



Automatic Gate Openers

International registered trademark n. 804888



Italiano

English

Français

Español

# **KITE**

**OPERATORE Elettromeccanico per cancelli a battente**  
**ELECTROMECHANICAL OPERATOR FOR SWING GATES**  
**OPÉRATEUR ELECTROMECHANIQUE POUR PORTAILS A BATTANT**  
**OPERADOR ELECTROMECÁNICO PARA CANCELAS A BATIENTE**



**MANUALE D'INSTALLAZIONE**  
**e informazioni sulla sicurezza**

**INSTALLATION MANUAL**  
**and safety information**

**SEA S.p.A.**

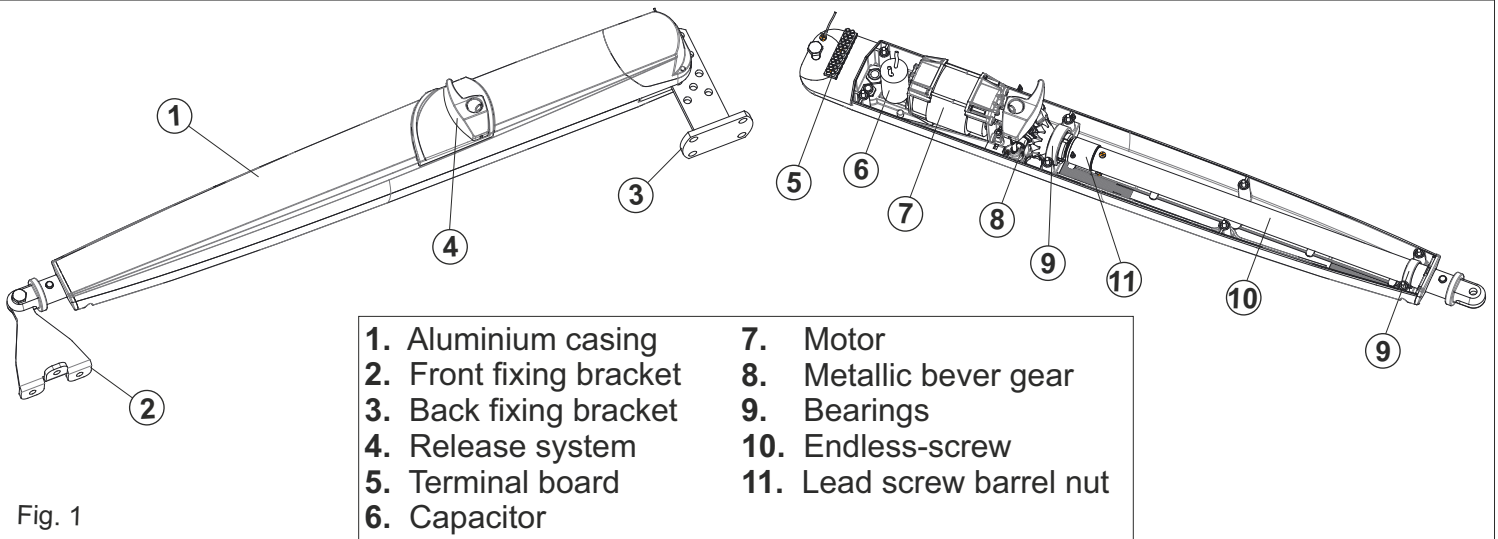
**Zona industriale Sant'Atto - 64100 - Teramo - ITALY**

**Tel. +39 0861 588341 r.a. Fax +39 0861 588344**

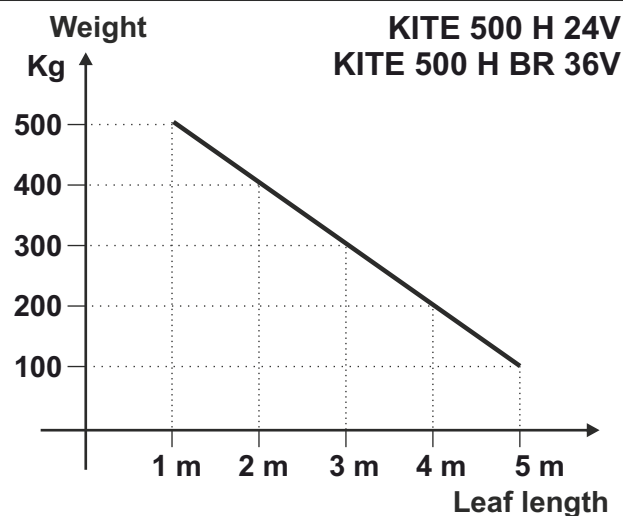
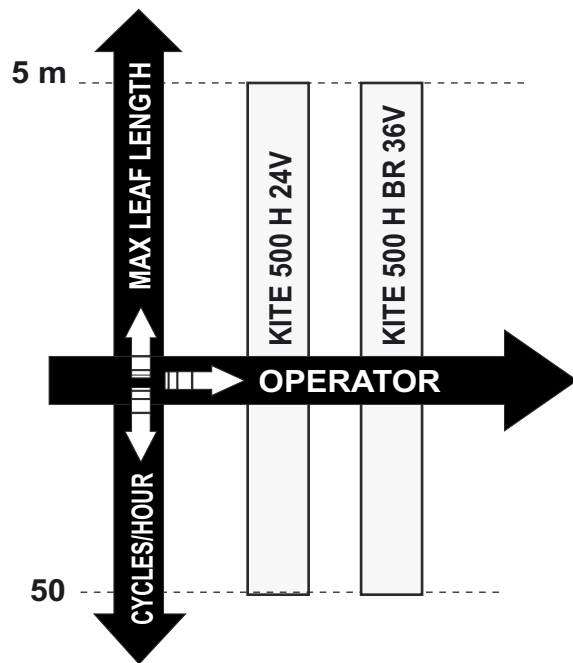
**[www.seateam.com](http://www.seateam.com)**

## TECHNICAL SPECIFICATIONS

**KITE** is an irreversible electromechanical swing gate operator, strong and safe, easy to install, for leaf length up to 5 m. KITE operator is equipped with release system through key, which allows the manual release of the leaf in case of emergency or black out



### USING GRAPHICS



TECHNICAL DATA	KITE 500 H 24V	KITE 500 H BR 36V
Power supply	24Vcc	36Vcc
Max. Power	60 W	260 W
Max. Absorbed current	2,5 A	1 A
Stroke	400 mm *	
Speed	ADJUSTABLE (MAX. 16")	ADJUSTABLE (MAX. 15")
Cycle/hour (operating at 20°C)	50	
Operating temperature	-20°C ↗ +55°C ↘	
Anti-crushing Clutch	ELECTRONIC	
Max. thrust	1800 N	3000 N
Operator weight	7,8 Kg	
Protection Class	Ip 44	
Max. Leaf length	5 m	
Max. Leaf weight	500 Kg	

