## ELECTROMECHANICAL OPERATOR FOR SWING GATES

## FLIPPER 24V W. CONTROL UNIT FLIPPER 24V W/OUT CONTROL UNIT



# FITTING INSTRUCTIONS and security advices 

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Flipper is an irreversible electromechanical swing gate operator for medium sized piers, maximum leaf length 2 m or 200 kg weight (see drawing in Fig 4-A)

## DIMENSIONS (mm)

| TECHNICAL DATA | FLIPPER 24V W/C.U. | FLIPPER 24V NO C.U. |
| :--- | :---: | :---: |
| Power Supply | $230 \mathrm{~V} \sim$ | $24 \mathrm{~V}=-=$ |
| Motor | $24 \mathrm{~V}=-$ |  |
| Motors' power | 40 W |  |
| Cycles hour (at a temp. of $20^{\circ} \mathrm{C}$ ) | 20 |  |
| Working temperature | $-20^{\circ} \mathrm{C} \nmid+55^{\circ} \mathrm{C} \backslash$ |  |
| Weight | 8 kg |  |
| Max weight of the gate | 200 kg |  |
| Max. weight of the leaf | 2 m |  |
| Opening degree | $110^{\circ}$ |  |
| IP degree | 24 |  |

Note: The frequency of use is valid only for the first hour at $20^{\circ} \mathrm{C}$ room temperature.

Fig. 1

## STANDARD INSTALLATION

Note: If the power supply cable is for outside, it has to be at least of HO5RN-F type.



Fig. 3

TAKING APART OF CARTER
Open the little release door and take off the screw on the inside (Fig 4).


DRAWING LEAVES DIMENSIONS


FLIPPER 24V W/CONTROL U.


Fig. 5

FLIPPER 24V W/CONTROL U.


Fig. 6



The yellow/ green ground wire is pre-wired and must not be removed. Pay particular attention when connceting the power supply cable referring to the corrisponding references.

Note: All the cables must be restrained by an additional fixing in proximity of the clamps. For instance through bands.
use 6,3A del.


Note: The power supply cable necessarily has to be separate from the low tension or control cables.

## GATE ARRANGEMENT

It is necessary to make controls on the gate to make sure the application of FLIPPER automation can be possible.

Make sure that:
A. The fixed and moving parts of the gate have a strong and crush-proof structure;
B. Each leaf does not weigh more than 200 kg (see drawing pag. 20, Fig 4-A);
C. Each is leaf is not longer than 2 m (see drawing pag. 20, Fig 4-A);
D. The hinges are strongly anchored and can support the torque of the operator; they do not have irregular movements and/or any friction during the whole movement of the leaf;

The FLIPPER operator comes with limit switch stop in opening and closing, nevertheless it is recommended to install mechanical limit switch stops to be fixed on the ground in closing and opening (Fig. 9).


## DIMENSIONS FOR THE INSTALLATION

Fig. 10

## MOUNTING PLATE AND MOTOR ASSEMBLING

- Attach the mounting plate to the pilaster with 4 screws and 4 washers *not included( (Fig. 11).
- Make sure that the plate is in horizontal position (with level).
- Mount the motor on the plate using the 2 furnished screws.

Note: Use appropriate fixing wedges for the material on which will be fixed the support.



## ASSEMBLING OF THE ARTICULATED ARM

- The two articulated arms must be assembled differently, distinguishing the right arm from the left one.

See Fig. 13 and 14.
Note: Before inserting the pivots lubricate them with water repellent grease


## ATTACHMENT OF THE ARTICULATED ARM TO THE MOTOR

- Fit the articulated arm into the motor shaft and lock it with the special screws (Fig. 15).
- The protection cover must be mounted on the end of all adjustments.



## EXTERNAL RELEASE MOUNTING



For further information see point "External release".

## FIXING OF THE FRONT BRACKET

- Close the leaf completely
- Release the motor (see Fig. 26 e 27)
- Extend the articulated arm (Fig. 10), lean the adjustable front bracket on the gate and make two marks on the center of the two holes (Fig. 17) respecting the measures in Fig. 10.
- Perforate the leaf and fix the front bracket with the screws (Fig. 18)
- Before tightening the screws move the front bracket to the right or to the left for a good positioning of the arm on the gate (Fig. 19) respecting the measure C in Fig. 10.



