

ARMOR

Operator for swing gates



Instructions and indications for installation and use

MANUAL FOR PROFESSIONAL FITTERS ONLY

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- Costruttore: **LIFE home integration S.r.l.**
- Indirizzo: **Via I Maggio, 37 – 31043 FONTANELLE (TV) Italia**
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Sulla targhetta d'identificazione sono riportati i dati del costruttore dell'automazione, il tipo e data di produzione (mese/anno).

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- Address: **Via I Maggio, 37 – 31043 FONTANELLE (TV) Italy**
- Telephone: + 39 0422 809 254
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The identity plate bears information on the Manufacturer of the operator and specifies the type and date (month/year) of manufacture.

For further information on technical or commercial issues and technician call-out and spares requests, Clients may contact the Manufacturer or area representative from whom the product was purchased.

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- Adresse : **Via I Maggio, 37 – 31043 FONTANELLE (TV) Italia**
- Téléphone : + 39 0422 809 254
- Télécopie : + 39 0422 809 250
- http : www.homelife.it
- email : info@homelife.it

Les données relatives au fabricant du système automatisé, au type et à la date de production (mois / année) de l'automatisme sont indiquées sur la fiche d'identification.

Pour d'autres informations techniques et / ou commerciales ou d'envoi du personnel technique ou de demande de pièces détachées, le client peut contacter directement le fabricant ou le réseau de vente auprès duquel il a acheté le produit.



DESTINAZIONE D'USO

- L'ARMOR è un attuatore meccanico articolato irreversibile a bassa tensione, concepito esclusivamente per aprire e chiudere cancelli ad una o due ante battenti di tipo "residenziale". Un uso diverso o su cancelli con misure superiori rispetto a quelle indicate nei cap. DATI TECNICI e LIMITI D'IMPIEGO è da considerarsi non conforme alla destinazione d'uso. Il costruttore declina ogni responsabilità per danni causati da un impiego diverso. Il rischio è esclusivamente a carico del proprietario e la garanzia decade.
- Ogni uso diverso da quanto sopra descritto è vietato.
- L'attuatore non può essere installato e usato in ambienti a rischio d'esplosione.
- I cancelli che vengono motorizzati devono essere conformi alle norme ed alle direttive europee vigenti, tra le quali EN 12604 e EN 12605.
- L'attuatore deve essere utilizzato solo se in condizioni tecnicamente perfette e secondo la destinazione d'uso, nella consapevolezza delle condizioni di sicurezza e di pericolo, e nell'osservanza delle istruzioni d'installazione ed uso.
- Le disfunzioni che possono pregiudicare la sicurezza devono essere eliminate immediatamente.
- Il cancello deve essere stabile, ben incernierato e resistente alla flessione; non deve cioè subire deflessioni o svergolamenti in fase di apertura o chiusura.
- L'attuatore non può compensare alcun difetto o un errato montaggio del cancello.
- L'attuatore deve essere usato solo in ambienti non soggetti al rischio d'allagamento.
- Non utilizzare l'attuatore in condizioni ambientali con agenti atmosferici aggressivi (ad es. aria salina).

INTENDED USE

- ARMOR is a low voltage, irreversible, articulated, mechanical operator designed exclusively for opening and closing one- and two-leaf residential-type swing gates only. Improper use or use on gates larger than those indicated in the TECHNICAL DATA and USAGE RESTRICTIONS chapters will be considered non-conform to the intended use. The Manufacturer declines all responsibility for other use. The owner accepts full responsibility for improper use, which will result in the warranty being rendered void.
- Any usage differing from that described above is forbidden.
- The operator may not be installed or used in potentially explosive environments.
- Motorised gates must conform to current European standards and Directives, including EN 12604 and EN 12605.
- The operator may only be used when in perfect working order and in compliance with the intended use, in the awareness of safety and hazard conditions and in compliance with the instructions for installation and use.
- Any dysfunctions that may pose threats to safety must be eliminated immediately.
- The gate must be stable, properly hung and resistant to flexion (it must not bend during opening and closure movements).
- The operator cannot compensate for faulty or incorrectly hung gates.
- The operator may not be used in environments prone to flooding.
- Do not use the operator in environmental conditions characterised by harsh atmospheric agents (e.g. salty air).

EMPLOI

- L'ARMOR est un actionneur mécanique articulé irréversible à basse tension, conçu exclusivement pour ouvrir et fermer les portails à un ou deux vantaux battants en « habitats individuels ou collectifs ». Tout autre emploi ou sur des portails dont les dimensions sont supérieures aux dimensions spécifiées dans les chap. DONNEES TECHNIQUES et LIMITES D'UTILISATION est considéré comme un non respect du but de l'emploi. Le fabricant décline toute responsabilité pour les dommages liés à cet autre emploi. Ces risques sont à la seule charge du propriétaire sans possibilité de recours à la garantie.
- Tout autre emploi est interdit.
- Il n'est pas possible d'installer et d'utiliser l'actionneur dans des zones comportant des risques d'explosion
- Les portails motorisés doivent être conformes aux normes et directives européennes en vigueur, notamment les normes EN 12604 et EN 12605.
- L'actionneur ne doit être utilisé que dans des conditions techniques optimales et suivant l'emploi prévu, en pleine connaissance des conditions de sécurité et de danger, et en observant les instructions d'installation et d'utilisation.
- Tout fonctionnement défectueux qui risque de compromettre la sécurité doit être immédiatement résolu.
- Le portail doit être stable, bien encharné et résistant au fléchissement. Il ne doit souffrir aucune déviation ou distorsion pendant l'ouverture ou la fermeture.
- L'actionneur ne peut compenser aucun défaut d'assemblage ou un mauvais assemblage du portail.
- L'actionneur doit être utilisé dans des zones qui ne sont pas soumises aux risques d'inondations.
- L'actionneur ne doit pas être utilisé dans des zones soumises à des attaques d'éléments atmosphériques agressifs (par ex. air salin).



3 DESCRIZIONE PRODOTTO

ARMOR è una famiglia d'attuatori elettromeccanici articolati irreversibili per l'automazione di cancelli ad una o due ante battenti di tipo residenziale. La gamma è costituita da 3 modelli, AR024, AR124XP e AR224XP; Nel caso di due ante sono necessari due motori, di cui uno con centrale (AR224XP) e uno senza centrale (AR024). Con unica unica si utilizza il modello AR124XP, con centrale di comando per un motore unico. Armor è dotato di sblocco a chiave per consentire di muovere manualmente il cancello in caso di mancanza d'alimentazione elettrica.

Tab. 1: componenti e dispositivi di un'automazione tipo - fig. 1

Pos.	Descrizione
1	Attuatore elettromeccanico articolato irreversibile ARMOR.
2	Centrale di comando (solo nei modelli AR124XP e AR224XP) con ricevitore radio integrato.
3	Coppia di fotocellule di sicurezza (composta da un TX ed un RX).
4	Segnalatore lampeggiante con antenna.
5	Selettore a chiave.
6	Radiocomando.
7	Colonnina per fotocellula.
8	Arresto meccanico in chiusura.
9	Arresto meccanico in apertura.
10	Elettroserratura (verticale/orizzontale).

3 DESCRIPTION OF THE PRODUCT

ARMOR is a family of irreversible articulated electromechanical operators for driving one- and two-leaf swing gates. The range is composed of 3 models, AR024, AR124XP and AR224XP. Gates with two leaves require two motors, one with control unit (AR224XP) and one without (AR024). For single leaves, the AR124XP model with control unit for single motor is used. Armor is equipped with a key release function, in order to make it possible to move the gate manually in the event of a power failure.

Tab. 1: components and devices of a typical automation - fig. 1

Pos.	Description
1	ARMOR irreversible articulated electromechanical operator.
2	Control unit (in AR124XP and AR224XP models only) with built-in radio receiver.
3	Pair of safety photocells (composed of a Transmitter (Tx) and receiver (Rx)).
4	Flashing light with aerial.
5	Key selector.
6	Radio control.
7	Column for photocell.
8	Closure mechanical end stop.
9	Opening mechanical end stop.
10	Electric lock (vertical/horizontal).

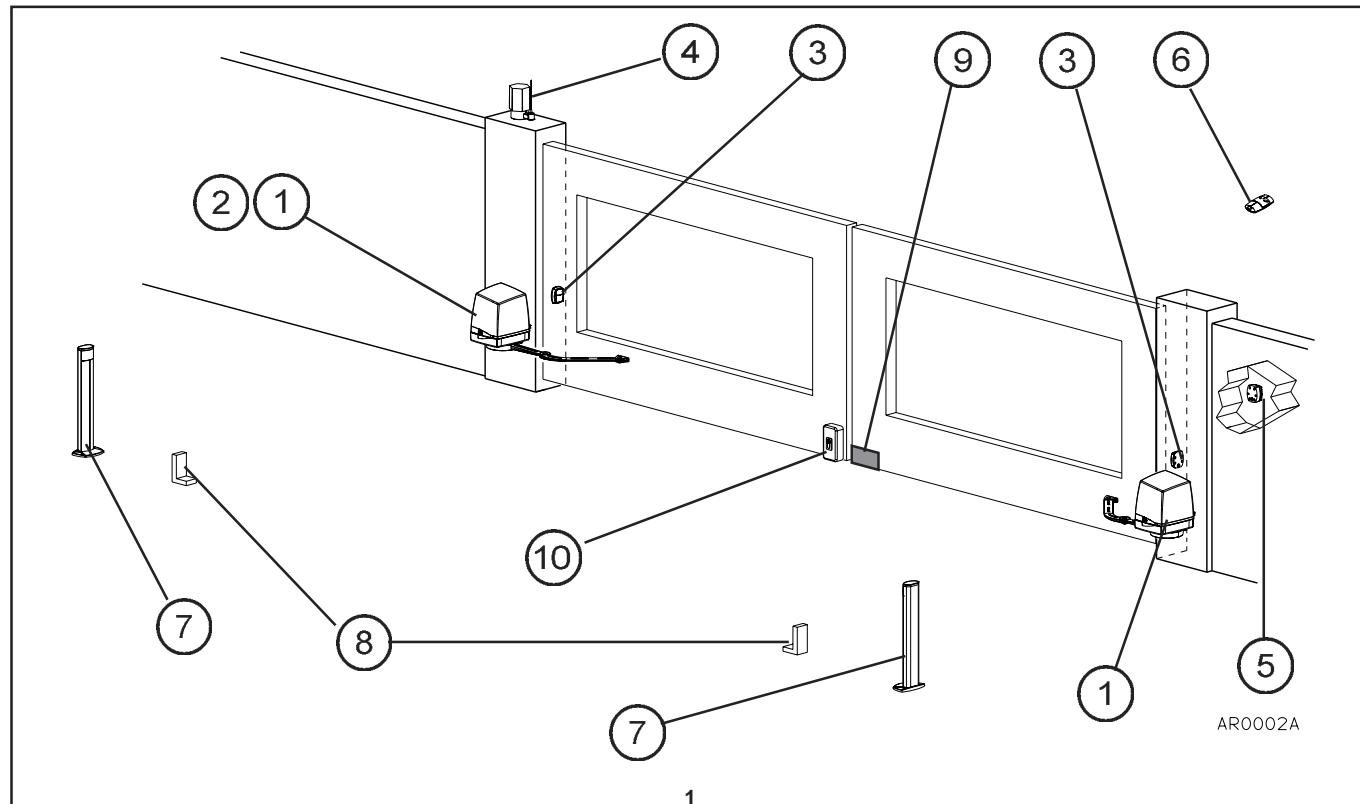
3 DESCRIPTION DU PRODUIT

ARMOR est une famille d'actionneurs électromécaniques articulés irréversibles pour la motorisation des portails à un ou deux vantaux battants en habitats individuels ou collectifs. La gamme est constituée par 3 modèles, AR024, AR124XP et AR224XP; Dans le cas de deux vantaux, deux moteurs sont nécessaires, dont l'un équipé d'une unité (AR224XP) et l'autre sans unité (AR024). Avec un seul vantail, on utilise le modèle AR124XP, avec une unité de contrôle pour un moteur unique.

Armor est équipé d'un dispositif de déverrouillage à clé pour permettre d'utiliser manuellement le portail en cas de coupure d'électricité.

Tab. 1: Composants et dispositifs du système automatisé - fig. 1

Repère	Description
1	Actionneur électromécanique articulé irréversible ARMOR
2	Unité de contrôle (uniquement dans les modèles AR124XP et AR224XP) avec récepteur radio intégré.
3	Paire de photocellules de sécurité (avec un émetteur et un récepteur).
4	Clignotant avec antenne.
5	Sélecteur à clef.
6	Emetteur
7	Colonne pour les photocellules
8	Arrêt mécanique à la fermeture
9	Arrêt mécanique à l'ouverture
10	Serrure électrique (verticale / horizontale)



Tab. 2: descrizione contenuto scatola attuatore ARMOR – fig. 2

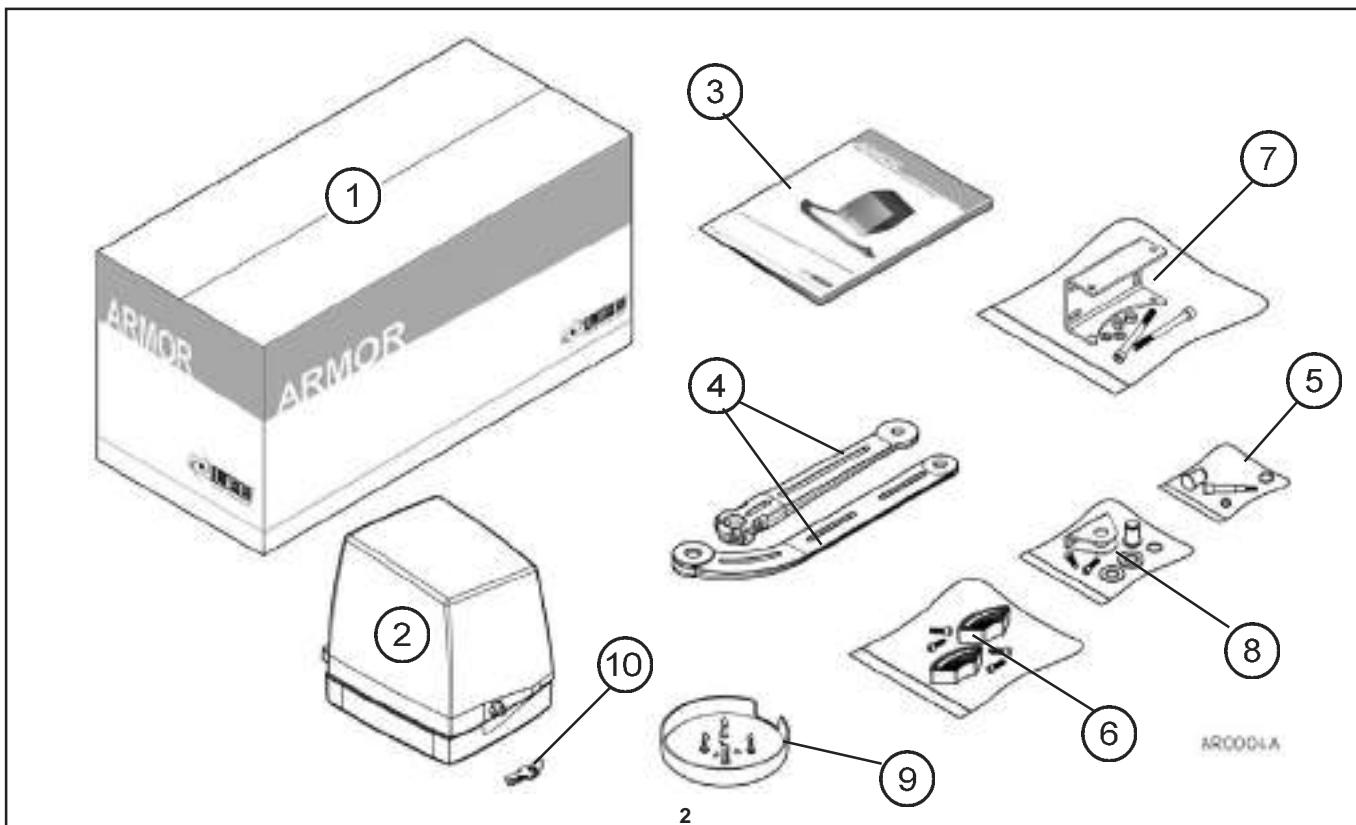
Pos.	Descrizione
1	Scatola in cartone.
2	Attuatore elettromeccanico articolato irreversibile ARMOR.
3	Manuale istruzioni installazione e uso.
4	N. 2 leve del braccio snodato.
5	Busta perni e fissaggi braccio snodato.
6	N. 2 finecorsa meccanici.
7	Staffa supporto attuatore.
8	Staffa braccio snodato.
9	Coperchio finecorsa meccanici.
10	N. 2 chiavi di sblocco.

Tab. 2: description of contents of ARMOR operator box- fig. 2

Pos.	Description
1	Cardboard box.
2	ARMOR irreversible articulated electromechanical operator.
3	Installation and Use Instruction Manual.
4	2 jointed arm levers.
5	Bag of pins and fasteners for jointed arm.
6	2 mechanical end stops.
7	Operator support bracket.
8	Jointed arm bracket.
9	Mechanical end stop lid.
10	2 release keys.

Tab. 2: Description du contenu du boîtier de l'actionneur ARMOR – fig. 2

Repère	Description
1	Boîtier en carton.
2	Actionneur électromécanique articulé irréversible ARMOR.
3	Mode d'emploi et d'installation.
4	2 leviers du bras articulé.
5	Sachet chevilles et fixations bras articulé.
6	2 fins de course mécaniques.
7	Etrier support actionneur.
8	Etrier bras articulé.
9	Couvercle fins de course mécaniques.
10	2 clés de déverrouillage.



4 INSTALLAZIONE

ATTENZIONE: importanti istruzioni di sicurezza. Seguire tutte le istruzioni in quanto una non corretta installazione può causare danni gravi alle persone.

Prima di eseguire l'installazione si raccomanda di leggere attentamente le prescrizioni e le avvertenze contenute nel presente manuale (vedere cap. PRESCRIZIONI E AVVERTENZE DI SICUREZZA) ed attenersi scrupolosamente alle istruzioni in esso riportate.

4 INSTALLATION

ATTENTION: important safety instructions. Follow all instructions carefully as incorrect installation may cause serious injury.

Before commencing installation we highly recommend reading the instructions and warnings contained in this manual carefully (see the SAFETY INSTRUCTIONS AND WARNINGS Chap) and scrupulously observing the instructions it contains.

4 INSTALLATION

ATTENTION: consignes de sécurité importantes. Suivre scrupuleusement ces consignes car une mauvaise installation peut être la source de graves dommages et préjudices aux personnes.

Avant toute installation, lire attentivement les prescriptions et conseils spécifiés dans ce mode d'emploi (voir chap. PRESCRIPTIONS ET CONSIGNES DE SECURITE) et respecter scrupuleusement les instructions ci-jointes.



4.1 PRESCRIZIONI E AVVERTENZE PER L'INSTALLAZIONE

- Prima di procedere con l'installazione leggere attentamente quanto riportato nel cap. PRESCRIZIONI E AVVERTENZE DI SICUREZZA.
- E' compito della PERSONA COMPETENTE che esegue l'installazione fare un'analisi dei rischi e adeguare di conseguenza i dispositivi di sicurezza dell'automazione.
- Prima di iniziare l'installazione verificare l'eventuale necessità d'ulteriori dispositivi e materiali che possono servire a completare l'automazione in base alla specifica situazione d'impiego.
- L'installatore deve controllare che il range di temperatura dichiarato per l'attuatore (vedi cap. DATI TECNICI) sia adatto al luogo d'installazione.
- L'attuatore non può essere utilizzato su cancelli dotati di porta per passaggio pedonale, a meno che il funzionamento dell'attuatore sia impedito con la porta aperta.
- Prima di installare l'attuatore assicurarsi che il cancello sia in buone condizioni meccaniche, correttamente bilanciato e che si apra e chiuda in maniera corretta.
- Assicurarsi che sia evitato il pericolo di intrappolamento tra il cancello aperto e le parti circostanti, in seguito al movimento di apertura.
- Eventuali pulsanti (normalmente aperti/off) installati per il comando dell'attuatore, devono essere posizionati in modo tale che il cancello sia a vista, ma distante dalle parti in movimento. Se il comando non è mediante chiave, ogni pulsante deve essere posto ad un'altezza minima di 1,5 m e non accessibile al pubblico.
- Dopo aver installato l'automazione, assicurarsi che sia regolata correttamente e che i sistemi di protezione e lo sblocco funzionino correttamente.
- È vietato motorizzare un cancello che non sia già efficiente e sicuro poiché la motorizzazione non può risolvere difetti causati da un'errata installazione o da una cattiva manutenzione del cancello stesso.
- Durante l'installazione dell'automazione fare costantemente riferimento alle norme armonizzate EN 12453 e EN 12445.
- Verificare che i singoli dispositivi da installare siano adatti all'automazione che s'intende realizzare, con particolare attenzione ai dati riportati nel cap. DATI TECNICI. Non proseguite se anche uno solo dei dispositivi non è adatto all'uso.
- Accertarsi che il luogo di installazione dell'automazione non sia soggetto a inondazioni o allagamenti, fonti di calore o fiamme, incendio o situazioni di pericolo in genere.

4.1 INSTRUCTIONS AND WARNINGS FOR INSTALLATION

- Before commencing installation read the SAFETY INSTRUCTIONS AND WARNINGS chapter carefully.
- The COMPETENT PERSON who installs the operator is responsible for performing risk analysis and regulating the automation's safety devices consequentially.
- Before commencing installation, check whether further devices or materials are needed to complete the automation in order to suit the specific situation in which it will be used.
- The Fitter must check that the temperature range declared on the operator (see TECHNICAL DATA Chap.) is suited to the place in which the device is installed.
- The operator cannot be fitted on gates with separate pedestrian access, unless operator function is prevented when the gate is open.
- Before installing the operator, ensure that the gate is in good mechanical conditions, correctly balanced and that it opens and closes correctly.
- Ensure that the risk of entrapment between the open gate and surrounding parts following the opening movement is eliminated.
- Any normally open/off buttons installed for the activation of the operator must be positioned so that they are within view of the gate but distant from moving parts. Unless said devices operate using keys, buttons be positioned at a minimum height of 1.5m and not accessible to unauthorised persons.
- Once the automation has been installed, ensure that it is correctly adjusted and that the protection systems and release work properly.
- It is strictly forbidden to motorise a gate that is not already efficient and secure as the automation cannot resolve faults caused by incorrect installation or poor maintenance of the gate.
- During installation, make constant reference to harmonised standards EN 12453 and EN12445.
- Ensure that the individual devices to be installed are suitable for the automation that one intends to create, paying careful attention to the points raised in the TECHNICAL DATA chapter. Do not proceed if even just one device is unsuitable for the intended use.

