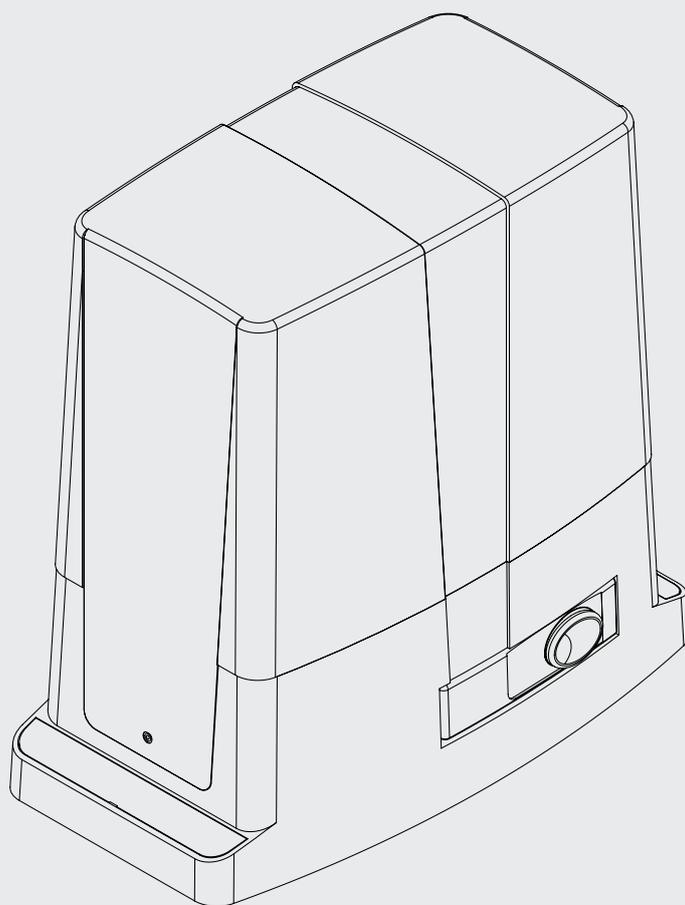


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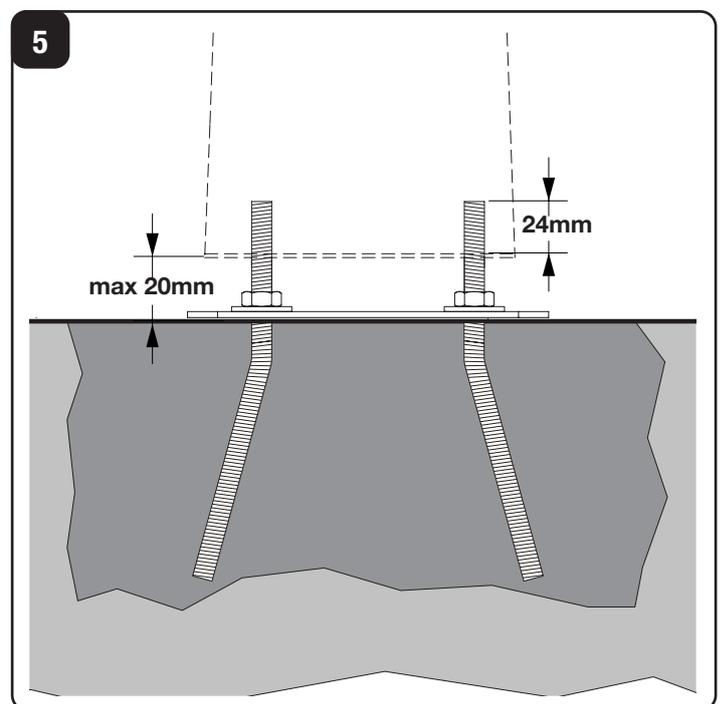
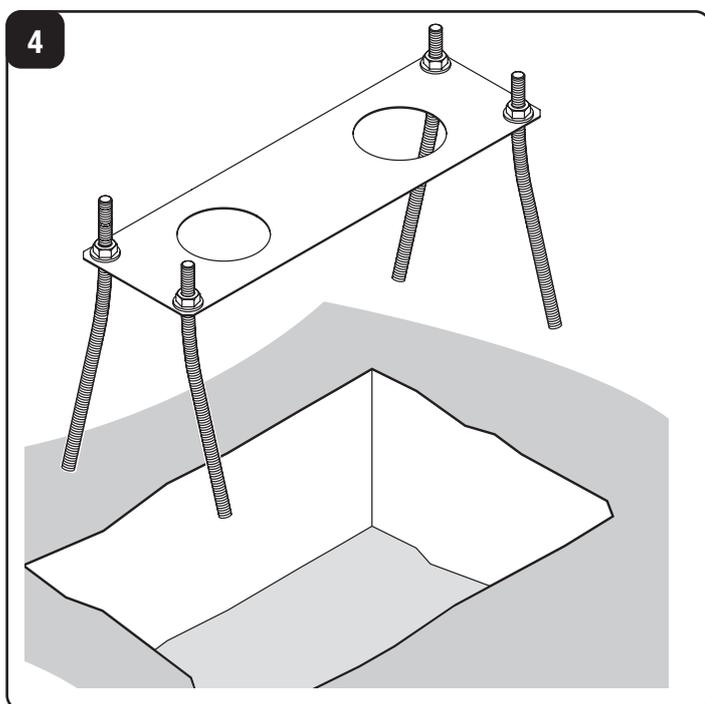
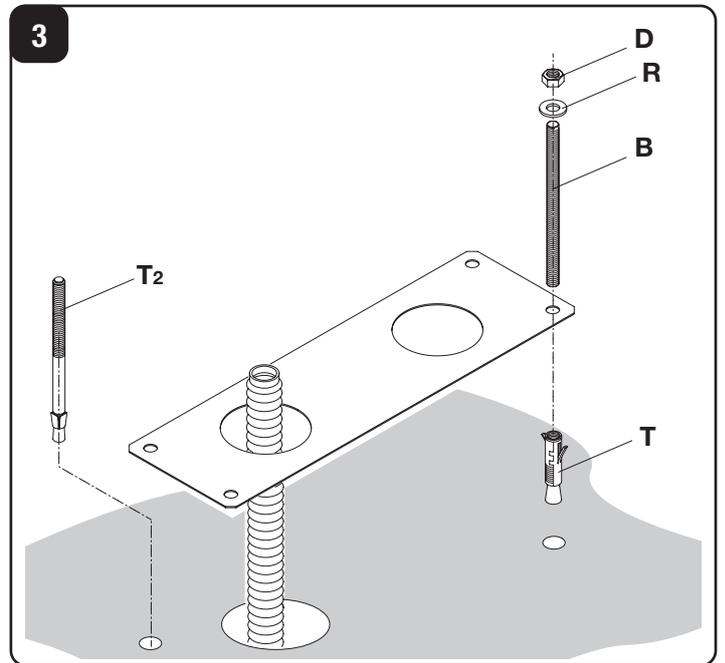
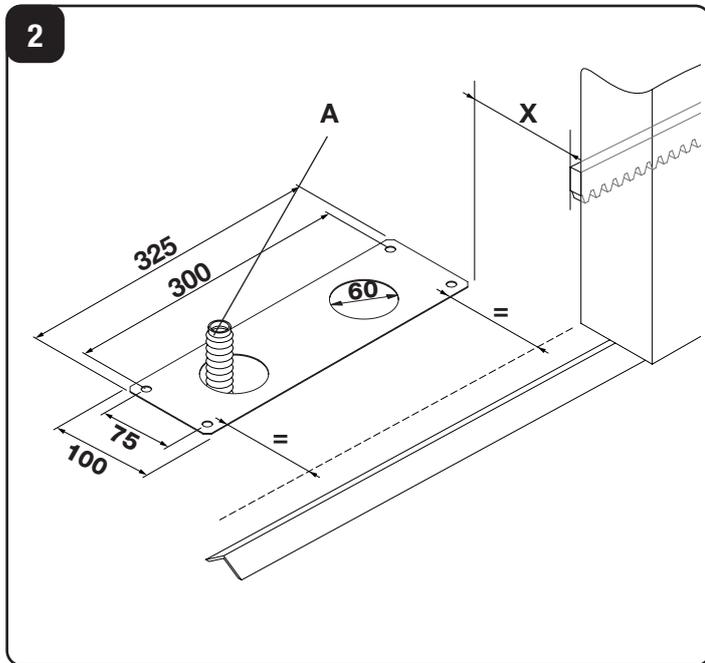
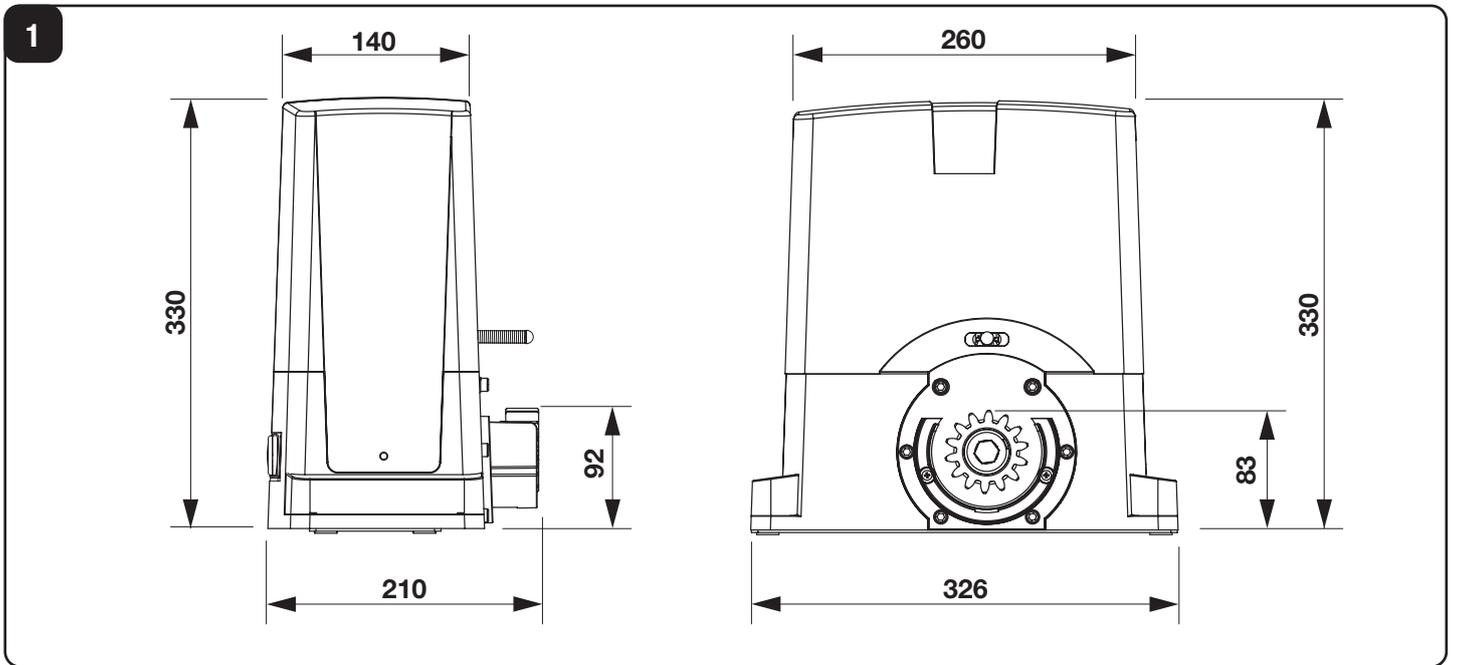
424 ESA - 424 ESA.S

