

*OPERATOR FOR SWING GATES*

# ATI SERIES



INSTALLATION MANUAL  
**A 3000/3006/3100/3106**  
**A 5000/5006/5100/5106**

**EN**

# **WARNING!**

## **Important instructions for the safety of people: READ CAREFULLY!**



### **Foreword**

• Use of the products must be restricted to its intended use (i.e. that for which it was expressly built for). Any other use is to be considered dangerous. CAME Cancelli Automatici S.p.A. is not liable for any damage resulting from improper, wrongful or unreasonable use • Keep these warnings with the installation and use manuals issued with the automated system.

### **Before installing**

*(preliminary check: in case of a negative outcome, do not proceed before having complied with the safety obligations)*

• Make sure that the parts you intend to automate are in good working order, and that they are properly balanced and aligned. Also, make sure that proper mechanical stops are already in place • If the operator will be installed at a height of less than 2.5 m from the ground or other access level, check whether you will need any protections and/or warnings • Any gate leaves, fitted with pedestrian entrances, onto which you will install an operator, must have a blocking mechanism when the gate is in motion • Make sure that the opening of the automated gate is not an entrapment hazard as regards any surrounding fixed parts • Do not mount the operator upside down or onto any elements that may fold under its weight. If needed, add suitable reinforcements at the points where it is secured • Do not install onto gates on either an upward or downward slope (i.e. that are not on flat, level ground) • Check that any lawn watering devices will not wet the gearmotor from the bottom up.

### **Installation**

• Carefully section off the entire site to prevent unauthorised access, especially by minors and children • Be careful when handling operators that weigh more than 20 Kg (see installation manual). In such cases, employ proper weight handling safety equipment • All opening commands (e.g. buttons, key selectors, magnetic detectors, etc.) must be installed at least 1.85 m from the gate's area of operation perimeter - or where they cannot be reached from the outside of the gate. Also, the direct commands (e.g. push button, or proximity devices, etc.) must be installed at a height of at least 1.5 m and must not be accessible to the public • All 'maintained action' commands, must be placed where the moving gate leaves, transit areas and driveways are completely visible • If missing, apply a permanent label that shows the position of the release mechanism • Before delivering to the client, verify that the system is EN 12453 (impact test) standard compliant. Make sure that the operator has been properly adjusted and that the safety and protection devices, as well as the manual release

are working properly • Where necessary and in plain sight, apply the Warning Signs (e.g. gate plate).

### **Special instructions and advice for users**

• Keep the gate's area of operation clean and clear of any obstacles. Trim any vegetation that may interfere with the photocells • Do not allow children to play with the fixed command devices, or in the gate's area of operation. Keep any remote control devices (i.e. transmitters) away from the children as well • Frequently check the system, to see whether any anomalies or signs of wear and tear appear on the moving parts, on the component parts, on the securing points, on the cables and any accessible connections. Keep any joints (i.e. hinges) lubricated and clean, and do the same where friction may occur (i.e. slide rails) • Perform functional tests on photocells and sensitive edges, every six months. Keep glass panels constantly clean (use a slightly water-moistened cloth; do not use solvents or any other chemical products) • If the system requires repairs or modifications, release the operator and do not use it until safety conditions have been restored • Cut off the power supply before releasing the operator for manual openings. See instructions • Users are FORBIDDEN to carry out ANY ACTIONS THAT THEY HAVE NOT BEEN EXPRESSLY ASKED TO DO OR SO INDICATED in the manuals. Any repairs, modifications to the settings and extraordinary maintenance MUST BE DONE BY THE TECHNICAL ASSISTANCE STAFF • On the periodic maintenance log, note down the checks you have done.

### **Special instructions and advice for all**

• Avoid working near the hinges or moving mechanical parts • Stay clear of the gate's area of operation when in motion • Do not resist the direction of movement of the gate; this may present a safety hazard • At all times be extremely careful about dangerous points that must be indicated by proper pictograms and/or black and yellow stripes • When using a selector or command in 'maintained action' mode, keep checking that there are no people in the area of operation of the moving parts. Do this until you release the command • The gate may move at any time without warning • Always cut the power when cleaning performing maintenance.



**CAME cancelli automatici s.p.a.**  
Via Martiri della Libertà, 15  
31030 Dosson di Casier  
TREVISO - ITALY  
[www.came.it](http://www.came.it) - [info@came.it](mailto:info@came.it)

# General conditions of sale



## 1. GENERAL POINTS

These general conditions shall apply to all purchase agreements for Came Cancelli Automatici SpA materials, hereinafter called “the company”.

## 2. OFFERS AND QUOTATIONS

The company's quotations are valid for a 30-day period at the most starting from the date they are sent.

## 3. ORDERS

The sale agreement is executed once the written order is confirmed by Came Cancelli Automatici SpA or when the order is fulfilled by the company. Orders that are addressed, and signed by clients, to Came Cancelli Automatici SpA are deemed to be firm and irrevocable for 30 days starting from the date they are received by the company. Any change or addition to the single provisions of these general conditions or single provisions of the order which was originally addressed by the client, shall have no validity unless otherwise approved in writing by the company. For any changes to the order, the company reserves the right to cancel both the changes and the original order. The delivery date for the goods appearing on the orders is always and in any case exclusively indicative, and any delays of such term may never justify claims for compensation or cancellation of contract.

Particularly, the company reserves the right to extend the delivery terms or cancellation of order in the event of: force majeure or events that are beyond the control of the company; change of the Client's legal status; difficulty in sourcing raw materials and component parts.

## 4. DELIVERY AND FORWARDING

The place of production or registered office of the company shall be the place of fulfilment for delivery. The cost and risk of the travelling goods is borne by the buyer ex works, pursuant to the 2000 incoterms. Unless otherwise agreed, the company establishes, for and on behalf of the client, the type of shipping, the travel route and type of carrier. The company reserves the right to carry out partial deliveries and fulfilment of orders, thereby issuing a separate invoice each time: in this case all partial deliveries shall be autonomously invoiced and the terms of payment shall begin as of the date on each invoice; the client may not, therefore, defer payment of partial orders, until the last delivery is made as concerns the original order.

## 5. PRICES AND PRICE LISTS

The prices are intended for goods delivered free to the company's registered office, not including VAT, with normal packaging, and not including forwarding expenses. Any reference to list prices shall refer to the latest price list published by the company, which theretofore cancels any previous price lists.

## 6. PAYMENTS

Non-payment within the established terms, shall result in the application of interest pursuant to Lgs. Decr. 09/10/2002 n. 231 and subsequent amendments and upgrades, with any possible greater damage unprejudiced. Any delay in payment, shall mean that the client shall owe the company, any losses due to exchange rates. The client may not advance any demands nor raise any exceptions as concerns the company, unless after having paid the goods it purchased. The company reserves the right to block all shipping and supply orders underway in the face of any irregularities in the payments, without need of prior notice nor compensatory damages of any kind.

## 7. RETURNS AND CLAIMS

All claims must be filed in writing within 8 days of receiving the goods, whether such claims refer to the quantity or quality of the delivered goods. Returned goods shall be accepted by company only following a written agreement, and only for new and packaged goods. Any returned goods must be complete of their relative transport documents, showing the company's written authorisation to accept the returned goods including the quality and quantity of the returned goods.

The returned goods shall not be accepted by the company unless carried out in the above mentioned manner and, especially, returned goods shall not be accepted if received at any of the company's premises.