4.1 PRESCRIPTIONS ET CONSEILS POUR L'INSTALLATION

- Avant l'installation, lire attentivement le chap. PRESCRIPTIONS ET CONSIGNES DE SECURITE).
- Un technicien compétent préposé à l'installation est chargé de faire l'analyse des risques et d'adapter par conséquent les dispositifs de sécurité du système automatisé.
- Avant l'installation, vérifier si des dispositifs ou des matériaux sont nécessaires pour compléter le système automatisé en fonction de son emploi spécifique.
- Le technicien préposé à l'installation doit vérifier que la température requise au niveau de l'actionneur (voir chap. DONNEES TECHNIQUES) est adaptée à la zone d'installation.
- L'actionneur ne peut pas être utilisé sur des portails avec portes de passage piétons, sauf si le fonctionnement de l'actionneur est bloqué lorsque le portail est ouvert.
- Avant l'installation de l'actionneur, vérifier que le portail est en bonne condition mécanique, qu'il est correctement équilibré et qu'il s'ouvre et se ferme correctement.
- S'assurer que tout danger de piégeage est évité entre le portail ouvert et les parties périphériques, lors du mouvement d'ouverture.
- D'éventuels boutons installés (généralement ON/OFF) au niveau du contrôle de l'actionneur doivent être placés de façon à ce que le portail soit visible et à distance des parties mobiles. Sauf s'ils fonctionnent à l'aide d'une clé, ces boutons doivent être placés à une hauteur minimum de 1,5 m et hors de portée du public.
- Après avoir installé le système automatisé, vérifier qu'il a été correctement programmé et que les systèmes de protection et le dispositif de déverrouillage fonctionnent correctement.
- Il est interdit d'installer un moteur sur un portail qui n'est pas adapté car la motorisation ne peut pas résoudre des défauts dus à une mauvaise installation ou à un manque d'entretien de ce portail.
- Pendant l'installation du système automatisé, se référer constamment aux normes harmonisées EN 12453 et EN 12445.
- Vérifier que chaque dispositif installé est adapté au système automatisé réalisé, en faisant attention particulièrement aux données spécifiées dans le chap. DONNEES TECHNIQUES. Cesser toute installation si l'un des dispositifs est inadapté à l'emploi prévu.
- Vérifier que la zone d'installation du système automatisé n'est pas située à proximité de zones d'inondations ou de crues, de sources de chaleur ou de flammes, d'incendies ou des zones de danger en général.



- Durante l'installazione tenere protetti i componenti dell'automazione per evitare che vi possano penetrare all'interno liquidi (es. pioggia) e/o corpi estranei (terra, ghiaia, ecc.).
- Il materiale dell'imballaggio deve essere smaltito nel pieno rispetto della normativa locale.
- Indossare occhiali di protezione quando si devono praticare i fori di fissaggio.
- Nel caso di lavori in quota (sopra i 2 m da terra), ad esempio per installare il segnalatore luminoso o l'antenna, è necessario che il personale competente sia attrezzato di scale, imbragature di sicurezza, casco di protezione ed quant'altro previsto dalle leggi e dalle norme per l'esecuzione di tali lavori. Fare riferimento alla direttiva 89/655/CEE modificata dalla 2001/45/CE.

4.2 VERIFICHE PRELIMINARI

Prima di procedere all'installazione è necessario effettuare le seguenti verifiche preliminari:

- Le ante del cancello devono avere peso e dimensioni che rientrano nei limiti di impiego (vedere cap. DATI TECNICI e LIMITI D'IMPIEGO), in caso contrario l'attuatore lineare elettromeccanico ARMOR non può essere installato.
- La struttura delle ante deve essere adatta al montaggio dell'attuatore e conforme alle norme vigenti. Eventualmente prevedere dispositivi ulteriori per garantire la sicurezza di funzionamento.
- Le ante del cancello devono essere solide e robuste; le cerniere devono essere adeguate alle dimensioni e al peso delle ante, avere giochi minimi ed essere solidamente fissate.
- Il movimento delle ante, sia in chiusura che in apertura, deve essere uniforme: non vi devono essere punti in cui la resistenza alla rotazione o l'attrito sia maggiore. Eseguire manualmente alcuni movimenti di prova aprendo e chiudendo più volte più volte le ante.
- Le ante del cancello devono essere ben bilanciate, cioè non devono muoversi se lasciate ferme in qualsiasi posizione durante l'apertura o la chiusura. Controllare inoltre che le ante non sbandino o flettano durante il movimento.
- Le cerniere delle ante del cancello devono essere perfettamente verticali, onde evitare sbandamenti durante il funzionamento.
- Nei cancelli a due ante, nel punto di chiusura le ante devono incontrarsi e combaciare perfettamente per tutta l'altezza, senza sforzare una contro l'altra o rimanere troppo lontane; devono inoltre essere perfettamente verticali.

- Ensure that the place of installation is not prone to flooding, does not contain sources of heat or naked flames, fires or hazard situations in general.
- During installation, protect automation components to prevent liquids (e.g. rain) and/or foreign bodies (earth, gravel, etc) penetrating inside.
- Wrapping materials must be disposed of in compliance with local regulations.
- Wear protective goggles when making holes for clamping.
- In the event of works at heights of over 2m from the ground, for example for the installation of the indicator lamp or aerial, fitters must be equipped with ladders, safety harnesses, protective helmet, and all other equipment required by law and the standards governing this kind of work. Refer to Directive 89/655/EEC amended by 2001/45/EC.

4.2 PRELIMINARY CHECKS

Before commencing installation, the following checks must be performed:

- The weight and dimensions of the gate must not exceed the limits for use (see the TECHNICAL DATA and USAGE RESTRICTIONS chaps.), if they exceed such limits, the ARMOR operator may not be installed.
- The structure of the gate leaf must be suitable for the installation of the operator and conform to current standards. Provide all devices necessary to guarantee safe operation.
- The gate leaves must be sturdy and solid; the hinges must be suited to the dimensions and weight of the leaves, gaps between parts must be minimal and they must be solidly fixed.
- The gate's movement in both opening and closure must be uniform, without points of greater resistance to rotation or friction. Check manually by opening and closing the leaves several times.
- The gate leaves must be well balanced, i.e. they must not move when left in any point during opening or closure. Ensure that the leaves not bend or deviate from their course during movement.
- Gate leaf hinges must be perfectly vertical in order to avoid deviations during operation,
- In two-leaf gates, when completely closed the two leaves must meet and match perfectly for their entire height, without forcing one against the other or remaining too distant, and they must be perfectly vertical.

- Pendant l'installation, protéger les composantes du système automatisé afin d'éviter l'éventuelle pénétration de liquides (par ex. pluie) et / ou de corps étrangers (terre, gravier, etc.).
- Détruire le matériel d'emballage dans le respect des normes locales.
- Porter des lunettes de protection au moment d'effectuer les trous de fixation.
- En cas de travaux en hauteur (au-delà de 2 mètres), pour installer par exemple le clignotant ou l'antenne, les techniciens professionnels doivent utiliser des échelles, des harnais de sécurité, porter un casque de protection et tout ce qui est prévu par la loi et les normes relatives à la réalisation de tels travaux. Se référer à la directive 89/655/CEE modifiée par la directive 2001/45/CE.

4.2 VÉRIFICATIONS PRÉLIMINAIRES

Avant l'installation, il est nécessaire d'effectuer les contrôles préliminaires suivants:

- Les vantaux du portail doivent présenter un poids et des dimensions qui sont conformes à l'emploi prévu (voir chap. DONNEES TECHNIQUES ET LIMITES D'UTILISATION), sans quoi il n'est pas possible d'installer l'actionneur électromécanique ARMOR.
- Il faut que la structure des vantaux soit adaptée à l'installation de l'actionneur conformément aux normes en vigueur. Prévoir éventuellement d'autres dispositifs afin d'en assurer le fonctionnement.
- Les vantaux du portail doivent être solides et robustes; les charnières doivent être adaptées aux dimensions et au poids des vantaux, avoir suffisamment de jeu et être solidement fixés.
- Le mouvement des vantaux doit être uniforme, au moment de la fermeture et de l'ouverture: il ne faut pas qu'il y ait des points de résistance ou de frottement. Effectuer manuellement quelques mouvements d'ouverture et de fermeture des vantaux à titre d'essai.
- Les vantaux du portail doivent être bien équilibrés, c'est-à-dire qu'ils ne doivent pas bouger s'ils sont fixes dans n'importe quelle position pendant l'ouverture ou la fermeture. Vérifier également que les vantaux ne dévient pas ni ne s'inclinent pendant le mouvement.
- Les charnières des vantaux du portail doivent être parfaitement verticales pour éviter des déviations pendant le fonctionnement.
- Dans les portails à deux vantaux, au niveau de la fermeture, les vantaux doivent se rencontrer et concorder parfaitement sur toute la hauteur, sans les forcer ni les tenir trop éloignés et doivent être parfaitement verticaux.



- 8) Verificare la presenza delle battute d'arresto meccanico in chiusura e in apertura; devono essere:
- idonee alle ante e ben fissate al suolo;
 - sufficientemente robuste;
 - inoltre, in caso d'urto contro le battute, non devono esserci rischi di danneggiamento delle ante del cancello.
- 9) La zona d'installazione dell'attuatore non deve essere soggetta ad allagamenti: è vietata quindi l'installazione troppo vicina al suolo.
- 10) Le superfici di fissaggio (colonna, pilastro, muro, ecc.) della staffa di supporto dell'attuatore devono essere lisce e verticali, parallele all'anta, nonché sufficientemente solide e compatte per consentire un fissaggio sicuro.
- 11) Impiegare dispositivi di fissaggio in base al materiale della superficie di appoggio (saldatura se la superficie è un tubo metallico, oppure viti e tasselli se la superficie è in muratura).

4.2.1 LIMITI D'IMPIEGO

Il tipo di cancello, l'altezza e la forma delle ante, le condizioni climatiche determinano i limiti d'impiego; essi devono essere attentamente considerati nell'installazione. La tabella 3 ha valore solamente indicativo.

Tab. 3: limiti d'impiego

Modelli: AR024-AR124XP-AR224XP

Larghezza max. anta	Peso max. anta
(m)	(Kg)
2,00	200

- 8) Check the opening and closure mechanical end stops; they must be:
- suited to the gate leaves and firmly fixed to the ground;
 - adequately robust;
 - free from potential damage to the gate leaves in the event of collision.
- 9) The operator installation area must not be prone to flooding and therefore it may not be installed too close to the ground.
- 10) The surfaces (column, pillar, wall, etc.) to which the operator's support bracket is fastened must be smooth and vertical, parallel to the leaf and sufficiently solid and compact to allow secure fixing.
- 11) Use fixing devices suited to the material of the surface (welding for metal tubes or screws and screw anchors for masonry).

4.2.1 USAGE RESTRICTIONS

The type of gate, height, form and climatic conditions cause usage restrictions and must be considered carefully during installation. Table 3 provides approximate indications only.

Tab. 3: usage restrictions

Models: AR024-AR124XP-AR224XP

Max. width leaf (m)	Max. weight leaf (Kg)
2. 00	200

- 8) Vérifier la présence des dispositifs d'arrêt mécanique à la fermeture et à l'ouverture. Ils doivent être:
- adaptés aux vantaux et bien fixés au sol;
 - suffisamment robustes;
 - en outre, en cas de heurt contre les arrêts, il ne doit exister aucun risque d'endommagement des vantaux du portail.
- 9) La zone d'installation de l'actionneur ne doit pas être soumise à des risques d'inondations: toute installation trop proche du sol est donc interdite.
- 10) Les zones de fixation (colonne, pilier, mur, etc.) de l'étrier de support de l'actionneur doivent être lisses et verticales, parallèles au vantail, ainsi que suffisamment solides et compactes afin de permettre une fixation plus sûre.
- 11) Utiliser des dispositifs de fixation selon la matière de la zone d'appui (soudage si cette zone est un tube métallique, ou des vis et des chevilles si cette zone est en béton).

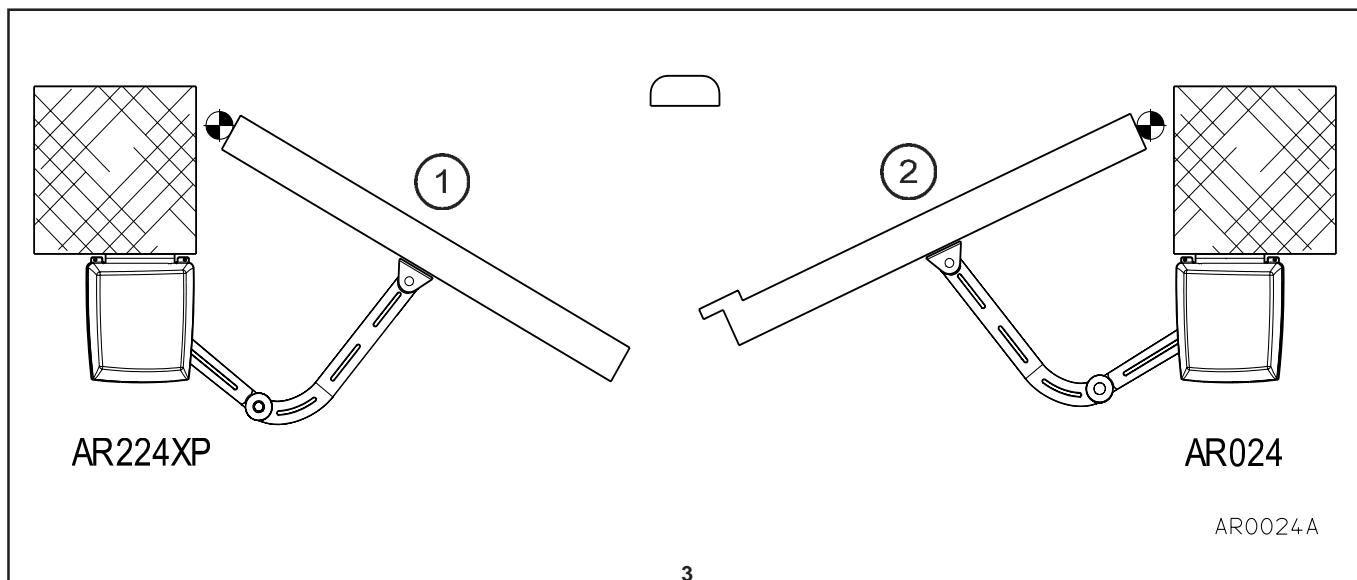
4.2.1 LIMITES D'UTILISATION

Le type de portail, sa hauteur et la forme de ses vantaux ainsi que les conditions climatiques déterminent les limites d'utilisation qui doivent être scrupuleusement pris en compte dans toutes les installations. Le tableau 3 a une valeur uniquement indicative.

Tab. 3: limites d'utilisation

Modèles : AR024-AR124XP-AR224XP

Largeur max. vantail (m)	Poids max. vantail (Kg)
2,00	200



4.2.2 INSTALLAZIONI TIPO

- 1) **IMPIANTO A DUE ANTE:** nel caso si automatizzi un cancello a due ante si devono utilizzare l'ARMOR AR224XP e AR024XP.

La definizione di anta 1 e di anta 2 del cancello è fondamentale per il funzionamento dell'automazione:

Anta 1: è la prima ad aprirsi (1 fig. 3) quando il cancello è chiuso, mentre è la seconda a muoversi quando si trova in posizione di ante aperte; arriva alla battuta di chiusura dopo l'anta 2.

Anta 2: è la seconda ad aprirsi (2 fig. 3) quando il cancello è chiuso, mentre è la prima a muoversi quando si trova in posizione di ante aperte; arriva alla battuta di chiusura prima dell'anta 1.

Effettuare l'installazione dei motori rispettando le seguenti corrispondenze:

- **AR224XP** (con centrale di comando) va montato sull'anta 1
- **AR024** (senza centrale) va montato sull'anta 2.

- 2) **IMPIANTO AD UNA SOLA ANTA:** nel caso si automatizzi un cancello ad una sola anta si deve utilizzare l'ARMOR AR124XP (fig. 4).

4.2.2 TYPICAL INSTALLATION

- 1) **TWO-LEAF SYSTEMS:** when automating a two-leaf gate, one must use ARMOR AR224XP and AR024. The definition of leaf 1 and leaf 2 of the gate is essential for automation operation:

Leaf 1: is the first to open (1 fig. 3) when the gate is closed, and the second to move when it is in an open position; it meets the end stop after leaf 2.

Leaf 2: is the second to open (2 fig. 3) when the gate is closed, and the first to move when it is in an open position, it meets the end stop before leaf 1.

Install the motors observing the following:

- **AR224XP** (with control unit) to be mounted on leaf 1
- **AR024** (without control unit) to be mounted on leaf 2

- 2) **SINGLE LEAF SYSTEM:** when automating a gate with a single leaf, the ARMOR AR124XP must be used.

4.2.2 INSTALLATIONS TYPE

- 1) **INSTALLATION A DEUX VANTAUX :** Dans le cas d'une automatisation d'un portail à deux vantaux, il faudra utiliser l'Armor AR224XP et AR024.

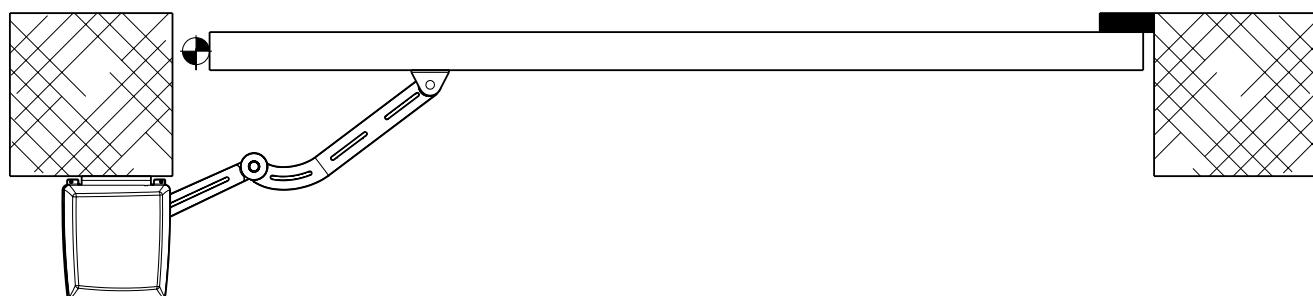
La définition de vantail 1 et vantail 2 du portail est fondamentale pour le fonctionnement du système automatisé: **Vantail 1** : il s'agit du premier à s'ouvrir (1 fig. 3) lorsque le portail est fermé, alors qu'il s'agit du second à se déplacer lorsqu'il se trouve en position de vantaux ouverts ; il arrive à la butée de fermeture après le vantail 2.

Vantail 2 : il s'agit du second à s'ouvrir (2 fig. 3) lorsque le portail est fermé, alors qu'il s'agit du premier à se déplacer lorsqu'il se trouve en position de vantaux ouverts ; il arrive à la butée de fermeture avant le vantail 1.

Effectuer l'installation des moteurs en respectant les indications suivantes:

- **AR224XP** (avec unité de contrôle) doit être monté sur le vantail 1
- **AR024** (sans unité) doit être monté sur le vantail 2.

- 2) **INSTALLATION A UN SEUL VANTAIL:** Dans le cas d'une automatisation d'un portail à un seul vantail, il faudra utiliser l'Armor AR124XP (fig. 4).



