

E2 Control System

Otis brings you the latest in high rise elevator control system technology. The innovative E2 controller delivers state of the art motion control algorithms and safety features while dramatically simplifying hoistway wiring. Its compact modular architecture works in harmony to deliver optimal elevator system performance.

KEY BENEFITS

Ultimate passenger comfort and control features

- Adjustable "SNAP" motion profile control

Environmentally Friendly

- Stand-by power modes
- Adaptive motion profiling

Enhanced Safety and Reliability

- Individually monitored safety device
- Enhanced diagnostics and setup
- Encoder based position reference system
- No relays or required maintenance

Simplified system wiring

- CAN communications architecture

Compact design

- Over 50% smaller than conventional controllers

KEY FEATURES

Ultimate passenger comfort and control features

Delivering the ultimate in passenger comfort, the E2 controller's advanced motion control algorithms allows you to adjust the rate of change of profile jerk (called "Snap"). This drastically decreases low frequency car bounce and increases passenger comfort.

Environmentally Friendly

Stand-by power modes reduces the elevator system energy consumption during off-peak periods. Adaptive motion profiling adjusts the motion profile depending on passenger loading to reduce peak power consumption.

Simplified system wiring

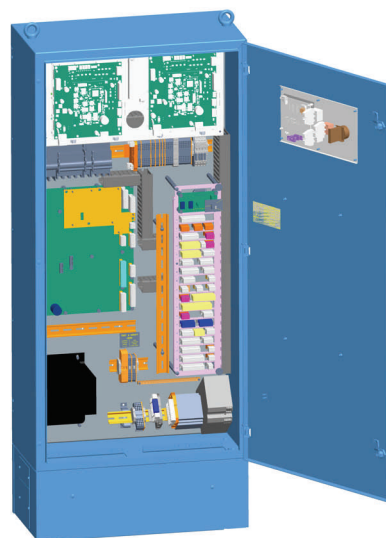
The E2 controller's CAN communications architecture dramatically reduces hoistway system wiring complexity.

Enhanced Safety and Reliability

The E2 control system continuously monitors individual safety device thousands of times per second. Enhanced diagnostics and setup functions improves system robustness. Relays and position tapes have been completely eliminated from the E2 control system improving overall system reliability

Compact design

Using the latest innovative design technology, the E2 control is over 50% smaller than conventional high rise controllers.



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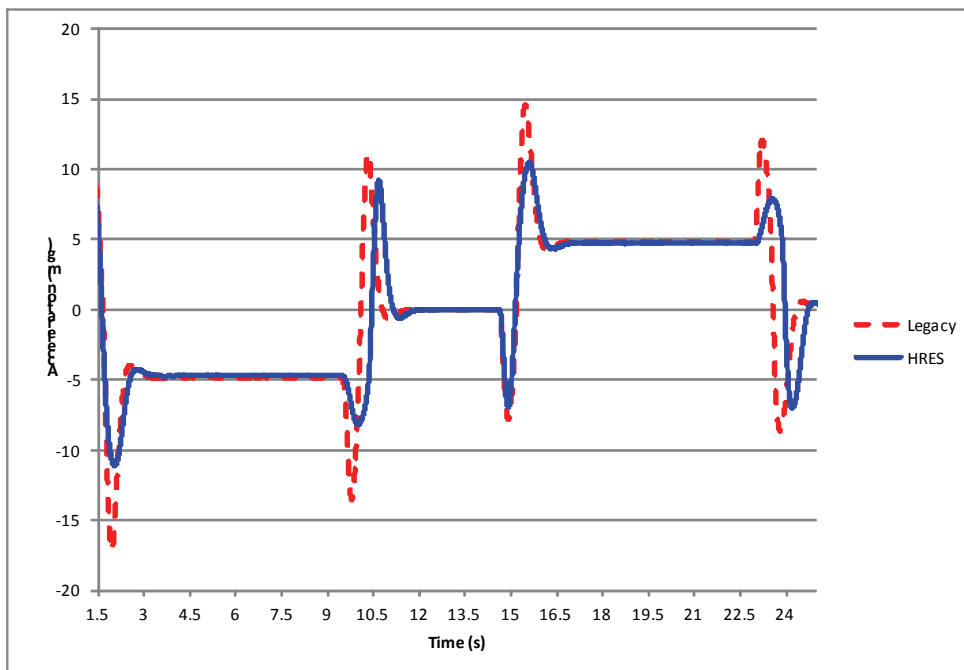
OTIS

E2 Control System

ADJUSTABLE “SNAP” MOTION CONTROL

Snap control and passenger comfort

“Snap” is the fourth derivative of position (“velocity” is the first, “acceleration” is the second, “jerk” is the third, and “snap” is the fourth). So to control “snap” is to control the rate of change of “jerk”, or the acceleration rate to the maximum acceleration rate of 1.2 m/s^2 . In simple terms, by controlling “snap” the E2 controller decreases the passenger discomfort during the car start. Snap control decreases in car bounce over 20%.



SPECIFICATIONS

Elevator Type	Single Deck , Double Deck and Super Double Deck
Maximum Speed	15 m/s
Maximum Group	12
Maximum Rise	Single Deck - 500m Double Deck—400m Super Double Deck—350m
Applicable Stops	2-140
Dispatching	RSR-V, Fuzzy (RRT, PWT), Compass
Rear Opening	Option
Fuzzy Logic	Standard
AI Prediction *2	Option (max 54 stops)
Dynamic Channeling	Option
Group Communications	CAN