STOPPER



Operatore Operateur Operator	Alimentazione Alimentation Power Supply	Peso max catena Poids maxi chaîne Max chain weight	Codice Code Code
STOPPER MASTER	230V 50/60Hz	9 EKa	AA51200
STOPPER SLAVE	2301 30/ 0002	8,5Kg	AA51205

ITALIANO pag. 04 / FRANÇAIS pag. 12 / ENGLISH page 20

- ATTENTION -FOR THE SAFETY OF THE PEOPLE IT IS IMPORTANT TO FOLLOW ALL THE INSTRUCTIONS.

FOLLOW ALL INSTALLATION INSTRUCTIONS

- 1° This handbook is exclusively addressed to the specialized personnel who knows the constructive criteria and the protection devices against the accidents for motorized gates, doors and main doors (follow the standards and the laws in force).
- 2° The wiring harness of the different electric components external to the operator (for example photoelectric cells, flashlights etc.) must be carried out according to the EN 60204-1.
- 3° The possible assembly of a keyboard for the manual control of the movement must be done by positioning the keyboard so that the person operating it does not find himself in a dangerous position; moreover, the risk of accidental activation of the buttons must be reduced.
- 4° Keep the automatism controls (push-button panel, remote control etc.) out of the children way. The controls must be placed at a minimum height of 1,5 m from the ground and outside the range of the mobile parts.
- 5° Before carrying out any installation, regulation or maintenance operation of the system, take off the voltage by operating on the special magnetothermic switch connected upstream it.

THE RIB COMPANY DOES NOT ACCEPT ANY RESPONSIBILITY for possible damages caused by the non observance during the installation of the safety standards and of the laws in force at present.

KEEP THESE INSTRUCTIONS WITH CARE

- 1° If it is not forecast in the electric gearcase, install a switch of magnetothermic type upstream, (omni polar with minimum port of the contacts of 3 mm) with a check of conformity to the international standards. Such devise must be protected against the accidental lockup (for example by installing inside a locked board).
- 2° For the section and the type of the motor cables, RIB advices to use a cable of the H05RN-F type with minimum section of 2,5 sqmm and, in any case, to keep to the IEC 364 standard and to the installation standards in force in your country.

N.B.: The system must be grounded

Data described by this manual are only Indicative and RIB reserves to modify them at any time. Install the system complying with current standards and regulations.

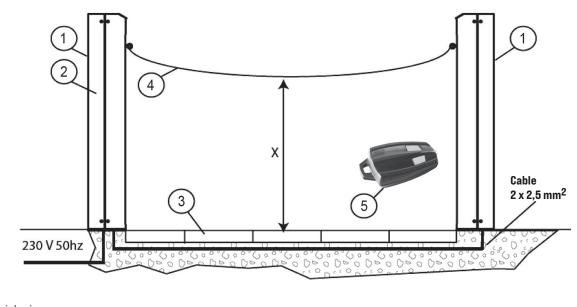


ENGLISH WEEE - Information for users

If the crossed-out bin symbol appears on the equipment or packaging, this means the product must not be included with other general waste at the end of its working life. The user must take the worn product to a sorted waste center, or return it to the retailer when purchasing a new one. Products for disposal can be consigned free of charge (without any new purchase obligation) to retailers with a sales area of at least 400 m2, if they measure less than 25 cm. An efficient sorted waste collection for the environmentally friendly disposal of the used device, or its subsequent recycling, helps avoid the potential negative effects on the environment and people's health, and encourages the re-use and/or recycling of the construction materials. Materials must be disposed of in accordance with the regulations in force. Do not throw away your discarded equipment or used batteries with household waste. You are responsible for taking all your waste electrical and electronic equipment to a suitable recycling centre.

TECHNICAL DATA / INSTALLATION STOPPER

LAY-OUT



- **Description:** 1 STOPPER Chain barrier
- 2 Control board 3 Chain protection guide ACG5481
- 4 Chain ACG5480
- 5 SUN Radio transmitter

Lenght of the chain (m)	4	6	8	10	12	14	16	18	20
Relative height in the middle X (cm)	75	70	65	60	55	50	45	40	35

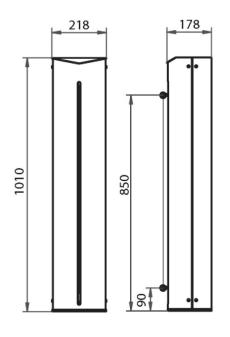
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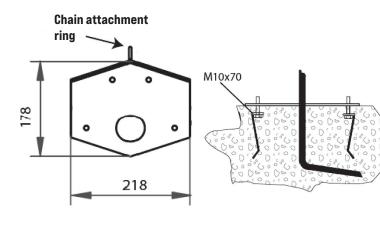
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The value in the table has been determinated using a chain of 400 g/m.

