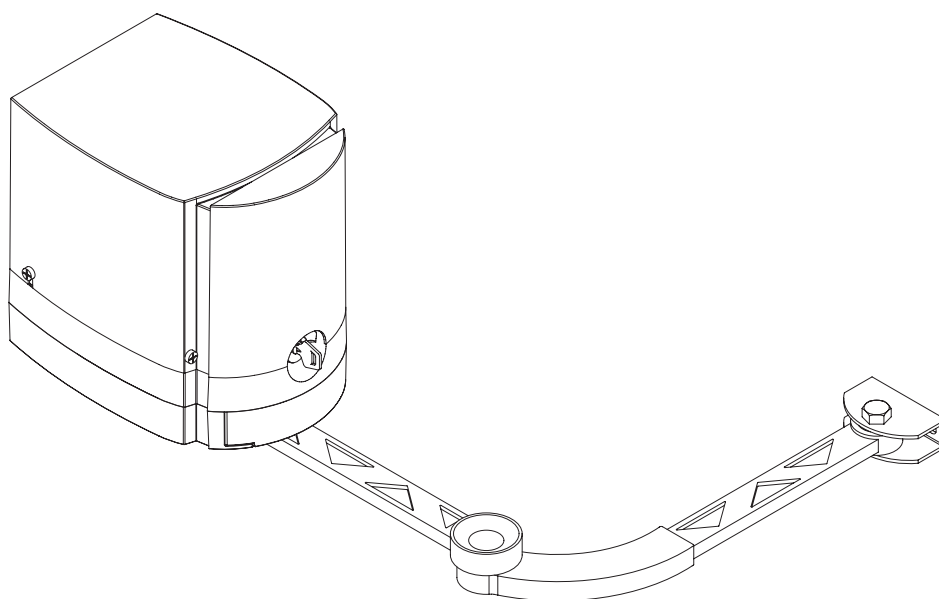


BENINCA®

AUTOMAZIONE PER CANCELLI A BATTENTE
AUTOMATION FOR HINGED GATES
AUTOMATION FÜR TORE
AUTOMATION POUR PORTAILS OUVRANTS
AUTOMATIZACIÓN PARA CANCELAS DE BATIENTE
AUTOMATYZACJA BRAM ROZWIERANYCH

MB24V

MBE24V



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 98/37 CE, Allegato II, parte B)
Divieto di messa in servizio

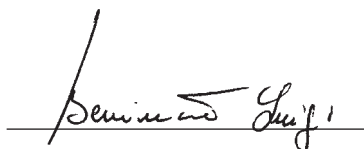
Fabbricante: **Automatismi Benincà SpA.**
Indirizzo: Via Capitello, 45 - 36066 Sandrigo (VI) - Italia

Dichiara che: l'automazione per cancelli a battente modello **MB24V/MBE24V.**

- è costruito per essere incorporato in una macchina o per essere assemblato con altri macchinari per costituire una macchina considerata dalla Direttiva 98/37 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 che 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 98/37 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, 10/01/2006.



Declaration by the manufacturer
(Directive 98/37/EEC, Art. 4.2 and Annex II, sub B)
Divieto di messa in servizio

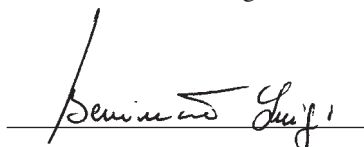
Manufacturer: **Automatismi Benincà SpA.**
Address: Via Capitello, 45 - 36066 Sandrigo (VI) - Italia

Herewith declares that: the operator for hinged gates model **MB24V/MBE24V.**

- is intended to be incorporated into machinery or to be assembled with other machinery to constitute machinery covered by Directive 98/37 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 98/37/EEC and with national implementing legislation, i.e. as a whole, including the machinery referred to in this declaration.

