

**Operator
for swing gates**

FA01156-EN



A 3000/3006/3100/3106

A 5000/5006/5100/5106

INSTALLATION MANUAL

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 m	Gate leaf weight kg	
	A3000-A3006-A3100-A3106	A5000-A5006-A5100-A5106
2,00	800	1000
2,50	600	800
3,00	400	600
4,00	/	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/A5006) 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 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:

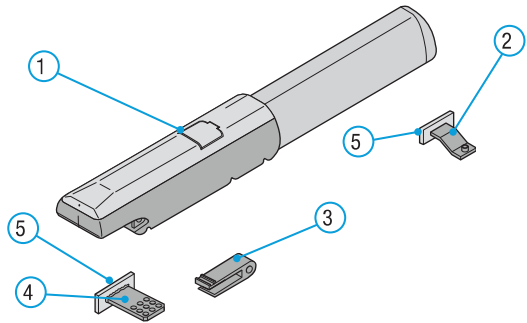
A3000 / A3100 / A3006 / A3106 = 10 kg

A5000 / A5100 / A5006 / A5106 = 11 kg



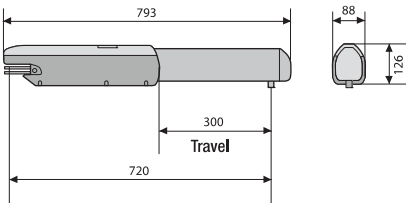
Description of parts

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

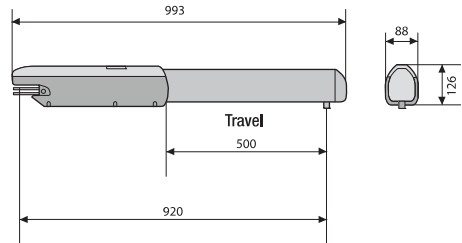


Dimensions

A 3000/3006/3100/3106



A 5000/5006/5100/5106

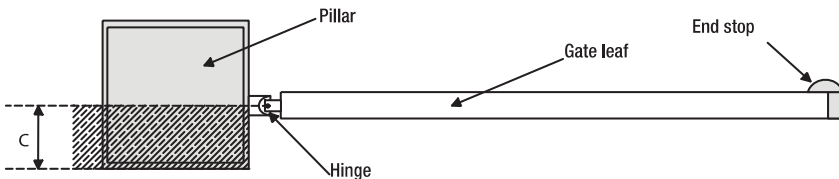


Installation

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.
- \ominus 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.



Cable list and minimum thickness

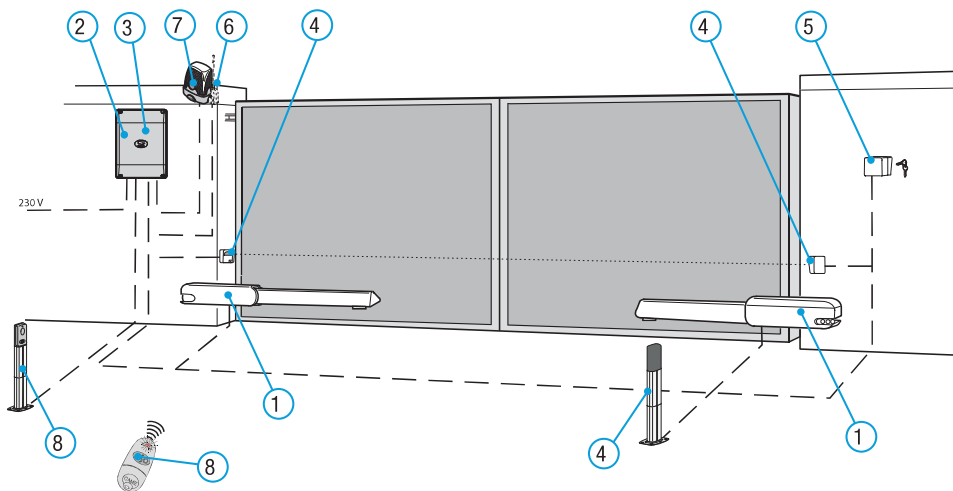
Connections	Type of cable	Length of cable 1 < 10 m	Length of cable 10 < 20 m	Length of cable 20 < 30 m
Control panel power supply 230V	FROR CEI 20-22 CEI EN 50267-2-1	3G x 1,5 mm ²	3G x 2,5 mm ²	3G x 4 mm ²
Motor power supply 230V		4G x 1 mm ²	4G x 1,5 mm ²	4G x 2,5 mm ²
Flashing light 24V		2 x 0,5 mm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

