AL

AUTOMATIC SYSTEMS

Access controlled...
Future secured

AccessLane

AL933

AL934

Engineering Specification

SECTION – Pedestrian Access Control Equipment (Gates/Turnstiles)

PART I – GENERAL

1.01 SECTION INCLUDES

A. This section covers the furnishing and installation of a Swing Gate for pedestrian access control.

1.02 REFERENCES

A- The glass swing gate must be evaluated and approved per CAN / CSA requirements contained in SPE-1000, Model Code for the Field Evaluation of Electrical Equipment.

1.03 SYSTEM REQUIREMENTS

A. The glass swing gate shall control and be able to restrict pedestrian traffic between public and secure areas

B. Shall feature 10mm clear tempered glass swinging obstacle to securely block the pedestrian's path and prevent access in restricted areas without authorization

C. Shall provide a standard point of access for the evacuation of buildings in the event of an emergency and a wider passageway for people with reduced mobility and service personnel

D. Shall be bi-directional, allowing traffic in both directions

E. Shall be equipped with a LED function pictogram on top of the column

F. Shall be IP44

G. Shall be managed by an electronic control logic insuring advanced system control through a built-in web server accessible from any standard Web browser, providing a simple interface for configuration of the gate's functional parameters and a complete diagnostics and maintenance tool.

H. Shall use the building access control system to grant or deny access to the facility and operate with a variety of user authentication devices

I. Shall be designed to guarantee user safety and ease of passage with a minimal width of 914mm (36")

J. Can be implemented in single lane facing a wall, railing, other type of obstacle or facing another AL93X

1.04 SUBMITTALS

A. Submit product data: equipment description, dimensions, electrical wiring diagrams for installation, and manufacturer's technical manuals on each product to be used, including:
   1. Preparation instructions and recommendations.
   2. Storage and handling requirements and recommendations.
   3. Installation methods.
   4. Operation and maintenance manuals.

B. Provide shop drawings and indicate component connections and location, anchorage methods and location, and installation details.

1.05 DELIVERY, STORAGE AND HANDLING

A. Deliver equipment to job site in manufacturer's packaging, undamaged and complete with installation instructions.

B. Store indoors in a controlled environment, protected from construction activities and debris.

1.06 PROJECT/SITE CONDITIONS

A. Install security entrance lane on a level finished floor.

1.07 QUALITY ASSURANCE

A. The product must be assembled in North America.

B. Manufacturer Qualifications:
   1. Manufacturer shall be a company specialising in designing and manufacturing swing gates with a proven minimum experience of fifteen (15) years
   2. Manufacturer with well-proven experience in public transport is recommended
   3. Manufacturer shall have a Quality Management System compliant with ISO 9001:2000.

C. Source Limitations: obtain Swing Gates through one source from Automatic Systems.

1.08 WARRANTY

A- Automatic Systems warranties its products against parts defects for a period of five (5) years from the date of invoicing if regular maintenance is performed. This warranty excludes normal wear on finishes or damage that occurs due to abuse or misuse. Obtain full warranty terms from Automatic Systems.

PART II – PRODUCTS

2.01 MANUFACTURERS

A- Manufacturers: subject to compliance with requirements, provide products by the following:

1. AUTOMATIC SYSTEMS AMERICA INC, 4005 Matte Boulevard, Unit D, Brossard, Quebec, J4Y 2P4, CANADA
   Phone : 800 263 6548
   Fax : 450 659 0966
   Homepage : www.automatic-systems.com E-mail : sales@automatic-systems.com

A. Products:

1. AL Swing Gate, Model AL933 or AL934

2.02 CONSTRUCTION

A. Housing

1. Housing shall be manufactured from brushed stainless steel type AISI 304

B. Swinging door

1. To be manufactured from monolithic clear ten 10 mm (3/8in) thick tempered glass

C. Enclosure

1. Design of the unit's enclosure shall insure an IP 44 degree of protection

2.03 DIMENSIONS

A. Lane width:

1. 914 mm (36 in)

