

AUTOMAZIONE PER PORTE BASCULANTI A CONTRAPPESI AUTOMATION FOR COUNTERBALANCED GARAGE DOORS AUTOMATISME DE PORTES BASCULANTES À CONTREPOIDS GARAGENTORANTRIEB FÜR SCHWING- UND KIPPTORE AUTOMATIZACIÓN PARA PUERTAS BASCULANTES POR CONTRAPESOS



ITALIANO

ATTENZIONE! Prima di iniziare l'installazione leggere le istruzioni attentamente!

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ENGLISH

ATTENTION! Before installing this device read the following instructions carefully!

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FRANÇAIS

ATTENTION! Avant de commencer la pose, lire attentivement les instructions!

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DEUTSCH

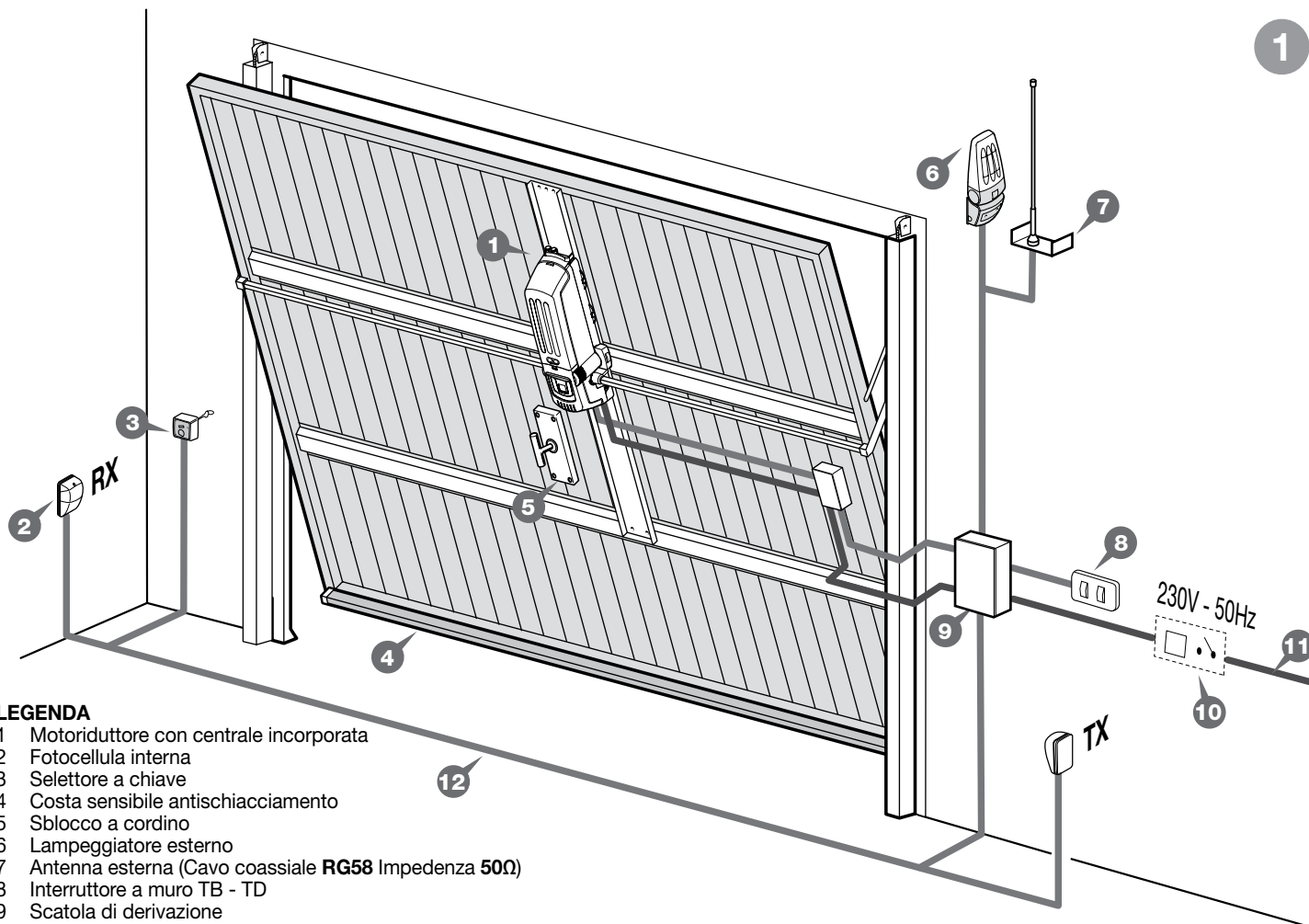
ACHTUNG! Bevor mit der Installation begonnen wird, sollte die Anleitung aufmerksam gelesen werden!

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ESPAÑOL

¡ATENCIÓN! Antes de iniciar la instalación del sistema, leer atentamente las instrucciones.

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**LEGENDA**

- 1 Motoriduttore con centrale incorporata
- 2 Fotocellula interna
- 3 Selettore a chiave
- 4 Costa sensibile antisciacciamento
- 5 Sblocco a cordino
- 6 Lampeggiatore esterno
- 7 Antenna esterna (Cavo coassiale **RG58** Impedenza **50Ω**)
- 8 Interruttore a muro TB - TD
- 9 Scatola di derivazione
- 10 Interruttore onnipolare con apertura contatti min. **3 mm**
- 11 Cavo alimentazione principale **230 Vac**
- 12 Canalatura 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 with onboard electronics
- 2 Internal photoelectric cells
- 3 Mechanical selector switch
- 4 Contact safety edge
- 5 Manual release cord
- 6 Flashing warning lights
- 7 External antenna (**RG58** coaxial cable with an impedance of **50Ω**)
- 8 Wall mounted switches TB - TD
- 9 Shunt box
- 10 All pole circuit breaker with a minimum gap of **3 mm** between the contacts
- 11 Mains cable **230 Vac**
- 12 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 Motoréducteur avec programmeur intégré
- 2 Cellule photoélectrique interne
- 3 Sélecteur à clé
- 4 Bord de sécurité
- 5 Câble de déverrouillage
- 6 Clignoteur externe
- 7 Antenne externe (Câble coaxial **RG58** - Impédance **50Ω**)
- 8 Commutateur du mur TB - TD
- 9 Boîte de dérivation
- 10 Interrupteur onnipolaire avec ouverture des contacts d'au moins **3 mm**
- 11 Câble d'alimentation principale **230 Vac**
- 12 Chemin pour branchement basse tension

