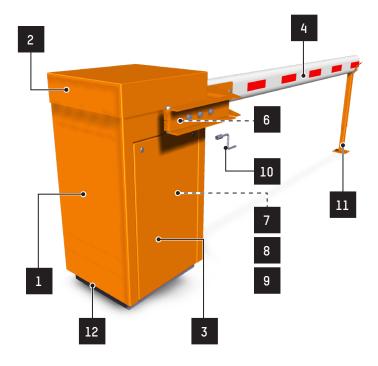
# **BL 53**

## Technical datasheet

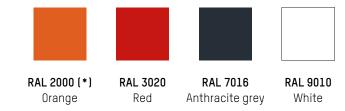
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The **BL 53** rising barrier is a heavy-duty high security barrier, with reinforced oval boom arm section, specially developed for installation where a high level of security is required.

## STANDARD RAL COLOURS



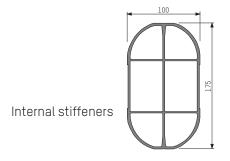
(\*) Standard color.

All other colors must be specified when ordering.

Note: These RAL references are available for free.

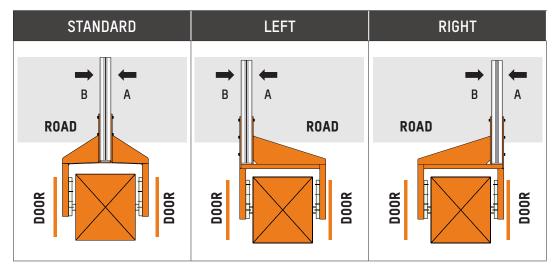
## **DESCRIPTION:**

- 1. Manufactured in shaped and welded steel sheeting 3 to 10 mm thick, with a framework of steel profiles welded into a strong section.
- 2. Removable upper hood, locked from the inside.
- 3. Two side doors with peripheral weather seals and safety lock to insure easy access to the internal mechanism.
- 4. Aluminium tube barrier arm with reinforced oval section of  $100 \times 175$  mm, varnished white with red reflecting stripes and end-sealing cap. The arm is mounted in a central position on a steel pole:



- 5. Arm shaft mounted on two life-lubricated ball bearings.
- 6. Electro-mechanical assembly comprising:
  - three-phase induction motor,
  - life-lubricated worm-screw gearbox,
  - operation by grooved pulley and V-belt making the adaptation of the operation speed possible according to the length of the boom arm,
  - movement transmission by crankshaft-rod mechanism with ball strap joints, to insure progressive shock-free accelerations and decelerations, as well as mechanical locking of the arm in end positions,
  - safety torque limiter with adjustable friction,
  - limit switches activated by adjustable cams.
- 7. Barrier arm balancing by means of a compression spring.
- 8. Programmable electronic control logic allowing various control operations and/or complementory accessories (see related technical data sheet). The logic protection to dust and condensation is assured by a removable hood. Electrical protection is secured by a bipolar circuit-breaker.
- 9. Emergency crank with safety cut-out for manual barrieroperation in the event of power failure.
- 10. Tip support (optional).
- 11. Fixing frame made of a fixing frame with threaded rods to be fixed in a concrete base to be provided by the customer.

## **CONFIGURATIONS**



## STANDARD TECHNICAL CHARACTERISTICS

Power supply	Single phase 230 VAC, 50/60 Hz + Ground. (1)
Nominal power consumption	350 W.
Motor	Induction, 3-phase 250 W
Gearbox	Worm-screw, life-lubricated
Thermostatic heater	80 W.
Ambient operation temperature	From -35 to +50°C.
Boom arm balancing	By adjustable spring(s)
Useful length of boom arm (L)	From 3 to 8 meters
Position of boom arm	Central
Operation time	8 to 12 sec. according to the boom's range and the installed options
Tolerated relative humidity	95%, without condensation
Net weight (without boom arm)	± 340 kg
MCBF (Mean Cycle Between Failure)	1,500,000 cycles, in compliance with recommended maintenance
Protection index	IP44
Limit switch sensor	IP65
CE	Complies with European standards.

