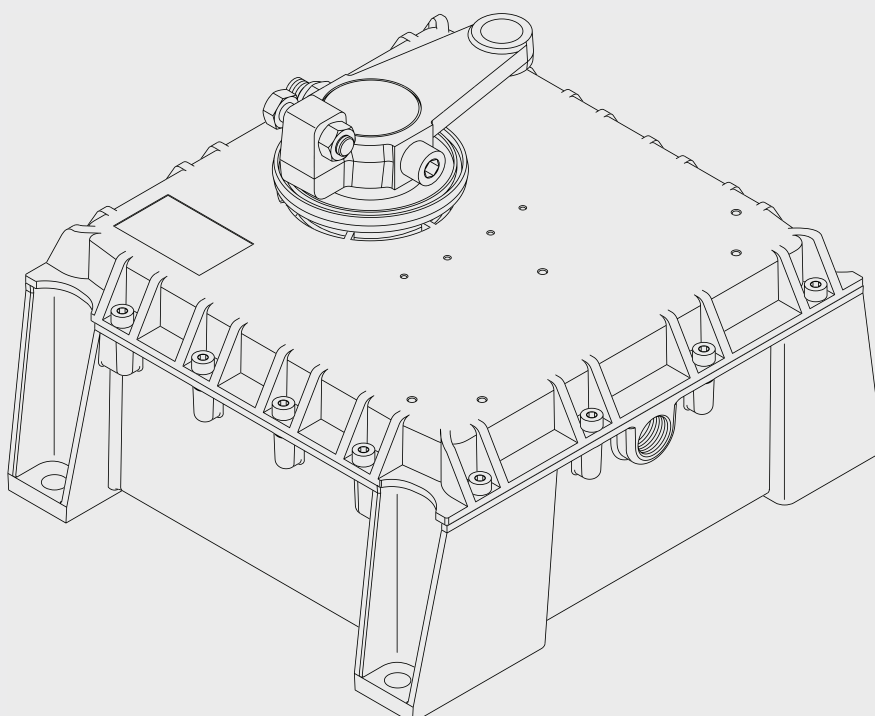
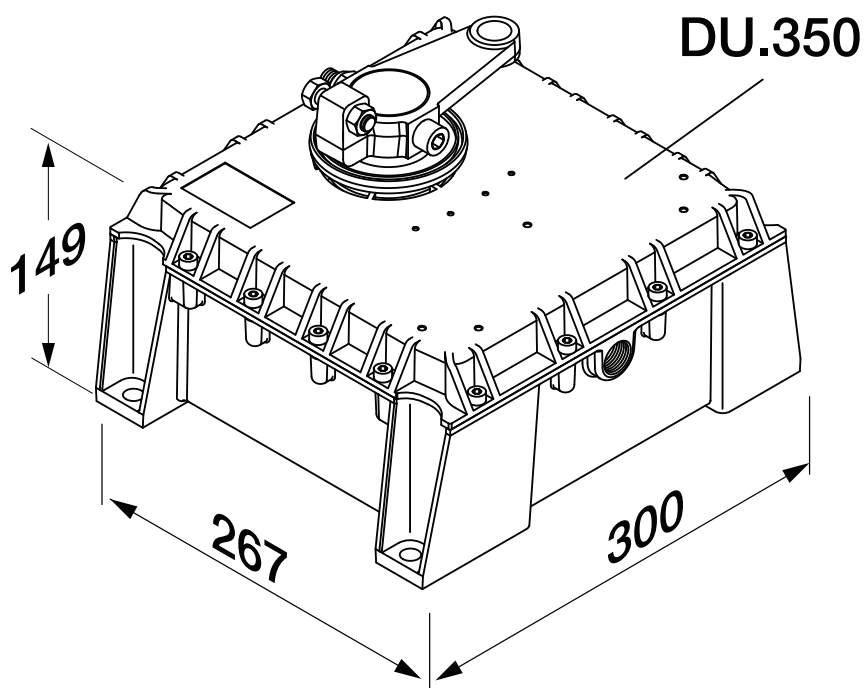
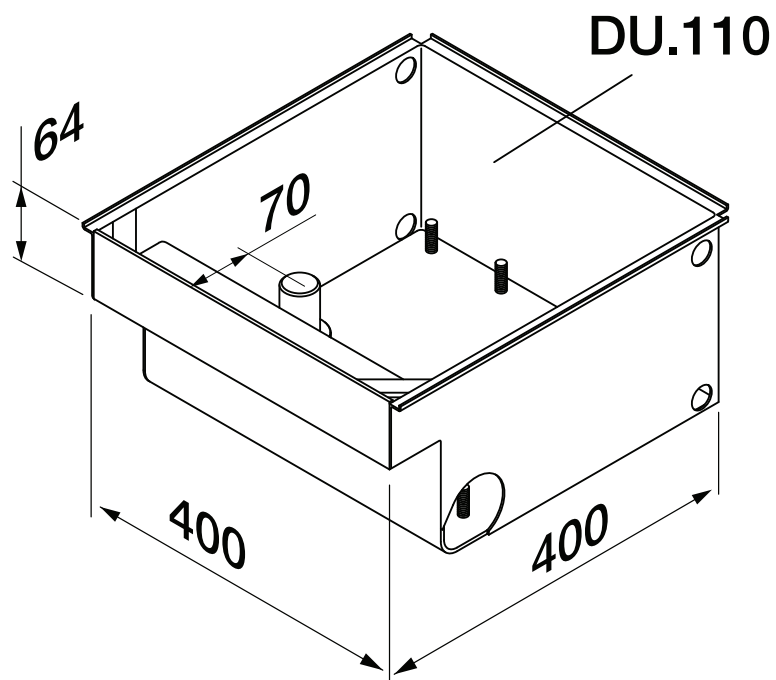