**Note:** The frequency of use is valid only for the first hour at 20°C room temperature

\* 370 mm with magnetic limit switch

### DIMENSIONS (mm)

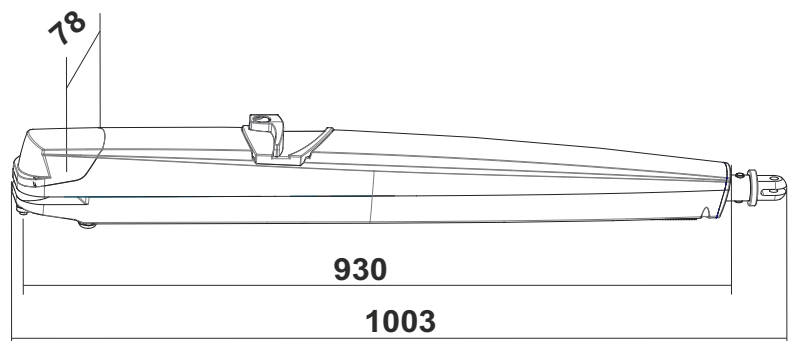
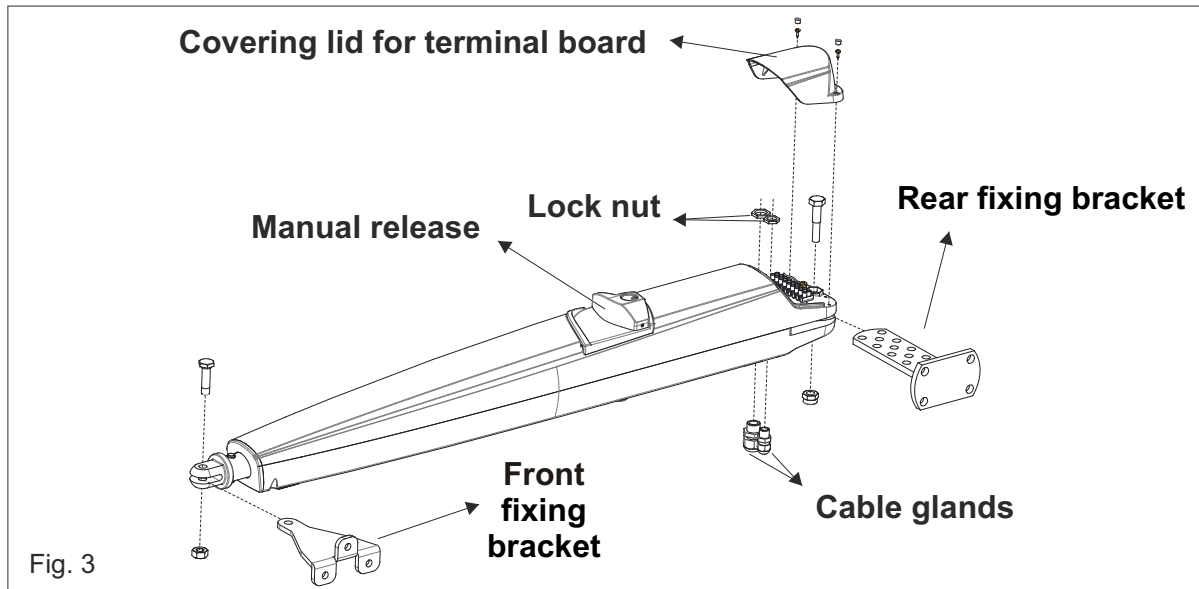


Fig. 2

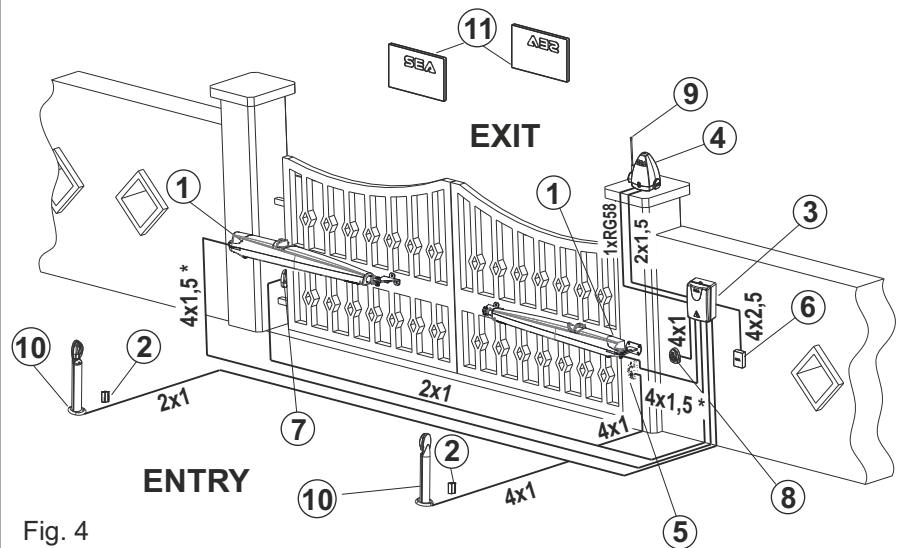
## MAIN PARTS



## STANDARD INSTALLATION

- 1) Operator
- 2) Mechanical stop
- 3) Electronic control unit
- 4) Flashing lamp
- 5) Right Photocell (Dx)
- 6) Differential switch 16A - 0,03A
- 7) Left Photocell (Sx)
- 8) Start/Stop push button with key
- 9) Antenna
- 10) Support for photocells
- 11) Warning notice