TECHNICAL DATA	STOPPER	
Power supply		230 Vac 50/60 Hz
Absorption	Α	1
Motor Power	W	60
Force	Nm	645
Service	%	50
Operating temperature	°C	-20 ÷ +55
Protection Degree	IP	34
Lubrification		Permanent
Weight	kg	25
Max chain weight	kg	8,5

DESCRIPTION AND DIMENSION OF THE COLUMN





1

4

INSTALLATION

All measures are expressed in milimeters unless otherwise indicated.

PRELIMINARY CONTROLS

- \cdot Control the stability and solidity of the zone where the columns are going to be fixed.
- \cdot $\,$ Use an omnipolar interrupter with contact distance of at least 3 mm.
- The connection to the power supply must be separated from the connections to the security and command devices.

INSTALLATION OF THE COLUMN (fig. 1, fig. 3, fig. 4)

- 1. Screw in the base for 1,5 2,0 cm the 4 screws M10x70 supplied.
- 2. Place than the base on the previously prepared base of cement (fig. 3).
- 3. The upper part of the base should be clean and perfectly horizontal.
- 4. Pass the plastic tubes of the cables through the central hole on the base and check again the stability of the base.
- 5. Unscrew the 8 screws (10) and take off the frontal cover (8) and the rear cover (9) of the column (fig. 4).
- 6. Place now the column structure on the base.
- 7. Fix now the column to the base with the 4 washers (5) and 4 nuts (4).
- 8. Fix the frontal covers (8) of both columns with 4 screws (10).
- Now you can fix the chain to the rings on both columns respecting the level X in the middle of the chain barrier as shown fig. 1.

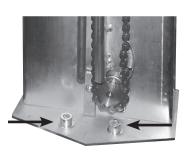
HALF-YEARLY MAINTENANCE

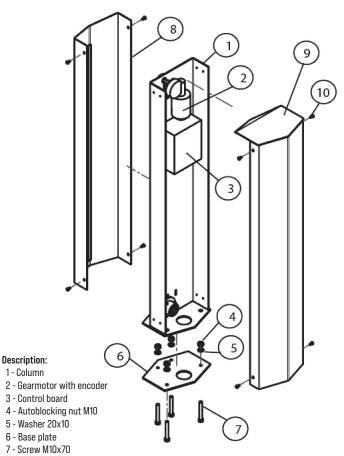
- 1. Cut the power supply off and disconnect the batteries, if present. Clean and grease the guide and the pignons internally.
- 2. Grease the internal transmitting chain (fig. 5).
- 3. Check the fixation nuts (fig. 6).
- 4. Control the electrical connections.
- 5. Supply the power again.
- 6. Check out the correct functioning of the obstacle recognition (encoder system).
- 7. Check out the correct functioning of all and of the security commands.
- 8. Replace any worn parts.





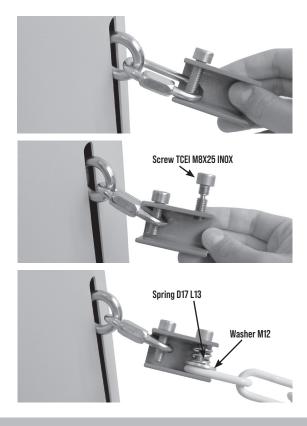
6





- 8 Frontal cover
- 9 Rear cover
- 10 Closing screw M5x10

INSTALLING THE PROTECTION SYSTEM (CVA2208)



1. INTRODUCTION

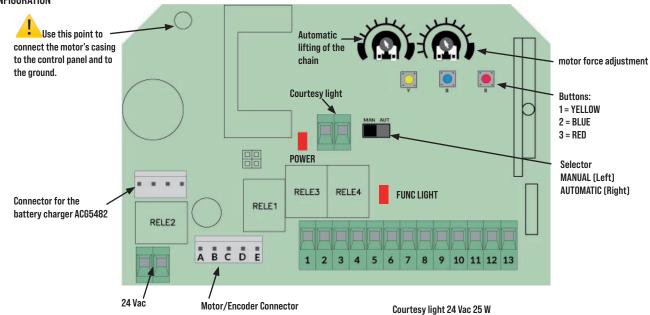
STOPPER is a control board dedicated to the movement of the chain barrier with 24Vdc motor. The coexistance of various types of safeties such as the control of the absorbed power by the motor and the velocity of the motor allows a rapid intervention of the anti - squeezing security (sense).

