

**Nidec**

**Drives**



# Elevator Drive E300

Dedicated drives for  
class-leading ride comfort

Specialist Drive



# Any size solutions

# Your top choice For every project



## 25+ Automation centers

Providing outstanding customer support for any product or service requirement.



## 5 manufacturing sites

Producing a comprehensive range of products, optimised for specific customer needs.



## Unparalleled performance

Control Techniques drives are the go to product in modern elevator systems around the globe.



## Drives you can rely on

Designed and tested to offer enduring reliability regardless of traffic requirements or installation preference.

### Our elevator drive solutions



## 5-year warranty as standard\*

Our Elevator Drive is so reliable we are confident enough to supply it with a five-year warranty as standard.

Now you can buy with the same confidence.

\*Warranty terms and conditions apply.

# A level above throughout The lifetime of your application

## Freedom to design

### For every project

Optimised and efficient for new elevators, truly comprehensive when it comes to the wide spectrum of requirements at retrofit projects.

### Broad power range, compact form factor

A full range of some of the smallest drives in the industry per kW rating. Perfect for MRL systems where space is at a premium, and just as capable as a full cabinet, offering 10 m/s speeds in high rise buildings.

### Match any control interface, any protocol

Velocity or position control through any common method, including analogue speed reference, digital I/O, or digital comms via Modbus, CANopen, CANopen-Lift, DCP or Ethernet.

### Work with any motor, any feedback device

Perfect control over any asynchronous or synchronous motor. Support for 17 different feedback types as standard, without the need for additional interface cards.

### Multiple mounting options

Flexible drive mounting options are available to optimise space, either in a cabinet or inside the elevator shaft.

### Dynamic braking & regen solutions

All drives are fitted with a dynamic braking transistor as standard. Braking energy can also be recuperated when using one of our regen solutions together with the drive.

### Back-up power connectivity & rescue mode

After connecting a UPS or battery to the terminals of the drive, low voltage mode can keep the drive running and perform a rescue even at 24 Vdc.



# Effortless installation and commissioning

## Pluggable drive terminals

Control terminal connections are pluggable across the full range and biased to ensure correct connection. Supply and motor power terminal connections are pluggable up to 22 kW.

## Robust cable management

Our standard accessories help keep things tidy and provide grounding points for shielded control and power cables.

## Elevator specific menu structure

Designed to be intuitive, everything is described clearly using familiar language and common units.

## Stationary autotune

Encoder offset detection and optimum current loop configuration without the need to lift the mechanical brakes or to de-rope the system.

## Parameter storage, cloning & security

Quickly back-up drive parameter configurations to an SD card or Smartcard, or clone them over multiple drives.

Create secure cards with pre-configured parameter sets and lock them to your specific units.

## Keypad with backlit LCD display

The Remote Keypad RTC helps make adjustments to drive settings rapidly. Mount it directly on the drive or remotely with an RS485 lead.

## Virtual terminal

Take advantage of advanced industry-specific comms protocols and set everything up through the elevator controller without direct interaction with the drive, especially if it's physically difficult to access.

## PC tools

Manage everything related to your elevator drive in our Connect software. Set up, fine tune or troubleshoot with just a few clicks.



## Class-leading performance

### Creep-to-floor or Direct-to-floor operation

Get class-leading ride performance either in traditional creep-to-floor operation or with our highly accurate direct-to-floor positioning mode, greatly improving travel times.

### Selectable gains

Choose separate variable speed loop and current loop gains as needed for start, run and stopping, and have perfect ride comfort at each section of the travel profile.

### Load cell compensation & Start locking

Prevent roll-back of the elevator car when the brakes are released, with or without a load cell fitted in the system.

### Start optimiser

Use the Start optimiser function to overcome stiction during start in either the motor gearbox or guide rail pads.

### Fast start

Speed up the starting sequence for every travel, allowing the brakes to release as the elevator doors are closing and for the car to move as soon as it can safely do so.

### Floor sensor correction

If your site has floor sensors or limit switches set up in the elevator shaft, FSC helps compensate for rope slip, rope stretch or any mechanical offset, achieving perfectly accurate positioning every time.

### Short floor landing

Where the garage or lobby has an odd height compared to other floors in the building, you can rely on Short floor landing for the elevator car to travel a fixed distance and get into position.

### Sleep mode

Turns off non-essential circuits to minimise energy consumption. Quick wake up times ensure the drive is ready to go when it's needed.



# Maintenance and diagnostics support

## Selectable status parameters

Two status parameters can be freely selected to be displayed on the attached drive keypad as default, and help monitor the drive during normal operation or maintenance.

## Diagnostics

The simple trip code system makes it easy to diagnose drive errors. The last 10 trip codes are recorded within the drive to aid troubleshooting.

With the KI-Keypad Plus attached, the diagnostic records also receive time and date stamps as they are generated.

## Data logger

All drives have a built-in data logger that can monitor any parameter, recording events such as drive trips. Records can be written onto a media card or retrieved by the elevator controller via the comms link.

## Normal Terminal Stopping Device

The NTSD function is intended to bring the elevator car to a controlled, limited speed if the car ever approaches the bounds of the shaft or the controller detects overspeed.

## Fast stop

When a technician is manually controlling the elevator car during maintenance, the Fast stop feature can bring the car to a rapid but controlled halt as needed.

## Low voltage rescue mode

Whenever the main power is down, the drive can perform a rescue of an unbalanced car to the nearest floor by sequencing the brakes. In systems with a synchronous machine, the drive can also utilise the braking energy generated by the motor and generate the rescue profile for improved comfort.

## Blocked elevator car release

The drive can undo the elevator's safety gear after it has been deployed and return the blocked car to normal operation, without the need for a technician to climb into the shaft.

