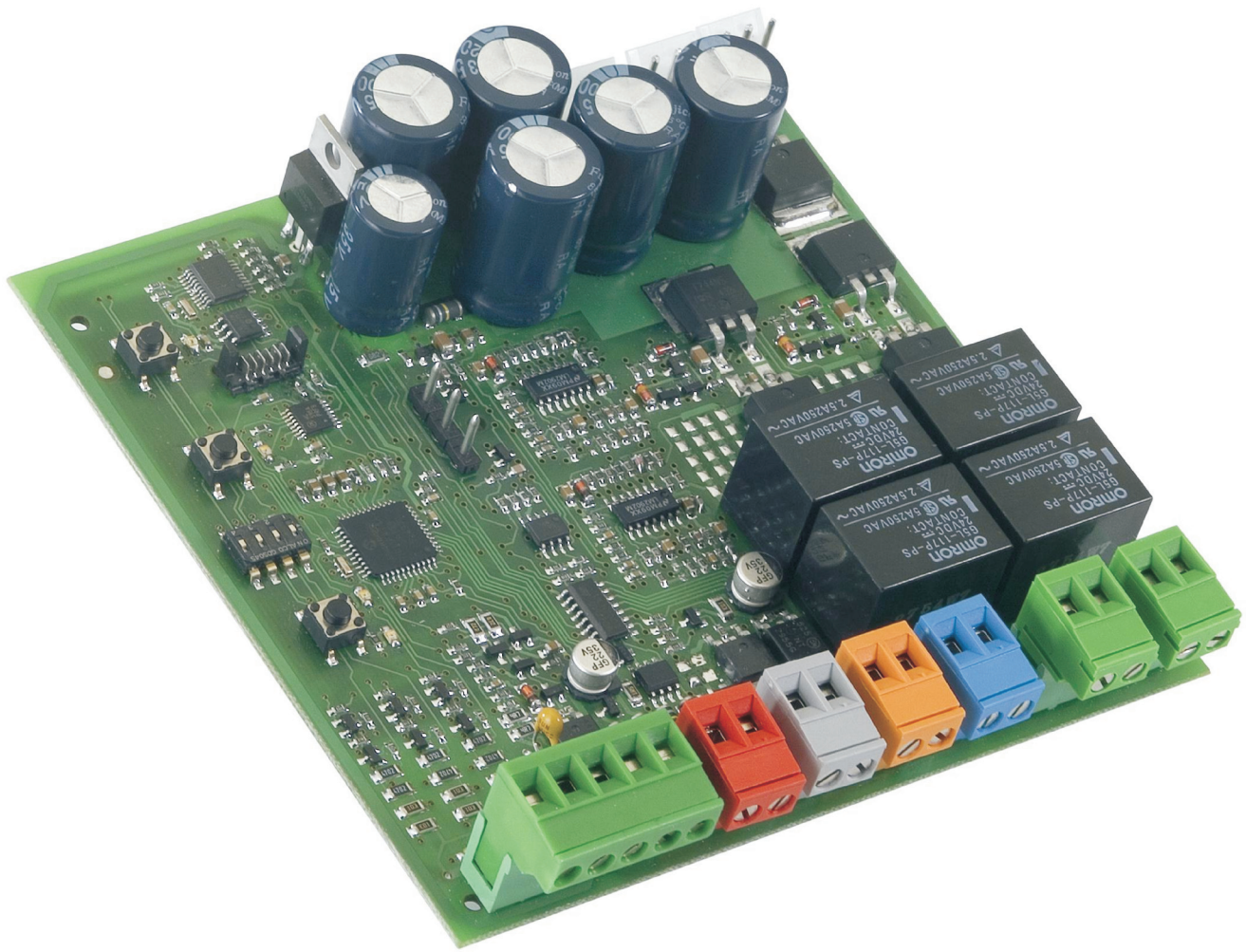
BRAIN 13 24V/230Vac

BRAIN 14 24V/115Vac



GENIUS®

COMPANY
WITH QUALITY SYSTEM
CERTIFIED BY DNV
= UNI EN ISO 9001/2000=

CE

ITALIANO

AVVERTENZE PER L'INSTALLATORE

OBBLIGHI GENERALI PER LA SICUREZZA

ATTENZIONE! È importante per la sicurezza delle persone seguire attentamente tutta l'istruzione. Una errata installazione o un errato uso del prodotto può portare a gravi danni alle persone.

1. Leggere attentamente le istruzioni prima di iniziare l'installazione del prodotto.
2. I materiali dell'imballaggio (plastica, polistirolo, ecc.) non devono essere lasciati alla portata dei bambini in quanto potenziali fonti di pericolo.
3. Conservare le istruzioni per riferimenti futuri.
4. Questo prodotto è stato progettato e costruito esclusivamente per l'utilizzo indicato in questa documentazione. Qualsiasi altro utilizzo non espressamente indicato potrebbe pregiudicare l'integrità del prodotto e/o rappresentare fonte di pericolo.
5. GENIUS declina qualsiasi responsabilità derivata dall'uso improprio o diverso da quello per cui l'automatismo è destinato.
6. Non installare l'apparecchio in atmosfera esplosiva: la presenza di gas o fumi infiammabili costituisce un grave pericolo per la sicurezza.
7. Gli elementi costruttivi meccanici devono essere in accordo con quanto stabilito dalle Norme EN 12604 e EN 12605.
8. Per i Paesi extra-CEE, oltre ai riferimenti normativi nazionali, per ottenere un livello di sicurezza adeguato, devono essere seguite le Norme sopra riportate.
9. GENIUS non è responsabile dell'inosservanza della Buona Tecnica nella costruzione delle chiusure da motorizzare, nonché delle deformazioni che dovessero intervenire nell'utilizzo.
10. L'installazione deve essere effettuata nell'osservanza delle Norme EN 12453 e EN 12445. Il livello di sicurezza dell'automazione deve essere C+D.
11. Prima di effettuare qualsiasi intervento sull'impianto, togliere l'alimentazione elettrica e scollegare le batterie.
12. Prevedere sulla rete di alimentazione dell'automazione un interruttore onnipolare con distanza d'apertura dei contatti uguale o superiore a 3 mm. È consigliabile l'uso di un magnetotermico da 6A con interruzione onnipolare.
13. Verificare che a monte dell'impianto vi sia un interruttore differenziale con soglia da 0,03 A.
14. Verificare che l'impianto di terra sia realizzato a regola d'arte e collegarvi le parti metalliche della chiusura.
15. L'automazione dispone di una sicurezza intrinseca antischiacciamento costituita da un controllo di coppia. E' comunque necessario verificarne la sogli di intervento secondo quanto previsto dalle Norme indicate al punto 10.
16. I dispositivi di sicurezza (norma EN 12978) permettono di proteggere eventuali aree di pericolo da Rischi meccanici di movimento, come ad Es. schiacciamento, convogliamento, cesoiamento.
17. Per ogni impianto è consigliato l'utilizzo di almeno una segnalazione luminosa nonché di un cartello di segnalazione fissato adeguatamente sulla struttura dell'infisso, oltre ai dispositivi citati al punto "16".
18. GENIUS declina ogni responsabilità ai fini della sicurezza e del buon funzionamento dell'automazione, in caso vengano utilizzati componenti dell'impianto non di produzione GENIUS.
19. Per la manutenzione utilizzare esclusivamente parti originali GENIUS.
20. Non eseguire alcuna modifica sui componenti facenti parte del sistema d'automazione.
21. L'installatore deve fornire tutte le informazioni relative al funzionamento manuale del sistema in caso di emergenza e consegnare all'Utente utilizzatore dell'impianto il libretto d'avvertenze allegato al prodotto.
22. Non permettere ai bambini o persone di sostare nelle vicinanze del prodotto durante il funzionamento.
23. L'applicazione non può essere utilizzata da bambini, da persone con ridotte capacità fisiche, mentali, sensoriali o da persone prive di esperienza o del necessario addestramento.
24. Tenere fuori dalla portata dei bambini radiocomandi o qualsiasi altro datore di impulso, per evitare che l'automazione possa essere azionata involontariamente.
25. Il transito tra le ante deve avvenire solo a cancello completamente aperto.
26. L'utente utilizzatore deve astenersi da qualsiasi tentativo di riparazione o d'intervento e deve rivolgersi solo ed esclusivamente a personale qualificato GENIUS o centri d'assistenza GENIUS.
27. Tutto quello che non è previsto espressamente in queste istruzioni non è permesso.

