

ENGINEERING
TOMORROW

Danfoss

Case story | VLT® Lift Drive LD 302

Faster, quieter, more
energy **efficient:**
Smooth elevators use
VLT® Lift Drive

58%

more energy
efficient operation
was achieved with
a retrofit

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VLT® VACON®

New lifting machinery and a Danfoss VLT® Lift Drive specially optimized for elevators took the agony out of unstable elevator operation, replacing it with a quiet, comfortable ride in a two-story senior residence.

The hydraulic Schindler elevator that moves the elderly inhabitants between floors was installed in 1989 and is the only one in the residence. After years of use, it eventually began to show its age. Regular stops during periods of heavy use due to high oil temperatures, which demanded forced ventilation, turned what should have been a comfortable ride for the senior citizens to an unstable and noisy experience. Something had to be done.

In cooperation with long-time partner and drives supplier, Danfoss, IBA Lift Components embarked in 2010 on a comprehensive upgrade of the aging elevator. A Danfoss VLT® Lift Drive LD 302 with optimized software for operating hydraulic lifts was installed together with a new aggregate. The lift system and cabin remained the same as always.

"Danfoss frequency converters are known as some of the most innovative and reliable drives worldwide. The outstanding Danfoss quality standards make this drive perfect for the elevator market," says Mr. Detlev Abraham, CEO at IBA.

Faster, quieter, and energy efficient

The new components immediately moved both the performance and comfort of the elevator to higher levels. Among several operational improvements, the new system provided a faster, more reliable and energy efficient daily operation, even improving the energy rating of the elevator by one class.

"The modular VLT® Lift Drive LD 302 enables us to control the motor as well as the hydraulic valves. It resulted in a perfect riding comfort with less energy consumption," continues Mr Abraham.

As good as new

Furthermore, the fact that the VLT® Lift Drive uses Danfoss patented technology, which enables it to function contactor-free, has made the elevator almost silent. The low noise level is also made possible thanks to the removal of the hydraulics which required forced ventilation due to high oil temperatures.

"With the VLT® Lift Drive LD 302 we are able to turn an aged hydraulic lift drive to a modern, energy saving elevator with good riding comfort. It is an optimal drive for modernization as well as for new applications," concludes Mr. Abraham.



About the VLT® Lift Drive LD 302

The VLT® Lift Drive is built on the same technology platform as the VLT® AutomationDrive and has been adapted to the conditions of elevator control, providing reliable operation, easy adjustment and a comfortable elevator ride.

Read more about VLT® Lift Drives at
drives.danfoss.com

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A better tomorrow is driven by drives

Danfoss Drives is a world leader in variable speed control of electric motors. We offer you unparalleled competitive edge through quality, application-optimized products and a comprehensive range of product lifecycle services. You can rely on us to share your goals. Striving for the best possible performance in your applications is our focus. We achieve this by providing the innovative products and application know-how required to optimize efficiency, enhance usability, and reduce complexity.

From supplying individual drive components to planning and delivering complete drive systems; our experts are ready to support you all the way.

You will find it easy to do business with us. Online, and locally in more than 50 countries, our experts are never far away, reacting fast when you need them.

You gain the benefit of decades of experience, since 1968. Our low voltage and medium voltage AC drives are compatible with all major motor brands and technologies.

VACON® drives combine innovation and high durability for the sustainable industries of tomorrow.

For long lifetime, top performance, and full-throttle process throughput, equip your demanding process industries and marine applications with VACON® single or system drives.

- Marine and Offshore
- Oil and Gas
- Metals
- Mining and Minerals
- Pulp and Paper
- Energy
- Elevators and Escalators
- Chemical
- Other heavy-duty industries

VLT® drives play a key role in rapid urbanization through an uninterrupted cold chain, fresh food supply, building comfort, clean water and environmental protection.

Outmaneuvering other precision drives, they excel, with remarkable fit, functionality and diverse connectivity.

- Food and Beverage
- Water and Wastewater
- HVAC
- Refrigeration
- Material Handling
- Textile

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