## Travel counter

The built-in travel counter helps keep track of rope lifetime when plastic ropes are used in the elevator system. The drive warns when critical thresholds have been reached, and maintenance is necessary.

# Elevator Drive E300

## State-of-the-art solutions in support of system safety

Above all else, safety is the number one priority in any elevator application. We at Control Techniques are rigorous in achieving the highest attainable safety levels, and assist our partners in doing the same, with pre-engineered features already built-in into our products.

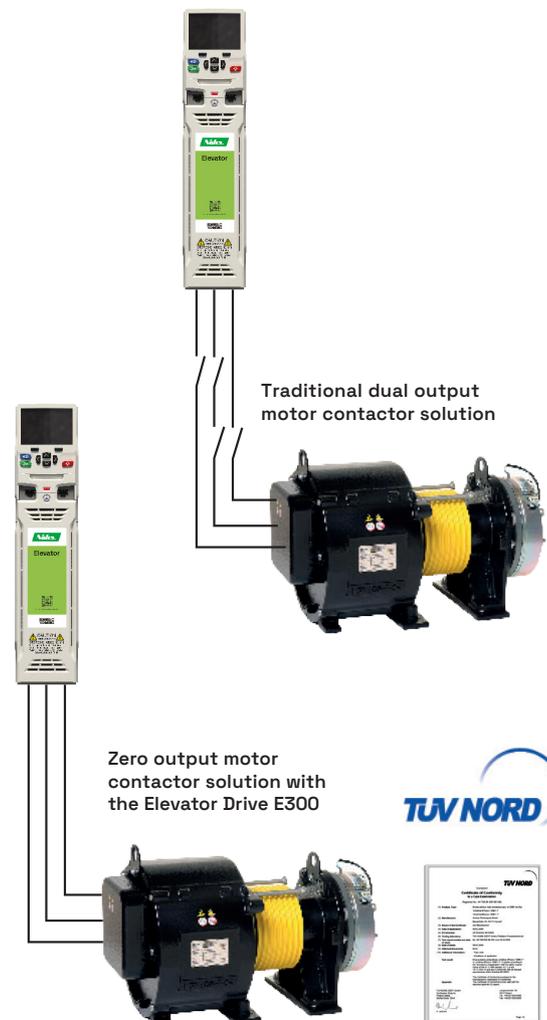
### Zero motor contactor operation

Control Techniques' drive range enables contactorless operation in elevator applications.

Our EN81-20, EN81-50 TÜV certified Safe Torque Off (STO) function provides an exceedingly dependable method for preventing the motor from being driven. This removes the need for both output motor contactors, a standard but burdensome feature of traditional elevator systems.

The benefits of switching to a contactorless solution include:

- Simplified electrical installation
- Improved system reliability
- Reduced EMC issues
- Reduced acoustic noise
- Improved system costs
- Minimised cabinet space allowing machine room-less (MRL) installations installation



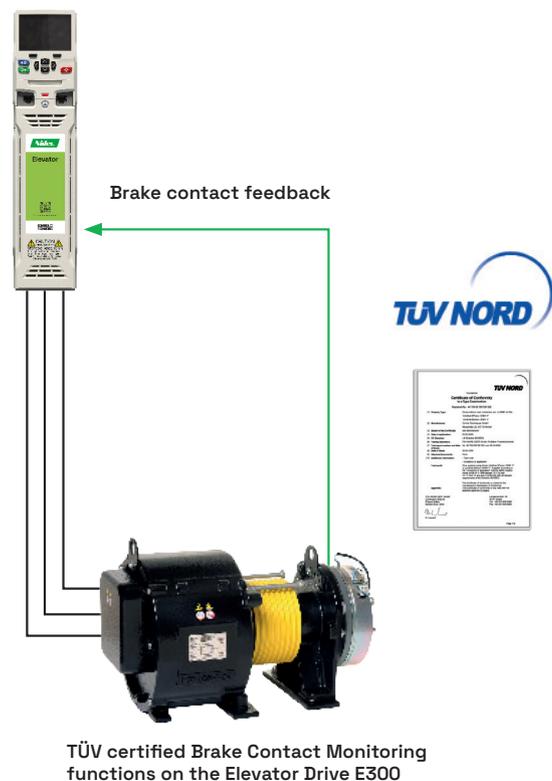
## Optimum brake control

Control Techniques' Elevator Drive E300 can manage the control signals of the mechanical brakes, allowing for the smoothest transition of load during start and stop, or leave it up to the elevator controller, depending on the customers' preferences in system design.

## Brake contact monitoring

The Elevator Drive E300 comes with Brake Contact Monitoring (BCM) as standard; an advanced feature set that improves overall system safety and supports even legacy elevator systems to meet the requirements of EN81-20, EN81-50 for Unintended Car Movement (UCM).

Our TÜV certified solution provides a flexible and simple addition to any existing or new project, managing brake contact feedback for motors with one to four motor brakes.



TÜV certified Brake Contact Monitoring functions on the Elevator Drive E300

# Effortless set-up

# Class leading Ride comfort

## Performance guaranteed

Ride experience is the true test of quality in the world of elevators. As a company of drive obsessives we take pride in honing our unique motor control algorithms, and so precise, smooth motor control is what we do best.

Our ultra fast current loop guarantees vibration and jerk-free motor control with virtually any motor, either geared or gearless induction motors, or the latest, highly efficient permanent magnet machines.

The benefit to you is the smoothest car movement possible and reduced travel times realized through optimum start sequencing. The improvements don't have to end there, as you may also take advantage of our highly accurate direct-to-floor positioning mode, eliminating the wait on the elevator car to creep into position.

## Right to remain silent

Sound also plays an important role in user's perception of quality. Thanks to the intelligent thermal design in our drives, the cooling fans only run when components require additional cooling at peak operation, cutting down on unwanted acoustic noise and making our drives run silently.