Attention: le 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

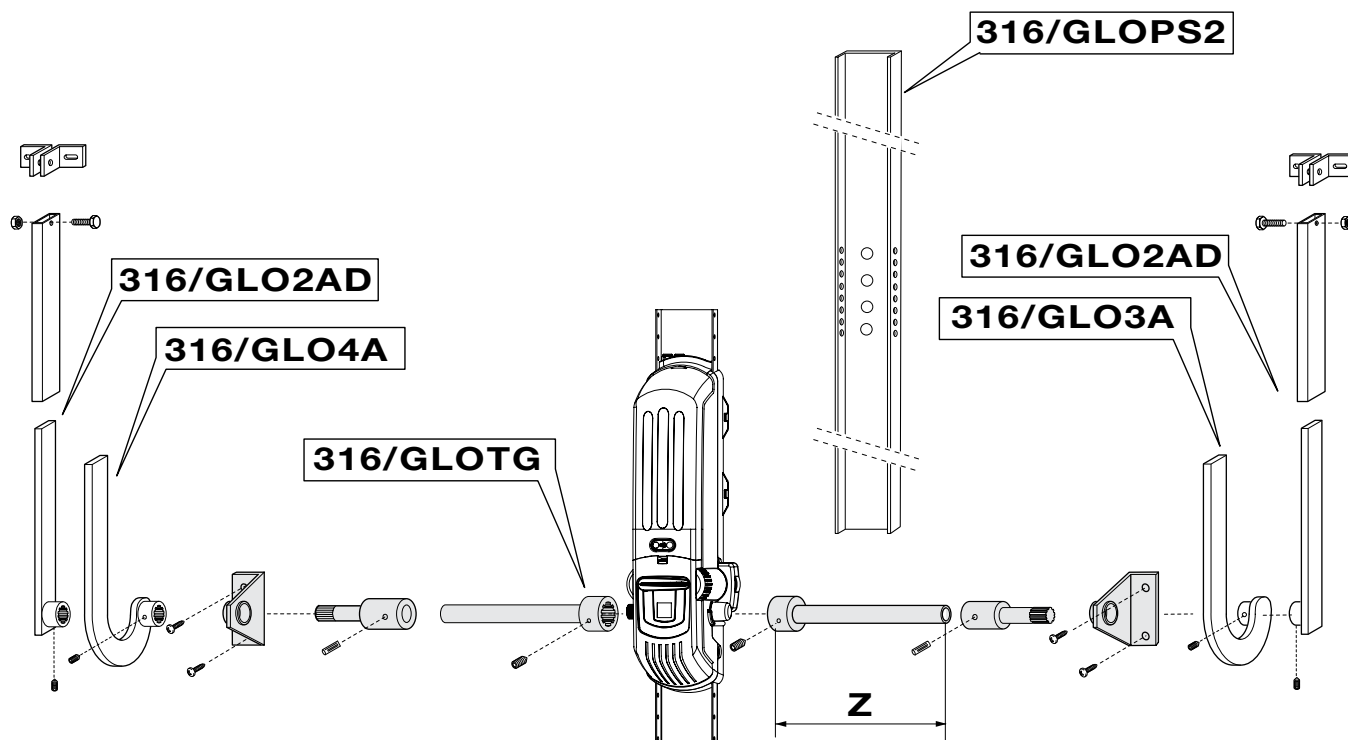
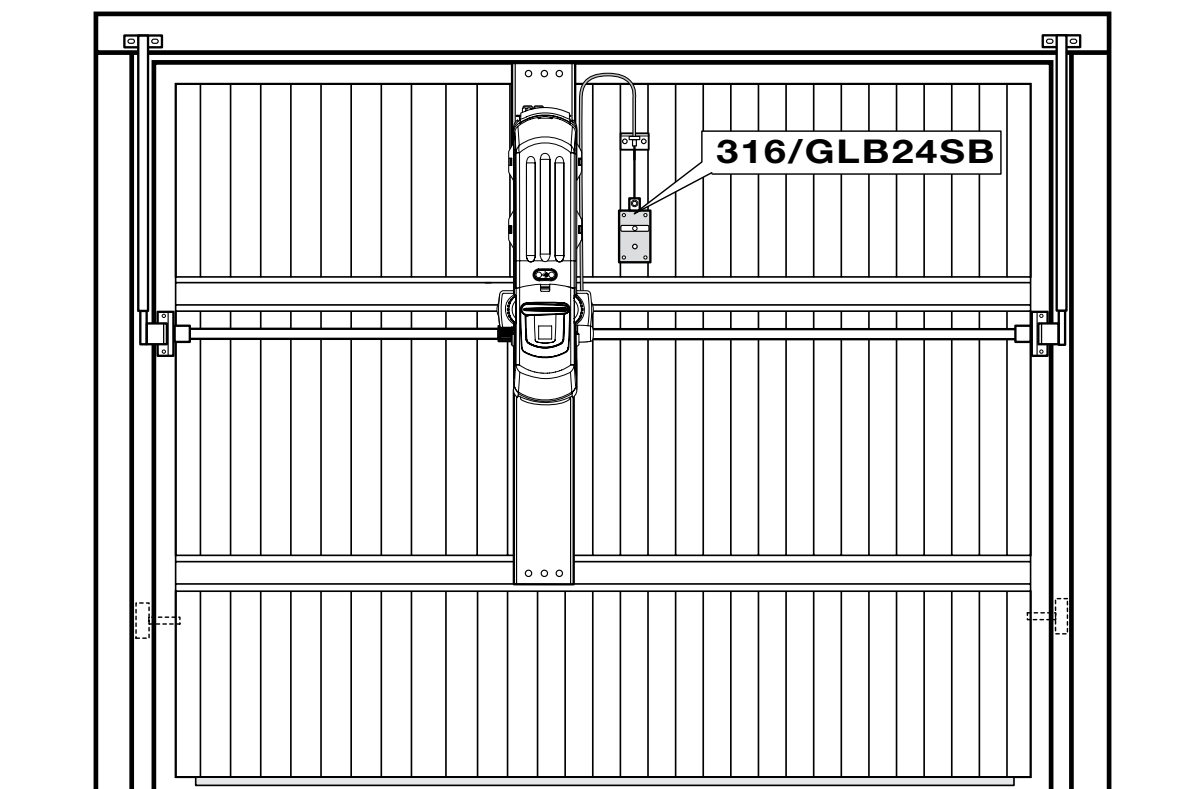
- 1 Getriebemotor mit eingebauter Steuerung
- 2 Interne Lichtschranke
- 3 Schlüsseltaster
- 4 Kontakteleiste
- 5 Seilzugentriegelung
- 6 Externes Blinklicht
- 7 Externe Antenne (Koaxialkabel **RG58** Impedanz **50Ω**)
- 8 Wandschalter TB - TD
- 9 Verteilerdose
- 10 Allpoliger Schalter mit Kontaktenabstand von mindestens **3 mm**
- 11 Hauptversorgungskabel **230 Vac**
- 12 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.

