For greater comfort and safety

Altivar 31 Lift and Altivar 71 Lift

Variable speed drives for lifts

Schneider Electric

Altivar 31 Lift and Altivar 71 Lift

Satisfying your requirements

Take advantage of this excellent opportunity to improve the drive quality of your lifts with a new generation of high-performance variable speed drives designed by specialists in the field.
Lift users will enjoy greater comfort and safety…
And technicians will benefit too - With their advanced application-specific functions and ease of programming, Altivar 31 Lift and Altivar 71 Lift drives are easy to install and maintain.

Make the most of your energy >

Enhance your lift performance

Smooth acceleration, deceleration and stopping to the nearest millimetre ... As you well know, these are the main criteria defining the quality of lift operation.
Couple these qualities with exceptional safety levels and you can be assured of complete peace of mind.

Exceptional drive quality...

Our Altivar 31 Lift and Altivar 71 Lift drives have been designed in close collaboration with lift manufacturers, installers and maintenance engineers.
Not only do these drives offer very specific characteristics, they incorporate the wealth of expertise acquired by Schneider Electric over the years in other applications, machines and processes where drive quality is paramount.
With an Altivar Lift drive, you will be assured of a durable product of impeccable quality, offering an exact match to your needs.

...and absolute operational safety

In addition to meeting the requirements of all applicable standards and legislation, all safety functions on our drives ensure safe and comfortable operation for users, as well as providing protection for both users and lift equipment, such as the motor, in the unlikely event of a fault.

Advanced application-specific functions

Altivar 31 Lift and Altivar 71 Lift drives have been specially developed for this field of application.
They feature numerous application-specific functions, some of which - the Power Removal function and the angle test for synchronous motors, for example - are unique.

Talking your language

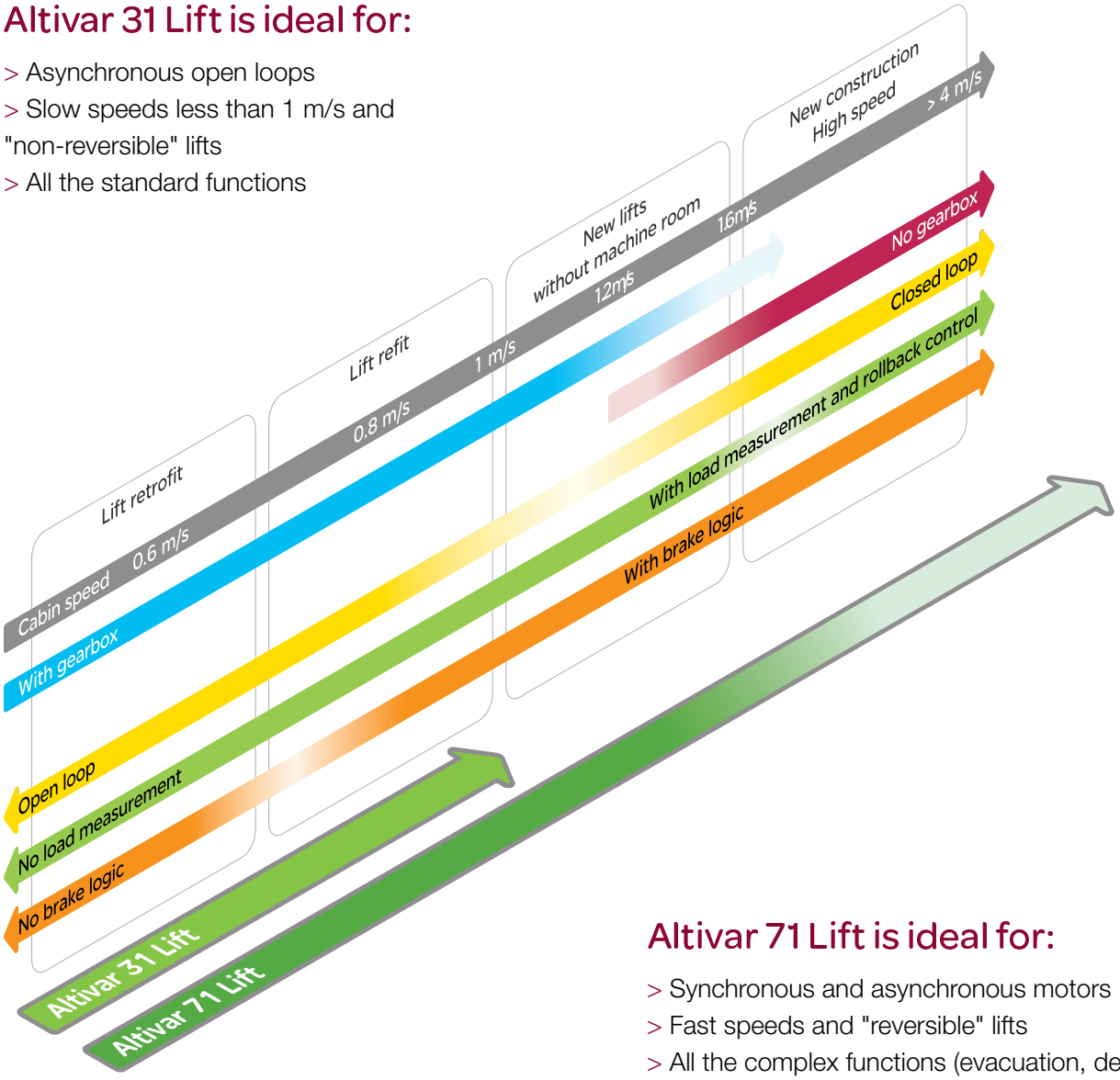
Altivar 31 Lift and Altivar 71 Lift drive communication uses the same terms and units of measurement that you use on a daily basis, thus simplifying programming.