You may also use our drives to switch to a zero output motor contactor solution to further reduce acoustic noise across the entire elevator system.

## Hassle-free installation

Gone are the days when a commissioning or maintenance job needs to take hours if not days, lifting the motor brakes or de-roping the system.

Our static autotune algorithms do all the hard work, quickly detecting the encoder offset and achieving optimum current loop configuration without you getting your hands dirty.

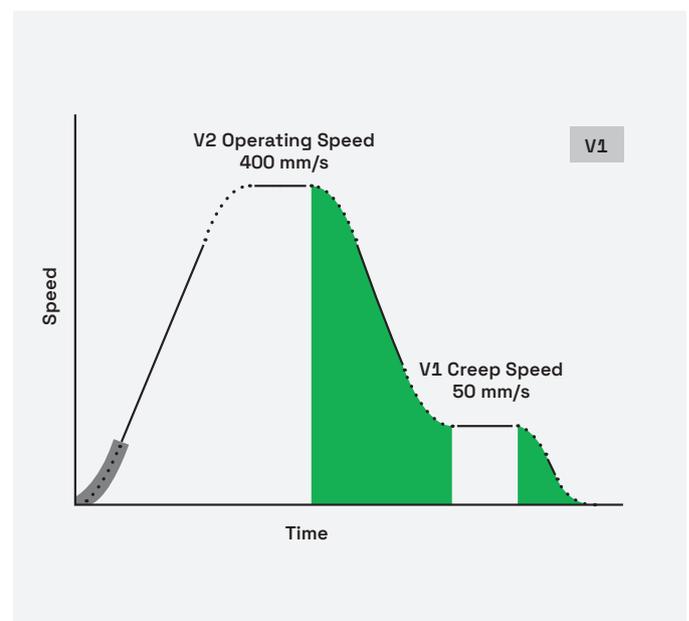
## Rapid set-up and adjustment

The menu structure of the Elevator Drive E300 is designed with elevator engineers in mind, so all the settings are where you'd expect them and described using familiar language. Setup is straightforward whether you're highly experienced working with Control Techniques drives or brand new to them.

Start with the top level "Menu A" to quickly access all frequently used functions. You can also go deeper and fine-tune the drive to your specific needs through KI-Keypad Plus.

## Visually pleasing

Optimising your system is easy and more pleasing to the eyes than ever with the advanced graphic interface of our PC tools. Hover over to highlight and fine-tune any part of the high resolution multi-step curve. Once finished, simply save and clone parameter sets to transfer between drives and devices.



# Elevator Drive E300

## To the rescue

With over 50 years of drive knowledge, Control Techniques know how to make reliable solutions designed to keep applications running.

### Flexible and cost effective

Ensuring no one gets trapped in an elevator car if the main power goes down is a must-have for any elevator system, yet sizing for such a contingency plan can be complex and costly.

Our drives allow for a fully flexible DC operating voltage range, down to 24Vdc, supporting common solutions such as a single phase UPS or battery operation.

The Elevator Drive E300 also incorporates a number of rescue assist modes, minimizing the power drawn from the backup supply, such as gravity-assisted Low Voltage Rescue, and even utilizing the energy generated by a synchronous motor.

Additional features like the Blocked Cabin Release function cut maintenance time and risk. In case the safety gear has been deployed, the drive can assist in releasing the cabin remotely, without the need for a technician to climb into the shaft.

### Stay in tune

The Elevator Drive E300's built-in data logger can monitor any drive parameter, and it's fully user configurable. It allows up to 4 user selected parameters to be logged at the same time.

That means, for example, you can log the speed reference, speed feedback, current and I/O sequence for every journey. If a fault occurs, it's easily traced and sorted out with minimum downtime.

Get time and date stamping with the real-time clock on the KI-Keypad Plus. Trip log data files can be automatically written to an on-board SD Card or Smartcard, or retrieved by the elevator controller.



## Robust and reliable

From the start we design our elevator drives with cyclic applications in mind, to help achieve long service life in the most demanding applications. To withstand harsh environments, we protect our drives with conformal coating for increased resilience.

All E300 drives also offer phase loss detection on both the input and output. This safeguards components, increases system lifetime, and helps avoid unnecessary downtime.

## Tried-and-true

We can ensure the highest level of performance no matter how the elevator system is configured. This is because our E300 drives have been extensively tested with a range of elevator motors and controller technologies at the UK National Lift Tower.

The National Lift Tower is an independent 127 m (418 ft) research and development facility in Northampton, England. There are six lift shafts of different heights and speeds including a high speed shaft with a travel of 100 m and a theoretical maximum speed of 10 m/s.

[nationallifttower.com](http://nationallifttower.com)

## Diagnostics? There's an app for that



Free  
download



### Diagnostic Tool App

The Diagnostic Tool App is a fast and simple tool, which allows users to quickly solve any error codes that the drive may show.

Download from:  
[controltechniques.com/mobile-applications](http://controltechniques.com/mobile-applications)

## Free online help: [Drive-Setup.com](http://Drive-Setup.com)

You'll have permanent free access to lots of web pages with useful information, like user manuals, 'how-to' videos and guides.

