

Motorigear for swing gates



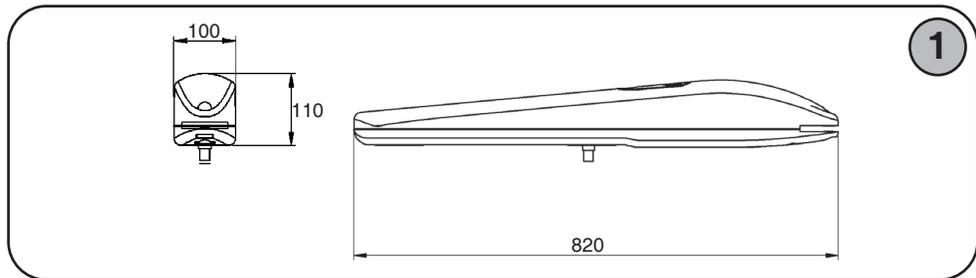
1 - WARNINGS

Unfulfilment of the below listed direction will release the Antoniulli Mario & C. sas, holder of the KING gates mark, from any responsibility for damage caused to people or things.

- Do not modify the product in any part.
- To optimize the functioning of the automation, King gates accessories only.
- Installing, testing and first functioning have to observe the laws in force.
- The gear-motor doesn't require any maintenance because provided with a permanent lubrication system.
- Disposal of waste material has to observe local regulations.

2 - TECHNICAL DATA

		Jet 230 F	Jet 230 S	Jet 24
Power supply	(Vac/Vdc)	230	230	24
Motor rating	(W)	200	170	50
Electrical input	(A)	1,1	1,4	3
Working temperature	(°C)	-20 ÷ +55	-20 ÷ +55	-20 ÷ +55
Termic protection	(°C)	110	110	-
Speed	(m/min)	0.016	0.010	0.013 ÷ 0.020
Effective strokes	(mm)	360	360	360
Frequency of use	(%)	30	30	90
Dimensions	(mm)	100x820x110	100x820x110	100x820x110
Operator weight	(Kg)	8	8	7
Max wing dimension	(m)	3	3	3



3 - INSTALLATION WARNING

Before beginning the installation, check that the gate is suitable for the automatization, in particular:

- Ascertain the solidity and appropriateness of the gate's frame.
- Ascertain that the gear-motor and the accessories are fixed on stable surfaces, protected from flooding and being hit.

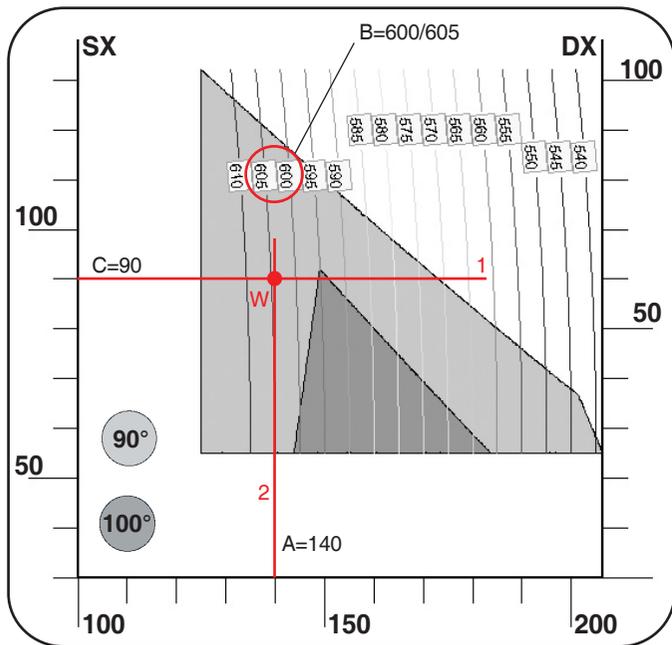
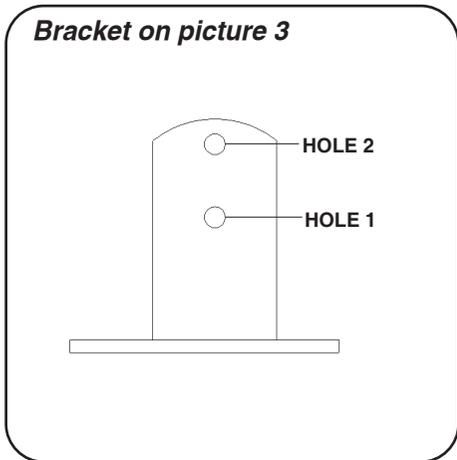
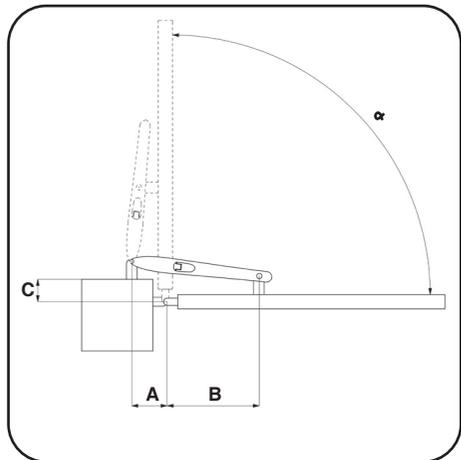
⚠ Ascertain the presence of the mechanical limit switch in closing position