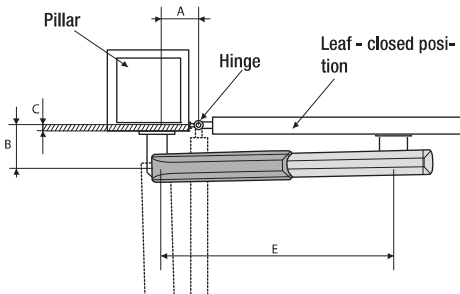
Standard installation

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



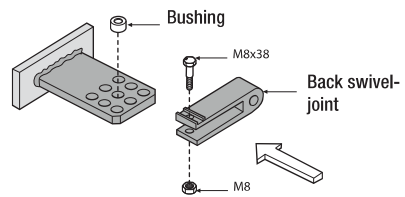
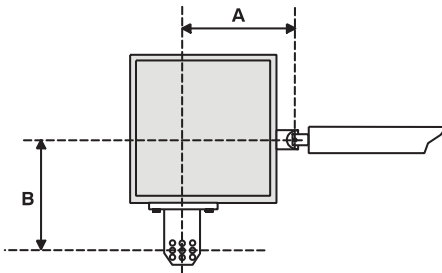
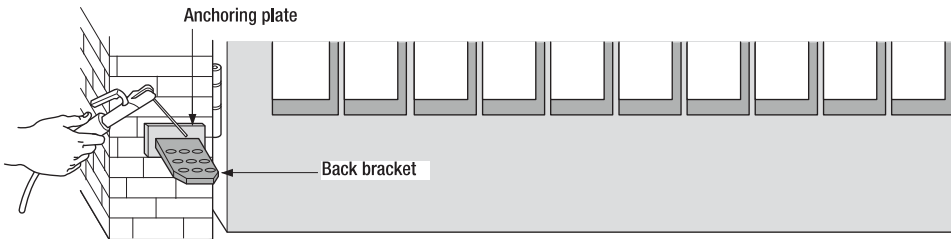
Mounting

! 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.



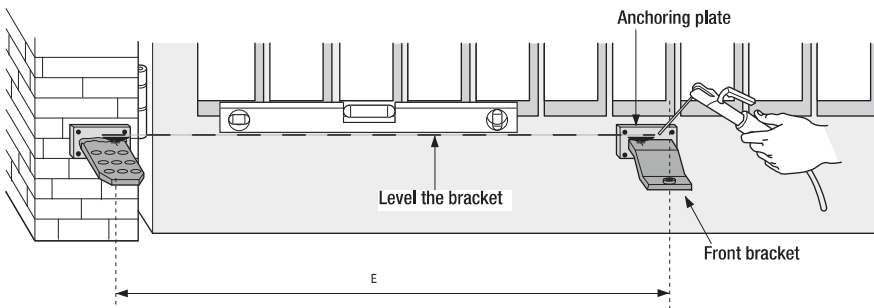
Tab. 3

Gate leaves < 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

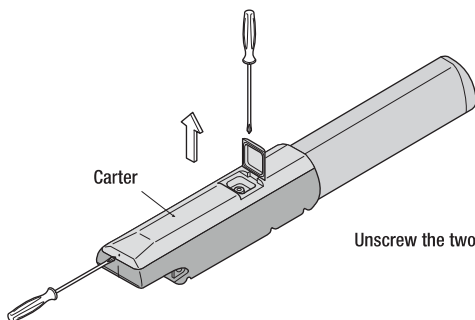


Apply the fixing plate to the post using the tail bracket, making sure that the values , A and B (tab. 3), are met between the hinge axis and the bracket's centre hole. The tail bracket is fitted with further holes to allow for variation of the gate's opening angle.

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.

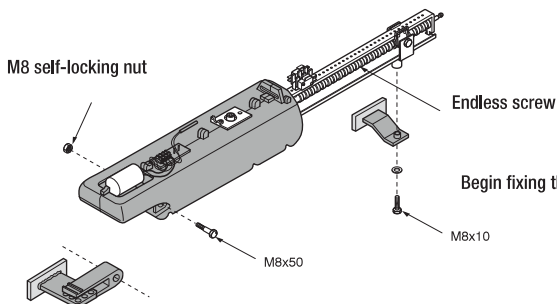
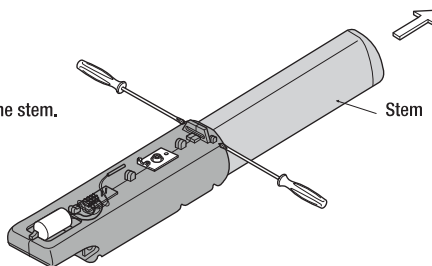


With the gate closed apply the anchoring plate to the gate leaf, making sure that the front bracket is lined up horizontally with the back bracket and ensuring that measurement E is met.