AR124XP

AR0037A

4.3 INSTALLAZIONE COMPONENTI ARMOR

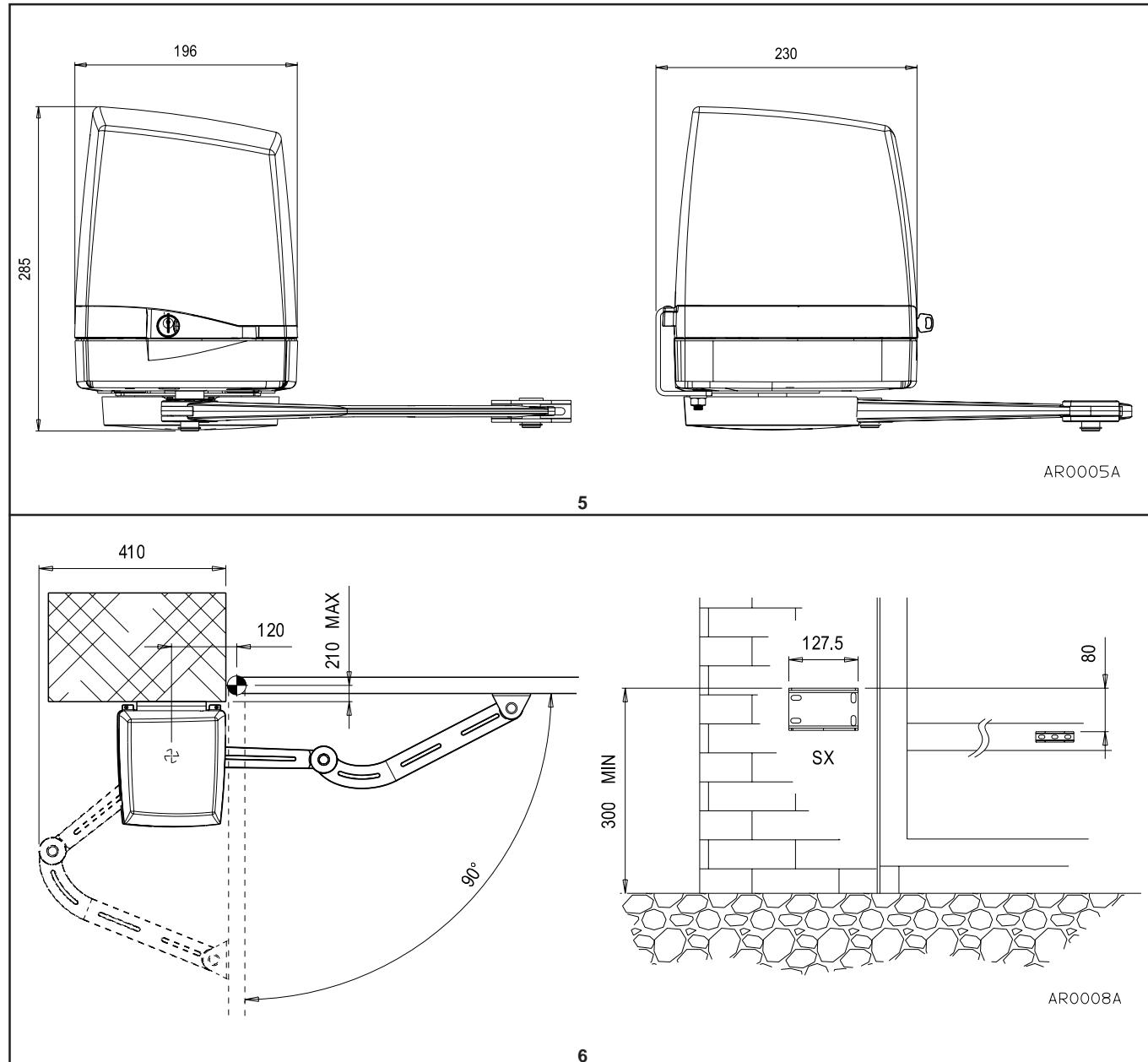
- La zona di installazione dell'attuatore deve prevedere lo spazio necessario per effettuare le operazioni di manutenzione e di sblocco manuale. Verificare i limiti d'ingombro facendo riferimento alla fig. 5.
- Le tipologie più comuni di installazione dell'attuatore sono due, rappresentate in fig. 6 e 7.
 - Tipologia 1 (fig. 6), con cerniera dell'anta non allineata alla superficie di montaggio della staffa di supporto attuatore. In questo caso l'angolo massimo di apertura dell'anta è di 90° e la distanza massima tra cerniera e superficie di appoggio della staffa di supporto attuatore è di 210 mm.

4.3 INSTALLING ARMOR COMPONENTS

- The area in which the operator is installed must be spacious enough to perform manual release and maintenance operations. Check dimension limits referring to fig. 5.
- There are two common types of operator installation, shown in figs. 6 and 7.
 - Type 1 (fig. 6), with the leaf hinge not aligned with the mounting surface of the operator support bracket. In this case the maximum leaf opening angle is 90° and the maximum distance between the hinge and support bracket contact surface is 210 mm.

4.3 INSTALLATION DES COMPOSANTES ARMOR

- La zone d'installation de l'actionneur doit prévoir suffisamment d'espace pour effectuer les opérations d'entretien et de déverrouillage manuel. Vérifier les limites d'encombrement en se référant à la fig. 5.
- Les typologies les plus communes d'installation de l'actionneur sont au nombre de deux et sont représentées sur les fig. 6 et 7.
 - Typologie 1 (fig. 6), avec charnière du vantail non alignée à la surface de montage de l'étrier de support de l'actionneur. Dans ce cas, l'angle maximum d'ouverture du vantail est de 90° et la distance maximum entre la charnière et la surface d'appui de l'étrier de support de l'actionneur est de 210 mm.



- 2) Tipologia 2 (fig. 7), con cerniera dell'anta allineata alla superficie di montaggio della staffa di supporto attuatore. In questo caso l'angolo massimo di apertura dell'anta è di 120° e la distanza massima tra cerniera e l'albero dell'attuatore è di 260 mm.

4.3.1 MONTAGGIO STAFFA SUPPORTO ATTUATORE

- a) Posizionare la staffa sulla superficie di appoggio rispettando le quote di fig. 5 e fig. 6 per aperture con angolo massimo di 90°, oppure di fig. 5 e fig.7 per aperture con angolo massimo di 120°.
- b) Verificare che l'uscita del tubo di passaggio dei cavi elettrici venga a trovarsi sotto la staffa (fig. 6 e 7).
- c) Verificare che sull'anta, nel punto in cui deve essere fissata la staffa del braccio snodato, vi sia lo spazio necessario e la superficie adatta al fissaggio (con viti o tramite saldatura).
- d) Fissare (con viti o tramite saldatura) la staffa supporto attuatore al pilastro nella posizione stabilita (fig. 6 e 7).
- e) Verificare che la staffa sia perfettamente in bolla nelle due direzioni (fig. 8).

- 2) Type 2 (fig. 7), with leaf hinge aligned with the operator support bracket, in this case the maximum leaf opening angle is 120° and the maximum distance between the hinge and the operator shaft is 260 mm.

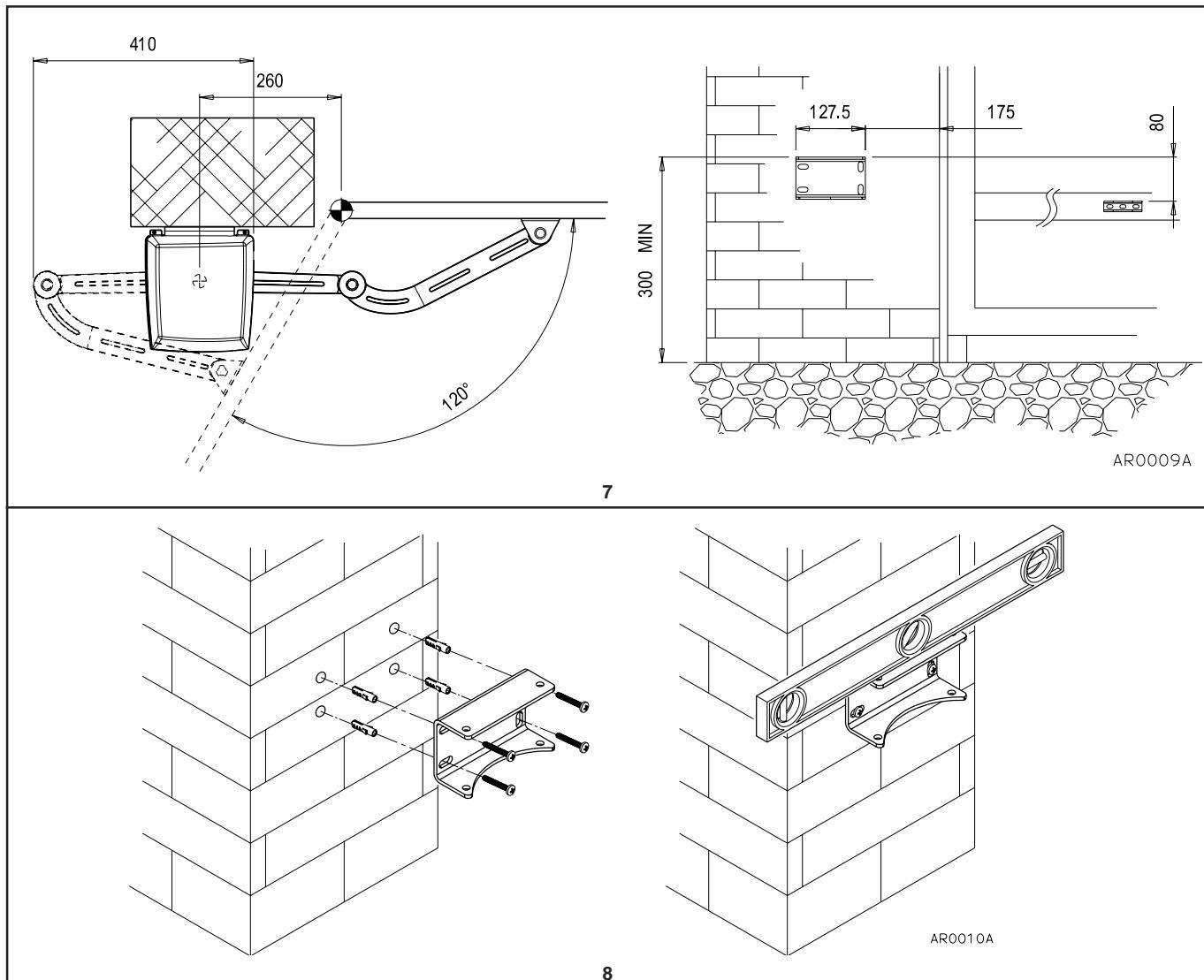
4.3.1 OPERATOR SUPPORT BRACKET ASSEMBLY

- a) Position the bracket on the contact surface respecting the distances shown in fig. 5 and fig. 6 for openings with a maximum angle of 90°, or fig. 5 and fig. 7 for openings with a maximum angle of 120°.
- b) Check that the outlet of the electric cable passage pipe is located beneath the bracket (fig. 6 and 7).
- c) Ensure that on the leaf, at the point in which the jointed arm bracket is to be fixed, there is enough space and that the surface is suitable for fastening (with screws or welding).
- d) Fasten (using screws or welding) the operator support bracket to the post in the established position. (fig. 6 and 7).
- e) Use a spirit level to ensure that the bracket is perfectly level in both directions (fig. 8).

- 2) Typologie 2 (fig. 7), avec charnière du vantail alignée à la surface de montage de l'étrier de support de l'actionneur. Dans ce cas, l'angle maximum d'ouverture du vantail est de 120° et la distance maximum entre la charnière et l'arbre de l'actionneur est de 260 mm.

4.3.1 MONTAGE DE L'ÉTRIER DE SUPPORT DE L'ACTIONNEUR

- a) Positionner l'étrier sur la surface d'appui en respectant les valeurs des fig. 5 et 6 pour des ouvertures avec un angle maximum de 90°, ou bien des fig. 5 et 7 pour des ouvertures avec un angle maximum de 120°.
- b) Vérifier que la sortie fourreau de passage des câbles électriques se situe en dessous de l'étrier (fig. 6 et 7).
- c) Vérifier que sur le vantail, au point de fixation de l'étrier du bras articulé, il y a suffisamment d'espace et la surface adaptée pour sa fixation (à l'aide de vis ou par soudage).
- d) Fixer (à l'aide de vis ou par soudage) l'étrier de support de l'actionneur au pilier selon la position décrite (fig. 6 et 7).
- e) Vérifier que l'étrier est parfaitement mis de niveau dans les deux directions (fig. 8).



4.3.2 ASSEMBLAGGIO E MONTAGGIO BRACCIO SNODATO

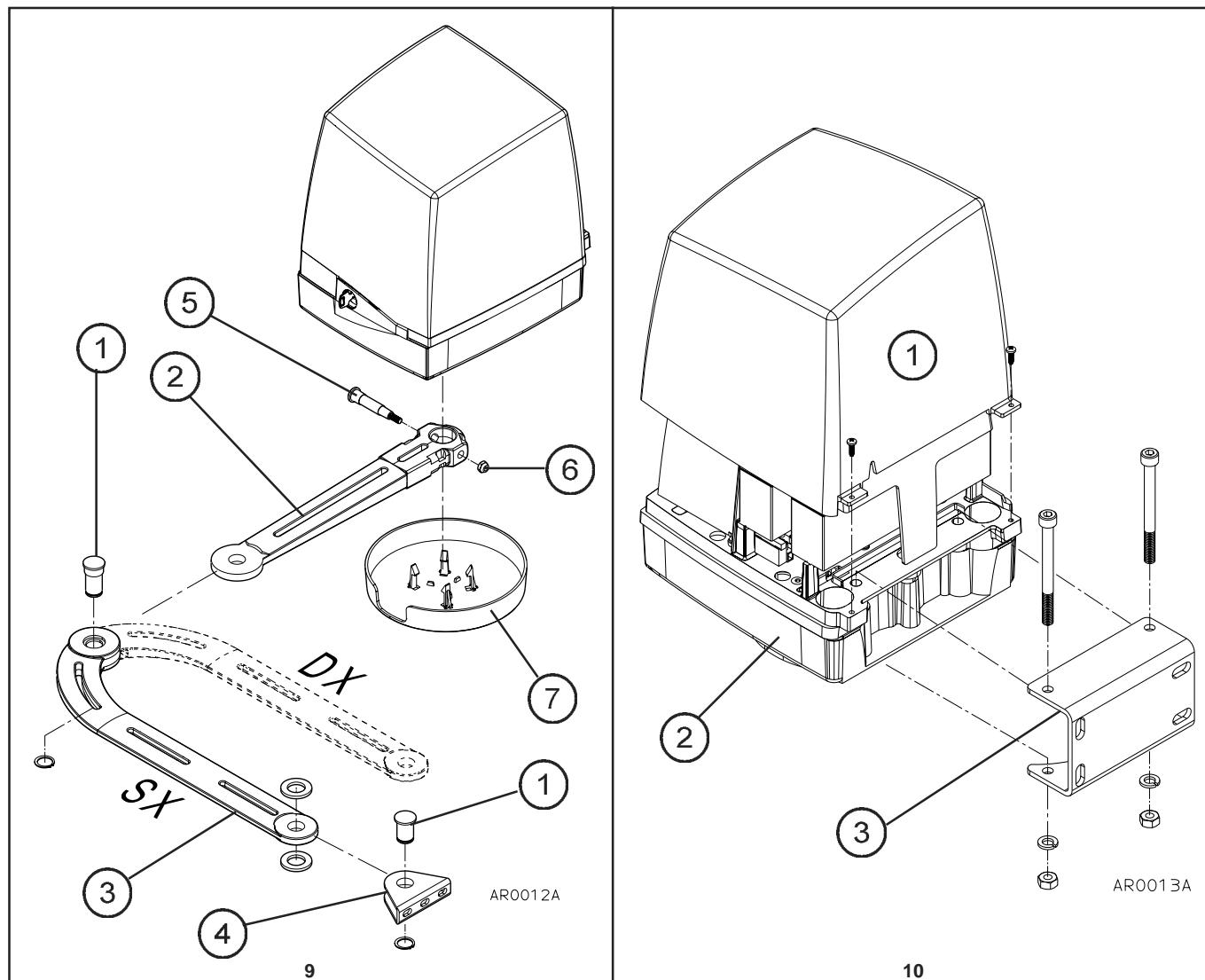
- a) Assemblare il braccio snodato come indicato in fig. 9, infilando i perni (1 fig. 9) nei fori delle leve (2 e 3 fig. 9) e della staffa (4 fig. 9), bloccandoli con gli anelli seeger.
- b) A seconda se l'attuatore deve movimentare un'anta destra o sinistra, le leve devono essere assemblate come in fig. 9:
 - DX = montaggio su anta destra,
 - SX = montaggio su anta sinistra.
- c) Infilare la leva (2 fig. 9) sull'albero dell'attuatore, bloccandola tramite l'apposita spina (5 fig. 9) e il dado autobloccante (6 fig. 9).

4.3.2 ASSEMBLING AND MOUNTING THE JOINTED ARM

- a) Assemble the jointed arm as shown in fig. 9, by threading the pins (1 fig. 9) into the holes on the levers (2 and 3 fig. 9) and bracket (4 fig. 9), fastening them with snap rings.
- b) Depending on whether the operator must drive a right or left leaf, the levers must be assembled as shown in fig. 9:
 - DX = assembly on right leaf,
 - SX = assembly on left leaf.
- c) Thread the lever (2 fig. 9) on to the operator shaft, locking it in place using the pin (5 fig. 9) and self-locking nut provided (6 fig. 9).

4.3.2 ASSEMBLAGE ET MONTAGE DU BRAS ARTICULÉ

- a) Assembler le bras articulé comme il est indiqué sur la fig. 9, en enfiler les chevilles (1 fig. 9) dans les trous des leviers (2 et 3 fig. 9) et de l'étrier (4 fig. 9), en les bloquant à l'aide des anneaux de retenue type Seeger.
- b) Selon si l'actionneur doit mettre en mouvement un vantail droit ou gauche, les leviers doivent être assemblés comme il est indiqué sur la fig. 9:
 - Droit = montage sur vantail droit,
 - Gauche = montage sur vantail gauche.
- c) Enfiler le levier (2 fig. 9) sur l'arbre de l'actionneur, en le bloquant à l'aide de la fiche prévue à cet effet (5 fig. 9) et de l'écrou autobloquant (6 fig. 9).



4.3.3 MONTAGGIO ATTUATORE

- Smontare il coperchio (1 fig. 10) dell'attuatore.
- Infilare il corpo del motoriduttore (2 fig. 10) nella staffa (3 fig. 10) e fissarlo con viti, dadi e rondelle come indicato in fig. 10.
- Sbloccare l'attuatore azionando la leva di sblocco (vedere cap. SBLOCCO ATTUATORE).

4.3.3 ASSEMBLING THE OPERATOR

- Remove the operator cover (1 fig. 10).
- Thread the body of the gearmotor (2 fig. 10) into the bracket (3 fig. 10) and fasten it using screws, nuts and washers as shown in fig. 10.
- Release the operator by activating the release lever (see OPERATOR RELEASE Chap.).

4.3.3 MONTAGE DE L'ACTIONNEUR

- Démonter le couvercle (1 fig. 10) de l'actionneur.
- Enfiler le corps du motoréducteur (2 fig. 10) dans l'étrier (3 fig. 10) et le fixer à l'aide de vis, d'écrous et de rondelles comme il est indiqué sur la fig. 10.
- Déverrouiller l'actionneur en actionnant le levier de déverrouillage (voir chap. DEVEROUILLAGE ACTIONNEUR).

4.3.4 MONTAGGIO STAFFA BRACCIO SNODATO

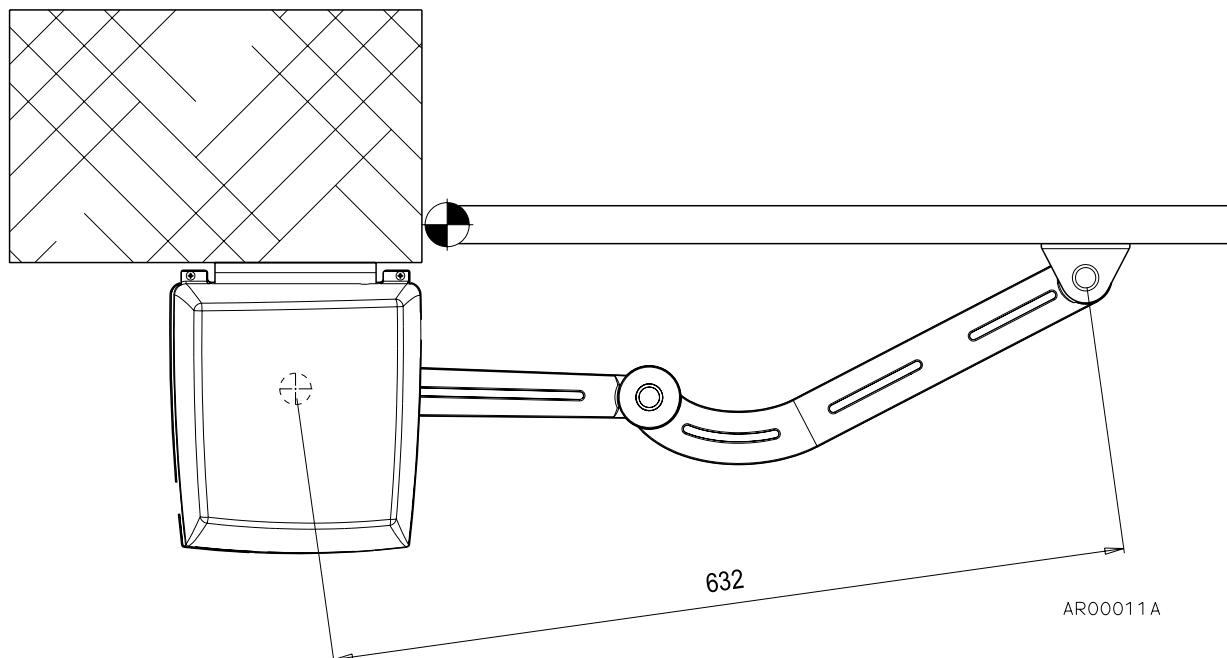
- Portare l'anta in posizione di chiusura posandola alla battuta d'arresto meccanico di chiusura.
- Scegliere la posizione più idonea per il fissaggio della staffa del braccio snodato, rispettando la quota in verticale di 80 mm dalla staffa supporto motore riportata in fig. 6 o fig. 7.
- Posizionare la staffa con il braccio snodato in modo che si posizioni come indicato in fig. 11, facendo attenzione a rispettare la quota indicata in figura.
- Fissare provvisoriamente la staffa.
- Con attuatore sbloccato, verificare il corretto funzionamento del braccio snodato e dell'anta aprendola e chiudendola più volte.
- Fissare definitivamente la staffa (con viti o tramite saldatura).
- Ribloccare l'attuatore come indicato al cap. SBLOCCO ATTUATORE.

4.3.4 JOINTED ARM BRACKET ASSEMBLY

- Take the leaf to a closed position, leaning it against the mechanical closure end stop.
- Choose the most suitable position for fastening the jointed arm, respecting the vertical distance of 80 mm from the motor support bracket shown in fig 6 or fig. 7.
- Position the bracket with the jointed arm as shown in fig. 11, paying careful attention to respect the distance shown in the figure.
- Fasten the bracket temporarily.
- With the operator released, check that the jointed arm and leaf function correctly, by opening and closing it several times.
- Definitively fasten the bracket (with screws or welding).
- Re-lock the operator as shown in the OPERATOR RELEASE Chap.

4.3.4 MONTAGE DE L'ÉTRIER DU BRAS ARTICULÉ

- Mettre le vantail en position de fermeture en butée sur le dispositif d'arrêt mécanique de fermeture.
- Choisir la position la plus adaptée pour la fixation de l'étrier du bras articulé, en respectant la valeur en vertical de 80 mm de l'étrier de support du moteur indiquée sur les fig 6 ou 7.
- Positionner l'étrier avec le bras articulé de manière à ce qu'il se positionne tel qu'il est indiqué sur la fig. 11, en faisant attention à respecter la valeur indiquée sur la figure.
- Fixer provisoirement l'étrier.
- Lorsque l'actionneur est déverrouillé, vérifier le fonctionnement correct du bras articulé et du vantail en l'ouvrant et en le fermant plusieurs fois.
- Fixer définitivement l'étrier (à l'aide de vis ou par soudage).
- Verrouiller de nouveau l'actionneur comme il est indiqué dans le chap. DEVEROUILLAGE ACTIONNEUR.



