



Opens the future

# CATALOGUE '09

AUTOMATIONS FOR HOUSE AND BUILDING

Gates | Roller shutters | Garages | Industrial doors | Roll-up doors | Automatic doors | Access control | Barriers | Rising bollards

---

EVERY DAY, FOR MORE THAN 25 YEARS,  
WE AT BFT HAVE BEEN MAKING LIFE  
FOR MILLIONS OF PEOPLE MORE COMFORTABLE AND MORE SECURE  
IN MORE THAN ONE HUNDRED COUNTRIES WORLDWIDE.



The quality of living grows every day thanks to innovative products which meet the increasing demands for simplicity, convenience and security.

BFT interprets these needs intelligently, studying and building a wide range of technologically advanced and flexible products, capable of meeting any automation need in homes and buildings: gates, garages, shutters and doors.



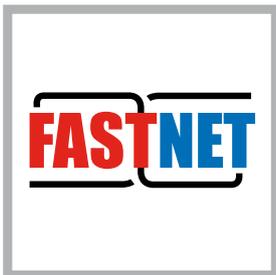
## General information

- 6. you and BFT together. Siding with safety
- 7. always at your side
- 8. the BFT warranty
- 9. conditions of sale
- 10. how to read this catalogue
- 12. EElink protocol



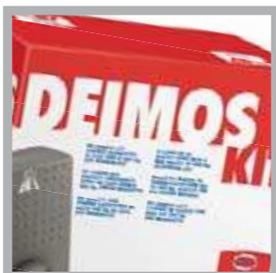
## 2009 New products

- 14. 2009 new products



## FAST NET

- 18. the simplified installation system



## Kit products

- 22. Kit products



## Automations for rack sliding gates

- 28. selection guide
- 30. deimos
- 32. urano
- 34. icaro



## 36. sp4000 Electromechanical and hydraulic automations for swing gates

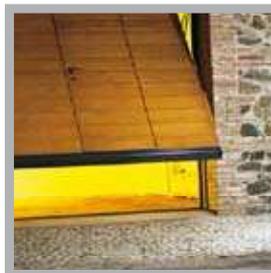
- 40. selection guide
- 42. phobos - electromechanical
- 44. virgo - electromechanical
- 46. igea - electromechanical
- 48. e5 - electromechanical
- 50. eli 250 - electromechanical

- 54. selection guide
- 56. oro - hydraulic
- 58. lux - hydraulic
- 60. lux bt - hydraulic
- 62. p4,5 p7 - hydraulic
- 64. sub - hydraulic



## Roller shutter automations

- 68. loop
- 69. loop radio



## Automations for counterweight and spring-operated overhead doors

- 74. selection guide
- 76. phebe
- 78. berma
- 80. botticelli
- 82. eos120



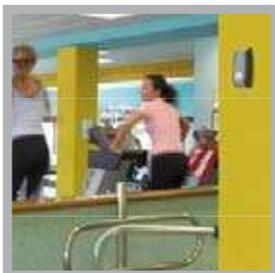
Automations for roll-up, automatic, folding and industrial sectional doors

- 84.** x130 - roll-up doors
- 90.** vista - automatic doors
- 94.** linea - automatic doors
- 108.** forb - folding doors
- 108.** igea lb - folding doors
- 112.** argo - industrial sectional doors
- 114.** ulisse - industrial sectional doors



**134.** ACCESSORIES  
Our services

- 154.** BFT tools for installers
- 155.** BFT certifications
- 156.** the plus of BFT on the territory
- 157.** alphabetical index



Access control system

- 118.** compass



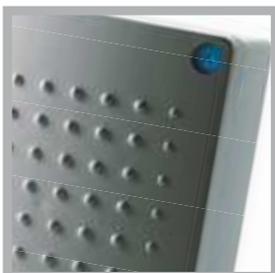
Car park management solutions

BFT also offer car park management solutions. Order the catalogue from us!



Automations for road barriers and rising bollards

- 122.** michelangelo - road barriers
- 126.** moovi - road barriers
- 128.** bgv - road barriers
- 130.** stoppy - rising bollards



ACCESSORIES

# YOU AND BFT TOGETHER. SIDING WITH SAFETY.

6



Automatic gates, motorized overhead doors and, more generally speaking, all automated opening systems fall within the field of application of European Directives that govern the production and installation of finished products and components alike. BFT put installers in a position whereby they can create a system in a professional manner to meet these standards. This we do by

manufacturing products boasting inimitable reliability and safety - as indeed we have been doing for over 25 years - which are constantly inspected and tested both by our own laboratories and by accredited certifying bodies. The whole BFT range has been designed with painstaking care to assure ease of use and, at the same time, avoid putting people, pets or property at risk. Every single automated device undergoes

severe testing to ensure it is supremely functional and safe. Having a product that meets standards does not exempt the installer from certifying the system put together.



The intelligence of BFT solutions is not limited to the products. The service also makes the difference: BFT is always close to its customers with a capillary network of installers and professionals who operate throughout Italy and all over the world to resolve any technical or commercial question rapidly. Security that lasts and will

last with the passage of time: the quality of every one of our products is guaranteed by the exclusive BFT Warranty.

# THE BFT WARRANTY

8



BFT protects its customers with an exclusive warranty valid for 30 months from the date of manufacture of the product. The return of a product covered by the terms of the warranty will result in its replacement with a newly manufactured equivalent product.

The calculation of the 30 months' warranty runs from the date of manufacture, shown on the product in the form of an impressed code or an applied adhesive label. Counterfeiting or deleting the date of manufacture voids the validity of the warranty.

To benefit from this special formula, the customer must accompany the returned goods with a transport document on which the following must obligatorily be indicated:

- the product code;
- the detailed description of the product;
- the quantity returned.

The warranty cannot be applied if:

- the failure has been caused by a system not installed in accordance with the instructions supplied by the company;
- components which are not original BFT parts have been used for installing the motorization;
- the failures are the result of tampering or improper repairs carried out by unauthorized personnel;
- the failures have been caused by improper or careless use;
- the causes of the failure are due to external agents such as: electrical discharges, tampering even accidental, impact even by accident, exposure to moisture or steam, use in extreme environmental or heat conditions, floods or other natural calamities.

The replacement of parts during the warranty period shall not give rise to an

extension of the expiry date of the warranty itself. No compensation shall be payable for the period during which the faulty system is inactive. BFT shall not be responsible for any damages, direct or indirect, caused to persons, things or pets by failure of the product, use for purposes not appropriate to its nature and/or its capacity, use over its capacity limit, and forced suspension in its use.

The rights expressly envisaged in the consumer's favour by the regulations governing the sale of consumer goods are not affected in any way by this warranty.

**Effectiveness:** these General Conditions of Sale replace the previous ones and are applicable to the orders for products bearing the BFT trademark or any other of its trademarks, addressed to BFT S.p.A. The following General Conditions of Sale govern all the sales by BFT to its customers, and constitute an integral part of the sales contract.

**Prices:** this new BFT price list cancels and replaces all previous price lists. The price list with the most recent month as the date on the cover shall be deemed to be the one in force. Prices are intended to exclude VAT but include packaging.

**Payments:** all payments must be made exclusively to BFT and made in accordance with the terms and procedures indicated in the invoice. Failure to pay in accordance with the agreed terms and procedures shall give rise, in favour of BFT S.p.A., of interest on arrears at the current bank rate increased by 3 points and shall entitle BFT to consider

itself released from all further delivery commitments.

**Ownership:** BFT is the owner of the goods sold until they have been paid for in full. The goods delivered are the full and exclusive property of BFT until their price has been paid in full. In the event of failure to pay, BFT shall be entitled to take immediate possession of the products sold wherever they are found even if they have been resold to third parties by the Customer in arrears. In this case, the Customer will be obliged to give notice of the names of the third-party purchasers of the products from whom BFT shall have the right to claim them back and resell them.

**Transport:** the material is shipped by the supplier carriage paid for orders in excess of €1,550 before tax or in the case of replacements under warranty. The material is shipped with the addition of transport costs in the case of orders of less than €1,550 or in the case of repairs and

replacements out of warranty.

**Complaints:** at the moment of receipt of the goods it is necessary to check that the number of packs corresponds with the delivery note and inspect the state of the goods and packaging. In the case in which anomalies are noted, the associated complaints must be raised in written form by the purchaser and noted on the courier's delivery documentation at the moment of receipt of the goods themselves. A copy of this document must be sent by fax immediately to BFT within and no later than eight days from receipt of the goods, as must any complaints for other defects in the conformity of the goods not noticeable from the outward appearance of the packs. Products returned without prior agreement with BFT will be rejected in all cases. Furthermore, no claim can give any right to delays or suspensions of the terms of payments, which must in any case be made completely for all

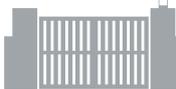
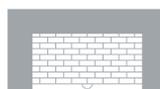
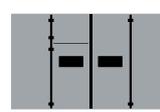
the undisputed goods. All delays in payment shall give rise to the immediate and total forfeiture of the warranty.

Failure to transmit the complaints or disputes within the terms mentioned above, and/or the use of the product by the customer notwithstanding the discover of the defects, shall constitute unconditional acceptance of the product itself and waiver of any complaint or dispute with regard to the same.

**Modifications:** BFT reserves the right, at any moment, to make the technical changes it deems appropriate for the improvement of the products contained in this price list, with this giving the Customer the right to make any claim whatsoever.

**Competent court:** It is agreed that Italian Law shall be applicable to any dispute arising out of this contract and that territorial competence shall lie exclusively with the Italian Judges of the Court of Vicenza.



FAST NET		1
AUTOMATIONS FOR RACK SLIDING GATES		2
ELECTROMECHANICAL AUTOMATIONS FOR SWING GATES		3
HYDRAULIC AUTOMATIONS FOR SWING GATES		4
ROLLER SHUTTER AUTOMATIONS		5
AUTOMATIONS FOR COUNTERWEIGHT AND SPRING-OPERATED OVERHEAD DOORS		6
AUTOMATIONS FOR ROLL-UP DOORS		7
AUTOMATIONS FOR AUTOMATIC DOORS		8
AUTOMATIONS FOR FOLDING DOORS		9
AUTOMATIONS FOR INDUSTRIAL SECTIONAL DOORS		10
ACCESS CONTROL SYSTEM		11
AUTOMATIONS FOR ROAD BARRIERS		12
AUTOMATIONS FOR RISING BOLLARDS		13



EELINK is an exclusive programming system developed by BFT which, by means of connection to handheld programmers (Unipro, Uniradio and Proxima) makes it possible to transfer data from operators to PCs and vice versa. As a result, it is possible to keep a database (EEdbase) of the information memorized in the installed systems. The database also makes it possible to associate personal parameters with every system: name and surname of the proprietor,

address, telephone number, name of the maintenance engineer, name of the owner of the radio control device, etc., facilitating the management of customers and preventive maintenance, for example. Furthermore, potentially complex functions such as the reconfiguration of the control panel or of the radio receiver in the event of replacement, or the configuration of a control panel starting from a standard or customized configuration, become much simpler with

EELink as it is only necessary to press a few keys.

Version 3 of EEdbase supports many functions for the Compass access control systems.

#### **Information managed by EELink for the control panels**

- Operational parameters: work times, automatic closing time, phase displacement time, slowdown, torques, antisquashing sensitivity.
- Operating logic: 2/4 steps, pulse blocking on opening, photocell operation on opening, fast closure, prealarm, hold to run, photocell check.
- Operating statistics: number of manoeuvres, number of manoeuvres since the last maintenance, date of the last maintenance, identification

of the terminal that carried out the maintenance, name of the system and version of the software installed in the control panel.

- Self-diagnostic: in the state of rest, the control panel carries out a check of the state of all the inputs connected to it and, if any of them are in any state other than rest, this is communicated to the handheld programmer.
- Default configuration: EELink makes it possible to restore all the control panel configurations to the original factory default states with one single command.

#### **EELink for the radio receivers**

- Receiver capacity: number of transmitters the receiver can memorize.
- Configuration of the outputs: monostable, bistable, timed.
- System code: makes it possible to create clones of the memorized radio control devices and manage installations comprising many receivers.
- List of the memorized transmitters, their position in the memory and association between the receiver's keys and outputs.

#### **Information managed by EELink for the radio transmitters**

- Serial number of the transmitter.
- Second rolling code cipher key.
- System code (for clones)

Evolution never stops  
in BFT. Once again  
2009 sees the design  
and realization of  
new systems, capable  
of meeting growing  
demands in terms of  
comfort and security.

VISTA SEL | T BOX | MITTO REPLAY | DCW

NEW NEW NEW NEW  
NEW NEW NEW NEW  
NEW NEW  
NEW NEW NEW NEW  
NEW NEW NEW NEW  
NEW NEW NEW NEW  
NEW NEW NEW NEW



ARGO  
Electromechanical automation for sectional industrial doors up to 20m<sup>2</sup>.

See page 112



MICHELANGELO 40  
Electromechanical barrier for entrance/exit points up to 4 m.

See page 122



DEIMOS 300 BT NET KIT  
Automation, employing FAST NET technology, for sliding gates weighing up to 300 kg.

See page 20



T-BOX  
Remote control digital pushbutton panel for exterior use, with backlit light-touch keypad.

See page 146



DCW  
Safety device for detecting obstacles, can be connected to infrared or resistive safety edges. Rotatable by 180°. Meets standard EN 12978.

See page 149



MITTO REPLAY  
Two-channel/Four-channel rolling code copiable transmitter 12V

See page 146



STOPPY H  
Electromechanical bollard with  
700mm operator travel.

See page 132



VISTA SL  
New automatic door.

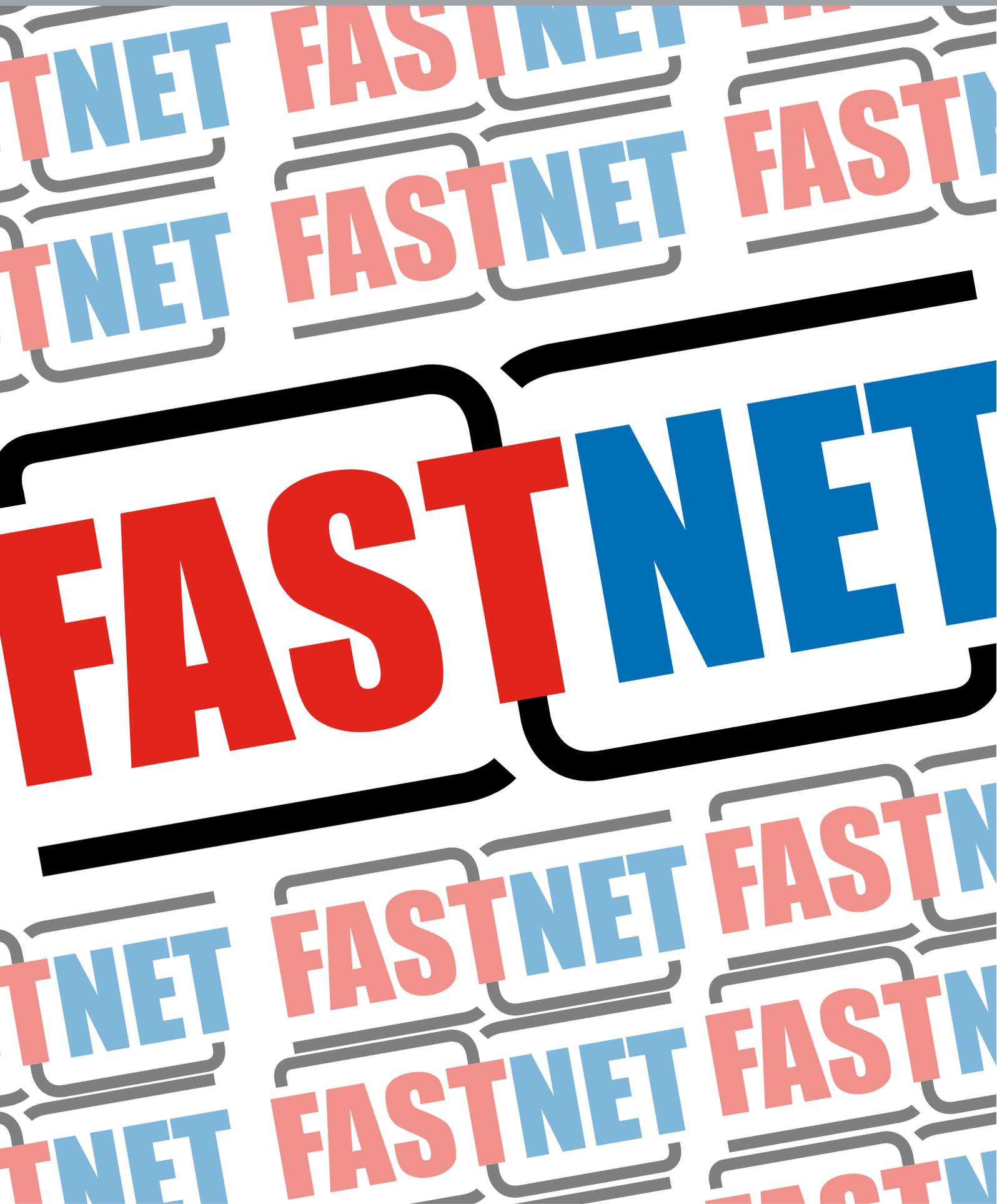
See page 90



VISTA SEL  
Mode selector for VISTA SL.

See page 93

Fast Net is a local network that makes it possible to connect one or more peripheral devices (slaves) powered by the connection line to any control unit (master). The network uses a non-polarized pair on which the power for the proper operation of the node is transferred to the local node itself. Furthermore, a bidirectional communication signal passes on the network and the various connected devices exchange information with the control panel.



# DEIMOS BT NET KIT - PHOBOS N BT NET KIT

FAST NET

20



CODE	DESCRIPTION	KIT	VOLTAGE	LEAF WEIGHT	LEAF LENGTH	PALLETS Q.TY
<b>ELECTROMECHANICAL AUTOMATION FOR RACK SLIDING GATES - RESIDENTIAL USE</b>						
R925241 00002	DEIMOS 300 BT NET KIT <small>NEW 2009</small>		24 V	up to 300 kg	-	27
R925236 00001	DEIMOS BT NET KIT		24 V	up to 500 kg	-	27
<b>ELECTROMECHANICAL OPERATOR FOR SWING GATES - RESIDENTIAL USE</b>						
R935249 00002	PHOBOS N BT NET KIT		24 V	up to 250 kg	up to 1,8 m	16

**• SMART TECHNOLOGY.**

- The unpolarized wire pair prevents connection order errors during installation.
- Open system: automatic recognition of the accessories installed and possibility of adding more accessories later.
- Exclusive BFT proprietary communications protocol protected by international patent.

**• SAFE USE.**

- The devices monitored by the bus protocol are continually checked over time.
- The photocells are synchronized.

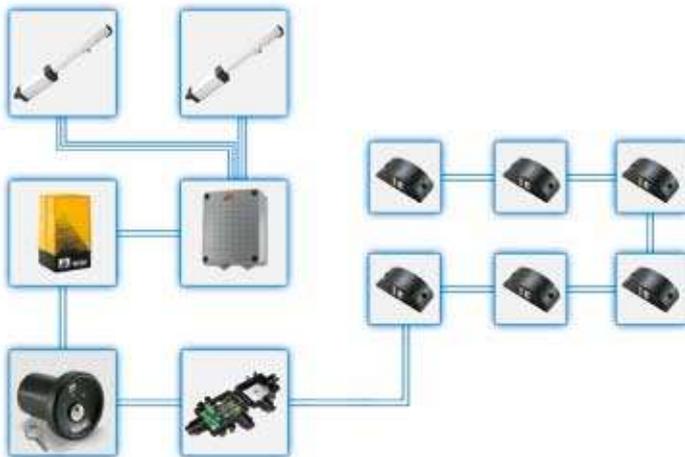
**• SIMPLER INSTALLATION.**

- All the peripheral devices are connected to the control unit by just two wires.
- All the devices contained in the same kit are configured in such a way as to allow immediate installation.
- The components can be connected freely: in series, parallel, etc.

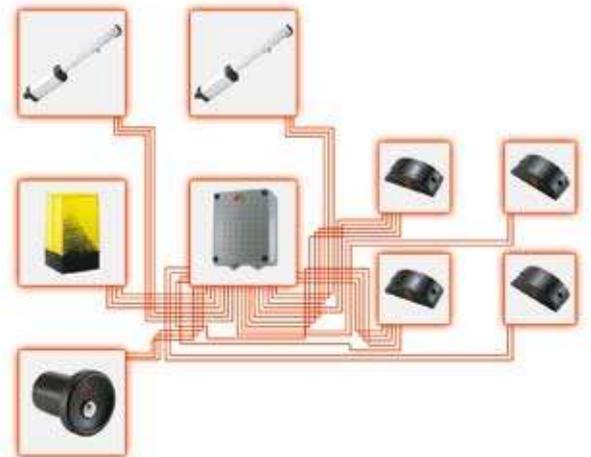
- solid state blinker with integrated antenna
- receiver with possibility of installation in the blinker or in the control unit
- synchronized photocells for the possibility of installing several pairs close to each other.
- preprogrammed kits with no need for configuration for connecting the accessories contained in the kit.
- the first additional accessory for every category of accessories, is already configured and therefore connectable directly to the bus without any address configuration.

Technical specifications:

- number of devices connectable:
- up to 2 receivers
  - up to 4 blinkers
  - up to 4 control buttons per type (4 start, 4 pedestrian)
  - up to 4 key selector switches



WITH **FASTNET**



WITHOUT **FASTNET**



## DEIMOS BT NET KIT

DEIMOS BT NET KIT comprises:

- n°1 DEIMOS BT NET, operator with incorporated NETTUNO S control board and rolling-code receiver
- n°1 MITTO 2 12V double-channel rolling-code transmitter
- n°1 pair of FL NET photocells
- n°1 SC NET key selector
- n.1 LAMP NET blinker with extractable self-learning FAST-NET receiver for MITTO series rolling code transmitters.

## DEIMOS 300 BT NET KIT

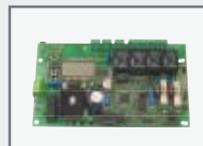
DEIMOS 300 BT NET KIT comprises:

- n°1 DEIMOS 300 BT NET, operator with incorporated NETTUNO S control board and rolling-code receiver
- n°1 MITTO 2 12V double-channel rolling-code transmitter
- n°1 pair of FL NET photocells
- n°1 SC NET key selector
- n.1 LAMP NET blinker with extractable self-learning FAST-NET receiver for MITTO series rolling code transmitters.

## PHOBOS N BT NET Kit

PHOBOS N BT NET KIT comprises:

- n°2 PHOBOS N BT NET operators
- n°1 NETTUNO B, control board
- n°1 MITTO 2 12V double-channel rolling-code transmitter
- n.1 pair of FL NET photocells
- n.1 SC NET, key selector
- n.1 LAMP NET blinker with extractable self-learning FAST-NET receiver for MITTO series rolling code transmitters.



### NETTUNO B

- Control panel for one or 2 24V motors of the Phobos BT Net series.
- Easy wiring thanks to the BUS system. Only 2 wires to connect up to 16 peripherals.
- Safety thanks to the electronic anti-squashing control with amperometric detection and continuous dialogue with peripherals.
- Complete with two-channel receiver incorporated or positioned on the blinker, with optional back-up batteries
- Total control of programming by digital display and three simple buttons.
- Easy setting by means of the AUTOSET function for automatic setting of the functional parameter and auto-recognition of the accessories connected.

## ACCESSORIES



### P125002 - SB BAT

Thanks to the back-up batteries and battery charger, the SB BAT kit guarantees low voltage operation in the event of power failure. For DEIMOS BT model.



### P125005 - BT BAT

Thanks to the back-up batteries and battery charger, the BT BAT kit guarantees low voltage operation of the leaf in the event of power failure (LIBRA C MA, HYDRA R).



### N999389 00001

**FAST WIRE**  
Connecting cable for FAST NET system.  
Available in 100 m roll.



### P121015 00001 - SW NET

Connecting interface to the FAST NET network for traditional push-buttons.



### D111750 - MITTO 2 12V

Two-channel transmitter, 12 V, with rolling code.



### P111382 - FL NET

Pair of FL NET photocells



### D113696 00003 - LAMP NET

Lamp Net blinker with extractable self-learning FAST-NET receiver for MITTO series rolling code transmitters.



### P121014 - SC NET

Key switch SC NET.



**NEW 2009**

### P121019 - T-BOX

Remote control digital pushbutton panel for exterior use, with backlit light-touch keypad.

**NEW 2009**



### P121016 - RB

Four channels wall radio control with rolling code.



BFT proposes kits for the automation of sliding gates, swing gates and overhead doors in order to permit straightforward guided installation. Every kit not only includes the automation system but also all the accessories required for creating a complete system.

DEIMOS KIT | DEIMOS BT KIT | VIRGO KIT | IGEA BT KIT | PHOBOS N KIT | PHOBOS N BT KIT | PHOBOS BT L KIT | ORO KIT



# KIT PRODUCTS

24



DEIMOS KIT R925227 00001

The DEIMOS KIT is used to automate sliding gates weighing up to 500 kg for residential use.

DEIMOS KIT comprises:

- n°1 DEIMOS SR, operator with incorporated control board and rolling-code receiver
- n°1 MITTO 2 12V double-channel rolling-code transmitter
- n°1 pair of CELLULA 130 photocells
- n°1 INTRO key selector
- n°1 blinker with 230 V antenna



DEIMOS BT KIT R925228 00001

DEIMOS BT KIT is used to automate sliding gates weighing up to 500 kg for residential use.

DEIMOS BT KIT comprises:

- n°1 DEIMOS BT, operator with incorporated control board and rolling-code receiver
- n°1 MITTO 2 12V double-channel rolling-code transmitter
- n°1 pair of CELLULA 130 photocells
- n°1 INTRO key selector
- n°1 blinker 24 V with antenna



VIRGO KIT R930130 00002

Is used to automate swing gates with the leaf length up to 2 m, and weight up to 200 kg, residential use.

VIRGO KIT comprises:

- n°1 VIRGO, operator with incorporated control board and rolling-code receiver
- n°1 VIRGO SQ, (VIRGO without control unit)
- n°1 MITTO 2 12V double-channel rolling-code transmitter
- n°1 pair of CELLULA 130 photocells
- n°1 INTRO key selector
- n°1 blinker 24 V with antenna



PHOBOS BT L KIT R935243 00002

The PHOBOS BT L KIT is used to automate swing gates with leaf length up to 5 m and weight up to 250 kg, for residential use.

PHOBOS BT L KIT comprises:

- n°2 PHOBOS BT L operators
- n°1 LIBRA C MA, control panel with incorporated rolling-code receiver
- n°1 MITTO 2 12V double-channel rolling-code transmitter
- n°1 pair of CELLULA 130 photocells
- n°1 INTRO key selector
- n°1 blinker 24 V with antenna



ORO KIT R935222 00002

The ORO KIT is used to automate swing gates with leaf length up to 1,80 m and weight up to 180 kg, for residential use.

ORO KIT comprises:

- n°2 ORO hydraulic operators
- n°1 ALCOR N, control panel
- n°1 MITTO 2 12V double-channel rollingcode transmitter
- n°1 pair of CELLULA 130 photocells
- n°1 INTRO key selector
- n°1 blinker 230 V with antenna



PHEBE KIT R915126 00002

The PHEBE KIT is used to automate of counterweight overhead doors for residential use.

PHEBE KIT comprises:

- n°1 PHEBE operator with incorporated control board and rolling-code receiver
- n°1 set of telescopic arms CBA
- n°1 wall support
- n°1 MITTO 2 12V double-channel rolling-code transmitter
- n°1 blinker 24 V with antenna



IGEA BT KIT R935229 00001

Is used to automate swing gates with the leaf length up to 2,5 m, and weight up to 200 kg, residential use.

IGEA BT KIT comprises:

- n°2 IGEA BT, operators
- n°1 LIBRA C MA, control panel with incorporated rolling-code receiver
- n°1 MITTO 2 12V double-channel rolling-code transmitter
- n°1 pair of CELLULA 130 photocells
- n°1 INTRO key selector
- n°1 blinker 24 V with antenna



PHOBOS N KIT R935248 00002

The PHOBOS KIT is used to automate swing gates with leaf length up to 1,80 m and weight up to 250 kg, for residential use.

PHOBOS N KIT comprises:

- n°2 PHOBOS N operators
- n°1 LIBRA C MA, control panel with incorporated rolling-code receiver
- n°1 MITTO 2 12V double-channel rolling-code transmitter
- n°1 pair of CELLULA 130 photocells
- n°1 INTRO key selector
- n°1 blinker 230 V with antenna



PHOBOS N BT KIT R935247 00002

The PHOBOS KIT is used to automate swing gates with leaf length up to 1,80 m and weight up to 250 kg, for residential use.

PHOBOS N BT KIT comprises:

- n°2 PHOBOS N BT operators
- n°1 LIBRA C MA, control panel with incorporated rolling-code receiver
- n°1 MITTO 2 12V double-channel rolling-code transmitter
- n°1 pair of CELLULA 130 photocells
- n°1 INTRO key selector
- n°1 blinker 24 V with antenna

## KIT CONTENTS



**D113703 00002**  
**ALTAIR P**  
See page 140



**D113672 00005**  
**LIBRA C MA**  
See page 141



**D113706 00002 - ALCOR N**  
See page 140



**D111750 - MITTO 2 12 V**  
Two-channel transmitter, 12 V, with rolling code.



**P111273 - CELLULA 130**  
Flat self-aligning photocell receiver/transmitter pair for external application, range up to 30 m with 24 Vac/dc power supply.



**P121011 - INTRO**  
Key switch for exteriors. Flush and column version.



**D113719 00002**  
**RAY X 230V**  
Blinker powered at 230Vac with integrated antenna.



**D113719 00003**  
**RAY X 24V**  
Blinker powered at 24Vac with integrated antenna.



**P123023 - RWS**  
Ray blinker support for wall applications.



**N7331120 - CBA**  
Set of telescopic arms for 1 overhead door, including side drive elements.



Designed to measure, BFT operators for sliding gates work in any weather conditions. Tested for their entire life cycle, extremely practical and designed to permit simple and immediate maintenance, they guarantee the maximum reliability even with continuous service.

# SOLUTIONS FOR THE AUTOMATION OF SLIDING GATES

DEIMOS | URANO BT | ICARO MA | SP4000



# SLIDING GATES

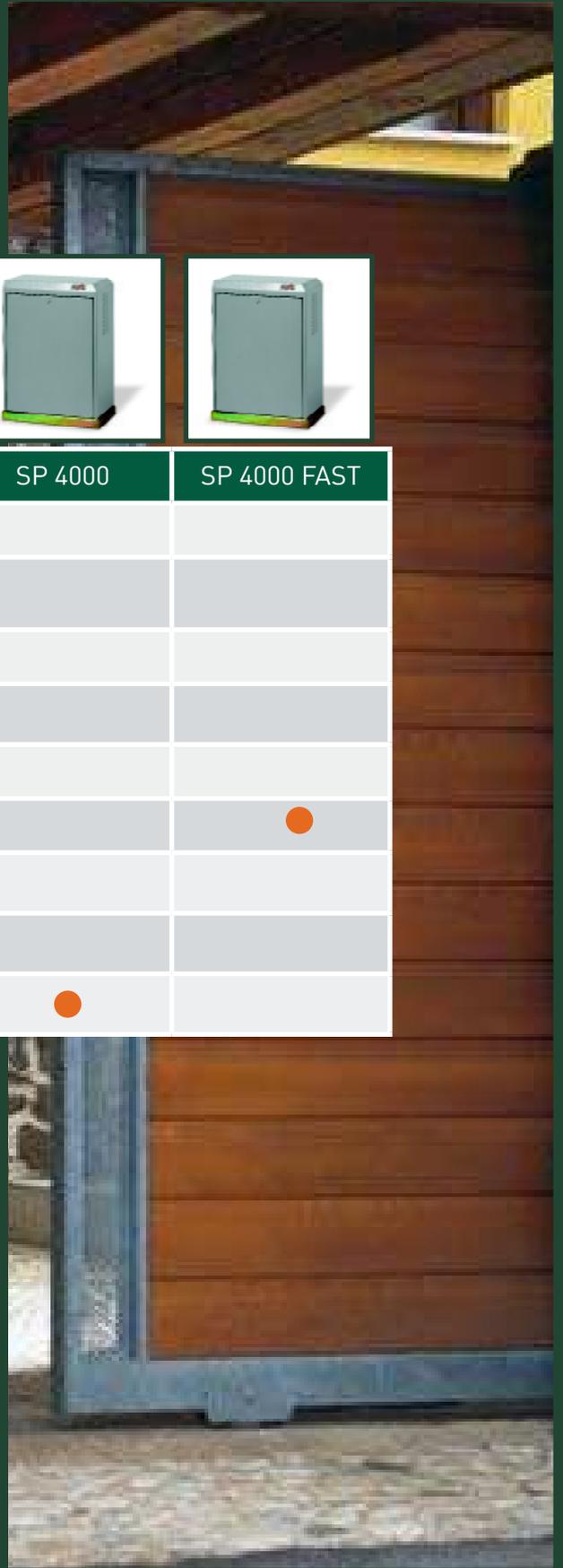
LEGEND

- SEMI INTENSIVE USE ●
- INTENSIVE USE ●
- VERY INTENSIVE USE ●



PESO MAX	DEIMOS 300 BT NET	DEIMOS	DEIMOS BT	DEIMOS 700
300 kg	●			
500 kg		●	●	
700 kg				●
800 kg				
100 kg				
1200 kg				
2000 kg				
4000 kg				

AVAILABLE IN KIT      DEIMOS 300 BT NET KIT      DEIMOS KIT      DEIMOS BT KIT DEIMOS BT NET KIT



DEIMOS 800 F	URANO BT	ICARO	SP 4000	SP 4000 FAST
●				
				●
	●			
		●		
			●	

# DEIMOS SERIES

ELECTROMECHANICAL AUTOMATION FOR RACK SLIDING GATES



**• SMART TECHNOLOGY.**

- Electromechanical microswitches that control the end stroke.
- Incorporated two-channel rolling code radio receiver.
- Control unit with self-learning and self-diagnostic functions.
- Control unit compatible with the EELink protocol.

**• SAFE USE.**

- The version powered at 24V has been specially designed for simpler and faster installation in compliance with the safety standards laid down by the Machinery Directive.
- Thanks to the antisquashing system, the operator inverts motion and prevents damage to people and property in the event of contact **(DEIMOS BT)**.
- Electromechanical braking system **(DEIMOS 800F)**.

**• SIMPLER INSTALLATION.**

- Incorporated control unit positioned frontally for easier accessibility.
- Control unit with programming by LCD display **(DEIMOS BT)**.

**• FAST NET SYSTEM.**

- Simplified 2-wire system **(DEIMOS BT NET - DEIMOS 300 BT NET KIT )**

CODE	DESCRIPTION	KIT	VOLTAGE	LEAF WEIGHT	Q.TY PER PALLET
R925241 00002	DEIMOS 300 BT NET KIT <small>NEW 2009</small>	<b>FASTNET</b> ●	24 V	up to 300 kg	27
P925178 00005	DEIMOS BT		24 V	up to 500 kg	36
R925228 00001	DEIMOS BT KIT	●	24 V	up to 500 kg	27
R925236 00001	DEIMOS BT NET KIT <b>FASTNET</b>	●	24 V	up to 500 kg	27
P925197 00001	DEIMOS		230 V	up to 500 kg	36
P925198 00002	DEIMOS SQ*		230 V	up to 500 kg	36
R925227 00001	DEIMOS KIT	●	230 V	up to 500 kg	27
P925196 00001	DEIMOS 700		230 V	up to 700 kg	36
P925200 00002	DEIMOS 800 F		230 V	up to 800 kg	36

**FAST NET DESCRIPTION on page 20 | KIT COMPOSITION on page 24**

\* Automation without control panel

## TECHNICAL FEATURES

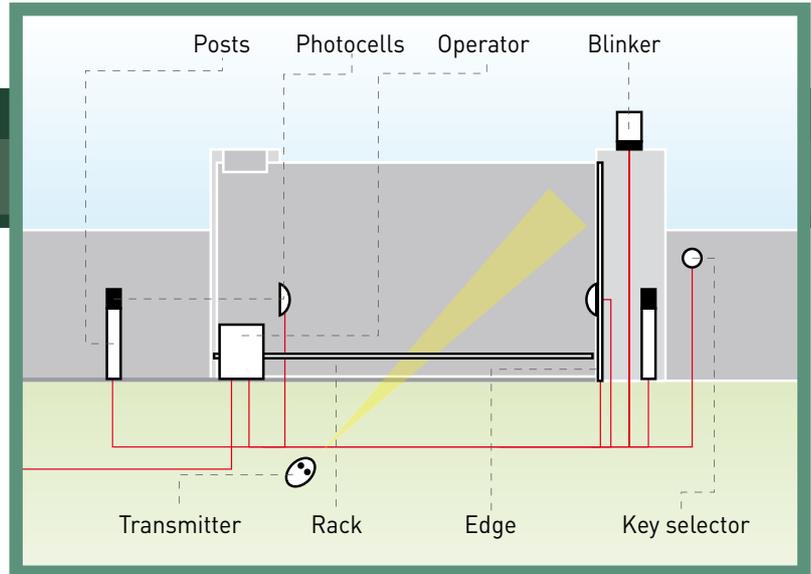
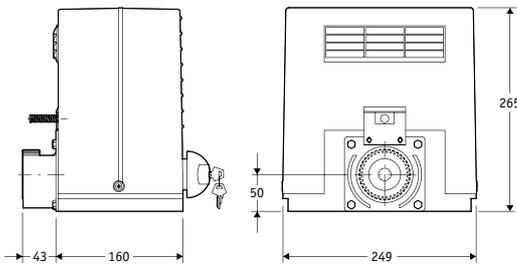
### FEATURES OF THE RANGE

### SPECIFIC FEATURES

	DEIMOS BT / BT NET DEIMOS 300 BT NET*	DEIMOS	DEIMOS 700	DEIMOS 800F
CONTROL PANEL	QSC D MA (incorporated)	ALPHA (incorporated)	ALPHA (incorporated)	ALPHA (incorporated)
OPERATOR	irreversible			
POWER SUPPLY	230 V- ± 10%, 50 Hz single-phase			
ABSORBED POWER	70 W	290 W	290 W	290 W
THERMAL PROTECTION	built into control unit	built into motor	built into motor	built into motor
LEAF SPEED	12 m/min	8,5 m/min	8,5 m/min	8,5 m/min
OUTPUT REVOLUTIONS	79 min	48 min	48 min	48 min
PINION PITCH	4 (14 teeth)			
IMPACT REACTION	stops and movement is reversed	mechanical clutch	mechanical clutch	mechanical clutch
TYPE OF LIMIT SWITCHES	electromechanical or inductive			
MANUAL RELEASE	mechanical release with knob			
OPERATING CYCLE	intensive use	semi intensive use	semi intensive use	semi intensive use
ENVIRONMENTAL CONDITIONS	from -15°C to + 60°C			
DEGREE OF PROTECTION	IP24			
OPERATOR WEIGHT	~7 kg	~15 kg	~15 kg	~15 kg

\*DEIMOS BT - Control panel QSC D MA | \*DEIMOS BT NET, DEIMOS 300 BT NET - Control panel NETTUNO S

DIMENSIONS (mm)



ACCESSORIES



**P125002 - SB BAT**  
Thanks to the back-up batteries and battery charger, the SB BAT kit guarantees low voltage operation in the event of power failure. For DEIMOS BT model.



**P111408 - SCS WIE**  
Circuit board for direct connection of wiegand accessories (such as SELETTO, COMPAS SLIM, etc) to the control units QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**P111376 - SCS 1**  
Serial connection board for QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**P111377 - SCS 1 MA**  
Control board for manage up to 4 pair of checked photocells in QSC D MA control board.



**D571054 - CFZ**  
22x22 4-pitch galvanised steel rack. 2 m lengths in 10 m packs.



**D571053 - CVZ**  
30x12 4-pitch drilled galvanised steel rack with support. 1 m lengths in 10 m packs.



**N999320 - CVZ-S**  
30x8 4-pitch drilled galvanised steel rack with support. 1 m lengths in 10 m packs.



**D221073 - CP**  
22x22 4-pitch plastic rack with adjustment slots. 1 m lengths.



**N999151 - SFD**  
Fixing system pack.



**N999158 - MSC**  
Personalised key release knob.



**P111410 - DCW**  
Safety device for detecting obstacles, can be connected to infrared or resistive safety edges. Rotatable by 180°. Meets standard EN 12978.



**N190106 - STR**  
Pair of infrared sensors, for DCW photocell safety edge.



**P111401 00001 VENTIMIGLIA NS**  
Infrared obstacle detection device for BIR C safety edge compliant with standard EN 12978.



**N190104 - BIR C**  
Rubber safety edge.



**N190039 - CSP 10**  
Shock absorber profile, length 1m. Also available in 2m and 2,5m version - See Page 151

# URANO BT

ELECTROMECHANICAL AUTOMATION FOR RACK SLIDING GATES

32



**• SMART TECHNOLOGY.**

- Electromechanical microswitches (inductive in the PROX version) that control the end stroke.
- Incorporated two-channel rolling code radio receiver.
- Control unit with self-learning and self-diagnostic functions.
- Control unit compatible with the EELink protocol.

**• SAFE USE.**

- Specially designed for simpler and faster installation in compliance with the safety standards laid down by the Machinery Directive.

→ Thanks to the antisquashing system, the operator inverts motion and prevents damage to people and property in the event of contact.