**\* For KITE 24V operator use 2x2,5 cables type to connect the motors to the control unit**

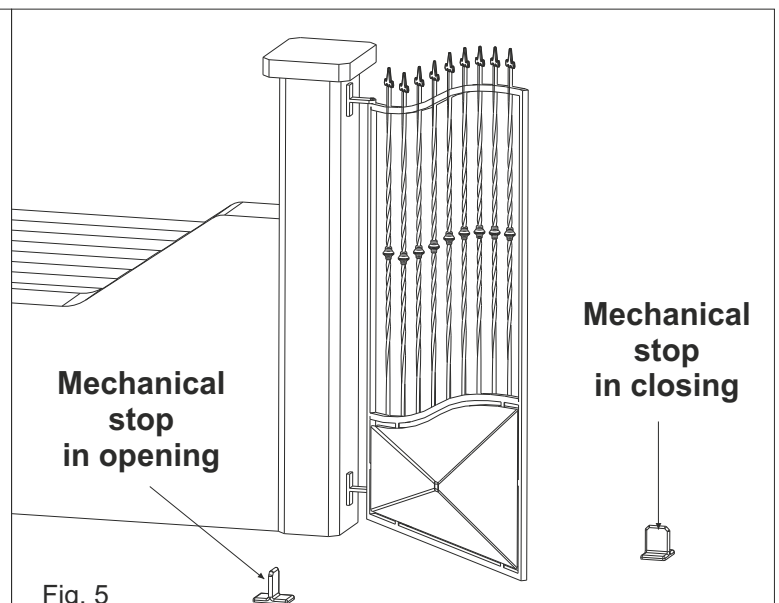


## GATE ARRANGEMENT

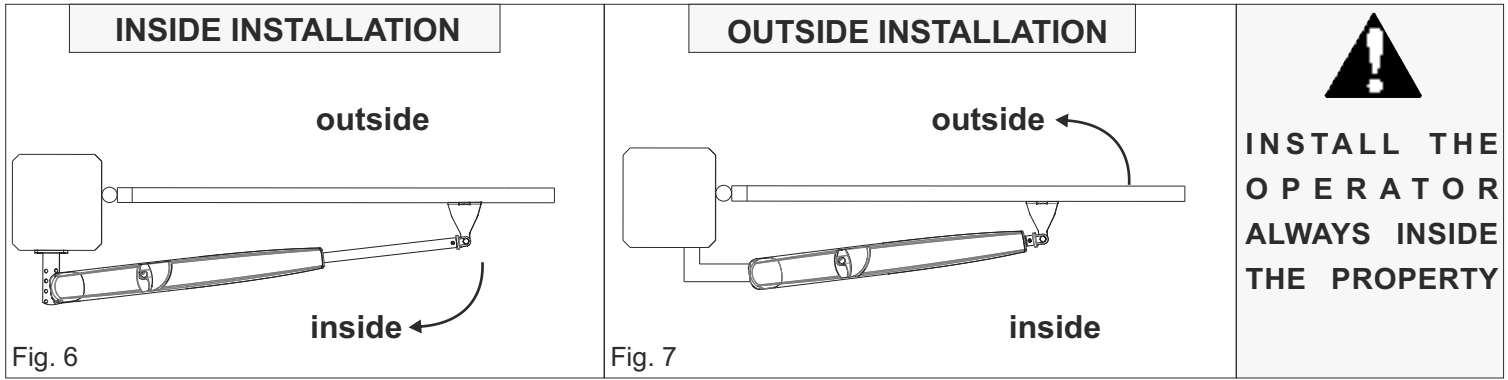
Some checks on the gate are required to verify the KITE operator fitting;  
Make sure that:

- A.** the fix and the moving parts of the gate are strong and non-deformable;
- B.** the length of each leaf does not exceed 5 m
- C.** the weight of each leaf does not exceed 500 Kg
- D.** the hinges and the general structure must be in good conditions and able to support the operator thrust; the gate must move smoothly throughout its whole travel;

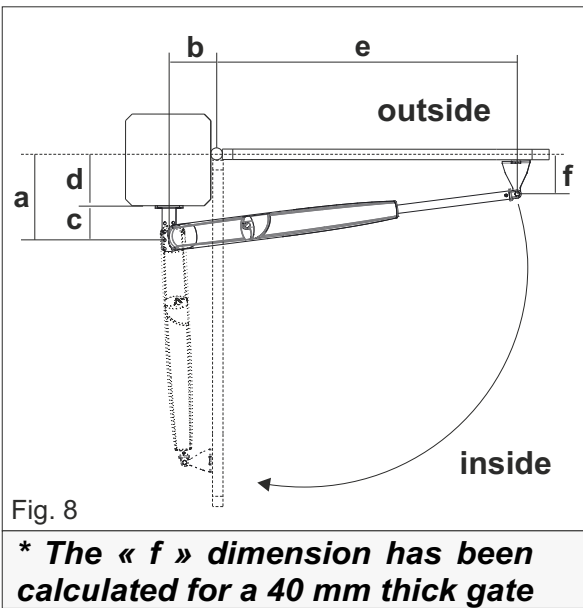
*Where possible, it is advisable to install mechanical stops on the ground for a good functioning of the operator*



## INSTALLATION TYPE



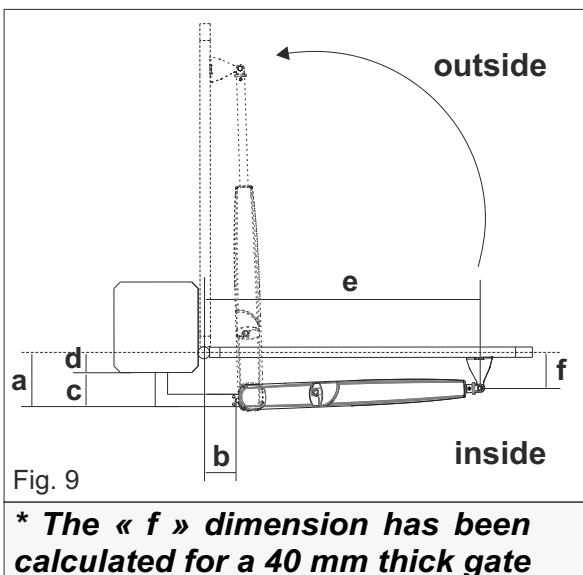
## INWARD INSTALLATION



a (mm)	b (mm)	c (mm)	d max (mm)	e (mm)	f * (mm)	Stroke for 90°	Opening for 90°	Max Stroke for opening angle	Opening angle
240	120	63	177	1210	140	360	90	381	100
250	120	63	187	1210	140	370	90	390	100
260	120	63	197	1210	140	380	90	394	95
210	100	63	147	1233	140	310	90	319	95
220	100	63	157	1233	140	320	90	329	95
230	100	63	167	1233	140	330	90	339	95
240	140	63	177	1193	140	380	90	394	95
230	140	63	167	1193	140	370	90	392	100
220	140	63	157	1193	140	360	90	389	105
220	160	63	157	1174	140	380	90	395	95
210	160	63	147	1174	140	370	90	395	100
200	160	63	137	1174	140	360	90	395	105
160	160	63	97	1175	140	320	90	371	115
160	180	63	97	1155	140	340	90	392	110
150	200	63	87	1137	140	350	90	400	105
140	210	63	77	1125	140	350	90	395	105

