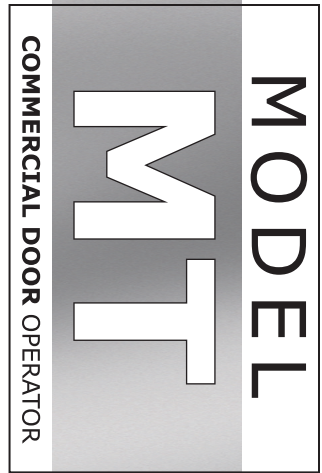


Medium-Duty Door Operator Specifications



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.

1.6 WARRANTY

- 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. Email: www.chamberlain.com
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 TROLLEY OPERATED DOOR OPERATOR

- A. Medium-Duty Operator: Limited-duty (recommended duty of 12 cycles per hour), high-starting torque motor with overload protection and emergency disconnect for manual door operation; Model MT; Chamberlain, Elmhurst, IL.
 - 1. Electric Operator: Model MT medium-duty assembly, cULus Listed and cULus Labeled, complete with electric motor and factory-prewired motor controls, 3-button OPEN/CLOSE/STOP control station, conduit-encased wiring from control circuit to motor and accessories required for proper operation; operator shall provide a door speed of approximately 8 inches (203 mm) to 10 inches (229 mm) per second.
 - a. Primary Speed Reduction: Heavy-duty 4L V-belt and #41 chain and sprocket with sprocket reduced secondary; operator shall be equipped with adjustable friction clutch, quick disconnect door arm for manual door operation, oil-tight bushings on output shaft and output and door driven sprockets.
 - b. Limit Switches: Fully adjustable, driven linear-type switch mechanism synchronizing operator with door; low friction nylon limit nuts fitted on threaded steel shaft that rotates on oil-tight self-lubricating bronze bushings; motor shall be removable without affecting limit switch settings.
 - c. Electric Motor: High-starting torque, 1/2 Horsepower, 115 volts, 1 phase motor with an internal automatic reset thermal overload device to protect against overload.
 - d. Motor Control and Enclosure: LiftMaster Medium Duty Logic motor control shall be a microprocessor solid-state type PCB; the control board shall provide the capability to select one of two wiring types, diagnostic LEDs for operator status and troubleshooting, programmable timer-to-close w/timer defeat 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 Medium Duty Logic on-board, 3-channel receiver with external antenna; equipped to accept Security+ Rolling Code Technology remote transmitters and Trinary Dip Switch remote transmitters, with memory for up to 20 Security+ remote transmitters or an unlimited number of Trinary Dip Switch remote transmitters.
 - e. 3-Button Control Station: 3-button station providing OPEN/CLOSE/STOP within a NEMA 1 Type enclosure.
 - f. Optional Operator Modifications
 - ** NOTE TO SPECIFIER: select only if applicable
 - 1) Electric solenoid-actuated brake capable of stopping and holding a door at any position.
 - g. Door Drive: Full #48 roller chain and emergency disconnect for manual door operation.
 - h. Track: Heavy-duty, double-angle, 11 gauge galvanized steel.
 - i. Trolley Assembly: 2 inch (51 mm) by 2 inch (51 mm) galvanized steel angle rails with cast aluminum trolley including plated steel rail spacers with nylon chain-guide assembly.
- 2. Primary Entrapment Protection Safety Devices
 - **NOTE TO SPECIFIER** for any type of operating mode other than constant contact on the 'Close' button of the 3-button station to lower the door, one of the following UL-Approved and UL-Listed Monitored Entrapment Protection safety devices must be connected directly to the Logic 4 operator; select one of the following:
 - 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.
 - c. 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 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; 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.
- B. Touch-up, repair or replace damaged products before Substantial Completion.