**• SIMPLER INSTALLATION.**

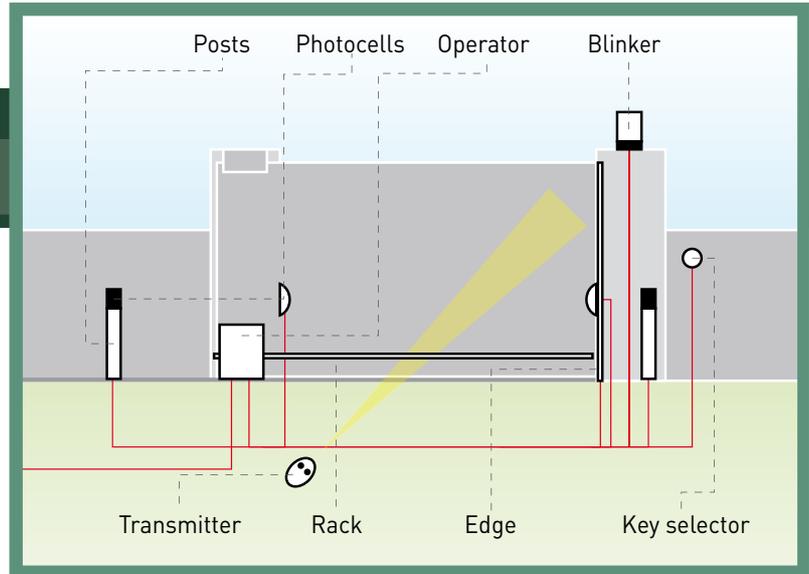
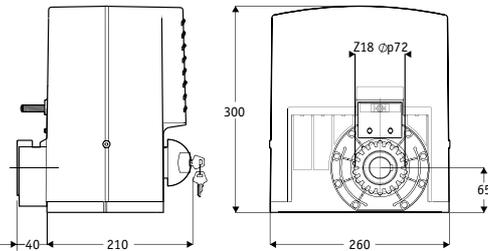
- Incorporated control unit positioned frontally for easier accessibility.
- Control unit with programming by LCD display.

CODE	DESCRIPTION	VOLTAGE	LEAF WEIGHT	Q.TY PER PALLET
P926180 00001	URANO BT	24 V	up to 1200 kg	24

TECHNICAL FEATURES	
URANO BT	
CONTROL PANEL	QSC D MA (incorporated)
OPERATOR	irreversible
POWER SUPPLY	230 V- ± 10%, 50 Hz single-phase
ABSORBED POWER	80 W
THERMAL PROTECTION	built into control unit
LEAF SPEED	9 m/min
OUTPUT REVOLUTIONS	39 min
PINION PITCH	4 (18 teeth)
IMPACT REACTION	stops and movement is reversed
TYPE OF LIMIT SWITCHES	electromechanical or inductive
MANUAL RELEASE	mechanical release with knob
OPERATING CYCLE	very intensive use
ENVIRONMENTAL CONDITIONS	from -15°C to + 60°C
DEGREE OF PROTECTION	IP24
OPERATOR WEIGHT	~20 kg



DIMENSIONS (mm)



ACCESSORIES



**P125009 - BT BAT2**  
The BT BAT 2 device ensures, through its back up batteries and battery charger, low-voltage operations when there is no power supply (URANO BT).



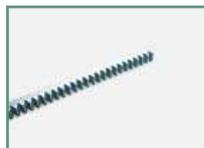
**P111408 - SCS WIE**  
Circuit board for direct connection of wiegand accessories (such as SELETTO, COMPAS SLIM, etc) to the control units QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**P111376 - SCS 1**  
Serial connection board for QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**P111377 - SCS 1 MA**  
Control board for manage up to 4 pair of checked photocells in QSC D MA control board.



**D571054 - CFZ**  
22x22 4-pitch galvanised steel rack. 2 m lengths in 10 m packs.



**D571053 - CVZ**  
30x12 4-pitch drilled galvanised steel rack with support. 1 m lengths in 10 m packs.



**N999320 - CVZ-S**  
30x8 4-pitch drilled galvanised steel rack with support. 1 m lengths in 10 m packs.



**D221073 - CP**  
22x22 4-pitch plastic rack with adjustment slots. 1 m lengths.



**N999156 - SFI**  
Fixing system pack.



**D531548 - KI**  
Release key blank for ICARO, URANO BT, IGEA, IGEA BT.



**P111410 - DCW**  
Safety device for detecting obstacles, can be connected to infrared or resistive safety edges. Rotatable by 180°. Meets standard EN 12978.



**N190106 - STR**  
Pair of infrared sensors, for DCW photocell safety edge.



**P111401 00001 VENTIMIGLIA NS**  
Infrared obstacle detection device for BIR C safety edge compliant with standard EN 12978.



**N190039 - CSP 10**  
Shock absorber profile, length 1m. Also available in 2m and 2,5m version See Page 151



**N190104 - BIR C**  
Rubber safety edge.

# ICARO MA

## ELECTROMECHANICAL AUTOMATION FOR RACK SLIDING GATES

34



**Dynamic TRAVEL**

### • SMART TECHNOLOGY.

- Incorporated two-channel rolling code radio receiver ready for connecting a second receiver.
- Control unit with self-learning and self-diagnostic functions of the parameters: brake, torque, antisquashing.
- Control unit compatible with the EELink protocol.

### • SAFE USE.

- Thanks to the antisquashing system, the operator inverts motion and prevents damage to people and property in the event of contact.

### • SIMPLER INSTALLATION.

- Incorporated control unit positioned frontally for easier accessibility.
- Control unit with programming by LCD display.

CODE	DESCRIPTION	VOLTAGE	LEAF WEIGHT	Q.TY PER PALLET
P925180 00006	ICARO MA	230 V	up to 2000 Kg	16

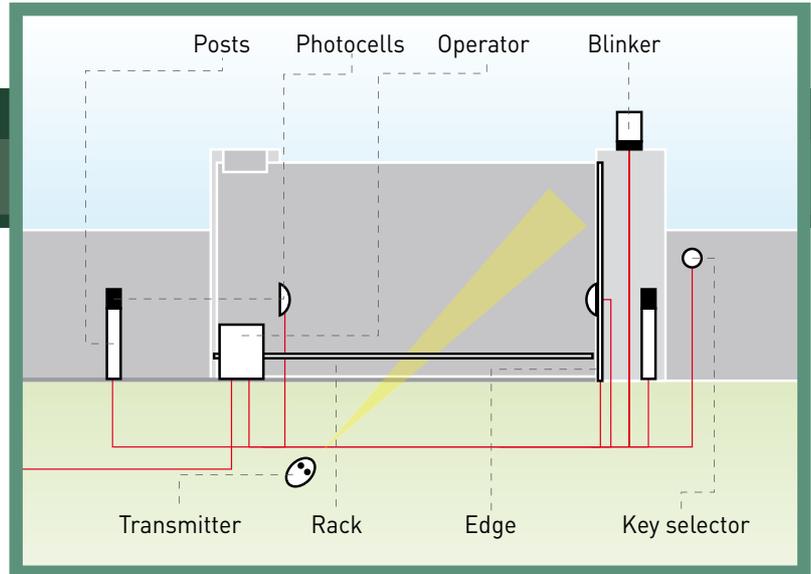
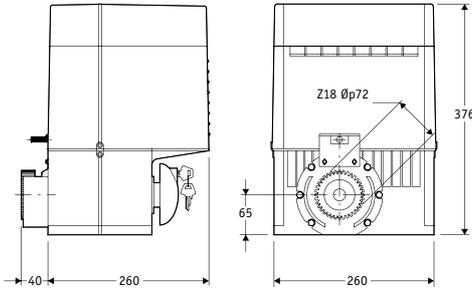
### TECHNICAL FEATURES

#### ICARO MA

CONTROL PANEL	LEO D MA (incorporated)
OPERATOR	irreversible
POWER SUPPLY	230 V~ ± 10%, 50 Hz single-phase
ABSORBED POWER	750 W
THERMAL PROTECTION	built into motor
LEAF SPEED	9 m/min
OUTPUT REVOLUTIONS	37 min
PINION PITCH	4 (18 teeth)
IMPACT REACTION	Stop and reverse on encountering obstacle with dynamic torque control curve
TYPE OF LIMIT SWITCHES	electromechanical or inductive
MANUAL RELEASE	mechanical release with knob
OPERATING CYCLE	very intensive use
ENVIRONMENTAL CONDITIONS	from -15°C to + 60°C
DEGREE OF PROTECTION	IP24
OPERATOR WEIGHT	~25 kg



DIMENSIONS (mm)



ACCESSORIES



**P111408 - SCS WIE**

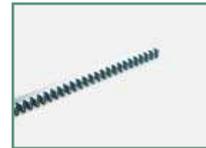
Circuit board for direct connection of wiegand accessories (such as SELETTO, COMPAS SLIM, etc) to the control units

QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**P111376 - SCS 1**

Serial connection board for QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**D571054 - CFZ**

22x22 4-pitch galvanised steel rack. 2 m lengths in 10 m packs.



**D571053 - CVZ**

30x12 4-pitch drilled galvanised steel rack with support. 1 m lengths in 10 m packs.



**N999320 - CVZ-S**

30x8 4-pitch drilled galvanised steel rack with support. 1 m lengths in 10 m packs.



**N999156 - SFI**

Fixing system pack.



**D531548 - KI**

Release key blank for ICARO, URANO BT, IGEA, IGEA BT.



**NEW 2009**

**P111410 - DCW**

Safety device for detecting obstacles, can be connected to infrared or resistive safety edges. Rotatable by 180°. Meets standard EN 12978.



**NEW 2009**

**N190106 - STR**

Pair of infrared sensors, for DCW photocell safety edge.



**P111401 00001 VENTIMIGLIA NS**

Infrared obstacle detection device for BIR C safety edge compliant with standard EN 12978.



**N190104 - BIR C**

Rubber safety edge.



**N190039 - CSP 10**

Shock absorber profile, length 1m. Also available in 2m and 2,5m version See Page 151

# SP4000 SERIES

ELECTROMECHANICAL AUTOMATION FOR RACK SLIDING GATES

36



• **SMART TECHNOLOGY.**

→ Hydrodynamic joint for smooth gate starts and stops.

• **SAFE USE.**

→ The strength and compactness of the structure guarantee the maximum reliability of operation over time.

→ The operator makes it possible to automate any type of gate, even the heaviest.

CODE	DESCRIPTION	VOLTAGE	LEAF WEIGHT	Q.TY PER PALLET
P925169 00001	SP4000	230/400 V three-phase	up to 4000 Kg	3
P925169 00003	SP4000 FAST	230/400 V three-phase	up to 1000 Kg	3

## TECHNICAL FEATURES

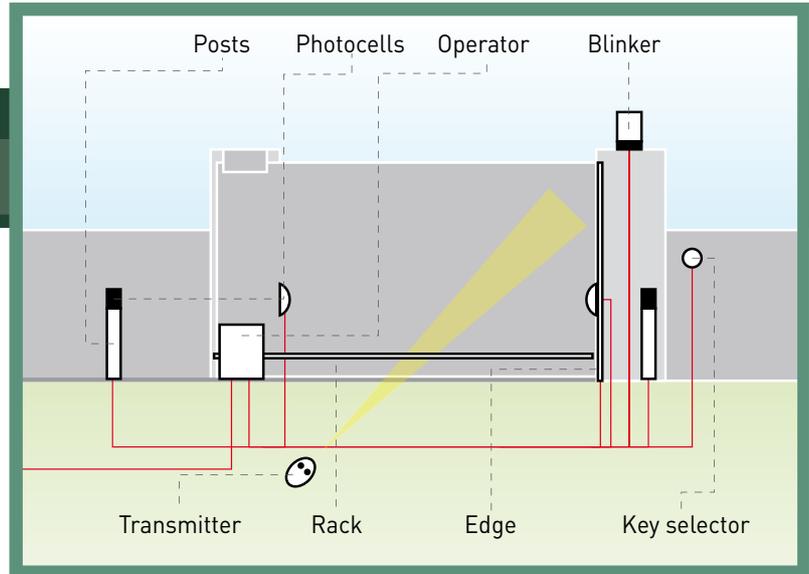
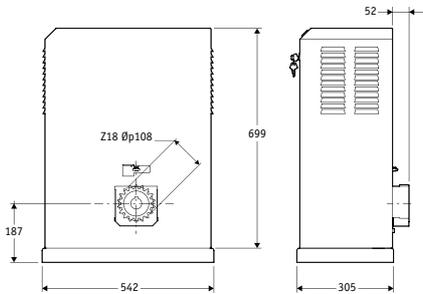
### FEATURES OF THE RANGE

### SPECIFIC FEATURES

		SP4000	SP4000FAST
CONTROL PANEL	SIRIO TEL (incorporated)		
OPERATOR	irreversible		
POWER SUPPLY	230/400 V- ± 10%, 50 Hz three-phase		
ABSORBED POWER	1500 W		
THERMAL PROTECTION	built into control unit		
LEAF SPEED		10 m/min	20 m/min
OUTPUT REVOLUTIONS		30 min	60 min
PINION PITCH	6 (18 teeth)		
TYPE OF LIMIT SWITCHES	electromechanical		
MANUAL RELEASE	mechanical release with knob		
OPERATING CYCLE	very intensive use		
ENVIRONMENTAL CONDITIONS	from -15°C to + 60°C		
DEGREE OF PROTECTION	IP 24		
OPERATOR WEIGHT	~85 kg		



DIMENSIONS (mm)



ACCESSORIES



**D571491 - CFZ6**  
30x30 6-pitch rack. 2 m lengths..



**P125001 - BASP**  
Adjustable anchoring base.



**P111450 00002 - BAR C 2**  
Bord en caoutchouc double profil. Length 2m  
Also available in 4m and 6m version - See Page 150



**P111401 00001 VENTIMIGLIA NS**  
Infrared obstacle detection device for BIR C safety edge compliant with standard EN 12978.



**N190104 - BIR C**  
Rubber safety edge.



**N190039 - CSP 10**  
Shock absorber profile, length 1m.  
Also available in 2m and 2,5m version  
See Page 151



Easy to install, BFT operators for swing gates ensure the maximum safety and ease of use. Their high versatility of use also makes them perfect in prestigious architectural contexts. Moreover, all the maintenance operations are particularly simple, fast and intuitive.

# ELECTROMECHANICAL SOLUTIONS FOR THE AUTOMATION OF SWING GATES

PHOBOS | VIRGO | IGEA | E5 | ELI 250



# ELECTROMECHANICAL SWING GATES

## LEGEND

- SEMI INTENSIVE USE ●
- INTENSIVE USE ●
- VERY INTENSIVE USE ●



LEAF LENGTH	LEAF WEIGHT	PHOBOS N	PHOBOS N BT	PHOBOS N L	PHOBOS N L BT
1,8 m	250 kg	●	●		
3 m				● without electric lock	● without electric lock
5 m				● with electric lock	● with electric lock
KIT		PHOBOS N KIT	PHOBOS N BT KIT PHOBOS N BT NET KIT		

## UNDERGROUND SWING GATES



LEAF LENGTH	LEAF WEIGHT	ELI 250 V	ELI 250	ELI 250 BT
2 m	150 kg	●		
2,5 m	300 kg		● without electric lock	
	400 kg			● without electric lock
3,5 m	300 kg		● with electric lock	
	400 kg			● with electric lock

## ARTICULATED ARM SWING GATES



LEAF LENGTH	LEAF WEIGHT	E 5	VIRGO	IGE A	IGE A BT
1,8 m	200 kg	●			
2 m			●		
2,5 m	250 kg			●	●
KIT			VIRGO KIT		



## PHOBOS L

## PHOBOS BT L

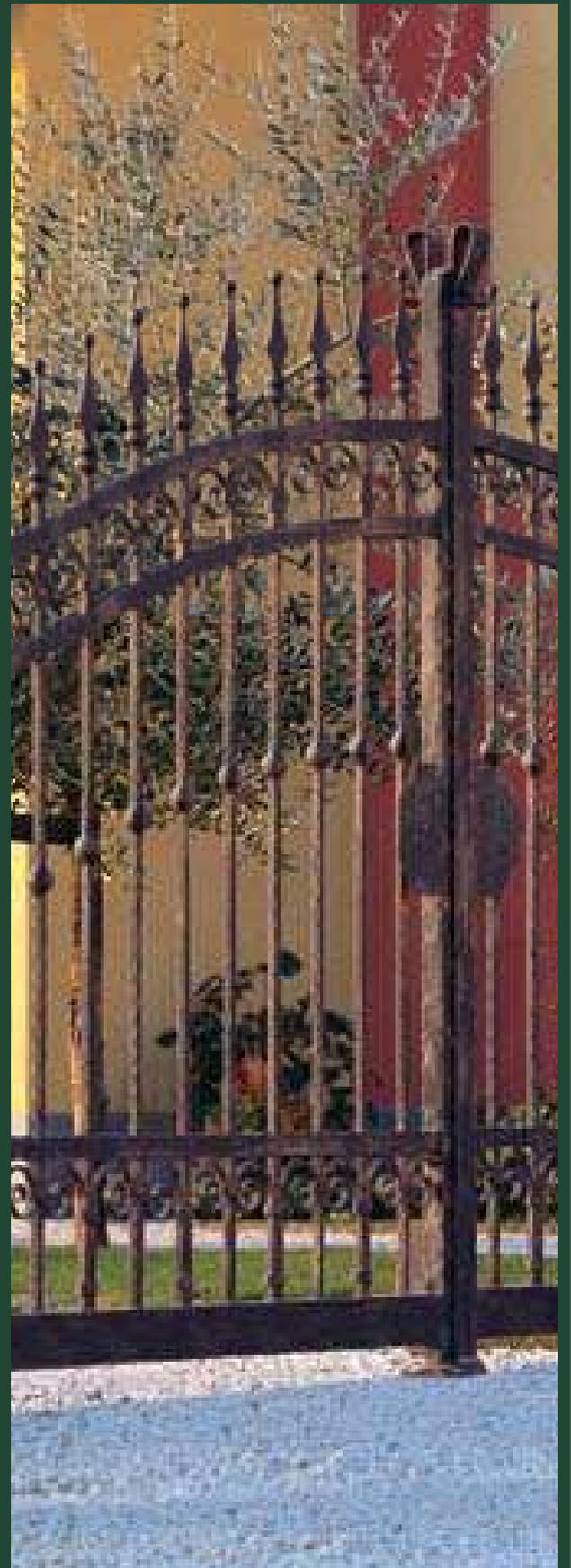
● without electric lock

● without electric lock

● with electric lock

● with electric lock

**PHOBOS BT L KIT**



# PHOBOS SERIES

## ELECTROMECHANICAL OPERATOR FOR SWING GATES

42



### • SMART TECHNOLOGY.

- Magnetic limit switches and release, efficient even at low temperatures (**PHOBOS N and PHOBOS N BT**).
- Only 18 seconds for 90° opening (**PHOBOS N and PHOBOS N BT**)
- Control unit compatible with the EELink protocol.

### • SAFE USE.

- The version powered at 24V has been specially designed for simpler and faster installation in compliance with the safety standards laid down by the Machinery Directive.

→ Thanks to the antisquashing system, the operator inverts motion and prevents damage to people and property in the event of contact (**PHOBOS N BT, PHOBOS N BT NET, PHOBOS L BT, PHOBOS NL BT**).

### • SIMPLER INSTALLATION.

- BFT's system of coded limit switches makes it possible to reduce the complexity of wiring the low-voltage motors: a single wire is carried to the control panel instead of the three normally required, thereby increasing the simplicity and speed of installation. Furthermore, the system is able

to automatically distinguish between the open limit switch and the closed one and hence prevent wasted time and wiring errors.

- The operator is supplied without cable to reduce the installation times (**PHOBOS N and PHOBOS N BT**)

### • FAST NET SYSTEM.

- Simplified 2-wire system (**PHOBOS N BT NET**)

CODE	DESCRIPTION	KIT	VOLTAGE	LEAF WEIGHT	LEAF LENGTH	Q.TY PER PALLET
P935066 00004	PHOBOS N BT		24 V	up to 250 kg	up to 1,80 m	48
R935247 00002	PHOBOS N BT KIT	●	24 V	up to 250 kg	up to 1,80 m	16
R935249 00002	PHOBOS N BT NET KIT	●	24 V	up to 250 kg	up to 1,80 m	16
P935074 00003	PHOBOS N L BT		24 V	up to 250 kg	up to 5 m (with electric lock)*	48
R935243 00002	PHOBOS BT L KIT **		24 V	up to 250 kg	up to 5 m (with electric lock)*	16
P935067 00004	PHOBOS N	●	230 V	up to 250 kg	up to 1,80 m	48
R935248 00002	PHOBOS N KIT		230 V	up to 250 kg	up to 1,80 m	16
P935073 00003	PHOBOS N L		230 V	up to 250 kg	up to 5 m (with electric lock)*	48
P935073 00002	PHOBOS L **		230 V	up to 250 kg	up to 5 m (with electric lock)*	24

FAST NET DESCRIPTION on page 20 | KIT COMPOSITION on page 24

\*\* Available while stock last | \* 3 m (without electric lock)

## TECHNICAL FEATURES

### FEATURES OF THE RANGE

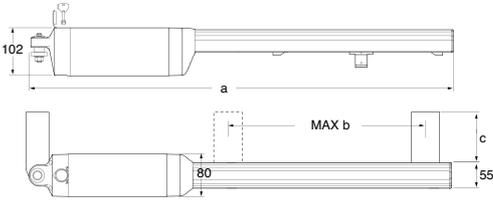
### SPECIFIC FEATURES

	* PHOBOS N BT PHOBOS N BT NET	PHOBOS NL BT	PHOBOS BT L	PHOBOS N	PHOBOS NL	PHOBOS L
CONTROL PANEL	LIBRA C MA/ NETTUNO B	LIBRA C MA	LIBRA C MA	ALTAIR P (suggested)	ALTAIR P (suggested)	ALTAIR P (suggested)
OPERATOR	irreversible					
POWER SUPPLY	24 Vdc	24 Vdc	24 Vdc	230 V- ± 10%, 50 Hz single-phase	230 V- ± 10%, 50 Hz single-phase	230 V- ± 10%, 50 Hz single-phase
ABSORBED POWER	40 W	40 W	40 W	210 W	210 W	210 W
THERMAL PROTECTION	built into control unit	built into control unit	built into control unit	built into motor	built into motor	built into motor
ROD WORKING STROKE	305 mm	410 mm	410 mm	305 mm	470 mm	470 mm
ROD SPEED	20 mm/s	20 mm/s	14 mm/s	20 mm/s	20 mm/sec	13 mm/sec
OPENING OR CLOSING TIME	15 s	18s	26s	15 s	18s	22s
IMPACT REACTION	stops and movement is reversed	stops and movement is reversed	stops and movement is reversed	torque limiter on control unit	torque limiter on control unit	torque limiter on control unit
TYPE OF LOCK	mechanical on opening/closing					
MANUAL RELEASE	release key CLS					
OPERATING CYCLE	intensive use	intensive use	intensive use	semi intensive use	semi intensive use	semi intensive use
ENVIRONMENTAL CONDITIONS	from -20°C to + 50°C	from -10°C to + 50°C	from -10°C to + 50°C	from -20°C to + 50°C	from -10°C to + 50°C	from -10°C to + 50°C
DEGREE OF PROTECTION	IPX4					
OPERATOR WEIGHT	~5 kg	~5 kg	~5 kg	~5 kg	~7,7 kg	~7,7 kg

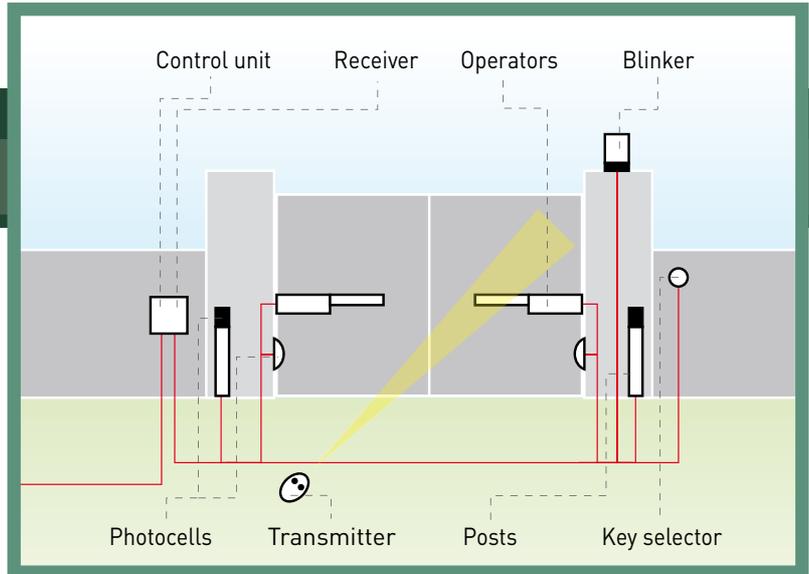
\*PHOBOS N BT - Unità di controllo LIBRA C MA | PHOBOS N BT NET- Unità di controllo NETTUNO B



DIMENSIONS (mm)



mm	N BT	NL BT	BT L	N	NL	L
a	825	943	915	825	943	915
max b	295	410	410	305	470	446
c	68	108	108	72,5	108	108



ACCESSORIES



**D113672 00005**  
**LIBRA C MA**  
See page 141



**D113703 00002**  
**ALTAIR P**  
See page 140



**P125005 - BT BAT**  
Thanks to the back-up batteries and battery charger, the BT BAT kit guarantees low voltage operation of the leaf in the event of power failure (LIBRA C MA, LIBRA C LX, HYDRA R).



**P111408 - SCS WIE**  
Circuit board for direct connection of wiegand accessories (such as SELETTO, COMPAS SLIM, etc) to the control units

QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**P111376 - SCS 1**  
Serial connection board for QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**D111013 - ME**  
12 Vac electric lock board.



**D111761 - ME BT**  
12/24 Vac electric lock board for BT operators.



**P123001 00001 - EBP**  
230 Vac electric lock with zero stop resistance. Also available in 50 mm, 75 mm versions and at 24V.



**D121017 - ECB LEFT**  
Left-hand horizontal electric lock, 12V. Also available in right-hand and vertical versions. See page 153.



**N733286 - SFR**  
Adjustable back fixing bracket for PHOBOS N/ PHOBOS N BT.



**N733347 - SFR L**  
Adjustable back fixing bracket for PHOBOS L / PHOBOS BT L, PHOBOS NL/PHOBOS NL BT.



**N999405 - CABLE N**  
Power supply cable for PHOBOS N / PHOBOS NL. Rolls of 100 m.



**N999404 - CABLE N BT**  
Power supply cable for PHOBOS N BT / PHOBOS NL BT. Rolls of 100 m.



**D730567 - PPE**  
Anchor plate used to weld PHOBOS model brackets



**D610180 - CLS**  
Release key for LUX B, ORO, SUB, PHOBOS N and PHOBOS N BT models (10-piece pack).

# VIRGO

## ELECTROMECHANICAL OPERATOR FOR SWING GATES

44



### • A MODEL FOR EVERY NEED.

→ Great versatility thanks to the levers that also permit installation on pillars of big dimensions and opening up to 120°.

### • SMART TECHNOLOGY.

→ Incorporated mechanical stops and adjustable electric limit switches.

→ Separate programming of the two motors.

→ Control unit with self-learning and self-diagnostic functions.

→ If the motor with the control unit is on the side opposite the one the wires arrive at, the ""motor logic inversion"" functions makes it possible to avoid further wiring.

→ Control unit compatible with the EELink protocol.

### • SAFE USE.

→ Specially designed for simpler and faster installation in compliance with the safety standards laid down by the Machinery Directive.

→ Thanks to the antisquashing system, the operator inverts motion and prevents damage to people and property in the event of contact.

### • SIMPLER INSTALLATION.

→ Incorporated control unit positioned frontally for easier accessibility.

→ Control unit with programming by LCD display.

→ Ease of fixing to the pillar without welding.

CODE	DESCRIPTION	KIT	VOLTAGE	LEAF WEIGHT	LEAF LENGTH	Q.TY PER PALLET
P930116 00002	VIRGO		24 V	up to 200 kg	up to 2 m	18
P930117 00002	VIRGO SQ*		24 V	up to 200 kg	up to 2 m	18
R930130 00002	VIRGO KIT	●	24 V	up to 200 kg	up to 2 m	18

**KIT COMPOSITION on page 24**

\* Automation without control panel

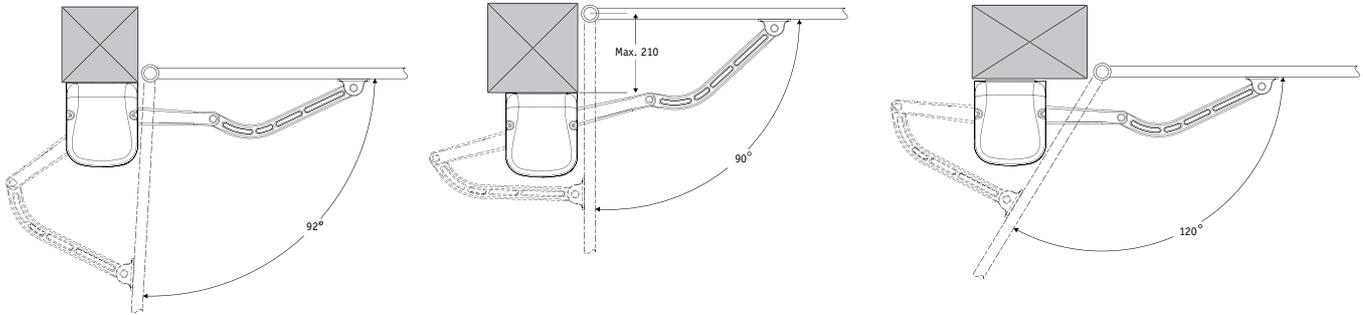
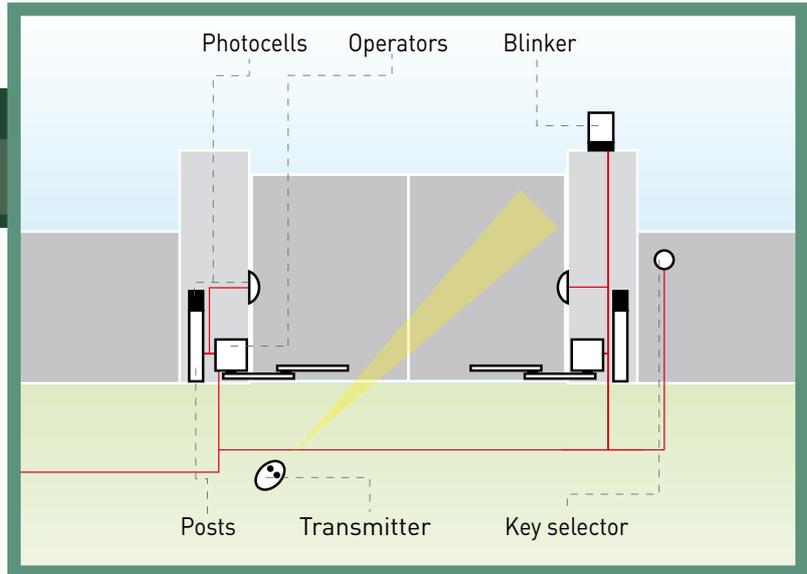
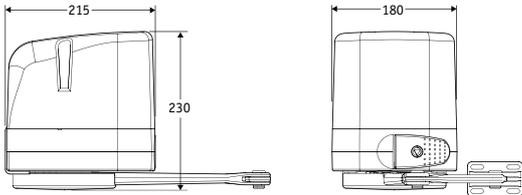
### TECHNICAL FEATURES

#### VIRGO

CONTROL PANEL	LINX (incorporated)
OPERATOR	irreversible
POWER SUPPLY	230 V- ± 10%, 50 Hz single-phase
ABSORBED POWER	40 W
THERMAL PROTECTION	built into control unit
OPENING OR CLOSING TIME	14 s
IMPACT REACTION	stops and movement is reversed
TYPE OF LOCK	mechanical on closing and opening
MANUAL RELEASE	release lever with CLS key
OPERATING CYCLE	intensive use
ENVIRONMENTAL CONDITIONS	from -15°C to + 50°C
DEGREE OF PROTECTION	IP44
OPERATOR WEIGHT	VIRGO ~8 kg - VIRGO SQ ~6 kg



DIMENSIONS (mm)



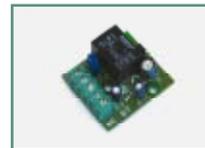
ACCESSORIES



**P125008 - VIRGO BAT**  
The VIRGO BAT device ensures, through its back up batteries and battery charger, low-voltage operations when there is no power supply (LINX).



**D121017 - ECB LEFT**  
Left-hand horizontal electric lock, 12V. Also available in right-hand and vertical versions. See page 153.



**D111761 - ME BT**  
12/24 Vac electric lock board for BT operators.



**N574005 - SIBOX**  
Empty safe for external release and control push-button panel.  
Dimensions:  
179.5x122x92 mm.



**N733036 - MOX**  
External release mechanism for SIBOX model.



**N733103 00002 POX-SC**  
Push-button panel with two buttons and pilot light for direct connection when the operator is regulated by an electrical control panel.

# IGEA SERIES

## ELECTROMECHANICAL OPERATOR FOR SWING GATES

46



### • A MODEL FOR EVERY NEED.

→ Great versatility thanks to the levers that also permit installation on pillars of big dimensions and opening up to 125°.

### • SMART TECHNOLOGY.

→ Control unit compatible with the EElink protocol.

### • SAFE USE.

→ The version powered at 24V is specially designed for simpler and faster installation in compliance with the safety standards laid down by the Machinery Directive.

→ Thanks to the antisquashing system, the operator inverts motion and prevents damage to people and property in the event of contact (**IGEA BT**).

### • SIMPLER INSTALLATION.

→ BFT's system of coded limit switches makes it possible to reduce the complexity of wiring the low-voltage motors: a single wire is carried to the control panel instead of the three normally required, thereby increasing the simplicity and speed of installation. Furthermore, the system is able to automatically distinguish between the open limit switch and the closed one and hence prevent wasted time and wiring errors (**IGEA BT**).

CODE	DESCRIPTION	KIT	VOLTAGE	LEAF WEIGHT	LEAF LENGTH	Q.TY PER PALLET
P935070 00002	IGEA BT		24 V	up to 250 kg	up to 2,5 m	20
R935229 00001	IGEA BT KIT	●	24 V	up to 250 kg	up to 2,5 m	12
P935065 00002	IGEA		230 V	up to 250 kg	up to 2,5 m	20

**KIT COMPOSITION on page 24**

## TECHNICAL FEATURES

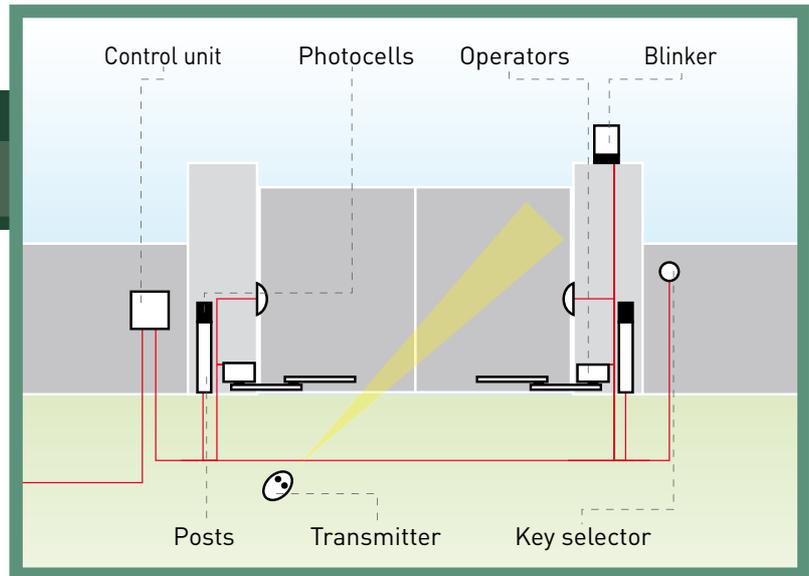
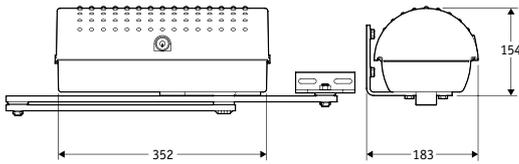
### FEATURES OF THE RANGE

### SPECIFIC FEATURES

		IGEA BT	IGEA
CONTROL PANEL		LIBRA C MA	ALTAIR P (suggested)
OPERATOR	irreversible		
POWER SUPPLY		24 Vdc	230 V~ ± 10%, 50 Hz single-phase
ABSORBED POWER		40 W	300 W
THERMAL PROTECTION		built into control unit	built into motor
OPENING OR CLOSING TIME	15 s		
IMPACT REACTION		stops and movement is reversed	torque limiter on control unit
TYPE OF LOCK	mechanical opening/closing		
MANUAL RELEASE	release knob with personalised key		
OPERATING CYCLE		intensive use	semi intensive use
ENVIRONMENTAL CONDITIONS	from -15°C to + 60°C		
DEGREE OF PROTECTION	IP44		
OPERATOR WEIGHT	~16 kg		



## DIMENSIONS (mm)



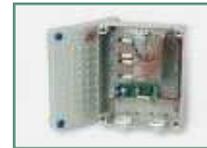
## ACCESSORIES



**D113672 00005**  
**LIBRA C MA**  
See page 141



**D113703 00002**  
**ALTAIR P**  
See page 140



**P125005 - BT BAT**  
Thanks to the back-up batteries and battery charger, the BT BAT kit guarantees low voltage operation of the leaf in the event of power failure (LIBRA C MA, LIBRA C LX, HYDRA R).



**P111408 - SCS WIE**  
Circuit board for direct connection of wiegand accessories (such as SELETTO, COMPAS SLIM, etc) to the control units

QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**P111376 - SCS 1**  
Serial connection board for QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**D111013 - ME**  
12 Vac electric lock board.



**D111761 - ME BT**  
12/24 Vac electric lock board for BT operators.



**D121017 - ECB LEFT**  
Left-hand horizontal electric lock, 12V. Also available in right-hand and vertical versions. See page 153.



**P123001 00001 - EBP**  
230 Vac electric lock with zero stop resistance. Also available in 50 mm, 75 mm versions and at 24V.



**N574005 - SIBOX**  
Empty safe for external release and control push-button panel.  
Dimensions: 179.5x122x92 mm.



**N733036 - MOX**  
External release mechanism for SIBOX model.



**P135005 - LRV**  
Reduced levers (IGEA, IGEA BT).



**D531548 - KI**  
Release key blank for ICARO, URANO BT, IGEA, IGEA BT.



**N733103 00002**  
**POX-SC**  
Push-button panel with two buttons and pilot light for direct connection when the operator is regulated by an electrical control panel.

# E5

## ELECTROMECHANICAL OPERATOR FOR SWING GATES

48



• **A MODEL FOR EVERY NEED.**

→ Multiple installation possibilities thanks to the optional articulated arms (BLE5 or BSE5) which allow the use of the operator on pillars of small dimensions or very tight spaces.

• **SAFE USE.**

→ Antisquashing protection guaranteed by the adjustable mechanical clutch.

CODE	DESCRIPTION	VOLTAGE	LEAF WEIGHT	LEAF LENGTH	Q.TY PER PALLET
P930003 00001	E5	230 V	up to 200 kg	up to 1,8 m	25

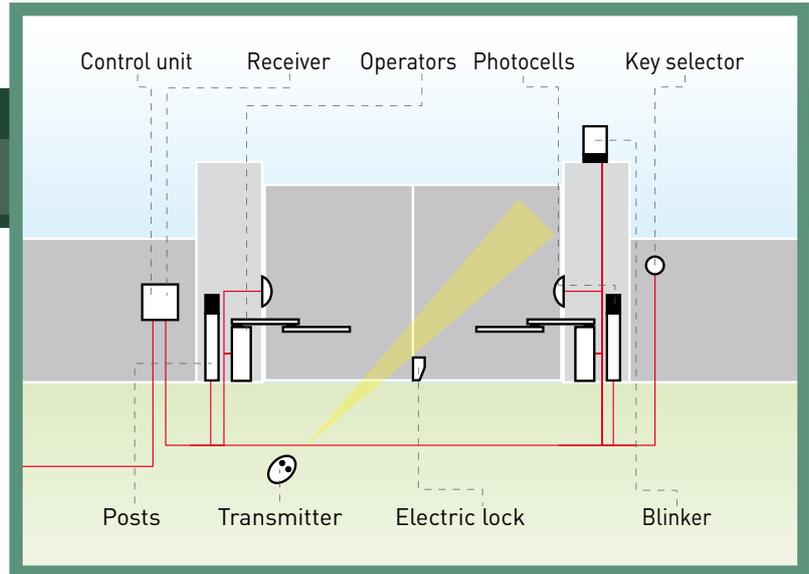
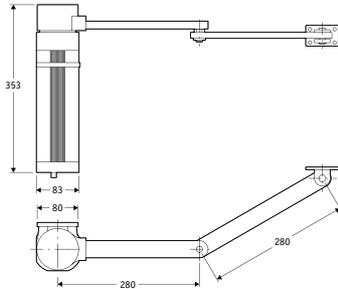
### TECHNICAL FEATURES

**E5**

CONTROL PANEL OPERATOR	ALCOR N (suggested)
OPERATOR	reversible
POWER SUPPLY	230 V- ± 10%, 50 Hz single-phase
ABSORBED POWER	200 W
THERMAL PROTECTION	built into motor
OPENING OR CLOSING TIME	22 s
IMPACT REACTION	mechanical clutch
TYPE OF LOCK	electric lock
MANUAL RELEASE	reversible operator
OPERATING CYCLE	semi intensive use
ENVIRONMENTAL CONDITIONS	from -10°C to + 60°C
DEGREE OF PROTECTION	IP44
OPERATOR WEIGHT	~8 kg



**DIMENSIONS (mm)**



**ACCESSORIES**



**D113706 00002**  
**ALCOR N**  
See page 140



**D113693 00003**  
**RIGEL 5**  
See page 141



**P111408 - SCS WIE**  
Circuit board for direct connection of wiegand accessories (such as SELETTO, COMPAS SLIM, etc) to the control units QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**P111376 - SCS 1**  
Serial connection board for QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**D113050 - SPL**  
Preheating board for 1 or 2 LUX, SUB, ORO, P4, 5-P7, BERMA and E5 operator models. With this accessory the operator is able to work at very low temperature.



**D111704 - SSR5**  
Traffic light and preheating control board for RIGEL 5 control panel. The operator is able to work at -20° with this accessory.



**P123001 00001 - EBP**  
230 Vac electric lock with zero stop resistance. Also available in 50 mm, 75 mm versions and at 24V.



**D111013 - ME**  
12 Vac electric lock board.



**N733008 - BLE 5**  
Complete extended arm.



**N728011 - BSE 5**  
Slide lever.

# ELI 250 SERIES

## ELECTROMECHANICAL OPERATOR FOR SWING GATES

50



ELI 250 + BTCF



• **SMART TECHNOLOGY.**

→ The incorporated magnetic limit switches allow positioning precision and constancy, remain unchanged with variations in climatic conditions and are not subject to wear (**ELI 250 BT**).