Total stroke 400 mm - max suggested stroke 380 mm

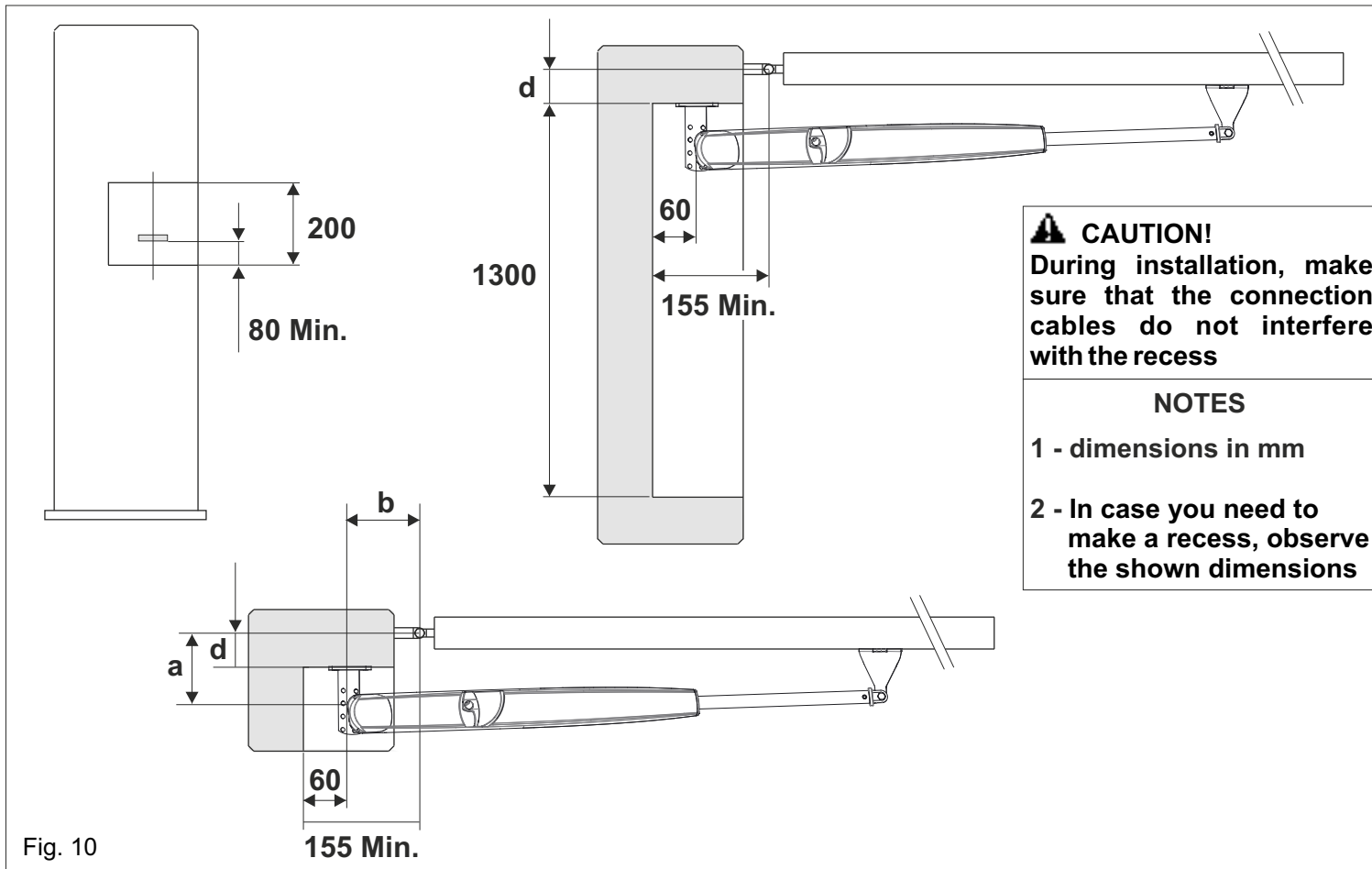
## OUTWARD INSTALLATION



a (mm)	b (mm)	c (mm)	d max (mm)	e (mm)	f * (mm)	Stroke for 90°	Opening for 90°	Max Stroke for opening angle	Opening angle
150	100	63	87	1045	140	250	90	259	95
150	120	63	87	1065	140	270	90	297	105
150	140	63	87	1085	140	290	90	330	110
160	120	63	97	1065	140	280	90	307	105
160	140	63	97	1085	140	300	90	331	105
160	160	63	97	1105	140	320	90	365	110
160	180	63	97	1125	140	340	90	392	110
180	140	63	117	1085	140	320	90	351	105
200	160	63	137	1104	140	360	90	394	105

Total stroke 400 mm - max suggested stroke 380 mm

## INSTALLATION ON MASONRY PILLARS, MAKING A RECESS



## CONNECTIONS

**make connections only after installation is complete and when the power supply is OFF**

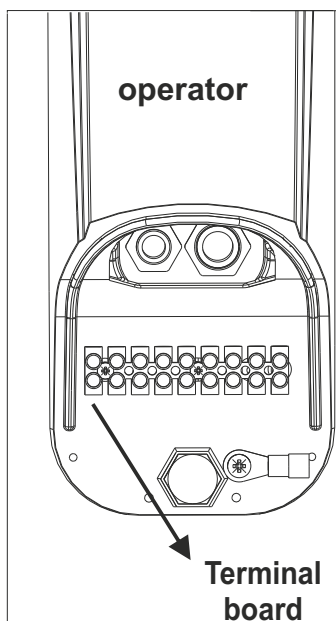


Fig. 11

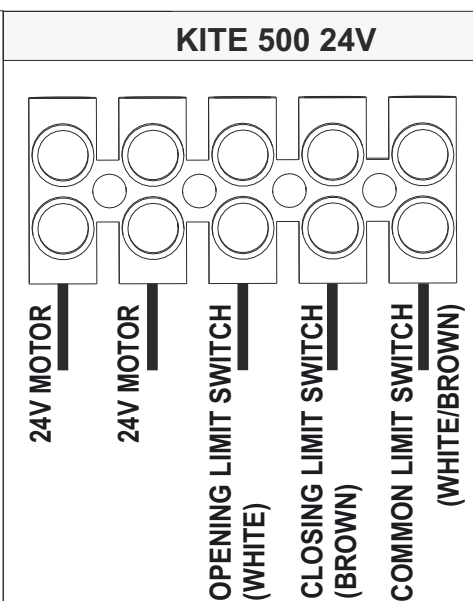


Fig. 12

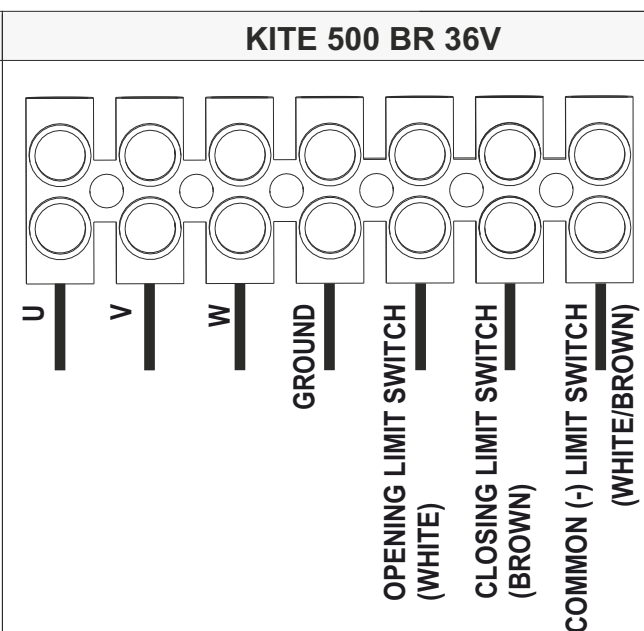


Fig. 13



## PRELIMINARY NOTES

- 1 - For the correct operation it is very important to position both the operator and its front and rear fixing brackets, in a perfectly horizontal way, by using a level, as shown in Fig. 14
- 2 - Before mounting operator on the rear and the front brackets, lubricate with water repellent grease
- 3 - The operator must be mounted with the release facing upwards (Fig. 14)

