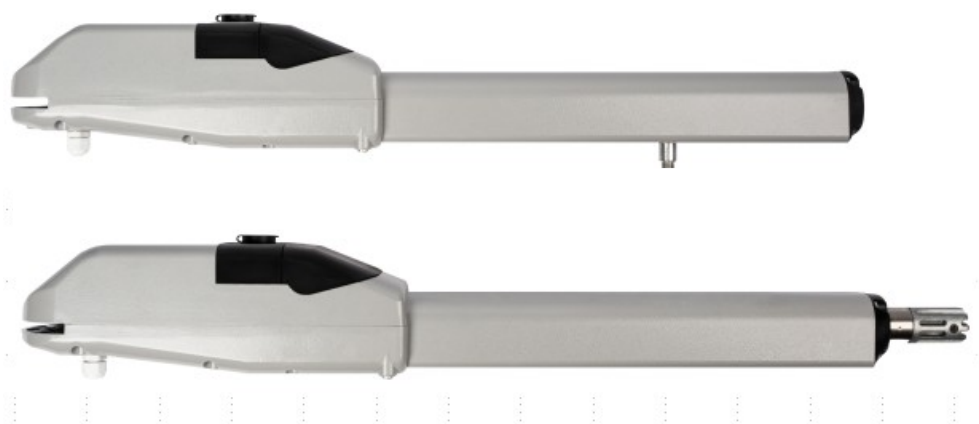


KUDU / KUDU-S



KUDU \ KUDU-S
Electromechanical irreversible motoreducer
for swings gates up to 2,5 \ 3,5 meters.

INSTALLER MANUAL

READ THIS MANUAL CAREFULLY
BEFORE PROCEEDING WITH THE INSTALLATION
KEEP THIS MANUAL FOR FUTURE REFERENCE



KUDU

Residential use 230\115 V.

Intensive use 24 V.

The body of the motor is made in die-cast aluminium, painted with epoxy powder paint to insure an high resistance to oxidation. The motoreducer with the endless screw it's lubricated with permanent grease and does not need maintenance. It allows to move manually the swing/ leaf in case of power supply failure through an emergency release system placed on the top of each operator and protected by a cover with lock. The 24 V operator can be provided with an emergency battery for the automatic move of the swing also during a black out. KUDU 230V operator can have both mechanical and electromechanical limit switches which are easy to adjust.

KUDU 24V operator can have mechanical limit switches as optional which are easy to adjust

	KUDU 230V	KUDU 24V
Power supply	230V 50-60Hz	24 Vcc
Power	350 W	60 W
Current	1,5 A	2,5 A
Working temperature	-20°C + 70°C	-20°C + 70°C
Working stroke without limit-switchs	330 mm	330 mm
Working stroke with limit-switchs	300 mm	300 mm
Swing speed	0,13 m/sec	0,13 m/sec
Time for a 95° opening	25 sec.	25 sec.
Max thrust on a swing	250 N	220 N
Grade of protection	IP 43	IP 43
Frequency use	30% max.	60% max.
Motor weight	Kg 8,5	Kg 8,5
Capacitor	8mf	--
Thermic protection	140°	--
Lubricant	Grease	Grease

ATTENTION



Electric shock!

ATTENTION



Moving gears!

