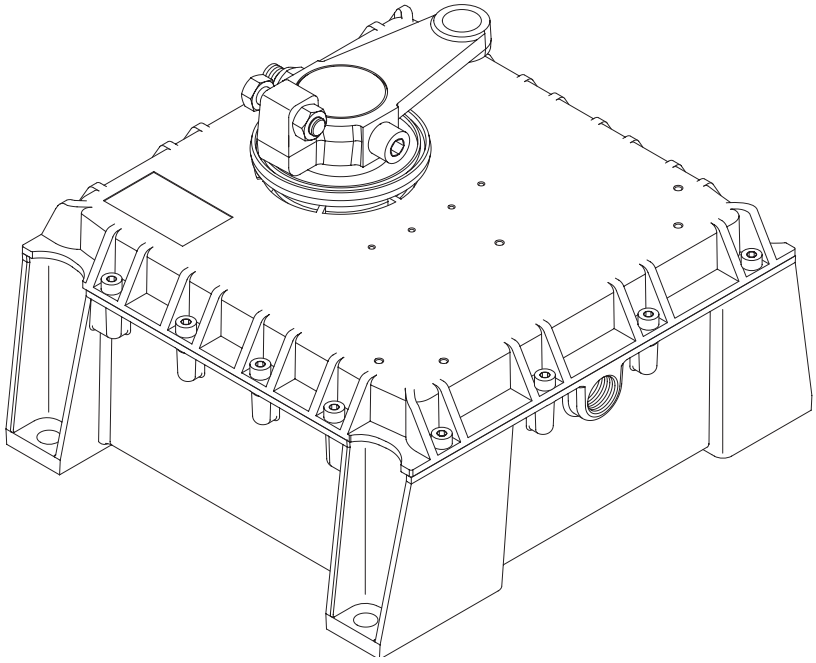
L8542386
Rev. 10/08/02

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

DU.350N
DU.350NV



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

CE

UNAC

UNIONE NAZIONALE COSTRUTTORI AUTOMATISMI PER CANCELLI, PORTE SERRANDE ED AFFINI

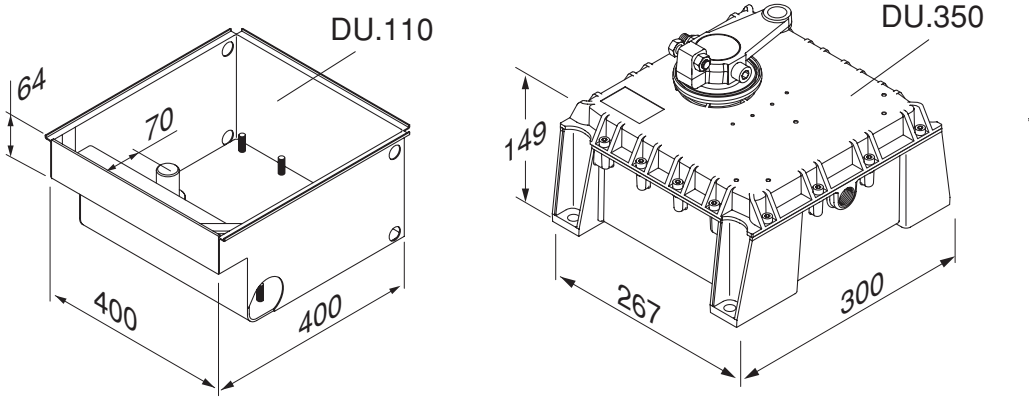
Dati tecnici	Technical data	Technische Daten	DU.350N	DU.350NV
Alimentazione	**Power supply**	*Stromversorgung*	**230 Vac**	**230 Vac**
Potenza assorbita	**Power drawn**	*Aufgenomm. Leistung*	**310 W**	**310 W**
Corrente assorbita	**Current drawn**	*Aufgenomm. Strom*	**1,4 A**	**1,4 A**
Coppia	**Torque**	*Drehmoment*	**450 Nm**	**270 Nm**
Classe isolamento mot.	**Motor insulation class**	*Schutzklasse des Mot.*	**F**	**F**
Rumorosità	**Noise level**	*Geräuschentwicklung*	**<70 dB**	**<70 dB**
Tempo man. anta (90°)	**Operating time at 90°**	*Betätigungszeit 90°*	**18 s (1).**	**11 s (1).**
Peso max. anta	**Door leaf max. weight**	*Max. Türflügelgewicht*	**500 kg**	**500 kg**
Lunghezza max. anta	**Door leaf max.**	*Max. Flügellänge*	**3,5 m (2)**	**3 m (2)**
Intermittenza lavoro	**Jogging**	*Betriebsintervall*	**40%**	**40%**
Lubrificazione	**Lubrication**	*Schmierung*	**AGIP Blasia 32**	**AGIP Blasia 32**
Condensatore	**Capacitor**	*Kondensator*	**12,5 µF**	**12,5 µF**
Grado IP	**IP class**	*IP Grad*	**IP67**	**IP67**
Peso DU.350/350V	**Weight DU.350/350V**	*Gewicht DU.350/350V*	**20 kg**	**20 kg**
Peso DU.110	**Weight DU.110**	*Gewicht DU.110*	**16,2 kg**	**16,2 kg**

Donnees technique	**Datos técnicos**	**Dane techniczne**	**DU.350N**	**DU.350NV**
Alimentation	Alimentación	Zasilanie	**230 Vac**	**230 Vac**
Puissance absorbée	Consumo de potencia	Natężenie	**310 W**	**310 W**
Courant absorbé	Consumo de corriente	Pobór mocy	**1,4 A**	**1,4 A**
Couple	Par	Moment obrotowy	**450 Nm**	**270 Nm**
Classe d'isolement	Clase aislamiento mot.	Klasa izolacji silnika	**F**	**F**
Bruit	Ruido	Max. halas	**<70 dB**	**<70 dB**
Temps manoeuvre 90°	Tiempo maniobra 90°	Czas posuwu skrzydła dła kąta 90°	**18 s (1).**	**11 s (1).**
Poids max. porte	Peso máx. hoja	Ciężar max. skrzydła	**500 kg**	**500 kg**
Longueur max. porte	Longitud máx. hoja	Dł. max. skrzydła	**3,5 m (2)**	**3 m (2)**
Intermittence travail	Intermitencia de trabajo	Cykliczność pracy	**40%**	**40%**
Lubrification	Lubrificación	Smarowanie	**AGIP Blasia 32**	**AGIP Blasia 32**
Condensateur	Condensador	Kondensator	**12,5 µF**	**12,5 µF**
Degré IP	Índice IP	Stopień IP	**IP67**	**IP67**
Poids DU.350/350V	Peso DU.350/350V	Ciężar DU.350/350V	**20 kg**	**20 kg**
Poids DU.110	Peso DU.110	Ciężar DU.110	**16,2 kg**	**16,2 kg**

