

AUTOMATION FOR ROAD BARRIERS AND PARKING PLACE PROTECTION

RAPID SELECTION GUIDE

CARDIN PRO EL AUTOMATION FOR ROAD BARRIERS

CARDIN TRADE EL AUTOMATION FOR ROAD BARRIERS



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CARDIN PRO PL PARKING PLACE PROTECTION







24V

AUTOMATION FOR ROAD BARRIERS

PRS



CARDIN PRO ERIES FI

Compatible with the data exchange system between digital devices (smartphone, tablet, etc.) and the Cardin multifunctional control units.

NiMH



See section 24V ECU INTERFACE DEVICES on page 176.

The latest addition to the company's range of road barriers is fitted with a 24Vdc motor and factory set for the application of 3, 4 or 5m booms (ELDOMS) and 6, 7 or 8m booms (ELDOML). Designed and built for use on car-parks of all dimensions this road barrier made of spray-painted metal (cataphoresis passivation + powder spray painting), offers the maximum resistance to the effects of weathering throughout time even in environments where they are exposed to corrosives such as saline elements or smoke. All the components are housed and protected inside a cabinet fitted with ample, extractable and lockable inspection panel. The mechanical organs are mounted on a robust steel chassis and consist of a highly efficient, double reduction geared motor and an adjustable spring loaded balancing system. The in-built command and control unit, complete with battery charger and NiMH batteries is located inside the cabinet and protected by a waterproof container. The integrated programmer allows encoder controlled boom positioning, automatic repositioning and self-programming. The electronic control unit is completed by the anti-crush and "soft start" and "soft stop" functions. The electronic programmer is factory fitted with a graphic LCD display (128 x 128 pixels) with backlighting in six different languages. The menu allows you to read the number of manoeuvres carried out and to rapidly set the system parameters including: the sequential button mode, automatic reclosing, warning lamp pre-flashing as well as deceleration adjustment both in the opening and closing directions. The electronics card, thanks to the presence of the real-time clock, allows you to set 10 events (shown on the display) and these events permit you to regulate the opening and closing of the motor at different times during the day within 3 weekly time bands (Mon-Fri, Sat-Sun, Mon-Sun); the events can be enabled or disabled (during holiday periods) either from the menu or by means of a radio channel. Compatible with the INTPRG-3G/WF system that allows the monitoring and programming of system parameters from remote positions. It is possible to synchronize (working together in a single installation) two road barriers via cable, with the Cardin MODCA slot-in modules inserted.

Booms

The barrier takes a special aluminium boom with rubber anti-shock protective edges and can be supplied either in a 3,4,5,6,7 or 8 metre version. The boom, to be ordered apart, is factory set for the application of a special led lighting system with variable flashing that illuminates it in whatever position it finds itself. The boom has rapid fitting cables that allow it to be replaced easily and guickly whenever necessary.

A special articulated aluminium boom with rubber anti-shock protective edges is also available. The boom consists of two parts for an overall length of 3m. The cast aluminium joint, which markedly reduces the height during opening, makes it ideal for use in installations such as underground car parks.



SPRAY-PAINTED ARTICULATED ALUMINIUM BOOM



ADJUSTABLE BOOM HOLDER **RIGHT - I FFT**



EXTRACTABLE KEY-LOCKED INSPECTION PANEL ELDOMSDG



REINFORCED BALANCE SYSTEM AND SELF-PROGRAMMING MONITORED GEARED MOTOR PERSONALISED FOR THE 3,4,5 METRE BOOMS OF THE **FLDOMSDG**



BY AN LCD GRAPHICS DISPLAY ELDOMSDG/6

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CARDIN PRO SERIES EL

SELF-PROGRAMMING ROAD BARRIERS WITH A 24V MOTOR

Encoder-controlled movement.

Lockable barrier trunk complete with boom holder and LED warning lights built into the barrier's flip-back hood and key operated external manual release system.

Automation with an in-built electronic programmer featuring an LCD graphics display, multi-decoding radio receiver module S449-S486-S504-S508, 433MHz / 868,3MHz FM, NiMH batteries and a battery charger.