## 8. GUARANTEE

The company guarantees the proper functioning of the products that it provides, as per the technical characteristics that are expressly shown on its products' technical sheets. The guarantee shall not apply in the case of any environmental interferences of any nature, which could cause disturbances in the functioning of any existing or future installations (radio frequencies – proximity of electric power lines...). The guarantee does not cover the normal wear and tear of the equipment, or mistakes made during the mounting phase or due to maintenance flaws, and in any case it does not cover any cases in which flaws in the functioning can be traced back to factors stemming from anything other than manufacturing.

The deadlines for filing a claim for any flaws or for the statute of limitations for actions to which the buyer is entitled are those foreseen by Italian law. The company at its own leisure, may decide to withdraw any goods supplied which it has ascertained as faulty, or decide to repair said ascertained flaws. The client may not request to be compensated for any indirect damages, missed gains, production losses, and in any case may not expect as compensation any sums greater than the value of the supplied components or products.

## 9. REPAIRS

Repairs to purchased items request by the client shall be carried out by the company following an agreement on the price of said repairs. In any case the expenses for labour and shipping (roundtrip) shall be borne by the client.

## 10. RESERVATION OF TITLE

It is expressly agreed that, any delivered goods remain owned by the company until the client pays the entire balance, regardless of who is in possession of said goods. Transport expenses and any other expenses needed to retrieve the equipment, therein including any extraordinary expenses as well as any repeatable ones, shall be borne by the client.

**11. APPLICABLE LAW – SETTLEMENT OF ANY DISPUTES** Any arising dispute resulting from the sale agreement, shall be settled according to the Italian law, thereby excluding any other law and in supplement to the Vienna Convention on the international sale of goods. All disputes shall be subject to Italian jurisdiction and come under the exclusive competence of the Tribunal of Treviso, Italy.

## 12. PROVISIONS ON THE SAFEGUARDING OF PERSONAL DATA.

Pursuant to current legislation for the safeguarding of personal data, clients are aware that their personal data is inputted into the company's databank, which is necessary for the proper carrying out of the contractual relationship and for compliance with certain provisions of law, as well as for purposes of statistics, promotion, marketing, commercial, credit protection, management and transfer of the same.

The personal data of the buying party are processed through automated and paper-based tools by authorised persons, by using safety procedures designed to guarantee confidentiality. The personal data of the client may be shared with Public Bodies, companies of the group, credit recovery firms, or consortiums or associations with business scopes, market research scopes, or marketing scopes. The data processor shall be the company, and the client may address said company to uphold their own rights as per law. To this end the buying party is aware that at any time it may access its personal data, ask that it be updated, corrected and/or prohibit it from being used.

## “IMPORTANT INSTALLATION, SAFETY INSTRUCTIONS”

“CAUTION: IMPROPER INSTALLATION MAY CAUSE SERIOUS DAMAGE, FOLLOW ALL INSTALLATION INSTRUCTIONS CAREFULLY”

“THIS MANUAL IS ONLY FOR PROFESSIONAL OR QUALIFIED INSTALLERS”



## 1 Legend of symbols

- This symbol tells you what to say to the end-users.
- This symbol tells you to read the section with particular care.
- This symbol tells you that the sections concern safety issues.

## 2 Intended use and restrictions

### 2.1 Intended use

- The ATI 230V gearmotor is designed to power residential and condominium swing gates.  
Any use, other than that described above or installations performed in ways other than those described herein, are forbidden.

### 2.2 Restrictions

A3000/A3006-A3100/A3106	
Gate leaf width	Gate leaf weight
m	kg
2.00	800
2.50	600
3.00	400

A5000/A5006-A5100/A5106	
Gate leaf width	Gate leaf weight
m	kg
2.00	1000
2.50	800
3.00	600
4.00	500
5.00	400

## 3 Reference Standards

For its quality processes management Came Cancelli Automatici is ISO 9001:2000 certified, and for its environmental management it is ISO 14001 certified.

This product complies with the following standards: *see declaration of conformity.*

## 4 Description

### 4.1 Gearmotor

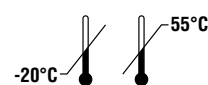
This product is engineered and manufactured by CAME CANCELLI AUTOMATICI S.p.A. and complies with current safety regulations. Guaranteed 24 months if not tampered with.

The (A3000/A3006/A5000/A5006) self-locking electro-blocked or A3100/A31006/A5100/5106) reversible gearmotors is made of two cast aluminium half shells inside of which lies the gearmotor with a planet gear and endless screw system.

### 4.2 Technical features

Motor power supply: 230V A.C. 50/60Hz  
Max draw.: 1,2A  
Power: 150W  
Opening time (90°) A3000/A3100: 19 s  
A3006/A3106: 28 s  
A5000/A5100: 32 s  
A5006/A5106: 45 s

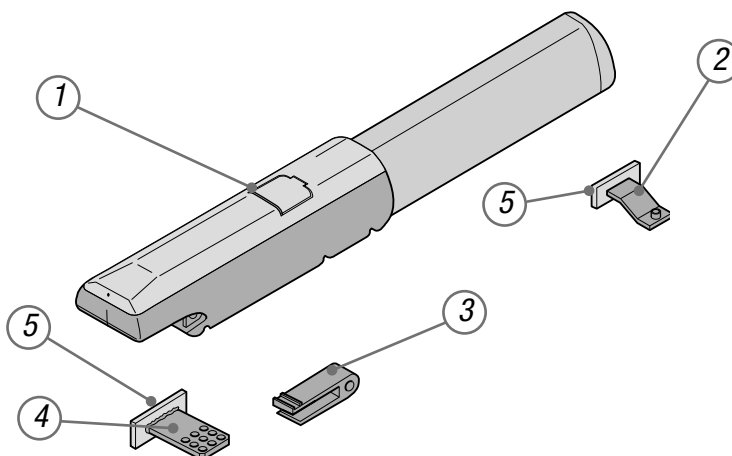
Gear ratio: 1/36  
Thrust: 400 ÷ 3000N  
Duty cycle: 50%  
Condenser: 10µF  
Protection rating: IP44  
Weight A3000/A3006/A3100/A3106: 10 kg  
A5000/A5006/A5100/A5106: 11 kg



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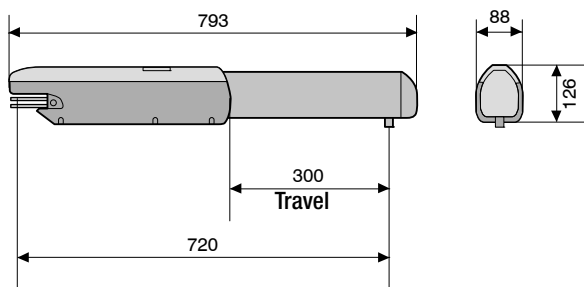
### 4.3 Description of parts

- 1) Gearmotor
- 2) Front bracket
- 3) Back swivel-joint
- 4) Back bracket
- 5) Anchoring plate

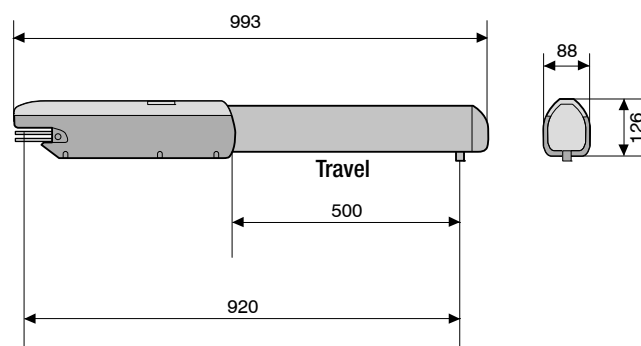


### 4.4 Overall dimensions

A 3000/3006/3100/3106



A 5000/5006/5100/5106



## 5 Installation



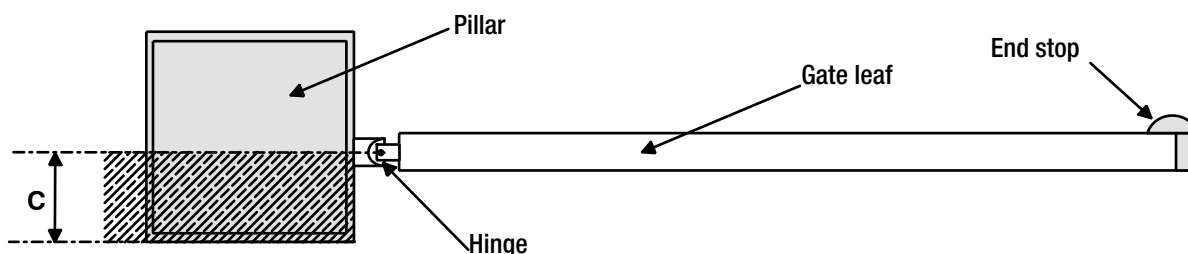
Installation must be carried out by expert qualified personnel and in full compliance with current regulations.