Through the encoder present in the motor it is possible to control the exact position of the chain and to use it without mechanical limit switches.

The control board has inputs for mechanical limit switches, for the step by step button, for the pedestrian opening, for the safety photocells and the output for flashing light 24 Vac. The unit also allows the regulation by trimmer both the automatic chain lifting and the motor force.

Action can control motors at 24 - 30 Vcc with a maximum consumption of 7A.

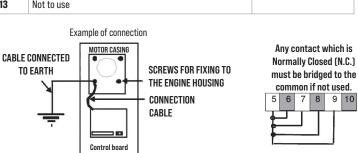
2. CONFIGURATION



8 9 10

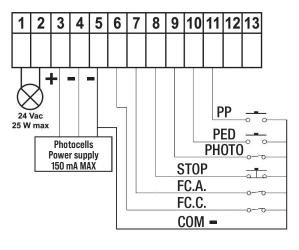
3. ELECTRICAL CONNECTIONS

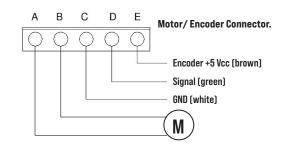
Terminal	Function	Setting
1-2	Flasher output	Out: 24 Vac 25 W MAX
3	Positive power supply for transmitter and receiver of the photocell	Out: +24 Vcc 150 mA MAX
4	Negative power supply for photocell transmitter	Out: GND TX
5	Negative power supply for photocell receiver and common for commands and safeties	Out: GND RX / Common
6	Limit switch of the chain raising	Normally closed (NC)
7	Limit switch of the chain lowering	Normally closed (NC)
8	STOP button input	Normally closed (NC)
9	RX photocell contact input	Normally closed (NC)
10	Pedestrian button input	Normally open (NO)
11	Step by step button input	Normally open (NO)
12	Not to use	
13	Not to use	



to obtain a correct working of the accessories (photo devices in particular) connected to the control board, it is very important that the entire system (motor + control board) has only one mass reference system.

Active during handling and for the following 3 minutes

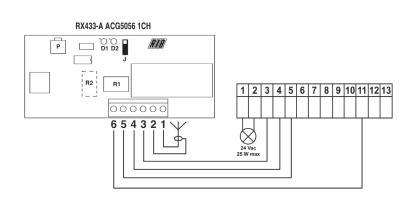


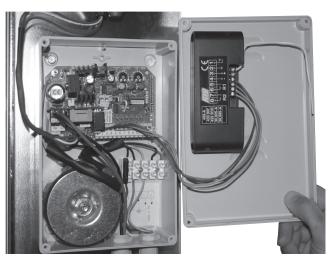


You must therefore connect a small cable between the motor casing and the control box in the point shown in the figure.

If there is a good ground connection it is advisable to connect all the system to it.

3.1 CONNECTIONS TO THE OPTIONAL RADIO RECEIVER





Please refer to the \$433 radio receiver manual

After the radio receiver has been connected, it can be glued, thanks to its bi-adhesive to the control board plastic top box, to the interior side.

4. SETTINGS

This chapter contains important informations for a secure and correct installation.

Follow exactly all the instructions because a wrong installation can cause serious damages to the automation.

4.1 PRELIMINARY CHECKS

Before powering up the control panel, check the wirings.

In particular check that there are no damaged wires, short-circuits between wires and that all the accessories are connected to the terminal board in the points indicated in the diagram on the previous page.

Once the power supply is on:

1. Check that the **POWER led** is steady on and that the chain is raised.

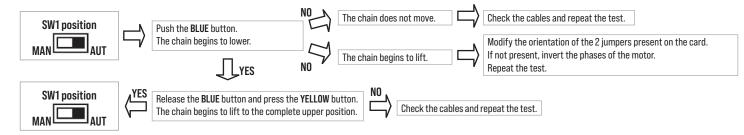
2. Check that the radio receiver is properly connected.