The S504 - S508 receiver module, features high security 128 bit cryptography, which allows transmitters to be enabled remotely thanks to the RFID technology built into the transmitters and the use of the code programming base PGBASE500.

The road barrier cabinet made of powder spray-painted metal is available in dark Slate grey RAL7015.

3m, 4m, 5m booms and the boom balancing springs are to be ordered apart.



SELF-PROGRAMMING ROAD BARRIER WITH A 24V MOTOR

Encoder-controlled movement.

Lockable barrier trunk complete with boom holder and LED warning lights built into the barrier's flip-back hood and key operated external manual release system.

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6m, 7m, 8m booms and the boom balancing springs are to be ordered apart.



GROUND FASTENING BASE PLATE

Counter-plate for preparing the barrier's ground fastening base. This accessory allows the installer to prepare the cement base with relative fastenings and cable channelling for the installation of the ELDOM barrier at a later date.

BASEDOMS BASEDOML

ELDOMSDG

ELDOMLDG







Slate grey RAL7015







SPRAY-PAINTED ALUMINIUM BOOMS

The barrier takes a special aluminium boom from 3 to 8 metres which is factory set for the application of a special led lighting system with variable flashing. A special articulated consisting of two parts for an overall length of 3m is also available.

BOOMS FOR THE ROAD BARRIER TRUNK ELDON	/ISDG	
3m Boom	DOM3	//
3m Boom WITH LEDS	DOM3L	
4m Boom	DOM4	
4m Boom WITH LEDS	DOM4L	
5m Boom	DOM5	
5m Boom WITH LEDS	DOM5L	PG-
3m ARTICULATED BOOM	DOM3AS	DOM3AS

BOOMS FOR THE ROAD BARRIER TRUNK ELDOMLDG

Booms marked with the letter 'J' are special versions made up of mutiple pieces plus joints. The article number **DOM8JL**, for example, is made up of two 4-metre booms and a hidden joint. Consult the table below for 6, 7 and 8 m boom configurations.

6m Boom	DOM6	
6m Boom WITH LEDS	DOM6L	
7m Boom	DOM7J	
7m Boom WITH LEDS	DOM7JL	
8m Boom	DOM8J	special booms with hidden joints
8m Boom WITH LEDS	DOM8JL	

SPRINGS FOR ELDOM BARRIERS

To custom fit springs according to the length and weight of the boom consult the table below. The type and number of springs remains the same however many Cardin (ELUFS1, ELUFS1-ML, ELUMS1, ELSRS ecc.) accessories are added.

Barrier trunk	Boom	Spring Art. Nr.	Colour code	Nr. of springs
	CUSTOM (lengths less than 3 metres)	SP-YE	Yellow	1
	DOM3 - DOM3L - DOM3AS (3 metres)	SP-GR	Green	1
ELDOMSDG	DOM4 - DOM4L (4 metres)	SP-GR	Green	1
	DOM5 - DOM5L (5 metres)	SP-BR	Brown	1
	DOM6J - DOM6JL (6 metres)	SP-BL	Blue	1
ELDOMLDG	DOM7J - DOM7JL (1 4-metre boom + 1 3-metre boom)	SP-2BR	Brown	2
	DOM8J - DOM8JL (2 4-metre booms)	SP-20R	Orange	2