The operator is supplied only with the mechanical limit switch in opening position. If the system is not arranged with external limit switches, it is necessary to buy the optional limit switch.

4 - GRAPH FOR THE BRACKET INSTALLATION

For the correct functioning of the system, and a long duration of the automation, it is necessary to follow the following graph, which allow to identify the correct position of the brackets, depending on the desired opening angle.

4A - EXAMPLES OF GRAPH USE



In the example we considered "C" to measure 90 mm. Once the horizontal line "1" had been drawn, we decided a 90° opening of the door. Among the "A" variances which allow such an opening angle, the most suitable to the expected conditions (in particular the column structure) was identified in the vertical line "2". Finally, the point (W) given by the intersection of the two lines, can be observed between the curves "605" and "600". "B" can therefore approximate 603/604 mm.

4C - HOW TO USE A GRAPH

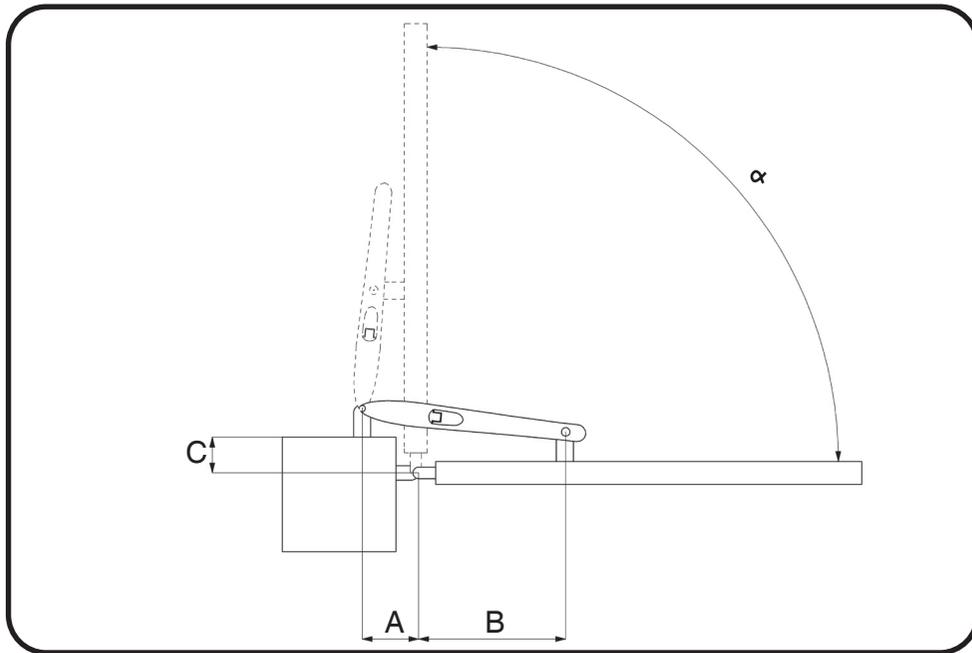
Measure "C", and draw a horizontal line in graph at the read measure. Choose the variance on the **left** axis when the motor gear is fixed on hole "1" of the back-stirrup, on the **right** axis when the motor gear is fixed on hole "2" of the back-stirrup. The presence of two holes on the stirrup aims at optimizing the use of the motor.