### [YouTube Training](https://www.youtube.com/controltechniques)

Access a series of Commander C training videos, available on YouTube, visit:  
[www.youtube.com/controltechniques](https://www.youtube.com/controltechniques)

# Elevator Drive E300

## Key features

Function		Function	
Creep-to-floor operation	✓	Active thermal management	✓
Direct-to-floor positioning	✓	Variable speed cooling fan	✓
Selectable speed reference	10	Supply loss detection	✓
Start optimizer	✓	Low DC link operation	✓
Start locking & pre-torquing	✓	24 Vdc backup	✓
Selectable switching frequencies	Up to 16 kHz	Simple UPS connection with load direction signal	✓
Skip frequency dead bans	✓	Analogue input control	3
Local/Remote keypad	✓	Analogue output control	2
High resolution S-ramp	✓	Temperature monitoring	✓
Acceleration Rates	8	Digital input control	3
Deceleration Rates	8	Digital I/O programmable control	3
Control mode: analogue reference	✓	Safe Torque Off input	1
Control mode: digital binary	✓	Relay control	1
Control mode: control word	✓	Mechanical Brake Controller	✓
Control mode: analogue reference over comms	✓	Brake contact monitoring	✓
Control mode: DCP3 & DCP4	✓	Adjustable break delays	✓
Control mode: CANopen-Lift	✓	Logic function control	✓
Stator resistance compensation	✓	Timer function control	✓
Slip compensation	✓	Limit switch control	✓
Selectable roping ratios	✓	Variable selector	✓
Auto-tune static	✓	Energy meter	✓
Auto-tune rotating	✓	Trip time stamping	✓
Tunable start, run & stop gains	✓	Trip logging	8
Fast stop	✓	Run time log	✓
Floor sensor correction	✓	Cloning	✓
DC injection braking	✓	Universal feedback port on-board	✓
Programmable braking	✓	Speed feedback via options	✓



# Key usability features

## Easy click-in keypad connection

### KI-Keypad Plus

- Dedicated elevator features for a straight forward setup
- Bluetooth for wireless monitoring
- Local or remote mounting
- Real-time clock for time-stamping and diagnostics

## Power on / Drive status LED

## Single screw removable cover

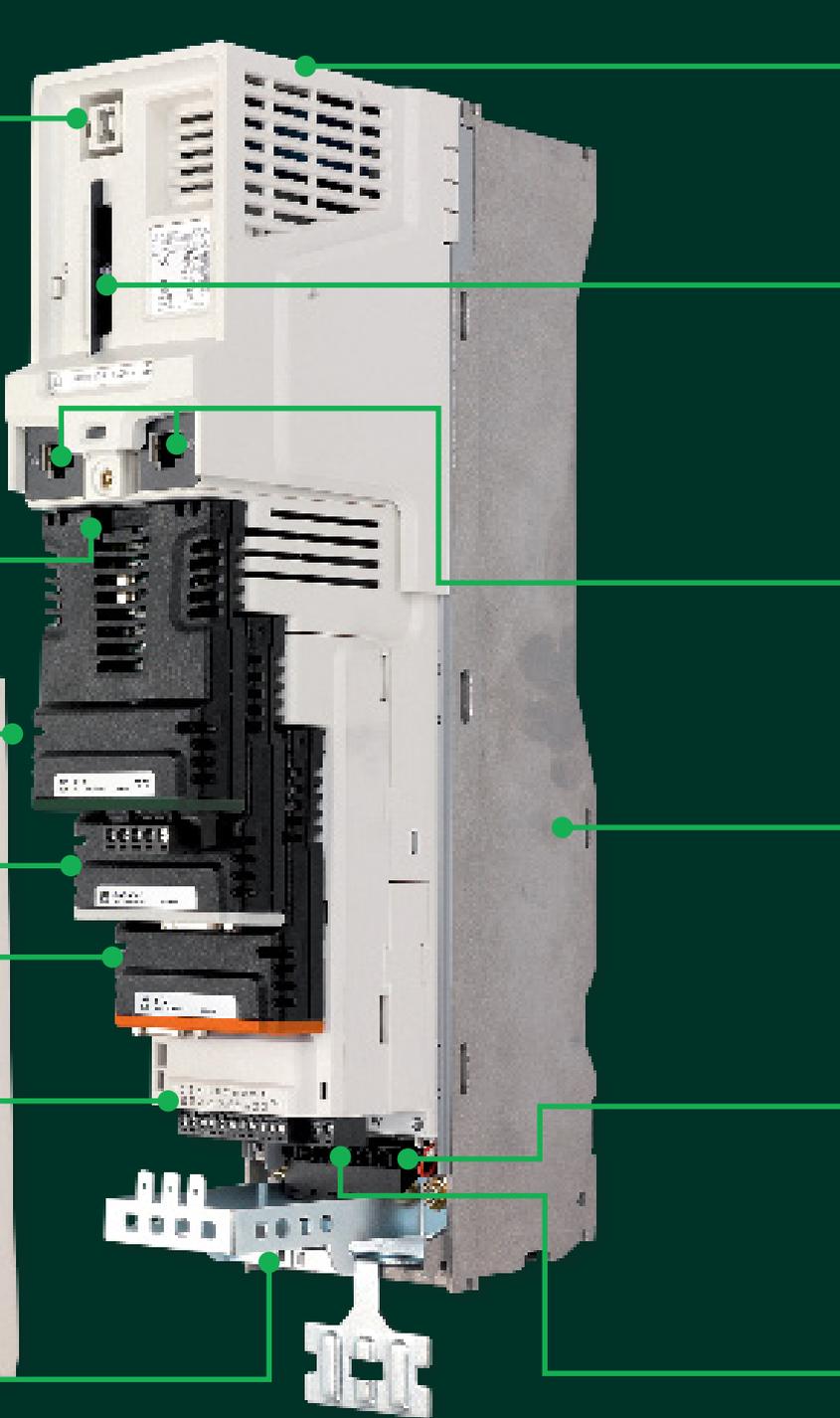
## 3 x slots available for additional communications, I/O, and feedback management modules

## Pluggable control connections

## Robust cable management system

Grounding point for shielded control and power cables





**Terminal cover for DC bus, braking terminal and on-board EMC filter\***

**Slot for Smartcard / SD Card Adaptor**

For parameter storage, back-up of drive configuration and cloning of parameters.

