

BENINCA®

AUTOMAZIONE PER CANCELLI A BATTENTE

AUTOMATION FOR HINGED GATES

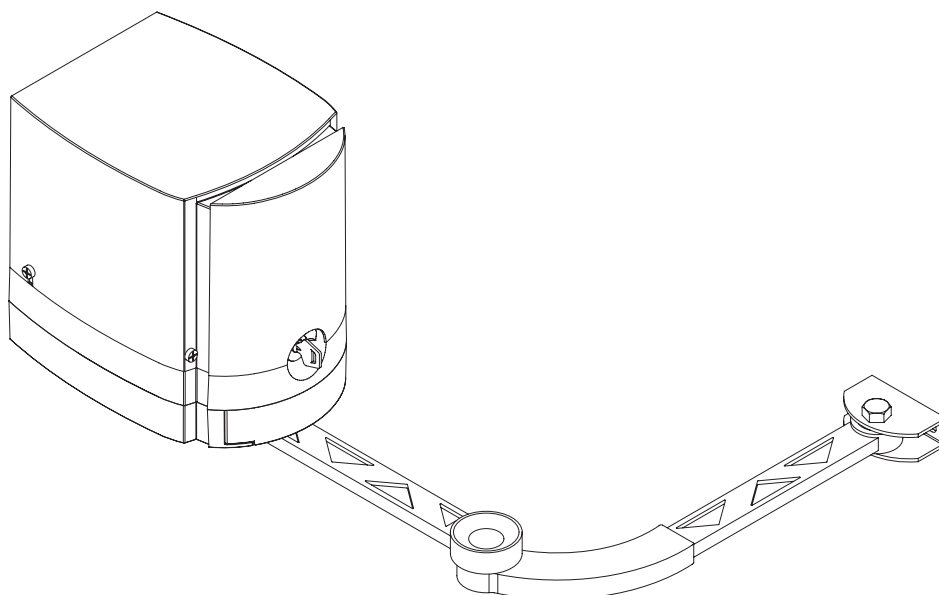
AUTOMATION FÜR TORE

AUTOMATION POUR PORTAILS OUVRANTS

AUTOMATIZACIÓN PARA CANCELAS DE BATIENTE

AUTOMATYZACJA BRAM ROZWIERANYCH

MB/MBE



Libro istruzioni e catalogo ricambi

Operating instructions and spare parts catalogue

Betriebsanleitung und Ersatzteilliste

Livret d'instructions et catalogue des pieces de rechange

Manual de instrucciones y catálogo de recambios

Książeczka z instrukcjami i katalog części wymiennych



UNIONE NAZIONALE COSTRUTTORI
AUTOMATISMI PER CANCELLI, PORTE
SERRANDE ED AFFINI

Dichiarazione CE di conformità per macchine
(Direttiva 89/392 CE, Allegato II, parte B)
Divieto di messa in servizio

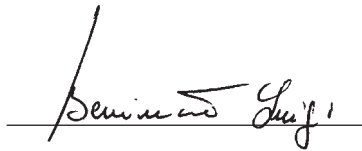
Fabbricante: **Automatismi Benincà SpA.**
Indirizzo: Via Capitello, 45 - 36066 Sandrigo (VI) - Italia

Dichiara che: l'automazione per cancelli a battente modello **MB/MBE**.

- è costruito per essere incorporato in una macchina o per essere assemblato con altri macchinari per costituire una macchina considerata dalla Direttiva 89/392 CE, come modificata;
- non è dunque conforme in tutti i punti alle disposizioni di questa Direttiva;
- è conforme alle condizioni delle seguenti altre Direttive CE:
Direttiva bassa tensione 73/23/CEE, 93/68/CEE.
Direttiva compatibilità elettromagnetica 89/336/CEE, 93/68/CEE.

e inoltre dichiara che non è consentito mettere in servizio il macchinario fino a che la macchina in cui sarà incorporato o di cui diverrà componente sia stata identificata e ne sia stata dichiarata la conformità alle condizioni della Direttiva 89/392 CE e alla legislazione nazionale che la traspone, vale a dire fino a che il macchinario di cui alla presente dichiarazione non formi un complesso unico con la macchina finale.

Benincà Luigi, Responsabile legale.
Sandrigo, 01/10/2005.



Declaration by the manufacturer
(Directive 89/392/EEC, Art. 4.2 and Annex II, sub B)
Divieto di messa in servizio

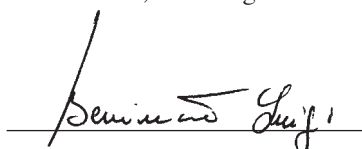
Manufacturer: **Automatismi Benincà SpA.**
Address: Via Capitello, 45 - 36066 Sandrigo (VI) - Italia

Herewith declares that: the operator for hinged gates model **MB/MBE**.

- is intended to be incorporated into machinery or to be assembled with other machinery to constitute machinery covered by Directive 89/392 EEC, as amended;
- does therefore not in every respect comply with the provisions of this Directive;
- does comply with the provisions of the following other EEC Directives:
Direttiva bassa tensione 73/23/CEE, 93/68/CEE.
Direttiva compatibilità elettromagnetica 89/336/CEE, 93/68/CEE.

and furthermore declares that it is not allowed to put the machinery into service until the machinery into which it is to be incorporated or of which it is to be a component has been found and declared to be in conformity with the provisions of Directive 89/392/EEC and with national implementing legislation, i.e. as a whole, including the machinery referred to in this declaration.