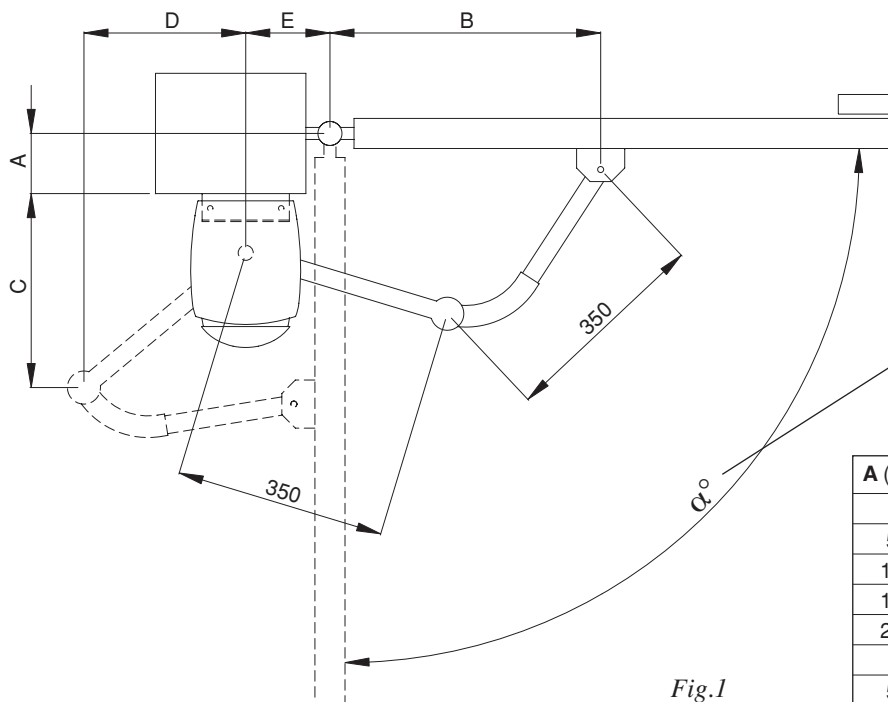
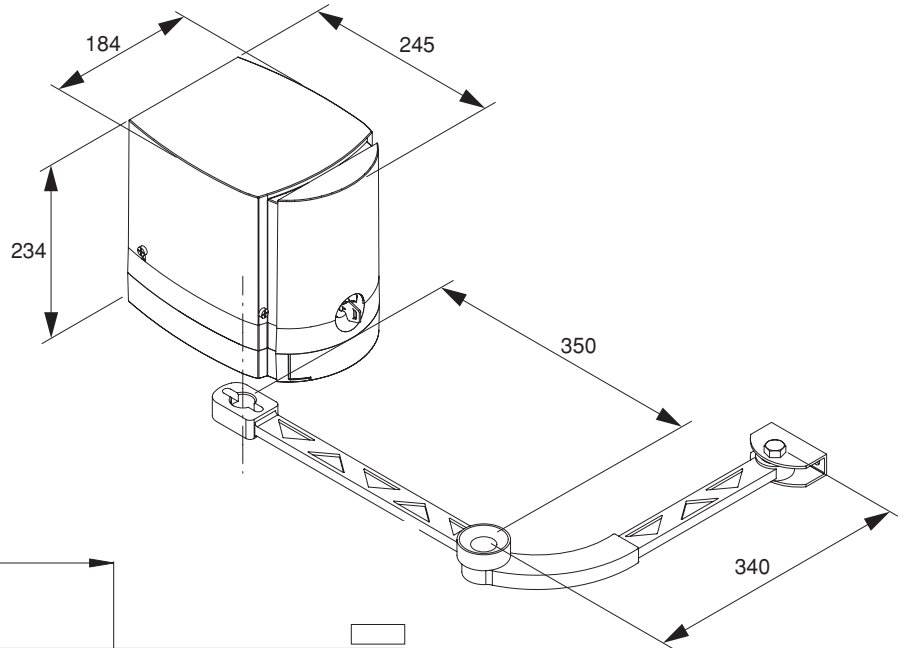
Benincà Luigi, Responsabile legale.
Sandrigo, 10/01/2006.