ENGLISH

IMPORTANT NOTICE FOR THE INSTALLER

GENERAL SAFETY REGULATIONS

ATTENTION! To ensure the safety of people, it is important that you read all the following instructions. Incorrect installation or incorrect use of the product could cause serious harm to people.

1. Carefully read the instructions before beginning to install the product.
2. Do not leave packing materials (plastic, polystyrene, etc.) within reach of children as such materials are potential sources of danger.
3. Store these instructions for future reference.
4. This product was designed and built strictly for the use indicated in this documentation. Any other use, not expressly indicated here, could compromise the good condition/operation of the product and/or be a source of danger.
5. GENIUS declines all liability caused by improper use or use other than that for which the automated system was intended.
6. Do not install the equipment in an explosive atmosphere: the presence of inflammable gas or fumes is a serious danger to safety.
7. The mechanical parts must conform to the provisions of Standards EN 12604 and EN 12605.
8. For non-EU countries, to obtain an adequate level of safety, the Standards mentioned above must be observed, in addition to national legal regulations.
9. GENIUS is not responsible for failure to observe Good Technique in the construction of the closing elements to be motorised, or for any deformation that may occur during use.
10. The installation must conform to Standards EN 12453 and EN 12445. The safety level of the automated system must be C+D.
11. Before attempting any job on the system, cut out electrical power and disconnect the batteries.
12. The mains power supply of the automated system must be fitted with an all-pole switch with contact opening distance of 3mm or greater. Use of a 6A thermal breaker with all-pole circuit break is recommended.
13. Make sure that a differential switch with threshold of 0.03 A is fitted upstream of the system.
14. Make sure that the earthing system is perfectly constructed, and connect metal parts of the means of the closure to it.
15. The automated system is supplied with an intrinsic anti-crushing safety device consisting of a torque control. Nevertheless, its tripping threshold must be checked as specified in the Standards indicated at point 10.
16. The safety devices (EN 12978 standard) protect any danger areas against mechanical movement Risks, such as crushing, dragging, and shearing.
17. Use of at least one indicator-light is recommended for every system, as well as a warning sign adequately secured to the frame structure, in addition to the devices mentioned at point "16".
18. GENIUS declines all liability as concerns safety and efficient operation of the automated system, if system components not produced by GENIUS are used.
19. For maintenance, strictly use original parts by GENIUS.
20. Do not in any way modify the components of the automated system.
21. The installer shall supply all information concerning manual operation of the system in case of an emergency, and shall hand over to the user the warnings handbook supplied with the product.
22. Do not allow children or adults to stay near the product while it is operating.
23. The application cannot be used by children, by people with reduced physical, mental, sensorial capacity, or by people without experience or the necessary training.
24. Keep remote controls or other pulse generators away from children, to prevent the automated system from being activated involuntarily.
25. Transit through the leaves is allowed only when the gate is fully open.
26. The User must not in any way attempt to repair or to take direct action and must solely contact qualified GENIUS personnel or GENIUS service centres.
27. Anything not expressly specified in these instructions is not permitted.

FRANÇAIS

CONSIGNES POUR L'INSTALLATEUR

RÈGLES DE SÉCURITÉ

ATTENTION! Il est important, pour la sécurité des personnes, de suivre à la lettre toutes les instructions. Une installation erronée ou un usage erroné du produit peut entraîner de graves conséquences pour les personnes.

1. Lire attentivement les instructions avant d'installer le produit.
2. Les matériaux d'emballage (matière plastique, polystyrène, etc.) ne doivent pas être laissés à la portée des enfants car ils constituent des sources potentielles de danger.
3. Conserver les instructions pour les références futures.
4. Ce produit a été conçu et construit exclusivement pour l'usage indiqué dans cette documentation. Toute autre utilisation non expressément indiquée pourrait compromettre l'intégrité du produit et/ou représenter une source de danger.
5. GENIUS décline toute responsabilité qui dériverait d'usage impropre ou différent de celui auquel l'automatisme est destiné.
6. Ne pas installer l'appareil dans une atmosphère explosive: la présence de gaz ou de fumées inflammables constitue un grave danger pour la sécurité.
7. Les composants mécaniques doivent répondre aux prescriptions des Normes EN 12604 et EN 12605.
8. Pour les Pays extra-CEE, l'obtention d'un niveau de sécurité approprié exige non seulement le respect des normes nationales, mais également le respect des Normes susmentionnées.
9. GENIUS n'est pas responsable du non-respect de la Bonne Technique dans la construction des fermetures à motoriser, ni des déformations qui pourraient intervenir lors de l'utilisation.
10. L'installation doit être effectuée conformément aux Normes EN 12453 et EN 12445. Le niveau de sécurité de l'automatisme doit être C+D.
11. Couper l'alimentation électrique et déconnecter la batterie avant toute intervention sur l'installation.
12. Prévoir, sur le secteur d'alimentation de l'automatisme, un interrupteur omnipolaire avec une distance d'ouverture des contacts égale ou supérieure à 3 mm. On recommande d'utiliser un magnétothermique de 6A avec interruption omnipolaire.
13. Vérifier qu'il y ait, en amont de l'installation, un interrupteur différentiel avec un seuil de 0,03 A.
14. Vérifier que la mise à terre est réalisée selon les règles de l'art et y connecter les pièces métalliques de la fermeture.
15. L'automatisme dispose d'une sécurité intrinsèque anti-écrasement, formée d'un contrôle du couple. Il est toutefois nécessaire d'en vérifier le seuil d'intervention suivant les prescriptions des Normes indiquées au point 10.
16. Les dispositifs de sécurité (norme EN 12978) permettent de protéger des zones éventuellement dangereuses contre les Risques mécaniques du mouvement, comme l'écrasement, l'acheminement, le cisaillement.
17. On recommande que toute installation soit doté au moins d'une signalisation lumineuse, d'un panneau de signalisation fixé, de manière appropriée, sur la structure de la fermeture, ainsi que des dispositifs cités au point "16".
18. GENIUS décline toute responsabilité quant à la sécurité et au bon fonctionnement de l'automatisme si les composants utilisés dans l'installation n'appartiennent pas à la production GENIUS.
19. Utiliser exclusivement, pour l'entretien, des pièces GENIUS originales.
20. Ne jamais modifier les composants faisant partie du système d'automatisme.
21. L'installateur doit fournir toutes les informations relatives au fonctionnement manuel du système en cas d'urgence et remettre à l'Usager qui utilise l'installation les "Instructions pour l'Usager" fournies avec le produit.
22. Interdire aux enfants ou aux tiers de stationner près du produit durant le fonctionnement.
23. Ne pas permettre aux enfants, aux personnes ayant des capacités physiques, mentales et sensorielles limitées ou dépourvues de l'expérience ou de la formation nécessaires d'utiliser l'application en question.
24. Eloigner de la portée des enfants les radiocommandes ou tout autre générateur d'impulsions, pour éviter tout actionnement involontaire de l'automatisme.
25. Le transit entre les vantaux ne doit avoir lieu que lorsque le portail est complètement ouvert.
26. L'utilisateur doit s'abstenir de toute tentative de réparation ou d'intervention et doit s'adresser uniquement et exclusivement au personnel qualifié GENIUS ou aux centres d'assistance GENIUS.
27. Tout ce qui n'est pas prévu expressément dans ces instructions est interdit.