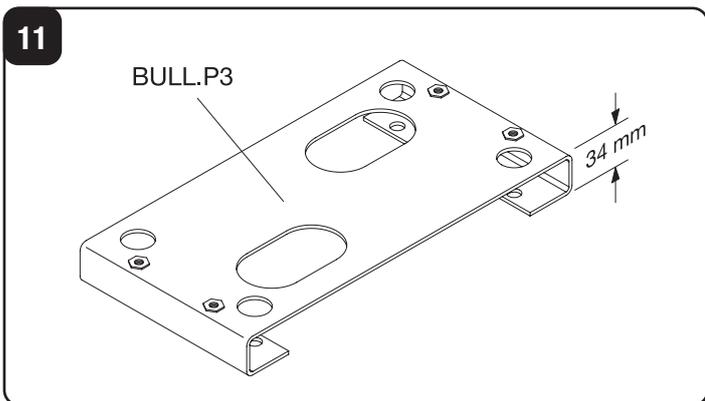
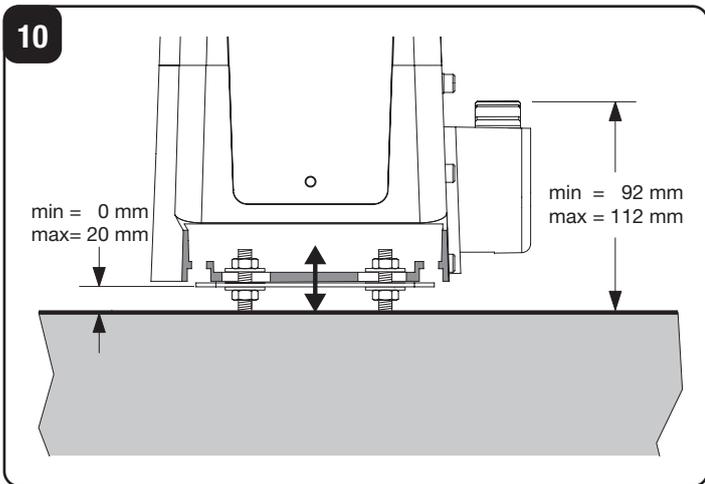
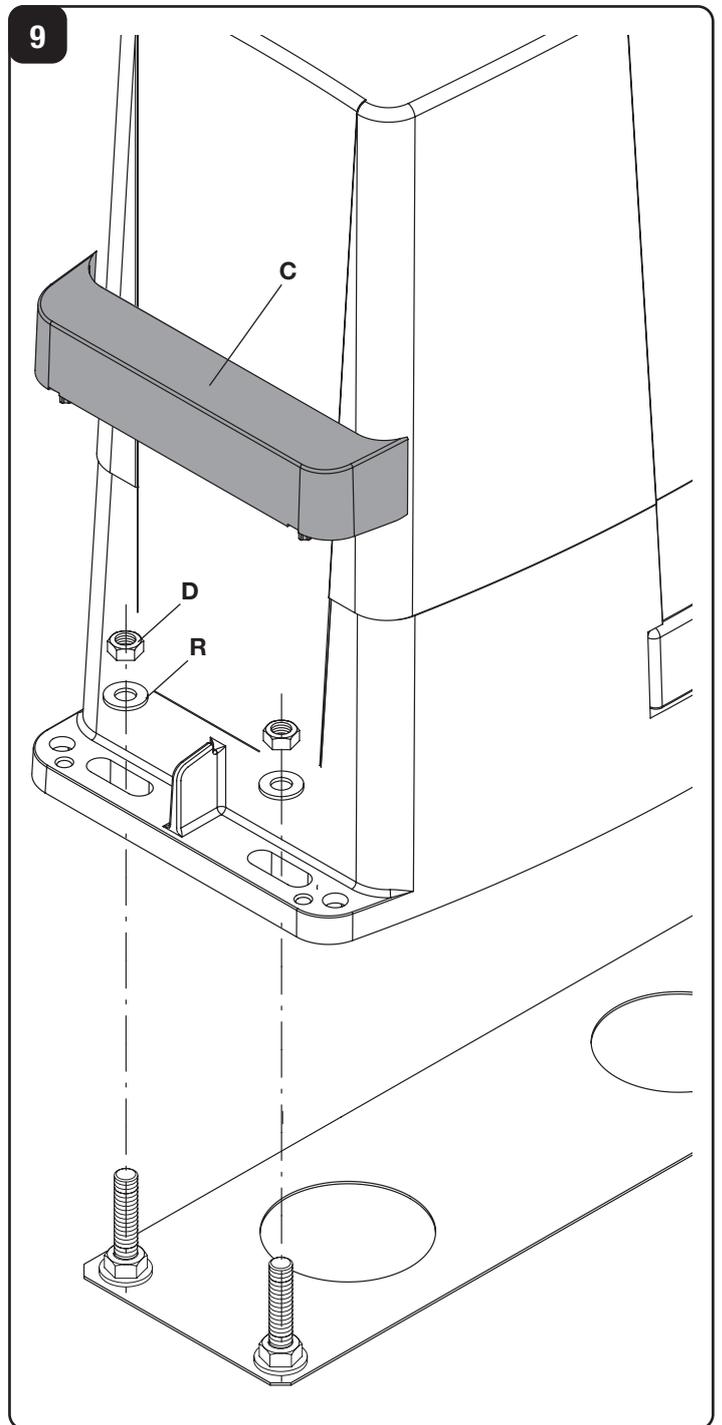
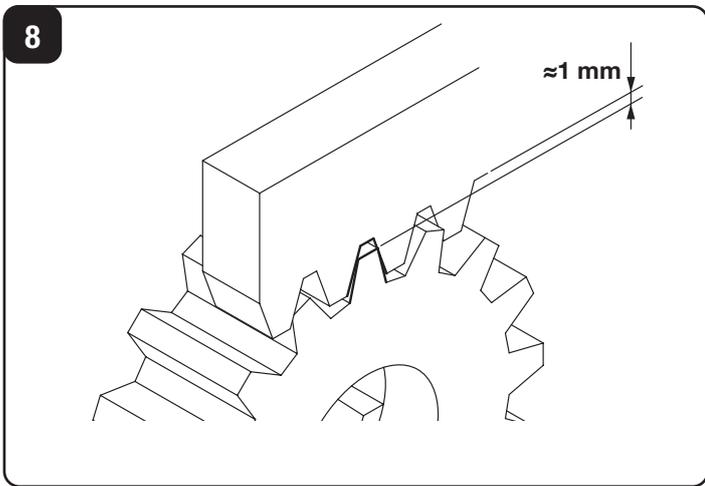
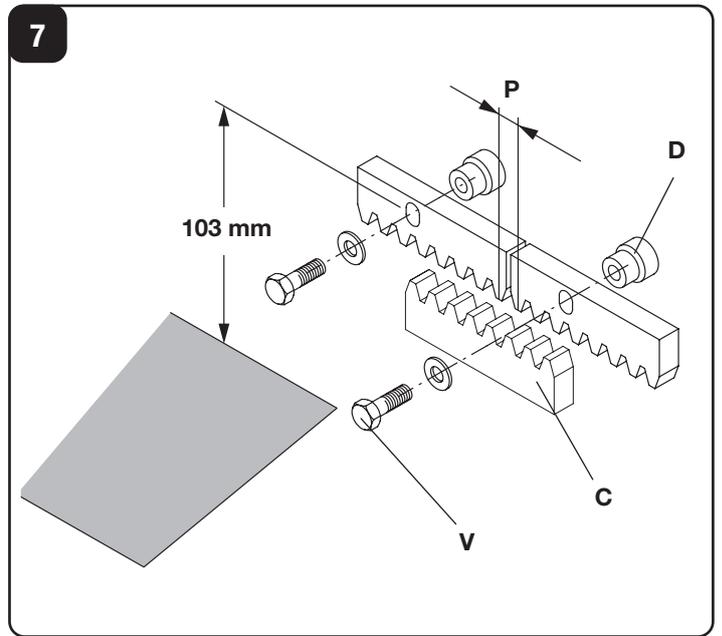
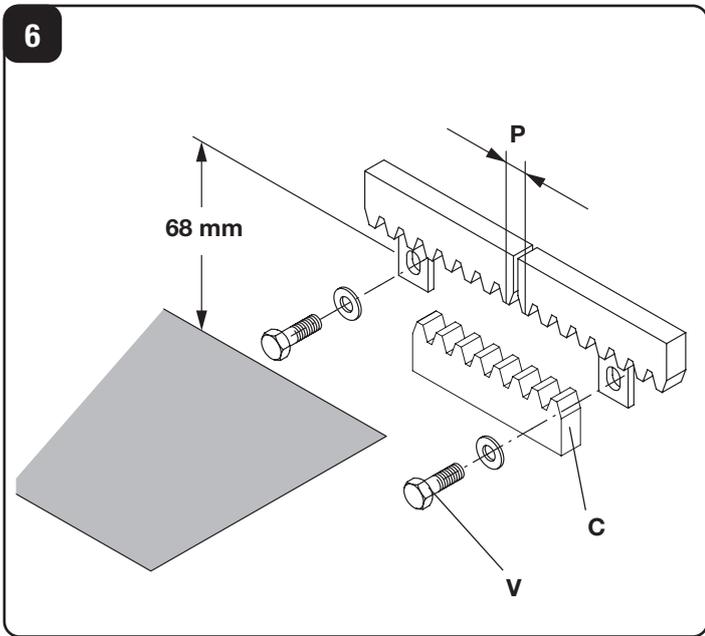
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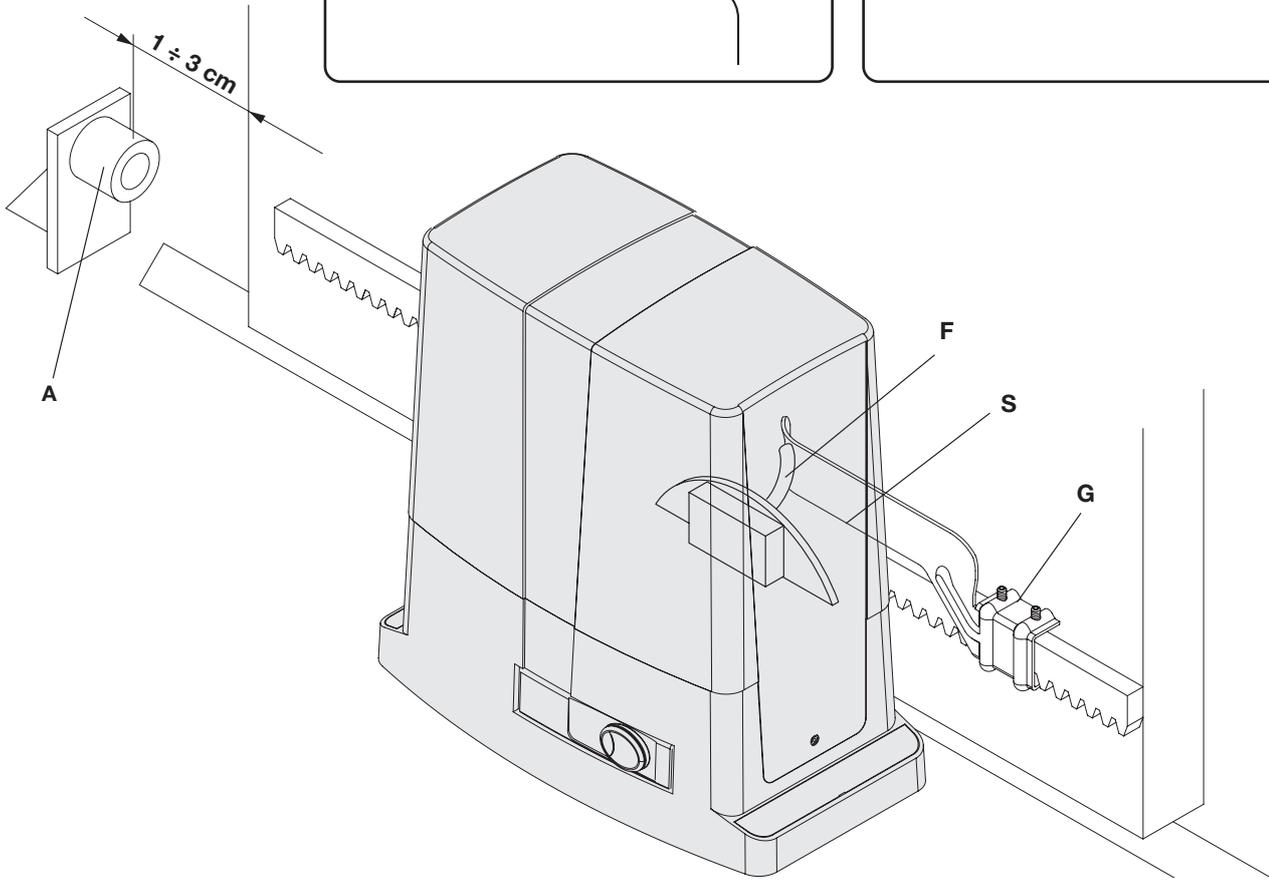
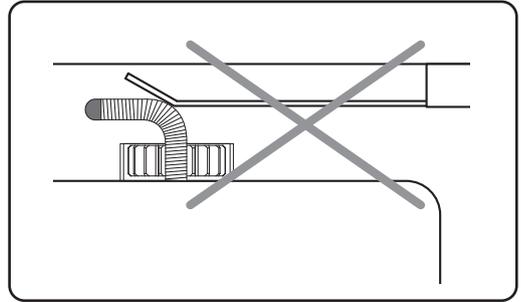
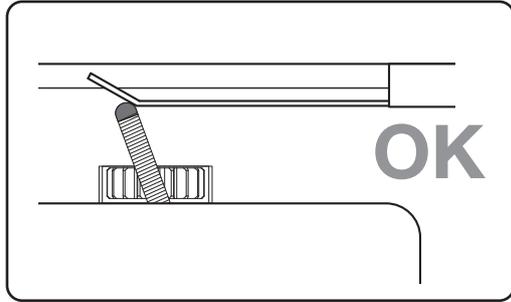
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TECHNOLOGY TO OPEN



