

# INDUSTRIAL-DUTY TROLLEY OPERATOR

Safest Installations. Smartest Innovations

COMMERCIAL DOOR OPERATOR

MODEL

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UL325-2010 COMPLIANT



**UL325-2010 Compliant Logic 4.0 technology provides primary monitored entrapment protection; a required safety regulation.** This insures that the appropriate safety devices, either a monitored photo sensor or monitored sensing edge, are functional in all operators formats.

The innovative design of Logic 4.0 also provides exceptional value, featuring a broad range of standard features, and all Logic 4.0 commercial door operators are engineered, manufactured and tested to provide reliable service and meet the requirements of the toughest commercial applications.

## Standard Features

- For standard lift sectional doors
- Continuous-duty high-starting torque motor
- Switchless motor eliminates stuck start switch and motor malfunctions on single-phase operators
- Low profile
- Industrial ball bearings on output shaft
- 115V, 208/230V, 460V, 575V, 24V NEC Class 2 Circuit with 40VA transformer



Includes the Logic 4.0 board and the exclusive Maintenance Alert System™

## Provides Compliance, Value and Convenience

- UL325-2010 Monitored Entrapment Capability
  - Provides primary monitored entrapment protection through monitored photo sensors, either CPS-U or CPS-UN4, or a 4-wire monitored edge, using the CPS-EI interface
- UL-Listed and UL-Labeled to insure compliance to local codes and approval at final inspection
- Built-in 3-channel, 315MHz radio receiver
- Seven field-selectable operator wiring formats via on-board selector switch
- Integrated Timer-To-Close
  - Programmable in 1-second and 15-second increments; allows for timed automatic door closure after the door reaches the full open position
- Programmable mid-stop, which permits an automatic stop between full close and full open, and maximum run timer, that prevents motor overrun and damage to the door and/or operator
- Maintenance Alert System™
  - Establish a routine maintenance schedule based on number of door cycles and/or calendar date; includes a self-diagnostic system for easy troubleshooting

**LiftMaster**  
ELITE SERIES™  
LOGIC 4.0



## COMMERCIAL DOOR OPERATOR

| MAXIMUM DOOR AREA (SQ. FT.) |     |                        |                        |                        |     |
|-----------------------------|-----|------------------------|------------------------|------------------------|-----|
| HORSEPOWER                  |     | 24 GA./22 GA. STEEL    | 20 GA. STEEL           | 16 GA. STEEL           |     |
|                             |     | FIBERGLASS             | ALUMINUM DOORS         | WOOD DOORS             |     |
|                             |     | 24 GA. STEEL INSULATED | 20 GA. STEEL INSULATED | 16 GA. STEEL INSULATED |     |
| 1/3                         | 310 | 285                    | 260                    | 175                    | 125 |
| 1/2                         | 400 | 350                    | 320                    | 250                    | 200 |
| 3/4                         | 560 | 500                    | 450                    | 325                    | 275 |
| 1                           | 640 | 625                    | 560                    | 400                    | 310 |

NOTES: On steel insulated doors, a 24-gauge back panel is assumed.

If a heavier back panel is supplied, use the next higher HP rating.

Recommended Duty Cycles: 25 per hour, 80-90 per day

### Standard Features

- Motor**  
 Continuous-duty high-starting torque motor with instant reverse and overload protection. Available in 1/3, 1/2, 3/4 and 1 HP; single- or three-phase. Capacitor start on single-phase. Removable without affecting limit switch settings.
- Quick-Mount Header Bracket**  
 Includes quick-mount header bracket which provides fast, swing-up installation.
- Emergency Disconnect**  
 Spring-loaded disconnect for emergency manual operation.
- Wiring Type**  
 All operators are factory preset to C2 wiring, providing momentary contact to open and stop, with constant contact to close. Monitored entrapment protection, using approved photo sensors or sensing edges is optional, although recommended, when using C2, D1 or E2. All other wiring types, B2, T, TS and FSTS, can be selected with the addition of an appropriate monitored entrapment protection device, either LiftMaster CPS-U / CPS-UN4 photo sensors or a monitored 4-wire sensing edge (via a CPS-EI Edge Interface Card). Logic 4.0 operators can only accept UL-approved LiftMaster CPS-U, CPS-UN4 or CPS-EI monitored entrapment protection devices.
- Drive Reduction**  
 First-stage heavy-duty 5L V-belt; second-stage #41 chain; output on trolley #48 chain on 1/3 and 1/2 HP; #41 chain on 3/4 and 1 HP.
- Brake**  
 Heavy-duty solenoid-actuated brake is standard on 3/4 and 1 HP units to prevent coasting of door. Optional on 1/3 and 1/2 HP units.
- Bearings**  
 Ball bearings on output shaft; heavy-duty, oil-filled bushings on reduction shafts.
- Friction Clutch**  
 Adjustable friction clutch helps protect against major damage to door and operator should the door meet an obstruction.
- push Button Station**  
 3-button station for open/close/stop functions is standard for all operators. Other controls available.
- Radio Receiver & External Radio Control Terminal**  
 315MHz radio receiver included as standard on Logic 4.0. Accepts up to 23 Security+® remote controls or unlimited DIP switch remotes. External terminals provide quick, convenient connections for retrofitting or adding an external radio receiver.
- Construction**  
 NEMA 1 type electrical box, heavy-duty 11-gauge steel frame with durable powdercoat finish, all reduction sprockets drilled and pinned to shafts.
- Rail Assembly**  
 High-strength dual L-rail track with exclusive nylon quiet-gliding chain guides on rail spacers for quiet, smooth operation.

