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SL
24Vdc
Motors

Instruction manual	Series	Model	Date
ZVL607.02	SLX	3024-1524-824-24DRACO	01-02-2017

Questo prodotto è stato testato e collaudato nei laboratori della casa costruttrice, la quale ha verificato la perfetta corrispondenza delle caratteristiche con quelle richieste dalla normativa vigente. **This product** has been tried and tested in the manufacturer's laboratory who have verified that the product conforms in every aspect to the safety standards in force. **Ce produit** a été testé et essayé dans les laboratoires du fabricant. Pour l'installer suivre attentivement les instructions fournies. **Dieses Produkt** wurde in den Werkstätten der Herstellerfirma auf die perfekte Übereinstimmung ihrer Eigenschaften mit den von den geltenden Normen vorgeschriebenen getestet und geprüft. **Este producto** ha sido probado y ensayado en los laboratorios del fabricante, que ha comprobado la perfecta correspondencia de sus características con las contempladas por la normativa vigente. **Dit product** is getest en goedgekeurd in de fabriek van de fabrikant die heeft vastgesteld dat de producteigenschappen volledig aan de geldende voorschriften voldoen.

AUTOMAZIONE PER CANCELLI SCORREVOLI CON MOTORE IN CORRENTE CONTINUA
AUTOMATION FOR SLIDING GATES WITH A DC POWERED MOTOR
AUTOMATISME POUR PORTAILS COULISSANTS AVEC MOTEUR À COURANT CONTINU
AUTOMATISIERUNG FÜR SCHIEBETORE MIT GLEICHSTROMMOTOR
AUTOMATIZACIÓN PARA CANCELLAS CORREDERAS CON MOTOR DE CORRIENTE CONTINUA
AANDRIJVING MET GELIJKSTROOMMOTOR VOOR SCHUIFPOORTEN



24Vdc Motors
SLX3024 - SLX3024CB
SLX1524 - SLX1524CB
SLX1224REV
SLX824 - SLX824CB
SLX24DRACO - SLX24DRACO2



ITALIANO

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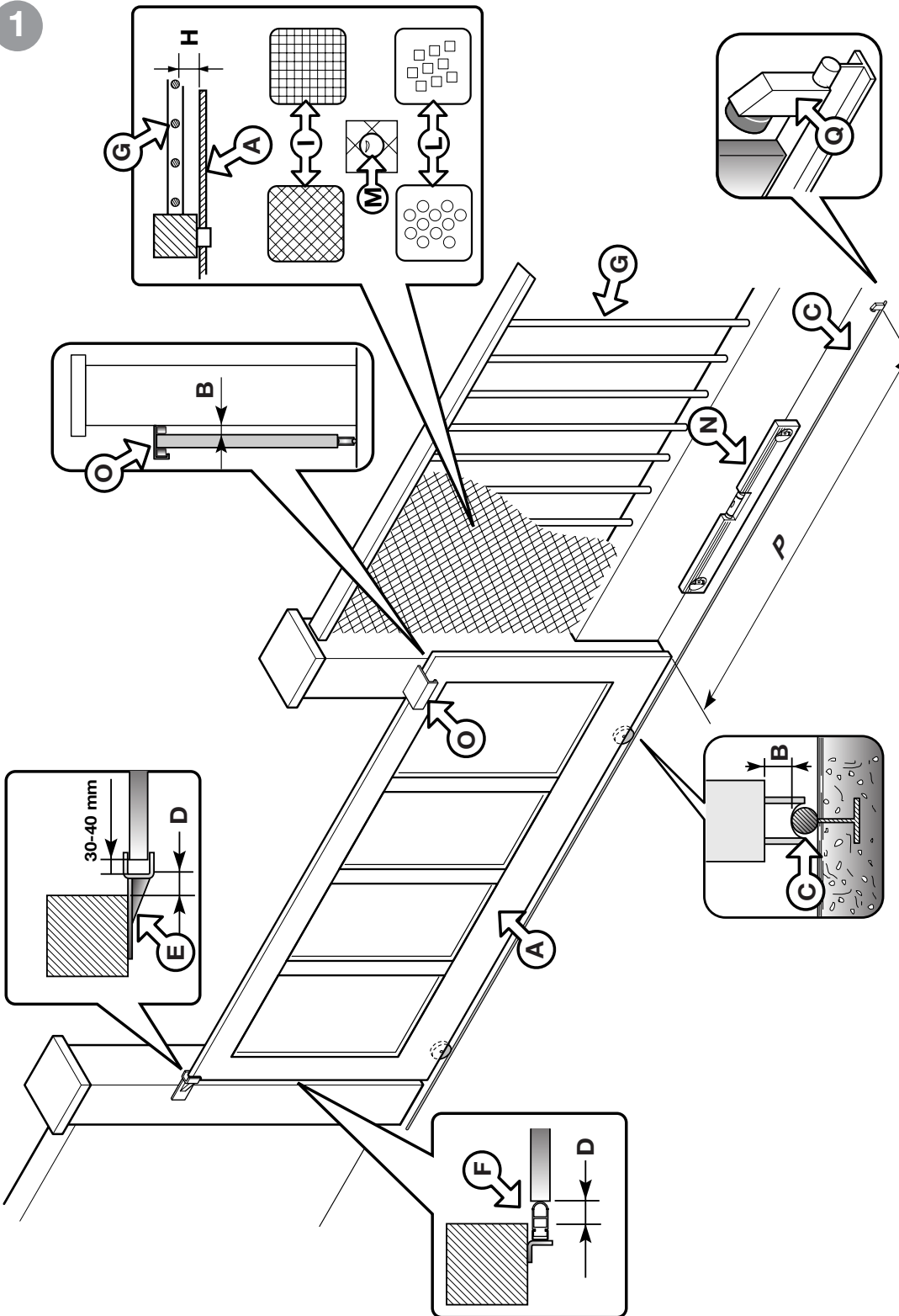
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LEGENDA

- A Superficie anta cancello
- B Distanza tra parti fisse e mobili
- C Guida di scorrimento
- D Distanza di sicurezza
- E Arresto meccanico in chiusura
- F Elemento elastico deformabile
- G Recinzione
- H Distanza tra recinzione e cancello
- I Rete o griglia
- L Traforato metallico
- M Sfera di prova passaggio
- N Livello a bolla
- O Pattini o rulli guida
- P Corsa cancello
- Q Arresto meccanico in apertura

LEGEND

- A Gate surface
- B Distance between the fixed and moving parts
- C Castor guide
- D Safety distance
- E Closing mechanical travel limit
- F Rubber anticrush buffer
- G Fencing
- H Distance between the fence and the gate
- I Wire mesh
- L Punched metal plate
- M Test sphere
- N Spirit level
- O Runner guide
- P Gate travel distance
- Q Opening mechanical travel limit

NOMENCLATURE

- A Surface du portail
- B Distance entre parties fixes et mobiles
- C Rail de guidage
- D Distance de sécurité
- E Butée en fermeture
- F Élément élastique déformable
- G Clôture
- H Distance entre clôture et portail
- I Grillage ou grille
- L Panneau métallique perforé
- M Bille d'essai de passage
- N Niveau à bulle
- O Patins ou galets de guidage
- P Course portail
- Q Butée en ouverture