4.3.5 MONTAGGIO FINECORSÀ MECCANICI

L'attuatore è fornito con due finecorsa meccanici che hanno la funzione di battute di arresto; devono essere fissati sul lato inferiore in base all'angolo di apertura/chiusura dell'anta. Facendo riferimento alla fig. 12 procedere come segue:

- Individuare i punti di finecorsa in apertura e chiusura dell'anta.
- Bloccare i finecorsa (1 fig. 12) con le viti e le rondelle in dotazione.
- Montare ad incastro il coperchio di protezione (7 fig. 9).

4.3.6 REGOLAZIONE FINECORSÀ

Sull'attuatore vi sono due microinterruttori con funzione di finecorsa in chiusura e in apertura; essi sono posti sulla base superiore dell'attuatore, in prossimità dell'albero sporgente. I microinterruttori sono attivati da due camme calettate direttamente sull'albero sporgente.

ATTENZIONE:

La camma rossa superiore (1 fig. 13) regola il finecorsa di apertura, mentre la camma grigia inferiore (2 fig. 13) regola il finecorsa di chiusura; prima di attivare la centrale di comando è necessario regolare correttamente la camma d'apertura (1 fig. 13) e quella di chiusura (2 fig. 13).

- Sbloccare la motorizzazione (vedere cap. SBLOCCO DEL MOTORIDUTTORE) e portare l'anta nella posizione di chiusura.

4.3.5 ASSEMBLY OF MECHANICAL END STOPS

The operator is provided with two mechanical end stops that serve as end stops; these must be fastened to the underside of the base at the leaf opening/closure corner. Referring to fig. 12 proceed as follows:

- Identify the leaf's opening and closure end of stroke.
- Lock the end stops (1 fig. 12) using the screws and washers provided.
- Clip in the protection cover (7 fig. 9).

4.3.6 END OF STROKE REGULATION

There are two microswitches on the operator with closure and opening end of stroke functions; they are positioned on the upper base of the operator, close to the protruding shaft. The microswitches are driven by two cams keyed directly on to the protruding shaft.

ATTENTION:

The upper red cam (1 fig. 13) regulates the opening end of stroke and the lower grey cam (2 fig. 13) regulates the closure end of stroke; before activating the control unit, it is essential to regulate the opening and closure cams correctly (fig. 13).

- Release the motor (see GEARMOTOR RELEASE Chap.) and take the leaf to the closure position

4.3.5 MONTAGE DES FINS DE COURSE MÉCANIQUES

L'actionneur est équipé de deux fins de course mécaniques qui ont la fonction de butées d'arrêt ; elles doivent être fixées sur le côté inférieur à la base de l'angle d'ouverture / fermeture du vantail. En se référant à la fig. 12, procéder de la manière suivante:

- Définir les points de fin de course en ouverture et en fermeture du vantail.
- Bloquer les fins de course (1 fig. 12) à l'aide des vis et des rondelles fournies.
- Encastre le couvercle de protection (7 fig. 9).

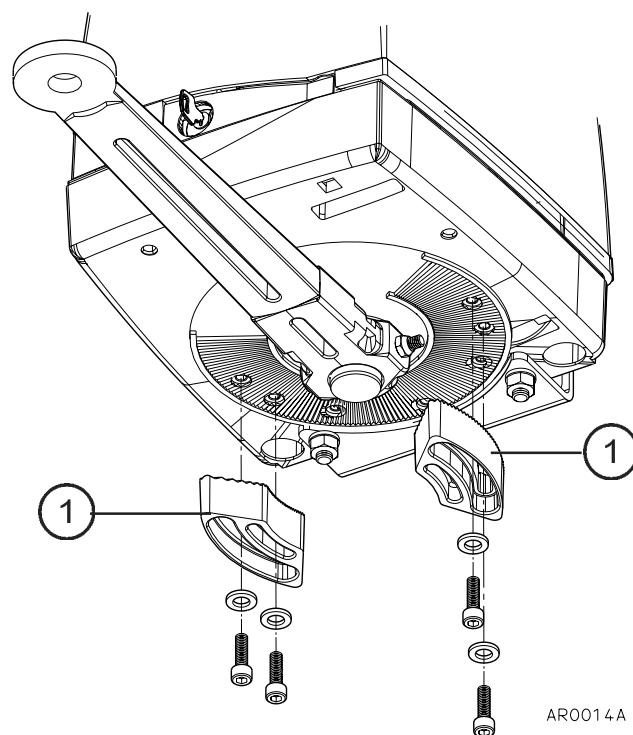
4.3.6 RÉGLAGE DE LA FIN DE COURSE

Deux micro-interrupteurs sont positionnés sur l'actionneur, ayant la fonction de fin de course en fermeture et en ouverture ; ils sont situés sur la base supérieure de l'actionneur, à proximité de l'arbre en saillie. Les micro-interrupteurs sont activés par deux cames emboîtées directement sur l'arbre en saillie.

ATTENTION :

La came rouge supérieure (1 fig. 13) règle la fin de course d'ouverture, alors que la came grise inférieure (2 fig. 13) règle la fin de course de fermeture ; avant d'activer l'unité de contrôle, il est nécessaire de régler correctement la came d'ouverture (1 fig. 13) et celle de fermeture (2 fig. 13).

- Déverrouiller la motorisation (voir chap. DEVERROUILLAGE DU MOTOREDUCTEUR) et porter le vantail en position de fermeture.



4.3.7 SBLOCCO ATTUATORE

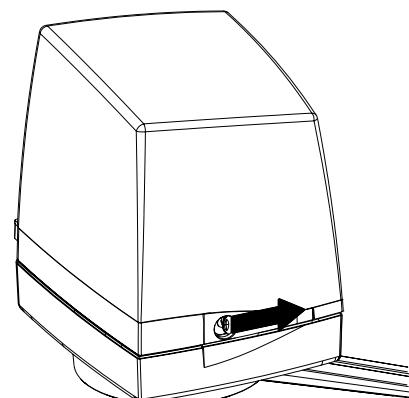
ATTENZIONE:

- L'installatore deve fissare permanentemente l'etichetta concernente l'operazione di sblocco manuale vicino alla chiave per lo sblocco manuale.
- L'attivazione dello sblocco manuale potrebbe causare un movimento non controllato del cancello a causa di danni meccanici o condizioni di sbilanciamento meccanico.
- Prima di eseguire la manovra togliere l'alimentazione elettrica all'automazione.
- Non far forza sulla chiave per evitare di romperla.

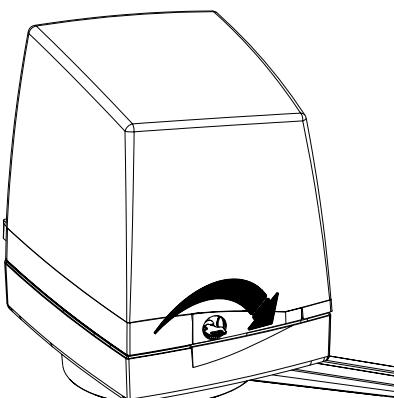
Questo comando permette di sganciare la trasmissione dell'attuatore e di effettuare lo spostamento a mano dell'anta; può essere utilizzato in caso di mancanza di alimentazione o di anomalia dell'impianto. Lo sblocco è attuato tramite una chiave che deve essere conservata in un luogo sicuro.

- a) Far scorrere il coperchietto di protezione della serratura (1 fig. 14).
- b) Infilare la chiave nella serratura (2 fig. 14) e ruotarla in senso antiorario di 90°.
- c) Tirare verso l'esterno la leva (3 fig. 14).
- d) Tenendo la leva estratta, muovere l'anta.
- e) Per ribloccare l'anta, rilasciare la leva e ruotare la chiave in senso orario di 90°.

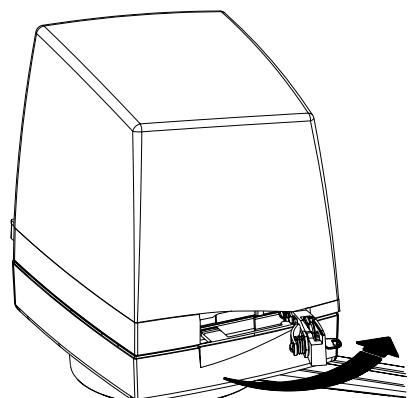
Con l'accessorio ASECAR, lo sblocco dell'attuatore può essere azionato tramite un comando a filo che ne consente lo sbloccaggio dall'esterno del cancello (fig. 15).



1



2



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4.3.7 OPERATOR RELEASE

ATTENTION:

- The Fitter must fix the manual release operation label close to the manual release key.
- The enabling of the manual release could cause an uncontrolled movement of the gate due to mechanical damage or mechanical unbalance conditions.
- Before performing the manoeuvre, switch off the electricity supply to the automation.
- To avoid breaking the key, do not apply excessive force.

This command is used during power failures and system faults to release the operator transmission and enable the leaf to be shifted manually.

The release function is controlled by a key that must be kept in a safe place.

- a) Slide the lock protection cover (1 fig. 14).
- b) Place the key in the lock (2 fig. 14) and rotate anticlockwise through 90°.
- c) Pull the lever towards the exterior (3 fig. 14).
- d) Move the leaf holding the extracted lever.
- e) To re-lock the leaf, release the lever and rotate the key clockwise through 90°.

Using the ASECAR accessory, operator release can be activated through a wire command that allows the release of the gate from outside (fig. 15).

4.3.7 DÉVERROUILLAGE DE L'ACTIONNEUR

ATTENTION:

- L'installateur doit fixer de façon permanente l'étiquette relative à l'opération de déverrouillage manuel à proximité de la clé de déverrouillage manuel.
- La mise en marche du déverrouillage manuel pourrait provoquer un mouvement incontrôlé du portail dû aux dommages mécaniques ou aux conditions de déséquilibrage mécanique.
- Avant de poursuivre cette manœuvre, couper l'électricité du dispositif automatisé.
- Ne pas forcer sur la clé pour éviter de la casser.

Cette commande permet de désenclencher la transmission de l'actionneur et d'effectuer le déplacement du vantail à la main. Il peut également être utilisé en cas de coupure de courant ou d'anomalie dans l'installation. Le déverrouillage est activé à l'aide d'une clé qui doit être conservée dans un lieu protégé.

- a) Faire glisser le couvercle de protection de la serrure (1 fig. 14).
- b) Insérer la clé dans la serrure (2 fig. 14) et la tourner à 90° dans le sens inverse des aiguilles d'une montre.
- c) Tirer le levier vers l'extérieur (3 fig. 14).
- d) En tenant le levier tiré, bouger le vantail.
- e) Pour verrouiller de nouveau le vantail, relâcher le levier et tourner la clé à 90° dans le sens des aiguilles d'une montre.

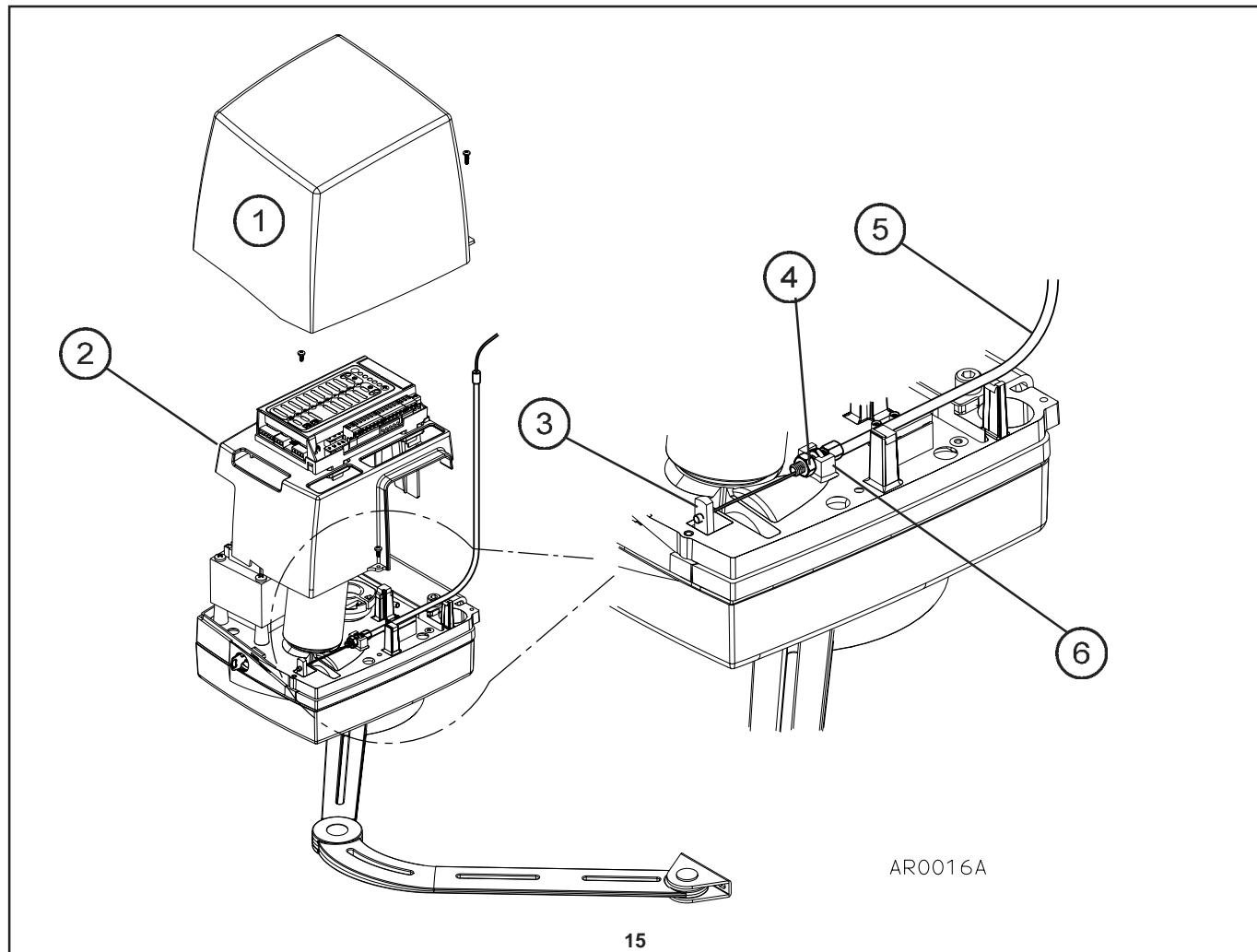
A l'aide de l'accessoire ASECAR, le déverrouillage de l'actionneur peut être enclenché par l'intermédiaire d'une commande à fil qui permet son déverrouillage de l'extérieur du portail (fig. 15).



- a) Smontare il coperchio (1 fig. 15) dell'attuatore.
- b) Svitare le viti che fissano il supporto scheda (2 fig. 15) e spostarlo lateralmente.
- c) Sfilare dalla guaina il filo metallico e infilarne il capo libero nella leva di sblocco (3 fig. 15).
- d) Infilare dal capo libero del filo il dispositivo di regolazione (4 fig. 15) e quindi la guaina (5 fig. 15).
- e) Bloccare la guaina inserendo il dispositivo di regolazione nell'apposita sede (6 fig. 15), provvedendo quindi a regolarla.
- f) Far passare la guaina nell'apposita feritoia sul bordo del coperchio dell'attuatore.
- g) Collegare quindi il filo e la guaina alla maniglia e/o serratura esterna.

- a) Dismantle the operator cover (1 fig. 15).
- b) Loosen the screws that fasten the card support (2 fig. 15) and move sideways.
- c) Slide the metal wire out of the sheath and thread the free end into the release lever (3 fig. 15).
- d) Thread the free end of the wire into the adjustment device (4 fig. 15) and then into the sheath (5 fig. 15).
- e) Block the sheath by introducing the adjustment device into the dedicated seat (6 fig. 15), and then adjust.
- f) Pass the sheath through the slot on the edge of the operator cover.
- g) Then connect the wire and sheath to the external handle and/or lock.

- a) Démonter le couvercle (1 fig. 15) de l'actionneur.
- b) Dévisser les vis fixant le support de la fiche (2 fig. 15) et le déplacer latéralement.
- c) Oter le fil métallique de la gaine et enfiler le bout libre dans le levier de déverrouillage (3 fig. 15).
- d) Enfiler le dispositif de réglage du bout libre du fil (4 fig. 15) et puis la gaine (5 fig. 15).
- e) Bloquer la gaine en introduisant le dispositif de réglage dans l'emplacement prévu à cet effet (6 fig. 15), puis la régler.
- f) Faire passer la gaine dans la fente prévue à cet effet située sur le bord du couvercle de l'actionneur.
- g) Relier ensuite le fil et la gaine à la poignée et / ou à la serrure externe.



5 ALLACCIAIMENTI E COLLEGAMENTI

- Prima di procedere agli allacciamenti e ai collegamenti leggere attentamente quanto riportato nel cap. PRESCRIZIONI E AVVERTENZE DI SICUREZZA.
- Tutte le operazioni d'allacciamento e collegamento devono avvenire con la centrale di comando scollegata dall'alimentazione elettrica; se il dispositivo di disconnessione non è a vista apporvi un cartello: "ATTENZIONE MANUTENZIONE IN CORSO".
- I cablaggi interni dell'attuatore sono stati effettuati dall'azienda e non vanno assolutamente modificati.

5.1 ELENCO CAVI ELETTRICI

A seconda dell'installazione, del tipo e della quantità di dispositivi installati, i cavi necessari possono variare; nella fig. 16 sono rappresentati i cavi necessari per una installazione tipica come quella descritta al cap. DESCRIZIONE PRODOTTO (tab. 1).

I cavi utilizzati nell'installazione devono essere conformi alla norma IEC 60335.

5 WIRING AND CONNECTIONS

- Before commencing wiring and connection work, read the SAFETY INDICATIONS AND WARNINGS and INSTRUCTIONS AND INDICATIONS FOR INSTALLATION Chapters thoroughly.
- All wiring and connection operations must be carried out with the operator disconnected from the electricity supply (and from the buffer battery if present); if the disconnection device is not in view, display a sign reading "ATTENTION: MAINTENANCE WORK IN PROGRESS".
- The internal operator wiring performed by the Manufacturer, may not be modified under any circumstances.

5.1 LIST OF ELECTRIC CABLES

The cables required may vary according to the installation, and type and quantity of devices installed. Figure 16 shows the cables necessary for a typical installation such as that described in the DESCRIPTION OF THE PRODUCT chapter (Tab. 1).

The cables used in the installation must comply with IEC standard 60335.

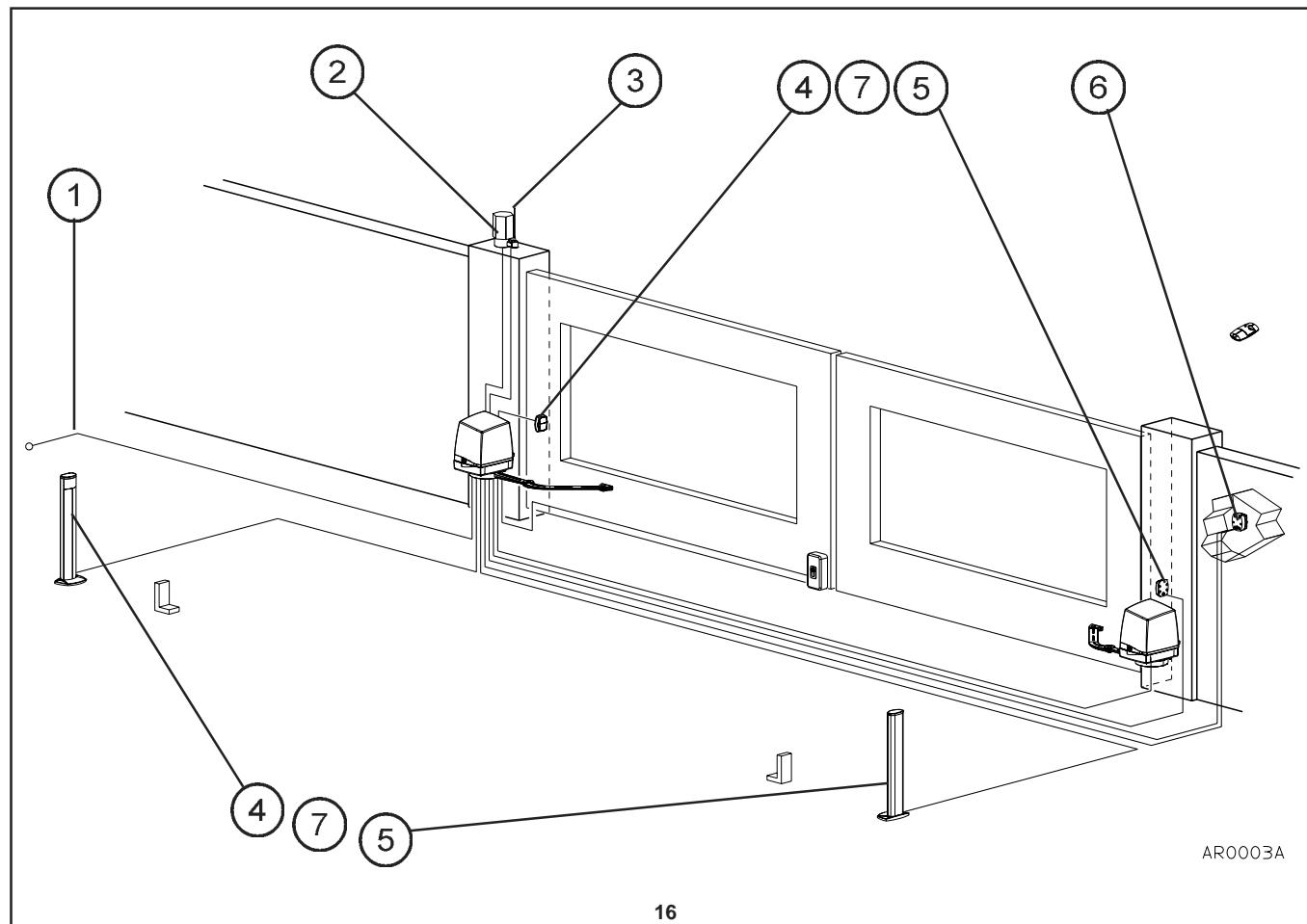
5 RACCORDEMENTS ET CONNEXIONS

- Avant tout raccordement et connexion, lire attentivement les instructions dans les chap. PRESCRIPTIONS ET CONSIGNES DE SECURITE.
- Toutes les opérations de raccordement et de connexion doivent être effectuées une fois que l'unité de contrôle est débranchée ; si le coupe circuit n'est pas visible, fixer le panneau « ATTENTION ENTRETIEN EN COURS ».
- Les câblages internes de l'actionneur ont été effectués par le fabricant et ne doivent en aucun cas être modifiés.