ESPAÑOL

ADVERTENCIAS PARA EL INSTALADOR

REGLAS GENERALES PARA LA SEGURIDAD

ATENCION! Es sumamente importante para la seguridad de las personas seguir atentamente las presentes instrucciones. Una instalación incorrecta o un uso impropio del producto puede causar graves daños a las personas.

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ENGLISH

CE DECLARATION OF CONFORMITY

Manufacturer: GENIUS S.p.A.

Address: Via Padre Elzi, 32 - 24050 - Grassobbio- Bergamo - ITALY

Declares that: Control board mod. **BRAIN 13** with 230 Vac power supply,

• conforms to the essential safety requirements of the following EEC directives:

73/23/EEC and subsequent amendment 93/68/EEC.
89/336/EEC and subsequent amendment 92/31/EEC and 93/68/EEC

Additional information:
This product underwent a test in a typical, uniform configuration. (all products made by GENIUS S.p.A)

Grassobbio, 15-08-2007

Managing Director
D. Gianantoni

Notes on reading the instruction
Read this installation manual to the full before you begin installing the product.
The symbol ⚠ indicates notes that are important for the safety of persons and for the good condition of the automated system.
The symbol ☞ draws your attention to the notes on the characteristics and operation of the product.

ENGLISH

1. WARNINGS

- *Before attempting any work on the control unit (connections, maintenance), always turn off power.*
- *Install, upstream of the system, a differential thermal breaker with adequate tripping threshold,*
- *Always separate power cables from control and safety cables (push-button, receiver, photocells, etc.).*
- *To avoid any electrical disturbance, use separate sheaths or a screened cable (with the screen earthed).*

2. LAYOUT AND CONNECTIONS

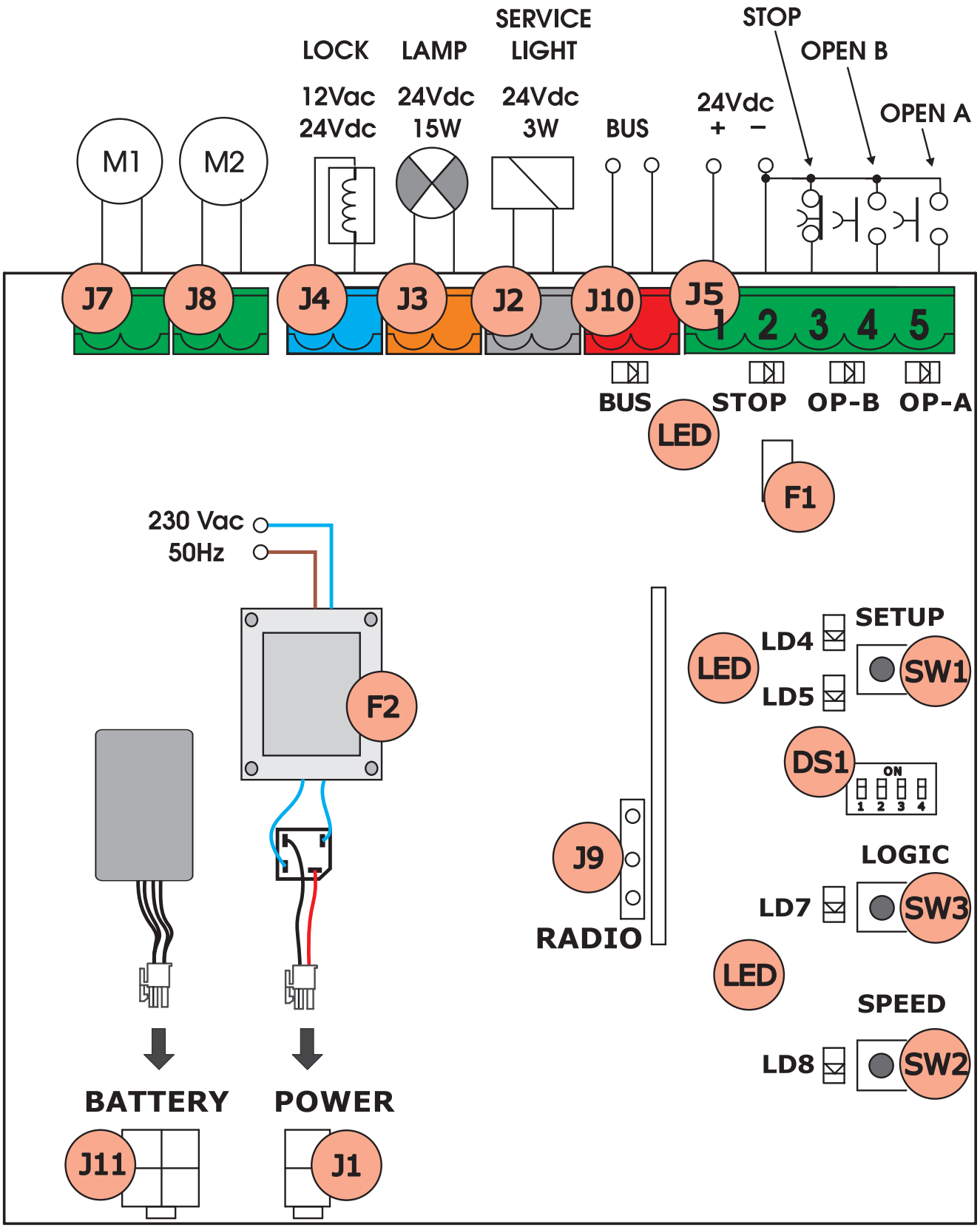

Fig. 1

3. TECHNICAL SPECIFICATIONS

Power supply voltage	230 (+6% -10%) 50 Hz / 115 Vac 60 Hz
Supply voltage of control unit	24 Vac nominal ①
Absorbed power	20W
Motor nominal power	150 W x 2
Accessories max. current (+24V)	100 mA
BUS Accessories max.current	400 mA
Operating ambient temperature	-20°C - +55°C
Fuses	F1 = self-resetting; F2 = T2A-250V
Function logics	EP, A
Work time (time-out)	1 minute (fixed)
Pause time	Varies according to learning (max. 10 min.)
Terminal board inputs	Open A, Open B, Stop, BUS (I/O)
Connector inputs	Power supply, battery, radio module
Terminal board outputs	Motors, flashing lamp, power supply to accessories, electric lock, service light contact (90 sec fixed)
Programmable functions	Logic (A, EP), Speed (depending on the motorization)
Learning functions	Pause time, leaf 2 delay at closing

① ***Different output values can be obtained on the board supply terminals depending on the mains voltage value. Before start-up always check if the output voltage on the transformer secondary winding is between 20 Vac and 26 Vac. Voltage must be measured load free.***