# DU.350NL



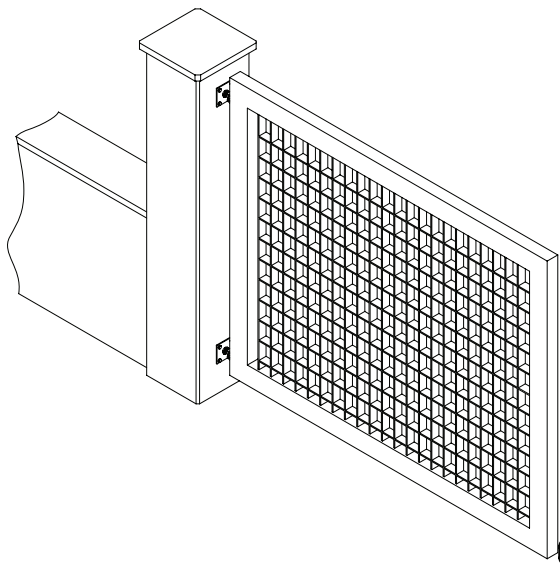
**BENINCA**<sup>®</sup>  
TECHNOLOGY TO OPEN





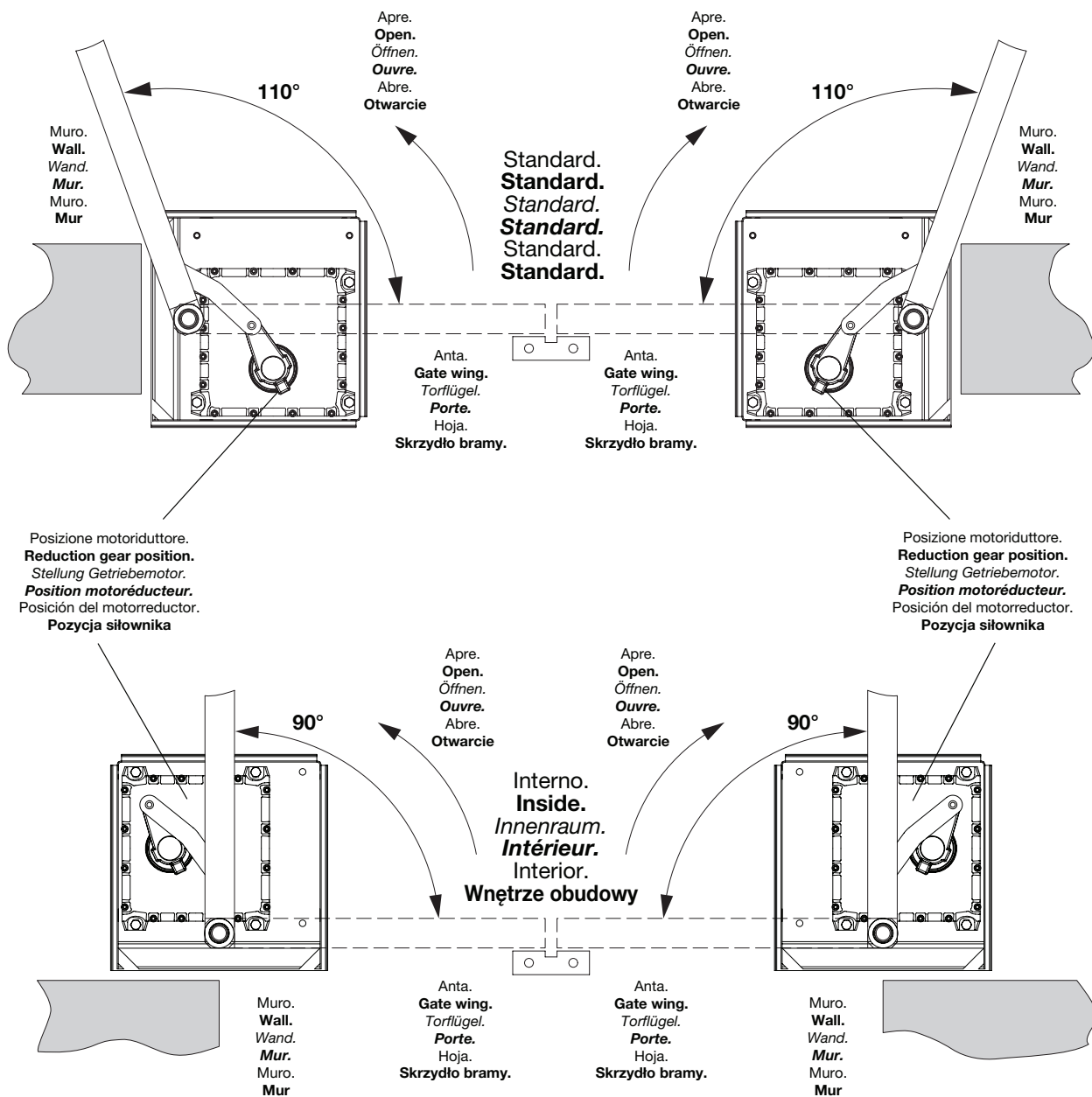
1

Arresto in apertura.  
**Stop when opening.**  
*Endanschlag zur Öffnung.*  
**Arrêt en ouverture.**  
 Tope en apertura.  
**Chwytnak blokujący podczas otwierania.**



Arresto in chiusura.  
**Stop when closing.**  
*Endanschlag zur Schließung.*  
**Arrêt en fermeture.**  
 Tope de cierre.  
**Chwytnak blokujący podczas zamykania.**