(1) Con rallentamento disabilitato - **With braking disabled - *Avec ralentissement désactivé***
Wenn Geschwindigkeitsabnahme deaktiviert - Con ralentización inhabilitada - **Przy funkcji zwolnienia biegu wykluczonej**

(2) È possibile automatizzare anche ante di lunghezza maggiore ma il funzionamento diventa meno dolce e regolare.
Automation for longer wings is also possible but running would not be so smooth and regular.
Flügel mit Länge über 3.5 m können automatisiert werden aber der Betrieb wird in diesem Fall weniger leicht und regelmäßig sein.
Il est possible d'automatiser des portes plus longues mais le fonctionnement sera moins aisé et moins régulier.
Es posible automatizar también hojas de longitud mayor pero el funcionamiento resulta menos dulce y regular.
Możliwa jest automatyzacja bram o skrzydłach o większej szerokości, ale działanie będzie mniej delikatne i regularne.

Dimensioni d'ingombro - Overall dimensions
Abmessungen - Dimensions d'encombrement
Dimensiones exteriores - Wymiary gabarytowe



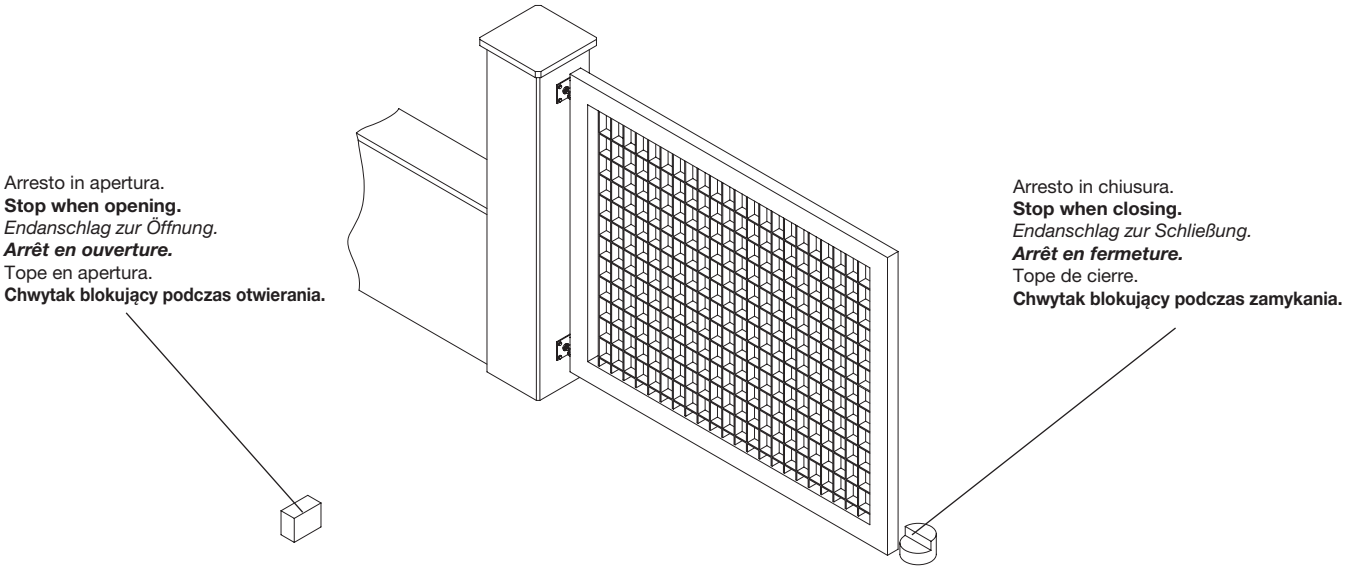
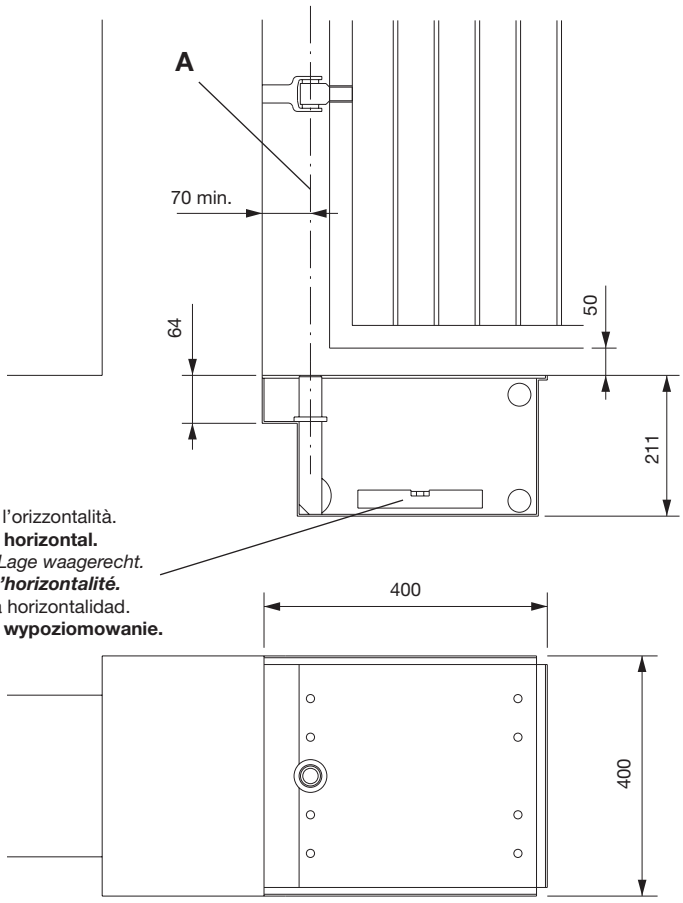


Fig.1

Ingombri cassa art. DU.110.
Overall dimensions box art. DU.110.
Raumbedarf Kasten DU.110.
Dimensions caisse art. DU.110.
Volumen caja art. DU.110.
Gabaryt skrzynki art. DU.110.