Altivar 31 Lift or Altivar 71 Lift... Which one should you choose?

These drives are complementary products, meeting the demands of both the retrofit market (Altivar 31 Lift) and new installations (Altivar 71 Lift), offering an excellent compromise between performance, functionality, investment and operating costs.

Altivar 31 Lift is ideal for:

> Asynchronous open loops
> Slow speeds less than 1 m/s and "non-reversible" lifts
> All the standard functions



Altivar 71 Lift is ideal for:

> Synchronous and asynchronous motors
> Fast speeds and "reversible" lifts
> All the complex functions (evacuation, deferred thermal stop, etc.)

Altivar 31 Lift

Its compact size and simple, yet comprehensive, range of functions make this the ideal drive for any operation where high performance and cost-effectiveness are important.

Safety

> **Motor made safe** by command of the output contactor (standard stop type, stop in inspection mode or emergency stop)

> **Factory-locking of drive** using an access code to prevent modification of drive settings by unauthorized personnel

> **Motor protection** (in the event of overheating, short-circuit, output phase loss)

> **Protection for the lift sheave and mechanics** by controlling the current limit time

Comfort

> **Dedicated ramp for enhanced comfort** (3 deceleration values for 2 thresholds and 4 roundings on the curve)

> **Optimized brake control**

> **Reduced motor noise** thanks to an adjustable switching frequency of up to 16 kHz

Ease of use

> **Assisted setup:** Direct access to application parameters grouped together in a dedicated menu for easy, reliable programming. The Lift menu contains all the necessary application parameters.

> **Preconfigured options for quick start-up:** Drive I/O are pre-assigned to certain functions.

> **Inspection function** for lift maintenance in complete safety (brake control and opening of motor contactors on loss of run command)

> **Optimized travel time** regardless of the distance between levels with the half-floor function

> **Automatic restart** if the fault has disappeared and conditions allow

> **Network access** with integrated CANopen

Altivar 31 Lift in brief

> **Range:**
- 380 V supply voltage
3 phases from 2.2 kW to 15 kW
- 200 V supply voltage
3 phases from 2.2 kW to 15 kW

> **Simple “Lift” menu:**
- Ramp adjustment (16 parameters)
- Motor settings (7 parameters)
- Brake sequence (6 parameters)
- Speed loop (2 parameters)
- Locking (1 parameter)

> **Dedicated ramp for enhanced comfort**

> **Smooth deceleration (brake sequence)**

> **Half-floor function**

Altivar 71 Lift

Featuring high performance levels and specialized functions, the Altivar 71 Lift has been designed to meet your most demanding specifications.