Dati tecnici	Technical data	Technische Daten	Donnees technique	Datos técnicos	Dane techniczne	MB/MBE24V
Alimentazione	Power supply	Stromversorgung	Alimentation	Alimentación	Zasilanie	230 Vac
Alimentazione motore	Motor feed	Motorspeisung	Alimentation moteur	Alimentación del motor	Zasilanie silnika	24 Vdc
Potenza assorbita	Power drawn	Aufgenomm. Leistung	Puissance absorbée	Consumo de potencia	Natéżenie	40 W
Corrente assorbita	Current drawn	Aufgenomm. Strom	Courant absorbé	Consumo de corriente	Pobór mocy	7 A
Coppia	Torque	Drehmoment	Couple	Par	Moment obrotowy	180 Nm
Classe isolamento mot.	Motor insulation class	Schutzklasse des Mot.	Classe d'isolement	Clase aislamiento mot.	Klasa izolacji silnika	F
Giri motore	Motor r.p.m.	Motorendrehzahl	Régime	Revoluciones motor	Obroty silnika	1500 r.p.m.
Giri uscita	Output rounds	Drehzahl am Ausgang	N. de tours en sortie	Revoluciones salida	Obroty wyjściowe	2,00 r.p.m.
Rumorosità	Noise level	Geräuschentwicklung	Bruit	Ruido	Max. hałas	<70 dB
Tempo man. anta (90°)	Operating time at 90°	Betätigungszeit 90°	Temps manoeuvre 90°	Tiempo maniobra 90°	Czas posuwu skrzydła dla kąta 90°	12 s (1).
Peso max. anta	Door leaf max. weight	Max. Türflügelgewicht	Poids max. porte	Peso máx. hoja	Ciężar max. skrzydła	300 kg (2)
Lunghezza max. anta	Door leaf max.	Max. Flügelänge	Longueur max. porte	Longitud máx. hoja	Dł. max. skrzydła	2,3 m(2)
Intermittenza lavoro	Jogging	Betriebsintervall	Intermittence travail	Intermittencia de trabajo	Cykliczność pracy	(3)
Lubrificazione	Lubrication	Schmierung	Lubrification	Lubrificación	Smarowanie	(4)
Grado IP	IP class	IP Grad	Degré IP	Índice IP	Stopień IP	IP54
Peso	Weight	Gewicht	Poids	Peso	Ciężar	8,3/10kg
Sblocco:	Built-in release:	Interne Entsicherung:	Déverrouillage inter.:	Desbloqueo interior:	Mech. odblokowujący:	(5)

- (1) Con rallentamento disabilitato - **With braking disabled** - **Avec ralentissement désactivé**
 Wenn Geschwindigkeitsabnahme deaktiviert - **Con ralentización inhabilitada** - **Przy funkcji zwolnienia biegu wykluczonej**
- (2) Vedi tabella - **See table** - **Siehe Tabelle** - **Voir tableau** - **Ver cuadro** - **Zobacz tabelę**
- (3) **Uso intensivo** - **Intensive use** - **Intensive Nutzung** - **Usage intensif** - **Uso intensivo** - **Użytkowanie intensywne**
- (4) **Grasso permanente** - **Permanent grease** - **Permanenfett** - **Graisse permanente** - **Grasa permanente** - **Smar trwały**
- (5) **Chiave personalizzata** - **Customized key** - **Spezialschlüssel** - **Clé personnalisée** - **Llave personalizada** - **Klucz osobisty**