3. Check that the motor and the encoder connections are correct by following the procedure described below.

This procedure allows to check the rotation sense of the motors and any possible blockages during the movement of the chain.

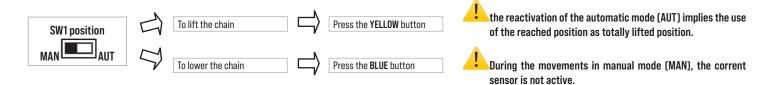
It is important to carry out this check in order to locate any wiring errors or anything else that can jeopardize.

During this handling the photocells, the radio and the buttons are NOT active.



4.2 MANUAL MODE (HOLD-TO-RUN)

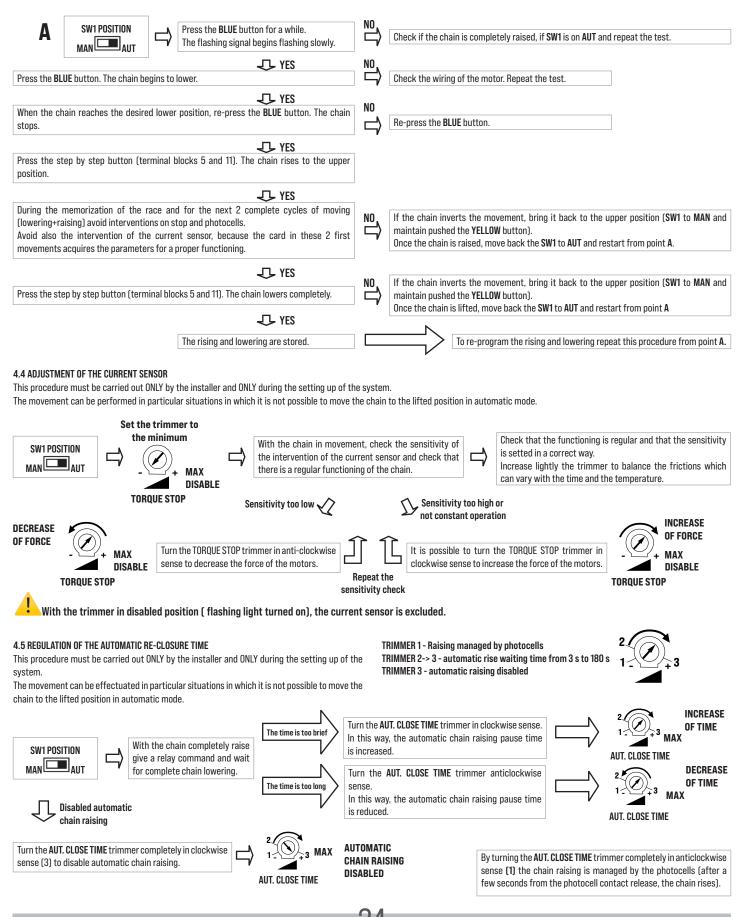
This procedure must be carried out ONLY by the installer and ONLY during the setting up of the system. This movement must be carried out only if it is not possible to fully raise the chain automatically.



4.3 PROGRAMMING THE CHAIN RACE

This procedure must be carried out ONLY by the installer and ONLY during the setting up of the system.

For correct programming, before making changes, always return the chain to the high position (see paragraph 4.2).



4.6 RESYNCHRONIZATION.

This operation must be carried out ONLY if it is repeatedly observed that the chain does not reach the correct climbing position (or if it try to go beyond it).

The resynchronization operation consists in the upward activation of the chain at reduced speed in order to find the total climb point.

The movement stops automatically at the point where a mechanical stop is found that hinders its movement. This position is identified as the end of climb position.

1 - Press the step-by-step button for more than 6 seconds, then release it.

- 2 The chain stops momentarily (if moving) and then restarts uphill at a reduced speed (if it does not happen, restart from point 1)
- 3 The window stops in the presence of a mechanical stop, memorizing the end of ascent position at this point.

! di

during the resynchronization operation, the intervention of the current sensor is interpreted as identification of the end-of-raise position. To avoid involuntary intervention, the sensitivity of the sensor must be significantly reduced compared to normal operating conditions.

5. ADVANCED FEATURES

This procedure must be carried out ONLY by an installer and ONLY during setting up of the system.