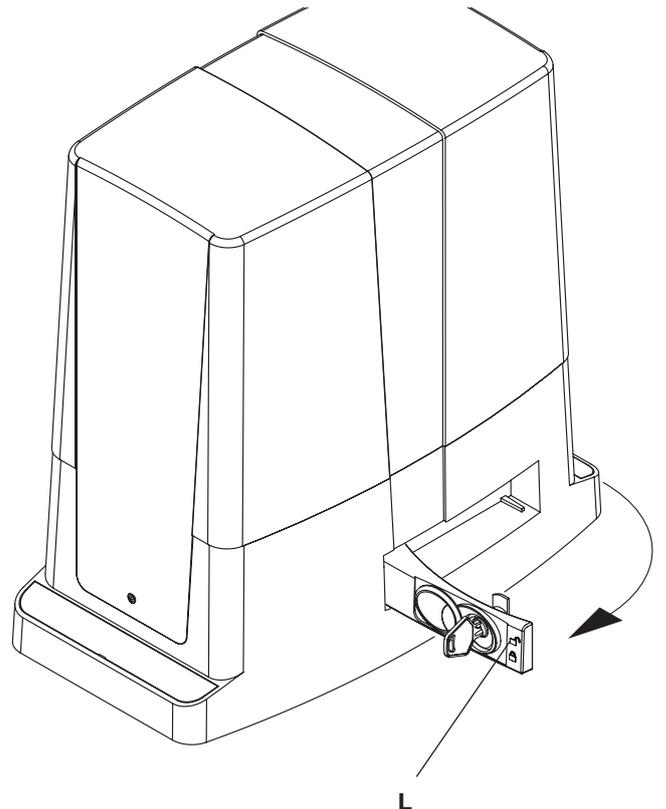
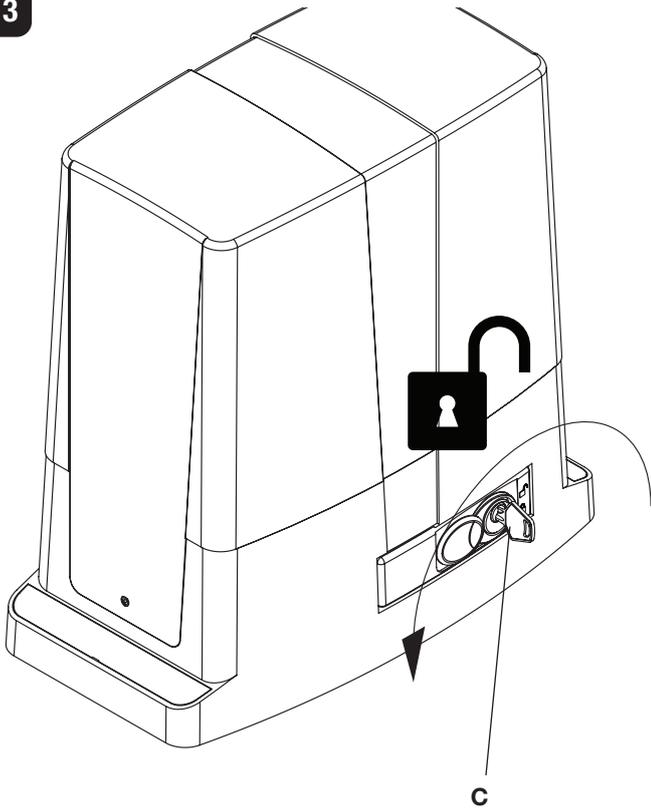