**RS485 communications port Modbus RTU**

**Aluminium chassis**

Allows flexible mounting, with high performance extruded heatsink.

**Flexible dual port universal encoder interface**

Supporting a wide range of incremental encoders (e.g. AB and SC), absolute encoders (e.g. SC.SSI, SC.EnDat, SC.Hiperface, SC.SC and SC.BiSS), absolute comms encoders (EnDat, BiSS) and resolvers.

**User-friendly power connections**

With removable terminals\*

\*Features and their locations vary between drive sizes.



Certificate No. EMS 54446



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Certificate No. Q 05176



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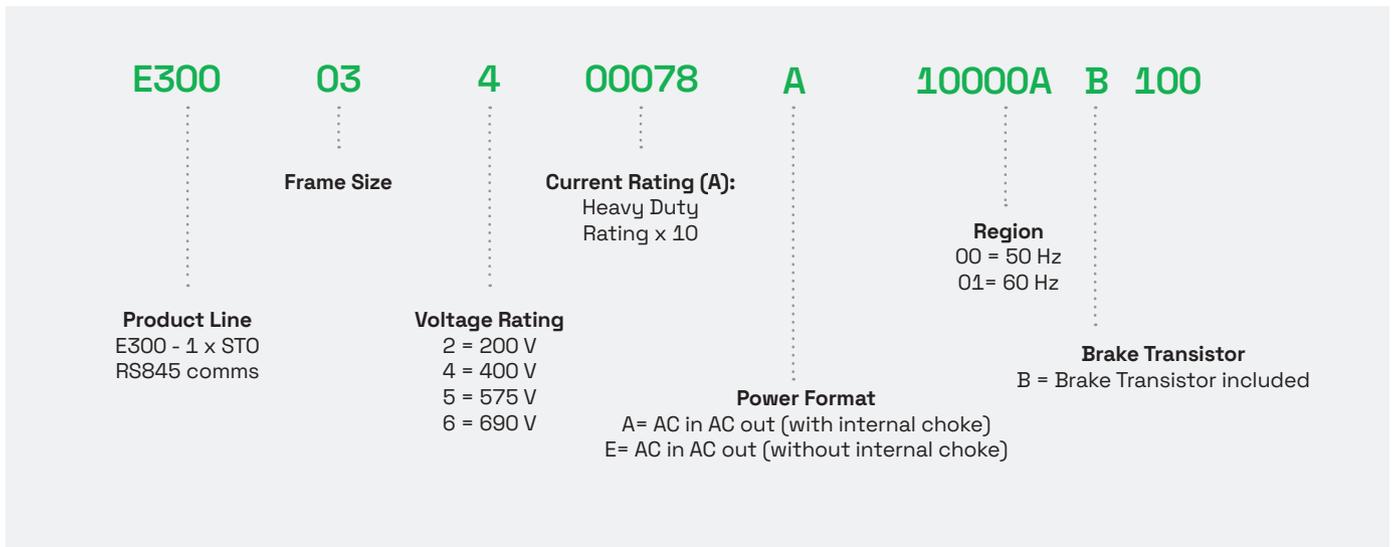
# Elevator E300

## Ordering guide



Frame size	Dimensions H x W x D mm (in)	Weight kg (lb)	DC Bus Choke/AC Line Choke	
			Internal	External
3	365 x 83 x 200 (14.4 x 3.3 x 7.9)	4.5 (9.9)	✓	-
4	365 x 124 x 200 (14.4 x 4.9 x 7.9)	6.5 (14.3)	✓	-
5	365 x 143 x 200 (14.4 x 5.6 x 7.9)	7.4 (16.3)	✓	-
6	365 x 210 x 227 (14.4 x 8.3 x 8.9)	14 (31)	✓	-
7	508 x 270 x 280 (20 x 10.6 x 11.0)	28 (62)	✓	-
8	753 x 310 x 290 (29.7 x 12.2 x 11.4)	52 (115)	✓	-
9A	1049 x 310 x 290 (41.3 x 12.2 x 11.4)	66.5 (147)	✓	-
10E	1010 x 310 x 290 (39.7 x 12.2 x 11.4)	46 (101)	-	✓
11E	1190 x 310 x 312 (46.9 x 12.2 x 12.3)	63 (139)	-	✓

### Order code





# Elevator Drive E300

## Drive ratings

The following ratings are based on the following conditions:

- 40 °C (104 °F) maximum ambient,
- 8 kHz switching frequency (3 to 16 kHz available),
- A typical elevator profile (50 % ED),
- IGBT lifetime optimization enabled (reduction of switching frequency based on drive inverter temperature),
- 1000 m altitude

Derating is required for higher switching frequencies, ambient temperatures > 40 °C (104 °F) and higher altitude. For derating information, contact your local drive supplier.

### 200 V to 240 V ±10%

Product Code	Frame Size	Input Phases	kW @ 230 V	HP @ 230 V	Nominal Output Current (A)	Peak Current (A)
E300-03200106A	3	3	2.2	3	10.6	18.6
E300-04200137A	4	3	3	3	13.7	24
E300-04200185A	4	3	4	5	18.5	32.4
E300-05200250A	5	3	5.5	7.5	25	43.8
E300-06200330A	6	3	7.5	10	33	57.8
E300-06200440A	6	3	11	15	44	77
E300-07200610A	7	3	15	20	61	107
E300-07200750A	7	3	18.5	25	75	132
E300-07200830A	7	3	22	30	83	146
E300-08201160A	8	3	30	40	116	203
E300-08201320A	8	3	37	50	132	231
E300-09201760A	9	3	45	60	176	308
E300-09202190A	9	3	55	75	219	383
E300-10202830E	10	3	75	100	283	496
E300-10203000E	10	3	90	125	300	525