ZEICHENERKLÄRUNG

- A Torflügeloberfläche
- B Abstand zwischen festen und beweglichen Teilen
- C Gleitschiene
- D Sicherheitsabstand
- E Mechanischer Anschlag bei Schließung
- F Verformbares elastisches Element
- G Gitter
- H Abstand zwischen Gitter und Torflügel
- I Drahtgeflecht oder Gitterwerk
- L Lochblech
- M Prüfkugel
- N Wasserwaage
- O Gleitschuhe oder Führungsrollen
- P Torflügelauflaufstrecke
- Q Mechanischer Endanschlag bei Öffnung

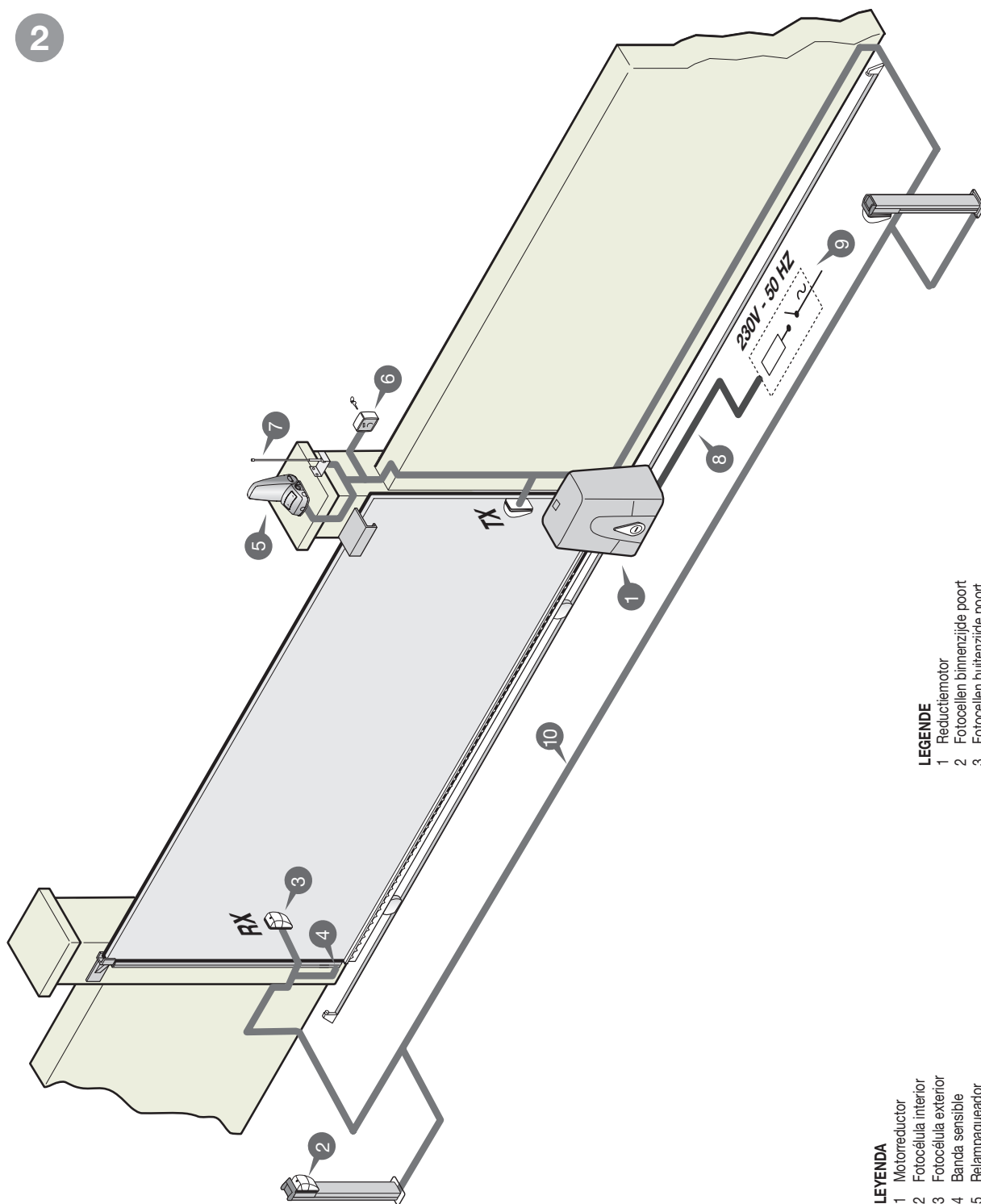
LEYENDA

- A Superficie cancello
- B Distancia entre piezas fijas y móviles
- C Guía de deslizamiento
- D Distancia de seguridad
- E Tope mecánico en fase de cierre
- F Elemento elástico deformable
- G Cercado
- H Distancia entre cercado y cancello
- I Red de alambre o cancello
- L Elemento metálico agujereado
- M Bola de prueba paso
- N Nivel de burbuja
- O Patines o rodillos de guía
- P Carrera cancello
- Q Tope mecánico en fase de apertura

LEGENDA

- A Poortoppervlak
- B Afstand tussen vaste en bewegende delen
- C Geleiderail
- D Veiligheidsafstand
- E Mechanische sluitbegrenzer
- F Vervormbaar soepel element (rubberen klembeveiligingsbuffer)
- G Hekwerk
- H Afstand tussen hekwerk en poort
- I Raster- of gaashekwerk
- L Geperforeerde metaalplaat
- M Testkogel
- N Waterpas
- O Bovengeleider (geleideblokken of -rollen)
- P Poortloopplengte
- Q Mechanische openingsbegrenzer

2



LEGENDA

- 1 Motorduttore
- 2 Fotocellula interna
- 3 Fotocellula esterna
- 4 Costa sensibile
- 5 Lampeggiatore
- 6 Selettore a chiave
- 7 Antenna esterna (cavo coassiale **RG58** impedenza **50Ω**)
- 8 Cavo alimentazione principale **230 Vac**
- 9 Interruttore onnipolare con apertura contatti min. **3 mm**
- 10 Canaletura per collegamenti a bassa tensione

Attenzione: Lo schema rappresentato è puramente indicativo e viene fornito come base di lavoro al fine di consentire una scelta dei componenti elettronici Cardin da utilizzare. Detto schema non costituisce pertanto vincolo alcuno per l'esecuzione dell'impianto

LEGEND

- 1 Geared motor
- 2 Internal photocells
- 3 External photocells
- 4 Contact safety edge
- 5 Warning lights
- 6 Mechanical selector switch
- 7 External antenna (**RG58** coaxial cable - impedance **50Ω**)
- 8 Mains cable **230 Vac**
- 9 All pole circuit breaker (**3 mm** min. between the contacts)
- 10 Channelling route for low voltage wires

Attention: The drawing is purely indicative and is supplied as working base from which to choose the Cardin electronic components making up the installation. This drawing therefore does not lay down any obligations regarding the execution of the installation.

NOMENCLATURE

- 1 Motoreductor
- 2 Cellule photoélectrique intérieure
- 3 Cellule photoélectrique extérieure
- 4 Barre palpeuse
- 5 Clignoteur
- 6 Contact à clé
- 7 Antenne externe (câble coaxial **RG58** impédance **50Ω**)
- 8 Câble d'alimentation principale **230 Vac**
- 9 Interrupteur omipolaire (ouverture contacts d'au moins **3 mm**)
- 10 Chemin pour branchement basse tension

Attention: ce schéma, diffusé à titre purement indicatif, est destiné à vous aider dans le choix des composants électroniques Cardin à utiliser. Par conséquent, il n'a aucune valeur obligatoire quant à la réalisation de l'installation.