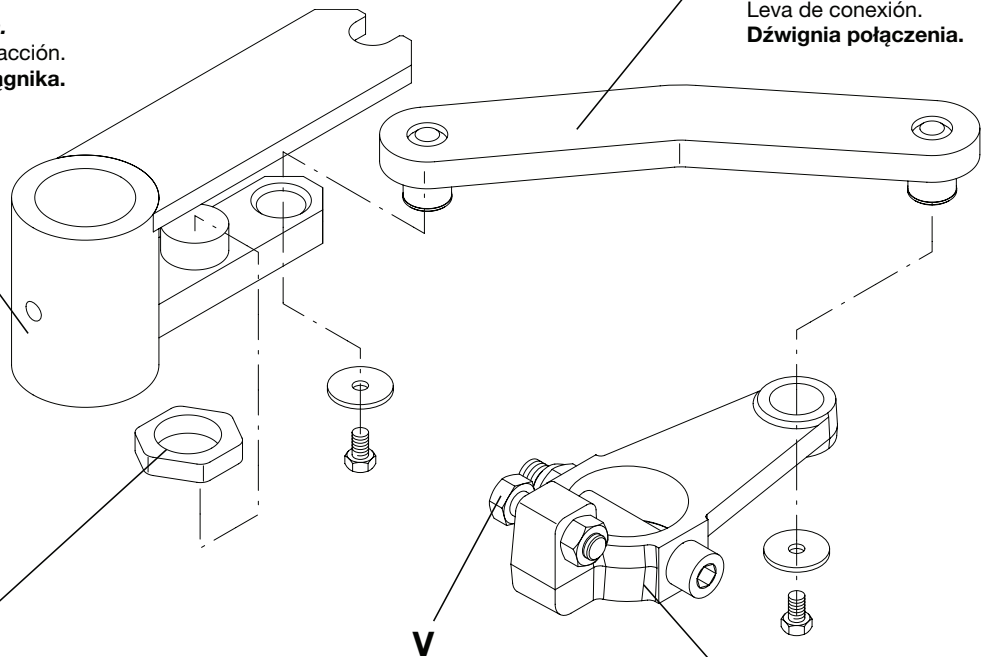
2



3

Staffa del gruppo di traino.  
**Drive unit flask.**  
*Bügel der Zuggruppe.*  
**Etrier du groupe de traction.**  
 Acoplamiento del grupo de tracción.  
**Strzemiączko zespołu pociągnika.**

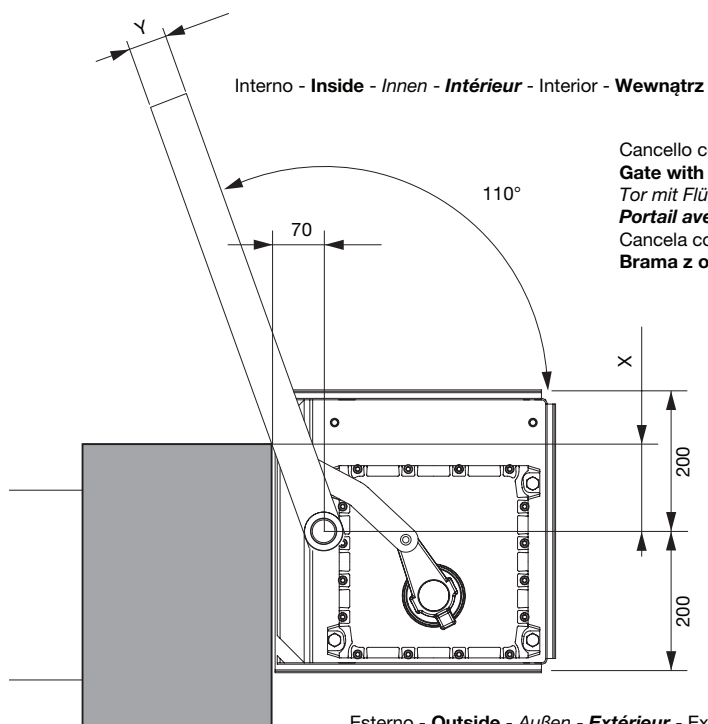
Leva di collegamento.  
**Connection lever.**  
*Anschlußhebel.*  
**Levier de liaison.**  
 Leva de conexión.  
**Dźwignia połączenia.**



Fermo meccanico per apertura regolabile DU.350ST.  
**Mechanical stopper for DU.350ST adjustable opening.**  
*Einstellbarer mechanischer Anschlag für DU.350ST-Öffnung.*  
**Butée mécanique pour ouverture réglable DU.350ST.**  
 Tope mecánico para apertura regulable DU.350ST.  
**Mechaniczny ogranicznik służący do regulacji stopnia otwierania DU.350ST.**

Staffa del motore.  
**Motor flask.**  
*Motorbügel.*  
**Etrier du moteur.**  
 Acoplamiento al motor.  
**Strzemiączko silnika.**

4



Cancello con apertura ante a 110°.  
**Gate with 110° opening.**  
*Tor mit Flügelöffnung bis 110°.*  
**Portail avec ouverture des vantaux à 110°.**  
 Cancela con apertura de hojas hasta 110°.  
**Brama z otwarciem skrzydeł na 110°.**

X	Y
130	30
115	40
100	50
85	60
70	70
55	80

In tabella si riportano alcune quote minime X in base ad alcuni spessori di portone Y.