## 380 V to 480 V ±10%

Product Code	Frame Size	Input Phases	kW @ 400 V	HP @ 460 V	Nominal Output Current (A)	Peak Current (A)
E300-03400062A	3	3	2.2	3	6.2	11
E300-03400078A	3	3	3	5	7.8	14
E300-03400100A	3	3	4	5	10	18
E300-04400150A	4	3	5.5	10	15	27
E300-04400172A	4	3	7.5	10	17.2	31
E300-054002200A	5	3	9	12	22	38.5
E300-05400270A	5	3	11	15	27	48
E300-05400300A	5	3	15	20	30	53
E300-06400350A	6	3	15	25	35	62
E300-06400420A	6	3	18.5	30	42	74
E300-06400470A	6	3	22	30	47	83
E300-07400660A	7	3	30	50	66	116
E300-07400770A	7	3	37	60	77	135
E300-07401000A	7	3	45	75	100	175
E300-08401340A	8	3	55	100	134	235
E300-08401570A	8	3	75	125	157	275
E300-09402000A	9	3	90	150	200	350
E300-09402240A	9	3	110	150	220	385
E300-10402700E	10	3	132	200	270	473
E300-10403200E	10	3	160	250	310	543
E300-1140370E	11	3	185	300	377	660
E300-11404170E	11	3	200	250	417	730
E300-11404640E	11	3	250	400	450*	787

\* at 4 kHz

## 500 V to 575 V $\pm 10\%$

Product Code	Frame Size	Input Phases	kW @ 575 V	HP @ 575 V	Max. Continuous Output Current (A)	RFC Peak Current (A)
E300-05500030A	5	3	1.5	2	3	5.5
E300-05500040A	5	3	2.2	3	4	7
E300-05500069A	5	3	4	5	6.9	12
E300-06500100A	6	3	5.5	7.5	10	17.5
E300-06500150A	6	3	7.5	10	15	26.5
E300-06500190A	6	3	11	15	19	33.5
E300-06500230A	6	3	15	20	23	40.5
E300-06500290A	6	3	18.5	25	29	51
E300-06500350A	6	3	22	30	31	54.5
E300-07500440A	7	3	30	40	44	77
E300-07500550A	7	3	37	50	55	96.5
E300-08500630A	8	3	45	60	63	110.5
E300-08500860A	8	3	55	75	86	150.5
E300-09501040A	9	3	75	10	104	182
E300-09501310A	9	3	90	125	131	229.5
E300-10501520E	10	3	110	150	152	266
E300-10501900E	10	3	132	200	190	332.5
E300-11502000E	11	3	150	200	200	350
E300-11502540E	11	3	185	250	213	373
E300-11502850E	11	3	225	300	264*	462