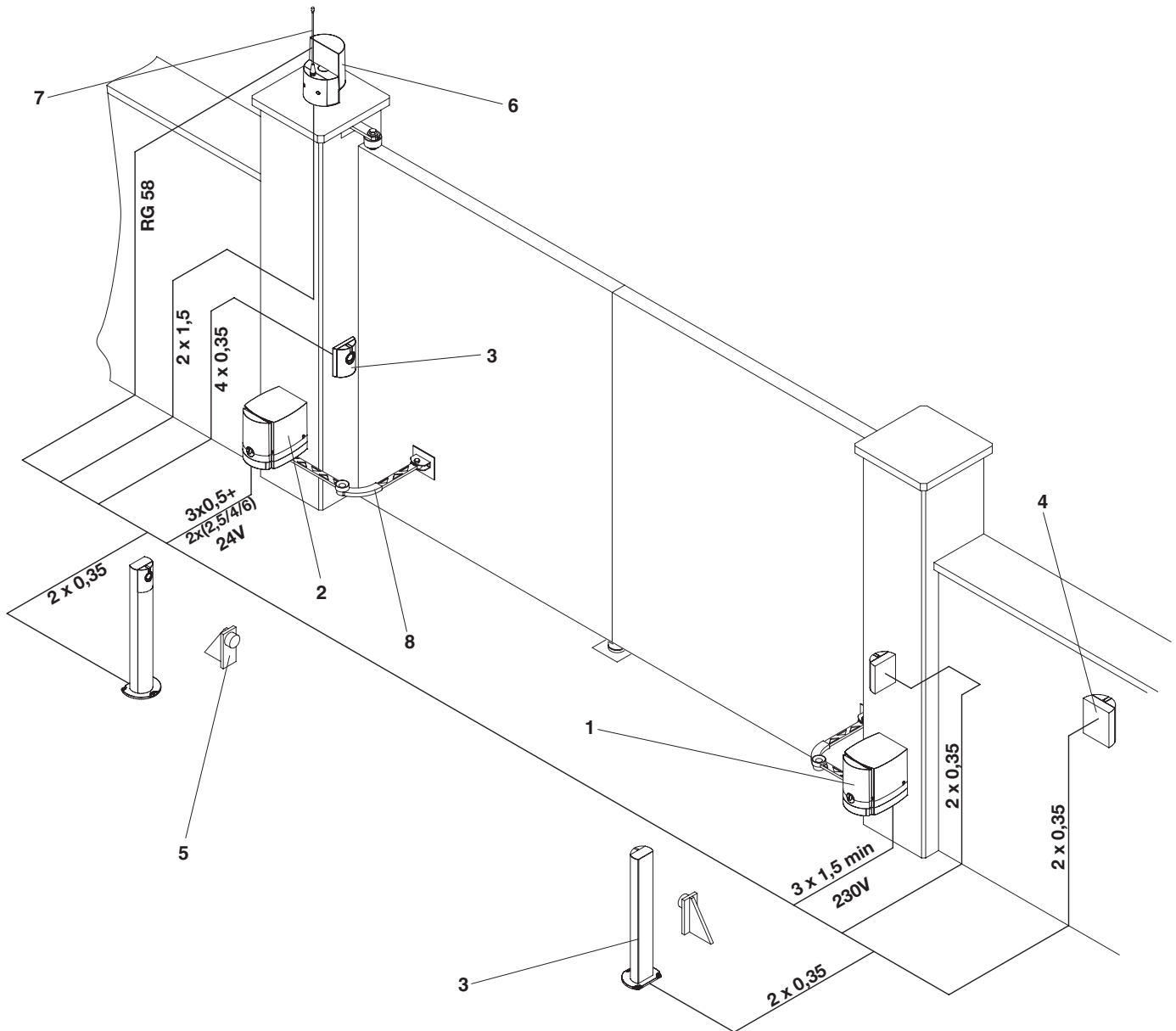
Lunghezza anta Door leaf width Flügelänge Longueur porte Longitud hoja Dł. skrzydła (m)	Peso anta Door leaf weight Türflügelgewicht Poids porte Peso hoja Ciężar skrzydła (kg)
1	300
1,5	250
2	215
2,3	200



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



Legenda:

- 1 Motoriduttore MBE24V
- 2 Motoriduttore MB24V
- 3 Fotocellule FTC/FTM
- 4 Selettore a chiave CH
- 5 Fermi meccanici
- 6 Lampeggiante LAMP
- 7 Antenna AW
- 8 Braccio snodato con staffe BC

Legenda:

- 1 Ratio-motor MBE24V
- 2 Ratio-motor MB24V
- 3 Photo-electric cells FTC/FTM
- 4 Key selector CH
- 5 Mechanical stop
- 6 Blinker LAMP
- 7 Aerial AW
- 8 Articulated arm with brackets BC

Zeichenerklärung:

- 1 Drehzahlminderer MBE24V
- 2 Drehzahlminderer MB24V
- 3 Fotozelle FTC/FTM
- 4 Schlüssel-Selektor CH
- 5 Mech. Endanschlag
- 6 Blinklicht LAMP
- 7 Antenne AW
- 8 Gelenkarm mit Bügeln BC

Légende:

- 1 Motorréducteur MBE24V
- 2 Motorréducteur MB24V
- 3 Photocellules FTC/FTM
- 4 Sélecteur à clef CH
- 5 Bûtee mécanique
- 6 Feu clignotant LAMP
- 7 Antenne AW
- 8 Bras articulé avec brides BC

Legenda:

- 1 Motorreductor MBE24V
- 2 Motorreductor MB24V
- 3 Fotocélulas FTC/FTM
- 4 Selector a llave CH
- 5 Topes mecánicos
- 6 Relampagueador LAMP
- 7 Antena AW
- 8 Brazo articulado con soportes BC

Objasnienia:

- 1 Siłownik MBE24V
- 2 Siłownik MB24V
- 3 Fotokomórki FTC/FTM
- 4 Przełącznik kluczowy CH
- 5 Blokady mechaniczne
- 6 Światło migające LAMP
- 7 Antena AW
- 8 Ramię przegubowe z zaczepem BC

Warning

- Before installation, carefully read the instructions hereunder.
- It is strictly forbidden to use the item MB24V/MBE24V 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 MB24V/MBE24V 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. MB24V/MBE24V 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

MBE24V: 24Vdc , irreversible geared motor with built-in control unit

MB24V: 24Vdc , 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.