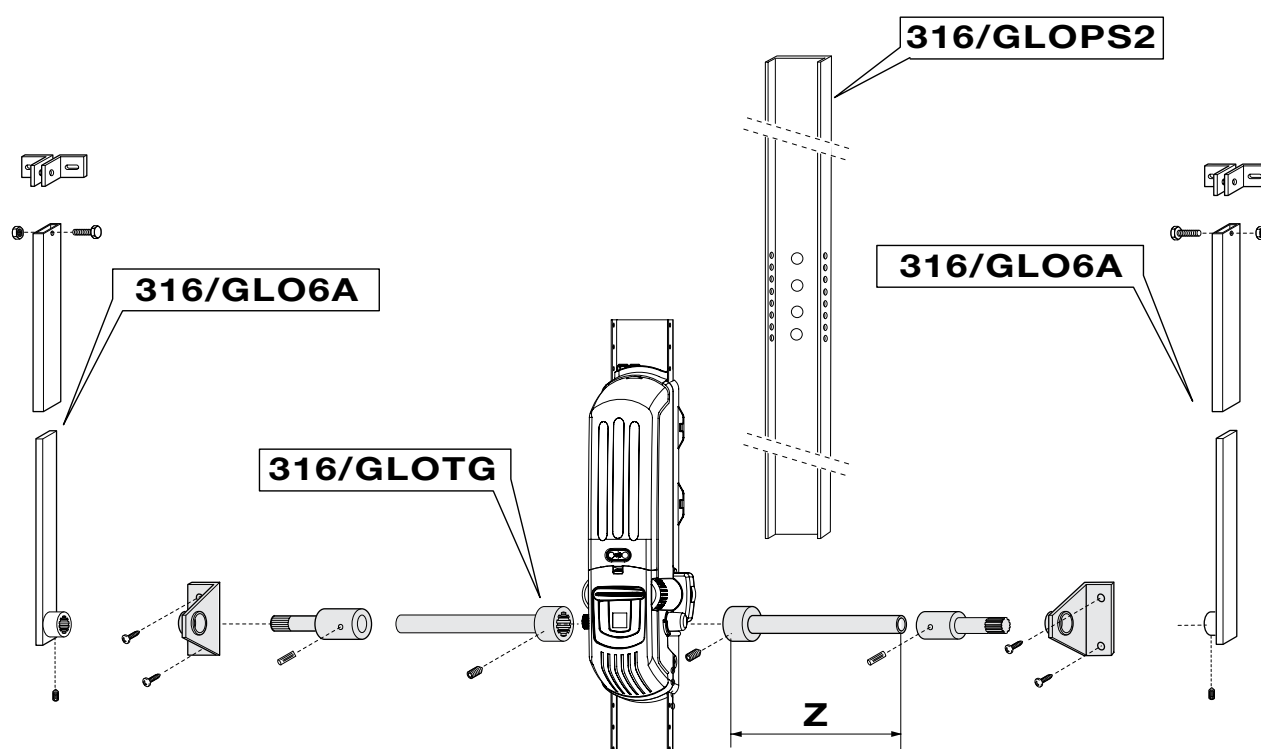
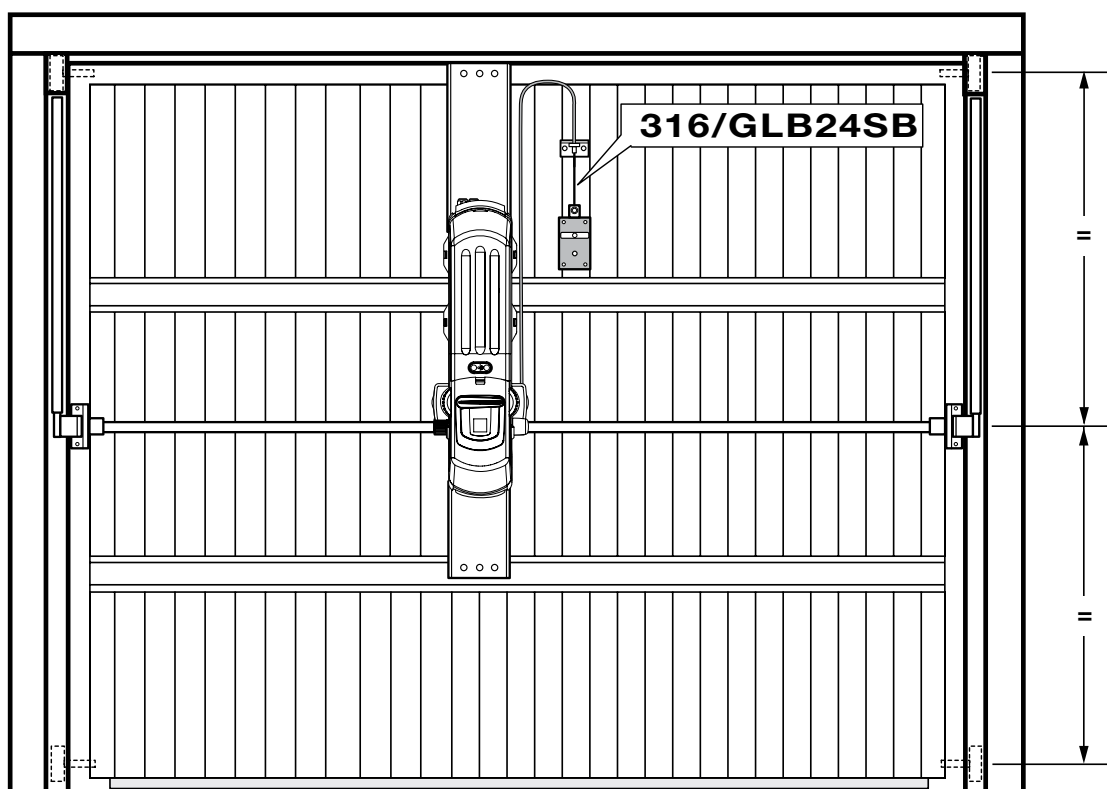
LEYENDA