A user-friendly graphic interface

The Altivar 71 Lift's HMI terminal enables rapid setup of the various drive functions, making it easy to use:
> Dedicated Lift menu
> Customizable graphic display
> 6 languages available as standard
> Navigation button for easy browsing through the menus
> Function keys for shortcuts
> Stored configurations

Ready for any destination

Whether your application is local or destined for export, the Altivar 71 Lift can be adapted for any situation:
> Integrated EMC filters
> Power Removal safety function
> Compliance with international standards, including UL, CSA, CE, C-Tick, Gost, and DNV

Safety

> **Integrated Power Removal**® function

> **Evacuation function** via an inverter emergency power supply

> **Motor made safe** by control/command of the output contactor (standard stop type, stop in inspection mode or emergency stop)

> **Deferred stop function ensures arrival at the required level** should the motor overheat

> **Motor protection** (in the event of overheating, short-circuit, output phase loss)

> **Protection for the lift sheave and mechanics** by controlling the current limit time

Comfort

> **Smooth lift travel** assured by optimizing the ramp to minimize accelerations and jerk

> **Direct to Floor function** for gradual deceleration to standstill

> **Optimized travel and ramp time** regardless of the distance between levels with the half-floor function

> **Automatic torque adaptation** on start-up via the load measurement function

> **Silent drive operation:** fan only operates when necessary

> **Reduced motor noise** thanks to an adjustable switching frequency of up to 16 kHz

Ease of use

> **Assisted setup:** Direct access to application parameters grouped together in a dedicated menu for easy, reliable programming. The Lift menu contains all the necessary application parameters.

> **Preconfigured options for quick start-up:** Drive I/O are pre-assigned to certain functions.

> **Dedicated ramp:**
• Use of application-specific units for ramp definition (m, m/s, etc.)
• Approach speed calculated automatically by the drive
• Direct to Floor function configured and activated automatically if the approach time is set to 0 seconds
• Half floor function configured and activated automatically if the high speed command is lost before reaching the travel speed

> **Special speed loop:**
• Reduced vibration during travel
• Preset according to lift data (cabin capacity and speed)
• Smooth cabin movement on brake release (no rollback)

> **Angle test for synchronous motors when not in motion** (Schneider Electric exclusive technology)

> **Identification of motor** when operating and motionless (only 4 parameters required for synchronous motors and 5 for asynchronous)

> **Inspection function** for lift maintenance in complete safety (brake control and opening of motor contactors on loss of run command)

> **Optimized travel time** regardless of the distance between levels with the half-floor function

> **Automatic restart** if the fault has disappeared and conditions allow

> **Exceptional stopping and repeat accuracy** in closed loop operation (0.01 %)

> **Dedicated monitoring** for easy maintenance:
• Number of journeys
• Total travel distance
• Cabin speed

> **Fault log** with record of the last 8 faults and their contexts

> **E-mail function** for immediate maintenance alert (with the Ethernet card option)

> **Network access** with integrated CANopen

Interface cards for incremental or absolute encoders

> Incremental encoder
> SinCos, SinCos EnDat, SinCos Hiperface
> Resolver
> Encoder signal emulation

Altivar 71 Lift
in brief

> **Range**
• 380 V supply voltage
3 phases from 3 kW to 75 kW
• 200 V supply voltage
3 phases from 2,2 kW to 45 kW
• 200 V supply voltage
single phase from 1.5 kW to 5.5 kW