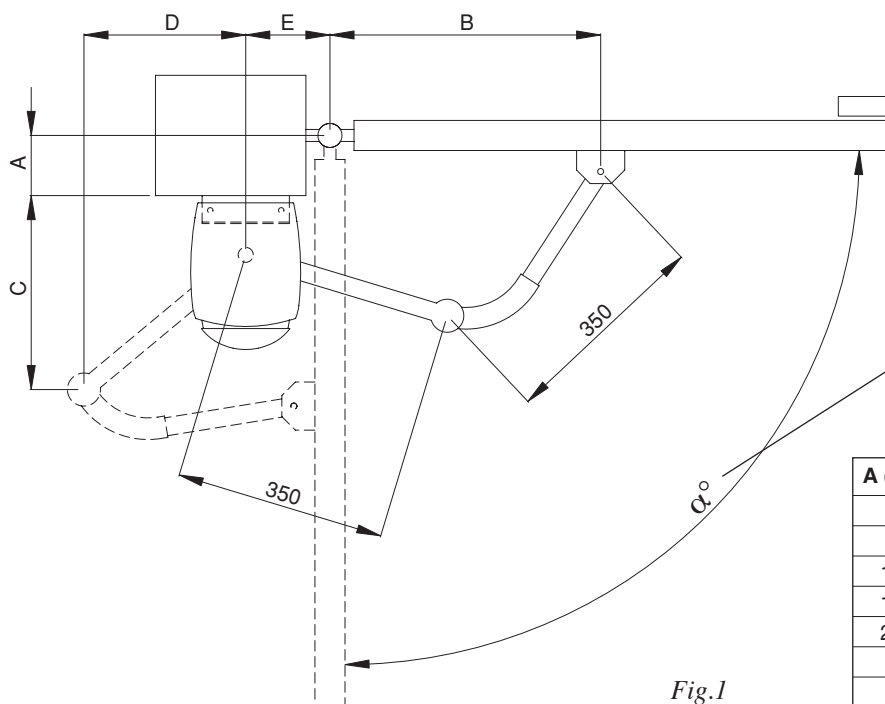
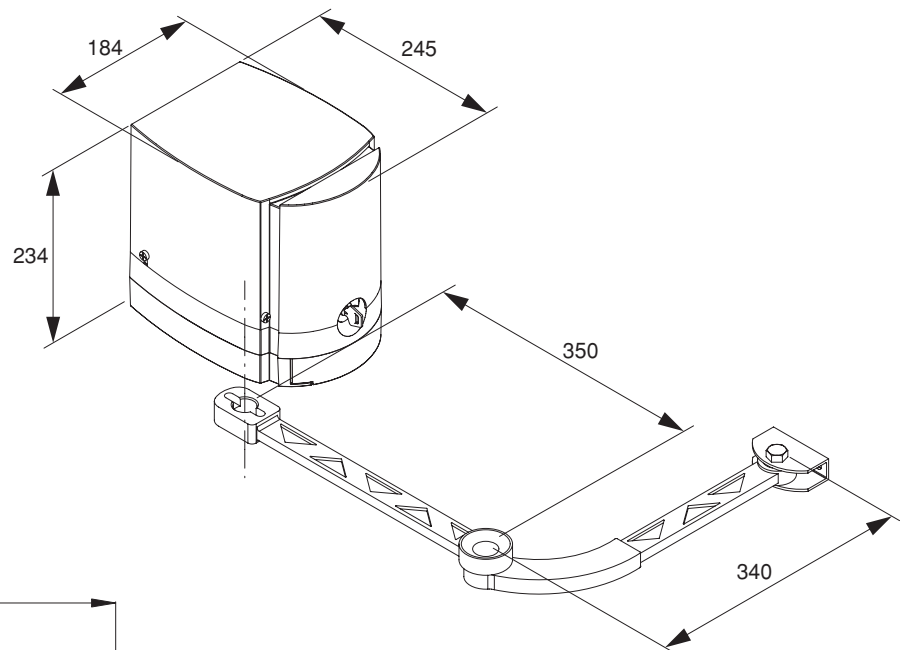
Benincà Luigi, Responsabile legale.
Sandrigo, 01/10/2005.



Dati tecnici	Technical data	Technische Daten	Donnees technique	Datos técnicos	Dane techniczne	MB/MBE
Alimentazione	Power supply	<i>Stromversorgung</i>	Alimentation	Alimentación	Zasilanie	230V
Potenza assorbita	Power drawn	<i>Aufgenomm. Leistung</i>	Puissance absorbée	Consumo de potencia	Natężenie	250W
Corrente assorbita	Current drawn	<i>Aufgenomm. Strom</i>	Courant absorbé	Consumo de corriente	Pobór mocy	1,2A
Coppia	Torque	<i>Drehmoment</i>	Couple	Par	Moment obrotowy	180Nm
Classe isolamento mot.	Motor insulation class	<i>Schutzklasse des Mot.</i>	Classe d'isolement	Clase aislamiento mot.	Klasa izolacji silnika	F
Giri motore	Motor r.p.m.	<i>Motorendrehzahl</i>	Régime	Revoluciones motor	Obroty silnika	900r.p.m.
Giri uscita	Output rounds	<i>Drehzahl am Ausgang</i>	N. de tours en sortie	Revoluciones salida	Obroty wyjściowe	1,25r.p.m.
Tempo man. anta (90°)	Operating time at 90°	<i>Betätigungszeit 90°</i>	Temps manoeuvre 90°	Tiempo maniobra 90°	Czas posuwu skrzydła dla kąta 90°	18s
Peso max. anta	Door leaf max. weight	<i>Max. Türflügelgewicht</i>	Poids max. porte	Peso máx. hoja	Ciężar max. skrzydła	300kg*
Lunghezza max. anta	Door leaf max.	<i>Max. Flügelänge</i>	Longueur max. porte	Longitud máx. hoja	Dł. max. skrzydła	2,3m*
Condensatore	Capacitor	<i>Kondensator</i>	Condensateur	Condensador	Kondensator	9µF
Lubrificazione	Lubrication	<i>Schmierung</i>	Lubrification	Lubrificación	Smarowanie	Grasso
Grado IP	IP class	<i>IP Grad</i>	Degré IP	Índice IP	Stopień IP	IP54
Peso	Weight	<i>Gewicht</i>	Poids	Peso	Ciężar	8,3/10kg
Dimensioni	Dimensions	<i>Masse</i>	Dimensions	Medidas	Wymiary	184x245xH234mm
Sblocco:	Built-in release:	<i>Interne Entsicherung:</i>	Déverrouillage inter.:	Desbloqueo interior:	Mech. odblokowujący:	
Chiave personalizzata	Customized key	<i>Spezialschlüssel</i>	Clé personnalisée	Llave personalizada	Klucz osobisty	

* Vedi tabella - See table - Siehe Tabelle - Voir tableau - Ver cuadro - Zobacz tabelę

Lunghezza anta Door leaf width <i>Flügelänge</i> Longueur porte Longitud hoja Dł. skrzydła (m)	Peso anta Door leaf weight <i>Türflügelgewicht</i> Poids porte Peso hoja Ciężar skrzydła (kg)
1	300
1,5	250
2	215
2,3	200



Rotazione max. anta.
Door leaf max. rotation
Max. Flügeldrehung
Rotation max. porte
Rotación máx. hoja
Max kąt obrotowy skrzydła

A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	α
0	450	340	252	140	90°
50	450	330	263	140	90°
100	450	322	269	140	90°
150	450	320	270	140	90°
200	450	332	260	140	90°
0	400	235	322	200	110°
50	400	244	318	220	110°

