1-H-F-4	2-S-#	ODL-2-2-2-150-1-K-F-4	2-S-#	ODL-2-2-2-020-1-H-F-4	2-S-#	ODL-2-2-2-220-1-K-F-4	2-S-#	ODL-2-2-2-030-1-H-F-4	2-S-#							
	1.5	2	7	2																			
	2.2	3	10.5	2																			
380-480V ± 10% 3 Phase Input	4	5	9.5	2	ODL-2-2-4-400-3-K-F-4	2-S-#	ODL-2-2-4-050-3-H-F-4	2-S-#	ODL-2-2-4-075-3-K-F-4	2-S-#	ODL-2-2-4-100-3-H-F-4	2-S-#	ODL-2-2-4-110-3-K-F-4	2-S-#	ODL-2-2-4-150-3-H-F-4	2-S-#							
	5.5	7.5	14	3																			
	7.5	10	18	3																			
	11	15	24	3																			
	11	15	24	4	ODL-2-4-4-110-3-K-F-4	N-S-#	ODL-2-4-4-150-3-H-F-4	N-S-#	ODL-2-4-4-150-3-K-F-4	N-S-#	ODL-2-4-4-200-3-H-F-4	N-S-#	ODL-2-4-4-185-3-K-F-4	N-S-#	ODL-2-4-4-250-3-H-F-4	N-S-#							
	15	20	30	4																			
	18.5	25	39	4																			
	22	30	46	4	ODL-2-4-4-220-3-K-F-4	N-S-#	ODL-2-4-4-300-3-H-F-4	N-S-#	ODL-2-4-4-300-3-K-F-4	N-S-#	ODL-2-4-4-040-3-H-F-4	N-S-#	ODL-2-4-4-370-3-K-F-4	N-S-#	ODL-2-4-4-050-3-H-F-4	N-S-#							
	30	40	61	5																			
	37	50	72	5																			

kW Models: Factory Settings

Motor Rated Frequency: 50Hz
Motor Rated Voltage: 400V

HP Models: Factory Settings

Motor Rated Frequency: 60Hz
Motor Rated Voltage: 460V

Replace # in model code with colour-coded option

Enclosure & Display Types

2-S



IP20 LED Display

N-S



IP55 LED Display

PCB Coating

N

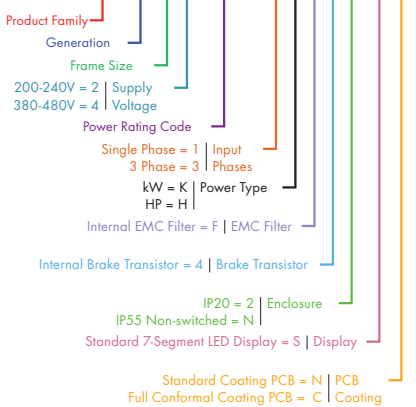
Standard Coating

C

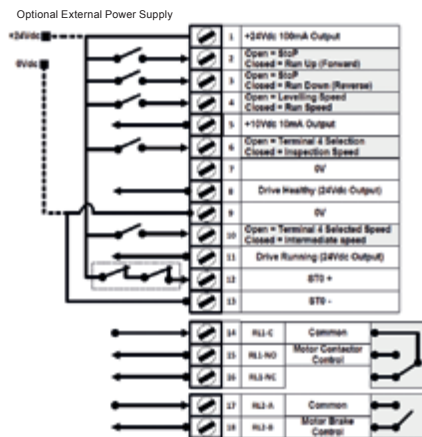
Full Conformal Coating

Model Code Guide

ODL-2-34055-3KF42-SN



Connection Diagram



Optipad Remote OLED Keypad
OPT-2-OPPAD-IN



Optistick
Fast & accurate repeat drive programming



EnDat Encoder module
OPT-2-ENDAT-IN



SinCos Encoder module
OPT-2-SINCOS-IN



Incremental Encoder module
OPT-2-ENCOD-IN, (5V TTL Encoder)
OPT-2-ENCHT-IN, (24V HTL Encoder)

NOT TO SCALE



	IP20		IP55	
	2	3	4	5
mm Height	221	261	450	540
mm Width	110	131	171	235
mm Depth	185	205	252	270
kg Weight	1.8	3.5	11.5	22.5

www.invertekdrives.com/elevators



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