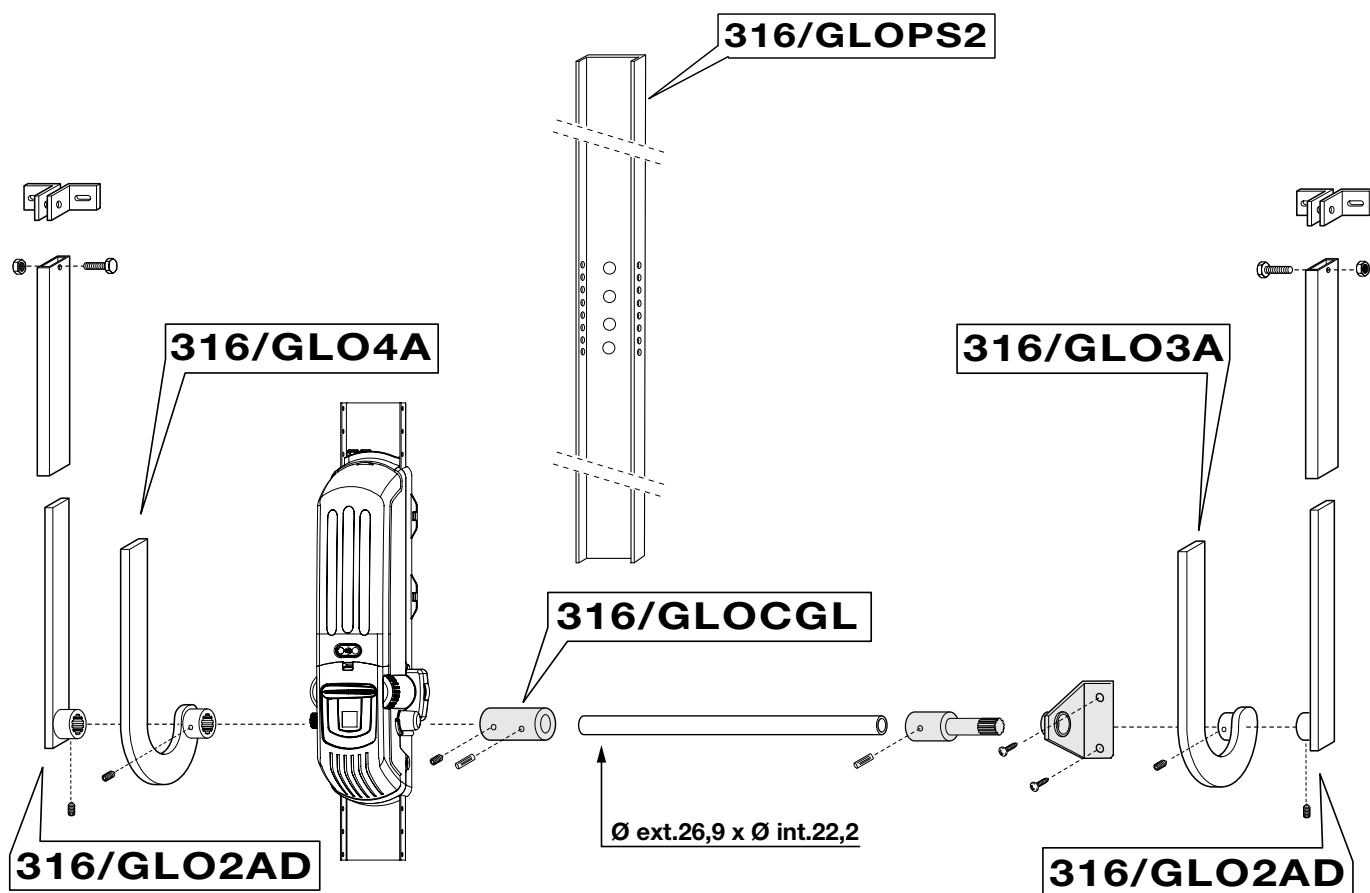
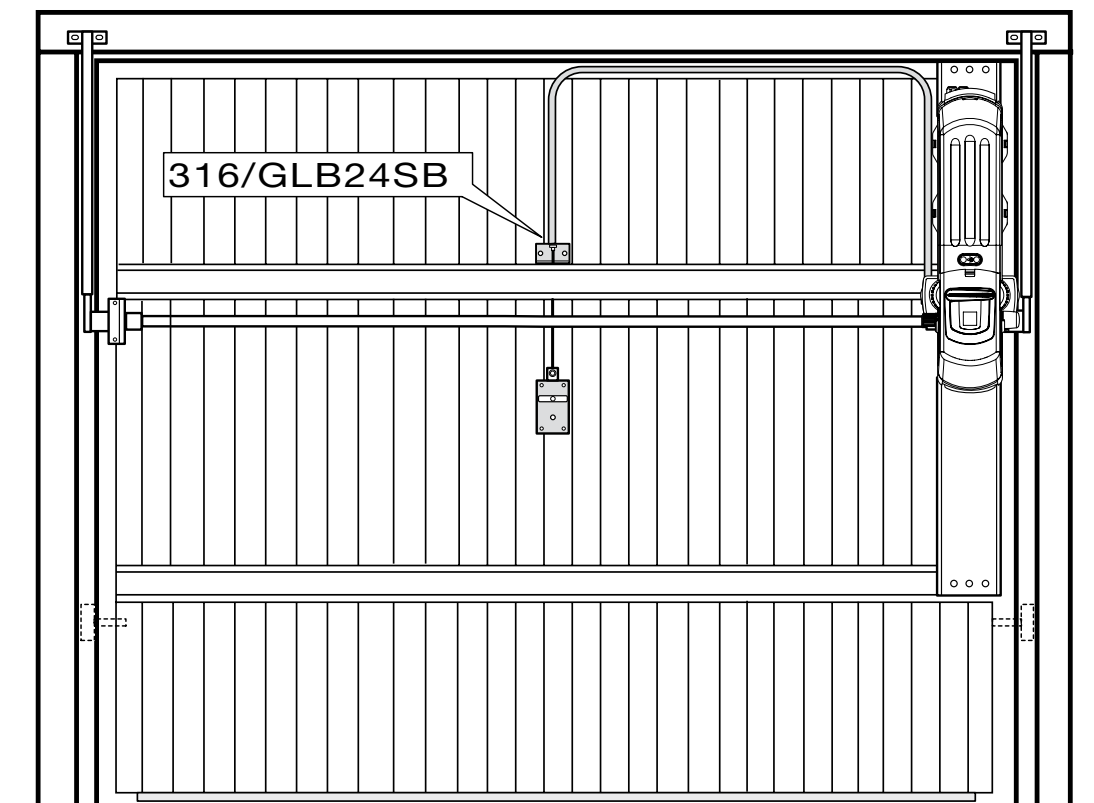
- 1 Motorreductor con programador incorporado
- 2 Fotocélula interior
- 3 Selector con llave
- 4 Banda sensible
- 5 Cordón de desbloqueo
- 6 Relampagueador intermitente exterior
- 7 Antena exterior (Cable coaxial **RG58** Impedancia **50Ω**)
- 8 Desviador de pared TB - TD
- 9 Caja de derivación
- 10 Interruptor onnipolar con apertura entre los contactos de **3 mm** como mínimo.
- 11 Cable de alimentación principal **230 Vac**
- 12 Canaleta para el conexionado a baja tensión

