

EASYSpec - The Automation Specification Service for Professionals

Automatic Swing Gates

(Gates & Below Ground Automation)



Gate Designs May Vary - Ask For Our Design Brochure

PREAMBLE

Gate automation is commonly accepted as one of the best methods to secure a property, offering convenience, security, and adding value. Most people report that once they have installed automatic gates they feel more secure (especially at nights), are delighted with the ease of operation, and also that their property feels more exclusive. They report that the project has added perceived value to the premises.

In effect you move your front door to beside the roadway. This deters unwanted callers and potential burglars who will not want to park visibly on the road while they enter your premises. A benefit is that the property does not look especially security conscious as normal gates are simply closed. The gates also keep your dogs in (or out as the case may be!) and stops you worrying where your offspring are playing.

ENTRY

Activation can be by numerous methods. This specification allows for activation via hand held remote transmitters and an audio intercom system with keypad entry. The gates will be set in fully automatic mode. In fully automatic mode you simply point the transmitter towards the gates and press once. The gates will open, you proceed, and after a pre-set delay (adjustable) they will automatically close unless blocked. The intercom system (normally located on a pillar to the external right hand side of the gate) functions when a visitor presses a call button on the intercom gate station. This sounds a handset internally within the property. When the handset is answered a two way conversation takes place and entry may be granted via a release button. An authorised user can also enter a correct code on the numeric sequence keypad to gain entry. This in turn sends a command to the gates to open. The gates will open, they enter and after a pre-set delay (adjustable) the gates will automatically close unless blocked.

EXIT

Will be via a free exit induction loop that is buried within the ground approximately 3m from the gates on the internal side (distance can be adjusted). The user approaches the gate and passes over the induction loop. This detects the vehicle and sends a command to the gates to open. The gates will open, they exit and after a pre-set delay (adjustable) the gates will automatically close unless blocked.

SAFETY

Safety is ensured by photocells which monitor the gate area during the closing cycle. If blocked, these will cause the gates to re-open and to remain open until cleared. In addition the operators incorporate internal safety which can ensure reduced force during opening or closing if an obstacle is detected. In order to meet HSE guidance, shear or crush points that are found on automatic electric swing gates require additional protection, sometimes with a safety edge. The safety edge profile is sensitive along its entire length and adaptable to suit requirements. Safety edges are manufactured to order and comprise of a flexible rubber profile mounted on an aluminium rail with an internal switching strip. They are constantly monitored using a switching unit that monitors the internal resistor by using a wired unit. If this detects the safety edge has been triggered, the safety relays will open and provide a stop signal to your system. Similarly, should a fault develop such as the cable being cut they will detect this and again stop your system. A <u>site survey or project evaluation</u> may be required before the extent of safety edges can be determined when viewed in-situ.

GENERAL

The Specialist Contractor Electro Automation (NI) Ltd shall supply, install and commission a complete swing gate automation system. The Gate System shall comprise of the gates and all necessary mechanical opening systems, electronic safety devices, radio receiver, etc as indicated on the content and detailed hereafter, the automated gate system shall be arranged for opening and closing by via hand held remote transmitters, a hard wired audio intercom system (with keypad) and a free exit induction loop.

GATES

The gate will be manufactured in mild steel using 40mm x 40mm hinge stiles and bottom rail 40mm x 10mm horizontal rails and 20mm Square or Round Vertical Bars (160mm centres at top and 80mm centres at bottom). The gates will be hot dipped galvanised and polyester powder coating is optional at extra cost. Gate height is 1.5m at the lowest point up to 1.75m at highest point. Gates include centre and back stops. The gate width shall be taken from plans and verified on site prior to manufacture.

MANUAL RELEASE

The operating system shall incorporate a lockable manual release, such that one average person can easily move the gate from open or closed position to the closed or open positions without recourse to disconnecting any further part of the system. It shall not be possible to move the gate against the mechanical drive system at any time other than by the use of the manual override.

MECHANICAL SAFETY REQUIREMENTS

All components within the system shall operate within their manufacturer's specification and all parts of the system shall be protected. The gates and automation must comply with all relevant EC safety standards.

POWER AND CABLING REQUIREMENTS

A 230v single phase supply rated at 6 amps is to be provided to the control panel point by the main contractor as well as any data/intercom cabling. In addition ducting (min 40mm) is to be supplied by the main contractor to enable connection between gates, photocells etc. The Specialist Contractor Electro Automation (NI) Ltd will complete all local cabling.

TECHNICAL SUPPORT

The specialist contractor shall undertake to hold all parts required and to allow access to a full 365 day 24 hour manned service and support telephone line.

All materials and specialist advice can be obtained from:

Electro Automation (NI) Ltd

21 Crescent Business Park Lisburn BT28 2GN

Office: 028 9266 4583 Local Contact: David Cobain Mobile: 07841 802801

Email: davidcobain@electroautomation.co.uk

CONTENT

- 2 No. Electro Automation Series 800 Mechanical Operators
- 1 No. Installation Accessories
- 2 No. Leaf Supporting Foundation Boxes
- 2 No. Leaf Supporting Foundation Box Lids
- 2 No. Manual Release System with Handles
- 1 No. Electronic Controller
- 1 No. Electronic Controller Enclosure
- 1 No. Plug-in Radio Receiver
- 2 No. Electro Automation Hand Held Remotes 2 Button
- 1 No. Set of Safety Photocells
- 1 No. Antenna
- 1 No. Set of Gates Galvanised and Powder Coated
- 1 No. Audio Intercom System 1 Call Button to 1 Hand Set with Keypad Entry
- 1 No. Free Exit Induction Loop Detector (within 3m of gate)

All civil works and cabling by others