→ Control unit compatible with the EELink protocol.

→ Shorter times for the opening and closing operations (**ELI 250 BT and ELI 250 V**).

• **SAFE USE.**

→ The version powered at 24V is specially designed for simpler and faster installation in

compliance with the safety standards laid down by the Machinery Directive.

→ Thanks to the antisquashing system, the operator inverts motion and prevents damage to people and property in the event of contact (**ELI 250 BT**).

• **SIMPLER INSTALLATION**

→ The special foundation case makes it possible to extract the operator without removing the gate leaf.

CODE	DESCRIPTION	VOLTAGE	LEAF WEIGHT	LEAF LENGTH	Q.TY PER PALLET
P930118 00001	ELI 250 BT	24 V	up to 400 Kg	up to 3,5 m (with electric lock )*	25
P930114 00001	ELI 250	230 V	up to 300 Kg	up to 3,5 m (with electric lock )*	25
P930114 00003	ELI 250-V	230 V	up to 150 Kg	up to 2 m	25

\* 2,5 m (without electric lock)

### TECHNICAL FEATURES

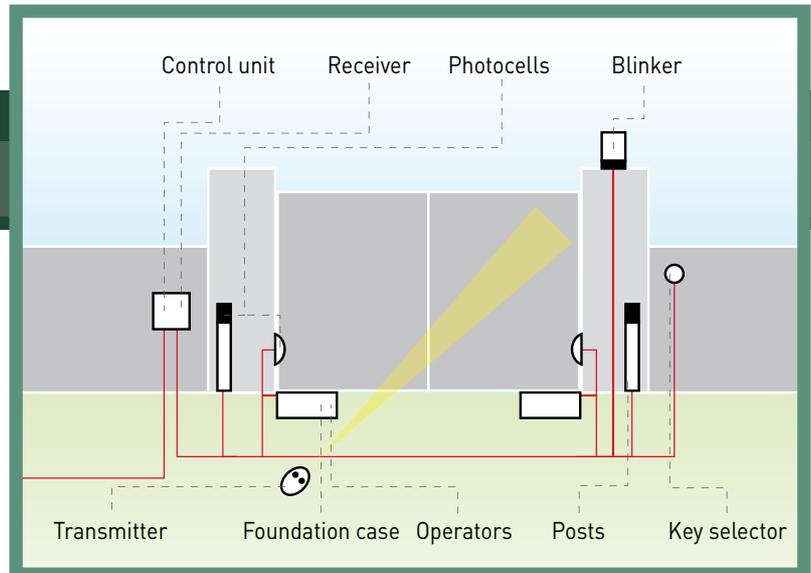
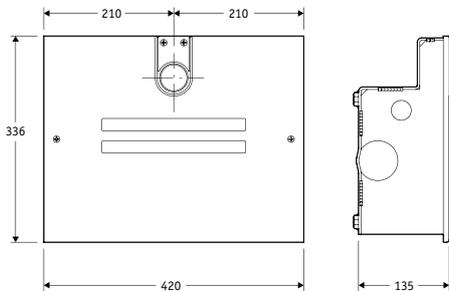
#### FEATURES OF THE RANGE

#### SPECIFIC FEATURES

	ELI 250 BT	ELI 250	ELI 250 V
CONTROL PANEL	LIBRA C MA	ALTAIR P (suggested)	ALTAIR P (suggested)
OPERATOR	irreversible		
POWER SUPPLY	24 Vdc	230 V~ ± 10%, 50 Hz single-phase	230 V~ ± 10%, 50 Hz single-phase
ABSORBED POWER	175 W	280 W	280 W
THERMAL PROTECTION	built into control unit	built into motor	built into motor
OPENING ANGLE	from -10° to +110°		
OPENING OR CLOSING TIME	15 s /120°	28 s / 120°	14 s / 120°
IMPACT REACTION	stops and movement is reversed	torque limiter on control unit	torque limiter on control unit
TYPE OF LOCK	mechanical		
MANUAL RELEASE	release key		
OPERATING CYCLE	intensive use	semi intensive use	semi intensive use
ENVIRONMENTAL CONDITIONS	from -20°C to + 50°C		
DEGREE OF PROTECTION	IP67		
OPERATOR WEIGHT	~10 kg		



## DIMENSIONS (mm)



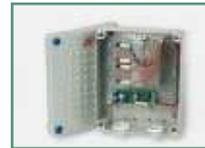
## ACCESSORIES



**D113672 00005  
LIBRA C MA**  
See page 141



**D113703 00002  
ALTAIR P**  
See page 140



**P125005 - BT BAT**  
Thanks to the back-up batteries and battery charger, the BT BAT kit guarantees low voltage operation of the leaf in the event of power failure (LIBRA C MA, LIBRA C LX, HYDRA R).



**P111408 - SCS WIE**  
Circuit board for direct connection of wiegand accessories (such as SELETTTO, COMPAS SLIM, etc) to the control units QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**N733397 - BTCF 120 E**  
Universal foundation case for ELI 250 BT, ELI 250, ELI 250 V with levers. Without release.



**N733398  
BTCF 120 E INOX**  
Foundation case in stainless steel with levers. Without release.



**N733189 - SCT**  
Release for ELI250 with triangular spanner.



**N733392 - SCC**  
Release for ELI250 with lever spanner.



**N733345 - CFE**  
Stop pack ELI 250.



**N733368 - CFE BT**  
Stop pack ELI 250 BT.



**N733304 - E180**  
180° opening kit for underground operator ELI 250, ELI 250 V.



**P123001 00001 - EBP**  
230 Vac electric lock with zero stop resistance. Also available in 50 mm, 75 mm versions and at 24V.



**D121017 - ECB LEFT**  
Left-hand horizontal electric lock, 12V. Also available in right-hand and vertical versions. See page 153.



**D111761 - ME BT**  
12/24 Vac electric lock board for BT operators.



**D111013 - ME**  
12 Vac electric lock board.



**N733250 - BTCF 120**  
Universal foundation case for ELI 250 with levers.  
**Available while stock last.**



**N733266 - BTCF 120  
INOX**  
Foundation case in stainless steel with levers.  
**Available while stock last.**



BFT hydrodynamic operators for swing gates ensure the maximum reliability and durability over time. Their high frequency of use makes them particularly suitable for apartment block contexts. Moreover, all the maintenance operations are particularly simple, fast and intuitive.

# HYDRODYNAMIC SOLUTIONS FOR THE AUTOMATION OF SWING GATES

ORO | LUX and LUX BT | P7 and P4,5 | SUB



# HYDRAULIC SWING GATES

LEGEND

- SEMI INTENSIVE USE ●
- INTENSIVE USE ●
- VERY INTENSIVE USE ●



LEAF LENGTH	LEAF WEIGHT	ORO	LUX BT	LUX
1,8 m	180 kg	● ORO		
2 m	300 kg		● LUX BT - LUX BT 2B	● LUX - LUX B - LUX 2B LUX R2BSN2
2,3 m	300 kg			● LUX MB
2,5 m	200 kg	● ORO E		
4 m	500 kg			● LUX L
4,5 m	500 kg			
5 m	800 kg			● LUX G
7 m	500 kg			
KIT		ORO KIT		

## UNDERGROUND SWING GATES



LEAF LENGTH	LEAF WEIGHT	SUB SC	SUB R SC	SUB G SC
1,8 m	800 kg	●	●	●
2,5 m				
3,5 m				



P4,5	P7
●	
	●



SUB ER SC	SUB EL SC
●	
	●



# ORO SERIES

HYDRAULIC OPERATOR FOR SWING GATES

56



**• A MODEL FOR EVERY NEED.**

→ Versions are available that are irreversible when closing (**ORO model**) and reversible (**ORO E model**).

**• SAFE USE.**

→ Antisquashing protection guaranteed by two adjustable bypass valves.

CODE	DESCRIPTION	KIT	VOLTAGE	LEAF WEIGHT	LEAF LENGTH	Q.TY PER PALLET
P935059 00001	<b>ORO</b>		230 V	up to 180 Kg	up to 1,8 m	<b>25</b>
R935222 00002	<b>ORO KIT</b>	●	230 V	up to 180 Kg	up to 1,8 m	<b>10</b>
P935058 00001	<b>ORO E</b>		230 V	up to 200 Kg	up to 2,5 m	<b>25</b>

**KIT COMPOSITION on page 24**

## TECHNICAL FEATURES

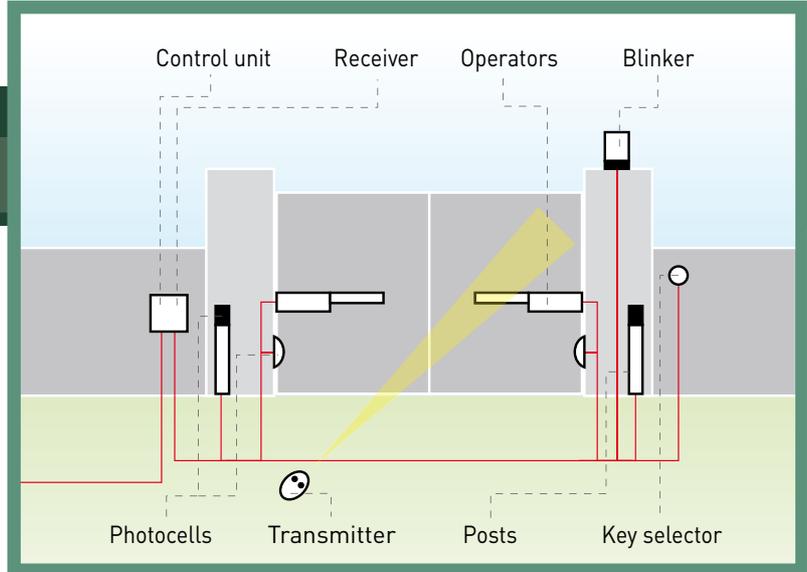
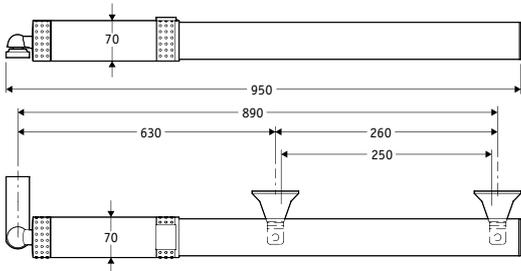
### FEATURES OF THE RANGE

### SPECIFIC FEATURES

		ORO	ORO E
CONTROL PANEL	ALCOR N (suggested)		
OPERATOR		irreversible	reversible
POWER SUPPLY	230 V~ ± 10%, 50 Hz single-phase		
ABSORBED POWER	240 W		
THERMAL PROTECTION	built into motor		
ROD WORKING STROKE	250 mm		
ROD SPEED		12 mm/s	8 mm/s
OPENING AND CLOSING TIME		20 s	27 s
IMPACT REACTION	hydraulic clutch		
TYPE OF LOCK		hydraulic on closing	electric lock
MANUAL RELEASE		release key CLS	reversible
OPERATING CYCLE	semi intensive use		
ENVIRONMENTAL CONDITIONS	from -10°C to + 60°C		
DEGREE OF PROTECTION	IP55		
OPERATOR WEIGHT	~5,3 kg		



DIMENSIONS (mm)



ACCESSORIES



**D113706 00002  
ALCOR N**  
See page 140



**D113693 00003  
RIGEL 5**  
See page 141



**P111408 - SCS WIE**  
Circuit board for direct connection of wiegand accessories (such as SELETTTO, COMPAS SLIM, etc) to the control units QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**D113050 - SPL**  
Preheating board for 1 or 2 LUX, SUB, ORO, P4,5-P7, BERMA and E5 operator models. With this accessory the operator is able to work at very low temperature.



**D111704 - SSR5**  
Traffic light and preheating control board for RIGEL 5 control panel. The operator is able to work at -20° with this accessory.



**D111013 - ME**  
12 Vac electric lock board.



**D121017 - ECB LEFT**  
Left-hand horizontal electric lock, 12V. Also available in right-hand and vertical versions. See page 153.



**P123001 00001 - EBP**  
230 Vac electric lock with zero stop resistance. Also available in 50 mm, 75 mm versions and at 24V.



**N999131 - NAT**  
Adapter for inserting the cable spiral protection sheath.



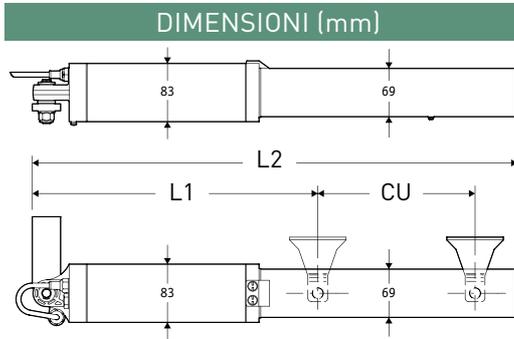
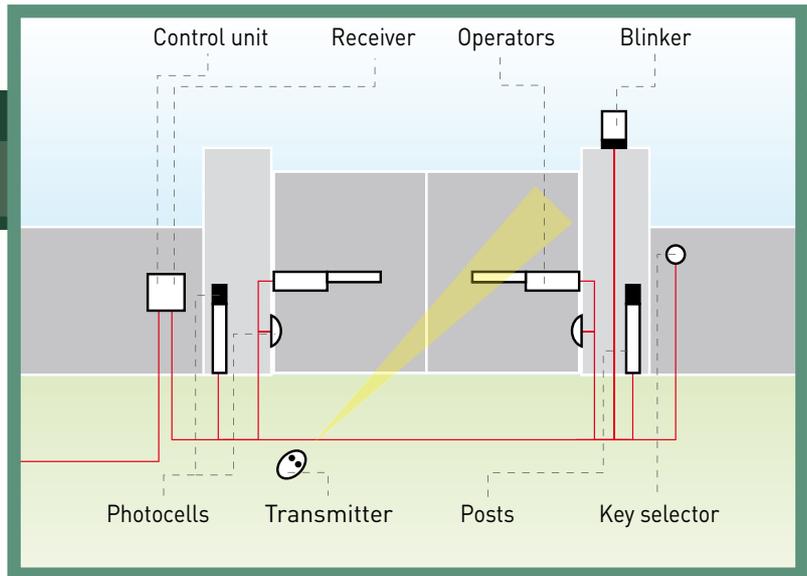
**D730178 - PLE**  
Anchor plate used to weld brackets to masonry pillars.



**D610180 - CLS**  
Release key for LUX B, ORO, SUB, PHOBOS N and PHOBOS N BT models (10-piece pack).

**NEW 2009**





	L1	CU	L2
LUX / LUX B / LUX 2B / LUX MB / LUX L	715	270	1025
LUX G / LUX FC 2B	850	390	1300
LUX R2BSN2	710	250	1050

ACCESSORIES



**D113706 00002**  
**ALCOR N**  
See page 140



**D113693 00003**  
**RIGEL 5**  
See page 141



**P111408 - SCS WIE**  
Circuit board for direct connection of wiegand accessories (such as SELETTO, COMPAS SLIM, etc) to the control units QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**P111376 - SCS 1**  
Serial connection board for QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**D113050 - SPL**  
Preheating board for 1 or 2 LUX, SUB, ORO, P4,5-P7, BERMA and E5 operator models. With this accessory the operator is able to work at very low temperature.



**D111704 - SSR5**  
Traffic light and preheating control board for RIGEL 5 control panel. The operator is able to work at -20° with this accessory.



**D111013 - ME**  
12 Vac electric lock board.



**D121017 - ECB LEFT**  
Left-hand horizontal electric lock, 12V. Also available in right-hand and vertical versions. See page 153.



**P123001 00001 - EBP**  
230 Vac electric lock with zero stop resistance. Also available in 50 mm, 75 mm versions and at 24V.



**D730178 - PLE**  
Anchor plate used to weld brackets to masonry pillars.



**N728003 - IDROLUX R**  
Red hydraulic oil, 2 Lt can. Always fill up with oil of the same colour.



**D610180 - CLS**  
Release key for LUX B, ORO, SUB, PHOBOS N and PHOBOS N BT models (10-piece pack).

# LUX BT SERIES

HYDRAULIC OPERATOR FOR SWING GATES

60



**Dynamic TRAVEL**

• **A MODEL FOR EVERY NEED.**

→ Comes in two versions:

**LUX BT 2B** with hydraulic locking that can be selected to produce an operator:

- reversible
- locks closed
- locks open
- locks closed and open

**LUX BT** reversible only (using solenoid lock).

• **SMART TECHNOLOGY.**

→ Management of limit switch stops using absolute encoder

→ Slowing on opening and closing managed by the control unit

Control unit with self-learning and self-diagnosis functions.

→ Control unit compatible with the protocol EELink.

• **SAFE TO USE.**

→ Specially designed for easier and faster installation, conforms to the safety requisites dictated by the Machinery Directive.

→ Thanks to the anti-crushing system, in the event of contact the system inverts the direction of movement, thus preventing injury and damage to persons or things).

• **EASIER INSTALLATION.**

→ Control unit programmable using the LCD display.

CODE	DESCRIPTION	VOLTAGE	LEAF WEIGHT	LEAF LENGTH	Q.TY PER PALLET
P935080 00001	LUX BT	24 V	up to 300 kg	up to 2 m	21
P935079 00001	LUX BT 2B (with 2 locks)	24 V	up to 300 kg	up to 2 m	21

## TECHNICAL FEATURES

### FEATURES OF THE RANGE

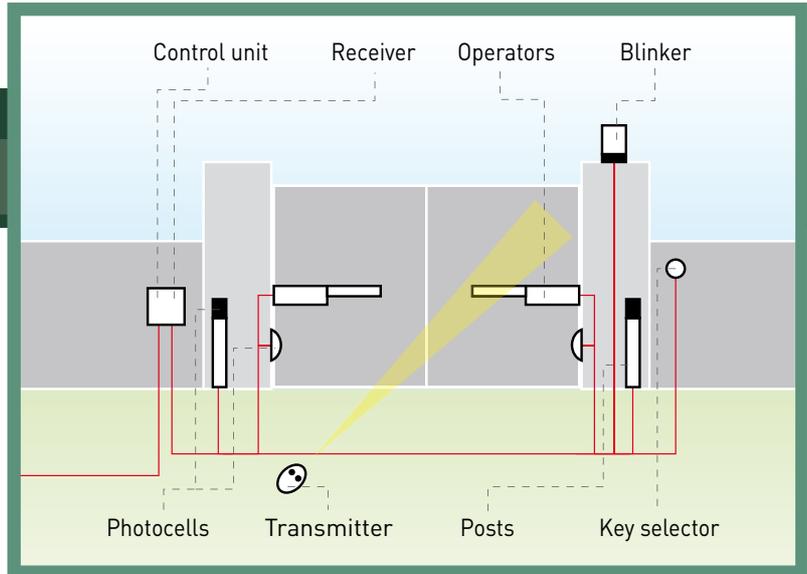
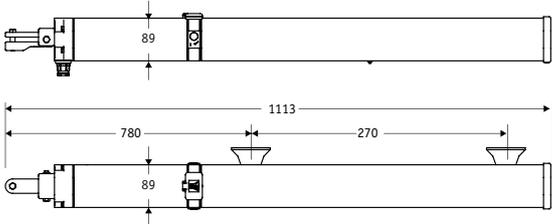
### SPECIFIC FEATURES

		LUX BT	LUX BT 2B
CONTROL PANEL	LIBRA C LX		
OPERATOR		reversible	reversible / irreversible*
POWER SUPPLY	24 Vdc		
ABSORBED POWER	300 W		
THERMAL PROTECTION	built into control unit		
ROD WORKING STROKE	270 mm		
ROD SPEED	14 mm/s		
OPENING AND CLOSING TIME	17 s		
SLOWDOWN	opening/closing		
IMPACT REACTION	Stop and reverse on encountering obstacle with dynamic torque control curve		
TYPE OF LOCK		electric lock	hydraulic opening/closing
MANUAL RELEASE		reversible	release key
OPERATING CYCLE	very intensive use		
ENVIRONMENTAL CONDITIONS	from -20°C to + 60°		
DEGREE OF PROTECTION	IP55		
OPERATOR WEIGHT	~8,7 kg		

\*Option of selecting desired locking type on operator



DIMENSIONS (mm)



ACCESSORIES



**D113715 00002  
LIBRA C LX**  
See page 141



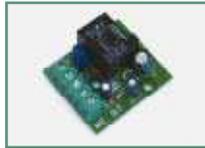
**P125005 - BT BAT**  
Thanks to the back-up batteries and battery charger, the BT BAT kit guarantees low voltage operation of the leaf in the event of power failure (LIBRA C MA, LIBRA C LX, HYDRA R).



**P111408 - SCS WIE**  
Circuit board for direct connection of wiegand accessories (such as SELETTO, COMPAS SLIM, etc) to the control units QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**P111376 - SCS 1**  
Serial connection board for QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**D111761 - ME BT**  
12/24 Vac electric lock board for BT operators.



**D121017 - ECB LEFT**  
Left-hand horizontal electric lock, 12V. Also available in right-hand and vertical versions. See page 153.



**P123001 00013 - EBP 24**  
24Vac electric lock with 230/24V transformer to be inserted in the control panel



**N999417  
CABLE LX BT**  
Power supply cable for LUX BT. Rolls of 100 m.



**N999443 - PL LX BT**  
Anchor plate used to weld brackets to masonry pillars for LUX BT.

# P7 - P4,5

## HYDRAULIC OPERATOR FOR SWING GATES

62



• **A MODEL FOR EVERY NEED.**

→ Two versions available, one for gates with leaves up to 4.5 m and one for leaves up to 7 m.

• **SAFE USE.**

→ Antisquashing protection guaranteed by two adjustable bypass valves.

• **SMART TECHNOLOGY.**

→ Adjustable slowdown when closing.  
→ Customized release key.

CODE	DESCRIPTION	VOLTAGE	LEAF WEIGHT	LEAF LENGTH	Q.TY PER PALLET
P935061 00001	P4,5	230 V	up to 500 Kg	up to 4,5 m	20
P935060 00001	P7	230 V	up to 500 Kg	up to 7 m	20

### TECHNICAL FEATURES

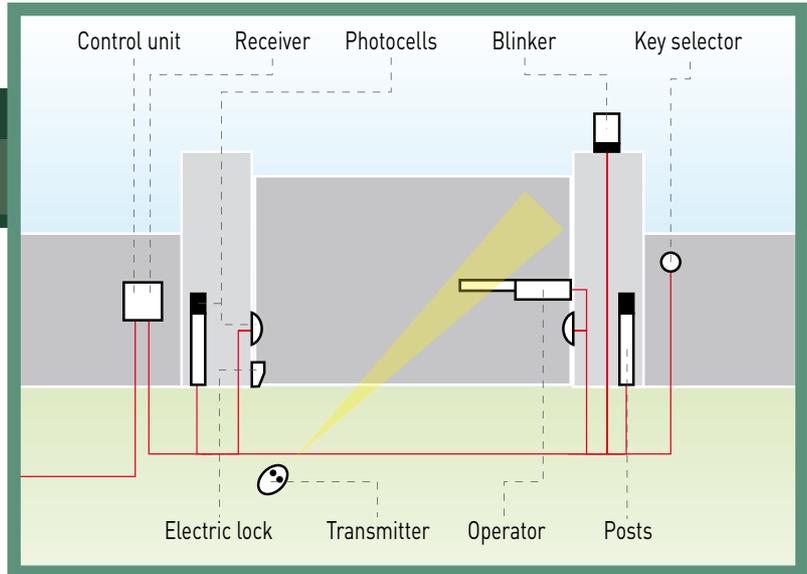
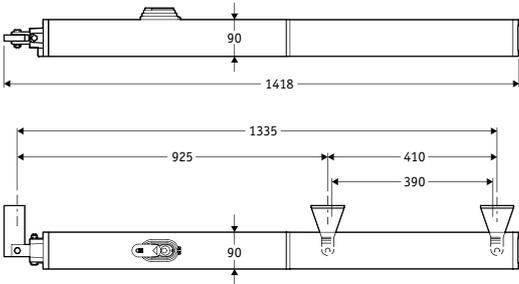
#### FEATURES OF THE RANGE

#### SPECIFIC FEATURES

		P4,5	P7
CONTROL PANEL	ALCOR N (suggested)		
OPERATOR	reversible		
POWER SUPPLY	230 V~ ± 10%, 50 Hz single-phase		
ABSORBED POWER	250 W		
THERMAL PROTECTION	built into motor		
ROD WORKING STROKE	390 mm		
ROD SPEED		14 mm/s	8,3 mm/s
OPENING TIME		30 s	45 s
CLOSING TIME		28 s + slowdown	42 s + slowdown
SLOWDOWN	hydraulic on closing		
IMPACT REACTION	hydraulic clutch		
TYPE OF LOCK	electric lock		
MANUAL RELEASE	reversible + release knob		
OPERATING CYCLE	very intensive use		
ENVIRONMENTAL CONDITIONS	from -10°C to + 60°C		
DEGREE OF PROTECTION	IP55		
OPERATOR WEIGHT	~12,25 kg		



DIMENSIONS (mm)



ACCESSORIES



**D113706 00002**  
**ALCOR N**  
See page 140



**D113693 00003**  
**RIGEL 5**  
See page 141



**P111408 - SCS WIE**  
Circuit board for direct connection of wiegand accessories (such as SELETTO, COMPAS SLIM, etc) to the control units QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**P111376 - SCS 1**  
Serial connection board for QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**D113050 - SPL**  
Preheating board for 1 or 2 LUX, SUB, ORO, P4,5-P7, BERMA and E5 operator models. With this accessory the operator is able to work at very low temperature.



**D111704 - SSR5**  
Traffic light and preheating control board for RIGEL 5 control panel. The operator is able to work at -20° with this accessory.



**D111013 - ME**  
12 Vac electric lock board.



**D121017 - ECB LEFT**  
Left-hand horizontal electric lock, 12V. Also available in right-hand and vertical versions. See page 153.



**P123001 00001 - EBP**  
230 Vac electric lock with zero stop resistance. Also available in 50 mm, 75 mm versions and at 24V.

**NEW 2009**

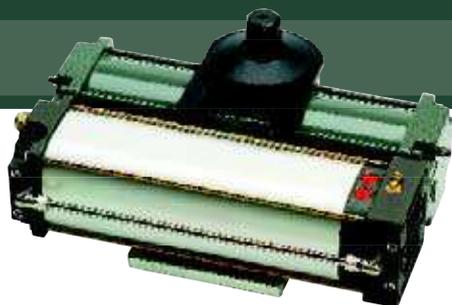


**N999131 - NAT**  
Adapter for inserting the cable spiral protection sheath.

# SUB SERIES

## HYDRAULIC OPERATOR FOR SWING GATES

64



### • A MODEL FOR EVERY NEED.

→ Several versions available: irreversible with hydraulic locking (for holding when closed and open) and reversible (with use of an electric lock).

### • SAFE USE.

→ Antisquashing protection guaranteed by two adjustable bypass valves.

### • SIMPLER INSTALLATION.

→ The special foundation case makes it possible to remove the operator without taking off the gate leaf.

CODE	DESCRIPTION	VOLTAGE	LEAF WEIGHT	LEAF LENGTH	Q.TY PER PALLET
P930026 00001	SUB SC RIGHT	230 V	up to 800 kg	up to 1,80 m	24
P930026 00002	SUB SC LEFT	230 V	up to 800 kg	up to 1,80 m	24
P930012 00005	SUB R SC RIGHT	230 V	up to 800 kg	up to 1,80 m	24
P930012 00006	SUB R SC LEFT	230 V	up to 800 kg	up to 1,80 m	24
P930010 00005	SUB G SC RIGHT	230 V	up to 800 kg	up to 1,80 m	24
P930010 00006	SUB G SC LEFT	230 V	up to 800 kg	up to 1,80 m	24
P930013 00007	SUB E-R SC RIGHT	230 V	up to 800 kg	up to 2,50 m	24
P930013 00008	SUB E-R SC LEFT	230 V	up to 800 kg	up to 2,50 m	24
P930014 00005	SUB E-L SC RIGHT	230 V	up to 800 kg	up to 3,50 m	24
P930014 00006	SUB E-L SC LEFT	230 V	up to 800 kg	up to 3,50 m	24

R slow-down during closing and opening | G large version - opens up to 180° | E reversible | L reduced speed

## TECHNICAL FEATURES

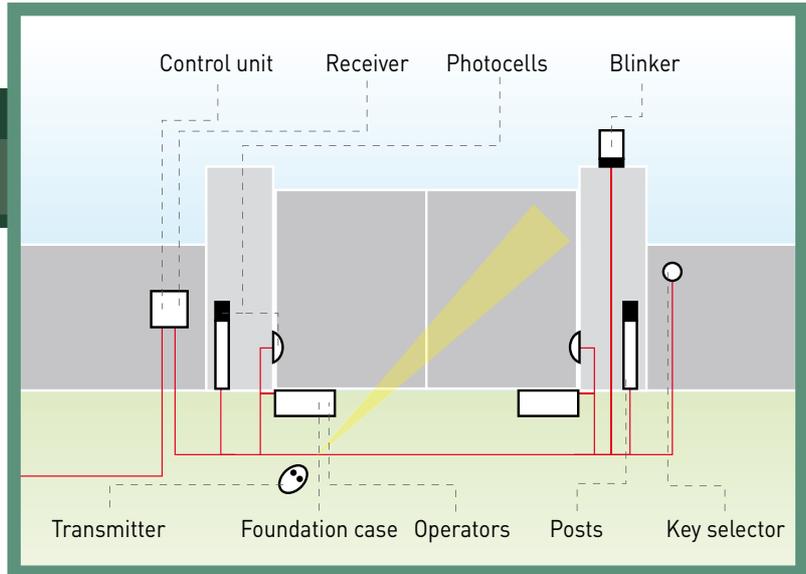
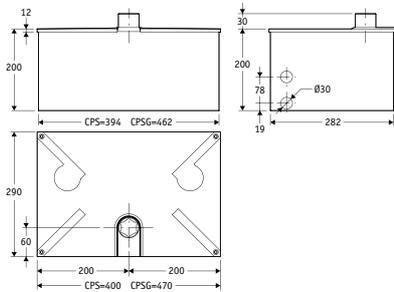
### FEATURES OF THE RANGE

### SPECIFIC FEATURES

		SUB SC	SUB R SC	SUB G SC	SUB ER SC	SUB EL SC
CONTROL PANEL	ALCOR N (suggested)					
OPERATOR		irreversible	irreversible	irreversible	reversible	reversible
POWER SUPPLY	230 V- ± 10%, 50 Hz single-phase					
ABSORBED POWER	250 W					
THERMAL PROTECTION	built into motor					
OPENING ANGLE		130°	130°	180°	130°	130°
OPENING OR CLOSING TIME		24 s	14 s + slowdown	33 s	14 s + slowdown	33 s
SLOWDOWN		-	opening/closing	-	opening/closing	-
IMPACT REACTION	hydraulic clutch					
TYPE OF LOCK		hydraulic opening/closing	hydraulic opening/closing	hydraulic opening/closing	electric lock	electric lock
MANUAL RELEASE		release key	release key	release key	reversible	reversible
OPERATING CYCLE	very intensive use					
ENVIRONMENTAL CONDITIONS	from -10°C to + 60°C					
DEGREE OF PROTECTION	IP67					
OPERATOR WEIGHT		~22 kg	~22 kg	~24 kg	~22 kg	~22 kg



DIMENSIONS (mm)



ACCESSORIES



**D113706 00002**  
**ALCOR N**  
See page 140



**D113693 00003**  
**RIGEL 5**  
See page 141



**P111408 - SCS WIE**  
Circuit board for direct connection of wiegand accessories (such as SELETTTO, COMPAS SLIM, etc) to the control units QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**P111376 - SCS 1**  
Serial connection board for QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**D113050 - SPL**  
Preheating board for 1 or 2 LUX, SUB, ORO, P4,5-P7, BERMA and E5 operator models. With this accessory the operator is able to work at very low temperature.



**D111704 - SSR5**  
Traffic light and preheating control board for RIGEL 5 control panel. The operator is able to work at -20° with this accessory.



**D111013 - ME**  
12 Vac electric lock board.



**P123001 00001 - EBP**  
230 Vac electric lock with zero stop resistance. Also available in 50 mm, 75 mm versions and at 24V.



**D121017 - ECB LEFT**  
Left-hand horizontal electric lock, 12V. Also available in right-hand and vertical versions. See page 153.



**N733066 00003 - FCS right**  
Bearing foundation case for SUB operator fitting. Maintenance can be carried out without disassembling the gate.



**N733066 00004 - FCS left**  
Bearing foundation case for SUB operator fitting. Maintenance can be carried out without disassembling the gate.



**N733092 - CPS G**  
Bearing foundation case for either left hand or right hand SUB G operator fitting. Maintenance can be carried out without disassembling the gate.



**D610256 - CLS/82**  
Release key for SUB model (10-piece pack).



**N728003 - IDROLUX R**  
Red hydraulic oil, 2 Lt can. Always fill up with oil of the same colour.



**N728002 - BSC**  
SUB arm outside hinge.



**N733066 00002 - CPS left**  
Bearing foundation case for SUB operator fitting. Maintenance can be carried out without disassembling the gate. **Available while stock last.**



**N733066 00001 - CPS right**  
Bearing foundation case for SUB operator fitting. Maintenance can be carried out without disassembling the gate. **Available while stock last.**



From small shutters to French windows, BFT offers models made to measure for every need. Everything is oriented towards the creation of a customized system: strong, powerful and reliable motors; a wide range of accessories; simplified assembly, installation and adjustment.

# SOLUTIONS FOR THE AUTOMATION OF ROLLER SHUTTERS

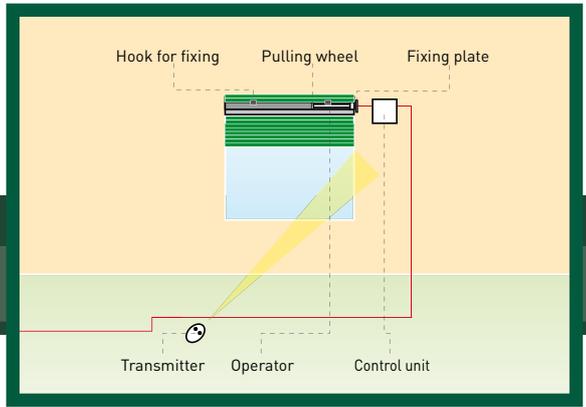
LOOP | LOOP RADIO



# LOOP SERIES

ROLLER SHUTTER AUTOMATION  
RESIDENTIAL AND APARTMENT-BLOCK USE

68



**• A MODEL FOR EVERY NEED.**

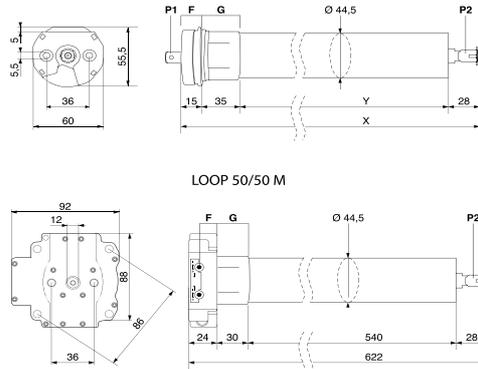
→ Several versions available for shutters of any material (aluminium, steel, PVC, wood) and size (max. weight 88 kg with Loop 50/50, Loop 50/50M and octagonal tube with diameter 60).

**• SMART TECHNOLOGY.**

→ Fast adjustment of the limit switches.

**• SAFE USE.**

→ Compact and robust self-braking gearmotor.



	X	Y
LOOP 50/10	537	459
LOOP 50/15	537	459
LOOP 50/35	582	504
LOOP 50/50	582	504

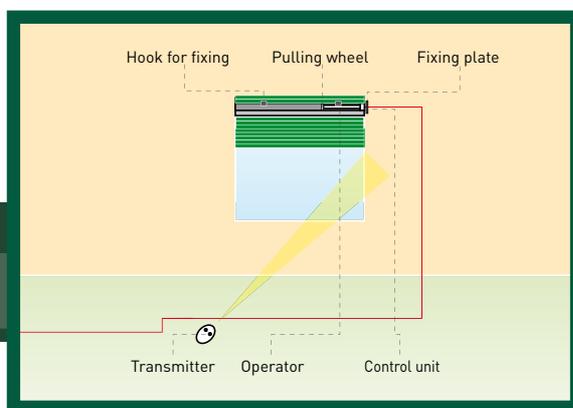
CODE	DESCRIPTION	VOLTAGE	OPERATOR DIAMETER	ROLLER SHUTTER WEIGHT	Q.TY PER PALLET
P910028 00001	LOOP 50/10	230 V	60 mm	18 kg	10
P910028 00002	LOOP 50/15	230 V	60 mm	35 kg	10
P910028 00003	LOOP 50/35	230 V	60 mm	55 kg	10
P910028 00004	LOOP 50/50	230 V	60 mm	88 kg	10
P910029 00001	LOOP 50/50M	230 V	60 mm	88 kg	10

## TECHNICAL FEATURES

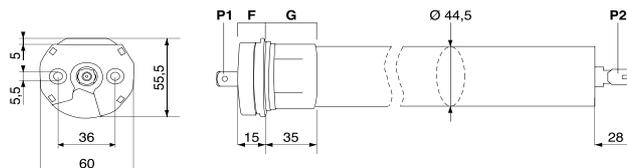
FEATURES OF THE RANGE		SPECIFIC FEATURES				
		LOOP 50/10	LOOP 50/15	LOOP 50/35	LOOP 50/50	LOOP 50/50M
CONTROL PANEL	ELBA, ELBA BU (suggested)					
OPERATOR	irreversible					
POWER SUPPLY	230 V- ± 10%, 50 Hz single-phase					
ABSORBED POWER		130 W	160 W	210 W	270 W	270 W
THERMAL PROTECTION	integrated					
ABSORBED CURRENT		0,5 A	0,5 A	1 A	1,1 A	1,1 A
MAX TORQUE		10 Nm	20 Nm	30 Nm	50 Nm	50 Nm
SHAFT OUTPUT RPM		16 min	16 min	16 min	12 min	12 min
LIMIT SWITCH RPM	28					
TYPE OF LIMIT SWITCHES	mechanical					
WEIGHT UP WITH ROLLER DIAM, 60		18 kg	35 kg	55 kg	88 kg	88 kg
MANUAL RELEASE		-	-	-	-	release with rod
ENVIRONMENTAL CONDITIONS	from -10°C to +40°C					
DEGREE OF PROTECTION	IP44					
OPERATOR WEIGHT		~2,1 kg	~2,2 kg	~2,75 kg	~2,8 kg	~2,8 kg

# LOOP RADIO SERIES

ROLLER SHUTTER AUTOMATION  
RESIDENTIAL AND APARTMENT-BLOCK USE



69



## • ONE MODEL FOR EACH REQUIREMENT.

→ Different versions available for roller shutters of any materials (aluminium, steel, pvc, wood) and dimensions (max weight 88 kg with Loop Radio 50/50 and octagonal pipe with 60 diameter).

## • INTELLIGENT TECHNOLOGY.

→ Electronic limit device.

## • SIMPLER INSTALLATION.

→ Minimum wiring needed.

→ Limit device setting from remote control.

CODE	DESCRIPTION	VOLTAGE	OPERATOR DIAMETER	ROLLER SHUTTER WEIGHT	Q.TY PER PALLET
P910030 00001	LOOP RADIO 50/10	230 V	60 mm	18 kq	10
P910030 00002	LOOP RADIO 50/20	230 V	60 mm	35 kq	10
P910030 00003	LOOP RADIO 50/30	230 V	60 mm	55 kq	10
P910030 00004	LOOP RADIO 50/50	230 V	60 mm	88 kq	10

5

## TECHNICAL FEATURES

### FEATURES OF THE RANGE

### SPECIFIC FEATURES

		LOOP RADIO 50/10	LOOP RADIO 50/20	LOOP RADIO 50/30	LOOP RADIO 50/50
CONTROL PANEL	incorporated				
OPERATOR	irreversible				
POWER SUPPLY	230 V- ± 10%, 50 Hz single-phase				
ABSORBED POWER		130 W	160 W	210 W	270 W
THERMAL PROTECTION	integrated				
ABSORBED CURRENT		0,5 A	0,5 A	1 A	1,1 A
MAX TORQUE		10 Nm	20 Nm	30 Nm	50 Nm
SHAFT OUTPUT RPM		16 min	16 min	16 min	12 min
LIMIT SWITCH RPM	28				
TYPE OF LIMIT SWITCHES	electronic				
WEIGHT UP WITH ROLLER DIAM, 60		18 kg	35 kg	55 kg	88 kg
ENVIRONMENTAL CONDITIONS	from -10°C to + 40°C				
DEGREE OF PROTECTION	IP44				
OPERATOR WEIGHT		~2,1 kg	~2,2 kg	~2,75 kg	~2,8 kg

Roller Shutter width

WOOD

m.	0,8	0,9	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3	
1																								
1,1																								
1,2																								
1,3																								
1,4																								
1,5																								
1,6																								
1,7																								
1,8																								
1,9																								
2																								
2,1																								
2,2																								
2,3																								
2,4																								
2,5																								
2,6																								
2,7																								
2,8																								
2,9																								
3																								

LOOP and  
LOOP RADIO  
50/10

LOOP 50/15  
LOOP-RADIO 50/20

LOOP 50/35  
LOOP RADIO 50/30

LOOP and  
LOOP RADIO  
50/50

Roller Shutter height

Roller Shutter width

ALLUMINIUM  
PVC

m.	0,8	0,9	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3	
1																								
1,1																								
1,2																								
1,3																								
1,4																								
1,5																								
1,6																								
1,7																								
1,8																								
1,9																								
2																								
2,1																								
2,2																								
2,3																								
2,4																								
2,5																								
2,6																								
2,7																								
2,8																								
2,9																								
3																								

LOOP and  
LOOP RADIO  
50/10

LOOP 50/15  
LOOP RADIO 50/20

LOOP 50/35  
LOOP RADIO 50/30

LOOP and  
LOOP RADIO  
50/50

Roller Shutter height

ACCESSORIES



**D113716 00002 - ELBA**  
See page 140.



**D113717 00002 - ELBA BU**  
See page 140.



**P130025 - ER1**  
External receiver used to control motors without an incorporated radio. Compatible with Tel. 1 and Tel. 5 transmitters and Timer.



