ECS
ENERGY CONTROL SYSTEMS

Elevators are vital in today's world!

Starting in 1878, electric elevators have been used to allow the world to expand building to ever increasing heights! As of today, there are over 900,000 elevators in use each day in the U.S. alone. On average these elevators are moving 20,000 people per year, and a staggering 18 billion passenger trips annually, and we only remember those times when they drop us at the wrong floor, stop mid-floor or are out of order altogether.

The fact of the matter is the more technologically advanced, the greater the need for a regular preventive and proactive maintenance program! Unfortunately, elevators tend to be overlooked until something goes wrong. Compounding the problem is the fact that, as the sophistication of elevators has increased, so has the need for maintenance. While the components may be more reliable, the sheer number of them combined with tight tolerances demand a higher level of maintenance than did the old electromechanical systems. Failure to keep up with maintenance will harm performance, slow response time, increase downtime and raise costs.

Proactively addressing the most critical and sensitive elements in the elevator systems is the surest route to greater availability and reduced downtime costs. However, the knowledgebase available to draw from to provide this is limited in many aspects. For the most part it is assumed that these systems are somewhat ruggedized, and the manufacturer has taken the proper steps to build in protection. Sadly, that is not the case due to the highly competitive nature found in the design, build and construction world. It is atypical if the low bidder is not awarded the project. Almost 100% of the time no additional thought has been given to protecting the critical hardware and software of the elevator system.

The software and the hardware used to operate today's elevators is more reliable than that of the past, but it is also extremely sensitive to fluctuations in power. More importantly is the fact that it isn't just the strong surges from lightning or the utility company that are causing the software confusion and elevator downtime, that is the reason why your typical surge protector will not be effective in limiting that downtime and improving reliability. Something different in technology is required.

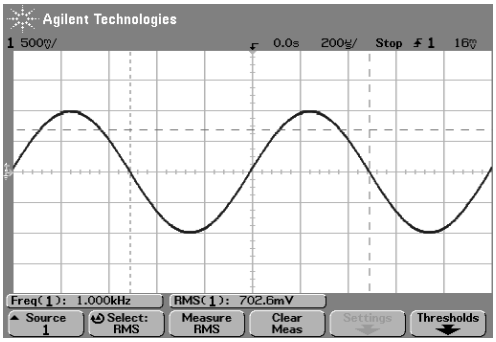
SineTamer® is THE Standard!

Why Sinetamer®? The typical SPD is voltage triggered only. The clamping operation of the SPD will occur at some set point above/below the sinewave. These operations, while successful in mitigating the damaging impacts of lightning or utility company events, are for the most part useless when dealing with the real source of the problem. It is not just the voltage events; it's the frequency change events as well! The high inductive load transient events occur in such a manner as to create false zero crossings that create false triggering of diodes, timing issues, errors and resets.

In every known instance of applying Sinetamer® to existing issues related to power, all have been eliminated and the return on investment has been 10 months or less. If a return on investment can be achieved in less than 12 months, it is considered an exceptionally good investment.

Our unique Frequency Attenuation Network™ and Transient Equalization Network™ address both the power and control sections ensuring the proper operating environment for both the hardware and software! Outages and downtime may be rare, but is it worth the risk? Personnel safety must be priority in the minds of facilities and building managers.

4th Generation Technology



SineTamer® is not your common surge device. It is an engineered transient disturbance filter that is designed to monitor all 360° of the sine wave. According to numerous studies one of the predominant power quality issues involves loss of synchronization of processes and unexplained reboots or resets. Many of these events are triggered by false zero crossings of the sine wave, which the typical surge arrestor can never prevent.

Why Sinetamer®?

One of our early experiences in Central America involved a major utility generated power surge destroying a number of elevators and related equipment in one building, while right next door, being fed from the same transformer not a single elevator component was damaged. When asked why, the foreman said, we installed Sinetamer®. Not long after, this same foreman installed Sinetamer® as well and to this day neither property has experienced any downtime issues.

Another instance at the World Trade Center of a South American capital city, the elevator systems (30 in total) would routinely experience 5-7 issues daily. In addition to those were the constant deprogramming failure of the HMI's on each of the 22 floors. At a loss of where to look for solutions the elevator provider looked to us for the answer. Post the two level installation all failures, lockups and loss of program ceased 100%.

In Southern Brazil, a hotel was plagued with constant recurring elevator failures even though they had installed surge suppression in the panels. It was difficult to overcome the objection of "We installed surge suppressors and we still have the problems." This is a quite common objection. We installed a single unit in the elevator control cabinet and removed the existing SPD. 30 days following the maintenance intervention decreased 90% and the ROI was 9 months.

Elevator productivity and availability are key performance indicators for successful service companies and OEM's. Every day of delay increases the probability of downtime, costly repairs.

Join companies like OTIS, Hyundai, ThyssenKrupp, Schindler along with facilities engineers around the world that have come to trust in THE standard for surge protection worldwide - *Sinetamer®!*

For the security of your electronic infrastructure contact us or one of our global partners at info@sinetamer.com.