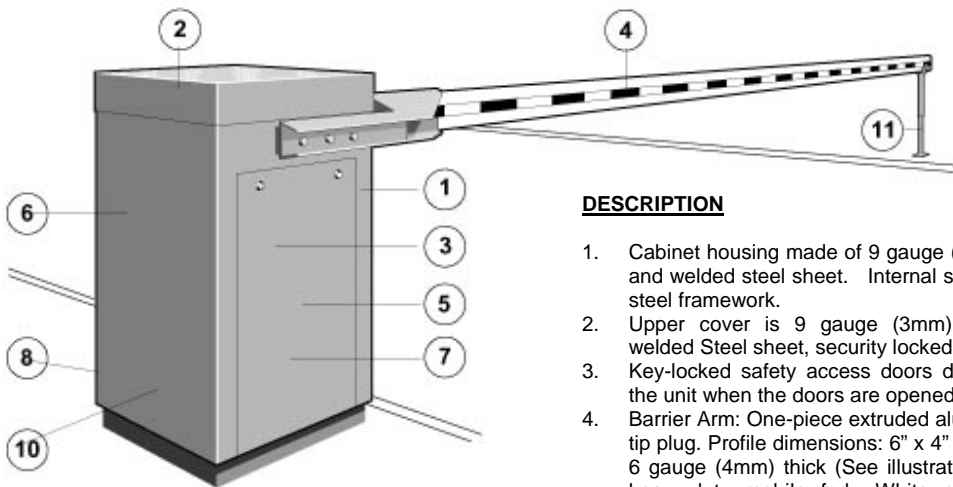


MODEL BL53 INDUSTRIAL GATE OPERATOR



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The Model BL53 Industrial Gate Operator is designed and manufactured by Automatic Systems. The BL53 is typically utilized for medium traffic volume and wide lane management. It is designed to stand up to the harshest weather environments and operating conditions.

The BL53 is a real formidable barrier. It is often utilized for asset protection, keeping valuables in, as much as preventing vehicle access. The BL53 is most often utilized where vehicle access protection is critical, and multiple lanes access exists. Common applications includes: Public Highways, Bridge and Tunnel access; coastal zones, harbour areas, petrochemicals facilities, commercials/industrials garages and warehouses, etc. The BL53 is capable of utilizing a heavy-duty barrier arm to a maximum of 8m (26'3"), and can fully open in 5 to 10 seconds.

SAFETY

1. Completed Cycle Locking: Barrier arm mechanically locked in the fully completed 90° vertical up position, and in the completed horizontal down position.
2. HD Clutch: Dual Friction Disk: Torque limiter (Heavy-duty), which protects the electromechanical drive system, as well as both vehicles and pedestrians.
3. Emergency Crank with safety circuit.
4. Barrier arm safety sensor system. (See options).
5. Power Failure: System will shut off and the clutch will maintain the barrier arm in its current position.

DESCRIPTION

1. Cabinet housing made of 9 gauge (3 mm) thick, folded and welded steel sheet. Internal structure is a welded steel framework.
2. Upper cover is 9 gauge (3mm) thick, folded and welded Steel sheet, security locked.
3. Key-locked safety access doors disconnect power to the unit when the doors are opened.
4. Barrier Arm: One-piece extruded aluminium profile with tip plug. Profile dimensions: 6" x 4" (175mm x 100mm); 6 gauge (4mm) thick (See illustration). Retained by a heavy-duty mobile fork. White enamelled with red reflecting stripes.
5. Barrier arm rotating shaft mounted on twin balls bearings.
6. Barrier arm "45° balanced" achieved by means of integrated adjustable extension springs.
7. Electromechanical assembly includes:
 - 1/2 HP, heavy-duty, AC single or 3 phases instant-reversing motor, with life-lubricated speed reduction gearbox, with worm screw type mechanism.
 - Crankshaft/rod device with rubber abutments ensuring smooth, flexible movements, and progressive decelerations at the end of the movements.
 - Safety torque limiter with adjustable friction disks. (HD Safety Clutch).
 - Limit switches, activated by adjustable cams.
 - Transmission between motor and gearbox, by trapezoidal pulleys and V-belt.
 - Integrated heater for low temperature locations and humidity control.
8. AS 1320 Controller including:
 - Many adjustable parameters to control the barrier.
 - 2 lines LCD screen to adjust or change parameters.
 - Built-in overload protection.
 - Up to 4 vehicle detectors.
 - Log of events.
 - Input and output contacts.
 - Test switches for opening and closing.
9. Emergency crank with safety circuit breaker for manual operation of the barrier in the event of a power failure.
10. Optional recessed installation template (steel base frame), which is provided for attaching the barrier to the ground using expansion bolts or threaded rods.
11. Tip support: Electromagnetic Lock. (Supplied as an option).

