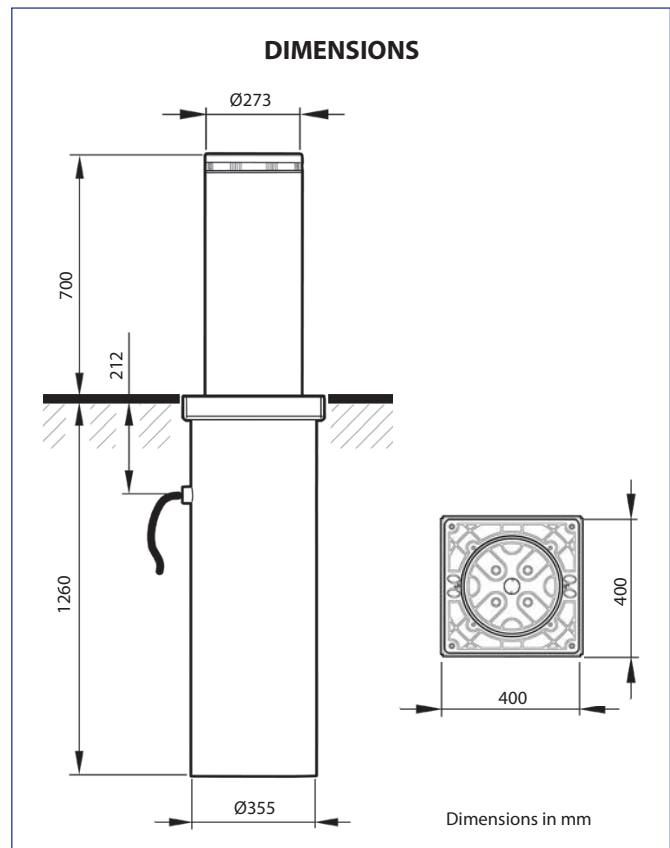


PRODUCT DATASHEET

DEFENDER

Electromechanical bollard

*Suitable to private and industrial use
(companies, car dealer, shops of particular importance, lenders, etc..)*



• Automatic electromechanical retractable bollards for intensive use

- Actuator in oil
- Break-in resistance: **300 000 J**
- Impact resistance: **20 000 J**
- Work time: **9.0 s**
- Max operating frequency: up to **1 500 op./day**
- MCBF: **1 000 000 cycles**
- Electric parking brake to stem high
- Limit switches
- Rod position with magnetic sensor
- Bollard top cover with led lights and buzzer
- Bollard will open the passage in case of power loss
- Electrical emergency unit for upper stem position maintenance (optional)

REFERENCE STANDARDS

2004/108/CEE; 93/68/CEE (EN55014-1; EN55014-2) • Electromagnetic Compatibility
 2006/95/CEE; 93/68/CEE (EN60335-1(2002)) • Low voltage
 2006/42/CEE (EN60204-1) • Machinery directive
 99/5/CEE (ETSI EN 301 489-3 (2002) + ETSI EN 301 498-1 (2005); ETSI EN 300 220-2 (2006)) •
 Radio set (tested with the electronic control unit CDS-K)

TECHNICAL-ENVIRONMENTAL MAIN FEATURES

Driven rod out of the ground	Ø273 x h.700 mm (± 3 mm) x th. 6mm steel Fe 360 (S235 JR) *
Buried structure	Ø355 x h.1262 mm
Foundation	Concrete
Excavation	1 500 x 1 500 x h.1 500mm
Break-in resistance	300 000 J
Impact resistance	20 000 J
Allowable axial static load	Bollard up max 5 000 N; bollard down max 200 000 N
Driven rod treatment	Cataphoresis and coating RAL7031 standard, other colour on request
Passive visibility	Reflective film H=100 mm **
Flange	Cast iron, cataphoresis black
Top cover	Cast iron, cataphoresis black
Actuator	Reversible; in oil
Power	230 Vac ±10%, 50-60 Hz
Working time	9.0 s (50 Hz)
Working temperature	-40°C *** +60°C
Operating humidity	up to 100%
IP grade	IP67
Hand operation	In case of power failure the bollards goes down spontaneously
Net weight	184 kg
Gross weight	201 kg

* option, AISI304 or AISI316

** Customizable (optional)

*** With integrated heater active

ELECTRICAL FEATURES

Control unit	CDS-K
Power	1-phase 230 Vac ±10%, 50-60 Hz (115 Vac with optional adapter)
IP grade	IP54
Working temperature	-40°C +60°C
Operating humidity	up to 95%, non condensing
Use	Max. 4 for each control unit. Parallel control wiring possible for driving many groups of bollards.
Power absorbed	0.35 kW for each bollard
Stopping movement	Electric brake; 24 Vdc - 20 W (sustained 12 Vdc - 5 W)
Signalling	On the top with high intensity LEDs, and buzzer
Sensors	Open passage, closed passage, antitampering switch (option)
Local/Remote control	<ul style="list-style-type: none"> · Digital inputs · Radio remote control · RS485, TCP/IP (option)

For system composition and installation refer to the regulations in force in the country where the system is being installed.

ITEM SPECIFICATION

Electromechanical bollard for intensive use, with actuator in oil bath, suitable for private and industrial areas use. Rod out of the ground th. 6mm steel Fe 360 (S235 JR). Rod dimensions Ø273xh.700. Cataphoresis of all mechanical parts, powder coating, IP67. Break-in resistance up to 300 000 J. Allowable axial static load: bollard up max 5 000 N; bollard down max 200 000 N. Working temperature up to -40°C +60°C. Operating humidity up to 100%. Working time 9.0 s with limit switch. Power 230 Vac ±10%, 50-60 Hz. Power absorbed 0.35 kW for each bollard. High intensity LED, and buzzer on the top. Electric parking brake to stem high. In case of power failure the bollard go down spontaneously.



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