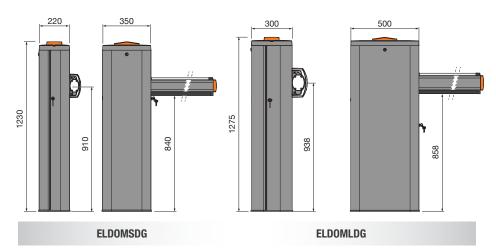


SUPPORT FORKS / POLES		
FIXED ALUMINIUM SUPPORT FORK - H 910	ELUFS1	T T
FIXED ALUMINIUM SUPPORT FORK - H 910 WITH An electromagnetic suction cup	ELUFS1-ML	
MOBILE SUPPORT POLE 1200mm	ELUMS1	ELUFS1 ELUMS1
FOLD-UP MESH in plastic, lengths of 200cm.	ELSRS	
ACCESSORY BOX Accessory box with DIN rails and fastening plates.	BOXDOM	
ADHESIVE REFLECTIVE TAPE STRIPS FOR ELDOMS (3000 x 50mm) Adhesive Reflective Tape Strips for Eldoms (4000 x 50mm) Adhesive Reflective Tape Strips for Eldoms (5000 x 50mm)	ELREF3 ELREF4 ELREF5	
Note: The 6-metre boom requires two pieces of ELREF3 The 7-metre boom requires one pieces of ELREF3 + one piece of ELREF4 The 8-metre boom requires two pieces of ELREF4 ADHESIVE REFLECTIVE TAPE (250 x 50mm) Lots of 12 pcs.	ELSRE	
DATA INTERFACE MODULE VIA CABLE The module allows the exchange of information between the motor's electronic control unit and the Cardin 3G/WF interface and also allows you to connect two motors via cable in order to use the synchronised master/slave function.	MODCA	()
BLUETOOTH MODULE The module allows the exchange of information between the motor's	MODBT	

The module allows the exchange of information between the motor's electronic control unit and the Cardin 3G/WF interface via BLUETOOTH.



OVERALL DIMENSIONS





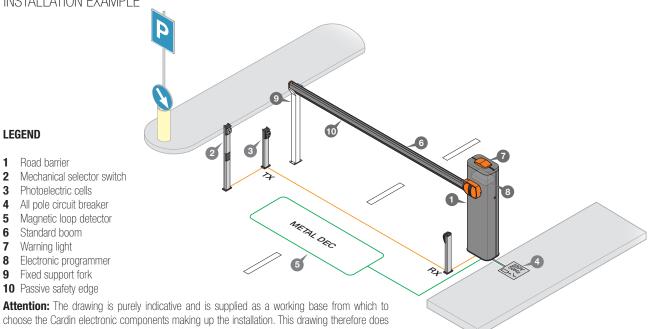
NiMH

GENERAL CHARACTERISTICS		ELDOMS (3-5m)	ELDOML (6m-8m)
Mains power supply	Vac	230	230
Nominal electrical input	А	0,9	0,9
Power input	W	250	250
Duty cycle	%	90	90
Geared motor speed	revs/min	6	6
Opening time 90°	S	34	612
Passageway opening time (75°)	S	2	4
Maximum torque	Nm	180	180
Operating temperature range	°C	-20°+55	-20°+55
Protection grade	IP	54	54
MOTOR DATA			
Power supply	Vdc	24	24
Nominal electrical input	А	3	3
Maximum power yield	W	120	120
BUILT-IN RECEIVER CARD			
Reception frequency	MHz	433.92/868,3	433.92/868,3
Number of channels / Number of functions	No	4/8	4/8
Number of stored codes	No	300 / 1000	300 / 1000

BATTERY TYPE

Model

INSTALLATION EXAMPLE



NiMH

not lay down any obligations regarding the execution of the installation.

24V

AUTOMATION FOR ROAD BARRIERS

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<u>PSP</u>



CARDIN TRADE

Road barrier with an enhanced geared motor powered by 24V, designed for access control of passageways up 6m with rapid and fluid boom movement.

The linear boom-holder cabinet made of robust steel panels spray-painted in different finishings allows the SNAP range of road barriers to blend in perfectly into the most modern of architectural urban contexts at the same time guaranteeing its reliability throughout time.

The SN24 control electronics has several stand-out characteristics beginning with the progressive, calibrated management of the motor power with the possibility to adjust the manoeuvring speed, the "master/slave" function allowing you to synchronise two barriers working in unison, internal diagnostics indicating main errors and the vast array of available command and safety accessories.

The integrated programmer allows encoder controlled boom positioning, automatic repositioning and self-programming. The electronic control unit is completed by the anti-crush and "soft start" and "soft stop" functions.

The installation and programming times are rapid and the electronic programmer is positioned in the hood of the structure allowing ease of access.

The barriers can be fitted with buffer batteries which allow them to function with the SUN POWER system for isolated installations where mains power supply is not available or where you simply wish to reduce energy costs.