3.1. DESCRIPTION OF COMPONENTS

J1	POWER SUPPLY connector
J2	SERVICE LIGHT command terminal-board
J3	FLASHING LAMP terminal-board
J4	ELECTRIC LOCK terminal-board
J5	COMMANDS terminal-board
J7	MOTOR 1 terminal-board
J8	MOTOR 2 terminal-board
J9	Rapid connection for RADIO MODULE
J10	BUS terminal-board
J11	BATTERY connector
SW1	SET UP push-button
SW2	SPEED push-button
SW3	LOGIC push-button
DS1	Programming Dip-switch
F1	Accessories protective fuse
F2	Fuses protecting transformers and motors
LED	Signalling LEDs

3.2. DESCRIPTION OF TERMINAL-BOARDS

Terminal and/or terminal-board		Description	Device connected
1	J5	+24V	Power supply for accessories
2		GND	Negative
3		STOP	Device with NC contact which causes the automated system to shut down
4		OPEN B	Device with N.O contact (see chap. FUNCTION LOGICS)
5		OPEN A	
J10 RED terminal		BUS	Safety devices with BUS technology
J2 GREY terminal		SERVICE LIGHT	Service Light control output (connect a relay coil at 24Vdc-100mA max)
J3 ORANGE terminal		LAMP	Flashing lamp 24Vdc - 15W
J4 BLUE terminal		LOCK	Electric lock 12Vac or 24 Vdc (to be installed on leaf 1)
J7		MOT1	Motor 1 (leaf 1)
J8		MOT2	Motor 2 (leaf 2)

- *Leaf 1 means the leaf which opens first during the opening operation.*
- *The service light control is active during the entire gate opening or closing movement and for the successive 90 seconds.*

4. PROGRAMMING THE LOGIC

The function logic can be selected at any time by pressing push-button SW3.
The selected logic is then displayed on LED LD7:

LED on = AUTOMATIC logic (A)
LED off = SEMIAUTOMATIC STEPPED logic (EP)

5. PROGRAMMING THE SPEED

The function logic can be adjusted at any time by pressing push-button SW2.
The selected logic is then displayed on LED LD8:

LED on = HIGH speed
LED off = LOW speed

6. START-UP

6.1. LEDS CHECK

The following table shows that status of the LEDs in relation to the status of the inputs (the closed at rest automated system condition is shown in bold). Check the status of the signalling LEDs as per table below:

Tab. 1 - Operation of inputs status LEDs

LED	ON (closed contact)	OFF (open contact)
STOP	**Command disabled**	Command enabled
OPEN A	Command enabled	**Command disabled**
OPEN B	Command enabled	**Command disabled**
BUS	See par. 7.2	

6.2. PROGRAMMING THE DIPS-SWITCH

The following tables show the settings of the DS1 dip-switch for programming force, pre-flashing and reversing stroke.

Tab. 2 - DS1 programming (default settings in bold)

DS1	DS2	DS3	DS4	Description
OFF	**OFF**			**LOW FORCE**
OFF	ON			MEDIUM - LOW FORCE
ON	OFF			MEDIUM - HIGH FORCE
ON	ON			HIGH FORCE
		ON		ANTI-WIND ON
		OFF		**ANTI-WIND OFF**
			ON	REVERSING STROKE ON
			OFF	**REVERSING STROKE OFF**

If you connect an electric lock to terminal J4, position DS4 to ON to enable the reversing stroke (before opening, the motors thrust to close, thus facilitating the electric lock to uncouple).

By setting dip-switch DS3 on ON, a special antiwind function is activated that enables the gate operation even if strong wind is present.

6.3. PRE-FLASHING

The pre-flashing function can be activated and disabled (following an OPEN command, the unit activates the flashing lamp for 3 seconds before it starts the movement). Procedure:

1. Press LOGIC key (SW3) for at least 5 secs. to aCTIVATE pre-flashing.
2. Press SPEED key (SW2) for at least 5 secs. to dESACTIVATE pre-flashing.

In both cases check if the LED of the pressed key changes its status: in such cases it means that the function of the key and not the pre-flashing was changed.

6.4. TIME - SETUP LEARNING

Before any manoeuvre is executed, a SETUP cycle must first be run.

During SETUP do not interrupt the photocells because their interruption causes the immediate stop of the leaves. To end the procedure, repeat SETUP from the beginning.

When the board is powered up and a SETUP cycle has never been executed, LEDs LD4 and LD5 begin to flash slowly to signal that a SETUP cycle must be executed.
There are two possible types of SETUP: AUTOMATIC and MANUAL.

ENGLISH

6.4.1. AUTOMATIC SET-UP

To execute an AUTOMATIC SETUP, follow the procedure below:

1. Take the leaves to mid-point.
2. Hold down the SETUP (SW1) push-button until the 2 adjacent LEDs (LD4 and LD5) light up on steady beam.
3. Release the SETUP push-button, LEDs LD4 and LD5 begin to flash rapidly.
4. Leaf 2 (if present) starts the closing movement, stopping when it reaches the closing mechanical stop.
5. Leaf 1 starts the closing movement, stopping when it reaches the closing mechanical stop.
6. Leaf 1 starts the opening movement.
7. Leaf 2 (if present) starts the opening movement after a fixed delay at opening.
8. Leaves 1 and 2 (if present) stop when they reach the opening mechanical stop.
9. Wait for LEDs LD4 and LD5 to go OFF, which means that the SETUP procedure has finished.
10. Give an OPEN pulse to close the gate.

When the SETUP procedure has been started, if the leaves at point 4 and 5 open instead of closing, the motor power supply cables must be changed over.

When using the AUTOMATIC SETUP, the slow down spaces, the leaf opening and closing delays, and the pause time (30 sec., with A logic), are all preset by the board and cannot be modified.

6.4.2. MANUAL SET-UP

To execute a MANUAL SETUP, follow the procedure below:

1. Take the leaves to mid-point.
2. Hold down the SETUP (SW1) push-button until the leaves start to move.
3. Release the SETUP push-button, LEDs LD4 and LD5 begin to flash rapidly.
4. Leaf 2 (if present) starts the closing movement, stopping when it reaches the closing mechanical stop.
5. Leaf 1 starts the closing movement, stopping when it reaches the closing mechanical stop.
6. Leaf 1 starts the opening movement.
7. Leaf 2 (if present) starts the opening movement after a fixed delay at opening.
8. Leaves 1 and 2 (if present) stop when they reach the opening mechanical stop.
9. If LOW force was set, wait for about 5 sec checking if the flashing lamp goes OFF.
10. If the A Logic was selected, the board begins to count the pause time (max 10 min) and, after the required time has elapsed, give an OPENING pulse to continue the procedure. Otherwise, if you have selected the EP logic, give an OPEN pulse to continue the procedure.
11. Leaf 2 (if present) starts the closing movement an the board begins to count the delay of the leaf at closing.
12. After the required time has elapsed, give an OPEN pulse to make leaf 1 start the closing movement. If leaf 2 is not present, the pulse given in point 9 directly makes leaf 1 close.
13. Leaves 1 and 2 (if present) stop when they reach the closing mechanical stop.
14. Wait for LEDs LD4 and LD5 to go OFF, which means that the SETUP procedure has finished.

When the SETUP procedure has been started, if the leaves at point 4 and 5 open instead of closing, the motor power supply cables must be changed over.

When using the MANUAL SETUP, the slow-down spaces, and leaf delays at opening are preset by the board and cannot be modified. However, delay at leaf closing and pause time can be programmed during learning.

