

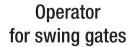
CAME.COM



FA01156-EN

CE







A 3000/3006/3100/3106 A 5000/5006/5100/5106

INSTALLATION MANUAL

EN English



WARNING! important safety instructions: READ CAREFULLY!



INTRODUCTION

 USE THIS PRODUCT ONLY FOR THE SPECIFIC PURPOSE FOR WHICH IT IS DESIGNED.
 ANY OTHER USE IS THEREFORE IMPROPER AND DANGEROUS, CAME S.P.A. IS NOT LIABLE FOR ANY DAMAGE DUE TO IMPROPER, ERRONEOUS AND UNREASONABLE
 USE • KEEP THESE WARNINGS TOGETHER WITH THE INSTALLATION AND USERS' MANUAL FOR THE AUTOMATION SYSTEM.

BEFORE INSTALLING

(CHECK WHAT'S THERE: IF YOU FIND SOMETHING WRONG, PROCEED ONLY AFTER CORRECTING THE PROBLEM SO THE EQUIPMENT IS SAFE TO USE)

• CHECK THAT THE PART YOU WANT TO AUTOMATE IS IN GOOD MECHANICAL CONDITION, THAT IT IS BALANCED AND ALIGNED, AND THAT IT OPENS AND CLOSES PROPERLY MAKE SURE YOU HAVE SUITABLE MECHANICAL STOPS • IF THE OPERATOR WILL BE INSTALLED LESS THAN 2.5 M FROM THE FLOOR OR FROM ANY OTHER ACCESS LEVEL, CHECK WHETHER YOU NEED ADDITIONAL PROTECTIONS AND/OR WARNINGS • WITH PEDESTRIAN DOORS FRAMED INTO THE DOORS THAT WILL BE AUTOMATED, A SYSTEM MUST BE IN PLACE TO BLOCK THEIR OPENING DURING MOVEMENT • MAKE SURE THE OPENING OF THE AUTOMATED DOOR LEAF DOES NOT CAUSE ANY TRAPPING SITUATIONS INVOLVING ANY SURROUNDING FIXED PARTS • DO NOT INSTALL THE OPERATOR UPSIDE DOWN OR ON ANY ELEMENTS THAT MAY BEND. IF NECESSARY, ADD SUITABLE REINFORCEMENTS AT THE FASTENING POINTS • DO NOT INSTALL ON SLOPING GROUND (ONLY INSTALL ON FLAT GROUND) • CHECK THAT ANY WATERING DEVICES CANNOT WET THE GEARMOTOR FROM THE BOTTOM ITEMPARS.

INSTALLATION

• PROPERLY SIGNAL AND DEMARCATE THE ENTIRE SITE PREVENT ANY CARELESS PEOPLE FROM ENTERING THE WORKS AREA . BE CAREFUL WHEN HANDLING OPE-RATORS THAT WEIGH MORE THAN 20 KG (SEE INSTALLATION MANUAL. IF SUCH IS THE CASE, MAKE SURE YOU HAVE PROPER HOISTING EQUIPMENT, ALL OPENING COMMANDS (BUTTONS, KEY SELECTORS, MAGNETIC CARD READERS, AND SO ON) MUST BE INSTALLED AT LEAST 1.85 M FROM THE GATE'S AREA OF MOVEMENT, OR SO THAT THEY ARE UNREACHABLE FROM THE OUTSIDE. MOREOVER, THE DIRECT COMMANDS (FROM BUTTONS, SWIPE CARDS, AND SO ON) MUST BE INSTALLED 1.5 M HIGH OFF THE GROUND AND MUST NOT BE REACHABLE BY THE PUBLIC . ALL "HOLD-TO-RUN" COMMANDS MUST BE PLACED WHERE THE OPERATING GATE LEA-VES AND TRANSIT AREAS ARE COMPLETELY VISIBLE. . APPLY A PERMANENT LABEL THAT SHOWS THE POSITION OF THE RELEASE DEVICE • BEFORE TURNING OVER THE INSTALLATION TO THE USER, CHECK THAT THE SYSTEM CONFORMS TO STANDARDS EN 12453 AND EN12445 (IMPACT TESTING), MAKING SURE THE DEVICE HAS BEEN PROPERLY ADJUSTED AND THAT THE SAFETY AND PROTECTION AND RELEASE DE-VICES FUNCTION PROPERLY . WHERE NECESSARY APPLY THE WARNING SIGNS SO THAT THEY ARE CLEARLY VISIBLE (E.G. THE GATE PLATE)