ATTENTION



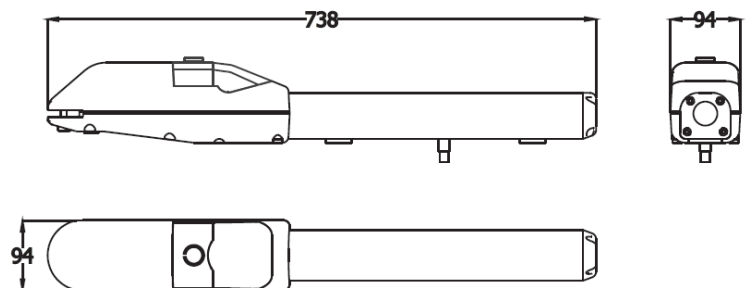
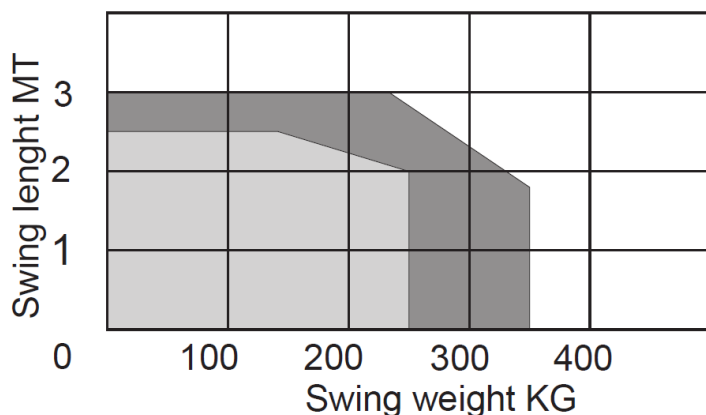
Keep safety distance!

ATTENTION



Do not install motors in areas saturated with explosives mixtures!

- Non Panelled gate with electric-lock
- Non panelled gate or Panelled gate whit electric-lock



KUDU-S

Residential use 230\115 V.

Intensive use 24 V.

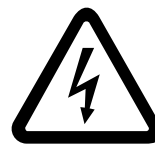
The body of the motor is made in die-cast aluminium, painted with epoxy powder paint to insure an high resistance to oxidation.

The motoreducer with the endless screw it's lubricated with permanent grease and does not need Maintenance. It allows to move manually the swing/ leaf in case of power supply failure through an emergency release system placed on the top of each operator and protected by a cover with lock.

The 24 V operator can be provided with an emergency battery for the automatic move of the swing also during a black out.

	KUDU-S 230V	KUDU-S 24V
Power supply	230V 50-60Hz	24 Vcc
Power	350 W	60 W
Current	1,5 A	2,5 A
Working temperature	-20°C + 70°C	-20°C + 70°C
Working stroke	400 mm	400 mm
Swing speed	0,13 m/sec	0,13 m/sec
Time for a 95° opening	25 sec.	25 sec.
Max thrust on a swing	250 N	220 N
Grade of protection	IP 43	IP 43
Frequency use	30% max.	60% max.
Motor weight	Kg 8,5	Kg 8,5
Capacitor	8mf	--
Thermic protection	140°	--
Lubricant	Grease	Grease

ATTENTION



Electric shock!

ATTENTION



Moving gears!

ATTENTION



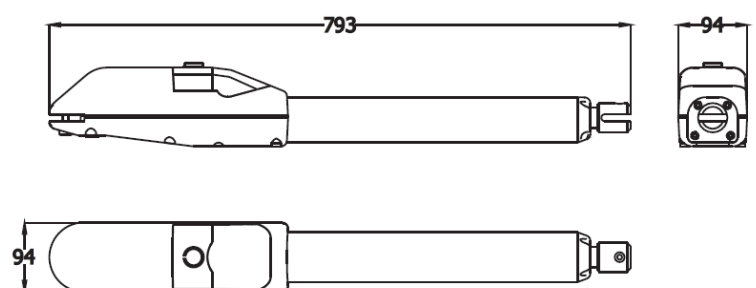
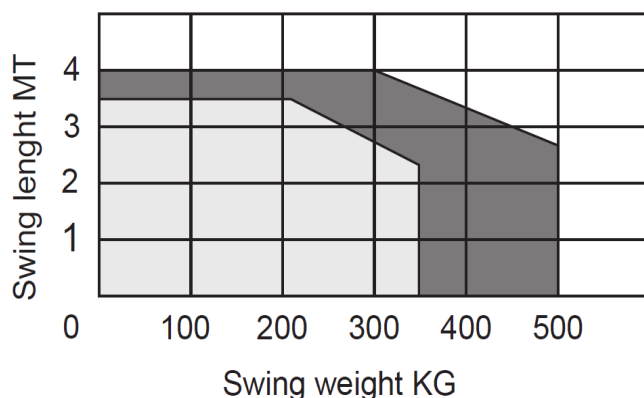
Keep safety distance!