Fig.1

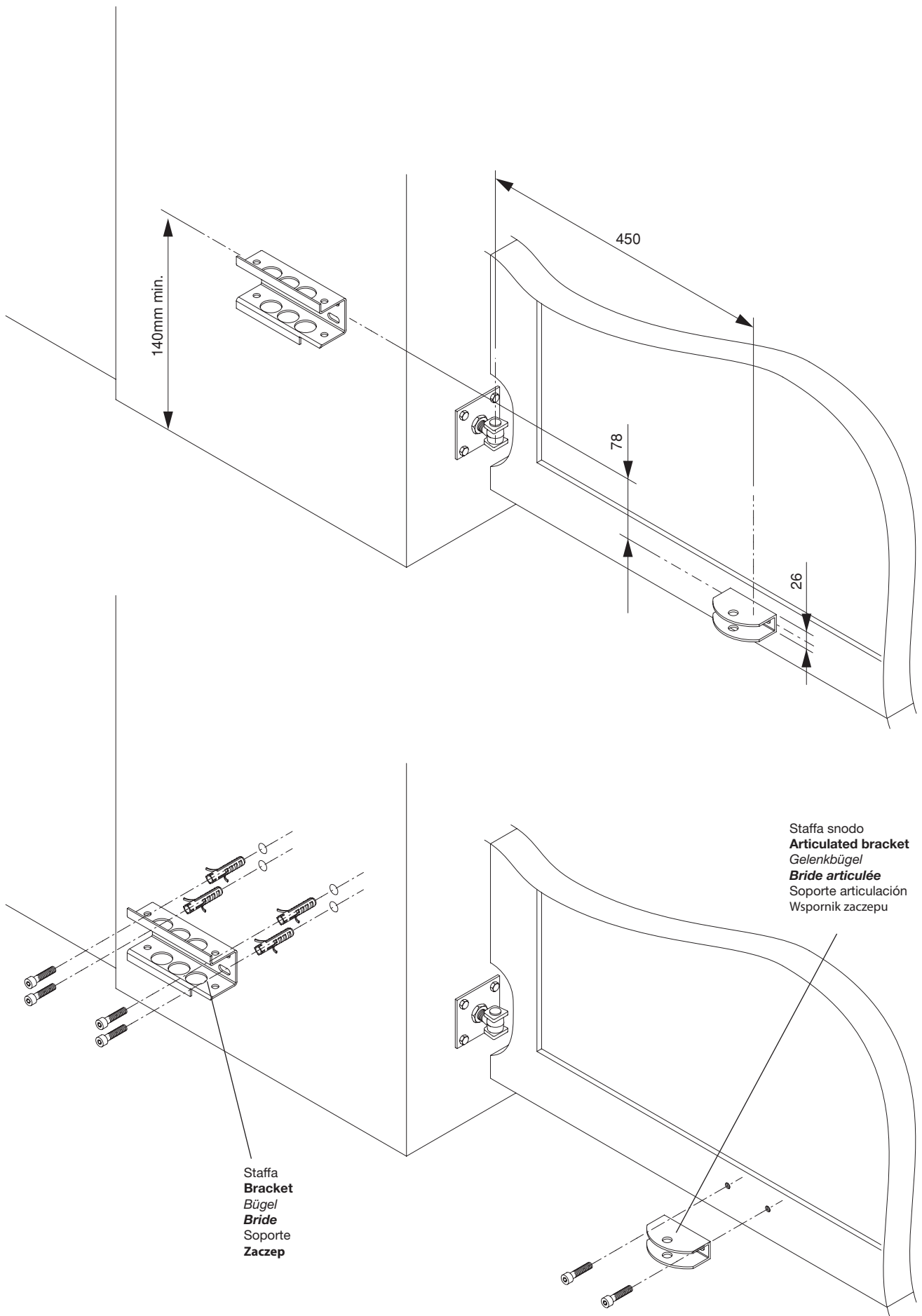


Fig.2

Vite TE M8x65 UNI 5737
Screw M8x65 UNI 5737
 Schraube M8x65 UNI 5737
 Vis M8x65 UNI 5737
 Tornillo M8x65 UNI 5737
 Śruba TE M8x65 UNI 5737

Piastra di fissaggio
Fixing bracket
 Befestigungsbügel
Bride de fixation
 Soporte de fijación
 Płyta do mocowania

Dado autobloccante M8 UNI 7473
Self locking nut M8 UNI 7473
 Selbstsichernde Mutter M8 UNI 7473
Écrou autoserreur M8 UNI 7473
 Tuerca autoblocante M8 UNI 7473
 Nakrętka samozabezpieczająca M8 UNI 7473

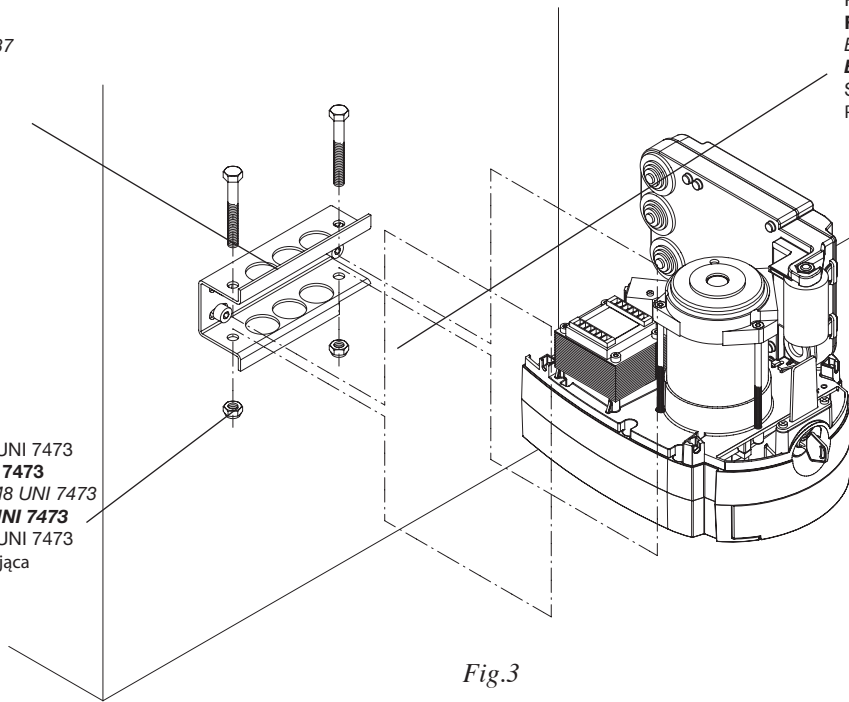


Fig.3

Staffa
Bracket
 Befestigungsplatte
Bride articulée
 Soporte articulación
 Zaczepek

Perno Ø12
Pin Ø12
 Stift Ø12
Pivot Ø12
 Perno Ø12
 Sworzeń Ø12

Perno Ø10x45
Pin Ø10x45
 Stift Ø10x45
Pivot Ø10x45
 Perno Ø10x45
 Sworzeń Ø10x45

Dado autobloccante M10 UNI 7474
Self locking nut M10 UNI 7474
 Selbstsichernde Mutter M10 UNI 7474
Écrou autoserreur M10 UNI 7474
 Tuerca autoblocante M10 UNI 7474
 Nakrętka samozabezpieczająca M10 UNI 7474

Rosetta 11x30x2,5 UNI 6593
Washer 11x30x2,5 UNI 6593
 Scheibe 11x30x2,5 UNI 6593
Rondelle 11x30x2,5 UNI 6593
 Arandela 11x30x2,5 UNI 6593
 Podkładka 11x30x2,5 UNI 6593

