

SPECIFICATION FOR LINEAR INDUCTION SLIDE GATE OPERATOR

1.0 OVERVIEW

1.1 This specification defines a slide gate operator utilizing linear induction motors (hereafter referred to as the LIM operator) as the drive force. The LIM operator shall consist of a control unit, one or more linear induction motors and reaction fin sections.

2.0 UNIQUE DESIGN

2.1 The LIM operator shall be manufactured with a totally unique design, system and method for moving a horizontally movable portal closure that is unlike any other slide gate operator.

3.0 OPERATION

3.1 The LIM operator shall use linear induction technology as the operating force. The LIM operator shall not use gears, belts, hydraulics, chain, pinch wheels or any other mechanical means of transferring the drive force to the gate.

4.0 TESTING

4.1 The LIM operator design shall have been tested for endurance and reliability for a minimum 1,000,000 cycles over a period of more than seven years at an actual security controlled installation.

4.2 All LIM operators shall be inspected and functionally tested prior to shipment from the manufacturer.

5.0 MANUFACTURING

5.1 The LIM operator shall be assembled within the United States of America.

5.2 All aluminum and steel parts shall be formed or extruded, machined, and finished within the United States of America.

5.3 All electrical and electronic components shall conform to U.L. standards and be listed with a Nationally Recognized Testing Laboratory.

6.0 CONSTRUCTION

6.1 All metallic components shall be of stainless steel, powder coated / anodized aluminum or corrosion protected steel. All fasteners shall be produced out of stainless steel, aluminum or have zinc plating.

6.2 The reaction fins shall be extruded 6061-T6 anodized aluminum.

6.3 The controller enclosure shall comply with NEMA Type 3R, 4, and 12

7.0 SYTEM ADAPTATION

- 7.1 The LIM operator shall interface with all standard access control devices.
- 7.2 The LIM operator shall interface and operate with entrapment and safety devices in accordance to U.L. 325.
- 7.3 The LIM operator shall interface with all vehicular detection devices.
- 7.4 The slide gate which the LIM will be installed on shall be reasonably level and in acceptable operating condition.

8.0 ELECTRICAL

- 8.1 The LIM operator electrical supply standard shall be 208-240VAC, single or 3 phase 60Hz or 440-480VAC single or 3 phase 60Hz.
- 8.2 A 20 amp service shall be available at the installation site. Additional options and configurations may require higher current service.
- 8.3 All electrical supply shall be installed in accordance with the National Electrical Code (N.E.C.). Additional local codes may exist.
- 8.4 The LIM motors shall be encapsulated in an epoxy potting compound and have internal thermal protection.
- 8.5 A 24VDC 2A fused supply shall be available for auxiliary device power.

9.0 MANUAL OPERATION

- 9.1 A pad lockable mechanical release shall be provided in the event of a power failure or malfunction. The standard LIM operator shall be FAIL SECURE. An optional version shall be available for FAIL SAFE requirements.

10.0 ENVIRONMENTAL

- 10.1 The LIM operator shall have a normal ambient operating temperature range of 0°F - +120°F
- 10.2 The LIM operator shall have provisions for employing heating or cooling elements required in geographical locations exceeding the normal ambient operating temperature range.
- 10.3 The LIM operator shall have provisions for employing an optional de-icing feature recommended in geographical locations prone to icing conditions.

11.0 INSTALLATION

- 11.1 The LIM operator shall be installed in accordance with the manufacturer's installation instructions and performed by a factory certified installer.

12.0 Warranty

- 12.1 The LIM operator shall be warranted against defects and workmanship from the manufacturer for a period of five years.