7. INSTALLATION OF BUS ACCESSORIES

This board is supplied with a BUS circuit enabling easy connection of a high number of BUS accessories (e.g. up to 16 photocells pairs), appropriately programmed, using only two cable without polarity.
Below we describe the addressing and memory storage of the BUS photocells.
For other future accessories, refer to the specific instructions.

7.1. ADDRESSING THE BUS PHOTOCELLS

- *Important: the same address must be given to both transmitter and receiver.*
- *Make sure that there are no two or more photocells pairs with the same address.*
- *If no BUS accessory is used, leave the BUS connector free (J10 - fig. 1).*

A maximum of 16 BUS photocell pairs can be connected to the board.
The photocells are split into groups:

Opening photocells:	max 6
Closing photocells:	max 7
Opening /Closing photocells:	max 2
Photocell used as an OPEN pulse:	max 1

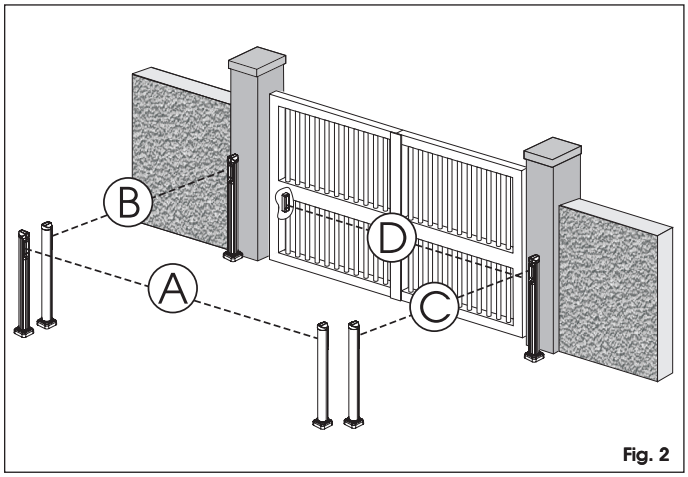

Fig. 2

Fig. 2 shows a 2-swing leaf automated system indicating the coverage beams of the photocells:

A: Photocells with OPENING and CLOSING action.
B: Photocells with OPENING action
C: Photocells with OPENING action
D: Photocells with CLOSING action

Table 3 shows the programming operations of the dip-switch inside the transmitter and of the BUS Photocells receiver.

Tab. 3 - Addressing of BUS Photocells

Dip1	Dip2	Dip3	Dip4	Ref.	Type
OFF	OFF	OFF	OFF	B -C	OPENING
OFF	OFF	OFF	ON		
OFF	OFF	ON	OFF		
OFF	OFF	ON	ON		
OFF	ON	ON	OFF		
OFF	ON	ON	ON		
ON	OFF	OFF	OFF	D	CLOSING
ON	OFF	OFF	ON		
ON	OFF	ON	OFF		
ON	OFF	ON	ON		
ON	ON	OFF	OFF		
ON	ON	OFF	ON		
ON	ON	ON	OFF		
OFF	ON	OFF	OFF	A	OPENING and CLOSING
OFF	ON	OFF	ON		
ON	ON	ON	ON	/	OPEN PULSE

7.2. MEMORY STORAGE OF BUS ACCESSORIES

You can add the BUS photocells to the system at any time, simply by memory-storing them on the board, observing the following procedure:

1. Install and program the accessories using the required address (see paragraph 7.1).
2. Cut power to the board.
3. Connect the two accessories cables to the red terminal-board J10 (any polarity will do).
4. Power up the board, taking care to first connect the main power supply (transformer output) and then any batteries.
5. Quickly press once only the SW1 (SETUP) push-button, to execute learning. The BUS LED flashes.
6. Give an OPEN impulse, leaves will move and the BUS learning procedure is over.

The board has memory stored the BUS accessories. Follow the instructions in the table below to check if the BUS connection is correct.

Tab. 4 - Description of BUS LED

Steady light	Normal operation (LED ON even in the absence of photocells)
Slow flashing lamp (flash every 0.5 sec)	At least one input engaged: photocell engaged or not aligned, Open A or Open B or Stop input engaged
Light OFF (flash every 2.5 sec)	BUS line short circuited
Fast flashing lamp (flash every 0.2 sec)	If you have detected a BUS connection error, repeat the acquisition procedure. If the error is repeated, make sure that there is not more than one accessory with the same address in the system (also see the accessories instructions)

8. MEMORY STORING THE RADIO CODE

The control board has an integrated 2-channel decoding system. This system makes it possible to memory-store both total opening (OPEN A) and partial opening OPEN B) of the automated system - this is made possible by an additional receiver module (fig.3 ref. ①) and radio controls on the same frequency.

- **Only one** *radio code can be used at a time.*
- *To change over from one code to another, you must delete the existing one (see paragraph on deletion), and repeat the memory-storage procedure.*

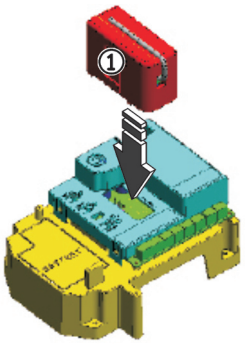

Fig. 3

8.1. MEMORY STORAGE OF 868 RADIO CONTROLS

A maximum of 250 codes can be memory stored, split between OPEN A and OPEN B.

1. On the radio control, simultaneously press and hold down push-buttons P1 and P2.
2. The radio control LED begins to flash.
3. Release both push-buttons.
4. Press the LOGIC (SW3) or SPEED (SW2) push-button, to memory store respectively total opening (OPEN A) or partial opening (OPEN B), and as you hold it down, also press the SETUP (SW1) push-button. The relevant LED starts to flash slowly for 5 sec.
5. Release both push-buttons.
6. Within these 5 sec., while the radio control LED is still flashing, press and hold down the required push-button on the radio control (the radio control LED lights up on steady beam).
7. The LED on the board lights up on steady beam for 1 second and then goes OFF, indicating that storage was executed.
8. Release the radio control push-button.
9. Quickly press twice the memory stored radio control push-button.

The automated system performs one opening operation. Make sure that the automated system is free of any obstacle created by persons or things.

To add other radio controls, transfer the code of the memory-stored push-button of the radio control to the relevant push-button of the radio controls to be added, observing the following procedure:

- On the memory stored radio control, simultaneously press and hold down push-buttons P1 and P2.
- The radio control LED begins to flash.
- Release both push-buttons.
- Press the memory stored push-button and hold it down (the radio control LED lights up on steady beam).
- Bring the radio controls near, press and hold down the push-button of the radio control to be added, releasing it only after the double flash of the radio control LED, which indicates memory storage executed.
- Quickly press twice the push-button of the memory stored radio control.

The automated system performs one opening operation. Make sure that the automated system is free of any obstacle created by persons or things.

8.2. MEMORY STORAGE OF 433 RADIO CONTROLS

A maximum of 250 codes can be memory stored, split between OPEN A and OPEN B.

1. Use 433 remote controls only with receiver module at 433 MHz.
2. Press the LOGIC (SW3) or SPEED (SW2) push-button, to memory store respectively total opening (OPEN A) or partial opening (OPEN B), and as you hold it down, also press the SETUP (SW1) push-button. The relevant LED starts to flash slowly for 5 sec.
3. Release both push-buttons. Within these 5 sec., press the appropriate push-button on the remote control.
4. The LED lights up on steady beam for 1 second, indicating memory storage executed, and then resumes flashing for another 5 sec., during which another radio control (point 4) can be memory stored.
5. When the 5 sec. have elapsed, the LED goes OFF indicating the end of the procedure.
6. To add other radio controls, repeat the operation at point 1.

