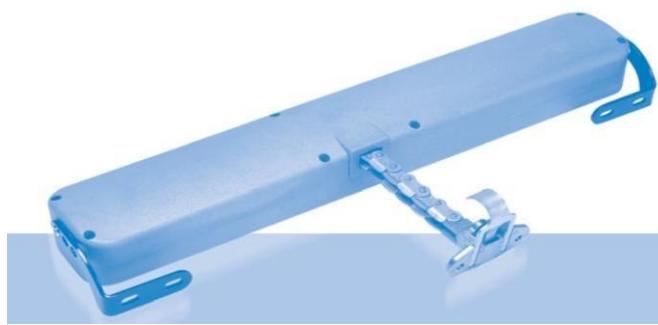


## ***EOL-N Assembly Procedure, Interior Opening***



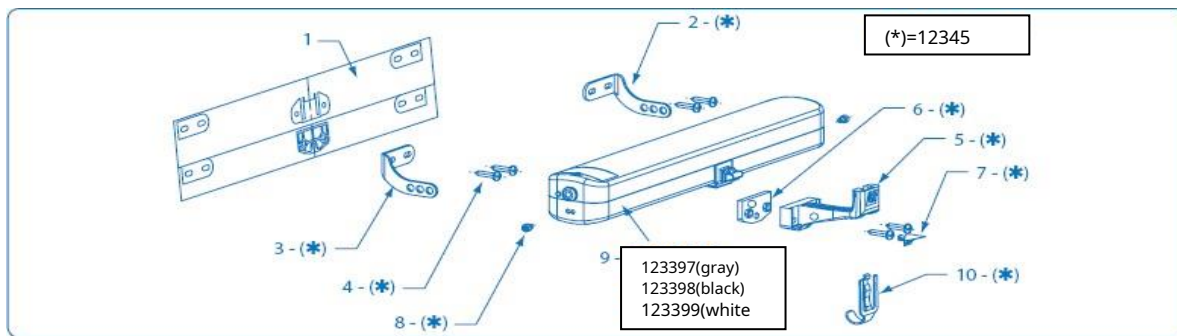
### **Content**

- 1. Technical Data.**
- 2. Mounting the actuator on the window**
- 3. Electrical connection diagrams, 230V**
- 4. Adjusting the chain length**

### **1. Technical Data**

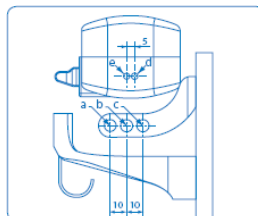
<b><u>GEZE EOL N</u></b>	<b><u>Specifications</u></b>
<b>230 V AC.</b>	<b>Power voltage</b>
<b>Electronic</b>	End of course opening phase
<b>Electronic</b>	End of course closing phase
<b>400mm</b>	<b>Maximum current path</b>
Variable every 12mm up to 400mm (by magnet)	<b>Current path positions</b>
<b>250N up to 300mm chain/200N up to 400mm chain</b>	<b>Push force</b>
<b>250N up to 300mm chain/200N up to 400mm chain</b>	<b>Traction force</b>
<b>Approx 25mm/s</b>	<b>Travel speed at maximum load</b>
<b>117 W</b>	<b>Power absorbed at nominal load</b>
<b>0.52A</b>	<b>Current consumption at nominal load</b>
<b>4 min</b>	<b>Length of service</b>
<b>IP20</b>	<b>Degree of protection</b>
<b>H (180°C)</b>	<b>Motor insulation class</b>
<b>- 10°C - 40°C</b>	<b>Serving temperature</b>
<b>+ 140°C +-5%</b>	<b>Thermal overload protection</b>
<b>NODE</b>	<b>Synchronization of two engines</b>
<b>Long x tall x deep (362x49x60)</b>	<b>Dimensions</b>
<b>Gray / white / black</b>	<b>Colors</b>

## 2. Assembly (For stability reasons, it is preferable to mount an auxiliary hinge on the motor side)



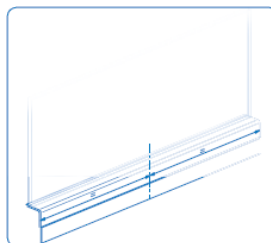
### 2.1 Adjustments for flush or overlapping windows.

Installation is valid for coplanar closures or overlapping windows. The holes for the mounting brackets and those located on the motor (positions a, b, c, d, e) must be selected based on the overlap of the window and can be adjusted every 5 mm.



### 2.2 Determining the window center

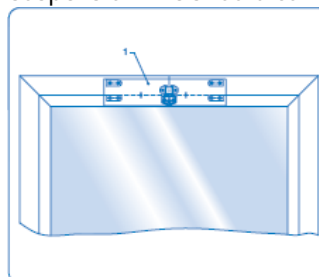
Determine the vertical center of the fixed frame and the movable frame and draw a line with a pencil.