ZEICHENERKLÄRUNG

- 1 Getriebemotor
- 2 Interne Lichtschranke
- 3 Externe Lichtschranke
- 4 Kontaktleiste
- 5 Blinklicht
- 6 Schlüsselschalter
- 7 Außenantenne (Koaxialkabel **RG58** Impedanz **50Ω**)
- 8 Hauptversorgungsleitung **230 Vac**
- 9 Allpoliger Schalter (Kontaktabstand von mindestens **3 mm**)
- 10 Kanalverlauf für Anschluss auf Niederspannung

Achtung: Bei dem dargestellten Plan handelt es sich nur um ungefähre Angaben und er wird als Arbeitsgrundlage geliefert, um eine Auswahl der zu benutzenden elektronischen Komponenten von Cardin zu erlauben. Der besagte Plan ist daher für die Ausführung der Anlage nicht bindend.

LEGENDE

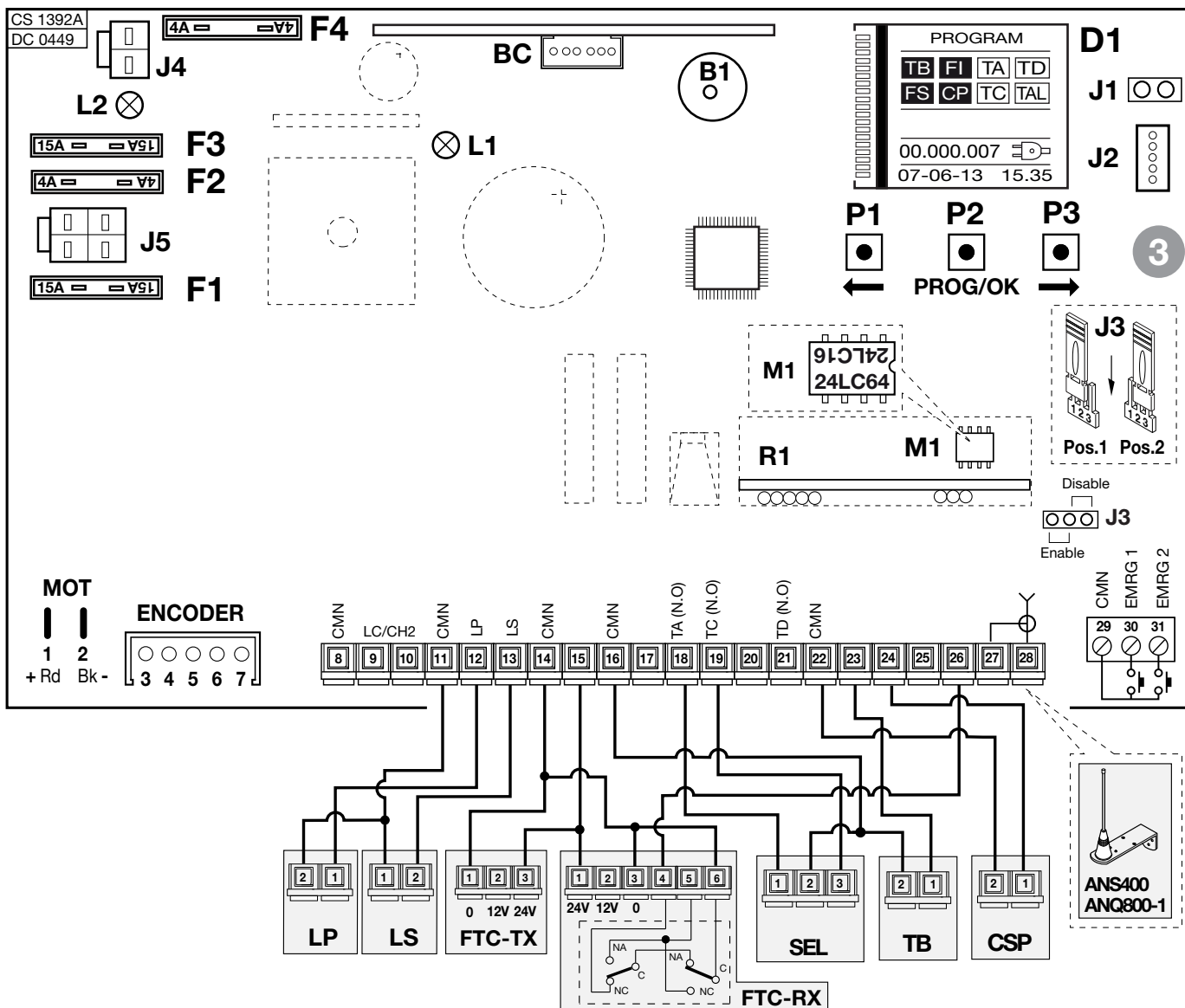
- 1 Reductiemotor
- 2 Fotocellen binnenzijde poort
- 3 Fotocellen buitenzijde poort
- 4 Veiligheidscontactlijst
- 5 Knipperlicht (waarschuwingsslamp)
- 6 Sleutelcontact
- 7 Externe antenne (coaxkabel **RG58** impedantie **50Ω**)
- 8 Hoofdtoevoeringskabel **230 Vac**
- 9 Meerpolige onderbrekingschakelaar met contactafstand van minstens **3 mm**
- 10 Kabelgoot voor laagspanningsaansluitingen

Opgelet: De tekening is alleen voor informatieve doeleinden en is bedoeld om u te helpen bij de keuze van de elektronische componenten van Cardin. Deze tekening mag dan ook niet beschouwd worden als bindend voor het uitvoeren van de installatie.

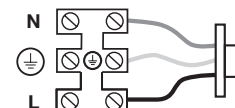
LEYENDA

- 1 Motorreductor
- 2 Fotocélula interior
- 3 Fotocélula exterior
- 4 Banda sensible
- 5 Relampagueador
- 6 Selector con llave
- 7 Antena exterior (Cable coaxial **RG58** Impedancia **50Ω**)
- 8 Cable de alimentación principal **230 Vac**
- 9 Interruptor omipolar (apertura entre los contactos de min. **3 mm**)
- 10 Canaleta para el conexionado a baja tensión

Atención: La pantalla que se muestra es sólo indicativa y se suministra como base de trabajo, con el fin de permitir una elección de los componentes electrónicos Cardin por utilizar, en consecuencia, dicho esquema no constituye vínculo alguno para la ejecución del sistema.



Collegamento alimentazione generale **230 Vac**
Mains power supply connection **230 Vac**
Branchement alimentation générale **230 Vac**
Anschluss allgemeine Stromversorgung **230 Vac**
Conexión alimentación general **230 Vac**
Hoofdvoedingsaansluiting **230 Vac**



ATTENTION! IMPORTANT SAFETY INSTRUCTIONS

READING THESE INSTRUCTIONS IS IMPORTANT FOR PERSONAL SAFETY. READ THE FOLLOWING REMARKS CAREFULLY BEFORE PROCEEDING WITH THE INSTALLATION. PAY PARTICULAR ATTENTION TO ALL THE PARAGRAPHS MARKED WITH THE SYMBOL  IN THIS ORIGINAL INSTRUCTION MANUAL. NOT READING THESE IMPORTANT INSTRUCTIONS COULD COMPROMISE THE CORRECT WORKING ORDER OF THE SYSTEM AND CREATE DANGER SITUATIONS FOR THE USERS OF THE SYSTEM. SAVE THESE INSTRUCTIONS FOR FUTURE USE.