## MECHANICAL POSITIVE STOP ADJUSTMENT IN OPENING

- Release the operator.
- Open the leaf completely or up to the desired opening point.
- Position the stop as in Fig. 24 on the stop of the arm and lock the screws as in Fig. 25.
N.B: The delivered screws are selfthreading and have to be locked at 10 Nm .



## LEFTHAND MOUNTING




Fig. 24


KEY SWITCH


PHOTOCELLS


RADIO RECEIVER


ELECTRIC LOCK


TRANSMITTER


KIT EXTERNAL LOCK FLIPPER


## TO THE ATTENTION OF USERS AND TECHNICIANS

## RELEASE SYSTEM

## To release operate as follows:

- Take off the protection cap of the lock.
- Insert the key and turn about $90^{\circ}$ into clockwise direction (Fig. 26).
- Pull the door until its complete opening (Fig.27).
- Open manually the leaf

To block again operate as follows:

- close the door again.
- Turn the key about $90^{\circ}$ into anti-clockwise direction.
- Extract the key.
- Close the lock again with the protection cap.



## RISK EXAMINATION

The points pointed by arrows in Fig. 28 are potentially dangerous. The installer must take a close risk examination to prevent crushing, conveying, cutting, grappling, trapping so to guarantee a safe installation for people, things and animals (Re. Laws in force in the country where the installation has been made).

## PERIODICAL MAINTENANCE

| Grease the moving parts <br> (Articulated arm, release, etc..) | Annual |
| :--- | :---: |
| Check the functioning of the release | Annual |
| Check the lock of the screws | Annual |
| Check the wear of the devices in movement | Annual |
| Check the integrity of the connected cables | Annual |



Fig. 28


The periodic maintenance must be executed by qualified personal.
SEA s.r.l. is not liable for damages caused by bad maintenance.

Sistemi Elettronici
di Apertura Porte e Cancelli
FITTING AND CONNECTION INSTRUCTIONS

## TO THE ATTENTION OF USERS AND TECHNICIANS

## INTENDED USE:

FLIPPER W/C.U. and FLIPPER W/OUT C.U. operator has been designed to be used only for the automation of swing gates.

## SPARE PARTS:

To obtain spare parts contact:
SEA S.r.I. -Zona Ind.le S.Atto, 64020 S. Nicolò a Tordino - Teramo -ITALIA
SAFETY AND ENVIRONMENTAL COMPATIBILITY:
Don't waste product packing materials and/or circuits.
When being transported this product must be properly packaged and handled with care.

## WARRANTY

The warranty for the operator FLIPPER W/C.U. and FLIPPER W/OUT C.U. is of 24 months starting from the date printed on the product. The product will be accepted under guaranty if it does not present damages due to improprer use or to any kind of modification or changement.

## MAINTENANCE AND OUT OF SERVICE:

The decommission and maintenance of FLIPPER W/C.U. and FLIPPER W/OUT C.U. must only be carried out by specialised and qualified personnel.

## NOTE: THE MANUFACTURER CAN NOT BE DEEMED RESPONSIBLE FOR ANY DAMAGE OR INJURY CAUSED BY IMPROPER USE OF THIS PRODUCT.

SEA reserves the right to do changes or variations that may be necessary to its products with no obligation to notice.

## ARRANGEMENTS

Read attentively the installation manual as it gives important indications concerning safety, installation, use and maintenance.

Installation, maintenance, reparation, controls and eventual putting out of function of the product must be executed by qualified staff only.

For the security of people it is important to follow with attention all the advises and instructions in this manual. A wrong installation or a wrong use of the product can cause sever damages to people.
The max. length of the power supply cable between control unit and motors is 10 m , use cables with $\mathbf{2 , 5} \mathbf{~ m m}^{2}$ section.

Use wirings with double insulated cables (cables with sheath) up to the immediate proximities of the terminals especially for the power supply cable (230V~).