### 5.1 Preliminary checks



Before installing, do the following:

- make sure the structure of the gate is sturdy, the hinges work and that there is no friction between moving parts and non-moving parts;
- measurement C cannot be greater than the value shown in Tab. 3, p. 5. In this case you need to work on the pillar until said measurement is obtained;
- the path of the electrical cables must comply with the command and safety instructions;
- there must be a soundly secured to the ground mechanical stop to prevent the gate leaf/gearmotor from over extending.
- ⚡ Any connections inside the case (that provide continuance to the protective circuit) must be fitted with extra insulation as compared to the other conductive part inside;
- Make sure you have suitable tubing and conduits for the electrical cables to pass through and be protected against mechanical damage.



## 5.2 Tools and materials

Make sure you have all the tools and materials you will need for the installation at hand to work in total safety and compliance with the current standards and regulations.



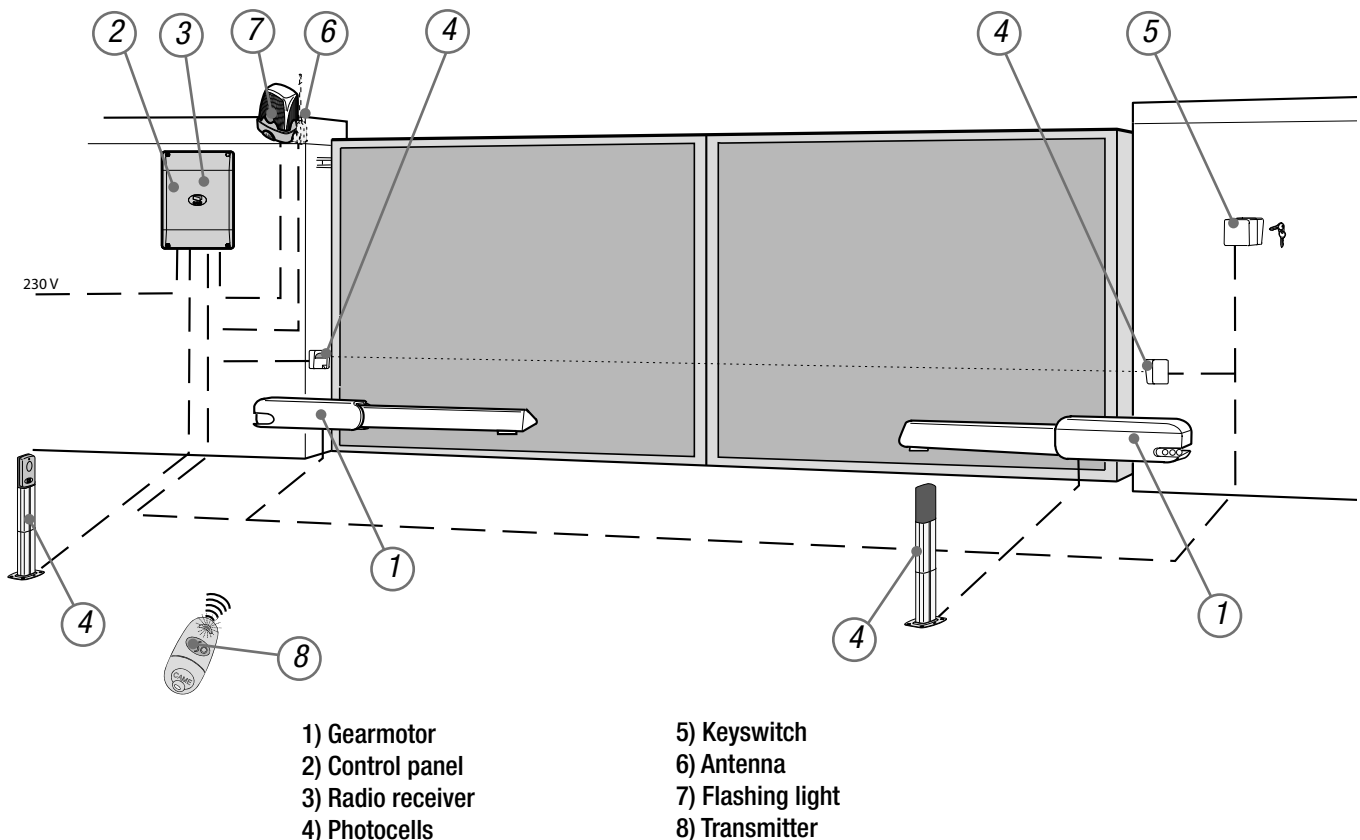
## 5.3 Cable list and minimum thickness

Connections	Type of cable	Length of cable 1 < 10 m	Length of cable 10 < 20 m	Length of cable 20 < 30 m
Control panel power supply 230V	FROR CEI 20-22 CEI EN 50267-2-1	3G x 1,5 mm <sup>2</sup>	3G x 2,5 mm <sup>2</sup>	3G x 4 mm <sup>2</sup>
Motor power supply 230V		4G x 1 mm <sup>2</sup>	4G x 1,5 mm <sup>2</sup>	4G x 2,5 mm <sup>2</sup>
Flashing light 24V		2 x 0,5 mm <sup>2</sup>	2 x 1 mm <sup>2</sup>	2 x 1,5 mm <sup>2</sup>
Photocell transmitters		2 x 0,5 mm <sup>2</sup>	2 x 0,5 mm <sup>2</sup>	2 x 0,5 mm <sup>2</sup>
Photocell receivers		4 x 0,5 mm <sup>2</sup>	4 x 0,5 mm <sup>2</sup>	4 x 0,5 mm <sup>2</sup>
Accessories power supply 24V		2 x 0,5 mm <sup>2</sup>	2 x 0,5 mm <sup>2</sup>	2 x 1 mm <sup>2</sup>
Control and safety devices		2 x 0,5 mm <sup>2</sup>	2 x 0,5 mm <sup>2</sup>	2 x 0,5 mm <sup>2</sup>
Endpoints		3 x 0,5 mm <sup>2</sup>	3 x 1 mm <sup>2</sup>	3 x 1,5 mm <sup>2</sup>
Antenna connection	RG58	max. 10 m		

N.B.: The cable section, with different lengths from those shown on the table, must be considered on the basis the actual draw of the connected devices, according to what is prescribed in the CEI EN 60204-1 Code.

For connections that require varying loads on the same line (i.e. sequential), the table values should be reconsidered depending on the actual draws and distances.

