## Aprimatic. Certified Quality.

Aprimatic is Urmet S.p.A.'s company access automation systems. Aprimatic products are designed, developed and manufactured in compliance with UNI EN ISO 9001 standards. This internationally acknowledged certification attests Urmet S.p.A.'s status as a leader in the Communication, Security and Building Automation industry and to the all-round quality of its products and services.


All Aprimatic products bear the mark $\subset €$

Aprimatic is a registered
trademark belonging
aprimatic.it
to Aprimatic s.r.l.

## THE URMET GROUP

## Urmet Group. <br> Communication, security and energy. All over the world, in every project.

Urmet Group means integration of expertise and international dimensions, to offer global solutions to its partners. Born in Italy, it was able to develop internationally and now it has a significant presence on the world market. Our Group designs, develops and markets
products and systems in the communication and security sectors, as well as in energy management and saving and telecommunications. In Italy it is a leading manufacturer of video door phone and telephone systems, access automation systems and control, professional intrusion
alarm systems, fire alarm and video surveillance systems, from private homes to town redevelopment planning, up to large public infrastructures. It is as a global partner for product quality and service efficiency.


Systems and Products for Video Door Phone, Intrusion Alarm, Access Control, Fire Alarm, Video Surveillance, Residential Applications.


Photovoltaic, Wind Power, Hydroelectric Power, Geothermal Energy,
Biomass. Heat Metering and Management Systems.


TELECOMMUNICATION SYSTEMS AND SOLUTIONS

[^0]
## APRIMATIC

## The champion of automation.

Aprimatic is the leader in Italy and in Europe for access automation systems. Thanks to the experience gained in two decades of presence in the market and the very high know-how of


EXTERNAL CLOSING SYSTEMS

Technological solutions for swing and sliding gates, up-and-over doors and traffic barriers.
designers, engineers, testers and consultants, Aprimatic offers its customers high performance, product reliability and value retention in time. Today, Aprimatic is the only company offering
all kinds of automation systems, with a complete range of products suitable for residential, commercial and industrial application as well as for public areas.


Systems for rolling shutters, shutters, windows and domes, sliding doors and home
automation.


DOORS, WINDOWS AND SHUTTERS

Ready-made solutions to meet the most common residential automation requirements.

## Catalogue guide

## EXTERNAL CLOSING SYSTEMS

The RED section of the catalogue features automation systems for gates, up-and-over doors and for entrances installed in public areas, as well as all-in-one kits for a wide range of automation needs in residential and industrial applications

DOORS, WINDOWS AND SHUTTERS

The WHITE section of the catalogue presents automation devices for doors, windows and rolling shutters. A specific chapter of this section is devoted to home automation solutions

## technical

The GREY appendix contains the technical data sheets with product dimensions


## AT THE SERVICE OF PROFESSIONALS

## A COMPLETE RANGE

Aprimatic offers a complete range for every type of product, satisfying the needs of all end users and ensuring their complete satisfaction.

## COMMERCIAL ORGANISATION

Aprimatic supports its customers during the entire process, helping them choose the best solution, providing assistance and guaranteeing a complete and accurate service. The sales network covers the entire Italian territory and responds in real time to doubts or installation needs, providing specialised, competent and timely support.

## CUSTOMER SERVICE

Aprimatic Customer Service is available to companies and installers to provide all the necessary support during installation and operation of the equipment.

## Aprimatic

## Aprimatic



## SERVICE NETWORK

Over forty authorised service centres throughout Italy constitute an extensive, homogeneous and always up-to-date network.

## WEB

Click on www.aprimatic.com to enter a world of information and services designed for end customers and installers, including special on-line services such as consultation of detailed exploded views.

## TRAINING

Meetings for the presentation of news, courses on new products and systems, update seminars on professional and regulatory issues improve the quality of everyone's work and represent a benefit for end customers.

## SHOWCASE

## Traffic barriers

24 V barriers used for the management of continuous use car parks in large apartment buildings, companies, or even private car parks with frequent passage of vehicles during the day.

## NEW <br> AT APRIMATIC: <br> ARMS, OPERATORS <br> AND PHOTOCELLS



SERIE HARRIER
P. 94

## Hydraulic operators

Hydraulic operators for swing gates with hydraulic brake during opening and closing.

Operator for up-and-over doors

Brand new low-voltage electromechanical operator for sectional and counterweight-balanced up-and-over doors.

12V Photocells

The wall-mounted photocells with a 20 -metre range can also be welded onto a post. They are self-aligning and with IP45 protection degree. They operate with 12 V and 24 V power supply.


GA-MATIC CF800/CF1000
P. 88


ER12-24V
P. 118


New microwave + IR mixed technology radar for automatic door control.

Wireless tubular motors

The entire range of Aprimatic Revolux, known for its performance and reliability, is now available version with control multiposition for the management of the movement of adjustable shutters, with integrated receiver.

Remote controls for tubular motors

The new Revolux wireless remote controls for tubular motors are available with one or five programmable channels.

Gate remote control

New remote control for gates and up-and-over doors supporting up to 4 radio channels for the transmission of pulses.


DT90C
P. 176


## SERIE REVOLUX MP

P. 126


## 1 / 5 CANALI

P. 135


TM4
P. 112

## 01. <br> AUTOMATION KITS

KIT RAIDER 2500
KIT AP424
KIT AP423
KIT G-MATIC AP350
KIT FLEXI
KIT TWENTY 270
KIT MONZA ONDA 424
KIT HOCKENHEIM ONDA 624
KIT ONDA 623
KIT INDIANAPOLIS ONDA 801
KIT ESTORIL ALZO
KIT GA-MATIC CF 800
KIT GA-MATIC CF 1000


## EUROPEAN STANDARDS

Standards EN 12453 and EN 12445 set out the minimum safety parameters. For automatic closing systems whose operation involves persons. These standards allow the identification of the necessary technical measures aimed at ensuring the safety of users and facilities.

Classification criteria include the position of the system the type of user and the control mode.


THE SYSTEM
can be:
a system can be found in a delimited private area, in a private area which adjoins a public area or in a completely public area.


## THE USER <br> can be:

a user is not instructed when he/she has not received the necessary information to operate the automation system; this generally happens for automation systems found in public areas. For automation systems in private areas, instead, the user is usually instructed.


## THE CONTROL can be:

the system can be controlled in a number of ways: automatic when the pulse activates a series of operations and not a single action; radio-controlled if a pulse corresponds to a single operation (e.g.: opening or closing); operated by pulses from a fixed position if the activation of the system is possible from a single location even without automatic control reset; finally, it may lack the self-holding function, if the desired action lasts as long as the command activation.

## MANDATORY SAFETY DEVICES

A - Operator present and control with automatic reset
B-Operator present and control with manual reset
C - Mechanical or electronic devices lyou need to check the conformity of the impact forces tolerated compared to reference standards)

D - Infrared photocells to detect obstacles in the operation area

THE SCENARIO - REGULATORY REQUIREMENTS

## Control device

|  | $\begin{aligned} & \text { withou } \\ & \text { self-hold } \end{aligned}$ | h pulse f ixed posit | radio control automatic |  |
| :---: | :---: | :---: | :---: | :---: |
|  | A | C | C | $C+D$ |
|  | C | C | $C+D$ | C+D |
|  | B | C | C + D | C + D |
|  | $\sim$ | C + D | C+D | C+D |

## EXAMPLE OF A TYPICAL SYSTEM COMPLIANT WITH EN 12453 - EN 12445 STANDARDS

## System

## ON A PUBLIC AREA

The system marks the boundary between a private and a public area (e.g., the driveway gate with a ramp for a condominium garage).

## User <br> INSTRUCTED

The system is activated by people having received a proper training on the automation system operation.

## Safety is guaranteed by INFRARED BEAM PHOTOCELLS

Aprimatic automation systems are designed for connection of all types of infrared beam photocells, ensuring greater safety for the user.

## SAFETY EDGES

Sensitive edge used to prevent the risk of crushing due to electric gates movement. In case of contact, the automation system inverts motion and prevents damage to people and property.

Control
RADIO
To send pulses even from a fixed position (e.g. from a desktop) or from a mobile station.

## CHOOSING THE RIGHT PRODUCT

## Easy to purchase, fast to install

Aprimatic optimises your stock with only a few references. Packaging is designed to ensure exceptionally clear and readable information, making it easier to find the right product. Aprimatic has already identified all the difficulties that may be encountered by installers when working with highly
technological solutions and has therefore decided to solve these problems with practical ready-to-use kits. Everything you need is ready for assembly: discover the advantage of these genuine technological gems to make your installations quicker, easier and more durable.

## TYPES

## SWING <br> GATES

Recommended installation for gates with one or two wings, where the operating space is reduced by the presence of walls and fences. Wings usually open inwards inside the property and require a certain room for movement.


Operators with vertical engine

- KIT G-MATIC AP350
- KIT RAIDER 2500
- KIT AP423
- KIT AP424
- KIT TWENTY 270 B
- KIT TWENTY 270 C
- KIT TWENTY 270 SF


## SLIDING

GATES

Easy installation, ideal for moving a single wing, equipped with rack, running on a ground rail. This type of system is used in long and narrow spaces where the gate slides during opening and closing.


- KIT MONZA ONDA 424
- KIT HOCKENHEIM ONDA 624
- KIT ONDA 623
- KIT INDIANAPOLIS ONDA 801

Three-year warranty. Aprimatic kits are covered by an extended warranty. For an unbeatable long-lasting safety.


## UP-AND-OVER DOORS

Ideal installation for spring-loaded or counterweight-balanced up-and-over doors and sectional doors, for residential use.


- KIT ESTORIL ALZO
- KIT GA-MATIC CF 800
- KIT GA-MATIC CF 1000


## Electromechanical wing operator KITS

| KIT NAME | $\begin{array}{cc} \text { WING WIDTH } \\ 1,8 & (\mathrm{~m}) \\ 3,0 \end{array}$ | 4,0 | WING WEIGHT (kg) | USE |
| :---: | :---: | :---: | :---: | :---: |
| RAIDER 2500 | \| 1 III| <br>  |  | $\begin{aligned} & 500 \\ & 300 \end{aligned}$ | (R) |
| AP423/AP424 |  |  | $\begin{aligned} & 300 \\ & 200 \end{aligned}$ | (R) |
| AP 350 |  |  | 350 | (R) |

(*) For gates with wings longer than 1.8 m , it is necessary to use the electric lock.

Hydraulic wing operator KITS

(*) For gates with wings longer than 1.8 m , it is necessary to use the electric lock.

Articulated arm operator KITS

| KIT NAME | WING WIDTH (m) $1,8 \quad 3,0$ | 4,0 | WING WEIGHT (kg) | USE |
| :---: | :---: | :---: | :---: | :---: |
| FLEXI | - |  | 300 | (R) |

Sliding gate KITS

| KIT NAME | WING WEIGHT (kg) | USE |
| :--- | :--- | :--- |
| MONZA ONDA 424 (24V) | 400 | $®$ |
| HOCKENHEIM ONDA $624(24 \mathrm{~V})$ | 400 | $®(C)$ |
| ONDA 623 (230V) | 600 | $®(C)$ |
|  | 400 | $®(C)$ |

Up-and-over door operator KITS

| KIT NAME | MAX. DOOR DIMENSION | USE |
| :--- | :--- | :--- |
| ESTORIL ALZO | $3,5 \times 3,0 \mathrm{~m}$ | $\circledR$ |
| GA-MATIC CF 800 | $12 \mathrm{~m}^{2}$ | $\circledR$ |
| GA-MATIC CF 1000 | $14 \mathrm{~m}^{2}$ | $\circledR$ |

KEY
(R) residential
(C) CONDOMINIUM
(I) industrial

## KIT RACING RAIDER 2500

## 41026/800-801



Self-learning configuration and possibility of adjusting the parameters through a simple and intuitive menu.

Pre-drilled adjustable rear bracket. The arms are equipped with mechanical limit stops to allow stroke adjustment

Continuous operation guaranteed, in case of power supply failure, by two optional emergency batteries.

The use of an electric lock is recommended for gate wings longer than 1.8 metres.

| TECHNICAL DATA |  |
| :--- | :--- |
| MAIN POWER SUPPLY | $230 \mathrm{Vca}-50 \mathrm{~Hz}$ |
| MOTOR POWER SUPPLY | 24 Vdc |
| MAX. THRUST FORCE | 2500 N |
| MAX. WING WIDTH <br> WITHOUT ELECTRIC LOCK | $1,8 \mathrm{~m}$ |
| MAX. WING WIDTH | 3 m |
| WITH ELECTRIC LOCK |  |
| MAX. WING WEIGHT | 300 kg (for 3 m wing) |
|  | 500 kg (for 1.8 m wing) |
| WEIGHT KIT | 10 kg |



Kit for swing gates, for residential use, with electromechanical arm operator.

OPERATOR DIMENSIONS


KIT 41026/801: 733,47 euro. The kit includes

| ITEM <br> NUMBER | DESCRIPTION | Pcs. |
| :--- | :--- | :--- | :--- |
| 41026/001 | RAIDER 2500 Operator | 2 |
| 41600/014 | RSK-24-2500 control unit <br> (with receiver 433.92MHz <br> PL-ECO) | 1 |

(*) For gates with wings longer than 1.8 m , it is necessary
to use the electric lock.


41026/800 ( 792,67 euro) The kit includes
(in addition to 41026/801)


NOTE: Not compatible with previous Raider model
NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
NOTE: All prices are subject to variation.

## KIT AP424



| TECHNICAL DATA |  |
| :--- | :--- |
| MAIN POWER SUPPLY | $230 \mathrm{Vac}-50 \mathrm{~Hz}$ |
| MOTOR POWER SUPPLY | 24 Vdc |
| MAX. THRUST FORCE | 1500 N |
| MAX. WING WIDTH | $1,8 \mathrm{~m}$ |
| WITHOUT ELECTRIC LOCK  <br> MAX. WING WIDTH 3 m <br> WITH ELECTRIC LOCK 300 kg (for 2 m wing) <br> MAX. WING WEIGHT 200 kg (for 3 m wing) <br> WEIGHT KIT 15 kg |  |

Kit for swing gates, for residential, with electromechanical arm operator.

OPERATOR DIMENSIONS

${ }^{*}$ *) For gates with wings longer than 1.8 m , it is necessary to use the electric lock.

41033/800 (899,00 euro)
The kit includes: (in addition to 41033/801)
41033/801 (649,00 euro) The kit includes :


NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
NOTE: All prices are subject to variation.

## KIT AP 423

## 41032/800-801



Elegant design suggests classic hydraulic models.
Irreversible motor for a maximum power during the closing.
Multiposition brackets for easy and fast assembly.
Stainless steel screw for maximum strengness and long life

| TECHNICAL DATA |  |
| :--- | :--- |
| MAIN POWER SUPPLY | $230 \mathrm{Vac}-50 \mathrm{~Hz}$ |
| MAX. THRUST FORCE | 1500 N |
| MAX. WING WIDTH | $1,8 \mathrm{~m}$ |
| WITHOUT ELECTRIC LOCK |  |
| MAX. WING WIDTH <br> WITH ELECTRIC LOCK | 3 m |
| MAX. WING WEIGHT | 300 kg (for 2 m wing) |
| WEIGHT KIT | 200 kg (for 3 m wing) |

(*) For gates with wings longer than 1.8 m , it is necessary to use the electric lock.

41032/801 (649,00 euro) The kit includes



Kit for swing gates, for residential, with electromechanical arm operator.

OPERATOR DIMENSIONS


KIT 41032/800: 899,00 euro.
The kit includes : (in addition to 41032/801)


41929/003 KIT antenna 433.92 MHz 1 for ET2N-ET2ON


NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
NOTE: All prices are subject to variation.

## KIT G-MATIC AP 350



| TECHNICAL DATA |  |
| :--- | :--- |
| MAIN POWER SUPPLY | $230 \mathrm{~V}-50 \mathrm{~Hz}$ |
| MAX. WING WIDTH <br> WITHOUT ELECTRIC LOCK | $1,8 \mathrm{~m}$ |
| MAX. WING WIDTH <br> WITH ELECTRIC LOCK | 3 m |
| MAX. WING WEIGHT | 350 kg |
| WEIGHT KIT | 17 kg |

41035/801 ( 603,87 euro) The kit includes:

| ITEM NUMBER | DESCRIPTION | Pcs. |
| :--- | :--- | :--- |
| 41035/001 | Left swing gate <br> operator |  |
| $\mathbf{4 1 0 3 5 / 0 0 2}$ | Right swing gate <br> operator | BA230 control unit (with <br> receiver 433.92MH) |
| $\mathbf{4 1 6 2 8 / 0 0 1}$ | TM4 433,92 Mhz <br> four channel trasmitter |  |

Kit for swing gates up to 350 Kg per leaf. Residential use, with electromechanical arm operator.


41035/800 (703,13 euro)
The kit includes (in addition to 41035/801):

$\qquad$


[^1] (refer to the initial index).
NOTE: All prices are subject to variation.

## KIT FLEXI

## 41029/800

Articulated arm fitted with mechanical limit stop, to adjust the stroke and prevent the positioning in negative angle.

Control unit on board of the operator, with full self-learning configuration. It can move wings having a maximum length of 3 m (without electric lock).

Ideal for gates with large pillars.


Articulated electromechanical arm for swing gates for residential use.

## OPERATOR DIMENSIONS



KIT 41029/800: 1389,40 euro
The kit includes:

| ITEM <br> NUMBER | DESCRIPTION | Pcs. |
| :--- | :--- | :--- |
| 41029/001 | FLEXI 300 OPERATOR <br> 1 operator Master with <br> dedicated on-board elec- <br> tronic unit and 433.92MHz <br> built-in radio receiver <br> 1 operator Slave | 2 |
| $\mathbf{4 1 0 2 9 / 0 5 4}$ | Articulated arm <br> for FLEXI operator | 2 |



[^2]
## KIT TWENTY 270 B

## 41012/800



Kit for swing gates, with hydraulic operator with lock on openings and closing. Condominium use.

TECHNICAL DATA

| MAIN POWER SUPPLY | $230 \mathrm{~V}-50 \mathrm{~Hz}$ |
| :--- | :--- |
| MAX. WING WIDTH | 4 m |
| WITH ELECTRIC LOCK |  |
| MAX. CYCLE NUMBER | 800 cycles/day |
| WEIGHT KIT | 23 kg |

## OPERATOR DIMENSIONS



NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
NOTE: All prices are subject to variation.

5A 020 EXTERNAL CLOSING SYSTEMS

## KIT TWENTY 270 C

## 41012/802



Simple and linear design with a compatible aestetics for all types of gates.

The standard hydraulic slowing down system in the closing (electronically adjustable) allows a soft approach of the wings, silently and without mechanical stress to the structure;

## Emergency relaese system under the top cover.

It equipped with front hitch ball joint uniball threaded 20 mm , like the previous range ZT 44 , which allows to retrieve any tolerances during the fixing.

Extremely sturdy and flexible pillar mounting thanks to the rear flange with articulated aluminium fork.


Kit for swing gates, with hydraulic operator with lock on closing. Condominium use.

## OPERATOR DIMENSIONS



KIT 41012/802: 1349,00 euro
The kit includes:

| ITEM <br> NUMBER | DESCRIPTION | Pcs. |
| :--- | :--- | :--- | :--- |
| 41012/002 | Operator TWENTY 270 C | 2 |

(*) For gates with wings longer than 1.8 m , it is necessary to use the electric lock.

NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
NOTE: All prices are subject to variation.

## KIT TWENTY 270 SF

## 41012/804



Simple and linear design with a compatible aestetics for all types of gates.

The standard hydraulic slowing down system in the closing (electronically adjustable) allows a soft approach of the wings, silently and without mechanical stress to the structure;

## Emergency relaese system under the top cover.

It equipped with front hitch ball joint uniball threaded 20 mm , like the previous range ZT44, which allows to retrieve any tolerances during the fixing.

Extremely sturdy and flexible pillar mounting thanks to the rear flange with articulated aluminium fork.


Kit for swing gates, with hydraulic operator without lock on openings and closing. Condominium use.

OPERATOR DIMENSIONS


41812/008 ER12-24V -
Pair of photocells


41830/007 PC12E-Wall-mounted 1
key-operated switch


Aprimatic signal panel

(*) For gates with wings longer than 1.8 m , it is necessary to use the electric lock.

NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
NOTE: All prices are subject to variation.

## KIT MONZA ONDA 424

## 41101/800-802



Complies with the current safety standards as regards to obstacle detection and inversion of movement in accordance with EN12453 and EN12445 (product certified under ideal installation conditions). The electronic torque adjustment combined with encoder technology guarantees a gradual approach during opening and closing movements.

Continuity of operation guaranteed, in the event of a power supply failure by a set of optional batteries which may be fitted in the operator casing.
Sturdy and reliable thanks to the die-cast aluminium casing.
Worm screw gear motor with aluminium body and on-board electronic control unit. Equipped with adjustable-height foundation plate.

Emergency release lever with customised key, for use during power supply failures.


Kit for sliding gates with wings up to 400 kg . Residential use.

## OPERATOR DIMENSIONS



KIT 41101/800: 613,08 euro
The kit includes: (in addition to 41101/802):

| ITEM NUMBER | DESCRIPTION | Pcs. |
| :--- | :--- | :--- |
| 41840/006 | ET2N 24V Led <br> flashing light | 1 |
| $\mathbf{4 1 8 3 0 / 0 0 7}$ | PC12E Wall-mounted <br> key-operated switch | 1 |


| ITEM <br> NUMBER | ACCESSORIES COMPLETING THE KIT | $\boldsymbol{€}$ |
| :--- | :--- | ---: |
| $\mathbf{4 1 1 8 0 / 0 6 4}$ | CP - Aprimatic 10m plastic rack with steel core <br> and mounts (module 4) | 156,09 |

[^3]
## KIT HOCKENHEIM ONDA 624



Complies with the current safety standards as regards to obstacle detection and inversion of movement in accordance with EN12453 and EN12445 (product certified under ideal installation conditions). The electronic torque adjustment combined with encoder technology guarantees a gradual approach during opening and closing movements.

Continuity of operation guaranteed, in the event of a power supply failure, by a set of optional batteries which may be fitted in the operator casing.
Sturdy and reliable thanks to the die-cast aluminium casing.
Worm screw gear motor with aluminium body and on-board electronic control unit. Equipped with adjustable-height foundation plate.
Emergency release lever with customised key, for use during power supply failures.

| TECHNICAL DATA |  |
| :--- | :--- |
| MAIN POWER SUPPLY | $230 \mathrm{Vac}-50 \mathrm{~Hz}$ |
| MOTOR POWER SUPPLY | 24 Vdc with encoder |
| ABSORBED POWER | 80 W |
| ABSORBED CURRENT | $4,2 \mathrm{~A}$ |
| MAX. THRUST FORCE | 650 N |
| MAX. LINEAR SPEED | $10 \mathrm{~m} / \mathrm{min}$ |
| OPERATING TEMPERATURE | $-20^{\circ}+55^{\circ} \mathrm{C}$ |
| MAX. GATE WEIGHT | 600 kg |
| HEIGHT OF PINION FROM GROUND | 70 mm |
| MAX. CYCLE NUMBER | $100 \mathrm{cycles} /$ day |
| WEIGHT KIT | 10 kg |

## OPERATOR DIMENSIONS



KIT 41102/802: 601,55 euro
The kit includes:

| ITEM NUMBER | DESCRIPTION | Pcs. |
| :--- | :--- | :--- |
| 41102/001 | ONDA 624 gear motor with <br> dedicated on-board electronic <br> control unit, b333.92 MHz built- <br> in superheterodyne radio <br> receiver, release key and <br> foundation kit |  |
| $\mathbf{4 1 9 0 5 / 0 0 4}$ | TM4-433.92 MHz <br> four-channel transmitter |  |
| $\mathbf{4 1 9 2 9 / 0 0 3}$ | KIT antenna 433.92 MHz for <br> ET2N-ET20N | 1 |

KIT 41102/800: 700,17 euro
The kit includes: (in addition to 41102/802):

| ITEM NUMBER | DESCRIPTION | Pcs. |  |
| :--- | :--- | :--- | :--- |
| $\mathbf{4 1 8 4 0 / 0 0 6}$ | ET2N 24V Led | 1 |  |
|  | flashing light |  |  |

NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).

NOTE: All prices are subject to variation.

## KIT ONDA 623

## 41623/800



Complies with the current safety standards as regards to obstacle detection and inversion of movement in accordance with EN12453 and EN12445 (product certified under ideal installation conditions). The electronic torque adjustment combined with encoder technology guarantees a gradual approach during opening and closing movements.

Continuity of operation guaranteed, in the event of a power supply failure, by a set of optional batteries which may be fitted in the operator casing.
Sturdy and reliable thanks to the die-cast aluminium casing
Worm screw gear motor with aluminium body and on-board electronic control unit. Equipped with adjustable-height foundation plate.
Emergency release lever with customised key, for use during power supply failures.

| TECHNICAL DATA |  |
| :--- | :--- |
| MAIN POWER SUPPLY | $230 \mathrm{Vac}-50 \mathrm{~Hz}$ |
| ABSORBED POWER | 250 W |
| ABSORBED CURRENT | $1,3 \mathrm{~A}$ |
| MAX. THRUST FORCE | 650 N |
| MAX. LINEAR SPEED | $10 \mathrm{~m} / \mathrm{min}$ |
| OPERATING TEMPERATURE | $-20^{\circ}+55^{\circ} \mathrm{C}$ |
| MAX. GATE WEIGHT | 600 kg |
| HEIGHT OF PINION FROM GROUND | 70 mm |
| MAX. CYCLE NUMBER | $100 \mathrm{cycles} /$ day |
| WEIGHT KIT | 10 kg |

KIT 41102/802: 601,55 euro
The kit includes:

| ITEM NUMBER | DESCRIPTION | Pcs. |
| :--- | :--- | :--- |
| $\mathbf{4 1 6 2 3 / 0 0 1}$ | ONDA 623 gear motor with <br> control unit SC230 on-board. <br> 433.92 Mhz built-in radio <br> receiver, release key and <br> foundation plate kit. |  |
| $\mathbf{4 1 9 0 5 / 0 0 4}$ | TM4 - 433.92 MHz <br> four-channel transmitter |  |
| $\mathbf{4 1 9 2 9 / 0 0 3}$ | KIT antenna 433.92 MHz for <br> ET2N-ET20N |  |



Sliding gate kit. Residential use for wings up to 600 kg . Condominium use for wings up to 400 Kg .

## OPERATOR DIMENSIONS



KIT 41102/800: 700,17 euro
The kit includes:(in addition to 41102/802):


41830/007
PC12E Wall-mounted 1 key-operated switch


| ITEM NUMBER | ACCESSORIES COMPLETING THE KIT | $\boldsymbol{\epsilon}$ |
| :--- | :--- | :--- |
| $41180 / 063$ | CZ - Aprimatic $4 m$ galvanized steel rack with mounts (module 4) |  |

[^4]
## KIT INDIANAPOLIS ONDA 801

## 41127/810-811

Maximum safety thanks to the on-board electronic control unit with electronic torque adjustment.
An additional anti-crushing card can be connected as an optional for gate auto reverse if an obstacle is detected during gate closing

Steel gears with permanent lubrication.
Because it is self-locking, this gear motor keeps the gate shut
Therefore, it is not necessary to use a lock.
In the event of power supply failure you can proceed with the manual key release via a convenient unlocking device.

| TECHNICAL DATA |  |
| :--- | :--- |
| MAIN POWER SUPPLY | $230 \mathrm{~V}-50 \mathrm{~Hz}$ |
| THRUST FORCE | 1250 N |
| MAX. WING WEIGHT | 800 kg (residential use) |
|  | 500 kg (condominium use) |
| WEIGHT KIT | 13 kg |

KIT 41127/801: 839,74 euro. The kit includes:

| ITEM NUMBER | DESCRIPTION | Pcs. |
| :--- | :--- | :--- |
| $\mathbf{4 1 1 2 7 / 0 2 3}$ | ONDA 801 gear motor with <br> SC230 on-board electronic <br> control unit, 433.92 MHz built-in <br> superheterodyne radio receiver, <br> release key and foundation kit |  |
| $\mathbf{4 1 9 0 5 / 0 0 4}$ | TM4 - 433.92 MHz <br> four-channel transmitter | 1 |
| $\mathbf{4 1 9 2 9 / 0 0 3}$ | KIT antenna 433.92 MHz for <br> ET2N-ET20N | 1 |

41127/800: 947,85 euro. The kit includes:
(in addition to 41127/801)
Kit for sliding gates. Residential use for wings up to 800 kg . Condominium use for wings up to 500 kg .

## OPERATOR DIMENSIONS


ITEM NUMBER DESCRIPTION Pcs

| ITEM NUMBER | ACCESSORIES COMPLETING THE KIT | $€$ |
| :--- | :--- | :--- |
| $41180 / 063$ | CZ - Aprimatic 4m galvanised steel rack with mounts (module 4) |  |

NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
NOTE: All prices are subject to variation.

## KIT ESTORIL ALZO

## 41210/801



Self-locking gear motor, keeping the up-and-over door closed even in the absence of an electric lock. External emergency release (optional) for accessing the garage in case of power supply failure.

Maximum anti-crushing safety for the lower edge of the door, thanks to the on-board electronic control unit equipped with electronic torque adjustment and anti-crushing system (which can be disabled)

Great quality material: steel drive parts, die-cast aluminium gear motor body and ABS protective cover guarantee IP 44 protection degree

Slowdown system for a soft approach of the door during opening and closing, thus avoiding noise and mechanical stress to the structure.


Kit for counterweight-balanced up-and-over doors with electromechanical operator. Residential use.

## OPERATOR DIMENSIONS



KIT 41210/801: 641,52 euro

| ITEM NUMBER | DESCRIPTION | Pcs. |
| :--- | :--- | :--- |
| $\mathbf{4 1 2 1 0 / 0 0 2}$ | ALZO electromechanical operator <br> with T3SC on-board electronic <br> control unit and 433.92 MHz <br> built-in superheterodyne radio <br> receiver |  |
| $\mathbf{4 1 9 0 5 / 0 0 4}$ | TM4 - 433.92 MHz four-channel <br> transmitter |  |


| TECHNICAL DATA |  |
| :--- | :--- |
| MAIN POWER SUPPLY | $230 \mathrm{~V}-50 \mathrm{~Hz}$ |
| MAX. SHEET DIMENSION | $3,5 \times 3 \mathrm{~m}$ |
|  | (for single motor) <br> $5 \times 3 \mathrm{~m}$ <br> (for double motor drive) |
| WEIGHT KIT | 10 kg |



Aprimatic signal panel


| ITEM NUMBER | ACCESSORIES COMPLETING THE SINGLE MOTOR KIT |  |  |
| :--- | :--- | :--- | :--- |
| $\mathbf{4 1 2 1 0 / 0 6 2}$ | HARDWARE KIT (for single-motor installation) | $\mathbf{\epsilon}$ |  |
|  | The package includes: |  |  |
|  | Two $1.8 \mathrm{~m}, \varnothing 25 \mathrm{~mm} \times 3$ galvanised pipes with pre-welded bushes, |  |  |
|  | 180 cm sheet fixing bracket |  |  |

NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
NOTE: All prices are subject to variation.

## KIT GA-MATIC CF800 / CF1000

## 41242/800 / 41242/810



Maximum anti-crushing safety thanks to the on-board electronic control unit equipped with auto reverse function when an obstacle is detected while closing the gate.

GA-MATIC operators can be used for sectional doors if installed with the adapter arm accessory, also for counterweight-balanced up-andover door automation.

Slowdown system for a soft approach of the door during opening and closing, thus avoiding noise and mechanical stress to the structure.

Timed courtesy light built into the operator to light up the garage during opening and closing.

Silent and resistant thanks to the belt drive.
Continuity of operation guaranteed, in the event of a power supply failure, by a set of optional batteries which may be fitted in the operator casing.
$\left.\begin{array}{lll}\hline \text { TECHNICAL } & 41242 / 800 & 41242 / 810 \\ \text { DATA }\end{array}\right)$

OPERATOR DIMENSIONS


KIT 41242/800: 357,90 euro
KIT 41242/810: 431,07 euro


NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).

## 02.

## SWING GATES

RAIDER 2500
AP424
AP423
AP350
FLEXI300
FORTY 270-390
TWENTY 270
EM73N
ZT70
ZT71


54

## SWING GATES

## TYPES

## EXTERNAL MOUNTING Linear operators

Simple installation with brackets secured to the gate. The most widespread among swing gate automation systems.


Electromechanical RAIDER 2500
AP424
AP423
AP350

EXTERNAL MOUNTING Articulated arm operators

When the traditional external gear motor cannot be installed due to lack of space.


## Electromechanical

 FLEXI 300UNDERGROUND MOUNTING

It is virtually invisible and does not affect the gate design style. It does not limit the passage's clear width.

$\begin{array}{ll}\text { Electromechanical } & \text { Hydraulic } \\ \text { EM 73 N } & \text { ZT 70 }\end{array}$ ZT 71

## TYPICAL SYSTEM COMPOSITION

1) Operator: device allowing, with an external power supply, to move a gate.
2) Control unit: electronic unit for handling the operator movement
3) Transmitter: wireless equipment that transmits information to the control unit.
4) Antenna: device that increases the reception of the signals sent by the transmitter.
5) Flashing light: light signalling that the gate is moving.
6) Pair of photocells: safety devices stopping gate movement if an obstacle is detected;
7) Control unit: it allows
activation of gate movement through a mechanical or electronic key.
8) Electric lock: to be included based on gate wing width.


## EUROPEAN STANDARDS

Standards EN 12453 and EN 12445 set out the minimum safety parameters. For automatic closing systems whose operation involves persons. These standards allow the identification of the necessary technical measures aimed at ensuring the safety of users and facilities.

Classification criteria include the position of the system, the type of user and the control mode.


THE SYSTEM
can be:
a system can be found in a delimited private area, in a private area which adjoins a public area or in a completely public area.


THE USER can be:
a user is not instructed when he/she has not received the necessary information to operate the automation system; this generally happens for automation systems found in public areas. For automation systems in private areas, instead, the user is usually instructed.


## THE CONTROL can be:

the system can be controlled in a number of ways: automatic when the pulse activates a series of operations and not a single action; radio-controlled if a pulse corresponds to a single operation (e.g.: opening or closing); operated by pulses from a fixed position if the activation of the system is possible from a single location even without automatic control reset; finally, it may lack the selfholding function, if the desired action lasts as long as the command activation.

## MANDATORY SAFETY DEVICES

THE SCENARIO - REGULATORY REQUIREMENTS

Dispositivo di comando

A - Operator present and control with automatic reset
$B-$ Operator present and control with manual reset
C - Mechanical or electronic devices lyou need to check the conformity of the impact forces tolerated compared to reference standards)

D - Infrared photocells to detect obstacles in the operation area

| $\substack{\text { without } \\ \text { self-holding }}$ | with pulse from <br> a fixed position | radio control | automatic |
| :---: | :---: | :---: | :---: |
| A | C | C | C + D |
| C | C | C + D | C + D |
| B | C | C + D | C + D |
| $\sim$ | C + D | C + D | $\mathbf{C}+\mathbf{D}$ |

## EXAMPLE OF A TYPICAL SYSTEM COMPLIANT WITH EN 12453 - EN 12445 STANDARDS

## System

## ON A PUBLIC AREA

The system marks the boundary between a private and a public area le.g., the driveway gate with a ramp for a condominium garage).

## User <br> INSTRUCTED

The system is activated by people having received a proper training on the automation system operation.

Safety is guaranteed by INFRARED BEAM PHOTOCELLS

Aprimatic automation systems are designed for connection of all types of infrared beam photocells, ensuring greater safety for the user.

Control
RADIO
To send pulses even from a fixed position (e.g. from a desktop) or from a mobile station.

REFERENCE LAYOUT FOR SWING GATES - EXTERNAL AUTOMATION SYSTEMS


## CHOOSING THE RIGHT PRODUCT

|  | MODEL | USE | POWER <br> SUPPLY | CYCLES PER DAY | WING WEIGHT | MAX. WING WIDTH | TECHNOLOGY | PAGE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | RAIDER 2500 | (R) | 24 Vdc | 50 | 500 Kg | 1,8 m | Electromechanical | 36 |
|  |  |  |  |  | 300 Kg | 3,0 m* |  |  |
|  | AP424 | (R) | 24 Vdc | 75 | 300 kg | 1,8 m | Electromechanical | 38 |
|  | AP423 |  | 230 Vdc |  | 200 kg | 3,0 m* |  |  |
|  | AP350 | (R) | 230 Vac | 50 | 350 Kg | $3 \mathrm{~m} *$ | Electromechanical | 40 |
|  | FLEXI 300 | (R) | 24 Vdc | 100 | 300 kg | 3 m | Electromechanical | 42 |
|  | TWENTY 270 | (R) | 230 Vac | 800 |  | 1,8 m | Hydraulic | 44 |
|  |  | (C) |  |  |  | 3,0 m* |  |  |
|  | FORTY 270 | (C) | 230 Vac | 1000 |  | 2,0 m; 4,0 m* | Hydraulic | 46 |
|  | FORTY 390 | (I) | 230 Vac | 800 |  | $3,0 \mathrm{~m} ; 7,0 \mathrm{~m}$ * |  |  |

Continuous $\rightarrow$

REFERENCE LAYOUT FOR SWING GATES - UNDERGROUND AUTOMATION SYSTEMS


NOTE: For equipment and control, safety and warning devices, see the optional accessories indicated for the specific operator.
NOTE: For more devices, see the section "Control units and Indicators" in this catalogue (refer to the initial index).

## UNDERGROUND-MOUNTED AUTOMATION SYSTEMS

|  | MODEL | USE | POWER SUPPLY | CYCLES PER DAY | WING WEIGHT | MAX. WING WIDTH | TECHNOLOGY | PAGE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | EM 73 N | (R) | 24 Vdc | 50 | 400 Kg | 1,8 m | Electromechanical | 48 |
|  |  |  |  |  | 200 Kg | 3,5 m* |  |  |
|  | ZT 70 | R | 230 Vac | 300 | 800 Kg | $2,0 \mathrm{~m}$ | Hydraulic | 50 |
|  |  | (C) |  |  |  | 4,0 m* |  |  |
|  | ZT 71 | R | 230 Vac | 300 | 800 Kg | $2,0 \mathrm{~m}$ | Hydraulic | 52 |
|  |  | (C) |  |  |  | 4,0 m* |  |  |

KEY
(R) RESIDENTIAL
(C) CONDOMINIUM
(I) INDUSTRIAL

[^5]
## RAIDER 2500 <br> 

## Low-voltage

electromechanical operator, for swing gates.
Residential use.

| TECHNICAL DATA | $\mathbf{2 5 0 0}$ |
| :--- | :--- |
| MAIN POWER SUPPLY | $230 \mathrm{Vac}-50 \mathrm{~Hz}$ |
| MOTOR POWER SUPPLY | 24 Vdc |
| MAX. WING WIDTH | $1,8 \mathrm{~m}$ |
| WITHOUT ELECTRIC LOCK | 3 m |
| MAX. WING WIDTH |  |
| WITH ELECTRIC LOCK | 300 kg (for 3 m wing) |
| MAX. WING WEIGHT | 500 kg (for 1.8 m wing |
| MAX. CYCLE NUMBER | $50 \mathrm{cycles} /$ day |
| PROTECTION DEGREE | $\mathrm{IP44}$ |
| ABSORBED POWER | 120 W |
| ABSORBED CURRENT | 5 A |
| MAX. THRUST FORCE | 2500 N |
| ROD STROKE | 400 mm |
| LINEAR SPEED | $16 \mathrm{~mm} / \mathrm{s}$ |
| OPERATING TEMPERATURE | $-20^{\circ}+70^{\circ} \mathrm{C}$ |
| ANTI-CRUSHING SAFETY | Electronic |
| WEIGHT OPERATOR | 8 Kg |
|  |  |

NOTE: Not compatible with previous Raider model

Full self-learning configuration and possibility of adjusting the parameters through a simple and intuitive menu.

## Pre-drilled adjustable rear bracket.

The arms are equipped with mechanical limit stops to allow stroke adjustment. The use of an electric lock is recommended for gate wings longer than 1.8 metres.