Controllare l'orizzontalità.
Check it is horizontal.
Prüfen, ob Lage waagerecht.
Contrôler l'horizontalité.
Controlar la horizontalidad.
Sprawdzić wypoziomowanie.

Controllare che l'asse A sia perfettamente a piombo.
Check axis A is plumbed.
Prüfen, ob Achse A vollkommen lotrecht.
Contrôler que l'axe A soit parfaitement d'aplomb.
Controlar que el eje A esté perfectamente aplomado.
Sprawdzić czy oś A jest dokładnie w pionie.

Fig.2

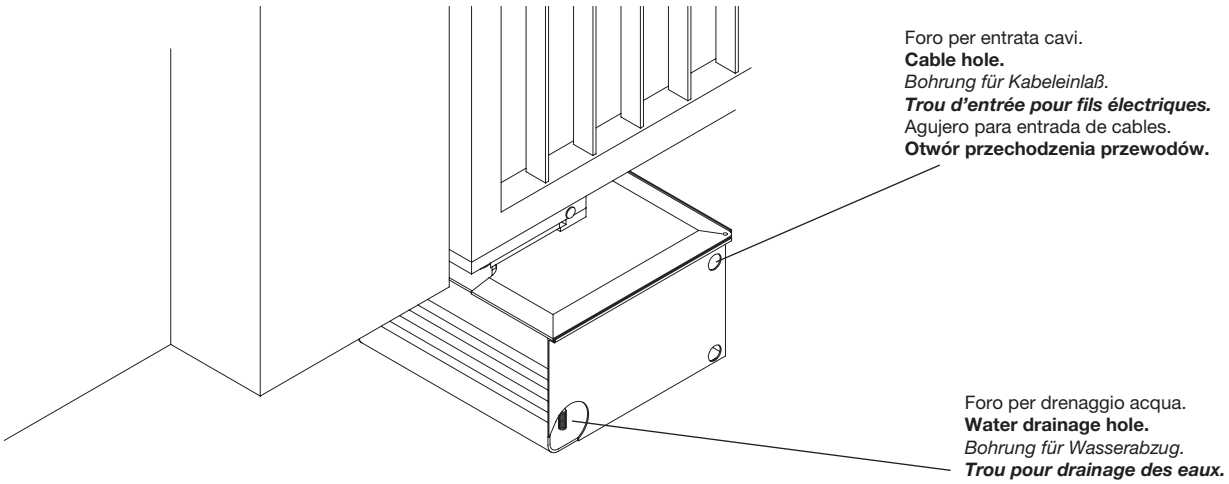

Foro per entrata cavi.
Cable hole.
Bohrung für Kabeleinlaß.
Trou d'entrée pour fils électriques.
Agujero para entrada de cables.
Otwór przechodzenia przewodów.
Foro per drenaggio acqua.
Water drainage hole.
Bohrung für Wasserabzug.
Trou pour drainage des eaux.
Agujero para drenaje de agua.
Otwór drenowania wody.

Fig.3

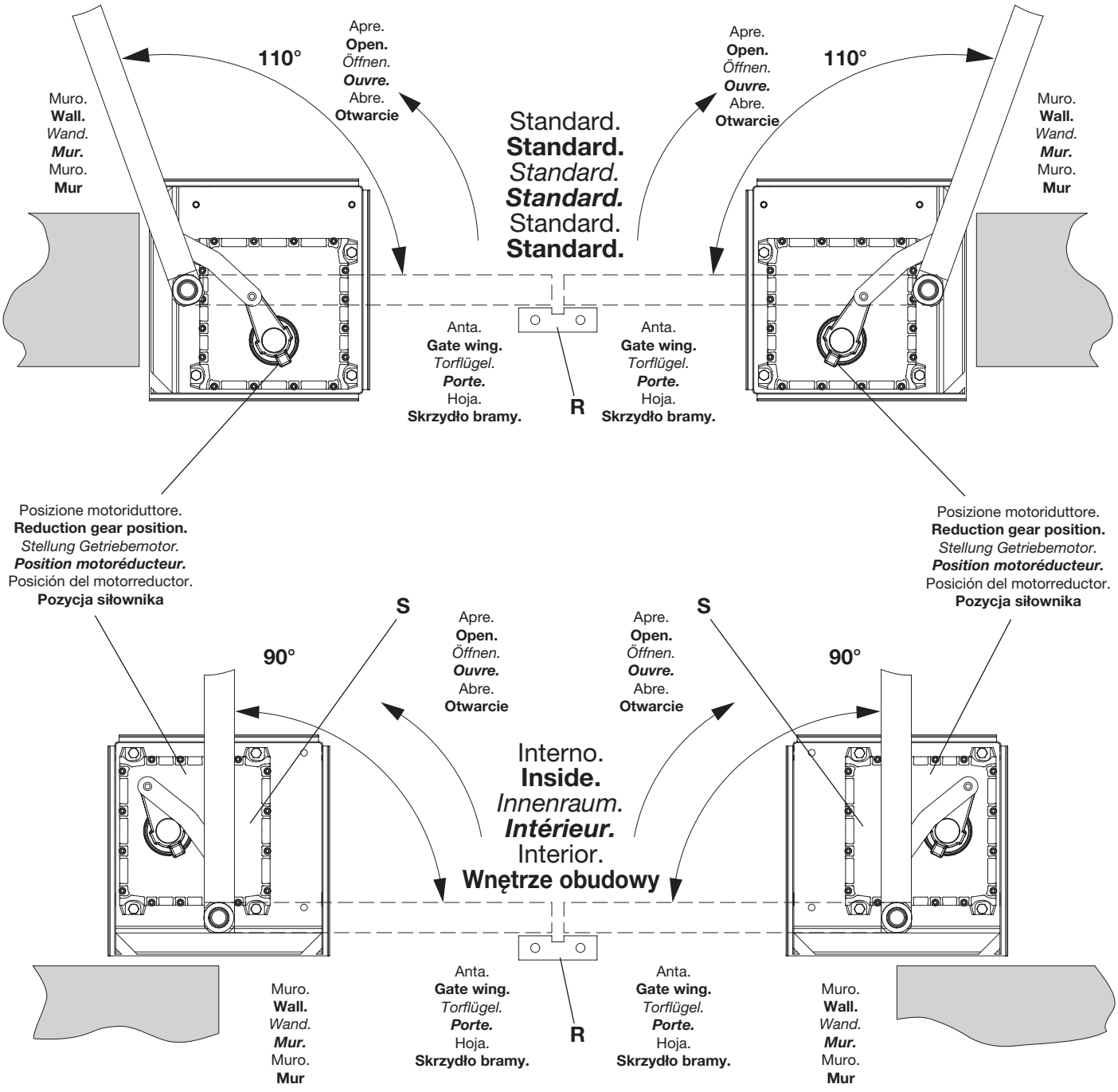
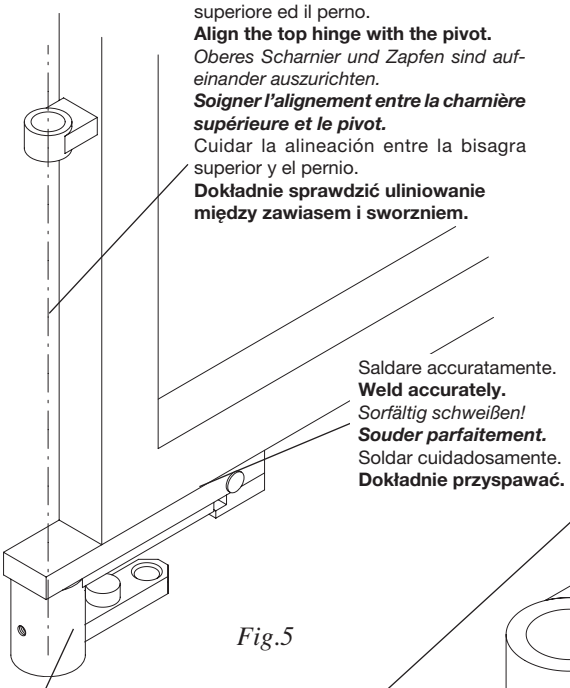