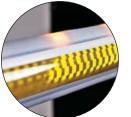
Open collector:

The product range is factory set for the insertion of an open collector receiver card that guarantees compatibility with all the radio control series available in the Cardin catalogue.





HOOD WITH BUILT-IN BOOM MOVEMENT LEDS



BOOM WITH LED LIGHTING



ALLEN KEY OPERATED MANUAL RELEASE SYSTEM



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(optional)

IN-BUILT ELECTRONIC PROGRAMMER



ROBUST SPRING BALANCED GEARS SYSTEM

SELF-PROGRAMMING ROAD BARRIER WITH A 24V MOTOR

Encoder-controlled movement.

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Encoder-controlled movement.

working in unison.

Robust, rapid opening road barrier designed to last through time, complete with boom holder, warning lights built in to the hood and an external Allen key operated release system.

The "master/slave" function allows you to synchronise two barriers working in unison.

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SELF-PROGRAMMING ROAD BARRIER WITH A 24V MOTOR

Robust, rapid opening road barrier designed to last through time, complete with boom holder, warning lights built in to the hood and

The "master/slave" function allows you to synchronise two barriers

Boom and boom balancing spring to be ordered apart (see

Boom balancing spring included. Boom to be ordered a part.

3m

EL SNAP-RAPID

EL SNAPS





an external Allen key operated release system.

paragraph 'operational constraints' on page 148).

SELF-PROGRAMMING ROAD BARRIER WITH A 24V MOTOR

Encoder-controlled movement.

Robust barrier designed to last through time, complete with boom holder, warning lights built in to the hood and an external Allen key operated release system.

The "master/slave" function allows you to synchronise two barriers working in unison.

Boom and boom balancing spring to be ordered apart (see paragraph 'operational constraints' on page 148).













BOOMS Rigid boom in white spray-painted aluminium. Length 3,25m Ø70mm. Complete with end caps and passive rubber safety edge.	SNAPPER3	L 3,25m
Rigid boom in white spray-painted aluminium. Length 4,25m Ø70mm. Complete with end caps and passive rubber safety edge.	SNAPPER4	L 4,25m
Rigid boom in white spray-painted aluminium. Length 5,25m Ø70mm. Complete with end caps and passive rubber safety edge.	SNAPPER5	L 5,25m
Rigid boom in white spray-painted aluminium. Length 6,25m Ø70mm. Complete with end caps and passive rubber safety edge.	SNAPPER6	L 6,25m
JOINT for EL SNAP-RAPID - EL SNAPS. Maximum passageway 3 metres.	SNR SNAP	
LED LIGHTS	LED SNAPPER3	00 0+01
for SNAPPER3 (with 4 leds), SNAPPER4 (with 5 leds), SNAPPER5 (with 6 leds) and SNAPPER6 (with 8 leds).	LED SNAPPER5 LED SNAPPER6	

SELF-PROGRAMMING ROAD BARRIER WITH A 24V MOTOR

Encoder-controlled movement.

24V road barrier spray-painted and cataphoresis treated complete with electronic programmer and encoder.

EL RAP4E is a light automation cabinet for tubular booms up to 4m long. The small size, simple programming and 24V encoder controlled geared motor give it an excellent price to performance ratio.



BOOM

Rigid tubular boom in white spray-painted aluminium Ø7cm, Length 4,25m for passageways up to 4m.



RAPPER4TL

EL RAP4E





FOLD-UP MESH in plastic, lengths of 200cm. (also for EL SNAP-RAPID, 4, 5/6).	ELSRS	
SUPPORT FORKS / POLES FIXED ALUMINIUM SUPPORT FORK H 910 (for EL SNAP-RAPID, 4, 5/6). FIXED ALUMINIUM SUPPORT FORK H 910 with a magnetic suction cup (for EL SNAP-RAPID, 4, 5/6). MOBILE SUPPORT POLE 1200mm (for EL SNAP-RAPID, 4, 5/6).	ELUFS1 ELUFS1-ML ELUMS1	ELUFS1 ELUMS1 ELUFS1-ML
ANCHOR PLATE ground fastening base	FIX SNAP FIX RAP4	
ADHESIVE REFLECTIVE TAPE (1000 x 50mm) for SNAP barriers.	ADEK	
ADHESIVE REFLECTIVE TAPE STRIPS. for SNAP barriers. Lots of 12 pcs.	STICKERS	
BATTERY CHARGER for use with 24V programmers. EXTERNAL BOX with 2 batteries 12V 7Ah.	CB24 SPB24	
POWER SUPPLY KIT Solar panels for use with all 24Vdc automation.	SUNPOWER	



