Modernization of Elevator Doors

Many elevator reliability problems are the result of outdated or poorly-performing door systems. The elevator door is also the first thing building users see, so it should make a good first impression. Modernizing the elevator door system with KONE ReNova will improve the safety, performance and reliability of the doors and can also be an ideal opportunity to upgrade aesthetics as well as accessibility for your passengers.

Modularity enables KONE ReNova doors to meet the specific needs of your building. The flexibility of KONE ReNova enables it to be interfaced with different parts of existing door systems, if their operation is satisfactory. In certain situations this can reduce the cost and time needed for modernization.

KONE ReNova elevator door modernization solutions require less power than conventional door operators, enabled by a combination of sophisticated mechanical and electrical systems. The mechanical system includes a linear door drive system, with large diameter door rollers and a substantial track, which minimizes friction and reduces noise. A highly efficient synchronous motor, closed-loop control and inverter drive system ensure optimum electrical efficiency is achieved.

Key benefits

- Complete elevator door modernization system
- Modular solution
  - Flexible interface allows retention of satisfactory door equipment
  - Fast installation and minimized disruption
- Safe and energy efficient
  - Safety assured, compliance with latest local, state and elevator codes
  - Enhanced levels of door motion control enabled by an advanced drive system
  - Superior levels of energy efficiency
  - Passenger comfort assured by door protection devices and smooth door motion control
- Reliable
  - Optimum reliability and longer life due to rugged mechanical design

KONE ReNova elevator door modernization solutions require less power than conventional door operators, due to their sophisticated mechanical design and the highly efficient drive motor. KONE’s installation methods increase the efficiency of the project, reducing downtime and disruption to building residents.
A flexible modular solution

1. The V3F inverter drive is integrated with the door control electronics.
2. The system features a synchronous PMSM motor, excitation by permanent magnets (no brushes).
3. The drive system and track allow for true “linear” motion.
4. KONE ReNova solutions feature patented KONE AMD technology. The substantial track design and resilient rollers are designed for long life.
5. The elevator doors retract the instant the infrared beam light curtain is broken, virtually eliminating the chance of door contact with passengers.
6. The clutch offers a solid coupling and quiet operation.

KONE ReNova technology is modular. This allows KONE to provide a product that meets the specific needs of your building. The flexible design enables the KONE ReNova solution to interface with existing door equipment, even from other manufacturers.