Choose a position (W) on the draw line, considering the expected opening angle ("α") adequate to the column.

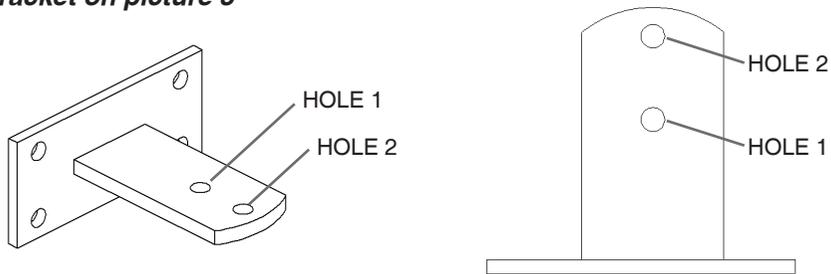
Draw vertical line from W and determinate "A".

PTo continue the installation ascertain that the "A" variance allows the back stirrup to be fixed, otherwise choose another position on the graph.

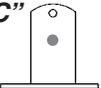
Determinate "B" using the curves which cross the graph vertically.



Bracket on picture 3



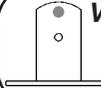
4D - GRAPH

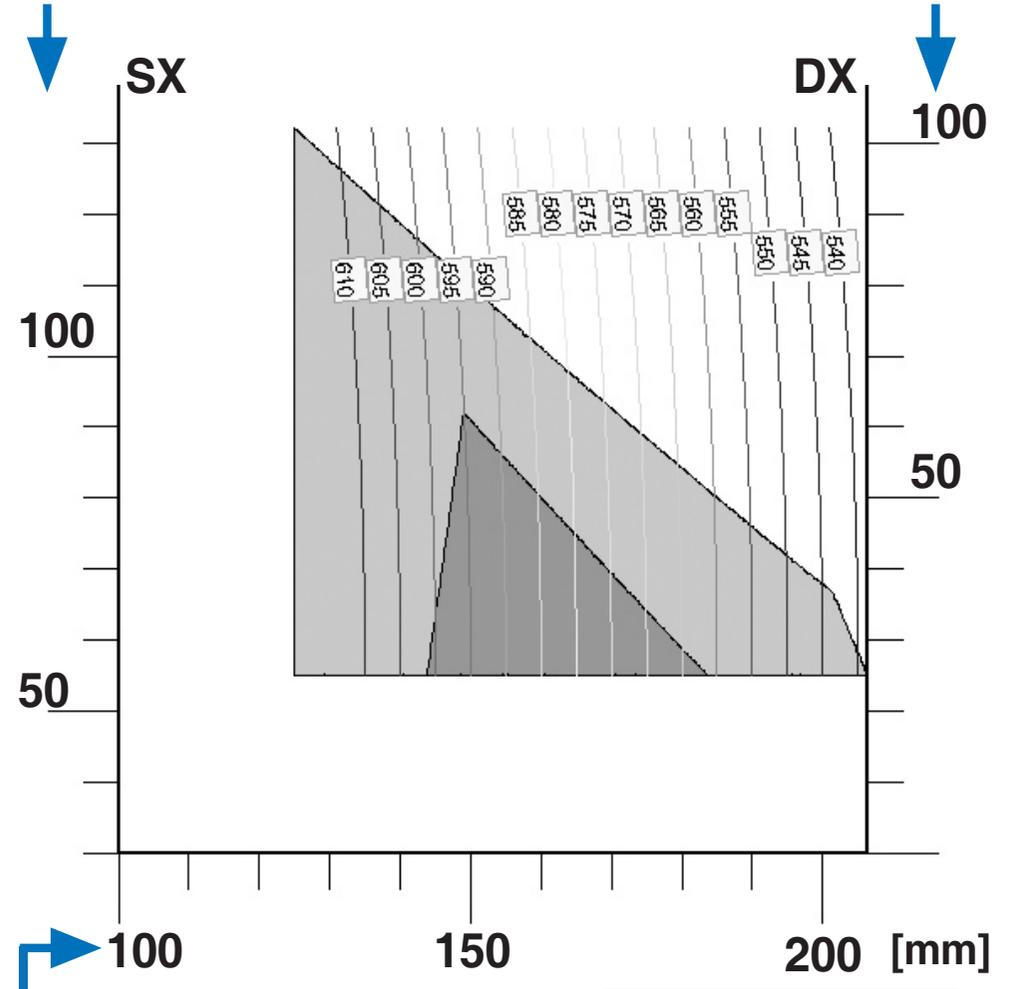
Value of "C" if used hole "1" 