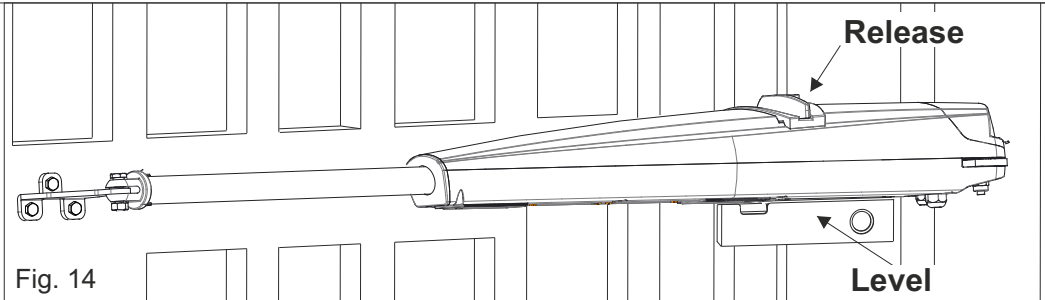


Fig. 14

## REAR FIXING BRACKET MOUNTING

### REAR FIXING BRACKET TO BE SCREWED

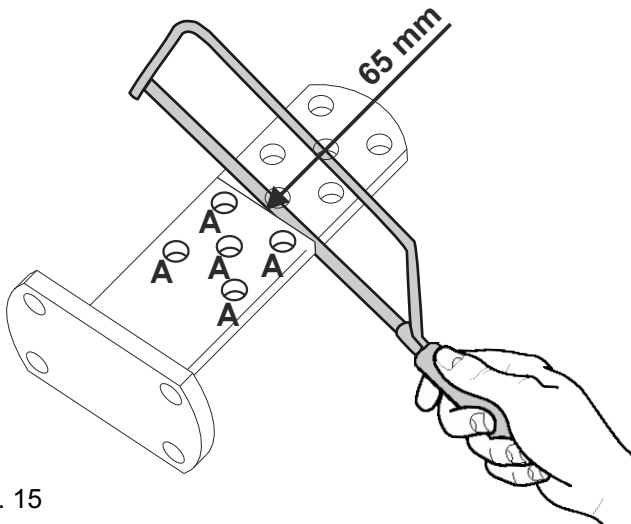


Fig. 15

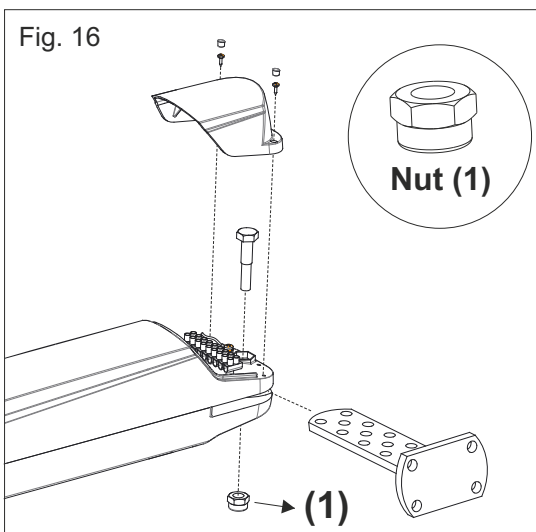
If the rear fixing bracket has to be screwed using the holes marked as «A», so the fixing bracket must be cut at a distance of 65 mm from its end (Fig. 15). It is not necessary to cut the bracket if using other holes

*The support must be positioned so that the operator is in a perfect horizontal position (see Fig.14)*



**CAUTION!** To avoid the oscillation of the operator during the operating phase, it is recommended to adjust the nut (1) (Fig. 16) taking care to not block the rotation of the operator on the fixing bracket

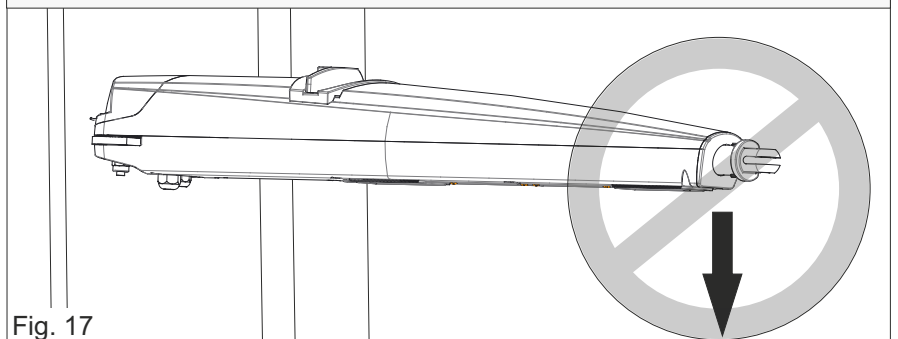
Fig. 16



### WARNING!

once the rear bracket has been fixed, immediately fix the front bracket, always keeping the operator in a horizontal position. Do not leave the front of the operator detached because it would fall down causing damage

Fig. 17







## PRELIMINARY NOTES

- 1 - According to the gate type (wood, iron, aluminium) the front bracket can be welded or screwed
- 2 - Before mounting the rear and the front fixing brackets, lubricate with water repellent grease
- 3 - The operator must be mounted with the release facing upwards (Fig. 14)