The control unit must not be used by people (including children) whose physical, sensory or mental ability is reduced, or with lack of experience or knowledge, unless they are guarded or have been instructed on how to use the control unit by a person respondsible for their safety. Children must be guarded to make sure that they don't play with the control unit.

Foresee on the power supply net of the automation a device that assures the complete omnipolar disconnection from the net, with a distance of opening of the contacts on each pole of at least 3 mm . Those devices of disconnection have to be foreseen on the power supply net accordingly to the rules of installation, and they have to be directly connected to the power supply terminals.

It is necessary to keep in adequate distance (at least 2.5 mm in the air) the low tension conductors (230V~) from the very low tension conductors (SELV) or to use a suitable sheath of at least 1 mm which supplies an additional insulation.

Make sure that during installation the power supply and interconnection cables cannot come into contact with pointed or sharp extremities.

Dispose of the package materials (plastics, carton, polistirene, etc.) respecting the laws in order. Keep nylon and polistirene bags out of the reach of children.

## TO THE ATTENTION OF USERS AND TECHNICIANS

Save these instructions for further information attaching them to the technical documents.
This product has been projected and built exclusively for the use described in this instruciton manual.
Uses not indicated in this manual could damage the product and be source of danger.
SEA declines all responsibility for improper or different use from the one for which it has been planed and described in the present manual.

Don't install the product in explosive atmospheres.
SEA declines all responsibility for the non-observance of the good technique in the construction of closings (doors, gates, etc.), as well as for the deformations which could occure during the use.

Remove the power supply before any intervention on the installation. Disconnect also possible battery buffers if present.
Make sure that the earth installation has been correctly made: connect all the metallic parts of the closing (doors, gates, etc.) and all the components of the installation provided with earth terminals.

Apply all the safety devices (photocells, sensitive edges, etc.) which are necessary to protect the area from dangers of crushing, conveying, cutting.

SEA declines all responsibility for safety and for the correct functioning of the automation if parts of other producers are used.
Use only original parts for any maintenance or reparation.
Do not modify the parts of the automation if not explicitly authorized by SEA.
Instruct the user of the installation on the applied command systems and how to manually open the gate in case of emergency.

What is not explicitly contained in these instructions is not permitted.

## TERMS OF SALE

EFFICACY OF THE FOLLOWING TERMS OF SALE: the following general terms of sale shall be applied to all orders sent to SEA srl. All sales made by SEA to all costumers are made under the prescription of this terms of sales which are integral part of sale contract and cancel and substitute all apposed clauses or specific negotiations present in order document received from the buyer.
GENERAL NOTICE The systems must be assembled exclusively with SEA components, unless specific agreements apply. Noncompliance with the applicable safety standards (European Standards EM12453 - EM 12445) and with good installation practice releases SEA from any responsibilities. SEA shall not be held responsible for any failure to execute a correct and safe installation under the above mentioned standards.