## Continuous operation guaranteed,

in case of power supply failure,
by two optional emergency batteries.

| IDEAL INSTALLATION (1.8 M wing*) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ITEM NUMBER | DESCRIPTION | SINGLE WING | DOUBLE WING | $\boldsymbol{\epsilon}$ |
| 41026/001 | Raider 2500 | 1 | 2 | Cad. 238,79 |
| 41923/009 | RRSE - Unico 433.92 MHz Memory System superheterodyne receiver | 1 | 1 | 88,67 |
| 41600/013 | RSK 24-2500 - Electronic control unit (without 433Mhz receiver) | 1 | 1 | 185,46 |
| 41905/004 | TM4-433.92 MHz four-channel transmitter | N | N | 38,41 |
| 41812/008 | ER12-24V - Pair of photocells | 1 | 1 | 71,16 |
| 41929/001 | ANT433-433.92 MHz antenna with 4.5 m coaxial cable and ground connection | 1 | 1 | 19,12 |
| 41840/006 | ET2N-24V LED flashing light | 1 | 1 | 42,30 |
| 41830/007 | PC12E - Wall-mounted key-operated switch | 1 | 1 | 27,81 |
| 41702/003 | Battery kit (optional) | 1 | 1 | 67,23 |

(*) For gates with wings longer than 1.8 m , it is necessary to use the electric lock.
$\mathrm{N}=$ Based on specific installation requirements

| ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
| :--- | :--- | :--- |
| $\mathbf{4 1 0 2 6 / 0 0 1}$ | RAIDER 2500 |  |
|  | 24 V electromechanical operator including mounts and mechanical limit stops | 238,79 |
| $\mathbf{4 1 6 0 0 / 0 1 3}$ | RSK 24-2500 <br> Electronic control unit for RAIDER 2500 operator (without receiver), with built-in battery charging card | 185,46 |


| ITEM NUMBER | OPTIONAL ACCESSORIES | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| $41702 / 003$ | Battery kit nr.2 battteries $12 \mathrm{Vcc}-1.3 \mathrm{Ah}$ | 67,23 |

SET RAIDER 2500 INTERNATIONAL: 599,23 euro

| ITEM NUMBER | DESCRIPTION |  | Q.ty |
| :--- | :--- | :--- | :--- |
| 41026/802 | Set Raider 2500 International | Item numbers <br> included in the set |  |
|  | RAIDER 2500 | $\mathbf{4 1 0 2 6 / 0 0 1}$ | 2 |
|  | RSK 24-2500 CONTROL UNIT | $\mathbf{4 1 6 0 0 / 0 1 3}$ | 1 |

$\mathrm{N}=$ Based on specific installation requirements

[^6]
## AP424 / AP423 <br> 

Electromechanical operator, for swing gates. Residential use.

| TECHNICAL DATA | AP424 | AP423 |
| :--- | :--- | :--- |
| MAIN POWER SUPPLY | $230 \mathrm{Vac}-50 \mathrm{~Hz}$ | $230 \mathrm{Vac}-50 \mathrm{~Hz}$ |
| MOTOR POWER SUPPLY | 24 Vdc | 230 V |
| MAX. WING WIDTH <br> WITHOUT ELECTRIC LOCK | $1,8 \mathrm{~m}$ | 1.8 m |
| MAX. WING WIDTH <br> WITH ELECTRIC LOCK | 3 m | 3 m |
| MAX. WING WEIGHT | 300 kg lfor 2 m wing) | 300 kg (for 2 m wing) |
|  | 200 kg lfor 3 m wing) | 200 kg (for 3 m wing) |
| MAX. CYCLE NUMBER | $75 \mathrm{cycles} /$ day | $75 \mathrm{cycles} /$ day |
| PROTECTION DEGREE | $\mathrm{IP55}$ | IP55 |
| ABSORBED POWER | 50 W | 200 W |
| ABSORBED CURRENT | 3 A | 1 A |
| MAX. THRUST FORCE | 1500 N | 1500 N |
| ROD STROKE | 400 mm | 400 mm |
| LINEAR SPEED | $16 \mathrm{~mm} / \mathrm{s}$ | $16 \mathrm{~mm} / \mathrm{s}$ |
| 90 OPENING TIME | 15 s | 15 s |
| OPERATING TEMPERATURE | $-20^{\circ}+70^{\circ} \mathrm{C}$ | $-20^{\circ}+70^{\circ} \mathrm{C}$ |
| ANTI-CRUSHING SAFETY | Electronic | Electronic |
| WEIGHT OPERATOR | $6,5 \mathrm{Kg}$ | $6,5 \mathrm{Kg}$ |

Elegant design suggests classic hydraulic models. Irreversible motor for a maximum power during the closing.

Multiposition brackets for easy and fast assembly. Stainless steel screw for maximum strengness and long life.

| ITEM NUMBER | DESCRIPTION | SINGLE WING | DOUBLE WING | $€$ |
| :---: | :---: | :---: | :---: | :---: |
| 41033/001 | AP424 24 V operator | 1 | 2 | cad. 259,00 |
| 41600/013 | RSK 24-2500-Electronic control unit (without 433Mhz receiver) | 1 | 1 | 185,46 |
| 41923/009 | RRSE - Unico 433.92 MHz Memory System superheterodyne receiver | 1 | 1 | 88,67 |
| 41905/004 | TM4-433.92 MHz four-channel transmitter | N | N | 38,41 |
| 41812/008 | ER12-24V - Pair of photocells | 1 | 1 | 71,16 |
| 41929/001 | ANT433-433.92 MHz antenna with 4.5 m coaxial cable and ground connection | 1 | 1 | 19,12 |
| 41840/006 | ET2N-24V LED flashing light | 1 | 1 | 42,30 |
| 41830/007 | PC12E - Wall-mounted key-operated switch | 1 | 1 | 27,81 |

(*) For gates with wings longer than 1.8 m , it is necessary to use the electric lock.
$\mathrm{N}=$ Based on specific installation requirements

| IDEAL INSTALLATION (1.8 M wing*) MODEL AP424 230V |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ITEM NUMBER | DESCRIPTION | SINGLE WING | DOUBLE WING | $€$ |
| 41032/001 | AP423 230 V operator | 1 | 2 | cad. 249,00 |
| 41628/001 | BA230-Electronic control unit with 433.92Mhz receiver built-in | 1 | 1 | 226,80 |
| 41905/004 | TM4-433.92 MHz four-channel transmitter | N | N | 38,41 |
| 41812/008 | ER12-24V - Pair of photocells | 1 | 1 | 71,16 |
| 41929/001 | ANT433-433.92 MHz antenna with 4.5 m coaxial cable and ground connection | 1 | 1 | 19,12 |
| 41840/006 | ET2N-24V LED flashing light | 1 | 1 | 42,30 |
| 41830/007 | PC12E - Wall-mounted key-operated switch | 1 | 1 | 27,81 |

(*) For gates with wings longer than 1.8 m , it is necessary to use the electric lock.
$\mathrm{N}=$ Based on specific installation requirements

[^7]
## AP 350

 230
vac


Operator for swing gates. Residential use for wings up to 3 m 350 Kg .

TECHNICAL DATA

| POWER SUPPLY | 230 Vac |
| :--- | :--- |
| MAXIMUM LENGHT PER LEAF | 3 mt |
| MAXIMUM WEIGHT PER LEAF | 350 Kg |
| MAX. CYCLE NUMBER | $30 \mathrm{cycles} /$ day |
| PROTECTION DEGREE | $1 P 44$ |
| ABSORBED POWER | 280 W |
| ABSORBED CURRENT | $1,8 \mathrm{~A}$ |
| ROD SPEED (CM/S) | 1,8 |
| USABLE STROKE | MAX 400 mm |
| TERMIC PROTECTION | $150^{\circ} \mathrm{C}$ |
| OPERATING TEMPERATURE | $-20^{\circ}+70^{\circ} \mathrm{C}$ |
| CAPACITOR | 84 F |
| MOTOR WEIGHT | 6 Kg |

Possibility to create single

- or double-wing systems


## Simple installation

Easy to release in case of power blackout Resistant to high and low temperatures

Made in Italy

## Suitable for left- and right swing leafs

Max. leaf opening 350 kg length 3 mt
Rod stroke 400 mm
Power supply 230Vac


Safety lock / unlock

| ITEM NUMBER | DESCRIPTION | Q.ty | $€$ |
| :---: | :---: | :---: | :---: |
| 41035/001 | Left swing gate operator AP350 | 1 | 190,22 |
| 41035/002 | Right swing gate operator AP350 | 1 | 190,22 |
| 41628/001 | BA230-Electronic control unit with 433.92Mhz receiver built-in | 1 | 226,80 |
| 41905/004 | TM4 433.92MHz four channel trasmitter | N | 38,41 |
| 41840/006 | ET2N-24V LED flashing light | 1 | 42,30 |
| 41812/008 | ER12-24V Pair of photocells | 1 | 71,16 |
| 41929/001 | ATN433 MHz antenna with 5mt coaxial cable and ground connection | 1 | 19,12 |
| 41830/007 | PC12E - Wall-mounted key-operated switch | 1 | 27,81 |

(*) For gates with wings longer than 1.8 m , it is necessary to use the electric lock.
N : Based on specific installation requirements.

NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
NOTE: All prices are subject to variation.


FLEXI 300

Low-voltage electromechanical articulated arm, for swing gates for residential use.


TECHNICAL DATA

| MAIN POWER SUPPLY | $230 \mathrm{Vac}-50 \mathrm{~Hz}$ |
| :--- | :--- |
| MOTOR POWER SUPPLY | 24 Vcc |
| MAX. WING WIDTH | 3 m <br> without electric lock |
| MAX. WING WEIGHT | 300 kg |
| PROTECTION DEGREE | $\mathrm{IP44}$ |
| ABSORBED POWER | 45 W per motor |
| ABSORBED CURRENT | $1,87 \mathrm{~A}$ per motor |
| MAXIMUM TORQUE | 150 Nm |
| MAX. OPENING ANGLE | $120^{\circ}$ |
| OPERATING TEMPERATURE RANGE | $-20^{\circ}+55^{\circ} \mathrm{C}$ |
| ANTI-CRUSHING SAFETY | Electronic |
| WEIGHT OPERATOR | 7 Kg |

On-board control unit with full self-learning configuration.

Articulated arm fitted with mechanical limit stop, to adjust the desired stroke and prevent negative angle positioning.

Emergency release positioned on the side
(*) Prodotto certificato in condizioni installative ideali.

| IDEAL INSTALLATION (max. 3 m wing)* |  |  |  |
| :---: | :---: | :---: | :---: |
| ITEM NUMBER | DESCRIPTION | SINGLE WING | $€$ |
| 41029/001 | FLEXI 300 OPERATOR <br> Electromechanical operator with on-board control unit and 433.92 MHz radio receiver | 1 | 734,33 |
| 41029/054 | ARTICULATED ARM | 1 | 83,46 |
| 41905/004 | TM4-433.92 MHz four-channel transmitter | N | 38,41 |
| 41812/008 | ER12-24V - Pair of photocells | 1 | 71,16 |
| 41929/001 | ANT433-433.92 MHz antenna with 4.5 m coaxial cable and ground connection | 1 | 19,12 |
| 41840/006 | ET2N-24V LED flashing light | 1 | 42,30 |
| 41830/007 | PC12E - Wall-mounted key-operated switch | 1 | 27,81 |

NOTE: For DOUBLE WING installation, use kit 41029/800
N : Based on specific installation requirements.

| ITEM NUMBER | DESCRIPTION | $€$ |
| :---: | :---: | :---: |
| 41029/001 | FLEXI 300 Electromechanical operator with on-board control unit and 433.92 MHz radio receiver | 734,33 |
| 41029/054 | Articulated arm for FLEXI operator | 83,46 |
| ITEM NUMBER | OPTIONAL ACCESSORIES | € |
| 41029/050 | FLEXI limit stop kit | 16,80 |
| 41029/053 | ELC FLEXI - Optional card for electric lock and courtesy light management | 67,80 |

[^8]
## TWENTY 270 <br> 

Hydraulic swing gate operators. For condominium and intensive use.

| TECHNICAL DATA | TWENTY 270 |
| :--- | :--- |
| MAIN POWER SUPPLY | $230 \mathrm{~V}-50 \mathrm{~Hz}$ |
| MOTOR POWER SUPPLY | 250 W |
| MAX. WING WIDTH | 1.8 m |
| WITHOUT ELECTRIC LOCK | 3 m |
| MAX. WING WIDTH |  |
| WITH ELECTRIC LOCK | 800 cycles/day |
| MAX. CYCLE NUMBER | IP55 |
| PROTECTION DEGREE | 5500 N |
| MAX. THRUST FORCE | $\mathrm{B}-\mathrm{C}-\mathrm{SF}$ |
| VERSIONS | Yes |
| SLOWDOWN | lelectronically adjustable) |
| ON CLOSING | NO |
| SLOWDOWN ON CLOSING | $1.3 \mathrm{~cm} / \mathrm{s}$ |
| AND OPENING | $-20^{\circ}+70^{\circ} \mathrm{C}$ |
| LINEAR SPEED | 270 mm |
| OPERATING TEMPERATURE | 9.8 kg |
| ROD STROKE |  |
| WEIGHT OPERATOR |  |

Simple and linear design with a compatible aestetics for all types of gates.

The standard hydraulic slowing down system in the closing (non-adjustable) allows a soft approach of the wings, silently and without mechanical stress to the structure; The slowing down can be electronically adjustable.

It equipped with front hitch ball joint uniball threaded 20 mm , like the previous range ZT4-ZT44, which allows to retrieve any tolerances during the fixing.


[^9][^10]
## FORTY 270-390 <br> (NEW) <br>  <br> i210

Hydraulic swing gate operators. For residential, condominium and intensive use.

| TECHNICAL DATA | FORTY 270 | FORTY 390 |
| :--- | :--- | :--- |
| MAIN POWER SUPPLY | $230 \mathrm{~V}-50 \mathrm{~Hz}$ | $230 \mathrm{~V}-50 \mathrm{~Hz}$ |
| MOTOR POWER SUPPLY | 250 W | 350 W |
| MAX THRUS T FORCE | 6700 N | 7800 N |
| MAX. WING WIDTH <br> WITHOUT ELECTRIC LOCK | 2 m | 3 m |
| MAX. WING WIDTH <br> WITH ELECTRIC LOCK | 4 m | 7 m |
| MAX. CYCLE NUMBER | 1000 cycles/day | 800 cycles/day |
| PROTECTION DEGREE | IP55 | IP55 |
| VERSIONS | $\mathrm{B}-\mathrm{C}-$ SF | $\mathrm{B} \mathrm{-} \mathrm{C} \mathrm{-} \mathrm{SF}$ |
| SLOWDOWN ON CLOSING | yes - electronically <br> adjustable | yes - electronically <br> adjustable |
| LINEAR SPEED | $1.3 \mathrm{~cm} / \mathrm{s}$ | $1.3 \mathrm{~cm} / \mathrm{s}$ |
| OPERATING TEMPERATURE | $-25^{\circ}+70^{\circ} \mathrm{C}$ | $-20^{\circ}+70^{\circ} \mathrm{C}$ |
| ROD STROKE | 270 mm | 390 mm |
| WIGHT OPERATOR | 13 kg | 13 kg |

Simple and linear design with a compatible aestetics for all types of gates.

The standard hydraulic slowing down system in the closing (non-adjustable) allows a soft approach of the wings, silently and without mechanical stress to the structure; The slowing down can be electronically adjustable.

It equipped with front hitch ball joint uniball threaded 20 mm , like the previous range ZT 40 , which allows to retrieve any tolerances during the fixing.

| IDEAL INSTALLATION |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CODICE | DESCRIPTION |  | SINGLE WING | DOUBLE <br> WING | $€$ |
| 41013/001 | FORTY (choose the version in the list of available models) |  | 1 | 2 | cad. 679,00 |
| 41605/802 | ESB 433-433.92MHz swing gate Elettroset | Item numbers included in the Elettroset | 1 | 1 | 418,71 |
|  | BA230 electronic control unit with 433MHz built-in radio receiver | 41628/001 |  |  |  |
|  | 433.92 MHz antenna kit | 41929/003 |  |  |  |
|  | Two TM4-433.92MHz four-channel Transmiters | 41905/004 |  |  |  |
|  | ET2N 24V led flashing light | 41840/006 |  |  |  |
|  | ER12-24V - Pair of photocells | 41812/008 |  |  |  |
|  | PC12E - Wall-mounted key-operated switch | 41830/007 |  |  |  |
|  | Signal panel |  |  |  |  |


| CODICE | DESCRIPTION | Max.wing width without electric lock | Max.wing width with electric lock | $€$ |
| :---: | :---: | :---: | :---: | :---: |
| 41013/001 | FORTY 270 B <br> Hydraulic operator - locks on opening and closing | 2 m | 4 m | 679,00 |
| 41013/002 | FORTY 270 C <br> Hydraulic operator - locks on closing | 2 m | 4 m | 675,00 |
| 41013/003 | FORTY 270 SF <br> Hydraulic operator - without lock | - | 4 m | 671,00 |
| 41013/004 | FORTY 390 B <br> Hydraulic operator - locks on opening and closing | 3 m | 7 m | 799,00 |
| 41013/005 | FORTY 390 C Hydraulic operator - locks on closing | 3 m | 7 m | 795,00 |
| 41013/006 | FORTY 390 SF <br> Hydraulic operator - without lock | - | 7 m | 791,00 |
| 41628/001 | BA230 electronic control unit with 433MHz built-in radio receiver |  |  | 226,80 |

NOTE : All operators are equipped with hydraulic slowing down in the closing system fix (but electronically adjustable).
NOTE : The Forty B-C operator can also be used with wings longer than 2.0 m , but in that case the electric locks is required. SF versions, without hydraulic lock, always require the use of the electric lock.

NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
NOTE: All prices are subject to variation.


## EM 73N



Underground electromechanical operator for swing gates. Residential use.


## TECHNICAL DATA

| MAIN POWER SUPPLY | $230 \mathrm{~V}-50 \mathrm{~Hz}$ |
| :--- | :--- |
| MOTOR POWER SUPPLY | 24 Vcc |
| WING OPENING ANGLE | $110^{\circ}, 140^{\circ}, 180^{\circ}$ |
| WIDTH / WEIGHT | $1,8 \mathrm{~m} / 400 \mathrm{~kg}$ |
|  | $3,5 \mathrm{~m} / 200 \mathrm{~kg} *$ |
| PROTECTION DEGREE | IP 67 |
| ABSORBED POWER | 200 W |
| ABSORBED CURRENT | 10 A |
| NOMINAL TORQUE | 280 Nm |
| OPERATING TEMPERATURE | $-20^{\circ}+70^{\circ} \mathrm{C}$ |
| $110^{\circ}$ OPENING TIME | 20 s |
| SLOWDOWN | 0 Otional |
| WEIGHT OPERATOR | 9 Kg |

${ }^{*}$ ) It is necessary to use the electric lock with wings longer than 1.8 m .

The underground system is not visible, and is ideal for those who do not wish to alter the gate design style.

Maximum safety thanks to the 24 V power supply voltage.

Anti-crushing safety ensured by a simple adjustment of the T4 POWER electronic control unit. Cataphoresis-coated sheet metal.
self-supporting container.
System of levers with anti-corrosion electro-plating. $110^{\circ}$ gate opening.

EM 73N can be equipped with a separate lever system that enables opening up to $140^{\circ}$ or a chain pinion system for opening up to $180^{\circ}$.

The application of an optional slowdown system allows the EM 73N to let the doors perform a fast movement during the stroke, and a soft approach on opening and closing, thus eliminating noisy impacts and rebounds.

For greater safety of operation, a manual emergency release device (SB73) is available upon request. A customised key-operated lock prevents accidental actuation of the wing's emergency release pedal. The lock can be activated from both inside and outside the gate.

| IDEAL INSTALLATION (max. 2 m wing) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ITEM NUMBER | DESCRIPTION |  | SINGLE WING | DOUBLE WING | $€$ |
| 41060/001 | EM 73N Operator |  | 1 | 2 | 353,54 |
| 41060/051 | CIA 173-400 kg underground self-supporting box |  | 1 | 2 | 206,90 |
| 41060/052 | SB73-Release lock |  | 1 | 2 | 73,54 |
| 41600/001 | T4 Power - Electronic control unit |  | 1 | 1 | 249,72 |
| 41923/009 | RR SE - Unico 433.92 MHz Memory System superheterodyne receiver |  | 1 | 1 | 88,67 |
| 41700/801 | EKK 24V - Elettrokit | Item numbers included in the Elettrokit |  |  | 237,61 |
|  | 433.92 MHz antenna kit | 41929/003 |  |  |  |
|  | Two TM4-433.92 MHz four-channel transmitters | 41905/004 |  |  |  |
|  | ET2N-24V LED flashing light | 41840/006 |  |  |  |
|  | ER12-24V - Pair of photocells | 41812/008 |  |  |  |
|  | PC12E - Wall-mounted key-operated switch | 41830/007 |  |  |  |
|  | Signal panel |  |  |  |  |
| 41060/050 | SAC - Gate wing mounting bracket |  | 1 | 2 | 8,67 |
| 41060/055 | $1{ }^{\text {st }}$ wing slowdown kit |  | 1 | 1 | 83,33 |
| 41060/056 | $2^{\text {nd }}$ wing slowdown kit |  | $\sim$ | 1 | 37,89 |


| ITEM <br> NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
| :--- | :--- | :--- |
| $\mathbf{4 1 0 6 0 / 0 0 1}$ | EM 73N -24 V underground, self-locking electromechanical operator | 353,54 |
| $\mathbf{4 1 0 6 0 / 0 5 1}$ | CIA 173 - Underground self-supporting box | 206,90 |
| $\mathbf{4 1 6 0 0 / 0 0 1}$ | T4 POWER - Electronic control unit | 249,72 |


| ITEM <br> NUMBER | OPTIONAL <br> ACCESSORIES | $\boldsymbol{€}$ |
| :--- | :--- | ---: |
| $\mathbf{4 1 0 2 0 / 0 5 4}$ | SCB - Buffer battery charging card. To charge buffer batteries up to 4.5 A, for use with T4 PRO <br> and T4 POWER units | 31,03 |
| $\mathbf{4 1 0 6 0 / 0 5 0}$ | SAC - Gate wing mounting bracket | 8,67 |
| $\mathbf{4 1 0 6 0 / 0 5 2}$ | SB73 - Release lock | 73,54 |
| $\mathbf{4 1 0 6 0 / 0 5 5}$ | 1st wing slowdown kit | 83,33 |
| $\mathbf{4 1 0 6 0 / 0 5 6}$ | 2nd wing slowdown kit | 37,89 |
| $\mathbf{4 1 0 6 0 / 0 5 3}$ | LE140 - Lever-operated unit for opening up to $140^{\circ}$ | 70,70 |
| $\mathbf{4 1 0 6 0 / 0 5 4}$ | LE180 - Chain-operated unit for opening up to $180^{\circ}$ | 171,59 |

NOTE: On two-wing gates, the slowdown function requires 1 slowdown kit for the 1 st wing and 1 slowdown kit for the 2 nd wing if the T4 POWER electronic control unit is used. On single-wing gates, the slowdown function requires 1 slowdown kit for the 1 st wing if the T4POWER electronic control unit is used.
NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
NOTE: All prices are subject to variation.


## ZT 70



Underground swing gate hydraulic operator.
Residential and
condominium use.

| HYDRAULIC |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| CONTROL UNIT ZT 70 | B4 |  | SF4 | SF5 |
| SINGLE-PHASE POWER SUPPLY | $230 \mathrm{~V}-50 \mathrm{~Hz}$ |  |  |  |
| ABSORBED POWER | 250 W |  |  |  |
| MAX. WING WIDTH (m) | 2,0 |  | 4,0 | 4,0 |
| PUMP CAPACITY (Lt/min) | 0,6 | 0,75 | 0,6 | 0,75 |
| PROTECTION DEGREE | IP54 |  |  |  |
| OPERATING | $-20^{\circ}+70^{\circ} \mathrm{C}$ |  |  |  |
| TEMPERATURE |  |  |  |  |
| MAX. OPERATING PRESSURE | 40 Bar |  |  |  |
| OIL QUANTITY | 1 Lt |  |  |  |
| OIL TYPE | AprimOil |  |  |  |
| WEIGHT WITH OIL | 5 kg |  |  |  |


| JACK | AT 175 | AT 176 |
| :--- | :--- | :--- |
| MAX. USEFUL <br> OPERATING ANGLE | $110^{\circ}$ | $200^{\circ}$ |
| MAX. WING WEIGHT | 800 kg | 800 kg |
| PROTECTION DEGREE | IP 67 | IP 67 |
| ANGULAR PUMP <br> SPEED FROM 0.6 Lt/min. | $6 \% / \mathrm{s}$ | $6 \% / \mathrm{s}$ |
| ANGULAR PUMP <br> SPEED FROM 0.75 Lt/min. | $7 \% / \mathrm{s}$ | $7 \% / \mathrm{s}$ |
| NOMINAL TORQUE | 410 Nm | 410 Nm |
| OIL QUANTITY | 1 Lt | $1,2 \mathrm{Lt}$ |
| OIL TYPE | AprimOil | AprimOil |
| WEIGHT WITH OIL | 12 kg | 13 kg |

Very low noise levels thanks to the hydraulic brake used to slow down the gate during opening and closing, thus preventing rebounds and noisy impacts.

The automation is located underground and therefore does not affect the design style of the gate.

The anti-crushing system consists of very sensitive bypass valves, calibrated during installation. They immediately cut the hydraulic pressure when an obstacle is detected, to ensure maximum system safety.

The system features an easy-maintenance self-supporting box. The jack is accessed by removing the stainless steel cover without removing the gate wing.

An easy-to-use manual release device ensures gate operation in the event of power supply failure.

| IDEAL INSTALLATION (max. 2 m wing) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CODICE | DESCRIZIONE |  | SINGLE WING | DOUBLE WING | € |
| 41050/003 | AT 175N - Hydraulic jack |  | 1 | 2 | 388,32 |
| 41055/003 | ZT 70B5-Hydraulic control unit |  | 1 | 2 | 450,34 |
| 41005/050 | CIA $170-800 \mathrm{~kg}$ underground self-supporting box |  | 1 | 2 | 179,05 |
| 41056/054 | TF - 10 m hose for ZT70 |  | 1 | 1 | 45,79 |
| 41056/055 | RAC - Pair of TF hose couplings |  | 1 | 2 | 23,17 |
| 41700/016 | AprimOil (1 litre bottle) |  | 1 | 1 | 16,96 |
| 41605/802 | ESB 433-433.92 MHz swing gate Elettroset | Item numbers included in the Elettroset | 1 | 1 | 418,71 |
|  | BA230 electronic control unit with 433Mhz built-in radio receiver | 41628/001 |  |  |  |
|  | 433.92 MHz antenna kit | 41929/003 |  |  |  |
|  | Two TM4-433.92 MHz four-channel transmitters | 41905/004 |  |  |  |
|  | ET2N-24V LED flashing light | 41840/006 |  |  |  |
|  | ER12-24V - Pair of photocells | 41812/008 |  |  |  |
|  | PC12E - Wall-mounted key-operated switch | 41830/007 |  |  |  |
|  | Signal panel |  |  |  |  |


| CODICE | DESCRIPTION - HYDRAULIC CONTROL UNIT | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| 41055/003 | ZT 70 B5 <br> Hydraulic control unit with metal box - lock on opening and closing | 450,34 |
| 41055/001 | ZT 70 SF5 <br> Hydraulic control unit with metal box, without hydraulic lock, electric lock required | 410,92 |

\(\left.$$
\begin{array}{llll}\hline \text { CODICE } & \text { DESCRIPTION - JACK } & & \boldsymbol{\epsilon} \\
\hline \mathbf{4 1 0 5 0 / 0 0 3} & \begin{array}{l}\text { AT 175N } \\
\text { Single hydraulic jack for use without self-supporting box (41005/050). Adjustable slowdown during opening and closing }\end{array}
$$ \& 388,32 <br>

\hline \mathbf{4 1 0 5 1 / 0 0 2} \& AT 176N single hydraulic jack for use without self-supporting box. Adjustable slowdown during opening and closing\end{array}\right]\)|  | 431,22 |
| :--- | :--- |
| $\mathbf{4 1 0 5 0 / 0 0 2}$ | AT 175 <br> Hydraulic jack with metal box and stainless steel lid. Adjustable slowdown during opening and closing |
| $\mathbf{4 1 0 5 1 / 0 0 1}$ | AT 176 <br> Hydraulic jack with metal box and stainless steel lid. Adjustable slowdown during opening and closing |
| $\mathbf{4 1 0 0 5 / 0 5 0}$ | CIA 170 <br> Underground self-supporting box complete with installation accessories and stainless steel lid |
| $\mathbf{4 1 0 5 0 / 0 5 0}$ | PF 70 <br> Foundation plate for AT 175, AT176 (cataphoresis coated) |


| ITEM NUMBER | DESCRIZIONE - APPARECCHIATURA | $\boldsymbol{\epsilon}$ |
| :--- | :--- | :--- |
| $41628 / 001$ | BA230 electronic control unit with 433.92 MHz built-in radio receiver | 226,80 |


| ITEM NUMBER | OPTIONAL ACCESSORIES | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| $\mathbf{4 1 7 0 0 / 0 1 6}$ | AprimOil (1 litre bottle) | 16,96 |
| $41056 / 056$ | TRA - Copper pipe with 8 mm ext. $\varnothing$ (to be ordered in the desired length) | 6,36 |

[^11]
## ZT 71



Compact underground hydraulic operator for swing gates.
Residential and condominium use.

| CONTROL UNIT | B5 | SF5 |  |
| :--- | :---: | :---: | :---: |
| SINGLE-PHASE | $230 \mathrm{~V}-50 \mathrm{~Hz}$ |  |  |
| POWER SUPPLY | 2,0 | 4,0 |  |
| MAX. WING WIDTH (m) | IP54 |  |  |
| PROTECTION DEGREE | 250 W |  |  |
| ABSORBED POWER | $-20^{\circ}+70^{\circ} \mathrm{C}$ |  |  |
| OPERATING TEMP. | 0,75 | 0,75 |  |
| PUMP CAPACITY (Lt/min) | 40 Bar |  |  |
| MAX. OPERATING PRESSURE | AprimOil |  |  |
| OIL TYPE | 5 kg |  |  |
| WEIGHT WITH OIL | 1 Lt |  |  |
| OIL QUANTITY |  |  |  |


| JACK |  |
| :--- | :--- |
| USEFUL OPERATING ANGLE | $110^{\circ} \mathrm{max}$. |
| MAX. WING WEIGHT | 800 kg |
| ANGULAR PUMP <br> SPEED FROM $0.6 ~ L t / m i n . ~$ | $6 \% / \mathrm{s}$ |
| ANGULAR PUMP <br> SPEED FROM 0.75 Lt $/ \mathrm{min}$. | $7 \% / \mathrm{s}$ |
| NOMINAL TORQUE | 410 Nm |
| WEIGHT WITH OIL | 12 kg |
| OIL QUANTITY | 1 Lt |
| OIL TYPE | AprimOil |

Very low noise levels thanks to the hydraulic brake to slowdown the gate during opening and closing, thus preventing rebound and noisy impacts.

The automation is located underground, and therefore does not affect the design style of the gate.

The anti-crushing system consists of very sensitive bypass valves, calibrated during installation. They immediately cut the hydraulic pressure when an obstacle is detected to ensure maximum system safety.

The system features an easy-maintenance self-supporting box. The jack is accessed
by removing the stainless steel cover without removing the gate wing.

An easy-to-use manual release device ensures gate operation in the event of a power supply failure.
(*) Product certified under ideal installation conditions.


NOTE: All compact hydraulic operators contain the SED 71/72 direct external release device

| ITEM NUMBER | OPTIONAL ACCESSORIES | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| $\mathbf{4 1 0 5 6 / 0 5 2}$ | SED 71/72 - Direct external release (provided as standard with all ZT operators) | 15,63 |
| $\mathbf{4 1 0 5 6 / 0 5 3}$ | SER 71/72 - Driven external release ZT 71 ZT 72 | 35,93 |
| $\mathbf{4 1 7 0 4 / 0 0 2}$ | CS - External strongbox, for driven release | 74,19 |
| $\mathbf{4 1 7 0 4 / 0 0 4}$ | CSP - Wall mounted outdoor strongbox | 61,43 |
| $\mathbf{4 1 7 0 0 / 0 1 6}$ | Aprim0il $\mathbf{1}$ litre bottle | 16,96 |

NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).

## 03.

## SLIDING <br> GATES

ONDA 424
ONDA 624
ONDA 623
ONDA 800 / 801E
AT 80E
ONDA 2000 / 2001
AT 86T / AT 88T AT 90T / AT 92T


## $\rightarrow$ 胃胃|

$\approx=A$

## SLIDING GATES

## TYPES

## RESIDENTIAL USE

A wide range of motors for residential use is available, for light wings up to 400 kg and heavy wings up to $1,200 \mathrm{~kg}$, for the installation of "custom-made" systems.

CONDOMINIUM USE

The following motors for condominium use are available: for light wings of 300 kg and heavy wings up to $2,000 \mathrm{~kg}$.


| 24V version | 230V version |
| :--- | :--- |
| ONDA 424 | ONDA 623 |
| ONDA 624 | ONDA 800 |
|  | AT 80 E |


$\begin{array}{ll}\text { 24V version } & \text { 230V version } \\ \text { ONDA } 624 & \text { ONDA 623 } \\ & \text { ONDA 801 E } \\ & \text { AT 80 E } \\ & \text { ONDA 2000 }\end{array}$

INDUSTRIAL USE

For industrial use, it is possible to automate heavy gates for large entrances las in the case of shopping centres, factories, hospitals, etc.), with motors designed to operate gates having wings up to $12,000 \mathrm{~kg}$. Designed to ensure maximum safety in operation and reliable performance over time, to withstand all weather conditions.


| 230V version | 380V vers |
| :--- | :--- |
| AT 80 E | AT 86 T |
| ONDA 2000 | AT 88 T |
|  | AT 90 T |
|  | AT 92 T |

380 V version

AT 88 T
AT 90 T
AT 92 T

## TYPICAL SYSTEM COMPOSITION

1) Operator: device allowing, with an external power supply, to move a gate.
2) Control unit: electronic unit for handling the operator movement.
3) Transmitter: wireless equipment that transmits information to the control unit.
4) Antenna: device that increases the reception of the signals sent by the transmitter.
5) Flashing light: light signalling that the gate is moving;
6) Pair of photocells: safety devices stopping the gate movement in case of obstacles.
7) Control unit: it allows activation of gate movement through a mechanical or electronic key.
8) Safety edge: sensitive edge used to prevent the risk of crushing due to electric gate movement. In case of contact, the automation system inverts motion and prevents damage to people and property.

## EUROPEAN STANDARDS

Standards EN 12453 and EN 12445 set out the minimum safety parameters. For automatic closing systems whose operation involves persons. These standards allow the identification of the necessary technical measures aimed at ensuring the safety of users and facilities.

Classification criteria include the position of the system, the type of user and the control mode.


THE SYSTEM
can be:
a system can be found in a delimited private area, in a private area which adjoins a public area or in a completely public area.


## THE USER

 can be:a user is not instructed when he/she has not received the necessary information to operate the automation system; this generally happens for automation systems found in public areas. For automation systems in private areas, instead, the user is usually instructed.


## THE CONTROL can be:

the system can be controlled in a number of ways: automatic when the pulse activates a series of operations and not a single action; radio-controlled if a pulse corresponds to a single operation (e.g.: opening or closing); operated by pulses from a fixed position if the activation of the system is possible from a single location even without automatic control reset; finally, it may lack the self-holding function, if the desired action lasts as long as the command activation.

## MANDATORY SAFETY DEVICES

THE SCENARIO - REGULATORY REQUIREMENTS

Control device

A - Operator present and control with automatic reset

B - Operator present and control with manual reset
C - Mechanical or electronic devices lyou need to check the conformity of the impact forces tolerated compared to reference standards)

D - Infrared photocells to detect obstacles in the operation area

| Without self-holding | With pulse from a fixed position | Radio control | Automatic |
| :---: | :---: | :---: | :---: |
| A | C | C | $C+D$ |
| C | C | $C+D$ | $C+D$ |
| B | C | $C+D$ | $C+D$ |
| $\sim$ | $C+D$ | $C+D$ | $C+D$ |

## EXAMPLE OF A TYPICAL SYSTEM COMPLIANT WITH EN 12453 - EN 12445 STANDARDS

## System <br> ON A PUBLIC AREA

The system marks the boundary between a private and a public area (e.g., the driveway gate with a ramp for a condominium garage).

## User <br> INSTRUCTED

The system is activated by people having received a proper training on the automation system operation.

## Control

RADIO
To send pulses even from a fixed position (e.g. desktop) or from mobile stations

## Safety is guaranteed by INFRARED BEAM PHOTOCELLS

Aprimatic automation systems are designed for connection of all types of infrared beam photocells, ensuring greater safety for the user.

## SAFETY EDGE

Sensitive edge used to prevent the risk of crushing due to electric gates movement. In case of contact, the automation system inverts motion and prevents damage to people and property.


## CHOOSING THE RIGHT PRODUCT

|  | MODEL | USE | POWER SUPPLY | $\begin{aligned} & \text { CYCLES } \\ & \text { DAY } \end{aligned}$ | MAX. WING WEIGHT | CLUTCH | PAGE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ONDA 424 | (R) | 24 Vdc | 100 | 400 kg | Electronic | 62 |
|  | ONDA 624 | (R) | 24 Vdc | 100 | 600 kg 400 kg | Electronic | 64 |
|  |  | (C) |  |  |  |  |  |
|  | ONDA 623 | (R) <br> (C) | $\begin{aligned} & 230 \mathrm{Vac} \\ & 230 \mathrm{Vac} \end{aligned}$ | 100 | $\begin{aligned} & 600 \mathrm{~kg} \\ & 400 \mathrm{~kg} \end{aligned}$ | Electronic | 66 |
|  |  |  |  |  |  |  |  |
|  | ONDA 800 ONDA 801 E | (R) <br> (C) | $\begin{aligned} & 230 \mathrm{Vac} \\ & 230 \mathrm{Vac} \end{aligned}$ | $\begin{aligned} & 100 \\ & 200 \end{aligned}$ | $\begin{aligned} & 800 \mathrm{~kg} \\ & 500 \mathrm{~kg} \end{aligned}$ | 800 Mechanical 500 Electronic | 68 |
|  |  |  |  |  |  |  |  |
|  | AT 80 E | (R) <br> (C) <br> (I) | 230 Vac | $800$ | 800 kg | Mechanical | 70 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | ONDA 2000 ONDA 2001 | (C) <br> (I) |  |  |  | 2001 Electronic | 72 |
|  |  |  |  |  | $1000 \mathrm{~kg}$ |  |  |

REFERENCE LAYOUT FOR SLIDING GATE SYSTEMS


|  | MODEL | USE | POWER <br> SUPPLY | CYCLES DAY | MAX. WING WEIGHT | CLUTCH | PAGE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AT 86 T | (I) | 380 Vca | Continuous use | 2000 kg | Mechanical | 74 |
|  | AT 88 T |  | 380 Vca | Continuous use | 4000 kg | Mechanical |  |
|  |  | (I) |  |  |  |  |  |
| ? | AT 90 T |  | 380 Vca | Continuous use | 8000 kg | Mechanical | 76 |
|  | AT 92 T |  | 380 Vca | Continuous use | 12000 kg | Mechanical |  |
| $\square$ |  | (1) |  |  |  |  |  |

KEY
(R) residential
(C) CONDOMINIUM
(1)
INDUSTRIAL

NOTE: The data provided refer to correctly installed products undergoing regular maintenance.


## ONDA 424 <br> 

Low-voltage gear motor for sliding gates.
Residential use for wings up to 400 kg .


TECHNICAL DATA

| MAIN POWER SUPPLY | $230 \mathrm{Vac}-50 \mathrm{~Hz}$ |
| :--- | :--- |
| MOTOR POWER SUPPLY | 24 Vdc |
| MAX. WING WEIGHT | 400 kg |
| CYCLE NUMBER | 100 cycles/day |
| PROTECTION DEGREE | $1 P 44$ |
| MAX. ABSORBED POWER | 80 W |
| MAX. ABSORBED CURRENT | 4.2 A |
| MAX. THRUST FORCE | 450 N |
| MAX. LINEAR SPEED | $10 \mathrm{~m} / \mathrm{min}$ |
| OPERATING TEMPERATURE | $-20^{\circ}+55^{\circ} \mathrm{C}$ |
| HEIGHT OF PINION FROM GROUND | 55 mm |
| WEIGHT OPERATOR | 7 Kg |

## Complies with the current safety

standards as regards to obstacle detection and inversion of movement in accordance with EN12453 and EN 12445 (*).
The electronic torque adjustment combined with encoder technology guarantees a gradual approach during opening and closing movements.

Continuity of operation guaranteed,
in the event of power supply failure, by a set of optional batteries which may be fitted inside the operator casing.

Sturdy and reliable thanks to the die-cast aluminium casing.

Worm screw gear motor with aluminium body and on-board electronic control unit.Equipped with adjustable-height foundation plate.