**This table shows some min. X dimensions based on gate thickness Y.**

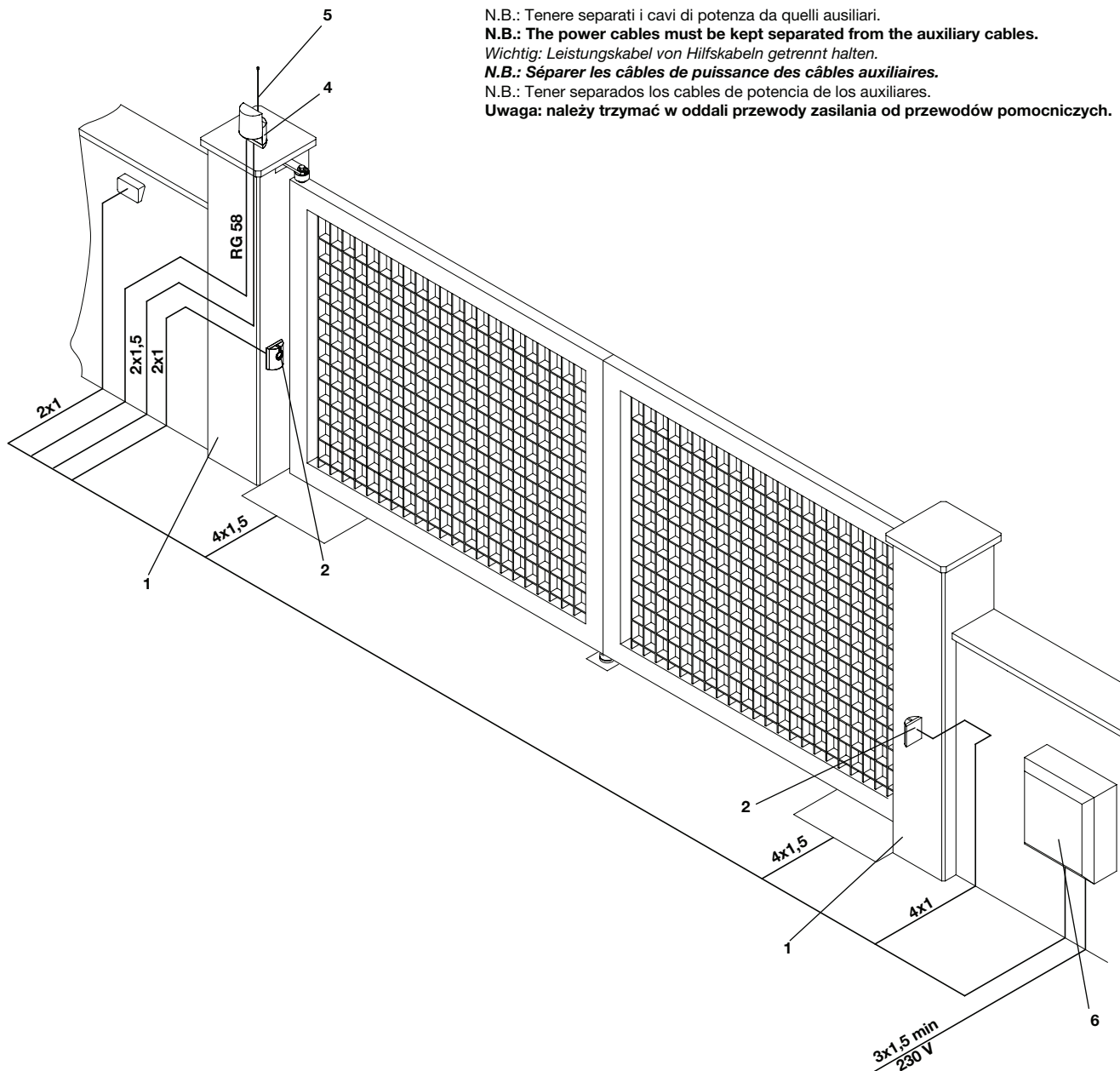
*Die Tabelle enthält einige Mindestwerte X aufgrund einiger Tordicken Y.*

**Dans le tableau sont indiqués quelques cotes minimales et quelques épaisseurs de porte Y.**

En la tabla se exponen algunas cotas mínimas X en base a algunos espesores del portón Y.

**W tabeli podane są niektóre minimalne odległości X w zależności od grubości bramy Y.**

Collegamenti elettrici / **Wire diagram** / *Elektrische Anschlüsse*  
**Branchements électriques** / Conexiones eléctricas / **Połączenia elektryczne**



N.B.: Tenere separati i cavi di potenza da quelli ausiliari.

**N.B.: The power cables must be kept separated from the auxiliary cables.**

*Wichtig: Leistungskabel von Hilfskabeln getrennt halten.*

**N.B.: Séparer les câbles de puissance des câbles auxiliaires.**

N.B.: Tener separados los cables de potencia de los auxiliares.

**Uwaga: należy trzymać w oddali przewody zasilania od przewodów pomocniczych.**

**Legenda:**

- 1 Motoriduttore DU.350NL
- 2 Fotocellule FTC/FTM
- 3 Selettore a chiave CH (da esterno) o tastiera digitale
- 4 Lampeggiante LAMP
- 5 Antenna AW
- 6 Centrale elettronica.

**Legenda:**

- 1 **Motorreducer DU.350NL**
- 2 **Photo-electric cells FTC/FTM**
- 3 **Key selector CH (external) or digital keyboard**
- 4 **Flash-light LAMP**
- 5 **Antenna AW**
- 6 **Electronic board.**

**Zeichenerklärung:**

- 1 Getriebemotor DU.350NL
- 2 Fotozelle FTC/FTM
- 3 Schlüssel-Selektor CH (außenliegend) oder Digital-Tastatur
- 4 Blinker LAMP
- 5 Antenne AW
- 6 Elektroschrank.

**Légende:**

- 1 **Moteur-réducteur DU.350NL**
- 2 **Photocellule FTC/FTM**
- 3 **Selecteur à clé CH (d'extérieur) ou clavier digital**
- 4 **Clignotant LAMP**
- 5 **Antenne AW**
- 6 **Centrale électronique.**

**Leyenda:**

- 1 Motorreductor DU.350NL
- 2 Fotocélulas FTC/FTM
- 3 Selectores a llave CH (de superficie).
- 4 Relampagueador LAMP.
- 5 AntenaAW.
- 6 Central electrónica.