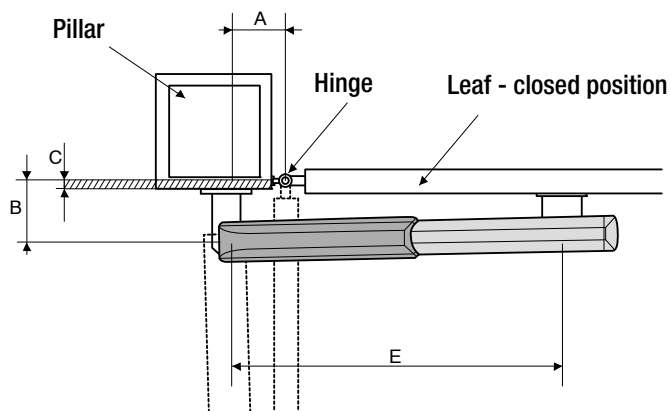
## 5.4 Standard installation



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## 5.5 Mounting

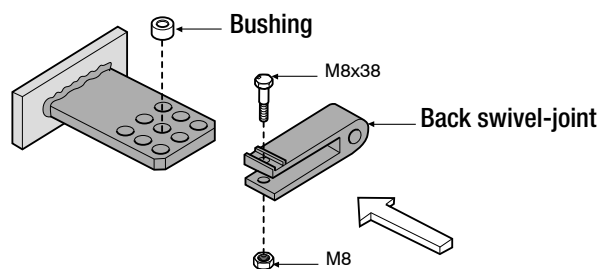
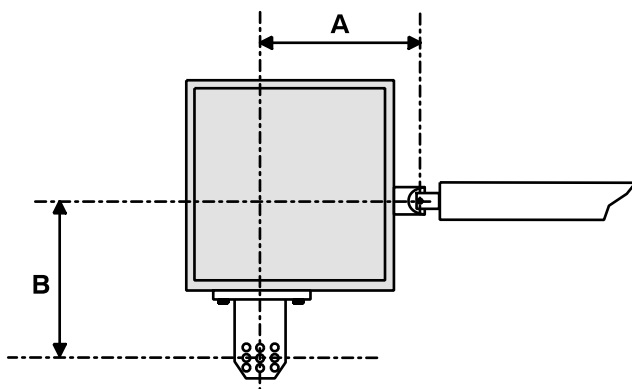
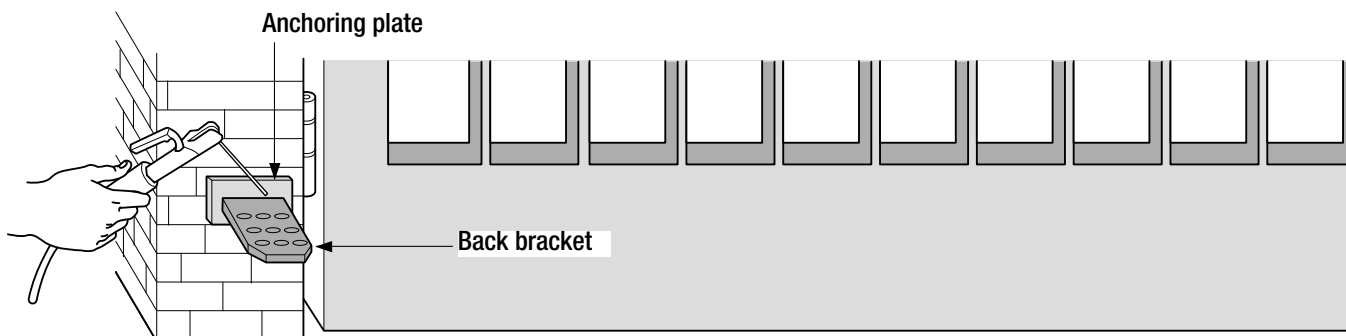
**⚠** The following applications are only examples, in that the space available for fixing the operator and accessories varies depending on the dimensions. It is thus up to the installer to choose the most suitable solution.



Tab. 3

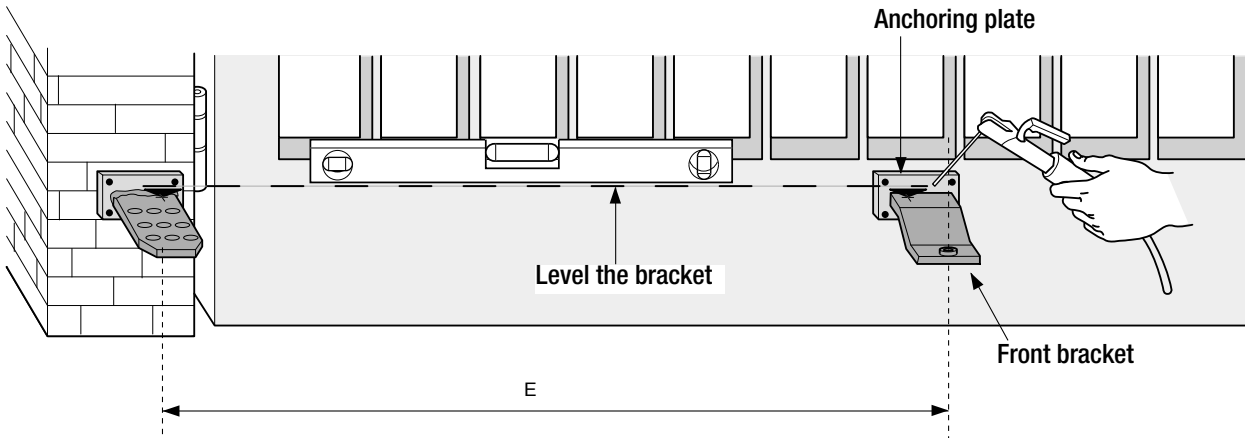
Gate leaves up to 3 m				
Opening	A mm	B mm	C max mm	E mm
90°	130	130	60	720
120°	130	110	50	720

Gate leaf up to 5 m				
Opening	A mm	B mm	C max mm	E mm
90°	200	200	120	920
130°	200	140	70	920

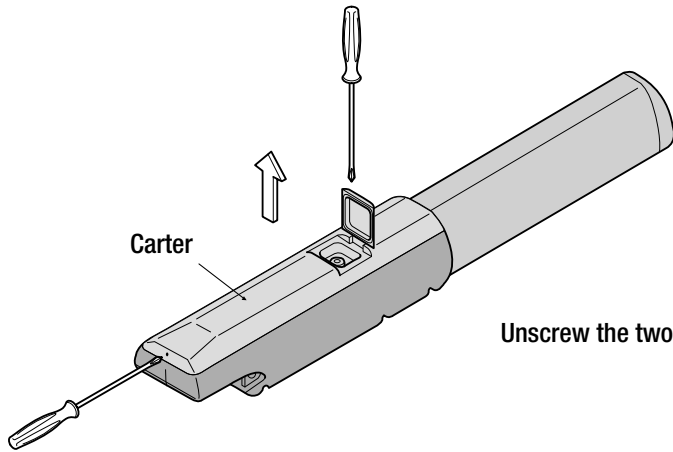


Apply the fixing plate to the post using the tail bracket, making sure that the values , A and B (tab. 3), are met between the hinge axis and the bracket's centre hole. The tail bracket is fitted with further holes to allow for variation of the gate's opening angle.