## FRONT FIXING BRACKET MOUNTING

### SCREWED FRONT FIXING BRACKET

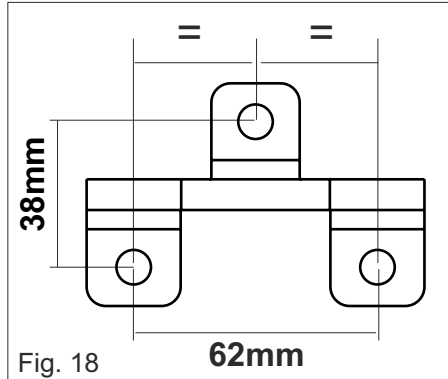


Fig. 18

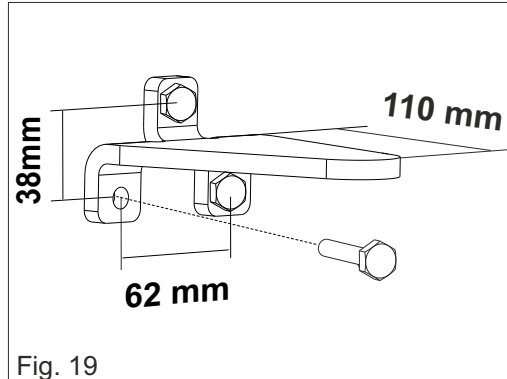


Fig. 19

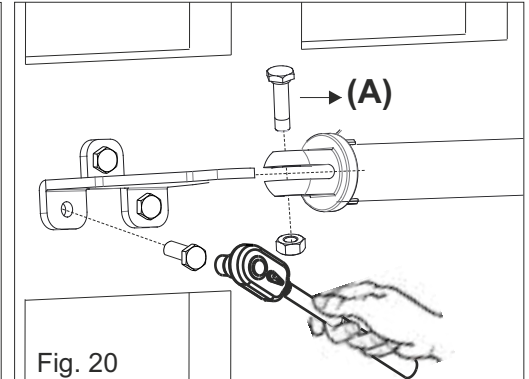


Fig. 20

Once the operator has been mounted on the rear fixing bracket, **close the leaf** and proceed as follows:

- 1) Release the operator keeping it always in a horizontal position
- 2) Screw the front fixing bracket onto the gate in correspondence of the holes made respecting the dimensions as per Fig. 18 and Fig. 19
- 3) Insert the bracket into the housing pin on the operator (Fig. 20) and tighten the «A» screw to max 8.5 Nm

**CAUTION: Lubricate the pin with grease before installing the front fixing bracket on the operator**

### WELDED FRONT FIXING BRACKET

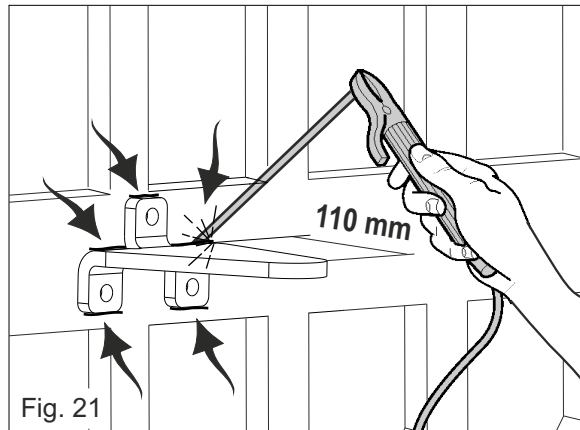


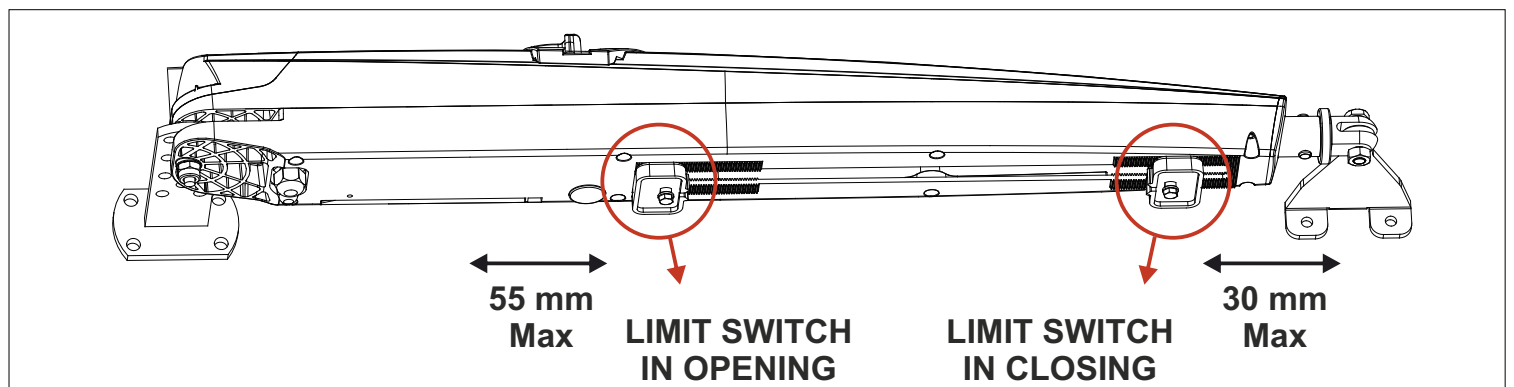
Fig. 21

Once the operator has been mounted on the rear fixing bracket, **close the leaf** and proceed as follows:

- 1) Release the operator keeping it always in a horizontal position
- 2) Weld the front fixing bracket to the gate operating on the points indicated by the arrows (Fig. 21)
- 3) Insert the bracket into the housing pin on the operator (Fig. 20) and tighten the «A» screw to max 8.5 Nm

**CAUTION: Lubricate the pin with grease before installing the front fixing bracket on the operator**

## MAGNETIC LIMIT SWITCHES



## TO THE ATTENTION OF THE TECHNICIAN AND THE END-USER

### INTERNAL METAL RELEASE SYSTEM

#### TO RELEASE THE OPERATOR:

- 1) Turn counter-clockwise the lock protection cover (Fig. 22)
- 2) Insert the key and turn of about 90° clockwise (Fig. 23)
- 3) Turn the handle counter-clockwise to release the operator (Fig. 24)

#### TO LOCK THE OPERATOR:

- 1) Turn the handle clockwise to revert it to the initial position
- 2) Turn the key about 90° counter-clockwise (Fig. 25)
- 3) After having relocked the operator, close the lock protection cover to prevent damages due to atmospheric agents

**NOTE: for a proper operation of the manual release it is recommended to observe the current regulations regarding the thrust force**