110°
Apre.
Open.
Öffnen.
Ouvre.
Abre.
Otwarcie
Standard.
Standard.
Standard.
Standard.
Standard.
Standard.
Muro.
Wall.
Wand.
Mur.
Muro.
Mur
Anta.
Gate wing.
Torflügel.
Porte.
Hoja.
Skrzydło bramy.
R
Posizione motoriduttore.
Reduction gear position.
Stellung Getriebemotor.
Position motoréducteur.
Posición del motorreductor.
Pozycja siłownika
S
90°
Interno.
Inside.
Innenraum.
Intérieur.
Interior.
Wnętrze obudowy

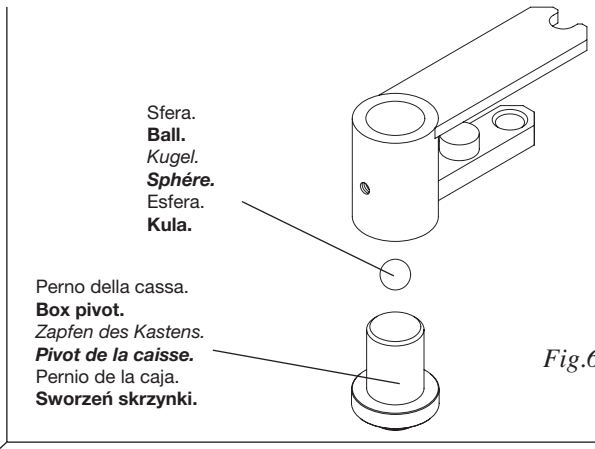
Fig.4



Curare l'allineamento tra la cerniera superiore ed il perno.
Align the top hinge with the pivot.
Oberes Scharnier und Zapfen sind aufeinander auszurichten.
Soigner l'alignement entre la charnière supérieure et le pivot.
Cuidar la alineación entre la bisagra superior y el pernio.
Dokładnie sprawdzić uliniowanie między zawiasem i sworzniem.

Saldare accuratamente.
Weld accurately.
Sorfältig schweißen!
Souder parfaitement.
Soldar cuidadosamente.
Dokładnie przyspawać.