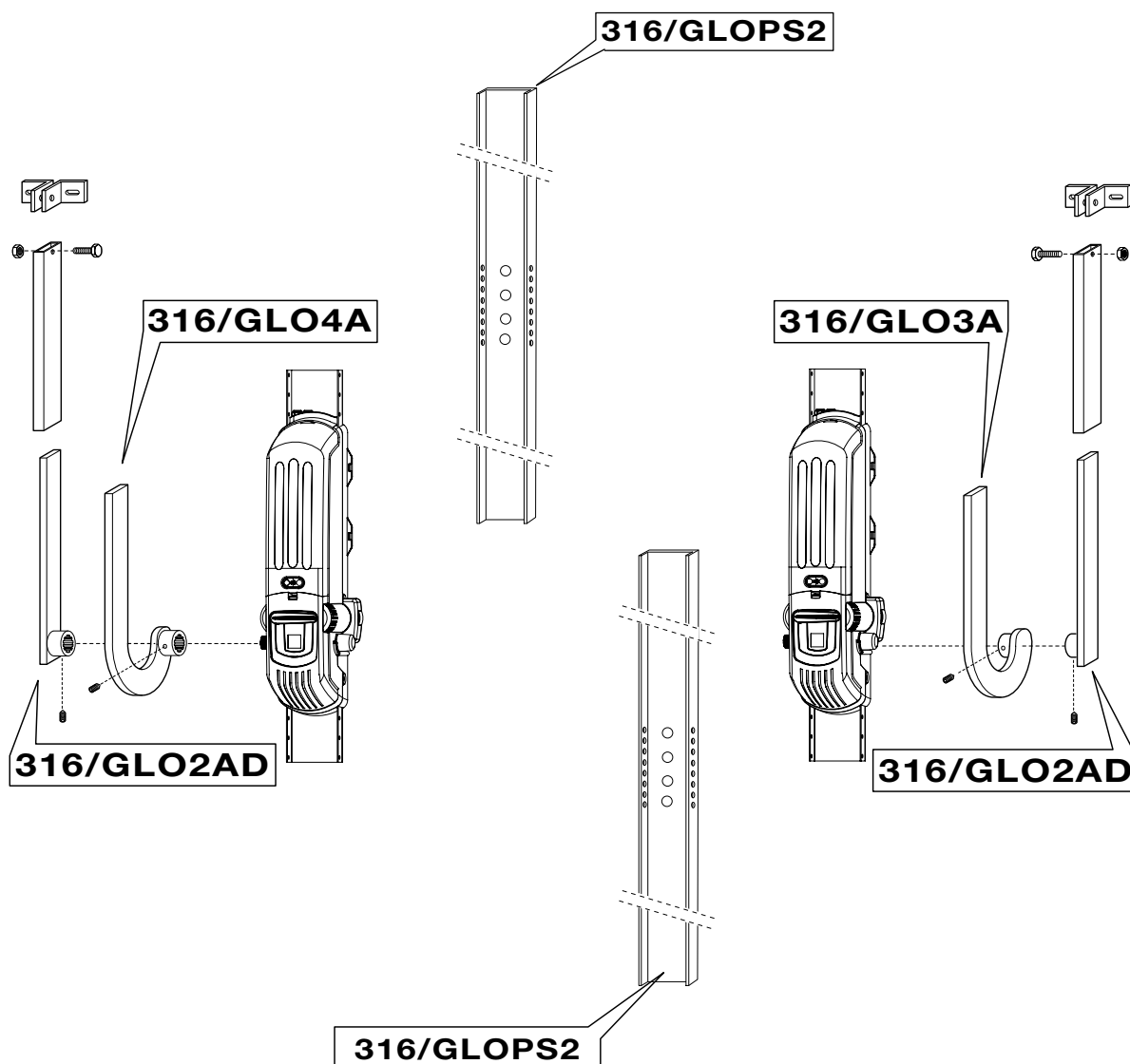
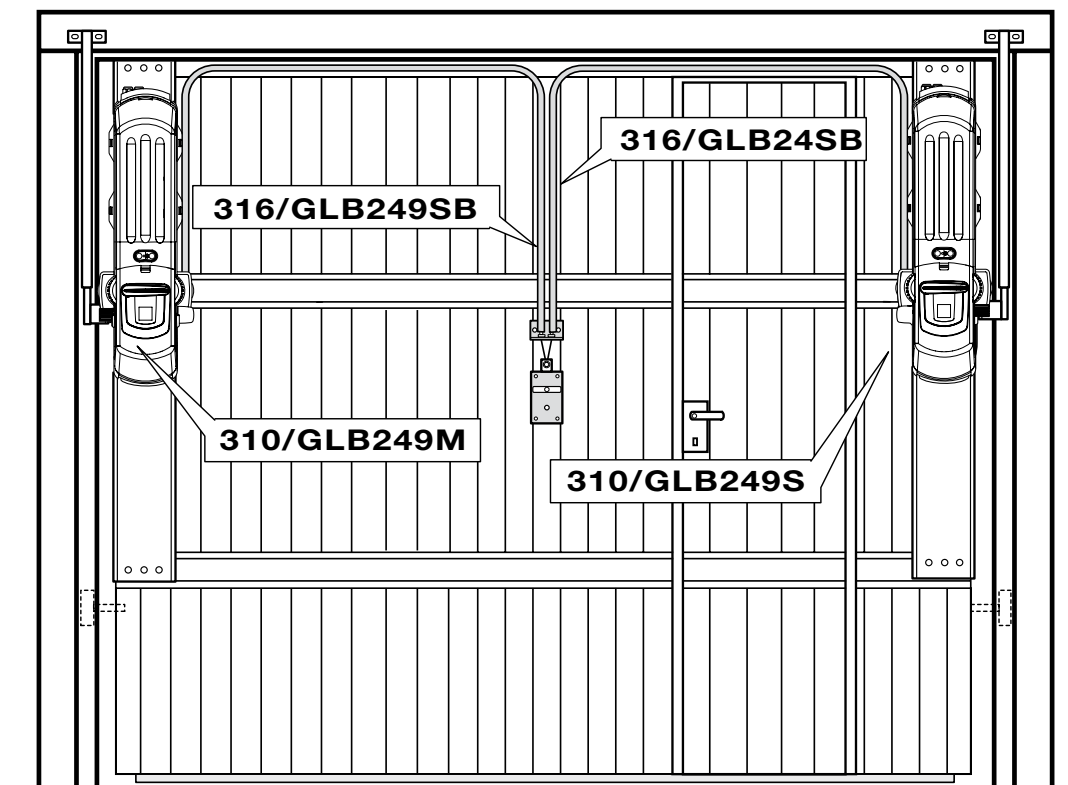
Atención: La pantalla que se muestra es sólo indicativa y se suministra como base de trabajo, con el fin de permitir una elección de los componentes electrónicos Cardin por utilizar; en consecuencia, dicho esquema no constituye vínculo alguno para la ejecución del sistema.