### 2.3 Template: Mark the fixing points for the supports

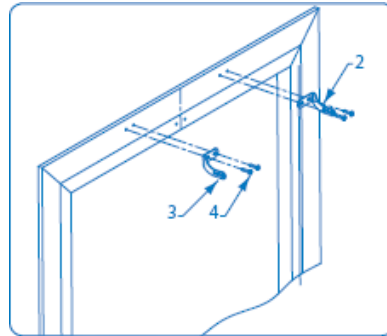
Place the adhesive template (1) on the window, making the vertical center coincide with the line drawn previously.

Note: For overlapping (non-coplanar) windows, cut the template along the dotted line and position the top part on the fixed frame, while the bottom part should coincide with the movable part. In both cases, the horizontal suspension line should coincide with the closing line.



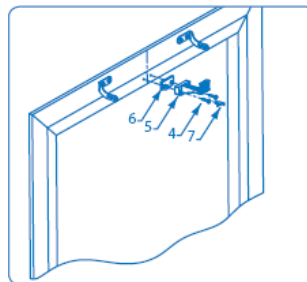
## 2.4 Drilling of the points found.

Drill the 4 holes in the frame (4). For aluminum windows, use 3.8x22mm drill bits. For 4.8x22 screws: Attach the right (3) and left (2) brackets to the fixed window frame using the provided screws (4). Do not tighten completely to make further adjustments. Make sure it matches the template position, as incorrect positioning may damage the frame or motor.



## 2.5 Fixing the clamping bracket for internal opening.

Fix the handle bracket (5) to the moving leaf using the screws (4) provided (for aluminum windows only). If necessary, use the spacer (6) located under the clamping bracket (it depends on the type of frame and the window overlap). Place the closing cover in the appropriate bracket housing.



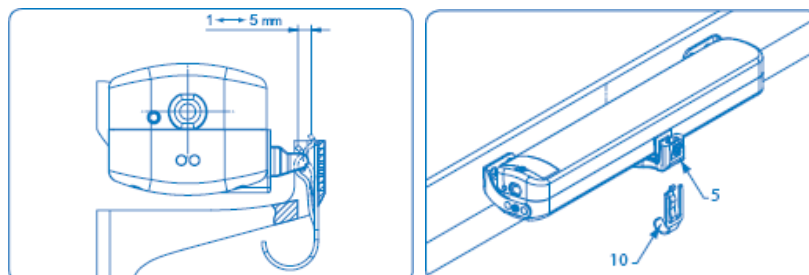
## 2.6 Mounting the engine on the supports

Screw the Allen head screw (8) into the side of the motor and insert the motor and screw into a bracket. Choose the hole based on the overlap. Align the motor on the other bracket and tighten the screw (8). The combination of the holes in the clamps with the holes in the motor casing allows for 6 mounting positions relative to the frame. Using the spacer (6) provides another possibility.

## 1.1 Elastic clamp adjustments.

Fully tighten the bracket screws, align the chain head with the bellows clamp (5). Close the housing by applying slight pressure and insert the elastic clamp.

Attention: The elastic clamp must not be preloaded with a deformation greater than 5 mm



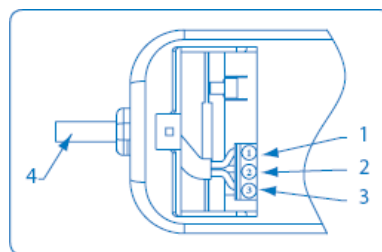
## 1.2 Connection check

The ideal position of the motor is achieved when, when closing the frame, the elastic clamp is preloaded with a deformation equal to or less than 5 mm.

Attention: Connect the motor to the electrical system following the attached diagrams. Operate the motor to open the lock, reach the end of its travel, and close it again to check that it operates correctly. Make sure the electrical limit switches are engaged, that the window closes correctly, and that the deformation of the clamp does not exceed the indicated value.

## 1.3 Electrical connection.

Connect the power cable (4) to the motor's electrical terminal, following the instructions in the figure and comparison table.



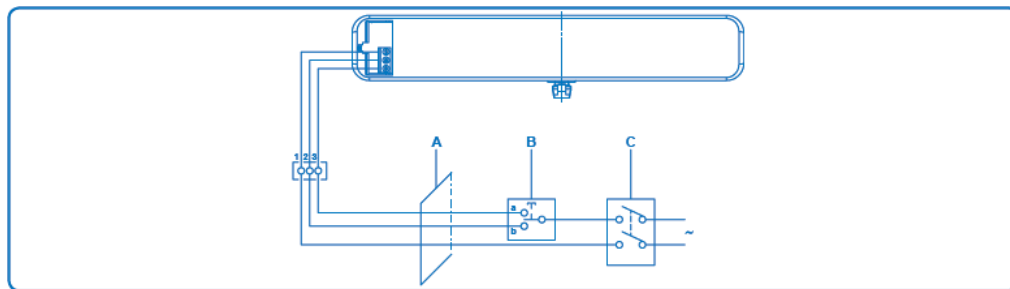
## 2. Electrical connection diagrams, 230V:

2.1 Conductors with a minimum cross-section of 1mm<sup>2</sup> and in any case with a cross-section suitable for the electrical load and length of the line.