Biella dritta
Straight connection rod
 Pleuelstange
Bielle
 Biela
 Łącznik prosty

Biella curva
Bent connection rod
 Pleuelstange
Bielle
 Biela curvada
 Łącznik zakrzywiony

Vite TE M10x16 UNI 5739
Screw M10x16 UNI 5739
 Schraube M10x16 UNI 5739
 Vis M10x16 UNI 5739
 Tornillo M10x16 UNI 5739
 Śruba TE M10x16 UNI 5739

Rosetta 11x30x2,5 UNI 6593
Washer 11x30x2,5 UNI 6593
 Scheibe 11x30x2,5 UNI 6593
Rondelle 11x30x2,5 UNI 6593
 Arandela 11x30x2,5 UNI 6593
 Podkładka 11x30x2,5 UNI 6593

Rosetta Ø10 UNI 1751
Washer Ø10 UNI 1751
 Scheibe Ø10 UNI 1751
Rondelle Ø10 UNI 1751
 Arandela Ø10 UNI 1751
 Podkładka Ø10 UNI 1751

Vite TE M10x16 UNI 5739
Screw M10x16 UNI 5739
 Schraube M10x16 UNI 5739
 Vis M10x16 UNI 5739
 Tornillo M10x16 UNI 5739
 Śruba TE M10x16 UNI 5739

Fig.4

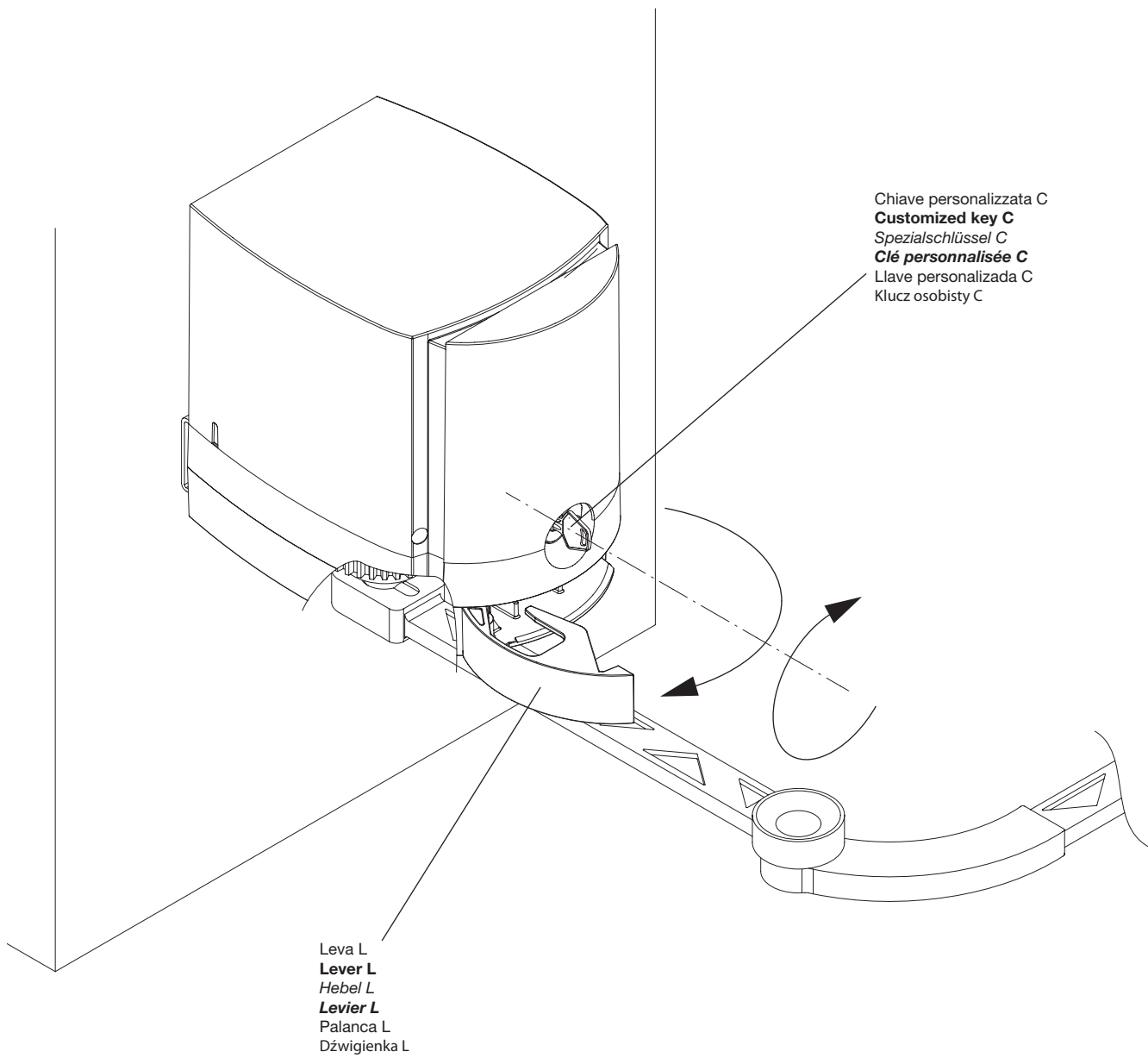
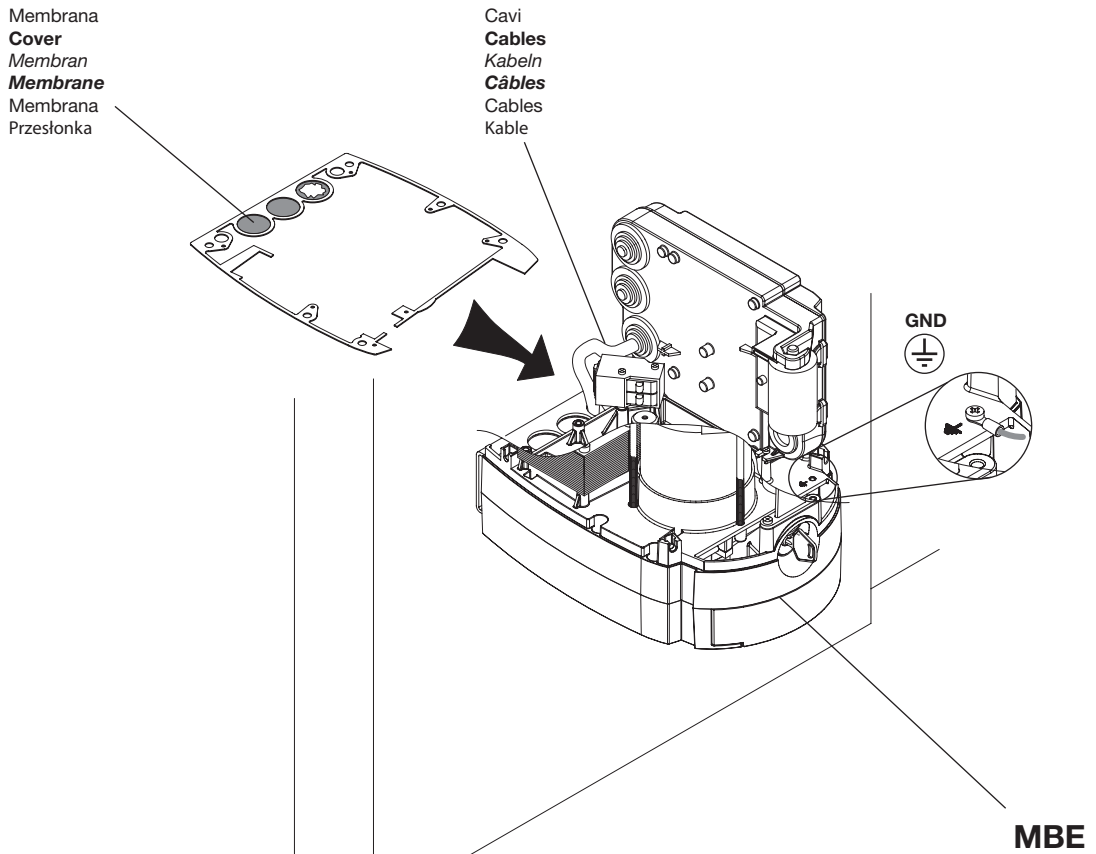