8.2.1. REMOTE MEMORY STORAGE OF 433 RADIO CONTROLS

Other radio controls can be remotely stored only with the 433 radio controls, i.e. without using the LOGIC-SPEED-SETUP push-buttons, but using a previously stored radio control.

1. Get a radio control already stored on one of the 2 channels (OPEN A or OPEN B).
2. Press and hold down push-buttons P1 and P2 simultaneously until both the LEDs flash slowly for 5 sec.
3. Within 5 sec. press the push-button of the radio control that had been memory stored to enable learning on the selected channel.
4. The LED on the board relating to the channel being learned flashes for 5 sec., within which time the code of another radio control must be transmitted.
5. The LED lights up on steady beam for 2 seconds, indicating memory storage executed, and then resumes flashing for 5 sec., during which other radio controls can be memory stored, and then goes OFF.

8.3. RADIO CONTROLS DELETION PROCEDURE

To delete ALL the input radio control codes, press push-button LOGIC (SW3) or SPEED (SW2) and, while holding it down, also press push-button SETUP (SW1) for 10 sec.

1. The LED relating to the pressed push-button flashes for the first 5 sec, and then flashes more quickly for the next 5 sec.
2. Both LEDs light up on steady beam for 2 sec and then go OFF (deletion completed).
3. Release both push-buttons.

This operation is NOT reversible. All codes of radio controls stored as OPEN A and OPEN B will be deleted.

9. BATTERY KIT (OPZIONAL)

The buffer battery kit was built for insertion inside the control board support.
This support (Fig. 4 ref. ①) was pre-moulded to permit the battery housing to be opened.

1. Remove the board support material covering the battery housing, cutting the material connections along the perimeter.

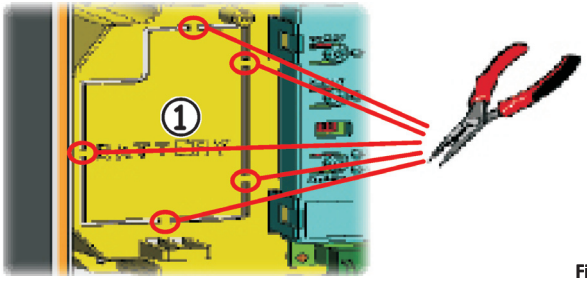

Fig. 4

2. Insert the battery in the housing you have just created, and secure it on the anchoring supports (Fig. 5).

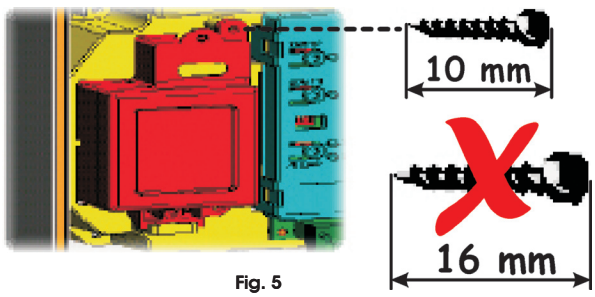

Fig. 5

3. To correctly fasten and connect the kit to the control unit, consult the instructions enclosed with the battery kit.

10. AUTOMATED SYSTEM TEST

When you have finished programming, check if the system is operating correctly. In particular, check if the safety devices are operating correctly.

ENGLISH

11. LOGIC TABLES

Tab. 5

LOGIC "A"	PULSES						
STATUS OF AUTOMATED SYSTEM	**OPEN A**	**OPEN B**	**STOP**	**FSW-OP**	**FSW-CL**	**FSW-OP/CL**	**FSW-OPEN**
CLOSED	opens leaves and closes after pause time	opens leaf 1 and closes after pause time	no effect (opening inhibited)	no effect (opening inhibited)	no effect	no effect (opening inhibited)	opens leaves and closes after pause time
OPENING	no effect		stops operation	reverses immediately at closing	no effect	stops and continues to open at disengagement	no effect ①
OPEN IN PAUSE	recharge the pause time		stops operation	no effect	recharges pause time (closing inhibited)	recharges pause time (closing inhibited)	recharges pause time (closing inhibited) ①
CLOSING	reverses immediately at opening	reverses immediately at opening	stops operation	no effect	reverses immediately at opening	stops and, at disengagement, reverses at opening	reverses immediately at opening
STOPPED	closes	closes	no effect (opening and closing inhibited)	no effect (opening inhibited)	no effect (closing inhibited)	no effect (opening and closing inhibited)	opens leaves

Tab. 6

LOGIC "EP"	PULSES						
STATUS OF AUTOMATED SYSTEM	**OPEN A**	**OPEN B**	**STOP**	**FSW-OP**	**FSW-CL**	**FSW-OP/CL**	**FSW-OPEN**
CLOSED	opens leaves	opens leaf 1	no effect (opening inhibited)	no effect (opening inhibited)	no effect	no effect (opening inhibited)	opens leaves
OPENING	stops operation ①	stops operation	stops operation	reverses immediately at closing	no effect	stops and continues to open at disengagement	no effect ①
OPEN	closes	closes	no effect (closing inhibited)	no effect	no effect (closing inhibited)	no effect (closing inhibited)	no effect ①
CLOSING	stops operation	stops operation	stops operation	no effect	reverses immediately at opening	stops and, at disengagement, reverses at opening	reverses immediately at opening
STOPPED	After OPEN: Restarts moving in reverse direction After STOP: Re-closes the leaf/ves immediately ①		no effect (opening and closing inhibited)	no effect (opening inhibited)	no effect (closing inhibited)	no effect (opening and closing inhibited)	opens leaves

① If the cycle began with OPEN-B (partial opening), an OPEN-A pulse will activate both leaves to open.