GENERAL CHARACTERISTICS		EL SNAP-RAPID	EL SNAPS	EL SNAPL	EL RAP4E
Mains power supply	Vac	230	230	230	230
Nominal electrical input	A	1,5	1	1,5	1
Power input	W	350	300	350	120
Duty cycle	%	70	70	70	50
Geared motor speed	revs/min	8,3	6	2,1	2,5
Opening time 90°	S	1,8	2,5	7	6
Passageway opening time (75°)	S	1,2	1,8	3	5
Maximum torque	Nm	750	600	750	260
Operating temperature range	°C	-20°+55	-20°+55	-20°+55	-20°+55
Protection grade	IP	54	54	54	54
MOTOR DATA					
Power supply	Vdc	24	24	24	24
Nominal electrical input	A	4,5	3,5	4,5	3
Maximum power yield	W	300	250	300	180

OPTIONAL RECEIVER CARD

The product range is factory set for the insertion of an open collector receiver card that guarantees compatibility with all the radio control series available in the Cardin catalogue.

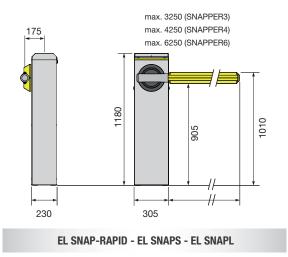
Operational constraints

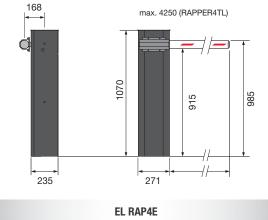
BOOM MAKE UP	3 METRES	4 METRES	5 METRES	6 METRES
SNAPPER3 SNAPPER3 + ELUMS1 SNAPPER3 + SNR SNAP SNAPPER3 + ELSRS SNAPPER3 + ELSRS + ELUMS1				
SNAPPER4 SNAPPER4 + ELUMS1 SNAPPER4 + SNR SNAP SNAPPER4 + ELSRS SNAPPER4 + ELSRS + ELUMS1				
SNAPPER6 SNAPPER6 + ELUMS1 SNAPPER6 + ELSRS SNAPPER6 + ELSRS + ELUMS1				

Barrier trunk	Boom	Spring Art. Nr.	Colour code	Nr. of springs
	SNAPPER3	SP-YE	Yellow	1
SNAPS	SNAPPER3 - SNAPPER4	SP-GR	Green	1
SNAPL	SNAPPER5	SP-RE	Red	1
	SNAPPER5 - SNAPPER6	SP-WH	White	1

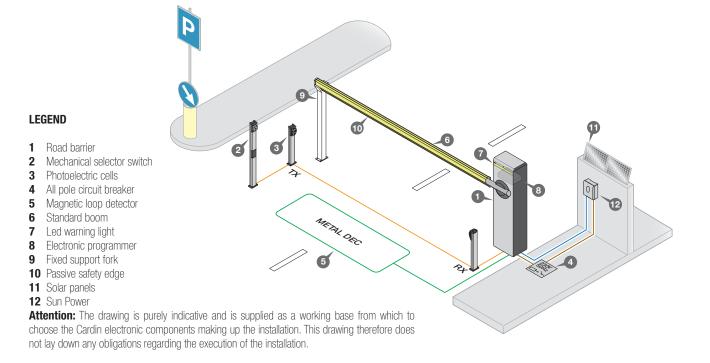
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INSTALLATION EXAMPLE



SELF-POWERED ELECTROMECHANICAL PARKING PLACE PROTECTION



CARDIN PRO SERIES PL

The PL (Parking Line) series consists of two parking space protection devices PARKSUN and PARKLINE which stand out from other similar products for their robustness and completely automatic electrical movement. Simple and practical to operate thanks to the remote control included in the system, a stainless steel arch rises up to prevent non authorised vehicles from using your personal parking space.