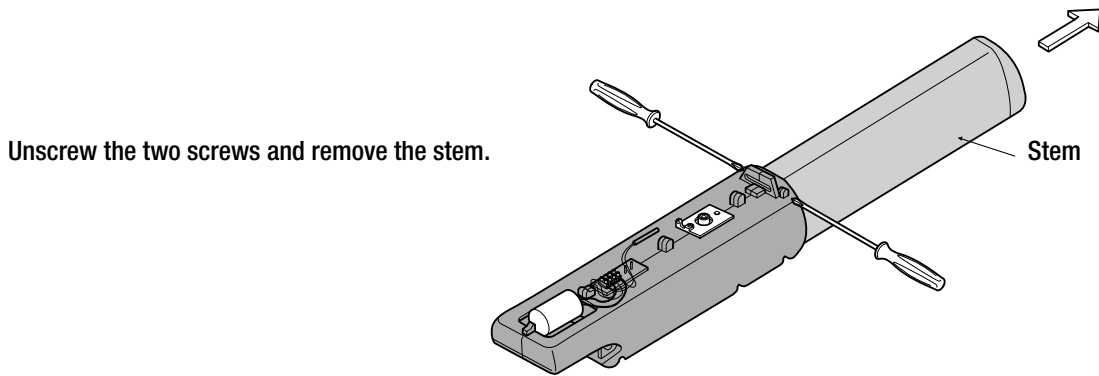
**N.B.:** increasing measurement B reduces the opening angle and thus the peripheral speed and increases the motor thrust on the gate leaf. Increasing measurement A increases the opening angle and thus the peripheral speed and reduces the motor thrust on the gate leaf.



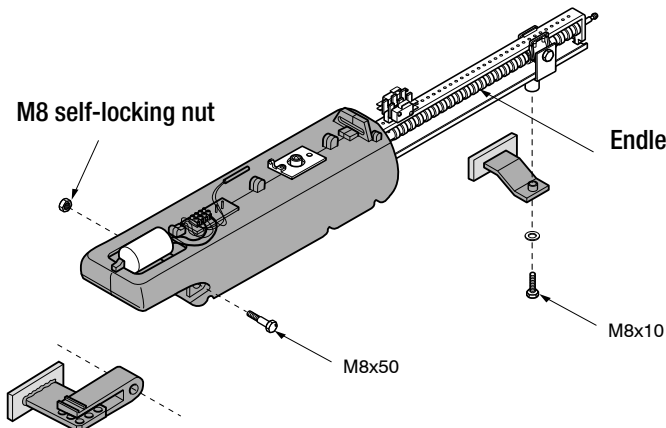
With the gate closed apply the anchoring plate to the gate leaf, making sure that the front bracket is lined up horizontally with the back bracket and ensuring that measurement E is met.



Unscrew the two screws and remove the carter.



Unscrew the two screws and remove the stem.



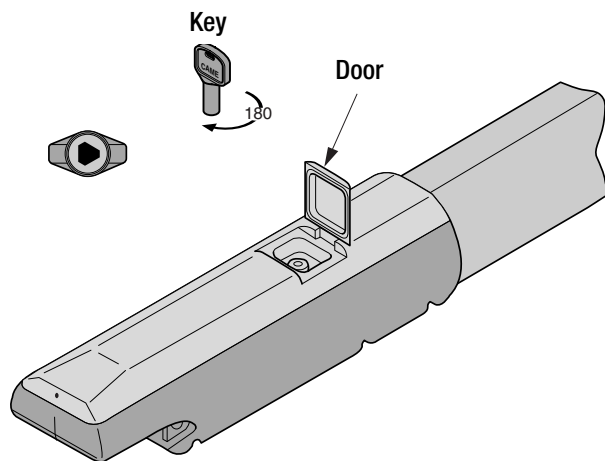
Begin fixing the gearmotor to the two brackets.

N.B.: upon installation we suggest lubricating (using a neutral grease) the endless screw and the bushing.



## 5.6 Release with customised key

Only for: A3000/A3006  
A5000/A5006

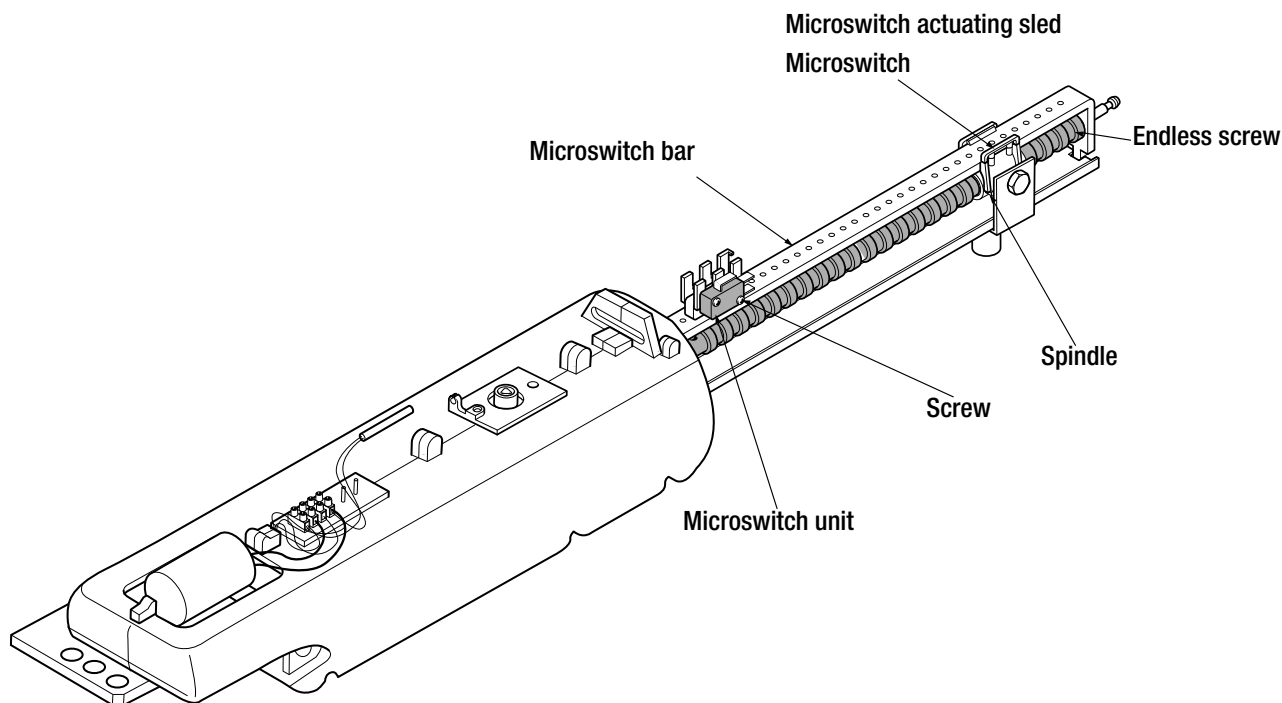


Release only with motor stopped:

- 1) raise the door;
- 2) insert and turn key which immediately releases door;
- 3) manually push or pull gate leaf.

To lock gate leaf again into place just insert key again and turn.