For correct setting, before carrying out changements, bring the chain completely up (see paragraph 4.2).

5.1 RESET

In case it is necessary to reset the control board, proceed as follows (total erasing of the race data and deactivation of pre-blinking, photocell test and multi-user functions):

- 1. Remove power supply from the system.
- 2. Set the selector SW1 to AUT (automatic).
- 3. Press the RED button.
- 4. Keep it pressed while reconnecting the power supply.
- 5. Keep it pressed until the FUNC LIGHT led lights up for the 3rd time.
- 6. Release the button and wait until the FUNC LIGHT led turns off.

The reset is done

6. ENABLING AND DESABLING THE PRE-FLASHING, PHOTOCELL TEST AND THE MULTI-USER FEATURES

To modify the status of any of these features it is necessary to enable the setting mode. During the learning phase the control board automatically goes through all possible features in

which it is possible to intervene. The **FUNC LIGHT led** on the control board show the selected function with a different number of flashings.

The passage from a function to another one is made automatically (it is enough to maintain always pressed the **RED** button).

The control board starts selecting the first function (showed by 1 flashing), successively, keeping pressed the **RED** button you pass at the second function (showed by 2 flashings) and so on.

- To enable the setting/learning mode proceed as follows:
- 1. Raise the chain to its upper position (SW1 has to be set on AUT).
- 2. Press and keep pressed the **RED** button.
- After 4 5 s the led FUNC LIGHT does a series of 8 flashings (notifying the next entry to the learning mode). Once the series of flashings ends, the control board is in the learning mode. Do not release the RED button yet.
- 4. Once found (through the number of flashings of the flashing-light led) the function that you want to modify, release the RED button. In this way the function is selected. Once selected the function, the FUNC LIGHT led puts in evidence the setting by flashing with a slow frequence (1 flash each second) or with a rapid frequence (2 flashes each second) as pointed out on the next table.
- Press now the button correspondant to the new status you wish set for the selected function (see table). The frequency of FUNC LIGHT led flashes will vary according to the chosen mode.

At this point it is possible to modify further features or, if you have ended, go out from the setting phase.

In case you want to modify other features, press and keep pressed the RED button.

After few seconds, the control board will start again to select in sequence the several functions. If you want to exit from the learning mode, it is sufficient to set SW1 to MAN, wait 1 - 2 s and set SW1 to AUT.

6.1 PRE-FLASHING FUNCTION

The chain movement is always signalized by a pre-blinking, advising the user that the chain is next to move.

6.2 MULTI-USER FUNCTION

During the opening phase of the chain, every other command is ignored.

Once opened the chain (completely down, it is possible to close it using the step-by-step command or using the automatic re-closure.

During the closing phase, a step-by-step command blocks and inverts the movement.

6.3 PHOTOCELL TEST FUNCTION

Connect just one pair of photocells (max 150 mA)

Every time the motor is switched on, the control board automatically controls if the photocells are functioning properly.

This operation increases the security system.

If a photocell is damaged (for instance: output relay stuck) or in case of undesired photocell input short circuit.

This test is performed immediately after that the control board has received a command to move, but before power is supplied to the motor.

No. of flashes	function selected	FUNC LIGHT LED	YELLOW button	BLUE button
1	Pre-flashing	Slow = disabled / Fast = enabled	to enable	to disable
other 2	Photocell Test	Fast = disabled / Slow = disabled	to enable	to disable
other 3	Multi-user setting	Slow = disabled / Fast = enabled	to enable	to disable
other 4	Reserved			
other 5	Reserved			
other 6	Reserved			

7. PROBLEMS AND THEIR SOLUTIONS

Problem	Possible cause	Solution
Once a lift command is pressed, the chain does not move.	Lack of electrical power supply	Check the presence of the electrical voltage and all the connections to the electrical network
once a int command is pressed, the chain does not move.	Burned fuse	Replace the fuse with a similar one
Once a lift command is pressed, the chain rises for brief time and then stops.	Incorrect encoder connection	Check the connections of the encoder's wires
The programming procedure cannot be activated.	The chain is not completely lifted.	Lift the chain with the manual procedure. If the chain is already lifted, turn SW1 to MAN, wait 1 s, turn SW1 to AUT and try again.
The control panel is powered but the chain does not move.	A normally closed input is not active	Check the photocell, stop and limit switch inputs. If not used, they must be bridged to the common.



