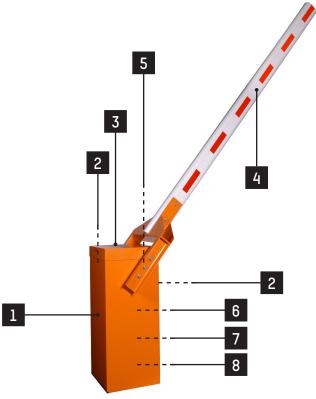
# BL 43 Datasheet

Rev. 11 • Update 01/2020





Rapid rising barrier, short- and medium-range with reinforced oval section arm, for installation on public roads: parking, traffic management, etc.

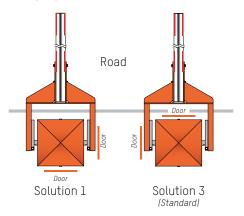
# STANDARD RAL COLORS



(\*) Standard color. All other colors must be specified when ordering.

Note: These RAL references are available for free.

# CONFIGURATIONS



# DESCRIPTION

- 1. Sheet metal body folded and welded, from 3 to 8 mm thick.
- Lateral and frontal doors with peripheral sealing joint and lock, ensuring easy access to the mechanism. Two configurations are possible for their installation (see illustration).
- 3. Removable top cover, with lock and key.
- 4. Central oval reinforced section arm measuring  $175 \times 100$  mm, in aluminium, white lacquered with red reflective strips.
- 5. Solid driving shaft for the arm, diameter 50 mm, mounted on 2 bearings lubricated for life.
- 6. Electromechanical assembly:
  - Reversible three-phase asynchronous gear motor, ensuring protection of the mechanism in the event of forced lifting of the arm due to fraudulent action.
  - Secondary transmission on gearwheel and sprocket wheel.
     Maintaining the arm in its two extreme positions (open and closed), as well as after a STOP command, is achieved by means of an electromagnetic brake.
  - Frequency inverter ensuring progressive accelerations and cushioned decelerations, for movement without vibration, direction inversion without jolts (reopening) and increased protection of the mechanism.
  - Electronic limitation of the electromechanical assembly torque allowing for the immediate stop of the arm during closing in the event of an obstacle.
  - · Inductive limit switches.
  - Balancing of the arm by means of one or more compression springs, depending on the weight of the arm.
  - Lever for manual lifting of the arm (except for the automatic opening option).
- 7. Parameterisable electronic control board allowing for various control options and/or additional accessories.
- 8. Connecting terminal block on the control board:
  - Providing status of the arm position (open or closed)
  - · Providing status of the presence detectors
  - Allowing for master-slave control of 2 barriers opposite each other (movement of one barrier controlled by the other barrier).
  - ...

# STANDARD TECHNICAL SPECIFICATIONS

Electrical power supply  Single-phase 230 VAC - 50/60 Hz + ground (Not to be connected to a floating network or to an industrial distribution network with a high impedance earth)  Consumption  450 W  Motor  Three-phased asynchronous 250W  Reversible ring and pinion speed reducer, service factor 1.2  Useful arm length (L)  2 to 6 m; in increments of 0.5 m  Operation not hampered by 120 km/h winds  Ambient operating temperature  (without optional heating)  Tolerated relative humidity  Minimum opening/closing time  Net weight (without arm)  MCBF (Mean Cycle Between Failure)  IP  44  CCC compliant		
Motor  Three-phased asynchronous 250W  Reversible ring and pinion speed reducer, service factor 1.2  Useful arm length (L)  Operation not hampered by 120 km/h winds  Ambient operating temperature  Tolerated relative humidity  Minimum opening/closing time  Net weight (without arm)  MCBF (Mean Cycle Between Failure)  Three-phased asynchronous 250W  Reversible ring and pinion speed reducer, service factor 1.2  2 to 6 m; in increments of 0.5 m  Between -20 and +50°C (without optional heating)  Tolerated relative humidity  95% without condensation  3.5 s (adjustable through the control board)  In compliance with recommended maintenance: 3,000,000 cycles  IP  44	Electrical power supply	(Not to be connected to a floating network or to an industrial distribution network with
Reversible ring and pinion speed reducer, service factor 1.2  Useful arm length (L) 2 to 6 m; in increments of 0.5 m  Operation not hampered by 120 km/h winds  Ambient operating temperature (without optional heating)  Tolerated relative humidity 95% without condensation  Minimum opening/closing time 3.5 s (adjustable through the control board)  Net weight (without arm)  MCBF (Mean Cycle Between Failure) In compliance with recommended maintenance: 3,000,000 cycles  IP 44	Consumption	450 W
Useful arm length (L)  Operation not hampered by 120 km/h winds  Ambient operating temperature  Tolerated relative humidity  Minimum opening/closing time  Net weight (without arm)  MCBF (Mean Cycle Between Failure)  12 to 6 m; in increments of 0.5 m  2 to 6 m; in increments of 0.5 m  Between -20 and +50°C (without optional heating)  3.5 s (adjustable through the control board)  150 kg  In compliance with recommended maintenance: 3,000,000 cycles  16 44	Motor	Three-phased asynchronous 250W
Operation not hampered by 120 km/h winds  Ambient operating temperature	Reversible ring and pinion speed reducer, service factor 1.2	
Ambient operating temperature  Tolerated relative humidity  Minimum opening/closing time  Net weight (without arm)  MCBF (Mean Cycle Between Failure)  IP  Between -20 and +50°C (without optional heating)  95% without condensation  3.5 s (adjustable through the control board)  150 kg  In compliance with recommended maintenance: 3,000,000 cycles  164	Useful arm length (L)	2 to 6 m; in increments of 0.5 m
temperature (without optional heating)  Tolerated relative humidity 95% without condensation  Minimum opening/closing time 3.5 s (adjustable through the control board)  Net weight (without arm) 250 kg  MCBF (Mean Cycle Between Failure) In compliance with recommended maintenance: 3,000,000 cycles  IP 44	Operation not hampered by 120 km/h winds	
Minimum opening/closing time  3.5 s (adjustable through the control board)  Net weight (without arm)  MCBF (Mean Cycle Between Failure)  IP 44	1 0	
Net weight (without arm)  MCBF (Mean Cycle Between Failure)  IP  44	Tolerated relative humidity	95% without condensation
(without arm)     250 kg       MCBF     In compliance with recommended maintenance: 3,000,000 cycles       IP     44	1 0	3.5 s (adjustable through the control board)
(Mean Cycle Between Failure) maintenance: 3,000,000 cycles  IP 44		250 kg
	11051	•
<b>CE</b> EC compliant	IP	44
	CE	EC compliant

