Industrial-Duty Trolley Operator Specifications

PART 1 GENERAL

- 1.1 SECTION INCLUDES
- A. Trolley-type door operators for standard lift sectional doors.
- 1.2 RELATED SECTIONS
 - Note to Specifier: Please list all applicable CSI Masterformat Sections requiring coordination to Automatic Door Operators.
- 1.3 REFERENCES
 - Note to Specifier: Please list all applicable Standards, Codes and other Reference documentation related to the design, functionality, installation and performance of Automatic Door Operators
- 1.4 SUBMITTALS
- Note to Specifier: Please list all applicable submittal requirements required for approval.
- 1.5 DELIVERY, STORAGE, AND HANDLING
- Note to Specifier: Please list all applicable delivery, storage and handling requirements for Automatic Door Operators that are pertinent to the project site and conditions.
- A. Manufacturer's standard 2-year warranty against material and manufacturing defects.

PART 2 PRODUCTS

- 2.1 MANUFACTURERS
- A. Acceptable Manufacturer: The Chamberlain Group, Inc.; 845 Larch Avenue, Elmhurst, IL 60126-1196. ASD. Tel: (800) 282-6225. Fax: (630) 516-8412. www.chamberlain.com
- B. Substitutions: Not permitted.
- Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 TROLLEY OPERATED DOOR OPERATOR

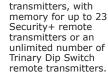
- A. Industrial-Duty for Standard Lift Sectional Door: Continuous-duty, high-starting torque motor with overload protection and emergency disconnect for manual door operation; Model T; Chamberlain, Elmhurst, IL.
 - Electric Operator: Model T industrial-duty assembly, cULus Listed and cULus Labeled, complete with electric motor and factory-prewired motor controls, internal auxiliary reversal circuit, 3-button OPEN/CLOSE/STOP control station, conduit-encased wiring from control circuit to motor and accessories required for proper operation; operator shall be capable of driving door at a speed of approximately 8 to 12 inches (279 mm) per second. Vertical operator profile shall not exceed 12 inches (279 mm).
 - a. Drive Reduction: Heavy-duty 5L V-belt and chain/sprocket secondary; all reduction sprockets and pulleys shall be drilled and pinned to steel shafts plated for resistance to corrosion; operator shall be equipped with permanently lubricated ball bearings on output shaft, adjustable friction clutch and quick disconnect door arm to facilitate manual operation.
 - b. Brake: Electric solenoid-actuated brake capable of stopping Brake: Electric solenoid-actuated brake capable of stopping and holding a door at any position (NOTE TO SPECIFIER: Brake is standard on ¾ and 1 HP models; brake is optional on 1/3 and ½ HP models and must be specified if desired).
 Limit Switches: Fully adjustable, driven linear-type switch mechanism synchronizing operator with door; low friction nylon limit nuts fitted on treaded steel shaft that rotates are all tight and limit and support the standard steel.
 - on oil-tight self-lubricating bronze bushings; motor shall be removable with affecting limit switch settings.

 d. Electric Motor: High-starting torque, continuousduty, industrial-type protected against overload by
 - current sensing and thermal overload devices

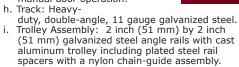
 - Motor Specification
 NOTE TO SPECIFIER: select one of the following:

 - (a) 115V-60Hz-1Phase; 1/3, 1/2, 3/4 or 1 HP (b) 230V-60Hz-1 Phase; 1/3, 1/2, 3/4 or 1 HP (c) 208/230V-60Hz-3 Phase; 1/3, 1/2, 3/4 or 1 HP (d) 460V-60Hz-3 Phase; 1/3, 1/2, 3/4 or 1 HP
 - (e) 575V-60H2-3 Phase; 1/3, 1/2, 3/4 of 1 HP e. Motor Control and Enclosure: LiftMaster LOGIC 4.0 motor control shall be UL approved microprocessor solid-state type and shall include the capability to select one of seven wiring types; additional features shall include a maintenance alert diagnostic system, programmable timer-to-close w/ timer defeat input, mid-stop programming capabilities and a maximum run timer to provide motor overrun protection; motor control shall be housed in a NEMA 1 enclosure integral
 - to the operator and shall conform to ANSI/NEMA ICS6.

 1) Radio Receiver: LiftMaster LOGIC 4.0 on-board, 3-channel receiver with standard external antenna; equipped to accept Security+ Rolling Code Technology remote transmitters and Trinary Dip Switch remote



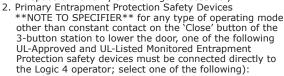
- remote transmitters. f. 3-Button Control Station: 3-button station providing OPEN/CLOSE/STOP functionality shall be NEMA Type 1 with maintenance alert indicator to signal intervals for routine door and operator maintenance.
- g. Door Drive: Full #48 (1/3 HP & ½ HP models) or #41 (3/4 HP and 1 HP models) roller chain with emergency disconnect for manual door operation.



COMMERCIAL

DOOR

OPERATOR



a. Industrial/Commercial Monitored Photo Sensors: CPS-U fully monitored, non-contact, infrared beam photo sensor system shall reverse, in conjunction with the Logic 4 operator, a closing door to the full open position when an obstruction is sensed; photo sensors shall be mounted no higher than 6" maximum above the floor.

b. NEMA 4 Monitored Photo Sensors: CPS-UN4 fully monitored, non-contact, infrared beam reversing photo sensor system, with NEMA 4 watertight enclosure shall reverse, in conjunction with the Logic 4 operator, a closing door to the full open position when an obstruction is sensed; photo sensors shall be mounted no higher than 6" maximum above the floor.

Monitored Sensing Edge Interface: CPS-EI edge interface shall provide a means to attach a 4-wire monitored sensing edge to a Logic 4 operator for monitored sensing edge to a Logic 4 operator for continuous monitoring purposes; the edge, in conjunction with the Logic 4 operators shall reverse a closing door to the full open position when an obstruction is sensed; sensing edge supplied by others.

3. Ancillary Entrapment Protection Safety Devices

** NOTE TO SPECIFIER** Ancillary Entrapment Protection safety devices are optional and can be used to supplement, but not replace, Primary Entrapment Protection safety devices, relactions as feety devices.

Protection safety devices; select one of the following:

- a. Retro-Reflective Photo Sensors: CPS-RN4 non-monitored, non-contact, infrared beam photo sensor with polarized reflector for use in conjunction with the CPS-EI edge interface and monitored 4-wire sensing edge; shall reverse a closing door to the full open position when an obstruction is sensed; photo sensor shall be mounted no higher than 6" maximum above the floor.
- b. Non-Monitored Electric Sensing Edge: 2-wire non-
- monitored electric edge shall reverse a closing door to the full open position when an obstruction is sensed c. Pneumatic Sensing Edge: Pneumatic (air hose) sensing edge shall reverse a closing door to the full open position when an obstruction is sensed.

PART 3 EXECUTION

3.1 EXAMINATION

- Note to Specifier: Please list all requirements regarding examination of the Substrate to which Automatic Door Operators will be mounted.
- 3.2 PREPARATION
- Note to Specifier: Please list all requirements regarding preparation of the Substrate to which Automatic Door Operators will be mounted.

3.3 INSTALLATION

A. Install in accordance with manufacturer's instructions.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- Touch-up, repair or replace damaged products before Substantial Completion.





LOGIC 4.0