Emergency release lever with customised key, for use during power supply failures.
(*) Product certified under ideal installation conditions.

| IDEAL INSTALLATION |  |  |  |
| :---: | :---: | :---: | :---: |
| ITEM NUMBER | DESCRIPTION | Q.ty | $\boldsymbol{€}$ |
| 41101/001 | ONDA 424 with on-board control unit and 433Mhz receiver | 1 | 425,41 |
| 41905/004 | TM4-433.92 MHz four-channel transmitters | N | each. 38,41 |
| 41929/001 | Ant 433-433.92 MHz antenna with 4.5 m coaxial cable and ground connection | 1 | 19,12 |
| 41840/006 | ET2N-24V LED flashing light | 1 | 42,30 |
| 41830/007 | PC12E - Wall-mounted key-operated switch | 1 | 27,81 |
| 41812/008 | ER 12-24V - Pair of photocells | 1 | 71,16 |
| 41180/064 | CP- Aprimatic 10 m plastic rack with steel core and mounts module 4) | 1 | 156,09 |

NOTE: Use of a safety edge is recommended; see section "Control units and Indicators".
N : Based on specific installation requirements

| ITEM NUMBER | DESCRIPTION | € |
| :--- | :--- | :--- |
| $\mathbf{4 1 1 0 1 / 0 0 1}$ | ONDA 424 <br> with on-board control unit and receiver (rack required) |  |


| ITEM NUMBER | OPTIONAL ACCESSORIES | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| $\mathbf{4 1 1 0 0 / 0 5 0}$ | Battery charging card | 24,32 |
| $\mathbf{4 1 1 0 2 / 0 5 0}$ | Battery kit (no. 2 batteries of 12V -1.3 Ah) | 74,19 |
| $\mathbf{4 1 1 8 0 / 0 6 4}$ | CP - APRIMATIC 10 m plastic rack with steel core and mounts (module 4) | 156,09 |

[^12]

## ONDA 624 <br> 

Low-voltage gear motor for sliding gates. Residential use for wings up to 600 kg , condominium use for wings up to 400 kg .

## TECHNICAL DATA

| MAIN POWER SUPPLY | $230 \mathrm{Vac}-50 \mathrm{~Hz}$ |
| :--- | :--- |
| MOTOR POWER SUPPLY | 24 Vdc |
| MAX. WING WEIGHT | 600 kg |
| CYCLE NUMBER | 100 cycles/day |
| PROTECTION DEGREE | IP44 |
| MAX. ABSORBED POWER | 80 W |
| MAX. ABSORBED CURRENT | 4.2 A |
| MAX. THRUST FORCE | 650 N |
| MAX. LINEAR SPEED | $10 \mathrm{~m} / \mathrm{min}$ |
| OPERATING TEMPERATURE | $-20^{\circ}+55^{\circ} \mathrm{C}$ |
| HEIGHT OF PINION FROM GROUND | 55 mm |
| WEIGHT OPERATOR | 7 Kg |



## Complies with the current safety

standards as regards to obstacle detection and inversion of movement in accordance with EN12453 and EN 12445 (*).
The electronic torque adjustment combined with encoder technology guarantees a gradual approach during opening and closing movements.

## Continuity of operation guaranteed

in the event of power supply failure,
by a set of optional batteries which may be fitted inside the operator casing.

Sturdy and reliable thanks to the die-cast aluminium casing.

Worm screw gear motor with aluminium body and on-board electronic control unit. Equipped with adjustable-height foundation plate.

Emergency release lever with customised key, for use during power supply failures.

[^13]| IDEAL INSTALLATION |  |  |  |
| :---: | :---: | :---: | :---: |
| ITEM NUMBER | DESCRIPTION | Q.ty | $€$ |
| 41102/001 | ONDA 624 with on-board control unit and 433Mhz receiver | 1 | 508,88 |
| 41905/004 | TM4-433.92 MHz four-channel transmitter | N | each. 38,41 |
| 41929/001 | Ant 433-433.92 MHz antenna with 4.5 m coaxial cable and ground connection | 1 | 19,12 |
| 41840/006 | ET2N - 24 V LED flashing light | 1 | 42,30 |
| 41830/007 | PC12E - Wall-mounted key-operated switch | 1 | 27,81 |
| 41812/008 | ER 12-24V - Pair of photocells | 1 | 71,16 |
| 41180/064 | CP-Aprimatic 10 m plastic rack with steel core and mounts module 4) | 1 | 156,09 |

NOTE: Use of a safety edge is recommended; see section "Control units and Indicators".
N : Based on specific installation requirements

| ITEM NUMBER | DESCRIPTION | $\boldsymbol{€}$ |
| :--- | :--- | :--- |
| $\mathbf{4 1 1 0 2 / 0 0 1}$ | ONDA 624 <br> with on-board control unit and 433Mhz receiver (rack required) |  |


| ITEM NUMBER | OPTIONAL ACCESSORIES | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| $\mathbf{4 1 1 0 0 / 0 5 0}$ | Battery charging card | 24,32 |
| $\mathbf{4 1 1 0 2 / 0 5 0}$ | Battery kit (no. 2 batteries of 12V - 1.3Ah) | 74,19 |
| $\mathbf{4 1 1 8 0 / 0 6 4}$ | CP - APRIMATIC 10 m plastic rack with steel core and mounts (module 4) | 156,09 |

[^14]
## ONDA 623



Low-voltage gear motor for sliding gates. Residential use for wings up to 600 kg , condominium use for wings up to 400 kg .


## TECHNICAL DATA

| MAIN POWER SUPPLY | $230 \mathrm{~V}-50 \mathrm{~Hz}$ |
| :--- | :--- |
| MAX. WING WEIGHT | 600 kg |
| CYCLE NUMBER | 100 cycles/day |
| PROTECTION DEGREE | IP44 |
| MAX. ABSORBED POWER | $1,3 \mathrm{~A}$ |
| MAX. ABSORBED CURRENT | 250 W |
| MAX. THRUST FORCE | 650 N |
| MAX. LINEAR SPEED | $10 \mathrm{~m} / \mathrm{min}$ |
| OPERATING TEMPERATURE | $-20^{\circ}+55^{\circ} \mathrm{C}$ |
| HEIGHT OF PINION FROM GROUND | 55 mm |
| WEIGHT OPERATOR | 7 Kg |

## Complies with the current safety

standards as regards to obstacle detection and inversion of movement in accordance with EN12453 and EN 12445 (*). The electronic torque adjustment combined with encoder technology guarantees a gradual approach during opening and closing movements.

Continuity of operation guaranteed, in the event of power supply failure, by a set of optional batteries which may be fitted inside the operator casing.

Sturdy and reliable thanks to the die-cast aluminium casing.

Worm screw gear motor with aluminium body and on-board electronic control unit. Equipped with adjustable-height foundation plate.

Emergency release lever with customised key, for use during power supply failures.
(*) Product certified under ideal installation conditions.

| INSTALLAZIONE IDEALE ONDA 623 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ITEM NUMBER | DESCRIPTION |  | Q.ty | $€$ |
| 41623/001 | ONDA 623 with SC230 on-board control unit and 43 | $z$ receiver | 1 | 599,00 |
| 41180/064 | CP-Aprimatic 10 m plastic rack with steel core and | unts module 4) | 1 | 156,09 |
| 41700/801 | EKK-24V Elettrokit | Item numbers included in the kit | 1 | 237,61 |
|  | 433.92 MHz antenna kit | 41929/003 |  |  |
|  | Two TM4-433.92 MHz four-channel transmitters | 41905/004 |  |  |
|  | ET2N-24V Led flashing light | 41840/006 |  |  |
|  | ER12-24V Pair of photocells | 41812/008 |  |  |
|  | PC12E Wall-mounted key-operated switch | 41830/007 |  |  |
|  | Signal panel |  |  |  |

NOTE: Use of a safety edge is recommended; see section "Control units and Indicators".

| ITEM NUMBER | ACCESSORIES | $\mathbf{€}$ |
| :--- | :--- | :---: |
| $\mathbf{4 1 1 8 0 / 0 6 4}$ | CP- Aprimatic 10m plastic rack with steel core and mounts module 4) |  |
| $\mathbf{4 1 1 8 0 / 0 6 3}$ | CZ - Aprimatic 4m galvanised steel rack with mounts (module 4) |  |

[^15]
## ONDA 800 / 801 E <br> 

Gear motor for sliding gates, for condominium use with wings up to 500 kg and for residential use with wings up to 800 kg .

| TECHNICAL DATA |  |
| :--- | :--- |
| MAIN POWER SUPPLY | $230 \mathrm{~V} \mathrm{-} 50 \mathrm{~Hz}$ |
| MAX. WING WEIGHT | $800 \mathrm{~kg}(\mathrm{Z} 16)$ |
|  | $500 \mathrm{~kg}(\mathrm{Z20})$ |
| CYCLE NUMBER | $100 \mathrm{cycles} /$ day |
| PROTECTION DEGREE | IP44 |
| ABSORBED POWER | 260 W |
| THRUST FORCE | $1250 \mathrm{~N} \mathrm{(Z16)}$ |
| MAX. LINEAR SPEED | $1000 \mathrm{~N}(\mathrm{Z20)}$ |
| OPERATING TEMPERATURE | $9,5 \mathrm{~m} / \mathrm{min}(\mathrm{Z16)}$ |
| HEIGHT OF PINION FROM GROUND | $12,0 \mathrm{~m} / \mathrm{min}(Z 20)$ |
| WEIGHT OPERATOR | $-20^{\circ}+70^{\circ} \mathrm{C}$ |



ONDA 800 - with mechanical clutch
for anti-crushing safety and preset for integrating the control unit.

ONDA 801 E - with SC 230 on-board control unit and electronic clutch.

ONDA 801E / 800E - for residential gates up to 800 kg , or condominium gates up to 500 kg .

## Self-locking worm screw gear motor

 with anodised aluminium body. Steel gears with permanent lubrication. No electric lock required.
## Equipped with a practical key release

for manual operation in the event of power supply failure.

Z20 20-teeth pinion available for installation in the gear motor for applications requiring faster automation speed.

| IDEAL INSTALLATION - ONDA 800 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ITEM NUMBER | DESCRIPTION |  | Q.ty | $€$ |
| 41127/029 | ONDA 800 Z16 Motor with mechanical clutch |  | 1 | 469,47 |
| 41180/063 | CZ - APRIMATIC 4 m galvanised steel rack with mounts (module 4) |  | 1 | 75,93 |
| 41615/801 | ESS 433-433.92 MHz swing gate Elettroset | Item numbers included in the kit | 1 | 442,63 |
|  | SC230 control unit with 433.92 MHz buit-in radio receiver | 41626/001 |  |  |
|  | 433.92 MHz antenna kit | 41929/003 |  |  |
|  | ER12-24V Pair of photocells | 41812/008 |  |  |
|  | ET2N 24V led flasing light | 41840/006 |  |  |
|  | Two TM4-433.92 MHz four-channel transmitters | 41905/004 |  |  |
|  | PC12E Wall-mounted key-operated switch | 41830/007 |  |  |
|  | Signal panel |  |  |  |

NOTE: Use of a safety edge is recommended; see section "Control units and Indicators".

| IDEAL INSTALLATION - ONDA 801E |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ITEM NUMBER | DESCRIPTION |  | Q.ty | $€$ |
| 41127/023 | ONDA 801 E Z16 Motor with electronic clutch and with built-in 433.92 MHz receiver | ard SC230 electronic card | 1 | 704,79 |
| 41180/063 | CZ - APRIMATIC 4 m galvanised steel rack with m | (module 4) | 1 | 75,93 |
| 41700/801 | EKK-24V Elettrokit | Item numbers included in the kit | 1 | 237,61 |
|  | 433.92 MHz antenna kit | 41929/003 |  |  |
|  | Two TM4-433.92 MHz four-channel transmitters | 41905/004 |  |  |
|  | ET2N-24V Led flashing light | 41840/006 |  |  |
|  | ER12-24V Pair of photocells | 41812/008 |  |  |
|  | PC12E Wall-mounted key-operated switch | 41830/007 |  |  |
|  | Signal panel |  |  |  |

NOTE: Use of a safety edge is recommended; see section "Control units and Indicators".

| ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
| :--- | :--- | :--- |
| $\mathbf{4 1 1 2 7 / 0 2 9}$ | ONDA 800 Z16 (rack required) <br> Gear motor with mechanical clutch and 16-teeth pinion, preset for the integration of SC230control unit |  |
| $\mathbf{4 1 1 2 7 / 0 2 3}$ | ONDA 801E Z16 (rack required) <br> Gear motor with on-board SC230 control unit with built-in radio, electronic clutch and 16-teeth pinion |  |


| ITEM NUMBER | ACCESSORIES | $\boldsymbol{\epsilon}$ |
| :--- | :--- | :---: |
| $\mathbf{4 1 1 2 6 / 0 5 1}$ | PF 500/800 - Foundation plate (package with 4 pieces) | each. 23,01 |
| $\mathbf{4 1 1 8 0 / 0 6 4}$ | CP - APRIMATIC 10 m plastic rack with steel core and mounts (module 4) | 156,09 |
| $\mathbf{4 1 1 8 0 / 0 6 3}$ | CZ - APRIMATIC 4 m galvanised steel rack with mounts (module 4) | 75,93 |
| $\mathbf{4 1 1 2 7 / 1 0 1}$ | Z20 - 20-teeth pinion | 42,81 |

[^16]

## AT 80 / AT 80 E <br> 

Sliding gate gear motor. Intensive use for wings up to 800 kg and residential use for wings up to 1200 kg .

## TECHNICAL DATA

| MAIN POWER SUPPLY | $230 \mathrm{~V}-50 \mathrm{~Hz}$ |
| :--- | :--- |
| MAX. WING WEIGHT | $1200 \mathrm{~kg}(\mathrm{Z} 16)$ |
|  | $800 \mathrm{~kg}(\mathrm{Z} 20)$ |
| CYCLE NUMBER | $200 \mathrm{cycles} /$ day |
| PROTECTION DEGREE | IP44 |
| ABSORBED POWER | 330 W |
| THRUST FORCE | $1400 \mathrm{~N}(\mathrm{Z} 16)$ |
|  | $1120 \mathrm{~N}(\mathrm{Z20})$ |
| MAX. LINEAR SPEED | $9,5 \mathrm{~m} / \mathrm{min} \mathrm{(Z16)}$ |
| OPERATING TEMPERATURE | $12,0 \mathrm{~m} / \mathrm{min}(Z 20)$ |
| LUBRICANT QUANTITY | $-20^{\circ}+70^{\circ} \mathrm{C}$ |
| LUBRICANT TYPE | $1,25 \mathrm{Lt}$ |
| HEIGHT OF PINION FROM GROUND | AprimOil SPIRAX |
| WEIGHT OPERATOR | 70 mm |

Anti-crushing device with wet mechanical clutch.

Emergency release lever with customised key for gate release and an effective anti-intrusion protection.

Wet gear motor with self-locking reduction unit for lockless application.

Maximum reliability thanks to steel gears and permanent system lubrication.

It can be secured to the ground both via a fixed and a tilting support.

The latter allows operation even when the guide is not on a perfectly level surface, thus preserving mechanical parts from operational stress.

SC230 electronic control unit on board of the operator. On AT80E model only.

| IDEAL INSTALLATION - AT 80 WITHOUT CONTROL UNIT |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ITEM NUMBER | DESCRIPTION |  | Q.ty | $€$ |
| 41120/021 | AT80 Z16 Gear motor without control unit |  | 1 | 542,50 |
| 41180/063 | CZ - APRIMATIC 4 m galvanised steel rack with mounts (module 4) |  | 1 | 75,93 |
| 41615/801 | ES 433.92 MHz sliding gate Elettroset | Item numbers included in the kit | 1 | 442,63 |
|  | SC230 control unit with 433.92 MHz buit-in radio receiver | 41626/001 |  |  |
|  | 433.92 MHz antenna kit | 41929/003 |  |  |
|  | ER12-24V Pair of photocells | 41812/008 |  |  |
|  | ET20N 230V flashing light | 41840/006 |  |  |
|  | Two TM4 433.92 MHz four-channel transmitters | 41905/004 |  |  |
|  | PC12E Wall-mounted key-operated switch | 41830/007 |  |  |
|  | Signal panel |  |  |  |

NOTE: Use of a safety edge is recommended; see section "Control units and Indicators"

| IDEAL INSTALLATION - AT 80E WITH CONTROL UNIT |  |  |  |
| :---: | :---: | :---: | :---: |
| ITEM NUMBER | DESCRIPTION | Q.ty | € |
| 41120/023 | AT80E Z16 Gear motor with SC230 on-board control unit with built-in 433.92 MHz receiverv | 1 | 863,60 |
| 41180/063 | CZ - APRIMATIC 4 m galvanised steel rack with mounts (module 4) | 1 | 75,93 |
| 41700/801 | EKK-24V Elettrokit Item numbers included in the kit | 1 | 237,61 |
|  | 433.92 MHz antenna kit 41929/003 |  |  |
|  | ER12-24V Pair of photocells 41812/008 |  |  |
|  | ET2N-24V Led flashing light 41840/006 |  |  |
|  | Two TM4 433.92 MHz four-channel transmitters 41905/004 |  |  |
|  | PC12E Wall-mounted key-operated switch 41830/007 |  |  |
|  | Signal panel |  |  |

NOTE: Use of a safety edge is recommended; see section "Control units and Indicators".
$\left.\begin{array}{lll}\hline \text { ITEM NUMBER } & \text { DESCRIPTION } & \boldsymbol{\epsilon} \\ \hline \mathbf{4 1 1 2 0 / 0 2 3} & \text { AT 80E YZ16 (rack required) } & 863,60 \\ & \text { Gear motor with on-board SC230 control unit with built-in radio, 16-teeth pinion and electromechanical limit stop }\end{array}\right]$

NOTE: Each installation requires an IF 80 or IB 80 package.

| ITEM NUMBER | ACCESSORIES | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| $\mathbf{4 1 1 2 0 / 0 5 1}$ | IF80 - Fixed installation package | 17,95 |
| $\mathbf{4 1 1 2 0 / 0 5 2}$ | IB80 - Tilting installation package | 49,25 |
| $\mathbf{4 1 1 2 0 / 0 5 0}$ | PF80 - Foundation plate for masonry installation (package with 4 pieces) | each. 17,38 |
| $\mathbf{4 1 1 8 0 / 0 6 3}$ | CZ - APRIMATIC 4 m galvanised steel rack with mounts (module 4) | 75,93 |
| $\mathbf{4 1 1 2 7 / 1 0 1}$ | Z20 - 20-teeth pinion | 42,81 |

[^17]

## ONDA 2000 / 2001

i215

Gear motor for sliding gates with wings from 1000 up to 2000 kg . Intensive use.

| TECHNICAL DATA |  |
| :--- | :--- |
| MAIN POWER SUPPLY | $230 \mathrm{~V}-50 \mathrm{~Hz}$ |
| MAX. WING WEIGHT | 2000 kg |
| CYCLE NUMBER | $1000 \mathrm{cycles} /$ day |
| PROTECTION DEGREE | IP 44 |
| ABSORBED POWER | 700 W |
| THRUST FORCE | 2570 N |
| MAX. LINEAR SPEED | $9,5 \mathrm{~m} / \mathrm{min}$ |
| OPERATING TEMPERATURE | $-20^{\circ}+70^{\circ} \mathrm{C}$ |
| LIMIT STOP | Electromechanical |
| PINION | Z16 |
| LUBRICANT TYPE | AprimOil SPIRAX |
| WEIGHT OPERATOR | 18 KG |

For residential use, up to $2,000 \mathrm{~kg}$, or condominium use up to $1,000 \mathrm{~kg}$.

ONDA 2000 - with mechanical clutch
for anti-crushing safety without on-board electronic control unit.

ONDA 2001 - with on-board SC 230 device
and electronic control unit.

## Worm screw gear motor

with permanent lubrication and anodised aluminium body.

Practical lever release with customised key for emergency operations.

NOTE: Due to the high power of the motor, properly evaluate the system risk analysis.

| ITEM NUMBER | DESCRIPTION |  | Q.ty | $€$ |
| :---: | :---: | :---: | :---: | :---: |
| 41125/007 | ONDA 2000 Z16 Motor with mechanical clutch |  | 1 | 594,65 |
| 41180/063 | CZ - Aprimatic 4m galvanised steel rack with mounts (module 4) |  | 1 | 75,93 |
| 41615/801 | ES 433.92 MHz sliding gate Elettroset | Item numbers included in the kit | 1 | 442,63 |
|  | SC230 control unit | 41626/001 |  |  |
|  | 433.92 MHz antenna kit | 41929/003 |  |  |
|  | ER12-24V Pair of photocells | 41812/008 |  |  |
|  | ET2N 24V led flasing light | 41840/006 |  |  |
|  | Two TM4 433.92 MHz four-channel transmitters | 41905/004 |  |  |
|  | PC12E Wall-mounted key-operated switch | 41830/007 |  |  |
|  | Signal panel |  |  |  |

NOTE: Use of a safety edge is recommended; see section "Control units and Indicators".

| IDEAL INSTALLATION - ONDA 2001 E Z16 MOTOR WITH ELECTRONIC CLUTCH |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ITEM NUMBER | DESCRIPTION |  | Q.ty | $\epsilon$ |
| 41125/005 | ONDA 2001 E Z16 Motor with electronic clutch with built-in 433.92 MHz receiver | oard SC 230 control unit | 1 | 729,70 |
| 41180/063 | CZ - Aprimatic 4m galvanised steel rack with m | (module 4) | 1 | 75,93 |
| 41700/801 | EKK-24V Elettrokit | Item numbers included in the kit | 1 | 237,61 |
|  | 433.92 M Hz antenna kit | 41929/003 |  |  |
|  | ER12-24V Pair of photocells | 41840/006 |  |  |
|  | ET2N-24V Led flashing light | 41840/006 |  |  |
|  | Two TM4 433.92 MHz four-channel transmitters | 41905/004 |  |  |
|  | PC12E Wall-mounted key-operated switch | 41830/007 |  |  |
|  | Signal panel |  |  |  |

NOTE: Use of a safety edge is recommended; see section "Control units and Indicators".

| ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
| :--- | :--- | :--- |
| $\mathbf{4 1 1 2 5 / 0 0 7}$ | ONDA 2000 Z16 (rack required) <br> Gear motor with mechanical clutch and 16-teeth pinion, preset for the integration of the control unit |  |
| $\mathbf{4 1 1 2 5 / 0 0 5}$ | ONDA 2001 E Z16 (rack required) <br> Gear motor with on-board SC 230 control unit with built-in 433.92 MHz receiver, electronic clutch and 16-teeth <br> pinion |  |


| ITEM NUMBER | OPTIONAL ACCESSORIES | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| $\mathbf{4 1 1 2 5 / 0 5 0}$ | PF2000 - Foundation plate | each. 22,01 |
| $\mathbf{4 1 1 8 0 / 0 6 3}$ | CZ - Aprimatic 4m galvanised steel rack with mounts (module 4) | 75,93 |

[^18]

## AT 86 T / AT 88 T

## Automation for industrial sliding gates. <br> Intensive use.



AT 88T MOTOR

| TECHNICAL DATA | AT 86T | AT 88T |
| :--- | :--- | :--- |
| MAIN POWER SUPPLY | Three-phase 230/400 | Three-phase 230/400 |
|  | $\mathrm{V}-50 / 60 \mathrm{~Hz}$ | $\mathrm{~V}-50 / 60 \mathrm{~Hz}$ |
| MAX. GATE WEIGHT | 2000 kg | 4000 kg |
| PROTECTION DEGREE | IP44 | IP44 |
| MOTOR POWER | 1 kW | $0,96 \mathrm{~kW}$ |
| MAX ABSORBED CURRENT | $1,07 \mathrm{~A} \mathrm{(a} \mathrm{400} \mathrm{V)}$ | $2,6 \mathrm{~A} \mathrm{la} \mathrm{400} \mathrm{V)}$ |
| NO. OF MOTOR/PINION REVS g/1 | $1400 / 36$ | $1400 / 33$ |
| DRIVE SPEED m/1' | 9 | 9 |
| PINION MODULE | 4 mm | 4 mm |
| OPERATING TEMPERATURE | $-15^{\circ}+60^{\circ} \mathrm{C}$ | $-15^{\circ}+60^{\circ} \mathrm{C}$ |
| LUBRICANT BRAND | API DT SINT 320 | API DT SINT 320 |
| WEIGHT OPERATOR | 35 Kg | 50 Kg |

These motors are designed to drive very heavy sliding gates. Intended for an intensive use, they guarantee a high degree of reliability

Adjustable dry clutch between the motor and gear unit, for the preservation of mechanical parts in case of obstacles to the movement of the gate.

Toothed pinion suitable for 4 mm rack module. Rack available in 1 m items with adjustment slots and spacers for gate installation. Bidirectional lever mechanical limit stop.

The electromechanical unit consists of a ventilated three-phase motor, coupled to a steel worm screw gear unit and a bronze gear.

Emergency manual operation thanks to a device for trip disengaging mounted on the gear unit, easily operable by rotating the lever.

The gear motor is encased in a stainless steel protective box with ABS inspection door that can be opened with a key.

| IDEAL INSTALLATION - AT 86T |  |  |  |
| :---: | :---: | :---: | :---: |
| ITEM NUMBER | DESCRIPTION | Q.ty | € |
| 41134/002 | AT 86T Three-phase gear motor | 1 | 2019,32 |
| 41615/008 | A888 control unit | 1 | 521,96 |
| 41923/009 | RRSE - Unico 433.92 MHz Memory System receiver | 1 | 88,67 |
| 41929/001 | ANT 433 433.92 MHz Antenna | 1 | 19,12 |
| 41811/001 | ER2N Pair of photocells | 1 | 95,62 |
| 41841/001 | ET22 230V flashing light | 1 | 62,59 |
| 41905/004 | TM4-433.92 MHz four-channel transmitter | N | each. 38,41 |
| 41180/063 | CZ - Aprimatic 4m galvanised steel rack with mounts (module 4) | 1 | 75,93 |
| 41830/007 | PC12E Wall-mounted key-operated switch | 1 | 27,81 |

NOTE: The same items can be used when installing an AT 88T gear motor.
NOTE: Use of a safety edge is recommended; see section "Control units and Indicators".
N : Based on specific installation requirements

| ITEM NUMBER | DESCRIPTION | € |
| :---: | :---: | :---: |
| 41134/002 | AT 86T - Three-phase gear motor (with foundation plate) | 2019,32 |
| 41124/001 | AT 88T - Three-phase gear motor (with foundation plate) | 2179,29 |
| ITEM NUMBER | ACCESSORIES | € |
| 41615/008 | A888 Electronic control unit in sealed APRIMATIC container (IP55) with 4 operating modes: automatic, semiautomatic, dead-man operation, suitable for a three-phase ( $230 / 380 \mathrm{~V}-50 \mathrm{~Hz}$ ) or single-phase ( 740 W ) operator with max. power 740W | 521,96 |
| 41180/063 | CZ - Aprimatic 4m galvanised steel rack with mounts (module 4) | 75,93 |
| 41850/002 | CF1M - Straight safety edge 1.5 m | 68,39 |
| 41850/003 | CF2M - Straight safety edge 2 m | 75,33 |
| 41850/004 | CF3M - Straight safety edge 3 m | 85,68 |

NOTE: The use of a safety edge is recommended.

[^19]

## AT 90 T / AT 92 T

Automation for industrial sliding gates.
Intensive use.


AT 90T MOTOR

| TECHNICAL DATA | AT 90T | AT 92T |
| :--- | :--- | :--- |
| MAIN POWER SUPPLY | Three-phase 230/400 | Three-phase 230/400 |
|  | $\mathrm{V}-50 / 60 \mathrm{~Hz}$ | $\mathrm{~V}-50 / 60 \mathrm{~Hz}$ |
| MAX. GATE WEIGHT | 8000 Kg | 12000 kg |
| PROTECTION DEGREE | IP44 | IP44 |
| MOTOR POWER | $1,5 \mathrm{~kW}$ | 3 kW |
| MAX. ABSORBED CURRENT | $3,5 \mathrm{~A}$ la 400 V) | $6,8 \mathrm{~A}(\mathrm{a} \mathrm{400} \mathrm{V)}$ |
| NO. OF MOTOR/PINION REVS G/1’ | $1400 / 23$ | $1400 / 20$ |
| DRIVE SPEED M/1 | 8 | 9 |
| PINION MODULE | 5 mm | 8 mm |
| OPERATING TEMPERATURE | $-15^{\circ}+60^{\circ} \mathrm{C}$ | $-15^{\circ}+70^{\circ} \mathrm{C}$ |
| LUBRICANT | DTSINT 320 | TIVELA OIL SC320 |
| WEIGHT OPERATOR | 70 Kg | 200 Kg |

These motors are designed to drive very heavy sliding gates. Intended for an intensive use, they guarantee a high degree of reliability

Adjustable dry clutch between the motor and gear unit, for the preservation of mechanical parts in case of obstacles to the movement of the gate.

Toothed pinion suitable for 5 mm rack module (Mod. AT 90T) and 8 mm (Mod. AT 92T). Rack available in 1 m items with adjustment slots and spacers for gate installation.
Bidirectional lever mechanical limit stop.
The electromechanical unit consists of a ventilated three-phase motor, coupled to a steel worm screw gear unit and a bronze gear.

Emergency manual operation thanks to a device for trip disengaging mounted on the gear unit, easily activated by rotating the lever (for Mod. AT 90T).

The gear motor is encased in a stainless steel protective box with stainless steel inspection door that can be opened with a key.

| IDEAL INSTALLATION - AT 90T |  |  |  |
| :---: | :---: | :---: | :---: |
| ITEM NUMBER | DESCRIPTION | Q.ty | € |
| 41134/001 | AT 90T Three-phase gear motor | 1 | 5436,07 |
| 41637/001 | 8382L three-phase control unit without receiver | 1 | 751,15 |
| 41923/009 | RRSE - Unico Memory System 433.92 MHz receiver | 1 | 88,67 |
| 41929/001 | ANT433 433.92 MHz antenna | 1 | 19,12 |
| 41811/001 | ER2N Pair of photocells | 1 | 95,62 |
| 41841/001 | ET22 230V flashing light | 1 | 62,59 |
| 41905/004 | TM4-433.92 MHz four-channel transmitter | N | each. 38,41 |
| 41180/061 | CZ Module 5 steel rack (1M) | N (order N metres based on gate length) | each. 124,64 |

NOTE: The same items can be used when installing an AT 92T gear motor, swapping the rack with module 8.
NOTE: Use of a safety edge is recommended; see section "Control units and Indicators".
N : Based on specific installation requirements

| ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| $\mathbf{4 1 1 3 4 / 0 0 1}$ | AT 90T - Three-phase gear motor (with foundation plate) | 5436,07 |
| $\mathbf{4 1 1 3 4 / 0 0 3}$ | AT 92T - Three-phase gear motor (with template and foundation plate) | 7878,02 |
| $\mathbf{4 1 6 3 7 / 0 0 1}$ | 8382L three-phase unit (without receiver) | 751,15 |


| ITEM NUMBER | ACCESSORIES | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| $\mathbf{4 1 1 8 0 / 0 6 1}$ | CZ - Cremagliera in acciaio zincato modulo 5 (metri 1 con attacchi) - per AT 90T | 124,64 |
| $\mathbf{4 1 1 8 0 / 0 6 2}$ | CZ - Cremagliera in acciaio zincato modulo 8 (metri 1 con viteria) - per AT 92T | 237,63 |
| $\mathbf{4 1 8 5 0 / 0 0 2}$ | CF1M - Costa di sicurezza a filo 1,5 m | 68,39 |
| $\mathbf{4 1 8 5 0 / 0 0 3}$ | CF2M - Costa di sicurezza a filo 2 m | 75,33 |
| $\mathbf{4 1 8 5 0 / 0 0 4}$ | CF3M - Costa di sicurezza a filo 3 m | 85,68 |

NOTE: The use of a safety edge is recommended.

[^20]
## 04.

## UP-AND-OVER, SECTIONAL, FOLDING DOORS

## ALZO

AT 50
GA-MATIC CF800
GA-MATIC CF1000


## UP-AND-OVER / SECTIONAL DOORS

## TYPES

## UP-AND-OVER DOOR WITH COUNTERWEIGHTS OR SPRINGS (with door automation)

Door equipped with balancing system with counterweights or springs. On opening and closing, the door may wholly fall within or partly protrude. Application with single or double motor for heavy doors or up-and-over doors with built-in pedestrian door.


| Electromechanical | Hydraulic |
| :--- | :--- |
| ALZO | AT 50 |
| TWIN ALZO | TWIN AT50 |

## COUNTERWEIGHT-BALANCED UP-AND-OVER DOOR <br> (with drive or spring operator)

Door equipped with balancing system with counterweights or springs. On opening and closing, the door may wholly fall within or partly protrude.


Electromechanical
GA-MATIC CF800
GA-MATIC CF1000

SECTIONAL DOOR

Door equipped with spring balancing system. Consisting of many horizontal panels hinged together. When opening, the door falls entirely within the garage.


[^21]
## TYPICAL SYSTEM COMPOSITION

1) Operator: device allowing, with an external power supply, to move a door. 2) Control unit: electronic unit for handling the operator movement. 3) Transmitter: wireless equipment that transmits information to the control unit. 4) Antenna: device that increases the reception of the signals sent by the transmitter.
2) Flashing light: light signalling that the gate is moving; 6) Pair of photocells: safety devices stopping the gate movement in the presence of obstacles.
3) Control unit: allows activation of gate movement through a mechanical or electronic key.
4) Safety edge: Sensitive edge used to prevent the risk of crushing due to electric door movement. In case of contact, the automation system inverts motion and prevents damage to people and property.

REFERENCE LAYOUT FOR UP-AND-OVER DOOR SYSTEM


## CHOOSING THE RIGHT PRODUCT

AUTOMATION SYSTEMS FOR COUNTERWEIGHT-BALANCED UP-AND-OVER DOORS

|  | MODEL | USE | CYCLES <br> PER DAY | DOOR <br> DIMENSION | SAFETY | TECHNOLOGY |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | ALZO | (R) | 50 | $3,5 \times 3,0 \mathrm{~m}$ | $\mathrm{~A}^{*}$ | Electromechanical |
|  | TWIN ALZO | (R) | 50 |  |  |  |

REFERENCE LAYOUT FOR SECTIONAL DOORS / COUNTERWEIGHT-BALANCED UP-AND-OVER DOORS


NOTE: For equipment and control, safety and warning devices, see the optional accessories indicated for the specific operator
NOTE: For more devices, see the section "Control units and Indicators" in this catalogue (refer to the initial index).

DRIVEN AUTOMATION SYSTEMS FOR SECTIONAL AND UP-AND-OVER DOORS

|  | MODEL | USE | CYCLES <br> PER DAY | DOOR <br> DIMENSION | SAFETY | TECHNOLOGY |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | GA-MATIC CF800** | R | 30 | $12 \mathrm{~m}^{2}$ | $\mathrm{~A}^{*}$ | Electromechanical |
|  |  |  |  |  |  |  |

KEY
(R) residential
(C) CONDOMINIUM
(I) INDUSTRIAL
*A -Anti-crushing $\quad$ Suitable for counterweight-balanced up-and-over doors if equipped with curved arm.
NOTE: The data provided refer to correctly installed products undergoing regular maintenance. NOTE: The choice depends on the force required to move the frame and not on its size.

## ALZO

(4) 1217

## Electromechanical operator for up-and-over doors <br> Residential use.



## TECHNICAL DATA

| MAIN POWER SUPPLY | $230 \mathrm{~V}-50 \mathrm{~Hz}$ |
| :--- | :--- |
| NOMINAL TORQUE | 450 Nm |
| INTERMITTENT USE | $50 \%$ |
| SHEET DIMENSION | $3,5 \times 3 \mathrm{~m}$ single motor |
|  | $5 \times 3 \mathrm{~m}$ double motor |
| PROTECTION DEGREE | IP44 |
| ABSORBED POWER | 250 W |
| ABSORBED CURRENT | $1,6 \mathrm{~A}$ |
| OPERATING TEMPERATURE | $-20^{\circ}+60^{\circ} \mathrm{C}$ |
| OPENING TIME | 17 s |
| OVERLOAD INTERVENTION | $150^{\circ} \mathrm{C}$ |
| WEIGHT OPERATOR | 9 Kg |

Self-locking gear motor, keeping the up-and-over door closed even in the absence of an electric lock.

External emergency release (optional) for accessing the garage in case of power supply failure.

## High-quality materials:

steel transmission parts die-cast aluminium gear motor body and ABS protection hood with IP44 protection degree.

## Maximum anti-crushing safety for the

 lower edge of the door, thanks to the on-board electronic control unit equipped with electronic torque adjustment and anti-crushing system (which can be disabled) with sensitive edges.Timed courtesy light built into the operator to light up the garage during opening and closing.

Slowdown system for a soft approach of the door during opening and closing, thus avoiding noise and mechanical stress to the structure.

One of the best operators in the market. Developing a 450 Nm torque, it allows the automation of counterweight-balanced up-and-over doors with size:
$-3.5 \times 3$ m using only one motor;
$-5 \times 3 \mathrm{~m}$, or up-and-over with built-in pedestrian door using two motors.

| IDEAL INSTALLATION FOR SINGLE MOTOR (max. sheet dim. $3.5 \times 3 \mathrm{~m}$ ) |  |  |  |
| :---: | :---: | :---: | :---: |
| ITEM NUMBER | DESCRIPTION | Q.ty | € |
| 41210/002 | EM51 OPERATOR with T3EC on-board control device (without receiver) | 1 | 498,44 |
| 41923/009 | RRSE - Unico 433.92 MHz receiver | 1 | 88,67 |
| 41905/004 | TM4-433.92 MHz four-channel transmitter | N | 38,41 |
| 41210/058 | Pair of plasma-cut curved arms | 1 | 79,76 |
| 41210/062 | HARDWARE KIT Item numbers included in the Kit | 1 | 126,05 |
|  | Two TZ - $\emptyset 25 \mathrm{mmx} 3$ galvanised pipes with 1.8 m pre-welded bushes |  |  |
|  | ST180-180 cm sheet fixing bracket 41210/061 |  |  |

NOTE: The installation can be completed by adding a flashing light
N : Based on specific installation requirements

| IDEAL INSTALLATION FOR DOUBLE MOTOR (max. sheet dim. $5 \times 3 \mathrm{~m}$ ) |  |  |  |
| :--- | :--- | :--- | :--- |
| ITEM NUMBER | DESCRIPTION | $\mathbf{Q . t y}$ | $\boldsymbol{\epsilon}$ |
| $\mathbf{4 1 2 1 0 / 0 0 2}$ | EM51 OPERATOR with T3EC on-board control device (without receiver) | 1 | 498,44 |
| $\mathbf{4 1 2 1 0 / 0 0 1}$ | EM51 SLAVE OPERATOR Including a pair of 20 cm pipes with splined bush | 1 | 396,43 |
| $\mathbf{4 1 2 1 0 / 0 6 9}$ | Pair of straight arms, with quick coupling (required for double motor installation) | 1 | 64,91 |
| $\mathbf{4 1 2 1 0 / 0 6 1}$ | ST180 - Sheet fixing bracket L= 180 cm | 2 | 32,45 |
| $\mathbf{4 1 9 2 3 / 0 0 9}$ | RR SE - Unico 433.92 MHz receiver | 1 | 88,67 |
| $\mathbf{4 1 9 0 5 / 0 0 4}$ | TM4 - 433.92 MHz four-channel transmitter | N | 38,41 |

NOTE: The installation can be completed by adding a flashing light
N : Based on specific installation requirements.

| ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| $\mathbf{4 1 2 1 0 / 0 0 2}$ | EM51 T3EC OPERATOR - T3EC on-board electronic control unit (without receiver) Aprimatic signal panel | 498,44 |
| $\mathbf{4 1 2 1 0 / 0 0 1}$ | EM51 SLAVE OPERATOR - Including a pair of 20 cm pipes with splined bush | 396,43 |


| ITEM NUMBER | OPTIONAL ACCESSORIES | € |
| :---: | :---: | :---: |
| 41840/006 | ET2N -24V led flashing light | 42,30 |
| 41812/008 | ER12-24V Pair of photocells | 71,16 |
| 41210/054 | SS EM 51 - Single external emergency release | 22,01 |
| 41210/055 | SD EM 51 - Double external emergency release | 44,61 |
| 41201/052 | Pair of straight telescopic arms | 44,79 |
| 41201/051 | Pair of curved telescopic arms | 89,52 |
| 41210/068 | TZ - $1.8 \mathrm{~m} \emptyset 25 \mathrm{~mm} \times 3$ galvanised pipe with pre-welded bushes | 49,42 |
| 41210/061 | ST180-180 cm sheet fixing bracket | 32,45 |
| 41210/067 | PST - Sheet fixing bracket extension | 17,95 |
| 41850/001 | CF3MS - 3.0 m straight safety edge (thin and specific for garage doors) | 79,19 |

[^22]

## AT 50

Hydraulic operator for up-and-over doors. Residential, condominium and intensive use.


| TECHNICAL DATA | AT50B7 |
| :--- | :--- |
| MAIN POWER SUPPLY | $230 \mathrm{~V}-50 \mathrm{~Hz}$ |
| NOMINAL TORQUE AT 40 BAR | 320 Nm |
| SHEET DIMENSION | $3,5 \times 3 \mathrm{~m}$ single motor |
|  | $5 \times 3 \mathrm{~m}$ double motor |
| PROTECTION DEGREE | $\mathrm{IP53}$ |
| ABSORBED POWER | 250 W |
| NOMINAL TORQUE AT 40 BAR | 320 Nm |
| OPERATING | $-20^{\circ}+60^{\circ} \mathrm{C}$ |
| TEMPERATURE | 13 s approx.. |
| OPENING TIME |  |
|  | 40 bar |
| MAX. OPERATING PRESSURE | $1 \mathrm{Lt} / \mathrm{min}$ |
| PUMP CAPACITY | $1,3 \mathrm{Lt}$ |
| OIL QUANTITY | 13 kg |
| WEIGHT WITH OIL | AprimOil |
| OIL TYPE | With T3E unit |
| SLOWDOWN | 10 Kg |
| WEIGHT OPERATOR |  |

Maximum anti-crushing safety thanks to the sensitive edges (optional) combined with maximum pressure relief valves that limit the maximum value of the hydraulic pressure in the presence of obstacles (adjustable during installation).