5.1 LISTE DES CÂBLES ÉLECTRIQUES

Selon l'installation, le type et la quantité de dispositifs installés, les câbles nécessaires peuvent varier ; dans la fig. 16 sont représentés les câbles nécessaires pour une installation typique comme celle décrite dans le chap. DESCRIPTION DU PRODUIT (tab. 1).

Les câbles utilisés dans l'installation doivent être conformes à la norme IEC 60335.



Tab. 4: elenco cavi elettrici – fig. 16

Pos.	Collegamento / Tipo di cavo
1	Linea elettrica d'alimentazione Cavo 3x1,5 mm ²
2	Segnalatore lampeggiante Cavo 2x1 mm ²
3	Antenna radio Cavo schermato tipo RG58 50W
4	Foto Tx Cavo 2x1 mm ²
5	Foto Rx Cavo 4x1 mm ²
6	Selettore Cavo 3x1 mm ²
7	Fotocellule Digital LifeTechnology Cavo 3x1 mm ²

ATTENZIONE: i cavi utilizzati devono essere adatti al tipo d'installazione; questa valutazione è a carico dell'installatore.

- Tutti i cavi devono essere sguainati il minimo indispensabile, al massimo 6 mm, il più vicino possibile ai morsetti di collegamento, per prevenire il contatto accidentale con parti in tensione nel caso il cavo si stacchi dal morsetto.
- Non prestagnare i cavi che devono essere fissati con viti ai morsetti.
- Nell'eventualità che i cavi sottoposti ad una tensione maggiore di 50 Volt RMS e quelli a bassissima tensione di sicurezza possano andare a contatto tra loro, il cavo a tensione maggiore di 50 volt RMS deve essere isolato con guaina; oppure il filo a bassissima tensione di sicurezza deve avere una guaina isolante di spessore di almeno 1 mm.
- Tutti i cavi per i collegamenti esterni non devono essere di tipo flessibile a rosetta (flat twin tinsel cord).

5.2 PREDISPOSIZIONE IMPIANTO ELETTRICO ED ALLACCIAIAMENTO ALLA RETE ELETTRICA

La predisposizione dell'impianto elettrico e l'allacciamento alla linea elettrica d'alimentazione esula dal presente manuale. Si fanno comunque presenti le seguenti avvertenze:

- La linea elettrica d'alimentazione deve essere posata e collegata da un tecnico elettrico abilitato o da un installatore professionista.
- La linea d'alimentazione elettrica deve avere un'adeguata protezione contro il corto circuito e le dispersioni a terra.
- Deve essere previsto nella rete d'alimentazione un dispositivo di disconnessione onnipolare con distanza in aria d'apertura dei contatti uguale o superiore a 3,5 mm, che assicuri la disconnessione completa dell'alimentazione.

Tab. 4: list of electric cables – fig. 16

Pos.	Connection / Type of cable
1	Electric power supply line Cable 3x1,5 mm ²
2	Flashing light Cable 2x1 mm ²
3	Radio aerial Screened cable type RG58 50W
4	Transmitter photo Cable 2x1 mm ²
5	Receiver photo Cable 4x1 mm ²
6	Selector Cable 3x1 mm ²
7	Digital LifeTechnology photocells Cable 3x1 mm ²

ATTENTION: the cables used must be suited to the type of installation; this choice is the Fitter's responsibility.

- All wires must be unsheathed as little as possible (6mm at the most), as close as possible to the connection terminals, in order to prevent accidental contact with live parts should the cables disconnect from the terminals.
- Do not pre-seal cables that are to be fixed to the terminals with screws.
- If it is possible that wires subject to voltage higher than 50 Volt RMS and very low voltage safety wires may come into contact with one another, wires with voltage higher than 50 volt RMS must be insulated with a sheath; or the very low voltage safety wire must have an insulating sheath at least 1mm thick.
- External connection cables must not be of the flat twin tinsel cord type.

5.2 PREPARING THE ELECTRICS AND MAINS CONNECTION

This manual does not describe how the electrics system should be prepared for connection to the mains, however it gives the following warnings:

- **The mains supply line must be installed and connected by a qualified electrician or a professional fitter.**
- **The electricity supply line must have adequate protection against short circuits and must be earthed.**
- **The power supply network must contain a unipolar disconnection device with an opening distance of the contacts equal or greater than 3.5 mm that assures the complete disconnection of the power supply**

Tab. 4: Liste des câbles électriques – fig. 16

Pos.	Connexion / Type de câble
1	Ligne électrique d'alimentation Câble 3 x 1,5 mm ²
2	Signalisateur clignoteur Câble 2 x 1 mm ²
3	Antenne radio Câble blindé type RG58 50W
4	Photocellule émetteur Câble 2 x 1 mm ²
5	Photocellule récepteur Câble 4 x 1 mm ²
6	Sélecteur Câble 3 x 1 mm ²
7	Photocellules Digital LifeTechnology Câble 3 x 1 mm ²

ATTENTION: les câbles utilisés doivent être adaptés au type d'installation ; cette évaluation est à la charge de l'installateur.

- Tous les câbles doivent être dégainés le moins possible, au maximum sur 6 mm, le plus près possible des bornes de connexion, afin de prévenir le contact accidentel avec des parties sous tension au cas où le câble se détache de la borne.
- Ne pas étamer les câbles devant être fixés aux bornes à l'aide de vis.
- Dans l'éventualité que les câbles soumis à une tension dépassant 50 Volt RMS et ceux à très basse tension de sécurité puissent entrer en contact entre eux, le câble supportant la plus haute tension de 50 volt RMS doit être isolé avec une gaine ; ou bien le fil à très basse tension de sécurité doit avoir une gaine isolante d'une épaisseur d'au moins 1 mm.
- Tous les câbles pour les connexions externes ne doivent pas être du type flexible à rosette (flat twin tinsel cord).

5.2 PRÉDISPOSITION DE L'INSTALLATION ÉLECTRIQUE ET RACCORDEMENT AU RÉSEAU ÉLECTRIQUE

La prédisposition de l'installation électrique et le raccordement à la ligne électrique d'alimentation n'est pas du ressort de ce mode d'emploi. Suivre néanmoins les avertissements suivants:

- La ligne électrique d'alimentation doit être installée et reliée par un électricien compétent ou bien par un installateur professionnel.
- La ligne d'alimentation électrique doit avoir une protection adéquate contre les courts-circuits et les dispersions à la terre.
- Il doit être prévu dans le réseau d'alimentation un dispositif de coupe-circuit onnipolaire avec une distance en l'air d'ouverture des contacts égale ou supérieure à 3,5 mm, assurant le coupe-circuit complet de l'alimentation.

5.3 INTRODUZIONE DEI CAVI ELETTRICI NELL'ATTUATORE

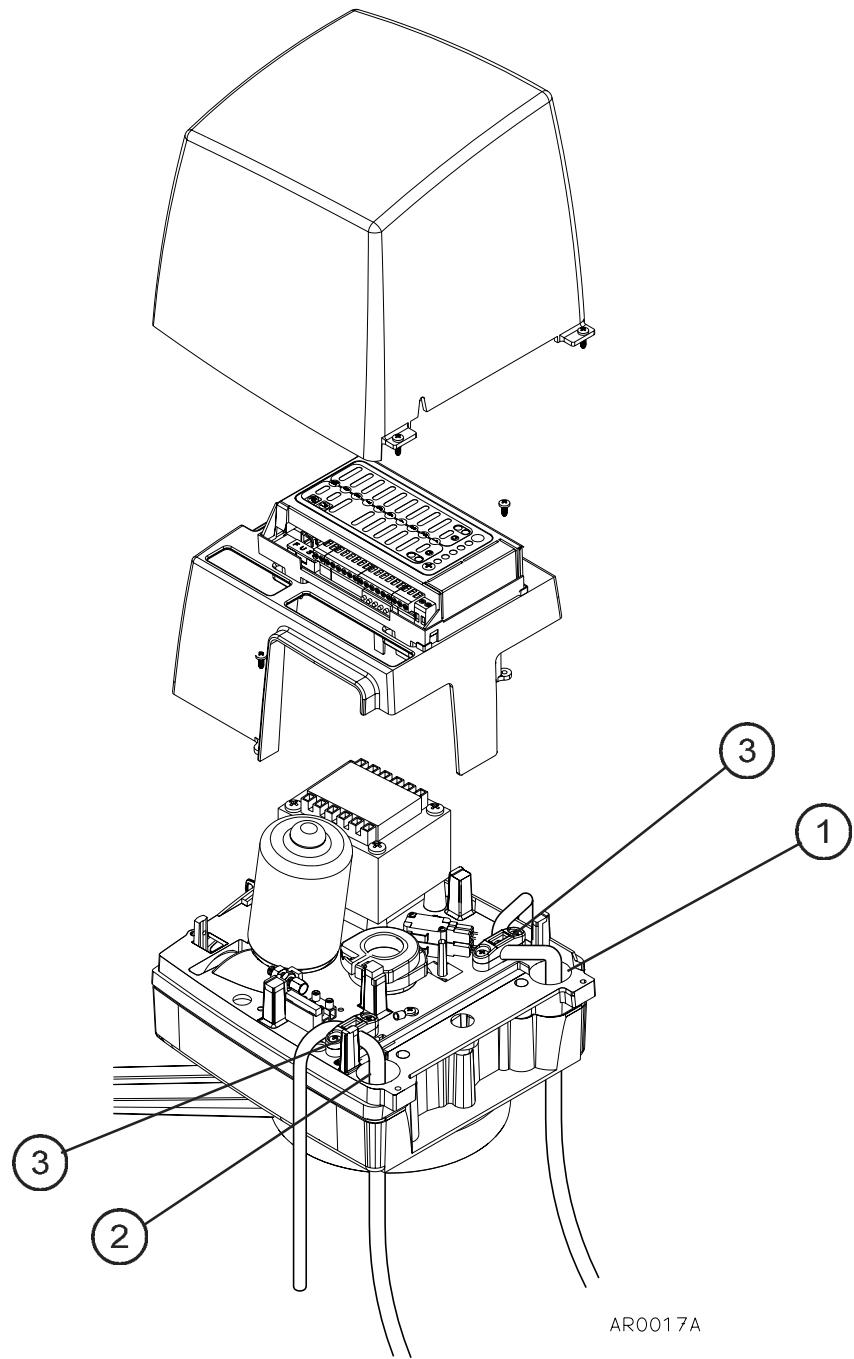
- a) Per accedere ai morsetti di alimentazione e della centrale di comando è necessario smontare il coperchio che copre l'attuatore svitando le due viti di bloccaggio (fig. 17).
- b) I cavi devono essere inseriti attraverso i due fori presenti sulla base dell'attuatore (1 e 2 fig. 17) tenendo separati i cavi con 230 Vac da quelli a bassissima tensione.
- c) Lasciare i cavi più lunghi di circa 40 cm. Fissare i cavi alla base mediante il montaggio dei fermacavi (3 fig. 17).

5.3 INTRODUCING THE ELECTRIC CABLES INTO THE OPERATOR

- a) In order to access the power supply terminal and control unit, one must dismantle the lid covering the operator by unscrewing the two clamping screws (fig. 17).
- b) The cables must be introduced through the two holes on the base of the operator (1 and 2 fig. 17) keeping 230Vac cables separate from those powered at a very low voltage.
- c) Leave the cables approximately 40 cm longer.
- d) Fasten the cables to the base by introducing the cable gland (3 fig. 17).

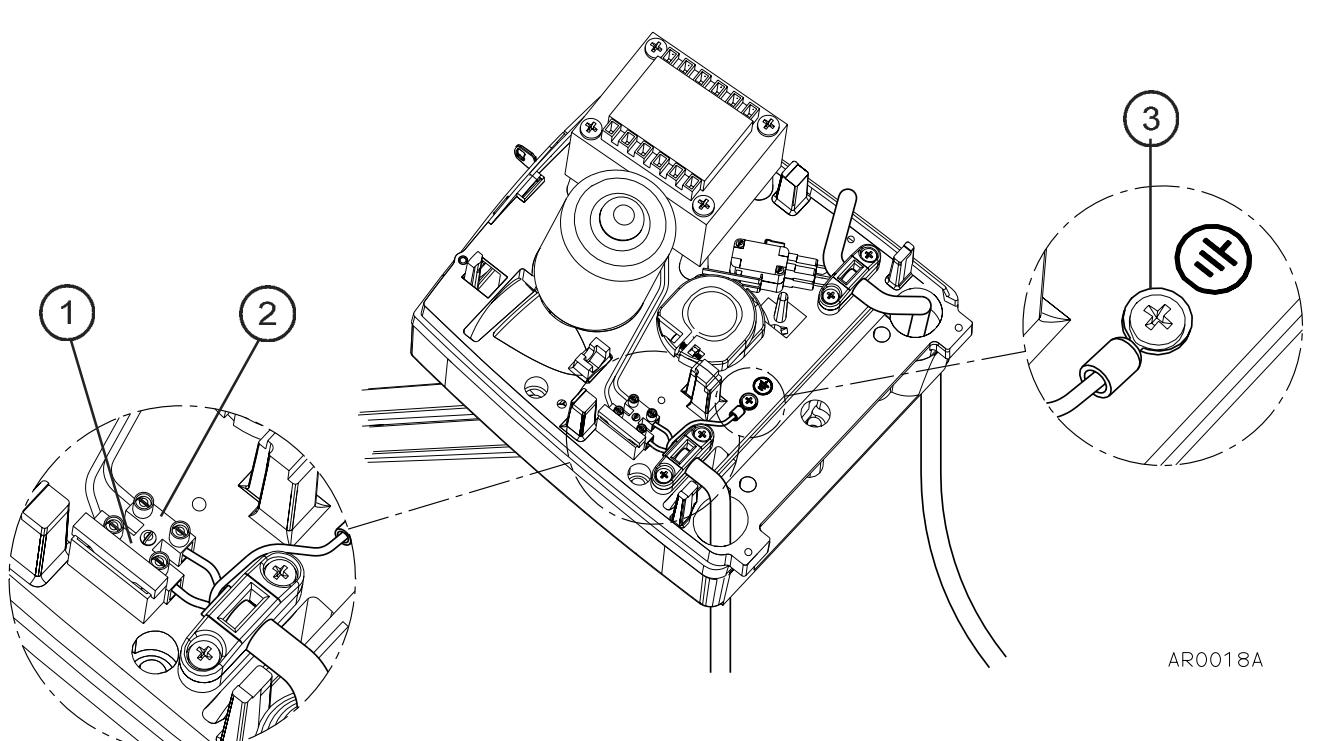
5.3 INTRODUCTION DES CÂBLES ÉLECTRIQUES DANS L'ACTIONNEUR

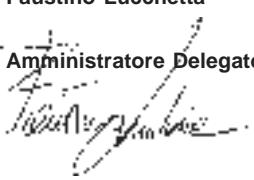
- a) Pour accéder aux bornes d'alimentation et de l'unité de contrôle, il est nécessaire de démonter le couvercle qui couvre l'actionneur en dévissant les deux vis de blocage (fig. 17).
- b) Les câbles doivent être introduits au travers des deux trous se trouvant sur la base de l'actionneur (1 et 2 fig. 17) en tenant séparés les câbles avec 230 Vca de ceux à très basse tension.
- c) Laisser les câbles plus longs d'environ 40 cm.
- d) Fixer les câbles à la base en montant les cale-câbles (3 fig. 17).



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5.4 COLLEGAMENTO ALIMENTAZIONE (230 VAC) E MESSA A TERRA	5.4 CONNECTING THE 230 VAC POWER SUPPLY AND EARTHING.	5.4 CONNEXION DE L'ALIMENTATION (230 VCA) ET MISE À LA TERRE.
Collegare il cavo di alimentazione a 230Vac ai morsetti L (fase) e N (neutro) (1 e 2 fig.18); utilizzare esclusivamente un cavo adeguato, IEC 60335 sezione 3x1,5 mm ² .	Connect the 230 Vac power supply cable to terminals L (phase) and N (neutral) (1 and 2 fig.18); using an adequate IEC 60335 compliant cable with a section of 3x1.5 mm ² .	Relier le câble d'alimentation à 230 Vca aux bornes L (phase) et N (neutre) (1-2 figure 18); utiliser exclusivement un câble adéquat, IEC 60335 section 3 x 1,5 mm ² .
ATTENZIONE: Ai fini della sicurezza è indispensabile effettuare il collegamento della messa a terra dell'attuatore; crimpate il filo giallo-verde del cavo di alimentazione al capocorda con occhiello fissato con vite alla base attuatore, nel punto contrassegnato dal simbolo di terra, come indicato in (3 fig. 18).	ATTENTION: For security reasons, it is essential to earth the operator; crimp the yellow – green wire of the power supply cable to the cable terminal with loop fixed with screws to the operator base, in the point marked with the earth symbol, as shown in (3 fig. 18).	ATTENTION: Pour toute sécurité, il est indispensable d'effectuer la connexion de la mise à la terre de l'actionneur; sertir le fil jaune-vert du câble d'alimentation à la cosse avec l'œillet fixé avec une vis à la base de l'actionneur, au point indiqué par le symbole de la terre tel qu'il est illustré sur 3 fig. 18.
5.5 COLLEGAMENTI CENTRALE	5.5 CONTROL UNIT WIRING	5.5 CONNEXIONS DE L'UNITÉ
I collegamenti già eseguiti dal costruttore non vanno assolutamente modificati. L'installatore deve eseguire i collegamenti dei vari dispositivi previsti per l'automazione secondo gli schemi elettrici riportati: <ul style="list-style-type: none">• CANCELLA A DUE ANTE: utilizzare l'ARMOR AR224XP e AR024, fare riferimento agli schemi di fig. 19, 20, 21, 23.• CANCELLA AD UNA SOLA ANTA: utilizzare l'ARMOR AR124XP, fare riferimento allo schema di fig. 19, 22, 23.	The Fitter must connect the various automation devices as shown in the wiring diagrams provided: <ul style="list-style-type: none">• TWO-LEAF GATE: use ARMOR AR224XP and AR024, refer to the diagrams in fig. 19, 20, 21, 23.• SINGLE-LEAF GATE: use ARMOR AR124XP, refer to diagram in fig. 19, 22, 23. <p>Wiring diagrams:</p> <ul style="list-style-type: none">• Fig. 19 ARMOR 224XP/AR124XP• Fig. 20 ARMOR 224XP• Fig. 21 ARMOR AR224XP/AR024• Fig. 22 ARMOR AR124XP• Fig. 23 Examples of wiring	Les connexions déjà effectuées par le fabricant ne doivent absolument pas être modifiées. L'installateur doit effectuer les connexions des différents dispositifs prévus pour le système automatisé selon les schémas électriques reportés: <ul style="list-style-type: none">• PORTE À DEUX VANTAUFS: utiliser l'Armor AR224XP et AR024XP, se référer aux schémas de fig. 19, 20, 21, 23.• PORTE À UN SEUL VANTAIL: utiliser l'Armor AR124XP, se référer aux schémas de fig 19, 22, 23. <p>Schémas électriques:</p> <ul style="list-style-type: none">• Fig. 19 ARMOR 224XP/AR124XP• Fig. 20 ARMOR 224XP• Fig. 21 ARMOR AR224XP/AR024• Fig. 22 ARMOR AR124XP• Fig. 23 Exemples des connexions
Schemi elettrici: <ul style="list-style-type: none">• Fig. 19 ARMOR 224XP/AR124XP• Fig. 20 ARMOR 224XP• Fig. 21 ARMOR AR224XP/AR024• Fig. 22 ARMOR AR124XP• Fig. 23 Esempi di collegamento	 <p>AR0018A</p>	