**Objaśnienia:**

- 1 **Siłownik DU.350NL**
- 2 **Fotokomórki FTC/FTM**
- 3 **Przełącznik kluczowy CH (zewnątrzny) lub panel z przyciskami**
- 4 **Światło migające LAMP**
- 5 **Antena AW**
- 6 **Centralka elektroniczna**

# CE Declaration of Conformity

Declaration in accordance with Directives 2004/108/CE(EMC); 2006/95/CE(LVD)

The Manufacturer:

**AUTOMATISMI BENINCÀ SPA**

Address:

**Via Capitello, 45 - 36066 Sandrigo (VI) - Italy**

Declares that the product:

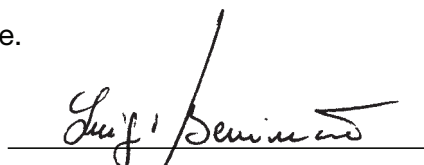
Electromechanical actuator 230V AC for swing gates, model:

**DU.350NL**

conforms with the requirements of the following EU Directives:

- **DIRECTIVE 2004/108/CE OF THE EUROPEAN PARLIAMENT AND COUNCIL**, 15 December 2004, in relation to the harmonisation of the legislation of member states regarding electromagnetic compatibility, in abrogation of Directive 89/336/CEE, per the following harmonised standards: EN 61000-6-2:2005, EN 61000-6-3:2007.
- **DIRECTIVE 2006/95/CE OF THE EUROPEAN PARLIAMENT AND COUNCIL**, 12 December 2006, in relation to the harmonisation of the legislation of member states regarding electrical material intended to be used within certain voltage ranges, per the following harmonised standards: EN 60335-1:2002 + A1:2004 + A11:2004 + A12:2006 + A2:2006 + A13:2008; EN 60335-1-103:2003. as applicable:
- **DIRECTIVE 1999/5/CE OF THE EUROPEAN PARLIAMENT AND COUNCIL**, 9 March 1999 in relation to radio equipment and telecommunications terminals and the mutual recognition of their conformity, per the following harmonised standards: ETSI EN 301 489-3 V1.4.1 (2002) + ETSI EN 301 489-1 V1.4.1 (2002) + ETSI EN 300 220-3 V1.1.1 (2000) + EN 60950-1 (2001)

Benincà Luigi, Legal representative.  
Sandrigo, 02/11/2010.



## WARNING

The product shall not be used for purposes or in ways other than those for which the product is intended for and as described in this manual. Incorrect uses can damage the product and cause injuries and damages.

The company shall not be deemed responsible for the non-compliance with a good manufacture technique of gates as well as for any deformation, which might occur during use.

Keep this manual for further use.

Qualified personnel, in compliance with regulations in force, shall install the system.

Packaging must be kept out of reach of children, as it can be hazardous. For disposal, packaging must be divided the various types of waste (e.g. carton board, polystyrene) in compliance with regulations in force.

The installer must supply all information on the automatic, manual and emergency operation of the automatic system and supply the end user with instructions for use.



An omnipolar switch/section switch with remote contact opening equal to, or higher than 3mm must be provided on the power supply mains.. Make sure that before wiring an adequate differential switch and an overcurrent protection is provided.

Pursuant to safety regulations in force, some types of installation require that the gate connection be earthed.

During installation, maintenance and repair, cut off power supply before accessing to live parts.

Descriptions and figures in this manual are not binding. While leaving the essential characteristics of the product unchanged, the manufacturer reserves the right to modify the same under the technical, design or commercial point of view without necessarily update this manual.

## Introduction

Thank you for choosing our DU.350NL 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.

## General information

For an efficient operation of these automatisms, the gate must have the following features:

- good stoutness and stiffness
- every wing must have one only hinge (if necessary, eliminate the others).
- all hinges must have positive clearances and permit smooth and regular manual operations.
- when wings are closed their height have to fit together.

### 1. General features

This entirely concealing system does not alter the external aspect of the gate.

Easy to use and reliable, this system can be installed on any swing gate, up to 4m width per gate leaf.

The movement is smooth and noiseless thanks to a lever system that adjusts speed to the various operating phases. The oil submerged geared motor prevents any water leakage or condensate which might irremediably compromise the motor operation.

No electric locks are required as the irreversible system ensures the locking of the gate leaves.

The system is easy to install. Once the casing is underground, in fact, the geared motor is fixed with stainless steel nuts and screws.

The system is released by hand through the special lever supplied (item SB.DU350L), or through customized key (item SB.DU350K).

The foundation casings are treated by cathoresis and the cover is varnished for a longer duration and excellent aesthetic result.

With the application of the DU.180N device, a 180° opening is obtained (with gate leaves not wider than 2 m). The DU.180N can be adopted for the automation of special passages.

### 2. Mechanical stops (fig. 1)

The gate to automate must have an opening and closing mechanical stop as the DU.350NL is not equipped with electro-magnetic limit stops. The DU.350FC limit switch kit, easy to install and adjust, is in any case available.

### 3. Laying of the foundation casing

Refer to instructions supplied with the DU.350CF foundation casing.

### 4. Motoreducer fixing

4.1 Fix the motoreducer with the 4 stainless steel M10 hexagon nut (part of the supply) that are fitted onto the screws projecting from the embedded box.

P.N. In the box there are 8 screws; use the ones that are suitable to the requirements as per instructions given in Fig.4.

4.2 Connect the drive unit with the motor flask through the connection lever (Fig. 7)

4.3 With the door leaf resting onto the closing stopper, adjust the screw V, Fig. 7, at a distance of 1/2mm from the linking lever (in the case of standard mounting only).

4.4 The mechanical stopper is available for the adjustable

opening (DU.350ST) to be positioned in the special housing of the drive bracket, as indicated in Fig. 7.

4.5 Before tightening the M10 nuts, check that the gear motor rests solidly on the bottom of the casing. Conversely, shim where required, keeping in mind that the gear motor should rest flat (check by using a level).

### 5. 110° opening (Fig. 8)

For a 110° opening, calculate that the X quota between pivot and angle of the beam permits rotation taking account of the thickness of the Y door.

### 6. 180° Opening

The 180° opening can be made through the special device Art. DU.180N. This solution is advisable for gates up to 2m wide. Wider gates can be used, but operation is less smooth.

## CAUTION

All Benincà 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 Benincà parts be used.