ATTENTION



Do not install motors in areas saturated with explosives mixtures!

- Non Panelled gate with electric-lock
- Non panelled gate or Panelled gate whit electric-lock



Standard specifications

These standards define the mechanical requisites needed for motorised residential gates in public areas. To guarantee the safety the installer must verify:

- Eventual transparent surfaces must have no less than class 1 resistance, must be unbreakable or if breakable the resulting fragments must not have cutting edges.
- If the surfaces are scarcely visible these must be marked or colored.
- To move the swing manually the pressure applied must not exceed 15 kg for residential gates and 26 kg for industrial gates.
- The swing and relatives accessories must not expose people to danger of dragging, cutting or shearing.
- The gate during the movement must not create trapping zones.
- The danger zone where these risk must not be present it's extened up to 2,5 mt of height.

BAME s.r.l. is liable only for the individual articles produced and sold by BAME. the gate with the motor it's considered a machine and must respect the machinery directives, the installer must verify the safety of the gate with the motor and is liable for any damage due to a poor installation.

ATTENTION

BAME is not liable for any damage depending on modifications to any particular : electrical, electronic or mechanical done by other persons without prior consent by BAME s.r.l..

ATTENTION

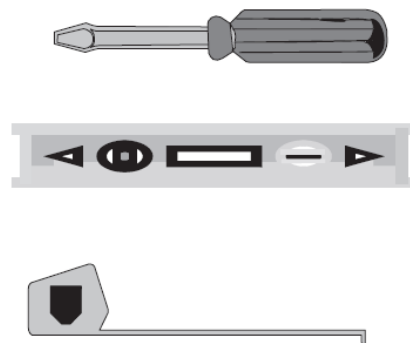
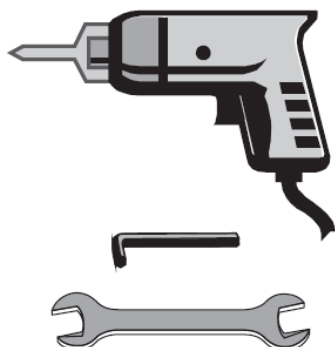
BAME is not liable for any damage depending on accessories, electronic control boards and photocells without BAME trademark or for the use of these parts without prior consent by BAME s.r.l..

Pre installation check

Verify that the swing of the gate:

- can rotate properly, without hangings;
- it's straight and moving without oscillations;
- the hinges must keep the swing in axis;
- have mechanical swing stopper installed; these problems if present, must be corrected before installing the motor.

Tools needed for the installation of the motor



Emergency release system:

In case of need follow these instructions to unlock the motor:

1. Open the plastic cap positioned on the motor top and insert the key.
2. Turn the key and remove the plastic cover.



**ATTENTION:
THIS SHEET
MUST BE
CONSIGNED
TO THE CLIENT**

**ATTENTION:
THE CUSTOMER MUST KEEP
THIS SHEET TOGETHER WITH
THE UNLOCKING KEY IN A
SAFE PLACE.
THE PLACE WHERE THE KEY
IS STORED MUST BE
ACCESSIBLE ALSO IN CASE
OF POWER FAILURE**

3. To unlock the motor turn the knob 180° until it stops.
4. To lock the motor turn the knob to the original position.



**ATTENTION:
INFORM ALSO OTHER USERS
OF THE AUTOMATION
ABOUT THE PLACE WHERE
THE KEY AND THIS SHEET
ARE STORED**



**Important: at the end of the release operation
always close the plastic cap firmly.**

Declaration of conformity
(must be filled by the installer)

DECLARATION OF CONFORMITY “A”

The undersigned

Name:

Surname:.....

responsible of the installation of the system declare that the product:

Gate type:

Address:

satisfies all the technical regulations applicable to the product within
the scope of Council Directives 73/23/EEC, 89/336/EEC, 98/37/EEC
and subsequent modifications.

