

Architectural Specifications for Chamberlain ELITE™ CSW200UL Commercial Swing Gate Operator

(For Inclusion within Section 2827 Gate Operators)

Part 1 – General

1.1 Section Includes

- A. Swing gate operators with integral battery backup systems and accessories
- B. Sensors and Controls

1.2 Related Sections

- A. Section 02820 – Fences and Gates
- B. Section 03300 – Cast-In-Place Concrete – Concrete Mounting Pad
- C. Section 11150 – Parking Control Equipment
- D. Section 16131 – Conduits
- E. Section 16115 – Equipment Wiring

1.3 References

- A. UL325 – Standard for Safety for Door, Drapery, Gate, Louver, and Window Operators and Systems
- B. UL991 – Standard for Safety – Tests for Safety-Related Controls Employing Solid-State Devices

1.4 Submittals

- A. Submit under provisions of Section 01300
- B. Product Data: Equipment list, system description, block diagrams on equipment to be finished, electrical wiring diagrams for installation, and 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

1.5 Quality Assurance

- A. Provide documentation of maintenance and repair service availability for emergency conditions
 - 1. Installer Qualifications: Factory authorized contractor specifically trained in gate operation systems of the type found within this section

1.6 Warranty

- A. Warranty: Manufacturers standard warranty for five years on commercial applications and seven years on single home applications

Part 2 – Products

2.1 Manufacturer

- A. Acceptable Manufacturer: Chamberlain/LiftMaster, 845 Larch Avenue, Elmhurst, Illinois 60126. Telephone: (800) 282-6225
- B. Substitutions: Not permitted
- C. Requests for substitutions will be considered in accordance with the provisions of Section 01600

2.2 Swing Gate Operator

- A. Commercial Gate Operator for Single or Double Swing Gates
 - 1. Chamberlain/Elite™ (Note to Specifier: Select one) Model Number: CSW200UL, CSW200ULST, CSW200ULD, or CSW200UL1HP Swing Gate Operator
 - a. Gate capacities: For push or pull to open gates up to 600 lbs. (CSW200UL, CSW200ULST), 800 lbs. (CSW200ULD), or 1000 lbs. (CSW200UL1HP) and lengths

to 18 feet (CSW200UL, CSW200ULST, CSW200ULDM) or 20 feet (CSW200UL1HP) for each gate

- b. UL Classification: (Note to Specifier: Select one)
 - 1.) Conforms to Class I, when tested in accordance with UL325
 - 2.) Conforms to Class II, when tested in accordance with UL325
 - 3.) Conforms to Class III, when tested in accordance with UL325
 - 4.) Conforms to Class IV, when tested in accordance with UL325
- c. Chassis: Manufactured from ¼" gold, zinc-plated metal with a high-density polyethylene plastic cover (CSW200UL, CSW200ULDM, CSW200UL1HP) or 16-gauge stainless steel (CSW200ULST) for superior heat and corrosion resistance
- d. Operator:
 - 1.) ½ HP, 4 amp, instant-reversing 120VAC motor with electrical limit switch system capable of 75 cycles per hour (CSW200UL, CSW200ULST)
 - 2.) Two ½ hp, 4 amp, instant-reversing 120 VAC motors (one for open, one for close) with electrical limit switch system capable of continuous cycles (CSW200ULDM)
 - 3.) Two ½ hp gate motors (one for open, one for close) capable of 60 cycles per hour (CSW200UL1HP) with electrical limit switch system and generating 250 lbs. of pulling torque
 - 4.) Control circuit: Microprocessor electronics and solid-state control board in a weatherproof housing; low-voltage control inputs to provide for connection of a full range of optional external devices including safety loop, exit loop, photocell sensors, telephone entry access systems, computer attachment, keyed manual disconnect switch operation (to provide release and manual operation of the gate in emergency situations), fire dept. keyed manual disconnect, and 3-button push-button station; provides outputs for sensor alarm, alarm system, and magnetic locks; provides LED indication of all input and output functions; provides modular plug-in loop detector technology for safety and exit loops
- e. Additional required controls:
 - 1.) Internally-mounted RF receiver tuned at 315 MHz for use with LiftMaster DIP switch, billion code, and Security+ remote controls
 - 2.) Inherent obstruction sensing providing a slight reverse/full stop if an object is contacted while opening or a complete reopen if an object is contacted while closing
 - 3.) Entrapment sensor to temporarily shut off motor for 3 seconds upon contacting an obstruction which causes the operator to labor, followed by a slight reverse of direction away from the obstruction before shutting off the motor again resulting in a full stop of the gate
 - 4.) Soft start/stop capabilities providing extended gate system life
 - 5.) Timer-to-close providing adjustable timer settings between 0 and 60 seconds
 - 6.) On-board 3-push button control for close, stop, and open of gate
 - 7.) Two-stage surge/lightning protection protecting against a lightning strike within a 50-ft radius
 - 8.) Emergency release to manually operate the gate
 - 9.) Dual gate operation capabilities to allow two separate gate operators to operate in unison at a single entrance
 - 10.) Internal alarm to activate whenever the gate encounters an obstruction
 - 11.) Master/Second capability to provide synchronized movement between two gate operators in a double gate installation at a single entrance
- f. Mounting: Left- or right-hand operation to provide flexibility in determining orientation either prior to or during installation
- g. Non-scissor swing aluminum arm designed to be free of pinch points and to bend when at the break point if the gate encounters an obstruction.
- h. Optional Equipment (Note to Specifier: Delete all not applicable)
 - 1.) Battery Backup: An externally mounted battery backup system to automatically engage in the event of a power loss and auto-reset to normal operation when power is restored; battery backup shall provide complete operation of not only

the gate operator, but all control and sensing devices, including all sensing loops, to ensure proper and expected operation of the barrier gate system in the event of a power loss; battery charging shall be accomplished by a regulated battery management system that maintains proper battery levels to insure no disruption in service in the event of line power failure.

- 2.) Heater to keep gearbox at optimum temperature range
- 3.) Integrated, plug-in loop detector modules to create safety and exit loops

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 specifications
- B. Mount directly to concrete pad, firmly secured, plumb, and level
- C. Mount to mounting pedestal; provide base plate
- D. Wire in accordance with National Electric Code
- E. Enclose all splices in easily accessible junction boxes or on terminal boards
- F. Tag and identify all cable runs in all junction boxes
- G. Test system and adjust to assure components and accessories are properly connected and in working order

3.4 Preparation

- A. Protect installed products until completion of project
- B. Touch-up, repair, or replace damaged products before completion

3.5 Maintenance

- A. Provide Owner with two copies of operation, installation, and maintenance manuals including wiring diagrams
- B. Provide owner with two copies of risers, layouts, and special wiring diagrams showing any changes to standard drawings
- C. Maintain at three-month intervals, checking external reversing devices once per month