### Value Added Standard Features

- Timer-to-Close**  
 Automatically closes the door – programmable in 1-second or 15-second increments.

- Maximum Run Timer**  
 Signals door to reverse or stop if closing time exceeds maximum by more than 10 seconds.
- Mid-Stop**  
 Stops door at programmable mid-stop during open travel.
- Delay-on-Reverse Circuit**  
 A 1.5 second delay-on-reverse circuit to prevent premature door and operator wear.

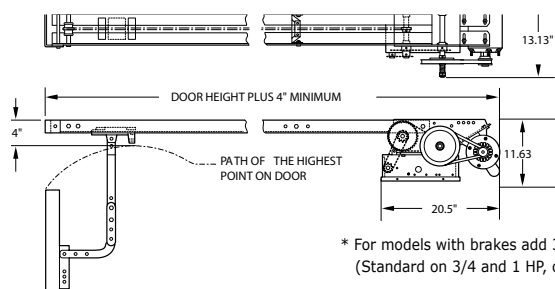
### Control Accessories and Options

- CpS® Commercial protector System®**  
 LiftMaster photo sensors, CPS-U and CPS-UN4, are considered primary entrapment protection devices and are designed to sense an obstruction and instruct the operator to reverse a closing door to the full open position; LiftMaster photo sensors must be present in order to program any features or wiring types other than constant contact to close (C2, D1 and E2). In lieu of photo-sensors, the CPS-EI Edge Interface, which permits the attachment of a 4-wire monitored sensing edge to a Logic 4.0 operator, may be substituted as a primary entrapment protection device. CPS devices:
  - Signal the operator continuously in compliance with regulatory agency requirements regarding primary monitored entrapment protection devices
  - Provide LED indicators for quick and easy alignment
  - Feature heavy gauge mounting brackets and a bright, yellow safety color
  - Offer quick installation via pre-molded 1"conduit connections
  - Provide a watertight NEMA4 design (CPS-UN4)
- Sensing Edge**  
 If CPS-U / CPS-UN4 photo sensors are present, a non-monitored 2-wire electric edge or pneumatic (air hose) edge may be used as ancillary protection devices. For C2 mode only, installation of either a 2-wire electric or pneumatic edge is optional.
- Transmitters**  
 1- and 3-button transmitters available for Logic 3.0. 3-button transmitter can be programmed for open/close/stop functionality.
- Treadle**  
 Signals door operator to open and/or close when vehicle depresses treadle.
- Key Switch**  
 Designed to restrict operation of door to authorized personnel only. Various types available.
- Interlock Switch**  
 Prevents accidental operation of the door by interrupting the control circuit.

### Available Plug-in Options for the Logic 4.0 Control Board (L4)

- TLS1CARD**  
 The Timer Light Status Card (TLS1CARD) provides the capability to control auxiliary devices such as warning lights, bells, horns, horn/strobes, etc. through timed relay activation occurring at various door positions (open, mid-stop or closed). The TLS1CARD also provides an input for external limit switches on tall rolling doors.
- AUXCARD**  
 Activates security, warning, heating or other 5V to 240V devices while door is in motion (either opening or closing).
- CpS3 & CpS3-N4**  
 Provides the ability to add a second set of photo sensors for additional safety. CPS3 includes CPS3CARD and a set of CPS-U photo sensors. CPS3-N4 includes the CPS3CARD and a set of CPS-UN4 photo sensors. CPS3CARD may be purchased separately.

### Technical Information



\* For models with brakes add 3-1/2" (Standard on 3/4 and 1 HP, optional on 1/3 and 1/2 HP)

# LiftMaster®

Commercial Door Operators

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