

SECTION 32 31 11
GATE OPERATORS

PART 1 - GENERAL

1.1 STIPULATIONS

- A. The specifications sections “General Conditions to the Construction Contract”, “Special Conditions”, and “Division 01 – General Requirements” form a part of this Section by the reference thereto and shall have the same force and effects as if printed herewith in full.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.3 SUMMARY

- A. Section Includes:
 - 1. Gate Operators.

1.4 SUBMITTALS

- A. Product Data: For each type of panelboard, switching and overcurrent protective device, transient voltage suppression device, accessory, and component indicated. Include dimensions and manufacturers' technical data on features, performance, electrical characteristics, ratings, and finishes.
- B. Shop Drawings: For each panelboard and related equipment.
 - 1. Shop Drawings: Illustrate products, installation, and relationship to adjacent construction. Provide wiring diagrams and details of the installation including the keypads, the loop sensor, photoelectric and edge sensors, and the operator.
 - 2. Product Data: Manufacturer’s descriptive data and product attributes.
- C. Closeout Submittals:
 - 1. Operation and Maintenance Data.

1.1 QUALITY CONTROL

- A. Field Quality Control Services including Testing and Inspections are the responsibility of the contractor.
- B. Installer Qualifications: Firm specializing in the work of this Section, with minimum 4 years' experience. Shall be provided a certified installer approved by the manufacturer.

1.2 WARRANTY

- A. Manufacturer's 7 year warranty against material and manufacturing defects.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Contract Documents are based on products by LiftMaster. Provide LiftMaster or approved equal.
- B. Hoover Fence Company
- C. Eagle Access Control Systems

2.2 MANUFACTURED UNITS

- A. Slide Gate Operator:
 - 1. Model: CSL24UL.
 - 2. Operation: Gear driven.
 - 3. Meet UL 325, UL 991, ASTM F2200, and CAS C22.2 No. 247.
 - 4. Motor: 24 VDC, continuous duty type, sized to gate conditions.
 - 5. Traveling speed: 12 inches per second.
 - 6. Battery backup: 33Ah.
 - 7. Keypad: Dual-height keypad mounted pedestal, 42" and 72", in 2"x2" square post, black powder coated, weather resistant finish. Provide lift master PED4272 or approved equal.
 - 8. Monitoring and controls:
 - a. Internet connectivity: MyQ technology with 50 channel FHSS.
 - b. Built-in Wi-Fi with internet gateway.
 - c. Radio receiver: Security+ 2.0 technology.
 - d. Monitored retro-reflective photo eyes.
 - e. Monitored small profile wired safety edge.
 - 9. Accessories:
 - f. Monitored safety devices: Photo eyes, monitored edge.
 - g. Wired monitored edges: Monitored edge.
 - a. Plug-in loop detector.
 - b. Wireless commercial keypad.
 - c. One button encrypted DIP remote control.

- d. Internet gateway.
- e. Smart video intercom.
- f. Commercial access control receiver.
- g. Passport receiver with Security+ 2.0 technology.
- h. Passport one-button [mini] remote.
- i. Heater kit.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Receive, inspect, handle, and store gate controls equipment in a place not affected by the weather.
- B. Examine gate control before installation. Reject equipment that are damaged or rusted or have been subjected to water saturation.
- C. Examine elements and surfaces to receive equipment for compliance with installation tolerances and other conditions affecting performance of the Work.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install gate controls in accordance with manufacturer's instructions.
- B. Provide Identify field-installed conductors, interconnecting wiring, and components; provide warning signs complying with Division 26 Section "Electrical Identification."

3.3 FIELD QUALITY CONTROL

- A. Testing Agency: **Engage** a qualified testing agency to perform tests and inspections.
- B. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust components, assemblies, and equipment installations, including connections.
- C. Perform tests and inspections.
 - 1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections, and to assist in testing.
- D. Acceptance Testing Preparation:
 - 1. Test insulation resistance for each VFC element, bus, component, connecting supply, feeder, and control circuit.

2. Test continuity of each circuit.

E. Tests and Inspections:

1. Inspect gate controller, wiring, components, connections, and equipment installation. **Test and adjust controllers, components, and equipment.**
2. Test insulation resistance for each controller element, component, connecting motor supply, feeder, and control circuits.
3. Test continuity of each circuit.
4. Perform each electrical test and visual and mechanical inspection stated in manufacturer recommendations. Certify compliance with test parameters.
5. Correct malfunctioning units on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.
6. Test and adjust controls, safety devices, and operation of the controller with the gate. Check proper operation of the gate. Replace damaged and malfunctioning controls and equipment.

3.4 ADJUSTING

- A. Adjust moving parts and operable component to function smoothly and lubricate as recommended by manufacturer.
- B. Test and adjust operators for proper operation.

3.5 DEMONSTRATION AND TRAINING

- A. Demonstration: Demonstrate operation and programming of operators to maintenance and operation personnel.
- B. Training: Provide training in the adjustment, operation, and maintenance of the gate to the operation and maintenance personnel. Provide minimum 4 hours of training. The training shall be performed by the manufacturer or by an authorized agent.

END OF SECTION 32 31 11