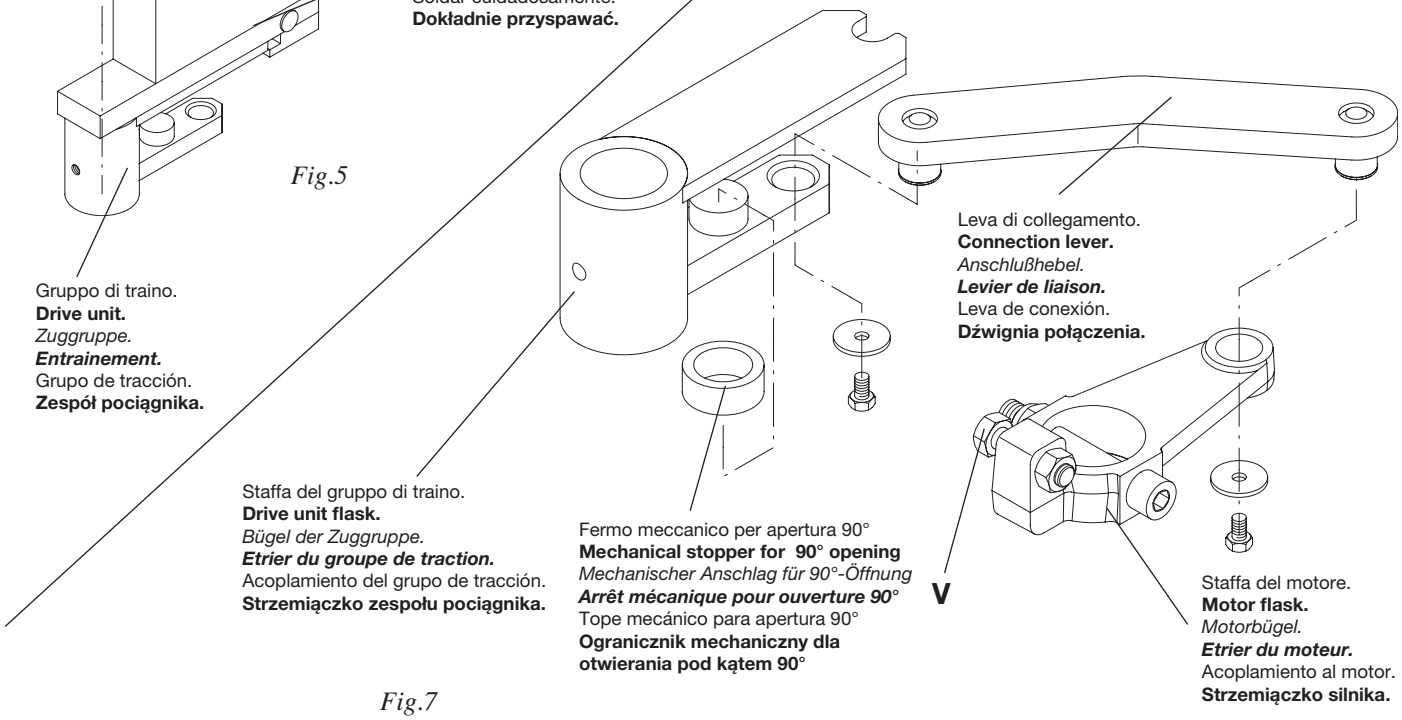
Fig.5



Sfera.
Ball.
Kugel.
Sphére.
Esfera.
Kula.

Perno della cassa.
Box pivot.
Zapfen des Kastens.
Pivot de la caisse.
Pernio de la caja.
Sworzeń skrzynki.

Fig.6



Gruppo di traino.
Drive unit.
Zuggruppe.
Entrainement.
Grupo de tracción.
Zespół pociągnika.

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

Fermo meccanico per apertura 90°
Mechanical stopper for 90° opening
Mechanischer Anschlag für 90°-Öffnung
Arrêt mécanique pour ouverture 90°
Tope mecánico para apertura 90°
Ogranicznik mechaniczny dla otwierania pod kątem 90°

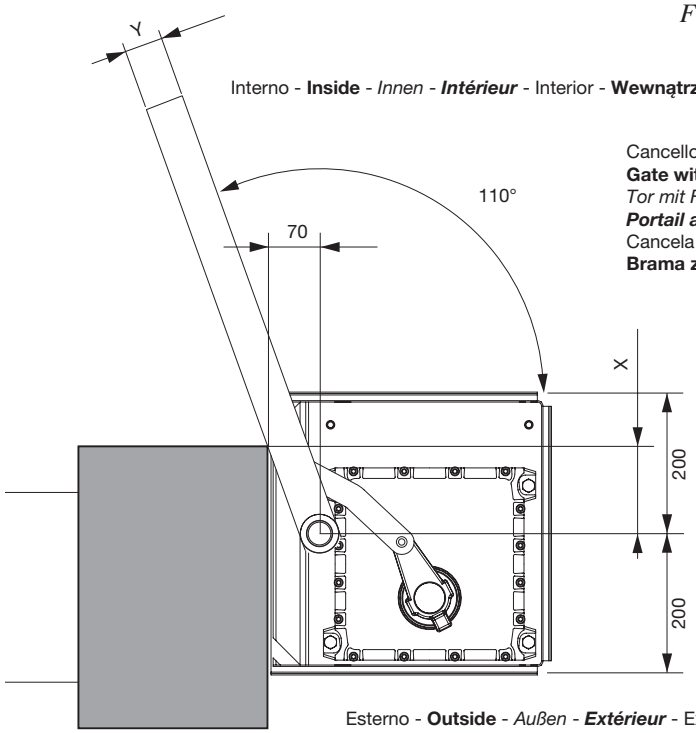
Leva di collegamento.
Connection lever.
Anschlußhebel.
Levier de liaison.
Leva de conexión.
Dźwignia połączenia.

V

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

Fig.7

Fig.8



Interno - **Inside** - *Innen* - ***Intérieur*** - Interior - **Wewnątrz**

Esterno - **Outside** - *Außen* - ***Extérieur*** - Exterior - **Zewnątrz**.

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.

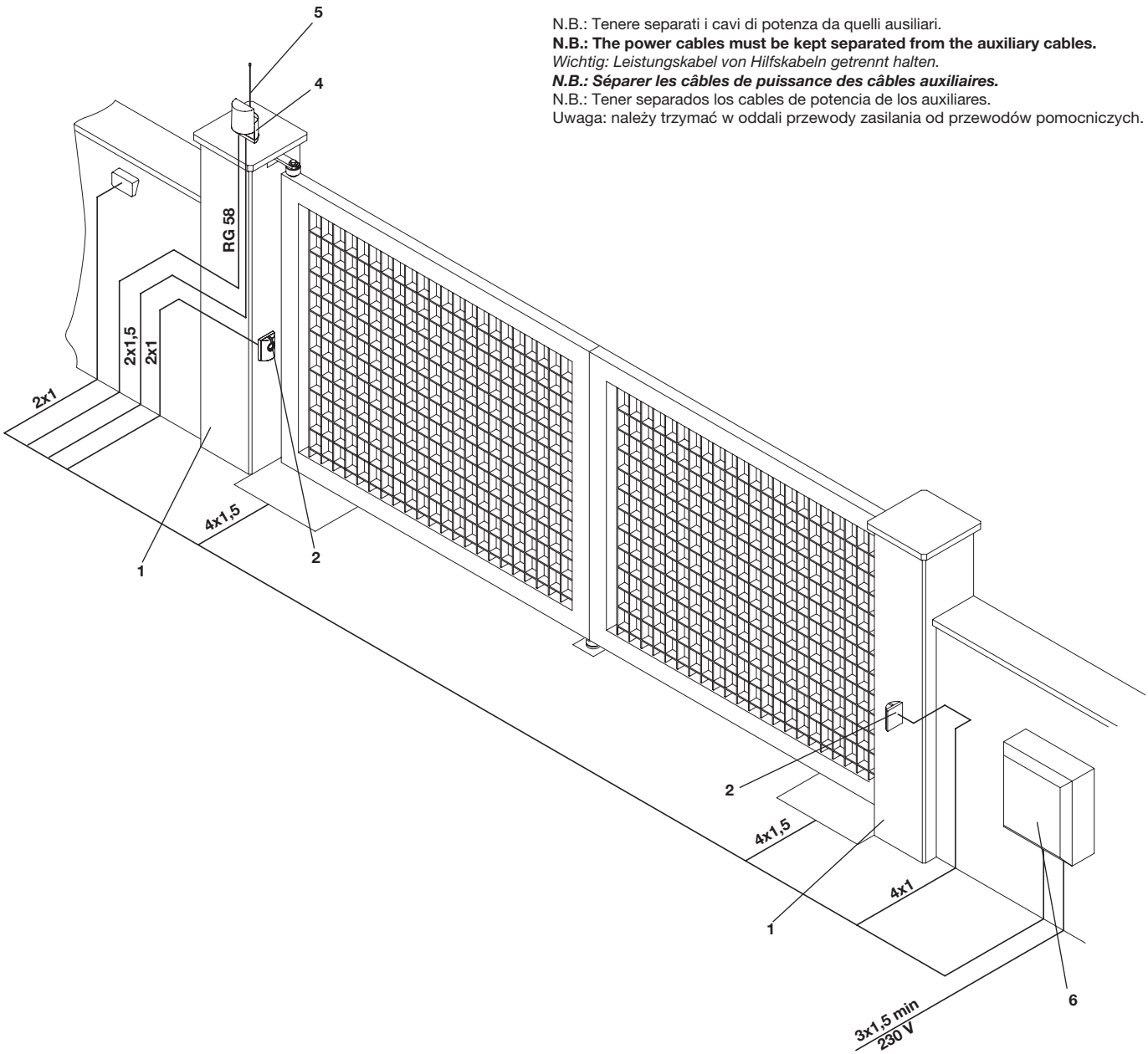
This table shows some min. X dimensions based on gate thickness Y.