Fig.5



- 23 - Apre/Chiude
- 23 - Open/Close**
- 23 - Öffnen/Schließen
- 23 - Ouvre/Ferme**
- 23 - Abre/Cierra
- 23 - Otworzy/zamknie

- 24 - Comune
- 24 - Common**
- 24 - Gemeinsam
- 24 - Comune**
- 24 - Comune
- 24 - Wspólny

- 22 - Apre/Chiude
- 22 - Open/Close**
- 22 - Öffnen/Schließen
- 22 - Ouvre/Ferme**
- 22 - Abre/Cierra
- 22 - Otworzy/zamknie

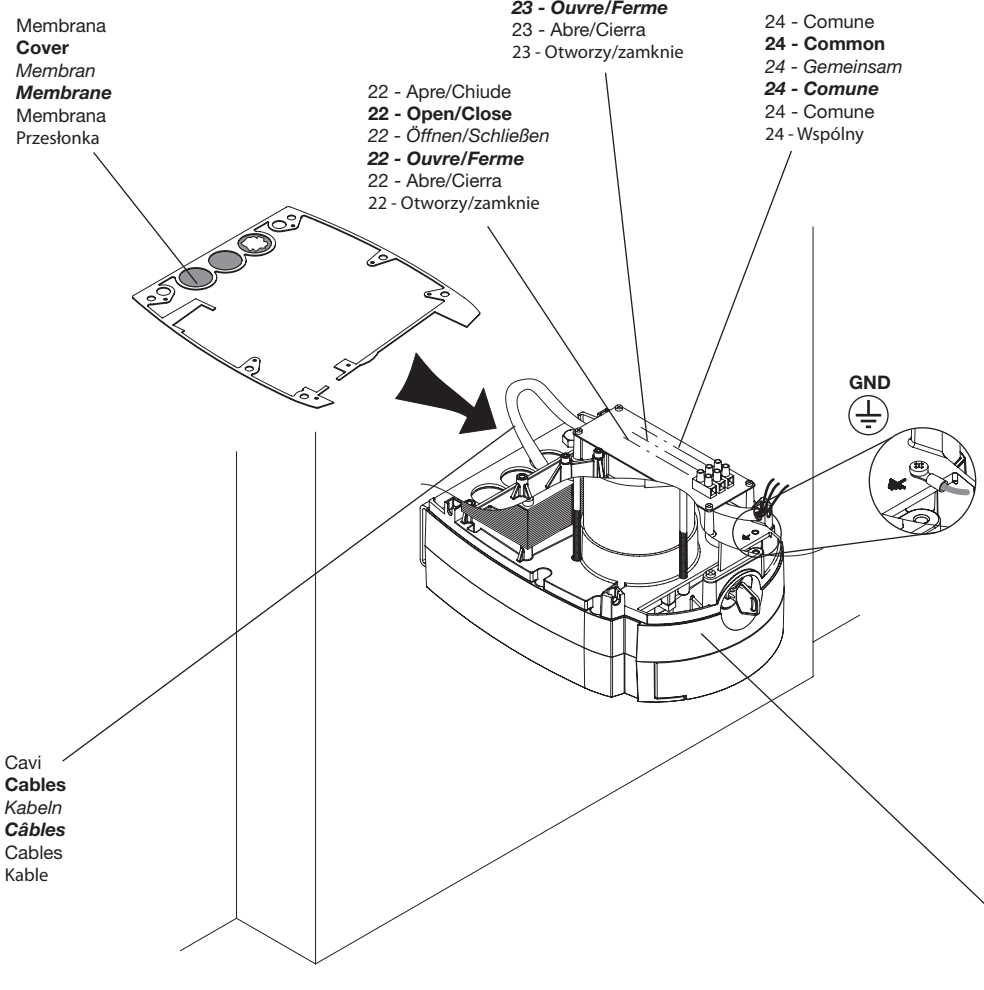


Fig.6

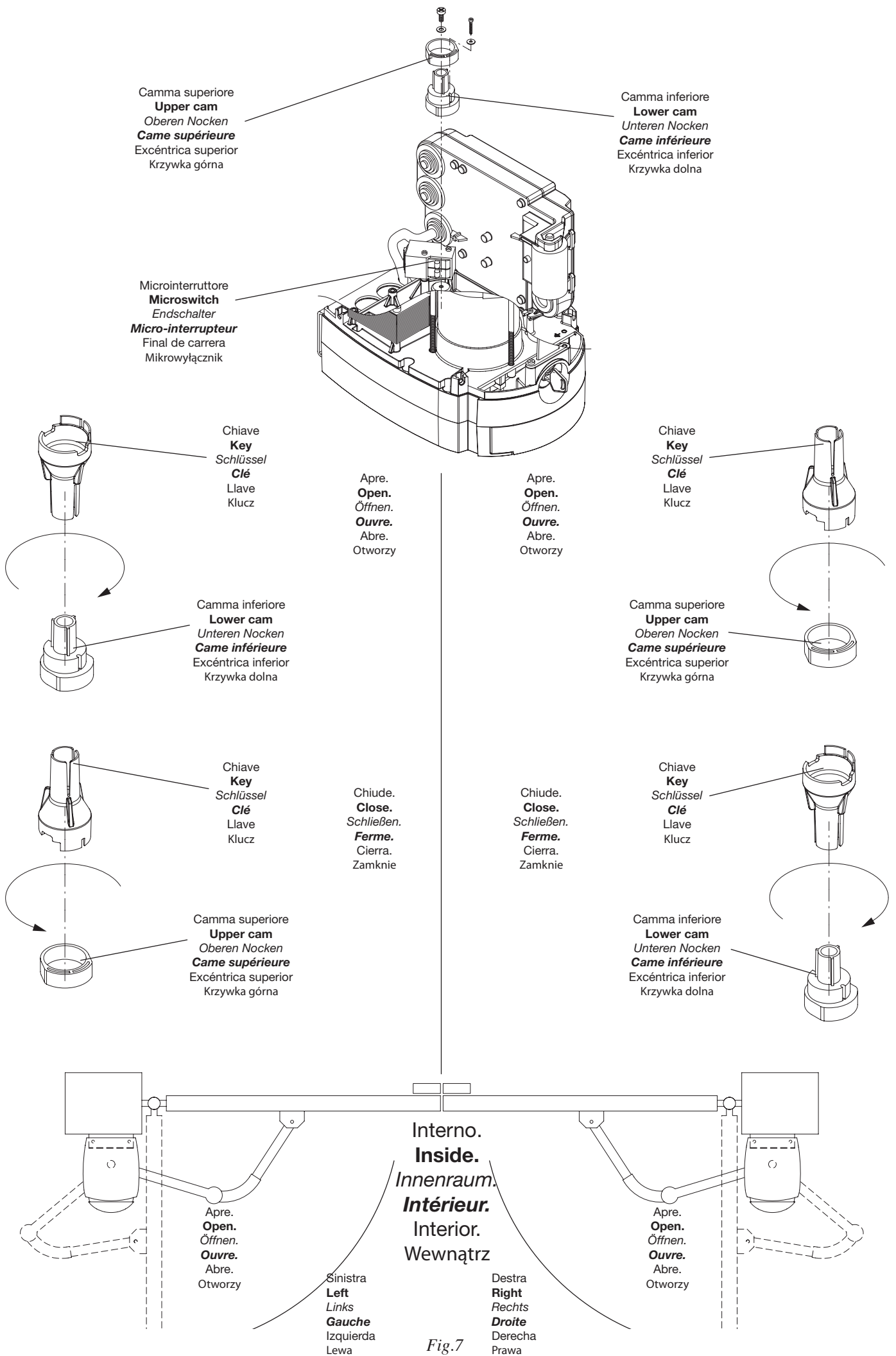


Fig.7

Per aumentare la coppia spostare il faston F da 120V min. a 230V max.
To increase the torque move the faston F from 120V min. to 230V max.
Um das Drehmoment zu erhöhen, den Faston F von 120V Min. auf 230V Max. verstellen
Pour augmenter le couple, déplacer le faston F de 120V min. à 230V max.
Para aumentar el par, desplazar el faston F de 120V Min. a 230V Máx.
W celu zwiększenia momentu obrotowego należy przełączyć faston F (czerwony drut) ze 120V min. na 230V max.