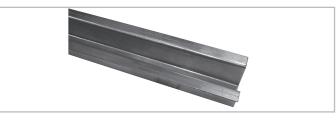
STEEL CHAIN



Ø 6 mm red and white.

code ACG5480

CHAIN PROTECTION RAMP



to fit at floor level. L = 2 m

code ACG5481

code ACG5482

BATTERIES CHARGER STOPPER



1,2Ah 12V

BATTERY

code ACG9511

RADIO TRANSMITTER SUN



CODE LEARNIG SYSTEM RADIORECEIVERS



LOOP PRE-ASSEMBLED



6 m - perimeter 2 x 1 + 15 m of cable 10 m - perimeter 3 x 2 + 15 m of cable code ACG9067 code ACG9068

METALLIC MASS DETECTOR

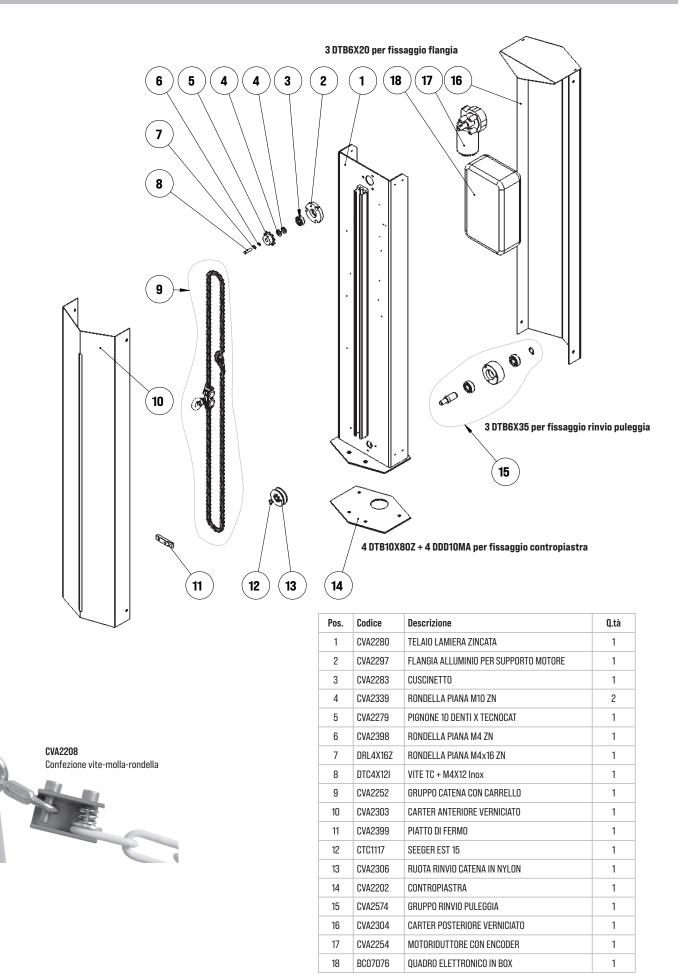


to open with vehicles 1 channel - 230 Vac 1 channel - 12÷24 Vac/dc 2 channels - 12÷24 Vac/dc

code ACG9060 code ACG9063 code ACG9064

26

STOPPER



27

Dichiarazione di incorporazione per le quasi-macchine - Direttiva Macchine 2006/42/CE. Allegato II., B Déclaration d'incorporation pour les guasi-machines - Directive Machines 2006/42/CE, Annexe II, B Declaration of incorporation for partly completed machinery - Machinery Directive 2006/42/EC, Annex II., B UK Declaration of Conformity - Supply of Machinery (Safety) Regulations 2008

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I seguenti requisiti essenziali della Direttiva Macchine (2006/42/CE) sono applicati e rispettati:

- · La documentazione tecnica pertinente è stata compilata in conformità alla parte B dell'allegato VII; tale documentazione, o parti di essa, sarà trasmessa per posta o per via elettronica, in risposta ad una richiesta motivata da parte delle autorità nazionali competenti.
- Questa quasi-macchina è conforme alle disposizioni delle seguenti altre direttive CE: Direttive 2014/30/UE e 2014/35/UE
- Sono stati applicati e rispettati tutti i requisiti essenziali pertinenti di cui all'allegato I della direttiva UE 2006/42/CE mediante il rispetto delle norme armonizzate applicate che conferiscono presunzione di conformità ai requisiti essenziali specifici delle Direttive applicabili da esse coperti.
- 🔺 Altri requisiti e altre Direttive UE possono essere applicabili ai prodotti oggetto di questa dichiarazione.