- These instructions are aimed at professionally qualified '**INSTALLERS OF ELECTRICAL EQUIPMENT**' and must respect the local standards and regulations in force.
All materials used must be approved and must suit the environment in which the installation is situated and all maintenance operations must be carried out by professionally qualified technicians.
- This appliance must be used exclusively for the purpose for which it has been made. '**i.e. for the automation of sliding gates**' with a maximum weight of up to **800 - 1000 - 1500 - 2000 or 3000 kg**.

PLEASE READ CAREFULLY

The installation of both anti-derailment buffers is absolutely obligatory.



The reversible model **SLX1224REV** requires an electric lock to guarantee that the gate locks in the closed position.



The rapid models **SLXDRACO** and **SLXDRACO2** are not suitable for use with telescopic gates.



IMPORTANT SAFETY INSTRUCTIONS

- This appliance must never be used by people (including children) with physical, sensory or mental disabilities or by people without specific knowledge and experience in its operation unless they are able to benefit from the experience or are being taught to use the appliance whilst being safeguarded by the presence of somebody responsible for their safety.
- Before installing make sure that the guided parts are in good condition, correctly balanced and that they open and close correctly.
- Avoid becoming trapped between the moving parts and the fixed parts during the opening and closing movements.
- The motor's power cable must be made of polychloroprene in conformity with the international standard 60245 IEC 57.

It is the responsibility of the installer to make sure that the following public safety conditions are satisfied:

- 1) Ensure that the gate operating installation is far enough away from the main road to eliminate possible traffic disruptions and that the size of the gate, the distance from the road and the work cycle speed can in no way interfere, causing possible traffic hazards.
- 2) The motor must be installed on the inside of the property and not on the public side of the gate. The gates must not open onto a public area.
- 3) The sliding gate operator is designed for use on gates through which vehicles are passing. The gates must not be fitted with pedestrian access doors.
- 4) The minimum controls which may be installed are OPEN-STOP-CLOSE, these controls must be installed at a height between **1,5** and **1,8 m** and in a location not accessible to children. Controls installed externally must be protected by a safety device inhibiting unauthorised use.
- 5) Do not allow children to play with the operator or with the control devices.
- 6) **At least two warning signs** should be placed, where they can be easily seen by the public, in the area of the system of automatic operation. One inside the property and one on the public side of the installation. These signs must be indelible and not hidden by any objects (such as tree branches, decorative fencing etc.). Make sure that the end-user is aware that children and/or pets must not be allowed to play within the area of a gate installation. If possible include this in the warning signs.
- 7) Ahead of the automation a means of disconnection from the power supply must be installed which has an opening distance on the contacts of all the poles and ensures that the power supply is completely cut off under the conditions of a category III overvoltage situation.
- 8) A correct earth connection is fundamental in order to guarantee the electrical safety of the machine.
- 9) If you have any questions about the safety of the gate operating system, do not install the operator. Contact your dealer for assistance.



TECHNICAL DESCRIPTION

- Mains power supply **230 Vac**.
- Motor powered with a maximum voltage of **37 Vdc**.
- Upper and lower cover in highly resistant shock-proof plastic.
- The reduction unit stator is made of die cast aluminium and contains a never ending screw and double reduction lubricated with permanently fluid grease.
- Irreversible reduction system with a key-operated manual release mechanism.
- The incorporated electronic programmer contains the power stage, the logic control, battery charger and the radio receiver decoding module. The power supply is routed to the electronics card via a separate transformer which is housed in the same container and is connected to the card by Faston clips.
- The system is fitted with electronic deceleration control which reduces the stress caused by the gate inertia when it stops.

Accessories

Gear rack in nylon reinforced with glass fibre, **30 mm x 20 mm, M4, 1 m** pieces

CRENY1 Version with 4 lower fastening slits
For sliding gates up to **600 kg**

CRENY Version with 6 upper fastening slits
For sliding gates up to **800 kg**

CREMP Version with 6 lower fastening slits
For sliding gates up to **800 kg**

Gear rack in galvanised steel for the **DRACO** motor and industrial installations up to **3000 kg**.

SLOAC 22 mm x 22 mm to be soldered, **2 m** pieces.

SLOAC2 30 mm x 12 mm with fastening slits, **1 m** pieces.

USER INSTRUCTIONS



Attention! Only for EU customers - **WEEE marking**.

This symbol indicates that once the products life-span has expired it must be disposed of separately from other rubbish. The user is therefore obliged to either take the product to a suitable differential collection site for electronic and electrical goods or to send it back to the manufacturer if the intention is to replace it with a new equivalent version of the same product.

Suitable differential collection, environmental friendly treatment and disposal contributes to avoiding negative effects on the ambient and consequently health as well as favouring the recycling of materials. Illicitly disposing of this product by the owner is punishable by law and will be dealt with according to the laws and standards of the individual member nation.

During the opening/closing manoeuvre check for correct operation and activate the emergency stop button in case of danger.

Warning! Entrapment danger. When using the device you are advised to wait for the gate to completely open before crossing its threshold and to pay the maximum attention in order to avoid becoming trapped between the hinged parts and the fixed parts during the opening and closing movements. During blackouts with a flat battery the gate can be released and manually manoeuvred using the supplied release key (see manual release).

The appliance is not suitable for continuous operation and may only be operated using a duty cycle of **70%**.

PRELIMINARY CHECKS (fig. 1, pag. 2)

Before starting the installation make sure that the structure which is to be automated is in good working order and respects the local standards and regulations in force.

To this end ensure that:

- the surface of the sliding gate "A" is smooth and has no protrusions up to a distance of **2,5 m** from ground level. Protrusions on the gate surface which are not greater than **3 mm** and have rounded edges are acceptable.

If the surface of the gate is not smooth, the entire height up to **2,5 m** from the ground must be protected by two of the following devices:

- photoelectric cells
 - contact safety buffer;
- the distance 'B' between the fixed parts and sliding parts of the installation must not exceed **15 mm**;
 - the runner guide 'C', preferably round, should be securely fixed to the ground, completely exposed and free of any imperfections which could inhibit the correct movement of the gate;
 - when the gate is closed a space of **50 mm** 'D' must remain for the entire height of the front part of the gate and a mechanical travel limit 'E' must be positioned on the upper part of the gate.
 - The free space 'D' can be covered with a rubber anti-crush buffer 'F' or better still a pneumatic or photoelectric contact safety buffer.
 - If the gate slides past a fixed structure 'G' which has railings or

bars leaving open spaces, it must be protected in one of the following ways:

- distance 'H' greater than **500 mm**: no protection required;
- distance 'H' between **500** and **300 mm**: wire mesh fencing 'I' or punched metal plating 'L' with an opening which does not allow the passage of a **25 mm** diameter sphere 'M' must be fitted;
- distance 'H' smaller than **300 mm**: wire mesh fencing 'I' or punched metal plating 'L' with an opening which does not allow the passage of a **12 mm** diameter sphere 'M' must be fitted.

The wires of the mesh 'I' must not have a cross-section of less than **2,5 mm²** and the punched metal plating 'L' must not have a thickness of less than **1.2 mm**. Protection is not necessary for the area 'P' if the fixed structure with railings or bars is over **2,5 m** above the ground.