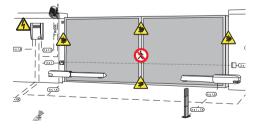
INSTRUCTIONS AND SPECIAL RECOMMENDATIONS FOR USERS

 KEEP THE BARRIER'S AREAS OF OPERATIONS UNOBSTRUCTED, CHECK THAT THE PHOTOCELLS ARE FREE OF ANY VEGETATION BLOCKING THEM. AND THAT THERE ARE NO OBSTACLES TO THE FREE MOVEMENT OF THE OPERATOR. DO NOT ALLOW CHILDREN TO PLAY WITH THE FIXED COMMAND DEVICES, OR IN THE BARRIER'S AREA OF OPERATION. KEEP TRANSMITTERS AND ANY OTHER COMMAND DEVICES AWAY FROM CHILDREN, TO PREVENT THE OPERATOR FROM BEING ACTIVATED BY MI-STAKE . FREQUENTLY CHECK THE SYSTEM. TO SCAN FOR ANY ANOMALIES OR WEAR AND TEAR IN THE MOVING STRUCTURES, THE OPERATOR'S COMPONENTS, ALL FA-STENING POINTS AND DEVICES, THE CABLES AND ACCESSIBLE CONNECTIONS. KEEP ANY JOINTED PARTS LIKE HINGES LUBRICATED AND CLEAN OF DEBRIS AND THE GUIDE-SLEDS FREE OF ANY FRICTION . PERFORM FUNCTIONAL CHECKS TO THE PHOTOCELLS AND SENSITIVE EDGES EVERY SIX MONTHS. TO CHECK THAT THE PHO-TOCELLS WORK PROPERLY, WAVE AN OBJECT IN FRONT OF THEM DURING CLOSING; IF THE OPERATOR INVERTS ITS DIRECTION OF TRAVEL OR BLOCKS MOVEMENT, THEN THE PHOTOCELLS ARE WORKING PROPERLY. THIS IS THE ONLY MAINTENANCE JOB THAT CAN BE DONE TO THE GATE WHEN IT IS POWERED UP. ENSURE PROPER CLEANING OF THE GLASS ON THE PHOTOCELLS (USE A SLIGHTLY DAMP CLOTH); DO NOT USE ANY SOLVENTS OR OTHER CHEMICAL PRODUCTS THAT MAY RUIN THE DEVICES) • SHOULD ANY REPAIRS OR CHANGES TO THE SYSTEM SETTINGS BE NEE-DED, RELEASE THE OPERATOR AND REFRAIN FROM USING IT UNTIL SAFETY CON-DITIONS HAVE BEEN RESTORED . CUT THE POWER OFF BEFORE RELEASING THE OPERATOR FOR MANUAL OPENING, TO AVOID ANY HAZARDOUS SITUATIONS, CHECK INSTRUCTIONS . IT IS FORBIDDEN FOR USERS TO PERFORM ANY OPERATIONS THAT ARE NOT EXPRESSLY REQUESTED OF SAID USERS IN THE MANUALS. ANY REPAIRS, ADJUSTMENTS OR EXTRA-ORDINARY MAINTENANCE, EXCLUSIVELY CALL TECHNI-CAL ASSISTANCE . LOG ANY SERVICE JOBS ONTO THE PERIODIC MAINTENANCE JOURNAL.