Furthermore declare that the following standard specifications have been applied:

☐ EN12453/EN12445 Safety for motorised doors and gates, industrial,
commercial and residential - Requisites and classification - Test methods

☐ EN12604/EN12605 Mechanical aspects for doors and gates, industrial,
commercial and residential – Requisites and classification – Test methods

☐ CEI 64/8 electrical plant with nominal tension not over 1000 VAC and
1500 VDC

Notes:

.....

Place:

.....

Date:

.....

Signature

.....

Declaration of conformity

DECLARATION OF CONFORMITY “B”

BAME srl
Leonardo da Vinci, 23
46020 San Giacomo Segnate (MN)
Italy

declare that the product
motoreducer for sliding gates, see the instruction manual for compatible gates

KUDU \ KUDU-S

satisfies all the technical regulations applicable to the product within the scope of
Council Directives:

MACHINERY DIRECTIVE 98/37/CEE AND SUBSEQUENT MODIFICATIONS.
DIRECTIVE EMC 89/336/CEE.
DIRECTIVE BT 73/23/CEE AND 93/68/CEE.

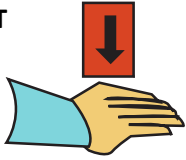
IS FORBIDDEN TO PUT INTO SERVICE THE DEVICE OF THIS DECLARATION BEFORE
THE PRODUCT OF THE DECLARATION “A” HAS BEEN DECLARED IN COMPLIANCE
WITH THE SPECIFICATIONS STANDARD.

San Giacomo Segnate, 12/09/2010

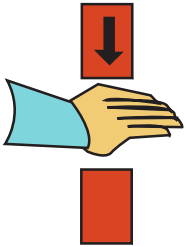
Baraldini Silvano
BAME srl

Safety checks

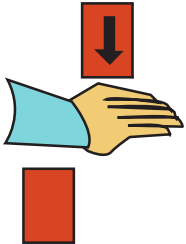
IMPACT



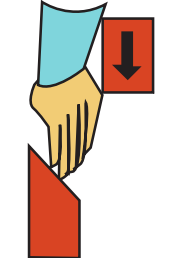
CRUSHING



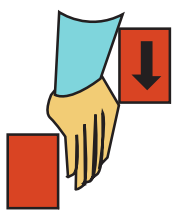
SHEARING



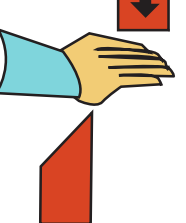
HOOKING



DRAGGING



CUTTING



Checks:

- ☐ The ruggedness and the fastening of the structure is adequate.
- ☐ The swing can not fall in the ground.
- ☐ The threshold of the gate it's modeled not to create hindrance.
- ☐ Limit switch are installed and verified.
- ☐ The moving parts are equipped with adequate protections installed in compliance with the safety standards.
- ☐ The torque regulation can be changed only by specialized personnel, operating on the control board in compliance with the instructions from the manufacturer.
- ☐ The gate with the motor is supplied with an emergency release system.
- ☐ The client have been supplied with information about the emergency release system.

Possible risks

Impact	cutting	lifting	shearing
dragging		hooking	crushing

Mark for each risk the solution adopted.

(Possible solutions : 1-only manual operations, 2-sensitive edges, 3-photocells, 4-swing stoppers, 5-torque limiter, 6-surface modelling, 7-footboards, 8-radar, 9-acoustic signal, 10-visual signal, 11-markings, 12-isolation, 13-protection net, 14-....., 15-.....)