- Check the gate components, replace any worn or damaged parts and then lubricate them.
- Using a spirit level 'N' check that the castor guide is in square.
- The upper runner guide 'O' must have the correct play for the gate and must not inhibit the gate's sliding action.
- Check that a mechanical travel limit 'Q' (absolutely necessary) has been fitted in the opening direction and that it corresponds to the maximum travel distance 'P' of the gate. The travel limit must guarantee anti-derailment and gate stability.



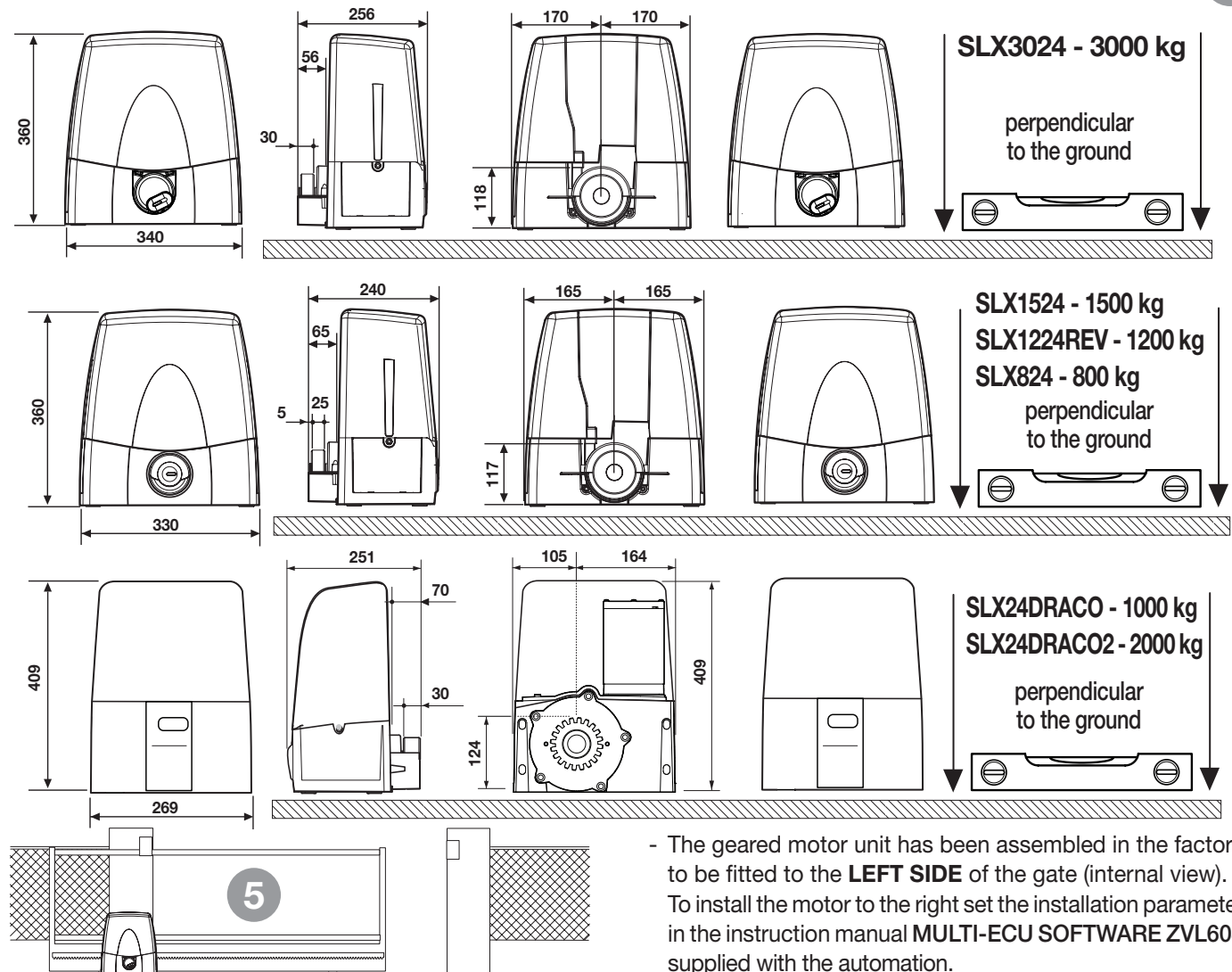
Warning! It is the installer's responsibility to check all critical danger points, to take action and to install any devices needed to guarantee the safety of all people using the gate (risk analysis).

INSTALLATION INSTRUCTIONS

Overall dimensions and positioning

- The geared motor must be correctly positioned when it is installed: perpendicular to the ground and straight up on flat ground.

4



- The geared motor unit has been assembled in the factory to be fitted to the **LEFT SIDE** of the gate (internal view). To install the motor to the right set the installation parameter in the instruction manual **MULTI-ECU SOFTWARE ZVL608** supplied with the automation.

Anchoring the unit SLX24DRACO - SLX24DRACO2 (fig. 6, 7)

Important! Check the exact anchoring position with respect to the alignment of the sliding gate

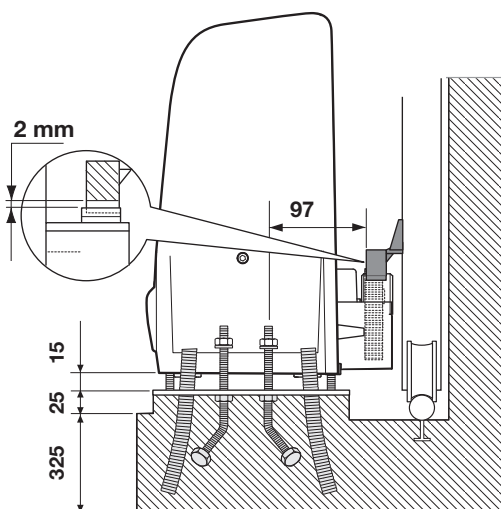
- Run the piping and connection wires to the position where the motor is to be installed.
- Attach the anchor bolts to the base plate 'A' allowing them to protrude by **50 mm** and then tighten down using the supplied **M12** nuts.
- Prepare a cement plinth, in the position where the motor is to be installed, with a depth of **350 mm** (the base should protrude by about **25 mm** to avoid damage by pools of water building up under the appliance).
- Insert the base plate making sure that:
 - the electrical cables pass through the hole 'B';
 - the anchor bolts 'C' are immersed into the cement base and the base plate is perfectly level;
 - the four protruding threaded bolts are perpendicular to the base plate;
 - the surface area of the base plate is clean and free of cement residue.

If the runner guide already exists the cement base should be extended to take in part of the runner guide foundation. This will stop the two foundations from giving way separately.

- Unscrew the four **M12** nuts on the four threaded bolts (previously used to block the anchor bolts) from the base of the anchor plate. Then insert the four washers and allow them to rest on the nuts.
- Position the geared motor over the four threaded bolts and allow it to rest on the four washers.
- Fasten in to the base using the other four washers and adjustment nuts supplied with the kit, making sure that the unit remains perfectly level and stable.
- Adjust the height if the unit using the four grub screws already positioned on the motor. This will allow you to adjust the height and position of the motor later on.