SPECIAL INSTRUCTIONS AND RECOMMENDATIONS FOR EVERYONE

• KEEP AWAY FROM THE HINGES AND ANY MOVING MECHANICAL PARTS • STAY

OUT OF THE OPERATING RANGE OF THE OPERATOR WHILE IT IS MOVING • DO NOT OPPOSE THE MOVEMENT OF THE OPERATOR AS THIS MAY RESULT IN DANGER • ALWAYS BE CAREFUL AROUND THE DANGEROUS PARTS, WHICH MUST BE PROPERLY INDICATED WITH WARNING SIGNS AND BLACK AND YELLOW STRIPES • WHEN USING A SELECTOR SWITCH OR A MAINTANNED-ACTION MODE COMMAND, KEEP CHECKING THAT NO PERSONS COME WITHIN THE OPERATING RANGE OF THE MOVING PARTS, UNTIL THE COMMAND IS RELEASED • THE GATE MAY MOVE AT ANY MOMENT WITHOUT WARNING. ALWAYS CUT OFF THE MAIN ELECTRIC POWER SUPPLY BEFORE PERFORMING ANY CLEANING OR MAINTENANCE.





Hand crushing hazard



Danger high voltage



Danger of crushing feet



No transit during operation

p. 3 - Manual FA01156 - EN - 04/2018 - © CAME S.p.A. - Translated original instructions

Legend of symbols



This symbol tells you to read the section with particular care.



This symbol tells you that the sections concern safety issues.

This symbol tells you what to say to the end-users.

THE MEASUREMENTS, UNLESS OTHERWISE STATED, ARE IN MILLIMETERS.

Conditions of use

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.

Restrictions

Gate leaf width	Gate leaf weight kg	
m	A3000-A3006-A3100-A3106	A5000-A5006-A5100-A5106
2.00	800	1000
2.50	600	800
3.00	400	600
4.00	1	500
5,00	/	400

With swing gates it is always advisable to install and electro-lock. This is to ensure a reliable closing and to protect the gearmotor's inner workings.

But whereas with reversible operators it is merely advisable, with irreversible ones, beyond 4 m, it is obligatory.

Description

Operator

The electro-lock fitted (A3000/A3006/A5000/A5000) irreversible or (A3100/A31006/A5100/5106) reversible gearmotor, is made up of two cast-aluminium half shells containing a gearmotor with epicycloid gearbox system.

A double, electromechanical limit-switch system is fitted above the gate-movement worm-screw

Technical features

Motor power supply: 230V A.C. 50/60Hz

Max draw.: 1,2A Power: 150W Opening time (90°):

A3000 / A3100 = 19 sA3006 / A3106 = 28 sA5000 / A5100 = 32 sA5006 / A5106 = 45 s

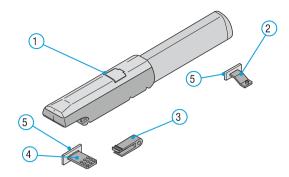
Gear ratio: 1/36 Thrust: 400 ÷ 3000N Duty cycle: 50% Condenser: 10µF Protection rating: IP44

Weight:

A3000 / A3100 / A3006 / A3106 = 10 kg A5000 / A5100 / A5006 / A5106 = 11 kg

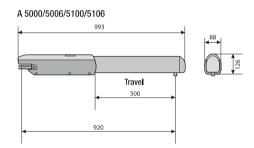
Description of parts

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



Dimensions

A 3000/3006/3100/3106 Trave 720



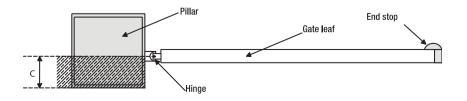
Installation

Preliminary checks



A 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.



