



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.

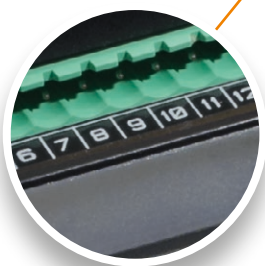
Optidrive Elevator also incorporates Safe Torque Off* as standard, and a range of key elevator features including Rescue Mode with light load detection and short floor operation.



Optipad Multi Language TFT Display



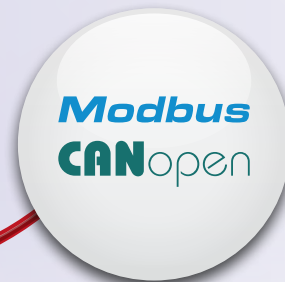
EnDat, SinCos Encoder modules



Pluggable control terminals



Long life, low noise cooling fans



Modbus RTU & CANopen on-board



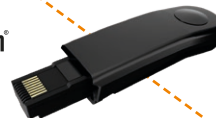
NFC Connectivity



Elevator Controller



Optistick Fast & accurate repeat drive programming



Free PC Commissioning & Diagnostics Software





Reliable,
Fast Setup &
Long Life

Elevator Motor

- Gearless Permanent Magnet Motors
- Geared Induction Motors
- No motor manufacturer allegiance for full motor flexibility

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 Geared and Gearless elevator systems in a single product
- Open loop or Closed loop vector (with incremental encoder) control of standard IM motors
- Open loop or Closed loop (with SinCos/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 (Open and closed loop operation)
- Rescue mode operation (Sine wave or square wave UPS), with easiest direction measurement for UPS longevity.
- On-board simple PLC function allows custom application programs to be written and interfacing with a wide variety of control systems built in as standard
- Modbus RTU and CANopen as standard
- Full load operation up to 50°C with no de-rating
- Safe Torque Off function built in as standard
- Brake release monitoring (In compliance with EN81-20 protection against unintended car movement)



Easy to Use

- Easy-learn parameter structure and programming
- 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 Model Code	kW	HP	Amps	Size	Product Family	Generation	Frame Size	Voltage Code	Power Rating Code	Supply Phases	EMC Filter	Brake Transistor	Enclosure	Display	PCB Coating	HP Model Code	Product Family	Generation	Frame Size	Voltage Code	Power Rating Code	Supply Phases	EMC Filter	Brake Transistor	Enclosure	Display	PCB Coating
					ODL - 2 - 2	ODL - 2 - 3	ODL - 2 - 4	ODL - 2 - 5	ODL - 2 - 2	ODL - 2 - 3	ODL - 2 - 4	ODL - 2 - 5	ODL - 2 - 2	ODL - 2 - 3	ODL - 2 - 4	ODL - 2 - 5	ODL - 2 - 2	ODL - 2 - 3	ODL - 2 - 4	ODL - 2 - 5							
200-240V ± 10% 1 Phase Input	0.75	1	4.3	2	ODL - 2 - 2 - 2 075 - 1 K F 4	2 - S N	ODL - 2 - 2 - 2 010 - 1 H F 4	2 - S N	ODL - 2 - 2 - 2 150 - 1 K F 4	2 - S N	ODL - 2 - 2 - 2 020 - 1 H F 4	2 - S N	ODL - 2 - 2 - 2 220 - 1 K F 4	2 - S N	ODL - 2 - 2 - 2 030 - 1 H F 4	2 - S N											
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kW Models: Factory Settings

Motor Rated Frequency: 50Hz
Motor Rated Voltage: 230/400/575V

HP Models: Factory Settings

Motor Rated Frequency: 60Hz
Motor Rated Voltage: 230/460/575V

Replace # - # in model code with colour-coded option

Enclosure & Display Types

2-S



IP20
With LED Display

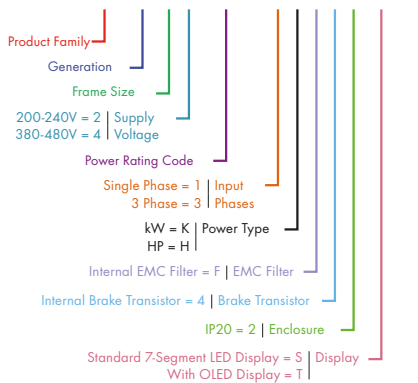
2-T



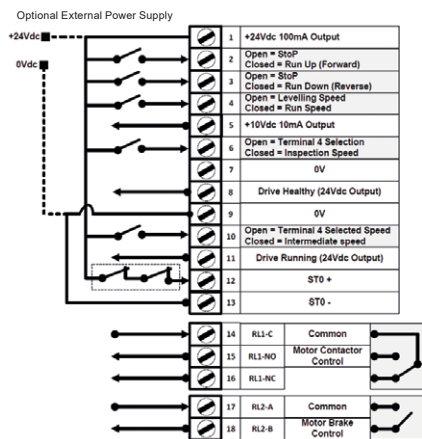
IP20
With OLED Display

Model Code Guide

ODL-2-34055-3KF42-SN



Connection Diagram



Options & Accessories



Optipad Remote TFT Keypad
OPT-3-OPPAD-IN



Optistick
Fast & accurate repeat drive programming



EnDat Encoder Module
OPT-2-ENDAT2-IN



SinCos Encoder Module
OPT-2-SINCOS2-IN



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

NOT TO SCALE



IP20

Size	2	3	4	5
mm Height	221	261	418	486
mm Width	110	131	160	222
mm Depth	185	205	240	260
kg Weight	1.8	3.5	11.5	23



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