Fitting the gear rack

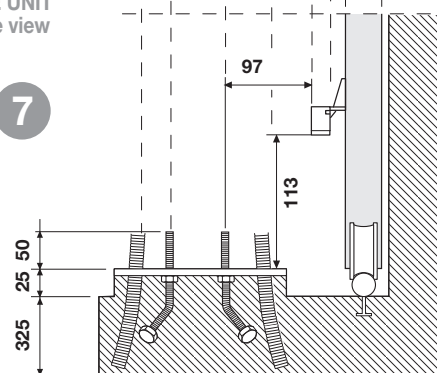
- release the geared motor (fig. 8), lay the first stretch of the toothed rack on the pinion and fix it to the gate, then fasten down all the other parts along the entire length of the gate.
- after having fastened the toothed rack, realign the pinion (play of **1 to 2 mm** between the gear runner and the pinion) using the grub screws at the base of the geared motor. This action will prevent the weight of the sliding gate from damaging the unit when working.



ANCHORING THE UNIT
Plan view

ANCHORING THE UNIT
Side view

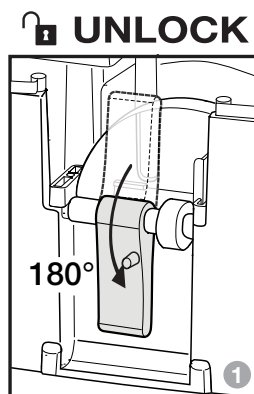
7



LEVER ACTIVATED MANUAL MANOEUVRE WITH THE MOTOR RELEASED SLX24DRACO - SLX24DRACO2

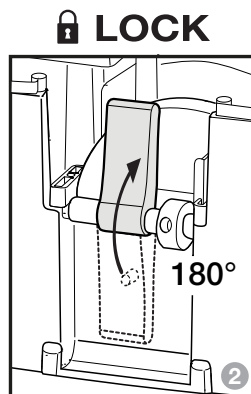
Manual release is to be carried out with the motor stopped. To release the gate use the manual release key supplied with the unit. The key should be kept in an easily accessible place.

8



1 - MOTOR RELEASED

- Rotate the lock protection disk, insert the key, rotate it half a turn anticlockwise
- all commands are inhibited
- the gate can be moved by hand



2 - RELEASE MEC. REACTIVATED

- Rotate the knob anticlockwise and replace the lock protection disk.
- all commands are enabled
- the automation will start up again in the repositioning mode.

Anchoring the unit SLX3024 - SLX1524 - SLX1224REV - SLX824 (fig. 9, 10)

Important! Check the exact anchoring position with respect to the alignment of the sliding gate

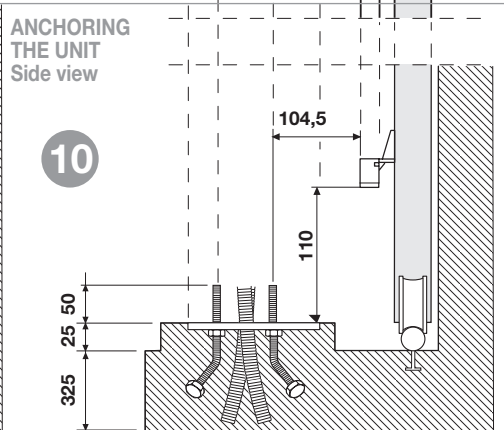
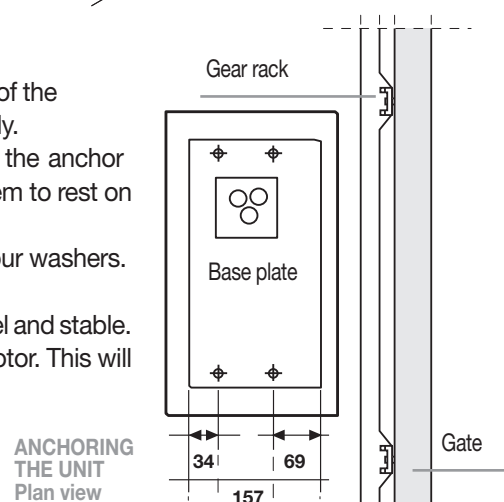
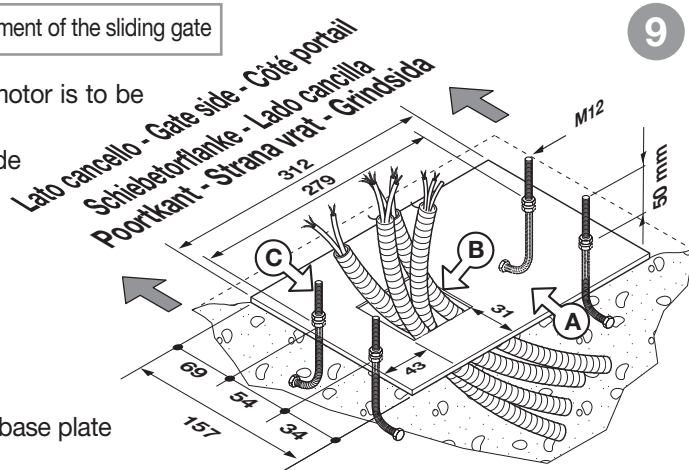
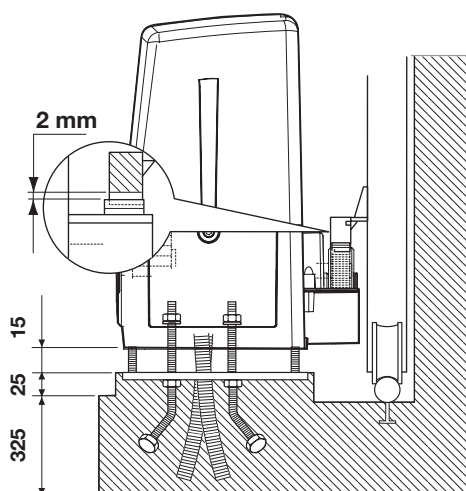
- Run the piping and connection wires to the position where the motor is to be installed.
- Attach the anchor bolts to the base plate 'A' allowing them to protrude by **50 mm** and then tighten down using the supplied **M12** nuts.
- Prepare a cement plinth, in the position where the motor is to be installed, with a depth of **350 mm** (the base should protrude by about **25 mm** to avoid damage by pools of water building up under the appliance).
- Insert the base plate making sure that:
 - the electrical cables pass through the hole 'B';
 - the anchor bolts 'C' are immersed into the cement base and the base plate is perfectly level;
 - the four protruding threaded bolts are perpendicular to the base plate;
 - the surface area of the base plate is clean and free of cement residue.

If the runner guide already exists the cement base should be extended to take in part of the runner guide foundation. This will stop the two foundations from giving way separately.

- Unscrew the four **M12** nuts on the four threaded bolts (previously used to block the anchor bolts) from the base of the anchor plate. Then insert the four washers and allow them to rest on the nuts.
- Position the geared motor over the four threaded bolts and allow it to rest on the four washers.
- Fasten in to the base using the other four washers and adjustment nuts supplied with the kit, making sure that the unit remains perfectly level and stable.
- Adjust the height if the unit using the four grub screws already positioned on the motor. This will allow you to adjust the height and position of the motor later on.

Fitting the gear rack

- release the geared motor (fig. 11-12), lay the first stretch of the toothed rack on the pinion and fix it to the gate, then fasten down all the other parts along the entire length of the gate.
- after having fastened the toothed rack, realign the pinion (play of **1 to 2 mm** between the gear runner and the pinion) using the grub screws at the base of the geared motor. This action will prevent the weight of the sliding gate from damaging the unit when working.



MANUAL MANOEUVRE WITH THE MOTOR RELEASED

Manual release is to be carried out with the motor stopped. To release the gate use the manual release key supplied with the unit. The key should be kept in an easily accessible place.