B. Dimensions

1. Cabinet Diameter: ø220 mm (8 5/8 in) maximum
2. Cabinet Height: 1000 mm (39 ½ in) / 1535 mm (60 1/2 in) maximum (AL933 / AL934)

2.04 OPERATION

A. The unit must operate in both directions.

B. Normal Operation (available for "Normally Closed & Controlled" configuration)

1. In stand-by position, the passageway shall be securely blocked by means of swinging door
2. Upon receipt of opening pulse from the access control system the swinging door shall open in the passage direction, consequently the passageway is completely clear
3. The door automatically closes after an adjustable time-out

C. Emergency Operation

1. The unit shall have an input in order to receive the "fire alarm" signal. When the emergency signal is activated, the swinging door shall open in the selected direction and remain open
2. This operating mode continues as long as the emergency signal is active. After the emergency signal has been turned off, the unit shall return to its previous operating mode.

D. Power Failure

1. In case of power failure, the swing gate shall be unlocked and shall freely rotate (Fail-Safe)
2. After the power supply has been restored, the unit shall return to its previous operating mode.

2.05 SECURITY

A. Shall provide swinging door to securely block the passageway:
   1. 1000 mm (39 in) low height doors (AL933)
   2. 1200 mm (47 in) half-height doors (AL933)
   3. 1700 mm (67 in) full-height doors (AL934)

B. Shall have an electromechanical locking integrated. The door shall be electromechanically blocked in the closed position to prevent any attempted break-in

C. The swinging obstacle shall not be-removable without appropriate tools

2.06 SAFETY

A. In case of power failure, the swinging door shall be unlocked and shall freely rotate allowing the user to manually push the door out of the way in either direction

B. Shall provide minimum 1000 mm (39,37 in) wide passageway to ensure equal access to people with reduced mobility

C. Shall be able to stop and reverse door's movement when an obstacle is detected and make successive attempts to complete the cycle. These attempts shall be made with reduced strength to protect the user

D. In the open position, the swinging door shall not block the passage, providing a fully clear passageway as well as safety egress

2.07 DRIVE UNIT

A. Shall have a power-assisted drive to ensure ease of passage

B. Controller ensuring progressive accelerations and gradual decelerations, for safe movement without vibrations

C. Swinging door's movement shall be monitored by a position encoder

2.08 CONTROLLER

D. Microprocessor-based controller with the following characteristics:
   1. Interface to set operating modes, advanced parameters and to provide diagnostics for quick detection of problem source
   2. LED indicators showing the status of the inputs and outputs

2.09 POWER SUPPLY

A. Power supply:
   1. 230 Volts AC 50 Hz
   2. 120 Volts AC 60 Hz

B. Nominal consumption in operation: 15 W maximum

2.10 PERFORMANCES

C. Opening Time & Closing Time
   1. The opening time of the doors shall be minimum 6 seconds
   2. The closing time of the doors shall be minimum 6 seconds

D. MCBF: 1.000.000 average number of cycles between breakdowns, when respecting recommended maintenance

E. Operating Temperatures: -10 to +50 degrees Celsius (+14 to +122 degrees Fahrenheit)

PART III – EXECUTION

2.11 INSPECTION

A. Installer must examine the installation location and advise the Contractor of any site conditions inconsistent with proper installation of the product. These conditions include but are not limited to the following:
   1. Swing gate must be installed on a level concrete pad
   2. Power supply and control wiring must be installed. Follow manufacturer's recommendations

B. Proceed with installation only after unsatisfactory conditions have been corrected.

2.12 INSTALLATION

A. Install swing gate in strict accordance with manufacturer's instructions. Set units level. Anchor securely into place.

2.13 ADJUSTMENT

A. Installer shall adjust swing gate for proper performance after installation.

2.14 INSTRUCTION

A. A factory trained installer shall demonstrate to the owner's maintenance crew the proper operation and the necessary service requirements of the equipment, including exterior maintenance.

2.15 CLEANING

A. Clean turnstile and area carefully after installation to remove excess caulk, dirt and labels.

2.16 MAINTENANCE

A. Maintain the equipment according to the manufacturer's instructions.

Automatic Systems reserves the right to change this specification at any time without notice.

END OF SECTION