# Industrial-Duty Door Operator Specifications

#### PART 1 GENERAL

#### **1.1 SECTION INCLUDES**

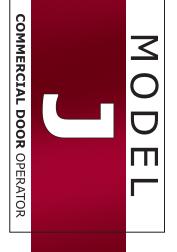
- A. Jackshaft-type door operators for high or vertical lift sectional doors and limited rolling door and grille applications.
- **1.2 RELATED SECTIONS** Note to Specifier: Please list all applicable CSI Masterformat
- Sections requiring coordination to Automatic Door Operators. **1.3 REFERENCES**
- 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. Industrial-Duty Operator: Continuous-duty, high-starting torque motor with overload protection and emergency disconnect for manual door operation; Model J; Chamberlain, Elmhurst, IL.
  - 1. Electric Operator: Model J industrial-duty assembly, cULus Listed and cULus Labeled, complete with electric motor and factory-prewired motor controls, positive locking mechanical system acting as a holding brake, emergency disconnect for manual operation of the door, 3-button OPEN/CLOSE/STOP control station, conduit-encased wiring from control circuit to motor, and accessories required for proper operation; operator a below the second structure of the secon
    - reduction; 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 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 treaded steel shaft that rotates on oil-tight self-lubricating bronze bushings; motor shall be removable with affecting limit switch settings.
    - c. Electric Motor: High-starting torque, continuousduty, industrial-type protected against overload by current sensing and thermal overload devices. 1) Motor Specification
      - \*\*NOTE TO SPECIFIER\*\*: select one of the following:

      - 2) 115V-60Hz-1Phase; 1/3, 1/2, 3/4 or 1HP 3) 230V-60Hz-1 Phase; 1/3, 1/2, 3/4 or 1HP
      - 4) 208/230V-60Hz-3 Phase; 1/3, 1/2, 3/4 or 1HP 5) 460V-60Hz-3 Phase; 1/3, 1/2, 3/4 or 1HP 6) 575V-60Hz-3 Phase; 1/3, 1/2, 3/4 or 1HP
    - d. 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. e. 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.

- f. Door Drive: Full #50 roller chain; operator shall be equipped with a floor level disconnect for manual operation of the door.
- 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.
- 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  $6^{\prime\prime}$  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:
  - 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.
  - Non-Monitored Electric Sensing Edge: 2-wire nonmonitored electric edge shall reverse a closing door to the full open position when an obstruction is sensed Pneumatic Sensing Edge: Pneumatic (air hose) sensing
  - с. 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.

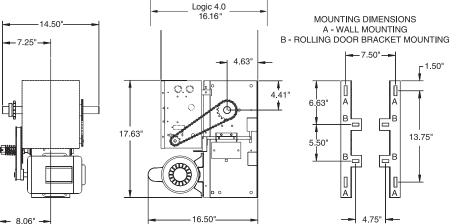






Customer			
Project			
Architect/Engineer			
Contractor			
Drawing Number	Date	Sheet	_of

## 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 cont	rol station(s) in NEMA enclosure per operator		
4) Supply auxiliary and optional equipment as specified below (one per operator unless otherwise noted)						
Additional Inf	ō					

#### Notes:

1) Refer to Model J product data sheet for general information

2) Refer to drawing \_\_\_\_\_\_ for wiring diagram

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

MOTOR AMPERAGE RATING								
HORSE	VOLTAGE - PHASE - 60Hz							
POWER	115-1Ø	230-1Ø	230-3Ø	460-3Ø	575-3Ø			
1/3	6.6	3.3	2.2	1.0	0.8			
1/2	8.2	4.1	2.2	1.0	0.8			
3/4	11.2	5.6	2.9	1.4	1.2			
1	13.6	6.8	3.4	1.7	1.4			