## 5.7 Adjusting opening STOP microswitch



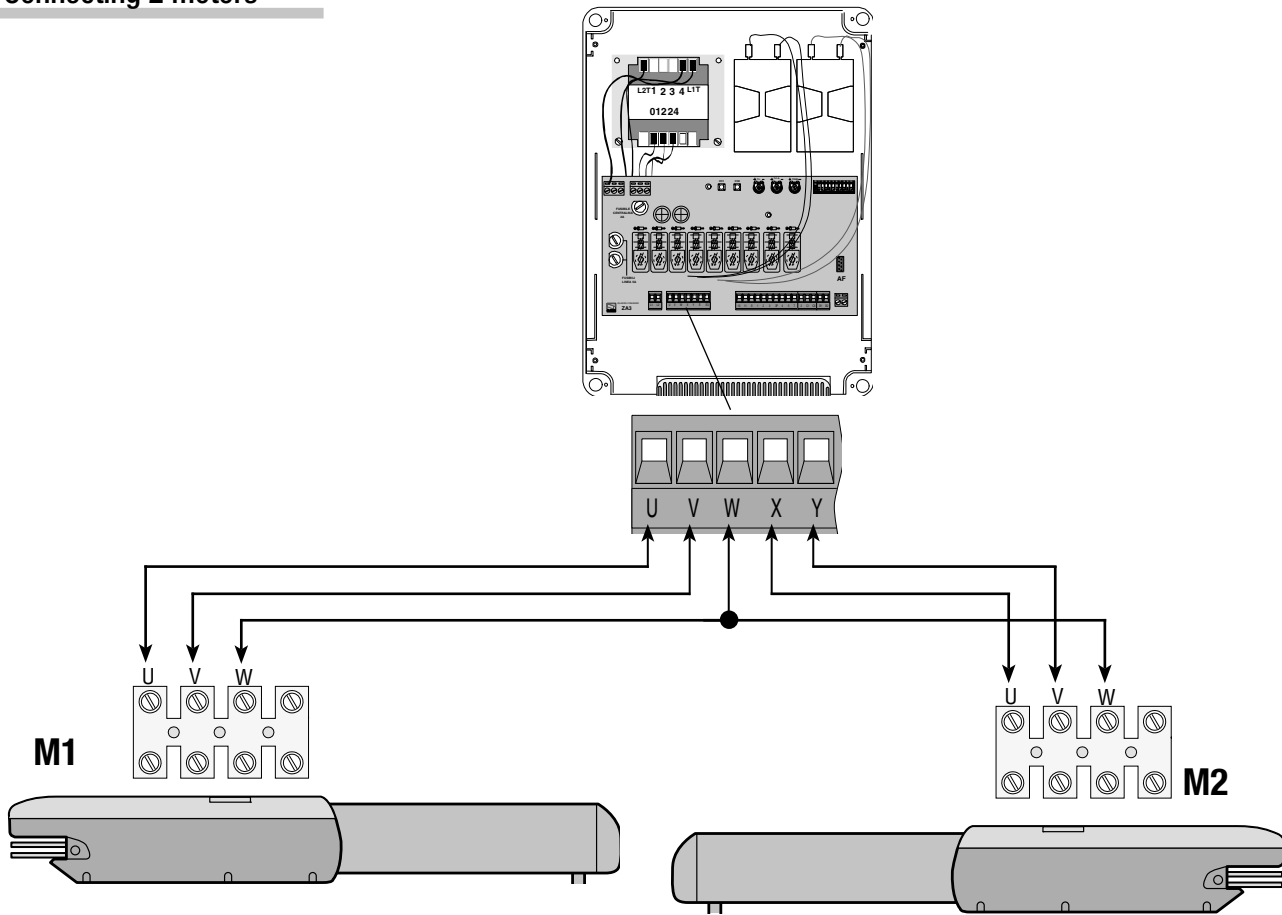
Release the gearmotor and set the gate leaf to the full opening position required.

Slide the microswitch unit on the microswitch sled until the same is inserted by making contact with the microswitch actuating sled.

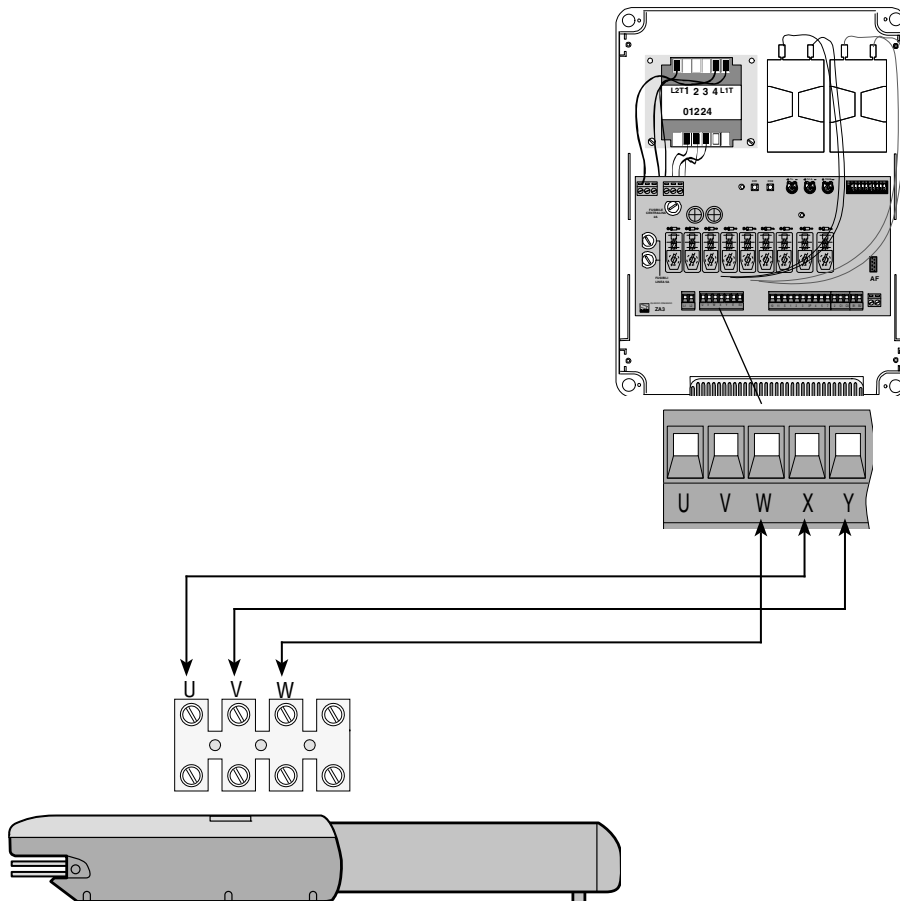
Secure the microswitch unit with the screws.