## TECHNICAL DATA

	DU.350N
Power supply	230 Vac
Power drawn	310 W
Current drawn	1,4 A
Torque	450 Nm
Motor insulation class	F
Noise level	<70 dB
Operating time at 90°	28 s (1)
Door leaf max. weight	500 kg
Door leaf max.	3,5 m (2)
Jogging	40%
Lubrication	AGIP Blasias 32
Capacitor	12,5 µF
IP class	IP67
Weight DU.350NL	20 kg
Weight DU.350CF	16,2 kg

(1) With braking disabled.

(2) Automation for longer wings is also possible but running would not be so smooth and regular.

# DU.350NL

Libro istruzioni per l'utente

User's handbook for the user

Handbuch für den Verbraucher

Manuel d'instructions pour l'utilisateur

Libro de instrucciones para el usuario

Instrukcja obsługi dla użytkownika

Sblocco a leva SB.DU350L

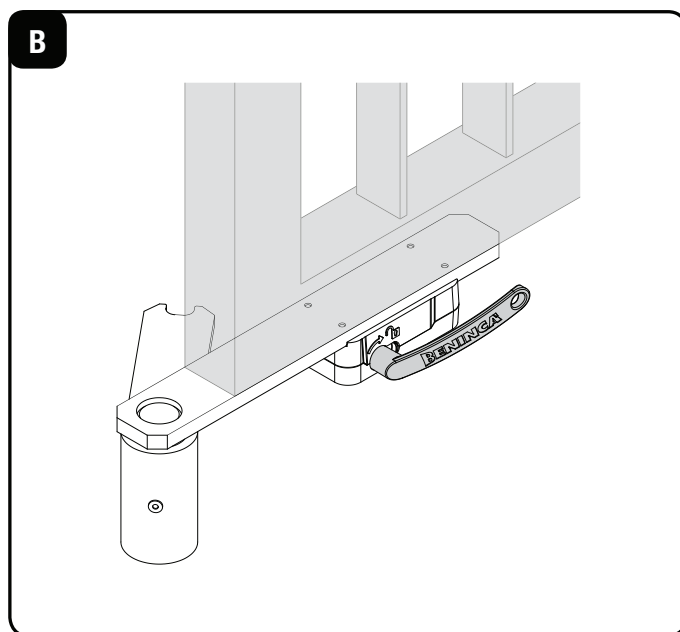
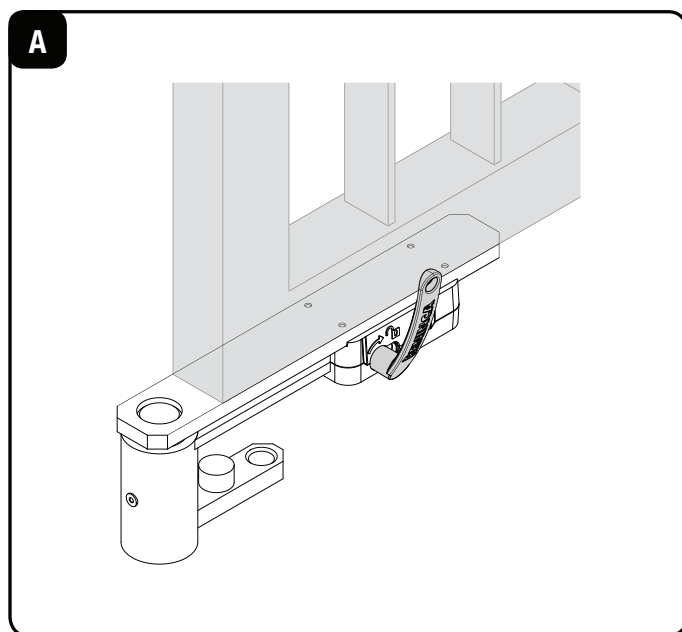
**SB.DU350L lever release**

*Hebelentsicherung SB.DU350L*

**Système de déblocage à levier SB.DU350L**

Desbloqueo con palanca SB.DU350L

**Odblokowanie za pomocą dźwigni SB.DU350L**



Sblocco a chiave personalizzata SB.DU350K

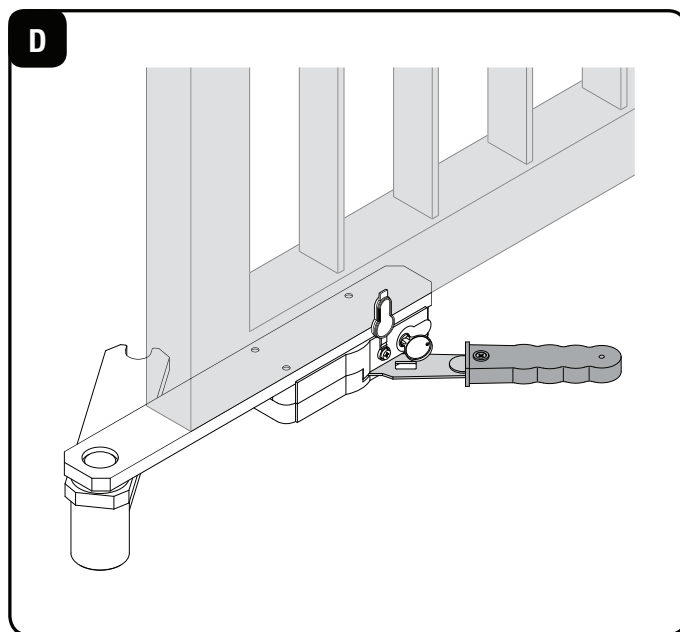
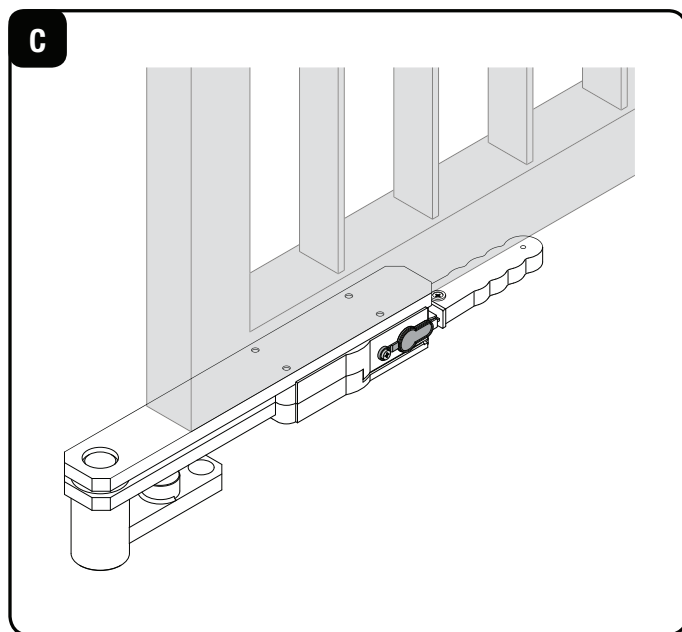
**How to release with SB.DU350K customized key**