> **Advanced “Lift” menu**

> **New ramp for easy adjustment and enhanced comfort**

> **Rollback control**

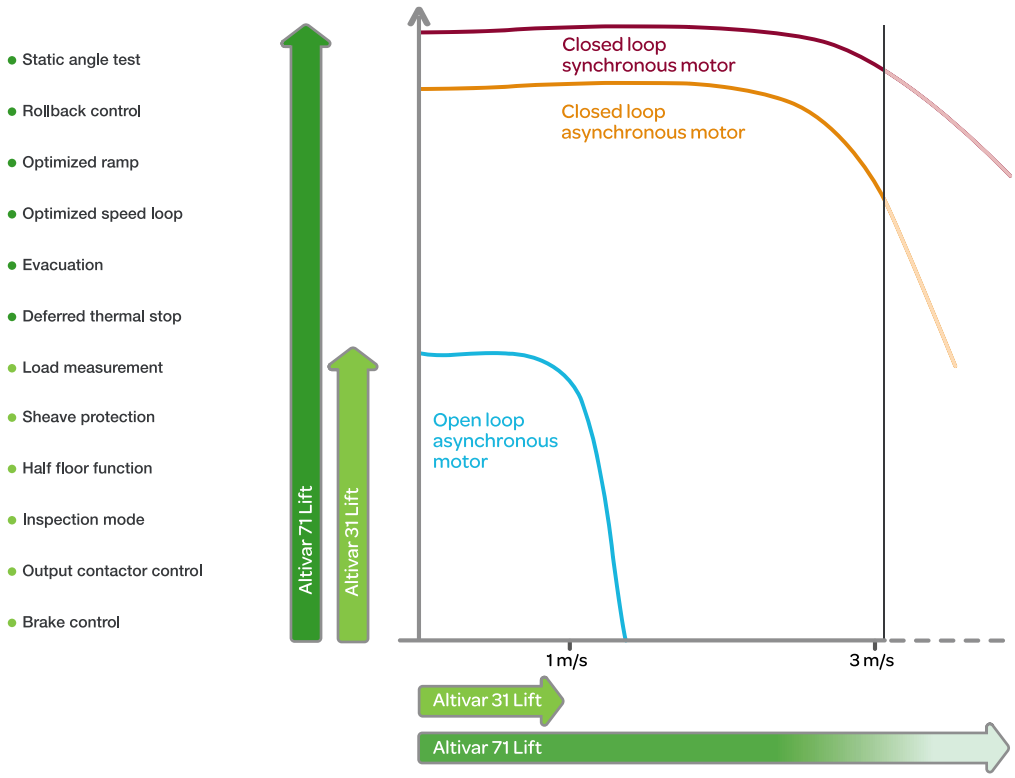
> **Wide range of encoders**

Exclusive to Schneider Electric

> **Angle test for static synchronous motors**
• Can be retrofitted on an existing lift

Technical characteristics

		Altivar 31 Lift	Altivar 71 Lift
Lift function	Output contactor control	■	■
	Output contactor feedback		■
	Inspection mode	■	■
	Half-floor control	■	■
	Direct to floor		■
	Brake control	■	■
	Deferred thermal stop		■
	Advanced detection of output phase loss		■
	Adjustable noise level	■	■
	Evacuation with inverter		■
	Rollback control		■
	External load measurement		■
	Sheave protection	■	■
	Optimized speed loop		■
	Optimized ramp profile		■
Motor characteristics	Asynchronous open loop	■	■
	Asynchronous closed loop		■
	Synchronous open loop		■
	Synchronous closed loop		■
	Static motor parameter identification	■	■
	Static angle test (synchronous motor)		■
Encoder characteristics	Incremental encoder		■
	SinCos, SinCos EnDat, SinCos Hiperface		■
	Resolver		■
	Encoder signal emulation		■
Communication	Modbus	■	■
	CANopen	■	■
	Ethernet, Profibus, DeviceNet, etc.		■



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Design: pemaco
Photo: Getty images/Stockbyte
Printed by:

DIA2ED1080902EN

ART.835854

09/2008