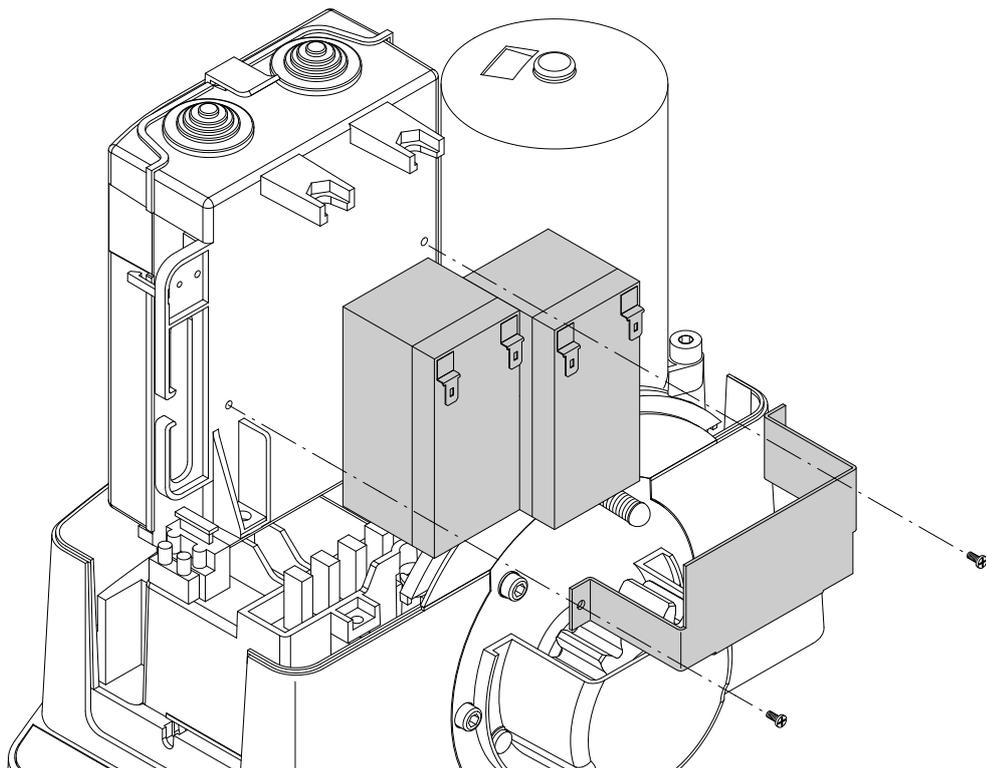
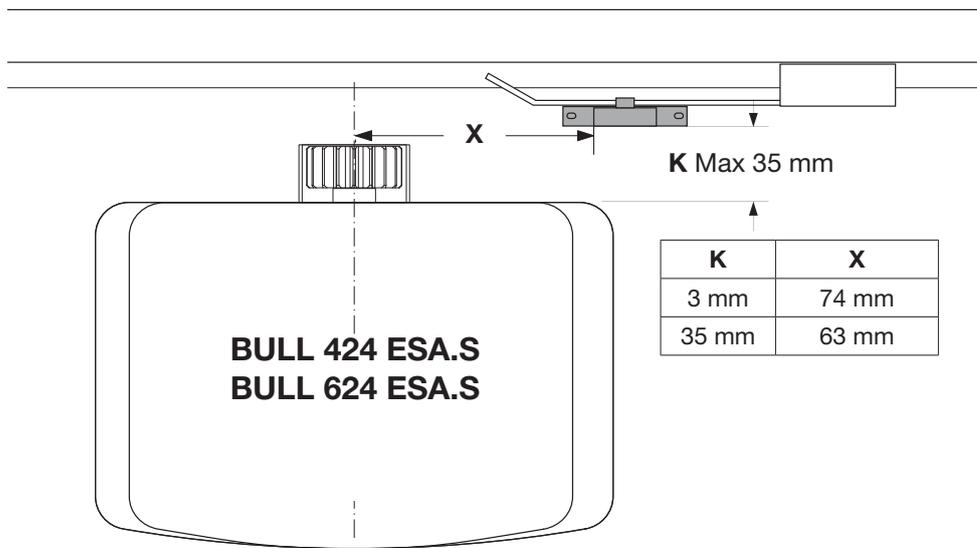
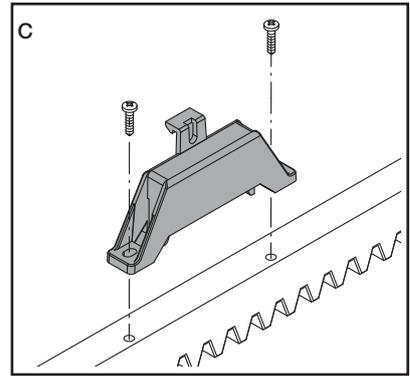
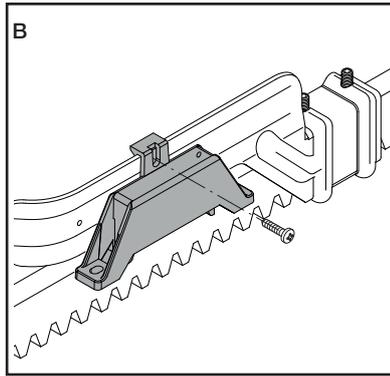
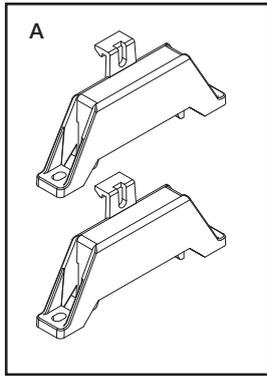