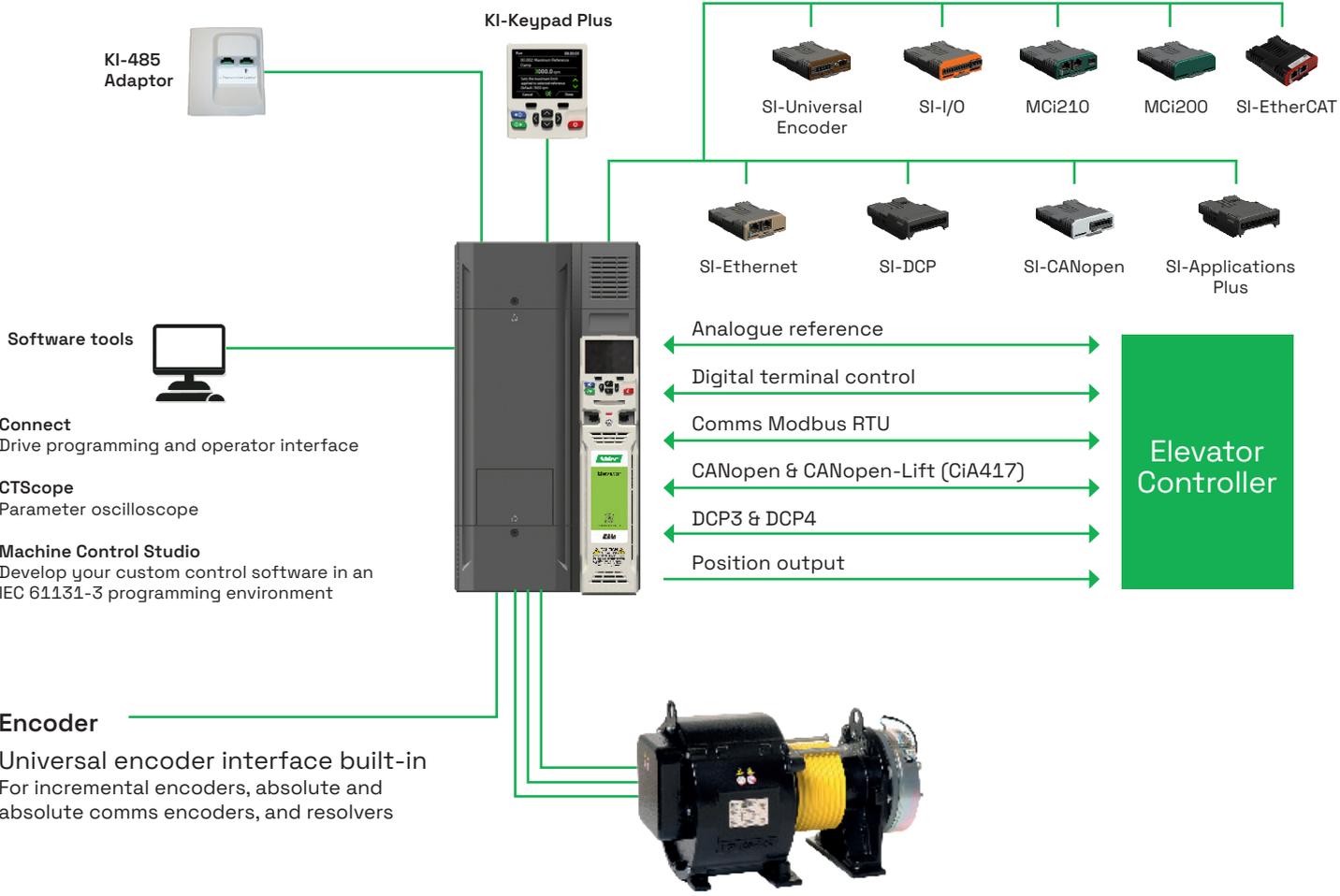
\* at 4 kHz

## 500 V to 690 V ±10%

Product Code	Frame Size	Input Phases	kW @ 575 V	HP @ 575 V	Max. Continuous Output Current (A)	RFC Peak Current (A)
E300-07600190A	7	3	15	20	19	33.5
E300-07600240A	7	3	18.5	25	24	42
E300-07600290A	7	3	22	30	29	51
E300-07600380A	7	3	30	40	38	66.5
E300-07600440A	7	3	37	50	44	77
E300-07600540A	7	3	45	60	48	84
E300-08600630A	8	3	55	75	63	110.5
E300-08600860A	8	3	75	100	86	150.5
E300-09601040A	9	3	90	125	104	182
E300-09601310A	9	3	110	150	131	229.5
E300-10601500E	10	3	132	175	150	262.5
E300-10601780E	10	3	160	200	178	311.5
E300-11602100E	11	3	185	250	210	367.5
E300-11602380E	11	3	200	250	232	406

# Elevator Drive E300

## Options and accessories



# Accessories ordering guide

## Comprehensive options for flexibility

Keypad type	Part No.	Description
Remote Keypad RTC (Supplied as standard)	 82400000019600	The KI-HOA Keypad RTC provides Hand-Off-Auto control. The display presents up to four lines of real text with multi-language translation, enhancing clarity and increasing ease of use. A battery operated real-time clock allows scheduling of run and off periods and adds accurate time stamping to diagnostics to aid rapid fault resolution.
KI – Keypad Plus (For Remote Mounting)	 82400000022700	KI-Keypad Plus's large and clear colour display makes the drive status information and parameter descriptions easy to read and readily accessible. It enables easy access to key drive features for enhanced machine performance, with the helpful wizard quickly guiding the user through configuration. Bluetooth allows remote and flexible connectivity for PC tool commissioning and programming, without needing to open the cabinet, for smarter and safer working. 10 user selectable parameters can be shown on the status screen, with real-time information, plus all parameters can be scaled and their units customised.

## Communication and Control

SI-Universal Encoder	 82400000018300	Encoder input and simulated output interface supporting Quadrature, SinCos, EnDat and SSI encoders.
SI-I/O	 82400000017800	Extended I/O interface module to increase the number of I/O analogue and digital points on a drive.
SI-DCP	 82400000019900	PROFIBUS interface module PROFIBUS-DP (Decentralized Peripheral) interface module enables follower connectivity. It is possible to use more than one SI-PROFIBUS or a combination of SI-PROFIBUS and other option modules to add additional functionality such as extended I/O, gateway functionality, or additional PLC features.
SI-CANopen	 82400000017600	CANopen interface module supporting various profiles, including several drive profiles
SI-CiA417	 82400000021700	Supports the CiA417 CANopen application profile for lift control systems.
SI-Ethernet	 82400000017900	External Ethernet module that supports EtherNet/IP and Modbus TCP/IP and has an integrated web server that can generate emails. The module can be used to provide high speed drive access, global connectivity and integration with IT network technologies, such as wireless networking.
SI-EtherCAT	 82400000018000	External Ethernet module that supports EtherNet/IP and Modbus TCP/IP and has an integrated web server that can generate emails. The module can be used to provide high speed drive access, global connectivity and integration with IT network technologies, such as wireless networking.
MCI200	 82400000017000	Second processor, providing advanced customisation using standard IEC61131-3 programming languages. This allows the drive to act as a micro controller for small HVACR systems.
MCI210	 82400000016700	Extended advanced machine control using industry standard IEC61131-3 programming languages with simultaneous Connectivity to 2 separate Ethernet networks.
SI-Applications Plus	 82400000016500	Allows SyPTPro application programs to be recompiled and executed to enable rapid & simple upgrade for existing Control Techniques drive users.

## Additional I/O and NV media cards

Smartcard	 2214-0010	The optional Smartcard memory device can be used to back-up parameter sets, as well as copying them from one drive to another.
SD Card Adaptor	 82400000016400	Conversion device that allows an SD card to be inserted into the Smartcard slot, for parameter cloning and application programs.
KI-485 Adaptor	 82400000016100	This adaptor can be fitted in place of the drive keypad and provides additional ports to communicate via RS485. The adaptor is commonly used for programming the drive.
RS485 cable	 4500-0096	The cable allows the drive to connect to a PC for use with PC tools.

\*For higher cost efficiency, H300 can be supplied without a keypad. Please specify your preference when ordering.



## Through-hole IP65 kit

Frame size	Order code
3	3470-0053
4	3470-0056
5	3470-0067
6	3470-0055
7	3470-0079
8	3470-0083

## Tile mount kit

Frame size	Order code
3	3470-0049
4	3470-0060
5	3470-0073

## Retrofit brackets

To allow E300 drives to be fitted in existing Unidrive SP and Unidrive ES surface mount installations.

