

# Elevator Protection for Schindler (Hawaii)

Hawaii's electrical grid is prone to power-quality fluctuations, including voltage spikes, brownouts, and outages that can disrupt elevator operation. Further, the local electric utility allows voltage to fluctuate by as much as 15%, while a fluctuation of approximately 10% could permanently damage elevator control boards, variable-frequency drives, or controller fuses.

Lucid Load technology was identified by Schindler Hawaii as the **ideal layer of power conditioning and protection for elevators and other sensitive electronic equipment**. Lucid Load delivered positive results in buildings throughout Hawaii, including reduced power expenses.

**By improving the quality of power supplied to elevator systems, Lucid Load helped reduce callbacks associated with power-related faults, lowered energy usage, extended equipment life, and protection for building owner's investments in new, existing, or modernized elevator systems.**

## The Lucid Load Impact



### With Lucid Load Protection

- ✓ Conditioned incoming power
- ✓ Reduced power-related faults
- ✓ Protected control electronics
- ✓ Reduced energy use potential
- ✓ Extended parts life potential
- ✓ Improved system reliability

### Without Lucid Load Protection

- ✗ Exposed to power fluctuations
- ✗ Greater risk of callbacks
- ✗ Risk of component damage
- ✗ Potentially higher energy costs
- ✗ Increased repair costs
- ✗ Possible service interruptions

“Our world is filled with increasingly sensitive devices...that contain precise circuitry and micro-processors. They are **easily affected by power quality disturbances, such as surges, sags, or interruptions...**[and] by external factors such as weather.”

Hawaii Electric Company