

## IMPORTANT REMARKS

For any installation problem please contact our Customer Service at the number +39-0172.812411 operating Monday to Friday from 8:30 to 12:30 and from 14:00 to 18:00.

**V2 has the right to modify the product without previous notice; it also declines any responsibility to damage or injury to people or things caused by improper use or wrong installation.**



**Please read this instruction manual very carefully before installing and programming your control unit.**

- This instruction manual is only for qualified technicians, who specialize in installations and automations.
- The contents of this instruction manual do not concern the end user.
- Every programming and/or every maintenance service should be done only by qualified technicians.

### **AUTOMATION MUST BE IMPLEMENTED IN COMPLIANCE WITH THE EUROPEAN REGULATIONS IN FORCE:**

**EN 60204-1** (Machinery safety electrical equipment of machines, part 1: general rules)

**EN 12445** (Safe use of automated locking devices, test methods)

**EN 12453** (Safe use of automated locking devices, requirements)

- The installer must provide for a device (es. magnetothermal switch) ensuring the omnipolar sectioning of the equipment from the power supply.  
The standards require a separation of the contacts of at least 3 mm in each pole (EN 60335-1).
- The plastic case has an IP55 insulation; to connect flexible or rigid pipes, use pipefittings having the same insulation level.
- Installation requires mechanical and electrical skills, therefore it shall be carried out by qualified personnel only, who can issue the Compliance Certificate concerning the whole installation (Machine Directive 98/37/EEC, Annex IIA).
- The automated vehicular gates shall comply with the following rules: EN 12453, EN 12445, EN 12978 as well as any local rule in force.
- Also the automation upstream electric system shall comply with the laws and rules in force and be carried out workmanlike.
- The door thrust force adjustment shall be measured by means of a proper tool and adjusted according to the max. limits, which EN 12453 allows.
- We recommend to make use of an emergency button, to be installed by the automation (connected to the control unit STOP input) so that the gate may be immediately stopped in case of danger.
- The appliance is not to be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.
- Children being supervised do not play with the appliance.

- For correct installation of the system, we recommend following the instructions issued by UNAC very carefully, which can be consulted at the following web site: [www.v2home.com](http://www.v2home.com)

## DECLARATION OF CONFORMITY

The following statement is applicable only if the below listed equipments are employed in accordance with the purpose indicated in the instruction manual.

### **Company:**

V2 SPA  
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Tel. +39 01 72 82 10 11  
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### **Contact person:**

Cosimo De Falco  
Chief Executive Officer

V2 SPA declares that the series of BLITZ actuators are in conformity with the provisions of the following EC directives:

**73/23/EEC** low voltage directive  
**89/366/CEE** electromagnetic compatibility directive  
**98/37/EEC** machine directive

Note: Declares that the above mentioned devices may not be operated until the machine (automated gate) is identified, CE-labeled, and declared to be compliant to the specifications of Directive 89/392/EEC and following modifications.