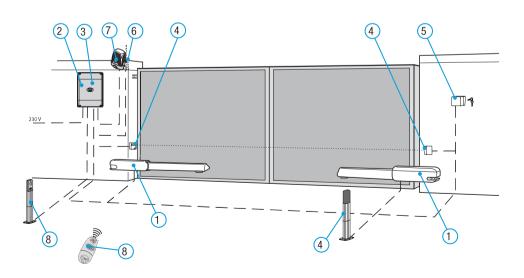
Connections	Type of cable	Length of cable 1 < 10 m	Length of cable 10 < 20 m	Length of cable 20 < 30 m
Control panel power supply 230V		3G x 1,5 mm ²	3G x 2,5 mm ²	3G x 4 mm ²
Motor power supply 230V]	4G x 1 mm ²	4G x 1,5 mm ²	4G x 2,5 mm ²
Flashing light 24V	FROR CEI 20-22	2 x 0,5 mm ²	2 x 1 mm ²	2 x 1,5 mm ²
Photocell transmitters		2 x 0,5 mm ²	2 x 0.5 mm ²	2 x 0,5 mm ²
Photocell receivers	CEI EN	4 x 0,5 mm ²	4 x 0,5 mm ²	4 x 0,5 mm ²
Accessories power supply 24V	50267-2-1	2 x 0,5 mm ²	2 x 0,5 mm ²	2 x 1 mm ²
Control and safety devices	1	2 x 0,5 mm ²	2 x 0,5 mm ²	2 x 0,5 mm ²
Endpoints		3 x 0,5 mm ²	3 x 1 mm ²	3 x 1,5 mm ²
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.

Standard installation

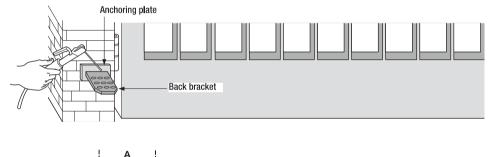
- 1) Gearmotor
- 2) Control panel
- 3) Radio receiver
- 4) Photocells
- 5) Keyswitch
- 6) Antenna
- 7) Flashing light
- 8) Transmitter

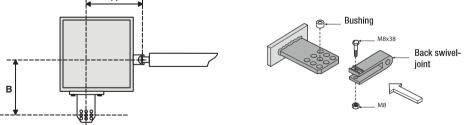


Pillar Leaf - closed position

Gate leaves < 3 m				
Opening	A mm	B mm	C < mm	E mm
90°	130	130	60	720
120°	130	110	50	720
Gate leaves < 5 m				
90°	200	200	120	920
120°	200	140	70	920

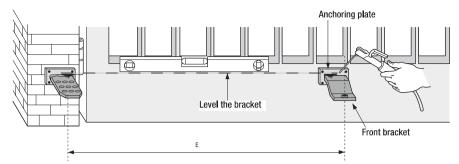
Tab. 3



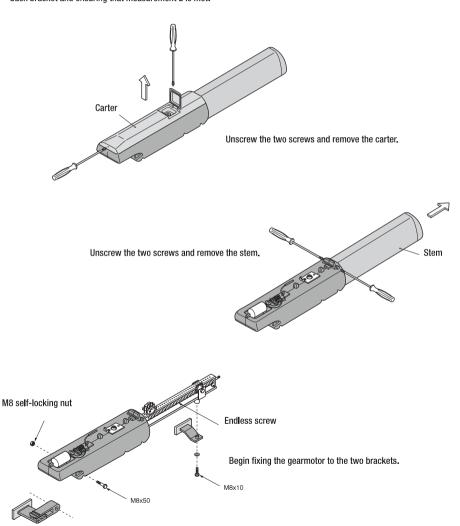


Apply the fixing plate to the post using the tail bracket, making sure that the values, A and B (tab. 3), are met between the hinge axis and the bracket's centre hole. The tail bracket is fitted with further holes to allow for variation of the gate's opening angle.