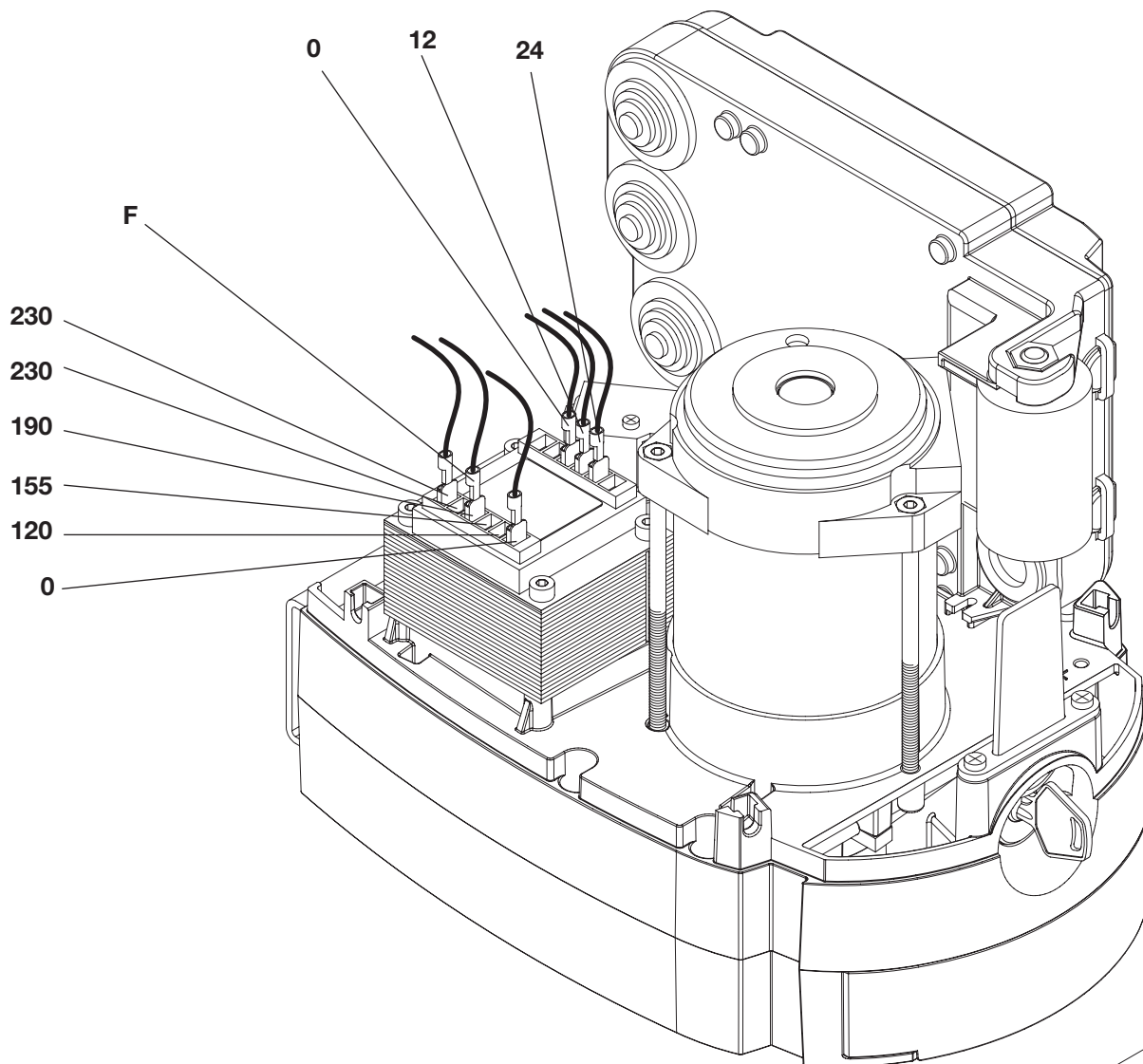
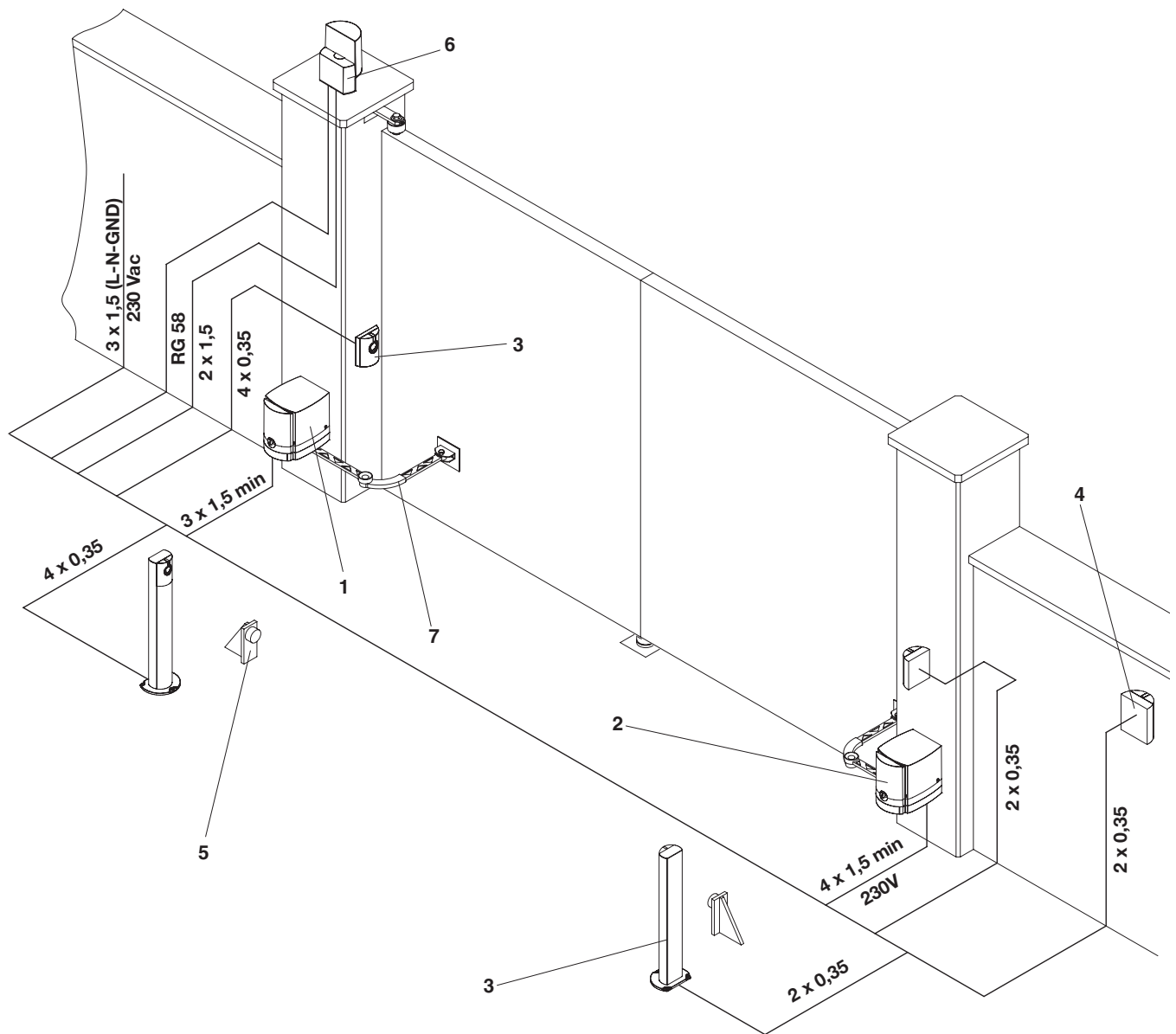


Fig.8



Legenda:

- 1 Motoriduttore MBE
- 2 Motoriduttore MB
- 3 Fotocellule FTC/FTM
- 4 Selettore a chiave CH
- 5 Fermi meccanici
- 6 Lampeggiante LAMPPI
- 7 Braccio snodato con staffe BC

Legenda:

- 1 Ratio-motor MBE
- 2 Ratio-motor MB
- 3 Photo-electric cells FTC/FTM
- 4 Key selector CH
- 5 Mechanical stop
- 6 Blinker LAMPPI
- 7 Articulated arm with brackets BC

Zeichenerklärung:

- 1 Drehzahlminderer MBE
- 2 Drehzahlminderer MB
- 3 Fotozelle FTC/FTM
- 4 Schlüssel-Selektor CH
- 5 Mech. Endanschlag
- 6 Blinklicht LAMPPI
- 7 Gelenkarm mit Bügeln BC

Légende:

- 1 Motoréducteur MBE
- 2 Motoréducteur MB
- 3 Photocellules FTC/FTM
- 4 Sélecteur à clef CH
- 5 Bûtee mécanique
- 6 Feu clignotant LAMPPI
- 7 Bras articulé avec brides BC

Leyenda:

- 1 Motorreductor MBE
- 2 Motorreductor MB
- 3 Fotocélulas FTC/FTM
- 4 Selector a llave CH
- 5 Topes mecánicos
- 6 Relampagueador LAMPPI
- 7 Brazo articulado con soportes BC

Objasnenia:

- 1 Siłownik MBE
- 2 Siłownik MB
- 3 Fotokomórki FTC/FTM
- 4 Przełącznik kluczowy CH
- 5 Blokady mechaniczne
- 6 Światło migające LAMPPI
- 7 Ramię przegubowe z zaczepem BC

Warning

- Before installation, carefully read the instructions hereunder.
- It is strictly forbidden to use the item MB/MBE for applications other than the intended uses described in these instructions.
- Instruct the user on how to use the system.

Introduction

Thank you for choosing our MB/MBE ratiomotor. All items in the wide Benincà production range are the result of twenty-years' experience in the automatism sector and of continuous research for new materials and advanced technologies. We are, therefore, in the position to offer highly reliable products that due to their power, effectiveness and useful life, fully satisfy the final user's requirements.

All our products are manufactured to the existing standard and are covered by warranty. Possible injury to people or accidents caused by defects in construction are covered by a civil liability policy drawn up with one of the major insurance companies.

1. General notes

For a good operation of the automatic system the door to be automated must feature the following characteristics:

- Rugged and stiff door leaves.
- Efficient hinges.
- The door leaves should be moved by hand without any friction for the entire stroke.
- The doors should be complete with a catch in the closing phase.

In the negative, replace the faulty parts. Reliability and safety of the automatic system depend on the gate structure.

