# **HEAVY INDUSTRIAL-DUTY TROLLEY OPERATOR**

Safest Installations. Smartest Innovations

## Standard Features

- For standard lift sectional doors
- Continuous-duty high-starting torque motor
- Quiet-gliding rail spacers
- Quick-mount swivel header bracket
- Removable hinged electrical box cover
- 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<sup>™</sup>



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.

#### **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<sup>™</sup>
  - Establish a routine maintenance schedule based on number of door cycles and/or calendar date; includes a self-diagnostic system for easy troubleshooting

COMMERCIAL

DOOR

OPERATOR



## **COMMERCIAL DOOR** OPERATOR

## MAXIMUM DOOR AREA (SQ. FT.)

STANDARD SECTIONAL			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
ĸ	1/2	400	350	320	250	200
MO	3/4	560	500	450	325	250
HORSEPOWER	1	625	575	500	400	300
	1-1/2		625	550	475	380

NOTE: 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, in excess of 90 per day

## Standard Features

#### Motor

Continuous-duty high-starting torque motor with instant reverse and overload protection. Available in 1/2, 3/4, 1 and 1-1/2 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

10:1 first stage using heavy-duty gears running in oil bath; cast iron housing; #41 chain second stage; #41 chain on trolley.

#### Brake

Heavy-duty solenoid-actuated brake.

#### Bearings

Sealed roller bearings in gear reducer. Flange-mount industrial ball bearings on drive shaft.

## Clutch

Heavy-duty torque limiter 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. Controls with 1, 2 and 3 buttons are available.

## Radio Receiver & External Radio Control Terminal

315MHz radio receiver included as standard on Logic 3.0. 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. Includes heavy-duty wall-mount brackets for rail and operator.

## 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.

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## **Commercial Door Operators**

THE CHAMBERLAIN GROUP, INC. 845 Larch Avenue • Elmhurst, IL 60126 www.liftmaster.com • http://specs.liftmaster.com/architectscorner

#### 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<sup>®</sup> Commercial Protector System<sup>®</sup>: 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.

## **Manual Hoist Modification**

Allows easy emergency manual operation using a hoist mechanism without the need to disconnect and reconnect the trolley assembly.

#### 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.

#### Transmitters

1- and 3-button transmitters available. 3-button transmitter can be programmed for open/close/stop functionality.

## 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.

#### Auxiliary Contact Board

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



CHAMBERLAIN IS AN ISO9001:2008 REGISTERED COMPANY



I.C./F.C.C.

**TWO-YEAR** 

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