Both models are powered by heavy duty, long-life buffer batteries. The PARKSUN model does not require connection to external power sources as the batteries are recharged by an in-built solar panel, while the PARKLINE model requires an external battery charger powered by the mains. The control panel has an in-built state-of-the-art S504 radio receiver card with 128 bit cryptography, "433MHz" FM ROLLING CODE and the possibility of memorising up to 1000 user codes. Various solutions have been adopted in the PARKING LINE systems in order to guarantee the safety and security of people and materials, foremost among which is the electronic sensor that inverts the movement of the arch whenever it encounter an obstacle and a mechanical shock absorbing device that reduces the effect of eventual crashes and bangs even when not in movement. The device is fitted with a key-operated manual release mechanism.

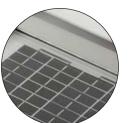
Rapid installation:

- does not require particular tools;
- for standard operation it does not require programming and travel limit setting;
- the code of the radio control transmitter supplied with the device is already stored in the control panel.





MECHANICAL SHOCK ABSORBER



SOLAR PANEL (PARKSUN VERSION)



STAINLESS STEEL ARCH



MANUAL RELEASE MECHANISM



S504 RADIO RECEIVER



PARKING SPACE PROTECTION WITH A 12V MOTOR

The automation system consists of the PARKSUN parking space protection plus:

- electronic programmer;
- solar panel;
- built-in S504 receiver "433MHz" FM ROLLING CODE;
- one S504 pre-coded two-channel transmitter;
- buffer batteries.

The parking space protection, self-powered with built-in photovoltaic panel, can be installed anywhere as it needs no power cable.

The built-in control unit controls the photovoltaic panel and the battery to ensure maximum energy efficiency and continuity of operation. Even with no light whatsoever Parksun can operate for up to 4 months.

PARKING SPACE PROTECTION WITH A 12V MOTOR

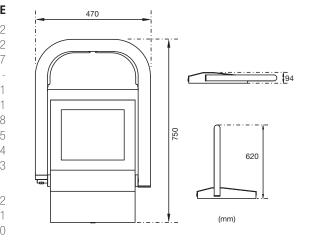
The automation system consists of the PARKLINE parking space protection plus:

- electronic programmer;
- built-in S504 receiver "433MHz" FM ROLLING CODE;
- one S504 pre-coded two-channel transmitter;
- buffer batteries.

Parking space protection with external battery charger powered from the mains or battery. The built-in control unit controls the battery charge so as to guarantee continuity of operation even without a power supply.

Parkline can operate up to 4 months without being connected to a mains power supply.

GENERAL CHARACTERISTICS		PARKSUN	PARKLINE
Mains power supply	Vdc	12	12
Battery	Vdc	12	12
Battery power supply	AH	7	7
Solar panel power	W	5	-
Power consumption in standby	mA	1	1
Motor electrical input	А	1	1
Opening / closing time	S	8	8
Operating temperature range	°C	-20°+55	-20°+55
Protection grade	IP	54	54
Weight	Kg	23	23
BUILT-IN RECEIVER CARD (S504)			
Reception frequency	MHz	433.92	433.92
Number of channels / Number of functions	No	4 /1	4 /1
Number of stored codes	No	1000	1000



OVERALL DIMENSIONS

470 x 750mm, height 620mm (94mm lowered arch)