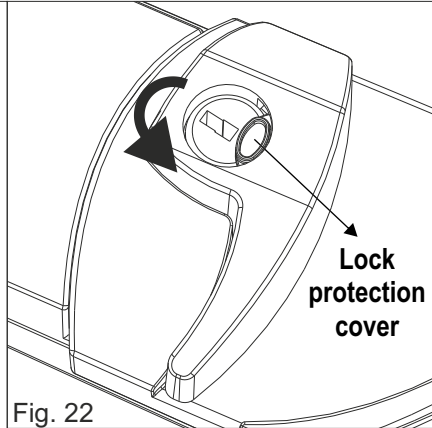


Fig. 22

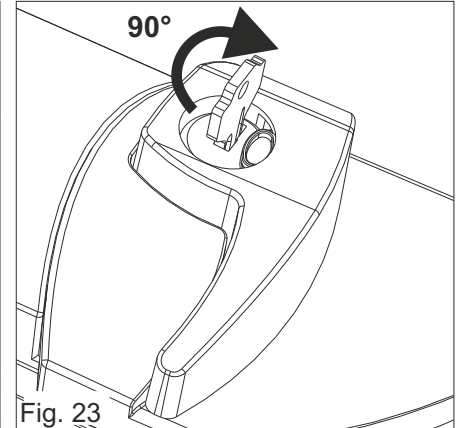


Fig. 23

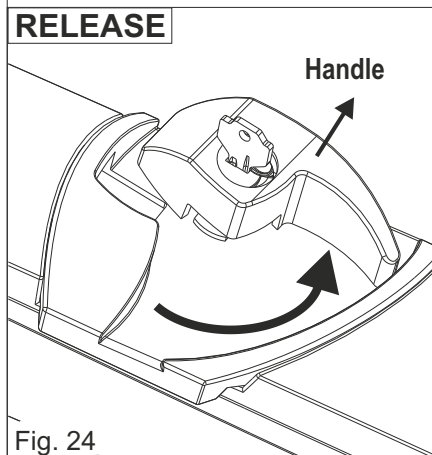


Fig. 24

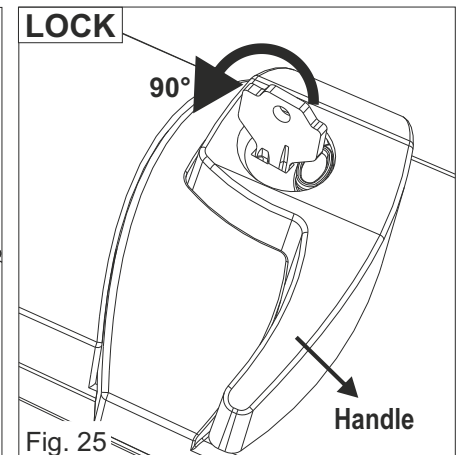


Fig. 25

### PERIODIC MAINTENANCE

**! ALL OPERATIONS MUST BE MADE EXCLUSIVELY BY AN AUTHORIZED INSTALLER AND WHEN POWER SUPPLY IS OFF**

1	Check the robustness and the stability of the gate, especially of the points of support and/or the gate points of rotation (pivots)	YEARLY
2	Check the release system function	YEARLY
3	Check and grease the fixing pivots and the endless screw	YEARLY
4	Check the integrity of the connection cables	YEARLY
5	Verify the function and the conditions of the mechanical stops in opening and closing	YEARLY
6	Verify the good condition of all mechanism subject to stress (as front and rear fixing brackets)	YEARLY
7	Check the function of all accessories, in particular of all safety devices	YEARLY

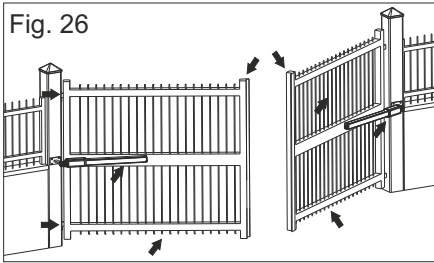
**AFTER THE PERIODICAL MAINTENANCE OPERATIONS IT IS NECESSARY TO REPEAT THE TEST OF THE AUTOMATION AND ITS COMMISSIONING**



## TO THE ATTENTION OF THE TECHNICIAN AND THE END-USER

### RISK EXAMINATION

The points pointed by arrows in Fig. 26 are potentially dangerous. The installer must take a thorough risk examination to prevent crushing, conveying, cutting, grappling, trapping so as to guarantee a safe installation for people, things and animals (Re. Laws in force in the Country where installation has been made). As for misunderstandings that may arise refer to your area distributor or call our help desk. These instructions are part of the device and must be kept in a well known place. The installer shall follow the provided instructions thoroughly. SEA products must only be used to automate doors, gates and wings. Any initiative taken without SEA explicit authorization will preserve the manufacturer from whatsoever responsibility. The installer shall provide warning notices on not assessable further risks. SEA in its relentless aim to improve the products, is allowed to make whatsoever adjustment without giving notice. This doesn't oblige SEA to upgrade the past production. SEA can not be deemed responsible for any damage or accident caused by product breaking, being damages or accidents due to a failure to comply with the instructions herein. The guarantee will be void and the manufacturer responsibility will be nullified if SEA original spare parts are not being used. The electrical installation shall be carried out by a professional technician who will release documentation as



requested by the laws in force. Packaging materials such as plastic bags, foam polystyrene, nails etc must be kept out of children's reach as dangers may arise.

**INITIAL TEST AND STARTING OF THE AUTOMATION:** After having completed the necessary operations for a correct installation of the product and after having evaluated all the risks which could arise in any installation, **it is necessary to test the automation to guarantee the maximum security and, in particular, to guarantee that the laws in force are fully respected.** The first Start must be executed according to the rule **EN 12445** which establishes the methods of tests for checking the gate automation respecting the limits established by the rule **EN 12453**.

**SAFETY PRECAUTIONS:** All electrical work should comply with the current regulations. A 16A / 0,030 differential switch must be used. Separate the source cables (operators, power supply) and command cables (photocells, push-buttons, etc). Be sure the entire system is properly earth bonded. Always run cables in separate ducts to prevent interferences.

**INTENDED USE:** The operator has been designed to be used for the automation of swing gates only.

**SPARE PARTS:** Send request for spare parts to: **SEA S.p.A. - Teramo - ITALY - [www.seateam.com](http://www.seateam.com)**

**SAFETY AND ENVIRONMENTAL COMPATIBILITY:** Don't waste product packing materials and/or circuits.

**STORAGE:** Materials must be properly packaged, handled with care and with appropriate vehicles;

**WARRANTY LIMITS** - see the sales conditions

**MAINTENANCE AND DECOMMISSION:** must only be carried out by specialised and authorised personnel.

**THE MANUFACTURER CAN NOT BE DEEMED RESPONSIBLE FOR ANY DAMAGE OR INJURY CAUSED BY IMPROPER USE OF THIS PRODUCT;** SEA S.p.A. reserves the right to make any required modification or change to the products and/or to this manual without any advanced notice obligation.

