

## **SECTION 02832**

## **VEHICULAR SLIDE GATE OPERATORS**

### **PART 1 - GENERAL**

#### **1.01 DESCRIPTION**

- A. Vehicular slide gate operator, complete with all drive and electrical components, to move gate and control its position in both the open and close directions.

#### **1.02 RELATED WORK SPECIFIED ELSEWHERE**

- A. Fences and gates: See section 02831
- B. Division 16: Electrical

#### **1.03 CODES AND STANDARDS**

- A. Manufacturer shall conform to:
  - a. UL325: Standard for door, drapery, gate, louver, and window operators and systems.
  - b. UL991: Standard for testing of solid state control devices.
- B. Installer will complete all electrical work in accordance with local codes and follow the guidelines of National Electrical Code. All fieldwork shall be performed in a neat and professional manner.

#### **1.04 QUALITY ASSURANCE**

- A. Manufacturer: a company specializing in the design and manufacture of door and gate operators, with a minimum of twenty five years of experience.
- B. Installer: a company certified as a dealer of the manufacturer within qualifying industries, such as fence, security, ornamental iron, or parking, with expertise in installation of gate operators.

#### **1.05 PRODUCT DELIVERY AND STORAGE**

- A. Installer will store product upright in the original shipping containers, covered and protected from all weather conditions.

#### **1.06 SUBMITTALS**

- A. Installation manuals: manufacturer shall supply a copy with each operator, detailing all necessary mounting instructions, wiring connections, parts lists, maintenance, and troubleshooting.
- B. Owner's information sheet: A separate Owner's information sheet shall also be supplied with the installation manual.
- C. Wiring Diagram: Manufacturer shall supply a wiring connections diagram for each operator.
- D. Safety Literature: Manufacturer shall supply a copy of its safety literature with each operator.

- E. Shop Drawings: Shop drawings shall be supplied by the manufacturer and/or installer.

## **PART 2 - PRODUCTS**

### **2.01 VEHICULAR SLIDE GATE OPERATOR**

- A. Slide gate operator as designed by Operator Specialty Company, Inc. (OSCO), or approved equal, shall open and close cantilever, overhead, or track gates, to provide convenience and security. The slide gate operator model shall be adapted to function with most accessories including: radio controls, single and three button control stations, digital keypads, coded cards, sensing loops, telephone entry systems, and revenue control equipment.

### **2.02 DESIGN CRITERIA**

- A. Operation shall be by means of a ½, ¾, or 1 horsepower single or three phase instant reversing motor, transferring power to dual 7 inch pulleys using V-belts. Power is then transferred to a #41 sprocket, then to a #41 clutch and clutch sprocket. From the clutch sprocket power transfers to the output drive shaft equipped with a #40 drive sprocket and roller chain which attaches to the gate with heavy-duty gate attachment brackets.
- B. The operator shall open the gate at a rate of approximately 9 inches per second.

### **2.03 COMPONENTS**

- A. Standard mechanical components shall include as a minimum:
  - a. 14 gauge weather-resistant galvanized steel cabinet
  - b. Gasketed cabinet door which is removable and lockable
  - c. Dual V-belts
  - d. 1-inch solid steel output drive shaft
  - e. Heavy-duty pillow block bearings with grease fittings for easy maintenance.
  - f. Adjustable spring loaded, double facing clutch.
  - g. Solenoid brake.
  - h. Spring loaded manual disconnect.
  - i. All welded interior steel framework.
  - j. Automotive type powder coat finish.
- B. Standard electrical components shall include as a minimum:
  - a. ½ through 1 HP motor with thermal overload protection in 115 and 230 VAC single phase or 230 or 460 VAC three phase.
  - b. Solid state logic controls featuring 15 diagnostic L.E.D. indicators and auto-close timer (0 to 124 seconds)
  - c. Inherent, adjustable motor over-current sensing to detect obstructions, with separate adjustments for opening and closing directions.
  - d. Controller housed in a zinc plated control box.
  - e. Power On/Off switch. In 115 VAC units, 115 VAC duplex outlets included.
  - f. Contacts for opening, closing and reversing accessories, as well as contact and noncontact obstruction sensing devices. 24 VAC and 24 VDC available on terminal strip to power accessory devices.
  - g. Adjustable limits with precision snap-action type limit switches to control gate position.
  - h. Master / Slave or stand alone capable with dip switch selection. Three wire twisted pair shielded cable required.

- C. Optional Accessories, contact, non-contact, and control devices:
  - a. Control devices shall include push-buttons, radio controls, keypads, card readers, key switches, telephone entry systems, and revenue control equipment.
  - b. Contact and non-contact devices include photoelectric sensors, vehicular detectors, proximity sensors, and contact edges.
  - c. Accessories include flashing strobe lights, cycle counters, and intercom systems.

## **2.04 FACTORY INSPECTION AND TESTING**

- A. Manufacturer shall test each operator at factory to assure smooth, quiet operation.
- B. Manufacturer shall test all control inputs to ensure proper function.

## **2.05 WARRANTY**

- A. Operations shall be warranted by the manufacturer to the installer for a period of two years from date of sale against defects in materials or workmanship. Defective part(s) shall be repaired or replaced at no charge.
- B. All Accessories shall be covered by manufacturer's warranty.

## **PART 3 - EXECUTION**

### **3.01 GENERAL**

- A. The installer will become familiar with the installation of this model of operator and review the necessary adjustments to configure the operator before installation begins.

### **3.02 INSPECTION**

- A. The installer will inspect the site prior to installation to confirm that the manufacturer's instructions can and will be followed. Should standard installation not be possible, the Installer shall coordinate and contact the manufacturer to request special instructions.

### **3.03 INSTALLATION**

- A. The installer will install the operator in accordance with all the manufacturer's written instruction, referencing all dimensional schematics and shop drawings provided.
- B. The installer will install all provided warning signs securely within view of both sides of the gate, as required by the manufacturer.

### **3.04 TESTING AND ADJUSTING**

- A. The installer will adjust the operator and will test the adjustments to verify correct settings for the installation.

### **3.05 TRAINING**

- A. The installer will review the owner's manual and safety literature with the end user, and when finished, leave a copy of this information with the end user.
- B. The installer will instruct the end user in the use of the operator, the manual disconnect, and all control devices.
- C. The installer will review proper maintenance of the operator with the end user.

**END OF SECTION**