## Ideal for heavy workloads

in the presence of large-sized up-and-over doors.

## Locks on opening and closing (double lock):

 the door remains shut without installing further locks.AT 50 can be easily installed without modifying the up-and-over doors.

Very high resistance to shocks and stress during operation thanks to the ductile cast iron body.

Great hydraulic sealing thanks to internal scrapers.

Silent and regular performance guaranteed by polyurethane seals and P.T:E. guide rings.

| ITEM NUMBER | DESCRIPTION | PCS | € |
| :---: | :---: | :---: | :---: |
| 41200/005 | AT50B7 Operator | 1 | 627,12 |
| 41625/003 | T3E - Electronic control unit | 1 | 277,38 |
| 41923/009 | RR SE - Unico 433.92 MHz superheterodyne receiver | 1 | 88,67 |
| 41905/004 | TM4-433.92 MHz four-channel transmitter | N | 38,41 |
| 41210/069 | Pair of quick-fit straight arms | 1 | 64,91 |
| 41210/068 | TZ - $1.8 \mathrm{~m} \emptyset 25 \mathrm{~mm} \times 3$ galvanised pipe with pre-welded bushes | 2 | 49,42 |
| 41201/056 | Pair of $30 \times 15 \times 1.5 \mathrm{~mm}$ tubular upright supports -2.5 m bars | 1 | 31,29 |

NOTE: The installation can be completed by adding a flashing light
N : Based on specific installation requirements

| IDEAL INSTALLATION FOR DOUBLE MOTOR (max. sheet dim. $5 \times 3 \mathrm{~m}$ ) |  |  |  |
| :--- | :--- | :--- | :--- |
| ITEM NUMBER | DESCRIPTION | PCS | $\boldsymbol{\epsilon}$ |
| $\mathbf{4 1 2 0 0 / 0 0 5}$ | AT50B7 Operators | 2 | 627,12 |
| $\mathbf{4 1 6 2 5 / 0 0 3}$ | T3E - Electronic control unit | 1 | 277,38 |
| $\mathbf{4 1 9 2 3 / 0 0 9}$ | RR SE - Unico 433.92 MHz superheterodyne receiver | 1 | 88,67 |
| $\mathbf{4 1 9 0 5 / 0 0 4}$ | TM4 - $\mathbf{4 3 3 . 9 2 ~ M H z ~ f o u r - c h a n n e l ~ t r a n s m i t t e r ~}$ | N | 38,41 |
| $\mathbf{4 1 2 1 0 / 0 6 9}$ | Pair of quick-fit straight arms | 1 | 64,91 |
| $\mathbf{4 1 2 0 1 / 0 5 5}$ | Pair of 20 cm pipes with pre-welded splined bushes | 1 | 34,35 |
| $\mathbf{4 1 2 0 1 / 0 5 6}$ | Pairs of tubular upright supports $30 \times 15 \times 1.5 \mathrm{~mm}-2.5 \mathrm{~m}$ bars | 2 | 31,29 |

NOTE: The installation can be completed by adding a flashing light
N : Based on specific installation requirements

| ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| $\mathbf{4 1 2 0 0 / 0 0 5}$ | AT 50B7 Operator | 627,12 |
| $41625 / 003$ | T3E - Electronic control unit | 277,38 |


| ITEM NUMBER | OPTIONAL ACCESSORIES | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| $\mathbf{4 1 8 4 0 / 0 0 6}$ | ET2N -24V led flashing light | 42,30 |
| $\mathbf{4 1 8 1 2 / 0 0 8}$ | ER12-24V Pair of photocells | 71,16 |
| $\mathbf{4 1 2 0 1 / 0 5 0}$ | ALZO/AT 50 slowdown limit stop unit | 29,42 |
| $\mathbf{4 1 2 0 0 / 0 5 0}$ | SS AT $50-$ AT 50 Single external emergency release | 26,65 |
| $\mathbf{4 1 2 0 0 / 0 5 1}$ | SD AT 50 - AT 50 Double external emergency release | 55,51 |
| $\mathbf{4 1 2 0 1 / 0 5 1}$ | Pair of curved telescopic arms | 89,52 |
| $\mathbf{4 1 2 0 1 / 0 5 2}$ | Pair of straight telescopic arms | 44,79 |
| $\mathbf{4 1 2 0 1 / 0 5 5}$ | Pair of 20 cm pipes with pre-welded splined bushes | 34,35 |
| $\mathbf{4 1 8 5 0 / 0 0 1}$ | CF3MS -3.0 m straight safety edge lthin and specific for garage doors) | 79,19 |

NOTE: AT 50 application requires a rebalancing of the door (see instructions).
NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
NOTE: All prices are subject to variation.

## GA-MATIC CF800 / CF1000

Low-voltage electromechanical operator for sectional and counterweight-balanced up-and-over doors. Residential use.

| TECHNICAL DATA | CF 800 | CF 1000 |
| :--- | :--- | :--- |
| MAIN POWER SUPPLY | $220-240 \mathrm{~V} \mathrm{AC}$ | $220-240 \mathrm{~V} \mathrm{AC}$ |
| MOTOR POWER SUPPLY | $50 / 60 \mathrm{~Hz}$ | $50 / 60 \mathrm{~Hz}$ |
| OUTPUT VOLTAGE | 24 VCC | 24 VCC |
| TRACTION FORCE | 235 W | 245 W |
| OPENING/CLOSING SPEED | 800 N | 1000 N |
| LAMP | $0.15 \mathrm{~m} / \mathrm{s}$ | $0.15 \mathrm{~m} / \mathrm{s}$ |
| LIGHTING TIME | LED, 24V DC | LED, 24V DC |
| DECODING | 3 minutes | 3 minutes |
| BATTERY (optional) | Rolling code | Rolling code |
| RADIO FREQUENCY | 2 batteries | 2 batteries |
| OPERATING TEMP. | $12 \mathrm{~V} \mathrm{3,5} \mathrm{~A}$ | $12 \mathrm{~V} \mathrm{3,5A}$ |
| RELATIVE HUMIDITY | 433.92 MHz | 433.92 MHz |
| MAXIMUM DOOR SIZE | $-20^{\circ} \mathrm{Cl}-40^{\circ} \mathrm{C}$ | $-20^{\circ} \mathrm{Cl}-40^{\circ} \mathrm{C}$ |
| DIMENSIONS (mm) | $\%$ |  |
| $90 \%$ |  |  |
| WEIGHT OPERATOR | $12 \mathrm{~m}^{2}$ | $14 \mathrm{~m}^{2}$ |

Maximum anti-crushing safety thanks to the on-board electronic control unit equipped with auto reverse safety system when an obstacle is detected while closing the gate and to the use of sensitive edges.

The kit GA-MATIC can be used for sectional doors and when installed with the accessory adapter arm, even to automate up-and-over doors.

Slowdown system for a soft approach of the door during opening and closing, thus avoiding noise and mechanical stress to the structure.

Timed courtesy light built into the operator to light up the garage during opening and closing.

The pre-assembled guides optimise installation time, while the encodercontrolled stroke simplifies the configuration phase.

Silent and resistant thanks to the belt drive.

Continuity of operation guaranteed,
in the event of power supply failure, by a set of optional batteries which may be fitted inside the operator casing. Possibility of manual operation via the release system (optional).

| IDEAL INSTALLATION - GA-MATIC CF800 |  |  |  |
| :--- | :--- | :--- | :--- |
| ITEM NUMBER | DESCRIPTION | Q.ty | $\boldsymbol{\epsilon}$ |
| $\mathbf{4 1 2 4 2 / 8 0 0}$ | GA-MATIC 800 Operator with on-board unit and 433.92 MHz radio receiver, | 1 | 357,90 |
| $\mathbf{4 1 9 0 5 / 0 0 4}$ | nr.2 TM4 four channel transmitter and 3m guide $3 \mathrm{pcs} \times 1 \mathrm{~m}$ ) included | N | 38,41 |

N : Based on specific installation requirements

| ITEM NUMBER | DESCRIPTION | Q.ty | $€$ |
| :---: | :---: | :---: | :---: |
| 41242/810 | GA-MATIC 1000 Operator with on-board unit and 433.92 MHz radio receiver, nr. 2 TM4 four channel transmitter and 3 m guide ( $3 \mathrm{pcs} \times 1 \mathrm{~m}$ ) included | 1 | 431,07 |
| 41241/056 | GA-MATIC adapter arm for counterweight-balanced up-and-over doors | 1 | 185,46 |
| 41905/004 | TM4-433.92 MHz four-channel transmitter | N | 38,41 |

N : Based on specific installation requirements

| ITEM NUMBER | DESCRIPTION | Max. sheet dimension | $\boldsymbol{\epsilon}$ |
| :--- | :--- | :--- | :--- |
| $\mathbf{4 1 2 4 2 / 8 0 0}$ | GA-MATIC CF800 | $12 \mathrm{~m}^{2}$ | 357,90 |
| $\mathbf{4 1 2 4 2 / 8 1 0}$ | GA-MATIC CF1000 | $14 \mathrm{~m}^{2}$ | 431,07 |
| The two packages include: |  |  |  |
| GA-MATIC Operator with on-board unit and 433.92 MHz radio receiver, nr. 2 TM4 four channel transmitter and 3m guide (3pcs x 1m) included |  |  |  |


| ITEM NUMBER | GA-MATIC GUIDES AND ACCESSORIES | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| $\mathbf{4 1 2 4 2 / 0 5 0}$ | Release cable | 19,19 |
| $\mathbf{4 1 2 4 1 / 0 5 6}$ | Adapter arm for counterweight-balanced up-and-over doors | 185,46 |
| $\mathbf{4 1 8 4 0 / 0 0 6}$ | ET2N -24V led flashing light | 42,30 |
| $\mathbf{4 1 8 1 2 / 0 0 8}$ | ER12-24V Pair of photocells | 71,16 |

[^23]
## 05.

## TRAFFIC BARRIERS

HARRIER 4000R
HARRIER 4000I HARRIER 60001 HARRIER 80001


## TRAFFIC BARRIERS

## TYPES

## SINGLE OR DOUBLE BARRIERS FOR RESIDENTIAL USE

230 V barriers employed in the management of small private or condominium car parks, with limited vehicle traffic.

SINGLE OR DOUBLE BARRIERS FOR CONDOMINIUM AND INTENSIVE USE

24 V barriers used for the management of continuous use car parks in large apartment buildings, companies, or even private car parks with frequent passage of vehicles during the day.


Electromechanical
Harrier 40001 Harrier 6000

BARRIERS FOR INTENSIVE USE OR FOR LARGE-SIZED ENTRANCES

These barriers are also used for accesses used by special or large-sized vehicles.


Electromechanical
Harrier 80001

## TYPICAL SYSTEM COMPOSITION

6) Control unit: allows activation of gate movement through a mechanical or electronic key;
7) Operator: device with an external power supply designed for access control.
8) Control unit: electronic unit for handling the operator movement.
9) Transmitter: wireless equipment that transmits information to the control unit.
10) Flashing light: light signalling that the gate is moving;
11) Pair of photocells: safety devices stopping the gate movement in the presence of obstacles.



## CHOOSING THE RIGHT PRODUCT

| AUTOMATION SYSTEMS FOR TRAFFIC BARRIERS |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | MODEL | USE | MOTOR POWER <br> SUPPLY | FREQUENCY <br> OF USE | BEAM MAX. <br> LENGTH (M) | TECNOLOGY |
|  | (R) | 230 V | $40 \%$ | 4 m | Electromechanical | 96 |
|  | HARRIER |  |  |  |  |  |
| 4000R |  |  |  |  |  |  |

REFERENCE LAYOUT FOR BARRIER SYSTEM (BARRIER WITH SKIRT)


NOTE: For equipment and control, safety and warning devices, see the optional accessories indicated for the specific operator. NOTE: For more devices, see the section "Control units and Indicators" in this catalogue (refer to the initial index).

| TRAFFIC BARRIERS - BEAMS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | Beam profile* H65 (AAP) | Beam profile* <br> H100 (AAG) | $\begin{aligned} & \emptyset 80 \\ & \text { Max length } 6 \mathrm{~m} \end{aligned}$ | Telescopic $4,5-6 \mathrm{~m}$ |
| ELECTROMECHANICAL BARRIERS |  |  |  |  |
| Harrier 4000R | $\bullet$ |  | $\bullet$ |  |
| Harrier 40001 | - |  | - | - |
| Harrier 60001 |  | - | - | $\bullet$ |
| Harrier 80001 |  | $\bullet$ |  |  |

$\overline{\mathrm{KEY}}$
(R) residential
(C) condominium
(I) industrial

[^24]
## HARRIER 4000R

Electromechanical traffic barriers 230V, for vehicle passage from 3 to 4 m . Residential use.

| TECHNICAL DATA |  |
| :--- | :--- |
| MAIN POWER SUPPLY | $230 \mathrm{~V}-50 \mathrm{~Hz}$ |
| OPENING TIME | 7 s max. |
| BEAM LENGTH | from 3 to max. 4 m. |
| PROTECTION DEGREE | IP54 |
| MAX. ABSORBED POWER. | 180 W |
| ACCESSORY MAX. ABSORBED CURRENT | $1,3 \mathrm{~A}$ |
| OPERATING TEMPERATURE | $-25^{\circ}+70^{\circ} \mathrm{C}$ |
| NOMINAL TORQUE | 400 Nm |
| ANTI-CRUSHING | YES |
| WEIGHT BARRIER | 40 Kg |



Easy access for wiring and configuration in the upper part of the barrier.

User-friendly electronics: no configuration is required for basic use. Parameters are easy to check and set.

Easy to install: simple installation and configuration. IT is only necessary to balance the spring.

Reduced dimensions and next-generation design: long and narrow shape.

High intensity of use: suitable for the control of vehicular access for small/medium car parks for private use.

Main technical solutions adopted:

1. Super smooth action thanks to the spring-loaded balancing system.
2. Strong construction featuring a metal load-bearing framework.
3. Release system with customised key
4. The electronic control unit is housed in a protective plastic casing with easy access from the top.
5. Ready for "master-slave" mode for twin barrier operation.

| ITEM NUMBER | DESCRIPTION | € | Solution A | Solution B |
| :---: | :---: | :---: | :---: | :---: |
| 41545/001 | Harrier 4000R 230 V barrier with on-board control unit and foundation plate included | 1192,80 | 1 | 2 |
|  | Beam fixing flange (to be selected based on beam chosen) See Mandatory Accessories) |  | 1 | 2 |
|  | Beam (to be selected based on beam type) -See Mandatory Accessories |  | 1 | 2 |
|  | Spring (to be selected based on length beam chosen) |  | 1 | 2 |
| 41580/052 | FC HARRIER - Fork support | 141,52 | 1 | ~ |
| 41923/009 | RR SE - Unico 433.92 MHz superheterodyne receiver | 88,67 | 1 | 1 |
| 41905/004 | TM4-433.92 MHz four-channel transmitter | 38,41 | N | N |
| 41812/008 | ER12-24V - Pair of photocells | 71,16 | 1 | N |
| 41830/055 | CPC - PC column 12E H=110 | 57,37 | N | N |
| 41830/007 | PC12E - Wall-mounted key-operated switch | 27,81 | N | N |

N : Based on specific installation requirements
NOTE: To complete the system, it is possible to add a second pair of ER12-24V photocells


NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
NOTA: All prices are subject to variation.


## HARRIER 4000I <br> NEW 24

Electromechanical traffic barriers 24V, for vehicle passage from 3 to 5 m . Intensive use.

TECHNICAL DATA

| MAIN POWER SUPPLY | $230 \mathrm{~V}-50 \mathrm{~Hz}$ |
| :--- | :--- |
| MOTOR POWER SUPPLY | 24 V |
| OPENING TIME | from 2 to max. 5 m |
| BEAM LENGTH | 5 m max. |
| PROTECTION DEGREE | IP54 |
| MAX. ABSORBED POWER | 160 W |
| ACCESSORY MAX. ABSORBED CURRENT | 6 A |
| OPERATING TEMPERATURE | $-25^{\circ}+70^{\circ} \mathrm{C}$ |
| NOMINAL TORQUE | 200 Nm |
| ANTI-CRUSHING | YES |
| WEIGHT BARRIER | 52 Kg |

User-friendly electronics: no configuration is required for basic use. Parameters are easy to check and set.

Easy to install: simple installation and configuration. IT is only necessary to balance the spring.

Reduced dimensions and next-generation design: long and narrow shape.

High intensity of use: suitable
for the control of vehicular access for medium/large parks, for intensive use

## Main technical solutions adopted:

1. Super smooth action thanks to the spring-loaded balancing system.
2. Strong construction featuring a metal load-bearing framework.
3. Release system with customised key.
4. The electronic control unit is housed in a protective plastic casing with easy access from the top.
5. Ready for "master-slave" mode for twin barrier operation.

| ITEM NUMBER | DESCRIPTION | € | Solution A | Solution B |
| :---: | :---: | :---: | :---: | :---: |
| 41580/001 | Harrier 4000124 V barrier with on-board control unit and foundation plate included | 2011,72 | 1 | 2 |
|  | Beam fixing flange (to be selected based on beam chosen) See Mandatory Accessories) |  | 1 | 2 |
|  | Beam (to be selected based on beam type)- See Mandatory Accessories |  | 1 | 2 |
|  | Spring (to be selected based on length beam chosen) |  | 1 | 2 |
| 41580/052 | FC HARRIER - Fork support | 141,52 | 1 | $\sim$ |
| 41923/009 | RR SE - Unico 433.92 MHz superheterodyne receiver | 88.67 | 1 | 1 |
| 41905/004 | TM4-433.92 MHz four-channel transmitter | 38,41 | N | N |
| 41812/008 | ER12-24V - Pair of photocells | 71,16 | 1 | N |
| 41830/055 | CPC - PC column 12E H=110 | 57,37 | N | N |
| 41830/007 | PC12E - Wall-mounted key-operated switch | 27,81 | N | N |

N : Based on specific installation requirements
NOTE: To complete the system, it is possible to add a second pair of ER12-24V photocells



## HARRIER 60001 / 80001



Electromechanical traffic barriers 230V, for vehicle passage from 6 to 8 m .
Intensive use.

| TECHNICAL DATA | $\mathbf{6 0 0 0 1}$ | $\mathbf{8 0 0 0 I}$ |
| :--- | :--- | :--- |
| MAIN POWER SUPPLY | $230 \mathrm{~V}-50 \mathrm{~Hz}$ | $230 \mathrm{~V}-50 \mathrm{~Hz}$ |
| MOTOR POWER SUPPLY | 24 V | 24 V |
| OPENING TIME | $8 \mathrm{~s} \mathrm{max}$. | $8 \mathrm{~s} \mathrm{max}$. |
| BEAM LENGTH | 6 m | 8 m |
| PROTECTION DEGREE | $\mathrm{IP54}$ | IP54 |
| MAX. ABSORBED POWER | 200 W | 200 W |
| ACCESSORY MAX. ABSORBED CURRENT | 8 A | 8 A |
| OPERATING TEMPERATURE | $-25^{\circ}+70^{\circ} \mathrm{C}$ | $-25^{\circ}+70^{\circ} \mathrm{C}$ |
| NOMINAL TORQUE | 300 Nm | 300 Nm |
| ANTI-CRUSHING | YES | YES |
| WEIGHT BARRIER | 74 Kg | 77 Kg |

User-friendly electronics: no configuration is required for basic use. Parameters are easy to check and set.

Easy to install: simple installation and configuration. IT is only necessary to balance the spring.

Reduced dimensions and next-generation design: long and narrow shape.

High intensity of use: suitable
for the control of vehicular access for medium/large parks, for intensive use

## Main technical solutions adopted:

1. Super smooth action thanks to the spring-loaded balancing system.
2. Strong construction featuring a metal load-bearing framework.
3. Release system with customised key.
4. The electronic control unit is housed in a protective plastic casing with easy access from the top.
5. Ready for "master-slave" mode for twin barrier operation.

| ITEM NUMBER | DESCRIPTION | € | Solution A | Solution B |
| :---: | :---: | :---: | :---: | :---: |
| 41580/002 | Harrier 6000124 V barrier with on-board control unit and foundation plate included | 2242,43 | 1 | 2 |
|  | Beam fixing flange (to be selected based on beam chosen) - See Mandatory Accessories) |  | 1 | 2 |
|  | Beam (to be selected based on beam type) -See Mandatory Accessories |  | 1 | 2 |
|  | Spring (to be selected based on length beam chosen) |  | 1 | 2 |
| 41580/052 | FC HARRIER - Fork support | 141,52 | 1 | $\sim$ |
| 41923/009 | RR SE - Unico 433.92 MHz superheterodyne receiver | 88.67 | 1 | 1 |
| 41905/004 | TM4-433.92 MHz four-channel transmitter | 38,41 | N | N |
| 41812/008 | ER12-24V - Pair of photocells | 71,16 | 1 | N |
| 41830/055 | CPC - PC column 12E H=110 | 57,37 | N | N |
| 41830/007 | PC12E - Wall-mounted key-operated switch | 27,81 | N | N |

N : Based on specific installation requirements
NOTE: To complete the system, it is possible to add a second pair of ER12-24V photocells
 (refer to the initial index).
NOTA: All prices are subject to variation.
06.

# CONTROL DEVICES AND INDICATORS 

## ELECTRONIC CONTROL UNIT

ACCESS CONTROL MEMORY SYSTEM 433,92MHZ
INSTALLATION ACCESSORIES



## ELECTRONIC CONTROL UNITS

Aprimatic control units ensure reliability and durability thanks to the careful design and selection of the best components available and offer the highest technological
content, together with a variety of features. Prestigious third-party laboratories perform compliance testing required for EC marking and certify the
compliance of the equipment with the requirements imposed by European standards for electrical safety and electromagnetic compatibility.


Top quality electronic and electromechanical components and careful circuit design for exceptional interference immunity.

Spike filters built onto the card for high protection against mains disturbances.

Voltage stabilisers dedicated to logic circuits and power on/reset circuits to protect against fluctuations and transient power failures.

Zero-crossing power triacs to minimise interference and to guarantee perfect operation and a long working life of the equipment.

Short circuit and overload protection fuses for 24 Vdc transformers, motors and accessories.

Boards, circuits, power components and heat sinks all dimensioned to guarantee trouble-free operation even in continuous use at maximum nominal power.

Compact board size to leave plenty of room for wiring and to ensure easy installation and maintenance.

Numbered and mechanically polarised removable terminal boards to guarantee easy wiring and safe connections.
Plug-in connectors for easy installation of receivers and optional boards.

Boxes fitted with locking devices operated by a special key supplied as standard, and seals with IP55 protection degree for high resistance to atmospheric agents.

| SWING GATE CONTROL UNITS |  |  |  |  |
| ---: | :---: | :---: | :---: | :---: |
|  | BUILT-IN | RSK24 2500 | T4 POWER | BA230 |
| RAIDER 2500 | $\bullet$ |  |  |  |
| AP424 24V | $\bullet$ |  | $\bullet$ |  |
| AP423 230V |  |  | $\bullet$ |  |
| FLEXI | $\bullet$ |  | $\bullet$ |  |
| FORTY |  |  | $\bullet$ |  |
| TWENTY |  | $\bullet$ |  |  |
| EM 73N |  |  |  |  |
| ZT 70 |  |  |  |  |
| ZT 71 |  |  |  |  |


| SLIDE CONTROL UNITS |  |  |  |  |
| ---: | :---: | :---: | :---: | :---: |
|  | SC230 | A888 | 8382L | BUILT-IN |
| ONDA 424 |  |  | $\bullet$ |  |
| ONDA 624 |  |  |  |  |
| ONDA623 | $\bullet$ |  |  |  |
| ONDA 800 | $\bullet$ |  |  |  |
| AT 80 E | $\bullet$ |  |  |  |
| ONDA 2000-2001 | $\bullet$ |  |  |  |
| AT 86 T |  |  |  |  |
| AT 88 T |  |  |  |  |
| AT 90 T |  |  |  |  |
| AT 92 T |  |  |  |  |


| UP-AND-OVER CONTROL UNITS |  |  |  |
| ---: | :---: | :---: | :---: |
|  | T3 EC | T3 E | INTEGRATA |
| ALZO | $\bullet$ |  |  |
| AT 50 |  |  |  |
| GA-MATIC CF800 |  | $\bullet$ |  |
| GA-MATIC CF1000 |  |  |  |


| BARRIER CONTROL UNITS |  |
| ---: | :---: |
|  | BUILT-IN |
| HARRIER 4000R | $\bullet$ |
| HARRIER 40001 | $\bullet$ |
| HARRIER 6000I | $\bullet$ |
| HARRIER 80001 | $\bullet$ |


| THE RANGE |  |  |  |
| :---: | :---: | :---: | :---: |
|  | ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
|  | 41628/001 | BA230 - Electronic control unit for swing gates with one/two electromechanical or hydraulic 230 Vac operators, with electronic slowdown and torque control, built-in receiver, compatibility with all Aprimatic receiver modules | 226,80 |
|  | 41626/001 | SC230 - Electronic control unit for swing gates with electromechanical 230 Vac operator, built-in receiver, compatibility with all Aprimatic receiver modules | 219,00 |
|  | 41625/003 | T3E - Electronic control unit for up-and-over doors and bars with one/two electromechanical or hydraulic 230 Vac operators | 277,38 |
|  | 41600/001 | T4 POWER - Electronic control unit for swing gates with one/two electromechanical 24 Vdc operators | 249,72 |

* Until stocks last

| ACCESSORIES |  |
| :--- | :--- |
| ITEM NUMBER | $\boldsymbol{\epsilon}$ |
| $41706 / 009$ | FR 220 - Mains filter for |

41706/009 FR 220 - Mains filter for electronic control units to be used in case of mains disturbances 34,76

[^25]CONTROL UNIT TECHNICAL SPECIFICATIONS

| TECHNICAL DATA | BA230 | SC230 |
| :--- | :--- | :--- |
| POWER SUPPLY |  | Single phase $230 \mathrm{Vac}(6 \%-10 \%)-50 \mathrm{~Hz}$ |
| MOTOR VOLTAGE | 230 Vac | 230 Vac |
| OPERATING | $-20^{\circ}+70^{\circ} \mathrm{C}$ | $-20^{\circ}+70^{\circ} \mathrm{C}$ |
| TEMPERATURE |  |  |
| STORAGE TEMPERATURE | $-40^{\circ}+85^{\circ} \mathrm{C}$ | $-40^{\circ}+85^{\circ} \mathrm{C}$ |
| RELATIVE HUMIDITY |  | $90 \%$ max. (non condensing) |
| PROTECTION DEGREE | IP 55 | IP 55 |
|  |  |  |
| INPUTS |  |  |
| Opening/Start | Yes | Yes |
| Closing | $\sim$ | $\sim$ |
| Pedestrian Start / Partial opening | Yes | Yes |
| Stop | Yes | Yes |
| Standard safety (photocell) | Yes | Yes |
| Additional safety | Yes | Yes |
| Limit stop | $\sim$ | Yes |
| prepared for motor  <br> control with encoder Yes |  |  |

## OUTPUTS

| Motor | 2 | 1 |
| :--- | :--- | :--- |
| Flashing light | Yes | Yes |
| Indicator light | Yes | Yes |
| Electric lock | Yes | $\sim$ |
| Courtesy light | $\sim$ | $\sim$ |
| Accessory 24 Vdc power supply | 1 A | 350 mA |

## SPECIAL FUNCTIONS

| Limit stop slowdown | $\sim$ | $\sim$ |
| :--- | :--- | :--- |
| Electronic slowdown | Yes | Yes |
| Anti-crushing | $\sim$ | Yes - with encoder |
| Electronic torque control | Yes | Yes |
| Motor braking | Yes | Yes |
| Built-in 433.92 MHz <br> superheterodyne receiver | Yes | Yes |
| safety tests | Yes | Yes |

OPERATING MODES

| Automatic standard | Yes | Yes |
| :--- | :--- | :--- |
| Automatic super | Yes | Yes |
| Automatic with Stop | $\sim$ | Yes |
| Semi-automatic with Stop | Yes | Yes |
| Semi-automatic Open/Close | $\sim$ | $\sim$ |
| Dead man | $\sim$ | $\sim$ |
|  |  |  |
| SETTINGS | $\sim$ | $\sim$ |
| Operating time | Yes | Yes |
| Pause time | Yes | $\sim$ |
| Wing delay on closing | Yes | Yes |
| Braking delay | Yes | Yes |
| Torque adjustment | Yes | Yes |
| Slowdown |  |  |

## TECHNICAL SPECIFICATIONS OF PROFESSIONAL CONTROL UNITS



## OPERATING MODES

| Automatic Standard | Sì | sì |
| :--- | :--- | :--- |
| Automatic Super | $\sim$ | $\sim$ |
| Automatic with stop Stop | $\sim$ | $\sim$ |
| Semi-Automatic with stop | sì | sì |
| Semi-Automatic open/close | sì | $\sim$ |
| Dead man | sì | $\sim$ |

## SETTINGS

| Operating time | Yes | $\sim$ |
| :--- | :--- | :--- |
| Pause time | Yes | $\sim$ |
| Wing delay on closing | $\sim$ | Yes |
| Braking delay | $\sim$ | $\sim$ |
| Torque adjustment | Yes | $\sim$ |
| Slowdown |  | Yes |

Elettroset and Elettrokit:
flexible and easy use for any automation system
COMPATIBILITY WITH APRIMATIC OPERATORS

\section*{ELETTROSET FOR SLIDING GATES / ELETTROKIT <br> 

## SWING GATE ELETTROSET / ELETTROKIT



## ELETTROKIT FOR TRAFFIC BARRIERS



230 V 433.92 MHz Elettrokit 24 V 433.92 MHz Elettrokit

Price kit 41615/801: 442,63 euro


| ES 433.92 MHz SLIDING GATE ELETTROSET |  |
| :---: | :---: |
| ITEM NUMBER | DESCRIPTION |
| 41626/001 | - SC230 Electronic control unit with 433.92 MHz built-in radio receviver |
| 41929/003 | - 433.92 MHz antenna |
| 41905/004 | - Two TM4 433.92 MHz four-channel transmitters |
| 41840/006 | - ET2N - 24V flashing light |
| 41812/008 | - ER 12-24V pair of photocells |
| 41830/007 | - PC12E Wall-mounted key-operated switch <br> - Signal panel |



Price kit 41605/802 : 418,71 euro
The kit includes:

| ESB 433.92 MHZ SWING GATE ELETTROSET |  |
| :---: | :---: |
| ITEM NUMBER | DESCRIPTION |
| 41628/001 | - BA230 Electronic control unit with 433.92 MHz built-in radio receviver |
| 41929/003 | - 433.92 MHz antenna kit |
| 41905/004 | - Two TM4 433.92 MHz four-channel transmitters |
| 41840/006 | - ET2N-24V flashing light |
| 41812/008 | - ER 12-24V pair of photocells |
| 41830/007 | - PC12E wall-mounted key-operated switch <br> - Signal panel |

Price kit 41700/800: 231,85 euro
The kit includes:
ELETTROKIT EKK - 230 V

ITEM NUMBER DESCRIPTION

| 41929/003 | - 433.92 MHz antenna kit |
| :--- | :--- |
| $\mathbf{4 1 9 0 5 / 0 0 4}$ | - Two TM4 433.92 MHz four-channel transmitters |
| $\mathbf{4 1 8 4 1 / 0 0 9}$ | - ET20N - 230 V flashing light |
| $\mathbf{4 1 8 1 2 / 0 0 8}$ | - ER 12-24V Pair of photocells |
| $\mathbf{4 1 8 3 0 / 0 0 7}$ | - PC12E Wall-mounted key-operated switch <br> -Signal panel |

Price kit 41700/801: 237,61 euro
The kit includes:

| ELETTROKIT EKK - 24 V |  |
| :--- | :--- |
| ITEM NUMBER | DESCRIPTION |
| 41929/003 | -433.92 MHz antenna kit |
| $41905 / 004$ | - Two TM4 433.92 MHz four-channel transmitters |
| 41840/006 | - ET2N - 24V LED flashing light |
| 41812/008 | - ER 12-24V Pair of photocells |
| $41830 / 007$ | - PC12E Wall-mounted key-operated switch <br> -Signal panel |

## ACCESS CONTROL MEMORY SYSTEM 433.92

MEMORY SYSTEM is the perfect radio access control solution for residential and industrial buildings, condominiums, car-parks, clubs, tourist ports and other community applications.
Technology, design and special dedicated access control functions make of Memory System an indispensable tool for advanced installers wishing to attract new customers by guaranteeing maximum security. Memory System's access management functions make it far more than just another remote opening system and allow installations to be managed with far greater professionalism and skill.

## 4- and 14-KEY ROLLING CODE REMOTE CONTROLS

- A single code set from

72,000,000,000,000,000 possible combinations guarantees maximum user security.

- Attractive, stylish design in clear orange and red, and excellent ergonomics.


## UNICO MEMORY SYSTEM RECEIVERS

Memory System receivers represent a unique hardware and software solution and can be expanded with up to 4 channels.

They are suitable for all installation types and all access control requirements.

- $24 \mathrm{Vdc} / \mathrm{Vac}$ power supply, low
consumption ( 20 mA max. in stand by).
- 104 dBm sensitivity, range from 40 to 120 m , front end radio frequency input filter.
- Hopping / rolling code decoding system.
- Radio code self-learning, beeper and flasher for code recognition.
- Standard removable memory module for up to 496 different codes. Optional module for over 2,000 codes.
- Standard relay output and relay modules for up to 3 expansion channels with 4 operating modes:
pulse, hold, step-by-step, and timer with programmable 1-255 second duration.


## APRITOOL HAND-HELD CONFIGURATION TOOL

A portable hand-held configuration tool capable of installer code configuration, renewal, disabling and cancelling even wirelessly; active channel selective disabling for each individual code; access management configuration (base, easy, special, super); data storage on receiver memory modules; update download onto a PC.

## APRIBASE1 CONFIGURATION BASE

A configuration base for remote controls, receivers and memory modules.
For use in conjunction with Apricot
Manager software or the Apritool
configuration tool.
Complete with serial cable for connection to a PC or to the Apritool configuration tool.

## APRICOT MANAGER ACCESS

## MANAGEMENT SOFTWARE

Apricot Manager software allows installers to make full, simple and intuitive use of all Memory System access management functions (user identification, lost code cancellation, hierarchic access control, etc.). The powerful database also allows you to archive all installation data for easier maintenance and warranty management etc.

## REMOTE CONTROLS AND RECEIVERS

| MEMORY SYSTEM 433.92 MHZ |  |  |
| :--- | :--- | :--- |
|  | ITEM NUMBER | DESCRIPTION |


| ACCESSORIES FOR UNICO MEMORY SYSTEM RECEIVER 41923/009 |  |  |
| :--- | :--- | :--- |
| ITEM NUMBER | DESCRIPTION |  |
|  |  |  |

PORTABLE HAND-HELD CONFIGURATION TOOLS


CONFIGURATION TOOL
AND CONFIGURATION BASE FOR REMOTE CONTROLS AND RECEIVERS

Customise Installer code and System code. Select access management functions. Select receiver output channel functions: pulse, hold, step-by-step and timer with 1-255 s programmable duration. Configure codes in memory modules or internal buffers. Configure remote controls with code customisation.

Read remote controls.
Identify, read, edit and transfer data to and from memory modules. Cancel and disable memory module codes. Edit memory module function parameters. Program remote controls to duplicate, replace and disable codes by radio. Transfer data to and from PC.

HAND-HELD CONFIGURATION TOOL

|  | ITEM NUMBER | DESCRIPTION |
| :--- | :--- | :--- |
| $\mathbf{4 1 9 3 0 / 0 0 5}$ | The APRITOOL hand-held configuration tool must always be combined with <br> APRIBASE1 |  |
| $\mathbf{4 1 9 3 0 / 0 0 1}$ | Apribase 1-Configuration base for memory modules and remote controls, <br> complete with power unit and battery charger for configuration tool |  |

41930/102

APRICOT SOFTWARE


## APRICOT MANAGER

is the software allowing to make full and simple use of all Memory System access management functions. It is also a very useful tool allowing the installer to store customer and system data, thus facilitating maintenance operations, warranty management etc. Using Apricot Manager does not require any particular IT skills. The window-based interface allows to perform all operations in a simple and intuitive way.

The software is supplied on a self-installing CD-ROM for PC with the following operating systems: Windows 95, 97, 2000, NT. Any prohibited or potentially dangerous operations that could compromise the integrity of stored data are protected against operator errors. Access to the application is protected by a password that can be customised by the user. Installation is protected with unique user number for each support.

| COMMON ACCESSORIES |  |  |
| :--- | :--- | :--- |
|  | ITEM NUMBER | DESCRIPTION |
|  |  | Apricot Manager, Windows XP version (multi-language) - Access control <br> Software on self-installing CD-ROM only for PC with Windows XP operating <br> system (No Notebook) always in combination with APRIBASE1 |

Note : Ask availability to Customer Service.

## OTHER ACCESS CONTROL SYSTEMS

## PROXIMITY READERS



|  | ITEM NUMBER | DESCRIPTION |
| :--- | :--- | :--- |
|  |  | PR5 - Proximity reader <br> always in combination with the DEC/A 41820/050 decoding card |

* For multiple purchases, always consider 1 extra TAG to be used as a Master.


