

# Industrial-Duty Door Operator Specifications



## PART 1 GENERAL

### 1.1 SECTION INCLUDES

- A. Industrial-duty single and bi-parting door operators.

### 1.2 RELATED SECTIONS

- A. Section 06100 – Rough Carpentry: Installation and requirements for blocking and nailers.
- B. Section 16050 – Basic Electrical Materials and Methods: Installation and requirements for electrical connections.

### 1.3 REFERENCES

- A. National Electrical Manufacturers Association (NEMA): NEMA ICS 6 - Industrial Control and Systems: Enclosures.

### 1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
  1. Preparation instructions and recommendations.
  2. Storage and handling requirements and recommendations.
  3. Installation Methods.
  4. Cleaning Methods.
- C. Shop Drawings: Submit Shop drawings showing layout, profiles, and product components, including anchorage, edge conditions, and accessories.

### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging with labels intact until ready for installation.
- B. Schedule delivery of door operator so that spaces are sufficiently complete that door operators can be installed immediately upon delivery.
- C. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

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

### 2.2 INDUSTRIAL-DUTY SINGLE AND BI-PARTING DOOR OPERATOR

- A. Industrial-Duty Operator; Model SD; Chamberlain, Elmhurst, IL.
  1. Electric Operator: Model SD industrial-duty assembly, with electric motor and factory-prewired motor controls, 3-button OPEN/CLOSE/STOP control station, conduit and wiring from control to motor, and accessories required for proper operation; door speed of approximately 11 inches (279 mm) per second. Operator vertical profile shall not exceed 11 inches (279 mm).
  2. Primary Speed Reduction Device: Heavy-duty 5L V-belt and #41 chain and sprocket secondary to Hold door in any position. Reduction sprockets and pulleys shall be drilled and pinned to steel shafts and all shafts shall be plated for resistance to corrosion. Operator shall be equipped with adjustable friction clutch, quick disconnect door arm for manual door operation, and permanently lubricated ball bearings on output shaft.
  3. Limit Switches: Fully adjustable, driven linear-type switch mechanism synchronizing operator with door. Low-friction nylon limit nuts shall be fitted on threaded steel shaft, rotating on oil-tight self-lubricating bronze bushings. Motor shall be removable without affecting limit switch settings.
- a. Electric Motor: High-starting torque, continuous-duty, industrial-type protected against overload by current sensing or thermal overload device.
  - 1) Motor Specification (choose one):
    - (a) 115V-60Hz-1 Phase; 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) 230-50Hz-3 Phase; 1/3, 1/2, 3/4 or 1 HP

- (e) 380V-50Hz-1Phase; 1/3, 1/2, 3/4 or 1 HP
- (f) 460V-60Hz-3 Phase; 1/3, 1/2, 3/4 or 1 HP
- (g) 575V-60Hz-3 Phase; 1/3, 1/2, 3/4 or 1 HP
- b. Motor Control and Enclosure (choose one):
  - 1) Contactor-style (Mechanical) Motor Starter, Control, and Enclosure: Motor starter shall be an across-the-line, mechanically interlocked, magnetic-reversing contactor. Motor starting device shall be enclosed in a NEMA 1 enclosure and integral with the operator. Motor control device shall be enclosed in NEMA 1 enclosure and shall be integral with operator. Control enclosures shall conform to ANSI/NEMA ICS 6. Control enclosures shall conform to ANSI/NEMA ICS6.
  - 2) Solid-State Motor Control and Enclosure: LiftMaster LOGIC 3 motor control shall be UL approved microprocessor solid-state type, and include the capability to select one of seven wiring types and a maximum run timer for motor protection. Additional features shall include a maintenance alert diagnostic system, timer-to-close w/timer defeat input, and mid-stop programming capabilities. Motor control device shall be enclosed in a NEMA 1 enclosure and integral with the operator. Control enclosures shall conform to ANSI/NEMA ICS6.
    - (a) Radio Receiver: LiftMaster LOGIC 3 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.
    - c. 3-Button Control Station: 3-button station providing OPEN/CLOSE/STOP shall be NEMA Type 1 with maintenance alert indicator to signal intervals for routine door and operator maintenance.
  4. Track: Heavy duty, double angle, 11 gauge galvanized steel.
  5. Door Drive: #41 roller chain and solenoid brake shall be supplied.
  6. Trolley Assembly: 2 inch (51 mm) by 2 inch (51 mm) galvanized steel rails with cast aluminum trolley along with plated steel rail spacers on a nylon chain guide assembly.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

### 3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the Methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

### 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.

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