Opening degrees

90°

100°

Value of "C" if used hole "2" 



Value of "A" customizable depending on the installation

The value of "B" is showed on the frame of the curves

- ⓘ If the installation measures are not properly followed, the atomation could not work correctly. For example:
- Cyclical trends, and sudden accelerations
 - Noise of the motor
 - Limited opening degree or absent opening (in case of motor counter-lever fixed)

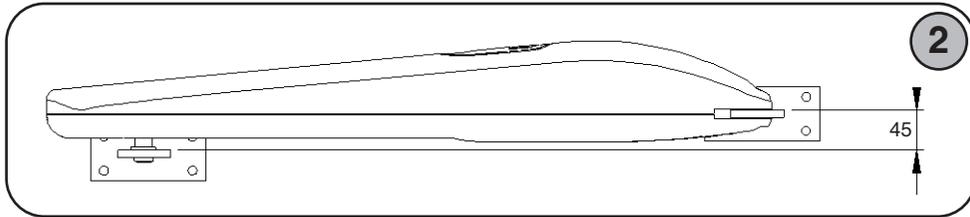
5 - INSTALLATION

Read the instructions with care before installing the product. The producer disclaims all responsibility for any damage or bad functioning caused by non-observance of the instructions or bad connection that may result in poor safety and functioning of the gear-motor.

5A - STIRRUPS HEIGHT

Fix the stirrups allowing **45 mm** between the faces in order to fix the gear-motor horizontally. (see **pic.2**).

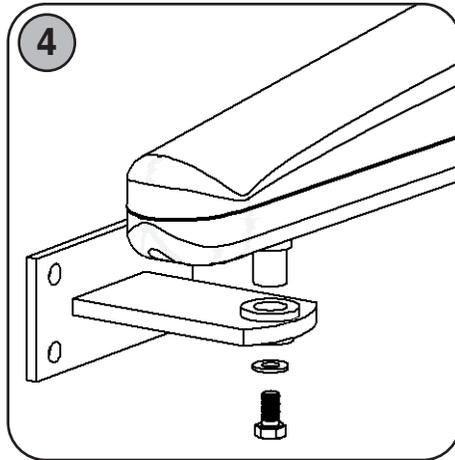
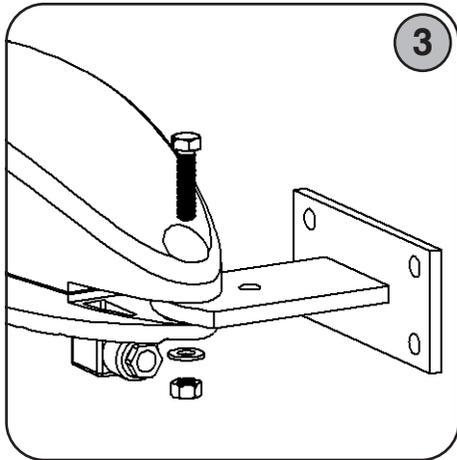
⚠ **The stirrups MUST be fixed following the graph on paragraph 4D. Otherwise read the notes under the graph.**