**D111828 - TEL1**  
1-channel remote control for the LOOP RADIO motors and ER-1 receiver.



**D111829 - TEL5**  
5-channel remote control for the LOOP RADIO motors and ER-1 receiver.



**P130023 - TEL FIX**  
Wall-mounted remote control for the LOOP RADIO operator.



**P130024 - TIMER**  
Used to control the LOOP RADIO motors and ER-1 external receiver, by automatically setting the roller shutter opening/closing times.



## ACCESSORIES



**P130018 - KIT TL 60**  
Basic hardware kit for installing one LOOP operator, comprising: no. 1 wall bracket - no. 1 adapter for octagonal roller, size 60 - no. 2 hooks for fixing the belt to the winding roller.



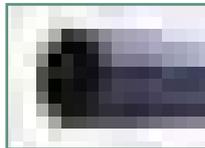
**P130020 - KIT TL 60M**  
Basic hardware kit for installing one LOOP operator with manual release comprising: no. 1 wall bracket for manual release - no. 1 adapter for octagonal roller, size 60 - no. 2 hooks for fixing the belt to the winding roller.



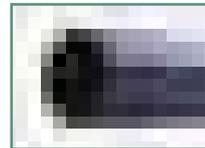
**P130001 - BLOCCANTI 40**  
40 mm anti-break-in block. Available for standard, mini and wooden slats. 1 block every 1.10 m of roller shutter.



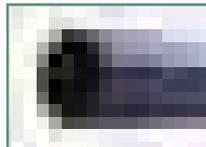
**P130013 - BLOCCANTI 50**  
50 mm anti-break-in block. Available for standard, mini and wooden slats. 1 block every 1.10 m of roller shutter.



**P130010 - RUL 60/1,5**  
Octagonal shutter winding roller  $\varnothing 60 \times 1.5$  m.



**P130012 - RUL 60/3**  
Octagonal shutter winding roller  $\varnothing 60 \times 3$  m.



**P130008 - RUL 60/6**  
Octagonal shutter winding roller  $\varnothing 60 \times 6$  m.



**P130002 - CAL 60/100**  
Adjustable telescopic octagonal cover for  $\varnothing 60$  roller.



**P130004 - CAL 60/30**  
Octagonal shaped cover for  $\varnothing 60$  roller.



**P130006 - GANC**  
Hook for fixing the belt to the winding roller.



**P130015 - SM504**  
Wall-mounted 50 support with bearing.



**P130014 - SM505**  
Support 50 to be flush mounted.



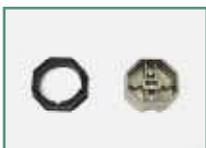
**N999324 - SM5013**  
Revolving wall adapter for manual release.



**N999325 - SM5014**  
Bracket with 10 mm shaft for direct coupling to motor and square-section snap-on shaft for mounting.



**N999326 - SM5015**  
Dual-position revolving bracket with rounded shaft, with two positions and associated saddle for manual release.



**N999323 - AD5027**  
Wheel+adapter pack for series 50 actuator for octagonal roller  $\varnothing 60$ . Note: adapters for rollers of different form available on request.



**N999328 - MM8**  
Eye-ring for manual release.



**N999329 - MM9**  
45° universal joint for manual release.



**N999330 - MM10**  
90° universal joint for manual release.



**N999331 - MM11**  
1.5 m articulated crank with hook for manual release.



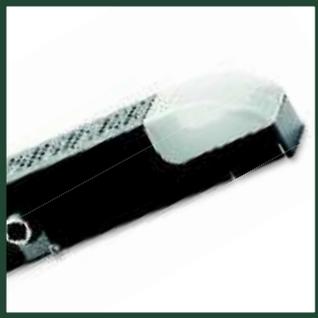
**N999332 - MM12**  
1.5 m rigid crank with hook for manual release.



**P111182 - ANEM**  
Wind sensor.



**P111183 - CREP**  
Twilight sensor.



For those who use counterweight, spring and sectional overhead doors, BFT proposes a complete range of operators, with solutions made to measure for garage doors of any weight or size. Every model combines aesthetic and functional value, privileging ease of installation and simple maintenance.

# SOLUTIONS FOR THE AUTOMATION OF GARAGE DOORS

PHEBE | BERMA | BOTTICELLI | EOS 120



# COUNTERWEIGHT AND SPRING-OPERATED OVERHEAD DOORS

LEGEND

- SEMI INTENSIVE USE ●
- INTENSIVE USE ●
- VERY INTENSIVE USE ●

## SPRING-OPERATED OVERHEAD DOORS



FORCE	BOTTICELLI	EOS 120
60 kg	●	
120 kg		●

## COUNTERWEIGHT OVERHEAD DOORS



DOOR SURFACE	PHEBE	PHEBE + PHEBE SQ	BERMA
up to 7 m <sup>2</sup>	●		
up to 9 m <sup>2</sup>			●
over 10 m <sup>2</sup>		●	● 2 operators
up to 12,5 m <sup>2</sup>			● 2 operators
KIT	PHEBE KIT		



# PHEBE

ELECTROMECHANICAL OPERATOR FOR COUNTERWEIGHT OVERHEAD DOORS

76



• **SMART TECHNOLOGY.**

- Management of slowdown, adjustable for opening and closing.
- Control unit compatible with the EElink protocol.

• **SAFE USE.**

- Specially designed for simpler and faster installation in compliance with the safety standards laid down by the Machinery Directive.
- Thanks to the antisquashing system, the operator inverts motion and prevents damage to people and property in the event of contact.

CODE	DESCRIPTION	KIT	VOLTAGE	DOOR SURFACE	Q.TY PER PALLET
P915134 00002	PHEBE		24 V	7 m <sup>2</sup> (1 operator), 10 m <sup>2</sup> (2 operators)	32
P915135 00002	PHEBE SQ*		24 V	7 m <sup>2</sup> (1 operator), 10 m <sup>2</sup> (2 operators)	32
R915126 00002	PHEBE KIT	●	24 V	7 m <sup>2</sup> (1 operator),	18

**KIT COMPOSITION on page 24**

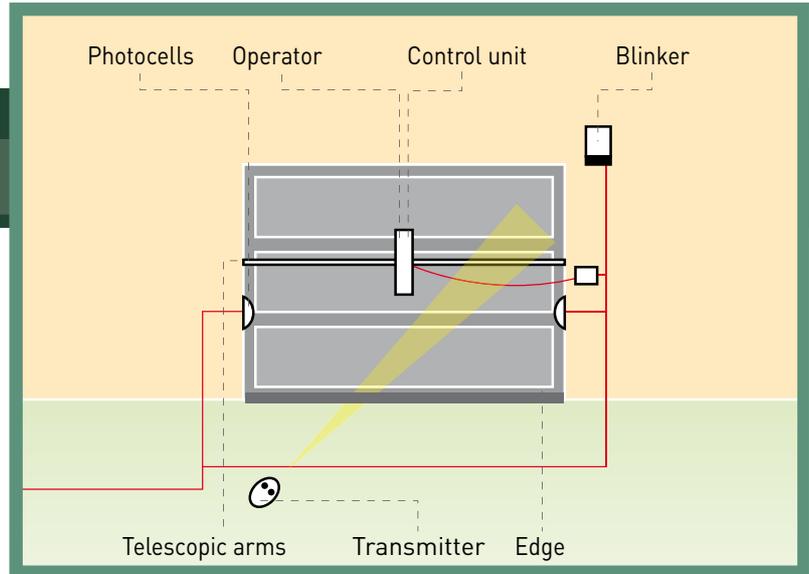
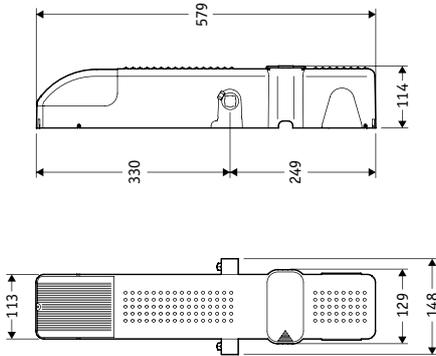
\* Automation without control panel

## TECHNICAL FEATURES

	PHEBE
CONTROL PANEL	HYDRA R (incorporated)
OPERATOR	irreversible
POWER SUPPLY	230 V- ± 10%, 50 Hz single-phase
ABSORBED POWER	170 W
THERMAL PROTECTION	built into control unit
OPENING OR CLOSING TIME	from 17 to 20 s
IMPACT REACTION	stops and movement is reversed
LIMIT SWITCHES	electric, incorporated and adjustable
MANUAL RELEASE	knob release
OPERATING CYCLE	semi intensive use
ENVIRONMENTAL CONDITIONS	from -15°C to + 60°C
DEGREE OF PROTECTION	IP30 (IP44)
OPERATOR WEIGHT	~10 kg



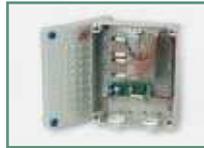
DIMENSIONS (mm)



ACCESSORIES



**D113662 00004**  
**HYDRA R QSG2**  
See page 141



**P125005 - BT BAT**  
Thanks to the back-up batteries and battery charger, the BT BAT kit guarantees low voltage operation of the leaf in the event of power failure (LIBRA C MA, LIBRA C LX, HYDRA R). For motors with on-board control unit.



**P125007 - BT BAT1**  
Thanks to the back-up batteries and battery charger, the BT BAT1 kit guarantees low voltage operation in the event of power failure (HYDRA R QSG2).



**P111323 - SCS**  
Serial connection board for HYDRA R.



**N733112 - CBA**  
Set of telescopic arms for 1 overhead door, including side drive elements.



**N733114 - CBAC**  
Set of curved telescopic arms, including side drive elements for 1 overhead door.



**N733120 - CTA**  
No. 2 square 20x20 1800 mm long drive tubes. Suitable for 1-operator motor drive.



**N733129 - CTA2**  
No. 2 square 20x20 200 mm long drive tubes. Suitable for 2-operator motor drive.



**N733299 - CTBP**  
Set of drive tubes and fixing bases to complete the PHEBE KIT.



**D412377 - BCP**  
Short base to be welded for PHEBE operator.



**N733288 - BLP**  
Long base to be welded for PHEBE operator.



**P115005 - SM1**  
External manual release with single cable control to be fitted to the cremone bolt. Obligatory if there are no secondary access doors to the premises.



**P115001 - SM2**  
External manual release with double cable control to be fitted to the cremone bolt. Compulsory if there are no secondary access doors to the place.



**P121016 - RB**  
Four channels wall radio control with rolling code.

NEW 2009



**P121019 - T-BOX**  
Remote control digital pushbutton panel for exterior use, with backlit light-touch keypad.

# BERMA SERIES

HYDRAULIC OPERATOR FOR COUNTERWEIGHT OVERHEAD DOORS

78



• **A MODEL FOR EVERY NEED.**

→ Several versions available, with slowdown, with slowdown and external release and with slowdown and automatic release, for automating doors including large ones.

• **SMART TECHNOLOGY.**

→ Hydraulic locking on closing and internal release (also external in **SEB** versions).

→ Incorporated slowdown device (in the **BERMA R**, **BERMA SEB R** and **BERMA SA R** models).

• **SAFE USE.**

→ Hydraulic antisquashing system.

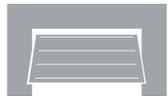
CODE	DESCRIPTION	VOLTAGE	DOOR SURFACE	Q.TY PER PALLET
P915007 00001	<b>BERMA R</b>	230 V	9 m <sup>2</sup> (1 operator), over 9 m <sup>2</sup> (2 operators)	<b>18</b>
P915105 00001	<b>BERMA SEB R</b>	230 V	9 m <sup>2</sup> (1 operator), over 9 m <sup>2</sup> (2 operators)	<b>18</b>
P915009 00001	<b>BERMA SA R</b>	230 V	9 m <sup>2</sup> (1 operator), over 9 m <sup>2</sup> (2 operators)	<b>18</b>

## TECHNICAL FEATURES

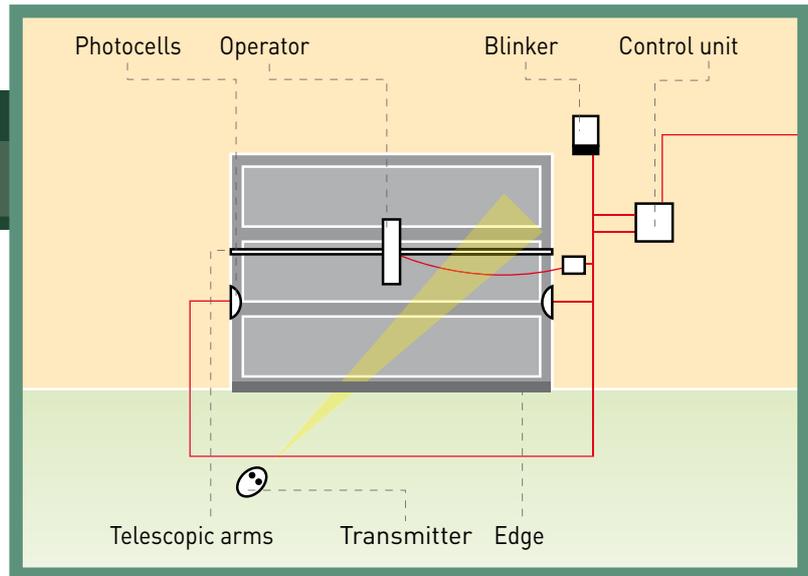
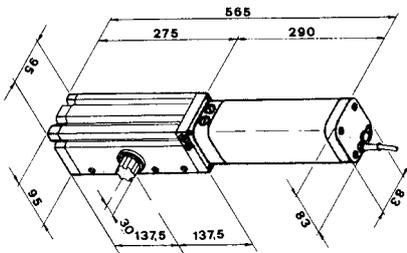
### FEATURES OF THE RANGE

### SPECIFIC FEATURES

		BERMA R	BERMA SEB R	BERMA SA R
CONTROL PANEL	RIGEL 5 (suggested)			
OPERATOR	irreversible			
POWER SUPPLY	230 V~ ± 10%, 50 Hz single-phase			
ABSORBED POWER	250 W			
THERMAL PROTECTION	built into motor			
OPENING OR CLOSING TIME	25 s			
IMPACT REACTION	hydraulic clutch			
MANUAL RELEASE		knob release	release key	knob release
OPERATING CYCLE	very intensive use			
ENVIRONMENTAL CONDITIONS	from -10°C to +60°C			
DEGREE OF PROTECTION	IPX5			
OPERATOR WEIGHT	~10 kg			



DIMENSIONS (mm)



ACCESSORIES



**D113693 00003**  
**RIGEL 5**  
See page 141



**D113680 00002**  
**ALPHA SD**  
See page 140



**D113706 00002**  
**ALCOR N**  
See page 140



**P111408 - SCS WIE**  
Circuit board for direct connection of wiegand accessories (such as SELETTO, COMPAS SLIM, etc) to the control units

QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**P111376 - SCS 1**  
Serial connection board for QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**D111704 - SSR5**  
Traffic light and preheating control board for RIGEL 5 control panel. The operator is able to work at -20° with this accessory.



**D113050 - SPL**  
Preheating board for 1 or 2 LUX, SUB, ORO, P4,5-P7, BERMA and E5 operator models. With this accessory the operator is able to work at very low temperature.



**N733038 - CA1**  
Set of accessories for installation of 1 operator. Max length 4 m. Comprising telescopic arms, longitudinal members, tubes for overhead doors.



**N733039 - CA1C**  
Set of accessories for installation of 1 operator. Max length 4 m. Comprising curved telescopic arms, longitudinal members.



**N733040 - CA2**  
Set of accessories for installation of two operators. Length over 4 m. Comprising telescopic arms, longitudinal members.



**N733041 - CA2C**  
Set of accessories for installation of two operators. Length over 4 m. Comprising curved telescopic arms, longitudinal members, tubes for overhead doors.



**N733020 - SEB**  
External key release for BERMA, FORB and IGEA LB BT models.



**P123007 - SEI**  
Hydraulic lock for BERMA SA and BERMA SA R models. Including connection pipe.



**P115005 - SM1**  
External manual release with single cable control to be fitted to the cremone bolt. Obligatory if there are no secondary access doors to the premises.



**P115001 - SM2**  
External manual release with double cable control to be fitted to the cremone bolt. Compulsory if there are no secondary access doors to the place.



**P121016 - RB**  
Four channels wall radio control with rolling code.

**NEW 2009**



**P121019 - T-BOX**  
Remote control digital pushbutton panel for exterior use, with backlit light-touch keypad.

# BOTTICELLI

## ELECTROMECHANICAL OPERATOR FOR SPRING-OPERATED OVERHEAD DOORS

80



**Dynamic  
TRAVEL**

### • SMART TECHNOLOGY.

- Control unit with self-learning functions.
- Encoder-type limit switch without references in the chain or in the belt.

### • SAFE USE.

- Specially designed for simpler and faster installation in compliance with the safety standards laid down by the Machinery Directive.
- Thanks to the antisquashing system, the operator inverts motion and prevents damage to people and property in the event of contact.
- The limit switch with integrated encoder allows the maximum stopping precision. No

mechanical component of the limit switch system is subject to wear and maintenance.  
→ The strength of the track provides greater resistance to stress during assembly and in operation.

### • SIMPLER INSTALLATION.

- The track can be fixed directly to the ceiling without using brackets. The cables are housed inside two grooves formed in the track itself.
- Working stroke recovery possibility by rotating the motor head 90°.

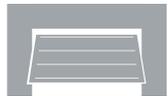
CODE	DESCRIPTION	VOLTAGE	FORCE	Q.TY PER PALLET
P915194 00002	BOTTICELLI	24 V	up to 60 kg	30
P915194 00003	BOTTICELLI VENERE-D	24 V	up to 60 kg	30

## TECHNICAL FEATURES

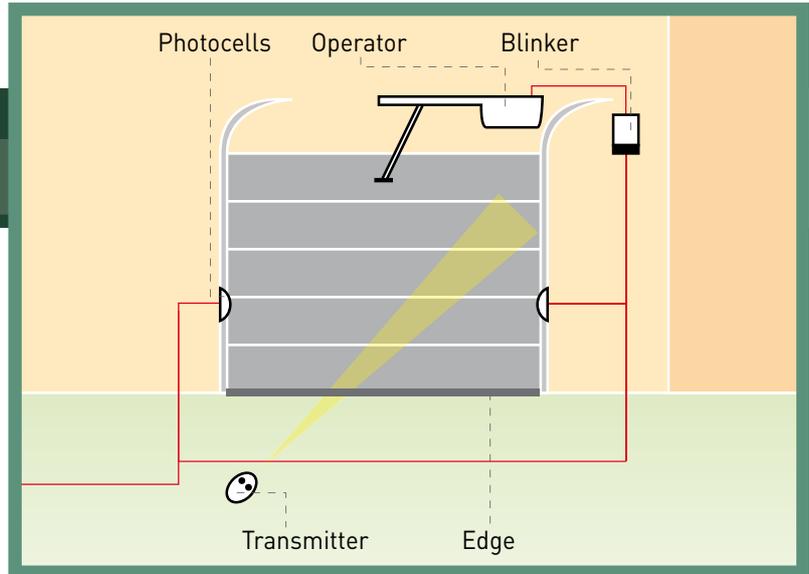
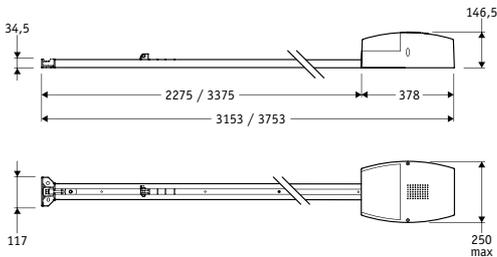
### FEATURES OF THE RANGE

### SPECIFIC FEATURES

	BOTTICELLI	BOTTICELLI VENERE D
CONTROL PANEL	VENERE (incorporated)	VENERE D (incorporated)
OPERATOR	irreversible	
POWER SUPPLY	230 V~ ± 10%, 50 Hz single-phase	
ABSORBED POWER	236 W	
FORCE	600 N	
OPENING OR CLOSING TIME	28 s	
IMPACT REACTION	Stop and reverse on encountering obstacle with dynamic torque control curve	
TYPE OF LIMIT SWITCHES	electronic with encoder	
MANUAL RELEASE	unlocking with rope	
OPERATING CYCLE	intensive use	
ENVIRONMENTAL CONDITIONS	from -15°C to + 60°C	
DEGREE OF PROTECTION	IPX0	
OPERATOR WEIGHT	~5 kg	



DIMENSIONS (mm)



ACCESSORIES



**P115009 00001**  
**BIN CATENA 2900**  
Chain track for Botticelli, length 2900, working stroke 2400 mm.



**P115009 00002**  
**BIN CATENA 3500**  
Chain track for Botticelli, length 3500, working stroke 3000 mm.



**P115009 00003**  
**BIN CINGHIA 2900**  
Belt track for Botticelli, length 2900, working stroke 2400 mm.



**P115009 00004**  
**BIN CINGHIA 3500**  
Belt track for Botticelli, length 3500, working stroke 3000 mm



**P115009 00005**  
**BIN CATENA 2x1450**  
Chain track divided into two halves for Botticelli, length 2900, working stroke 2400 mm



**P115009 00006**  
**BIN CATENA 2x1750**  
Chain track divided into two halves for Botticelli, length 3500, working stroke 3000 mm



**P115009 00007**  
**BIN CINGHIA 2x1450**  
Belt track divided into two halves for Botticelli, length 2900, working stroke 2400 mm



**P115009 00008**  
**BIN CINGHIA 2x1750**  
Belt track divided into two halves for Botticelli, length 3500, working stroke 3000 mm



**P115005 - SM1**  
External manual release with single cable control to be fitted to the cremone bolt. Obligatory if there are no secondary access doors to the premises.



**N733069 - SET/S**  
External release for insulated sectional and overhead doors up to 50 mm thick.



**P115003 - ST**  
Automatic bolt release for spring-operated overhead doors.



**P115002 - BRCT**  
Adapter arm used to install BOTTICELLI, EOS 120, to counterweight overhead doors.



**N999060 - APT**  
Complete kit for assembly 25 cm from ceiling or directly on the ceiling.



**N733391 - PBE**  
Complete kit to extend the working stroke by 1 mt on EOS and BOTTICELLI



**N999370 - TA BIN**  
Anti-vibration plugs for EOS120 and BOTTICELLI (pack of 4 plugs).



**P1121016 - RB**  
Four channels wall radio control with rolling code.



**NEW 2009**  
**P1121019 - T-BOX**  
Remote control digital pushbutton panel for exterior use, with backlit light-touch keypad.



**P1125006 - CB EOS**  
Thanks to the back-up batteries and battery charger, the CB EOS kit guarantees low voltage operation in the event of power failure (VENERE D).

# EOS 120

ELECTROMECHANICAL OPERATOR FOR SPRING-OPERATED OVERHEAD DOORS

82



• **SMART TECHNOLOGY.**

- Control unit with self-learning and self-diagnostic functions.
- Encoder-type limit switch without references in the chain.
- Control unit compatible with the EElink protocol.

• **SAFE USE.**

- Specially designed for simpler and faster installation in compliance with the safety standards laid down by the Machinery Directive.
- Thanks to the antisquashing system, the operator inverts motion and prevents damage to people and property in the event of contact.

→ The strength of the track provides greater resistance to stress during assembly and in operation.

• **SIMPLER INSTALLATION.**

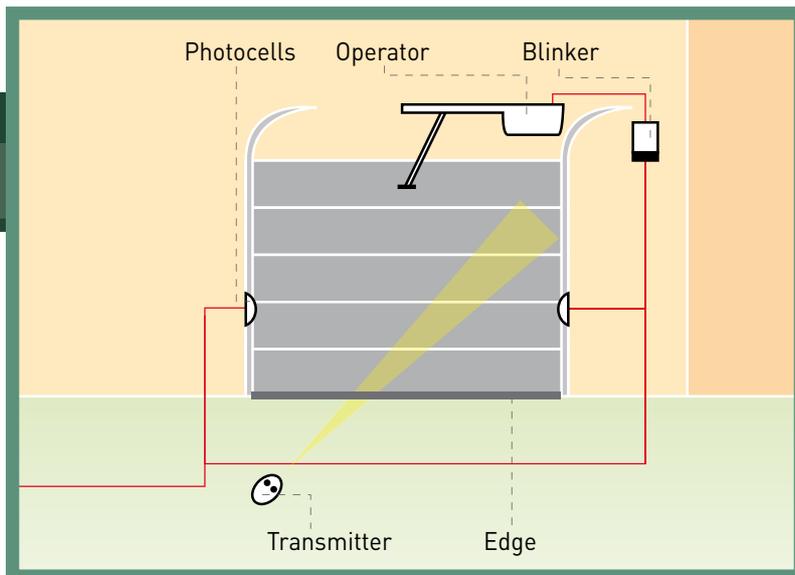
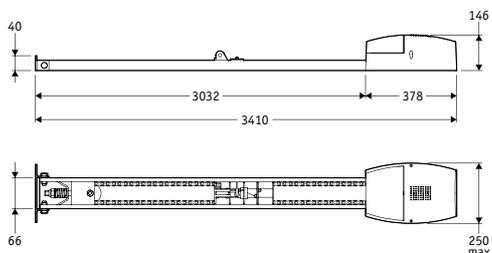
- The track can be fixed directly to the ceiling without using brackets. The cables are housed inside two grooves formed in the track itself.
- Working stroke recovery possibility by rotating the motor head 90°.

CODE	DESCRIPTION	VOLTAGE	FORCE	Q.TY PER PALLET
P915195 000025	EOS 120	24 V	up to 120 kg	30

TECHNICAL FEATURES	
EOS 120	
CONTROL PANEL	VENERE D (incorporated)
OPERATOR	irreversible
POWER SUPPLY	230 V- ± 10%, 50 Hz single-phase
ABSORBED POWER	240 W
FORCE	1200 N
OPENING OR CLOSING TIME	28 s
IMPACT REACTION	Stop and reverse on encountering obstacle with dynamic torque control curve
TYPE OF LIMIT SWITCHES	electronic with encoder
MANUAL RELEASE	unlocking with rope
OPERATING CYCLE	very intensive use
ENVIRONMENTAL CONDITIONS	from -15°C to +60°C
DEGREE OF PROTECTION	IPX0
OPERATOR WEIGHT	~8 kg



DIMENSIONS (mm)



ACCESSORIES



**P125006 - CB EOS**  
Thanks to the back-up batteries and battery charger, the CB EOS kit guarantees low voltage operation in the event of power failure (VENERE D).



**P111408 - SCS WIE**  
Circuit board for direct connection of wiegand ACCESSORIES (such as SELETTO, COMPAS SLIM, etc) to the control units QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**P111376 - SCS 1**  
Serial connection board for QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**P115010 00001  
BIN 120 CATENA 2900**  
Chain track for EOS 120, length 2900, working stroke 2400 mm.



**P115010 00002  
BIN 120 CATENA 3500**  
Chain track for EOS 120, length 3500, working stroke 3000 mm.



**P115010 00003  
BIN 120 CATENA 2x1450**  
Chain track for EOS 120, length 2x1450, working stroke 2400 mm.



**P115010 00004 - BIN  
120 CATENA 2x1750**  
Chain track for EOS 120, length 2x1750, working stroke 3000 mm.



**N733069 - SET/S**  
External release for insulated sectional and overhead doors up to 50 mm thick.



**P115005 - SM1**  
External manual release with single cable control to be fitted to the cremone bolt. Obligatory if there are no secondary access doors to the premises.



**P115003 - ST**  
Automatic bolt release for spring-operated overhead doors.



**N999370 - TA BIN**  
Anti-vibration plugs for EOS120 and BOTTICELLI (pack of 4 plugs).



**P115002 - BRCT**  
Adapter arm used to install BOTTICELLI, EOS 120, to counterweight overhead doors.



**N999060 - APT**  
Complete kit for assembly 25 cm from ceiling or directly on the ceiling.



**N733391 - PBE**  
Complete kit to extend the working stroke by 1 mt on EOS and BOTTICELLI



**P121016 - RB**  
Four channels wall radio control with rolling code.

NEW 2009



**P121019 - T-BOX**  
Remote control digital pushbutton panel for exterior use, with backlit light-touch keypad.



Shops, bars and restaurants, shopping centres and other buildings: BFT presents its operators for roller shutters, subjected to testing for their entire life cycle to guarantee perfect operation in every situation.

# SOLUTIONS FOR THE AUTOMATION OF ROLL-UP DOORS

X 130



# X130 SERIES

## ELECTROMECHANICAL OPERATOR FOR BALANCED ROLL-UP DOORS

86



• **A MODEL FOR EVERY NEED.**

→ Several versions available, also with electric brake.

• **SMART TECHNOLOGY.**

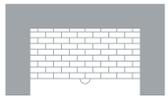
→ Memorization of the position reached to simplify limit switch adjustment.

CODE	DESCRIPTION	VOLTAGE	ROLL UP DOOR	ROLL UP DOOR WEIGHT	Q.TY PER PALLET
P910024 00007	X130	230 V	16 m <sup>2</sup>	up to 200 kg	30
P910025 00007	X130 EF (Motor-driven brake)	230 V	16 m <sup>2</sup>	up to 180 kg	30
P910027 00007	X130 PEF (Pulley 200mm, Motor-driven brake)	230 V	16 m <sup>2</sup>	up to 200 kg	30
P910026 00007	X130 P (Pulley 200mm)	230 V	16 m <sup>2</sup>	up to 220 kg	30

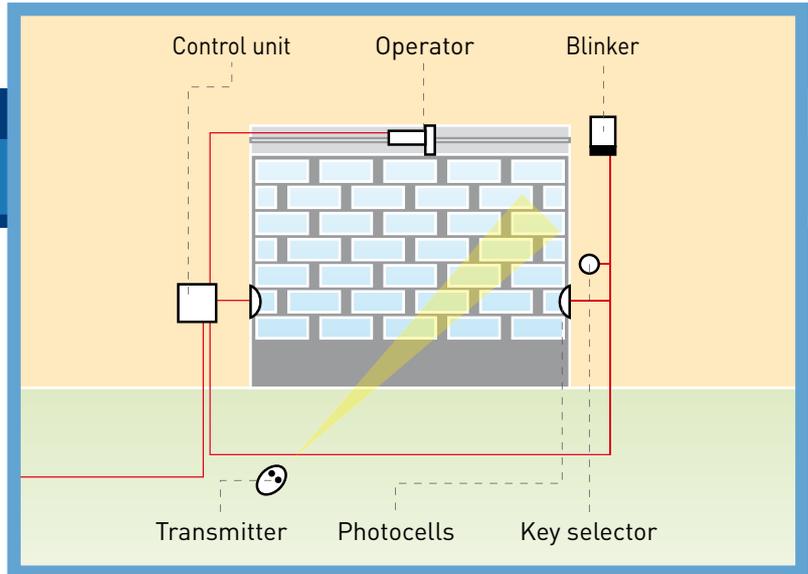
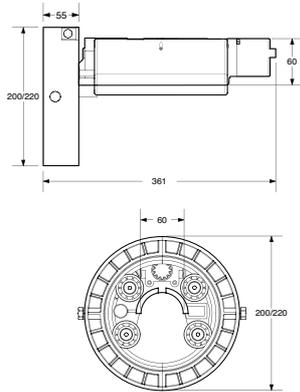
### TECHNICAL FEATURES

FEATURES OF THE RANGE		SPECIFIC FEATURES			
		X130	X130 EF	X130 PEF	X130 P
CONTROL PANEL	ELBA				
OPERATOR		reversible	irreversible	irreversible	reversible
POWER SUPPLY	230 V~ ± 10%, 50 Hz single-phase				
ABSORBED POWER		400 W	410 W	425 W	425 W
THERMAL PROTECTION	built into motor				
OUTPUT TORQUE	130 Nm				
PULLEY DIAMETER		220 mm	220 mm	200 mm	200 mm
SHAFT DIAMETER	60 mm (42 e 48 mm with the optional CS adapters)				
TORQUE FOR REVERSIBILITY *	4 Nm				
TYPE OF LOCK		-	electric brake	electric brake	-
TYPE OF LIMIT SWITCHES	electric, incorporated, adjustable				
MANUAL RELEASE		reversible	release by wire	release by wire	reversible
ENVIRONMENTAL CONDITIONS	from -10°C to +50°C				
DEGREE OF PROTECTION	IP20				
OPERATOR WEIGHT	~6 kg				

\* (brake not fitted or released)



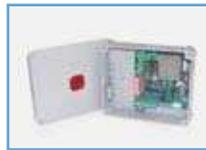
DIMENSIONS (mm)



ACCESSORIES



**D113716 00002 - ELBA**  
See page 140



**D113717 00002 ELBA BU**  
See page 140



**D113252 00003 CAPRI TCA**  
See page 142  
**Available while stock last.**



**D113252 00001 - CAPRI**  
See page 142  
**Available while stock last.**



**D113680 00002 ALPHA SD**  
See page 140



**P111408 - SCS WIE**  
Circuit board for direct connection of wiegand accessories (such as SELETTTO, COMPAS SLIM, etc) to the control units QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**P111376 - SCS 1**  
Serial connection board for QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**N733103 00002 POX-SC**  
Push-button panel with two buttons and pilot light for direct connection when the operator is regulated by an electrical control panel.



**N574005 - SIBOX**  
Empty safe for external release and control push-button panel. Dimensions: 179.5x122x92 mm.



**N733036 - MOX**  
External release mechanism for SIBOX model.



**N733103 00001 POX-UP**  
Push-button panel with two buttons and pilot light for direct connection without control panel. To be inserted into the SIBOX model safe.



**N999298 00002 - EF X**  
Complete electric brake for X130 - X130 P.



**D211007 - CS 48**  
Pair of reduction half bearings for 48 mm diameter shafts.



**D211008 - CS 42**  
Pair of reduction half bearings for 42 mm diameter shafts.



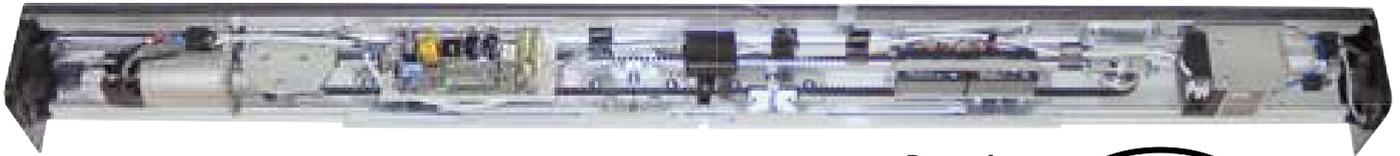
Shops, offices, banks and shopping centres: there are lots of possibilities for installing our versatile and functional automatic doors. With accessories and security devices, BFT offers a broad range of profiles and seals to provide a wide range of opportunities for customizing the installation.

# SOLUTIONS FOR THE AUTOMATION OF SLIDING DOORS

VISTA | LINEA



# 2009 NEW

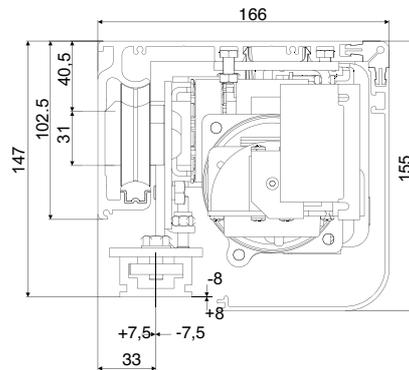
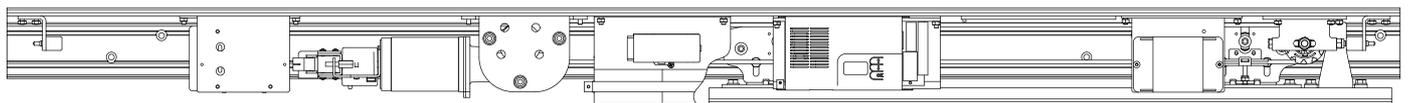


### Quick and simple installation

- Fast assembly profile WMP
- Control unit featuring self-learning of dimensions and speeds
- Lift-up cover that locks in two positions to provide unrestricted access
- Programming via display built into ARIA control unit

- Technology and reliability
- Cushioned anti-vibration track
- Reinforced runners with three wheels shaped for noise reduction
- Electric lock with doors locked in any stopping position

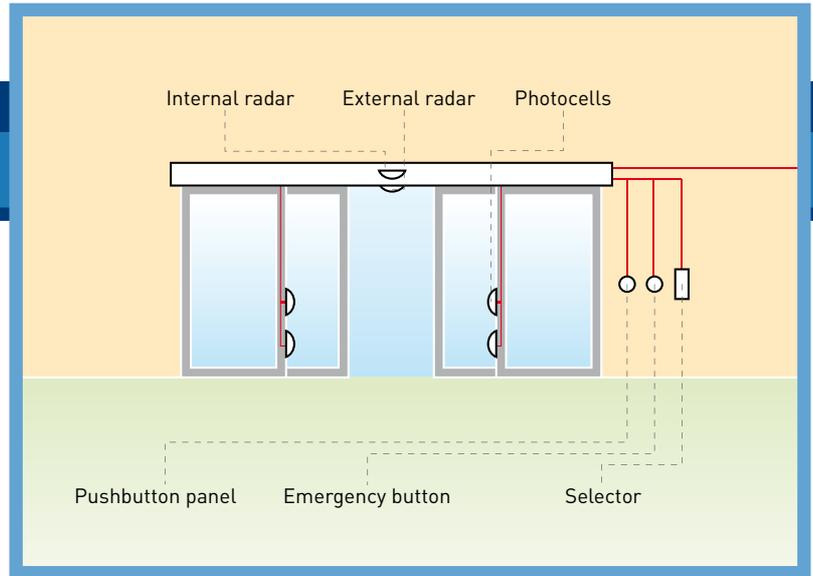
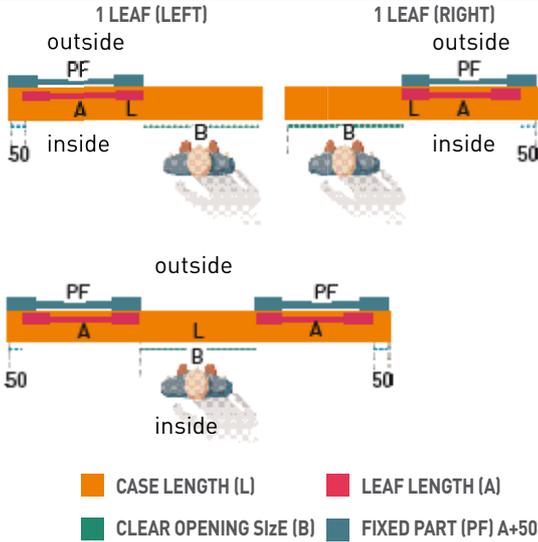
### DIMENSIONS (mm)



### TECHNICAL FEATURES

FEATURES OF THE RANGE		SPECIFIC FEATURES	
		VISTA SL1	VISTA SL2
CONTROL PANEL	Aria		
POWER SUPPLY	230 Vac~ ± -10%, 50 Hz single-phase *		
ACCESSORY POWER SUPPLY	24Vac 500mA +180mA max		
USEFUL PASSAGE		min 750 mm - max 2500 mm	min 800 mm - max 2900 mm
CAPACITY		150kg	120+120kg
ABSORBED CURRENT (RETE)	1A		
OPENING/CLOSING SPEED		adjustable up to 90 cm/s	adjustable up to 180 cm/s
SLOWDOWN	adjustable		
ENVIRONMENTAL CONDITIONS	from 0 to 50 °C (inside carter)		
WORKING CYCLE	Continuous at 25°C		
BRAKING	adjustable		
ANTICRUSHING	Stop and reverse on encountering obstacle with dynamic torque control curve		
BACK-UP BATTERIES	2x12V 1.2Ah (optional extras)		
RADIO-RECEIVER	433.92Mhz Built-in Rolling-Code		

\*Available for all voltage ratings.



CODE	DESCRIPTION	VOLTAGE	B mm	A mm	L mm	ANODIZED GUARD*
<b>VISTA 1</b> FOR THE RIGHT-HAND VERSION, ADD THE 00004 SUFFIX INSTEAD OF 00002						
P960502 00002	VISTA SL-107	24 V	750	800	1600	P111411 00002
P960503 00002	VISTA SL-108	24 V	850	900	1800	P111412 00002
P960504 00002	VISTA SL-109	24 V	950	1000	2000	P111414 00002
P960505 00002	VISTA SL-110	24 V	1050	1100	2200	P111415 00002
P960506 00002	VISTA SL-111	24 V	1150	1200	2400	P111416 00002
P960507 00002	VISTA SL-112	24 V	1250	1300	2600	P111417 00002
P960508 00002	VISTA SL-113	24 V	1350	1400	2800	P111418 00002
P960509 00002	VISTA SL-114	24 V	1450	1500	3000	P111419 00002
P960510 00002	VISTA SL-115	24 V	1550	1600	3200	P111420 00002
P960511 00002	VISTA SL-116	24 V	1650	1700	3400	P111421 00002
P960512 00002	VISTA SL-117	24 V	1750	1800	3600	P111422 00002
P960513 00002	VISTA SL-119	24 V	1950	2000	4000	P111423 00002
P960514 00002	VISTA SL-121	24 V	2150	2200	4400	P111424 00002
P960515 00002	VISTA SL-123	24 V	2350	2400	4800	P111425 00002
P960516 00002	VISTA SL-125	24 V	2550	2600	5200	P111426 00002
<b>VISTA 2</b>						
P960517 00002	VISTA SL-208	24 V	800	2X500	1900	P111413 00002
P960518 00002	VISTA SL-209	24 V	900	2X500	2000	P111414 00002
P960519 00002	VISTA SL-210	24 V	1000	2X550	2200	P111415 00002
P960520 00002	VISTA SL-211	24 V	1100	2X600	2400	P111416 00002
P960521 00002	VISTA SL-212	24 V	1200	2X650	2600	P111417 00002
P960522 00002	VISTA SL-213	24 V	1300	2X700	2800	P111418 00002
P960501 00002	VISTA SL-214	24 V	1400	2X750	3000	P111419 00002
P960523 00002	VISTA SL-215	24 V	1500	2X800	3200	P111420 00002
P960524 00002	VISTA SL-216	24 V	1600	2X850	3400	P111421 00002
P960525 00002	VISTA SL-217	24 V	1700	2X900	3600	P111422 00002
P960526 00002	VISTA SL-219	24 V	1900	2X1000	4000	P111423 00002
P960527 00002	VISTA SL-221	24 V	2100	2X1100	4400	P111424 00002
P960528 00002	VISTA SL-223	24 V	2300	2X1200	4800	P111425 00002
P960529 00002	VISTA SL-225	24 V	2500	2X1300	5200	P111426 00002
P960530 00002	VISTA SL-227	24 V	2700	2X1400	5600	P111427 00002
P960531 00002	VISTA SL-229	24 V	2900	2X1500	6000	P111428 00002

\* For Natural Aluminium Guards, give the Anodised Guard codes with 00001 instead of 00002.