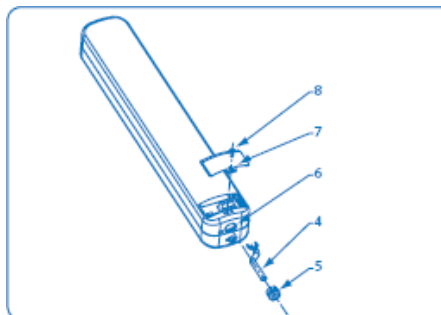
2.2 Push button / bipolar switch with central OFF position (a = open / b = close)

2.3 Bipolar power supply main switch with minimum contact opening equal to 3mm.

Color	Número	Signal
Blue	1	Comum
Black	2	Closure
Castanho	3	Opening



2.4 Place the power cable in the clamp (5) locking it in its housing (6) on the motor flank. Hold the closing cover (7) of the button box container and lock it with 2.9x9.5 screws (8)

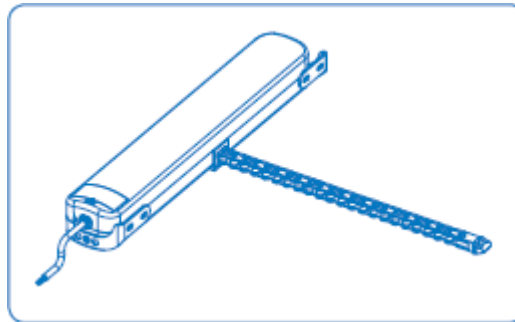


### **3. Adjusting the chain length**

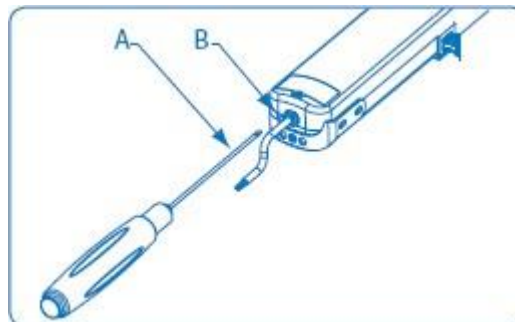
The chain travel is programmed by the manufacturer at a value lower than the maximum allowed. To program the desired travel, perform the following steps.

Attention: Stroke adjustment must be carried out with the connection cover closed.

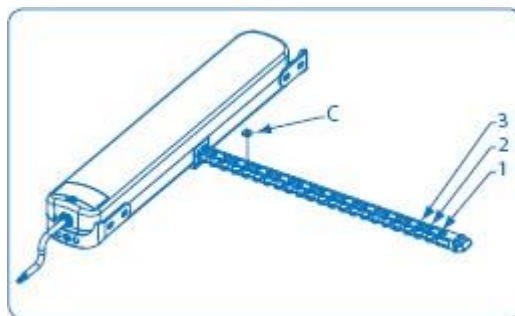
a) Power the motor and remove the current until it reaches the end of its stroke.



b) Press the chain release button through the hole (B) with a screwdriver (A) and hold it down while the engine is running until the chain starts. As soon as the engine starts, immediately release the release button.



c) Wait until the current is completely discharged and remove the adjustable stroke magnet (C) and place it on the pin corresponding to the desired stroke (see stroke table) keeping the colored side visible.



Perno N° • Pin No. • Pivot n° • Bolzen Nr • Perno N° • Perno N.º • Csap sz • As Nr • Zatič št. • Čep č. • Πείρος N° محور رقم	Corsa • Stroke • Course Lauf • Carrera • Curso • Lökett • • Werkslag • Hod • Pohyb • Πορεία • مجرى • (mm)	Perno N° • Pin No. • Pivot n° • Bolzen Nr • Perno N° • Perno N.º • Csap sz • As Nr • Zatič št. • Čep č. • Πείρος N° محور رقم	Corsa • Stroke • Course Lauf • Carrera • Curso • Lökett • • Werkslag • Hod • Pohyb • Πορεία • مجرى • (mm)
No magnete • No magnet • Non aimant • Kein Magnet • No magneto • Nenhum íman • Nincs mágnes • Geen magneet • Ni magneta • Žiadny magnet • Όχι μαγνήτης • غير مغناطيس	400	19	150
31	300	18	138
30	288	17	125
29	275	16	113
28	263	15	100
27	250	14	88
26	238	13	75
25	225	12	63
24	213	11	50
23	200	10	38
22	188	9	25
21	175	8	13
20	163		

