

# VLT® Lift Drive

Developed specifically for lifts to provide reliable and excellent ride comfort. Operates without motor contactors and can be commissioned in less than 10 minutes.



### Designed specifically for lifts

The VLT® Lift Drive's compact, rugged design is optimized for easy installation. Built-in features ensure a long life of reliable operation, a smooth ride, and low total costs.

### Easy commissioning with customized software

Setup and service is easily handled using the drive's dedicated software, which can be accessed at your convenience via the graphical display, VLT® Control Panel LCP 102. Read-outs are simple and clear, including the scope function that presents analog and digital data.

With parameterization tailored specifically for lifts all settings use "elevator language". This means that specialists are not required, as owners can set up and service their lift themselves in the shortest possible time.

### Operates without motor contactors

The patented Safe Stop function eliminates the need for motor contactors, increasing the reliability of the elevator installation, which is at least as safe as a solution with motor contactors.

An integrated RFI filter and DC coils eliminate the costly installation of external components. This reduces space requirements and eliminates a complex EMC-compliant wiring.

### Reliable in all environments

The Lift Drive can be installed in challenging ambient conditions outside the control of the variety of available housing and protection classes. For example, a unique feature of the Lift Drive means that when the temperature rises, the drive maintains the output current so that only the switching frequency is derated.

### Product range

- 4 – 55 kW (380-400 V) IP 20/21/55

**2.1 million  
Load cycles**

Is the minimum life time of the VLT® Lift Drive at 16 KHz frequency and 45 °C ambient temperature.

Feature	Benefit
Patented Safe Stop technology	<ul style="list-style-type: none"> <li>- Save space</li> <li>- Reduce costs for materials</li> <li>- No switching noise</li> <li>- Higher reliability</li> </ul>
IP 20, 21, 55, 66 protection rating	<ul style="list-style-type: none"> <li>- Flexible installation options</li> <li>- Mount the drive outside the lift cabinet</li> </ul>
Dedicated lift functionality	<ul style="list-style-type: none"> <li>- Increases comfort during start-up, operation, and passenger entry/exit</li> <li>- Very little noise from the lift shaft</li> <li>- Reduces total system costs</li> </ul>
Integrated RFI filter and DC coils	<ul style="list-style-type: none"> <li>- Reduces space requirements</li> <li>- Lowers installation costs</li> <li>- Easy compliance with EMC and harmonics standards</li> </ul>

## Specifications

Mains supply (L1, L2, L3)	
Supply voltage	380 – 400 V ±10%
Motor and Motor Feedback	
Load profile and lifetime expectancy	2.1 million load cycles
Motor feedback supported types	Incremental: 5V TTL (RS422) Incremental: 1Vpp SinCos Absolute: ENDAT, Hiperface
Acoustics	
Acoustic noise	55 dB
Maximum switching frequency	16 kHz
Environment	
Temperature operation	0 to 45°C
Enclosure IP protection	IP 20/21, IP 55
RFI filter	Included as standard

Power rating	4 kW			5.5 kW		7.5 kW		11 kW		15 kW		18 kW		22 kW		30 kW		37 kW		45 kW		55 kW	
IP Class	IP 20	IP 20	IP 55	IP 20	IP 55	IP 20	IP 55	IP 20	IP 55	IP 20	IP 55	IP 20	IP 55	IP 20	IP 55	IP 20	IP 55	IP 20	IP 55	IP 20	IP 55	IP 20	IP 55
Frame size	A2	A3	A5	A3	A5	B3	B1	B4	B4	B2	B4	C3	C1	C4	C4	C4	C4	C4	C4	C4	C4	C2	C2
Voltage [V]	400 V																						
Continuous output current 100%	10	13	16	16	26	21	35	44	35	51	60	50	75	90	110	98	98	98	98	98	98	98	98
Overload 6s/60s [A]	16	20.8	26.6	26.6	46.8/41.6	33.6	60/56	74.4	56	91.3/81.6	180/90	75	135/112.5	162/135	198/165	147	147	147	147	147	147	147	147
Current @ 16kHz [A]	10	13	16	16	N/A	N/A	32	35	35	44	N/A	50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Current @ 14kHz [A]	10	13	16	16	N/A	N/A	32	35	35	44	N/A	50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Current @ 12kHz [A]	10	13	16	16	21	21	35	44	35	51	60	50	75	83	98	98	98	98	98	98	98	98	98
Current @ 10kHz [A]	10	13	16	16	26	21	35	44	35	51	60	50	75	90	98	98	98	98	98	98	98	98	98
Current @ 8kHz [A]	10	13	16	16	26	21	35	44	35	51	60	50	75	90	110	98	98	98	98	98	98	98	98
Ambient temperature	45 °C																						
Duty cycle	50%																						