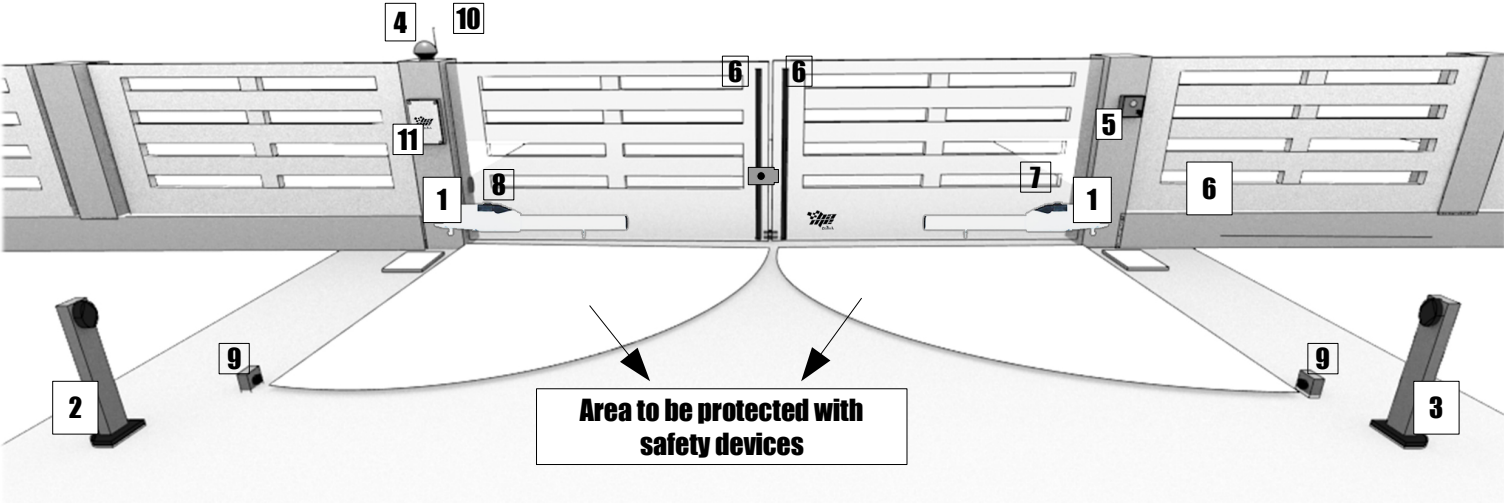
Electrical risks:

- ☐ CE markings are present in compliance with the directive
- ☐ BT(73/23/CEE).
- ☐ All electrical connections are made in compliance with standard specifications, also according to the manufacturer manual.
- ☐ The remote controls are compliant with the directive R&TTE(99/5/CE). Components are marked CE, according to directive EMC(89/336/CEE).

Safety and reliability of the motor and control devices:

- ☐ Controls are verified with the movement of the gate, according with the manufacturer manual.
- ☐ All the control device are installed in an accesible position and they are easily visible.
- ☐ The motor is compliant with the standard specification EN12453.
- ☐ All the presence and motion sensor are working according with the standard specification EN12445.

Electrical plant



For the electrical connections use the following cables (fig.1):

- 3x1.5 main power supply 230 V
- 2x1.5 + 1xRG58 flashing light + antenna
- 2x1 photocell transmitter
- 4x1 photocell receiver
- 3x1 keyswitch
- 2x1 electric lock
- 4x1.5 for motor 230 Volt
- 2x2.5 for motor 24 Volt

1	OPERATOR	7	EXTERNAL PHOTOCELL RX
2	INTERNAL PHOTOCELL RX	8	EXTERNAL PHOTOCELL TX
3	INTERNAL PHOTOCELL TX	9	MECHANICAL STOPPER
4	FLASHING LIGHT	10	ANTENNA
5	KEY SWITCH	11	CONTROL BOARD
6	SENSITIVE EDGE	12	ELECRIC LOCK

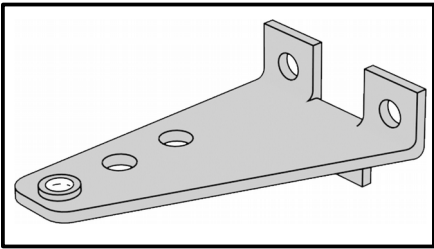
All cables must be protected with rubber pipes to be inserted in the pillars of the gate and in the ground.
The photocells must be fixed at no more than 10 cm from the gate with an height between 40 and 60 cm. On the figure below the highlighted area is to be protected with safety devices.

