

# Architectural Specifications for LiftMaster SL585 Slide Gate Operator

(For Inclusion within Section 02829 Gate Operators)

## Part 1 – General

### 1.1 Section Includes

- A. Slide Gate Operators and Accessories
- B. Access 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 11150 - Parking Control Equipment
- E. Section 16131 – Conduits
- F. Section 16155 - 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 of five years for commercial installation

## 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 Parking Gates

- A. Hydraulic Slide Gate Operator
  - a. Chamberlain/LiftMaster SL 585 Model Slide Gate Operator that provides continuous cycle operation and a traveling speed of up to 11" per second
  - 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
- b. Operator Enclosure: Weather-resistant, hinged, lockable, 16-gauge steel enclosure with baked-on powdercoat finish over a 7 gauge steel frame
- c. Operator Motor (Note to Specifier: Select one of the following):
  - 1) ½ HP Continuous Duty motor with built-in overload protection in single phase 115, 208, or 230 VAC 60 Hz (Note to Specifier: Select One) or three phase 208, 230, 460, or 575 VAC 60 Hz (Note to Specifier: Select One) operation for gates up to 1200 lbs. and 40 ft (Overhead) or 25 ft. (Cantilever) in length
  - 2) 1 HP Continuous Duty motor with built-in overload protection in single phase 115, 208, or 230 VAC 60 Hz (Note to Specifier: Select One) or three phase 208, 230, 460, or 575 VAC 60 Hz (Note to Specifier: Select One) operation for gates up to 1800 lbs. and 50 ft (Overhead) or 32 ft. (Cantilever) in length
- d. Drive System: 20:1 gear reduction using worm-gear reduction in synthetic oil bath with a solenoid-activated brake system that prevents back-driving
- e. Open and Close Limit Settings: Limit switches are modular and fully adjustable
- f. Control circuit: LiftMaster GL solid-state control board; low-voltage control inputs protected from external spikes and surges that provides long distance control of wiring runs over 1,000 ft. for connection of a full range of optional external devices including loop detectors, telephone entry systems, access control systems, and radio receivers
- g. Additional required controls:
  - 1) Internally-mounted RF receiver tuned at 315MHz
  - 2) Inherent obstruction sensing providing separate, single force adjustments for both open and closed directions, allowing a closing gate to reverse to the opposite limit and stop when encountering an obstruction
  - 3) External obstruction sensing providing separate open and close cycle input connections for external contact and non-contact sensors
  - 4) Maglock control relay to activate and deactivate an optional magnetic lock for securing the gate
  - 5) UL 325-compliant entrapment warning alarm system providing ability to offer a warning tone which begins 3-seconds prior to gate movement and continues during gate operation
  - 6) Loop detector inputs allowing for the connection of exit, shadow, and interrupt loop detectors
  - 7) Dual gate operation 2-wire control system that provides for the operation of two separate gate operators in unison at a single entrance and also provides the ability to connect accessories to either operator
  - 8) Timer-to-close providing adjustable timer settings between 1 and 180 seconds which resets upon receiving any additional open commands
  - 9) Sequenced Access Management System providing ability to control a slide or swing gate operator in tandem with a barrier gate operator
  - 10) Maximum run timer to protect gate and operator from damage by limiting run time to 120 seconds
- h. Emergency Release: External manual hydraulic release for manual operation of gate during emergencies and maintenance work
- i. Emergency Stop: Stop button in a weather-tight outdoor enclosure to halt operation of the operator in an emergency situation
- j. Accessory Power: One 24 VAC connection for operator accessories, including a radio receiver and loop detectors
- k. Optional Equipment:
  - 1) Integral thermostat-controlled heater kit for use in cold weather climates

## 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