# SURFACE TREATMENTS

- Zinc-coated internal mechanical parts
- Complete body (housing, base plate, cover and doors):
   zinc dusting + epoxy structured
   Total thickness of the surface treatment exceeds 160 µm

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

- Adapted ground fastening.
- Power supply.
- Wiring towards eventual external peripherals.

Note: comply with the installation plan (CH6943-GB).

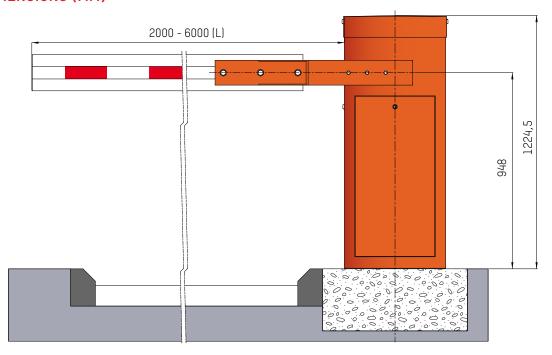
# **OPTIONS**

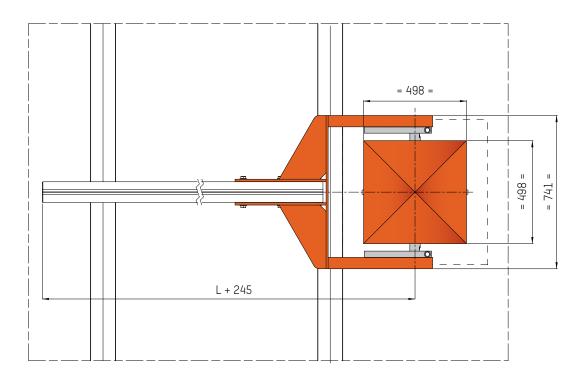
- 1. Rigid aluminum skirt.
- 2. Arm offset on right-hand or left-hand side.
- 3. Automatic opening of the arm in case of power failure.
- Locking the arm in opened and/or closed position. The reaction in case of power cut (locked or not) must be specified when ordering
- 5. Double limit switches for information on the arm status in the event of power failure.
- 6. Tip support: fixed height tip, adjustable tip, electromagnetic tip, antivandalism tip, antivandalism + electromagnetic tip, folding tip and electrically lockable tip.
- 7. Rotating base with breaker pin in case of impact and report of housing position by dry contact.
- 8. Anti-vandalism belt, protection of the doors and hood.
- 9. Bolt cover to protect arm from vandalism.
- 10. Hood and door intrusion information (by dry contact).
- 11. Push-button box.
- 12. Fireman emergency opening antivandalism.
- 13. Programmable clock (weekly or yearly).
- 14. Lockable switch on housing.
- 15. Radio transmitter/receiver.
- 16. Detection loop.
- 17. Presence detector for inductive loops.
- 18. Photoelectric cell for opening, closing or automatically stopping the barrier arm.
- 19. Cell support post.
- 20. Fixating of the cell.
- 21. Ultrasonic detector in housing.
- 22. Electronic board for input/output CAN.
- 23. Totaling counter with reset button.
- 24. LEDs on arm.
- 25. Traffic lights (Leds) alone or fixed on barrier.
- 26. Support post for traffic lights.
- 27. AS1049 card for third-party traffic signs.
- 28. Acoustic alarm 100 dB (±5) fixed inside.
- 29. Aluminium traffic sign (Ø 300 mm).
- 30. LED flashing light on cover for arm movement signalisation.
- 31. Anti vandalism LEDs on hood.
- 32. Non standard RAL color.
- 33. Treatment for aggressive saline environment.
  (Recommended when the barrier is installed within 10 km of the coast and may be subject to salt attack): sandblasting + Alu Zinc plating 80µm outside (40µm inside) + polyzinc 80µm + 80µm powder paint).
- 34. Raised base.
- 35. 120 VAC 60 Hz power supply.
- 36. Thermostatic 250 or 500 W heating for operation to -25 or -45°C. *Note: for restrictions on the options, consult the rate table.*





# STANDARD DIMENSIONS (MM)







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