*Entsicherung mit dem kundenspezifischen Schlüssel SB.DU350K*

**Déblocage à clé personnalisée SB.DU350K**

Desbloqueo con llave personalizada SB.DU350K

**Odblokowanie przy użyciu specjalnego klucza SB.DU350K**





### Norme di sicurezza

- Non sostare nella zona di movimento della porta.
- Non lasciare che i bambini giochino con i comandi o in prossimità delle ante.
- In caso di anomalie di funzionamento non tentare di riparare il guasto ma avvertire un tecnico specializzato.

### Manovra manuale e d'emergenza

In caso di mancanza dell'energia elettrica o di guasto, per azionare manualmente le ante procedere come segue:

#### Sblocco a leva SB.DU350L (fig. A e B):

- inserire la chiave in dotazione C e ruotarla, seguendo il verso della freccia in rilievo sullo sblocco.
- tenendo la chiave ruotata, spingere l'anta fino a farla ruotare di qualche grado.
- levare la chiave;

È ora possibile aprire e chiudere manualmente l'anta. Il portone si ribloccherà automaticamente non appena riportato nella posizione iniziale o quando si riattiverà il motore.

#### Sblocco a chiave personalizzata SB.DU350K (fig C e D):

- Togliere il tappo "T" di protezione della serratura inserito a pressione.
- Inserire la chiave "C" e ruotarla fino a che oppone resistenza.
- Ruotare la leva "L" in uno dei due sensi fino a fine corsa.

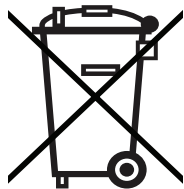
È ora possibile aprire e chiudere manualmente l'anta. Per ripristinare il movimento automatico, riportare la leva "L" nella posizione originale, girare ed estrarre la chiave personalizzata "C" e richiudere il tappo "T"; la prima manovra ripristinerà il normale funzionamento.

### Manutenzione

- Controllare periodicamente l'efficienza dello sblocco manuale di emergenza.
- Astenersi assolutamente dal tentativo di effettuare riparazioni, potreste incorrere in incidenti; per queste operazioni contattare un tecnico specializzato.
- L'attuatore non richiede manutenzioni ordinarie, tuttavia è necessario verificare periodicamente l'efficienza dei dispositivi di sicurezza e le altre parti dell'impianto che potrebbero creare pericoli in seguito ad usura.

### Smaltimento

Come indicato dal simbolo a lato, è vietato gettare questo prodotto nei rifiuti domestici in quanto alcune parti che lo compongono potrebbero risultare nocive per l'ambiente e la salute umana, se smaltite scorrettamente. L'apparecchiatura, pertanto, dovrà essere consegnata in adeguati centri di raccolta differenziata, oppure riconsegnata al rivenditore al momento dell'acquisto di una nuova apparecchiatura equivalente. Lo smaltimento abusivo del prodotto da parte dell'utente comporta l'applicazione delle sanzioni amministrative previste dalla normativa vigente.



### Attenzione

Tutti i prodotti Benincà sono coperti da polizza assicurativa che risponde di eventuali danni a cose o persone causati da difetti di fabbricazione, richiede però la marcatura CE della "macchina" e l'utilizzo di componenti originali Benincà.

### 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

In the event of power failure or faults, the gate can be manually operated as follows:

#### SB.DU350L lever release (Fig. A and B):

- Introduce the key C supplied and turn it following the direction shown by the arrow embossed on the release.
- while keeping the key turned, push the gate, making it turn for some degrees.
- remove the key;

The gate can be now opened and closed by hand. The gate will lock again automatically as soon as it reaches the initial position or when the motor is activated again.

#### How to release with SB.DU350K customized key (Fig. C and D).

- Remove the "T" protective cap from the lock.
- Introduce the "C" key and turn it until you feel resistance.
- Turn the "L" lever in either directions, until reaching the limit switch.

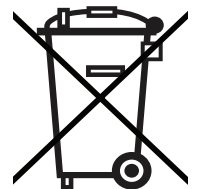
The gate can be now opened and closed by hand. To reset the automatic movement, move the "L" lever to the original position, turn and extract the "C" customized key and close the "T" cap again. The regular operation will be reset with the first movement.