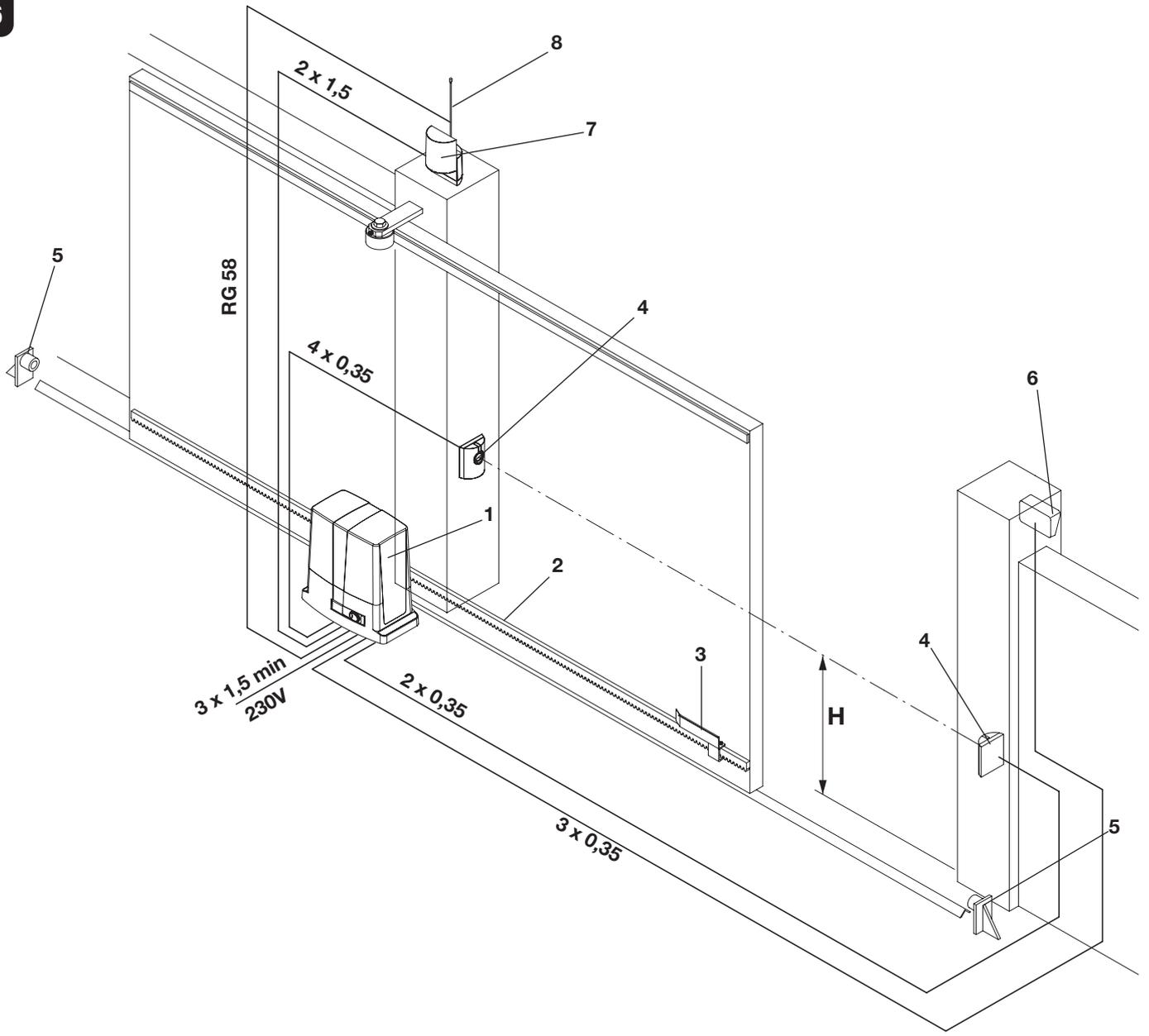
12



13









The product shall not be used for purposes or in ways other than those for which the product is intended for and as described in this manual. Incorrect uses can damage the product and cause injuries and damages.
The company shall not be deemed responsible for the non-compliance with a good manufacture technique of gates as well as for any deformation, which might occur during use.
Keep this manual for further use.



This manual has been especially written to be use by qualified fitters.
Installation must be carried out by qualified personnel (professional installer, according to EN 12635), in compliance with Good Practice and current code.
Make sure that the structure of the gate is suitable for automation.
The installer must supply all information on the automatic, manual and emergency operation of the automatic system and supply the end user with instructions for use.



Packaging must be kept out of reach of children, as it can be hazardous.
For disposal, packaging must be divided the various types of waste (e.g. carton board, polystyrene) in compliance with regulations in force. Do not allow children to play with the fixed control devices of the product.
Keep the remote controls out of reach of children.
This product is not to be used by persons (including children) with reduced physical, sensory or mental capacity, or who are unfamiliar with such equipment, unless under the supervision of or following training by persons responsible for their safety.
Apply all safety devices (photocells, safety edges, etc.) required to keep the area free of impact, crushing, dragging and shearing hazard. Bear in mind the standards and directives in force, Good Practice criteria, intended use, the installation environment, the operating logic of the system and forces generated by the automated system.
Installation must be carried out using safety devices and controls that meet standards EN 12978 and EN 12453.
Only use original accessories and spare parts, use of non-original spare parts will cause the warranty planned to cover the products to become null and void.
All the mechanical and electrical parts composing automation must meet the requirements of the standards in force and outlined by CE marking.