1. Lean detenidamente las instrucciones antes de instalar el producto.
2. Los materiales del embalaje (plástico, poliestireno, etc.) no deben dejarse al alcance de los niños, ya que constituyen fuentes potenciales de peligro.
3. Guarden las instrucciones para futuras consultas.
4. Este producto ha sido proyectado y fabricado exclusivamente para la utilización indicada en el presente manual. Cualquier uso diverso del previsto podría perjudicar el funcionamiento del producto y/o representar fuente de peligro.
5. GENIUS declina cualquier responsabilidad derivada de un uso impropio o diverso del previsto.
6. No instalen el aparato en atmósfera explosiva: la presencia de gas o humos inflamables constituye un grave peligro para la seguridad.
7. Los elementos constructivos mecánicos deben estar de acuerdo con lo establecido en las Normas EN 12604 y EN 12605.
8. Para los países no pertenecientes a la CEE, además de las referencias normativas nacionales, para obtener un nivel de seguridad adecuado, deben seguirse las Normas arriba indicadas.
9. GENIUS no es responsable del incumplimiento de las buenas técnicas de fabricación de los cierres que se han de motorizar, así como de las deformaciones que pudieran intervenir en la utilización.
10. La instalación debe ser realizada de conformidad con las Normas EN 12453 y EN 12445. El nivel de seguridad de la automación debe ser C+D.
11. Quiten la alimentación eléctrica y desconecten las baterías antes de efectuar cualquier intervención en la instalación.
12. Coloquen en la red de alimentación de la automación un interruptor omnipolar con distancia de apertura de los contactos igual o superior a 3 mm. Se aconseja usar un magnetotérmico de 6A con interrupción omnipolar.
13. Comprueben que la instalación disponga línea arriba de un interruptor diferencial con umbral de 0,03 A.
14. Verifiquen que la instalación de tierra esté correctamente realizada y conecten las partes metálicas del cierre.
15. La automación dispone de un dispositivo de seguridad antiaplastamiento constituido por un control de par. No obstante, es necesario comprobar el umbral de intervención según lo previsto en las Normas indicadas en el punto 10.
16. Los dispositivos de seguridad (norma EN 12978) permiten proteger posibles áreas de peligro de Riesgos mecánicos de movimiento, como por ej. aplastamiento, arrastre, corte.
17. Para cada equipo se aconseja usar por lo menos una señalización luminosa así como un cartel de señalización adecuadamente fijado a la estructura del bastidor, además de los dispositivos indicados en el "16".
18. GENIUS declina toda responsabilidad relativa a la seguridad y al buen funcionamiento de la automación si se utilizan componentes de la instalación que no sean de producción GENIUS.
19. Para el mantenimiento utilicen exclusivamente piezas originales GENIUS
20. No efectúen ninguna modificación en los componentes que forman parte del sistema de automación.
21. El instalador debe proporcionar todas las informaciones relativas al funcionamiento del sistema en caso de emergencia y entregar al usuario del equipo el manual de advertencias que se adjunta al producto.
22. No permitan que niños o personas se detengan en proximidad del producto durante su funcionamiento.
23. La aplicación no puede ser utilizada por niños, personas con reducida capacidad física, mental, sensorial o personas sin experiencia o la necesaria formación.
24. Mantengan lejos del alcance los niños los telemandos o cualquier otro emisor de impulso, para evitar que la automación pueda ser accionada involuntariamente.
25. Sólo puede transitarse entre las hojas si la cancela está completamente abierta.
26. El usuario debe abstenerse de intentar reparar o de intervenir directamente, y debe dirigirse exclusivamente a personal cualificado GENIUS o a centros de asistencia GENIUS.
27. Todo lo que no esté previsto expresamente en las presentes instrucciones debe entenderse como no permitido

DEUTSCH

HINWEISE FÜR DEN INSTALLATIONSTECHNIKER

ALLGEMEINE SICHERHEITSVORSCHRIFTEN

ACHTUNG! Um die Sicherheit von Personen zu gewährleisten, sollte die Anleitung aufmerksam befolgt werden. Eine falsche Installation oder ein fehlerhafter Betrieb des Produktes können zu schwerwiegenden Personenschäden führen.

1. Bevor mit der Installation des Produktes begonnen wird, sollten die Anleitungen aufmerksam gelesen werden.
2. Das Verpackungsmaterial (Kunststoff, Styropor, usw.) sollte nicht in Reichweite von Kindern aufbewahrt werden, da es eine potentielle Gefahrenquelle darstellt.
3. Die Anleitung sollte aufbewahrt werden, um auch in Zukunft Bezug auf sie nehmen zu können.
4. Dieses Produkt wurde ausschließlich für den in diesen Unterlagen angegebenen Gebrauch entwickelt und hergestellt. Jeder andere Gebrauch, der nicht ausdrücklich angegeben ist, könnte die Unversehrtheit des Produktes beeinträchtigen und/oder eine Gefahrenquelle darstellen.
5. Die Firma GENIUS lehnt jede Haftung für Schäden, die durch unsachgemäßen oder nicht bestimmungsgemäßen Gebrauch der Automatik verursacht werden, ab.
6. Das Gerät sollte nicht in explosionsgefährdeten Umgebungen installiert werden: das Vorhandensein von entflammbaren Gasen oder Rauch stellt ein schwerwiegendes Sicherheitsrisiko dar.
7. Die mechanischen Bauelemente müssen den Anforderungen der Normen EN 12604 und EN 12605 entsprechen.
8. Für Länder, die nicht der Europäischen Union angehören, sind für die Gewährleistung eines entsprechenden Sicherheitsniveaus neben den nationalen gesetzlichen Bezugsvorschriften die oben aufgeführten Normen zu beachten.
9. Die Firma GENIUS übernimmt keine Haftung im Falle von nicht fachgerechten Ausführungen bei der Herstellung der anzutreibenden Schließvorrichtungen sowie bei Deformationen, die eventuell beim Betrieb entstehen.
10. Die Installation muß unter Beachtung der Normen EN 12453 und EN 12445 erfolgen. Die Sicherheitsstufe der Automatik sollte C+D sein.
11. Vor der Ausführung jeglicher Eingriffe auf der Anlage sind die elektrische Versorgung und die Batterie abzunehmen.
12. Auf dem Versorgungsnetz der Automatik ist ein omnipolarer Schalter mit Öffnungsabstand der Kontakte von über oder gleich 3 mm einzubauen. Darüber hinaus wird der Einsatz eines Magnetschutzschalters mit 6A mit omnipolarer Abschaltung empfohlen.
13. Es sollte überprüft werden, ob vor der Anlage ein Differentialschalter mit einer Auslöseschwelle von 0,03 A zwischengeschaltet ist.
14. Es sollte überprüft werden, ob die Erdungsanlage fachgerecht augeführt wurde. Die Metallteile der Schließung sollten an diese Anlage angeschlossen werden.
15. Die Automation verfügt über eine eingebaute Sicherheitsvorrichtung für den Quetschschutz, die aus einer Drehmomentkontrolle besteht. Es ist in jedem Falle erforderlich, deren Eingriffsschwelle gemäß der Vorgaben der unter Punkt 10 angegebenen Vorschriften zu überprüfen.
16. Die Sicherheitsvorrichtungen (Norm EN 12978) ermöglichen den Schutz eventueller Gefahrenbereiche vor mechanischen Bewegungsrisiken, wie zum Beispiel Quetschungen, Mitschleifen oder Schnittverletzungen.
17. Für jede Anlage wird der Einsatz von mindestens einem Leuchtsignal empfohlen sowie eines Hinweisschildes, das über eine entsprechende Befestigung mit dem Aufbau des Tors verbunden wird. Darüber hinaus sind die unter Punkt "16" erwähnten Vorrichtungen einzusetzen.
18. Die Firma GENIUS lehnt jede Haftung hinsichtlich der Sicherheit und des störungsfreien Betriebs der Automatik ab, soweit Komponenten auf der Anlage eingesetzt werden, die nicht im Hause GENIUS hergestellt urden.
19. Bei der Instandhaltung sollten ausschließlich Originalteile der Firma GENIUS verwendet werden.
20. Auf den Komponenten, die Teil des Automationssystems sind, sollten keine Veränderungen vorgenommen werden.
21. Der Installateur sollte alle Informationen hinsichtlich des manuellen Betriebs des Systems in Notfällen liefern und dem Betreiber der Anlage das Anleitungsbuch, das dem Produkt beigelegt ist, übergeben.
22. Weder Kinder noch Erwachsene sollten sich während des Betriebs in der unmittelbaren Nähe der Automation aufhalten.
23. Die Anwendung darf nicht von Kindern, von Personen mit verminderter körperlicher, geistiger, sensorieller Fähigkeit oder Personen ohne Erfahrungen oder der erforderlichen Ausbildung verwendet werden.
24. Die Funksteuerungen und alle anderen Impulsgeber sollten außerhalb der Reichweite von Kindern aufbewahrt werden, um ein versehentliches Aktivieren der Automation zu vermeiden.
25. Der Durchgang oder die Durchfahrt zwischen den Flügeln darf lediglich bei vollständig geöffnetem Tor erfolgen.
26. Der Benutzer darf direkt keine Versuche für Reparaturen oder Arbeiten vornehmen und hat sich ausschließlich an qualifiziertes Fachpersonal GENIUS oder an Kundendienstzentren GENIUS zu wenden.
27. Alle Vorgehensweisen, die nicht ausdrücklich in der vorliegenden Anleitung vorgesehen sind, sind nicht zulässig

NEDERLANDS

WAARSCHUWINGEN VOOR DE INSTALLATEUR

ALGEMENE VEILIGHEIDSVOORSCHRIFTEN

LET OP! Het is belangrijk voor de veiligheid dat deze hele instructie zorgvuldig wordt opgevolgd. Een onjuiste installatie of foutief gebruik van het product kunnen ernstig persoonlijk letsel veroorzaken.