SCREW OPERATED MANUAL RELEASE SYSTEM SLX3024

To release the unit

1. Rotate the lock protection disk, insert the key, rotate it half a turn anticlockwise and lift up the knob cover.
The knob is now free and can be released.

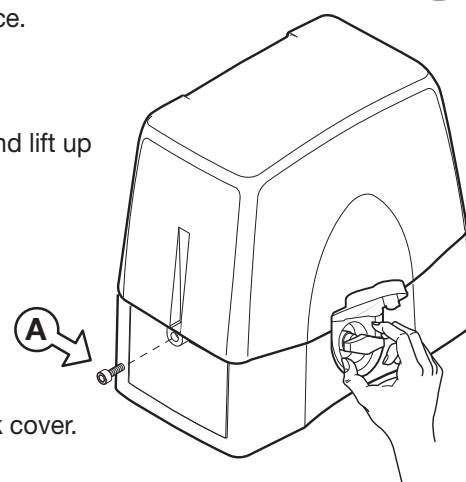
2. Rotate the knob clockwise until it can turn no more.

Attention: do not force the knob to turn further than its travel limit.

The gears are now released and the gate can be moved manually.

To relock the unit

1. Rotate the knob anticlockwise and move it back to the blocked position.
2. Close the knob cover, rotate the key clockwise and rotate the lock protection disk cover.
The gears are now blocked and the gate is ready for use.
Once the system has been reset store the key in a safe place.



SCREW OPERATED MANUAL RELEASE SYSTEM SLX1524 - SLX824

To release the unit

1. Lower the lock protection 'A' on the release knob, insert the key 'B' and rotate it through 180 degrees clockwise. The knob is now free and can be rotated.
2. Rotate the knob 'C' clockwise until reaches its travel limit. The geared motor is now released and the gate can be moved manually.

Attention! Do not force the knob to exceed the travel limit.

To relock the unit

1. Rotate the knob 'D' anticlockwise until it blocks completely.
2. Rotate the key anticlockwise and position the lock protection. The geared motor is now locked and the gate may be used normally. Once the system has been reset store the key in a safe place.



Attention! Never use the manual release mechanism while the gate is in operation.



Moving the gate manually will force the encoder to lose the position of the gate. To reset the control, once the gate has been relocked, you will need to give 3 or more movement commands so that the gate leaf will reach the travel limit enough times to position itself correctly.

Access to the electronic card

Attention! Before opening the cover make sure that the power has been switched off at the mains. To access the motor loosen the two screws 'A' positioned on either end of the cover as indicated in figure 11.

NOTES ON REV. MOTORS (SLX1224REV)

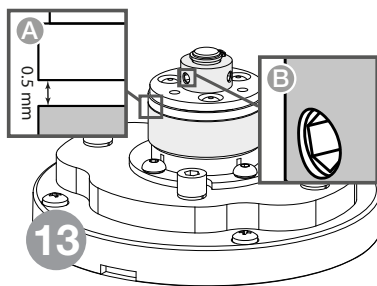
Opening The Gate By Hand

Attention! When the power is off the **SLX1224REV** motor is reversible and requires a force of at least **35 kg** to open the gate.

Electromagnetic Lock Inspection (fig.13)

After opening the motor to access the ECU but before connecting the power supply, carry out the electromagnetic lock inspection:

- check that there is no dark dust and that the distance between the plate and the coil is 0.5 mm (A);
- check that the headless screws (grub screws) are fully and correctly tightened (B).



ELECTRICAL CONNECTION

Important remarks



- After having installed the device, **and before powering up the programmer**, release the door (manual release mechanism) and move it manually, checking that it moves smoothly and has no unusual points of resistance.

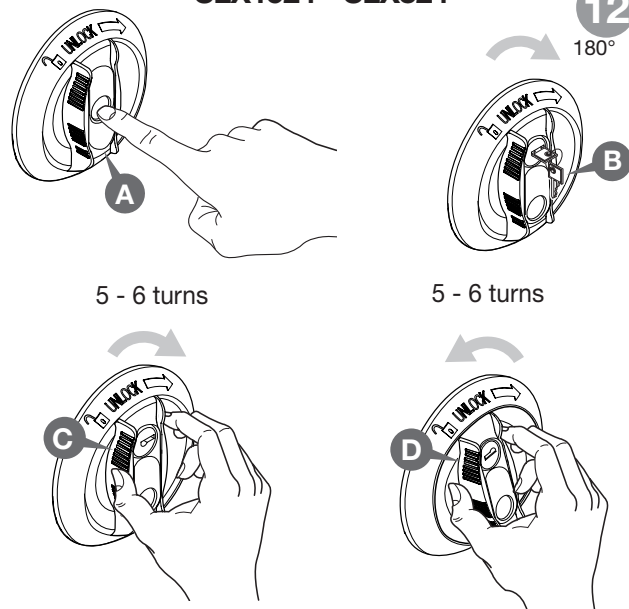


- The presence of the electrical current sensor does not dispense with the obligation to install photoelectric cells and other safety devices foreseen by the safety standards in force.
- Before connecting the appliance make sure that the voltage and frequency rated on the data plate conform to those of the mains supply.



- The motor's power cable must be made of polychloroprene in conformity with the international standard **60245 IEC 57** (e.g. **3 x 1.5 mm²** H05RN-F).
- The cable may only be replaced by qualified technicians.
- An all pole trip switch with at least **3 mm** between the contacts must be installed between the unit and the mains supply.
- Don't use cables with aluminium conductors; don't solder the ends of cables which are to be inserted into the binding posts; use cables marked **T min 85°C** and resistant to atmospheric

SLX1524 - SLX824

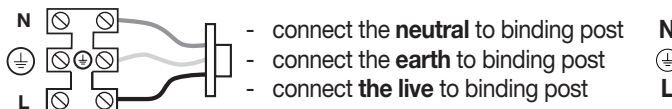


agents.

- The terminal wires must be positioned in such a way that both the wire and the insulating sheath are tightly fastened.

MAINS POWER SUPPLY CONNECTION 230 Vac

- Connect the control and security device wires.
- Run the mains power supply through the cable clamp located on the bottom right of the main circuit board and to the **separate 3-way** terminal board:



- connect the **neutral** to binding post
- connect the **earth** to binding post
- connect the **live** to binding post

Electronic programming unit

Instructions for programming the ECU and battery powered operation can be found in the **MULTI-ECU SOFTWARE** manual **ZVL608** supplied with the automation.

MAINTENANCE

To use the **36 month** or **50000 manoeuvre** guarantee, read the following notes carefully.

Attention! Before carrying out any cleaning or maintenance operations make sure the power is disconnected at the mains, the motor power cables are disconnected and the batteries have been disconnected. Eventual repair work must be carried out by specialised personnel using original spare parts.

The motor does not normally require particular maintenance; in any case the **36 month** or **50000 manoeuvre** guarantee is only valid if the following controls have been observed and eventual maintenance has been carried out to the machine 'sliding gate':

- check the straightness of the toothed rack, make sure the teeth fit correctly in the pinion throughout its entire length; in particular the gear rack must have a cross section of **20 x 20 mm**;
- check the play of the gear rack - pinion (**1-2 mm** see fig. 7/10);
- periodically check the moving parts for wear and tear and grease if required, using lubricants which maintain their friction levels unaltered throughout time and are suitable for temperatures of **-20 to +70°C**;
- check the battery charge level;
- if the motor is a reversible one, periodically check for signs for wear and tear, particularly **dark dust**, in which case an **electromagnetic lock inspection (fig. 13)** has to be performed.