PPA  
Aluminium clamp for tempered glass doors with no frame

MODEL	mm	CODE
MOD. 107	10	P111159 00001
	12	P111159 00063
MOD. 108	10	P111159 00002
	12	P111159 00064
MOD. 109	10	P111159 00003
	12	P111159 00065
MOD. 110	10	P111159 00004
	12	P111159 00066
MOD. 111	10	P111159 00005
	12	P111159 00067
MOD. 112	10	P111159 00006
	12	P111159 00068
MOD. 113	10	P111159 00007
	12	P111159 00069
MOD. 114	10	P111159 00008
	12	P111159 00070
MOD. 115	10	P111159 00009
	12	P111159 00071
MOD. 116	10	P111159 00010
	12	P111159 00072
MOD. 117	10	P111159 00011
	12	P111159 00073
MOD. 119	10	P111159 00012
	12	P111159 00074
MOD. 121	10	P111159 00013
	12	P111159 00075
MOD. 123	10	P111159 00014
	12	P111159 00076
MOD. 125	10	P111159 00015
	12	P111159 00077
MOD. 208	10	P111159 00016
	12	P111159 00078

MODEL	mm	CODE
MOD. 209	10	P111159 00017
	12	P111159 00079
MOD. 210	10	P111159 00018
	12	P111159 00080
MOD. 211	10	P111159 00019
	12	P111159 00081
MOD. 212	10	P111159 00020
	12	P111159 00082
MOD. 213	10	P111159 00021
	12	P111159 00083
MOD. 214	10	P111159 00022
	12	P111159 00084
MOD. 215	10	P111159 00023
	12	P111159 00085
MOD. 216	10	P111159 00024
	12	P111159 00086
MOD. 217	10	P111159 00025
	12	P111159 00087
MOD. 219	10	P111159 00026
	12	P111159 00088
MOD. 221	10	P111159 00027
	12	P111159 00089
MOD. 223	10	P111159 00028
	12	P111159 00090
MOD. 225	10	P111159 00029
	12	P111159 00091
MOD. 227	10	P111159 00030
	12	P111159 00092
MOD. 229	10	P111159 00031
	12	P111159 00093



**NEW 2009**



**D113722 - VISTA SEL**  
Mode selector for VISTA SL. Used for selecting door and radar operating modes in a straightforward, intuitive way

**NEW 2009**



**N733408 - ERV**  
Electric lock assembly for VISTA SL (use recommended in conjunction with BBV)

**NEW 2009**



**P111442 - BBV**  
Battery-powered panic device for VISTA SL

**NEW 2009**



**P111445 - SBV**  
Anodized aluminium supporting beam for VISTA SL



**P111163 00001 - SASAM 1**  
Breakout door device enabling door leaves to be pushed open even when the door is closed. Complete with safety contacts that prevent the door from being driven by the motor when door leaves are "open". SASAM 1 designed for use with single-leaf doors (maximum opening width 1100mm)



**P111163 00002 - SASAM 1**  
SASAM 1 version but in anodized aluminium. Maximum opening width 1100mm.



**P111263 00001 - SASAM 2**  
Breakout door device for use with two-leaf doors (maximum opening width 2200mm)



**P111263 00002 - SASAM 2**  
Anodized aluminium breakout door device for use with breakout doors with two moving leaves. Maximum opening width 2200mm.



**P111156 - PPR**  
Runner for bottom guide for aluminium frame. If a door has one leaf, use one runner, if the door has two leaves, use two runners. For one-leaf doors use 1 runner, for two-leaf doors use 2 runners.



**P111158 - PGI**  
Bottom door guide profile for aluminium frame.

### RADAR AND RADAR ACCESSORIES - RADAR SPECIFICATIONS FROM PAGE 98 TO PAGE 100



**P111404 SEAGLE TWO**  
Bidirectional presence sensor.



**P111403 - EAGLE ONE**  
Unidirectional presence sensor. TELECOMANDO needed for programming.



**P111402 00001 - ACTIVE8 TWO PB**  
Safety and presence sensor.



**P111406 - SPOTFINDER**  
Infrared light-cone detector.



**P111407 - FALCON**  
Industrial presence sensor. Provided with a 6m cable. TELECOMANDO needed for programming.



**P111405 - TELECOMANDO**  
Remote control for Eagle, Active8 and Falcon.



**P111325 - RIP**  
Broad/narrow band active multifunctional infrared radar.



**P111265 - FPA 1**  
1 pair of photocells with a pair of sensors.



**P111266 - FPA 2**  
1 pair of photocells with two pairs of sensors.



**• A MODEL FOR EVERY NEED.**

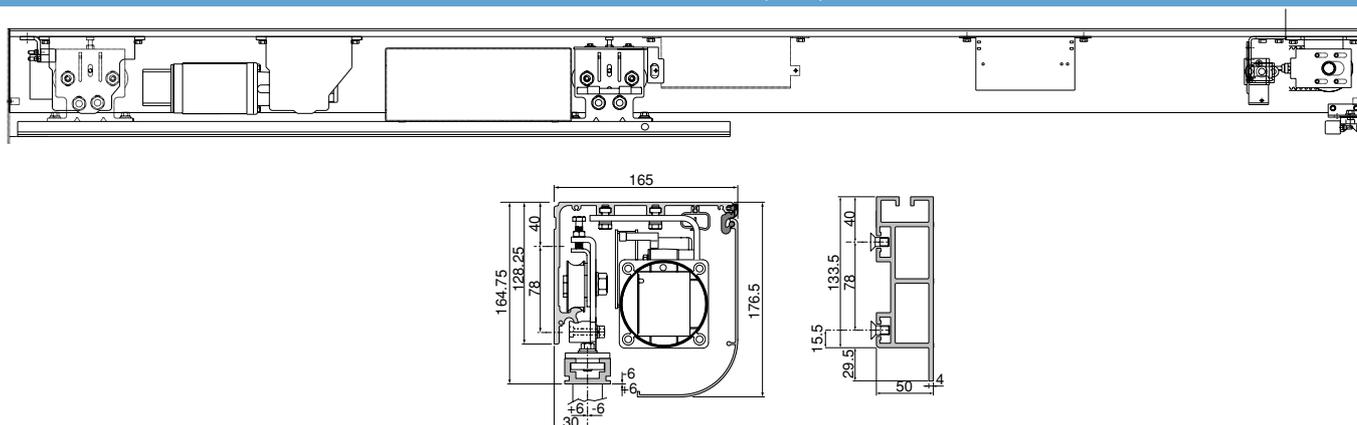
- Several versions available: for single leaf with 150 kg max. weight or for two leaves with max. weight 120+120 kg.
- Possibility of installing glass leaves.
- A wide range of accessories.

**• SIMPLER INSTALLATION.**

- Incorporated control unit.
- The door can be configured in different ways by means of the practical PFD pushbutton panel.
- Guard raisable for maintenance.
- Configurable using the Proxima programmer thanks to compatibility with the EElink protocol.

**AVAILABLE WHILE STOCK LAST.**

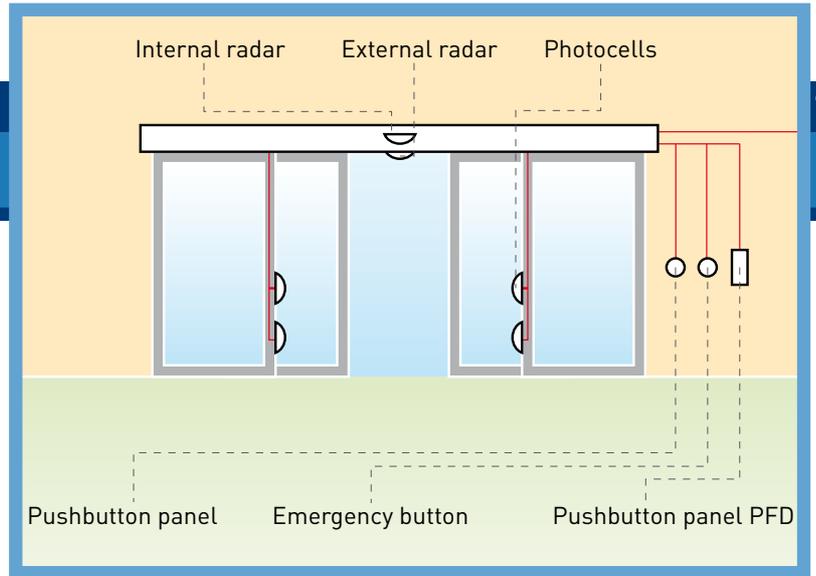
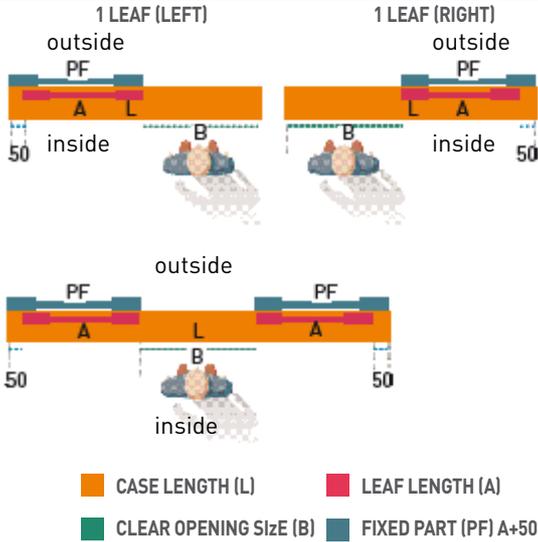
**DIMENSIONS (mm)**



**TECHNICAL FEATURES**

FEATURES OF THE RANGE	SPECIFIC FEATURES	
	LINEA 1	LINEA2
CONTROL PANEL	AD LINEA (incorporated)	
OPERATOR	reversible	
POWER SUPPLY	230 V~ ± 10%, 50 Hz single-phase (*)	
ACCESSORY POWER SUPPLY	24 Vac-dc 0,4 A max	
USEFUL PASSAGE	min 750 mm - max 2550 mm	min 800 mm - max 2900 mm
CAPACITY	150 kg	120 + 120 kg
ABSORBED CURRENT	1 A	
OPENING SPEED	adjustable up to 90 cm/s	adjustable up to 180 cm/s
CLOSING SPEED	adjustable up to 35 cm/s	adjustable up to 70 cm/s
SLOWDOWN	adjustable	
AUTOMATIC CLOSING TIME	from 1 to 60 s	
ENVIRONMENTAL CONDITIONS	from 0 to 50 °C (inside carter)	
WORKING CYCLE	continuous	
BRAKE CONTROL	adjustable	
ANTICRUSHING	anticrush safety device	
BACK-UP BATTERIES	(optional) 2x12V 1,2 A/h	

\*Available for all voltage ratings.



CODE	DESCRIPTION	VOLTAGE	B mm	A mm	L mm	ANODIZED GUARD*
<b>LINEA 1</b>						
P960414 00002	LINEA 107	24 V	750	800	1600	P111336 00002
P960433 00002	LINEA 108	24 V	850	900	1800	P111343 00002
P960434 00002	LINEA 109	24 V	950	1000	2000	P111344 00002
P960418 00002	LINEA 110	24 V	1050	1100	2200	P111345 00002
P960435 00002	LINEA 111	24 V	1150	1200	2400	P111342 00002
P960419 00002	LINEA 112	24 V	1250	1300	2600	P111341 00002
P960417 00002	LINEA 113	24 V	1350	1400	2800	P111339 00002
P960436 00002	LINEA 114	24 V	1450	1500	3000	P111346 00002
P960437 00002	LINEA 115	24 V	1550	1600	3200	P111347 00002
P960438 00002	LINEA 116	24 V	1650	1700	3400	P111348 00002
P960439 00002	LINEA 117	24 V	1750	1800	3600	P111338 00002
P960440 00002	LINEA 119	24 V	1950	2000	4000	P111337 00002
P960441 00002	LINEA 121	24 V	2150	2200	4400	P111349 00002
P960442 00002	LINEA 123	24 V	2350	2400	4800	P111350 00002
P960443 00002	LINEA 125	24 V	2550	2600	5200	P111351 00002
<b>LINEA 2</b>						
P960421 00002	LINEA 208	24 V	800	2X500	1900	P111343 00002
P960422 00002	LINEA 209	24 V	900	2X500	2000	P111344 00002
P960423 00002	LINEA 210	24 V	1000	2X550	2200	P111345 00002
P960420 00002	LINEA 211	24 V	1100	2X600	2400	P111342 00002
P960424 00002	LINEA 212	24 V	1200	2X650	2600	P111341 00002
P960425 00002	LINEA 213	24 V	1300	2X700	2800	P111339 00002
P960412 00002	LINEA 214	24 V	1400	2X750	3000	P111346 00002
P960426 00002	LINEA 215	24 V	1500	2X800	3200	P111347 00002
P960427 00002	LINEA 216	24 V	1600	2X850	3400	P111348 00002
P960416 00002	LINEA 217	24 V	1700	2X900	3600	P111338 00002
P960415 00002	LINEA 219	24 V	1900	2X1000	4000	P111337 00002
P960428 00002	LINEA 221	24 V	2100	2X1100	4400	P111349 00002
P960429 00002	LINEA 223	24 V	2300	2X1200	4800	P111350 00002
P960430 00002	LINEA 225	24 V	2500	2X1300	5200	P111351 00002
P960431 00002	LINEA 227	24 V	2700	2X1400	5600	P111352 00002
P960432 00002	LINEA229	24 V	2900	2X1500	6000	P111353 00002

\* For Natural Aluminium Guards, give the Anodised Guard codes with 00001 instead of 00002.



PPA  
Aluminium clamp for tempered glass doors with no frame

MODEL	mm	CODE
MOD. 107	10	P111159 00001
	12	P111159 00063
MOD. 108	10	P111159 00002
	12	P111159 00064
MOD. 109	10	P111159 00003
	12	P111159 00065
MOD. 110	10	P111159 00004
	12	P111159 00066
MOD. 111	10	P111159 00005
	12	P111159 00067
MOD. 112	10	P111159 00006
	12	P111159 00068
MOD. 113	10	P111159 00007
	12	P111159 00069
MOD. 114	10	P111159 00008
	12	P111159 00070
MOD. 115	10	P111159 00009
	12	P111159 00071
MOD. 116	10	P111159 00010
	12	P111159 00072
MOD. 117	10	P111159 00011
	12	P111159 00073
MOD. 119	10	P111159 00012
	12	P111159 00074
MOD. 121	10	P111159 00013
	12	P111159 00075
MOD. 123	10	P111159 00014
	12	P111159 00076
MOD. 125	10	P111159 00015
	12	P111159 00077
MOD. 208	10	P111159 00016
	12	P111159 00078

MODEL	mm	CODE
MOD. 209	10	P111159 00017
	12	P111159 00079
MOD. 210	10	P111159 00018
	12	P111159 00080
MOD. 211	10	P111159 00019
	12	P111159 00081
MOD. 212	10	P111159 00020
	12	P111159 00082
MOD. 213	10	P111159 00021
	12	P111159 00083
MOD. 214	10	P111159 00022
	12	P111159 00084
MOD. 215	10	P111159 00023
	12	P111159 00085
MOD. 216	10	P111159 00024
	12	P111159 00086
MOD. 217	10	P111159 00025
	12	P111159 00087
MOD. 219	10	P111159 00026
	12	P111159 00088
MOD. 221	10	P111159 00027
	12	P111159 00089
MOD. 223	10	P111159 00028
	12	P111159 00090
MOD. 225	10	P111159 00029
	12	P111159 00091
MOD. 227	10	P111159 00030
	12	P111159 00092
MOD. 229	10	P111159 00031
	12	P111159 00093



**D113626 - PFD**  
Digital pushbutton panel for LINEA, for: - selecting the desired function using an appropriate key for the door, possible by entering a user code - modifying the operating parameters and the operating logic of the door after entering an installer code - set personal user and installer codes.

**Available while stock last.**



**P111330 00002 NTS Anodised**  
Door operator support beam in anodised aluminium for LINEA.  
**Available while stock last.**



**P111267 - DAB-1**  
Battery-powered antipanic device, which can be installed to doors.  
**Available while stock last.**



**P111163 00001 - SASAM 1**  
Breakout door device enabling door leaves to be pushed open even when the door is closed. Complete with safety contacts that prevent the door from being driven by the motor when door leaves are "open". SASAM 1 designed for use with single-leaf doors (maximum opening width 1100mm)



**P111163 00002 - SASAM 1**  
SASAM 1 version but in anodized aluminium. Maximum opening width 1100mm.

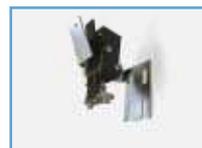


**P111263 00001 - SASAM 2**  
Breakout door device for use with two-leaf doors (maximum opening width 2200mm)



**P111263 00002 - SASAM 2**  
Anodized aluminium breakout door device for use with breakout doors with two moving leaves.

Maximum opening width 2200mm.



**N733320 - NCE**  
Electromagnetic latch for LINEA.  
**Available while stock last.**



**P111158 - PGI**  
Bottom door guide profile for aluminium frame.



**P111156 - PPR**  
Runner for bottom guide for aluminium frame. If a door has one leaf, use one runner, if the door has two leaves, use two runners.

For one-leaf doors use 1 runner, for two-leaf doors use 2 runners.

### RADAR AND RADAR ACCESSORIES - RADAR SPECIFICATIONS FROM PAGE 98 TO PAGE 100



**P111404 SEAGLE TWO**  
Bidirectional presence sensor.



**P111403 - EAGLE ONE**  
Unidirectional presence sensor. TELECOMANDO needed for programming.



**P111402 00001 - ACTIVE8 TWO PB**  
Safety and presence sensor.



**P111406 - SPOTFINDER**  
Infrared light-cone detector.



**P111407 - FALCON**  
Industrial presence sensor. Provided with a 6m cable. TELECOMANDO needed for programming.



**P111405 - TELECOMANDO**  
Remote control for Eagle, Active8 and Falcon.



**P111325 - RIP(\*)**  
Broad/narrow band active multifunctional infrared radar.



**P111265 - FPA 1**  
1 pair of photocells with a pair of sensors.



**P111266 - FPA 2**  
1 pair of photocells with two pairs of sensors.

\* If access is required both for entrance and exit, order no. 2 RIP radars.

# VISTA / LINEA

## MICROWAVE PRESENCE DETECTORS

98



### • EAGLE ONE E SEAGLE TWO

- Mono- and/or bi-directional detector
- Universal motion detector for automatic doors with high energy efficiency .
- K-band planar antenna specifically designed for automatic doors
- Digital electronics controlled by a powerful microprocessor
- Very wide detection lobe to provide the user with the best possible comfort and good side motion detection on approach

- "3D" adjustment: the antenna can be rotated along both axes:
  - Front adjustment: from 0° to 90°
  - Side adjustment: from 30° on left to 30° on right!
- Can be fitted as high up as 4 m (up to 3 metres for SEAGLE TWO)
- Strong ABS casing
- Programming via REMOTE CONTROL (for EAGLE ONE only)



### P111403 - EAGLE ONE

Unidirectional presence sensor. TELECOMANDO needed for programming.



### P111404 - SEAGLE TWO

Bidirectional presence sensor.

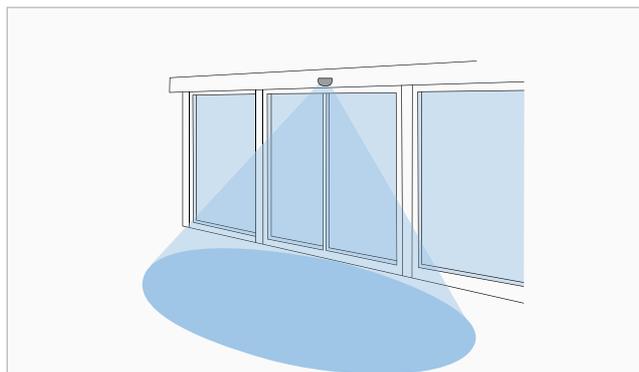


### FALCON - P111407

- Universal motion detector which can be installed up to 7 meters
- Vehicle/pedestrian distinction, rejecting parallel traffic
- REMOTE CONTROL programming

- Antenna with planar technology used for the first time in an automatic industrial door, able to provide high precision and stability in the detection field
- IP65

## EAGLE / FALCON EXAMPLE OF INSTALLATION





### •ACTIVE8 TWO PB

- Hyperfrequency and active infrared combined in a single unit
- Numerical electronics
- Motion detection for one-way opening (detection on approach)
- Presence detection provided by a double IR curtain, each comprising 24 interlaced spots so as to assure even, reliable detection
- Simplified settings courtesy of pre-programmed configurations

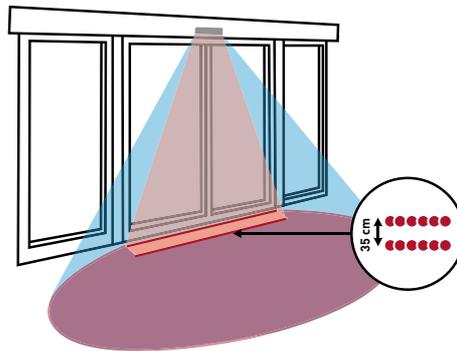


**P111402 00001 - ACTIVE8 TWO PB**  
Safety and presence sensor.



**P111406 - SPOTFINDER**  
Instrument used to detect the exact position of the infrared safety curtains

### EXAMPLE OF INSTALLATION



### TELECOMANDO (FOR EAGLE, FALCON AND ACTIVE 8)



### P111405 - TELECOMANDO

Instrument employed to program the sensor by adjusting:

- Sensitivity

- Programming mode
- Immunity
- Relay output configuration

# VISTA / LINEA

## RIP - FPA - INFRARED AND PHOTOCELL PRESENCE DETECTORS

100



### RIP

- Infrared presence detector
- Installation height up to 3 metres
- Double changeover output contact (NO/NC)
- Snow mode management
- Work frequency setting so that a number of sensors can be used close to each other without interference

### FPA 1 - FPA 2

- Recessed safety photocells for automatic pedestrian doors
- Safe, accurate operation by virtue of "microprocessor" technology
- Extremely small optics (12.4 mm in diameter and 10 mm deep) for "concealed" installations
- Maximum range up to 10 metres
- Double output contact (NO/NC)



### P111325 - RIP(\*)

Broad/narrow band active multifunctional infrared radar. If access is required both for entrance and exit, order no. 2 RIP radars.



### P111265 - FPA 1

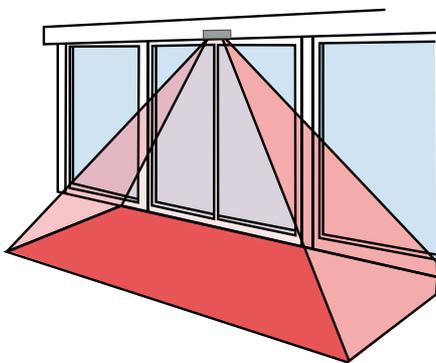
1 pair of photocells with a pair of sensors.



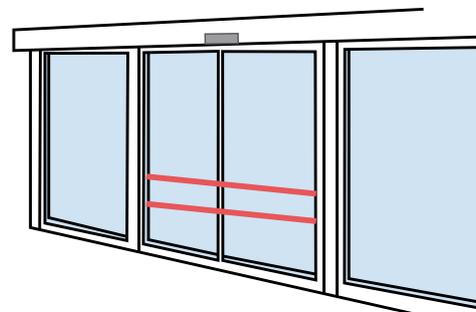
### P111266 - FPA 2

1 pair of photocells with two pairs of sensors.

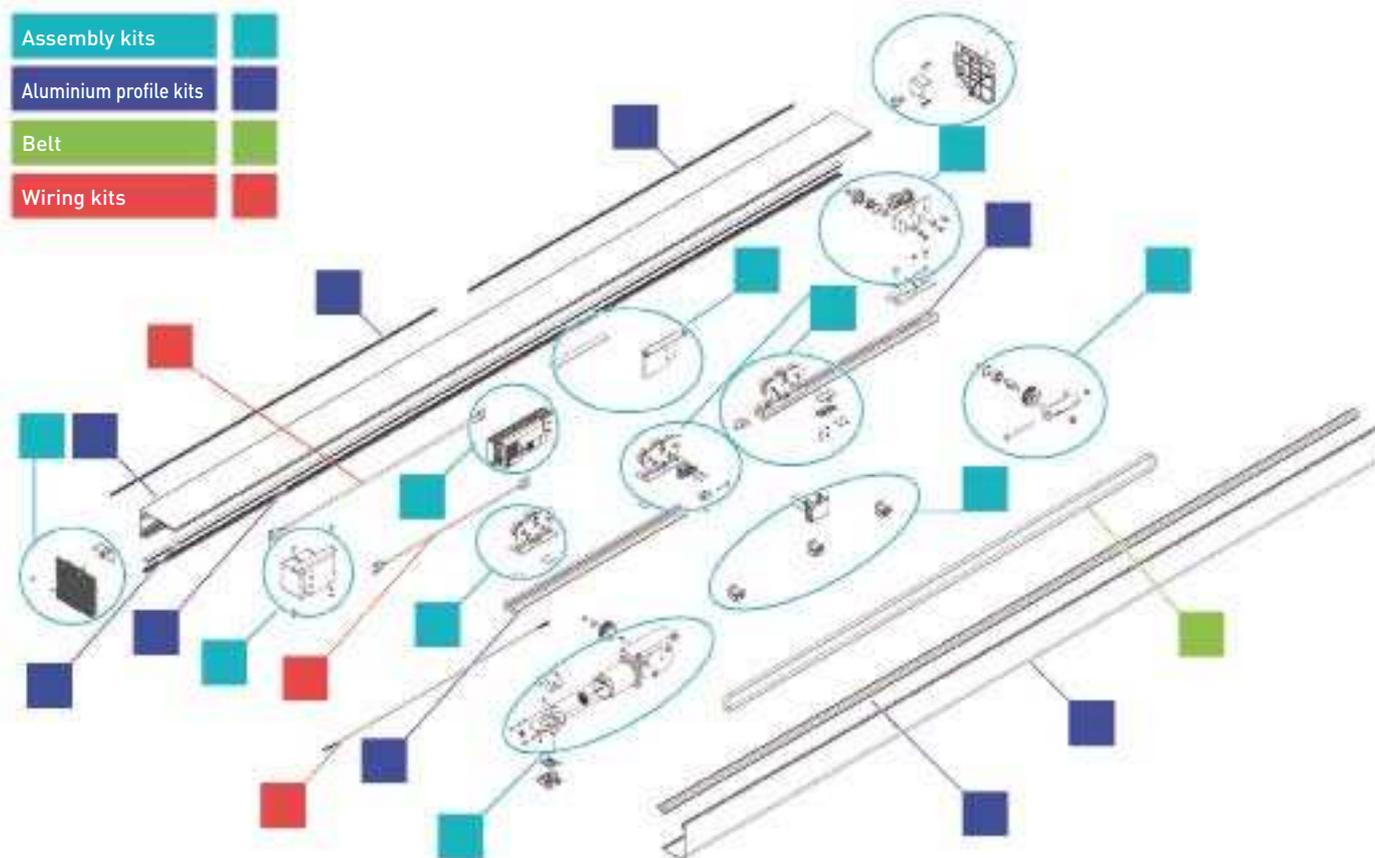
### RIP - EXAMPLE OF INSTALLATION



### FPA - EXAMPLE OF INSTALLATION



## ASSEMBLY KITS



CODE	DESCRIPTION
P960536 00002	230V 2-LEAF VISTA2 ASSEMBLY KIT
P960535 00002	230V 1-LEAF VISTA1 ASSEMBLY KIT
P960533 00002	ANOD. ALUMINIUM PROFILE KIT, 4,2 m LONG
P960534 00002	ANOD. ALUMINIUM PROFILE KIT, 6,5 m LONG
P960533 00001	NATURAL. ALUMINIUM PROFILE KIT, 4,2 m LONG
P960534 00001	NATURAL. ALUMINIUM PROFILE KIT, 6,5 m LONG
P111447	WIRING KIT VISTA SL MOD 107-125 E 212-229
P111448	WIRING KIT VISTA SL MOD 208-211
D191099	VISTA SL BELT KIT- 30 m PACK

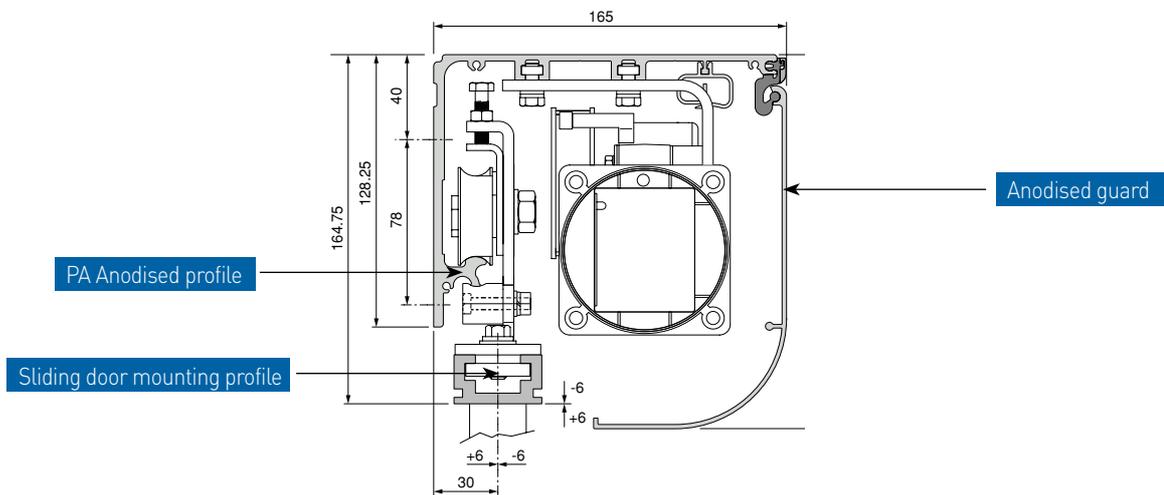
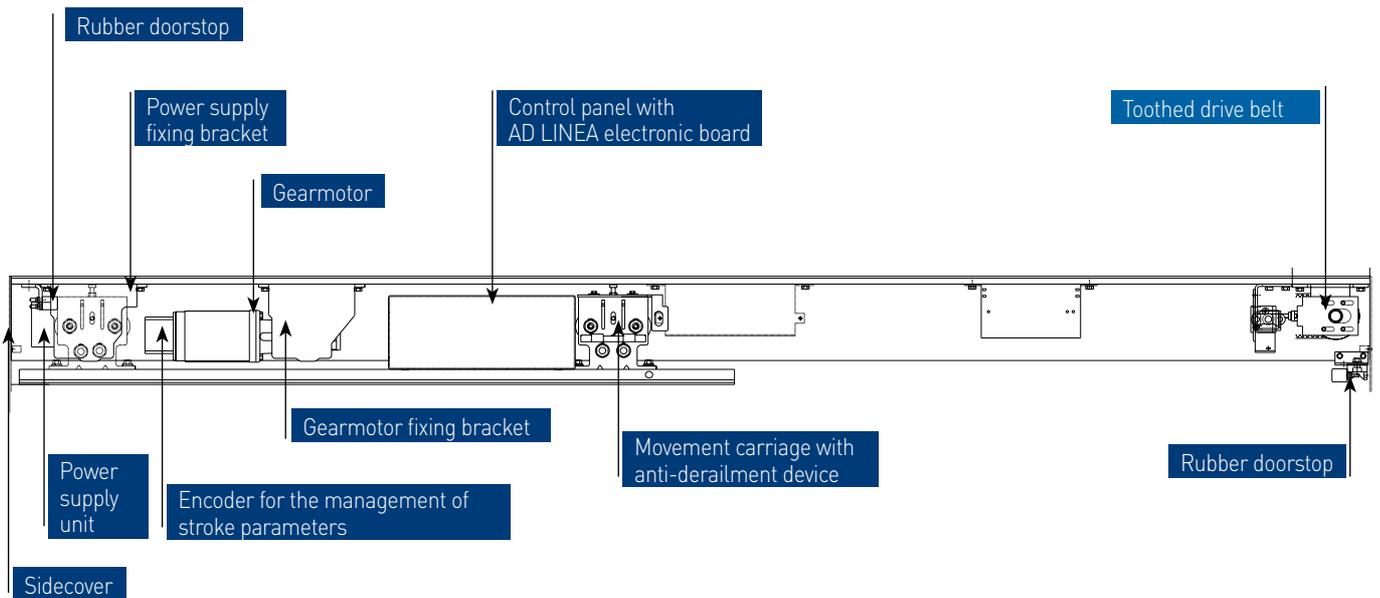
# LINEA KIT

## ELECTROMECHANICAL AUTOMATION FOR PEDESTRIANS DOORS

102

Components contained in the LINEA 1 and LINEA 2 kits

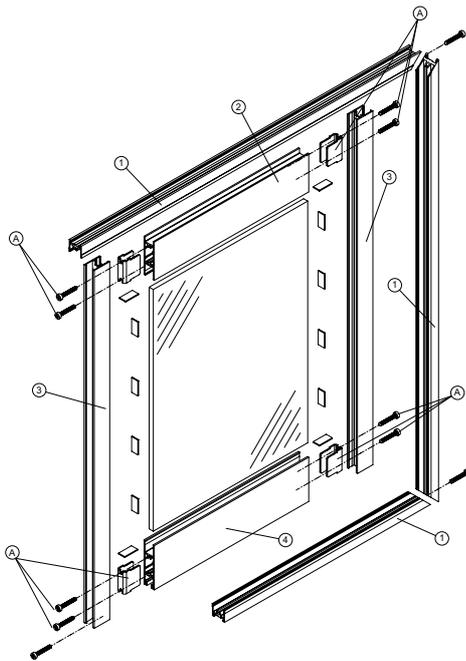
Hardware necessary for completing the installation



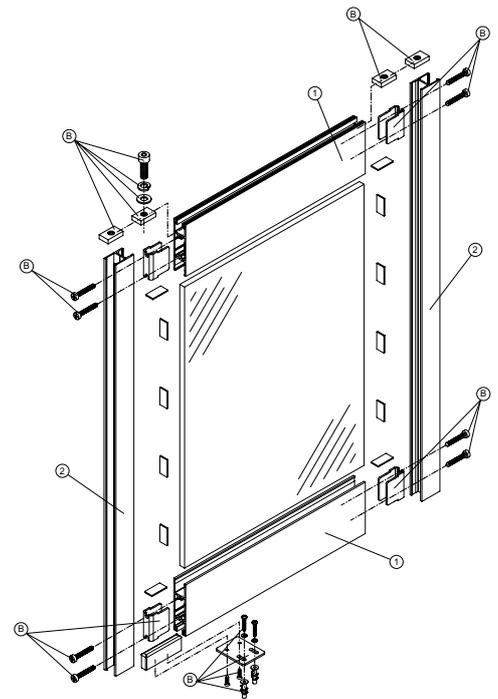


CODE	DESCRIPTION
<b>P960444 00002</b>	<b>AUTOMATIC SLIDING DOOR KIT</b> Complete kit for the installation of a LINEA 1 230V single-leaf sliding door
<b>P960445 00002</b>	<b>AUTOMATIC SLIDING DOOR KIT</b> Complete kit for the installation of a LINEA 2 230V double-leaf sliding door
<b>TO COMPLETE INSTALLATION OF THE AUTOMATIC SLIDING DOOR, THE FOLLOWING ACCESSORIES MUST BE USED:</b>	
<b>D191016</b>	Toothed drive belt
<b>D729034</b>	Sliding door mounting profile
<b>D729120</b>	<b>PA</b> Anodised PA profile
<b>D729119</b>	<b>CARTER</b> Anodised guard
<b>D729121</b>	Anodised front profile
<b>D221886</b>	Carter hinge

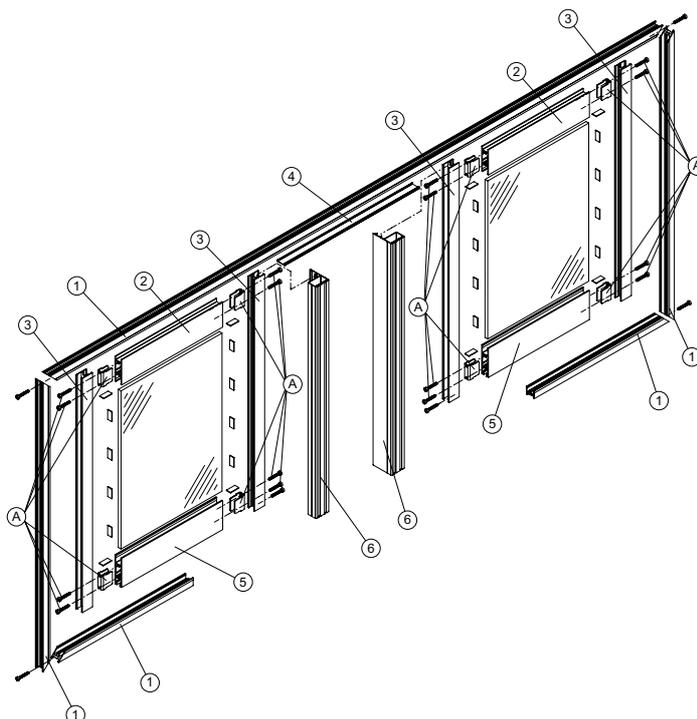
### ASSEMBLY OF FIXED DOOR SYSTEM



### ASSEMBLY AND INSTALLATION OF SLIDING DOOR



### ASSEMBLY OF DOUBLE FIXED DOOR SYSTEM



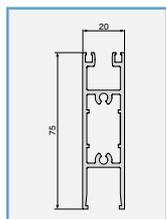
#### NOTES

Channel sections are supplied in 5m lengths and weatherstripping in 30m rolls.

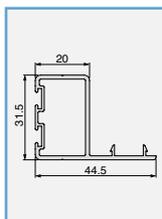
The quantity of each item thus varies according to door size.



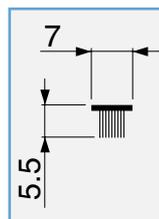
## DOOR PROFILE AND SEALS FOR FRAMED DOORS (20 mm SERIES)



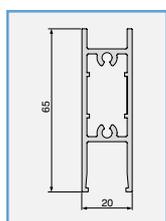
Top profile for bottom mobile leaf, fixed and mobile leaf. Available in 5 m bars.



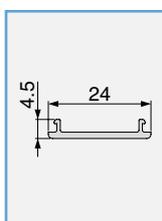
Edge profile / photocell holder. Available in 5 m bars.



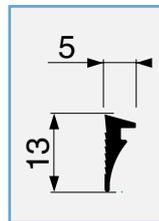
Side sealing brush pack. (30 metres)



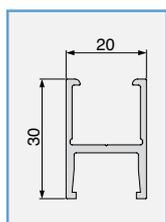
Top profile for fixed leaf. Available in 5 m bars.



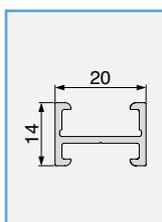
Latch profile. Available in 5 m bars.



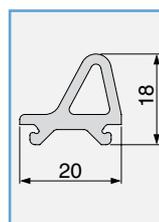
Glass stopper seal pack. (30 metres)



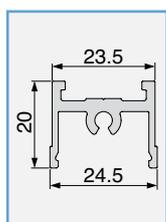
Jamb profile. Available in 5 m bars.



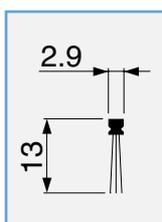
Weather strip profile. Available in 5 m bars.



Leaf latch seal pack. (30 metres)



Frame profile. Available in 5 m bars.



Mobile leaf sealing brush pack. (30 metres)

Accessory pack for constructing 1.

Accessory pack for assembling 1 mobile leaf.

• PROFILES NOT COMPATIBLE WITH SASAM SYSTEM

• CONTACT BFT FOR FURTHER INFORMATION



All the doors in sheds and industrial structures can be automated using a BFT operator. Extremely strong and compact, these solutions are also suitable for the most difficult applications: whatever the space they are installed in, they drive doors of different sizes in a safe and regular manner.

# SOLUTIONS FOR THE AUTOMATION OF INDUSTRIAL FOLDING DOORS

FORB | IGEA LB BT



# FORB - IGEA LB BT SERIES

ELECTROMECHANICAL OPERATOR FOR INDUSTRIAL SECTIONAL DOORS

108



## FORB

### • A MODEL FOR EVERY NEED.

→ Several versions available for automating large doors.

### • SAFE USE.

→ Hydraulic antisquashing system.  
 → Hydraulic locking on closing and internal release (also external with optional SEB accessory).  
 → Incorporated slowdown device.

## IGEA LB BT

### • SMART TECHNOLOGY.

→ Control unit compatible with the EELink protocol.

### • SAFE USE.

→ Specially designed for simpler and faster installation in compliance with the safety standards laid down by the Machinery Directive.

→ Thanks to the antisquashing system, the operator inverts motion and prevents damage to people and property in the event of contact.

### • SIMPLER INSTALLATION.

→ BFT's system of coded limit switches makes it possible to reduce the complexity of wiring the low-voltage motors: a single wire is carried to the control panel instead of the three normally required, thereby increasing the simplicity and speed of installation. Furthermore, the system is able to automatically distinguish between the open limit switch and the closed one and hence prevent wasted time and wiring errors.