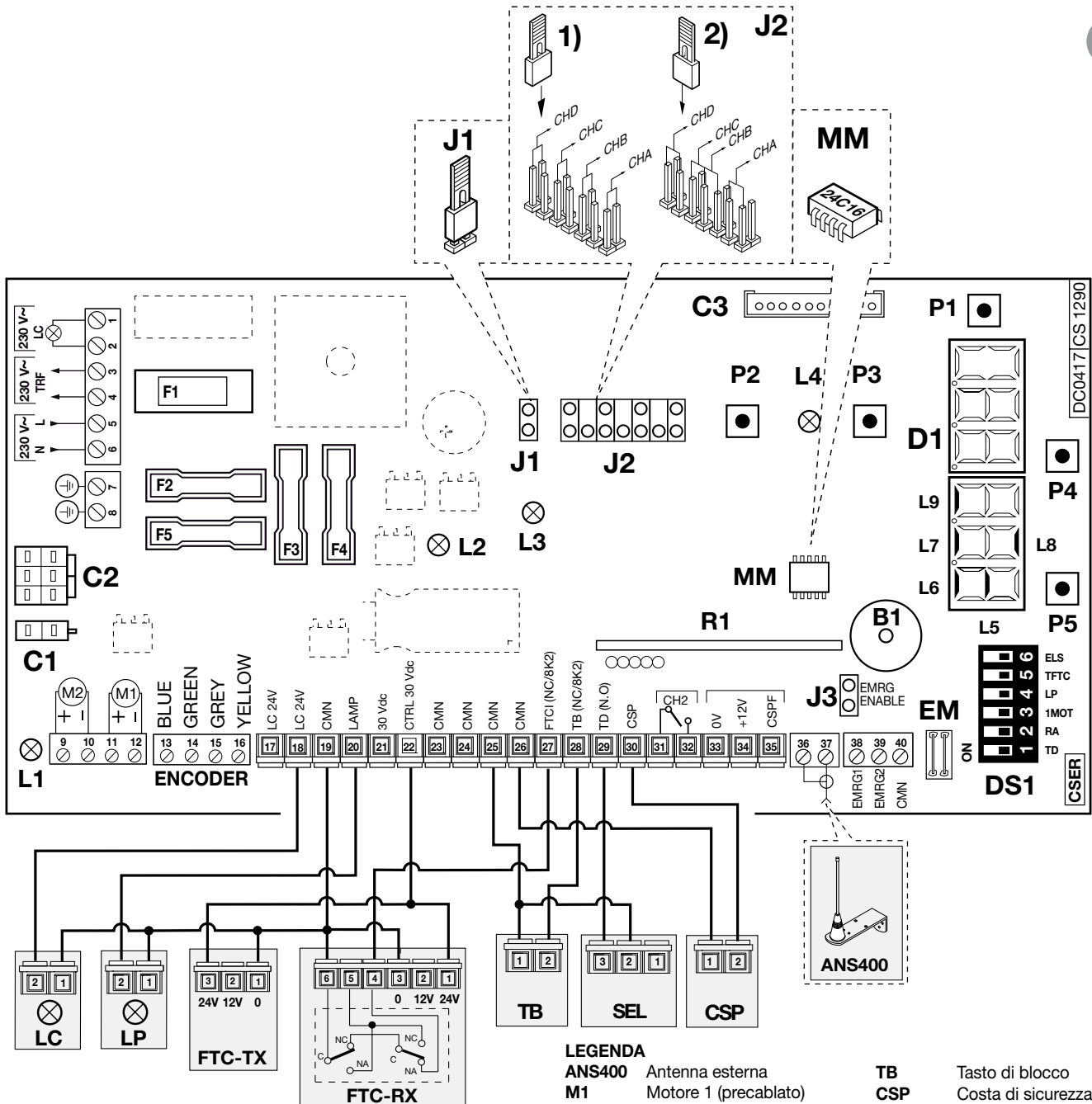


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LEGEND

ANS400 External antenna
M1 Motor 1 (pre-wired)
M2 Motor 2
LC Courtesy light (pre-wired)
LP Flashing warning lights
FTC-RX Photocell receiver
FTC-TX Photocell transmitter
SEL Selector switch
TB Blocking button
CSP Safety edge

ENCODER

Encoder terminal block connections:

- Blue -
- Green -
- Grey -
- Yellow -

NOMENCLATURE

ANS400 Antenne externe
M1 Moteur 1 (pré-câblé)
M2 Moteur 2
LC Éclairage de zone (pré-câblé)
LP Clignoteur
FTC-RX Cellule photoél. récepteur
FTC-TX Cellule photoél. émetteur
SEL Sélecteur à clé
TB Touche de blocage
CSP Bord de protection

ENCODEUR

Bornier de branchement encodeur:

- Blue - Bleu
- Green - Vert
- Grey - Gris
- Yellow - Jaune

ZEICHENERKLÄRUNG

ANS400 Außenantenne
M1 Motor 1 (vorverkabelt)
M2 Motor 2
LC Wachlicht (vorverkabelt)
LP Blinklicht
FTC-RX Lichtschrank Empfänger
FTC-TX Lichtschrank Sender
SEL Schlüsselwahlschalter
TB Blockiertaste
CSP Sicherheitsleiste

ENCODER

Anschlussklemmleiste für Encoder:

- Blue - Blau
- Green - Grün
- Grey - Grau
- Yellow - Gelb

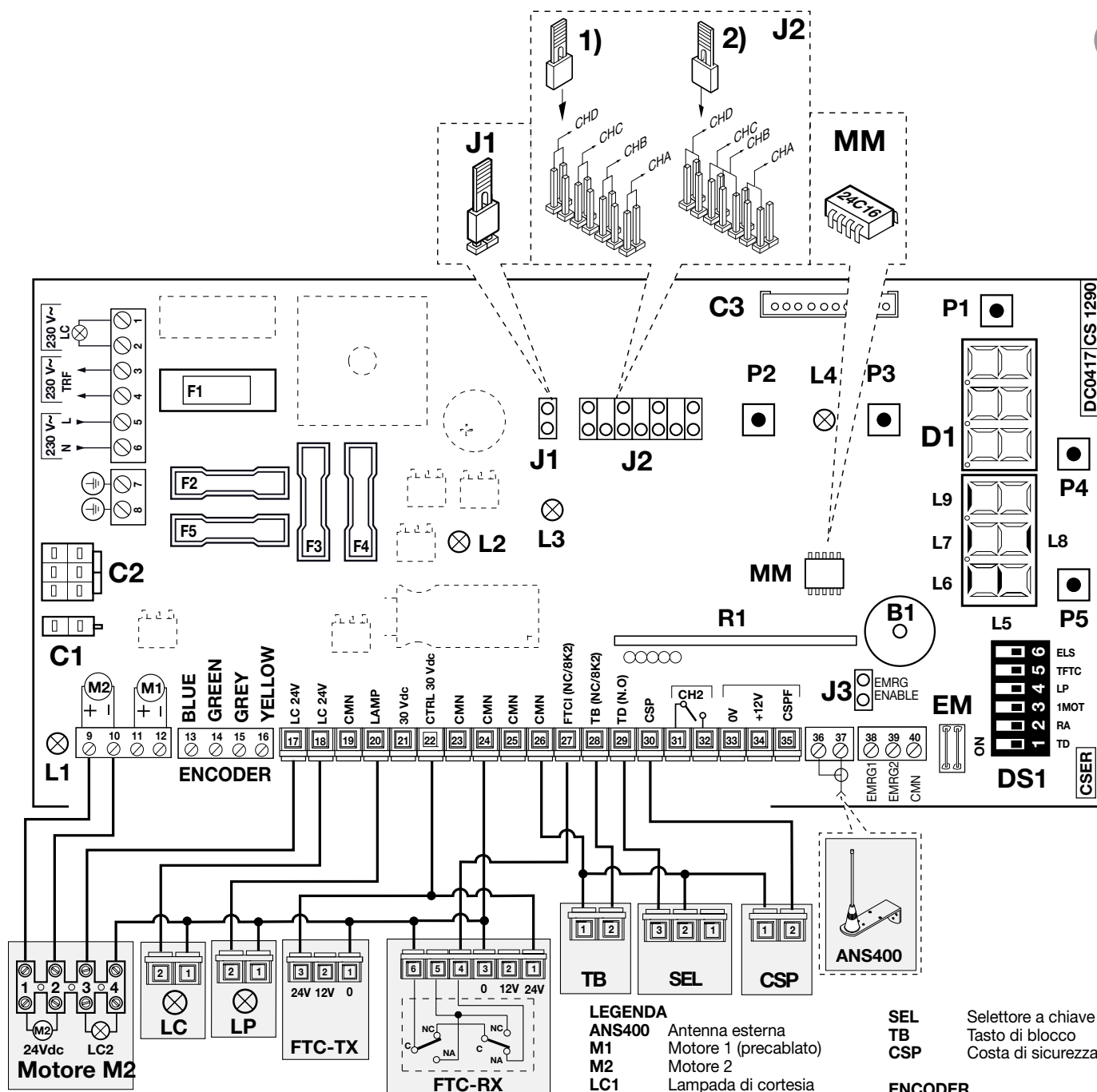
LEYENDA

ANS400 Antena exterior
M1 Motor 1 (precableado)
M2 Motor 2
LC Luz de zona (precableado)
LP Relampagueador
FTC-RX Fotocélula receptor
FTC-TX Fotocélula emisor
SEL Selector de llave
TB Tecla de bloqueo
CSP Banda sensible

ENCODER

Placa de bornes encodeur:

- Blue - Azul oscuro
- Green - Verde
- Grey - Gris
- Yellow - Amarillo



LEGENDA

ANS400 Antenna esterna
M1 Motore 1 (precabato)
M2 Motore 2

LC1 Lampada di cortesia motore 1 (precabata)
LC2 Lampada di cortesia motore 2

LP Lampeggiatore
FTC-RX Fotocellula ricevitore
FTC-TX Fotocellula trasmettitore

SEL Selettore a chiave
TB Tasto di blocco
CSP Costa di sicurezza

ENCODER

Morsettiera collegamento encoder:
Blue - Blu
Green - Verde
Grey - Grigio
Yellow - Giallo

LEGEND

ANS400 External antenna
M1 Motor 1 (pre-wired)
M2 Motor 2
LC1 Courtesy light motor 1 (pre-wired)
LC2 Courtesy light motor 2
LP Flashing warning lights
FTC-RX Photocell receiver
FTC-TX Photocell transmitter
SEL Selector switch
TB Blocking button
CSP Safety edge

ENCODER

Encoder terminal block connections:
Blue -
Green -
Grey -
Yellow -

NOMENCLATURE

ANS400 Antenne externe
M1 Moteur 1 (pré-câblé)
M2 Moteur 2
LC1 Éclairage de zone moteur 1 (precabato)
LC2 Éclairage de zone moteur 2
LP Clignoteur
FTC-RX Cellule photoél. récepteur
FTC-TX Cellule photoél. émetteur
SEL Sélecteur à clé
TB Touche de blocage
CSP Bord de protection

ENCODEUR

Bornier de branchement encodeur:
Blue - Bleu
Green - Vert
Grey - Gris
Yellow - Jaune

ZEICHENERKLÄRUNG

ANS400 Außenantenne
M1 Motor 1 (vorverkabelt)
M2 Motor 2
LC1 Wachlicht Motor 1 (vorverkabelt)
LC2 Wachlicht Motor 2
LP Blinklicht
FTC-RX Lichtschrank Empfänger
FTC-TX Lichtschrank Sender
SEL Schlüsselwahlschalter
TB Blockiertaste
CSP Sicherheitsleiste

ENCODER

Anschlussklemmleiste für Encoder:
Blue - Blau
Green - Grün
Grey - Grau
Yellow - Gelb

LEYENDA

ANS400 Antena exterior
M1 Motor 1 (precableado)
M2 Motor 2
LC1 Luz de zona motor 1 (precableado)
LC2 Luz de zona motor 2
LP Relampagueador
FTC-RX Fotocélula receptor
FTC-TX Fotocélula emisor
SEL Selector de llave
TB Tecla de bloqueo
CSP Banda sensible

ENCODER

Placa de bornes encóder:
Blue - Azul oscuro
Green - Verde
Grey - Gris
Yellow - Amarillo

IMPORTANT REMARKS



READ THE FOLLOWING REMARKS CAREFULLY BEFORE PROCEEDING WITH THE INSTALLATION. PAY PARTICULAR ATTENTION TO ALL THE PARAGRAPHS MARKED WITH THE SYMBOL  NOT READING THESE IMPORTANT INSTRUCTIONS COULD COMPROMISE THE CORRECT WORKING ORDER OF THE SYSTEM AND CREATE DANGER SITUATIONS FOR THE USERS OF THE SYSTEM.

- 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.
- All maintenance operations must be carried out by professionally qualified technicians. Before carrying out any cleaning or maintenance operations make sure the power is disconnected at the mains.
- This appliance must be used exclusively for the purpose for which it has been made. "i.e. **The automation of garage doors**". Any non authorised modifications are to be considered improper and therefore dangerous.

USE

The appliance may be used to operate overhead garage doors.

For garage doors with a width of over **4 m** and not more than **2,7 m** in height and for garage doors with a pedestrian access door two motors are required (one "master" motor with on board electronics **310/GLB249M** and one "slave motor" without **310/GLB249S**).

IMPORTANT SAFETY INSTRUCTIONS

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

- 1) The pedestrian door must not open on its own, e.g.; swing open while the garage door is in movement.
- 2) The appliance must not be operated when the pedestrian door is not fully closed.
- 3) Make sure that there are no dangerous sharp edges.
- 4) Make sure that the end-user is aware that children and/or pets must not be allowed to play within the area of a garage door installation. If possible include this in the warning signs.
- 5) A correct earth connection is fundamental in order to guarantee the electrical safety of the machine.
- 6) If you have any questions about the safety of the door operating system, do not install the operator. Contact your dealer for assistance.

TECHNICAL DESCRIPTION

- Single piece geared reduction unit with an incorporated encoder and manual release system.
- **24 V** direct current drive motor.
- Reduction unit in pressed aluminium fitted with a reduction system made out of materials that guarantee maximum efficiency and maximum noise reduction.
- Handle operated manual release mechanism mounted directly on the motor.
- Base in zinc-plated steel
- Carter in shock-proof plastic
- Incorporated **24 Vdc** courtesy light protected by an opaque panel.
- Output for a **230 Vac** external courtesy light located on the "Master" motor.
- **310/GLB249M** Motor with an incorporated electronic programmer complete with power stage, logic control, (optional battery charger) and radio receiver.

Power is rooted to the card by a separate toroidal transformer housed in the same container and connected to the card. Incorporated "**TD**" and "**TB**" manoeuvring buttons, visualisation via LED display, fuse checking and replacement access port.

Access for function setting and radio control transmitter programming and cancellation.

- **310/GLB249S** motor without on board electronics.

IMPORTANT REMARKS

ACCESSORIES

- 316/GLO2AD** - Straight telescopic arm length 700 mm.
- 316/GLO3A** - Curved (right) telescopic arm length 700 mm.
- 316/GLO4A** - Curved (left) telescopic arm length 700 mm.
- 316/GLO6A** - Straight telescopic arm length 1000 mm.
- 316/GLOPS2** - Extended support base (optional).
- 316/GLOTG** - Pair of pipes, pipe support brackets and DIN threaded pins for central motor positioning.
- 316/GLOCGL** - Ferrule and DIN threaded pin, with pipe support brackets for lateral motor positioning.
- 316/GL24SB** - Manual release cord.
- PRG249BCN** - Kit battery charger + batteries.

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.

The appliance must not be activated in the dark therefore make sure that the night lights function correctly.

The appliance can be manually released in case of emergency (see manual release mechanism on page 21).

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**. In case of failure or operational anomalies switch off the power at the mains do not attempt to repair the appliance yourself. Periodically check the correct operation of all safety devices (photoelectric cells, safety edge etc.). In particular make sure that the safety edge forces the door to invert travel direction and that weights greater than **20 kg** are not lifted.

Eventual repair work must be carried out by specialised personnel using original spare parts. The appliance is not suitable for continuous operation and must be contained within the value stipulated (see technical data on page 60).

INSTALLATION INSTRUCTIONS

The minimum controls which may be installed are SEQUENTIAL-STOP, these controls must be installed at a height between **1,5** and **1,8 m** in a location not accessible to children. Warning signs or adhesive should be placed near the commands indicating the points where the risk of crushing exists.

Instruct the end user in the correct use of the manual release device and apply permanent adhesives indicating that procedure near the device.

Before starting with the installation of the system check that the structure which is to be automated is in good working order and respects the local standards and regulations in force.