Unscrew the two screws and remove the carter.

Unscrew the two screws and remove the stem.

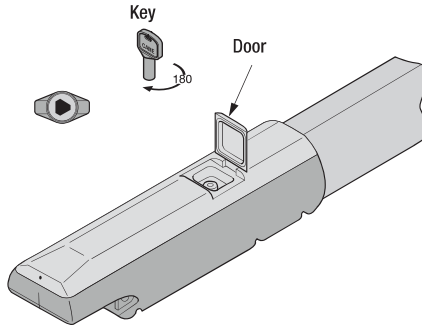


Begin fixing the gearmotor to the two brackets.

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

Release with customised key

Only for: A3000/A3006
A5000/A5006

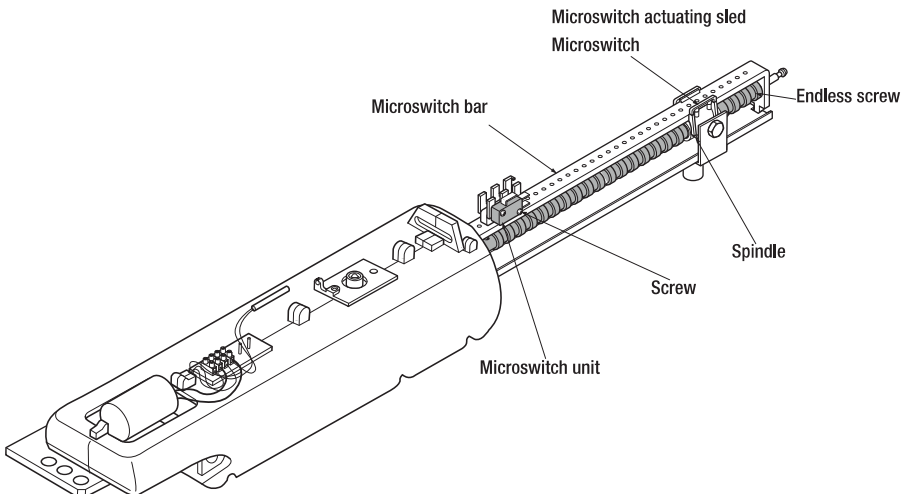


Release only with motor stopped:

- 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.

Adjusting opening STOP microswitch

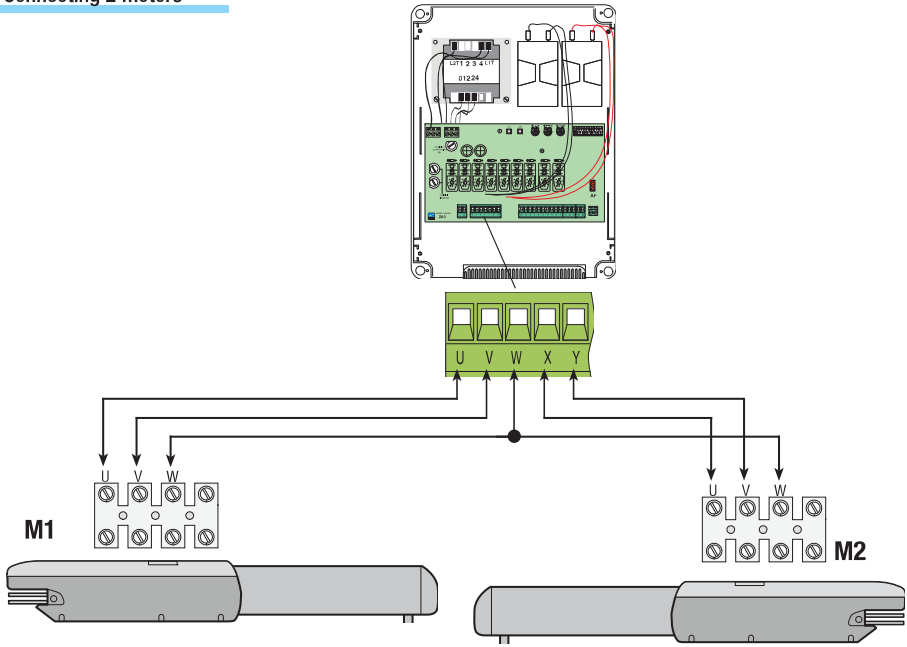


Release the gearmotor and set the gate leaf to the full opening position required.