5B - FIXING THE GEAR-MOTOR TO THE STIRRUPS

Fixing the gear-motor to the back stirrup. (vedi **pic.3**).

Fixing the gear-motor to the front stirrup. (vedi **pic.4**).



6 - MANUAL CONTROL

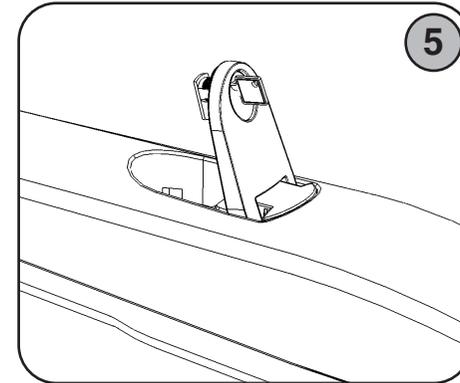
⚠ **Before operating the manual release disconnect the power.**

Manual control has been thought for manual opening of the gate in case of power-cut or motor breakdown.

6A - RELEASE

INSTRUCTION (see **pic.5**).

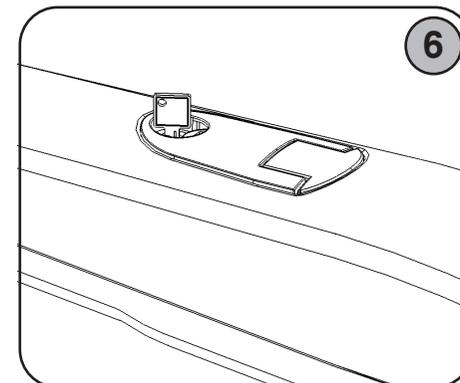
- Operate the manual release moving back the key hole cover.
- Insert the key in the cylinder lock and turn it of 90° clockwise direction.
- Pull the lever till it is perpendicular to the gear-motor.



6B - RESTORATION

INSTRUCTION (see **pic.6**)

- Bring back the lever in the original position.
- Insert the key in the cylinder lock and turn it of 90° anticlockwise direction.



7 - ELECTRICAL CONNECTION

7A - CONNECTION TO THE POWER STATION

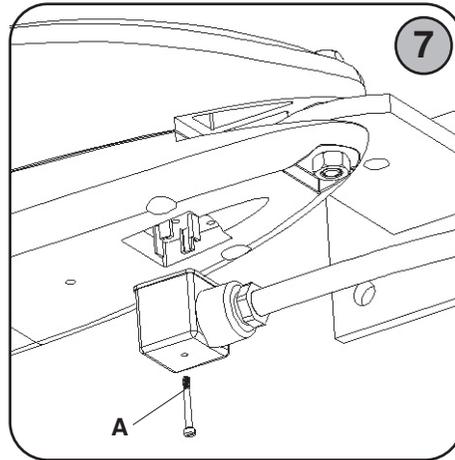
The installer is provided with the assembled connector.

This has the function of connecting the motor to the power station and to power it.

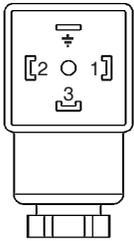
This procedure can only be carried out by authorized staff.