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.



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

Objaśnienia:
1 Siłownik DU.350N
2 Fotokomórki FTC/FTM
3 Przełącznik kluczowy CH (zewnętrzny) lub panel z przyciskami
4 Światło migające LAMP
5 Antena AW
6 Centralka elektroniczna

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

A completely built-in system that does not alter the appearance of gates.
Simple and reliable, it can be installed on any hinged gate of up to a max. 3.5 m per wing (3m max for DU350NV model).
Movement is quiet and smooth thanks to a lever system that adjusts the speed depending on the different operation phases.
The full oil bath motor units prevents water seepage and formation of condensate which might permanently damage motor operation.
Electric locking is not required because the irreversible system ensures locking of the wings.
Installation is easy; once the box is embedded, the motor unit is fastened with stainless-steel nuts and bolts.
A special key is supplied to release it for manual manoeuvre.
The foundation boxes are in hot-galvanized sheet metal to guarantee longer life.
Device DU.180 offers 180° opening (for wing lengths not exceeding 2 m).
The same DU.180 can be used 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.350N/DU.350NV 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. Foundation box laying

Dig as per instructions given in fig. 2 and make sure that on one of the four angles, where suitable holes have been made, a water drainage and a cable terminal have been prearranged. (fig. 3)
Cement the box and check it is horizontal with the level.

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 Weld the drive unit to the wing as per Fig. 5.
4.3 Place the wing into its seat after fitting the ball between the foundation box pivot and the drive unit (Fig. 6).
4.4 Connect the drive unit with the motor flask through the connection lever (Fig. 7)
4.5 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).
4.6 The mechanical stopper for 90° opening is available as optional. It must be placed in the special housing on the drive bracket, as indicated in Fig. 7.
4.7 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. 7)

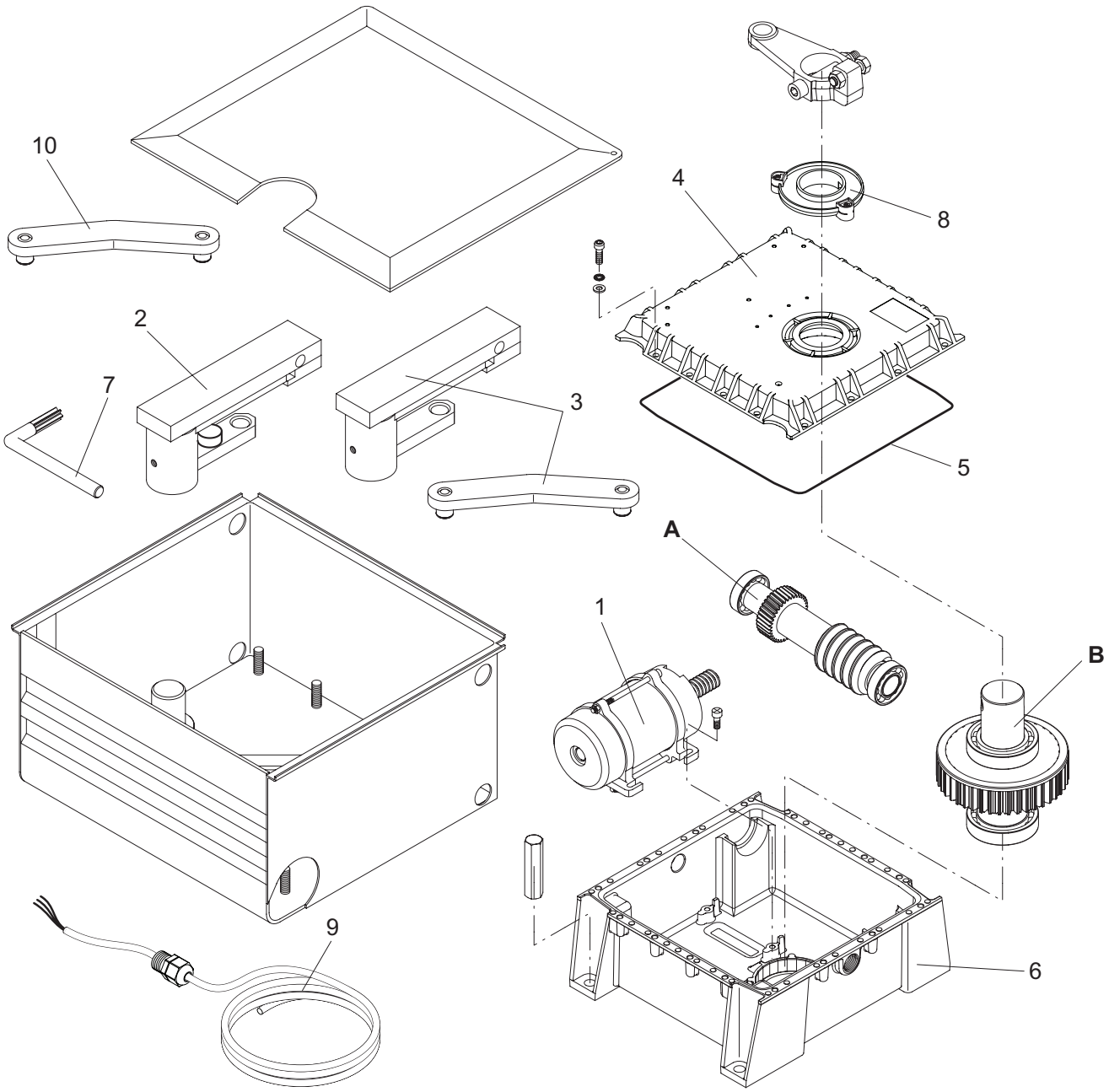
When positioning the boxes for 110° opening, Art. DU.110, calculate dimension X (between pivot and load bearing corner) so that it permits the rotation also in consideration of the gate thickness Y.

