

Light-Duty Industrial 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. Light-Duty Gear-Reduced Operator: Limited duty (recommended duty of 7 cycles per hour) high-starting torque ¼ HP motor with emergency disconnect for manual door operation and internal door lock sensor to prevent accidental operation of a locked door; Model LGJ; Chamberlain, Elmhurst, IL.

- 1. Electric Operator: Model LGJ light-duty 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 be capable of driving door at a speed of approximately 8 inches (203 mm) to 9 inches (229 mm) per second.
 - a. Primary Speed Reduction: Wormgear-in-oil-bath; operator equipped with floor level disconnect and output and door driven sprocket
 - 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, 1/4 Horsepower, 115 volts, 1 phase motor rated for a maximum capacity of 7 cycles per hour.
 - d. Control and Motor Drive: Solid-state circuit board design with internal door lock-sensing circuit.
 - e. Internal Door Lock Sensor: Speed sensor and sensing circuit to stop operator when door is locked or obstructed while opening, or reverse the door if obstructed when closing.
 - f. 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.
 - g. Door Drive: Full #41 roller chain; operator shall be equipped with an electrically interlocked, floor level disconnect for manual operation.
- 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:
 - 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.