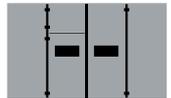
CODE	DESCRIPTION	VOLTAGE	DOOR WEIGHT	Q.TY PER PALLET
P935019 00001	FORB R	230 V	72 kg = 2,4 m <sup>2</sup> (2 operators)	20
P935072 00002	IGEA LB BT	24 V	from 200 kg to 250 kg	20

## TECHNICAL FEATURES

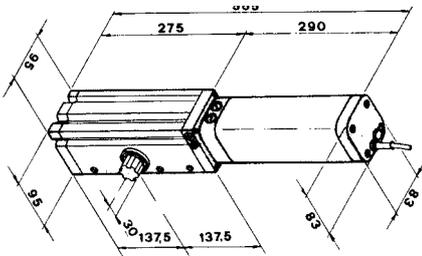
### FEATURES OF THE RANGE

### SPECIFIC FEATURES

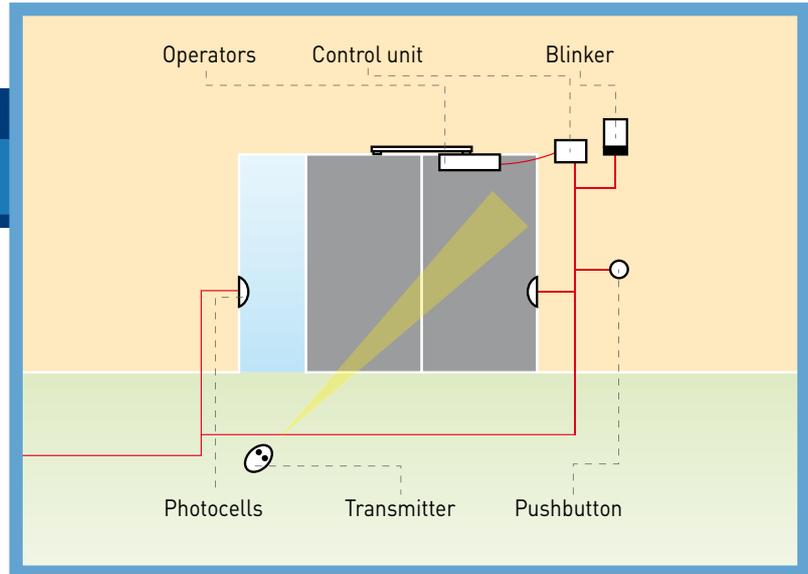
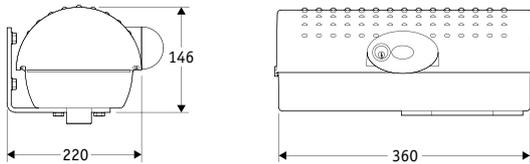
	FORB R	IGEA LB BT
CONTROL PANEL	RIGEL 5 (suggested)	LIBRA C MA
OPERATOR	irreversible	
POWER SUPPLY	230 V~ ± 10%, 50 Hz single-phase	24 Vdc
ABSORBED POWER	250 W	40 W
THERMAL PROTECTION	built into motor	built into control unit
OPENING OR CLOSING TIME	13 s + slow down	15 s
OUTPUT REVOLUTIONS	2,4 min	1,8 min
REDUCTION RATIO	-	1/812
MAX TORQUE	320 Nm	300 Nm
IMPACT REACTION	hydraulic friction	stops and movement is reversed
TYPE OF LIMIT SWITCHES	-	incorporated electric limit switch
MANUAL RELEASE	lever	release knob
OPERATING CYCLE	very intensive use	intensive use
ENVIRONMENTAL CONDITIONS	from -15°C to + 60°C	
DEGREE OF PROTECTION	IP20	IP4X
OPERATOR WEIGHT	~13 kg	~12 kg



DIMENSIONS (mm) FORB



DIMENSIONS (mm) IGEA LB BT



ACCESSORIES



**D113693 00003**  
**RIGEL 5**  
See page 141



**D113672 00005**  
**LIBRA C MA**  
See page 141



**D113703 00002**  
**ALTAIR P**  
See page 140



**P125005 - BT BAT**  
Thanks to the back-up batteries and battery charger, the BT BAT kit guarantees low voltage operation of the leaf in the event of power failure (LIBRA C MA, LIBRA C LX, HYDRA R).



**P111408 - SCS WIE**  
Circuit board for direct connection of wiegand accessories (such as SELETTO, COMPAS SLIM, etc) to the control units QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**P111376 - SCS 1**  
Serial connection board for QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**N733020 - SEB**  
External key release for BERMA, FORB and IGEA LB BT models.



**P121016 - RB**  
Four channels wall radio control with rolling code.



**NEW 2009**  
**P121019 - T-BOX**  
Remote control digital pushbutton panel for exterior use, with backlit light-touch keypad.



**D121611 - SPC**  
External Start-Stop 2-button panel.



**D121612 - SPC2**  
External Open-Close 2-button panel.



**NEW 2009**  
**D121619 - SPC3**  
External Open-Stop-Close 3-button panel



**D121613 - SPCE**  
External pushbutton panel with mushroom-head emergency button.



**NEW 2009**  
**N733422 - RCAL**  
Lever-operated release, with 7m-long steel cable.



**NEW 2009**  
**N733421 - RCA**  
Lever-operated release, with 3.5m-long steel cable.



BFT proposes lasting and reliable solutions for automating sectional industrial doors. In industrial contexts, where long-lasting security and durability are required, BFT operators meet even the most difficult needs.

# SOLUTIONS FOR THE AUTOMATION OF SECTIONAL DOORS

ULISSE



# 2009 NEW



**Dynamic TRAVEL**



**• POWERFUL AND ACCURATE.**

- 55Nm maximum torque in an extremely small package.
- Travel-limit positioning and intermediate positions controlled by absolute-encoder technology.
- 24V technology and solid design: tested to provide unbeatably long service life and reliability under any operating conditions, whether in residential, commercial or industrial settings.

**• OPERATING SAFETY.**

- Electronic torque, speed and slow-down management system.
- With the anti-crush system installed, the automated door's movement is reversed whenever there is any contact, thus preventing injury and damage to property.
- The absolute-encoder travel limit means stopping is extremely accurate. The travel limit system has no mechanical parts subject to wear or requiring maintenance.

**• SMART TECHNOLOGY**

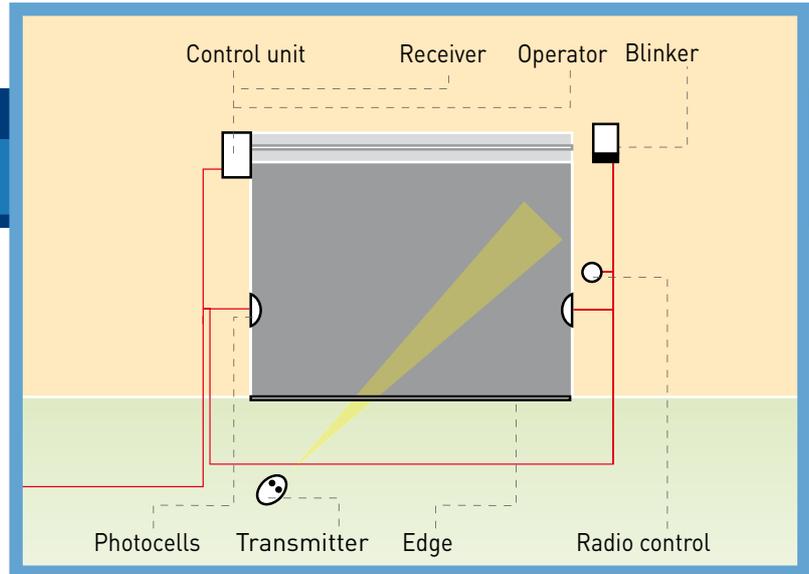
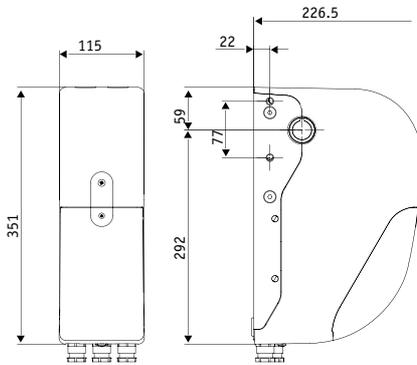
- Control unit with microprocessor technology.
- The simple, automatic setting of operating parameters makes for easier and quicker installation in conformity with the safety requirements laid down by the Machinery Directive.
- Absolute-encoder travel limit, with overrun clutch for quick and simple adjustment.
- Control unit compatible with EELink protocol.

CODE	DESCRIPTION	VOLTAGE	DOOR WEIGHT	Q.TY PER PALLET
P925202 00001	ARGO	24 V	max 20 m <sup>2</sup>	30

TECHNICAL FEATURES	
ARGO	
CONTROL PANEL	VENERE D ARGO (incorporated)
OPERATOR	irreversible
POWER SUPPLY	230 V~ ± 10%, 50 Hz single-phase
ABSORBED POWER	70 W
THERMAL PROTECTION	built into control unit
OUTPUT REVOLUTIONS	30 min <sup>-1</sup>
MAX TORQUE	55 Nm
IMPACT REACTION	Stop and reverse on encountering obstacle with dynamic torque control curve
TYPE OF LIMIT SWITCHES	encoder
THROUGH-SHAFT	Ø 25,4 mm
MAXIMUM TRAVEL	19 rpm
DIRECT TAKE-OFF	yes
OPERATING CYCLE	intensive use
ENVIROMENTAL CONDITIONS	from -20°C to + 55°C
DEGREE OF PROTECTION	IP40
OPERATOR WEIGHT	~10 kg



DIMENSIONS (mm)



ACCESSORIES



**P125005 - BT BAT**  
Thanks to the back-up batteries and battery charger, the BT BAT kit guarantees low voltage operation of the leaf in

the event of power failure (LIBRA C MA, LIBRA C LX, HYDRA R).

**NEW 2009**

**P125014 - SCS IO**  
Input/output serial expansion board



**P111408 - SCS WIE**

Circuit board for direct connection of wiegand accessories (such as SELETTO, COMPAS SLIM, etc) to the control units QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**P111401 00001 - VENTIMIGLIA NS**  
Infrared obstacle detection device for BIR C safety edge compliant with standard EN 12978.



**N190104 - BIR C**  
Rubber safety edge  
**Prezzo al m.**

**NEW 2009**



**P111451 00002 BAR C BA 2**  
Bord en caoutchouc double profil (2m).  
**Also available in 4m and 6m version - See Page 150**



**P111407 - FALCON**  
Industrial presence sensor. Provided with a 6m cable. TELECOMANDO needed for programming.

**NEW 2009**



**P121019 - T-BOX**  
Remote control digital pushbutton panel for exterior use, with backlit light-touch keypad.



**P121017 - SEK**  
Vandal-resistant key switch for exterior use with metal casing.



**P121016 - RB**  
Four channels wall radio control with rolling code.



**D121611 - SPC**  
External Start-Stop 2-button panel.



**D121612 - SPC2**  
External Open-Close 2-button panel.

**NEW 2009**



**D121619 - SPC3**  
External Open-Stop-Close 3-button panel



**D121613 - SPCE**  
External pushbutton panel with mushroom-head emergency button.

**NEW 2009**



**N733421 - RCA**  
Lever-operated release, with 3.5m-long steel cable.

**NEW 2009**

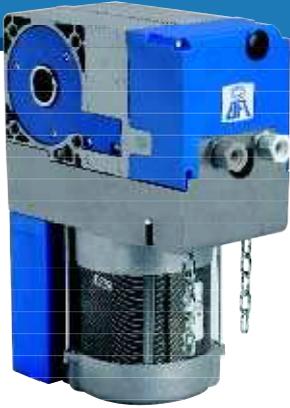


**N733422 - RCAL**  
Lever-operated release, with 7m-long steel cable.

# ULISSE SERIES

## ELECTROMECHANICAL OPERATOR FOR INDUSTRIAL SECTIONAL DOORS

114



• **A MODEL FOR EVERY NEED.**

→ Several versions available: 230 or 400 V, 4 or 6-pole, which allow different door opening and closing speeds on the basis of the weight and dimensions of the same.

→ Several versions available: with chain, fast release, and hold-to-run function (in the version with incorporated control panel).

→ Possible of direct or pulley transmission installation.

CODE	DESCRIPTION	VOLTAGE	DOOR WEIGHT	Q.TY PER PALLET
P925188 00002	ULISSE C (Chain release)	230 V	250 kg = 18 m <sup>2</sup>	24
P925188 00003	ULISSE C (Chain release)	400 V	500 kg = 36 m <sup>2</sup>	24
P925188 00004	ULISSE C UP (Chain release - hold to run)	400 V	500 kg = 36 m <sup>2</sup>	24
P925189 00002	ULISSE SB (Quick release)	230 V	250 kg = 18 m <sup>2</sup>	24
P925189 00003	ULISSE SB (Quick release)	400 V	500 kg = 36 m <sup>2</sup>	24
P925191 00002	ULISSE S C (Fast version with chain release)	230 V	350 kg = 25 m <sup>2</sup>	24
P925191 00003	ULISSE S C (Fast version with chain release)	400 V	700 kg = 40 m <sup>2</sup>	24
P925191 00004	ULISSE S C UP (Fast version with chain release - hold to run)	400 V	700 kg = 40 m <sup>2</sup>	24
P925192 00002	ULISSE S SB (Fast version with quick release)	230 V	350 kg = 25 m <sup>2</sup>	24
P925192 00003	ULISSE S SB (Fast version with quick release)	400 V	700 kg = 40 m <sup>2</sup>	24

### TECHNICAL FEATURES

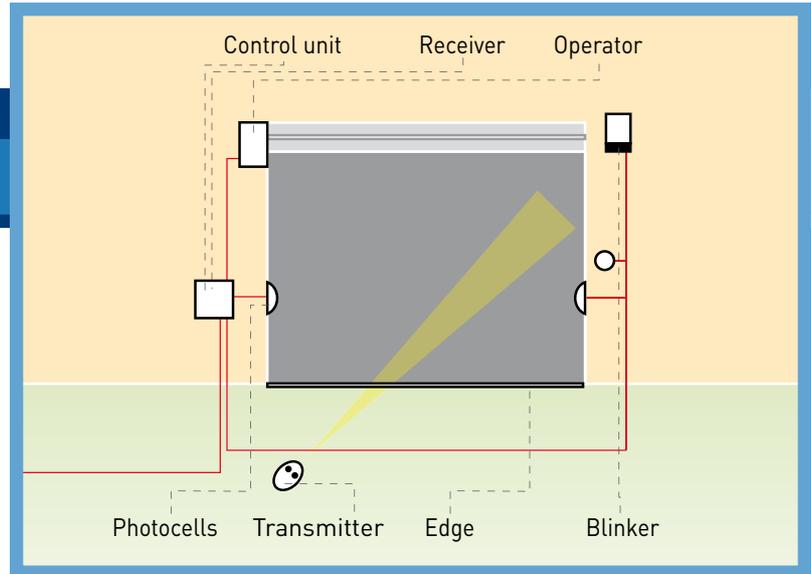
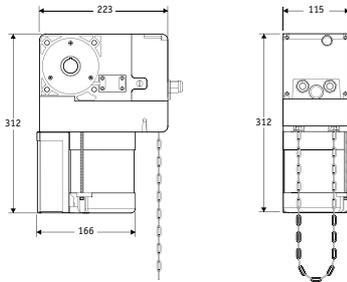
#### FEATURES OF THE RANGE

#### SPECIFIC FEATURES

	ULISSE C/SB (230V)	ULISSE C/SB (400V)	ULISSE S C/SB (230V)	ULISSE S C/SB (400V)
CONTROL PANEL	ALPHA FR (suggested)	SIRIO MA (suggested)	ALPHA FR (suggested)	SIRIO MA (suggested)
OPERATOR	irreversible			
POWER SUPPLY	230 V- ± 10%, 50 Hz single-phase	400 V- ± 10%, 50 Hz three-phase	230 V- ± 10%, 50 Hz single-phase	400 V- ± 10%, 50 Hz three-phase
ABSORBED POWER	500 W	770 W	600 W	720 W
THERMAL PROTECTION	built into motor			
OPENING OR CLOSING TIME	from 17 to 20 s			
OUTPUT REVOLUTIONS	22 min	22 min	33 min	33 min
REDUCTION RATIO	1/43			
MAX TORQUE	45 Nm	65 Nm	40 Nm	65 Nm
IMPACT REACTION	external active safety edge			
TYPE OF LIMIT SWITCHES	electric, incorporated and adjustable			
NO. POLES MOTOR	6	6	4	4
THROUGH-SHAFT	Ø 25,4 mm			
STROKE	27,5 rpm			
DIRECT TAKE-OFF	yes	yes	no	no
OPERATING CYCLE	semi intensive use			
ENVIRONMENTAL CONDITIONS	from -15°C to +60°C			
DEGREE OF PROTECTION	IP20			
OPERATOR WEIGHT	~10 kg			



DIMENSIONS (mm)



ACCESSORIES



**D113713 00002**  
**SIRIO MA**  
See page 141



**D113689 00002**  
**ALPHA FR**  
See page 140



**D113612 00001**  
**ELMEC 1**  
See page 141



**D113613 00001**  
**ELMEC 2**  
See page 141



**D113200 00001**  
**SIRIO TMA**  
See page 142  
**Available while stock last.**



**D533019 - CAP5**  
5-m open release chain pack for ULISSE C.



**D533020 - CAP8**  
8-m open release chain pack for ULISSE C.



**N733336**  
**PIG 14/ULISSE S**  
Z14 pinion gear kit for 1/2" x 5/16" chain.



**N733337**  
**PIG 30/ULISSE S**  
Z30 pinion gear kit for 1/2" x 5/16" chain.



**N733338**  
**PIG 12/ULISSE S**  
Z12 pinion gear kit for 1/2" x 5/16" chain.



**N733339**  
**PIG 18/ULISSE S**  
Z18 pinion gear kit for 1/2" x 5/16" chain.



**N733148 - COR 30**  
Z30 crown wheel assembly for 1' (25.4 mm) sectional door shafts, including key and 2m 1/2x5/16" chain. Suitable for sectional doors with 140 mm cable-winder pulleys.



**N733149 - COR 40**  
Z40 crown wheel assembly for 1' (25.4 mm) sectional door shafts, including key and 2m 1/2x5/16" chain and split link. Suitable for sectional doors with 160 mm cable-winder pulleys.



**P111407 - FALCON**  
Industrial presence sensor. Provided with a 6m cable. TELECOMANDO needed for programming.



**P111401 00001**  
**VENTIMIGLIA NS**  
Infrared obstacle detection device for BIR C safety edge compliant with standard EN 12978.



**N190104 - BIR C**  
Rubber safety edge.



**NEW 2009**  
**P111451 00002**  
**BAR C BA 2**  
Bord en caoutchouc double profil. Length 2m  
**Also available in 4m and 6m version - See Page 150**



Reserved areas, protected areas, working environments and sports clubs become much more secure with BFT access control times. Avant-garde applications and the broad range of ACCESSORIES make it possible to create systems to measure for every need, capable of guaranteeing the maximum reliability and the possibility of managing a very high number of software functions and accesses.

# SOLUTIONS FOR THE AUTOMATION OF AREAS WITH CONTROLLED ACCESS

COMPASS



# COMPASS

## ACCESS CONTROL SYSTEM

118



### • A MODEL FOR EVERY NEED.

→ Multiple application possibility thanks to the broad range of cards managed (up to 6000) in standalone mode.

→ The wide range of components and accessories makes it possible to create a product to measure for every need.

### • SAFE USE.

→ Identification of the cards is carried out in an environment which is separate from the reading one, thereby guaranteeing the system's inaccessibility even if the card reader is tampered with.

### • SMART TECHNOLOGY.

→ Parameter variations are made without interrupting operation of the system.



#### D113684 - COMPASS SC 232

- Stand-alone unit (with no permanent PC connection) • The system performs independent access control, allowing functions to be configured via the Securbase Light or Securbase Plus software
- In stand-alone mode it is able to handle 6000

recognition devices and stores all associated events and relative date and time parameters.

**COMPASS-SC:** Control unit for access control systems capable of handling up to 32 peripheral devices (Compass-485, RTD-CA).

**Supply voltage:** 230 Vac.

**Inputs:** open pushbutton, door status sensor.

**Passageway control output:** 12A 250 Vac relay.

**Auxiliary output (door open alarm):** 12A 250Vac relay.

**Connections:** RS485 serial port for connecting to other system peripherals, RS232 serial port to communicate with the PC.

**Degree of protection:** IP20.

**Number of storable events in the stand-alone**

**version:** 65000 without keypad.

**Alarms:** Buzzer.

**Installation:** wall-mounted



#### D113691 - COMPASS SC USB

The same characteristics as Compass SC but with serial USB interface for connecting to the personal computer.



#### D1123257 - COMPASS 232

- To connect up to 19 Compass 485 units to the PC serial port • All the readers can be connected to a PC by the network to increase the number of codes which can be managed • Also includes operation of a Compass 485 unit

**COMPASS 232:** Serial converter RS485 - RS232

**Power supply voltage:** 230 Vac

**Inputs:** opening button, door status sensor

**Access control output:** 10A 250V relay with insulated contact

**Degree of protection:** IP20

**Number of peripheral units which can be connected:** 19

**Number of cards which can be memorised in standalone version:** 6000

**Programming:** by means of Master Cards or PC

**Installation:** wall-mounted.



#### D113256 - COMPASS 485

- Installed inside the protected area, this unit memorises the card codes and receives signals from the Compass Slim. It manages: • door opening input • door status input • door alarm output • door lock output • up to 6000 cards as a stand-alone system

**COMPASS 485:** Management unit for COMPASS SLIM

**Power supply voltage:** 230 Vac

**Inputs:** opening button, door status sensor

**Access control output:** 10A 250V relay with insulated contact

**Auxiliary output (door-open alarm):** 10A 250V relay

**Degree of protection:** IP20

**Programming:** by means of Master Cards or PC

**Serial interface:** RS485 (2 wires)

**Installation:** wall-mounted.



#### D113704 - COMPASS SLIM

- Proximity reader for indoor and outdoor use with compact size and thickness. • Built with vandal-proof materials. • Detection distance 3-4 cm. For combination with COMPASS - SC, 485, 232.
- Compatible with RTD CA and CLONIX 4 RTE.
- Output connection with protocol according to

Wiegand 26 BIT standard.

**COMPASS SLIM:** Proximity reader to be used with COMPASS SC, 485, 232.

**Power supply voltage:** 12Vdc (supplied by Compass SC, 485, 232)

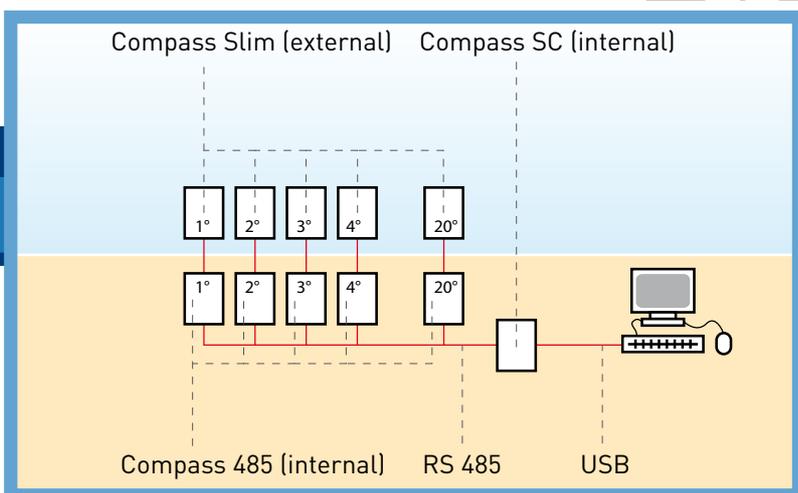
**Degree of protection:** IP44

**Max connection distance between reader and management unit:** 5 metres

**Reading distance:** 3-4 cm

**Signal indications:** Buzzer + two-colour LED

**Installation:** wall-mounted.



### ACCESSORIES



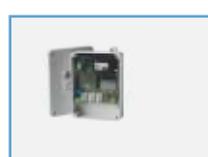
**D413130 - COMPASS-ATS**  
Anti-vandalism enclosure for COMPASS-READER.



**D111453 00001 - MITTO 2T**  
Two-channel rolling code transmitter and transponder, incorporated for reading by a proximity reader.  
**Available while stock last.**



**D111454 00001 - MITTO 4T**  
Four-channel rolling code transmitter and transponder incorporated for reading by a proximity reader.  
**Available while stock last.**



**D113671 00002 - RTD CA 2048**  
2048 code rolling code receiver and built-in display for programming. It can be used with COMPASS SYSTEM. Makes it possible to manage openings with radio controls, with COMPASS ISOCARD and with COMPASS RING cards.



**D110912 - COMPASS-ISOCARD**  
Proximity card ISO standard.



**D110917 - COMPASS ISOCARD PERSONALIZZATA**  
On request, card customisation, with 1 colour, minimum quantity to be ordered 100 pcs (including clichés).



**D110914 - COMPASS-RING**  
Key holder with incorporated transponder for reading by a proximity reader.



**D121502 - UNICAVO**  
Serial cable for Proxima-PC connections.



**D811315 - SECURBASE**  
Access control management database on PC. Operating system: Windows 95, 98, 2000, NT, XP. Complete data storage

management of: cards, readers, card groups, reader groups, card subgroups, reader subgroups, time band, calendar, antipassback function, card self-learning by means of system reader. The program provides an interesting graphic display of the system status (showing the plan of the area controlled, and the status of the alarms and accesses, the representation is animated and therefore shows the accesses being open and closed as they actually are in reality). Moreover, it will be possible to consult the list of the cards within the system at any time, and a whole range of enquiries about the steps completed will be available. Available only with COMPASS 232.

control of accesses in real time by means of the display of all the events in table or graph form. All the remote management is implemented with the aid of a database completely synchronized with the internal memory of the Compass SC, permitting the complete management of the unit with the aid of a Windows-compatible graphical interface. Access control, implemented by means of the hardware system managed by the Compass SC, is made visible in graphical mode by means of the graphical display of the plan if this has been installed. It permits complete management of all the system's basic functions. Basic functions - Management of file records of persons and access control criteria relating to individual identification devices - Management and programming of 256 groups, 256 calendars and 256 time bands - Associability of a person with one group from 256 available - Management of 16 readers and associated programming parameters plus local network management - Management of system reader and self-learning system - Management of a protected antipassback area - management of current and daylight-saving time and date - Management of prepaid cards with premium rate readers. - PC management of single database - Multilingual operations (Italian, English, German, French, Portuguese and Spanish). Serial USB interface for connecting to the personal computer. Compatible with Windows XP.



**P111389 SECURBASE PLUS USB**  
Similar to SECURBASE LIGHT but also permits management of advanced functions as

- specified below: - Management of 32 readers • Management of daily, weekly, monthly and annual prepaid cards • A person can be associated with four different groups from 256 available • Management of 8 protected antipassback areas • Multiple database management by PC, for programming several systems/installations • Graphical management of persons belonging to a group • Graphical management of protected areas and associated readers. USB interface for connecting to the personal computer. Compatible with Windows XP.



**P111388 - SECURBASE LIGHT USB**  
Compass SC remote unit management software. The software makes it possible to program the

Compass SC unit and all the associated functions completely. It also makes it possible to manage the



Accesses to private areas, apartment buildings, car parks, garages and industries: BFT produces automatic road barriers for openings of variable width for all these contexts. The entire range ensures broad installation versatility and a great maintenance simplicity.

# SOLUTIONS FOR THE AUTOMATION OF ROAD BARRIERS

MICHELANGELO | BGV | MOOVI



# MICHELANGELO SERIES

## ROAD BARRIERS

122



• **A MODEL FOR EVERY NEED.**

→ Possibility of closing passages up to 8 m.

• **SMART TECHNOLOGY.**

→ Electronic adjustment of the limit switches.  
→ The new position of the control panel makes it possible to operate in a vertical position.

• **SAFE USE.**

→ The barrier features a very stout structure to guarantee greater protection from vandal attacks and constant reliability in use.

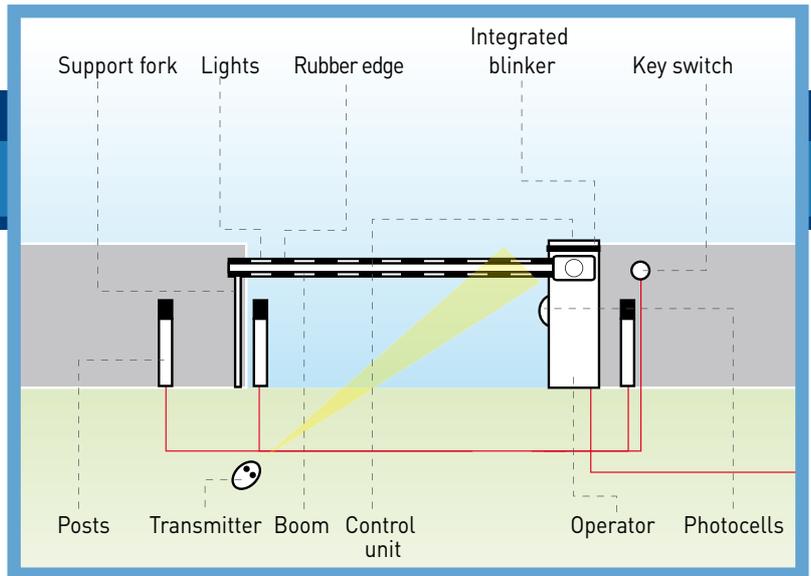
• **SIMPLER INSTALLATION.**

→ The blinker and the support for the photocells are integrated in the frame (optional), the lights are integrated in the boom (optional).  
→ Cabling is simplified by means of the ducting for housing the cables themselves.

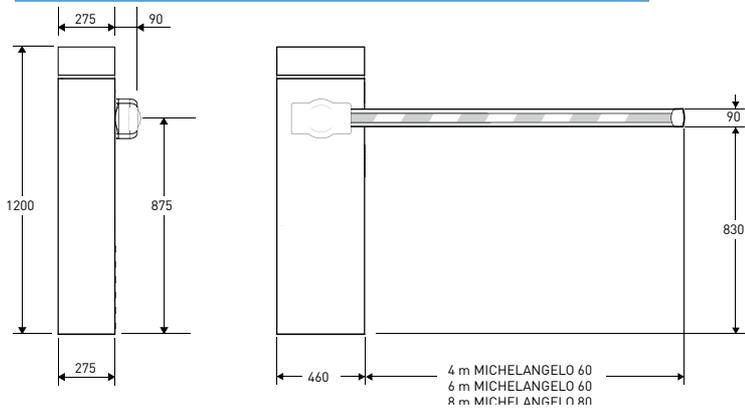
CODE	DESCRIPTION	VOLTAGE	BOOM LENGTH	Q.TY PER PALLET
P941005 00001	MICHELANGELO 40 (Red version) <b>NEW<sup>2009</sup></b>	24V	4m	4
P941008 00001	MICHELANGELO 40 (Blue version) <b>NEW<sup>2009</sup></b>	24 V	4 m	4
P941006 00001	MICHELANGELO 60 (Red version)	24 V	6 m	4
P941002 00001	MICHELANGELO 60 (Blue version)	24 V	6 m	4
P941007 00001	MICHELANGELO 80 (Red version)	24 V	8 m	4
P941004 00001	MICHELANGELO 80 (Blue version)	24 V	8 m	4

### TECHNICAL FEATURES

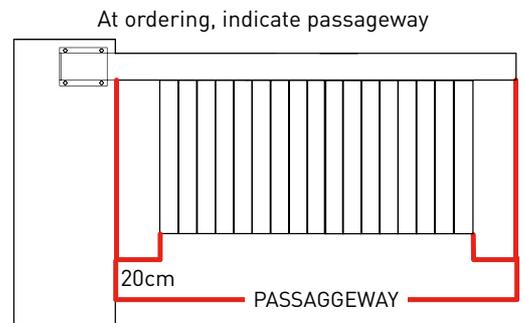
FEATURES OF THE RANGE		SPECIFIC FEATURES		
		MICHELANGELO 40	MICHELANGELO 60	MICHELANGELO 80
CONTROL PANEL	LIBRA C MV (incorporated)			
OPERATOR	irreversible			
POWER SUPPLY	230 V- ± 10%, 50 Hz single-phase			
ABSORBED POWER	300 W			
OPENING OR CLOSING TIME		4 s (4 m)	6 s (6 m)	8 s (8 m)
IMPACT REACTION	stops and movement is reversed			
TYPE OF LIMIT SWITCHES	electronic opening/closing			
MANUAL RELEASE	fast key release			
OPERATING CYCLE	very intensive use			
ENVIRONMENTAL CONDITIONS	from -10°C to + 55°C			
DEGREE OF PROTECTION	IP24			
OPERATOR WEIGHT WITHOUT BOOM		55 kg	58 kg	68 kg



DIMENSIONS (mm)



FENCE



**NOTE: MICHELANGELO ACCESSORIES ILLUSTRATED ONLY ON FOLLOWING PAGES (PAGE 124-PAGE 125)**



# MICHELANGELO SERIES

## ROAD BARRIERS

124

### ACCESSORIES



**N728026 - ATT 704**  
First part telescopic round boom, ø 70, long 4,3 m.

**NEW 2009**



**N728030 - ATT 706**  
First part telescopic round boom, ø 70, long 6,35 m.



**N728028 - ATT 502**  
Second part telescopic round boom, ø 50, long 2,60 m.



**N728027 - ATT 504**  
Second part telescopic round boom, ø 50, long 4,6 m.



**N999386 ACC MCL ATT**  
accessories packaging for ATT 704 / 706 boom.



**N728022 - ELL 6**  
Rectangular boom 6 m long.



**N999391 ACC MCL ELL**  
accessories packaging for boom.



**P120003 00002 - PCA 6**  
Boom upper and lower casing profile in rubber for MICHELANGELO (boom max 6 m).  
For MICHELANGELO Red.



**NEW 2009**

**P120003 00003 - PCA 8**  
Boom upper and lower casing profile in rubber for MICHELANGELO (boom max 8 m).  
For MICHELANGELO Red.



**P120010 - MCL PCA 8**  
Boom upper and lower casing profile in rubber for MICHELANGELO (boom max 8 m).  
For MICHELANGELO Blue.



**P120008 - MCL PCA 6**  
Boom upper and lower casing profile in rubber for MICHELANGELO (boom max 6 m).  
For MICHELANGELO Blue.



**P120006 KIT MCL LAMPO**  
Integrated blinker.  
**It must be connected to KIT SCHEDA MCL.**



**P120005 00001 KIT MCL LIGHT**  
Lighting kit with 6 lights.  
To be used in combination with PCA 6, PCA 8 or KIT MCL LAMPO. **It must be connected to KIT SCHEDA MCL.**



**P120009 KIT SCHEDA MCL**  
Lights control board. One board is sufficient to have both KIT MCL LIGHT and LAMPO working.



**NEW 2009**

**P903015 00001 KIT MCL RFL**  
CELLULA RFL mount on MICHELANGELO barrier.  
Reflector included.

**NEW 2009**



**P120007 00001 KIT MCL 130**  
External photocell post kit.



**D730964 - BM**  
MICHELANGELO anchor base.



**D730088 - FAF**  
Fixed bar rest fork.  
For MICHELANGELO Red.



**D730991 - MCL FAF**  
Fixed bar rest fork.  
For MICHELANGELO Blue.



**D940008 - MOOVI GA**  
Movable boom rest rod



**D940009 MOOVI GAMA**  
Movable boom rest rod, shock absorbing.



**D573003 - SB**  
Skirt to be fitted on boom, comes with L-shaped fastening profile. Cannot be applied to BGV/MOOVI 30 models.

Its application in the other models gives rise to a reduction of the overall length of the boom (see table).



**P111408 SCS WIE**  
Circuit board for direct connection of wiegand accessories (such as SELETTO, COMPAS SLIM, etc) to the control units

QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**P111376 - SCS 1**  
Serial connection board for QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.

**NEW 2009**

**P125011 - MCL BAT**  
Thanks to the back-up batteries and battery charger, the MCL BAT kit guarantees low voltage operation in the event of power failure.

**AVAILABLE WHILE STOCK LAST**



**P120007 - KIT MCL 130**  
External photocell post kit. For MICHELANGELO Blue. **Available while stock last.**



**P903015 - MCL RFL**  
CELLULA RFL mount on MICHELANGELO barrier. Reflector included. For MICHELANGELO Blue. **Available while stock last.**

**CALCULATING THE MAXIMUM BOOM LENGTH OF MICHELANGELO 60 AND MICHELANGELO 80 ROAD BARRIERS BASED ON THE ACCESSORIES INSTALLED.**

SB	SB	SB	SB	SB								
1 PCA or MCL PCA (only above the boom)	1PCA	1PCA			1PCA	1PCA		1PCA		1PCA		
2 PCA or MCL PCA (under and above the boom)								2 PCA			2 PCA	
KIT MCL LIGHT	KIT MCL LIGHT	KIT MCL LIGHT			KIT MCL LIGHT	KIT MCL LIGHT		KIT MCL LIGHT	KIT MCL LIGHT	KIT MCL LIGHT	KIT MCL LIGHT	
GA	GA		GA		GA	GA	GA	GA	GA			
BIR						BIR	BIR			BIR		BIR
ELL6 + MICHELANGELO 60	4,7 m	5 m	4,9 m	5,2 m	6 m	5,5 m	5,9 m	6 m	6 m	5,9 m	6 m	6 m
ATT704 + ATT502 + MICHELANGELO 60					5,9 m	5,2 m	5,5 m	5,9 m	5,7 m	5,5 m	6 m	5,8 m
ATT704+ATT504 + MICHELANGELO 80					8 m	7,1 m	7,5 m	8 m	7,8 m	7,3 m	8 m	7,8 m
ATT706 + MICHELANGELO 60	4,3 m	4,5 m	4,5 m	4,6 m	5,6 m	5 m	5,2 m	5,6 m	5,4 m	5,3 m	5,7 m	5,5 m
ATT706 + MICHELANGELO 80	6 m	6 m		6 m								
ATT704 + MICHELANGELO 40	2,2 m	2,4 m	2,5 m	2,6 m	4 m	3 m	3,4 m	4 m	3,8 m	3,2 m	4 m	3,7 m

**EXAMPLE FOR MICHELANGELO 60 + ELL 6: SB + 1PCA + KIT MCL LIGHT + GA = BOOM MAX 4,7 m**

**NOTE:** The values given in the table refer to maximum boom length. Booms that are shorter than the values given must be tested and suitably balanced.

# MOOVI SERIES

## ROAD BARRIERS

126



### • A MODEL FOR EVERY NEED.

- Available in several versions, for openings from 3 to 5 m and speeds from 1.5 to 8 s.
- Supplied with a wide range of accessories.

### • SMART TECHNOLOGY.

- Internal ventilation system.
- Fast release with personalised key.
- Predrilled frame to allow simpler installation of the accessories.

CODE	DESCRIPTION	VOLTAGE	BOOM LENGTH	Q.TY PER PALLET
P940026 00002	MOOVI 30	230 V	3 m	5
P940028 00002	MOOVI 50	230 V	5 m	5
P940030 00002	MOOVI 30S (Fast)	230 V	3 m	5
P940027 00002	MOOVI 30 RMM (Provision for metal object detector)	230 V	3 m	5
P940029 00002	MOOVI 50 RMM (Provision for metal object detector)	230 V	5 m	5

### TECHNICAL FEATURES

#### FEATURES OF THE RANGE

#### SPECIFIC FEATURES

	MOOVI 30	MOOVI 50	MOOVI 30S	MOOVI 30/50 RMM
CONTROL PANEL				
OPERATOR	irreversible			
POWER SUPPLY	230 V- ± 10%, 50 Hz single-phase			
ABSORBED POWER	300 W			
THERMAL PROTECTION	built into motor			
OPENING OR CLOSING TIME	4 s	8 s	1,5 s + slowdown	4 s (MOOVI 30), 8 s (MOOVI50)
SLOWDOWN	-	-	adjustment	-
IMPACT REACTION	-	-	stops and movement is reversed	stops and movement is reversed
TYPE OF LOCK	mechanical opening/closing			
TYPE OF LIMIT SWITCHES	electric, incorporated, adjustable			
MANUAL RELEASE	fast release with personalised key			
OPERATING CYCLE	very intensive use			
ENVIRONMENTAL CONDITIONS	from -10°C to + 55°C			
DEGREE OF PROTECTION	IP24			
OPERATOR WEIGHT WITHOUT THE ROD	~36 kg			

### CALCULATING THE MAXIMUM BOOM LENGTH OF MOOVI ROAD BARRIERS BASED ON THE ACCESSORIES INSTALLED.

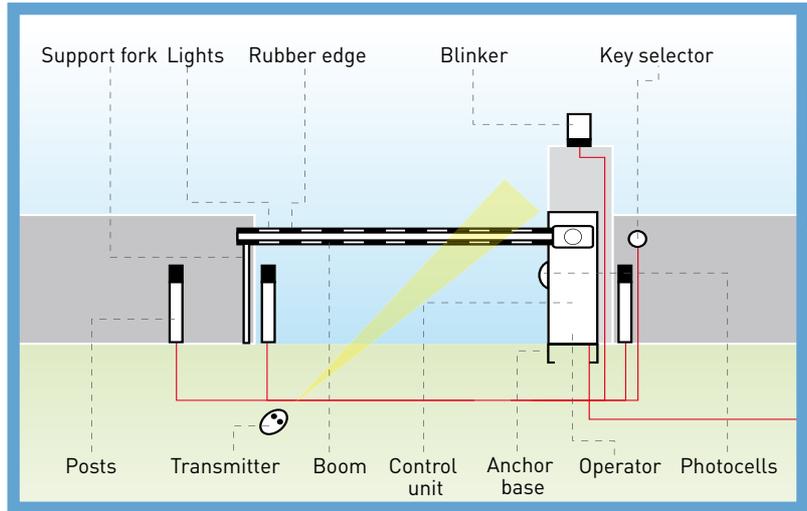
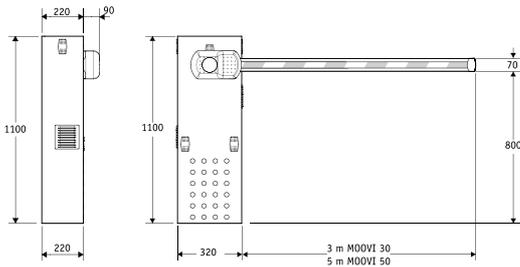
Boom ELL3 or ELL5	Boom															
SB	SB	SB	SB						SB	SB	SB					
PCA (only above the boom)	PCA	PCA		PCA	PCA				PCA	PCA		PCA	PCA			
PCA (under and above the boom)						PCA	PCA							PCA	PCA	
KIT LIGHT and KIT LIGHT 1	LIGHT			LIGHT		LIGHT			LIGHT			LIGHT		LIGHT		LIGHT
MOOVI GA or MOOVI GAMA	GA															
	GAMA															
Passageway MOOVI 30 (m)				2,7 m	2,7 m	2,5 m	2,6 m	2,9 m				3,0 m	3,0 m	2,9 m	3,0 m	3,0 m
Passageway MOOVI 50 (m)	3,3 m	3,3 m	3,5 m	4,6 m	4,8 m	4,4 m	4,5 m	5,0 m	3,6 m	3,6 m	3,7 m	5,0 m	5,0 m	4,8 m	5,0 m	5,0 m

EXAMPLE FOR MOOVI 50: BOOM + SB + PCA + LIGHT + GA = BOOM MAX. ELL5 3,3m

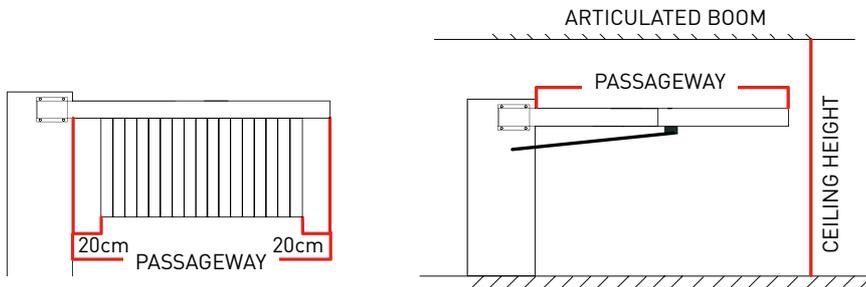
NOTE: The values given in the table refer to maximum boom length. Booms that are shorter than the values given must be tested and suitably balanced.