### GENERAL NOTICE FOR THE INSTALLER AND THE USER

1. **Read carefully these Instructions** before beginning to install the product. Store these instructions for future reference
2. Don't waste product packaging materials and /or circuits.
3. This product was designed and built strictly for the use indicated. Any other use could compromise the condition and the operation of the product or be a source of danger. SEA S.p.A. declines all liability caused by improper or different use in respect to the intended one.
4. The mechanical parts must be comply with: Machine Regulation 2006/42/CE and following adjustments, Low Tension (2006/95/CE), Electromagnetic Consistency (2004/108/CE). Installation must respect Directives: EN12453 and EN12445.
5. Do not install the equipment in an explosive atmosphere.
6. SEA S.p.A. is not responsible for failure to observe Good Techniques in the construction of the locking elements to motorize, or for any deformation that may occur during use.
7. Before attempting any job on the system, cut out electrical power and disconnect the batteries. Be sure that the earthing system is perfectly constructed, and connect it metal parts of the lock.
8. Use of the indicator-light is recommended for every system, as well as a warning sign well-fixed to the frame structure.
9. SEA S.p.A. declines all liability concerning system security and efficiency, if components used are not produced by SEA
10. For maintenance, strictly use original parts by SEA.
11. Do not modify in any way the components of the automated system.
12. The installer shall supply all information concerning system's manual functioning in case of emergency, and shall hand over to the user the warnings handbook supplied with the product.
13. Do not allow children or adults to stay near the product while it is operating. The application cannot be used by children, by people with reduced physical, mental or sensorial capacity, or by people without experience or necessary training. Keep remote controls or other pulse generators away from children, to prevent involuntary activation of the system.
14. Transit through the leaves is allowed only when the gate is fully open.
15. The User must not attempt to repair or to take direct action on the system and must solely contact qualified SEA personnel or SEA service centers. User can apply only the manual function of emergency.
16. The power cables maximum length between the control unit and motors should not be greater than 10 m. Use cables with 2,5 mm<sup>2</sup> section. Use double insulation cable (cable sheath) close to the terminals, in particular for the 230V cable. Keep an adequate distance (at least 2.5 mm in air), between low voltage (230V) cables and safety low voltage cables (SELV) or use an appropriate sheath that provides extra insulation having a thickness of 1 mm



Automatic Gate Openers  
International registered trademark n. 804888

## DECLARATION OF CONFORMITY DICHIARAZIONE DI CONFORMITÀ

SEA S.p.A. declares under its proper responsibility and, if applicable, under the responsibility of its authorised representative that, by installing the appropriate safety equipment and noise filtering, the products:

La SEA S.p.A. dichiara sotto la propria responsabilità e, se applicabile, del suo rappresentante autorizzato che, con l'installazione degli adeguati dispositivi di sicurezza e di filtraggio disturbi, i prodotti:

DESCRIPTION - DESCRIZIONE	MODEL - MODELLO	TRADEMARK - MARCA
KITE 500 230V (AND ALL ITS BY-PRODUCTS - E TUTTI I SUOI DERIVATI)	11010000IV	SEA
KITE 500 H 24V (AND ALL ITS BY-PRODUCTS - E TUTTI I SUOI DERIVATI)	11010202	SEA
KITE 500 H BR (AND ALL ITS BY-PRODUCTS - E TUTTI I SUOI DERIVATI)	11010007	SEA

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 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 conforming to the essential safety requirements related to the products within the field of applicability of the Community Directives 2014/35/UE and 2014/30/UE

sono conformi ai requisiti essenziali di sicurezza relativi ai prodotti entro il campo di applicabilità delle Direttive Comunitarie 2014/35/UE e 2014/30/UE

THE MANUFACTURER OR THE AUTHORIZED REPRESENTATIVE  
IL COSTRUTTORE O IL RAPPRESENTANTE AUTORIZZATO

**SEA S.p.A.**

ZONA INDUSTRIALE SANT'ATTO  
64100 - TERAMO - ITALY  
+ 39 0 861 588341

[www.seateam.com](http://www.seateam.com)

PLACE AND DATE OF ISSUE  
LUOGO E DATA DI EMISSIONE

TERAMO, 24/11/2021

L'Administratore  
The Administrator  
Ennio Di Saverio



## CERTIFICATE OF WARRANTY EXTENTION CERTIFICATO DI ESTENSIONE GARANZIA

### PRODUCT DESCRIPTION - DESCRIZIONE PRODOTTO

MODEL - MODELLO \_\_\_\_\_

NO. PIECES - N° PEZZI \_\_\_\_\_

SERIAL NUMBERS - NUMERI SERIALI \_\_\_\_\_

INVOICE NO. AND DATE - N° E DATA FATTURA \_\_\_\_\_

INSTALLATION DATE - DATA INSTALLAZIONE \_\_\_\_\_

CONTROL UNIT - SCHEDA ELETTRONICA SEA ☐ OTHER BRAND - ALTRA MARCA ☐

PHOTOCELLS - FOTOCELLULE SEA ☐ OTHER BRAND - ALTRA MARCA ☐

Tx/Rx SEA ☐ OTHER BRAND - ALTRA MARCA ☐

OTHER ACCESSORIES - ALTRI ACCESSORI SEA ☐ OTHER BRAND - ALTRA MARCA ☐

### INSTALLER - INSTALLATORE

COMPANY NAME - RAGIONE SOCIALE \_\_\_\_\_

V.A.T. - P. IVA \_\_\_\_\_

ADDRESS - INDIRIZZO \_\_\_\_\_

CONTACT PERSON - REFRENTE \_\_\_\_\_

### END-USER - UTENTE

FIRST & FAMILY NAME - NOME & COGNOME \_\_\_\_\_

INSTALLATION ADDRESS - INDIRIZZO INSTALLAZIONE \_\_\_\_\_

The extension of the legal standard warranty of 12 months to 24 months or to 36 months is valid only if the present form is returned by e-mail to SEA S.p.A within 15 days from the date of purchase. It is necessary to attach the invoice to the present form

L'estensione della garanzia legale di 12 mesi a 24 mesi o 36 mesi è valida solo se il presente modulo viene rispedito via e-mail a SEA S.p.A. entro 15 giorni dalla data di acquisto. È necessario allegare la relativa fattura d'acquisto al presente modulo

COPY TO BE RETURNED  
COPIA DA RESTITUIRE

PLACE & DATE - LUOGO & DATA \_\_\_\_\_

STAMP & SIGNATURE - TIMBRO & FIRMA \_\_\_\_\_

### For the Installer - Per L'Installatore

Agreement to the GDPR EU Regulation No. 679/2016 (Privacy)

Firma per il trattamento dei dati personali ai sensi del Regolamento UE 679/2016

PLACE & DATE - LUOGO & DATA \_\_\_\_\_

STAMP & SIGNATURE - TIMBRO & FIRMA \_\_\_\_\_



Automatic Gate Openers

International registered trademark n. 804888

**SEA S.p.A.**

**Zona Industriale Sant'Atto - 64020 - Teramo - ITALY**

**Tel. +39 0 861 588341 r.a. Fax +39 0 861 588344**

**[www.seateam.com](http://www.seateam.com)**