## DECODER



## DEC/A

Decoder card with 256 codes
for access control systems.
Plug-in installation on Aprimatic control units. DEC/A is compatible with the PR5 proximity sensor; CT4 keypad and LB4 magnetic card reader. It replaces the previous range of Aprimatic decoders (DC/3 and DB/4).

| TECHNICAL DATA |  |
| :--- | :--- |
| POWER SUPPLY | $24 \mathrm{Vdc} \pm 15 \%$ |
| INSTALLATION | Plug-in |
| NUMBER OF <br> STORABLE CODES | 256 |
| READER <br> CONNECTION | 3-wire bus |
| DIMENSIONS | $\mathrm{mm} \mathrm{105} \mathrm{\times 65} \mathrm{\times 30}$ |


| ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| $41820 / 050$ | DEC/A - Access control decoder with 256 codes | 85,77 |

[^26]
## KEYBOARD COMBINATION LOCK

|  | ITEM NUMBER | DESCRIPTION |
| :--- | :--- | :--- |
|  | 41800/002 | CT4 - Electronic keyboard combination lock with capacitive keypad for over <br> 2 billion possible combinations, data transmission on serial cable between |
|  |  | the keyboard and the decoding card ensures tamper-proof protection. |

CARD AND MAGNETIC KEY READERS

|  | ITEM NUMBER | DESCRIPTION |
| :--- | :--- | :--- |
|  |  | LB4 - Tamper-proof magnetic card reader with over 2 billion possible <br> combinations, data transmission on a serial cable between the reader and <br> the decoding card ensures tamper-proof protection. Always in combination <br> with the DEC/A 41820/050 decoding card. |
|  |  |  |

*Item out-of stock. Request availability to back Office

ANTI-TAMPER KEY-OPERATED SWITCHES

|  | ITEM NUMBER |
| :--- | :--- |
| DESCRIPTION | PM12 - Two-contact metal key-operated switch for wall- or post-mounting |
| 41830/006 | PC12 - Two-contact key-operated switch, accessories are available for |
| recessed post- and wall-mounting and for external wall- and post-mounting |  |



FLASHING LIGHTS

| ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| $\mathbf{4 1 8 4 0 / 0 0 6 *}$ | ET 2N -24 V LED flashing light | 42,30 |
| $\mathbf{4 1 8 4 1 / 0 0 \boldsymbol { q } ^ { * }}$ | ET 20N -230 V single flashing lamp | 32,45 |
| $\mathbf{4 1 8 4 1 / 0 0 1}$ | ET $22-230$ V double flashing lamp | 62,59 |
| $\mathbf{4 1 9 2 9 / 0 0 3}$ | 433.92 MHz antenna kit for ET2N and ET20N | 18,48 |

* Sold without antenna kit

NOTE: All prices are subject to variation

## METAL DETECTOR

|  | ITEM NUMBER | DESCRIPTION |
| :--- | :--- | :--- |
|  | $41801 / 004$ | 230 V single channel Loop Detector |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## STRAIGHT EDGES



Straight edges consist of an aluminium support profile with a rubber profile containing the steel cable system for obstacle detection.

| ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| $\mathbf{4 1 8 5 0 / 0 0 2}$ | CF1M -1.5 m straight safety edge | 75,57 |
| $\mathbf{4 1 8 5 0 / 0 0 3}$ | CF2M -2.0 m straight safety edge | 80,46 |
| $\mathbf{4 1 8 5 0 / 0 0 4}$ | CF3M -3.0 m straight safety edge | 87,56 |
| $\mathbf{4 1 8 5 0 / 0 0 1}$ | CF3MS -3.0 m straight safety edge lthin and specific for garage doors) | 79,19 |

## RADIO BAND



| ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| $\mathbf{4 1 9 0 6 / 0 0 1}$ | TBX 868 MHz - Radio Band transmitter | 150,68 |
| $\mathbf{4 1 9 2 6 / 0 0 1}$ | RU $868 \mathrm{MHz}-$ Radio Band receiver | 170,96 |

OPTIONAL POWER UNITS

|  | ITEM NUMBER | DESCRIPTION |
| :--- | :--- | :--- |
|  | 41703/002 | AL1-24 Vdc 500 mA power unit for independent control of electric locks, relays, <br> CT4 keyboard combination lock, LB4 badge reader, with preset connection <br> for DC/3 and DB/4 decoding cards |

## PHOTOCELLS



ER12-24V - MINI PHOTOCELLS FOR WALL-MOUNTING

The ER12-24V photocells, with $20-\mathrm{m}$ maximum range, are designed to be welded onto a post or wall-mounted and require no recess. The elements are self-aligning and therefore need no adjustments.

The transmitter and receiver are infrared-modulated and therefore unaffected by sun disturbances or bright direct light.
IP45 protection degree guaranteed by a special rubber seal that prevents water infiltrations.

| ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
| :--- | :--- | :---: |
| $41812 / 008$ | ER12-24V - Modulated infrared photocells, 12-24 Vac power supply, for post- or wall-mounting | 71,16 |



## ER2N - PHOTOCELLS FOR

RECESSED MOUNTING
ER2N photocells are equipped with
an adjustment system that keeps them perfectly aligned. The modulated infrared beam makes them unaffected by sun disturbances or bright direct light.

| ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
| :--- | :--- | :---: |
| $\mathbf{4 1 8 1 1 / 0 0 1}$ | ER2N - Modulated infrared photocells, 24 Vdc/Vac, for post mounting, recessed mounting <br> or inside a container to be welded, max. range 40 m | 95,62 |

## REFLEX PHOTOCELLS

REFLEX - PHOTOCELL WITH


REFLECTION OF POLARISED LIGHT FOR AUTOMATIC GATES.

Quick installation (on wall or support post) because it requires wiring only to one end of the gate; the round reflector must be secured at the same height as the photocell, on the other end of the gate. Extremely reliable, because it can detect even highly reflective objects,
such as mirrors or glossy surfaces. Extremely easy photocell alignment: thanks to the analogue pointing LED, finding the best efficiency point is easy. An optional accessory is available to protect the reflector from bumps and splashes.

| ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| $\mathbf{4 1 8 1 0 / 0 0 2}$ | REFLEX - Photocell with reflection of polarised light | 97,94 |
| $\mathbf{4 1 8 1 0 / 0 5 0}$ | Reflector protection | 12,95 |

TECHNICAL DATA

| POWER SUPPLY | $24 \mathrm{Vdc} / \mathrm{Vac}$ |
| :--- | :--- |
| MAX. ABSORBED POWER | 3 W |
| MAX. RANGE RECEIVER RELAY CONTACT | $1 \mathrm{~A}-24 \mathrm{Vdc}$ for resistive loads; $0.5 \mathrm{~A}-24 \mathrm{Vdc}$ for non-resistive loads |
| INTERVENTION TIME | 20 ms |
| MAX. OPERATING DISTANCE | nominal 12 m |
| OPERATING TEMPERATURE | $-15^{\circ}+70^{\circ} \mathrm{C}$ |
| RELATIVE HUMIDITY | $<90 \%$ non condensing |
| LIGHT REJECTION | 20000 lux |
| PROTECTION DEGREE | IP 45 |
| APPLICATION FIELD | For use in protected environments lindoors, under porches, etc.) |

[^27]PHOTOCELLS


## ER180B - BATTERY-POWERED PHOTOCELLS FOR WALL-MOUNTING

The ER180B photocells are equipped with lenses adjustable up to $180^{\circ}$. The TX transmitter is powered by 21.5 V batteries ( $2 \times \mathrm{AAA}$ or LR03)
with a maximum duration of 30 months. The RX receiver is powered by a $12-24 \mathrm{Vac} /$ dc current through the system's electronic control unit.


| ITEM NUMBER | DESCRIPTION <br> Foundation plate for $41811 / 050$ or $41812 / 052$ or $41812 / 050$ posts <br> (pack of 4 pcs ) |
| :--- | :--- |
| $\mathbf{4 1 8 1 2 / 0 5 1}$ | Bracket for metal pillar connection complete with screws to be matched <br> to $41830 / 050$ or $41830 / 054$ metal container (pack of 4 pcs) |

## INSTALLATION ACCESSORIES FOR OPERATORS

## ELECTRIC LOCK AND ACCESSORIES FOR EXTERNAL SWING GATE OPERATORS

|  | ITEM NUMBER | DESCRIPTION |
| :--- | :--- | :--- |
| 41080/008 | ES3 - 12 Vac Electric lock complete with ground striker plate <br> (requires CL1 or CL2) |  |

INSTALLATION ACCESSORIES

|  | ITEM NUMBER | DESCRIPTION |
| :--- | :--- | :--- |
| 41080/003 | Welding plate for vertical fitting of ES3 | $\boldsymbol{\epsilon}$ |
|  |  |  |
|  |  |  |
|  |  |  |

## INSTALLATION ACCESSORIES FOR OPERATORS

| ACCESSORIES FOR EXTERNAL OPERATORS: |  |  |
| :--- | :--- | :--- |
|  | ITEM NUMBER | DESCRIPTION |
|  |  | Front and rear bolt-on fixing plates |

SIGNAL PANEL


| ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| APMA5845000 | Aprimatic signal panel | 3,56 |

## 01. <br> ROLLING SHUTTERS

AUTOMATION<br>SYSTEMS<br>FOR SHUTTERS AND SUN BLINDS<br>TUBULAR MOTORS:<br>- REVOLUX SERIES<br>AUTOMATION<br>SYSTEMS<br>FOR ROLLING GATES<br>SERIES ROLLING SHUTTER MOTORS:<br>- RO-MATIC RS140<br>- RO-MATIC RS180



## ROLLING SHUTTERS

## TYPES

## ROLLING SHUTTER MOTORS

Automation system used for standard rolling shutters or rolling shutters with container.

BLIND MOTORS

Automation system used for technicalfabric curtains, which can be installed in small premises as a sun-block, or as a projector screen. The same can be fitted on folding-arm sun blinds.


Revolux 35 series
Revolux 35 Wireless series
Revolux 45 series
Revolux 45 Wireless series
Revolux 59 series
Revolux 92 series

ROLLING GATE MOTORS

Automation system used for closing premises used for residential and commercial use.


RO-MATIC RS140 series R0-MATIC RS180 series

## SHUTTERS AND SUN BLINDS: TYPICAL SYSTEM COMPOSITION

1) Operator with and without on-board receiver: device that allows powering a rolling shutter or sun blind with an external power supply
2) Accessories for installing/fixing the motor;
3) Transmitter: wireless equipment that transmits information to the control unit.


## ROLLING GATES: TYPICAL SYSTEM COMPOSITION

1) Operator: device for shutter operation with an external power supply.
2) Control unit: electronic unit for handling the operator movement
3) Transmitter: wireless equipment that transmits information to the control unit.
4) Antenna: device that increases the reception of the signals sent by the transmitter.
5) Flashing light: light signalling that the automation is moving
6) Pair of photocells: safety devices stopping automation movement in the presence of obstacles.
7) Control unit: allows
to activate the movement
of the automation through a mechanical or electronic key.


## THE RANGE

## Aprimatic's range of tubular motors

for rolling shutters and sun blinds is extremely reliable, fast, and silent and offers performance to satisfy even the most demanding users.
Available with wired or wireless controls.

SMS model: without emergency operation (ideal for rolling shutters) CMS model: with emergency operation (ideal for sun blinds). Device allowing, with the necessary accessories, to perform manual operation with the relevant rod.

Models with mechanical limit stops:
easy adjustment facilitated by the presence of 2 mechanical settings on the motor head.
Models with electronic limit stops:
limit stop adjustment via electric pulse

## REVOLUX TUBULAR MOTORS

Tubular motors for rolling shutters and sun blinds.


SERIES 35 TUBULAR MOTORS WITHOUT EMERGENCY OPERATION


SERIES 45 TUBULAR MOTORS WITH EMERGENCY OPERATION


SERIES 92 TUBULAR MOTORS WITH EMERGENCY OPERATION


SERIES 45S SHORT TUBULAR MOTORS WITHOUT EMERGENCY OPERATION


SERIES 59 TUBULAR MOTORS WITHOUT EMERGENCY OPERATION

New series 92 motors: the best solution for the automation of rolling gates or mesh gates (weighing up to max. 350 kg ).


ROLLER KIT REVOLUX


SERIES 45 TUBULAR MOTORS WITHOUT EMERGENCY OPERATION


SERIES 59 TUBULAR MOTORS WITH EMERGENCY OPERATION


RO-MATIC RS140 / RS180
Operator for rolling gates, for residential use.

NEW WIRELESS SYSTEMS

The entire range of Aprimatic Revolux, known for its performance and reliability, is now available in a wireless version, with built-in receiver.

Available new MP version tubular motors, with built-in receiver for the management of the movement of adjustable shutters.


## RADIO CONTROLS FOR (( $)$ ) REVOLUX WIRELESS

 TUBULAR MOTORSRevolux wireless series radio control to manage up to 5 tubular motors


# CHOOSING THE RIGHT PRODUCT ROLLING SHUTTER AUTOMATION SYSTEMS 

WEIGHT $=\frac{\text { Nominal motor torque }(\mathrm{Nm})}{\text { Lifting lever }(\mathrm{m})}$

The nominal motor torque in Nm (Newton metre) is indicated on the motor label. The lifting force is obtained by adding the radius of the winding roller (R1 in the drawing) and half the thickness of the shutter ( R 2 in the drawing) or half the length of the rope supporting the applied weight.

## EXAMPLE IN METRES

Motor rated torque 45 Nm
Pipe diameter $60 \mathrm{~mm}-\mathrm{R} 1=30 \mathrm{~mm}(0.030 \mathrm{~m})$


WEIGHT $=\frac{45 \mathrm{Nm}}{0,030 \mathrm{~m}+0,005}=\frac{45 \mathrm{Nm}}{0,035 \mathrm{~m}}=$
This motor can lift a free weight of 131 kg However, application on window frames and rolling shutters requires safety coefficients of up to $50 \%$. Therefore the maximum weight that can be lifted by the motor must be divided in half, and thus is 65 kg .

The tables to the side allow the selection of a motor in relation to the diameter of the winding roller and the weight of the rolling shutter. The weight of the rolling shutter in kg can be obtained by multiplying the area by the weight per $\mathrm{m}^{2}$ of the material it is made of.

## WARNING

The weights shown in the tables are calculated with a $50 \%$ margin (considering friction, winding diameter increase, etc.). Oversizing or downsizing the motor is not recommended.

| WINDING MATERIAL | $\mathbf{K g}$ for $\mathbf{m}^{2}$ |
| :--- | :--- |
| ALUMINIUM WITH POLYURETHANE FOAM | 3,5 |
| ALUMINIUM WITH HD POLYURETHANE FOAM | 4,8 |
| PVC | 6,0 |
| WOOD | 8,5 |
| EXTRUDED ALUMINIUM | 9,0 |
| STEEL WITH POLYURETHANE FOAM | 9,5 |
| STEEL WITH HD POLYURETHANE FOAM | 10,5 |
| STEEL | 11,0 |



ROLLING SHUTTER AUTOMATION SYSTEMS


| MINIMUM CONFIGURATION - TUBULAR MOTOR WITHOUT EMERGENCY OPERATION |  |  |  |
| :---: | :---: | :---: | :---: |
| Ref. | Component | Notes | Page |
| 1 | Tubular motor | Revolux 35 series Motors (models from 6Nm to 10Nm) | 133 |
|  |  | Revolux 45 series Motors ( $20 \mathrm{Nm}-30 \mathrm{Nm}-50 \mathrm{Nm}$ models) | 134 |
|  |  | Revolux 59 series Motors ( $80 \mathrm{Nm}-100 \mathrm{Nm}-120 \mathrm{Nm}$ models) | 137 |
|  |  | Revolux 92 series Motors (230Nm model) | 138 |
| 2 | Motor fixing accessories | Revolux 35 series | 133 |
|  |  | Revolux 45 series | 136-137 |
|  |  | Revolux 59 series | 138 |
|  |  | Revolux 92 series | 146 |
| 3 | Pipe adapters | Revolux 35 series | 133 |
|  |  | Revolux 45 series | 136 |
|  |  | Revolux 59 series | 145 |
|  |  | Revolux 92 series | 138 |


| OPTIONAL ACCESSORIES |  |  |  |
| :--- | :--- | :--- | :--- |
| Ref. | Component | Notes | Page |
| 4 | Octagonal pipe |  | 139 |
| 5 | Cap with round adjustable pivot |  | 139 |



## CHOOSING THE RIGHT PRODUCT AUTOMATION SYSTEMS FOR BLINDS

| NUMBER OF ARMS | ARM PROTRUSION (m) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1,5 m | 2 m | 2,5 m | 3 m | 3,5 m | 4 m | 5 m |
| 2 | $\square$ | - | - | - | - | - | - |
| 4 | $\square$ | $\square$ | $\square$ | $\square$ | - | - | $\sim$ |
| 6 | $\square$ | $\square$ | $\square$ | $\square$ | ~ | ~ | ~ |
| 8 | $\square$ | - | $\sim$ | $\sim$ | $\sim$ | $\sim$ | $\sim$ |

NOTE: Winding and friction coefficents included.

70 mm DIAMETER AND ROUND OGIVE ROLLER

| NUMBER OF ARMS | ARM PROTRUSION (m) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1,5 m | 2 m | 2,5 m | 3 m | 3,5 m | 4 m | 5 m |
| 2 | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 4 | $\square$ | - | $\square$ | $\square$ | $\square$ | $\square$ |  |
| 6 |  | $\square$ | - | $\square$ | $\square$ | $\square$ | $\square$ |
| 8 |  |  |  |  | $\square$ |  |  |

NOTE: Winding and friction coefficents included.

78 mm DIAMETER AND ROUND OGIVE ROLLER

| NUMBER OF ARMS | ARM PROTRUSION (m) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1,5 m | 2 m | 2,5 m | 3 m | 3,5 m | 4 m | 5 m |
| 2 | - | - | - | - | - | - | - |
| 4 | $\square$ | $\square$ | - | $\square$ | $\square$ | $\square$ |  |
| 6 | $\square$ |  |  |  |  | $\square$ |  |
| 8 |  |  |  |  | - | - | $\sim$ |

[^28]| KEY |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  |

AUTOMATION SYSTEMS FOR BLINDS

Tubular operator on sun blinds


| MINIMUM CONFIGURATION - TUBULAR MOTOR WITHOUT EMERGENCY OPERATION |  |  |  |
| :--- | :--- | :--- | :--- |
| Ref. | Component | Notes | Page |
| 1 | Tubular motor | Revolux Series 35 Motors (models from 6Nm to 10Nm) | 133 |
|  |  | Revolux Series 45 Motors (20Nm - 30Nm - 50nm models) | $133-134-135$ |
|  |  | Revolux 59 Series Motors (80Nm - 100Nm - 120Nm models) | 137 |
| 2 | Motor fixing accessories | Revolux 35 series | 133 |
|  |  | Revolux 45 series | $136-137$ |
|  |  | Revolux 59 series | 138 |
| 3 | Pipe adapters | Revolux 35 series | 133 |
|  |  | Revolux 45 series | 136 |
|  |  | Revolux 59 series | 137 |
| 4 | Accessories for emergency operation | Revolux 45M series | 136 |
|  |  | Revolux 59M series | 138 |


| OPTIONAL ACCESSORIES |  |  |  |
| :--- | :--- | :--- | :--- |
| Ref. | Component | Notes | Page |
| 5 | Rod for manual emergency operation |  | 139 |

## REVOLUX TUBOLAR MOTORS

Tubular motors for rolling shutters and sun blinds.


The motors can be combined with ADI control units, thus allowing the creation of fully-automated systems even with radio controls.

The wide availability of adapters and installation accessories allows to meet any application requirement.

3 automation kits are available for $30 \mathrm{~kg}, 60 \mathrm{~kg}$ and 90 kg shutters respectively, complete with accessories for installation.

The motors of the series 45,59 and 92 are also available in CSM versions, i.e., equipped with emergency operation for manual opening in case of power supply failure.

| TECHNICAL DATA |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SERIES | MODEL <br> (S without emergency operation) <br> ( $M$ with emergency operation) | TORQUE ( Nm ) | $\begin{aligned} & \text { POWER } \\ & \text { (W) } \end{aligned}$ | SPEED (rpm) | DIAMETER <br> (ø) |
| 35 | 35S 10Nm/17 | 10 | 121 | 17 | 35 |
|  | 35S 6Nm/28F | 6 | 121 | 28 | 35 |
| 45 | 45 S 20 Nm - 45M 20Nm | 20 | 145 | 15 | 45 |
|  | 45 S 30 Nm - 45 M 30 Nm | 30 | 191 | 15 | 45 |
|  | 45 S 50 Nm - 45 M 50 Nm | 50 | 191 | 12 | 45 |
| 59 | $59 \mathrm{~S} 80 \mathrm{Nm}-59 \mathrm{M} 80 \mathrm{Nm}$ | 80 | 298 | 15 | 60 |
|  | $59 \mathrm{~S} \mathrm{100Nm-59M} \mathrm{100Nm}$ | 100 | 305 | 12 | 60 |
|  | $59 \mathrm{~S} \mathrm{120Nm-59M} \mathrm{120Nm}$ | 120 | 305 | 9 | 60 |
| 92 | 92S 230Nm - 92M 230Nm | 230 | 602 | 12 | 92 |

For all 45 and 59 series models, the operating time is 4 minutes.

Engine equipped with a 1.9 m cable for electrical connection.
A simple device allows easy and accurate limit stop adjustment.

## ROLLER KIT REVOLUX



MOTORS WITHOUT EMERGENCY OPERATION AND MECHANICAL LIMIT STOPS

| ITEM NUMBER | KIT DESCRIPTION | Max. weight | $\boldsymbol{€}$ |
| :---: | :---: | :---: | :---: |
| 43302/802 | ROLLER KIT 30 kg ( $45 \mathrm{~S}-20 \mathrm{Nm}$ ) | $\emptyset 60 \quad 35 \mathrm{~kg}$ | 178,79 |
| 43302/803 | ROLLER KIT $60 \mathrm{~kg}(455-30 \mathrm{Nm})$ | $\emptyset 60 \quad 56 \mathrm{~kg}$ | 191,03 |
| 43302/804 | ROLLER KIT 90 kg (45S-50Nm) | $\emptyset 60 \quad 90 \mathrm{~kg}$ | 210,24 |
| The kits include |  |  |  |
| Revolux 45 S tubular motor ( 20 Nm -30Nm or 50 Nm version) |  |  |  |
| 43380/156 | Octagonal adapter - Ø60 |  | 5,30 |
| 43380/057 | Bracket with square shaft 10 for direct insertion in existing walls |  | 13,10 |
| 43380/083 | Support with square shaft 10 |  | 6,39 |

[^29]
## SERIES 35 TUBULAR MOTORS WITHOUT EMERGENCY OPERATION*



| MOTOR WITHOUT EMERGENCY OPERATION AND MECHANICAL LIMIT STOP |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | ---: | :---: | :---: |
| ITEM NUMBER | DESCRIPTION | Max. weight** | $\boldsymbol{€}$ |  |  |  |
| $43300 / 001$ | REVOLUX 35S 10Nm | $\emptyset 40$ | 20 kg | 142,11 |  |  |
| $43300 / 002$ | REVOLUX 35S 6Nm | $\emptyset 40$ | 20 kg | 142,11 |  |  |

${ }^{* *}$ see Table on page 128


WIRELESS MOTOR WITHOUT EMERGENCY OPERATION AND ELECTRONIC LIMIT STOPS


| ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| $\mathbf{4 3 8 0 0 / 0 0 1}$ | REVOLUX WIRELESS 35SMS 10Nm |  |
|  | 35mm diameter without manual emergency operation and with electronic limit stops. |  |
|  | Built-in receiver. |  |

DESCRIPTION OF SERIES 35 ACCESSORIES


NOTE: All described motors, except for the REVOLUX WIRELESS models, can be combined with ADI control units - See the "Home Automation" section of this catalogue (refer to the initial index).
(*) To complete the tubular motor installation, add an adapter to be chosen based on rolling shutter or blind winding roller, and a support to be chosen based on installation type. See the relevant pages on adapters and accessories for item selection.
NOTE: All prices are subject to variation

## TUBULAR MOTORS

SERIES 45 TUBULAR MOTORS WITHOUT EMERGENCY OPERATION*
MOTOR WITHOUT EMERGENCY OPERATION AND MECHANICAL LIMIT STOP

| ITEM NUMBER | DESCRIPTION | Max. weight** | $\boldsymbol{\epsilon}$ |
| :--- | :--- | :--- | :--- |
| $43302 / 011$ | REVOLUX 45S 10Nm | $\emptyset 6020 \mathrm{~kg}$ | 189,00 |

45S Short tubular motor is suitable for applications on small screens or shutters.
** see Table on page 128

## MOTORI TUBOLARI SERIE 45 SENZA MANOVRA DI SOCCORSO*


${ }^{* *}$ see Table on page 128


[^30]SERIES 45 TUBULAR MOTORS WITH EMERGENCY OPERATION*


MOTOR WITH EMERGENCY OPERATION AND MECHANICAL LIMIT STOP

| ITEM NUMBER | DESCRIPTION | Max. weight** $^{*}$ | $\boldsymbol{€}$ |  |
| :--- | :--- | :--- | :--- | ---: |
| $\mathbf{4 3 3 1 0 / 0 0 5}$ | REVOLUX 45M 20Nm | $\emptyset 60$ | 35 kg | 198,01 |
| $\mathbf{4 3 3 1 0 / 0 0 6}$ | REVOLUX 45M 30Nm | $\emptyset 60$ | 55 kg | 225,98 |
| $\mathbf{4 3 3 1 0 / 0 0 7}$ | REVOLUX 45M 50Nm | $\emptyset 60$ | 88 kg | 256,85 |

** see Table on page 128


| Mod. | A mm |
| :---: | :---: |
| 20 | 685 |
| 30 | 740 |
| 50 | 740 |


((o))
WIRELESS MOTOR WITH EMERGENCY OPERATION AND MECHANICAL LIMIT STOPS

| ITEM NUMBER | DESCRIPTION | $\mathbf{€}$ |
| :--- | :--- | ---: |
| $\mathbf{4 3 8 1 0 / 0 0 1}$ | REVOLUX WIRELESS 45CMS 20Nm | 266,78 |
|  | 45mm diameter with manual emergency operation and mechanical limit stops. |  |
| $\mathbf{4 3 8 1 0 / 0 0 2}$ | Built-in receiver. | REVOLUX WIRELESS 45CMS 30Nm |
|  | 45mm diameter with manual emergency operation and mechanical limit stops. | 302,46 |
| $\mathbf{4 3 8 1 0 / 0 0 3}$ | Built-in receiver. | REVOLUX WIRELESS 45CMS 50Nm |
|  | 45mm diameter with manual emergency operation and mechanical limit stops. |  |
|  | Built-in receiver. | 326,67 |

# RADIO CONTROLS FOR REVOLUX WIRELESS TUBULAR MOTORS 

((o))

| ITEM NUMBER | DESCRIPTION | € |
| :--- | :--- | :--- |
| $\mathbf{4 3 9 0 1 / 0 0 1}$ | 1-channel radio control for Revolux wireless tubular motors <br> Radio control for one tubular motor | 44,23 |
| $\mathbf{4 3 9 0 1 / 0 0 5}$ | 5-channel radio control for Revolux wireless tubular motors <br> Radio control for up to 5 tubular motors | 58,20 |

[^31]
## TUBULAR MOTORS

| DESCRIPTION OF ADAPTERS FOR SERIES 45 (SMS-CMS) MOTORS |  |  |  |
| :---: | :---: | :---: | :---: |
|  | ITEM NUMBER | DESCRIPTION | $\boldsymbol{€}$ |
| 0 | 43380/156 | Octagonal for 60 mm roller | 5,30 |
| (o) | 43380/161 | Octagonal for 70 mm roller (for 45S-50, 45M-50 motors) | 6,64 |
| $50$ | 43380/064 | Ogive for 70 mm roller | 14.54 |
|  | 43380/059 | Ogive for 78 mm roller | 12,54 |
| (0) | 43380/063 | Round for 50 mm roller | 7,67 |
| 0 | 43380/058 | Bonfanti-Gaviota | 9,59 |
| $(0)$ | 43380/060 | ZF54 adapter | 7,67 |



| DESCRIPTION OF ACCESSORIES FOR SERIES 45 CMS MOTORS |  |  |
| :--- | :--- | :--- |
|  | ITEM NUMBER | DESCRIPTION |
|  | Revolux 45M square shaft | 6,39 |


| DESCRIPTION OF COMMON ACCESSORIES FOR SERIES 45 MOTORS |  |  |
| :--- | :--- | :--- |
|  | ITEM NUMBER | DESCRIPTION |
|  | $43380 / 057$ | Adjustable support -45 S and 45 M |
|  | $43380 / 068$ | Support with release -45 S and 45 M |

SERIES 59 TUBULAR MOTORS WITHOUT EMERGENCY OPERATION*


SERIES 59 TUBULAR MOTORS WITH EMERGENCY OPERATION*


| DESCRIPTION OF ADAPTERS FOR SERIES 59 (SMS-CMS) MOTORS |  |  |
| :--- | :--- | :--- |
|  | ITEM NUMBER | DESCRIPTION |
|  | 43380/088 | Octagonal for 70 mm roller |

(*) To complete the tubular motor installation, add an adapter to be chosen based on rolling shutter or blind winding roller, and a support to be chosen based on installation type. See the relevant pages on adapters and accessories for item selection.
NOTE: All prices are subject to variation

## TUBULAR MOTORS

| DESCRIPTION OF ACCESSORIES FOR SERIES 59 SMS MOTORS |  |  |
| :--- | :--- | :--- |
|  | ITEM NUMBER | DESCRIPTION |


| DESCRIPTION OF ACCESSORIES FOR SERIES 59 CMS MOTORS |  |  |  |
| :---: | :---: | :---: | :---: |
|  | ITEM NUMBER | DESCRIPTION | € |
|  | 43380/081 | Revolux 59M Square shaft | 6,39 |
|  | 43380/086 | Revolux 59 M Support kit with square shaft | 7,57 |
| DESCRIPTION OF COMMON ACCESSORIES FOR SERIES 59 MOTORS |  |  |  |
|  | ITEM NUMBER | DESCRIPTION | $\epsilon$ |
|  | 43380/099 | Adjustable support - Revolux 59S and 59M | 8,11 |
|  | 43380/100 | Wall support - Revolux 59S and 59M | 8,11 |

SERIES 92 TUBULAR MOTORS WITHOUT EMERGENCY OPERATION*


MOTOR WITHOUT EMERGENCY OPERATION AND WITH MECHANICAL LIMIT STOP

| ITEM NUMBER | DESCRIPTION | Max. weight** | $\boldsymbol{\epsilon}$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{4 3 3 4 0 / 0 0 1}$ | $92 S-230$ | $\emptyset 92$ | 350 kg | 530,59 | $* *$ see Table on page 128 |

## SERIES 92 TUBULAR MOTORS WITH EMERGENCY OPERATION*



| DESCRIZIONE ACCESSORI PER MOTORI SERIE 92 |  |  |
| :--- | :--- | :--- |
|  | ITEM NUMBER | DESCRIPTION |
|  | $43380 / 118$ | Round for $\varnothing 108 \mathrm{~mm}$ roller |
|  |  |  |
|  | $43380 / 125$ | Round for $\emptyset 97 \mathrm{~mm}$ roller |
|  |  |  |

(*) To complete the tubular motor installation, add an adapter to be chosen based on rolling shutter or blind winding roller, and a support to be chosen based on installation type. See the relevant pages on adapters and accessories for item selection.
NOTE: All prices are subject to variation

## COMMON ACCESSORIES

|  | ITEM NUMBER | DESCRIPTION | € |
| :---: | :---: | :---: | :---: |
|  | 43380/094 | Octagonal pipe $\emptyset 60$ (in 3 m bars) | 27,3 |
|  | 43380/095 | Octagonal pipe Ø 70 (in 3 m bars) | 49,15 |
|  | 43380/066 | Masonry camp | 4,06 |
|  | 43380/072 | $90^{\circ} 4$-hole articulation with 7 mm hexagonal rod eyelet $\mathrm{L}=250 \mathrm{~mm}$ * | 37,51 |
|  | 43380/071 | $45^{\circ}$ 2-hole articulation with 7 mm hexagonal rod eyelet $\mathrm{L}=400 \mathrm{~mm}$ * | 43,37 |
|  | 43380/093 | $45^{\circ}$ articulation with joint** | 30,58 |
|  | 43380/106 | Linear joint ** | 5,22 |
|  | 43380/089 | Articulated joint ** | 6,39 |
|  | 43380/090 | Hook for steel rod L=81 mm ** | 8,71 |
|  | 43380/112 | Hook for steel rod L=108 mm ** | 7,99 |
|  | 43380/096 | Rod for emergency manual operation $\mathrm{L}=150 \mathrm{mm*}$ | 27,27 |
|  | 43380/070 | Rod with hook and articulated handle L=150 mm* | 46,96 |
|  | 43380/097 | End piece with adjustable round pin for $\emptyset 60 \mathrm{~mm}$ octagonal pipe | 10,03 |
|  | 43380/098 | End piece with adjustable round pin for $\emptyset 70 \mathrm{~mm}$ octagonal pipe | 10,61 |
|  | 43380/113 | End piece for $\emptyset 60 \mathrm{~mm}$ octagonal pipe | 4,51 |
|  | 43380/114 | End piece for $\emptyset 70 \mathrm{~mm}$ octagonal pipe | 15,99 |
|  | 43380/073 | Safety spring spring for $\emptyset 60$ octagonal pipe | 31,44 |
|  | 43380/076 | Safety spring spring for $\varnothing 70$ octagonal pipe | 31,90 |

* Accessories specific for series 45M and 59M with emergency operation.
** Accessories specific for series 59M only.
NOTE: All prices are subject to variation



## R0-MATIC RS140 / RS180

## R0-MATIC RS140 / RS180

## Operator for rolling gates

 for residential use.

| TECHNICAL DATA | RO-MATIC 140 | RO-MATIC 180 |
| :--- | :--- | :--- |
| POWER SUPPLY | 230 V | 230 V |
| ABSORBED CURRENT | $2,5 \mathrm{~A}$ | $3,1 \mathrm{~A}$ |
| ABSORBED POWER | 520 W | 650 W |
| NOMINAL TORQUE | 140 Nm | 180 Nm |
|  | 130 Nm (vers. EB) | 170 Nm (vers. EB) |
| MAX. LIFTING FORCE | 140 kg | 180 kg |
| REV/I | 10 n | 10 n |
| CAPACITOR | $18 \mu \mathrm{~F}$ | $22 \mu \mathrm{~F}$ |
| OPERATING TEMPERATURE | $-20^{\circ} \mathrm{C}$ | $-20^{\circ}+85^{\circ} \mathrm{C}$ |
| ROLLING GATE MAX. HEIGHT | 6 m | 6 m |
| PROTECTION DEGREE | $\mathrm{IP30}$ | $\mathrm{IP30}$ |

R0-MATIC RS RS140 / RS180 (reversible) for rolling gates with $48 / 60 \mathrm{~mm}$ pole and $200 / 220 \mathrm{~mm}$ spring holder is a cost-effective solution for quick and easy installation of rolling gates up to 140 kg (RO-MATIC RS 140 model) and 180 kg (RO-MATIC RS 180 model). An electrical
brake is available as accessory. Mechanical limit stop adjustment.

M230S is an electronic control unit with built-in receiver, compatible with all Aprimatic 433.92 MHz remote controls, easy to install and put in service.

It can be connected to control and safety devices (max. accessory absorption: 300 mA ) and is also equipped with 4 control modes and configuration of pause/operation times.
Outdoor strongboxes for recessed or wall installation available.

## TYPICAL SYSTEM

## KEY

Flashing lightPair of photocellsControl device: key-operated switch / presence reader / keyboard combination lock / card reader / magnetic keys

| ITEM NUMBER | RO-MATIC RS 140 DESCRIPTION | $\boldsymbol{\epsilon}$ |
| :--- | :--- | :--- |
| $\mathbf{4 3 3 6 4 / 0 0 1}$ | RO-MATIC RS140 140 kg gear motor without electrical brake | 273,06 |
| $\mathbf{4 3 3 6 4 / 0 0 2}$ | RO-MATIC RS140 EB 140 kg gear motor with electrical brake | 305,43 |


| ITEM NUMBER | RO-MATIC RS 180 DESCRIPTION | $\boldsymbol{\epsilon}$ |
| :--- | :--- | :--- |
| $\mathbf{4 3 3 6 4 / 0 0 3}$ | RO-MATIC RS180 180 kg gear motor without electrical brake | 287,89 |
| $\mathbf{4 3 3 6 4 / 0 0 4}$ | RO-MATIC RS180 EB 180 kg gear motor with electrical brake | 325,29 |


| ITEM NUMBER | ACCESSORIES | € | (0) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 43364/050 | Electrical brake (with 5m steel cable) | 55,17 |  |  |  |
| 41704/002 | CS - Recessed strongbox (with up/down button and electrical brake release) | 74,19 |  |  | $3$ |
| 41704/004 | CSP - ROLLI Wall-mounted outdoor strongbox with up/down button | 61,43 |  |  |  |
| 41704/005 | ROLLI wall-mounted selector (with open/close button) | 58,52 | 41704/002 | 704/004 | 41704/005 |


| ITEM NUMBER | DESCRIPTION OF COMMON ACCESSORIES | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| $\mathbf{4 3 6 6 5 / 0 1 5}$ | M230S - Electronic control unit for rolling gates | 116,48 |
| $\mathbf{4 1 8 1 2 / 0 0 8}$ | ER 12-24V - Pair of photocells loptional) | 71,16 |
| $\mathbf{4 1 8 4 1 / 0 0 9}$ | ET20N - 230 V flashing light (needed if the opening is on road side) | 32,45 |
| $\mathbf{4 1 9 0 5 / 0 0 4}$ | TM4-433.92MHz four channel transmiter | 38,41 |

$\approx A$
02.

## SIDE-HUNG SHUTTERS

BUONGIORNO


144 DOORS, WINDOWS AND SHUTTERS

## BUONGIORNO

1220

## Electromechanical operator for side-hinged shutters.



| TECHNICAL DATA |  |  |
| :--- | :--- | :--- |
| POWER SUPPLY | 230 Vca |  |
| MOTOR POWER SUPPLY | 24 Vcc |  |
| MOTOR POWER | $4,2 \mathrm{~W}$ |  |
| MAX. NOMINAL TORQUE | 40 Nm |  |
| ELECTRIC LOCK | Internal |  |
| CLUTCH | Mechanical |  |
| OPERATING TIME | 18 sec. for $180^{\circ}$ |  |
|  |  |  |
| INSTALLATION DATA | 1 WING | 2 WING |
| MIN. WINDOW WIDTH | 43 cm | 86 cm |
| MAX. WINDOW WIDTH | 80 cm | 155 cm |
| MAX. WING AREA | $1,8 \mathrm{~m} 2$ | $1,75 \mathrm{~m} 2 \times 2$ |
| MAX. WING WEIGHT | 80 kg | $50 \mathrm{~kg} \times 2$ |

NOTE: Frictions are included in the weights.

## Maximum reliability and great flexibility.

Buongiorno is an automation system for side-hinged shutters. It can be used with any type of window including those fitted with security grates and mosquito screens. It consists of an aluminium beam which acts as a support for the gear motor (two in two-wing applications) and a PVC guard. The beam and guard can be cut to size to enable application with shutters of varying sizes. Buongiorno is easy to install without modifying the existing shutters or carry out masonry work.

## Absolute comfort.

Buongiorno enables you to open and close the shutters in your home without opening the windows simply by pressing a button.

Buongiorno is ideal for opening and closing your shutters in winter, in cold weather, in summer, even if your windows have mosquito screens or are difficult to reach.

## Security and durability.

Buongiorno is fitted with an electronic clutch that behaves intelligently depending on the absorbed current. The shutter stops if it meets an obstacle during movement thus protecting the user and the gear motor. Thanks to this device, the installer does not have to make any limit stop adjustments. In the event of mains power supply failure, the user can open or close the shutter immediately without unlocking it. An electric lock can also be fitted on demand for increased security.

IDEAL SINGLE-WING INSTALLATION

03.

## WINDOWS <br> AND DOMES

## WI-MATIC ATC300E

OM2
APRICOLOR VARIA
ST 450N
APRILINEARE DUO-TRY SYSTEM
520/600RF - 520/700RF


## CHOOSING THE RIGHT PRODUCT



Bottom-hinged L>


Small aligned


Large domes
$\max 120 \mathrm{~kg}$



Jalousie windows


## POSSIBLE CONFIGURATIONS


(1) $24 \mathrm{~V}-230 \mathrm{~V}$ control unit
(2) Switch
(3) Weather unit
(4) Smoke/heat detector
(5) Rain sensor

6 Anemometer

## WI-MATIC ATC300E

NEW IP42 230V

Electromechanical operator for windows with double layer chain, ideal for outward-opening windows.

## TECHNICAL FEATURES

| POWER SUPPLY | $100-240 \mathrm{Vca} 50 / 60 \mathrm{~Hz}$ |
| :--- | :--- |
| ABSORBED CURRENT | $0,15 \mathrm{~A}$ |
| RATED POWER | 28 W |
| PUSH/PULL FORCE | $250 \mathrm{~N} / 250 \mathrm{~N}$ |
| SPEED | $10 \mathrm{~mm} / \mathrm{s}$ |
| ADJUSTABLE STROKES FROM | $100-400 \mathrm{~mm}$ |
| TEMPERATURE | $-20^{\circ}+60^{\circ}$ |
| SIZE OPERATOR | $(L x \mathrm{HxP}) 460 \times 42 \times 56 \mathrm{~mm}$ |
| SIZE WINDOWS | 1600 mm MAX |
| IP CLASS | IP42 |
| PARALLEL CONNECTION | Yes, with 1 motor for each frame |
| OPERATOR WEIGHT | 1.8 KG |



Wide voltage 100-240Vca power input, suitable for all country's different requests.

Rocker brackets for long runs even on small frames. They also allow the operator suitable to a wide range of applications.

The race is easily adjusted through a simple rotation from the outside of the operator so you don't need to open anything.

## Adjustable running, from 100 up to 400 mm Slim dimensions and compact shape

 make this product easy to integrate with the window frame regardless of its thickness or design.Aluminum casing with oxidation treatment satin to give maximum strength and aesthetics.Operator quiet thanks to the extremely robust structure that prevents vibration.