**DIMENSIONS (mm)**



**WHEN ORDERING INDICATE THE WORKING PASSAGEWAY**



**ACCESSORIES**



**P111408 - SCS WIE**

Circuit board for direct connection of wiegand accessories (such as SELETTTO, COMPAS SLIM, etc) to the control units

QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**P111376 - SCS 1**

Serial connection board for QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**N728020 - ELL 3**

One-piece 3 m boom.



**N728021 - ELL 5**

One-piece 5 m boom.



**P120002 KIT MOOVI 130**

External photocell post kit



**N728029 MOOVI ART90**

90-degree articulated boom for MOOVI30, 50, 30S. Max opening 3,8m.



**D940008 - MOOVI GA**

Movable boom rest rod



**D940009 MOOVI GAMA**

Movable boom rest rod, shock absorbing.



**P120004 KIT MOOVI PRM**

Kit to protect hands from shearing.



**P120001 00001 KIT MOOVI LIGHT**

Lighting kit for 3 or 4.5 m booms. To be used in combination with the MOOVI PCA kit



**P120001 00002 KIT MOOVI LIGHT1**

Lighting kit for 5 or 6 m booms. To be used in combination with the MOOVI PCA kit



**P120003 00001 - PCA 3**

Boom upper and lower casing profile in rubber for boom.



**P120003 00002 - PCA 6**

Boom upper and lower casing profile in rubber for boom.



**D730251 - CBO**

MOOVI mod. anchor base.



**D573003 - SB**

Skirt to be fitted on boom, comes with L-shaped fastening profile. Cannot be applied to BGV/ MOOVI 30 models. Its application in the other models gives rise to a reduction of the overall length of the boom (see table).



**D730088 - FAF**

Fixed bar rest fork.



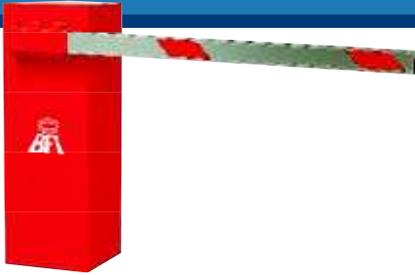
**N190104 - BIR C**

Rubber safety edge.

# BGV SERIES

## ROAD BARRIERS

128



• **A MODEL FOR EVERY NEED.**

→ Several versions available with low, medium and high speeds depending on the boom length.

• **SMART TECHNOLOGY.**

→ Boom balancing adjustable and controlled by a compression spring.

### BGV RIGHT

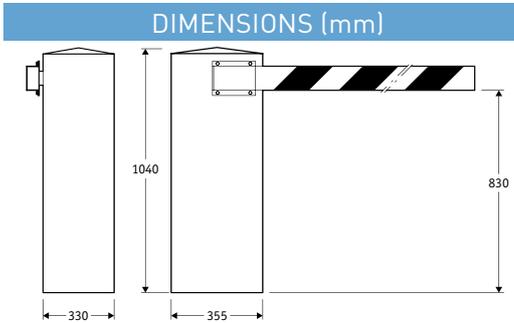
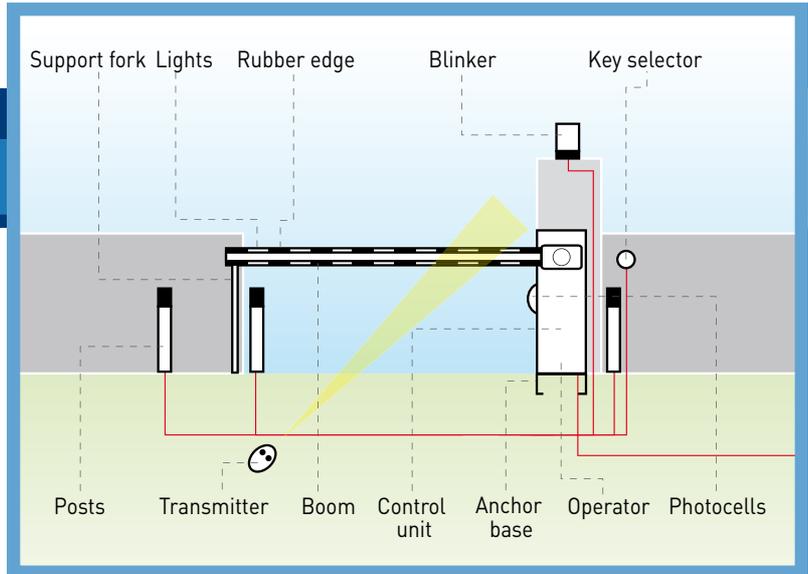
CODE	DESCRIPTION	VOLTAGE	BOOM LENGTH	Q.TY PER PALLET
P940007 00001	BGV 30 RIGHT	230 V	3 m	4
P940007 00003	BGV 30 LEFT	230 V	3 m	4
P940007 00020	BGV 30 INOX RIGHT	230 V	3 m	4
P940007 00022	BGV 30 INOX LEFT	230 V	3 m	4
P940008 00001	BGV 45 RIGHT	230 V	4,5 m	4
P940008 00003	BGV 45 LEFT	230 V	4,5 m	4
P940008 00020	BGV 45 INOX RIGHT	230 V	4,5 m	4
P940008 00022	BGV 45 INOX LEFT	230 V	4,5 m	4
P940010 00001	BGV 45 90° RIGHT	230 V	3,5 m	4
P940010 00003	BGV 45 90° LEFT	230 V	3,5 m	4
P940012 00001	BGV 45 180° RIGHT	230 V	3,5 m	4
P940012 00003	BGV 45 180° LEFT	230 V	3,5 m	4
P940009 00001	BGV 60 RIGHT *	230 V	6 - 7 m	4
P940009 00003	BGV 60 LEFT *	230 V	6 - 7 m	4
P940009 00020	BGV 60 INOX RIGHT *	230 V	6 - 7 m	4
P940009 00022	BGV 60 INOX LEFT *	230 V	6 - 7 m	4
P940011 00001	BGV 60 90° RIGHT *	230 V	5 - 6 m	4
P940011 00003	BGV 60 90° LEFT *	230 V	5 - 6 m	4
P940013 00001	BGV 60 180° RIGHT *	230 V	5 - 6 m	4
P940013 00003	BGV 60 180° LEFT *	230 V	5 - 6 m	4

For BGV models with jointed boom (BGV 45 90° - 60 90° - 45 180° - 60 180°) the maximum length of the boom must be reduced by 1m

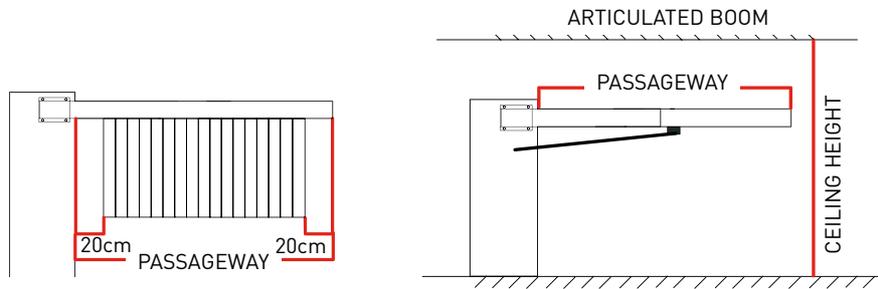
\*Available while stock last

### TECHNICAL FEATURES

FEATURES OF THE RANGE		SPECIFIC FEATURES		
		BGV 30	BGV 45	BGV 60
CONTROL PANEL	LEO MV D (incorporated)			
OPERATOR	irreversible			
POWER SUPPLY	230 V- ± 10%, 50 Hz single-phase			
ABSORBED POWER	180 W			
THERMAL PROTECTION	integrated			
OPENING OR CLOSING TIME		3 s	6 s	12 s
TYPE OF LOCK	mechanical opening/closing			
TYPE OF LIMIT SWITCHES	electric, incorporated and adjustable			
MANUAL RELEASE	handle			
OPERATING CYCLE	very intensive use			
ENVIRONMENTAL CONDITIONS	from -10°C to +55°C			
DEGREE OF PROTECTION	IP24			
OPERATOR WEIGHT WITHOUT BOOM	~60 kg			



WHEN ORDERING INDICATE THE WORKING PASSAGEWAY



ACCESSORIES



**N728004 - AI3**  
One-piece 3 m boom.



**N728008 - AI4,5**  
One-piece 4.5 m boom.



**N728016 - AI5**  
One-piece 5 m boom.



**N728007 - AI6**  
One-piece 6 m boom.



**N728015 - AT6**  
6 m long round boom for BGV. Not articulatable.



**N728014 - AT7**  
7 m round boom for counterweight barrier. Non-articulatable boom. For BGV only.



**N728009 - ART 90**  
90-degree articulated boom.



**N728010 - ART 180**  
180-degree articulated boom.



**D730148 - BB**  
BGV anchor base.



**D730088 - FAF**  
Fixed bar rest fork.



**D940007 - GAM**  
Movable boom rest rod (cannot be fitted on BGV 30 mod.).



**D573003 - SB**  
Skirt to be fitted on boom, comes with L-shaped fastening profile. Cannot be applied to BGV/MOOVI 30 models.



**P111408 - SCS WIE**  
Circuit board for direct connection of wiegand accessories (such as SELETT0, COMPAS SLIM, etc) to the control units



**P111376 - SCS 1**  
Serial connection board for QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.

Its application in the other models gives rise to a reduction of the overall length of the boom (see table).

QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



For protection and for the security of all those spaces that require controlled access, BFT proposes strong retractable bollards which require the minimum maintenance. Thanks to their small aesthetic impact, they provide the ideal solution for places such as old city centres and zones of particular architectural merit.

# SOLUTIONS FOR REGULATING PARKING AND PASSAGE

STOPPY



# STOPPY SERIES

## ELECTROMECHANICAL OPERATOR FOR RISING BOLLARD

132



• **A MODEL FOR EVERY NEED.**

→ Version with lights and alarm.

• **SMART TECHNOLOGY.**

→ Can be configured as follows for power failure: automatic descent or extracted position (with optional Stoppy BAT accessory); When there is no battery power, Stoppy returns flush to the ground automatically with slight pressure and without causing obstacles.

• **SAFE USE.**

→ Its reflective surface ensures visibility even at night.

CODE	DESCRIPTION	VOLTAGE	OPERATOR STROKE	Q.TY PER PALLETS
P970001 00002	STOPPY	230 V	500 mm	6
P970002 00002	STOPPY L	230 V	500 mm	6
P970007 00002	STOPPY LAR	230 V	500 mm	6
P970007 00004	STOPPY LAR INOX <b>NEW<sup>2009</sup></b>	230 V	500 mm	6
P970001	STOPPY F	-	500 mm	6
P970045 00002	STOPPY H <b>NEW<sup>2009</sup></b>	230 V	700 mm	1
P970045 00003	STOPPY H L <b>NEW<sup>2009</sup></b>	230 V	700 mm	1
P970045 00004	STOPPY H LAR <b>NEW<sup>2009</sup></b>	230 V	700 mm	1
P970045 00005	STOPPY H LAR INOX <b>NEW<sup>2009</sup></b>	230 V	700 mm	1
P970045 00001	STOPPY H F <b>NEW<sup>2009</sup></b>	-	700 mm	1

STOPPY L with warning lights

STOPPY LAR with theft prevention KIT and warning lights

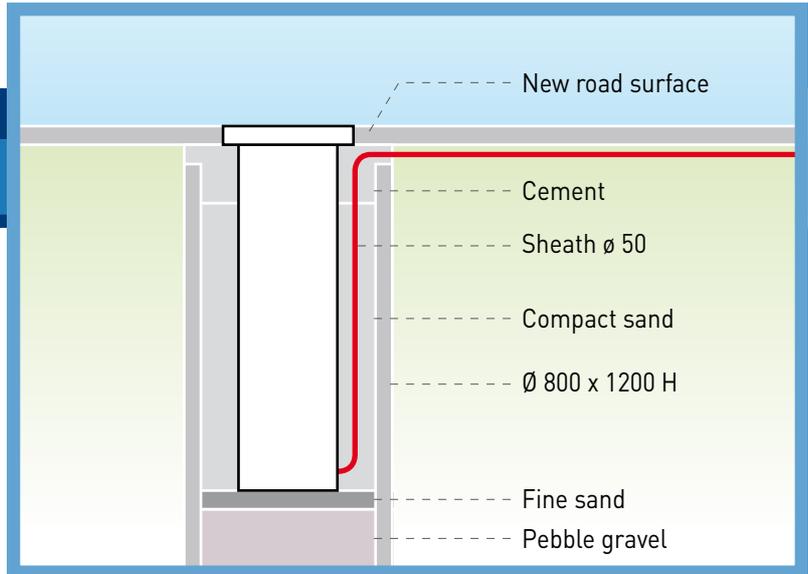
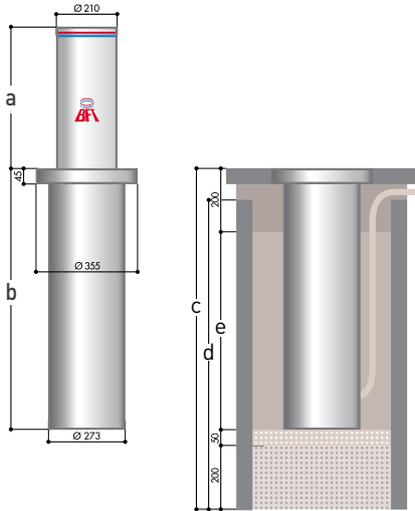
STOPPY F fixed rising bollards

### TECHNICAL FEATURES

FEATURES OF THE RANGE		SPECIFIC FEATURES	
		STOOPY	STOPPY H
CONTROL PANEL	PERSEON		
REVERSIBLE/IRREVERSIBLE OPERATOR	reversible		
POWER SUPPLY	230 V~ ± 10%, 50 Hz single-phase		
ABSORBED POWER	270 W		
THERMAL PROTECTION	integrated		
OPENING OR CLOSING TIME		6 s + slowdown	9 s + slowdown
IMPACT REACTION		8000 J	8000 J
MAX TORQUE	1000 Nm		
TYPE OF LOCK	electric brake		
TYPE OF LIMIT SWITCHES	magnetic		
MANUAL RELEASE	reversible in case of black-out		
OPERATING CYCLE	very intensive use		
ENVIRONMENTAL CONDITIONS	from -25°C to +60°C (STOPPY L/HL: from -15°C to +60°C)		
DEGREE OF PROTECTION	IP67		
OPERATOR WEIGHT		90 kg	110 kg



DIMENSIONS (mm)



mm	STOPPY	STOPPY H
a	500	700
b	915	1175
c	1100	1350
d	1000	1250
e	650	1000

ACCESSORIES

**NEW 2009**



**D113653 00008  
PERSEO N**  
See page 141



**D113653 00002  
PERSEO**  
See page 142  
Not suitable for STOPPY H motors  
**Available while stock last.**



**P975001 - STOPPY BAT**  
Back-up battery kit that allows the bollard to stay up even in the event of power failure.



**D113705  
ACUSTIC DETECTOR**  
Adjustable acoustic siren detector.



**P111001 00003  
RMM 2**  
Two-channel metal detectors. 230V~



**D110926 00001 -  
SPIRA 2X1**  
Magnetic loop 2x1 m.

**NEW 2009**



**P800037 - TBA**  
Totem bottom element for STOPPY

**NEW 2009**



**P800038 - TSU**  
Totem top element for STOPPY

**NEW 2009**



**P800039 - TL**  
Totem lights for STOPPY.

**NEW 2009**

**P800040 - TPF**  
Totem anchor plate for STOPPY.

**NEW 2009**

**P800034 - CABLE STOPPY**  
Power cable for STOPPY. 50m reel.

**NEW 2009**

**\*P800041**  
Additional charge for STOPPY with total cable length of 25 m.

**NEW 2009**

**\*P800042**  
Additional charge for STOPPY with total cable length of 50 m.

\*By ordering items P800041 and P800042, you can receive STOPPY operators already fitted with a cable measuring a total length of 25 or 50 metres. These items must therefore be ordered in addition to that of a bollard. For example, to receive a STOPPY L with a 25 metre cable, you will need to order items P970002 00002 and P800041.



The broad range of BFT accessories makes it possible to customize every type of system according to different needs, without forgoing fundamental aspects such as security, reliability and simple installation.

# ACCESSORIES





**LEGEND:**

**BASIC FUNCTIONS**

- THE CHOICE OF ONE FUNCTION EXCLUDES THE OTHER
- ONLY TO BE MANAGED BY MEANS OF UNIPRO/PROXIMA
- FUNCTION ONLY MANAGED BY MEANS OF
- OPTIONAL BOARD

The functions indicated are not binding.  
BFT reserves the right to make any modifications without prior notice.

FUNZIONI										
	LIBRA C MV	LINX	MIRA	QSC D MA	RIGEL 5 SD	SIRIO MA	SIRIO TEL	VENERE D	NETTUNO B	NETTUNO S
1-Management of up to 2 motors		■			■				■	
2-Management of automatic closing	■	■	■	■	■	■	■	■	■	■
3-Photocell intervention setting	■	■	■	■	■	■	■	■	■	■
4-Impulse lock on opening	■	■		■	■	■	■	■	■	■
5-Impulse lock in TCA	■				■					
6-4-step logic	■	■	■	■	■	■	■	■	■	■
7-3-step logic	■	■		■	■			■	■	■
8-2-step logic	■				■	■	■			
9-Management of leaf delay on closing		■			■				■	
10-Management of leaf delay on opening		■			■				■	
11-Pedestrian leaf management		■		■	■		■	■	■	■
12-Pre-alarm		■		■	■	■	■	■	■	■
13-Courtesy light			■		■			■		
14-Gate-open warning light	■	■		■	■		■	■	■	■
15-Second radio channel output		■	■	■	■	■		■	■	■
16-Ram blow					■					
17-Separate management of opening and closing commands	■			■	■	■	■	■	■	■
18-Management of hold-to-run controls	■			■	■	■	■	■	■	■
19-12 Vac/Vdc electric lock		■			■				■	
20-Rapid closing	■	■			■				■	■
21-Traffic-light management					■					
22-Clock contact input management	■				■					
23-Lock holding		■			■				■	
24-Torque setting					■					
25-Ampere-stop	■	■	■	■			■	■	■	■
26-Management of obstacle recognition device (encoder)	■	■	■	■			■	■	■	■
27-Brake	■				■					
28-Slow down	■	■	■	■	■		■	■	■	■
29-Supply to accessories in 24 Vac	■	■		■	■	■	■	■	■	■
30-Back up battery		■	■	■			■	■	■	■
31-EElink management	■	■		■	■		■	■	■	■
32-Centralised control management				■	■		■			
33-Self-diagnosis	■	■		■	■		■	■	■	■
34-Management of statistics	■	■		■	■		■	■	■	■
35-Management of incorporated rolling-code receiver	■	■		■	■		■	■	■	■
36-Control panel conforming to the EN12453 and EN12445 standards	■	■		■	■	■	■	■	■	■
37-Radio autolearning	■	■		■	■		■	■	■	■
38-Emergency brake	■									
39 Dynamic torque control							■			
40 EE-READY		■								
41 Funzionalità ICE				■						

# OPERATORS-CONTROL UNITS

"OPERATOR - CONTROL PANEL COMPATIBILITY" TABLE

## LEGEND

- AUTOMATIONS FOR RACK SLIDING GATES
- ELECTROMECHANICAL AUTOMATIONS FOR SWING GATES
- HYDRAULIC AUTOMATIONS FOR SWING GATES
- FAST NET SYSTEM
- ROLLER SHUTTER AUTOMATIONS
- AUTOMATIONS FOR COUNTERWEIGHT AND SPRING-OPERATED OVERHEAD DOORS
- AUTOMATIONS FOR BALANCED ROLL-UP DOORS
- AUTOMATIONS FOR AUTOMATIC DOORS
- AUTOMATIONS FOR INDUSTRIAL FOLDING DOORS
- AUTOMATIONS FOR INDUSTRIAL SECTIONAL DOORS
- AUTOMATIONS FOR ROAD BARRIERS AND RISING BOLLARDS

CONTROL UNITS	OPERATORS																			
	DEIMOS BT	DEIMOS	DEIMOS 700	DEIMOS 800F	URANO BT	ICARO MA	SP 4000	PHOBOS N BT	PHOBOS L BT	PHOBOS N L BT	PHOBOS N	PHOBOS L	PHOBOS N L	VIRGO	IGEA BT	IGEA	ELI 250 BT	ELI 250	E5	
AD LINEA																				
ALCOR N																				⊙
ALPHA BOM																				
ALPHA FR																				
ALPHA		⊙	⊙	⊙																
ALTAIR P											⊙	⊙	⊙			⊙			⊙	
CAPRI */ CAPRI RIC*																				
CAPRI TCA*																				
ELBA / ELBA BU																				
ELMEC 1																				
ELMEC 2																				
HYDRA R																				
LEO D MA						⊙														
LEO MV D																				
LIBRA C LX																				
LIBRA C MA								⊙	⊙	⊙				⊙	⊙		⊙			
LIBRA C MV																				
LINX														⊙						
NETTUNO B																				
NETTUNO S																				
PERSEO																				
QSC D MA	⊙				⊙															
RIGEL 5 SD		⊙	⊙	⊙								⊙	⊙	⊙		⊙			⊙	⊙
SIRIO MA / SIRIO TMA*																				
SIRIO TEL							⊙													
VENERE																				
VENERE D																				

- ⊙ SUGGESTED
- ⊙ COMPATIBLE

\* Available while stock last

The details specified are not binding. BFT reserves the right to make any modifications without prior notice.



## Control units



### D111326 - PROXIMA

New-generation universal handheld programmer. This permits interaction with clonable-algorithm

receivers and transmitters and with control units compatible with the EELINK protocol. Possibility of memorizing different lists of receivers. Simplified parameter management. USB interface for connection to the PC.



### D121502 - UNICAVO

Serial cable for Proxima-PC connections.



### D121501 - UNIPOWER

12V power supply unit for Proxima.



### D113706 00002 - ALCOR N

- Ideal control panel for one or two motors up to 230V/0.5 HP of the swing type.
- Easy wiring thanks to

extractable terminals blocks.

- Safety thanks to the AUTODIAGNOSIS function with LEDs for detecting faults.
- Complete with incorporated two-channel receiver and pedestrian management.
- Programming upgraded with the following functions: locked shut maintenance, 3/4 step logic, pedestrian closure, separate opening/closing.
- Easy use with previous systems thanks to total compatibility with ALCOR SD.



### D113703 00002 - ALTAIR P

- Universal control panel for one or two motors up to 230V/0.5 HP of the electromechanical swing type.

- Easy wiring also for centralized connections, thanks to the extractable terminal blocks and the AUTODIAGNOSTICS function.
- Security thanks to motor torque control, regulation of the working time for pedestrians and locked shut maintenance.
- Complete with incorporated 2-channel receiver and input for pedestrian opening.
- Total control of programming by digital display.
- Easy setting by means of three simple buttons for programming logic and parameters. Easy to use on pre-existing systems thanks to total compatibility with ALTAIR.



### D113680 00002 - ALPHA SD

- Ideal control panel for one or one motor up to 230V/0.5 HP of the sliding, swing and shutter type.
- Easy wiring thanks to

extractable terminals blocks.

- Safety thanks to the AUTODIAGNOSIS function with LEDs for detecting faults.
- Complete with integrated two-channel receiver, pedestrian management, can manage a second snap-in receiver with advanced function.
- Analogue programming for the operating parameters and digital for managing the radio system.
- Easy use with previous systems thanks to total compatibility with MIZAR.



### D113689 00002 - ALPHA FR

- Ideal control panel for a motor of the ULISSE single-phase series.
- Easy to wire thanks to extractable terminals and

AUTODIAGNOSIS function with LED.

- Safety guaranteed by lockable circuit breaker, start-stop buttons, and emergency stop button.
- Complete with integrated two-channel receiver and gate open indicator lamp, can manage a second snap-in receiver with advanced function.
- Analogue programming for the operating parameters and digital for managing the radio system.
- Easy use with previous systems thanks to total compatibility with MIZAR FR.

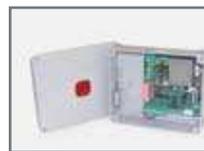


### D113716 00002 - ELBA

- Control unit suitable for an electromechanical motor for roller shutters up to 470W.
- Flexible and practical to

use thanks to the multiple operating logic

- Safety ensured by the incorporated receiver managing up to 64 rolling code radio commands, separate pushbuttons.
- Complete with separate inputs for the START, OPEN, CLOSE, STOP, PHOTOCELLS, WIND SENSOR and TWILIGHT sensor commands.
- Easy to set using the dip switch to enable the various functions.



### D113717 00002 - ELBA BU

- Control unit with incorporated command button, suitable for an electromechanical motor for roller shutters up to

470W with command button.

- Flexible and practical to use thanks to the multiple operating logic
- Safety ensured by the incorporated receiver managing up to 64 rolling code radio commands, separate pushbuttons.
- Complete with separate inputs for the START, OPEN, CLOSE, STOP, PHOTOCELLS, WIND SENSOR and TWILIGHT sensor commands.
- Easy to set using the dip switch to enable the various functions.



### D113612 00001 - ELMEC 1

- Ideal control unit for a ULISSE single-phase series motor.
- Safety guaranteed by Open-Close buttons

and emergency stop button. • Complete with automatic operating logic and semi-automatic when manned.



### D113613 00001 - ELMEC 2

- Ideal control unit for a ULISSE three-phase series motor.
- Safety guaranteed by Open-Close buttons and

emergency stop button. • Complete with automatic operating logic and semi-automatic when manned.



### D113662 00004 - HYDRA R QSG2

- Panel suitable for one or two 24V (40+40W) motors for overhead doors.
- Easy use even in the

event of power failure with back-up battery and AUTODIAGNOSIS for detecting faults. • Safety thanks to: electronic motor torque limitation, settable slowdown. • Complete with incorporated two-channel receiver, ready for serial management, back-up batteries and electric lock. • Total control of programming by digital display and three simple buttons. • Easy setting using the AUTOSSET function which allows automatic setting of the operating parameters.



### D113695 00002 LEO D MA

- Control panel for managing a single-phase electromechanical actuator with power of

up to 750 W. – Electronic torque adjustment. • Adjustable electrodynamic braking • Programming by means of display. • Self-diagnosis function. • detection and memorisation of statistical parameters. • Possibility of managing centralised systems by wire (master/slave system) up to 127 zones. • 63 code receiver with built-in rolling code. • Extractable terminals to facilitate installation and any servicing or replacement.



### D113672 00005 LIBRA C MA

- Universal control panel for one or two 24V motors with limit switch with 1 or 2 wires.

• Easy to wire also for centralised connections, thanks to extractable terminals, and the AUTODIAGNOSIS function. • Safety thanks to electronic antisquashing control with amperometric detection. • Complete with incorporated two-channel receiver, ready for serial management, back-up battery and electric lock. • Total control of programming by digital display and three simple buttons. • Easy setting using the AUTOSSET function which allows automatic setting of the operating parameters.



### D113715 00002 LIBRA C LX

- Universal control panel for one or two series LUX BT motors • Slowing on opening and closing

managed by an absolute encoder which, combined with the amperometric detection ensures maximum anti-crushing safety. • Complete with incorporated two-channel receiver, predisposed for serial management, back-up battery and electric lock. • Full control of programming by means of the digital display and three simple buttons. • Extremely simple to install and service thanks to the SELF-DIAGNOSIS (automatic detection of failures), and AUTOSSET (automatic setting of the operating parameters) functions and the extractable terminals. • Compatible with EeLink protocol, can therefore be programmed using Proxima.



### D113653 00008 PERSEON

- Control panel adaptable for motors of the STOPPY series, can command up to four bollards. • Easy

use thanks to the simple functions usable. • Safety thanks to inputs dedicated to safety circuits and dedicated commands. • Complete with operating logics in a centralised environment. • Total control of operation thanks to adjustment of the operating logics. • Easy setting by simple dip switches for enabling the various functions. Suitable for STOPPY and STOPPY H motors.



### D113693 00003 - RIGEL 5

- Universal control panel suitable for one or two 600W/230V motors (max 600+600W). • Easy to wire also for centralised

connections thanks to extractable terminals and the AUTODIAGNOSIS function. • Safety thanks to control of braking and the motor torque. • Complete with extractable 2-channel receiver, ready for fast coupling to receivers with greater capacity and advanced functions. • Total control of programming by digital display and three simple buttons.



### D113713 00002 - SIRIO MA

- Ideal control panel for a motor of the ULISSE single-phase and three-phase series. • Easy to wire thanks to extractable

terminals and AUTODIAGNOSIS function with LED. • Open, Stop and Close buttons • Complete automatic, semiautomatic and hold-to-run operating logics. • Analogue programming for all the operating parameters and the operating logic.

## CONTROL UNITS AVAILABLE WHILE STOCK LAST.



**P111080 - UNIPRO**  
UNIPRO universal handheld programmer which makes it possible to interact with the receivers, transmitters

and control panels compatible with the EELINK protocol.

**Available while stock last.**



**P111322 00001 UNIRADIO**  
UNIRADIO universal handheld programmer which makes it possible to interact with clonable

algorithm receivers and transmitters.

**Available while stock last.**



**D113252 00001 - CAPRI**  
• Control panel suitable for an electromechanical motor for roller shutters without receivers. • Easy use thanks to the simple functions

usable. • Safety thanks to the single wire or centralised commands and to the management of separate buttons, anemometer and twilight sensor. • Complete with operating logics in a centralised environment with multi-level master up to eight zones. • Total control of operation (step-by-step by button, zone closure from master, total control from Master 0). • Easy setting by simple dip switches for enabling the various functions.

**Available while stock last.**



**D113252 00002 - CAPRI RIC**  
• Control panel suitable for an electromechanical motor for roller shutters. • Easy use thanks to the simple functions usable

and incorporated receiver. • Safety thanks to the built in receiver handling rolling code transmitters, separate buttons, anemometer, twilight sensor. • Complete with operating logics in a centralised environment with multi-level master up to eight zones. • Total control of operation [step-by-step by button or transmitter, zone closure from master, total control from Master 0]. • Easy setting by simple dip switches for enabling the various functions.

**Available while stock last.**



**D113252 00003 - CAPRI TCA**  
• Control panel suitable for an electromechanical motor for shutters up to 350W. • Easy use thanks to the incorporated receiver,

automatic or manual 4-step logics. • Safety thanks to the built in receiver handling rolling code transmitters, separate buttons. • Complete with separate inputs for the OPEN, CLOSE, STOP and PHOTOCELL controls. • Total control of operation thanks to LED autodiagnosis. • Easy setting by simple dip switches for enabling the various functions.

**Available while stock last.**



**D113653 00002 - PERSEO**  
• Control panel adaptable for motors of the STOPPY series, can command up to four bollards. • Easy use

thanks to the simple functions usable. • Safety thanks to inputs dedicated to safety circuits and dedicated commands. • Complete with operating logics in a centralised environment. • Total control of operation thanks to adjustment of the operating logics. • Easy setting by simple dip switches for enabling the various functions.

Not suitable for STOPPY H motors  
**Available while stock last.**



**D113200 00001 - SIRIO TMA**  
• Ideal control panel for a motor of the ULISSE single-phase and three-phase series. • Easy to wire thanks to extractable

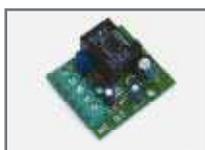
terminals and AUTODIAGNOSIS function with LED. • Safety guaranteed by lockable circuit breaker, start-stop buttons, and emergency stop button. • Complete automatic, semiautomatic and hold-to-run operating logics. • Analogue programming for all the operating parameters and the operating logic.

**Available while stock last**

## CONTROL UNITS ACCESSOIRES



**D111013 - ME**  
12 Vac electric lock board.



**D111761 - ME BT**  
12/24 Vac electric lock board for BT operators.



**P111408 - SCS WIE**  
Circuit board for direct connection of wiegand accessories (such as SELETTTO, COMPAS SLIM, etc) to the control units QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**D111061 - SS**  
Gate open indicator board for ALCOR N (operation with limit switch).



**D113050 - SPL**  
Preheating board for 1 or 2 LUX, SUB, ORO, P4,5-P7, BERMA and E5 operator models. With this accessory the operator is able to work at very low temperature.



**D111704 - SSR5**  
Traffic light and preheating control board for RIGEL 5 control panel. The operator is able to work at -20° with this accessory.

**NEW 2009**

**P125014 - SCS IO**  
Input/output serial expansion board



**P111323 - SCS**  
Serial connection board for HYDRA R.



**P111376 - SCS 1**  
Serial connection board for QSC D MA, LIBRA C MA, LIBRA C MV, LIBRA C LX, VENERE D, LEO D MA, LEO MV, RIGEL 5 and ALTAIR P.



**P111377 - SCS 1 MA**  
Control board for manage up to 4 pair of checked photocells in QSC D MA control board.



**D223040 - QSG2**  
Large control panel box. Permits plenty connection space.



**D223050 - SD**  
Control panel box. Protection rating IP55.



**N999369 - CP SD**  
Cable-clamp kit for SD panel.



**N999070 - SFQ**  
Pack of fixing brackets for SD and QSG.



**N999120 - CRTR**  
Set including 2 cable glands for 40 mm diam. pipe. These cableglands are necessary to comply with the current

electrical safety standards which prescribe the use of boxes with two holes closed by cable carriers for all control boards

**N999121 - CRTG**

Set including 2 cable glands for 32 mm diam. pipe with spiralsheath. These cable glands are necessary to comply with the current electrical safety standards which prescribe the use of boxes with two holes closed by cable carriers for all control boards.

## BLINKERS



**D113719 00002**  
**RAY X 230V**  
Blinker powered at 230Vac with integrated antenna.



**D113719 00003**  
**RAY X 24V**  
Blinker powered at 24Vac with integrated antenna.



**D113721 00002**  
**RAY X SA 230V**  
Blinker powered at 230Vac without integrated antenna.



**D113721 00003 - RAY X SA 24V**  
Blinker powered at 24Vac without integrated antenna.



**P123023 - RWS**  
Ray blinker support for wall applications.



**NEW 2009**

**P123024 - PCR**  
Protective gauge for RAY series blinkers.

**FASTNET**



**D113696 00003**  
**LAMP NET**  
Lamp Net blinker with extractable self-learning FAST-NET receiver for MITTO series rolling code transmitters.



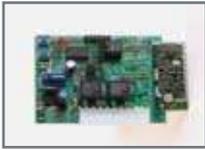
**D123013 - SLM2**  
Blinker support for wall applications.



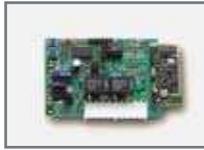
**P123022 - PRL**  
Protective gauge for LAMPO series blinkers.

## SELF-LEARNING ROLLING-CODE RADIO CONTROLS

### TYPE APPROVED FOR EUROPE 433 MHZ FREQUENCY



**D111662 - CLONIX 2**  
Two-channel receiver with 128 rolling codes. Using the cloning process by radio it is possible to replace or add transmitters to the receiver memory. Cloning is possible with MITTO transmitters.



**D111664 CLONIX 2/2048**  
Two-channel receiver with 2048 rolling codes. Using the cloning process by radio it is possible to replace or add transmitters to the receiver memory. Cloning is possible with MITTO transmitters.



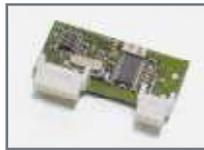
**D1113674 00001 CLONIX 2E**  
External two-channel receiver with 128 rolling codes. Using the cloning process by radio it is possible to replace or add transmitters to the receiver memory. Cloning is possible with MITTO transmitters.



**D113718 00002 - CLONIX 4 RTE**  
Four-channel rolling-code receiver. 128 codes. The outputs, with insulated relays,

allow direct connection of loads up to max 16A (operators, lights, garden irrigation etc.). It is possible to replace or add transmitters in the receiver memory by means of the cloning process by radio. Cloning is possible with Mitto transmitters. Possible connection with Compass Slim and Seletto. Possible configuration of each single output operation in impulse, bistable or timed mode (by selecting a time from 30s to 12h by means of a dip switch).

Box with IP55 degree of protection, Power supply 230 Vac 50Hz.



**P111380 00001 - MRE**  
Receiver 64 codes for Rigel 5, LAMP NET

## SELF-LEARNING ROLLING-CODE RECEIVERS

### WITH BUILT-IN DISPLAY - TYPE APPROVED FOR EUROPE 433,92 MHZ FREQUENCY



**D113670 00002 RTD 2048**  
Receiver 2048 codes with rolling code and built-in programming display. Each exit (max.

4) can be configured in an impulse, bi-stable, timer or anti-aggression mode. The connection of the remote control units can be performed manually, via radio and in blocks of 100 using the PROXIMA programmer. Access to the programming mode can be protected by a password. Power supply 230 Vac 50Hz.



**N733301 00001 - RTD RS**  
Accessory which when installed on a RTD 512 or RTD 2048 board permits remote management by modem.



**D111713 00001 - MOP**  
Accessory that makes it possible to add an RTD output channel.

## ROLLING-CODE CODED TRANSMITTERS TYPE-APPROVED FOR EUROPE - FREQUENCY 433.92 MHZ



**D111750 - MITTO 2 12V**  
Two-channel transmitter, 12 V, with rolling code.



**N999321 MITTO 2 12V/100**  
MITTO 2 100 remote control block ready for fast programming on RTD receiver or using the programmer Proxima on all the receiver of the Clonix series.



**D111751 - MITTO 4 12V**  
Four-channel transmitter, 12 V, with rolling code.



**N999322 MITTO 4 12V/100**  
MITTO 4 100 remote control block ready for fast programming on RTD receiver or using the programmer Proxima on all the receiver of the Clonix series.

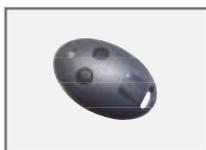


**P121019 - T-BOX**  
Remote control digital pushbutton panel for exterior use, with backlit light-touch keypad.



**P121016 - RB**  
Four channels wall radio control with rolling code.

## TRANSMITTER CLONEABLE WITH ROLLING CODE



**D111841 MITTO 2 REPLAY**  
Two channel rolling code copiable transmitter 12V



**D111842 MITTO 4 REPLAY**  
Four-channel rolling code copiable transmitter 12V

**NOTE:** The MITTO REPLAY units can be used to clone a transmitter directly, without using programmers. They are enabled for use in "variable code" mode in all receivers, control units and operators with the ((ER Ready)) logo printed on the packaging, on the product itself and on the instruction manual. In products that do not bear the ((ER Ready)) logo, they may only be used by setting the receivers to "fixed code" mode.

## RADIO CONTROLS WITH PROGRAMMER'S FEATURE



**D111840 - MITTO W LINK**  
4 channel transmitter with programmer's feature. For control board with built in display.

## QUARTZED RADIO CONTROLS 30.875 MHZ FREQUENCY



**D111305 - RO 2**  
Quartz two-channel receiver for fitting on all boards with sockets (10 pcs/package).  
**Available while stock last.**



**D111315 - RO 2E**  
Two-channel external receiver with antenna.  
**Available while stock last.**



**D111317 - RO 2 ES**  
Two-channel external receiver without antenna.  
**Available while stock last.**



**D111316 - RO 4E**  
Four-channel external receiver with antenna.  
**Available while stock last.**



**D111318 - RO 4 ES**  
Four-channel external receiver without antenna.  
**Available while stock last.**



**D111302 - T02**  
Two-channel quartz transmitter with double coding (10 pcs/package).  
**Available while stock last.**



**D111303 - T04**  
Miniaturized four-channel quartz transmitter (10 pcs/package).  
**Available while stock last.**



**D111300 - T03D**  
Transmitter with triple coding with four buttons for 3 codes. The first 3 buttons send a signal using 3 codes while the fourth button uses the third code with another channel. Useful in small apartment blocks with two gates in common and a private overhead door.  
**Available while stock last.**



**D1113631 - AEL 30.8**  
Antenna for radio control 30.875 MHz with 4 m cable.  
**Available while stock last.**

## SUPERACTIVE RADIO CONTROLS - TYPE APPROVED FOR EUROPE 433 MHZ FREQUENCY



**D113226 00001 - REO 2 E**  
Two-channel receiver, with incorporated box and antenna, for external application.  
**Available while stock last.**



**D111362 - TE0 2**  
Micro transmitter two-channel transmitter (10 pcs/package).  
**Available while stock last.**



**D111363 - TE0 4**  
Micro four-channel transmitter (10 pcs/package).  
**Available while stock last.**



**D1113632 - AEL 433**  
Radiocontrol antenna 433MHz, with 4 m cable.

## OBSTACLE DETECTION DEVICES



**P111025 - FL 100A**  
Flat photocell receiver/transmitter pair for external application, range up to 50 m, power supply 24V. (10 pcs/package).



**P111272 - CELLULA 50**  
Photocell receiver/transmitter pair, range up to 30 m, power supply from 24 Vac to 31 Vac.



**P111273 - CELLULA 130**  
Flat self-aligning photocell receiver/transmitter pair for external application, range up to 30 m with 24 Vac/dc power supply.