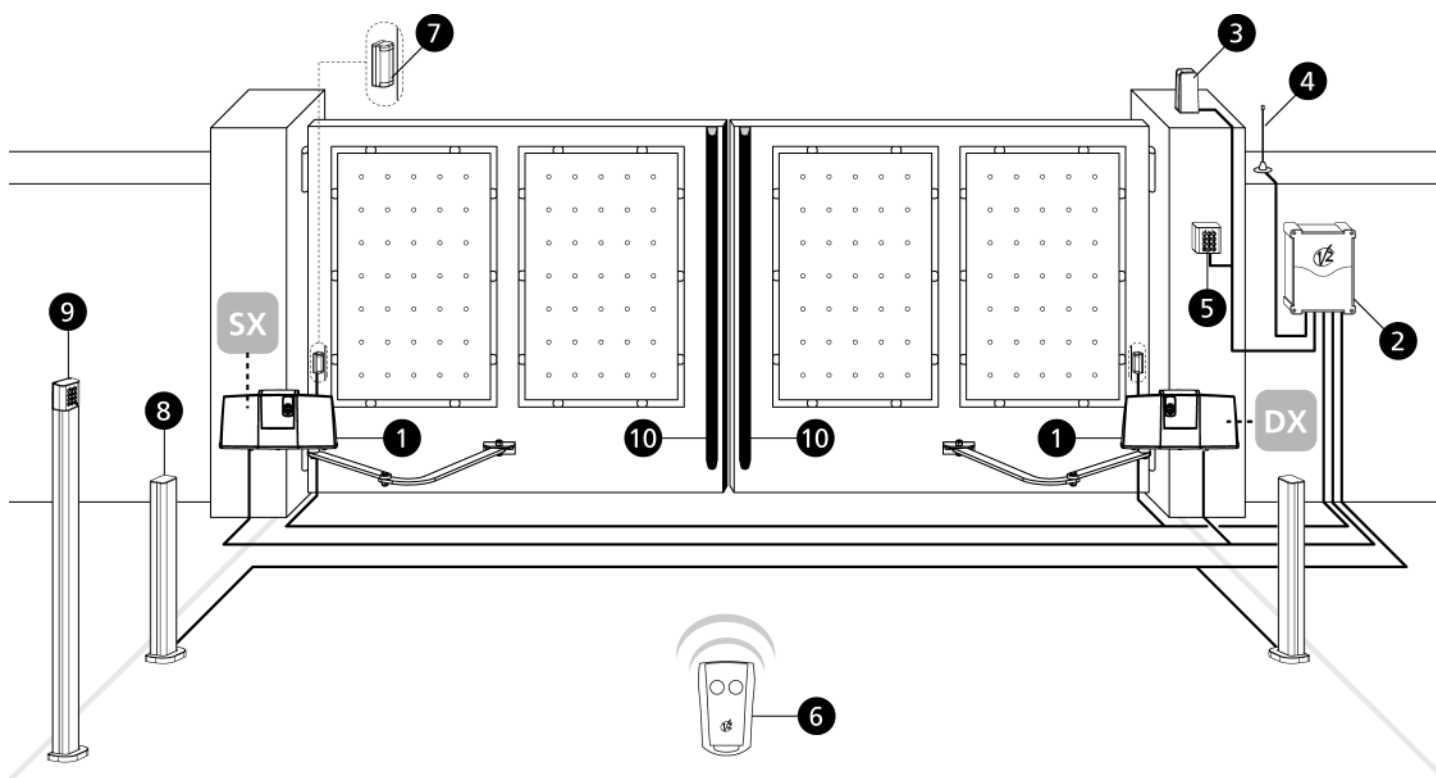
The person in charge for the machine start-up must provide the following records:

- Technical specification paper
- Declaration of conformity
- CE-labeling
- Testing record
- Maintenance record
- Operation manual and directions

Racconigi 20/10/2009  
V2 SPA legal representative  
**Cosimo De Falco**

TECHNICAL SPECIFICATIONS		BLITZ-24V	BLITZ-120V	BLITZ-230V
Max. leaf length	<b>m</b>	3 x 500 Kg 2,5 x 600 Kg 2 x 800 Kg	3 x 500 Kg 2,5 x 600 Kg 2 x 800 Kg	3 x 500 Kg 2,5 x 600 Kg 2 x 800 Kg
Power supply	<b>Vac / Hz</b>	24 Vdc	120 / 60	230 / 50
Idling current	<b>A</b>	1,5	3,8	1,8
Full load current	<b>A</b>	7,5	4,5	2,5
Rated power	<b>W</b>	45	400	400
Capacitor	<b>µF</b>	-	30	8
Speed	<b>Rpm</b>	1,4 ÷ 0,5	1,9	1,6
Torque	<b>N m</b>	320	340	340
Working temperature	<b>°C</b>	-30 ÷ +60	-30 ÷ +60	-30 ÷ +60
Thermal protection	<b>°C</b>	140	140	140
Working cycle	<b>%</b>	80	20	20
Motor weight	<b>Kg</b>	14,6	14,6	14,6