Special surface treatment to give an excellent resistance to oxidation. Excellent finishes too.

| ITEM NUMBER | DESCRIPTION | STROKE mm | POWER SUPPLY |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{4 3 5 0 9 / 0 1 5}$ | WI-MATIC ATC300E | € |  |



## 02M

Electromechanical operator for windows with double chain, ideal for outward-opening windows, bottom-hinged windows and domes.


| TECHNICAL DATA | 24 Vdc |
| :---: | :---: |
| POWER SUPPLY | 24 Vdc |
| ABSORBED POWER | 50 W |
| ABSORBED CURRENT | 2 A |
| THRUST FORCE | 350 N (stroke 150 mm ) |
|  | 250 N (stroke 250 mm ) |
|  | 100 N (stroke 380 mm ) |
| TRACTION FORCE | 350 N |
| ADJUSTABLE STROKES | $150 \mathrm{~mm}, 250 \mathrm{~mm}, 380 \mathrm{~mm}$, special stroke $(0 \div 380 \mathrm{~mm}$ ) |
| SHIFTING SPEED | $24 \mathrm{~mm} / \mathrm{s}$ |
| OPERATING TEMPERATURE | $-5^{\circ}+55^{\circ} \mathrm{C}$ |
| FRONT ADJUSTMENT | max. 10 mm |
| PARALLEL CONNECTION | YES (max 1 operator per window) |
| OVERLOAD PROTECTION | $100^{\circ} \mathrm{C}$ |
| DIMENSIONS | (LxHxP) 340x40x80 mm |
| LIMITS OF USE | non-intensive (continuous operation MAX 4 min) |
| PROTECTION DEGREE | IP54 |
| OPERATOR WEIGHT | 1,2 Kg |

Is a flexible, powerful and reliable product. These features make it unique in the market of window operators.

The special fixing device enables the installer to easily adjust the position of the operator on the frame.

Thanks to its thrust force and double chain, it can push and pull very heavy windows.

A dedicated software allows to reset the closing point automatically every 50 opening and closing operations. Thus, the window's heat insulation and soundproofing properties are not compromised.

The highest protection degree in its category, IP54, is a guarantee of good operation even for applications that are significantly exposed to atmospheric agents.

Smaller dimensions and a compact shape make this product easy to integrate with the window frame regardless of its thickness or design.

| OPERATORI A CATENA ALIMENTAZIONE 24V |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| ITEM NUMBER | DESCRIPTION | Max. stroke mm | Power supply |  |
| $\mathbf{4 3 4 9 2 / 0 0 1}$ | O2M RAL9005 black (with accessories) | 380 | 24 Vcc | $\mathbf{\epsilon}$ |
| $\mathbf{4 3 4 9 2 / 0 0 2}$ | O2M RAL 7040 grey (with accessories) | 380 | 24 Vcc | 168,65 |
| $\mathbf{4 3 4 9 2 / 0 0 3}$ | 02M RAL9010 white (with accessories) | 380 | 24 Vcc | 175,65 |

NOTE: The O2M range includes fixing accessories for OUTWARD-OPENING and BOTTOM-HINGED windows.

| ITEM NUMBER | DESCRIPTION |  |  |
| :--- | :--- | :--- | :--- |
| 43493/050 | SLIM brackets for black 02M (package with 5 pairs) |  |  |
| 43493/051 | Black skylight 02M brackets |  |  |
| 43493/052 | Grey skylight 02M brackets |  |  |
| 43493/053 | White skylight 02M brackets |  | 110,85 |



VARIA

Installation of the to the counter-frame to the counter-frame


Installation of the
chain coupling


Installation of the apricolor varia operator to the counter-frame



## APRICOLOR VARIA

(1222)

Chain operator for bottom-hinged and outward-opening windows.


NOTE: Use of the Varia actuator still requires (compulsorily) the application of safety arms on the windows.

| TECHNICAL DATA |  |
| :--- | :--- |
| POWER SUPPLY | $230 \mathrm{Vca}-24 \mathrm{Vcc}$ |
| ABSORBED POWER | $150 \mathrm{~W}-40 \mathrm{~W}$ |
| ABSORBED CURRENT | $0,8 \mathrm{~A} \mathrm{in} \mathrm{ca} / 1,8 \mathrm{in} \mathrm{cc}$ |
| THRUST FORCE | 150 N |
| TRACTION FORCE | 300 N |
| ADJUSTABLE STROKES | from 90 to 400 mm |
| SHIFTING SPEED | $40 \mathrm{~mm} / \mathrm{s}$ |
| FRONT ADJUSTMENT | max .10 mm |
| PARALLEL CONNECTION | YES |
| OVERLOAD PROTECTION | $100^{\circ} \mathrm{C}$ lonly 230 V versions) |
| CAPACITOR | $4 \mu \mathrm{~F}$ |
| BUILT-IN RELAY | YES |
| LIGHT INDICATOR | YES |
| REMOVABLE TERMINAL BOARD | YES |
| PROTECTION DEGREE | IP20 |
| OPERATOR WEIGHT | 1.7 Kg |



Exclusive quick-fit system securing the operator to the frame.

Apricolor VARIA is an electromechanical chain operator with internal nylon magazine.

It is suitable for bottom-hinged and outward-opening applications, and features an adjustable stroke from 90 to 400 mm . 230 V and 24 V operation.
It can be connected in parallel. The chain is rust-proof thanks to the Dacro-met coating.

Apricolor VARIA T is designed for twinmounting on single windows with width over 1600 mm . Apricolor VARIA T stands out for its overload protection, shared between the two parallel-connected operators. If one of the two trips, the other stops its motion, thus protecting the frame from torsional stresses.

| ITEM NUMBER | CHAIN OPERATORS | POWER SUPPLY | NOTES | $\boldsymbol{\epsilon}$ |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{4 3 5 0 3 / 0 2 1}$ | APRICOLOR VARIA RAL9005 Black | 230 Vca | Screw Kit <br> (conventional fitting) included | 130,96 |
| $\mathbf{4 3 5 0 3 / 0 2 2}$ | APRICOLOR VARIA RAL9010 White | 230 Vca | Screw Kit <br> (conventional fitting) included | 137,92 |
| $\mathbf{4 3 5 0 3 / 0 2 3}$ | APRICOLOR VARIA RAL9006 Grey | 230 Vca | Screw Kit <br> (conventional fitting) included | $\mathbf{1 2 5 , 7 4}$ |


| ITEM NUMBER | CHAIN OPERATOR PARALLEL CONNECTION ON THE SAME FRAME | POWER SUPPLY | NOTES | $€$ |
| :---: | :---: | :---: | :---: | :---: |
| 43503/024 | APRICOLOR VARIA T RAL9005 Black (for installation with another Varia T , $\rightarrow 1,600 \mathrm{~mm}$-wide windows) | 230 Vca | Screw Kit (conventional fitting) included | 144,87 |
| 43503/025 | APRICOLOR VARIA T RAL9010 White (for installation with another Varia T , $>1,600 \mathrm{~mm}$-wide windows) | 230 Vca | Screw Kit (conventional fitting) included | 152,41 |
| 43503/026 | APRICOLOR VARIA T RAL9006 Grey (for installation with another Varia T, $>1,600 \mathrm{~mm}$-wide windows) | 230 Vca | Screw Kit (conventional fitting) included | 144,87 |


| ITEM NUMBER | CHAIN OPERATORS | POWER SUPPLY | NOTES | $\boldsymbol{\epsilon}$ |
| :--- | :--- | :--- | :--- | :--- |
| 43502/001 * | APRICOLOR VARIA RAL9005 Black | 24 Vcc | Screw Kit <br> (conventional fitting) included | 129,23 |
| $\mathbf{4 3 5 0 2 / 0 0 2 *}$ | APRICOLOR VARIA RAL9010 White | 24 Vcc | Screw Kit <br> (conventional fitting) included | $\mathbf{1 4 0 , 2 5}$ |
| $\mathbf{4 3 5 0 2 / 0 0 3 *}$ | APRICOLOR VARIA RAL9006 Grey | 24 Vcc | Screw Kit <br> (conventional fitting) included | $\mathbf{1 2 9 , 2 3}$ |


| ITEM NUMBER | DESCRIPTION | NOTES | $\boldsymbol{\epsilon}$ |
| :--- | :--- | :--- | :--- |
| $\mathbf{4 3 5 0 1 / 0 5 0}$ | Extension Pin for chain connection -38 mm | For wood/PVC frames <br> Minimum pack 10 pcs | 4,05 |
| $\mathbf{4 3 5 0 3 / 0 5 5 *}$ | SCREW KIT conventional fitting system for outward- opening windows | Minimum pack 10 pcs | 6,36 |
| $\mathbf{4 3 5 0 3 / 0 5 6 *}$ | SCREW KIT conventional fitting system for bottom-hinged windows | Minimum pack 10 pcs | $\mathbf{6 , 3 6}$ |

* Until stocks last


## ST 450N

1223

Arm operator for domes, vertical sun blinds, jalousie windows, outward-opening windows.


Innovative magnetic limit stop detection system without moving mechanical parts: it further increases product reliability in any working condition.

Product dimensions are designed to
be as compact as possible to ensure an installation that blends with the rest of the building.

Silent operation and speed are the two strengths of the ST 450 N operator.

Can be connected in parallel thanks to the relay built into the card.

Electronic operator in aluminium casing with straight-arm linear movement.

230 Vac power supply with overload protection. Max. stroke 300 mm . Available accessory: Kit for limit stop adjustment. Features a reed switch system without moving mechanical parts.Brackets and supports are supplied for the required application.

| ITEM NUMBER | DESCRIPTION | STROKE mm | POWER SUPPLY | $€$ |
| :---: | :---: | :---: | :---: | :---: |
| 43545/011 | ST 450 N <br> With fixing accessories for OUTWARD-OPENING applications 180 | 180 | 230 Vca | 136,18 |
| 43545/012 | ST 450 N <br> With fixing accessories for OUTWARD-OPENING applications 300 | 300 | 230 Vca | 136,18 |
| 43545/013 | ST 450 N <br> With fixing accessories for jalousie windows and vertical sun blinds | 180 | 230 Vca | 177,92 |
| 43545/050 | ST 450 N stroke adjustment KIT |  |  | 19,12 |

NOTE: for motor control unit selection, please refer to the "Home automation" chapter.
NOTE: All prices are subject to variation.



## APRILINEARE - DUO SYSTEM

Rack operators (with two or three thrust points) for bottom-hinged and outward-opening applications, shed, skylights, domes, vertical sun blinds and sliding windows.


| TECHNICAL DATA | APRILINEARE | DUO SYSTEM |
| :---: | :---: | :---: |
| POWER SUPPLY | $230 \mathrm{Vca}-50 \mathrm{~Hz}$ | $230 \mathrm{Vca}-50 \mathrm{~Hz}$ <br> $24 \mathrm{Vcc}-50 \mathrm{~Hz}$ |
| ABSORBED POWER | 20 W | 20 W |
| ABSORBED POWER | 0,1A | 0,1A (230 V) |
|  |  | 0,8A (24 V) |
| THRUST AND TRACTION FORCE | 650 N | 600 N (duo-try system) |
| SHIFTING SPEED | $30 \mathrm{~mm} / \mathrm{s}$ | $8 \mathrm{~mm} / \mathrm{s}$ |
| STANDARD AVAILABLE STROKES | $170,230 \mathrm{~mm}$ | 350, $550,750 \mathrm{~mm}$ |
| LIMIT SWITCH | Electronic | Electronic |
| STANDARD LENGTH |  | 844, 1244, 1544, |
| DRIVE PIPES |  | 1844, 1944 mm |
| STANDARD LENGTH |  | 900, 1300, 1600, |
| DRIVE PIPES |  | 1900, 2000 mm |
| COLOURS | Silver | Silver |
| PARALLEL CONNECTION | YES | YES, with 1 moto for each frame |
| OPERATING TEMPERATURE | $-5^{\circ}+40^{\circ} \mathrm{C}$ | $-5^{\circ}+40^{\circ} \mathrm{C}$ |
| PROTECTION DEGREE | IP55 | IP55 |

Aprilineare serie are windows operators for vertical sunblinds, domes or applications that required on the frame one thrust point.

Duo System and Try System are ideal for use with automation systems for large domes, outward-opening windows and large skylights. They are valid alternatives in applications requiring two or three thrust points.

Duo and Try system have perfect balance and therefore evenly-distributed movement are obtained, even with large frames, by exploiting the power and reliability of a motor unit combined with one or two more thrust units.
Electric anodised aluminium operators with rack-driven linear movement, fitted with an electronic limit stop, IP55 protection degree, anodised aluminium bracket and galvanised steel frame mount. The operators can be connected in parallel.

The rack is made of C43 galvanised steel, and has a $10 \times 10$ square section. The box is made of two pieces of sealed impact-proof ABS. The operators are fitted with an internal cable.

The motor Duo System Can be used in conjunction with the TRY drive units made of anodised aluminium and consisting of: a C43 galvanised steel rack with $10 \times 10$ square section complete with anodised aluminium bracket and galvanised steel frame mount. The drive pipes for connection to two or three thrust points are made of anodised aluminium and are supplied complete with fixing screws.

| ITEM NUMBER | DESCRIPTION OF APRILINEARE FOR VERTICAL SUN BLINDS | STROKE mm | POWER SUPPLY | € |
| :---: | :---: | :---: | :---: | :---: |
| 43571/001 | APRI 17230 Stainless steel Aprilineare (version with 650N thrust force) | 170 | 230 Vca | 202,27 |
| 43571/002 | APRI 23230 Stainless steel Aprilineare (version with 650N thrust force) | 230 | 230 Vca | 201,11 |
| ITEM NUMBER | 230V RACK OPERATORS | STROKE mm | POWER SUPPLY | $€$ |
| 43572/001 | APRI DU0 35 | 350 | 230 Vca | 204,59 |
| 43572/002 | APRI DU0 55 | 550 | 230 Vca | 210,38 |
| 43572/003 | APRI DUO 75 | 750 | 230 Vca | 221,39 |
| ITEM NUMBER | 24V RACK OPERATORS | STROKE mm | POWER SUPPLY | € |
| 43573/001 | APRI DUO 35 | 350 | 24 Vcc | 172,12 |
| 43573/002 | APRI DUO 55 | 550 | 24 Vcc | 177,92 |
| 43573/003 | APRI DU0 75 | 750 | 24 Vcc | 190,10 |
| ITEM NUMBER | DRIVE UNITS STROKE mm | NOTES |  | € |
| 43574/050 | TRY 35 drive unit 350 | For use with A | + 2TT or 1TT | 83,30 |
| 43574/051 | TRY 55 drive unit 550 | For use with A | + 2TT or 1TT | 90,40 |
| 43574/052 | TRY 75 drive unit 750 | For use with A | + 2TT or 1TT | 99,86 |
| ITEM NUMBER | DRIVE PIPES | NOTES |  | € |
| 43531/050 | TT 90 (centre distance 900 mm ) | Pipe length = | ntre distance -56 mm | 23,17 |
| 43531/051 | TT 130 (centre distance 1300 mm ) | Pipe length = rack | ntre distance -56 mm | 26,65 |
| 43531/052 | TT 160 (centre distance 1600 mm ) | Pipe length = rader | ntre distance -56 mm | 27,81 |
| 43531/053 | TT 190 (centre distance 1900 mm ) | Pipe length = | ntre distance -56 mm | 30,13 |
| 43531/054 | TT 200 (centre distance 2000 mm ) | Pipe length = ras | ntre distance -56 mm | 31,29 |
| ITEM NUMBER | DESCRIPTION |  |  | $€$ |
| 43580/064 | Support bracket in silver anodised aluminium for special outward-opening applications |  |  | 7,57 |
| 43580/065 | 350 mm rear bracket for domes, in silver anodised aluminium for fixing to the rear mount of the operator |  | $\square$ | 29,11 |
| 43580/067 | Second bracket for sliding windows in silver anodised alumonium. |  | $5$ | 6,55 |
| 43580/068 | Adjustable "CK" support in galvanised sheet metal |  | 雨路 | 23,28 |

NOTE: for motor control unit selection, please refer to the "Home automation" chapter.
NOTE: All prices are subject to variation.
$\leqslant A$


## 520/600RF - 520/700RF

1225

## Systems for remote automation of windows.

## ELEMENTS OF THE SYSTEM:

1-Gear motor unit
2-Limit stop device
3-Rotary shaft
4-Shaft support bracket
5-Rack rail
6-Frame mount
with spring compensator


The new 520/600RF and 520/700RF
systems have been designed to solve the problems represented by remotely opening and closing bottom-hinged or outwardopening windows, whether installed individually or in rows, also in long rows of windows, skylights, in breeding farms or greenhouses.

The windows are opened and closed by a series of rack rails running on a toothed sprocket, driven by a shaft, which in turn is turned by a gear unit.


## APRICOP MOTOR

Electrical gear unit with single-phase motor coupled to a self-locking worm screw gear unit.
With limit stop.

## The transmission of the rotational

movement from the gear unit to the shaft, and from each element to the next on the shaft is guaranteed by joints with bolts and coupling pin.

The spring compensator on the end of the rack may be of the pulling or pushing type depending on which way the windows close, and guarantees even pressure on the window frames.


520/600RF Motor

The rotary shaft support brackets run on ball bearings and have adjustment slots. They can also be fitted with counterbrackets. Available for shafts with diameters of 27-33-42 mm.

The rack rails feature brass toothed sprockets, which must be fixed to the rotary shaft using the relevant press-fit bolts.

The bracket, to screw onto the window, is held on the rack with a practical spring-loaded pin.


520/700RF Motor

## 520 SERIES MOTORS

The 520 series motors have a three-phase motor coupled to a steel self-locking worm screw gear unit with bronze machined-from-solid gears in a cast iron selflubricated casing.
The low-speed shaft has two protuberances with holes and a slot on both ends, so that it can be positioned in the centre or at one end of the gear unit.

The rotary limit stops are fast-acting and adjustable, and are fitted on one of the two hubs of the low-speed shaft, with an aluminium protective cover.

| MOTOR UNIT TECHNICAL SPECIFICATIONS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SERIES $\begin{aligned} \text { RF }= & \text { WITH ROTARY } \\ & \text { LIMIT STOP } \end{aligned}$ | MOTOR <br> Kw <br> (CV) | POLES <br> (Size) | VOLTAGE | $\left\lvert\, \begin{aligned} & \text { SHAFT } \\ & \emptyset \mathrm{mm} \end{aligned}\right.$ | TORQUE N (GIRI 1') | ADJUSTABLE REV NO ON LIMIT STOP Min Max | MAX. THRUST RACKS <br> N | FRONT LENGTH m | PROTECTION DEGREE IP |
| APRICOP | 0,52 | $\begin{aligned} & \hline 4 \\ & (0,70) \end{aligned}$ | Singlephase | 33 | 5 | 1 12 <br> $(15)$  | 1200 | 25 | 30 |
| 520/600RF | $\begin{aligned} & \hline 0,18 \\ & (0,25) \end{aligned}$ | $\begin{aligned} & 6 \\ & 163) \end{aligned}$ | Threephase | 33 | $\begin{aligned} & \hline 115 \\ & (5,8) \end{aligned}$ | 111 | 4200 | 50 | 55 |
| 520/600RF | $\begin{aligned} & \hline 0,18 \\ & (0,25) \end{aligned}$ | $\begin{aligned} & 6 \\ & (63) \end{aligned}$ | Threephase | 42 | $\begin{aligned} & \hline 115 \\ & (5,8) \end{aligned}$ | 111 | 3000 | 50 | 55 |
| 520/700RF | $\begin{aligned} & 0,37 \\ & (0,5) \end{aligned}$ | $\begin{aligned} & \hline 6 \\ & (71) \end{aligned}$ | Threephase | 33 | $\begin{aligned} & 250 \\ & (7) \end{aligned}$ | 111 | 11760 | 100 | 55 |
| 520/700RF | $\begin{aligned} & 0,37 \\ & (0,5) \end{aligned}$ | $\begin{aligned} & \hline 6 \\ & (71) \end{aligned}$ | Threephase | 42 | $\begin{aligned} & 250 \\ & (7) \end{aligned}$ | 111 | 9400 | 120 | 55 |

## 520/600RF - 520/700RF



## RACK RAILS

A curved rack can be supplied, in order to reduce the inward projection in the presence of obstacles or in case of window frames with limited height from the ground.

| TECHNICAL SPECIFICATIONS OF RACKS AND BRACKETS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COMPENSATOR |  |  | RACK ROD |  |  | BRACKET |
| Pull on closing | Push on closing | Sprocket Ø mm | Section mm | Length mm | $\left\lvert\, \begin{aligned} & \text { Load } \\ & \mathrm{kg} \end{aligned}\right.$ |  |
| Mod. 377 | Mod. 387 | 27 | $30 \times 14$ | $800 / 1200$ | 40 | 50 |
| Mod. 379 | Mod. 389 | 33 | $30 \times 14$ | 800 / 1200 | 50 | 50 |
| Mod. 380 | Mod. 390 | 42 | $30 \times 18$ | 1000 / 1200 | 70 | 60 |

* Maximum overall load at $18^{\circ} \mathrm{C}$.
N.B.: The number of racks to fit on each window must be calculated by taking into consideration the necessary thrust and the dimensions and stiffness of the frame itself.
N.B.:Racks with different lengths are available on demand.
THRUST NEEDED FOR WINDOW OPERATION

| OUTWARD-OPENING | PIVOT-HINGED | BOTTOM-HINGED |
| :--- | :--- | :--- |
| From $1 / 3$ to $1 / 2$ | About $1 / 4$ <br> window weight | From $1 / 3$ to $1 / 2$ <br> window weight |


| ITEM NUMBER | DESCRIPTION |  |
| :--- | :--- | ---: |
| $\mathbf{4 3 5 5 0 / 0 0 1}$ | APRICOP single-phase motor $\left(^{*}\right) \emptyset 33 \mathrm{~mm}$ with limit stop | 296,45 |
| $\mathbf{4 3 5 5 0 / 0 5 1}$ | ( $^{*}$ ) To be used with adapter for round Apricop pipe | 36,35 |
| $\mathbf{4 3 5 6 2 / 0 0 2}$ | Three-phase $\emptyset 33 \mathrm{~mm} \mathrm{520/600RF}$ motor (with limit stop) | 986,07 |
| $\mathbf{4 3 5 6 2 / 0 0 6}$ | Three-phase $\emptyset 42 \mathrm{~mm} \mathrm{520/600RF}$ motor (with limit stop) | 984,90 |
| $\mathbf{4 3 5 6 2 / 0 0 4}$ | Three-phase $\emptyset 33 \mathrm{~mm} \mathrm{520/700RF}$ motor (with limit stop) | 1137,48 |
| $\mathbf{4 3 5 6 2 / 0 0 8}$ | Three-phase $\emptyset 42 \mathrm{~mm} \mathrm{520/700RF}$ motor (with limit stop) | 1137,48 |

RF: with rotary limit stop
NOTE: For applications with over 20 m of windows, the unit must be installed in the centre or off-centre, to limit the elastic deformation of the shaft.

| ITEM NUMBER | APPLICATION ON OUTWARD-OPENING OR PIVOT-HINGED WINDOWS (pull compensator racks) | $€$ | ITEM NUMBER | APPLICATION ON BOTTOM-HINGED WINDOWS <br> (push compensator racks) | $€$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 43563/001 | Straight version Mod. 377 Rack $\emptyset 27 \mathrm{~mm}-\mathrm{L}=800 \mathrm{~mm}$ | 29,11 | 43564/001 | Straight version Mod. 387 Rack $\emptyset 27 \mathrm{~mm}-\mathrm{L}=800 \mathrm{~mm}$ | 30,28 |
| 43563/002 | Straight version Mod. 377 - <br> Rack $\emptyset 27 \mathrm{~mm}-\mathrm{L}=1,000 \mathrm{~mm}$ | 30,28 | 43564/002 | Straight version Mod. 387 - <br> Rack $\emptyset 27 \mathrm{~mm}-\mathrm{L}=1,000 \mathrm{~mm}$ | 31,44 |
| 43563/003 | Straight version Mod. 377 - <br> Rack $\emptyset 27 \mathrm{~mm}-\mathrm{L}=1,200 \mathrm{~mm}$ | 31,44 | 43564/003 | Straight version Mod. 387 - <br> Rack $\emptyset 27 \mathrm{~mm}-\mathrm{L}=1,200 \mathrm{~mm}$ | 32,61 |
| 43563/021 | Curved version Mod. 377 Rack $\emptyset 27 \mathrm{~mm}-\mathrm{L}=800 \mathrm{~mm}$ | 30,28 | 43564/021 | Curved version Mod. 387 Rack $\emptyset 27 \mathrm{~mm}-\mathrm{L}=800 \mathrm{~mm}$ | 31,44 |
| 43563/006 | Straight version Mod. 379 - <br> Rack $\emptyset 33 \mathrm{~mm}-\mathrm{L}=1,000 \mathrm{~mm}$ | 26,78 | 43564/006 | Straight version Mod. 389 - <br> Rack $\emptyset 33 \mathrm{~mm}-\mathrm{L}=1,000 \mathrm{~mm}$ | 26,78 |
| 43563/007 | Straight version Mod. 379 - <br> Rack $\emptyset 33 \mathrm{~mm}-\mathrm{L}=1,200 \mathrm{~mm}$ | 29,11 | 43564/007 | Straight version Mod. 389 - <br> Rack $\emptyset 33 \mathrm{~mm}-\mathrm{L}=1,200 \mathrm{~mm}$ | 27,95 |
| 43563/008 | Straight version Mod. 379 Rack $\emptyset 33 \mathrm{~mm}-\mathrm{L}=1,400 \mathrm{~mm}$ | 29,11 | 43564/008 | Versione dritta Mod. 389 <br> Cremagliera $\emptyset 33 \mathrm{~mm}$ - L = 1400 mm | 29,11 |
| 43563/026 | Curved version Mod. 379 - <br> Rack $\emptyset 33 \mathrm{~mm}-\mathrm{L}=1,000 \mathrm{~mm}$ | 27,95 | 43564/026 | Curved version Mod. 389 - <br> Rack $\emptyset 33 \mathrm{~mm}-\mathrm{L}=1,000 \mathrm{~mm}$ | 27,95 |
| 43563/010 | Straight version Mod. 380 - <br> Rack $\emptyset 42 \mathrm{~mm}-\mathrm{L}=1,000 \mathrm{~mm}$ | 52,98 | 43564/010 | Straight version Mod. 390 - <br> Rack $\emptyset 42 \mathrm{~mm}-\mathrm{L}=1,000 \mathrm{~mm}$ | 52,98 |
| 43563/011 | Straight version Mod. 380 - <br> Rack $\emptyset 42 \mathrm{~mm}-\mathrm{L}=1,200 \mathrm{~mm}$ | 54,15 | 43564/011 | Straight version Mod. 390 - <br> Rack $\emptyset 42 \mathrm{~mm}-\mathrm{L}=1,200 \mathrm{~mm}$ | 54,15 |
| 43563/012 | Straight version Mod. 380 Rack $\emptyset 42 \mathrm{~mm}-\mathrm{L}=1,400 \mathrm{~mm}$ | 55,32 | 43564/012 | Straight version Mod. 390 - <br> Rack $\emptyset 42 \mathrm{~mm}-\mathrm{L}=1,400 \mathrm{~mm}$ | 55,32 |
| 43563/030 | Curved version Mod. 380 - <br> Rack $\emptyset 42 \mathrm{~mm}-\mathrm{L}=1,000 \mathrm{~mm}$ | 54,15 | 43564/030 | Curved version Mod. 390 - <br> Rack $\emptyset 42 \mathrm{~mm}-\mathrm{L}=1,000 \mathrm{~mm}$ | 54,15 |
| 43562/052 | Complementary coupling, pin and rack spring package | 5,46 | 43562/052 | Complementary coupling, pin and rack spring package | 5,46 |

NOTE: A complementary coupling, pin and rack spring package must be ordered for each rack, Item No. 43562/052. (min.quantity 20pcs)
NOTE: Always indicate the radius required for curved racks (minimum radius 750 mm ).
Oversized racks are available on request (max. length $2,200 \mathrm{~mm}$ ). When ordering, indicate the item number corresponding to the first larger standard-length rack and indicate the exact measurement in millimetres.
Delivery - 5 weeks from date of order. Contact customer service for AN estimate and availability.

| ITEM NUMBER | DESCRIPTION OF ACCESSORIES FOR RACK SYSTEM | $€$ | ITEM NUMBER | DESCRIPTION OF PIPE ACCESSORIES | $\epsilon$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 43562/055 | Standard bracket for $\emptyset 27 \mathrm{~mm}$ |  | 43562/062 | Steel joint for $\emptyset 33 \mathrm{~mm}$ shaft | 4,87 |
| 43562/055 |  | 9,64 | 43562/061 | Steel joint for $\emptyset 42 \mathrm{~mm}$ shaft | 6,04 |
| 43562/054 | Standard bracket for $\emptyset 33 \mathrm{~mm}$ | 9,64 | 43562/060 | Key for $\emptyset 33 \mathrm{~mm}$ shaft | 3,82 |
| 43562/057 | Standard bracket for $\emptyset 42 \mathrm{~mm}$ | 13,38 | 43562/063 | Key for $\emptyset 42 \mathrm{~mm}$ shaft | 3,83 |
| 43562/058 | Counter-bracket $\mathrm{L}=140 \mathrm{~mm}$ | 4,87 | 43562/063 | Key for 42 mm shat |  |

## 04.

## SLIDING DOORS

SLIM SNK<br>WING NK<br>WING NK H150<br>MODULAR SOLUTION<br>DOOR PROFILES<br>OVER




## WING NK / WING NK H150 / SLIM SNK

Smooth, accurate, silent movement.
Aprimatic offers a wide range of automation solutions for sliding doors. Products designed to provide top reliability in a wide range of applications for offices, shops and supermarkets.
All automation components feature compact, attractively designed extruded aluminium housings. The units are easy to install and do not require specialised skills or masonry work.
The automation units are equipped with intelligent electronic control systems which require very few adjustments. This makes for quicker installation and easier maintenance operations, while guaranteeing total safety.

## Wing NK

Reversible single-motor automation for sliding doors. Suitable for shops, supermarkets and offices with high traffic levels. Designed for medium-heavy loads.

Max. load for heavy-duty use (4 cycles/min.): For 2 wings, 100 kg each for one wing 150 kg . Max. load for continuous use ( 6 cycles/min.): For 2 wings, 80 kg each for one wing 130 kg .

Drive system with a toothed HPPD rubber drive belt. The belt is reinforced with a glass fibre core and has a non-slip coating. Modular carriages with large-diameter reinforced-nylon wheels running on upper and lower semicircular cross-section rails. The carriage modules feature an antiderailment, anti-pitching, load-balancing system. Reversible DC Gear motor with electronic pulse width control. 2-channel optical encoder connected

## Wing NK H150

New reversible single-motor automation for sliding doors. Suitable for shops, supermarkets and offices with high traffic levels. Designed for medium-heavy loads.

Max. load for heavy-duty use (4 cycles/min.): For 2 wings, 150 kg each for one wing 150 kg . Max. load for continuous use ( 6 cycles/min.): For 2 wings, 130 kg each for one wing 150 kg .
to the motor for electronic position and speed control. The control units ensure the highest levels of safety and reliability. Performance features include: stroke length, wing weight, braking force and braking distance self-learning. They also guarantee the emergency battery charge. Compact and aesthetically pleasing aluminium profile covers, available in natural, anodised silver and anodised black versions.

## Slim SNK

Reversible single-motor automation for sliding doors. Suitable for shops, supermarkets and offices with medium traffic levels and medium-light loads.

Max. load for NON intensive use ( $\leqslant 3$ cycles/min.): For 2 wings 70 kg each, for one wing 100 kg . Max. load for heavy-duty use (4 cycles/min.): For 2 wings, 50 kg each for one wing 70 kg .

AUTOMATION SYSTEMS FOR SLIDING DOORS


TECHNICAL DATA

WING NK 1
WING NK 2

WING NK H150 1
WING NK H150 2

SLIM SNK 1
SLIM SNK 2

GENERAL FEATURES

AUTOMATION POWER SUPPLY MOTOR POWER SUPPLY ACCESSORY POWER SUPPLY
OPERATING TEMPERATURE RANGE
INSTALLED POWER (MAX.)

DIMENSIONS in mm

| BULK (HxD) mm | $152 \times 172$ | $152 \times 172$ | $152 \times 172$ |
| :--- | :--- | :--- | :--- |
| MIN./MAX. BEAM LENGTH mm | $1,810-6,010$ | $1,810-6,010$ | $1,810-5,410$ |
| MIN./MAX. PASSAGE SPAN mm | $850-2,950$ | $850-2,950$ | $850-2,650$ |

WING LOAD CAPACITY in kg
$\begin{array}{lllllll}\text { MAX. LOAD } & 100 \times 1 & 100 \times 2 & 150 \times 1 & 150 \times 2 & 100 \times 1 & 70 \times 2\end{array}$

## SPEED in $\mathrm{cm} / \mathrm{s}$

| MIN./MAX. OPENING SPEED | $11-75(1 \mathrm{wing})$ | $11-75(1 \mathrm{wing})$ | $40-60$ |
| :--- | :--- | :--- | :--- |
|  | $22-150(2 \mathrm{wings})$ | $22-150(2 \mathrm{wings})$ | $80-120$ |
| MIN./MAX. CLOSING SPEED | $11-75(1 \mathrm{wing})$ | $11-75(1 \mathrm{wing})$ | $11-50$ |
|  | $22-150(2 \mathrm{wings})$ | $22-150(2 \mathrm{wings})$ | $22-100$ |
| APPROACHING SPEED | 6 | 6 | 6 |

DRIVE TRANSMISSION
TRANSMISSION
CARRIAGE TYPE
ROLLING TYPE
Toothed HPPD belt
Modular, 3-wheel carriages (2 for each wing)
On reinforced-nylon wheels

## AUTOMATION SYSTEMS FOR SLIDING DOORS

TECHNICAL DATA
WING NK 1 WING NK H150 1 SLIM SNK 1
WING NK 2
WING NK H150 2
SLIM SNK 2
SELF-LEARNING FUNCTIONS (at power on or after a reset)

| OPENING STROKE LENGTH | YES | YES | YES |
| :--- | :--- | :--- | :--- |
| CLOSING STROKE LENGTH | YES | YES | YES |
| WING WEIGHT | YES | YES | YES |
| BRAKING SPACES ladaptive) | YES | YES | YES |
| OPENING SPEED | YES | YES | YES |
| CLOSING SPEED | YES | YES | YES |


| STANDARD FUNCTIONS (selected from key-operated switch or keypad) |  |  |  |
| :---: | :---: | :---: | :---: |
| NIGHT LOCK | YES | YES | YES |
| AUTOMATIC TWO-WAY | YES | YES | YES |
| AUTOMATIC EXIT ONLY | YES | YES | YES |
| AUTOMATIC ENTRY ONLY | YES | YES | YES |
| COMPLETELY OPEN | YES | YES | YES |
| AUTOMATIC PARTIAL OPENING | YES | YES | YES |
| MANUAL OPENING | ~ | ~ | ~ |
| NIGHT SERVICE OPENING | ~ | $\sim$ | $\sim$ |
| RESET | YES | YES | YES |


| EMERGENCY FUNCTIONS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | INPUT FOR EMERGENCY PUSH-BUTTON | YES | YES | YES |
|  | ELECTRIC EMERGENCY OPENING DEVICE <br> WITH BATTERY | YES | YES | YES |
|  | EMERGENCY OPERATION WITH BATTERY | YES | YES | YES |
|  | STOP INPUT | YES | YES | YES |


| SAFETY FUNCTIONS |  |  |  |
| :--- | :---: | :---: | :---: |
| INPUT FOR SAFETY | YES | YES | YES |
| PHOTOCELL |  |  | YES |
| OBSTACLE | YES |  |  |
| DETECTION (adaptive) |  |  |  |


| ADJUSTABLE PARAMETERS |  |  |  |
| :--- | :--- | :--- | :--- |
| OPENING SPEED | YES | YES | YES |
| CLOSING SPEED | $65 \%$ opening speed <br> (dipswitch) | YES | YES |
| APPROACHING SPEED | YES | YES | YES |
| OPEN PAUSE TIME | YES | YES | YES |
| THRUST FORCE | YES | YES | YES |
| ELECTRIC LOCK ACTUATION DELAY | YES | YES | YES |
| PARTIAL OPENING PERCENTAGE | YES | YES | YES |
|  |  |  |  |
| DIAGNOSTICS |  | YES |  |
| IDENTIFICATION OF DIFFERENT | YES |  | YES |
| ALARMS AND WARNINGS |  |  |  |


| ADDITIONAL FUNCTIONS (OPTIONAL) |  |  |  |
| :--- | :--- | :--- | :--- |
| BISTABLE ELECTRIC <br> LOCK WITH SELF-TEST | YES | YES | YES |
| BUILT-IN EMERGENCY BREAK-OUT | YES | YES | YES |
| OPENING DEVICE | YES | YES |  |
| INTERLOCK FUNCTION | YES | YES | YES |
| MANUAL RELEASE |  |  | YES |

## POSSIBLE CONFIGURATIONS

## EXAMPLES OF AUTOMATION SYSTEM CONFIGURATIONS



SAFETY DISTANCES


| Key |  |
| :--- | :--- |
| AUTOMATION | Choose the model (complete operator assembly or beam system plus module) from the available range: <br> WING NK - WING NK H150 - SLIM SNK |
| COVER | Choose the cover with the desired surface finish from one of the following: natural, silver, black |
| SC6 | Choose the key-operated selector (REQUIRED): SC6 WIRELESS - SC6 EC - SC6 |
| ER6 | Choose the photocells: ER6 UNI - ER6/N |
| $1-2$ RADAR | Choose the radar: RI90C, DM-H22, DT90C, RSI 4C |
| NS 48* | *Batteries supplied as a standard on all models |
| EB2 | Electric lock: EB2 |
| SME | Choose the Emergency Manual Release device: SME/E - SME/I installable only <br> with EB2 |
| Choose Alternative Control Devices, if necessary: PC12E - PR5 - LB4 - CT4 |  |
| RADIO | Chee the "Electronic devices" section - refer to the initial index) |

## AUTOMATION SYSTEMS FOR SLIDING DOORS

## EX. OF AUTOMATION SYSTEM DIMENSIONING

Two-wing automation system: Wing NK, Wing NK H150


RH single-wing automation system: Wing NK, Wing NK H150


| Known A | Known VP | Known T |
| :--- | :--- | :--- |
| $2 \mathrm{~A}-2 \mathrm{~S}+10$ | $2 \mathrm{VP}+2 \mathrm{~S}+10$ | $\sim$ |
| $\mathrm{~A}-2 \mathrm{~S}$ | $\sim$ | $(\mathrm{~T}-2 \mathrm{~S}-10 \mathrm{O} / 2$ |
| $\sim$ | $\mathrm{VP}+2 \mathrm{~S}$ | $(\mathrm{~T}+2 \mathrm{~S}-10 \mathrm{)} / 2$ |

T= beam length in mm $\quad \mathbf{S}=$ overlap in mm

LH single-wing automation system: Wing NK, Wing NK H150


| Known A | Known VP | Known T |
| :--- | :--- | :--- |
| $2 \mathrm{~A}-\mathrm{S}+10$ | $2 \mathrm{VP}+\mathrm{S}+10$ | $\sim$ |
| $\mathrm{~A}-\mathrm{S}$ | $\sim$ | $(\mathrm{T}-\mathrm{S}-10) / 2$ |
| $\sim$ | $\mathrm{VP}+2 \mathrm{~S}$ | $(\mathrm{~T}+\mathrm{S}-10) / 2$ |

$\mathbf{A}=$ wing length in mm
$\mathbf{V P}=$ passage span in mm
nding).
The calculations for RH and LH single-wing automation systems are valid for both opening directions.
For RH single-wing automation, the actual passage span (VP) of the automation is reduced by the size of the overlap selected.