These checks must be written down as they are paramount in validating the guarantee.

CARATTERISTICHE TECNICHE

		SLX824CB	SLX1224REV	SLX1524CB	SLX3024CB	SLX24DRACO/2
Alimentazione	Vac	230	230	230	230	230
Corrente nominale assorbita	A	0,9	0,9	0,9	1,1	1,7
Potenza assorbita	W	200	200	200	250	380
Intermittenza di lavoro	%	70	70	70	70	50
Velocità di traslazione	m/min	13	17	9,5	8	30 - 22
Coppia max.	Nm	57	25	74	90	44 - 55
Rumorosità	dB	≤75	≤75	≤75	≤75	≤75
Temperatura di esercizio	°C	-20°+55	-20°+55	-20°+55	-20°+55	-20°+55
Grado di protezione	IP	44	44	44	44	44

DATI MOTORE

Alimentazione motore	Vdc	24	24	24	24	24
Potenza massima assorbita	W	110	110	130	160	250
Corrente nominale assorbita	A	3	3	3,5	4,5	10

RICEVENTE INCORPORATA

Frequenza di ricezione	MHz				433.92 / 868,3	
Canali	Nbre				4	
Funzioni gestibili	Nbre				8	
Codici memorizzabili	Nbre				300 / 1000	

TECHNICAL SPECIFICATIONS

		SLX824CB	SLX1224REV	SLX1524CB	SLX3024CB	SLX24DRACO/2
Power supply	Vac	230	230	230	230	230
Electrical input	A	0,9	0,9	0,9	1,1	1,7
Power input	W	200	200	200	250	380
Duty cycle	%	70	70	70	70	50
Drag speed	m/min	13	17	9,5	8	30 - 22
Maximum torque	Nm	57	25	74	90	44 - 55
Noise level	dB	≤75	≤75	≤75	≤75	≤75
Operating temperature range	°C	-20°+55	-20°+55	-20°+55	-20°+55	-20°+55
Protection grade	IP	44	44	44	44	44

MOTOR DATA

Motor power supply	Vdc	24	24	24	24	24
Maximum power yield	W	110	110	130	160	250
Nominal electrical input	A	3	3	3,5	4,5	10

BUILT-IN RECEIVER CARD

Reception frequency	MHz				433.92 / 868,3	
Number of channels	No				4	
Number of functions	No				8	
Number of stored codes	No				300 / 1000	

CARACTÉRISTIQUES TECHNIQUES

		SLX824CB	SLX1224REV	SLX1524CB	SLX3024CB	SLX24DRACO/2
Alimentation	Vac	230	230	230	230	230
Courant nominal absorbé	A	0,9	0,9	0,9	1,1	1,7
Puissance absorbée	W	200	200	200	250	380
Facteur de marche	%	70	70	70	70	50
Vitesse d'entraînement	m/min	13	17	9,5	8	30 - 22
Couple maxi.	Nm	57	25	74	90	44 - 55
Niveau de bruit	dB	≤75	≤75	≤75	≤75	≤75
Température de fonctionnement	°C	-20°+55	-20°+55	-20°+55	-20°+55	-20°+55
Indice de protection	IP	44	44	44	44	44

CARACTÉRISTIQUES DU MOTEUR

Alimentation du moteur	Vdc	24	24	24	24	24
Puissance maximum absorbée	W	110	110	130	160	250
Courant nominal absorbé	A	3	3	3,5	4,5	10

RÉCEPTEUR INCORPORÉ

Fréquence de réception	MHz				433.92 / 868,3	
Nbre de canaux	Nbre				4	
Nbre de fonctions disponibles	Nbre				8	
Nbre de codes mémorisables	Nbre				300 / 1000	

DATOS TÉCNICOS

		SLX824CB	SLX1224REV	SLX1524CB	SLX3024CB	SLX24DRACO/2
Alimentación	Vac	230	230	230	230	230
Corriente absorbida	A	0,9	0,9	0,9	1,1	1,7
Potencia absorbida	W	200	200	200	250	380
Intermitencia de trabajo	%	70	70	70	70	50
Velocidad de traslación	m/min	13	17	9,5	8	30 - 22
Par máx.	Nm	57	25	74	90	44 - 55
Ruido	dB	≤75	≤75	≤75	≤75	≤75
Temperatura de funcionamiento	°C	-20°+55	-20°+55	-20°+55	-20°+55	-20°+55
Grado de protección	IP	44	44	44	44	44

DATOS MOTOR

Alimentación motor	Vdc	24	24	24	24	24
Potencia máxima absorbida	W	110	110	130	160	250
Corriente máxima absorbida	A	3	3	3,5	4,5	10

RECEPTOR INCORPORADO

Frecuencia de recepción	MHz				433.92 / 868,3	
Número de canales	Núm.				4	
Número de funciones gobernables	Núm.				8	
Número de códigos almacenables	Núm.				300 / 1000	

TECHNISCHE DATEN

		SLX824CB	SLX1224REV	SLX1524CB	SLX3024CB	SLX24DRACO/2
Stromversorgung	Vac	230	230	230	230	230
Stromaufnahme	A	0,9	0,9	0,9	1,1	1,7
Leistungsaufnahme	W	200	200	200	250	380
Einschaltdauer	%	70	70	70	70	50
Versetzungsgeschwindigkeit	m/min	13	17	9,5	8	30 - 22
Maximales Drehmoment	Nm	57	25	74	90	44 - 55
Lärm	dB	≤75	≤75	≤75	≤75	≤75
Betriebstemperatur	°C	-20°+55	-20°+55	-20°+55	-20°+55	-20°+55
Schutzgrad	IP	44	44	44	44	44

MOTORDATEN

Motorstromversorgung	Vdc	24	24	24	24	24
Maximale Leistungsaufnahme	W	110	110	130	160	250
Stromaufnahme	A	3	3	3,5	4,5	10

EINGEBAUTER EMPFÄNGER

Empfangsfrequenz	MHz				433.92 / 868,3	
Anzahl Kanäle	Nr.				4	
Anzahl Funktionen	Nr.				8	
Anzahl speicherbare Codes	Nr.				300 / 1000	

TECHNISCHE SPECIFICATIES

		SLX824CB	SLX1224REV	SLX1524CB	SLX3024CB	SLX24DRACO/2
Voedingsspanning	Vac	230	230	230	230	230
Stroomverbruik	A	0,9	0,9	0,9	1,1	1,7
Opgenomen vermogen	W	200	200	200	250	380
Arbeidscyclus	%	70	70	70	70	50
Loopsnelheid	m/min	13	17	9,5	8	30 - 22
Max. koppel	Nm	57	25	74	90	44 - 55
Niveau de bruit	dB	≤75	≤75	≤75	≤75	≤75
Werkings temperatuur	°C	-20°+55	-20°+55	-20°+55	-20°+55	-20°+55
Beschermingsgraad	IP	44	44	44	44	44

MOTORGEGEVENS

Voeding motor	Vdc	24	24	24	24	24
Max. opgenomen vermogen	W	110	110	130	160	250
Nominaal stroomverbruik	A	3	3	3,5	4,5	10

INGEBOUWDE ONTVANGER

Ontvangstfrequentie	MHz				433.92 / 868,3	
Kanalen	Aant.				4	
Functies	Aant.				8	
Opslaanbare codes	Aant.				300 / 1000	



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