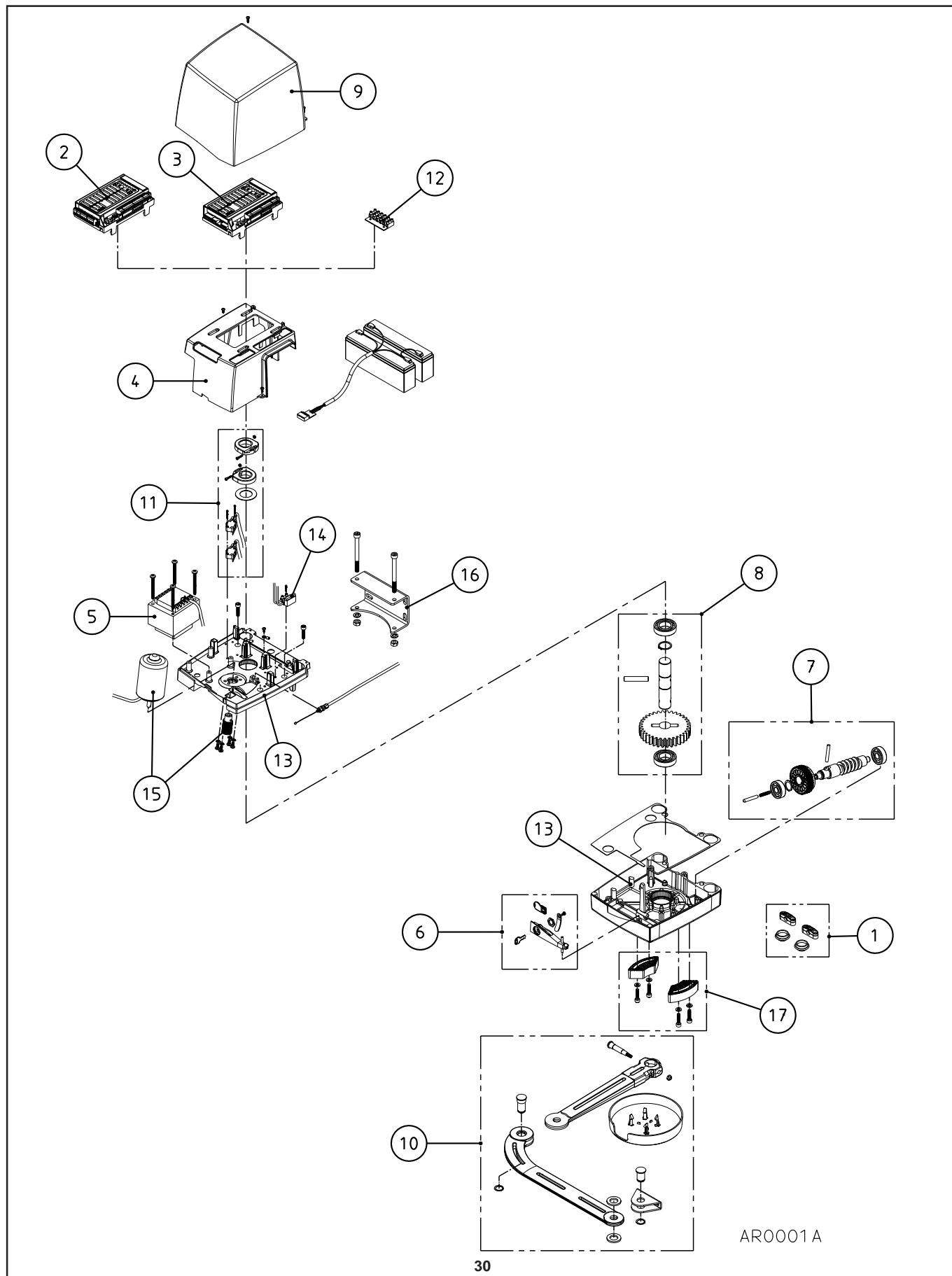
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11 DICHIARAZIONE CE DI CONFORMITÀ DEL FABBRICANTE	11 MANUFACTURER'S DECLARATION OF CE CONFORMITY	1 DECLARATION CE DE CONFORMITE DU PRODUCTEUR
Dichiarazione di conformità 	Declaration of conformity 	Déclaration de conformité 
secondo Direttiva 98/37/CE, Allegato II, parte B (dichiarazione CE di conformità del fabbricante)	under Directive 98/37/EC, appendix II, part B (Manufacturer's Declaration of CE Conformity).	selon la Directive 98/37/CE, Annexe II, partie B (déclaration CE de conformité du producteur)
LIFE home integration s.r.l. Via 1 Maggio, 37 31043 FONTANELLE (TV) – Italia	LIFE home integration s.r.l. Via 1 Maggio, 37 31043 FONTANELLE (TV) – Italy	LIFE home integration s.r.l. Via 1 Maggio, 37 31043 FONTANELLE (TV) – Italie
dichiara che il seguente prodotto:	declares that the following product:	déclare que le produit suivant:
Attuatore per cancelli a battente ARMOR AR024 – AR124XP– AR224XP	Swinging gate operator ARMOR AR024 – AR124XP– AR224XP	Actionneur pour portails à battant ARMOR AR024 – AR124XP– AR224XP
risulta conforme ai requisiti essenziali previsti dalle seguenti direttive:	satisfies the essential requisites established in the following directives:	est conforme aux principales spécifications prévues dans les directives suivantes:
<ul style="list-style-type: none"> • Macchine 98/37/CE (ex 89/392/CEE) e successive modificazioni, • Bassa Tensione 73/23/CEE e successive modificazioni, • Compatibilità Elettromagnetica 89/336/ CEE e successive modificazioni, • Apparecchiature radio e di telecomunicazione 1999/5/CE e successive modificazioni. 	<ul style="list-style-type: none"> • Machinery Directive 98/37/EC (formerly 89/392/EEC) and subsequent amendments, • Low voltage directive 73/23/EEC and subsequent amendments, • Electromagnetic compatibility directive 89/336/EEC and subsequent amendments. 	<ul style="list-style-type: none"> • Machines 98/37/CE (ex 89/392/CE), modifiée, • Basse tension 73/23/CE modifiée, • Compatibilité électromagnétique 89/336/ CE modifiée, • Appareils radio et de télécommunications 1999/5/CE modifiées.
risulta conforme a quanto previsto dalle seguenti norme:	and satisfies the following standards:	est conforme aux normes suivantes:
<ul style="list-style-type: none"> • EN 12445:2000 Porte e cancelli industriali, commerciali e da autorimessa – Sicurezza in uso di porte motorizzate – Metodi di prova. • EN 12453:2000 Porte e cancelli industriali, commerciali e da autorimessa – Sicurezza in uso di porte motorizzate – Requisiti. • EN 60204-1:1997 Sicurezza del macchinario – Equipaggiamento elettrico delle macchina – Parte 1: regole generali. • EN 60950 Apparecchiature per la tecnologia dell'informazione – Sicurezza - Parte 1: Requisiti generali • ETSI EN 301489-3:2001 Compatibilità elettromagnetica per equipaggiamenti e attrezzature radio. • EN 300220-3:2000 Apparecchi radio e sistemi – dispositivi a corto raggio – Caratteristiche tecniche e metodi di prova per apparati radio con frequenza da 25 a 1000 MHz e con potenza fino a 500 mW. 	<ul style="list-style-type: none"> • EN 12445:2000 Industrial, commercial and garage doors and gates – Safety in the usage of motorised doors – testing methods • EN 12453:2000 Industrial, commercial and garage doors and gates – Safety in the usage of motorised doors - Requisites. • EN 60204-1:1997 Machinery safety – Electric equipment of the machine – Part 1: general rules. • EN 60950 Information technology equipment - Safety - Part 1: General requisites • ETSI EN 301489-3:2001 Electromagnetic compatibility for radio equipment and appliances. • EN 300220-3:2000 Radio equipment and systems – short band devices – Technical characteristics and testing methods for radio apparatus with a frequency of 25 to 1000 MHz and powers of up to 500mW. 	<ul style="list-style-type: none"> • EN 12445:2000 Portes et portails industriels, commerciaux et de garage – Sécurité d'emploi des portes motorisées – Méthodes d'essai. • EN 12453:2000 Portes et portails industriels, commerciaux et pour garage – Sécurité d'emploi des portes motorisées – Spécifications • EN 60204-1:1997 Sécurité des machines – Equipement électrique des appareils – Partie 1: règles générales. • EN 60950 Equipements pour la technologie de l'information – Sécurité – Partie 1 : Spécifications générales • ETSI EN 301489-3:2001 Compatibilité électromagnétique pour équipements et dispositifs radio. • EN 300220-3:2000 Equipements radio et systèmes – dispositifs à rayon court – Caractéristiques techniques et méthodes d'essai pour les équipements radio à fréquence de 25 à 1000 MHz et puissance jusqu'à 500 mW.
Dichiara inoltre che non è consentita la messa in servizio dei componenti sopraindicati finché l'impianto, in cui sono incorporati, non sia stato dichiarato conforme alla direttiva 98/37/CE.	The Manufacturer also declares that it is not permitted for the abovementioned components to be used until such time as the system in which they are incorporated is declared conform to directive 98/37/EC.	Déclare également qu'aucune mise en service des éléments en question n'est autorisée si l'installation n'a pas été déclarée conforme à la directive 98/37/CE.
Fontanelle 20-10-2005	Faustino Lucchetta  Amministratore Delegato / Managing Director / Verwaltungsbeauftragter	
Nominativo / Name / Nom de signataire:		
Qualifica / Position / Titre:		
Firma / Signature / Signature:		

10 PARTI DI RICAMBIO**10 SPARE PARTS****10 PIECES DETACHEES**

Tab. 21: elenco parti di ricambio

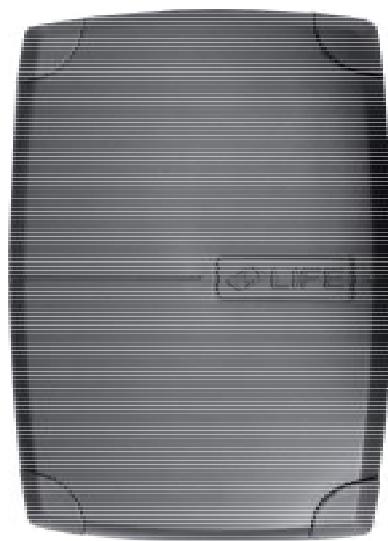
Tab. 21: list of spare parts

Tab. 21: liste des pièces détachées



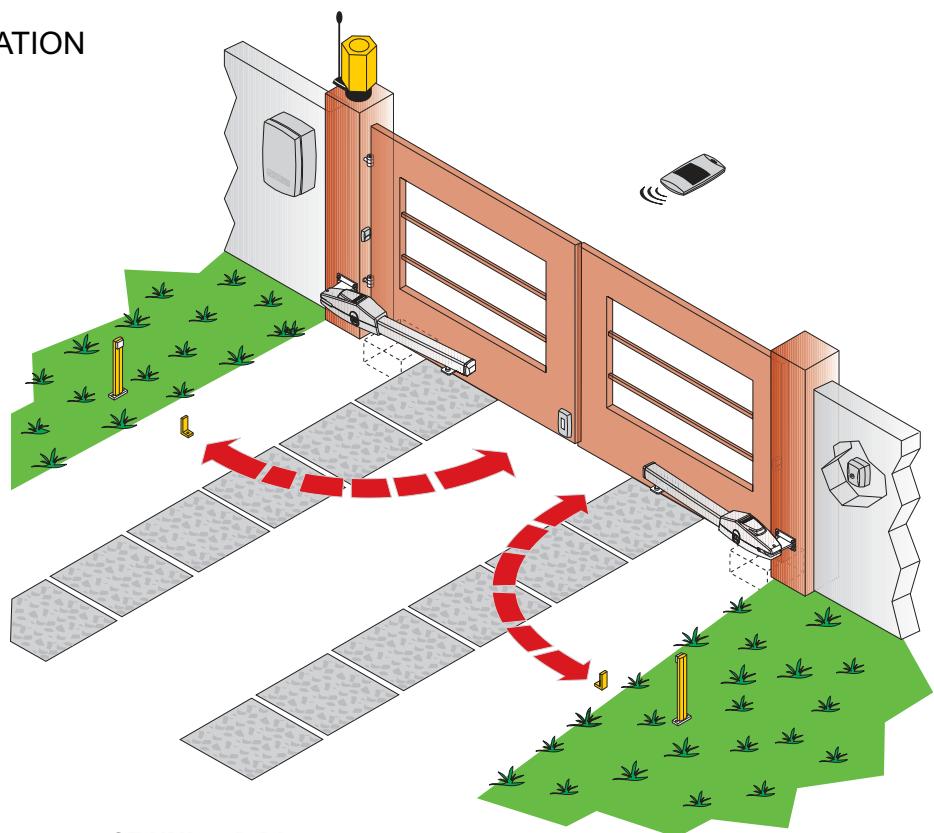
GE UNI24R DL

GB CONTROL UNIT FOR TWO-LEAF GATES



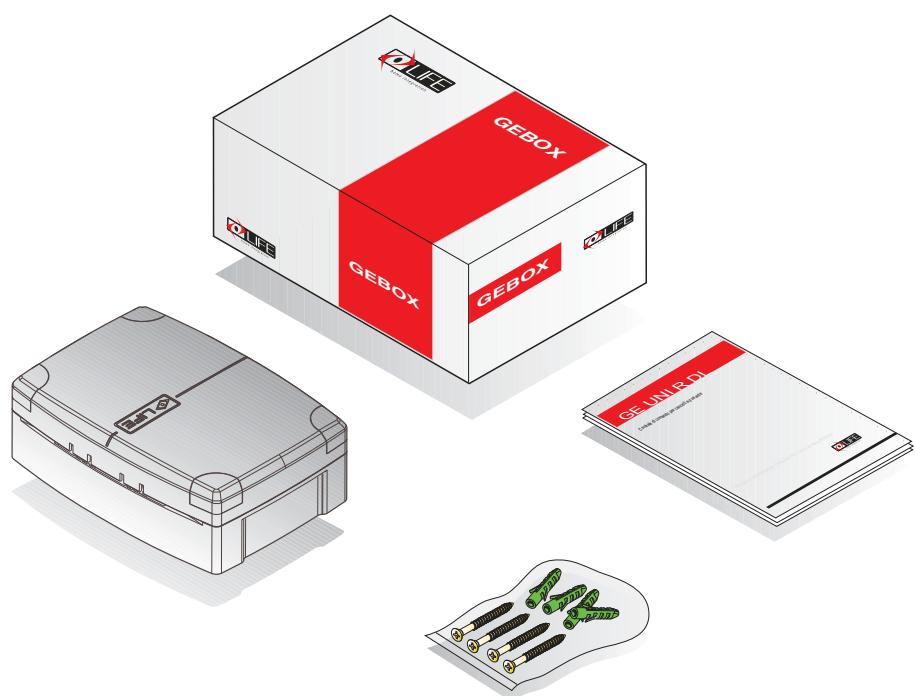
GB INSTRUCTIONS AND WARNINGS FOR INSTALLATION, USE AND MAINTENANCE

GB STANDARD INSTALLATION

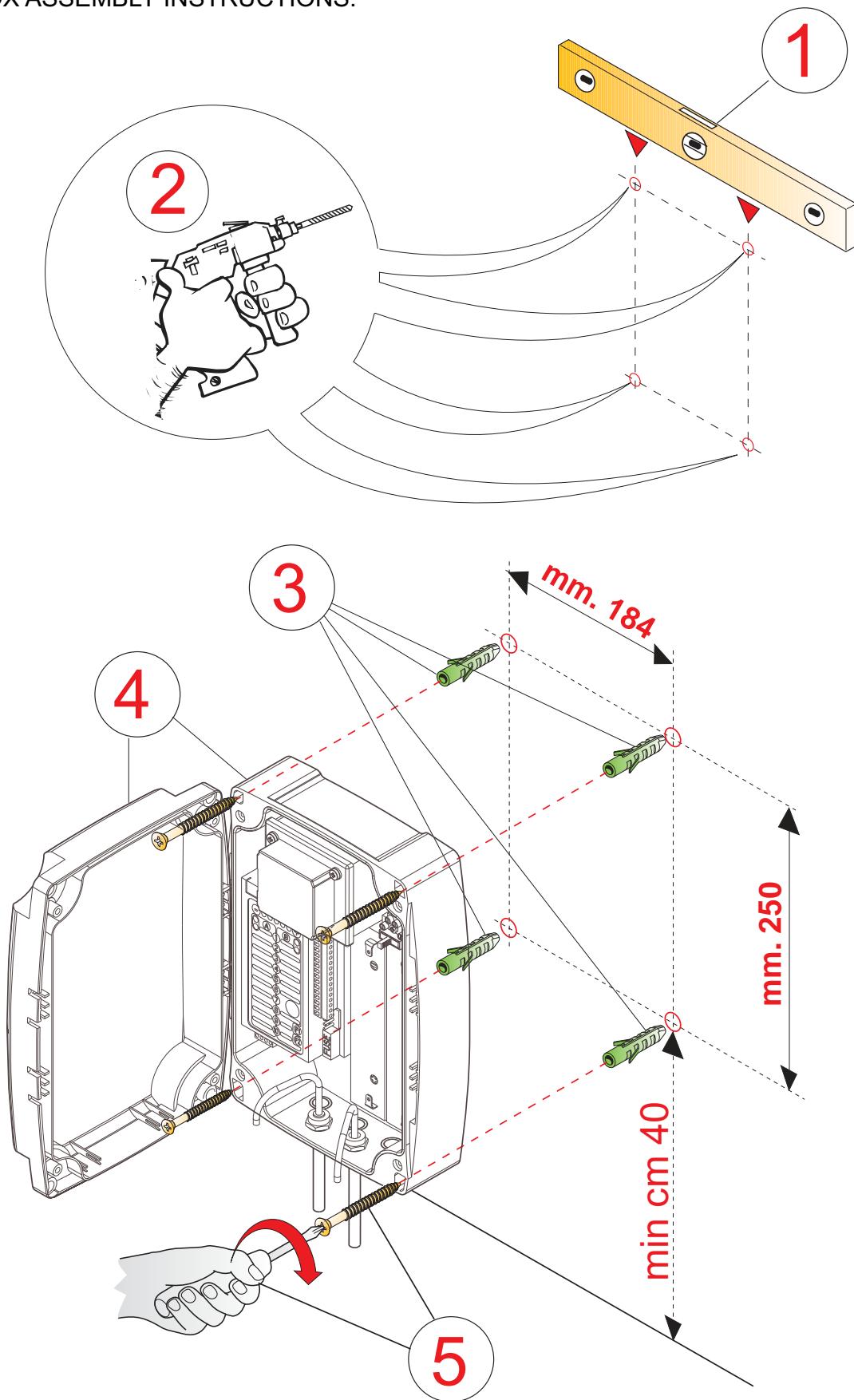


GB Tab. 1: Components and devices of a typical **GE UNI 24R DL**

GB Tab. 2: Description of the content of a **GE UNI 24R DL**



GB GEBOX ASSEMBLY INSTRUCTIONS.



List of electric cables

The cables needed may vary depending on the installation and type and quantity of devices installed.

The cables used in the installation must be IEC 60335 compliant.

Pos.	Connection	Type of cable
1	Electricity supply line	3x1,5 mm ² cable
2	Power supply	Cable supplied with Schuko socket
3	Flashing light	2x1 mm ² cable
4	Radio aerial	Screened RG58 50 Ω cable
5	Tx Photo	2x1 mm ² cable
6	Rx Photo	4x1 mm ² cable
7	Selector	3x1 mm ² cable
8	Internal button panel.	3x1 mm ² cable
9	Sensitive strip (signal)	2x1 mm ² cable

Three internal fuses:

- a) F1 protects the secondary 24v supply against transformer overload.

Technical characteristics: mini fuses 5x20 T10
A certificated by IEC 60127 or EN 60127.

- b) F2 protects the primary 24v supply against motor overload.

Technical characteristics: mini fuses 5x20 T1
A certificated by IEC 60127 or EN 60127.

- c) F3 protects the primary 24v supply, against motor overload.

Technical characteristics: mini fuses 5x20 F500 mA
A certificated by IEC 60127 or EN 60127.

ATTENTION: the cables used must be suited to the type of installation.

It is the Fitter's responsibility to choose appropriate material.

- Use the power supply cable provided with the operator only.
- The power cable provided may not be extended or shortened
- All wires must be unsheathed as little as possible (6mm at the most), as close as possible to the connection terminals, in order to prevent accidental contact with live parts should the cables disconnect from the terminals.
- Do not pre-seal cables to be fastened to the terminals using screws.
- If it is possible that wires subject to voltage higher than 50 Volt RMS and very low voltage safety wires may come into contact with one another, wires with voltage higher than 50 volt RMS must be insulated with a sheath; or the very low voltage safety wire must have an insulating sheath at least 1mm thick.
- No external connection cables must be of the flat twin tinsel cord type.

Setting up the electric system and connection to the mains supply

This manual does not describe how the electrics system should be prepared for connection to the mains. It does, however, give the following warnings:

- **The electricity supply line must be installed and connected by an authorised electrician or professional fitter.**
- **The electricity supply must be adequately protected against short circuits and static discharge.**
- **The power supply network must contain an omnipolar circuit breaker with a contact opening distance equal to or greater than 3.5 mm that assures the complete disconnection of the power supply.**

Control unit connections

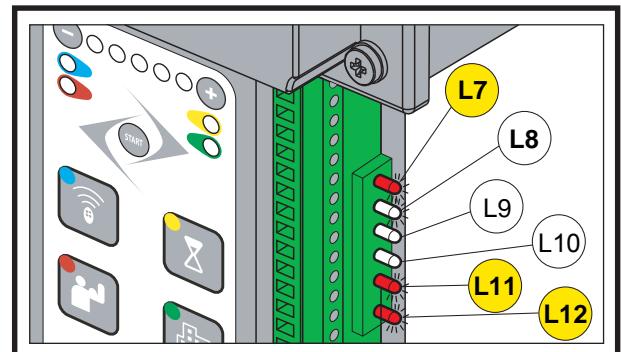
Fitters must make the connections of the 230 Vac 50 Hz electricity supply, and the various automation devices.

Connections between the control unit, motor, encoder and transformer have already been performed by the Manufacturer.