An omnipolar switch/section switch with remote contact opening equal to, or higher than 3mm must be provided on the power supply mains. Make sure that before wiring an adequate differential switch and an overcurrent protection is provided.
Pursuant to safety regulations in force, some types of installation require that the gate connection be earthed.
During installation, maintenance and repair, cut off power supply before accessing to live parts.
Also disconnect buffer batteries, if any are connected.
The electrical installation and the operating logic must comply with the regulations in force.
The leads fed with different voltages must be physically separate, or they must be suitably insulated with additional insulation of at least 1 mm. The leads must be secured with an additional fixture near the terminals.
During installation, maintenance and repair, interrupt the power supply before opening the lid to access the electrical parts
Check all the connections again before switching on the power.
The unused N.C. inputs must be bridged.



WASTE DISPOSAL
As indicated by the symbol shown, it is forbidden to dispose this product as normal urban waste as some parts might be harmful for environment and human health, if they are disposed of incorrectly.
Therefore, the device should be disposed in special collection platforms or given back to the reseller if a new and similar device is purchased.
An incorrect disposal of the device will result in fines applied to the user, as provided for by regulations in force.

Descriptions and figures in this manual are not binding. While leaving the essential characteristics of the product unchanged, the manufacturer reserves the right to modify the same under the technical, design or commercial point of view without necessarily update this manual.

GENERAL INFORMATION

This automatic system, with 24VDC single-phase power supply for sliding gates, is available in the following versions:

BULL 424 for gates with maximum weight equal to 350kg

BULL 624 for gates with maximum weight equal to 600kg

BULL is a monobloc system featuring a refined design and reduced dimensions. The motor and an irreversible reduction system, manufactured with high resistant materials, are housed in an aluminium container. BULL is equipped with spring limit switches. The customised key emergency release allows to open and close the gate in case of power failure.

Anti-crash safety is ensured by an electronic device (encoder and amperometric sensor) which detects any obstacle present.

PRELIMINARY CHECKS

For a good operation of the automatic system for sliding gates, the gate or door shall meet the following features:

- the track and relevant wheels must feature correct sizes and must undergo adequate maintenance (in order to avert excessive friction during the sliding of the gate).
- during operation, the door shall not excessively oscillate.
- a mechanical stopper (according to regulations in force) shall limit the opening and closing movements.

SPECIFICATIONS

	BULL 424 ESA	BULL 624 ESA
Power supply	230Vac 50Hz	
Power supply, motor	24Vdc	
Current drawn	0,4 A	0,5 A
Torque	12 Nm	24 Nm
Work jogging	(intensive use)	
Protection level	IP44	
Insulation Class	F	
Operating temperature	-20°C / +50°C	
Gate max. weight	350kg	600kg
Rack module	M4	
Opening speed	11 m/min	9.75 m/min
Noise	<70 dB	
Lubrication	CASTROL OPTITEMP LP2	
Weight	10,2 kg	11,6 kg

INSTALLATION

FIG.1

Overall dimensions of the gear motor expressed in mm.

POSITIONING OF THE FOUNDATION PLATE

FIG.2-3-4-5

It is very important to keep to dimension X shown in Fig.2. This value depends on the type of rack used:

X = 52 mm for rack in nylon

X = 49 mm for rack in iron, 12x30mm

Preset a corrugated tube (Fig.2 -A) for the passage of power supply cables and connection wires for the accessories.

Check that, at the end of the fitting, the foundation plate is perfectly parallel with respect to the wing.

Fit the system with screw anchors on the bottom of the cement (Fig.3).

Drill 4 holes, diam.10mm, by using the foundation plate as drilling template. Tightly anchor the foundation plate to ground through the 4 "T" steel screw anchors and the 4 "B" threaded bars, M8x150mm and corresponding "D" nuts and "R" washers.

Alternative fitting systems are available on the market, e.g. anchoring with retaining expansion band (Fig.3 -T2) to be inserted in the hole with some hammer strokes.

Fitting to be cemented (Fig.4)

In this case, after providing an adequate foundation hole, bend the threaded bars as shown in Fig.4.

Submerge the bars in cement, paying attention to the level of the plate.

Wait that the cement hardens.

Fig. 5 shows the completed fitting plate.

Regardless of the type of fitting, check that the threaded bars are firmly anchored to ground and that they protrude for at least 24mm (44 mm for raised installation).

FITTING OF THE RACK

FIG.6-7-8

Rack in nylon (Fig.6).

Position the rack at a height of 68 mm from the centre line of the fixing slot provided on the base on which the foundation plate will be fitted. At that height, drill a hole on the gate and provide for a M6 threading.

Keep to the P tooth pitch, even from a section of rack and another. To this purpose, it could be useful to join another section of rack (Part. C)

Rack in Fe 12x30mm (Fig.7).

Position the spacers D by welding them or fitting them with screws to the gate, at 103 mm height from the centre line of the fixing slot provided on the base on which the foundation plate will be fitted. Fix the rack by following points 4.3 and 4.4.

Keep to the P tooth pitch, for all sections of the rack. To this purpose, it could be useful to connect another section of rack (Part. C)

Then fix the rack with V screws, taking care, once the actuator is installed, that 1-mm backlash is left between the rack and the tow wheel (see Fig.8). To this purpose, use the slots on the rack.

POSITIONING AND ANCHORING OF THE ACTUATOR

FIG.9-10

Position the gear motor on the foundation plate with the gear centred with respect to the rack.

Release the automatic system and check that the gear be correctly positioned along the entire stroke of the rack. If required, adjust the alignment by using the special slots.

Fix the gear motor to the base by firmly tightening the 4 nuts D and inserting the R.

Apply the two screw covers C.

If the rack is already installed in a position which is higher than the pinion, the plate can be raised (20 mm maximum) by moving the nuts and the washers under the plate, as shown in Fig.10.

If the connecting cables already present make it difficult to fix the standard plate, the optional plate BULL P3 (Fig. 11) can be used, thus allowing to raise the actuator installation by about 34 mm and facilitating the passage of cables.

POSITIONING OF THE LIMIT SWITCH BRACKETS

FIG.12

Manually open the gate and leave a clearance from 1 to 3cm according to the weight of the gate between the main door and the mechanical stopper A. Fix the bracket to the limit switch S by using the grains G, so that the limit switch microswitch F is pressed. The same operation should be repeated with gate in the closing phase.

N.B.: The limit switch bracket should be positioned so that the gate can be stopped without hitting the mechanical stopper.

MANUAL OPERATION

FIG.13

Should a power failure or malfunction occurs, to manually operate the gate proceed as follows:

- After inserting the customised key C, turn it anti-clockwise and pull the lever L.
- The gear motor is unlocked and the gate can be moved by hand.
- To return to the normal operating mode, close the lever L again and manually activate the gate until it is geared.**5.4)**

HOW TO INSTALL THE MAGNETS (BULL424/624.S) FIG.14

The magnets are housed in special supports (fig.14-"A"). These magnets are to be fitted to the limit switch brackets or the rack and cause the triggering of sensors when they approach them.

Fitting onto the limit switch brackets

The bases are complete with hooking tongue allowing the fitting of the magnets to the limit switch bracket supplied with the operator, as shown in Fig.14-B.

This type of fitting allows to rapidly adjust the position of magnets. After calculating the correct distance, fix the support in the correct position by means of a screw, so as to avert the moving of the bracket.

Fitting onto the rack

As an alternative, the supports can be fitted directly to the rack, by using the slots shown in Fig. 14-C. This fitting mode does not allow for subsequent regulations. It is therefore advised to make some trials with temporarily fitted supports before carrying out the final fitting.

IMPORTANT: The correct distance of the magnet with respect to the sensor depends on the installation characteristics. This space cannot be preset and must be adjusted on a trial basis.

The distances regarding the triggering of the sensor (value X) with respect to distance K of 3 and 35 mm, which are shown in Fig. 14 are only indicative. In any case, distance K must not exceed 35 mm as a higher distance will not allow the triggering of the magnetic sensor.

BUFFER BATTERIES

FIG.15

An optional kit of buffer batteries is available. This permits the operation of the system also in case of power failure.

The batteries can be installed inside the gear motor as shown in Fig.15.

