

Our Elevator variable frequency drive gives Mrs Demetriou new mobility in her twilight years

Case Study



 Cyprus

Company / Project
MRS DEMETRIOU

Applications
Elevators

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Optidrive Elevator provides peace of mind for grandmother's family

While most variable frequency drive installations focus on industrial applications, they're sometimes used to bring tangible benefits to people – as demonstrated by this installation in Cyprus.

An Invertex Drives Optidrive Elevator installed in a machine-room-less (MRL) gearless home-lift system has given Mrs Demetriou, an elderly, disabled Cypriot grandmother, the freedom to move safely and independently around her family's four-storey home...

When the Demetriou family decided that they needed to install a lift to help their grandmother, the solution had to be supremely safe, comfortable, easy to use and quiet at night. It also had to be easy to program and allow safe, simple evacuation if there was a power failure.

The answer, in the form of an MRL lift, was made possible by the combined expertise of lift control-panel manufacturer StamTec and Invertex's dedicated elevator drive, Optidrive Elevator, supplied by Invertex's Greek sales partner Automation Experts.

Of particular interest for this project is the Optidrive Elevator's renowned ability to deliver smooth carriage through its use of no less than five independent S-shaped acceleration ramps. Along with a dedicated motor holding brake control algorithm, this allows fine tuning of the system by installers. Then there are Optidrive Elevator's compact external dimensions and factory parameter settings that are well-suited to fast, easy installation and setup of simple elevator applications.

Optional incremental/EnDat/Sincos encoder feedback interfaces allow compatibility with a wide range of motors, while Invertex's renowned motor control capability ensures maximum ride comfort under all conditions. And short floor operation, coupled with a high motor switching frequency (max 32 kHz), provides the quick, smooth, quiet journey that's perfect for Mrs Demetriou as she moves around her home.

Theodore Amiridis, Automation Experts' Technical Director and Business Development Manager for North Greece describes the very human scale of the challenge. He starts with how Invertex's proven technology contributed to Mrs Demetriou's new mobility and her family's peace of mind.

"For over two decades, Thessaloniki-based

StamTec has been a leading manufacturer of lift control-panels in Greece. As well as selling into its home territory, StamTec also sells into the Balkans, the Mediterranean Islands and Arab countries.

"As an experienced sector player, StamTec understands the importance of specifying the most reliable, versatile components. For variable speed drives, that means Invertex. For this particular application, and the new mobility enjoyed by this Cypriot grandmother, it meant the proven Optidrive Elevator with IP20 rating, three-phase input and output, and 5,5kW capability working with a closed-loop EnDat PG card."

For the Demetriou family, the new elevator has transformed daily life in their multi-level urban home.

Theodore Amiridis adds: "Since installation of the elevator, Mrs Demetriou can easily navigate her home and enjoy all its facilities despite her disability. Of course, other family members can use the lift too, which is useful in the large four-storey property."

"The elevator's near-silent electric operation also minimises disturbance at night. And it's fast and comfortable, making it easier for Mrs Demetriou to enjoy her twilight years. The smooth operation is achieved through the lift's closed-loop mode with EnDat encoder feedback and the S-ramp acceleration ramps."

Thanks to StamTec, Invertex Drives and her family's vision, Grandmother Demetriou is in safe hands even when using the lift on her own. That's because, if the lift loses communication with the encoder, it can operate safely and effectively in PM (permanent magnet gearless) open-loop mode too.

Such details may be lost on Mrs Demetriou, but what she and the rest of the family can be sure of is more independence than ever and round-the-clock peace of mind as they enjoy their home.

Find out more about Optidrive Elevator.