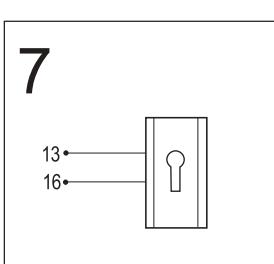
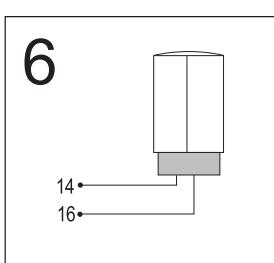
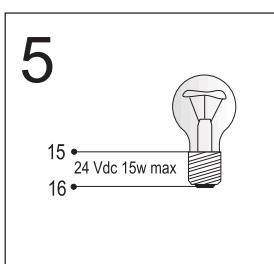
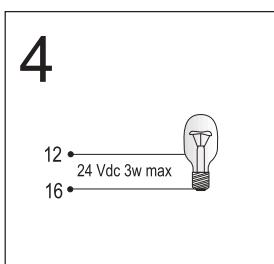
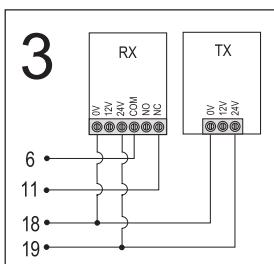
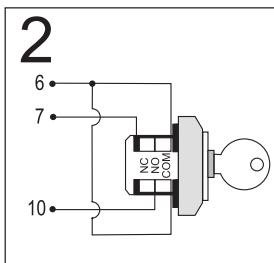
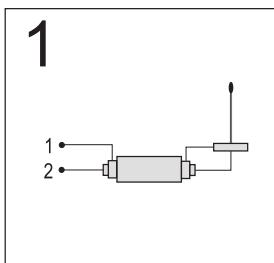
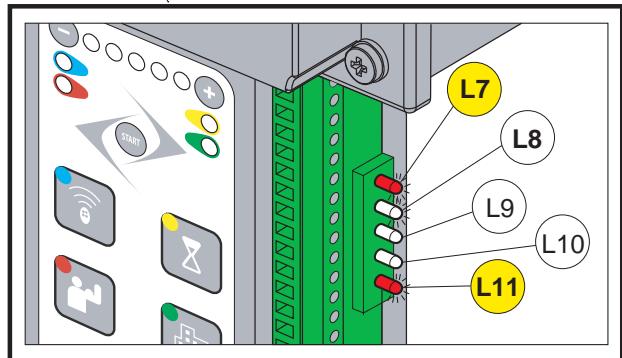
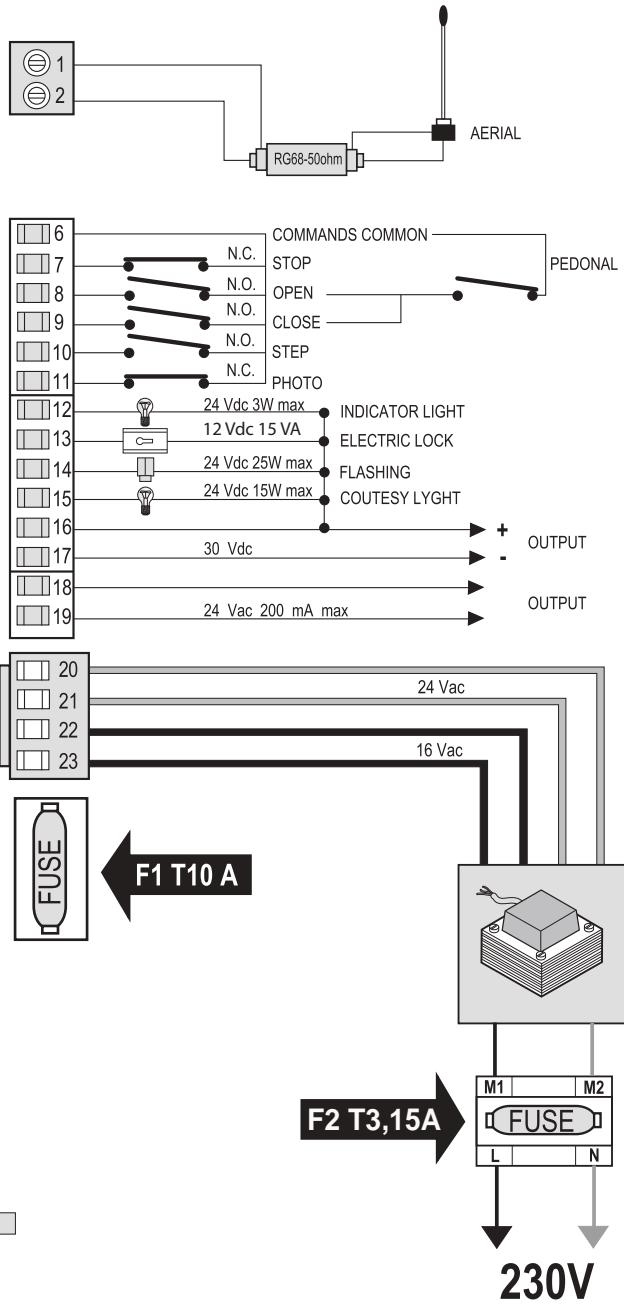
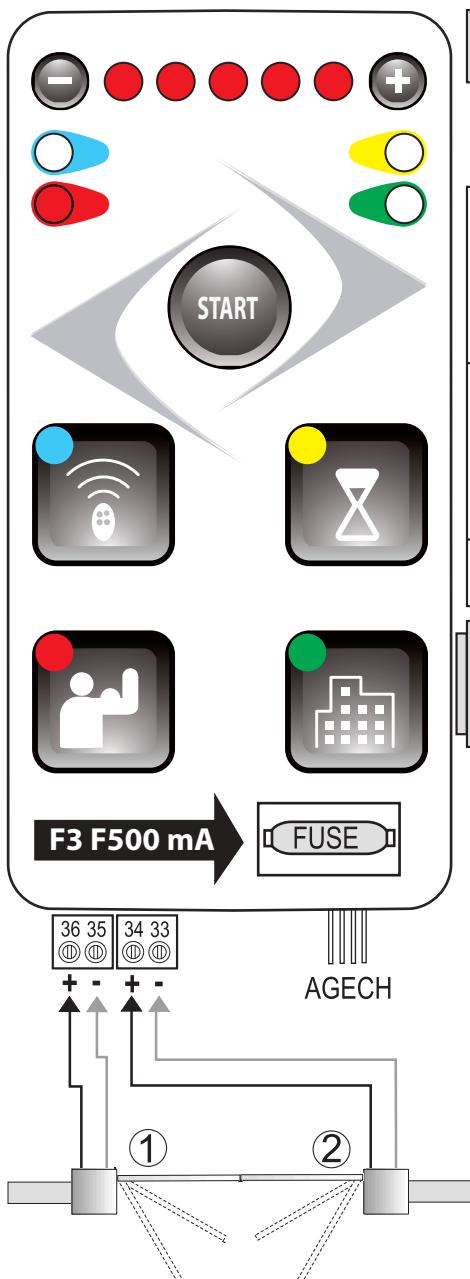
- Once the connections to the control unit have been made, the Fitter must use bands to join adjacent wires into groups of 2, 3 or 4 in order to prevent them coming away from the terminal board: bands must be attached as close as possible to the terminals, no more than 10mm away, taking care not to damage wire insulation. No cable may remain unpaired.
- The bands are only for unsheathed cables (sheathed cables are held in place by the sheath).
- Pay careful attention not to pair wires with voltages higher than 50 Volt RMD with lower voltage wires.
- The wiring performed internally by the manufacturer is already equipped with clamping bands.

Indicator LEDs

There is a row of 6 LEDs on the right hand side of the board, under the terminals. the NC inputs, stop and photo, the corresponding LEDs L7, L11 and L12 are normally lit; for the NO inputs open, close and step, the corresponding LEDs L8, L9 and L10 are normally off. These LEDs therefore indicate any malfunction of the connected devices.



GB ELECTRICAL SYSTEM



Wiring diagram of the right hand side of the control unit

Fig. 7 shows a diagram of the connection terminals for the aerial, various controls and the various power supplies (indicator light, electrolock, flashing light, courtesy light, photocells, selectors, etc.) . These are the vertical terminals positioned on the right hand side of the control unit and numbered from 1 to 19.

Terminals	Description (see wiring diagram on page 2A)			
1 - 2	Aerial: aerial cable input 1 sheath, 2 cables. Use a RG58- 50ohm cable			
6	Common: for stop, open, close, step and photo inputs.			
6 - 7	STOP* : programmable NC input, commands gate stoppage. Can be connected to safety devices such as an emergency stop button. When the command is released automatic closure never occurs and a new movement command must be given. Leave jumpered if no device is envisaged			
6 - 8	OPEN: NO input, commands gate opening.			
6 - 9	CLOSE: NO input, commands gate closure.			
6 - 10	STEP: NO input, commands gate movement according to the following cycles: SEMI-AUTOMATIC MODE: Open, stop, close, stop. 4-STEP MODE Open, pause, close, pause. 4-STEP with stop : OPEN-STOP-CLOSE-STOP CONDOMINIUM MODE: Open.			
6 - 11	PHOTO* : programmable NC input for photocells or safety devices. Does not intervene during gate opening, during closure causes reversal of motion until complete opening. Leave jumpered if no device is envisaged			
12 - 16	INDICATOR LIGHT: 24Vdc 3W max output, for connecting an indicator light that copies the function of the flashing light during movement and that remains on when the gate is open.			
13 - 16	ELECTROLOCK 12 Vdc output for connecting a 12 Vdc 15VA electrolock. To activate select the OPENING RAM BLOW function. Deactivated by default.			
14 - 16	FLASHING LIGHT: 24 Vdc 25 W max output for connecting a Splendor SPL24 flashing light characterised by three flashing modes: 1) slow during door opening; 2) fast (flashing times halved) during closure. 3) three flashes and a pause to indicate a fault state or travel identification.			
15 - 16	COURTESY LIGHT: 24 Vdc 15W max. output for connecting a courtesy light that switches on at the start of each movement (opening or closure) and is characterised by an adjustable on time.			
16	+	30 Vdc OUTPUT: power supply for various devices		
17	-			
18 - 19	24 Vac OUTPUT (200mA max): power supply for various devices, e.g. photocells, external radio receivers.			
N.C. = normally closed contact – NO = normally open contact				
* 6-7 and 6-11 are NC Pedestrian : the command causes partial and adjustable opening of a single leaf. Can be given using a remote control or the terminal board. Obtained from the terminal board by jumpering terminal 8 OPEN with terminal 9 CLOSE, this jumper then connects with a switch to terminal 6 COMMON. When given from the terminal board, the PEDESTRIAN command excludes the OPEN and CLOSE commands.				

Wiring diagram of the lower part of the control unit

The terminals on the lower right hand part of the control unit are reserved for the connections for the board's electricity supply through the transformer, the AGECH battery charger and the power supply of the two operators.

ATTENTION: the definition of leaf 1 and leaf 2 is essential for automation operation. Fitters must pay careful attention to the following.

Terminals	Description (see wiring diagram on page 2A)	
20-21	24Vac	Transformer power input.
22-23	16Vac	
24	AGECH battery charger connection (optional).	
33	-	Motor 2, 24Vdc power supply
34	+	
35	-	Motor 1, 24Vdc power supply
36	+	

1. **Leaf 1:** is the first to open when the gate is closed and the second to move when the gate is open; it finishes its closure travel after leaf 2.
2. **Leaf 2:** is the second to open when the gate is closed and the first to move when the gate is open; it finishes its closure travel before leaf 1.

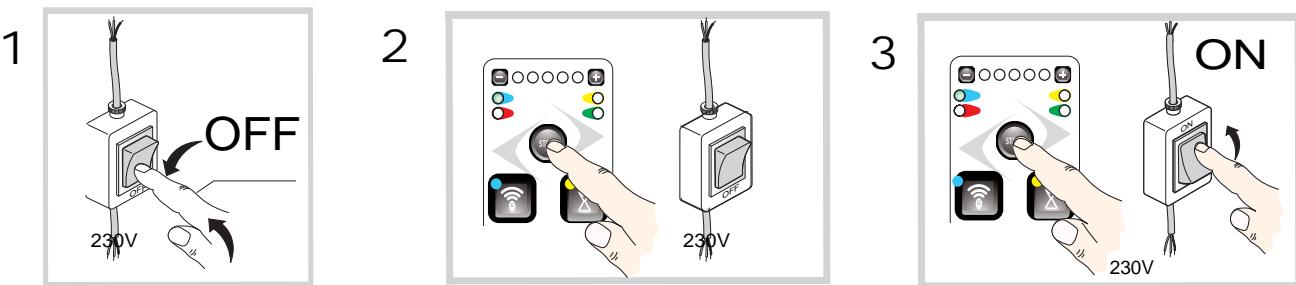
PROGRAMMING THE CONTROL BOARD

STOP PLATES - Ensure that the open and close stop metal bumpers set to the correct position.

SINGLE MOTOR - The control unit automatically recognize the installation of the single motor, it is sufficient to connect M1 to terminals nr. 35-36

To do TOTAL RESET: With the power off, hold the start button down ,reinstate the power supply and release the button when the 1th red led's will flash.

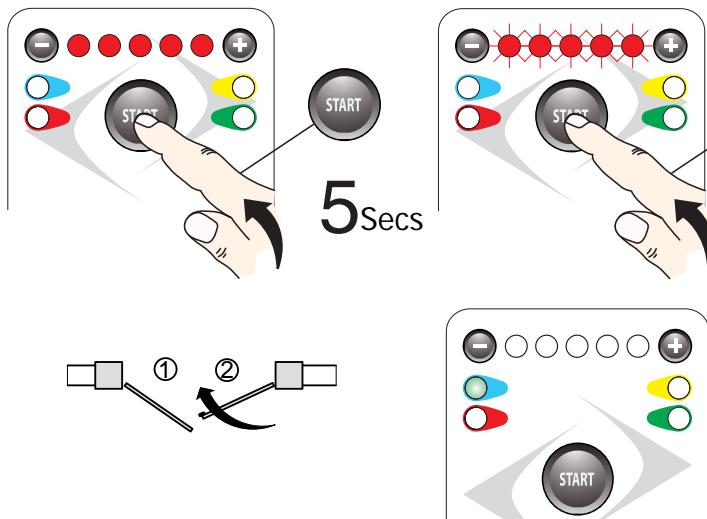
PHASE 1



Energy Saving

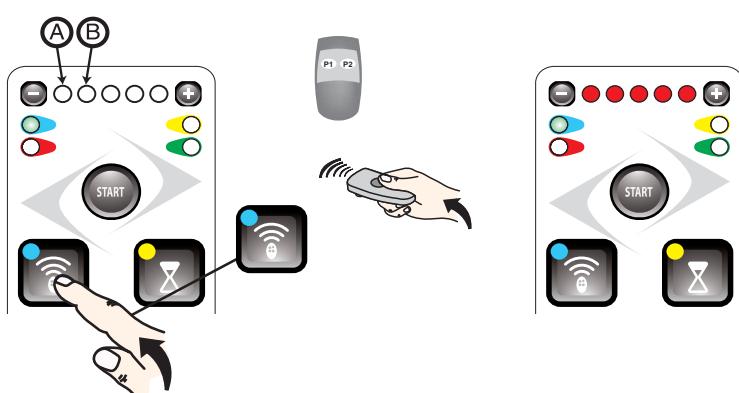
In order to save energy, we have introduced the function Energy Saving. 10 minutes after the end of programmation of the control board, the LED of the keyboard go out and it is no more possible to use the control board. To get the control board working again, switch it off and on.

PHASE 2



- Position the gate leafs at 45 degrees.
- Press the start button for 5 seconds. the 5 leds at the top of the board will light and start to flash.
- Press the start button and motor 2 should run closed. If it runs open you must invert the cables of electric motors to invert the movement. The red and green led's will flash.
- Once motor 2 has closed, motor 1 will then close, once closed it will re-open followed by motor 2. Once both motors are open, motor 1 will start to close again followed by motor 2.
- Once both motors have completed this full close cycle the programming is complete and the red led's will light and green led's will flash. The gates will now operate on the start button in semi automatic mode. **OPEN-STOP-CLOSE-STOP**
- This programming will set a default leaf delay time. If you wish to change this please refer to the manual set up instructions (page 11)
- You can now encode the radio transmitters and enter the programming menus to suit the type of operation required.

PHASE 3



PROGRAMMING RADIO TRANSMITTERS TOTAL OPENING COMMAND

- Press the radio icon button (top left) once. The left green led will light and the first (L to R) of the top 5 led's (A) will light.
- Hold down the button on the transmitter that you want to perform a total opening of the gates. Once the top 5 led's light the transmitter has been coded.
- To exit wait 25 seconds or push the radio icon button twice.

PEDESTRIAN OPENING COMMAND (ACTIVE ON MOTOR 1)

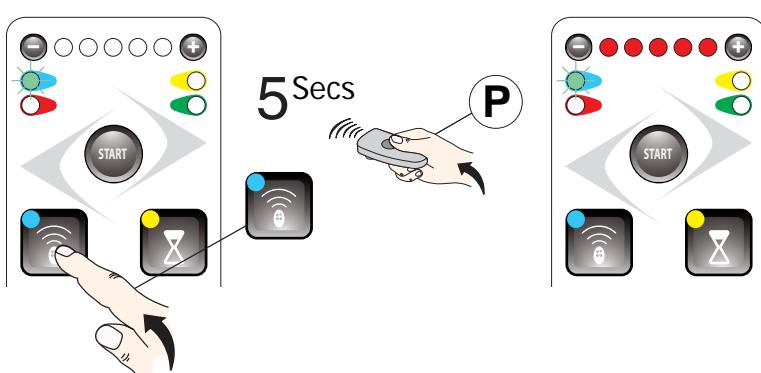
- Press the radio icon button (top left) **TWICE**. The left green led will light and the second (L to R) of the top 5 led's (B) will light.
- Hold down the button on the transmitter that you want to perform a pedestrian opening of the gate. Once the top 5 led's light the transmitter has been coded.

SEMIAUTOMATIC mode is enabled: by giving the 'STEP' command, the automation changes movement following the sequence 1 –OPEN 2 – STOP 3 – CLOSE 4 – STOP. Automatic re-closure is not enabled.

Once programming is complete the START button acts as a step command

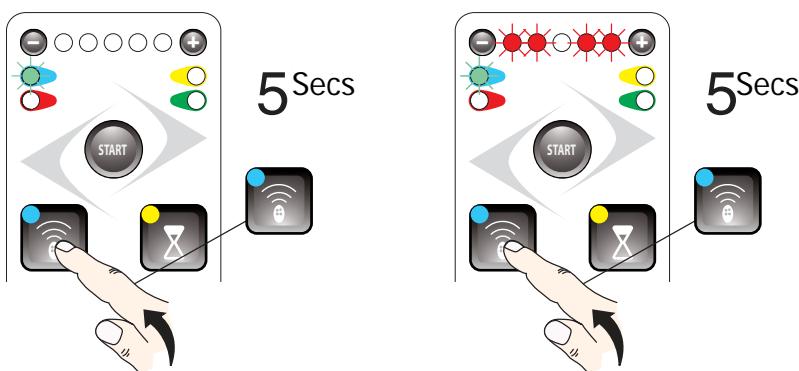
DELETING RADIO CONTROL TRANSMITTERS

The control unit is fitted with a built-in radio receiver with a 1 channel 1000-code memory, with a 433.92 MHz frequency with LIFE Rolling Code and Auto code encoding.



DELETING A SINGLE RADIO TRANSMITTER

- Press the radio icon button (top left) for 5 seconds. The left green led will light and start ashing.
- Hold down the button on the transmitter you wish to delete until all the top 5 led's light. The transmitter has been deleted
- To exit wait 25 seconds or push the radio icon button once.



DELETING ALL RADIO TRANSMITTERS.

- Press the radio icon button (top left) for 5 seconds. The left green led will light and start ashing.
- Press for 5 more seconds, the first two and the last two led's will ash alternatively. All transmitters have been deleted
- To exit wait 25 seconds or push the radio icon button once.

PHOTOCELL FUNCTIONS

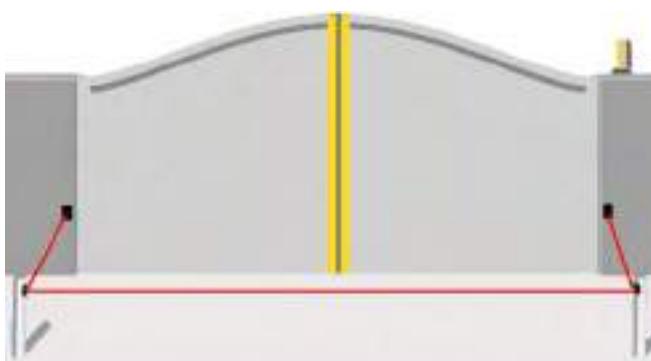


Photo Input

- Opening - No effect, continues to open.
Closing - Re opens.

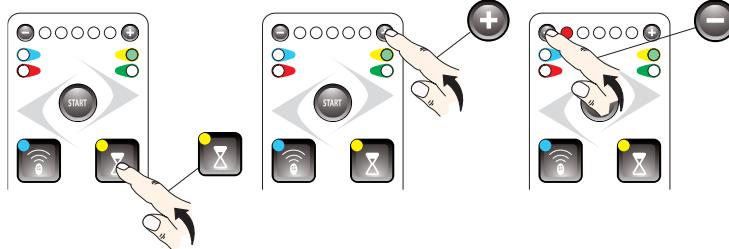
Photo1 input

- Opening - Stops and continues opening when photocells are cleared.
Closing - Stops and then reopens when photocells are cleared.

Photo2 input

- Opening - Stops and recloses slightly. (It will close fully after a pause time if set)
Closing - No effect.

PROGRAMMING MENUS



Press and to set the various PAUSE TIME values.

Wait 25 seconds or press again to quit.

AUTOMATIC CLOSING

In this mode by pressing the start button or radio transmitter the automation changes its motion as follows
OPEN-PAUSE- CLOSE – PAUSE

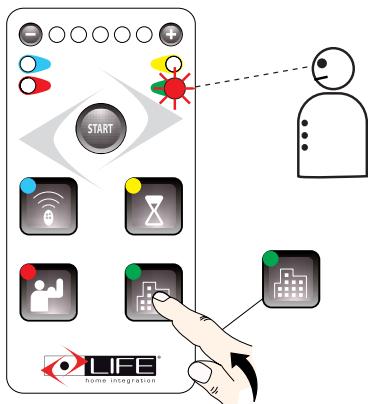
SELECTING A PAUSE TIME

- Press the time button (top right) and the right green led switches on.
- If none of the top 5 led's are lit automatic closure is not enabled.
- Press the + button to increase or the – button to decrease the pause time.
- Wait 25 Seconds or press the time button to quit

LEDS ON	PAUSE TIME
	AUTOMATIC RE-CLOSURE IS NOT ENABLED
	5 s
	10 s
	30 s
	60 s
	120 s

OPTION MENU

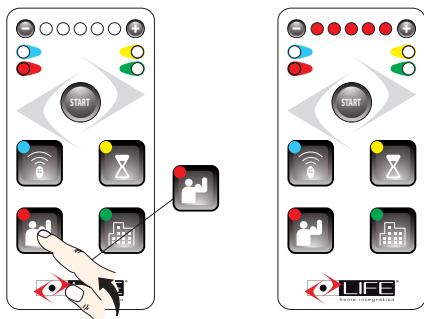
Press the option button (bottom right) once, then press in sequence to scroll through the options as shown by the five led's at the top. The flashing of the led indicates the option selected. The + button is used to select the function indicated by the led staying lit without flashing. The – button will de select the option, led off. To exit continue to scroll through to option 5.