1) PROPOSED ORDER The proposed order shall be accepted only prior SEA approval of it. By signing the proposed order, the Buyer shall be bound to enter a purchase agreement, according to the specifications stated in the proposed order.
On the other hand, failure to notify the Buyer of said approval must not be construed as automatic acceptance on the part of SEA.
2) PERIOD OF THE OFFER The offer proposed by SEA or by its branch sales department shall be valid for 30 solar days, unless otherwise notified.
3) PRICING The prices in the proposed order are quoted from the Price List which is valid on the date the order was issued. The discounts granted by the branch sales department of SEA shall apply only prior to acceptance on the part of SEA. The prices are for merchandise delivered ex-works from the SEA establishment in Teramo, not including VAT and special packaging. SEA reserves the right to change at any time this price list, providing timely notice to the sales network. The special sales conditions with extra discount on quantity basis (Qx, Qx1, Qx2, Qx3 formula) is reserved to official distributors under SEA management written agreement.
4) PAYMENTS The accepted forms of payment are each time notified or approved by SEA. The interest rate on delay in payment shall be $1.5 \%$ every month but anyway shall not be higher than the max. interest rate legally permitted.
5) DELIVERY Delivery shall take place, approximately and not peremptorily, within 30 working days from the date of receipt of the order, unless otherwise notified. Transport of the goods sold shall be at Buyer's cost and risk. SEA shall not bear the costs of delivery giving the goods to the carrier, as chosen either by SEA or by the Buyer. Any loss and/or damage of the goods during transport, are at Buyer's cost.
6) COMPLAINTS Any complaints and/or claims shall be sent to SEA within 8 solar days from receipt of the goods, proved by adequate supporting documents as to their truthfulness.
7) SUPPLY The concerning order will be accepted by SEA without any engagement and subordinately to the possibility to get it's supplies of raw material which is necessary for the production; Eventual completely or partially unsuccessful executions cannot be reason for complains or reservations for damage. SEA supply is strictly limited to the goods of its manufacturing, not including assembly, installation and testing. SEA, therefore, disclaims any responsibility for damage deriving, also to third parties, from non-compliance of safety standards and good practice during installation and use of the purchased products.
8) WARRANTY The standard warranty period is 12 months. This warranty time can be extended by means of expedition of the warranty coupon as follows:
SILVER: The mechanical components of the operators belonging to this line are guaranteed for 24 months from the date of manufacturing written on the operator.
GOLD: The mechanical components of the operators belonging to this line are guaranteed for 36 months from the date of manufacturing written on the operator.
PLATINUM: The mechanical components of the operators belonging to this line are guaranteed for 36 months from the date of manufacturing written on the operator. The base warranty ( 36 months) will be extended for further 24 months (up to a total of 60 months) when it is acquired the certificate of warranty which will be filled in and sent to SEA s.r.I. The electronic devices and the systems of command are guaranteed for 24 months from the date of manufacturing. In case of defective product, SEA undertakes to replace free of charge or to repair the goods provided that they are returned to SEA repair centre. The definition of warranty status is by unquestionable assessment of SEA. The replaced parts shall remain propriety of SEA. Binding upon the parties, the material held in warranty by the Buyer, must be sent back to SEA repair centre with fees prepaid, and shall be dispatched by SEA with carriage forward. The warranty shall not cover any required labour activities.
The recognized defects, whatever their nature, shall not produce any responsibility and/or damage claim on the part of the Buyer against SEA. The guarantee is in no case recognized if changes are made to the goods, or in the case of improper use, or in the case of tampering or improper assembly. Furthermore, the warranty shall not apply if SEA products are partly or completely coupled with non-original mechanical and/or electronic components, and in particular, without a specific relevant authorization, and if the Buyer is not making regular payments. The warranty shall not cover damage caused by transport, expendable material, faults due to non-conformity with performance specifications of the products shown in the price list. No indemnification is granted during repairing and/or replacing of the goods in warranty. SEA disclaims any responsibility for damage to objects and persons deriving from non-compliance with safety standards, installation instructions or use of sold goods.
9) RESERVED DOMAIN A clause of reserved domain applies to the sold goods; SEA shall decide autonomously whether to make use of it or not, whereby the Buyer purchases propriety of the goods only after full payment of the latter.
10) COMPETENT COURT OF LAW In case of disputes arising from the application of the agreement, the competent court of law is the tribunal of Teramo. SEA reserves the faculty to make technical changes to improve its own products, which are not in this price list at any moment and without notice. SEA declines any responsibility due to possible mistakes contained inside the present price list caused by printing and/or copying. The present price list cancels and substitutes the previous ones. The Buyer, according to the law No. 196/2003 (privacy code) consents to put his personal data, deriving from the present contract, in SEA archives and electronic files, and he also gives his consent to their treatment for commercial and administrative purposes. Industrial ownership rights: once the Buyer has recognized that SEA has the exclusive legal ownership of the registered SEA brand, he will commit himself to use it in a way which does not reduce the value of these rights, he won't also remove, replace or modify brands or any other particularity from the products. Any kind of replication or use of SEA brand is forbidden as well as of any particularity on the products, unless preventive and expressed authorization by SEA.
In accomplishment with art. 1341 of the Italian Civil Law it will be approved expressively clauses under numbers:
11) PAYMENTS -8) GUARANTEE - 10) COMPETENT COURT OF LOW