**FASTNET**



**P111382 - FL NET**  
Pair of photocells FL Net.



**P111081 - PRO 130**  
Anodised aluminium guard for CELLULA 130.



**P111391 - CELLULA RFL**  
Flat reflection photocell for external application, nominal activation distance 12 m, power 24Vac/dc. The photocell considerably simplifies the installation operation: a single transmitter/receiver is connected to the power supply.

**NEW 2009**



**P111409 - S RFLP**  
Reflector for retro-reflective RFL PHOTOCELL with reflector mount for wall mounting and/or mounting on CC post.



**P111399 - IT23**  
Connection interface for CELLULA RFL. It is possible to connect the CELLULA RFL in accordance with EN954-1 using this device.



**D221573 - CCI**  
Flush container for CELLULA 50 and INTRO.



**P903005 - CC130**  
Pair of aluminium posts for CELLULA 130 photocells.



**P903006 - CC130/2**  
Pair of aluminium posts, for double photocell insertion, for CELLULA 130 photocells.



**P903004 - CC50**  
Pair of aluminium posts for CELLULA 50 and RFL photocells.



**P903007 - CSC 130**  
Aluminium post for photocell, mod. CELLULA 130, and mod. INTRO switch, plus CC130 post.



**P903013 - CC RFL**  
RFL PHOTOCELL mount for mounting on CC post. Reflector included.



**P903014 - CM RFL**  
RFL PHOTOCELL wall mount. Reflector included.



**P903008 - CSC 50**  
Aluminium post for photocell, mod. CELLULA 50, and mod. INTRO switch.



**P903010 - PFC1**  
Pair of foundation plates for CC50, CC130, CSC50, CSC130 and CC130/2 posts.



**D141160 - FLEXY 6**  
Extensible cable for powering the FLCP safety edge applied in industrial sectional doors. Max extension 6 m.



**P111059 00001 - FLCP 2**  
Obstacle detection device consisting of two electronic boards with the respective sensors fixed to an aluminium section bar to use with the the associated safety edge.



**D831020 - CMS**  
Warning sign



**P111042 - PRC2**  
Pneumatic relay for BAR edge with no. 2 pressure switches.

## OBSTACLE DETECTION DEVICES - IN COMPLIANCE WITH EN 12978.

**NEW 2009**



**P111410 - DCW**  
Safety device for detecting obstacles, can be connected to infrared or resistive safety edges. Rotatable by 180°. Meets standard EN 12978.

**NEW 2009**



**N190106 - STR**  
Pair of infrared sensors, for DCW photocell safety edge.



**P111401 00001 - VENTIMIGLIA NS**  
Infrared obstacle detection device for BIR C safety edge compliant with standard EN 12978.



**N190104 - BIR C**  
Rubber safety edge.

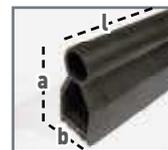


**D221074 - TB**  
Plug for BIR C.



**P111041 - PRC**  
Pneumatic relay for BAR edge with no. 1 pressure switch.

## OBSTACLE DETECTION DEVICES



NEW 2009



CODE	NAME	L (m)	B (mm)	A (mm)
Bord en caoutchouc double profil.				
P111450 00002	BAR C 2	2 m	30	60
P111450 00004	BAR C 4	4 m	30	60
P111450 00006	BAR C 6	6 m	30	60

NEW 2009



CODE	NAME	L (m)	B (mm)	A (mm)
Bord en caoutchouc double profil. For sectional doors.				
P111451 00002	BAR C BA 2	6 m	32	85
P111451 00004	BAR C BA 4	4 m	32	85
P111451 00006	BAR C BA 6	6 m	32	85



CODE	NAME	L (m)	B (mm)	A (mm)
Rubber safety edge. See page 149.				
N190104	BIR C	-	20	30



CODE	NAME	L (m)	B (mm)	A (mm)
Safety edge for model FLC2. AVAILABLE WHILE STOCK LAST.				
P111060 00001	CI 1	1,0	30	80
P111060 00002	CI 1,5	1,5	30	80
P111060 00003	CI 1,7	1,7	30	80
P111060 00004	CI 2	2,0	30	80
P111060 00005	CI 3	3,0	30	80
P111060 00006	CI 4	4,0	30	80
P111060 00007	CI 5	5,0	30	80
P111060 00008	CI 6	6,0	30	80



CODE	NAME	L (m)	B (mm)	A (mm)
Rubber safety edge with support with plugs already fitted. AVAILABLE WHILE STOCK LAST.				
N190027	BAR 1	1,0	40	70
N190028	BAR 1,5	1,5	40	70
N190029	BAR 1,8	1,8	40	70
N190030	BAR 2	2,0	40	70



CODE	NAME	L (m)	B/B <sup>2</sup> (mm)	A (mm)
Mechanical flush safety edge.				
<b>P111050</b>	<b>CM 1000</b>	1,0	50/40	80
<b>P111051</b>	<b>CM 1500</b>	1,5	50/40	80
<b>P111052</b>	<b>CM 1700</b>	1,7	50/40	80
<b>P111053</b>	<b>CM 2000</b>	2,0	50/40	80
<b>P111054</b>	<b>CM 3000</b>	3,0	50/40	80
<b>P111055</b>	<b>CM 4000</b>	4,0	50/40	80
<b>P111056</b>	<b>CM 5000</b>	5,0	50/40	80



CODE	NAME	L (m)	B (mm)	A (mm)
Shock absorber profile. <u>For sliding doors.</u>				
<b>N190039</b>	<b>CSP 10</b>	1,0 m	50	80
<b>N190040</b>	<b>CSP 20</b>	2,0 m	50	80
<b>N190041</b>	<b>CSP 25</b>	2,5 m	50	80

## Control device



**D113084 - PC 2E**  
Key switch for exterior with metal case. (10 pcs/package).  
**Available while stock last.**



**P121011 - INTRO**  
Key switch for exteriors. Flush and column version.



**P121017 - SEK**  
Vandal-resistant key switch for exterior use with metal casing.



**P121014 - SC NET**  
Key switch SC NET.



**D531097 - CRC**  
Spare coded key for (10 pcs/package). When ordering, specify key series number.



**D121011 - LCM**  
Magnetic key reader. For column mounting - see model CLC.



**D121012 - CM**  
Magnetic key for LCM readers (10 pcs/package).



**D731022 - CLC**  
Column for magnetic key readers. Height 1 m.



**D110926 00001 SPIRA 2X1**  
Magnetic loop 2x1 m.



**D121458 PARKY LIGHT**  
Traffic light



**P111274 - RME**  
Single-channel metal detector with installation base. Power supply 24Vac. Power supply LED. Channel LED. Pulse on release configuration. Presence relay with pulse or continuous operation. Pulse relay with deactivation possibility.



**P111001 00003 - RMM 2**  
Two-channel metal detectors. 230V~



**D121611 - SPC**  
External Start-Stop 2-button panel.



**D121612 - SPC2**  
External Open-Close 2-button panel.



**D121619 - SPC3**  
External Open-Stop-Close 3-button panel



**D121613 - SPCE**  
External pushbutton panel with mushroom-head emergency button.



**P121019 - T-BOX**  
Remote control digital pushbutton panel for exterior use, with backlit light-touch keypad.



**P123001 00001 - EBP**  
230 Vac electric lock with zero stop resistance. Also available in 50 mm, 75 mm versions and at 24V.



**P123006 00001 - EBPE 52**  
230Vac electric lock with zero stop resistance, with external release for max 50mm thick doors and gates



**P123008 00001 - EBPE 75**  
230Vac electric lock with zero stop resistance, with external release for max 75mm thick doors and gates.



**P123001 00013 - EBP 24**  
230/24V electric lock with 230/24V transformer to be inserted in the control panel



**P121012 - SELETTO**  
Flush digital pushbutton panel, programmable for controlling pedestrian and vehicle access, usable with two operating modes: with "serial connection" and with "interfacing with the COMPASS system"



**P121013 - SELETTO E**  
Flush digital ext. pushbutton panel, programmable for controlling pedestrian and vehicle access, usable with two operating modes: with serial connection and with interfacing with the COMPASS system.



**D121016 - ECB RIGHT**  
RH horizontal electric lock, 12V.



**D121017 - ECB LEFT**  
Left-hand horizontal electric lock.12V.

**D121018 - ECB vertical**  
Vertical electric lock, 12 V.



Always close to the needs of professionals in the sale and installation of automation systems for homes and buildings, BFT offers tools which simplify their everyday work.

## TECHNICAL TRAINING COURSES

BFT invites operators in the sector to take part in Technical Training Courses to update their knowledge of automation systems and discover how to install systems that comply with safety standards.

## LEONARDO BFT. THE FIRST INTERACTIVE SOFTWARE FOR THE CE CERTIFICATION OF INSTALLATIONS.

Leonardo BFT is a software application which provides a simplified approach to the obligations deriving from Safety Regulations. It is possible to draw up the documents that make up the Technical Folder by following a guided sequence.

## PRACTICAL GUIDE TO REGULATIONS

BFT's Practical Guide to Regulations gives the reader a complete overview of the Directives in the sector, summarising all the operations to carry out to meet the legal operations in force regarding the certification of compliance of the openings.

The quality of all BFT products is recognized by the most important certifications attesting to the reliability of our automation systems and the seriousness of our company structure.



CE



UNI EN ISO 9001-2000



UNI EN ISO 14001



CSA

# THE PLUS OF BFT ON THE TERRITORY

156



BFT operates in more than 120 countries around the world with over 530 distributors. We are present in 9 countries with branches that offer consultancy for the purchase, after-sales support and training courses.

# ALPHABETICAL INDEX

ACC MCL ATT	N999386	P.124	BGV 45 90° right	P940010 00001	P.128	CAPRI RIC	D113252 00002	P.142	CS 42	D211008	P.87
ACC MCL ELL	N999391	P.124	BGV 45 INOX left	P940008 00022	P.128	CAPRI TCA	D113252 00003	P.142	CS 48	D211007	P.87
ACOUSTIC DETECTOR			BGV 45 INOX right	P940008 00020	P.128	CAPRI TCA	D113252 00003	P.87	CSC 130	P903007	P.148
	D113705	P.133	BGV 45 left	P940008 00003	P.128	CB EOS	P125006	P.81	CSC 50	P903008	P.148
ACTIVE8 TWO PB	P111402 00001	P.93	BGV 45 right	P940008 00001	P.128	CB EOS	P125006	P.83	CSP 10	N190039	P.31
ACTIVE8 TWO PB	P111402 00001	P.97	BGV 60 180° left	P940013 00003	P.128	CBA	N733112	P.77	CSP 10	N190039	P.33
AD5027	N999323	P.71	BGV 60 180° right	P940013 00001	P.128	CBAC	N733114	P.77	CSP 10	N190039	P.35
AEL 30.8	D113631	P.147	BGV 60 90° left	P940011 00003	P.128	CBO	D730251	P.127	CSP 10	N190039	P.37
AEL 433	D113632	P.147	BGV 60 90° right	P940011 00001	P.128	CC RFL	P903013	P.148	CSP 10	N190039	P.151
AI3	N728004	P.129	BGV 60 INOX left	P940009 00022	P.128	CC130	P903005	P.148	CSP 20	N190040	P.151
AI4,5	N728008	P.129	BGV 60 INOX right	P940009 00020	P.128	CC130/2	P903006	P.148	CSP 25	N190041	P.151
AI5	N728016	P.129	BGV 60 left	P940009 00003	P.128	CC50	P903004	P.148	CTA	N733120	P.77
AI6	N728007	P.129	BGV 60 right	P940009 00001	P.128	CCI	D221573	P.148	CTA2	N733129	P.77
ALCOR N	D113706 00002	P.140	BIN 120 CATENA 2900	P115010 00001	P.83	CELLULA 130	P111273	P.148	CTBP	N733299	P.77
ALCOR N	D113706 00002	P.49	BIN 120 CATENA 2x1450	P115010 00003	P.83	CELLULA 50	P111272	P.148	CVZ	D571053	P.31
ALCOR N	D113706 00002	P.57	BIN 120 CATENA 2x1750	P115010 00004	P.83	CELLULA RFL	P111391	P.148	CVZ	D571053	P.33
ALCOR N	D113706 00002	P.59	BIN 120 CATENA 3500	P115010 00002	P.83	CFE	N733345	P.51	CVZ	D571053	P.35
ALCOR N	D113706 00002	P.63	BIN CATENA 3500	P115009 00002	P.81	CFE BT	N733368	P.51	CVZ-S	N999320	P.31
ALCOR N	D113706 00002	P.65	BIN CATENA 2900	P115009 00001	P.81	CFZ	D571054	P.31	CVZ-S	N999320	P.33
ALCOR N	D113706 00002	P.79	BIN CATENA 2x1450	P115009 00005	P.81	CFZ	D571054	P.33	CVZ-S	N999320	P.35
ALPHA FR	D113689 00002	P.140	BIN CATENA 2x1750	P115009 00006	P.81	CFZ	D571054	P.35	DAB-1	P111267	P.97
ALPHA FR	D113689 00002	P.115	BIN CINGHIA 2900	P115009 00003	P.81	CFZ6	D571491	P.37	DCW	P111410	P.31
ALPHA SD	D113680 00002	P.140	BIN CINGHIA 2x1450	P115009 00007	P.81	CI 1	p111060 00001	P.150	DCW	P111410	P.31
ALPHA SD	D113680 00002	P.79	BIN CINGHIA 2x1750	P115009 00008	P.81	CI 1,5	p111060 00002	P.150	DCW	P111410	P.33
ALPHA SD	D113680 00002	P.87	BIN CINGHIA 3500	P115009 00004	P.81	CI 1,7	p111060 00003	P.150	DCW	P111410	P.35
ALTAIR P	D113703 00002	P.140	BIR C	N190104	P.31	CI 2	p111060 00004	P.150	DCW	P111410	P.149
ALTAIR P	D113703 00002	P.43	BIR C	N190104	P.33	CI 3	p111060 00005	P.150	DEIMOS	P925197 00001	P.30
ALTAIR P	D113703 00002	P.47	BIR C	N190104	P.35	CI 4	p111060 00006	P.150	DEIMOS 300 BT NET KIT		
ALTAIR P	D113703 00002	P.51	BIR C	N190104	P.37	CI 5	p111060 00007	P.150		R925241 00002	P.30
ALTAIR P	D113703 00002	P.109	BIR C	N190104	P.113	CI 6	p111060 00008	P.150	DEIMOS 300 BT NET KIT		
ANEM	P111182	P.71	BIR C	N190104	P.115	CLC	D731022	P.152		R925241 00002	P.30
APT	N999060	P.81	BIR C	N190104	P.127	CLONIX 2	D111662	P.145	DEIMOS 700	P925196 00001	P.30
APT	N999060	P.83	BIR C	N190104	P.149	CLONIX 2/2048	D111664	P.145	DEIMOS 800 F	P925200 00002	P.30
ARGO	P925202 00001	P.112	BLE 5	N733008	P.49	CLONIX 2E	D113674 00001	P.145	DEIMOS BT	P925178 00005	P.30
ART 180	N728010	P.129	BLOCCANTI 40	P130001	P.71	CLONIX 4 RTE	D113718 00002	P.145	DEIMOS BT KIT	R925228 00001	P.30
ART 90	N728009	P.129	BLOCCANTI 50	P130013	P.71	CLS	D610180	P.43	DEIMOS BT NET KIT	R925236 00001	P.30
ASSEMBLY KITS LINEA		P.102	BLP	N733288	P.77	CLS	D610180	P.57	DEIMOS BT NET KIT	R925236 00001	P.30
ASSEMBLY KITS VISTA		P.101	BM	D730964	P.124	CLS	D610180	P.59	DEIMOS KIT	R925227 00001	P.30
AT6	N728015	P.129	BOTTICELLI	P915194 00002	P.80	CLS/82	D610256	P.65	DEIMOS SQ	P925198 00002	P.30
AT7	N728014	P.129	BOTTICELLI VENERE-D	P915194 00003	P.80	CM	D1121012	P.152	DOOR PROFILE		P.105
ATT 502	N728028	P.124	BRCT	P115002	P.81	CM 1000	P111050	P.151	E180	N733304	P.51
ATT 504	N728027	P.124	BRCT	P115002	P.83	CM 1500	P111051	P.151	E5	P930003 00001	P.48
ATT 704	N728026	P.124	BSC	N728002	P.65	CM 1700	P111052	P.151	EAGLE ONE	P111403	P.93
ATT 706	N728030	P.124	BSE 5	N728011	P.49	CM 2000	P111053	P.151	EAGLE ONE	P111403	P.97
BAR 1	n190027	P.150	BT BAT	P125005	P.43	CM 3000	P111054	P.151	EBP	P123001 00001	P.152
BAR 1,5	n190028	P.150	BT BAT	P125005	P.47	CM 4000	P111055	P.151	EBP	P123001 00001	P.43
BAR 1,8	n190029	P.150	BT BAT	P125005	P.51	CM 5000	P111056	P.151	EBP	P123001 00001	P.47
BAR 2	n190030	P.150	BT BAT	P125005	P.61	CM RFL	P903014	P.148	EBP	P123001 00001	P.49
BAR C 2	P111450 00002	P.150	BT BAT	P125005	P.77	CMS	D831020	P.149	EBP	P123001 00001	P.51
BAR C 2	P111450 00002	P.37	BT BAT	P125005	P.109	COMPASS - ISOCARD	D110912	P.119	EBP	P123001 00001	P.57
BAR C 4	P111450 00004	P.150	BT BAT	P125005	P.113	COMPASS - ISOCARD PERSONALIZZATA			EBP	P123001 00001	P.59
BAR C 6	P111450 00006	P.150	BT BAT1	P125007	P.77		D110917	P.119	EBP	P123001 00001	P.63
BAR C BA 2	P111451 00002	P.150	BT BAT2	P125009	P.33	COMPASS - RING	D110914	P.119	EBP	P123001 00001	P.65
BAR C BA 2	P111451 00002	P.113	BTCF 120	N733250	P.51	COMPASS 232	D113257	P.118	EBP 24	P123001 00013	P.152
BAR C BA 2	P111451 00002	P.115	BTCF 120 E	N733397	P.51	COMPASS 485	D113256	P.118	EBP 24	P123001 00013	P.61
BAR C BA 4	P111451 00004	P.150	BTCF 120 E INOX	N733398	P.51	COMPASS SC 232	D113684	P.118	EBPE 52	P123006 00001	P.152
BAR C BA 6	P111451 00006	P.150	BTCF 120 INOX	N733266	P.51	COMPASS SC USB	D113691	P.118	EBPE 75	P123008 00001	P.152
BASP	P125001	P.37	CA1	N733038	P.79	COMPASS SLIM	D113704	P.118	ECB LEFT	D121017	P.43
BB	D730148	P.129	CA1C	N733039	P.79	COMPASS-ATS	D413130	P.119	ECB LEFT	D121017	P.45
BBV	P111442	P.93	CA2	N733040	P.79	COR 30	N733148	P.115	ECB LEFT	D121017	P.47
BCP	D412377	P.77	CA2C	N733041	P.79	COR 40	N733149	P.115	ECB LEFT	D121017	P.51
BERMA R	P915007 00001	P.78	CABLE LX BT	N999417	P.61	CP	D221073	P.31	ECB LEFT	D121017	P.57
BERMA SA R	P915009 00001	P.78	CABLE N	N999405	P.43	CP	D221073	P.33	ECB LEFT	D121017	P.59
BERMA SEB R	P915105 00001	P.78	CABLE N BT	N999404	P.43	CP SD	N999369	P.143	ECB LEFT	D121017	P.61
BGV 30 INOX left	P940007 00022	P.128	CABLE STOPPY	P800034	P.133	CPS G	N733092	P.65	ECB LEFT	D121017	P.63
BGV 30 INOX right	P940007 00020	P.128	CAL 60/100	P130002	P.71	CPS left	N733066 00002	P.65	ECB LEFT	D121017	P.65
BGV 30 left	P940007 00003	P.128	CAL 60/30	P130004	P.71	CPS right	N733066 00001	P.65	ECB LEFT	D121017	P.153
BGV 30 right	P940007 00001	P.128	CAP5	D533019	P.115	CRC	D531097	P.152	ECB RIGHT	D121016	P.153
BGV 45 180° left	P940012 00003	P.128	CAP8	D533020	P.115	CREP	P111183	P.71	ECB vertical	D121018	P.153
BGV 45 180° right	P940012 00001	P.128	CAPRI	D113252 00001	P.142	CRTG	N999121	P.143	EF X	N999298 00002	P.87
BGV 45 90° left	P940010 00003	P.128	CAPRI	D113252 00001	P.87	CRTR	N999120	P.143	ELBA	D113716 00002	P.140

# ALPHABETICAL INDEX

ELBA	D113716 00002	P.70	LIBRA C MA	D113672 00005	P.51	MOOVI 30S (Fast)	P940030 00002	P.126	PPR	P111156	P.97
ELBA	D113716 00002	P.87	LIBRA C MA	D113672 00005	P.109	MOOVI 50	P940028 00002	P.126	PRC	P111041	P.149
ELBA BU	D113717 00002	P.140	LIBRA C MA	D113672 00005	P.141	MOOVI 50 RMM	P940029 00002	P.126	PRC2	P111042	P.149
ELBA BU	D113717 00002	P.70	LINEA		P.94	MOOVI ART90	N728029	P.127	PRL	P123022	P.144
ELBA BU	D113717 00002	P.87	LOOP 50/10	P910028 00001	P.68	MOOVI GA	D940008	P.124	PRO 130	P111081	P.148
ELI 250	P930114 00001	P.50	LOOP 50/15	P910028 00002	P.68	MOOVI GA	D940008	P.127	PROXIMA	P111326	P.140
ELI 250 BT	P930118 00001	P.50	LOOP 50/35	P910028 00003	P.68	MOOVI GAMA	D940009	P.124	QSG2	D223040	P.143
ELI 250-V	P930114 00003	P.50	LOOP 50/50	P910028 00004	P.68	MOOVI GAMA	D940009	P.127	RAY X 230V	D113719 00002	P.144
ELL 3	N728020	P.127	LOOP 50/50M	P910029 00001	P.68	MOP	D111713 00001	P.145	RAY X 24V	D113719 00003	P.144
ELL 5	N728021	P.127	LOOP RADIO 50/10	P910030 00001	P.69	MOX	N733036	P.45	RAY X SA 230V	D113721 00002	P.144
ELL 6	N728022	P.124	LOOP RADIO 50/20	P910030 00002	P.69	MOX	N733036	P.47	RAY X SA 24V	D113721 00003	P.144
ELMEC 1	D113612 00001	P.115	LOOP RADIO 50/30	P910030 00003	P.69	MOX	N733036	P.87	RB	P121016	P.146
ELMEC 1	D113612 00001	P.141	LOOP RADIO 50/50	P910030 00004	P.69	MRE	P111380 00001	P.145	RB	P121016	P.77
ELMEC 2	D113613 00001	P.141	LRV	P135005	P.47	MSC	N999158	P.31	RB	P121016	P.79
ELMEC 2	D113613 00001	P.115	LUX	P935009 00001	P.58	NAT	N999131	P.57	RB	P121016	P.81
EOS 120	P915195 00002S	P.82	LUX 2B	P935011 00001	P.58	NAT	N999131	P.63	RB	P121016	P.109
ER1	P130025	P.70	LUX B	P935010 00001	P.58	NCE	N733320	P.97	RB	P121016	P.113
ERV	N733408	P.93	LUX BT	P935080 00001	P.60	NTS Anodised	P111330 00002	P.97	RCA	N733421	P.109
FAF	D730088	P.124	LUX BT 2B	P935079 00001	P.60	ORO	P935059 00001	P.56	RCA	N733421	P.113
FAF	D730088	P.127	LUX G	P935013 00001	P.58	ORO E	P935058 00001	P.56	RCAL	N733422	P.109
FAF	D730088	P.129	LUX L	P935012 00001	P.58	ORO KIT	R935222 00002	P.56	RCAL	N733422	P.113
FALCON	P111407	P.93	LUX M-B	P935035 00001	P.58	P4,5	P935061 00001	P.62	REO 2 E	D113226 00001	P.147
FALCON	P111407	P.97	LUX R2B -SN2	P935046 00002	P.58	P7	P935060 00001	P.62	RIGEL 5	D113693 00003	P.49
FALCON	P111407	P.113	MCL BAT	P125011	P.125	PARKY LIGHT	D121458	P.152	RIGEL 5	D113693 00003	P.57
FALCON	P111407	P.115	MCL FAF	D730991	P.124	PBE	N733391	P.81	RIGEL 5	D113693 00003	P.59
FCS left	N733066 00004	P.65	MCL PCA 6	P120008	P.124	PBE	N733391	P.83	RIGEL 5	D113693 00003	P.63
FCS right	N733066 00003	P.65	MCL PCA 8	P120010	P.124	PC 2E	D113084	P.152	RIGEL 5	D113693 00003	P.65
FL 100A	P111025	P.148	MCL RFL	P903015	P.125	PCA 3	P120003 00001	P.127	RIGEL 5	D113693 00003	P.66
FL NET	P111382	P.148	ME	D111013	P.43	PCA 6	P120003 00002	P.124	RIGEL 5	D113693 00003	P.79
FLCP 2	P111059 00001	P.149	ME	D111013	P.47	PCA 6	P120003 00002	P.127	RIGEL 5	D113693 00003	P.109
FLEXY 6	D141160	P.148	ME	D111013	P.49	PCA 8	P120003 00003	P.124	RIGEL 5	D113693 00003	P.141
FORB R	P935019 00001	P.108	ME	D111013	P.51	PCR	P123024	P.144	RIP	P111325	P.93
FPA 1	P111265	P.93	ME	D111013	P.57	PERSEO	D113653 00002	P.142	RIP	P111325	P.97
FPA 1	P111265	P.97	ME	D111013	P.59	PERSEO	D113653 00002	P.133	RME	P111274	P.152
FPA 2	P111266	P.93	ME	D111013	P.63	PERSEO N	D113653 00008	P.133	RMM 2	P111001 00003	P.152
FPA 2	P111266	P.97	ME	D111013	P.65	PERSEO N	D113653 00008	P.141	RMM 2	P111001 00003	P.133
GAM	D940007	P.129	ME	D111013	P.143	PFC1	P903010	P.148	RO 2	D111305	P.147
GANC	P130006	P.71	ME BT	D111761	P.43	PFD	D113626	P.97	RO 2 ES	D113117	P.147
HYDRA R QSG2	D113662 00004	P.141	ME BT	D111761	P.45	PGI	P111158	P.93	RO 2E	D113115	P.147
HYDRA R QSG2	D113662 00004	P.77	ME BT	D111761	P.47	PGI	P111158	P.97	RO 4 ES	D113118	P.147
ICARO MA	P925180 00006	P.34	ME BT	D111761	P.51	PHEBE	P915134 00002	P.76	RO 4E	D113116	P.147
IDROLUX R	N728003	P.59	ME BT	D111761	P.61	PHEBE KIT	R915126 00002	P.76	RTD 2048	D113670 00002	P.145
IDROLUX R	N728003	P.65	ME BT	D111761	P.143	PHEBE SQ	P915135 00002	P.76	RTD CA 2048	D113671 00002	P.119
IGEA	P935065 00002	P.46	MICHELANGELO 60(Blue version)			PHOBOS BT L KIT			RTD RS	N733301 00001	P.145
IGEA BT	P935070 00002	P.46		P941008 00001	P.122		R935243 00002	P.42	RUL 60/1,5	P130010	P.71
IGEA BT KIT	R935229 00001	P.46	MICHELANGELO 60(Blue version)			PHOBOS L	P935073 00002	P.42	RUL 60/3	P130012	P.71
IGEA LB BT	P935072 00002	P.108		P941005 00001	P.122	PHOBOS N	P935067 00004	P.42	RUL 60/6	P130008	P.71
INTRO	P121011	P.152	MICHELANGELO 60(Blue version)			PHOBOS N BT NET KIT			RWS	P123023	P.144
IT23	P111399	P.148		P941002 00001	P.122		R935249 00002	P.30	S RFLP	P111409	P.148
KI	D531548	P.33	MICHELANGELO 60(Blue version)			PHOBOS N BT	P935066 00004	P.42	SASAM 1	P111163 00001	P.93
KI	D531548	P.35		P941006 00001	P.122	PHOBOS N BT KIT			SASAM 1	P111163 00002	P.93
KI	D531548	P.47	MICHELANGELO 80 (Blue version)				R935247 00002	P.42	SASAM 1	P111163 00001	P.97
KIT MOOVI PRM	P120004	P.127		P941004 00001	P.122	PHOBOS N BT NET KIT			SASAM 1	P111163 00002	P.97
KIT MCL 130	P120007 00001	P.124	MICHELANGELO 80 (Red version)				R935249 00002	P.42	SASAM 2	P111263 00002	P.93
KIT MCL 130	P120007	P.125		P941007 00001	P.122	PHOBOS N KIT	R935248 00002	P.42	SASAM 2	P111263 00002	P.97
KIT MCL LAMPO	P120006	P.124	MITTO 2 12V	D111750	P.146	PHOBOS N L	P935073 00003	P.42	SASAM 2	P111263 00001	P.93
KIT MCL LIGHT	P120005 00001	P.124	MITTO 2 12V/100	N999321	P.146	PHOBOS N L BT	P935074 00003	P.42	SASAM 2	P111263 00001	P.97
KIT MCL RFL	P903015 00001	P.124	MITTO 2 REPLAY	D111841	P.146	PIG 12/ULISSE S	N733338	P.115	SB	D573003	P.125
KIT MOOVI 130	P120002	P.127	MITTO 2T	D111453 00001	P.119	PIG 14/ULISSE S	N733336	P.115	SB	D573003	P.127
KIT MOOVI LIGHTP120001 00001		P.127	MITTO 4 12V	D111751	P.146	PIG 18/ULISSE S	N733339	P.115	SB	D573003	P.129
KIT MOOVI LIGHTP120001 00002		P.127	MITTO 4 12V/100	N999322	P.146	PIG 30/ULISSE S	N733337	P.115	SB BAT	P125002	P.31
KIT SCHEDA MCL	P120009	P.124	MITTO 4 REPLAY	D111842	P.146	PL LX BT	N999443	P.61	SBV	P111445	P.93
KIT TL 60	P130018	P.71	MITTO 4T	D111454 00001	P.119	PLE	D730178	P.57	SC NET	P121014	P.152
KIT TL 60M	P130020	P.71	MITTO W LINK	D111840	P.146	PLE	D730178	P.59	SCC	N733392	P.51
LAMP NET	D113696 00003	P.144	MM10	N999330	P.71	POX-SC	N733103 00002	P.45	SCS	P111323	P.77
LCM	D121011	P.152	MM11	N999331	P.71	POX-SC	N733103 00002	P.47	SCS	P111323	P.143
LEO D MA	D113695 00002	P.141	MM12	N999332	P.71	POX-SC	N733103 00002	P.87	SCS 1	P111376	P.31
LIBRA C LX	D113715 00002	P.61	MM8	N999328	P.71	POX-UP	N733103 00001	P.87	SCS 1	P111376	P.33
LIBRA C LX	D113715 00002	P.141	MM9	N999329	P.71	PPA		P.92/96	SCS 1	P111376	P.35
LIBRA C MA	D113672 00005	P.43	MOOVI 30	P940026 00002	P.126	PPE	D730567	P.43	SCS 1	P111376	P.43
LIBRA C MA	D113672 00005	P.47	MOOVI 30 RMM	P940027 00002	P.126	PPR	P111156	P.93	SCS 1	P111376	P.47

SCS 1	P111376	P.49	SM1	P115005	P.77	SUB SC left	P930026 00002	P.64
SCS 1	P111376	P.59	SM1	P115005	P.79	TA BIN	N999370	P.81
SCS 1	P111376	P.61	SM1	P115005	P.81	TA BIN	N999370	P.83
SCS 1	P111376	P.63	SM1	P115005	P.83	TB	D221074	P.149
SCS 1	P111376	P.65	SM2	P115001	P.77	TBA	P800037	P.133
SCS 1	P111376	P.79	SM2	P115001	P.79	T-BOX	P121019	P.146
SCS 1	P111376	P.83	SM5013	N999324	P.71	T-BOX	P121019	P.152
SCS 1	P111376	P.87	SM5014	N999325	P.71	T-BOX	P121019	P.77
SCS 1	P111376	P.109	SM5015	N999326	P.71	T-BOX	P121019	P.79
SCS 1	P111376	P.125	SM504	P130015	P.71	T-BOX	P121019	P.81
SCS 1	P111376	P.127	SM505	P130014	P.71	T-BOX	P121019	P.83
SCS 1	P111376	P.129	SP4000	P925169 00001	P.36	T-BOX	P121019	P.109
SCS 1	P111376	P.143	SP4000 FAST	P925169 00003	P.36	T-BOX	P121019	P.113
SCS 1 MA	P111377	P.31	SPC	D121611	P.152	TEL FIX	P130023	P.70
SCS 1 MA	P111377	P.33	SPC	D121611	P.109	TEL1	D111828	P.70
SCS 1 MA	P111377	P.143	SPC	D121611	P.113	TEL5	D111829	P.70
SCS IO	P125014	P.113	SPC2	D121612	P.152	TELECOMANDO	P111405	P.93
SCS IO	P125014	P.143	SPC2	D121612	P.109	TELECOMANDO	P111405	P.97
SCS WIE	P111408	P.31	SPC2	D121612	P.113	TEO 2	D111362	P.147
SCS WIE	P111408	P.33	SPC3	D121619	P.152	TEO 4	D111363	P.147
SCS WIE	P111408	P.35	SPC3	D121619	P.109	TIMER	P130024	P.70
SCS WIE	P111408	P.43	SPC3	D121619	P.113	TL	P800039	P.133
SCS WIE	P111408	P.47	SPCE	D121613	P.152	TO2	D111302	P.147
SCS WIE	P111408	P.49	SPCE	D121613	P.109	TO3D	D111300	P.147
SCS WIE	P111408	P.51	SPCE	D121613	P.113	TO4	D111303	P.147
SCS WIE	P111408	P.57	SPIRA 2X1	D110926 00001	P.152	TPF	P800040	P.133
SCS WIE	P111408	P.59	SPIRA 2X1	D110926 00001	P.133	TSU	P800038	P.133
SCS WIE	P111408	P.61	SPL	D113050	P.49	ULISSE C	P925188 00002	P.114
SCS WIE	P111408	P.63	SPL	D113050	P.57	ULISSE C	P925188 00003	P.114
SCS WIE	P111408	P.65	SPL	D113050	P.59	ULISSE C UP	P925188 00004	P.114
SCS WIE	P111408	P.79	SPL	D113050	P.63	ULISSE S C	P925191 00002	P.114
SCS WIE	P111408	P.83	SPL	D113050	P.65	ULISSE S C	P925191 00003	P.114
SCS WIE	P111408	P.87	SPL	D113050	P.79	ULISSE S C UP	P925191 00004	P.114
SCS WIE	P111408	P.109	SPL	D113050	P.143	ULISSE S SB	P925192 00002	P.114
SCS WIE	P111408	P.113	SPOTFINDER	P111406	P.93	ULISSE S SB	P925192 00003	P.114
SCS WIE	P111408	P.127	SPOTFINDER	P111406	P.97	ULISSE SB	P925189 00002	P.114
SCS WIE	P111408	P.129	SS	D111061	P.143	ULISSE SB	P925189 00003	P.114
SCS WIE	P111408	P.143	SSR5	D111704	P.49	UNICAVO	D121502	P.140
SCS WIE	P111408	P.125	SSR5	D111704	P.57	UNICAVO	D121502	P.119
SCS WIE	P111408	P.125	SSR5	D111704	P.59	UNIPOWER	D121501	P.140
SD	D223050	P.143	SSR5	D111704	P.63	UNIPRO	P111080	P.142
SEAGLE TWO	P111404	P.93	SSR5	D111704	P.65	UNIRADIO	P111322 00001	P.142
SEAGLE TWO	P111404	P.97	SSR5	D111704	P.79	URANO BT	P926180 00001	P.32
SEB	N733020	P.79	SSR5	D111704	P.143	VENTIMIGLIA NS	P111401 00001	P.31
SEB	N733020	P.109	ST	P115003	P.81	VENTIMIGLIA NS	P111401 00001	P.31
SECURBASE	D811315	P.119	ST	P115003	P.83	VENTIMIGLIA NS	P111401 00001	P.33
SECURBASE LIGHT USB			STOPPY	P970001 00002	P.132	VENTIMIGLIA NS	P111401 00001	P.35
	P111388	P.119	STOPPY BAT	P975001	P.133	VENTIMIGLIA NS	P111401 00001	P.37
SECURBASE PLUS USB			STOPPY F	P970001	P.132	VENTIMIGLIA NS	P111401 00001	P.113
	P111389	P.119	STOPPY H	P970045 00002	P.132	VENTIMIGLIA NS	P111401 00001	P.115
SEI	P123007	P.79	STOPPY H F	P970045 00001	P.132	VENTIMIGLIA NS	P111401 00001	P.149
SEK	P121017	P.152	STOPPY H L	P970045 00003	P.132	VIRGO	P930116 00002	P.44
SEK	P121017	P.113	STOPPY H LAR	P970045 00004	P.132	VIRGO BAT	P125008	P.45
SELETTO	P121012	P.153	STOPPY H LAR INOX	P970045 00005	P.132	VIRGO KIT	R930130 00002	P.44
SELETTO E	P121013	P.153	STOPPY L	P970002 00002	P.132	VIRGO SQ	P930117 00002	P.44
SET/S	N733069	P.81	STOPPY LAR	P970007 00002	P.132	VISTA		P.90
SET/S	N733069	P.83	STOPPY LAR INOX	P970007 00004	P.132	VISTA SEL	D113722	P.93
SFD	N999151	P.31	STR	N190106	P.31	X130	P910024 00007	P.86
SFI	N999156	P.33	STR	N190106	P.31	X130 EF	P910025 00007	P.86
SFI	N999156	P.35	STR	N190106	P.33	X130 P	P910026 00007	P.86
SFQ	N999070	P.143	STR	N190106	P.35	X130 PEF	P910027 00007	P.86
SFR	N733286	P.43	STR	N190106	P.149	*P800041	P.133	
SFR L	N733347	P.43	SUB E-L SC left	P930014 00006	P.64	*P800042	P.133	
SIBOX	N574005	P.45	SUB E-L SC right	P930014 00005	P.64			
SIBOX	N574005	P.47	SUB E-R SC left	P930013 00008	P.64			
SIBOX	N574005	P.87	SUB E-R SC right	P930013 00007	P.64			
SIRIO MA	D113713 00002	P.115	SUB G SC left	P930010 00006	P.64			
SIRIO MA	D113713 00002	P.141	SUB G SC right	P930010 00005	P.64			
SIRIO TMA	D113200 00001	P.142	SUB R SC left	P930012 00006	P.64			
SIRIO TMA	D113200 00001	P.115	SUB R SC right	P930012 00005	P.64			
SLM2	D123013	P.144	SUB SC right	P930026 00001	P.64			



## ITALIA

BFT S.P.A.

Via Lago di Vico 44  
36015 Schio (Vi) / Italy  
tel. +39 0445 69 65 11  
fax +39 0445 69 65 22  
www.bft.it  
e-mail: info@bft.it

## GREAT BRITAIN

### BFT AUTOMATION UK LTD

Unit 8E, Newby Road  
Industrial Estate  
Hazel Grove, Stockport,  
Cheshire, SK7 5DA - UK  
tel. +44 (0) 161 4560456  
fax +44 (0) 161 4569090  
info@bftautomation.co.uk  
www.bftautomation.co.uk

## FRANCE

### AUTOMATISMES BFT FRANCE

Multiparc de Parilly  
50 Rue Jean Zay, Bat C  
69800 Saint priest - France  
tel. +33 (0)4 78 76 09 88  
fax +33 (0)4 78 76 92 23  
contacts@automatismes-bft-  
www.bft-france.com

## GERMANY

### BFT TORANTRIEBSSYSTEME GMBH

Faber-Castell-Straße 29  
90522 Oberasbach - Germany  
Tel. +49 (0)911 766 00 90  
Fax +49 (0)911 766 00 99  
service@bft-torantriebe.de  
www.bft-torantriebe.de

## CROATIA

### BFT-ADRIA d.o.o.

Obrovac 39  
51218 Dražice (Rijeka)  
Hrvatska - Croatia  
tel. +385 (0)51 502 640  
fax +385 (0)51 502 644  
info@bft.hr  
www.bft.hr

## USA

### BFT USA

BFT U.S., Inc.  
6100 Broken Sound Pkwy. N.W.  
Suite 14  
Boca Raton, FL 33487,  
U.S.A.  
T: +1 561.995.8155  
F: +1 561.995.8160  
info.bft@bft-usa.com  
www.bft-usa.com

## PORTUGAL

### BFT SA-COMERCIO DE AUTOMATISMOS E MATERIAL DE SEGURANÇA

urbanização da pedrulha, lote 9  
apartado 8123,  
3020-305 Coimbra - Portugal  
tel. +351 239 082 790  
fax +351 239 082 799  
geral@bftportugal.com  
www.bftportugal.com

## SPAIN

### BFT GROUP ITALIBERICA DE AUTOMATISMOS S.L.

www.bftautomatismos.com

Pol. Palou Nord,  
Sector F - C/Cami - Can Basa nº 6-8  
08401 Granollers - (Barcelona) - Spain  
tel. +34 938 61 48 28  
fax +34 938 70 03 94  
bftbcn@bftautomatismos.com

Pl. Comendador - C/  
informática, Nave 22 - 19200  
Azuqueca de henares  
(Guadalajara) - Spain  
tel. +34 949 26 32 00  
fax +34 949 26 24 51  
administracion@bftautomatismos.com

## POLAND

### BFT Polska Sp.z o.o.

Ul. Lipowa 21  
05-091 ZĄBKI  
tel. +48 0 22 781 60 55  
fax +48 0 22 781 60 22  
e-mail: biuro@bft.com.pl  
www.bft.pl

## BELGIUM

### BFT BENELUX SA

Parc Industriel 1  
Rue du commerce 12  
1400 Nivelles - Belgium  
tel. +32 (0)67 55 02 00  
fax +32 (0)67 55 02 01  
info@bftbenelux.be  
www.bftbenelux.be

## AUSTRALIA

### BFT AUTOMATION AUSTRALIA PTY LTD

29, Bentley Street  
Wetherill Park NSW 2164  
Australia  
Tel: +61 (0) 2 9757 0677  
Fax: +61 (0) 2 9725 4225  
info@bftaustralia.com.au  
www.bftaustralia.com.au