Frame size	Order code
4	3470-0062
5	3470-0066
6	3470-0074
7	3470-0078
8	3470-0087
9A, 9B, & 10	3470-0118

## Environmental safety

IP20 / NEMA1 / UL TYPE 1\*

\*UL open class as standard, additional kit needed to achieve Type 1.

IP65 / NEMA12 / UL TYPE 12 rating can be achieved on the rear of the drive when through panel mounted.

Frames 9, 10 and larger can achieve IP55 / NEMA12 / UL TYPE 12 rating on the rear of the drive when through panel mounted.

Ambient temperature -20 °C to 40 °C as standard.  
Up to 55 °C with derating.

Humidity 95 % maximum (non-condensing) at 40°C.

Altitude: 0 to 3000 m, derate 1 % per 100 m between 1000 m and 3000 m.

Random Vibration: Tested in accordance with IEC 60068-2-64.

Mechanical Shock Tested in accordance with IEC 60068-2-29.

Storage temperature -40 °C to 70 °C.



## Optional external EMC filters

External EMC filters can be used where required for compliance with the harmonised European EMC emission standard EN12016.

For more information please contact your supplier and refer to the E300's EMC datasheet document: Electromagnetic Compatibility Data for Lifts, Elevators, Escalators and Moving Walks.

Frame size	Voltage	Order code
3	200 V	4200-3230
	400 V	4200-3480
4	200 V	4200-0272
	400 V	4200-0252
5	200 V	4200-0312
	400 V	4200-0402
	575 V	4200-0122
6	200 V	4200-2300
	400 V	4200-4800
	575 V	4200-3690
7	200 V & 400 V	4200-1132
	575 V & 690 V	4200-0672
8	200 V & 400 V	4200-1972
	575 V & 690 V	4200-1662
9A	200 V & 400 V	4200-3021
	575 V & 690 V	4200-1660
9E & 10	200 V & 400 V	4200-4460
	575 V & 690 V	4200-2210

## Elevator Drive E300

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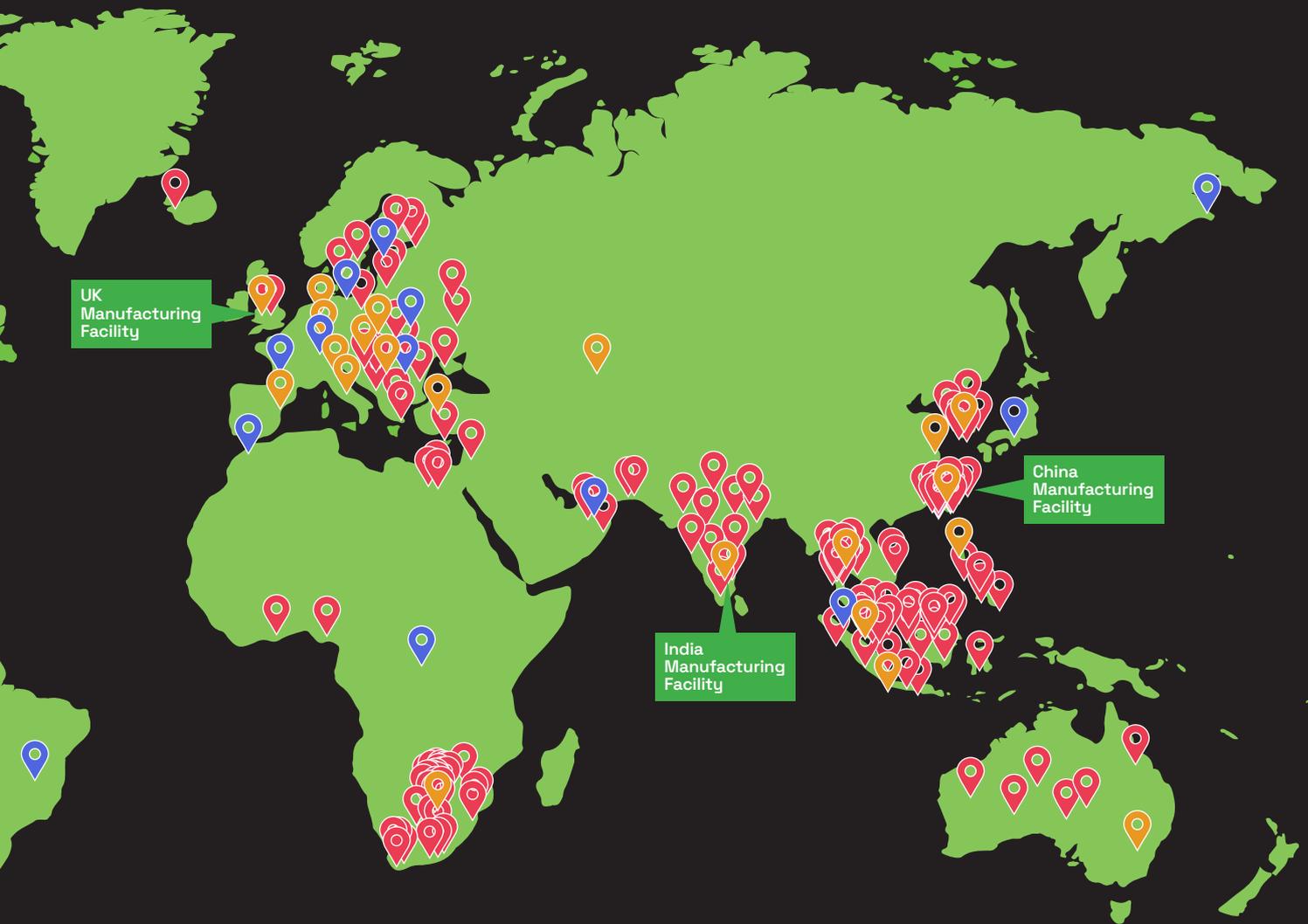
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