Periodic maintenance

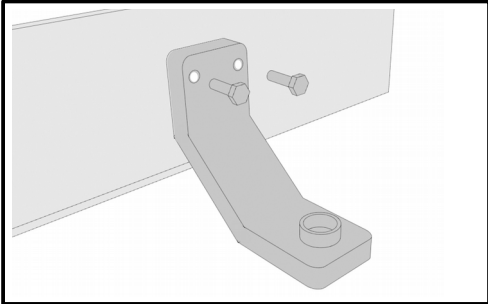
- To maintain a high reliability, also after years of use, the system must be checked each six month by authorized personnel. Checks to be done during the inspection:
- . Check all safety device
 - . Lubricate the gate hinges
 - . Check the emergency release system
 - . Keep the place of the gate and photocells free from trees, insects and stuffs which can cause a bad working of the motor

FIXING PLATE

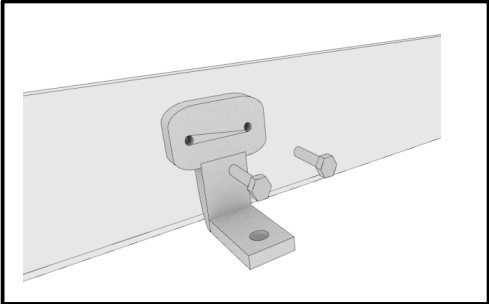
REAR PLATE



FRONT PLATE KUDU



FRONT PLATE KUDU-S



Installing the motoreducer KUDU

You must pay attention to the position of the motoreducer with reference to hinges of the swing:

- fix the exact opening angle of the swings (95° or 120°) as shown in fig. 5;
- respecting the measures on fig. 6, fix the exact fixing points of the stirrups which will sustain the motor;
- set the stirrups (fig. 2) on the pillars and gate, modifying them if needed;
- in case of big pillars it's necessary to make a notch on the pillar to insert the stirrups and respect the quotes A and B (fig. 4).

Once the installation of the stirrups is done correctly, install the motors to the stirrups with the screws supplied, check the electrical wirings and verify that the motors are working smoothly, first by hand and then with the control board (to program the motors check the manual supplied with the electronic control board).

NB: For a correct working of the motoreducer check as follow:

- Open and close the gate and make sure that the motoreducer's tip does not touch the gate during the movement.
- The lower pin of the motoreducer must not arrive at the end of the run (min. 10 mm run both during the opening and the closing).
- For swings with length more than 2,5 mt we suggest to install an electric lock .
- Always install opening and closing swing stop if the motor is not equipped with limit switches

Stirrup fixing on big pillars

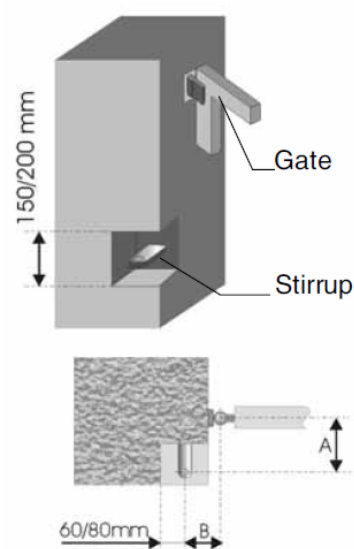
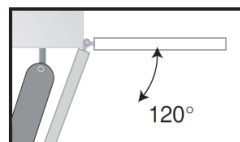
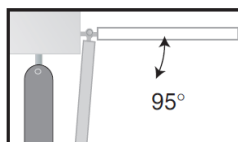
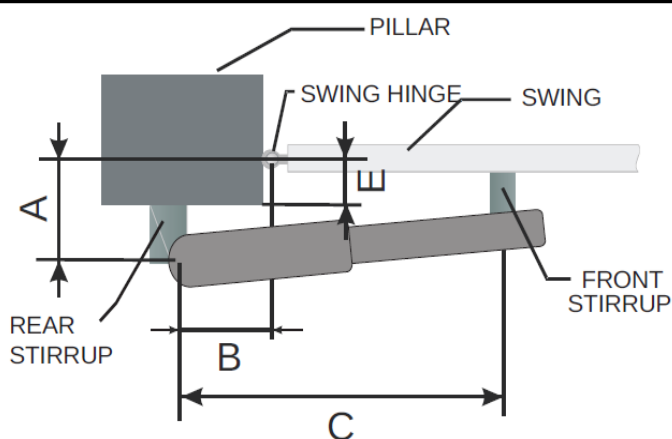