### INSTALLATION LAYOUT



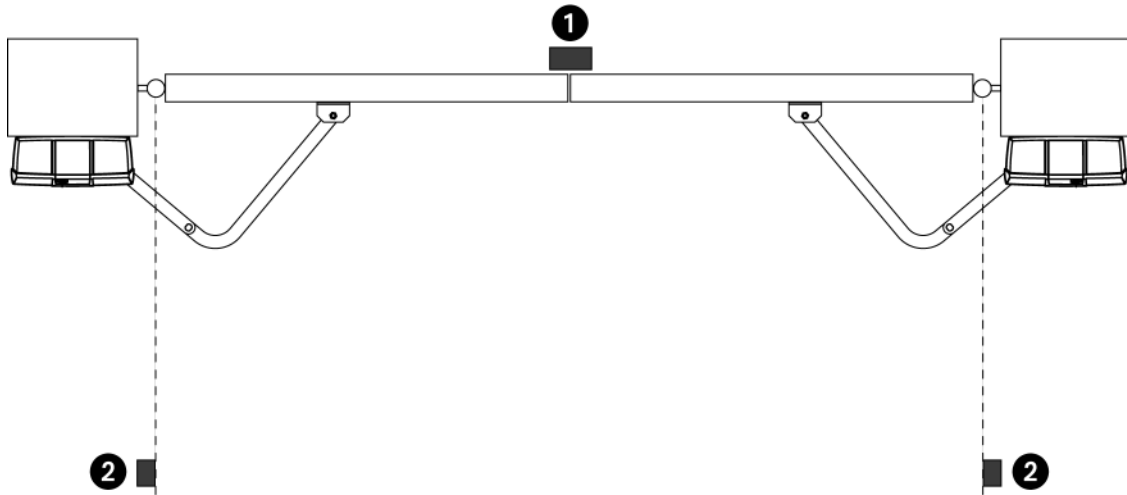
<b>1</b> BLITZ actuator	cable 4 x 1 mm <sup>2</sup> cable 1,5 x 2 mm <sup>2</sup> (Blitz-24V)
<b>2</b> Control unit	cable 3 x 1,5 mm <sup>2</sup>
<b>3</b> Blinker	cable 2 x 1 mm <sup>2</sup>
<b>4</b> Aerial	cable RG-58
<b>5</b> Key or digital selector	cable 3 x 0,5 mm <sup>2</sup>
<b>6</b> External photocells	cable 4 x 0,5 mm <sup>2</sup> (RX) cable 2 x 0,5 mm <sup>2</sup> (TX)
<b>7</b> Internal photocells + GARDO50 pillars	cable 4 x 0,5 mm <sup>2</sup> (RX) cable 2 x 0,5 mm <sup>2</sup> (TX)

<b>8</b> Safety edge (EN 12978)
<b>9</b> Proximity reader via radio or digital selector via radio + pillar GARDO100
<b>10</b> Transmitter

### PRELIMINARY OPERATIONS

The new series of actuators BLITZ, has been devised to serve gates up to 800 Kg with leaf up to 3 meters wide (look at the table technical data). Before proceeding with the installation, please make sure that your gate opens and closes freely, and that:

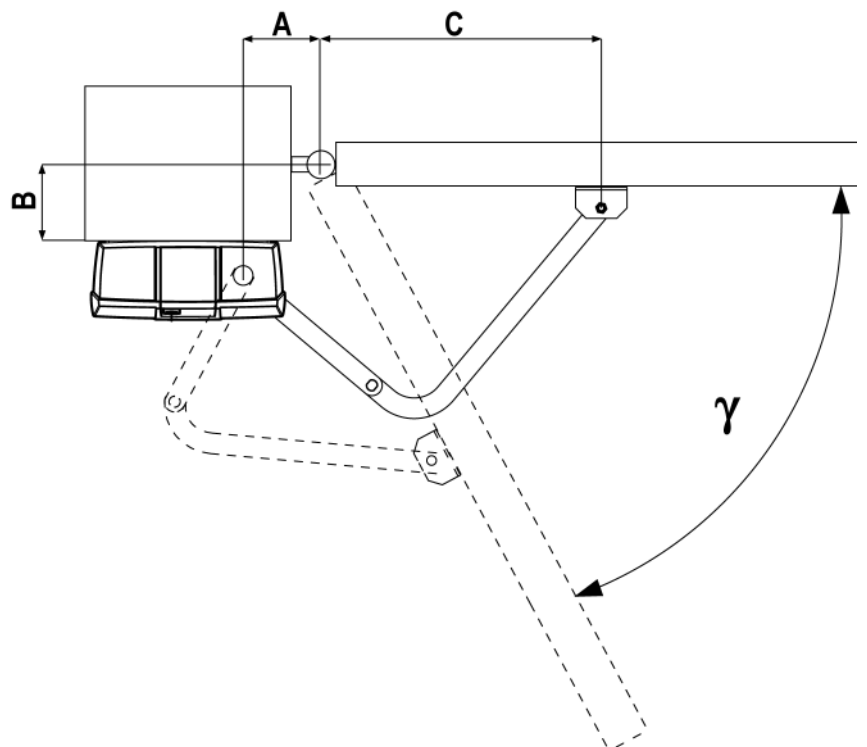
- Pintles and pivots shall be in good order and properly lubricated
- Nothing shall block the movement
- No friction with earth and between the doors shall exist (mechanical expansion from 7 to 8 mm min.)
- Your gate has to be equipped with central stop (1) and possibly side limits (2)



### INSTALLATION MEASURES

To carry out a proper installation of the operator parts as well as to ensure the best automation performance, the measurement levels shown in the following table shall be complied with. Change the gate structure to adapt it to one of the cases in the table, if necessary.

$\gamma$	B [mm]	A [mm]	C [mm]
90°	20 ÷ 40	140	650
	50 ÷ 80	140	650
	90 ÷ 140	150	650
	150 ÷ 160	160	650
	170 ÷ 180	180	650
	180 ÷ 220	180	650
	220 ÷ 250	180	600
	250 ÷ 320	200	600
100°	20 ÷ 60	170	650
	70 ÷ 110	180	650
	110 ÷ 150	190	650
	150 ÷ 200	200	650
110°	20 ÷ 50	180	650
	50 ÷ 100	200	650
	110 ÷ 130	210	650



## ACTUATOR FASTENING

As soon as the measures selected from the table, which is on the previous page, have been marked on piers, proceed with the following operations, considering figure 1 as a reference:

- Fasten the anchor plate **A** to the pier by making use of proper screws and blocks.
- Enter the ratiomotor into the anchor plate and fasten it by means of screws **B**, washers **C** and nuts **D** supplied (the shaft must be turned downwards).
- Assemble the articulated arm and the relevant bracket as shown in the figure.
- Fit the articulated arm into the shaft and fasten the screw **E**.
- Release the ratiomotor (see paragraph EMERGENCY LOCK RELEASE).
- Mark the front bracket fastening points on the door according to the previous established levels.
- Separate the front bracket **F** from the articulated arm.
- Fasten the bracket on the door by means of screws or directly weld it in case the material it is made of allows it.
- Link the clamp **F** to the pivoted arm.
- Make several manual attempts in order to open and close the doors by checking that no unwanted friction occurs.
- Proceed with ELECTRICAL CONNECTIONS and ADJUSTMENT OF STOP ENDS.
- Insert the cap **G**, the plug **H**, the unclamping handle **I** and fix the two screws.