1. Lees de instructies aandachtig door alvorens te beginnen met de installatie van het product.
2. De verpakkingsmaterialen (plastic, polystyreen, enz.) mogen niet binnen het bereik van kinderen worden gelaten, want zij vormen een mogelijke bron van gevaar.
3. Bewaar de instructies voor raadpleging in de toekomst.
4. Dit product is uitsluitend ontworpen en gebouwd voor het doel dat in deze documentatie wordt aangegeven. Elk ander gebruik, dat niet uitdrukkelijk wordt vermeld, zou het product kunnen beschadigen en/of een bron van gevaar kunnen vormen.
5. GENIUS aanvaardt geen enkele aansprakelijkheid voor schade die ontstaat uit oneigenlijk gebruik of ander gebruik dan waarvoor het automatische systeem is bedoeld.
6. Installeer het apparaat niet in een explosiegevaarlijke omgeving: de aanwezigheid van ontvlambare gassen of dampen vormt een ernstig gevaar voor de veiligheid.
7. De mechanische bouwelementen moeten in overeenstemming zijn met de bepalingen van de normen EN 12604 en EN 12605.
8. Voor niet-EEG landen moeten, om een goed veiligheidsniveau te bereiken, behalve de nationale voorschriften ook de bovenstaande normen in acht worden genomen.
9. GENIUS is niet aansprakelijk als de regels der goede techniek niet in acht genomen zijn bij de bouw van het sluitwerk dat gemotoriseerd moet worden, noch voor vervormingen die zouden kunnen ontstaan bij het gebruik.
10. De installatie dient te geschieden in overeenstemming met de normen EN 12453 en EN 12445. Het veiligheidsniveau van het automatische systeem moet C+D zijn.
11. Alvorens ingrepen te gaan verrichten op de installatie moet de elektrische voeding worden weggenomen en moeten de batterijen worden afgekoppeld.
12. Zorg op het voedingsnet van het automatische systeem voor een meerpolige schakelaar met een opening tussen de contacten van 3 mm of meer. Het wordt geadviseerd een magnetothermische schakelaar van 6A te gebruiken met meerpolige onderbreking.
13. Controleer of er bovenstrooms van de installatie een differentieelschakelaar is geplaatst met een limiet van 0,03 A.
14. Controleer of de aardingsinstallatie vakkundig is aangelegd en sluit er de metalen delen van het sluitsysteem op aan.
15. Het automatische systeem beschikt over een intrinsieke beveiliging tegen inklemming, bestaande uit een controle van het koppel. De inschakellimiet hiervan dient echter te worden gecontroleerd volgens de bepalingen van de normen die worden vermeld onder punt 10.
16. De veiligheidsvoorzieningen (norm EN 12978) maken het mogelijk eventuele gevaarlijke gebieden te beschermen tegen Mechanische gevaren door beweging, zoals bijvoorbeeld inklemming, meesleuren of amputatie.
17. Het wordt voor elke installatie geadviseerd minstens één lichtsignaal te gebruiken alsook een waarschuwingsbord dat goed op de constructie van het hang- en sluitwerk dient te worden bevestigd, afgezien nog van de voorzieningen die genoemd zijn onder punt "16".
18. GENIUS aanvaardt geen enkele aansprakelijkheid voor wat betreft de veiligheid en de goede werking van het automatische systeem, als er in de installatie gebruik gemaakt wordt van componenten die niet door GENIUS zijn geproduceerd.
19. Gebruik voor het onderhoud uitsluitend originele GENIUS-onderdelen.
20. Verricht geen wijzigingen op componenten die deel uitmaken van het automatische systeem.
21. De installateur dient alle informatie te verstrekken over de handbediening van het systeem in noodgevallen, en moet de gebruiker van de installatie het bij het product geleverde boekje met aanwijzingen overhandigen.
22. De toepassing mag niet worden gebruikt door kinderen, personen met lichamelijke, geestelijke en sensoriele beperkingen, of door personen zonder ervaring of de benodigde training.
23. Sta het niet toe dat kinderen of volwassenen zich ophouden in de buurt van het product terwijl dit in werking is.
24. Houd radio-afstandsbedieningen of alle andere impulsgevers buiten het bereik van kinderen, om te voorkomen dat het automatische systeem onopzettelijk kan worden aangedreven.
25. Ga alleen tussen de vleugels door als het hek helemaal geopend is.
26. De gebruiker mag zelf geen pogingen ondernemen tot reparaties of andere directe ingrepen, en dient zich uitsluitend te wenden tot gekwalificeerd en geautoriseerd GENIUS-personeel of een erkend GENIUS-servicecentrum.
27. Alles wat niet uitdrukkelijk in deze instructies wordt aangegeven, is niet toegestaan

Le descrizioni e le illustrazioni del presente manuale non sono impegnative. GENIUS si riserva il diritto, lasciando inalterate le caratteristiche essenziali dell'apparecchiatura, di apportare in qualunque momento e senza impegnarsi ad aggiornare la presente pubblicazione, le modifiche che essa ritiene convenienti per miglioramenti tecnici o per qualsiasi altra esigenza di carattere costruttivo o commerciale.

The descriptions and illustrations contained in the present manual are not binding. GENIUS reserves the right, whils leaving the main features of the equipments unaltered, to undertake any modifications to holds necessary for either technical or commercial reasons, at any time and without revising the present publication.

Les descriptions et les illustrations du présent manuel sont fournies à titre indicatif. GENIUS se réserve le droit d'apporter à tout moment les modifications qu'elle jugera utiles sur ce produit tout en conservant les caractéristiques essentielles, sans devoir pour autant mettre à jour cette publication .

Las descripciones y las ilustraciones de este manual no comportan compromiso alguno. GENIUS se reserva el derecho, dejando inmutadas las características esenciales de los aparatos, de aportar, en cualquier momento y sin comprometerse a poner al día la presente publicación, todas las modificaciones que considere oportunas para el perfeccionamiento técnico o para cualquier otro tipo de exigencia de carácter constructivo o comercial.

Die Beschreibungen und Abbildungen in vorliegendem Handbuch sind unverbindlich. GENIUS behält sich das Recht vor, ohne die wesentlichen Eigenschaften dieses Gerätes zu verändern und ohne Verbindlichkeiten in Bezug auf die Neufassung der vorliegenden Anleitungen, technisch bzw, konstruktiv / kommerziell bedingte Verbesserungen vorzunehmen.

De beschrijvingen in deze handleiding zijn niet bindend. GENIUS behoudt zich het recht voor op elk willekeurig moment de veranderingen aan te brengen die het bedrijf nuttig acht met het oog op technische verbeteringen of alle mogelijke andere productie- of commerciële eisen, waarbij de fundamentele eigenschappen van het apparaat gehandhaafd blijven, zonder zich daardoor te verplichten deze publicatie bij te werken.

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