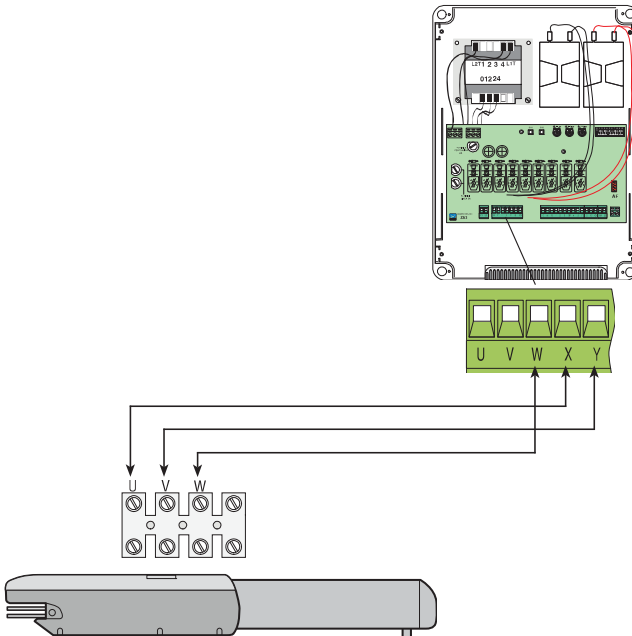
Slide the microswitch unit on the microswitch sled until the same is inserted by making contact with the microswitch actuating sled.

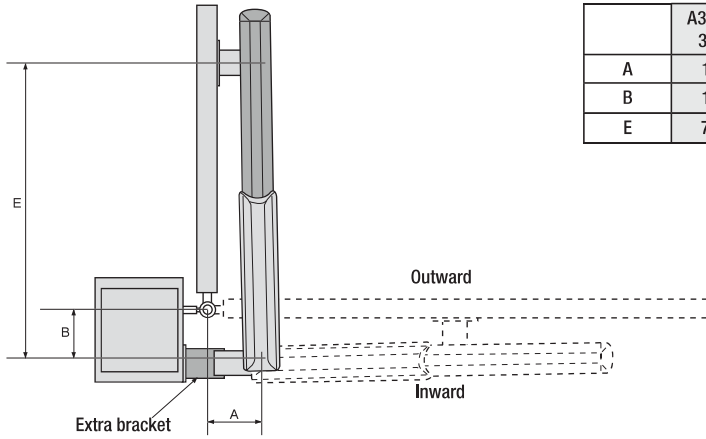
Secure the microswitch unit with the screws.

Connecting 2 motors



Connecting 1 motor

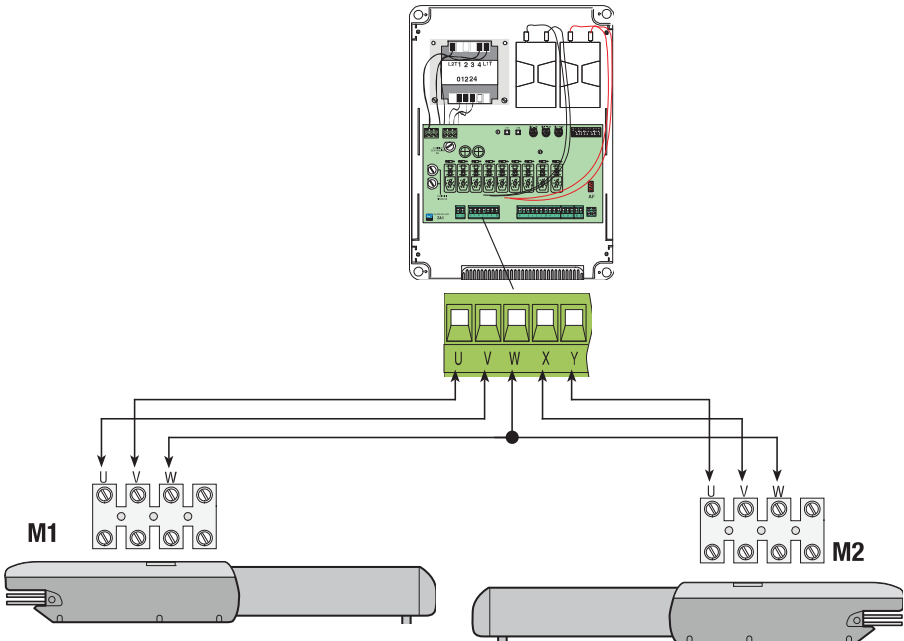




Tab. 4

	A3000-3006 3100-3106	A5000-5006 5100-5106
A	130 mm	200 mm
B	130 mm	200 mm
E	720 mm	920 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.



Maintenance

Periodic maintenance

☞ Before doing any 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• The photocells are engaged	<ul style="list-style-type: none">• Check that photocells are clean and in good working order• Call assistance
The flashing light does not work	<ul style="list-style-type: none">• The bulb is burnt	<ul style="list-style-type: none">• 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!

DISPOSING OF THE PRODUCT

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.

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