## 5.8 Connecting to the ZA3N/ZM2 control panels

### Connecting 2 motors



### Connecting 1 motor

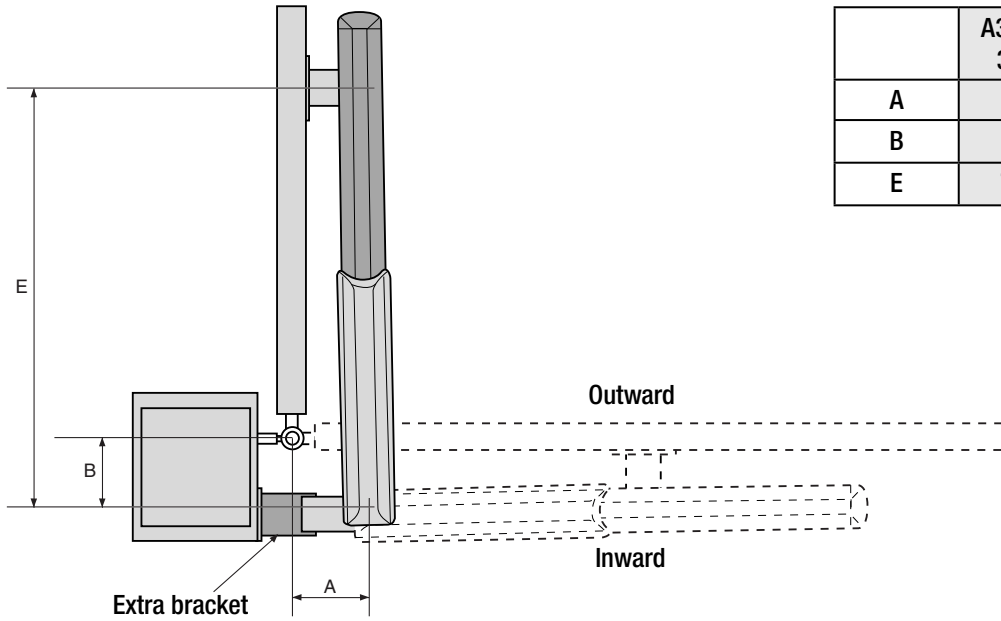


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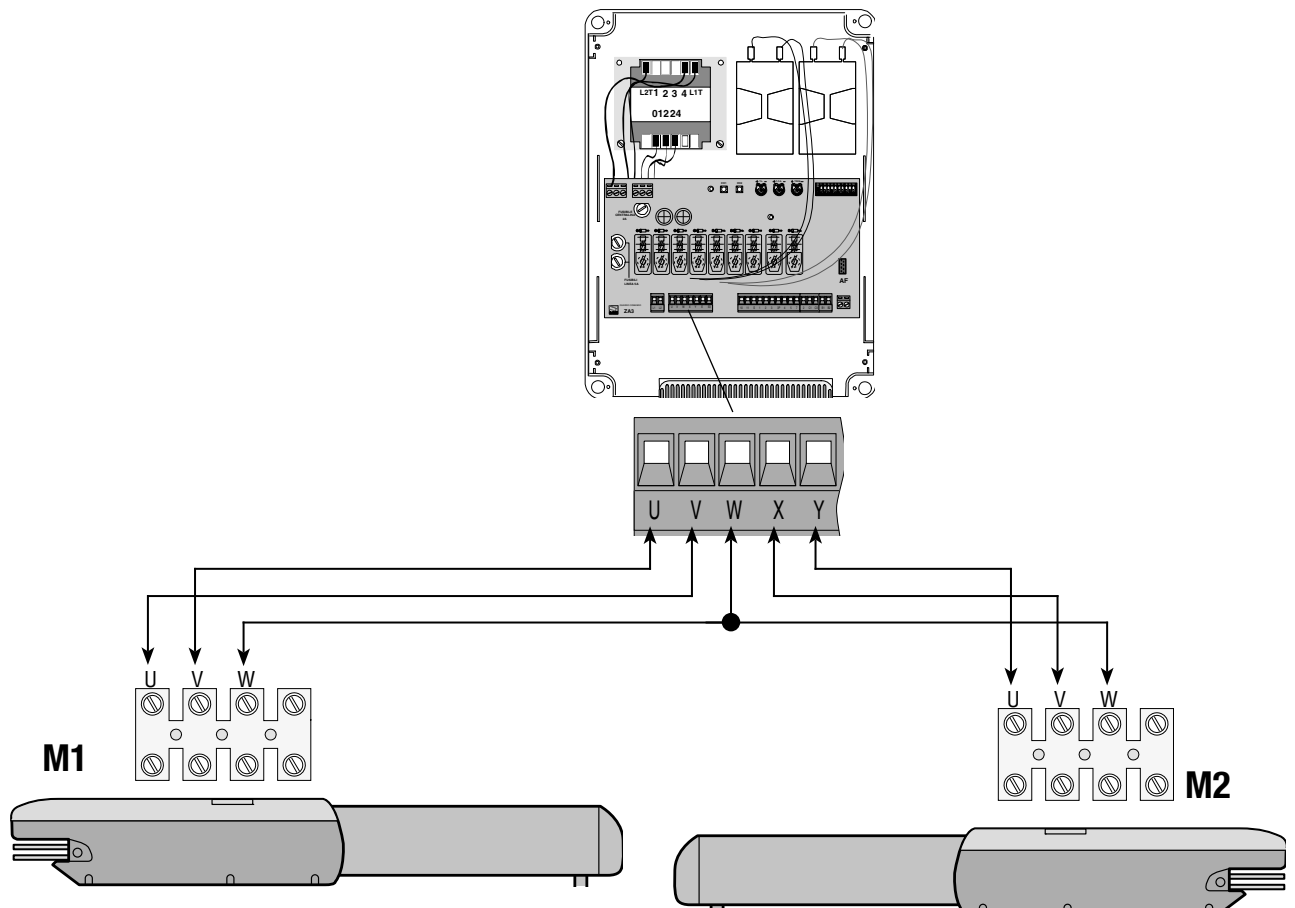
## 5.9 Application for outward opening

Tab. 4

	A3000-3006 3100-3106	A5000-5006 5100-5106
A	130 mm	200 mm
B	130 mm	200 mm
E	720 mm	620 mm



- Measure values A and B (Tab. 4)
- Secure the tail bracket to an extra bracket and apply to post.
- Open gate (max 90°), measure value E (Tab. 4) and secure head bracket to gate leaf.
- Perform electrical connections;
- Reposition and adjust openin stop microswitch.

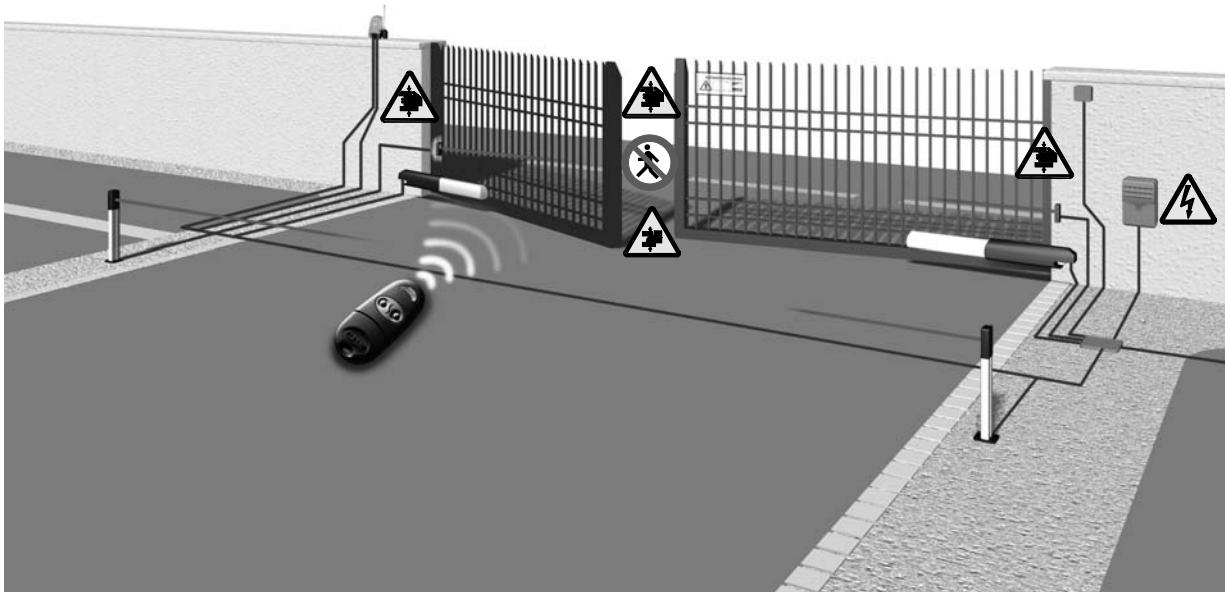


## 6 Safety instructions

### Important safety instructions

This product must only be employed for its originally intended use. Any other use is wrong and potentially dangerous. The manufacturer cannot be held liable for any damages resulting from wrongful, erroneous or negligent uses.

Avoid working close to the hinges or other moving mechanical parts. Stay out of the opening/closing arc when operator is in motion. Do not exercise force against the motion of the operator as this could result in potentially dangerous situations.



Do not allow children to play or loiter within the opening/closing arc of the operator. Keep transmitters and any other command device out the reach of children, to prevent operator from being activated by accident. In the event of anomalous behaviour, stop using the operator immediately.