Use a 3x0.5sqmm cable to connect the limit switches of MB motor to the control unit.

To connect the MB motor to the control unit, the cable cross section should comply with the values here-under:

For cable length lower than 5m, use a cable 2x2.5sqmm

For cable length from 5 to 7.5m use a cable 2x4sqmm

For cable length from 7.5 to 10m use a cable 2x6sqmm

Cables longer than 10m are not recommended to connect control unit and motor.

If it is required to invert the rotation direction of the motor, invert the connections of motors in the control unit, 1/2 for motor 1 (MBE24) and 3/4 for motor 2 (MB24).

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)

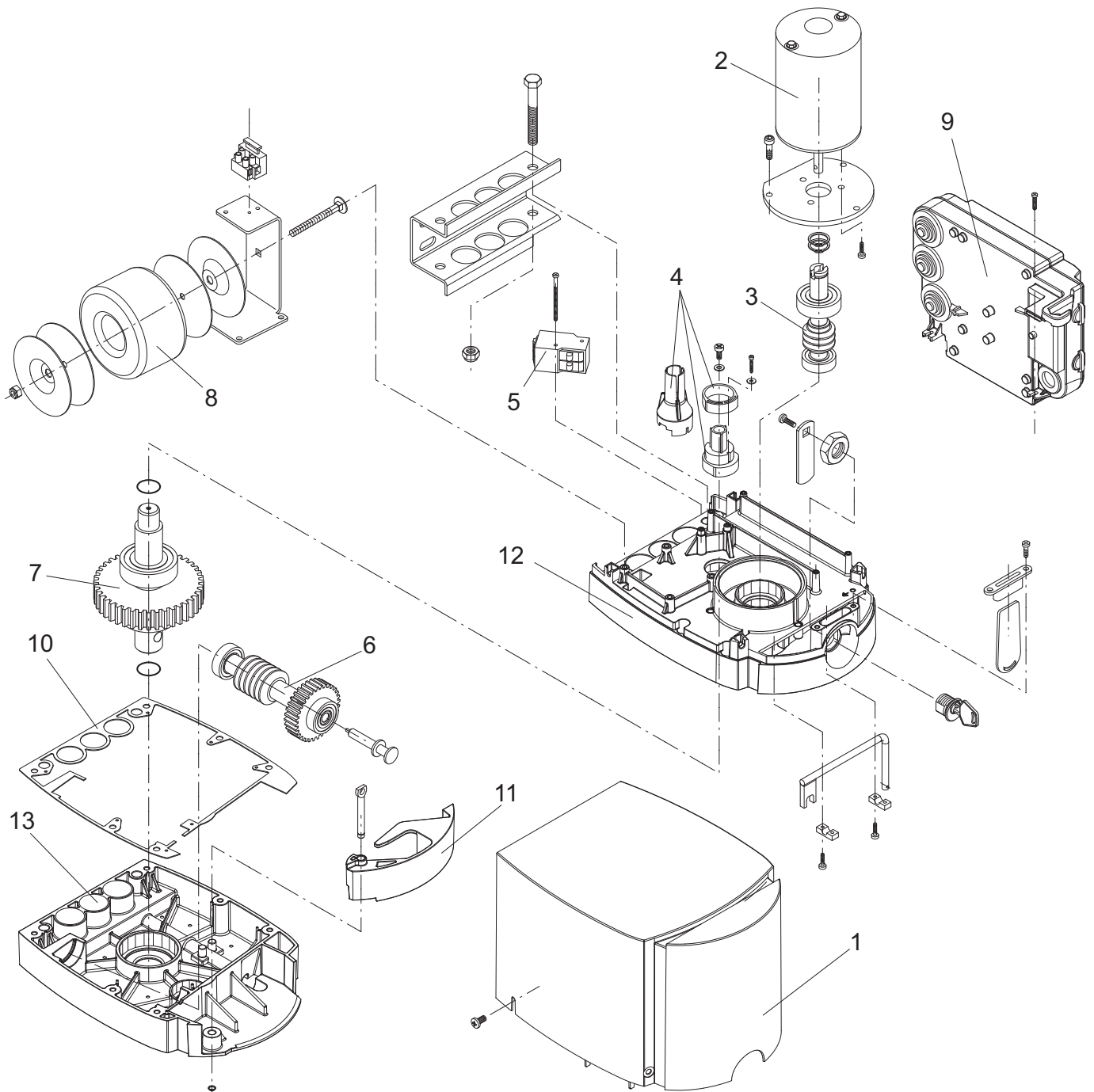
The torque adjustment is preset by the control unit. Please refer to the specific instructions.