2. Specifications

This automatic system is suited to motorise doors when overall dimensions, large pillars or columns impair the use of traditional actuators. MB/MBE is equipped with an articulated arm BC which permits smooth and noiseless movements, it is easy to assemble and, thanks to its pleasant design, is able to meet the most stringent requirements. It is composed of an irreversible geared motor group, made with very strong materials and two die-cast aluminium shells. The door opening is adjusted by limit switches. The system can be released by an emergency lever with customized key which allows the manual operation of the gate in the event of power failure.

3. Versions

MBE: 230Vac, irreversible geared motor with built-in control unit

MB: 230Vac, irreversible geared motor.

BC: Articulated arm with brackets.

4. Overall dimensions and limits for use (Fig.1)

For a correct installation check the limits for use and the overall dimensions, then calculate the values for installation.

5. Anchoring of brackets (Fig.2)

Once the fixing value "E" is taken from the relevant table, and considering a minimum height from floor of 100mm, fit the bracket to the pillar by means of the screws M8 with relevant screw anchors.

Once the fixing value "B" is calculated, fit the articulated bracket to the gate with the same screws M8 and relevant screw anchors or weld it to the gate by aligning the articulation bracket to the fitting bracket for the pillar, as shown in the drawing. Reinforce the fitting areas which are not sufficiently thick, or in any case not strong enough.

6. Positioning the geared motor (Fig.3)

Place the geared motor in the fitting bracket for assembly to pillar by using the special nuts and screws supplied.

7. Positioning the articulated arm BC (Fig.4)

Release the geared motor (see emergency operation) to make the shaft idle. Mount the arms as per Fig.4.

8. Manual and emergency operation (Fig.5)

To manually open or close the door in case of power failure or faults, two solutions are possible:

- **Built-in release**

Introduce the customized key C, turn it clockwise and pull lever L. At this point the geared motor is released and the gate can be manually pushed.

To reset the normal operation, close lever L again and turn key C anticlockwise. Manually move the gate until the geared motor is engaged again.

- **Rope external release: optional**

It is available for fitting to external wall or with accessory to be mounted flush (see MB.SE).

9. Wire connections (Fig.6)

For wire connections of the control unit, refer to instructions given in the control unit booklet. Lay the cables, adequately placed in ducts, by tearing only the cover of the cable passage used.

10. Adjusting the limit switches (Fig.7)

N.B.: The position of the cams referring to micro-switches varies according whether the installation of the geared motor is lefthand or righthand, view from inside. Pay attention to diagrams.

- **Closing limit switches**

Release the geared motor and manually close the door.

Turn the related cam to the position shown by using the special key supplied, until the micro-switch is activated. Lock the cam by tightening the central screw supplied.

- **Opening limit switches**

Release the geared motor and manually open the door.

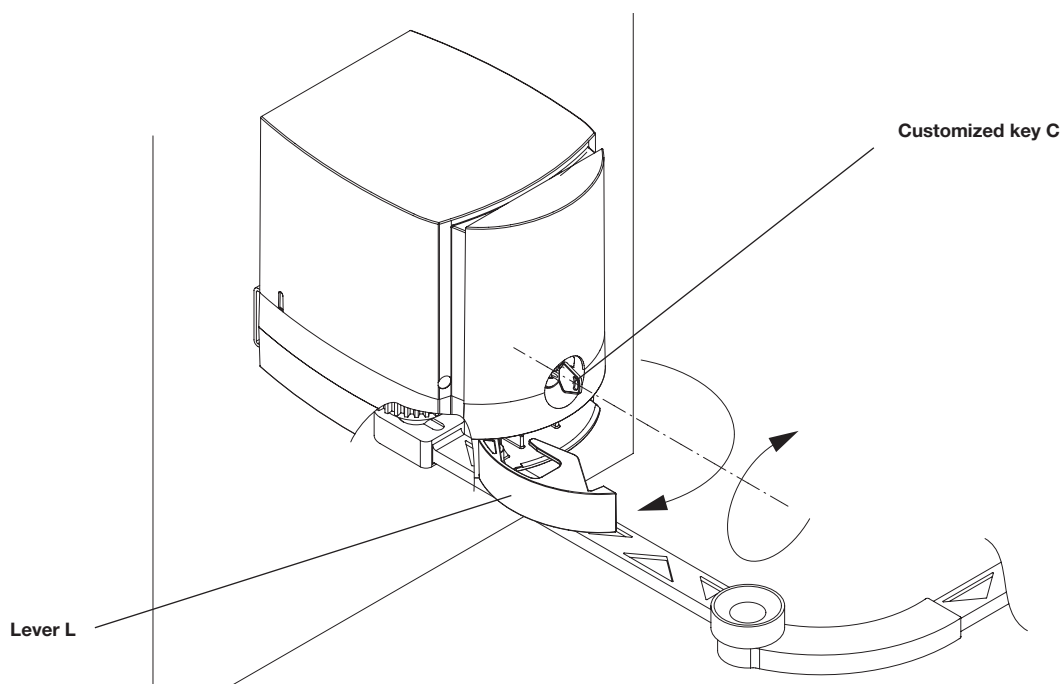
Turn the related cam to the position shown by using the special key supplied, until the micro-switch is activated. Lock the cam by tightening the two screws supplied.

11. Adjusting the motor torque (Fig.8)

It is possible to adjust the motor torque. The power levels are 4. The torque should be adjustment to the minimum force suited to perform the opening and closing stroke. To increase the torque move the faston F from 120V min. to 230V max. according to the power level required.

CAUTION

The civil liability policy, which covers possible injuries to people or accidents caused by defects in construction, requires the system to be to existing standard and to use original Benincà accessories.



Safety rules

- Do not stand in the movement area of the door.
- Do not let children play with controls and near the door.
- Should operating faults occur, do not attempt to repair the fault but call a qualified technician.

Manual and emergency operation

To manually open or close the door in case of power failure or faults, two solutions are possible:

• Built-in release

Introduce the customized key C, turn it clockwise and pull lever L. At this point the geared motor is released and the gate can be manually pushed.

To reset the normal operation, close lever L again and turn key C anticlockwise. Manually move the gate until the geared motor is engaged again.

• Rope external release: optional

It is available for fitting to external wall or with accessory to be mounted flush (see MB.SE).

Maintenance

- Every month check the good operation of the emergency manual release.
- It is mandatory not to carry out extraordinary maintenance or repairs as accidents may be caused. These operations must be carried out by qualified personnel only.
- The operator is maintenance free but it is necessary to check periodically if the safety devices and the other components of the automation system work properly. Wear and tear of some components could cause dangers.

Waste disposal

If the product must be dismantled, it must be disposed according to regulations in force regarding the differentiated waste disposal and the recycling of components (metals, plastics, electric cables, etc..). For this operation it is advisable to call your installer or a specialised company.

Warning

All Benincá products are covered by insurance policy for any possible damages to objects and persons caused by construction faults under condition that the entire system be marked CE and only Benincá parts be used.