**⚠ WARNING:** For the left actuator install the motor as shown in fig.2 and repeat the above operations.

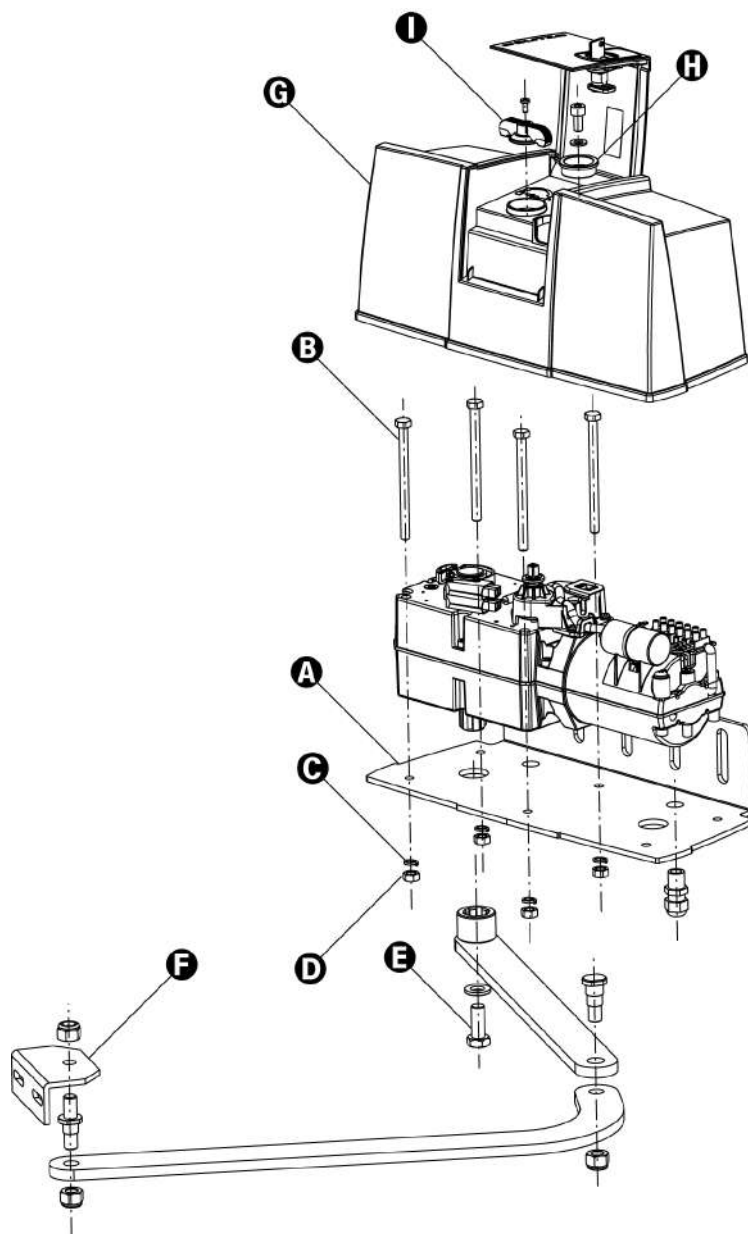
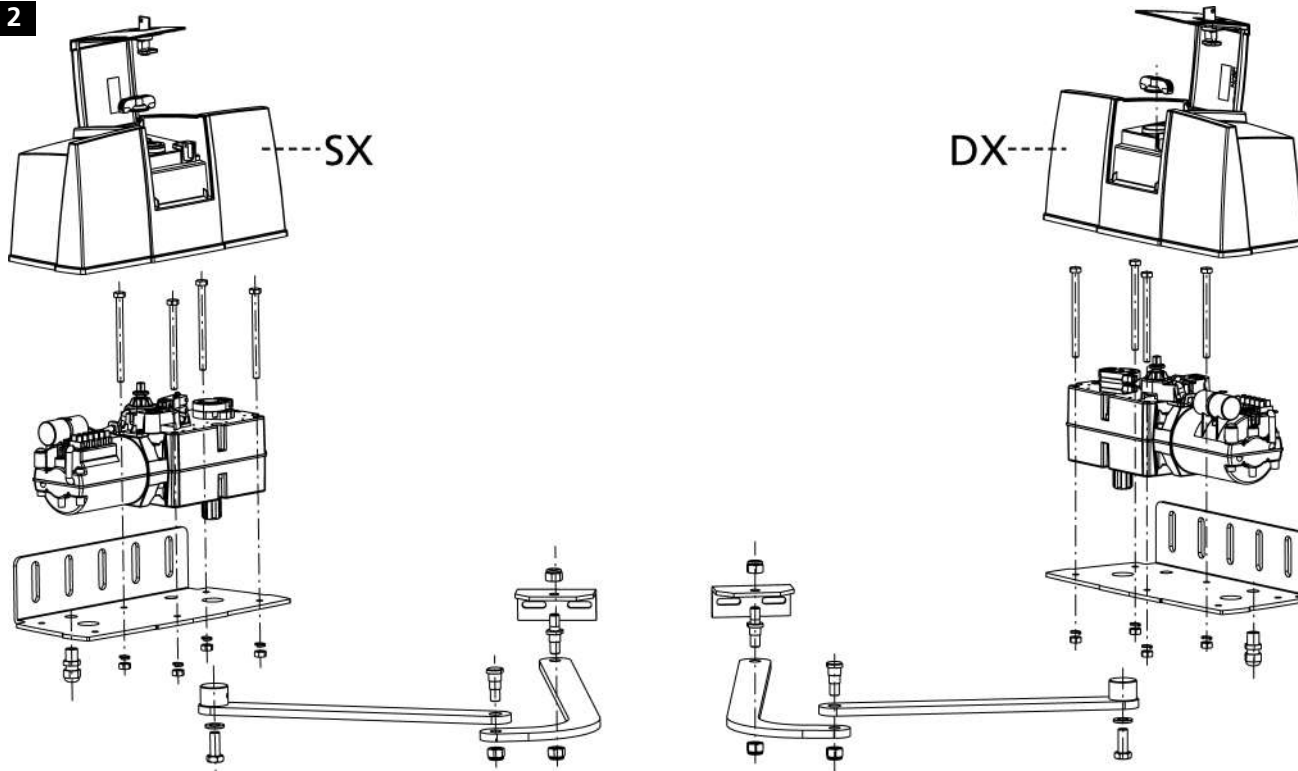