6. 180° opening

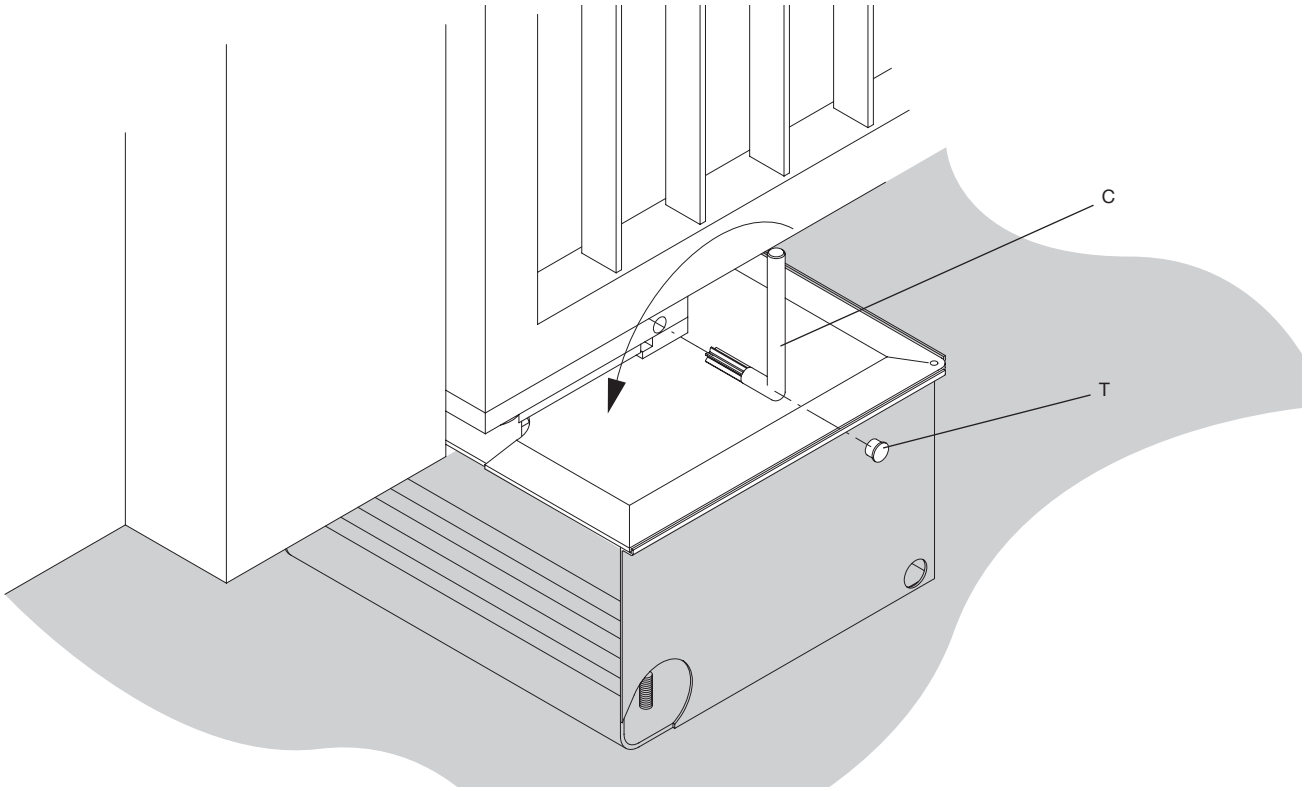
Device DU.180 offers 180° opening and use the DU.110 box. This option is recommended for wing length up to 2 m; it can also be used for longer lengths but in this case operation would not be smooth and regular.

CAUTION

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.