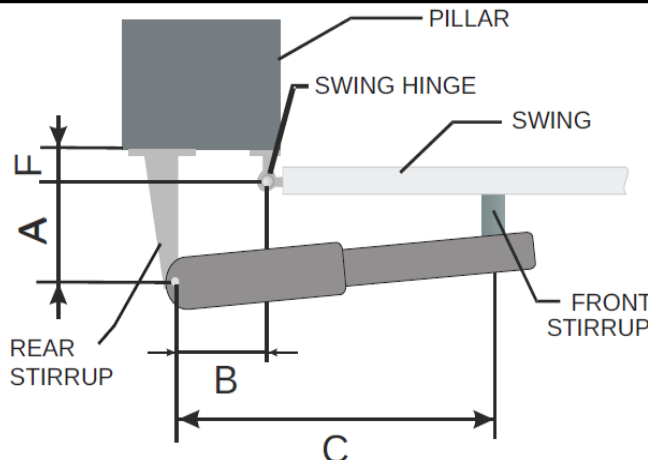
Figura 5



Stirrups fixing measures (with closed gate)



	95°	120°
A	155 mm	100 mm
B	130 mm	140 mm
C	650 mm	650 mm
E	100 mm MAX	50 mm MAX



	95°	120°
A	155 mm + F	100 mm + F
B	130 mm	140 mm
C	650 mm	650 mm

Installing the motoreducer KUDU-S

You must pay attention to the position of the motoreducer with reference to hinges of the swing:

- fix the exact opening angle of the swings (95° or 120°) as shown in fig. 5;
- respecting the measures on fig. 6, fix the exact fixing points of the stirrups which will sustain the motor;
- set the stirrups (fig. 2) on the pillars and gate, modifying them if needed;
- in case of big pillars it's necessary to make a notch on the pillar to insert the stirrups and respect the quotes A and B (fig. 4).

Once the installation of the stirrups is done correctly, install the motors to the stirrups with the screws supplied, check the electrical wirings and verify that the motors are working smoothly, first by hand and then with the control board (to program the motors check the manual supplied with the electronic control board).

NB: For a correct working of the motoreducer check as follow:

- With the open gate, the quote c must be included between 780-790 mm.
- The tube of the motoreducer does not arrive at the end of the run (min. 10 mm run both during the opening and the closing).
- For swings with length more than 3 mt we suggest to install an electric lock with a swing lock.
- Always install opening and closing swing stop.