The support of the control unit has a hole "Fig.15 ref. "A" which facilitates passage of the battery cables.

For further information, please see instructions supplied with the product.

WIRE DIAGRAM

FIG.16

For the wire connections of the system and to adjust the operating modes, please refer to the Instruction Manual of the control unit.

In particular, the anti-crash device (encoder) should be adjusted according to regulations in force.

Please remember that the device should be earthed by means of the appropriate terminal.

Fig.16 shows wiring for a standard installation. Before proceeding to wiring, check that the type of cables used is consistent with those required for accessories.

Dimension H stands for the installation height of photocells. A clearance between 40 and 60 cm is advisable.

Key of components:

- 1 Gear motor with incorporated BULL control unit
- 2 M4 rack, Nylon/Fe
- 3 Limit switch brackets
- 4 Photocells
- 5 Mechanical stoppers
- 6 Key selector or digital keyboard
- 7 Flashing light
- 8 Antenna

NORME DI SICUREZZA

- Non sostare nella zona di movimento dell'anta.
- Non lasciare che i bambini giochino con i comandi o in prossimità dell'anta.
- In caso di anomalie di funzionamento non tentare di riparare il guasto ma avvertire un tecnico specializzato.

MANOVRA MANUALE E D'EMERGENZA

In caso di mancanza dell'energia elettrica o di guasto, per azionare manualmente l'anta procedere come segue:

- Inserita la chiave personalizzata C, farla ruotare in senso antiorario e tirare la leva L.
- Il motoriduttore è così sbloccato ed è possibile movimentare manualmente l'anta.
- Per ristabilire il normale funzionamento richiudere la leva L ed azionare il cancello manualmente fino ad ingranamento avvenuto.

MANUTENZIONE

- Controllare periodicamente l'efficienza dello sblocco manuale di emergenza.
- Astenersi assolutamente dal tentativo di effettuare riparazioni, potreste incorrere in incidenti; per queste operazioni contattare un tecnico specializzato.
- L'attuatore non richiede manutenzioni ordinarie, tuttavia è necessario verificare periodicamente l'efficienza dei dispositivi di sicurezza e le altre parti dell'impianto che potrebbero creare pericoli in seguito ad usura.

SMALTIMENTO



Come indicato dal simbolo a lato, è vietato gettare questo prodotto nei rifiuti domestici in quanto alcune parti che lo compongono potrebbero risultare nocive per l'ambiente e la salute umana, se smaltite scorrettamente. L'apparecchiatura, pertanto, dovrà essere consegnata in adeguati centri di raccolta differenziata, oppure riconsegnata al rivenditore al momento dell'acquisto di una nuova apparecchiatura equivalente. Lo smaltimento abusivo del prodotto da parte dell'utente comporta l'applicazione delle sanzioni amministrative previste dalla normativa vigente.

SAFETY MEASURES

- Do not stand within the gate movement area.
- Children must not play with controls and near the gate.
- In the event of malfunctions, do not attempt to repair the failure but contact the specialised personnel.

MANUAL AND EMERGENCY MANOEUVRE

In the event of power failure or malfunction, to manually operate the gate proceed as follows:

- After inserting the customized key C, turn it anti-clockwise and pull the lever L.
- The geared motor is unlocked and the gate can be moved by hand.
- To return to the normal operating mode, close the lever L again and manually activate the gate until it is geared.

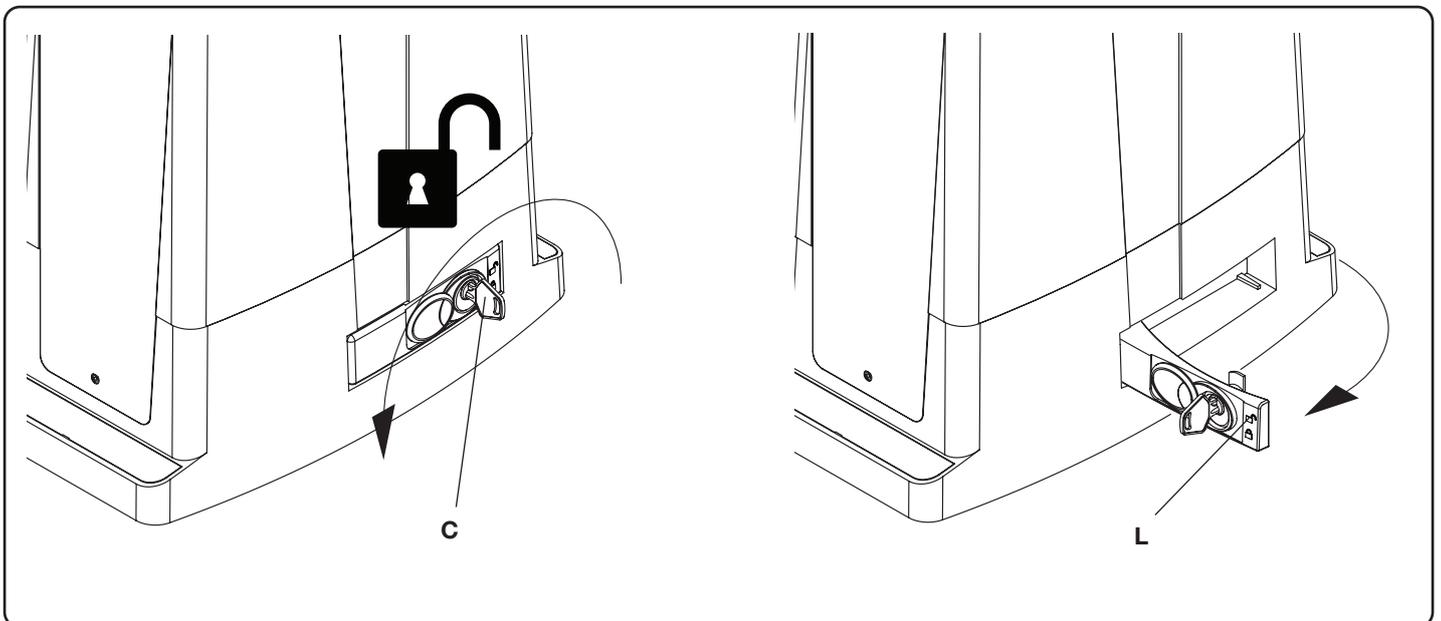
MAINTENANCE

- Every month check the good operation of the emergency manual release.
- It is mandatory not to carry out extraordinary maintenance or repairs as accidents may be caused. These operations must be carried out by qualified personnel only.
- The operator is maintenance free but it is necessary to check periodically if the safety devices and the other components of the automation system work properly. Wear and tear of some components could cause dangers.

WASTE DISPOSAL



As indicated by the symbol shown, it is forbidden to dispose this product as normal urban waste as some parts might be harmful for environment and human health, if they are disposed of incorrectly. Therefore, the device should be disposed in special collection platforms or given back to the reseller if a new and similar device is purchased. An incorrect disposal of the device will result in fines applied to the user, as provided for by regulations in force.