Les exigences essentielles suivantes de la Directive Machines (2006/42/CE) sont appliquées et satisfaites:

- · La documentation technique pertinente est constituée conformément à la partie B de l'annexe VII; ces documents, ou des parties de celui-ci, seront envoyés par la poste ou par voie électronique, en réponse à une demande motivée des autorités nationales compétentes.
- · Cette quasi-machine est en conformité avec les dispositions des autres directives CE suivantes: Directives 2014/30/UE et 2014/35/UE

- · Les exigences essentielles pertinentes indiqueés dans l'annexe I de la Directive UE 2006/42/ CE ont été appliquées, au moyen du respect des normes harmonisées donnant présomption de conformité aux exigences essentielles pertinentes spécifiques des Directives Européennes, couvertes par de telles normes ou parties de celles-ci.
- A On peut appliquer d'autres exigences et d'autres Directives Européennes aux produits couverts par cette déclaration.

The following essential requirements of the Machinery Directive (2006/42/EC) and UK Supply of Machinery (Safety) Regulations 2008 are abided by and applied:

· The relevant technical documentation is compiled in accordance with Part B of Annex VII; such documentation, or parts of it, will be sent by post or by electronic means, in response to a motivated request received from the qualified national authorities.

This almost complete-machinery is conformed with the provisions of these others EC directives: Directives 2014/30/UE, 2014/35/UE and 2014/53/UE and UK Electromagnetic Compatibility Regulations 2016, Electrical Equipment (Safety) Regulations 2016, Radio Equipment Regulations 2017

- All relevant essential requirements as given in Annex I of the EU Directive 2006/42/EC have been applied to the product. Compliance with the cited harmonized standards provides presumption of conformity with the specified essential requirements of the Directive covered by those Standards or parts thereof.
- 🔺 Other requirements and other EU/UK Directives may be applicable to the products falling within the scope of this Declaration

L'oggetto della dichiarazione di cui sopra è conforme alla pertinente normativa di armonizzazione dell'Unione: L'objet de la déclaration décrit ci-dessus est en conformité avec la législation d'harmonisation de l'Union: The object of the declaration described above is in conformity with the relevant Union harmonisation legislation and UK legislation:

BS EN 12635:2009 BS EN 13241:2016 RS FN 55014-1-2021 BS EN 55014-2:2021 BS EN 60335-1/A1/A2/A14:2021 BS EN 61000-3-2/A1:2021

BS EN 61000-3-3/A2:2022 BS EN 61000-6-1:2019 BS FN 61000-6-2-2019

BS EN 61000-6-3:2021 BS EN 61000-6-4:2022

- Il presente prodotto non può funzionare in modo indipendente ed è destinato ad essere incorporato in un impianto costituito da ulteriori elementi. Rientra perciò nell'Art. 6 paragrafo 2 della Direttiva 2006/42/CE (Macchine) e successive modifiche, per cui segnaliamo il divieto di messa in servizio prima che l'impianto sia stato dichiarato conforme alle disposizioni della Direttiva. - Le présent dispositif ne peut fonctionner de manière indépendante, étant prévu pour être intégré à une installation constituée d'autres éléments. Aussi rentre-t-il dans le champ d'application
- de l'art. 6, paragraphe 2 de la Directive machines 2006/42/CEE et de ses modifications successives. Sa mise en service est interdite avant que l'installation ait été déclarée conforme aux dispositions prévues par la Directive.
- This product can not work alone and was designed to be fitted into a system made up of various other elements. Hence, it falls within Article 6, Paragraph 2 of the EC-Directive 2006/42 (Machines) and following modifications, to which respect we point out the ban on its putting into service before being found compliant with what is provided by the Directive.

(Bosio Stefano - Presidente)

Castenedolo, 01-05-2023

CVA2211 - 052023 - Rev. 14 COMPANY WITH Cod. QUALITY SYSTEM CERTIFIED BY DNV ISO 9001





AUTOMATISMI PER CANCELLI AUTOMATIC ENTRY SYSTEMS