Stirrup fixing on big pillars

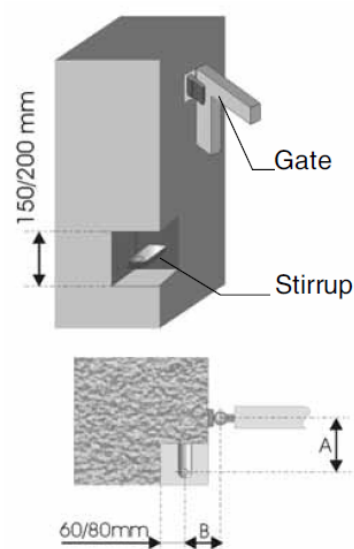
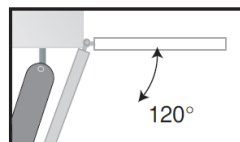
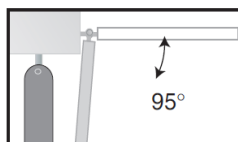
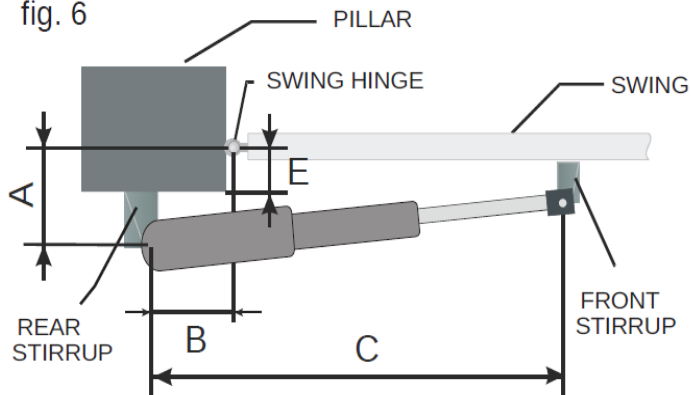


Figura 5



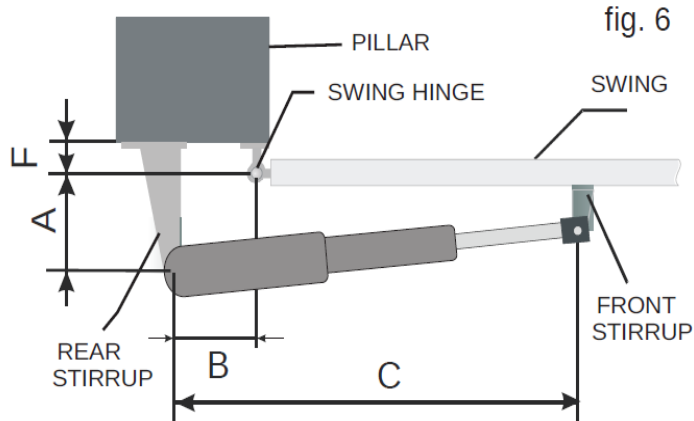
Stirrups fixing measures (with closed gate)

fig. 6



	95°	120°
A	155 mm	100 mm
B	130 mm	140 mm
C	1080 mm	1080 mm
E	100 mm MAX	50 mm MAX

fig. 6 **6**



	95°	120°
A	155 mm + F	100 mm + F
B	130 mm	140 mm
C	1080 mm	1080 mm

WARNINGS:

BAME s.r.l. , as manufacturer, can not be held responsible for damages due to wrong or missing connections or due to an improper setting.

The safety devices should be always installed and kept in full working order.

Once terminated the system setting, you should place back the container on its position, fastening tight its screws. BAME s.r.l. , as manufacturer, can not be held responsible for damages due to improper use of the door/gate.

It is forbidden to replace any electric, electronic or mechanic part with not original spare parts.

BAME s.r.l. , has the right to modify or change the electronic boards and manuals, without prior notice. Always regulate accurately the torque of the motors. An incorrect setting of the torque may cause damage to people, animals or objects.

WARRANTY:

Devices and accessories are guaranteed for a period of 24 months after production, whose date is printed on each item. The company will replace or repair its devices, provided that they are returned to our factory with the warranty label in good conditions. In case of replacement of the returned items, these will remain property of the company. The warranty does not include damages due to any incorrect use, such as: non fulfilment of the instruction detailed for each device, maintenance and servicing carried out without the previous written consent of our company. Moreover, warranty does not cover any damage due to wrong tension supply and any other reason for which the manufacturer cannot be made responsible. Any device returned must be delivered to our company with carriage paid and will be sent back with freight collect. Warranty validity ceases if customer's payments are not fulfilled. Each device manufactured by our company meets the european safety standards. Our company declines all responsibility for the non-observance of the safety rules by the installers. In order to reduce the time spent for servicing the returned items, all faulty materials which have been sent back to us must be accompanied by the installer description of the item fault.



BAME s.r.l.
Delma automazioni

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