EU Certificato di Conformità (DOC)

Nome del produttore: Automatismi Benincà SpA
Indirizzo: Via Capitello, 45
Codice postale e Città: 36066 - Sandrigo (VI) - Italia
Telefono: +39 0444 751030
E-mail: sales@beninca.it

Dichiara che il documento è rilasciato sotto la propria responsabilità e appartiene al seguente prodotto:

Modello/Tipo: BULL 424 ESA / BULL 424 ESA.S / BULL 624 ESA / BULL 624 ESA.S

Tipo di prodotto: Attuatore elettromeccanico 24Vdc per cancelli scorrevoli

Il prodotto sopraindicato risulta conforme alle disposizioni imposte dalle seguenti direttive:

Direttiva 2014/53/EU
Direttiva 2011/65/EU
Direttiva 2006/42/CE

Sono state applicate le norme armonizzate e le specifiche tecniche descritte di seguito:

ETSI EN 300 220-1 V3.1.1
ETSI EN 300 220-2 V3.1.1
ETSI EN 301 489-1 V2.1.1
ETSI EN 301 489-3 V2.1.1
EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013
EN 61000-6-2:2005, EN 61000-6-3:2007 + A1:2011
EN 60335-1:2012 + A11:2014; EN 60335-2-103:2015
50581:2012
EN 13241-1:2003
EN 12445:2002, EN 12453:2002, EN 12978:2003 (se applicabile)

Organismo notificato (se applicabile):

Ulteriori informazioni:

Firmato per conto di:
Sandrigo, 24/10/2018

Luigi Benincà, Responsabile legale

EU Declaration of Conformity (DOC)

Manufacturer's name: Automatismi Benincà SpA
Postal Address: Via Capitello, 45
Post code and City: 36066 - Sandrigo (VI) - Italia
Telephone number: +39 0444 751030
E-mail address: sales@beninca.it

Declare that the DOC is issued under our sole responsibility and belongs to the following product:

Model/Product: BULL 424 ESA / BULL 424 ESA.S / BULL 624 ESA / BULL 624 ESA.S

Type: Electromechanical actuator 24Vdc for sliding gates

The object of the declaration described above is in conformity with the relevant Union harmonization legislation:

Directive 2014/53/EU
Directive 2011/65/EU
Directive 2006/42/CE

The following harmonized standards and technical specifications have been applied:

ETSI EN 300 220-1 V3.1.1
ETSI EN 300 220-2 V3.1.1
ETSI EN 301 489-1 V2.1.1
ETSI EN 301 489-3 V2.1.1
EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013
EN 61000-6-2:2005, EN 61000-6-3:2007 + A1:2011
EN 60335-1:2012 + A11:2014; EN 60335-2-103:2015
50581:2012
EN 13241-1:2003
EN 12445:2002, EN 12453:2002, EN 12978:2003 (as applicable)

Notified body (where applicable):

Additional information:

Signed for and on behalf of:
Sandrigo, 24/10/2018

Luigi Benincà, Responsabile legale

EG-Konformitätserklärung (DOC)

Name des Herstellers: Automatismi Benincà SpA
Adresse: Via Capitello, 45
Codice postale e Città: 36066 - Sandrigo (VI) - Italia
Telefon: +39 0444 751030
E-mail: sales@beninca.it

Erklärt, dass das Dokument unter alleiniger Verantwortung herausgegeben wurde und zu dem folgenden Produkt gehört:MM

Modell/Produkt: BULL 424 ESA / BULL 424 ESA.S / BULL 624 ESA / BULL 624 ESA.S

Type: Elektromechanischer 24Vdc-Antrieb für Schiebetore

Das oben genannte Produkt stimmt mit den Vorschriften der folgenden Richtlinien überein:

Richtlinie 2014/53/EU
Richtlinie 2011/65/EU
Richtlinie 2006/42/CE

Die harmonisierten Normen und technischen Spezifikationen, die unten beschrieben werden, wurden angewandt:

ETSI EN 300 220-1 V3.1.1
ETSI EN 300 220-2 V3.1.1
ETSI EN 301 489-1 V2.1.1
ETSI EN 301 489-3 V2.1.1
EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013
EN 61000-6-2:2005, EN 61000-6-3:2007 + A1:2011
EN 60335-1:2012 + A11:2014; EN 60335-2-103:2015
50581:2012
EN 13241-1:2003
EN 12445:2002, EN 12453:2002, EN 12978:2003(falls anwendbar)

Benannte Stelle (falls zutreffend):

Weitere Informationen:

Unterzeichnet für und im Auftrag von:
Sandrigo, 24/10/2018

Luigi Benincà, Responsabile legale

Déclaration CE de conformité (DOC)

Nom du producteur : Automatismi Benincà SpA
Adresse: Via Capitello, 45
Ville et code postal: 36066 - Sandrigo (VI) - Italia
Téléphone: +39 0444 751030
E-mail: sales@beninca.it

Nous déclarons que le document est délivré sous notre responsabilité et qu'il appartient au produit suivant:

Modèle/Type: BULL 424 ESA / BULL 424 ESA.S / BULL 624 ESA / BULL 624 ESA.S

Type de produit: Actionneur électromécanique 24Vdc pour portails coulissants

Le produit mentionné ci-dessus est conforme aux dispositions établies par les directives suivantes:

Directive 2014/53/EU
Directive 2011/65/EU
Directive 2006/42/CE

Les normes harmonisées et les spécifications techniques décrites ci-dessous ont été appliquées:

ETSI EN 300 220-1 V3.1.1
ETSI EN 300 220-2 V3.1.1
ETSI EN 301 489-1 V2.1.1
ETSI EN 301 489-3 V2.1.1
EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013
EN 61000-6-2:2005, EN 61000-6-3:2007 + A1:2011
EN 60335-1:2012 + A11:2014; EN 60335-2-103:2015
50581:2012
EN 13241-1:2003
EN 12445:2002, EN 12453:2002, EN 12978:2003 (si applicable)

Organisme notifié (le cas échéant):

Plus d'informations:

Signé pour et au nom de:
Sandrigo, 24/10/2018

Luigi Benincà, Responsabile legale

Declaración CE de conformidad (DOC)

Nombre del productor: Automatismi Benincà SpA
Dirección: Via Capitello, 45
Ciudad y código postal: 36066 - Sandrigo (VI) - Italia
Teléfono: +39 0444 751030
E-mail: sales@beninca.it

Declara que el documento ha sido emitido bajo la propia responsabilidad y pertenece al siguiente producto:

Modelo/Tipo: BULL 424 ESA / BULL 424 ESA.S / BULL 624 ESA / BULL 624 ESA.S

Tipo de producto: Motorreductor electromecánico 24Vdc para portones correderos

El producto indicado arriba cumple con las disposiciones establecidas por las siguientes directivas:

Directiva 2014/53/EU
Directiva 2011/65/EU
Directiva 2006/42/CE

Han sido aplicadas las normas armonizadas y las especificaciones técnicas que se describen a continuación:

ETSI EN 300 220-1 V3.1.1
ETSI EN 300 220-2 V3.1.1
ETSI EN 301 489-1 V2.1.1
ETSI EN 301 489-3 V2.1.1
EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013
EN 61000-6-2:2005, EN 61000-6-3:2007 + A1:2011
EN 60335-1:2012 + A11:2014; EN 60335-2-103:2015
50581:2012
EN 13241-1:2003
EN 12445:2002, EN 12453:2002, EN 12978:2003 (si es aplicable)

Organismo notificado (en su caso):

Más información:

Firmado en nombre de:
Sandrigo, 24/10/2018

Luigi Benincà, Responsabile legale

Deklaracja zgodności CE (DOC)

Nazwa producenta: Automatismi Benincà SpA
Adres: Via Capitello, 45
Kod pocztowy i miasto: 36066 - Sandrigo (VI) - Italia
Teléfono: +39 0444 751030
Adres e-mail: sales@beninca.it

Oświadczam, że dokument został wydany na własną odpowiedzialność i dotyczy produktu:

Model/Typ: BULL 424 ESA / BULL 424 ESA.S / BULL 624 ESA / BULL 624 ESA.S

Rodzaj produktu: Urządzenie automatyzacji bram 24Vdc przesuwnych

Wyżej wskazany produkt spełnia wymagania dyrektyw:

Dyrektywy 2014/53/EU
Dyrektywy 2011/65/EU
Dyrektywy 2006/42/CE

Uwzględniono normy zharmonizowane i zastosowano niżej wskazane specyfikacje techniczne:

ETSI EN 300 220-1 V3.1.1
ETSI EN 300 220-2 V3.1.1
ETSI EN 301 489-1 V2.1.1
ETSI EN 301 489-3 V2.1.1
EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + AC:2011 + A2:2013
EN 61000-6-2:2005, EN 61000-6-3:2007 + A1:2011
EN 60335-1:2012 + A11:2014; EN 60335-2-103:2015
50581:2012
EN 13241-1:2003
EN 12445:2002, EN 12453:2002, EN 12978:2003 (jeśli ma zastosowanie)

Jednostka notyfikowana (stosownych przypadkach):

Dodatkowe informacje:

Podpisano w imieniu:
Sandrigo, 24/10/2018

Luigi Benincà, Responsabile legale

BENINCÀ