Dismantle the connector by unscrewing screw "A" and connect the cables according to the following plan. (see pic.7)

⚠ The electrical connection within the gear-motor is already provided and it is included the condenser

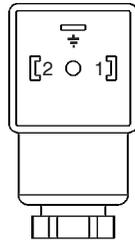


PLAN FOR THE 230V TYPE



- 1 Phase 1
- 2 Phase 2
- 3 Common
- ⊕ Earth

PLAN FOR THE 24 V TYPE



- 1 Phase 1
- 2 Phase 2
- ⊕ Earth

⚠ The connector ensures electrical connection insulation. It's therefore very important reassemble with great care.

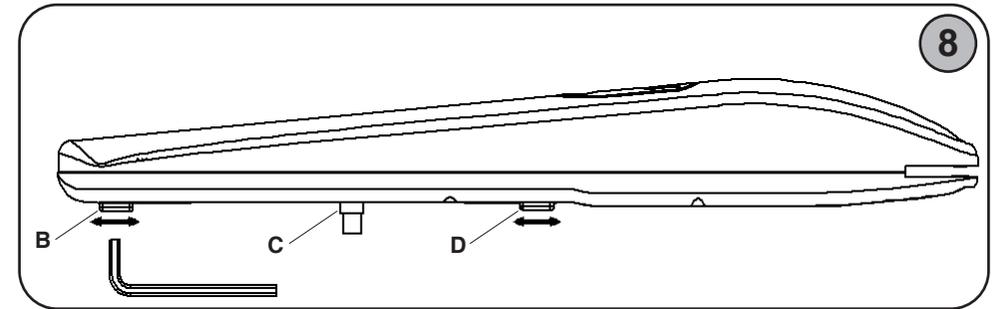
8 - STOP ADJUSTMENT

The mechanical-stop enables to stop the gate at a required position, avoiding the door hitting the stopping devices.

8A - INSTRUCTION FOR THE REGULATION

INSTRUCTION. (see pic.8)

- Set the gear-motor on manual functioning (pic.5).
- Unscrew the screw on the mechanical-stop (B).
- Move the door to its wide open desired position.
- Place the mechanical-stop next to the sliding pin (C), as a block.
- Screw in the screw tightly.
- Set the gear-motor on automatic functioning (pic.6).



⚠ The gear-motor are manually provided with mechanical stops in open position. In case of lack of external mechanical stops in closing position, it is possible to buy the optional mechanical limit switch.

DICHIARAZIONE CE DI CONFORMITÀ

Il sottoscritto Antonioli Mario, legale rappresentante della ditta Antonioli Mario & C. sas, dichiara che il prodotto:

-Jet 230F
-Jet 230S
-Jet 24

Risulta conforme a quanto previsto dalle seguenti direttive europee:

-Direttiva bassa tensione.

Direttiva base 73/23/EEC modificata dalla 93/68/EEC

-Direttiva macchine.

Direttiva base 98/37/EEC modificata dalle 98/79/EC
89/392/EEC
91/368/EEC
93/44/EEC
93/68/EEC

-Compatibilità elettromagnetica.

Direttiva base 89/336/EEC modificata dalle 2004/108/EC
92/31/EEC
93/68/EEC
91/263/EEC

Inoltre dichiara che non è consentita la messa in servizio prima che la macchina in cui il prodotto stesso è incorporato non sia dichiarata conforme alla direttiva macchine 98/37/CE.

Sacile, 01/02/06

Il legale rappresentante,
Antonioli Mario



EC DECLARATION OF CONFORMITY

The undersigned Mario Antonioli, general manager of the following producer, declares that the product:

-Jet 230F
-Jet 230S
-Jet 24

Appears to be in conformity with the following community (EEC) regulation:

-Low Voltage Directive.

73/23/EEC 93/68/EEC

-Machinery Directive.

98/37/EEC 98/79EC
89/392/EEC
91/368/EEC
93/44/EEC
93/68/EEC

-Electromagnetic Compatibility.

89/336/EEC 2004/108/EC
92/31/EEC
93/68/EEC
91/263/EEC

The above-mentioned product cannot be used until the machine into which it is incorporated has been identified and declared to comply with the 98/37/CE directive.

Sacile, 01/02/06

General Manager,
Antonioli Mario

