

Motion 4000 MRL™

A tailored solution for MRL hoistways

The MCE **Motion 4000 MRL™** traction elevator package is the ideal solution for machine-roomless installations. 4000 MRL provides service to 32 floors/64 openings, speeds to 500 feet per minute, and group control of up to 6 cars. And, the MRL package provides a standard wavelength/infrared video-assisted rescue system, remote governor overspeed switch set/reset, and remote brake picking capability. Motion 4000 MRL makes the jobs of installers, adjusters, and maintenance personnel as straightforward as possible, stressing minimal hardware requirements, “out-of-the-box” job readiness, and simple adjustment.

Installers

- Choose the landing system that suits the job. ELGO for fewer hardware requirements or LS-EDGE for specific code or NEMA 4X installations.
- Final limits must be physical switches. Slowdowns may be virtual, saving installation time and effort. If required, ETS may also be virtual for ELGO landing systems; LS-EDGE systems use ETS magnets.
- Hall call fixtures are connected serially along a simple, four-wire drop, providing signal communication and fixture power.
- Universal I/O boards for field connections accept 24 to 120-volt inputs, AC or DC.

Adjusters

- Factory pre-adjusted per job requirements.
- Easy, hand-held device (mPAC) lets you learn and adjust floor heights and make car call entries. mPAC connects in the car, on the cartop or in the machine room.
- Traditional MCE LCD display/keypad parameter entry.

Maintenance

- Plug the hand-held mPAC into any controller or car CAN Bus port and diagnose the system.
- Multiple, redundant, self-contained processors ensure reliable control and constant safety monitoring. Each processor is continuously aware of all system activity.
- Components shared with MCE's Motion 2000 hydraulic controller.
- Available MCE TAPS (Traction Auxiliary Power Supply) for automated rescue in the event of power failure.
- Built-in event log with 100 events.

¹Lift-Net™ is a trademark of Integrated Display Systems, Inc.



BENEFITS

- Designed for MRL applications
- Absolute position/distance feedback
- Low- and mid-rise applications
- Up to 500 fpm (2.5 m/s), 32 stops, simplex/duplex/groups to 6 cars
- Front and rear openings (32 each)
- Video-assisted, remote rescue system available
- Remote governor overspeed switch set/reset
- Minimal traveler and hoistway cable wire counts; minimal compensation requirement
- Universal I/O with built-in protection
- PC configuration tool — mView
- Seamlessly integrated with iMonitor, iReport and BMS Link. ¹Lift-Net™ compatible.
- Short floor minimum 3"

FEATURES

- Serial hall call (optional)
- Serial COP (optional)
- Full distance feedback
- Universal I/O (24 to 120V AC or DC)
- ACPM or AC induction motor compatible
- Serial PI and voice annunciation interface
- Video-assisted, remote rescue system
- iMonitor, iReport, iLobby, BMS Link or Lift-Net™ ready (monitoring, reporting, lobby display)
- Onboard event log, up to 100 events

COMPLIANCE

- ASME A17.1/CSA B44
- CSA B44.1/ASME A175
- AS 1735
- EN 12015 and 12016

Motion 4000 MRL™ Specifications

| | | | |
|--------------------------|---|----------------------------|---|
| Maximum Car Speed | 500 fpm, 2.5 m/s | System Access | Hand-held basic or advanced user interface |
| Configuration | Simplex, duplex, 6 car group | Monitoring | iMonitor, IDS Lift-Net™, BMS Link |
| Stops | Up to 32 with 64 openings | Report Generation | iReport |
| Drive Type | VVVF AC | Lobby Display | iLobby |
| Motor Control | Closed loop/velocity feedback | Environment | 32–104° F, 0–40° C, relative humidity non-condensing up to 95%; harsh environment rugged service available (NEMA 4, 4X, 12) |
| Landing Systems | ELGO - 1/2 inch wide magnetically encoded tape w/1 mm resolution | Standard Enclosures | Enclosure size may vary per specific application |
| | LS-EDGE - Robust, high accuracy, perforated steel tape. NEMA 4X certified | | |