### 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.

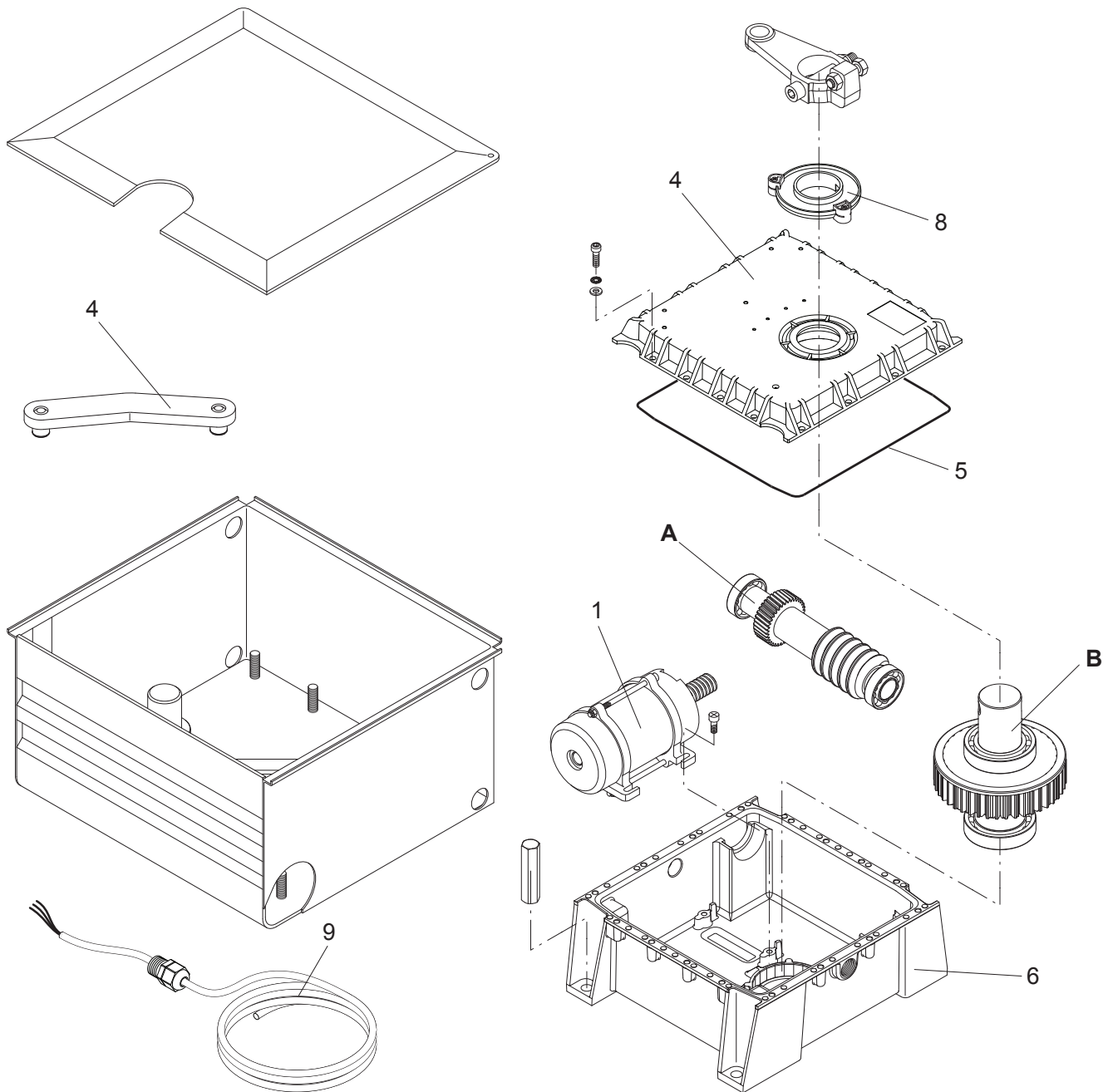
### Waste disposal

As indicated by the symbol shown, it is forbidden to dispose this product as normal urban waste as some parts might be harmful for environment and human health, if they are disposed of incorrectly. Therefore, the device should be disposed in special collection platforms or given back to the reseller if a new and similar device is purchased. An incorrect disposal of the device will result in fines applied to the user, as provided for by regulations in force.



### Warning

All Benincà 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 Benincà parts be used.



Pos.	Denominazione - Description - Bezeichnung - Dénomination - Denominación - Określenie						Cod.
A	Vite senza fine	<b>Worm screw</b>	<i>Welle</i>	<b>Vis sans fin</b>	Tornillo sin fin	Śruba dwustronna	9686372
B	Albero uscita	<b>Output shaft</b>	<i>Welle</i>	<b>Arbre</b>	Eje de salida	Wał wyjściowy	9686379
1	Motore	<b>Motor</b>	<i>Motor</i>	<b>Moteur</b>	Motor	Silnik	9688130
2	Sblocco	<b>Release</b>	<i>Entblockung</i>	<b>Débloccage</b>	Desbloqueo	Zespół odblok.	9686396
3	Sblocco + Leva	<b>Release + Lever</b>	<i>Entblockung + Hebel</i>	<b>Débloccage + Levier</b>	Desbloqueo + Palanca	Zespół odblok. + Dźwignienka	9686018
4	Carter superiore	<b>Upper cover</b>	<i>Gehäuse</i>	<b>Carter</b>	Cárter	Karter	9686376
5	Guarnizione	<b>Gasket</b>	<i>Dichtung</i>	<b>Guarniture</b>	Junta	Uszczelka	9686377
6	Carter inferiore	<b>Lower cover</b>	<i>Gehäuse</i>	<b>Carter</b>	Cárter	Karter	9686378
7	Chiave sblocco	<b>Key</b>	<i>Schlüssel</i>	<b>Clé</b>	Llave de desbloq.	Dźwignia odrygl.	9686071
8	Camme finec.	<b>Limit stop cam</b>	<i>Nocke</i>	<b>Came</b>	Levas fin. de car.	Krańcówka	9686323
9	Cavo alimentaz.	<b>Power cable</b>	<i>Stromkabel.</i>	<b>Câble alim.</b>	Cable alimen.	Przewód zasilania	9686371
10	Leva	<b>Lever</b>	<i>Hebel</i>	<b>Levier</b>	Palanca	Dźwignienka	9686374

**BENINCA<sup>®</sup>**

**AUTOMATISMI BENINCÀ** SpA - Via Capitello, 45 - 36066 Sandrigo (VI) - Tel. 0444 751030 r.a. - Fax 0444 759728

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