Specifications subject to change without prior notice
Specifications and dimensions on reverse side.

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ANTI-CORROSION PROTECTION

Internal mechanical parts

Protected by electro zinc plating.

Cabinet housing

Housing finish is with an anti-corrosion treatment to ensure resistance to the most severe environmental conditions.

PAINT WORK

Anti-corrosion paint

(1) Coat of primer paint, (2) components epoxy.

Finish coat

(1) Coat of (2) components polyurethane paint.

Standard colour: Orange (RAL 2000).

Arm

(1) Coat of (2) components polyurethane white paint for the arm.

TECHNICAL CHARACTERISTICS:

- Barrier arm (Boom) length: 3m to 8m (14'9" to 26'3")
- Opening time: 5 to 10 seconds, depending on length and weight of the barrier arm and barrier arm options.
- Localization of the barrier arm: Position of the barrier arm: central. Arm off-set to left or right-hand side to facilitate a folding skirt
- Tip Support, adjustable height. Electromechanically locking is optional. (See Tip Support data sheet).
- Motor: 1/2 HP AC - 1625 RPM.
- Power supply: 115 V single phase
- Frequency: 60Hz.
- Power Consumption:
 - o Stand-by = 175 W. (Heater: 125W)
 - o In operation = 738 W.
- Gearbox: Speed reduction type: VF110/A ratio of 100:1
- Net weight: 365Kg to 395Kg (800lbs to 860lbs.) with barrier arm.
- Operation temperatures: -25°C to +70° C (-13°F to +158°F).
- Bracing wires and adjustable stretchers: Stainless steel. 2 to 4 wires required depending on boom length.
- MCBF: 6 million cycles. (Normal maintenance required).

OPTIONS

- Barrier Arms: 3m to 8m (14'9" to 26'3") long
 - Boom mounting position is central. Arm offset to left or right-hand side to facilitate a folding skirt, optional.
 - Rigid aluminium folding lower skirt.
 - Alternate red and white plastic link folding skirt.
 - Barrier arm safety pressure switch. (Mounted on lead bottom edge).
 - Barrier arm safety sensor system. (Two types available, please consult).
 - Electro magnetically locked Barrier arm tip support.
 - Barrier arm lighting. (Spacing: one light approximately every 3 feet).
 - Flashing relay for arm lighting.
 - Barrier arm signage. (Please consult).
- Note: Adding optional attachments to the Barrier arm increases weight, therefore decreasing the maximum available Barrier arm length.
- Additional heater for extreme cold.
 - Cabinet colours other than the standard orange.
 - Installation template steel base frame.
 - 3-phase power supply.

CONTROLLER OPTIONS

- Operated via a 3 push button box (open-stop-close), or automatic closing with a loop detector.
- Actuation devices, such as push buttons, card readers, vehicle presence detectors + detection loops, etc., for opening or closing of gate.
- Controller and detector allow many settings of the detecting loops like:
 - > Arming,
 - > Reset, safety closing
 - > Free vend, automatic opening.

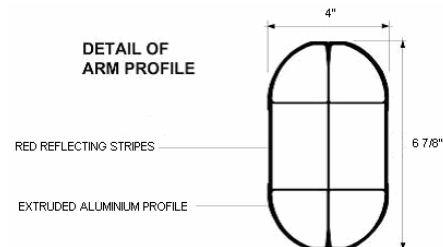


Figure 1



Figure 2

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