Danger of crushing hands



Danger! High voltage




Danger of crushing feet



No transit during operation

## 7 Maintenance

### 7.1 Periodic maintenance

 Periodic maintenance to be carried out by the end-user is as follows: wipe clean the glass surface of the photocells; check that the safety devices work properly; remove any obstructions.

We suggest checking the state of lubrication and tightness of the anchoring screws on the operator.

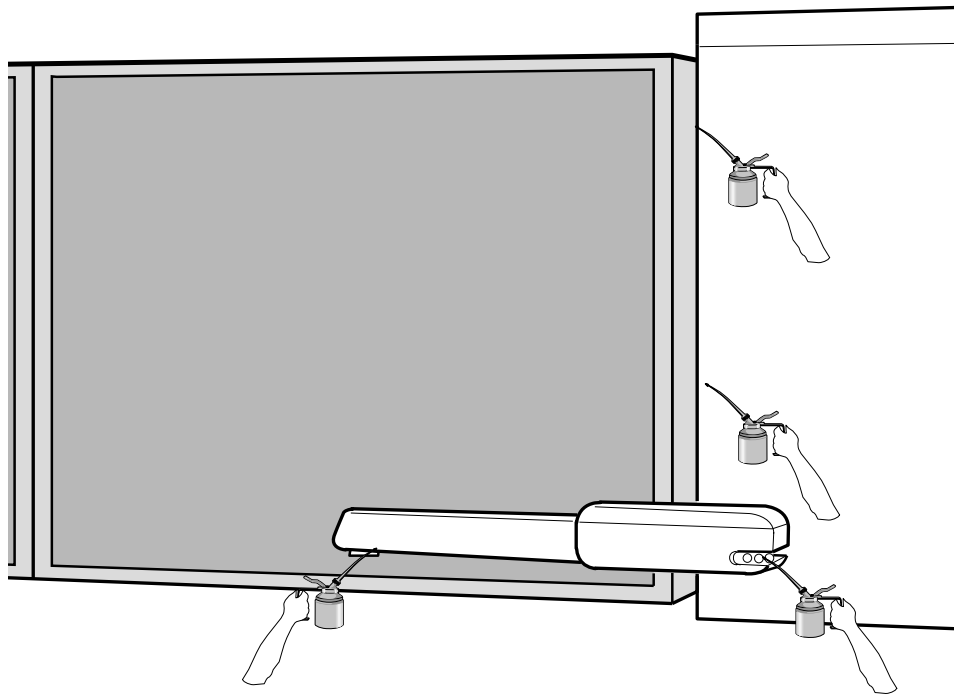
To check the efficiency of the safety devices, move an object in front of the photocells when gate is closing. If the operator inverts the motion or stops, the photocells are working properly.

This is the only maintenance procedure to be carried out with the power source connected.

Before performing any maintenance procedures, cut off the main power, to prevent possible accidents due to gate movement.

To clean the photocells use a water dampened cloth. Do not use solvents or other chemical products which may ruin the devices.

In the event of any strange vibrations or squeaking, lubricate the joints with grease, as shown in the diagram.



Make sure there are no plants within the photocell's beam, and that the gate motion is free of any obstacles.

### 7.2 Trouble shooting

MALFUNCTIONS	POSSIBLE CAUSES	CHECK AND REMEDIES
The gate will not open nor close	<ul style="list-style-type: none"> <li>• There is no power</li> <li>• The gearmotor is released</li> <li>• The transmitter's batteries are run down</li> <li>• The transmitter is broken</li> <li>• The stop button is either stuck or broken</li> <li>• The opening/closing button or the keyswitch are stuck</li> </ul>	<ul style="list-style-type: none"> <li>• Check that the power is up</li> <li>• Lock gearmotor (Chapt. 5.6)</li> <li>• Replace batteries</li> <li>• Call assistance</li> <li>• Call assistance</li> <li>• Call assistance</li> </ul>
The gate opens but will not close	<ul style="list-style-type: none"> <li>• The photocells are engaged</li> </ul>	<ul style="list-style-type: none"> <li>• Check that photocells are clean and in good working order</li> <li>• Call assistance</li> </ul>
The flashing light does not work	<ul style="list-style-type: none"> <li>• The bulb is burnt</li> </ul>	<ul style="list-style-type: none"> <li>• Call assistance</li> </ul>


The data and information shown in this manual may be changed by CAME cancelli automatici s.p.a. at any time without prior warning.



Installer's stamp	Technician's name
	Date of job
	Technician's signature
	Requester's signature
Job performed _____ _____ _____	

Installer's stamp	Technician's name
	Date of job
	Technician's signature
	Requester's signature
Job performed _____ _____ _____	

## 9 Phasing out and disposal

 CAME cancelli automatici s.p.a. employs a UNI EN ISO 14001 certified and compliant environmental protection system at its plants, to ensure that environmental safeguarding.

We ask you to keep protecting the environment, as CAME deems it to be one of the fundamental points of its market operations strategies, by simply following these brief guidelines when disposing:

### DISPOSING OF THE PACKING MATERIALS

The packing components (cardboard, plastic, etc.) are solid urban waste and may be disposed of without any particular difficulty, by simply separating them so that they can be recycled.

Before actions it is always advisable to check the pertinent legislation where installation will take place.

**DO NOT DISPOSE OF IN NATURE!**

### DISPOSING OF THE PRODUCT

Our products are made of different materials. The majority of these (aluminium, plastic, iron, and electric cables) are considered solid urban waste. As such they can be recycled by certified centres after proper collection.

Other components (such as electronic cards, batteries and transmitters) constitute environmental hazards.

They must thus be turned in to specialised firms for their processing and disposal.

Before actions it is always advisable to check the pertinent legislation on the matter.

**DO NOT DISPOSE OF IN NATURE!**

## 10 Conformity declaration



### MANUFACTURER'S DECLARATION OF CONFORMITY

Pursuant to annex II B of the Machinery Directive 98/37/EC



CAME Cancelli Automatici S.p.A.  
via Martiri della Libertà, 15  
31030 Dosson di Casier - Treviso - ITALY  
tel (+39) 0422 4940 - fax (+39) 0422 4941  
internet: www.came.it - e-mail: info@came.it

--- STANDARDS ---

EN 13241-1  
EN 12453  
EN 12445

EN 12635  
EN 12978  
EN 60335-1

EN 61000-6-2  
EN 61000-6-3

Declares under its own responsibility that the equipments for automatic garage doors and gates listed below :

**A 3000/3006/3100/3106**

**A5000/5006/5100/5106**

... comply with the National Law related to the following European Directives and to the applicable parts of the following Standards.

--- DIRECTIVES ---

98/37/CE - 98/79/CE  
98/336/CEE - 92/31/CEE  
73/23/CEE - 93/68/CE  
89/106/CEE

MACHINERY DIRECTIVE  
ELECTROMAGNETIC COMPATIBILITY DIRECTIVE  
LOW VOLTAGE DIRECTIVE  
CONSTRUCTION PRODUCTS DIRECTIVE

**IMPORTANT WARNING!**

Do not use the equipment specified here above, before completing the full installation in full compliance with the Machinery Directive 98/37/EC

MANAGING DIRECTOR  
Mr . Andrea Menuzzo

Reference code to request a true copy of the original: **DDF B EN A001C**

**CAME UNITED KINGDOM LTD**  
UNIT 3, ORCHARD BUSINESS PARK  
TOWN STREET, SANDIACRE  
NOTTINGHAM - NG10 5BP - U.K.

**Tel - 0044 115 9210430**

**Fax - 0044 115 9210431**