## WING NK automation systems with anodised silver finish

| Beam | Passage <br> span | LH <br> $\boldsymbol{\epsilon}$ single wing | RH <br> $\boldsymbol{\epsilon}$ | single wing | Double <br> $\boldsymbol{\epsilon}$ <br> wing |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2010 | 950 | $2.091,19$ | $42710 / 201.1$ | $2.091,19$ | $42710 / 201.0$ | $2.203,04$ | $42710 / 201.2$ |
| 2510 | 1200 | $2.145,67$ | $42710 / 251.1$ | $2.145,67$ | $42710 / 251.0$ | $2.262,76$ | $42710 / 251.2$ |
| 3010 | 1450 | $2.211,74$ | $42710 / 301.1$ | $2.211,74$ | $42710 / 301.0$ | $2.331,14$ | $42710 / 301.2$ |
| 3610 | 1750 | $2.291,74$ | $42710 / 361.1$ | $2.291,74$ | $42710 / 361.0$ | $2.412,29$ | $42710 / 361.2$ |
| 4010 | 1950 | $2.345,04$ | $42710 / 401.1$ | $2.345,04$ | $42710 / 401.0$ | $2.464,45$ | $42710 / 401.2$ |
| 4410 | 2150 | $2.396,64$ | $42710 / 441.1$ | $2.396,64$ | $42710 / 441.0$ | $2.517,19$ | $42710 / 441.2$ |
| 4810 | 2350 | $2.451,70$ | $42710 / 481.1$ | $2.451,70$ | $42710 / 481.0$ | $2.569,94$ | $42710 / 481.2$ |
| 5410 | $2.529,37$ | $42710 / 541.1$ | $2.529,37$ | $42710 / 541.0$ | $2.648,76$ | $42710 / 541.2$ |  |
| 6010 | 2950 | $2.610,52$ | $42710 / 601.1$ | $2.610,52$ | $42710 / 601.0$ | $2.729,91$ | $42710 / 601.2$ |

Order the automation with the next standard length up from the one you require and then state the exact beam length you require in mm ending with 0 or 5 . The standard supply includes the emergency battery unit.

| Beam | Passage span | € | LH single wing | € | RH single wing | € | Double wing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2010 | 950 | 2421,56 | 42715/201.1 | 2421,56 | 42715/201.0 | 2539,8 | 42715/201.2 |
| 2510 | 1200 | 2488,80 | 42715/251.1 | 2488,80 | 42715/251.0 | 2606,44 | 42715/251.2 |
| 3010 | 1450 | 2553,12 | 42715/301.1 | 2553,12 | 42715/301.0 | 2673,68 | 42715/301.2 |
| 3610 | 1750 | 2633,11 | 42715/361.1 | 2633,11 | 42715/361.0 | 2752,51 | 42715/361.2 |
| 4010 | 1950 | 2686,43 | 42715/401.1 | 2686,43 | 42715/401.0 | 2805,84 | 42715/401.2 |
| 4410 | 2150 | 2736,86 | 42715/441.1 | 2736,86 | 42715/441.0 | 2858,58 | 42715/441.2 |
| 4810 | 2350 | 2793,09 | 42715/481.1 | 2793,09 | 42715/481.0 | 2900,32 | 42715/481.2 |
| 5410 | 2650 | 2871,9 | 42715/541.1 | 2871,9 | 42715/541.0 | 2977,98 | 42715/541.2 |
| 6010 | 2950 | 2953,05 | 42715/601.1 | 2953,05 | 42715/601.0 | 3070,13 | 42715/601.2 |

Order the automation with the next standard length up from the one you require and then state the exact beam length you require in mm ending with 0 or 5 . The standard supply includes the emergency battery unit.

## AUTOMATION SYSTEMS FOR SLIDING DOORS

| SLIM SNK automation systems with anodised silver finish |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beam | Passage span | € | LH single wing | € | RH single wing | € | Double wing |
| 2010 | 950 | 1684,88 | 42705/201.1 | 1684,88 | 42705/201.0 | 1800,8 | 42705/201.2 |
| 2510 | 1200 | 1748,07 | 42705/251.1 | 1748,07 | 42705/251.0 | 1866,31 | 42705/251.2 |
| 3010 | 1450 | 1822,26 | 42705/301.1 | 1822,26 | 42705/301.0 | 1934,69 | 42705/301.2 |
| 3610 | 1750 | 1894,12 | 42705/361.1 | 1894,12 | 42705/361.0 | 2014,67 | 42705/361.2 |
| 4010 | 1950 | 1947,45 | 42705/401.1 | 1947,45 | 42705/401.0 | 2065,69 | 42705/401.2 |
| 4410 | 2150 | 1999,03 | 42705/441.1 | 1999,03 | 42705/441.0 | 2119,58 | 42705/441.2 |
| 4810 | 2350 | 2052,93 | 42705/481.1 | 2052,93 | 42705/481.0 | 2173,5 | 42705/481.2 |
| 5410 | 2650 | 2132,92 | 42705/541.1 | 2132,92 | 42705/541.0 | 2132,92 | 42705/541.2 |

Order the automation with the next standard length up from the one you require and then state the exact beam length you require in mm ending with 0 or 5 . The standard supply includes the emergency battery unit.

Covers for WING NK, WING NK H150, SLIM SNK automation systems

| Beam | € | Natural finishing | € | Silver finishing | € | Black finishing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2000 | 107,54 | 42102/200 | 123,76 | 42100/200 | 145,72 | 42101/200 |
| 2500 | 120,9 | 42102/250 | 144,37 | 42100/250 | 166,72 | 42101/250 |
| 3000 | 135,54 | 42102/300 | 158,77 | 42100/300 | 190,29 | 42101/300 |
| 3600 | 162,96 | 42102/360 | 190,14 | 42100/360 | 213,83 | 42101/360 |
| 4000 | 175,91 | 42102/400 | 199,83 | 42100/400 | 232,28 | 42101/400 |
| 4400 | 190,23 | 42102/440 | 213,83 | 42100/440 | 256,15 | 42101/440 |
| 4800 | 209,51 | 42102/480 | 248,87 | 42100/480 | 285,7 | 42101/480 |
| 5400 | 228,7 | 42102/540 | 254,56 | 42100/540 | 313,65 | 42101/540 |
| 6000 | 255,27 | 42102/600 | 278,1 | 42100/600 | 343,14 | 42101/600 |

## WING NK - WING NK H150-SLIM SNK BEAM SECTION



## MODULAR SOLUTIONS

## WING NK / SLIM SNK modules



## Composition

The WING NK and SLIM SNK modules consists of a module profile $L=1,100$ mm complete with pre-assembled components: control unit, power supply unit, motor with encoder, emergency batteries. The Module pack also includes an idle pulley and two side flanges.

These modules allow to construct any type of "Wing NK", "Wing NK H150" or "SLIM SNK" automation systems with the same technical characteristics and functions as
described above. The NK module profile is supplied ready for installation, complete with the control unit, power supply unit, motor and batteries ready-assembled.

To complete an automation you will need the following: the "L" beam lof convenient length), the hardware kit; the toothed belt and the cover.


[^32]
## MODULAR SOLUTIONS

## EX. OF AUTOMATION SYSTEM DIMENSIONING

## WING NK - WING NK H 150 MODULE

WING NK / NK H150 module:
RH single-leaf and double-leaf


NING NK / NK H150 module:
LH single-wing


| "L" (mm) |
| :--- |
| 1800 |
| 2000 |
| 2400 |
| 2500 |
| 2800 |
| 3000 |
| 3200 |
| 3600 |
| 4000 |
| 4400 |
| 4800 |
| 5400 |
| 6000 |


| "A" (mm) | "B"(mm) |
| :--- | :--- |
| 300 | 300 |
| 350 | 350 |
| 450 | 450 |
| 475 | 475 |
| 550 | 550 |
| 600 | 600 |
| 650 | 650 |
| 750 | 750 |
| 850 | 850 |
| 950 | 950 |
| 1050 | 1050 |
| 1200 | 1200 |
| 1350 | 1350 |

## SLIM SNK MODULE

SLIM SNK module:
RH single-leaf and double-leaf


SLIM SNK module:
LH single-wing


| "L" (mm) |
| :--- |
| 1800 |
| 2000 |
| 2400 |
| 2500 |
| 2800 |
| 3000 |
| 3200 |
| 3600 |
| 4000 |
| 4400 |
| 4800 |
| 5400 |


| "A" (mm) | "B"(mm) |
| :--- | :--- |
| 275 | 300 |
| 325 | 350 |
| 425 | 450 |
| 450 | 475 |
| 525 | 550 |
| 575 | 600 |
| 625 | 650 |
| 725 | 750 |
| 825 | 850 |
| 925 | 950 |
| 1025 | 1050 |
| 1175 | 1200 |

KIT UPGRADE WING NK

## Application range:

The WING NK upgrade kit can only be installed on: Automatic doors of the WING or WING EVO model on the catalogue since 2003.


TECHNICAL DATA

| AUTOMATION POWER SUPPLY | SINGLE-PHASE 230 Vac (+/-10\%) |
| :--- | :--- |
| MOTOR POWER SUPPLY | 24 Vdc |
| TEMPERATURE | $-10^{\circ}+60^{\circ} \mathrm{C}$ |
| BATTERY CHARGER | BUILT-INTO WING NK CARD |
| AUTOMATIC DIAGNOSTIC | SEVERAL TYPES OF BUZZER ALARMS |
| ADJUSTABLE PARAMETERS: | APPROACH SPEED DURING OPENING |
|  | AND CLOSING DOOR OPEN PAUSE TIME |
|  | THRUST FORCE ELECTRIC LOCK |
|  | ACTIVATION DELAY PARTIAL OPENING |
|  | PERCENTAGE MASTER/SLAVE |
|  | EMERGENCY OPENING PHOTOCELLS |
|  | USED SETTINGS FOR TAMPERING, |
|  | EMERGENCY OPENING, ELECTRIC LOCK |
|  | AND POWER FAILURE |

The Upgrade KIT allows all Aprimatic automatic door customers (Wing and Wing Evo series) to replace the basic components to adapt the "old"system to the new performance levels of the new WING NK series automation systems. The mechanical operations required for the replacement are extremely simple (the same bolts and component measurements are used) while the electronic operations are even simpler: just disconnect the old control unit and the peripheral units from the terminals and insert the new card.
Once it is powered up, the new Wing NK control board will do all the rest: the new HIGH-TECH software requires no manual operations: it will automatically learn all the necessary settings (such as wing weights, etc.) and self-calibrate as efficiently as possible.

| ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
| :--- | :--- | ---: |
| $\mathbf{4 2 9 0 2 / 0 5 2}$ | WING NK UPGRADE KIT |  |
|  | The package includes: |  |
|  | Gear motor unit, Wing NK control unit, idle pulley and fixing screws |  |

[^33]
## Stylish and functional design.

The key-operated selector units can be used to set and select 6 operating modes for automatic sliding doors. The SC6EC and SC6 WIRELESS key-operated selector units can be surface wall-mounted or flush-mounted in a standard 503 electrical box.
The Reset push-button on the keyoperated selector unit is small and recessed to prevent accidental operation.


| CONTROL AND SAFETY DEVICES |  |  |  |
| :---: | :---: | :---: | :---: |
| ITEM NUMBER | DESCRIPTION |  | $\epsilon$ |
| 42282/078 | SC6 WIRELESS - 6-way key-operated selector unit for setting standard functions, it operates by radio waves with a frequency of 433.92 MHz , installation: wall-mounted or flush-mounted with 503 box, PLUS SC6 WIRELESS receiver required |  | 128,55 |
| 42282/073 | SC6EC - 6-way key-operated selector unit for standard function setting, installation: wall-mounted or flush-mounted in 503 box, 4 -metre cable with connector |  | 118,55 |
| 41923/007 | PLUS SC6 WIRELESS RECEIVER - Installation on NK beams requires the NK 250 mm profile, SC6 WIRELESS key-operated selector and/or TR2 or TR4 transmitter required |  | 119,38 |
| 42282/070 | SC6 - 6-way key-operated selector unit for standard function setting installation: wall-mounted - 4-metre cable with connector |  | 93,99 |
| 41905/004 | TM4-433.92 MHz four-channel remote control |  | 38,41 |
| PHOTOCELLS |  |  |  |
|  | ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
|  | 42300/007 | ER6/N - Self-aligning, miniaturised, modulated infrared photocells Range of 6 metres at full power and 3 metres at half power, the unit consists of: amplifier card for two pairs of photocells with self-test function (fault signal relay output) and twin-relay output with series-connected contacts, pair of transmitter/receiver photocells with 8-metre shielded cables, fittings for assembly on aluminium frames, installation on NK beams requires the NK 250 profile | 143,96 |
|  | 42300/002 | ER6/N Pre-mounted NK (can be ordered only with the purchase of an automation system) | 193,13 |
|  | 42300/006 | Kit of extra ER6/N photocells | 42,8 |

NOTE: By ticking the appropriate box on the order form, the photocells ER6/N item No. 42300/002 will be supplied pre-assembled and pre-mounted on the beam at the same price.

176 DOORS, WINDOWS AND SHUTTERS

## CONTROL AND SAFETY DEVICES

## RADAR

## The range encompasses

all the technologies used for automatic door opening devices, such as microwave, active infrared and passive infrared.

| RADAR |  |  |  |
| :--- | :--- | :--- | :--- |
|  | ITEM NUMBER | DESCRIPTION | RI-H5 - Medium-range combined door activation and safety sensor with 4 detection rows <br> lactive infrared technology) |
|  | 42282/092 | RI90C - Radar infrarosso safe | 234,09 |


| TECHNICAL <br> DATA | DM-H22 | DT90C | RI-H5 | RI90C | RS-I4C |
| :--- | :--- | :--- | :--- | :--- | :--- |
| TECHNOLOGY | Microwaves | Microwaves <br> Active infrared | Active <br> infrared | Active <br> infrared | Active <br> infrared |
| INSTALLATION <br> HEIGHT | 4 m max. | From $1,8 \mathrm{a} \mathrm{a} \mathrm{4m}$ max | 3 m max |  |  |

## EMERGENCY PUSH-BUTTON

The emergency push-button enables door opening whenever necessary. It consists
of a highly-visible, red mushroom-head push-button with a twist-to-release action.

| EMERGENCY PUSH-BUTTON |  |  |
| :--- | :--- | :--- |
|  | ITEM NUMBER | DESCRIPTION |
|  | $\mathbf{4 2 2 8 2 / 0 8 2}$ | PE-Red mushroom-head emergency push-button <br> with twist-to-release actione |

## ELECTRIC LOCK AND MANUAL RELEASE UNITS

The electric lock has been designed specifically for locking mobile wings. It is supplied complete with a diagnostics card.
The system is not electrically powered when it is in the open or closed position.

The EB2 electric lock can be fitted (on request) with mechanical release systems which is used to release the lock in the event of an operating fault, a mains power failure or a backup battery failure.

A driven external release is also available This is mounted inside a recessed, wallmounted, lockable box to protect against unauthorised operation.

| ELECTRIC LOCK and MANUAL RELEASE UNITS |  | ITEM NUMBER |
| :--- | :--- | :--- |
| DESCRIPTION | EB2 - Electric lock for two-handed wings, controlled from by an electronic <br> card, with $0.9 \mathrm{~m}-1.5 \mathrm{~m}-2.5 \mathrm{~m}$, cables, installed on Nk beams with NK 250 <br> mm profile |  |

NOTE: By ticking the appropriate box on the order form, the EB2 electric lock code 42282/077, will be supplied pre-assembled and pre-mounted on the beam at the same price.

NS 48

| NS 48 |  |  |
| :--- | :--- | :--- |
|  | ITEM NUMBER | DESCRIPTION |
|  | NS48 (battery units are pre-assembled on all automation systems). <br> Battery unit with double function (charging and diagnostic functions built <br> into the door control device): <br> 1) Electrical emergency opening device |  |
| 2) Backup battery (autonomy of 1 hour, half-charged) |  |  |

[^34]OPTIONAL ACCESSORIES FOR BEAMS AND COVERS

|  | ITEM NUMBER | DESCRIPTION |
| :--- | :--- | :--- |
|  | 42910/008 | Telescopic cover* with natural finish $\mathrm{L}=7,000 \mathrm{~mm}$ |
|  |  |  |

* All profiles are supplied in lengths of 7 m which cannot be split.


## ACCESSORIES FOR WINGS WITH ALUMINIUM PROFILES

Floor guides for mobile wings.

| ACCESSORIES FOR WINGS WITH ALUMINIUM PROFILES |  |  |  |
| :---: | :---: | :---: | :---: |
|  | ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
|  | 42200/050 | SPS - Floor guide set for wing with Small profile frame (Can be used with other types of aluminium profile) | 17,02 |
|  | 42201/051 | SPT - Floor guide set for wing with Modular profile frame (Can be used with other types of aluminium profile) | 12,08 |

## ACCESSORIES FOR GLASS WINGS

Details used exclusively for assembly of mobile glass-only wings (not framed with aluminium profiles).
The new system cuts assembly work to the minimum and facilitates working with glass panels.

| ACCESSORIES FOR GLASS WINGS |  |  |
| :--- | :--- | :--- |
|  | ITEM NUMBER | DESCRIPTION |
|  | PCR - Clamps for glass doors, 3 m raw profile, <br> For 10 mm tempered glass, max. weight 80 kg <br> and max. wing width 1,500 mm |  |

## UNIVERSAL ACCESSORIES FOR OTHER TYPES OF WINGS

Useful accessories for rapidly fixing new or existing mobile wings to the carriages of APRIMATIC automatic doors.

| ACCESSORIES FOR WINGS WITH ALUMINIUM PROFILES |  |
| :--- | :--- | :--- |
| ITEM NUMBER | DESCRIPTION |

## SLIDING OPENINGS

## EXAMPLES OF POSSIBLE CONFIGURATIONS



ONE SLIDING WING


TWO WINGS
ONE SLIDING AND ONE FIXED


TWO SLIDING WINGS


TWO SLIDING WINGS TWO FIXED


ONE SLIDING WING WITH TRANSOM


TWO WINGS
ONE SLIDING AND ONE FIXED WITH TRANSOM


TWO SLIDING WINGS WITH TRANSOM


TWO SLIDING WINGS
TWO FIXED WITH TRANSOM

SLIDING OPENINGS WITH EMERGENCY OPENING DEVICE

## EXAMPLES OF POSSIBLE CONFIGURATIONS



ONE SLIDING WING WITH EMERGENCY OPENING DEVICE ON A MOBILE WING


ONE SLIDING WING
ONE FIXED WITH FULL EMERGENCY OPENING DEVICE


TWO SLIDING WINGS TWO FIXED WINGS WITH FULL EMERGENCY OPENING DEVICE


ONE SLIDING WING
ONE FIXED WITH EMERGENCY
DEVICE ON A MOBILE WING


TWO SLIDING WINGS WITH EMERGENCY OPENING DEVICE ON MOBILE WINGS


TWO SLIDING WINGS
TWO FIXED WINGS
WITH EMERGENCY OPENING DEVICE ON MOBILE WINGS

## EMERGENCY BREAK-OUT OPENING DEVICE

## ASM-N MECHANICAL EMERGENCY BREAK-OUT OPENING DEVICE, FULL AND PARTIAL



LAYOUT
The emergency break-out opening device
is a safety device enabling mobile and
semi-fixed wings of all types to be opened mechanically in the event of an emergency.

PARTIAL EMERGENCY OPENING DEVICE


DIRECTION
OF PUSH FOR OPENING

FULL EMERGENCY OPENING DEVICE


DIRECTION
OF PUSH FOR OPENING

WARNING: In configurations where mobile wings equipped with ASM-N are joined to semi-fixed wings also equipped with emergency opening devices (full emergency opening device), it is necessary to fix the wings using the fittings supplied in the special set (optional).

NEWS: The spinning point for mobile wings and semi-fixed wings is located inside the profile. The set of fittings for semi-fixed wings are not visible and located inside the covering profile.

The ASM-N mechanical emergency break-out opening device can be used on wings with a maximum width of $1,200 \mathrm{~mm}$ and max. weight of 90 kg ; and on wings with
a minimal width of 700 mm and max. weight of 120 kg (according to the table below) for a max. height of $2,400 \mathrm{~mm}$.

| Wing length mm | 900 | 1,000 <br> 110 | 1,200 <br> 100 | 90 |
| :--- | :--- | :--- | :--- | :--- |
| Max. wing weight* kg | 120 |  |  |  |
| ASM-N weight | 7 kg |  |  |  |

*Overall weight including ASM-N


THE ASM-N CAN BE USED WITH THE FOLLOWING TYPES OF PROFILES:



* For instructions on machining "Modular" profiles, request the cutting list.

If you cannot use the compatible profiles listed above, ensure that the profiles you use have the dimensions indicated above.

EMERGENCY BREAK-OUT OPENING DEVICE

## ASM-N EMERGENCY OPENING DEVICE



1- Lower arm
2 - Upper arm
3 - Adapter profile
4 - Plugs for adapter profile
5 - Rough adjustment insert
6 - Male fitting
7 - Female fitting
8 - Cover plate
9- Lower guide
10 - Lower guide slider Nuts, bolts and screws
Optional elements:
Semi-fixed wing fitting set
(for full emergency opening device)

ACCESSORIES FOR MECHANICAL EMERGENCY BREAK-OUT OPENING DEVICE ACCESSORIES USED TO STOP WING MOVEMENT IN THE EVENT OF EMERGENCY OPENING

| OPTIONAL ACCESSORIES |  |  |
| :--- | :--- | :--- |
| ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
| $\mathbf{4 2 2 8 0 / 0 7 6}$ | SMI - Magnetic lock sensor, recess mounted, to be connected as an N.C. contact in series with the reset button, <br> on full emergency break-out opening devices, to be fitted on all semi-fixed wings |  |
| $\mathbf{4 2 2 8 0 / 0 7 5}$ | SMS - Magnetic lock sensor, surface mounted, to be connected as an N.C. contact in series with the reset button, on <br> full emergency break-out opening devices to be fitted on all semi-fixed wings |  |
| $\mathbf{4 2 3 0 0 / 0 0 7}$ | ER6/N | 11,58 |

[^35] on "Control and safety devices" page).

## SMALL PROFILES

## PROFILES FOR AUTOMATIC DOORS

SUITABLE FOR 10/11 MM TICK GLASS PANELS

"SMALL" series profiles can be used to make wings
for automatic sliding doors. This profile has been designed and manufactured specifically for mobile wings, fixed side wings and semi-fixed side wings. In spite of its compact size, the profile is compatible with up to 10 mm thick glass panels.

## EXAMPLE OF ONE OF THE POSSIBLE CONFIGURATIONS

FIXED WING


MOBILE WING

"SMALL" SERIES PROFILES


NOTE: All aluminium profiles are supplied non-anodised in lengths of 5050 mm .

| "SMALL" SERIES PROFILES |  |  |  |
| :---: | :---: | :---: | :---: |
|  | ITEM NUMBER | DESCRIPTION | $€$ |
|  | $42200 / 012$ | "Small" mobile/fixed wing upright (srm) | 70,22 |
|  | 42200/013 | "Small" central upright ( $\mathrm{L}=5050 \mathrm{~mm}$ ) | 37,45 |
|  | 42200/014 | "Small" top and bottom rail ( $\mathrm{L}=5050 \mathrm{~mm}$ ) | 87,2 |
|  | $42200 / 015$ | "Small" single wing stop ( $\mathrm{L}=5050 \mathrm{~mm}$ ) | 22,23 |

## SMALL" SERIES PROFILES



NOTE: All seals necessary for wing assembly can be purchased to size in multiples of 1 metre. This does not apply to adhesive seals; which are sold exclusively in packs of 50 metres.

| FITTING ACCESSORIES |  |  |
| :--- | :--- | :--- |
|  | ITEM NUMBER | DESCRIPTION |
|  | Set of fixing screws for a small wing, <br> required for assembly of automatic door wing profiles |  |

NOTE: For the fittings required to secure the mobile wing to the carriage and for the floor guide to be used with Small profiles, see the catalogue on page 186-187 (SPM and "Set of fixing screws for a small wing").

PROFILI MODULAR
INSTALLAZIONE IDEALE
Porta a 4 ante, due fisse e 2 scorrevoli


## LEGENDA

Modulo automazioneRadarSblocco manuale(4) Dispositivo di comando: pulsante a chiave / lettore di presenze/ combinatore a tastiera / lettore di scheda / chiavi magnetiche

Coppia di fotocellule

## MODULAR PROFILES

## PROFILES FOR 9/13 mm AND 20/23 mm automatic doors

"MODULAR" profiles CAN be used for automatic sliding door wings. This profile has been specifically designed for the construction of fixed and mobile wings with or without mechanical emergency
break-out opening device (AMS) thus perfectly fitting in a system of windows and curtain walls providing a complete range of possible solutions.
The profile's modular construction, lends the wing a striking and aesthetically
pleasing look. "MODULAR" profiles complete the range of extruded wing elements and meet any installation requirements.
SEALS


## MODULAR PROFILES

PROFILES FOR 9/13 mm AND 20/23 mm automatic doors

| SEALS |  |  |
| :--- | :--- | :--- |
|  | ITEM NUMBER | DESCRIPTION |
|  | $42205 / 009$ | Horizontal 160 mm transom $(\mathrm{L}=6500 \mathrm{~mm})$ |

Snap-type rounded glass beading (L13) (L=6500 mm) 25,74


## OVER/ OVER HEAVY / OVER EVO (NEW) 24

Automation for indoor swing doors, of max. weight 300 kg . Continuous use.


| TECHNICAL DATA | OVER | OVERHEAVY | OVER EVO |
| :---: | :---: | :---: | :---: |
| POWER SUPPLY | $100 / 240 \mathrm{~V}-50 / 60 \mathrm{~Hz}$ |  |  |
| MOTOR POWER SUPPLY | 24 V |  |  |
| ACCESSORY | $12 \mathrm{Vcc}-1 \mathrm{~A}$ max. |  |  |
| POWER SUPPLY |  |  |  |
| THRUST FORCE | 20 Nm | 40 Nm | 23 Nm |
| MAX WEIGHT |  |  |  |
| APPLICABLE TO THE WING | 200 kg | 300 kg | 220 kg |
| MOTOR POWER | 40 W | 70 W | 70 W |
| MAX.WING WIDTH | $\mathrm{L}=1200 \mathrm{~mm}$ | L=1500 mm | $\mathrm{L}=1200 \mathrm{~mm}$ |
| USE FREQUENCY | S3 $=100 \%$ - continuous |  |  |
| OPENING ANGLE | $100^{\circ}$ max. |  |  |
| OBSTACLE DETECTION | YES adjustable |  |  |
| MAX. SPEED OPENING | 2-6s |  |  |
| OPERATING <br> TEMPERATURE | $-15^{\circ} \mathrm{C} /+50^{\circ} \mathrm{C}$ |  |  |
| EMERGENCY BATTERY | YES optional |  |  |
| PROTECTION DEGREE | IP20 |  |  |
| CERTIFIED | EN16005 |  |  |

OVER series, is equipped with encoder, a device through which you can control and manage with the utmost precision the engine and the port status in any use condition.

## Maximum safety is guaranteed by

OVER's many functions. The OBSTACLE DETECTION function, available thanks to the encoder, stops the door and/or reverses the wing movement direction when an obstacle is detected.

EMERGENCY opening mode, in case of a power failure, which allows the automation system to place the door in the OPEN position and STOP condition or, at the discretion of the user, allows the continuous operation of the door thanks to the optional backup battery.

The PUSH\&GO function enables OVER to recognise when the door is being pushed by hand and therefore allow door opening.

OVER and OVER HEAVY are available with opening and closing to motor; while OVER EVO with opening at motor and closing with spring, guarantee a safety closing also in blackout situation.

New technology brushless motor for greater durability, reducing the frequency of maintenance.

| DRIVE SYSTEM FOR INDOOR SWING DOORS |  |  |
| :--- | :--- | ---: |
| ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
| $\mathbf{4 2 6 0 5 / 0 0 1}$ | OVER (grey cover) | 899,00 |
| $\mathbf{4 2 6 0 5 / 0 0 2}$ | OVER HEAVY (grey cover) | 1699,00 |
| $\mathbf{4 2 6 0 5 / 0 0 3}$ | OVER EVO (grey cover) | 1299,00 |


| COMPULSORY CONTROL ACCESSORIES |  |  |
| :--- | :--- | ---: |
| ITEM NUMBER | DESCRIPTION | $\boldsymbol{\epsilon}$ |
| $\mathbf{4 2 6 0 5 / 0 5 0}$ | Articulated arm : for use with doors opening outward | 115,00 |
| $\mathbf{4 2 6 0 5 / 0 5 1}$ | Sliding arm : for use with doors opening inwards | 83,00 |
| $\mathbf{4 2 6 0 5 / 0 5 6}$ | Spacer 17 mm lonly for OVER model) | 36,00 |
| $\mathbf{4 2 6 0 5 / 0 5 7}$ | Spacer 51 mm | 47,00 |
| $\mathbf{4 2 6 0 5 / 0 5 8}$ | Spacer 68 mm | 71,50 |
| $\mathbf{4 2 6 0 5 / 0 5 9}$ | Spacer 85 mm | 74,50 |


| ACCESSORIES |  |  |
| :---: | :---: | :---: |
| ITEM NUMBER | DESCRIPTION | $€$ |
| 41923/009* | RR-SE - Unico 433.92 MHz Memory System superheterodyne receiver | 88,67 |
| 42282/096 | RSH - Swing door safety sensor lactive infrared distance measurement technology | 379,84 |
|  | RADAR: |  |
| 42282/092 | RI-H5 - Medium-range combined door activation and safety sensor with 4 detection rows | 234,09 |
| 42283/094 | DM-M Microwave monodirectional radar | 196,64 |
| 42605/060 | TOUCH T Function selector | 289,00 |
| 42605/061 | SEL F 3 position selector | 40,00 |

NOTE: for other control and safety devices, see page 176.
*Until stocks last

SEL F 3 POSIZIONI
Select basic door pperating modes.


## TOUCH T

Select door operating modes.
Parameters configuration.


## SLIDING ARM



## 05.

## HOME <br> AUTOMATION

| ADI | M230HR |
| ---: | :--- |
| MODULES | M230S |
|  | RX230 |

MOTOR
CONTROL UNITS AND ACCESSORIES

CV1N
CV10
CF10/2
PV1
PV2
RAIN/WIND/SMOKE SENSORS


## ADI MODULES - MOTOR CONTROL

Radio-controlled equipment for the automation of door, window and shutter motors, lights, fans, solenoid valves, small domestic loads with 230 Vac power supply.

Cost-effective solutions for the most common automation needs in the residential and service sectors (homes, offices, shops, hotels, etc.).

The indoor modules can also be installed in 4-module flush-mounting boxes, using the appropriate fixing tabs.

Suitable for systems with different levels of complexity: from individual automation systems to coordinated systems.

Ease of installation and commissioning, built-in antenna. Wired and wireless centralised operation.


ADI MODULES - MOTOR CONTROL

## INDIVIDUAL RADIO CONTROL: M230HR

Radio control with portable two-channel
transmitters (TM4) or wall-mounted
transmitters (TP2-BN, TP2-NR).


INDIVIDUAL WIRED AND WIRELESS CONTROLS: M230HR

Individual low-voltage wired control with standard, even pre-existing, pushbuttons and radio control with portable
two-channel transmitters (TM4) or wallmounted transmitters (TP2-BN, TP2-NR).

## ADI MODULES - MOTOR CONTROL

INDIVIDUAL WIRED AND MULTIPLE WIRELESS CONTROLS: M230HR

Individual low-voltage wired control with standard, even existing push-buttons and wireless control with portable
multichannel transmitters (TM4, TR14).
Simple configuration allows all modules to be controlled from a single remote control.


## CENTRALISED WIRED AND WIRELESS CONTROLS: M230HR

Indoor modules can receive individual controls and centralised priority wired controls.
Such controls can come from timers, weather units, alarm systems etc. as well as from simple manually-operated switches. Priority centralised controls take precedence over local controls as long as
they remain active or until the end of the operation. Priority centralised controls can be used to create simple but effective coordinated control "scenarios": for instance, in an office, with a single pulse control it is possible to implement an "exit" scenario that provides for the closing of all windows and turning off of all lights.

The same functions can be achieved with wireless controls, simply by configuring the control modules. For example a TR14 remote control can be used to control "scenarios" as well as controlling individual operators.


## ADI MODULES - MOTOR CONTROL

INDIVIDUAL WIRED AND WIRELESS CONTROL: M230S

Low-voltage wired control with standard outdoor push-button and wireless control with portable two-channel transmitters
(TM4) or wall-mounted transmitters (TP2-BN, TP2-NR).


## USE WITH WEATHER UNIT: M230HR

Automatic closing control from a weather unit on dedicated priority input.

Low-voltage wired control with standard outdoor switch and wireless control with portable two-channel transmitters (TM4)
or wall-mounted transmitters (TP2-BN, TP2-NR).

## ADI MODULES - RX230 RECEIVER MODULE

2-channel receiver module with 2 clean contacts for controlling low-voltage loads or pulse control for gate control units, theft-alarm etc.


## ADI MODULES - MOTOR CONTROL

| TECHNICAL DATA | M230HR | M230S |
| :---: | :---: | :---: |
| POWER SUPPLY | Single-phase 2 | -10\%) - 50 Hz |
| MOTOR VOLTAGE | 230 Vca | 230 Vca |
| PROTECTION FUSE | 5 A | 5 A |
| MAX. POWER W | 600 | 650 |
| EQUIPMENT CONSUMPTION | 2 W max. | 2 W max. |
| ACCESSORY POWER SUPPLY 24 VDC | Not available | 300 mA max. |
| ACCESSORY POWER SUPPLY PROTECTION. FUSE | Not available | 500 mA |
| MAX. SECTION OF POWER SUPPLY CABLES | 1,5 mm² | $2,5 \mathrm{~mm}^{2}$ |
| MAX. SECTION OF MOTOR CABLES | $1,5 \mathrm{~mm}^{2}$ | $2,5 \mathrm{~mm}^{2}$ |
| MAX. SECTION OF CONTROL CABLES | $1 \mathrm{~mm}^{2}$ | 2,5 mm ${ }^{2}$ |
| RADIO FREQUENCY | 433.92 Mhz | 433.92 Mhz |
| USEFUL RANGE | 120 metres in fre | optional antenna |
| OPERATING TEMPERATURE | $-20^{\circ}+70^{\circ} \mathrm{C}$ | $-20^{\circ}+70^{\circ} \mathrm{C}$ |
| STORAGE TEMPERATURE | $-40^{\circ}+85^{\circ} \mathrm{C}$ | $-40^{\circ}+85^{\circ} \mathrm{C}$ |
| RELATIVE HUMIDITY | 90\% max. (non condensing) | 90\% max. (non condensing) |
| PROTECTION DEGREE | IP20 | IP44 |
| INSTALLATION | Indoors, in a dry, not dusty area | Outdoors |
| MODULE CONTAINER |  |  |
| FEATURES | M230HR | M230S |
| Local opening | Removable terminal board | Terminal board |
| Local closing | Removable terminal board | Terminal board |
| Centralised opening | Removable terminal board | Not available |
| Centralised closing | Removable terminal board | Not available |
| Stop | Removable terminal board | Terminal board |
| Safety device | Removable terminal board | Terminal board |
| OPERATING MODES |  |  |
| Local opening | YES | YES |
| Local closing | YES | YES |
| Centralised opening | YES | ~ |
| Centralised closing | YES | $\sim$ |
| Stop | YES | YES |
| Dead man | YES | YES |
| Semi-automatic open/close | YES | YES |
| Semi-automatic step-by-step | YES | YES |
| Automatic | YES | YES |
| OUTPUTS |  |  |
| Outputs | 2 relays for motor control with HW and SW interlock |  |
| OTHER FUNCTIONS |  |  |
| Wireless control memorisation: | Wireless self-learning - Max. 496 different users |  |
| CONFIGURATIONS |  |  |
| Operating time | On module and wireless | On module and wireless |
| Pause time | On module and wireless | On module and wireless |
| TX buttons - Wireless controls | On module and wireless | On module and wireless |
| PRESETS |  |  |
| Operating logics | Semi-automatic Open/Close |  |
| Operating time | 45 s (programmable from 0 to 180 seconds) |  |
| Pause time | 45 s (programmable from 0 to 180 seconds) |  |
| Stop input | Disabled (JP5 closed) |  |
| Safety device input | Disabled (JP6 closed) |  |

## ADI MODULES - LIGHT CONTROL

## TECHNICAL DATA <br> POWER SUPPLY

LOAD VOLTAGE
PROTECTION FUSE
EQUIPMENT CONSUMPTION
MAX. SECTION OF POWER SUPPLY CABLES
MAX. SECTION OF CABLES FOR LOADS
MAX. SECTION OF CONTROL CABLES
RADIO FREQUENCY
USEFUL RANGE
OPERATING TEMPERATURE
STORAGE TEMPERATURE
RELATIVE HUMIDITY
PROTECTION DEGREE
INSTALLATION
MODULE CONTAINER

## RX230

Single-phase $230 \mathrm{Vca}(+6 \%-10 \%)-50 \mathrm{~Hz}$
$0-24 \mathrm{Vcc}$ Vca
3,15 A
2 W max.
$1,5 \mathrm{~mm}^{2}$
$1,5 \mathrm{~mm}^{2}$

### 433.92 Mhz

120 metres in free field with optional antenna
$-20^{\circ}+70^{\circ} \mathrm{C}$
$-40^{\circ}+85^{\circ} \mathrm{C}$
$90 \%$ max. (non condensing)
IP20
Even outdoors

| LOAD CONTROL | rx230 |
| :---: | :---: |
| No. of relays | 2 |
| MAX. APPLICABLE LOADS |  |
| Induction motor or transformer | 1 A |
| Resistive load | 1 A |
| Incandescent lamp | 1 A |
| Fluorescent lamp | 1 A |
| WIRED INPUTS |  |
| Channel 1 control | ~ |
| Channel 2 control | $\sim$ |
| Centralised activation | ~ |
| Centralised deactivation | $\sim$ |
| WIRELESS INPUTS |  |
| Channel 1 control | YES |
| Channel 2 control | YES |
| Centralised activation | ~ |
| Centralised deactivation | $\sim$ |
| OPERATING MODES |  |
| ON/OFF | YES |
| Timer 1-255 seconds | YES |
| Timer 1-255 minutes | YES |
| Dead man | YES |
| OTHER FUNCTIONS |  |
| Wireless control memorisation: | Wireless self-learning - Max. 496 different users |
| CONFIGURATIONS |  |
| Channel 1 timer | On module and wireless |
| Channel 2 timer | On module and wireless |
| TX buttons - Wireless controls | On module and wireless |
| PRESETS |  |
| Operating logics | ON/OFF |
| Channel 1 timer | 1 second |
| Channel 2 timer | 1 second |

## ADI MODULES - ACCESSORIES

| MOTOR CONTROL MODULES |  |  |
| :--- | :--- | :--- |
|  | ITEM NUMBER | DESCRIPTION |
|  | 43665/004 | M230HR - 230 Vac motor control module, wired and wireless control, <br> indoor installation, suitable size for installation in "504" flush-mounting box |


| TWO-CHANNEL RECEIVER MODULES |  |  |
| :--- | :--- | :--- |
|  | ITEM NUMBER | DESCRIPTION |
|  | $41923 / 055$ | RX230 - Two-channel receiver module with 2 clean contacts for controlling <br> low-voltage loads or pulse control for gate control units, theft-alarm etc., <br> suitable size for installation in "503" flush-mounting box |


| ACCESSORI |  |  |  |
| :---: | :---: | :---: | :---: |
|  | ITEM NUMBER | DESCRIPTION | $€$ |
|  | 41929/001 | ANT433-433.92 MHz external antenna with 4.5 m coaxial cable and ground connection in combination with 43665/004 or 43665/015 or 41923/055 | 19,12 |
|  | 41905/004 | TM 4-433.92 MHz four-channel remote control | 38,41 |
|  | 41903/014 | TR14-433.92 MHz 14-channel portable remote control | 282,63 |
|  | 41905/001 | TP2-BN - White wall-mounted two-channel 433.92 MHz remote control, compatible with BTicino living International/Light wiring systems | 65,22 |
|  | 41905/002 | TP2-NR - Black wall-mounted two-channel 433.92 MHz remote control, compatible with BTicino living International/Light wiring systems | 65,22 |
|  | 43701/050 | PP-BN - Plate for white wall-mounted remote control | 9,89 |
|  | 43701/051 | PP-NR - Plate for black wall-mounted remote control | 9,89 |

