

# Low-Profile Door Operator Specifications



## PART 1 GENERAL

### 1.1 SECTION INCLUDES

- A. Apartment House door operators.

### 1.2 RELATED SECTIONS

- \*\* Note to Specifier: Please list all applicable CSI Masterformat Sections related to Automatic Door Operators requiring coordination.

### 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 limited lifetime 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 APARTMENT HOUSE DOOR OPERATOR

- A. Low-Profile Apartment House Operator: Resilient mount motor with overload protection and emergency disconnect with auto-reconnect trolley assembly for manual door operation; Model APT; Chamberlain, Elmhurst, IL.
  - Electric Operator: Model APT low-profile assembly, cULus Listed and cULus Labeled, 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 drive the door at a speed of approximately 6 to 7 inches (150 mm) to 7 inches (178 mm) per second. Operator vertical profile shall not exceed 11 inches (279 mm).
    - 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.
    - Brake: Standard solenoid brake to stop and hold a door at any position
    - 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 on oil-tight self-lubricating bronze bushings; motor shall be removable with affecting limit switch settings.
    - Electric Motor: High-starting torque, 1/2 Horsepower, 115 volts, 1 phase resilient-mount continuous-duty type motor, protected against overload by current sensing and thermal overload devices.
    - Solid-State 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.
      - 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 transmitters, with memory for up to 23 Security+ remote transmitters or an unlimited number of Trinary Dip Switch remote transmitters.
    - 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 roller chain with 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 a nylon chain-guide assembly.
2. Primary Entrapment Protection Safety Devices  
\*\* NOTE TO SPECIFIER \*\*  
For any type of operating mode or features beyond basic constant contact on the 3-Button station 'Close' button to lower the door, one of the following UL-Approved and Listed Monitored Entrapment Protection safety devices must be connected directly to the Logic 4 operator. Select one of the following:
- 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.
  - 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 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:
- 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.
  - 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
  - Pneumatic Sensing Edge: Pneumatic (air hose) sensing edge shall reverse a closing door to the full open position when an obstruction is sensed.
4. Trolley Track: 2 inch (51 mm) by 2 inch (51 mm) galvanized steel angle rails with automatic reconnecting trolley and shall include plated steel rail spacers with nylon chain-guide assembly; nylon inserts will be provided on trolley mechanism and rail spacers to reduce vibration and chain noise.

## 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.

**LiftMaster**  
ELITE SERIES™  
LOGIC 4.0

Chamberlain reserves the right to make design or specification changes without notice.

Form LM SPEC APT

# APT Drawbar Operator

## Apartment House Duty Door Operator

CHAMBERLAIN IS AN ISO9001:2008 REGISTERED COMPANY



I.C./F.C.C. Certified

Customer \_\_\_\_\_

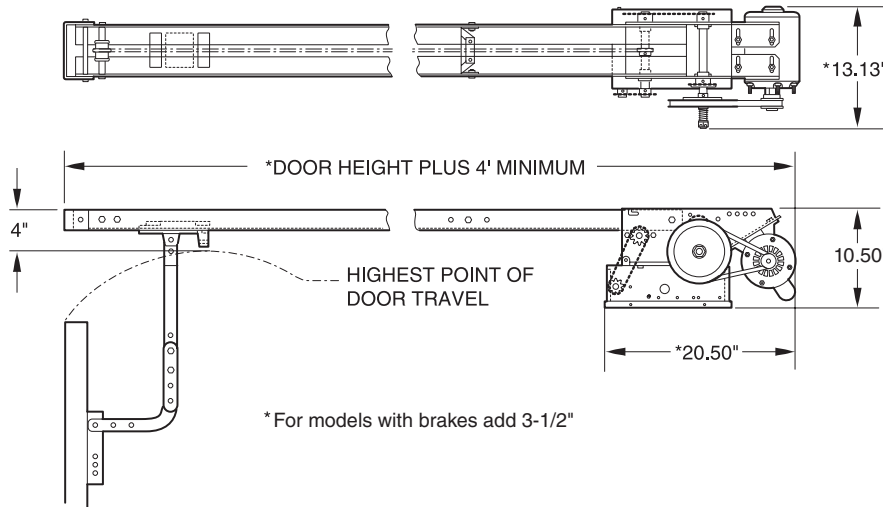
Project \_\_\_\_\_

Architect/Engineer \_\_\_\_\_

Contractor \_\_\_\_\_

Drawing Number \_\_\_\_\_ Date \_\_\_\_\_ Sheet \_\_\_\_\_ of \_\_\_\_\_

### SHOP DRAWING



### Specifications for Ordering

1) Supply \_\_\_\_\_ ( ) LiftMaster Operator(s) Model \_\_\_\_\_  
 \_\_\_\_\_ HP, \_\_\_\_\_ Volts, \_\_\_\_\_ Phase, \_\_\_\_\_ Hertz \_\_\_\_\_

2) For \_\_\_\_\_ wide x \_\_\_\_\_ high door(s) with \_\_\_\_\_

3) Supply \_\_\_\_\_ ( ) OPEN/CLOSE/STOP control station(s) in NEMA \_\_\_\_\_ enclosure per operator

4) Supply auxiliary and optional equipment as specified below (one per operator unless otherwise noted)

Additional Info

### Notes:

- 1) Refer to Model APT product data sheet for general information
- 2) Refer to drawing \_\_\_\_\_ for wiring diagram

MOTOR AMPERAGE RATING	
HORSE POWER	VOLTAGE - PHASE - 60Hz
1/2	115-1Ø 8.0

Manufactured by:  
 The Chamberlain Group, Inc.  
 845 Larch Avenue • Elmhurst, Illinois 60126  
**For More Information:**  
 call (800) 323-2276  
 visit [www.liftmaster.com](http://www.liftmaster.com) or  
<http://specs.liftmaster.com/architectscorner>

# LiftMaster®

Commercial Door Operators