Fig. 1

Fig. 2

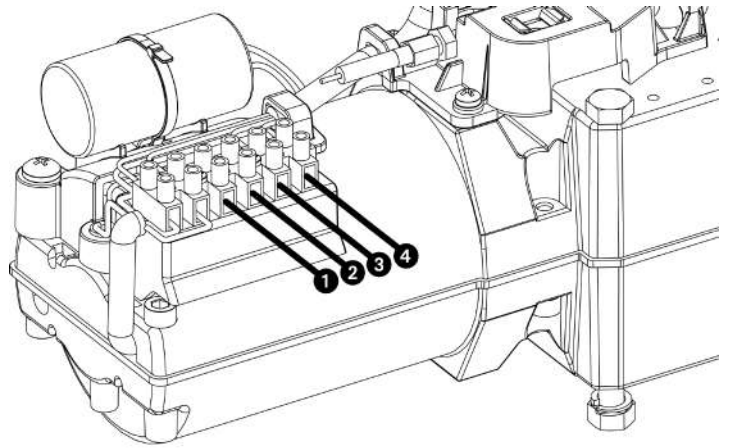


## ELECTRICAL CONNECTIONS

### BLITZ-230V / BLITZ-120V

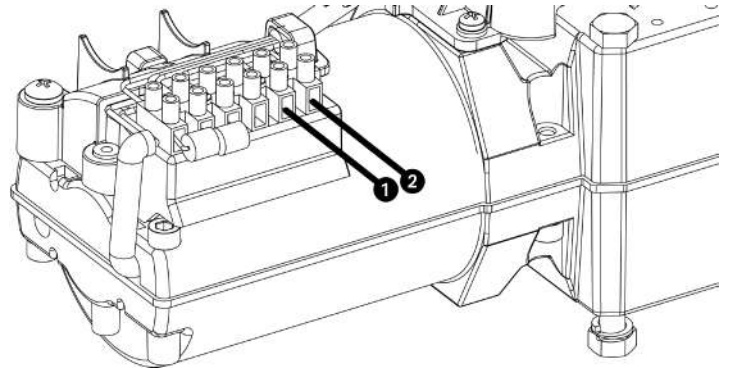
Rif.	Left MOTOR (SX)	Right MOTOR (DX)
①	GND	GND
②	COMMON	COMMON
③	OPENING	CLOSING
④	CLOSING	OPENING

**⚠ WARNING:** always remember to connect the earth according to current standards (EN 60335-1, EN 60204-1).



### BLITZ-24V

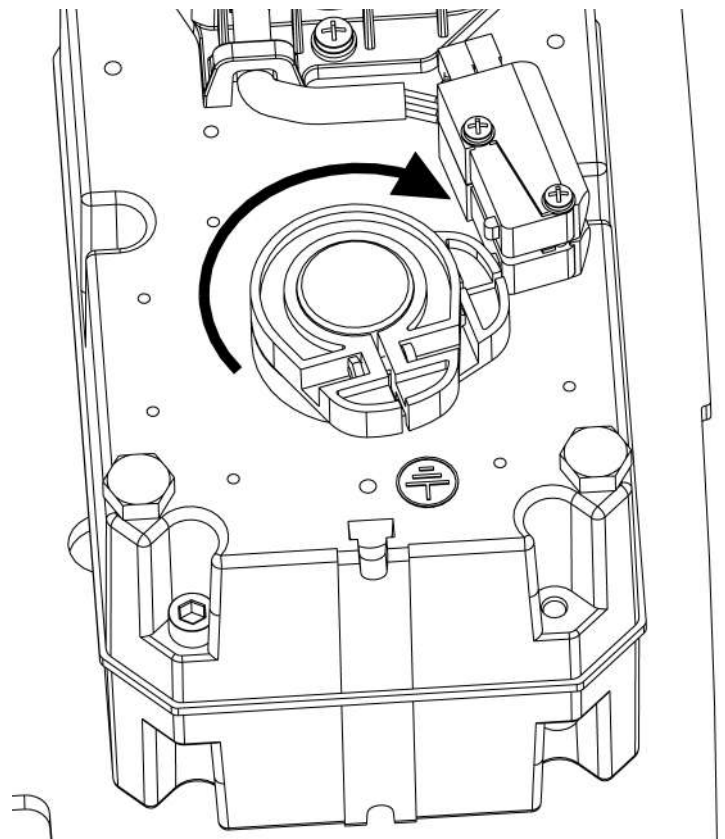
Rif.	Left MOTOR (SX)	Right MOTOR (DX)
①	OPENING	CLOSING
②	CLOSING	OPENING



## ADJUSTMENT OF STOP ENDS

**Opening stop end:** release the actuator and put the door into its opening position. Adjust the cam (LOWER for the RIGHT motor and UPPER for the LEFT motor) until the microswitch is entered (see figure). Then fasten the cam by closing the screw.

**Closing stop end:** release the actuator and put the door into its closing position. Adjust the cam (UPPER for the RIGHT motor and LOWER for the LEFT motor) until the microswitch is entered. Then fasten the cam by closing the screw.



## EMERGENCY RELEASE

In case of a blackout, the gate can be operated directly from the motor. Insert the key supplied in the lock, perform 1/2 of a turn. Open the door and turn the release lever to position 2. Turn again the release lever to position 1, close the door, turn the key and then close the plastic guard in order to restore the automation.