Pos.	Denominazione - Description - Bezeichnung - Dénomination - Denominación - Określenie						Cod.
A	Vite senza fine DU.350N	**Worm screw DU.350N**	*Welle DU.350N*	***Vis sans fin DU.350N***	Tornillo sin fin DU.350N	Śruba dwustronna DU.350N	9686372
	Vite senza fine DU.350NV	**Worm screw DU.350NV**	*Welle DU.350NV*	***Vis sans fin DU.350NV***	Tornillo sin fin DU.350NV	Śruba dwustronna DU.350NV	9686373
B	Albero uscita Du.350N	**Output shaft DU.350N**	*Welle DU.350N*	***Arbre DU.350N***	Eje de salida DU.350N	Wał wyjściowy DU.350N	9686379
	Albero uscita Du.350NV	**Output shaft DU.350NV**	*Welle DU.350NV*	***Arbre DU.350NV***	Eje de salida DU.350NV	Wał wyjściowy DU.350NV	9686380
1	Motore	**Motor**	*Motor*	***Moteur***	Motor	Silnik	9686013
2	Sblocco	**Release**	*Entblockung*	***Déblocage***	Desbloqueo	Zespół odblok.	9686396
3	Sblocco + Leva	**Release + Lever**	*Entblockung + Hebel*	***Déblocage + Levier***	Desbloqueo + Palanca	Zespół odblok. + Dźwigienka	9686018
4	Carter superiore	**Upper cover**	*Gehäuse*	***Carter***	Cárter	Karter	9686376
5	Guarnizione	**Gasket**	*Dichtung*	***Guarniture***	Junta	Uszczelka	9686377
6	Carter inferiore	**Lower cover**	*Gehäuse*	***Carter***	Cárter	Karter	9686378
7	Chiave sblocco	**Key**	*Schlüssel*	***Clé***	Llave de desbloq.	Dźwignia odrygl.	9686071
8	Camme finec.	**Limit stop cam**	*Nocke*	***Came***	Levas fin. de car.	Krańcówka	9686323
9	Cavo alimentaz.	**Power cable**	*Stromkabel.*	***Câble alim.***	Cable alimen.	Przewód zasilania	9686371
10	Leva	**Lever**	*Hebel*	***Levier***	Palanca	Dźwigienka	9686374



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

Come tutti gli altri automatismi della gamma Benincà, anche il DU.350V è dotato di uno sblocco semplice e funzionale che permette la manovra manuale in caso di mancanza dell'energia elettrica.
Procedere come segue:
- sfilare il tappo in plastica T facendo leva sul bordo.
- inserire la chiave in dotazione C e ruotarla.
- tenendo la chiave ruotata, spingere l'anta fino a farla ruotare di qualche grado.
- Levare pure la chiave e rimettere i tappi; il portone si riblocchera automaticamente non appena riportato nella posizione iniziale o quando si riattiverà il motore.

Manutenzione

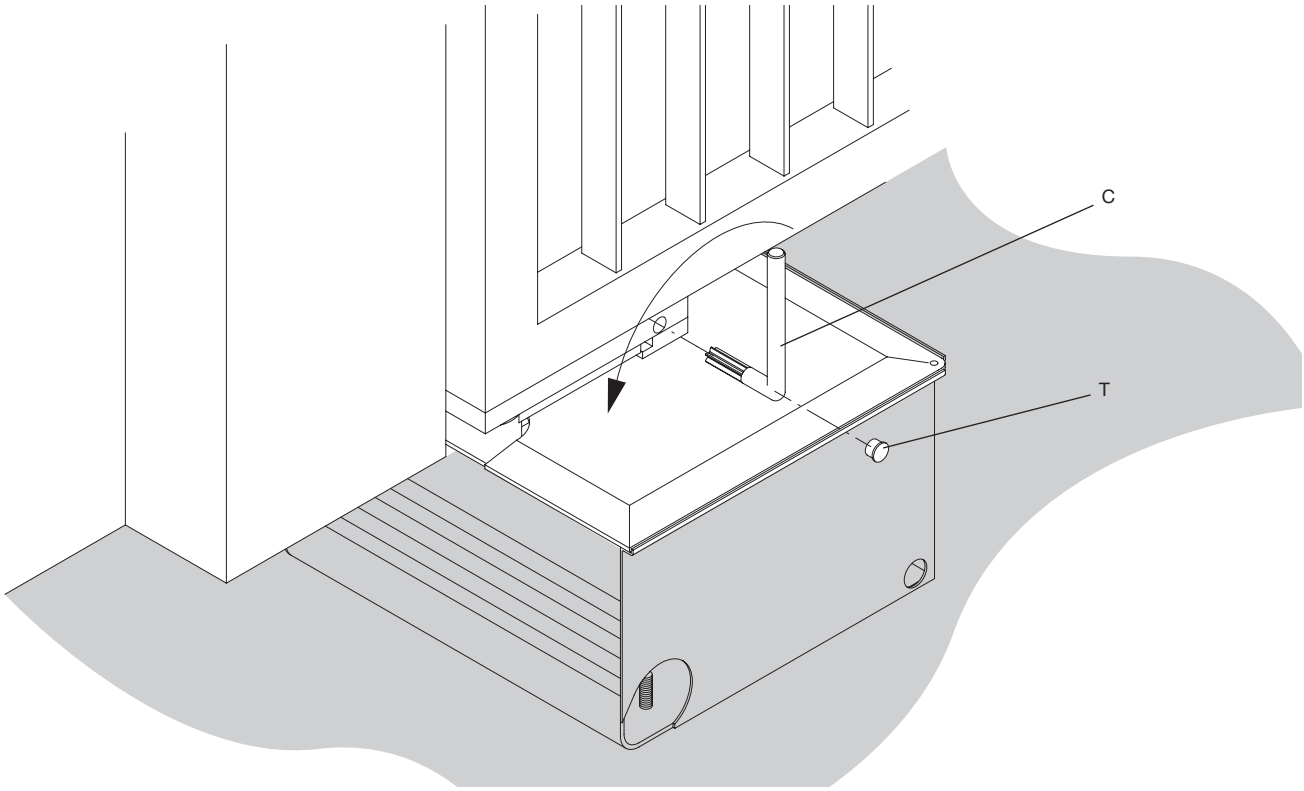
- Controllare periodicamente l'efficienza dello sblocco manuale di emergenza.
- Astenersi assolutamente dal tentativo di effettuare riparazioni, potreste incorrere in incidenti; per queste operazioni contattare un tecnico specializzato.
- L'attuatore non richiede manutenzioni ordinarie, tuttavia è necessario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

Smaltimento

Qualora il prodotto venga posto fuori servizio, è necessario seguire le disposizioni legislative in vigore al momento per quanto riguarda lo smaltimento differenziato ed il riciclaggio dei vari componenti (metalli, plastiche, cavi elettrici, ecc.); è consigliabile contattare il vostro installatore o una ditta specializzata ed abilitata allo scopo.

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

As all other Benincà automatisms, the DU.350V is featured by a simple and functional release which permits the manual move in case of electricity interruption.
Proceed as follows:
- Extract the plastic plug T by levering on the edge
- Insert the key C and turn it.
- While keeping the key turned push the wing until it rotates slightly.
- Remove the key and fit the plugs again; the gate will automatically stop once back in its original position or once the motor will be started.

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.