## MOTOR CONTROL UNITS, WEATHER UNITS AND ACCESSORIES

24 V AND 230 V MOTOR CONTROL UNITS, WEATHER UNITS, RAIN, WIND, SMOKE SENSORS.

| MATCHING OF MOTOR CONTROL UNITS WITH OPERATORS AND WEATHER UNITS |
| :--- |

WEATHER UNITS

| MOTOR CONTROL UNITS |  |  |  |
| :---: | :---: | :---: | :---: |
|  | ITEM NUMBER | DESCRIPTION | $€$ |
|  | 43660/002 | CV1N - 24 Vdc max. 1A motor control unit, inputs for local and centralised opening and closing commands, power adjustment potentiometer 300 mA to $600 \mathrm{~mA}, 24 \mathrm{Vdc}$ accessory power supply, can be connected in parallel with other CV1N units | 253,66 |
|  | 43660/007 | CV10-24 Vdc max. 8A motor control unit, inputs for local and centralised opening and closing commands, can be connected in parallel with other CV10 units | 165,98 |
|  | 43645/005 | 4 M - control unit for simultaneous control of four 230 Vac motors, inputs for local and centralised opening and closing commands, can be connected in parallel with other 4 M units | 214,91 |
|  | 43660/006 | CF10/2 - motor control unit (up to ten 24 Vdc max. 8 A motors), 24 Vdc max. 500 mA accessory power supply output, preset for backup battery and recharge circuit, built-in control panel for operators, rain/wind sensor and thermostat management, indicator LEDs, internal emergency thermostat triggered at + $70^{\circ} \mathrm{C}, 2.2 \mathrm{KOhm}$ balance line for max. 24 smoke and heat detectors, remote alarm signalling output | 485,16 |
| ACCESSORIES - CF 10/2 |  |  |  |
|  | ITEM NUMBER | DESCRIPTION | € |
|  | 43660/101 | CF10/2 - Backup battery (no. $2 \times 12 \mathrm{~V}$ - 5Ah batteries) | 173,56 |
|  | 43701/063 | RFC - Optical smoke detector with differential heat sensor, compliant with EN54 standards (for max. area 60 m 2 and height 12 m ) | 195,69 |
| WEATHER UNITS AND SENSORS |  |  |  |
|  | ITEM NUMBER | DESCRIPTION | € |
|  | 43665/018 | PV1 (power supply 230 Vac ) | 74,55 |
|  | 43660/008 | PV2 (power supply 24 Vdc ) | 67,55 |
|  | PV1 and PV2 w an alarm signal closing comma | her units can be connected to an anemometer and/or rain sensor to provide utput (normally-open relay with no-voltage contacts) that can be used to send s |  |
|  | 43701/055 | RV - Anemometer | 42,51 |
|  | 43701/052 | SP1-Rain sensor | 84,44 |

TECHNICAL
INFO

technical info $200 \geqslant \approx$ A

## RAIDER 2500

## OPERATOR DIMENSIONS



OPERATOR POSITIONING


AP424 / AP423

OPERATOR POSITIONING


| Degrees | A | B | Cu |
| :--- | :---: | :---: | :---: |
| $90^{\circ}$ Available stroke $=400 \mathrm{~mm}$ | 160 | 160 | 320 |
|  | 175 | 175 | 350 |
|  | 190 | 190 | 380 |
|  | 200 | 200 | 400 |

## FLEXI 300

## OPERATOR DIMENSIONS



## AP350

## OPERATOR DIMENSIONS

## OPERATOR POSITIONING



| L min | L max |
| :---: | :---: |
| 770 mm | 1130 mm |


| Type | $95^{\circ}$ rotation |  |  | $110^{\circ}$ rotation |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{W}$ | $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{W}$ | $\mathbf{X}$ | $\mathbf{Y}$ |
| 400 | 1130 | 160 | 210 | 1130 | 170 | 160 |

TWENTY 270

## OPERATOR DIMENSIONS



|  | DIMENSIONS (mm) |  |  |
| :--- | :---: | :---: | :---: |
| Model | Length <br> (A) | Distance <br> attacks (B) | Rod stroke <br> (C) |
| TWENTY 270 | 990 | 723 | 270 |

## OPERATOR POSITIONING



Table A: Dimensions recommended for standard operators

| Opening <br> angle | a <br> $(\mathrm{mm})$ | b <br> $(\mathrm{mm})$ | $\mathrm{c}\left(^{*}\right)$ <br> $(\mathrm{mm})$ | $\mathrm{d}\left({ }^{* *)}\right.$ <br> $(\mathrm{mm})$ |
| :--- | :---: | :---: | :---: | :---: |
| $90^{\circ}$ | 130 | 140 | 270 | 90 |

${ }^{(*)}$ rod stroke required to stem ${ }^{(* *)}$ max dimensions
$\mathbf{c}=$ The stroke of the rod is less than the maximum stroke in order the piston internally reaching its stop in the opening and closing phases

## FORTY 270 / 390

## OPERATOR DIMENSIONS



OPERATOR POSITIONING

(*) rod stroke required to stem the hydraulic slowdown in the closing ${ }^{(* *)}$ max dimensions

Table "B": Forty 390 - Fixing brackets

| Opening <br> angle | a <br> $(\mathrm{mm})$ | b <br> $(\mathrm{mm})$ | $\mathrm{c}\left({ }^{*}\right)$ <br> $(\mathrm{mm})$ | $\mathrm{d}\left({ }^{* *)}\right.$ <br> $(\mathrm{mm})$ | s <br> $(\mathrm{mm})$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $90^{\circ}$ | 200 | 160 | 390 | 150 | 20 |
| $115^{\circ}$ | 170 | 160 | 390 | 110 | 20 |
| $125^{\circ}$ | 130 | 170 | 390 | 80 | 20 |

(*) rod stroke required to stem the hydraulic slowdown in the closing (**) max dimensions

EM 73N

## OPERATOR DIMENSIONS



ZT 70

DIMENSIONS CIA 170 (undergound box)


NOTE : Always include a rainwater drain

## ZT 71

## DIMENSIONS CIA171 (undergorund box)



## ONDA 424

OPERATOR DIMENSIONS


ONDA 623


ONDA 624
P4

OPERATOR DIMENSIONS


EA 214 TECHNICAL INFO

## ONDA 800E / 801E



## AT 80E

OPERATOR DIMENSIONS


ONDA 2000 / 2001


AT 86 / AT 88T


## AT 86 GEAR MOTOR

 MAIN PRODUCT群:
1- Motor
2- Worm screw reduction unit
3- Bell type coupling
4- Single disk dry clutch
5- Release device
6 - Pinion
7- Support base
8- Door
9- Mechanical limit stop


## AT 90T / AT 92T

## DIMENSIONS



AT 92 T


AT 90T - AT 92T
GEAR MOTOR
MAIN
PRODUCT
ITEMS:
1- Motor
2- Worm screw reduction unit
3- Bell type coupling
4- Single disk dry clutch
5- Release device
6- Pinion
7-Support base
8- Door
9- Mechanical limit stop

## ALZO

## OPERATOR DIMENSIONS



## AT 50

## DIMENSIONS



## GA-MATIC CF800 / CF1000

## DIMENSIONS



## HARRIER 4000R / HARRIER 4000

DIMENSIONS


## HARRIER 60001 / HARRIER 80001



E/4 220 TECHNICAL INFO

## BUONGIORNO



## LEVERS

COMPASS LEVER R


COMPASS LEVER T
CURVED LEVER
WITH AMBIDEXTROUS GUIDE


R AND T COMPASS LEVER


CURVED LEVER WITH AMBIDEXTROUS GUIDE


## 02M

O2M OUTWARD-OPENING DIMENSIONS



02M BOTTOM-HINGED DIMENSIONS

Slim side bracket for bottom-hinged applications.


## APRICOLOR VARIA

OPERATOR DIMENSIONS


VARIA KIT
TRADITIONAL
FIXING SYSTEM


VARIA KIT
TRADITIONAL
FIXING SYSTEM


## ST 450N

## ST450N DIMENSIONS WITH 180MM STROKE



## ST450N DIMENSIONS WITH 300MM STROKE



## APRILINEARE

## APRILINEARE DIMENSIONS



## APRILINEARE DUO-TRY SYSTEM



## 520/600 RF - 520/700 RF

## OPERATOR DIMENSIONS



## 520/600RF MOTOR

1-Motor
2-Reduction unit
3- Planetary reduction unit
5-Rotary limit stop
6-Terminal with joint


## 520/700RF MOTOR

1-Motor
2-Reduction unit
4-Pulley gearbox
5-Rotary limit stop
6-Terminal with joint


## 520/600RF - 520/700RF

## RACK DIMENSIONS



## BRACKET AND COUNTER-BRACKET DIMENSIONS



Bracket Ø 27-37 mm



## 520/600RF - 520/700RF

BOTTOM-HINGED AND OUTWARD-OPENING/PIVOT-HINGED APPLICATION LAYOUTS

1- GEAR MOTOR UNIT WITH LIMIT STOP
2- UNIT BRACKETS (not included)
3- SHAFT JOINT
4- HORIZONTAL SHAFT
5- BRACKET

[^36]E-4 228 TECHNICAL INFO

## OVER



## OVER EVO

OPERATOR DIMENSIONS


## OVER HEAVY



EA $\mathbf{2 3 0}$ TECHNICAL INFO

## REGULATIONS

We hereby declare that all operators and control units are compliant with the regulations: 2004/108/ EC (EMC) directive replacing the previous 89/336/EEC 2006/95/EC (LVD) directive
replacing the previous 73/23/
EEC. The Aprimatic Memory System remote controls and receivers in this catalogue have passed the tests set by European regulations: 1999/5/EC directive (R \& TTE).

## KEY TO PRODUCT VERSIONS

## Description of application fields:

Doors and gates to be motorised typically of limited weight and size, with few daily operations. (E.g., detached/semi-detached houses).

CONDOMINIUM: Doors and gates to be motorised with medium/high frequency of operations per day. (Ex. Medium users, apartments).
(I) INDUSTRIAL: Doors and gates of considerable weight and bulk to be motorised.
(Ex. Industrial buildings, car parks).

## ADOPTED SYMBOLS

Motor
supply

## SPECIAL SYMBOLS

New item on the catalogue.

Special item.
(please contact the customer service to verify product availability)

## Automation systems for swing gates, up-and-over doors and traffic barriers:

A With hydraulic lock valve on opening only, in the closed position the electric lock is required.
B With hydraulic lock valve on opening and closing, it does not require any electric lock. In case of electromechanical operator, it indicates the self-locking model.
C With hydraulic lock valve on closing only. Does not require the electric lock in closing position.
SF Without hydraulic lock valve, when manually pushing the gate/door moves slowly as if it was braked (F). Electric lock required.

SR Similar to the SF model, but when manually pushing the gate/door moves freely as if it lacked an automation system. Electric lock required.
Hydraulic operator with hydraulic braking on both closing and opening.
RF Hydraulic operator with flow adjustment valve that allows to obtain a linear movement of the gate/door, also with unbalanced load and high initial weight.

## Automation systems for sliding gates:

Z16 Module 4 16-teeth pinion. Slow. Heavy gates.
Z20 Module 420 -teeth pinion. Fast. Light gates.
C 16-teeth pinion preset for chain drive.
E Electronic control unit on board of the gear motor.

## Control devices:

TR: Two - or four-channel transmitter. Rolling Code.
TG: Two - or four-channel transmitter. Quartz - Dip Switches.

## ORDER FORM

## SLIM SNK

| Name | City/Town |  |
| :--- | :--- | :--- |
| Surname | Post code | Province |
| Company name | C | 胃 |
| Address | @ |  |

## STANDARD AUTOMATION

| Code <br> Automation <br> LH single wing <br> Anodized silver | € | Code <br> Automation <br> RH single wing <br> Anodized silver | $€$ | Code <br> Automation <br> Double wing <br> Anodized silver | $€$ | span <br> passage <br> max <br> (mm) | lenght total automation (mm) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\square$ 42705/201.1 | 1.684,88 | $\square$ 42705/201.0 | 1.684,88 | $\square$ 42705/201.2 | 1.800,80 | 950 | 2010 |
| $\square$ 42705/251.1 | 1.748,07 | $\square$ 42705/251.0 | 1.748,07 | $\square$ 42705/251.2 | 1.866,31 | 1200 | 2510 |
| $\square$ 42705/301.1 | 1.822,26 | $\square$ 42705/301.0 | 1.822,26 | $\square$ 42705/301.2 | 1.934,69 | 1450 | 3010 |
| $\square$ 42705/361.1 | 1.894,12 | $\square$ 42705/361.0 | 1.894,12 | $\square$ 42705/361.2 | 2.014,67 | 1750 | 3610 |
| $\square$ 42705/401.1 | 1.947,45 | $\square$ 42705/401.0 | 1.947,45 | $\square$ 42705/401.2 | 2.065,69 | 1950 | 4010 |
| $\square$ 42705/441.1 | 1.999,03 | $\square$ 42705/441.0 | 1.999,03 | $\square$ 42705/441.2 | 2.119,58 | 2150 | 4410 |
| $\square$ 42705/481.1 | 2.052,93 | $\square$ 42705/481.0 | 2.052,93 | $\square$ 42705/481.2 | 2.173,50 | 2350 | 4810 |
| $\square$ 42705/541.1 | 2.132,92 | $\square$ 42705/541.0 | 2.132,92 | $\square$ 42705/541.2 | 2.251,16 | 2650 | 5410 |

Tick the box matching the model and size you wish to order.
Oversized: tick the box by the higher standard length and specify the exact size of the beam ending with zero or five.


## ACCESSORIES

| Q.ty | Code | Control unit | $\boldsymbol{\epsilon}$ |
| :---: | :---: | :---: | :---: |
| $\square$ | 42282/070 | SC6-6-way key-operated selector unit | 93,99 |
| $\square$ | 42282/073 | SC6EC - 6-way key-operated selector unit | 118,55 |
| $\square$ | 42282/082 | Emergency push-button | 54,23 |
| Q.ty | Code | Dispositivi di comando | $\boldsymbol{\epsilon}$ |
| $\square$ | 42283/090 | DT90C double technology safe radar | 389,68 |
| $\square$ | 42283/091 | DM H22 microwave radar | 185,85 |
| $\square$ | 42283/092 | RI90C infrared safe radar | 229,95 |
| $\square$ | 42283/096 | RSI 4C Swing door safety radar | 366,45 |
| $\square$ | 42283/098 | MS20 microwave contactless switch | 187,95 |
| Q.ty | Code | Accessories for glass wings | $\boldsymbol{\epsilon}$ |
| $\square$ | 42281/061 | PCR - clamps for glass doors | 252,82 |
| $\square$ | 42281/062 | Set of fitting for mounting glass wings | 112,07 |
| $\square$ | 42281/063 | Additional reinforcement bracket (1pc) | 20,63 |
| $\square$ | 42281/064 | Plug for glass door clamp (1pc) | 13,97 |
| $\square$ | 42280/079 | GTC - Floor guide set for glass wings | 7,60 |
| Q.ty | Code | Mechanical emergency break-out opening device | $\epsilon$ |
| $\square$ | 42280/081 | Guide and adapter set AMS | 76,07 |
| $\square$ | 42280/088 | 1 leaf mech.break out system | 338,28 |
| $\square$ | 42280/070 | Clamp set for semi-fixed door | 122,72 |
| $\square$ | 42280/076 | Magnetic contact smi | 10,13 |
| Q.ty | Code | Emergency release systems | $\boldsymbol{\epsilon}$ |
| $\square$ | 42280/084 | Internal manual release for eb2 | 66,71 |
| $\square$ | 42280/085 | External manual release for eb2 | 129,33 |
| Q.ty | Code | Pre-assembled beam accessories | $\boldsymbol{\epsilon}$ |
| $\square$ | 42300/002 | ER6/N pre-mtd - photocells pre-mounted for nk series | 193,13 |
| $\square$ | 42282/077 | eb2 nk pre-mtd - electric lock pre-mtd | 206,59 |

## COVERS

| Length <br> clear <br> (mm) | Code <br> cover <br> blank | € | Code <br> cover <br> silver | € | Code <br> cover <br> black | € |
| :--- | :--- | :---: | :--- | :--- | :--- | :---: |
| 2000 | $\square 42102 / 200$ | 107,54 | $\square 42100 / 200$ | 123,76 | $\square 42101 / 200$ | 145,72 |
| 2500 | $\square 42102 / 250$ | 120,90 | $\square 42100 / 250$ | 144,37 | $\square 42101 / 250$ | 166,72 |
| 3000 | $\square 42102 / 300$ | 135,54 | $\square 42100 / 300$ | 158,77 | $\square 42101 / 300$ | 190,29 |
| 3600 | $\square 42102 / 360$ | 162,96 | $\square 42100 / 360$ | 190,14 | $\square 42101 / 360$ | 213,83 |
| 4000 | $\square 42102 / 400$ | 175,91 | $\square 42100 / 400$ | 199,83 | $\square 42101 / 400$ | 232,28 |
| 4400 | $\square 42102 / 440$ | 190,23 | $\square 42100 / 440$ | 213,83 | $\square 42101 / 440$ | 256,15 |
| 4800 | $\square 42102 / 480$ | 209,51 | $\square 42100 / 480$ | 248,87 | $\square 42101 / 480$ | 285,70 |
| 5400 | $\square 42102 / 540$ | 228,70 | $\square 42100 / 540$ | 254,56 | $\square 42101 / 540$ | 313,65 |
| COMPLETE AUTOMATION: |  |  |  |  |  |  |

Tick the box matching the model and size you wish to order. Oversized: tick the box by the higher standard length and specify the exact size of the beam ending with zero or five.


ORDER FORM

## WING NK

| Name | City/Town |  |
| :--- | :--- | :--- |
| Surname | Post code | Province |
| Company name | C | 嘼 |
| Address | @ |  |

## STANDARD AUTOMATION

| Code <br> Automation LH single wing Anodized silver | $€$ | Cōde <br> Automation RH single wing Anodized silver | € | Code <br> Automation <br> Double wing <br> Anodized silver | $€$ | Span Passage max. (mm) | Length <br> Total <br> Automation <br> (mm) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\square$ 42710/201.1 | 2.091,19 | $\square$ 42710/201.0 | 2.091,19 | $\square$ 42710/201.2 | 2.203,04 | 950 | 2010 |
| $\square$ 42710/251.1 | 2.145,67 | $\square 42710 / 251.0$ | 2.145,67 | $\square$ 42710/251.2 | 2.262,76 | 1200 | 2510 |
| $\square$ 42710/301.1 | 2.211,74 | $\square$ 42710/301.0 | 2.211,74 | $\square 42710 / 301.2$ | 2.331,14 | 1450 | 3010 |
| $\square$ 42710/361.1 | 2.291,74 | $\square 42710 / 361.0$ | 2.291,74 | $\square 42710 / 361.2$ | 2.412,29 | 1750 | 3610 |
| $\square$ 42710/401.1 | 2.345,04 | $\square$ 42710/401.0 | 2.345,04 | $\square$ 42710/401.2 | 2.464,45 | 1950 | 4010 |
| $\square$ 42710/441.1 | 2.396,64 | $\square$ 42710/441.0 | 2.396,64 | $\square$ 42710/441.2 | 2.517,19 | 2150 | 4410 |
| $\square$ 42710/481.1 | 2.451,70 | $\square$ 42710/481.0 | 2.451,70 | $\square$ 42710/481.2 | 2.569,94 | 2350 | 4810 |
| $\square$ 42710/541.1 | 2.529,37 | $\square 42710 / 541.0$ | 2.529,37 | $\square 42710 / 541.2$ | 2.648,76 | 2650 | 5410 |
| $\square$ 42710/601.1 | 2.610,52 | $\square$ 42710/601.0 | 2.610,52 | $\square 42710 / 601.2$ | 2.729,91 | 2950 | 6010 |

Tick the box matching the model and size you wish to order.
Oversized: tick the box by the higher standard length and specify the exact size of the beam ending with zero or five.


## ACCESSORIES

| Q.ty | Code | Control unit | € |
| :---: | :---: | :---: | :---: |
| $\square$ | 42282/070 | SC6-6-way key-operated selector unit | 93,99 |
| $\square$ | 42282/073 | SC6EC - 6-way key-operated selector unit | 118,55 |
| $\square$ | 42282/082 | Emergency push-button | 54,23 |
| Q.ty | Code | Dispositivi di comando | € |
| $\square$ | 42283/090 | DT90C double technology safe radar | 389,68 |
| $\square$ | 42283/091 | DM H22 microwave radar | 185,85 |
| $\square$ | 42283/092 | RI90C infrared safe radar | 229,95 |
| $\square$ | 42283/096 | RSI 4C Swing door safety radar | 366,45 |
| $\square$ | 42283/098 | MS20 microwave contactless switch | 187,95 |
| Q.ty | Code | Accessories for glass wings | € |
| $\square$ | 42281/061 | PCR - clamps for glass doors | 252,82 |
| $\square$ | 42281/062 | Set of fitting for mounting glass wings | 112,07 |
| $\square$ | 42281/063 | Additional reinforcement bracket (1pc) | 20,63 |
| $\square$ | 42281/064 | Plug for glass door clamp (1pc) | 13,97 |
| $\square$ | 42280/079 | GTC - Floor guide set for glass wings | 7,60 |
| Q.ty | Code | Mechanical emergency break-out opening device | $\epsilon$ |
| $\square$ | 42280/081 | Guide and adapter set AMS | 76,07 |
| $\square$ | 42280/088 | 1 leaf mech.break out system | 338,28 |
| $\square$ | 42280/070 | Clamp set for semi-fixed door | 122,72 |
| $\square$ | 42280/076 | Magnetic contact smi | 10,13 |
| Q.ty | Code | Emergency release systems | $\boldsymbol{€}$ |
| $\square$ | 42280/084 | Internal manual release for eb2 | 66,71 |
| $\square$ | 42280/085 | External manual release for eb2 | 129,33 |
| Q.ty | Code | Pre-assembled beam accessories | € |
| $\square$ | 42300/002 | ER6/N pre-mtd - photocells pre-mounted for nk series | 193,13 |
| $\square$ | 42282/077 | eb2 nk pre-mtd - electric lock pre-mtd | 206,59 |

## COVERS

| Length <br> clear <br> (mm) | Code <br> cover <br> blank | € | Code <br> cover <br> silver | € | Code <br> cover <br> black | € |
| :--- | :--- | :---: | :---: | :---: | :--- | :---: |
| 2000 | $\square 42102 / 200$ | 107,54 | $\square 42100 / 200$ | 123,76 | $\square 42101 / 200$ | 145,72 |
| 2500 | $\square 42102 / 250$ | 120,90 | $\square 42100 / 250$ | 144,37 | $\square 42101 / 250$ | 166,72 |
| 3000 | $\square 42102 / 300$ | 135,54 | $\square 42100 / 300$ | 158,77 | $\square 42101 / 300$ | 190,29 |
| 3600 | $\square 42102 / 360$ | 162,96 | $\square 42100 / 360$ | 190,14 | $\square 42101 / 360$ | 213,83 |
| 4000 | $\square 42102 / 400$ | 175,91 | $\square 42100 / 400$ | 199,83 | $\square 42101 / 400$ | 232,28 |
| 4400 | $\square 42102 / 440$ | 190,23 | $\square 42100 / 440$ | 213,83 | $\square 42101 / 440$ | 256,15 |
| 4800 | $\square 42102 / 480$ | 209,51 | $\square 42100 / 480$ | 248,87 | $\square 42101 / 480$ | 285,70 |
| 5400 | $\square 42102 / 540$ | 228,70 | $\square 42100 / 540$ | 254,56 | $\square 42101 / 540$ | 313,65 |
| COMPLETE AUTOMATION: |  |  |  |  |  |  |

Tick the box matching the model and size you wish to order Oversized: tick the box by the higher standard length and specify the exact size of the beam ending with zero or five.


## WING NK H150

| Name | City/Town |  |
| :--- | :--- | :--- |
| Surname | Post code | Province |
| Company name | C | 间 |
| Address | @ |  |

## STANDARD AUTOMATION

| Code <br> Automation LH single wing Anodized silver | $€$ | Code <br> Automation RH single wing Anodized silver | $€$ | Code <br> Automation <br> Double wing <br> Anodized silver | $€$ | Span Passage max. (mm) | Length <br> Total <br> Automation <br> (mm) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\square$ 42715/201.1 | 2.421,56 | $\square$ 42715/201.0 | 2.421,56 | $\square$ 42715/201.2 | 2.539,80 | 950 | 2010 |
| $\square$ 42715/251.1 | 2.488,80 | $\square$ 42715/251.0 | 2.488,80 | $\square 42715 / 251.2$ | 2.606,44 | 1200 | 2510 |
| $\square$ 42715/301.1 | 2.667,97 | $\square 42715 / 301.0$ | 2.667,97 | $\square 42715 / 301.2$ | 2.673,68 | 1450 | 3010 |
| $\square 42715 / 361.1$ | 2.633,11 | $\square 42715 / 361.0$ | 2.633,11 | $\square$ 42715/361.2 | 2.752,51 | 1750 | 3610 |
| $\square$ 42715/401.1 | 2.686,43 | $\square$ 42715/401.0 | 2.686,43 | $\square$ 42715/401.2 | 2.805,84 | 1950 | 4010 |
| $\square$ 42715/441.1 | 2.736,86 | $\square$ 42715/441.0 | 2.736,86 | $\square$ 42715/441.2 | 2.858,58 | 2150 | 4410 |
| $\square$ 42715/481.1 | 2.793,09 | $\square$ 42715/481.0 | 2.793,09 | $\square$ 42715/481.2 | 2.900,32 | 2350 | 4810 |
| $\square$ 42715/541.1 | 2.871,90 | $\square 42715 / 541.0$ | 2.871,90 | $\square 42715 / 541.2$ | 2.977,98 | 2650 | 5410 |
| $\square$ 42715/601.1 | 2.953,05 | $\square$ 42715/601.0 | 2.953,05 | $\square$ 42715/601.2 | 3.070,13 | 2950 | 6010 |

Tick the box matching the model and size you wish to order.
Oversized: tick the box by the higher standard length and specify the exact size of the beam ending with zero or five.


## ACCESSORIES

| Q.ty | Code | Control unit | $\boldsymbol{\epsilon}$ |
| :---: | :---: | :---: | :---: |
| $\square$ | 42282/070 | SC6-6-way key-operated selector unit | 93,99 |
| $\square$ | 42282/073 | SC6EC - 6-way key-operated selector unit | 118,55 |
| $\square$ | 42282/082 | Emergency push-button | 54,23 |
| Q.ty | Code | Dispositivi di comando | € |
| $\square$ | 42283/090 | DT90C double technology safe radar | 389,68 |
| $\square$ | 42283/091 | DM H22 microwave radar | 185,85 |
| $\square$ | 42283/092 | RI90C infrared safe radar | 229,95 |
| $\square$ | 42283/096 | RSI 4C Swing door safety radar | 366,45 |
| $\square$ | 42283/098 | MS20 microwave contactless switch | 187,95 |
| Q.ty | Code | Accessories for glass wings | € |
| $\square$ | 42281/061 | PCR - clamps for glass doors | 252,82 |
| $\square$ | 42281/062 | Set of fitting for mounting glass wings | 112,07 |
| $\square$ | 42281/063 | Additional reinforcement bracket (1pc) | 20,63 |
| $\square$ | 42281/064 | Plug for glass door clamp (1pc) | 13,97 |
| $\square$ | 42280/079 | GTC - Floor guide set for glass wings | 7,60 |
| Q.ty | Code | Mechanical emergency break-out opening device | $\epsilon$ |
| $\square$ | 42280/081 | Guide and adapter set AMS | 76,07 |
| $\square$ | 42280/088 | 1 leaf mech.break out system | 338,28 |
| $\square$ | 42280/070 | Clamp set for semi-fixed door | 122,72 |
| $\square$ | 42280/076 | Magnetic contact smi | 10,13 |
| Q.ty | Code | Emergency release systems | $\boldsymbol{\epsilon}$ |
| $\square$ | 42280/084 | Internal manual release for eb2 | 66,71 |
| $\square$ | 42280/085 | External manual release for eb2 | 129,33 |
| Q.ty | Code | Pre-assembled beam accessories | € |
| $\square$ | 42300/002 | ER6/N pre-mtd - photocells pre-mounted for nk series | 193,13 |
| $\square$ | 42282/077 | eb2 nk pre-mtd - electric lock pre-mtd | 206,59 |

## COVERS

| Length <br> clear <br> (mm) | Code <br> cover <br> blank | € | Code <br> cover <br> silver | €Code <br> cover <br> black | € |  |
| :--- | :--- | :---: | :--- | :--- | :--- | :---: |
| 2000 | $\square 42102 / 200$ | 107,54 | $\square 42100 / 200$ | 123,76 | $\square 42101 / 200$ | 145,72 |
| 2500 | $\square 42102 / 250$ | 120,90 | $\square 42100 / 250$ | 144,37 | $\square 42101 / 250$ | 166,72 |
| 3000 | $\square 42102 / 300$ | 135,54 | $\square 42100 / 300$ | 158,77 | $\square 42101 / 300$ | 190,29 |
| 3600 | $\square 42102 / 360$ | 162,96 | $\square 42100 / 360$ | 190,14 | $\square 42101 / 360$ | 213,83 |
| 4000 | $\square 42102 / 400$ | 175,91 | $\square 42100 / 400$ | 199,83 | $\square 42101 / 400$ | 232,28 |
| 4400 | $\square 42102 / 440$ | 190,23 | $\square 42100 / 440$ | 213,83 | $\square 42101 / 440$ | 256,15 |
| 4800 | $\square 42102 / 480$ | 209,51 | $\square 42100 / 480$ | 248,87 | $\square 42101 / 480$ | 285,70 |
| 5400 | $\square 42102 / 540$ | 228,70 | $\square 42100 / 540$ | 254,56 | $\square 42101 / 540$ | 313,65 |
| COMPLETE AUTOMATION: |  |  |  |  |  |  |

Tick the box matching the model and size you wish to order.
Oversized: tick the box by the higher standard length and specify the exact size of the beam ending with zero or five.


## GENERAL SALES CONDITIONS

## GENERAL

The general conditions of sale, as reported below, are understood to be valid for any order received by Aprimatic s.r.l. and are an essential part of each order Any modifications to these clauses, as well as any special conditions, shall be expressly agreed upon in writing. Orders are only supplied in the packaging format indicated on the price list.

## ORDERS

Orders acquired by our sale organisation are subject to the approval of Aprimatic s.r.l.. Orders should comply with the packing as reported in the price list and their net amount may not be lower than $€ 150.00$.

## TRANSPORT

The goods shall travel at the Purchaser's own risk; before collection he/she shall verify, in his/her own interest, the integrity of the packages and the quantity of the goods received. Any complaint shall be made directly to the carrier upon delivery Delivery EXW Incoterms ICC2000 unless otherwise agreed in writing. All delivery dates given shall be deemed as purely indicative and non-binding. Aprimatic s.r.l. shall not be held responsible to the Purchaser for any failure to perform, including late delivery or failure to deliver, which failure to perform is caused by occurrences beyond Aprimatic's reasonable control or in any case caused by an event of force majeure, including, but not limited to, late delivery of non-delivery of material by suppliers, strikes, and other trade union actions, terrorist activities, suspension of electrical energy or difficulties in transportation.

## DELIVERIES

The goods are meant to be delivered ex our factory in Turin or our external warehouses, if the net amount of the order exceeds $€ 400.00$ for EU country and $€$ 600,00 for Extra EU country. For orders less than the net amounts of $€ 400.00$ for EU country will be applied on the ammount of order $€ 40$ of transport, and for order less than $€ 600.00$ for extra EU country will be apply on the ammount of order $€ 50$ for transport. The terms of delivery are just an indication and have no contractual value.

## PRICES

All listed prices are understood to be before VAT. Aprimatic s.r.l., reserves its unquestionable power to modify published list prices if this is required by the cos components of the individual items. The prices indicated on the Price List are no binding. Aprimatic s.r.l. reserves the right to change the price of the Products and/ or the discounts, if any, applicable thereto at any time and for any reason, upon 30 (thirty) days' prior written notice to the Purchaser. If any delay in delivery of the Products occurs through the fault of the Purchaser, any possible increase in the price of the Products which may have occurred since the confirmation of the order relating to the Products shall be borne solely by the Purchaser. Any and all taxes, duties, levies, licenses, authorizations, permits and any and all tax and administrative formalities relating to import and/or resale of the Products shall be borne and carried out exclusively by the Purchaser.

## RETURNS AND CLAIMS

Any complaints must be sent to Aprimatic s.r.l. in writing within 8 days of receiving of the goods. Returns must be authorised beforehand by Aprimatic s.r.l. Authorized returns must be sent carriage paid to the Aprimatic s.r.l. warehouse with the purchase documents delivery note and number of authorization enclosed. It will be issued a credit note for the purchase price of the goods minus $20 \%$ due to processing fee and testing procedures. Regarding the returns and claims, you can see and downloading the current "conditions" on our website www.aprimatic.com

## PRODUCTS

Aprimatic s.r.l. shall be entitled to make minor changes to the Products without being obliged to inform the Purchaser. The information shown in all Aprimatic publications is provided for information purposes only and is subject to modification at any time without prior warning. Aprimatic s.r.l. does not warrant to the Purchaser that the Products comply with the applicable laws and regulations in force in the country (ies) where the Purchaser is established or where the Products are meant to be sold, delivered and/or installed. Aprimatic shall have no obligation to modify the Products in compliance with said laws or regulations and the Purchaser shall be solely responsible for ensuring that the Products and any service of the Purchaser conform to the applicable technical and safety standards, laws and regulations in force in said country (ies).The Purchaser acknowledges that the Products may be dangerous to persons or property when not installed or used in strict compliance with Aprimatic's written instructions for installation and used furnished by Aprimatic and with the safety requirements specified in the EN 12445 and EN 12543. Aprimatic s.r.l. expressly disclaim liability for any personal injury or property damage resulting from installation or use of the Products other than in strict compliance with Aprimatic's written instructions with respect to installation and use, or from installation or use of the Products together with
safety accessories or other products not manufactured by Aprimatic, it being understood that the maximum liability of Aprimatic to the Purchaser or to any other person or entity, arising out of or in connection with the Products and based on a claim of breach or under warranty, shall in no case exceed the price paid to Aprimatic for the Products which gives rise to the claim, loss or damage. In no event shall Aprimatic s.r.l. be liable for special and consequential damages including, without limitation, loss of profit.

## PAYMENTS

Payments shall be made to Aprimatic s.r.l. within the agreed term and for the agreed amount. Any delay in the payment of invoices beyond the terms agreed upon triggers the immediate application of bank interest and entails the ensuing suspension of deliveries

## WARRANTIES

Sold goods are guaranteed against manufacturing defects and/or defects of materials for 24 months from the date of installation certified by sending Aprimatic s.r.l., the "Warranty Certificate" for the products provided with it. Exception is made for the products of the Racing Kit line, whose warranty has a 36-month duration from the installation date as certified by sending said certificate. In order for the warranty certificate to be considered valid, it must be sent within 10 days from the date of installation and filled in all its parts. Alternatively, and for the products that are not provided with such a certificate, the warranty shall have a duration of 30 months from the date of production. The warranty terms and conditions are verified by Aprimatic s.r.l. under its final judgment and by the Repair centres it has put in charge of it. The costs of any calling and servicing rights are to the Purchaser's charge. Aprimatic s.r.l. reserves the right not to provide warranty if the powering of the plant is not entirely realised with APRIMATIC products and the installation is not made up to standard. The warranty shall not be in force when operation defects depend on structural flaws, i.e. incompatibility, of the frames to be powered with APRIMATIC products.
The material recognised in warranty shall be accepted for repair only if shipped free port; after the repair or replacement it shall be shipped back freight forward. The replaced material shall remain property of APRIMATIC. The warranty does not include:

- Breakdown or damages caused by transport.

Breakdown or damages caused by faults in the electrical system and/ or carelessness, negligence in using plant and in any case of misuse. Breakdown or damages due to tampering or any negligent behaviours or behaviours not conforming with standards by the installer or purchaser without conforming to instructions provided by the manufacturer

- Breakdown or damages due to use of non-original spare parts
- Defects caused by chemical agents or atmospheric conditions.
- Consumables.

Interventions for supposed faults or convenient verifications
Aprimatic s.r.l. guarantees exclusively the conformity of the Products to the technical specifications submitted to Buyer and published on the web site www. aprimatic.com, provided that the Products have been correctly transported stored, installed, used and repaired by Buyer lincluding in compliance with the Aprimatic's manual); in case of defects, purchaser shall write a "reserve" on the delivery note and give a detailed notice thereof in writing to Aprimatic within 7 days from delivery or from discovery, in case of hidden defects and anyhow not later than two years from delivery and Aprimatic shall only be bound to, at its own choice: replace the defective Products or, totally or partially, reimburse their price. Apart from what set forth herewith, Aprimatic shall bear no other responsibility, in particular any liability for damages lincluding loss of profit or any other subsequent loss) here by expressly excluded.

OWNERSHIP OF GOODS

Aprimatic s.r.l. remains the owner of the goods until their complete payment by the customer. If the seller does not intend to repossess goods for which payment has not been made in full, the seller shall have the right to apply interest charges at a rate of $5 \%$ more than the current discount rate.

GENERAL RECOMMENDATIONS
This price list cancels and replaces all previous price lists. In accordance with current safety standards, it is essential to install genuine APRIMATIC control units and accessories. Aprimatic s.r.l. declines all responsibility for injury or damage, even to third parties, deriving from failure to observe these safety standards or from bad craftsmanship in the installation or operation of the goods

## COMPETENT COURT

For any dispute that might arise, the competent court is understood to be the Court of Turin, Italy.

## RAIDER 2500

PAG. 36


FLEXI 300
PAG. 42


TWENTY 270
PAG. 44


FORTY 270 / 390
PAG. 46


EM 73N
PAG. 48


ZT 70
PAG. 50



SWING GATES



ONDA 2000 / 2001
PAG. 72


AT 86T / AT 88T
PA G. 74


PAG. 70

PAG. 76
AT 90T / AT 92T

APRIBOX CF800 / CF100


HARRIER 4000R

HARRIER 40001
PAG. 98



HARRIERE 6000 / 80001
PAG. 100


TRAFFIC BARRIERS



[^0]:    Terminals, Telemetry Systems, Road Lighting, Public Telephone Network Systems, Heat Exchangers, Transport, Remote Management Systems

[^1]:    NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue

[^2]:    NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
    NOTE: All prices are subject to variation.

[^3]:    NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
    NOTE: All prices are subject to variation.

[^4]:    NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
    NOTE: All prices are subject to variation.

[^5]:    * Electric lock needed. For product version type, see key on page 233.

    NOTE: The data provided refer to correctly installed products undergoing regular maintenance.

[^6]:    NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
    NOTE: All prices are subject to variation.

[^7]:    NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
    NOTE: All prices are subject to variation.

[^8]:    NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
    NOTE: All prices are subject to variation.

[^9]:    All operators are equipped with hydraulic slowing down in the closing system fix (but electronically adjustable).
    SF versions, without hydraulic lock, always require the use of the electric lock.

[^10]:    NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
    NOTE: All prices are subject to variation.

[^11]:    NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
    NOTE: All prices are subject to variation.

[^12]:    NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
    NOTE: All prices are subject to variation.

[^13]:    (*) Product certified under ideal installation conditions.

[^14]:    NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
    NOTE: All prices are subject to variation.

[^15]:    NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
    NOTE: All prices are subject to variation.

[^16]:    NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
    NOTE: All prices are subject to variation.

[^17]:    NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
    NOTE: All prices are subject to variation.

[^18]:    NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
    NOTE: All prices are subject to variation.

[^19]:    NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
    NOTE: All prices are subject to variation.

[^20]:    NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
    NOTE: All prices are subject to variation.

[^21]:    Electromechanical
    GA-MATIC CF800
    GA-MATIC CF1000

[^22]:    NOTE: Alzo application requires a rebalancing of the door (see instructions).
    NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators"
    in this catalogue (refer to the initial index).

[^23]:    NOTE: For the available safety and signalling devices and for installation accessories, see section "Control units and indicators" in this catalogue (refer to the initial index).
    NOTE: All prices are subject to variation.

[^24]:    * Beams with predisposition of accessories installation like shockproof rubber edge, Led lights strip kit, basculant pin. Accessories to be ordered for separate. NOTE: The data provided refer to correctly installed products undergoing regular maintenance.

[^25]:    NOTE: All prices are subject to variation

[^26]:    NOTE: All prices are subject to variation

[^27]:    NOTE: All prices are subject to variation

[^28]:    NOTE: Winding and friction coefficents included.

[^29]:    NOTE: All prices are subject to variation

[^30]:    NOTE: All described motors, except for the REVOLUX WIRELESS models, can be combined with ADI control units - See the "Home Automation" section of this catalogue (refer to the initial index).
    (*) To complete the tubular motor installation, add an adapter to be chosen based on rolling shutter or blind winding roller, and a support to be chosen based on installation type. See the relevant pages on adapters and accessories for item selection.
    NOTE: All prices are subject to variation

[^31]:    NOTE: All described motors, except for the REVOLUX WIRELESS models, can be combined with ADI control units - See the "Home Automation" section of this catalogue (refer to the initial index).
    ${ }^{( }$) To complete the tubular motor installation, add an adapter to be chosen based on rolling shutter or blind winding roller, and a support to be chosen based on installation type. See the relevant pages on adapters and accessories for item selection.
    NOTE: All prices are subject to variation

[^32]:    * All profiles are supplied in lengths of 7 m which cannot be split.

[^33]:    NOTA: All prices are subject to variation.

[^34]:    NOTA: All prices are subject to variation.

[^35]:    NOTE: For technical details about the ER6N photocells, see the "Photocells" table

[^36]:    6- COUNTER-BRACKET L=140 mm
    6' - COUNTER-BRACKET L=210 mm
    7- RACK WITH COMPENSATOR
    8- FRAME MOUNT