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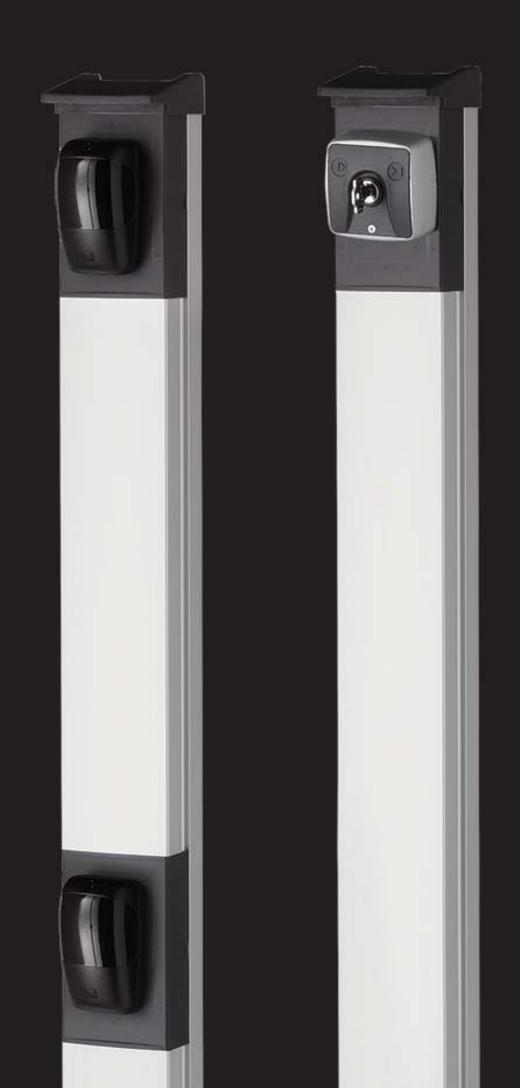


PARKSUN



PARKLINE





MECHANICAL ACCESSORIES

COMPLIMENTARY EQUIPMENT¹⁵⁴

AUXILIARY AND SAFETY DEVICES 156

COMPLIMENTARY EQUIPMENT



A correctly installed system guarantees safety and reliability.

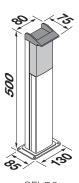
The installation must be carried out in conformity with the local standards and regulations in force and it therefore follows that all the components which make up the installation must be of high quality and also conform to these requirements. We advise you therefore to use Cardin electronic appliances to complete your installation.

The Cardin accessories are designed to enhance the performance of our appliances and are made of top quality materials in order to guarantee a long operating life and maintain the aesthetic characteristics throughout time.

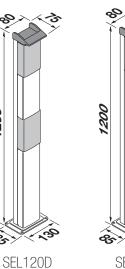
All the accessories bearing the Cardin trademark are built specifically for use in automatic opening installations.

Systems such as the safety edges have been tested in order to guarantee ample safety margins in all situations.

1200



SEL50



SEL120





SELMEC MOUNTED ON A SEL120 COLUMN



FACTORY SET FOR THE APPLICATION OF CARDIN PHOTOELECTRIC CELLS AND SELECTOR SWITCHES



MODULAR STRUCTURE EASILY RECONDITIONED



IMPACT-RESISTANT MODULAR BASE PLATE



ELECTRIC LOCKS



INTERNATIONAL WARNING SIGN in PP, multi-language. It is good practise to fit warning signs to your automatic installations and these should be placed where they can be easily seen.	TARGA-INT	and the second sec
SECTIONAL COLUMNS Sectional columns to which all the CDR, SEL, APRO, VEDO and PASS products can be fitted. They allow the installation of photoelectric cells and selector switches. The aluminium sectional structure makes them easy to reinstate after accidental knocks and bangs.		T
500mm COLUMN for 1 surface-mounted or embedded photoelectric cell.	SEL50	
1200mm COLUMN for a selector switch or keypad.	SEL120	
1200mm COLUMN for 2 surface-mounted or embedded photoelectric cells.	SEL120D	
FASTENING BASE Fastening base for columns SEL50, SEL120, SEL120D.	SELFIX	J); 🔷
ELECTRIC LOCKS 12V complete with accessories for the series BL - HL		
ELECTRIC LOCK Vertical/horizontal electric locking device	ELV	
RIGHT FITTING ELECTRIC LOCK with internal/external cylinder.	XLSE10DX	
LEFT FITTING ELECTRIC LOCK with internal/external cylinder.	XLSE10SX	
ELECTRIC LOCK rotating locking system without cylinder (European profile).	XLSE12	
6-WIRE SPECIAL CONNECTING CABLE 100m (supplied on a special spool).	CABPC100ST	