LEDS	OPTIONS
	No function is active.
	Residential : The automation closes automatically after the set PAUSE TIME
	Functioning mode as OPEN – STOP – CLOSE – STOP.
	Activation of the electrolock.
	Input STOP becomes FOTO1, the photocell is activated also for the opening phase (See page 8 for details)
	When gate has been opened, after passing between the photocells the gates will close

FORCE

The force function regulates the thrust and the speed of the automation.



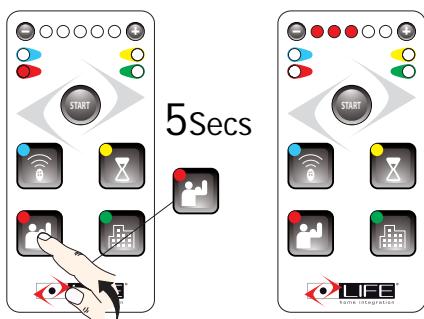
Wait 25 seconds or press again to quit.

- Press the force button (bottom left) and the left red led switches on.
- Press the + and - buttons to set the force values.
- The force value is indicated by the 5 led's at the top of the board.
- Wait 25 seconds or press the force button again to quit

LEDS ON	FORCE VALUE
	Minimum
	Maximum

OBSTACLE DETECTION

The automation is fitted with an obstacle detection system. The automation inverts its movement when it strikes an obstacle during the opening and closing phases.



Wait 25 seconds or press again to quit.

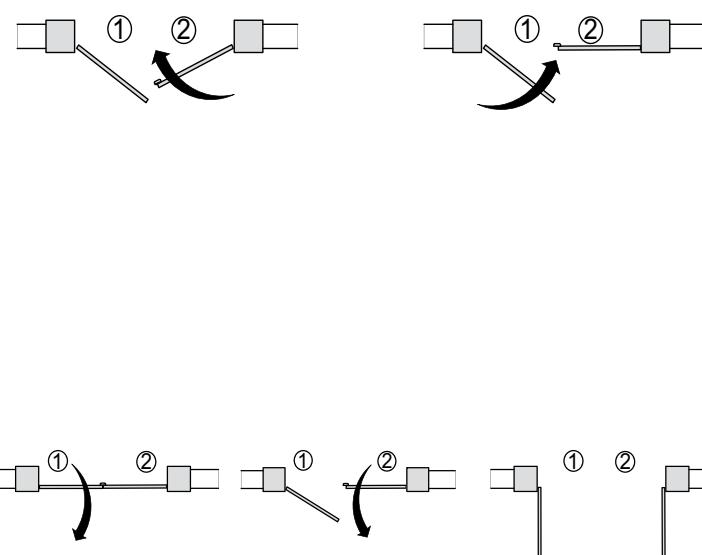
LEDS ON	OBSTACLE DETECTION
	NO OBSTACLE DETECTION
	MINIMUM
	MAXIMUM

MANUAL PROGRAMMING



POSITION THE GATE AT 45 DEGREES

- Press the start button for 5 seconds, the first of the 5 top led's light and flash.
- The programming can be done manually with a radio transmitter or a switch connected across terminal 6 & 10 .

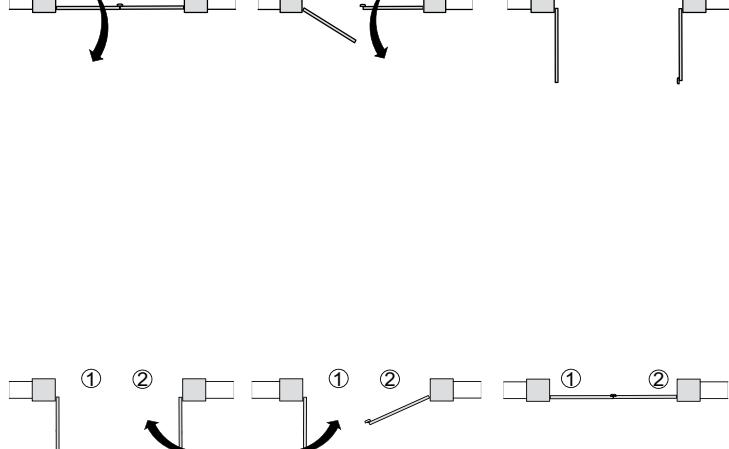


LEARNING THE CLOSING LIMIT

- Give a command with a radio transmitter or with a switch connected across terminals 6 & 10. Motor 2 will run closed and shut off when it drives against the close stop. The right red led will remain on.
- Give a second command using the radio transmitter or switch and motor 1 will run closed and shut off when it drives against the close stop. The left red led will remain on.

LEARNING THE OPEN LIMIT

- Give a command with a radio transmitter or with a switch connected across terminals 6 & 10. Motor 1 will run open. To set the required opening leaf delay, give a second command when the first gate has achieved the required delay.
- The two motors will run to the open stops and shut off. The two red led's will light.



LEARNING THE FULL CLOSING TRAVEL

- Give a command with a radio transmitter or with a switch connected across terminals 6 & 10. Motor 2 will run closed. To set the required closing leaf delay give a second command using the radio transmitter or switch when motor 2 has achieved the required delay.
- The two motors will run to the closing stops and shut off. To verify the completion of the manual programming the two red led's will light and the green led's will flash.

If the result is not satisfactory carry out the procedure again.

If the result is not satisfactory to reset the power and start over from scratch.

5 GENERAL INFORMATION

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LIFE home integration will not accept responsibility for damage or injury caused by non-compliance with the installation, set up, maintenance and use indications contained in this manual and the safety instructions described in the SAFETY INSTRUCTIONS AND WARNINGS chapter.
With the aim of improving its products, LIFE home integration reserves the right to bring about alterations to them at any time, without giving prior notice. This document conforms to the state of the automation at which it is provided when released for sale.

5.1 INFORMATION ON THE MANUFACTURER

LIFE home integration is the manufacturer of the RG1 24DL control unit (referred to for short as "control unit") and the owner of all rights concerning this document.. The Manufacturer's information as required by Machinery Directive 98/37/EC is given below:

- Manufacturer: LIFE home integration
- Address: Via S.Pertini,3/5 – 31014 COLLE UMBERTO (TV) Włochy
- Telephone: + 39 0422 809 254
- Fax: + 39 0422 809 250
- http: www.homelife.it
- e-mail: info@homelife.it

The identity plate bearing the information on the Manufacturer is fixed to the control unit. The plate specifies the type and date (month/year) of manufacture of the product.

For further information on technical and/or commercial issues and technician call-out and spares requests, Clients may contact the Manufacturer or area representative from which the product was purchased.

5.2 INTENDED USE

- The RG1 UNIR DLcontrol unit has been exclusively designed to command 1 electromechanical operator with 230 Vac power supply destined to motorising 'residential' type leafs. Any usage differing from that described above is forbidden.
- The control unit may only be used with other LIFE products.
- The manufacturer declines all responsibility for damage caused by improper use. All risks are the fitter's responsibility and the warranty shall be rendered void.
- The control unit may not be installed or used in potentially explosive environments.
- Motorised gates must conform to current European standards and Directives, including EN 12604 and EN 12605.
- The control unit may only be used when in perfect working order and in compliance with the intended use, in the awareness of safety and hazard conditions and in compliance with the instructions for installation and use.
- Any dysfunctions that may pose threats to safety must be eliminated immediately.
- The control unit may not be used in environments prone to flooding.
- Do not use the operator in environmental conditions characterised by harsh atmospheric agents (e.g. salty air).

6 SAFETY INSTRUCTIONS AND WARNINGS

6.1 General instructions and warnings

- This manual is designed for use by PROFESSIONAL FITTERS only. Installation of the control unit requires practical and theoretical knowledge of mechanics, electrics and electronics as well as current sector legislation and regulations.
- Once the control unit has been installed, it is forbidden for users to perform any operation on the control unit even following the instructions in this manual, which, as mentioned previously, are intended for use by qualified personnel only.
- Fitters must operate in compliance with the following: law 46/90, directive 98/37/EC, 73/23/EEC, 89/336/EEC and subsequent amendments. He/she must also make constant reference to harmonised standards EN 12453 and EN 12445.
- The indications given in this manual must always be observed when installing, connecting, adjusting, testing and setting the control unit. The Manufacturer declines all responsibility for damage or injury caused by non-observance of the instructions contained in this manual.
- The Manufacturer declines all responsibility for damage and faults to the control unit caused by non-observance of the instructions contained in this manual.
- Keep this manual in a safe and easily accessible place so that it can be consulted rapidly when necessary.
- During installation, connection, trial run and usage of the control unit, observe all applicable accident prevention and safety regulations.
- In the interests of safety and optimal functioning of the control unit, only use original spares, accessories, devices and fastening apparatus.
- Do not perform alterations on any control unit device or component. This type of operation may cause malfunctions. The manufacturer declines all responsibility for damage caused by products that have been modified.
- Should liquids penetrate inside the control unit, disconnect the electricity supply and contact the Manufacturer's Assistance Service immediately; use of the control unit in such conditions may cause hazard situations.
- In the event of long periods of inactivity, in order to prevent the leakage of harmful substances from the battery (optional), it should be removed, stored in a dry place and recharged periodically.
- In the case of faults or problems that cannot be resolved using the information contained in this manual, contact the Manufacturer's assistance service.

6.2 Storage instructions and warnings

- The Manufacturer declines all responsibility for damage and faults to control unit functioning caused by non-compliance with the storage instructions given below.
- The control unit must be stored in closed, dry places, at room temperatures of between -20 and +70°C and raised off the ground.
- Keep the control unit away from sources of heat and naked flames, which could damage it and cause malfunctions, fires or hazard situations.

7 INSTALLATION

ATTENTION: Important safety instructions. Follow all instructions carefully, incorrect installation may cause serious injury.

Before commencing installation we highly recommend reading the instructions and warnings contained in this manual carefully (see the SAFETY INSTRUCTIONS AND WARNINGS Chap) and observing the instructions it contains.

7.1 Instructions and warnings for installations

- Before commencing installation read the. SAFETY INSTRUCTIONS AND WARNINGS chapter carefully
- The PROFESSIONAL FITTER who installs the control unit is responsible for performing risk analysis and regulating the automation's safety devices consequentially.
- The Fitter must check that the temperature range declared on the control unit is suited to the place in which the device is installed.
- Any normally open/off buttons installed for the activation of the operator must be positioned so that they are within view of the gate but distant from moving parts. Unless said commands operate using keys, they must be positioned at a minimum height of 1.5m and not accessible to unauthorised persons.
- During installation, make constant reference to harmonised standards EN 12453 and EN12445.
- Ensure that the individual devices to be installed are compatible with the RG1 UNIR DL control unit. Do not proceed if even just one device is unsuitable for the intended use.
- Ensure that the place of installation of the central unit is not prone to flooding, does not contain sources of heat or naked flames, fires or hazard situations in general.
- During installation, protect control unit components in order to prevent liquids (e.g. rain) and/or foreign bodies (earth, gravel, etc) penetrating inside.
- Connect the control unit to a power supply line created in compliance with current regulations and earthed and fitted with a power supply sectioning switch.
- Wrapping materials must be disposed of in compliance with local regulations.
- Wear protective goggles when making holes for clamping.

In the event of work at heights of over 2m from the ground, for example for the installation of the indicator lamp or aerial, fitters must be equipped with ladders, safety harnesses, protective helmet, and all other equipment required by law and the standards governing this kind of work. Refer to Directive 89/655/EEC amended by 2001/45/EC.

8 TESTING AND TRIAL RUN

- The testing and trial run must be performed by a **COMPETENT PERSON** supervised and aided by a **PROFESSIONAL FITTER**. It is the responsibility of the person who tests and sets up the automation (of which the control unit is a part) to perform the checks required in accordance with the risks existing and to check conformity with the relevant legislation and standards, in particular with EN standard 12445, which governs the methods for performing trials on gate automations and EN standard 12453 that specifies the performance requisites concerning safety of use.
- The testing and trial run are the most essential phases of installation for guaranteeing maximum operating safety.
- The checks and procedures for testing may also be used for routine checks on the automation and its devices.
- The automation may only be tested if a non-hazardous force tolerance has been set. Force tolerance must be adjusted to a minimum value so as to exclude the danger of injury during closure.
- Adjust the maximum force in line with EN standard 12445.
- Never touch the gate or moving parts when they are in motion.
- Remain at a safe distance when the gate is in motion: only pass when the gate is completely open and immobile.
- In the event of malfunctions (noisiness, jerky movements, etc.) suspend the use of the automation immediately: failure to observe this rule may entail serious hazards, risks of accidents and/or serious damage to the gate and the automation.
- Always remember that the following residual risks exist when the gate is in movement:
 - a) impact and crushing against the main closure edge (against the single leaf or between the two leaves);
 - b) impact and crushing in the opening area;
 - c) cshearing between the moving and the fixed guides and support during movement;
 - d) mechanical risks caused by movement.

8.1 Testing

During testing, ensure that the measurement of the gate's impact force has been performed in accordance with EN standards 12445 and 12453.

- Check that the indications given in the **SAFETY INSTRUCTIONS AND WARNINGS** and **INSTRUCTIONS AND INDICATIONS FOR INSTALLATION** chapters have been carefully observed.
- Ensure that the automation is correctly adjusted and that the protection and release systems are in good working order.
- Using the key selector or the radio control perform gate opening and closure tests and ensure that each movement of the gate corresponds to the control unit settings. Perform as many checks as necessary to be certain of perfect operation.
- Ensure the correct operation of the LEDs on the keyboard of the control unit (see specific manual).
- In particular, for photocell checks, check that there is no interference with other devices. Pass a cylindrical tube with a diameter of 5cm and a length of approximately 30 cm through the optic axis that connects the two photocells. Perform this check firstly close to the transmitter and then close to the receiver and lastly halfway between the two.
- In all three cases, the device must intervene by passing from the active state to the alarm state and vice versa, thus causing the action set on the control unit: for example, during a closure manoeuvre it must cause inversion of movement.
- Perform the photocell operation test required in compliance with EN standard 12445 p. 4.1.1.6. The results must satisfy EN standard 12453 p. 5.1.1.6.

ATTENTION: once the automation has been tested, the parameters set must not be altered. If further adjustments (e.g. alterations to the voltage value) are made, all the checks required for testing and compliance with EN standard 12445 must be repeated.

8.2 First usage

The automation may only be used for the first time once all the checks described in the **TESTING** chapter have been performed successfully. The automation may not be used in precarious or temporary conditions.

- a) Compile a technical file for the automation, which must include at least:
 - a general mechanical and electrical diagram,
 - risk analysis and solutions adopted for eliminating or reducing risks,
 - manuals of the individual components,
 - list of the components used,
 - instructions for use and warnings concerning use by the owner,
 - system maintenance record
 - declaration of the system's CE conformity
- b) Fix a CE marking plate to the gate, bearing at least the following information:
 - Name and address of the party responsible for installation and testing;
 - Type of automation,
 - model,
 - registration number,
 - year of installation,
 - CE mark.
- c) Fill in the declaration of conformity and give it to the owner of the automation.
- d) Compile the guide with the instruction manual (EN 12635 p. 5.3 and 5.4) and give it to the owner of the automation.
- e) Compile the maintenance and improvement log (EN 12635 p. 5.3) and give it to the owner of the automation.
- f) Compile the guide containing the instructions for maintenance that provides instructions concerning the maintenance of all automation devices (EN 12635 p. 5.3 and 5.5) and give it to the owner of the automation.
- g) Before the first use of the automation, the owner must have been given adequate information concerning hazards and residual risks.

9 SAFETY INSTRUCTIONS AND WARNINGS

9.1 Instructions and warnings for use

- It is the fitter's duty to perform risk analysis and inform the user/owner of any existing residual risks. Any residual risk detected must be recorded in writing in the operator manual.
- The following residual risks are usually present in moving gates: impact and crushing against the main closure surface (of the single leaf or between the two leaves); impact and crushing in the opening area; crushing between the mobile and fixed guide and support parts during movement; mechanical risks caused by movement.
- The Manufacturer will not accept responsibility for damage or injury caused by the non-observance of the information on use contained in this manual, and the failure to observe the safety indications given below.
- The Manufacturer declines responsibility for damage and malfunctions caused by non-compliance with the instructions for use.
- Keep this manual in a safe and easily accessible place so that it can be consulted rapidly when necessary.
- Before activating the gate ensure that all persons are at a safe distance.
- Never touch the gate or moving parts when they are in motion.
- Remain at a safe distance when the gate is in motion: only pass when the gate is completely open and immobile.
- Do not allow children to play with gate controls; do not leave radio controls or other control devices within children's reach.
- Prevent children from playing or standing in the vicinity of the gate or the control organs (radio controls). The same precautions should be adopted for disabled persons and animals.
- In the event of malfunctions (noisiness, jerky movements, etc.) suspend the use of the automation immediately: failure to observe this rule may entail serious hazards, risks of accidents and/or serious damage to the gate and the automation. Contact a **PROFESSIONAL FITTER** and in the meantime use the gate manually by disconnecting the operator (see the **OPERATOR/ACTUATOR RELEASE** chapter) (**OPERATOR/ACTUATOR RELEASE** chapter) of the operator manual.
- In order to maintain the automation in efficient conditions, ensure that the operations indicated in the **MAINTENANCE** chapter are performed at the frequency indicated by a **PROFESSIONAL FITTER**.
- Examine the installation frequently in order to check that there are no signs of mechanical unbalance, wear and damage to the wires and assembled parts: do not use the operator until the necessary repairs or adjustments have been made.
- Should liquids penetrate inside the control unit, disconnect the electricity supply and contact the Manufacturer's Assistance Service immediately; use of the control unit in such conditions may cause hazard situations. The automation may not be used in these conditions, even with buffer batteries (optional).
- If a problem arises that cannot be resolved using the information contained in this manual, contact the Manufacturer's assistance service.



10 MAINTENANCE

10.1 Maintenance instructions and warnings

- Once the automation has been tested, the parameters set must not be altered. If further adjustments (e.g. alterations to the voltage value) are made, ALL THE CHECKS REQUIRED FOR TESTING AND COMPLIANCE WITH STANDARDS MUST BE REPEATED.
- The Manufacturer declines responsibility for damage or injury caused by non-compliance with the information provided in this manual and the safety instructions provided below.
- The Manufacturer declines all responsibility for damage and malfunctions deriving from non-compliance with the maintenance instructions.
- In order to keep the operator efficient and safe, follow the cleaning, checking and routine maintenance procedures as described in this manual. This is the owner's duty.
- Any checking, maintenance or repair work must be conducted by a PROFESSIONAL FITTER.
- Always switch off the electricity supply in the event of malfunctions, breakdowns and before any other operations in order to avoid the gate from being activated.
- Always disconnect the operator's power supply before performing any maintenance or cleaning operation.
- The owner is NOT authorised to remove the control unit cover as it contains live parts.
- If the power cable is damaged, it must be replaced by the Manufacturer or its technical Assistance service or in any case a person with a similar qualification in order to avoid risks.
- If the power cable is damaged, it must be replaced by the Manufacturer or its technical Assistance service or in any case a person with a similar qualification in order to avoid risks.
- Do not perform technical or programming modifications on the control unit. Operations of this type may cause malfunctions and/or risk of accidents. The manufacturer declines all responsibility for damage caused by products that have been modified.
- In the event of intervention of automatic or fuse switches, before restoring function conditions identify and eliminate the fault. Request the intervention of a PROFESSIONAL FITTER.
- The disconnection and replacement of the pair of buffer batteries (optional) may be performed by a PROFESSIONAL FITTER only.
- If a fault that cannot be solved following the information contained in the present manual arises, contact the manufacturer's assistance service.
- All maintenance, repair or replacement of parts must be recorded in the maintenance log, which is SUPPLIED AND INITIALLY FILLED IN BY THE FITTER.

10.2 Routine maintenance

Every 6 months a PROFESSIONAL FITTER should repeat the series of tests described for automation testing (see INSTALLATION MANUAL – TESTING AND TRIAL RUN Chap.) – TESTING AND TRIAL RUN Chap.).

11 DEMOLITION AND DISPOSAL

- The control unit is constructed using various materials, which implies the adoption of different disposal procedures. Refer to regulations in force in the country in which the automation is installed, especially with regard to the buffer batteries (if present).
- If present the batteries must be removed from the control unit prior to disposal. Disconnect the control unit from the electricity supply before removing batteries.
- Contact qualified firms for disposal.

ATTENTION: operator disconnection from the mains supply must be performed by a qualified electrician using suitable tools.

Declaration of conformity



under Directive 98/37/EC, appendix II, part B (Manufacturer's Declaration of CE Conformity)

**LIFE Home Integration
Via S.Pertini 3/5
31014 COLLE UMBERTO (TV)**

declares that the following product:

GEUNIR DL control unit

satisfies the essential requisites established in the following directives:

- Low voltage directive 73/23/EEC and subsequent amendments,
- Electromagnetic compatibility directive 89/336/EEC and subsequent amendments,
- Radio and telecommunications equipment directive 1999/5/EC and subsequent amendments.

and satisfies the following standards:

- EN 12445:2000 Industrial, commercial and garage doors and gates – Safety in the usage of motorised doors – testing methods
- EN 12453: Industrial, commercial and garage doors and gates – Safety in the usage of motorised doors – Requisites
- EN 60204-1:1997 Machinery safety – Electric equipment of the machine – Part 1: general rules.
- EN 60950 Information technology equipment - Safety - Part 1: General requisites
- ETSI EN 301489-3:2001 Electromagnetic compatibility for radio equipment and appliances.
- EN 300220-3:2000 Radio equipment and systems – short band devices – Technical characteristics and testing methods for radio apparatus with a frequency of 25 to 1000 MHz and powers of up to 500mW.

The Manufacturer also declares that it is not permitted for the abovementioned components to be used until such time as the system in which they are incorporated is declared conform to directive 98/37/EC.

COLLE UMBERTO _____

Name of Signor:

MICHELE RUI

Position:

PRESIDENT

Signature:





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