 $<sup>^{\</sup>mathrm{(1)}}$  Not to be connected to a floating network or to high impedance earthed industrial distribution network.

## SURFACE TREATMENT

- Internal mechanical items: electrozinc coating.
- Complete housing: cationic electrodeposition coating + 1 coat of 2-component epoxy anti-rust primer and 1 top coat of 2-component polyurethane structured paint.
   Standard colour: Orange, RAL 2000.

# **WORKS TO BE PROVIDED BY THE CUSTOMER**

- Power supply.
- Electrical wiring connection to the control instruments.
- Means of fixing to the ground, according to the nature of the existing ground.

Note: Follow the installation plan.





## **OPTIONS**

#### ARMS

- · Offset stirrup Left.
- · Offset stirrup Right.

#### TIP SUPPORT

- Height adjustable tip support.
- Electromagnetic tip support Ø100mm or oval arm.
- Folding tip support.

#### SECURITY & SAFETY

- Vandal-proof protection (bolt covers for stirrup and arm).
- · Crank handle flap locking.

## CONTROL & COMMAND

- Push button box 2 buttons (opening / closing).
- Push button box 3 buttons (opening / closing / stop).
- Push button box 2 push buttons + 1 switch (3 positions). (1)
- Key switch on the housing.<sup>[2]</sup>
- Radio transmitter/receiver 2 or 4 channels.
- Inductive loop for detection Car (2 x 1 m / connexion 5m).
- Inductive loop for detection Truck (3,50 x 1,50m / connexion 20m).
- Presence sensor on rail Single channel or Double channel
- Photo-electric cell Transmitter / Receiver.
- Support post for photo-electric cell (H = 0.7m).
- Cell mounting Transmitter + Receiver or Reflex.[3]
- Human Machine Interface colour screen with keypad for AS1620 logic board (AS1621).
- Ethernet interface (AS1622).
- SD memory card for AS1620 Ethernet board Industrial grade.
- Input / output (I/O) extention card for AS1620 logic board (AS1623).
- Totalling counter (number of vehicle operations or with resetting).

## SIGNALISATION

- LEDs on arm Per pair (Flashing lights (red) when closed).
- Traffic lights (Ø 200mm) Red/green LEDs Fixed on a support post on the barrier.
- Traffic lights (Ø 200mm) Orange LEDs Fixed on a support post on the barrier.
- Traffic lights (Ø 200mm) Red/green LEDs Supply.
- Traffic lights (Ø 200mm) Orange LEDs Supply.
- Support post (H = 2.7m) for traffic lights Supply.
- Extension board AS1049 (electronic board for third-party traffic lights).
- Aluminum traffic sign (Ø 400mm).

## **AESTHETIC**

- · Non standard colour.
- Treatment for aggressive saline environment. [4]
- Raised base (60mm-thick in RAL 9005 painted steel.

#### POWER SUPPLY

• Power supply 120V - 50/60Hz.

## CASES

- Painted IP66 steel case (dimensions 600x380x120mm) on the housing (with a lock & a key settled with a cable retainer)
- Painted IP66 stainless steel case (dimensions 600x380x 120mm) on the housing (with a lock & a key settled with a cable retainer)

Note: For restrictions on options, please contact us.

- (1) Opening / Closing / Switch in auto mode or in manual mode.
- <sup>(2)</sup> Automatic / locked open / locked closed.
- (3) Mounting for T/R photo-electric cell (at the customer's choice): Housing and tip support OR Housing and support post OR Housing only OR Support post and support post.
  - Mounting for Reflex photo-electric cell at the customer's choice: Housing and tip support OR Housing and support post OR Housing only
- (4) Recommended for an installation within 10 km of the coast: sandblasting + Alu Zinc plating 80µm outside (40µm inside) + polyzinc 80µm + 80µm powder coat.



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## STANDARD DIMENSIONS (MM)