SEA
Sistemi Elettronici
di Apertura Porte e Cancelli
International registered trademark n. 804888

## Dichiarazione di conformità Declaration of Conformity

La SEA s.r.I. dichiara sotto la propria responsabilità e, se applicabile, del suo rappresentante autorizzato che i prodotti:
SEA srl declares under its proper responsability and, if applicable, under the responsability of its authorised representative that the products:

## Descrizione / Description

Operatore elettromeccanico Flipper C/APP (e tutti i suoi derivati)
Operatore elettromeccanico Flipper S/APP (e tutti i suoi derivati)
Electromechanical operator Flipper W/C.UNIT (and all its by-products)
Electromechanical operator Flipper W/OUT C. UNIT (and all its by-products)

Modello / Model
10854000-1
10854005-1
10854000-1
10854005-1

Marca / Trademark
SEA
SEA
SEA
SEA
sono costruiti per essere incorporati in una macchina o per essere assemblati con altri macchinari per costruire una macchina ai sensi della Direttiva 2006/42/CE:
are built to be integrated into a machine or to be assembled with other machinery to create a machine under the provisions of Directive 2006/42/CE:
sono conformi ai requisiti essenziali di sicurezza relativi al prodotto entro il campo di applicabilità delle Direttive Comunitarie 2006/95/CE e 2004/108/CE.
are conforming to the essential safety requirements related to the product within the field of applicability of the Community Directives 2006/95/CE and 2004/108/CE.

COSTRUTTORE o RAPPRESENTANTE AUTORIZZATO:
MANUFACTURER orAUTHORISED REPRESENTATIVE:

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SEAS.r.l.
DIREZIONE E STABILIMENTO:
Zona industriale 64020 S.ATTO Teramo-(ITALY)
Tel. }0861588341\mathrm{ r.a. Fax 0861588344
Http://www.seateam.com
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I test sul prodotto sono stati effettuati in configurazione standard e in riferimento alle norme specifiche per la sua classe d'utilizzo.
The products have been tested in standard configuration and with reference to the special norms concerning the classe of use.



This item has been produced following strict production procedures and has been singularly tested for the highest quality levels and for your complete satisfaction. Thanks for choosing SEA.

Cet article a été produit suivant des procédures d'usinage strictes et il a singulièrement été testé afin de garantir les plus hauts niveaux de qualité pour votre satisfaction.

Nous vous remercions d'avoir choisi SEA.

Este articulo ha sido producido siguiendo rigidos procedimientos de elaboracion y ha sido probando singolarmente a fin de garantizar los mas altos inveles de calidad y vuestra satisfaccion.
Le agradecemos por haber escogito SEA.

## CERTIFICATO DI ESTENSIONE GARANZIA CERTIFICATE OF WARRANTY EXTENTION

## PRODOTTO/ PRODUCT

- Modello/Model
- Matricola n. /Serial Number $\qquad$
- Data di acquisto/Date of order $\qquad$
- Data di installazione/Date of installation $\qquad$

Centrale/Control unit
Fotocellule/Photocells
RX - TX
Altri accessori /Other accessories


Altri/Others Altri/Others Altri/Others Altri/Others

## UTENTE/Customer

Nome e Cognome $\qquad$
First Name and Family Name $\qquad$
Indirizzo/Address $\qquad$

## INSTALLATORE/Installer

Ragione sociale/Company Name $\qquad$
Nome e Cognome/First and Family Name $\qquad$
Indirizzo/Address $\qquad$

## INSTALLATORE/INSTALLER

Firma per il trattamento dei dati personali 196/2003
Agreement of law No. 196/2003 (Privacy Code)

Copia da restituire
Copy to be returned

Firma e Timbro
Sign and Stamp
N.B: L'estensione della garanzia legale di 12 mesi a 24 mesi e 36 mesi è valida solo se il presente modulo viene rispedito per posta o fax a SEA Srl entro 15 gg dalla data di acquisto. Allegare relativa fattura d'acquisto.

Note: The extension of the legal standard warranty of 12 months to 24 months and to 36 months, is valid only if the present form is returned by mail or fax to SEA Srl within 15days from the date of purchase. Attach customer invoice.


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