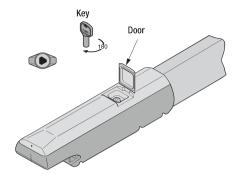
N.B.: increasing measurement B reduces the opening angle and thus the peripheral speed and increases the motor thrust on the gate leaf. Increasing measurement A increases the opening angle and thus the peripheral speed and reduces the motior thrust on the gate leaf.



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.



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

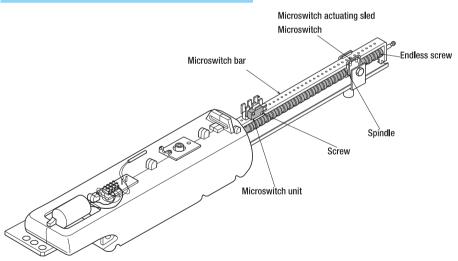


Release only with motor stopped:

- 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.

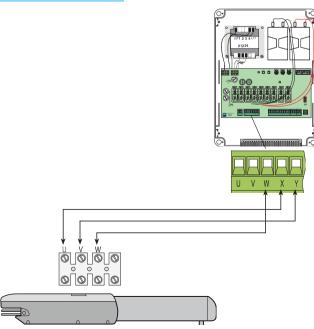
Adjusting opening STOP microswitch



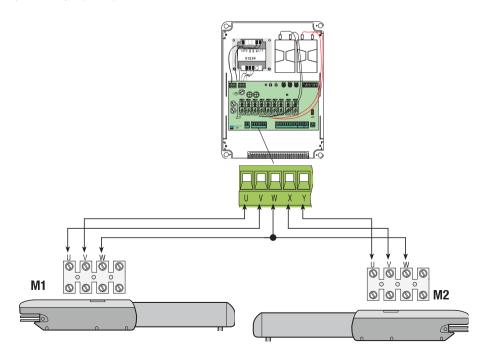
Release the gearmotor and set the gate leaf to the full opening position required.

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.

Connecting 1 motor



- 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.



A5000-5006

200 mm

200 mm

920 mm

5100-5106

Maintenance

Periodic maintenance

representations and maintenance, cut off the power supply, to prevent any hazardous situations caused by accidentally activating the operator.

Periodic maintenance log kept by users (every six months)

Date	Notes	Signature

Extraordinary maintenance

△ The following table is for logging any extraordinary maintenance jobs, repairs and improvements performed by specialized contractors.
☐ Any extraordinary maintenance jobs must be done only by specialized technicians.

Extraordinary maintenance log

Installer's stamp	Name of operator	
	Job performed on (date)	
	Technician's signature	
	Requester's signature	
Job performed		

Installer's stamp	Name of operator		
	Job performed on (date)		
	Technician's signature		
	Requester's signature		
Job performed			

Trouble shooting

MALFUNCTIONS	POSSIBLE CAUSES	CHECK AND REMEDIES
The gate will not open nor close	There is no power The gearmotor is released The transmitter's batteries are run down The transmitter is broken The stop button is either stuck or broken The opening/closing button or the keyswitch are stuck	Check that the power is up Lock gearmotor (Chapt. 5.6) Replace batteries Call assistance Call assistance Call assistance
The gate opens but will not close	The photocells are engaged	Check that photocells are cle- an and in good working order Call assistance
The flashing light does not work	• The bulb is burnt	Call assistance

Phasing out and disposal

CAME 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 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!



Our products are made using different types of materials. The majority of them (aluminium, plastic, iron, electric cables) can be considered to be solid urban waste. They may be recycled at authorised firms.

Other components (electrical circuit board, remote control batteries etc.) may contain hazardous waste.

They must, thus, be removed and turned in to licensed firms for their disposal.

Before acting always check the local laws on the matter.

DO NOT DISPOSE OF IN NATURE!

Reference regulations

The product complies to the reference regulations in effect.

The contents of this manual may change, at any time, and without notice.



CAME S.P.A.

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