An incorrect presetting of the torque may result in injuries or damages to property.

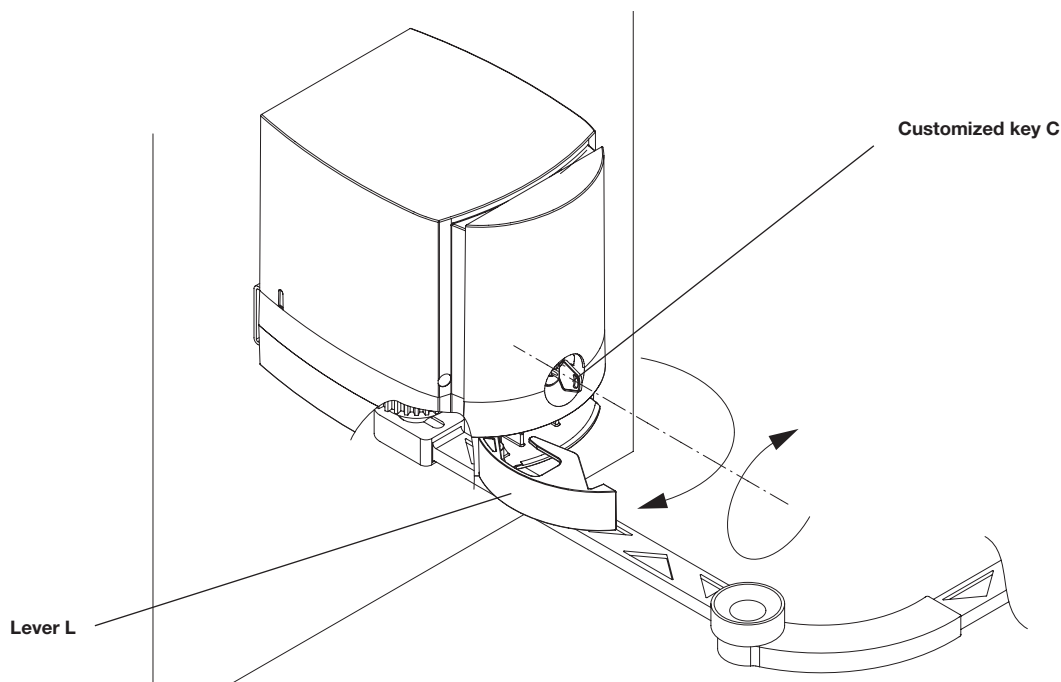
PLEASE COMPLY WITH REGULATIONS IN FORCE!

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.



Pos.	Denominazione - Description - Bezeichnung - Dénomination - Denominación - Określenie						Cod.
1	Carter	Cover	<i>Kasten</i>	Carter	Cárter	Karter	9686930
2	Motore	Motor	<i>Motor</i>	Moteur	Motor	Silnika	9686811
3	Vite senza fine	Screw	<i>Schraube</i>	Vis sans fin	Tornillo sin fin	Śruba dwustronna	9686110
4	Finecorsa	Limit stop	<i>Endschalter</i>	Fin de course	Final de carrera	Ogr. przesuwu	9686934
5	Microinterruttori	Microswitches	<i>Mikroschalter</i>	Microinterrupt.	Microinterrupt.	Mikrowyłączniki	9686935
6	Albero	Shaft	<i>Welle</i>	Arbre	Eje	Wał	9686936
7	Albero uscita	Output shaft	<i>Ausgangswelle</i>	Arbre sortie	Eje de salida	Wał wyjściowy	9686937
8	Trasformatore	Transformer	<i>Trafo</i>	Transformateur	Trasformador	Transformator	9686812
9	Centrale	Control unit	<i>Zentrale</i>	Centrale	Central	Centralka	9686927
10	Guarnizione	Gasket	<i>Dichtung</i>	Joint	Junta	Uszczelka	9686944
11	Leva sblocco	Release lever	<i>Hebel</i>	Levier	Pal. de desbloq.	Dźwigienka	9686941
12	Carter	Cover	<i>Kasten</i>	Carter	Cárter	Karter	9686942
13	Carter	Cover	<i>Kasten</i>	Carter	Cárter	Karter	9686943



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.