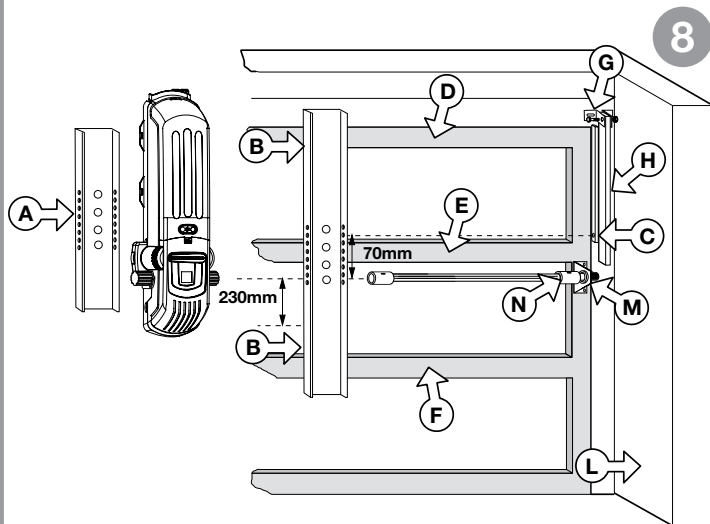
Automating an existing system which has sliding or balancing problems will not solve those problems and may even make them worse by placing more stress on weakened or damaged areas.

To this end make sure that the runner guides slide freely and grease all the moving parts (pins, castors etc.) using lubricants which maintain unaltered friction characteristics over a period of time and are suitable for temperatures of **-20 to +70°C**.

FITTING THE UNIT

Fitting the motor centrally

- 1) Remove the motor from its positioning base "A". Mark the position of the motor axis on the positioning base "A" (or on the optional extended base "B" **GLOPS2**) and fasten the profile to the cross piece of the garage door. The motor axis must be **70 mm** below the hinged point of the door arm "C". (for non flush fitting garage doors) or half way up for flush fitting garage doors (see figs 2-3). The motor support, complete with its extensions, must be fitted to the side of the lock and has to cover at least three cross pieces "D", "E" and "F" (fig. 8) using a minimum of three **Ø 5 mm** rivets for each cross piece.

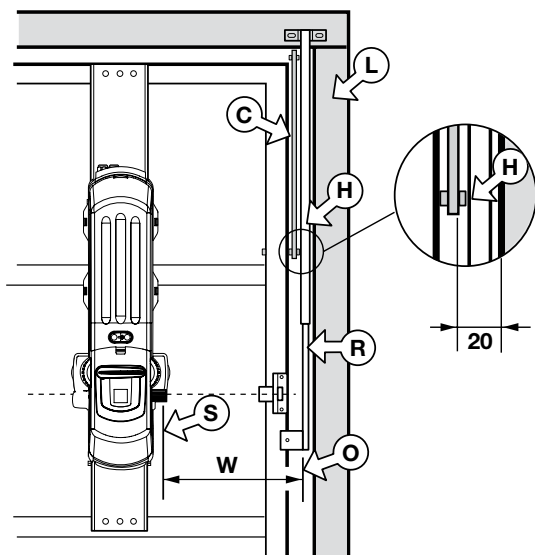


- 2) Fasten the geared motor (axis in the chosen position) to the support base "A" (or to the optional extended base "B" **GLOPS2**), with the night light facing towards the top, using the two previously removed screws and lock nuts.
- 3) The telescopic arm fastening brackets "G" can either be welded to the fixed frame of the garage door (reinforce the welding area if the metal sheet is less than **2,5 mm** thick) or fixed to the frame/wall using two M8 bolts.

At this point slide the tube "H" between the arms of the bracket "G" and fasten down (don't over tighten) using the supplied M8 x 25 screws and lock nuts.

To guarantee correct operation the tube "H" with its straight arm inserted must be able to move within a minimum space of **20 mm** between the door arm "C" and the counterweight housing "L".

If the available space is inferior you will have to use a curved arm.

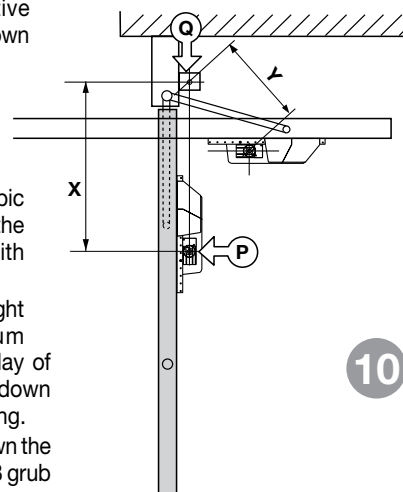


- 4) Place the tube "H" (with the arm "R" inserted) parallel to the counterweight housing "L" and measure the distance "W" between the end of the motor shaft "S" and the internal part of the straight arm "O" as shown in figure 9. Subtracting **63 mm** from the distance "W" will give you the overall length of the motor shaft extension tube (fig. 2,3).

Follow the same procedure to measure the cutting length for the other extension tube.

Remember to file down the sharp edges after cutting.

- 5) Position the support brackets "M" (fig. 9) at the same height as the geared motor axis and drill two **Ø4 mm** holes with which to fix the bracket to the garage door framework.
- 6) Assemble the **316/GLOTG** group (fig. 2-3) motor shaft extension tubes, threaded joints and relative supports and then fasten down the support tubes using the supplied **4,8 x 16** self-tapping screws.
- 7) Measure the distance between the motor axis "P" and the axis of the telescopic arm hinge hole "Q" with the garage closed "X" and with the garage door open "Y". Cut the tube "H" and straight arm "R" to the minimum measured size (minus a play of **2 cm**). Remember to file down the sharp edges after cutting. Reassemble and fasten down the arms using the supplied M8 grub screws.



- 8) Drill the extension tube as follows:

- Make sure that the garage door is closed and the geared motor is free;
 - Using a **Ø10 mm** drill bit make a hole in the centre of the joint "N" (fig.2-3) which passes half way through the tube.
 - Insert the **Ø10x50** elastic pin halfway through the tube.
 - Open the garage door and drill the joint from the other side then allow the elastic pin to outcrop the same distance on both sides of the joint.
- 9) Check that the door is well balanced by manoeuvring it manually. The weight of the motor means you will have to increase the counter weights by **4-5 kg** on each side.

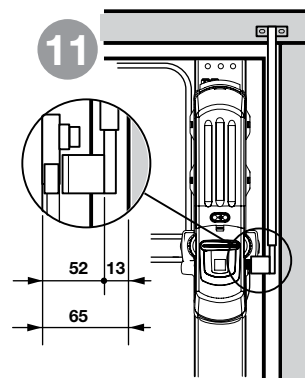
Compensate the counter weights until the garage door is perfectly balanced.

Fitting the motor laterally

- 1) Once you have decided upon the correct assembly diagram follow points 1,2,3 and 7 of the previous paragraph.

In this case there are two motor supports and they should be fixed to the extreme right and left of the garage door maintaining a distance of **65 mm** from the counterweight housing as shown in the drawing.

- 2) Insert the threaded joint of the telescopic arm directly into the threaded shaft of the motor, push it well in, and fasten down using the supplied grub screw.
- 3) Check that the door is well balanced by manoeuvring it manually. The weight of the motor means you will have to increase the counter weights by about **10 kg** on each side.
- 4) Compensate the counter weights until the garage door is perfectly balanced.

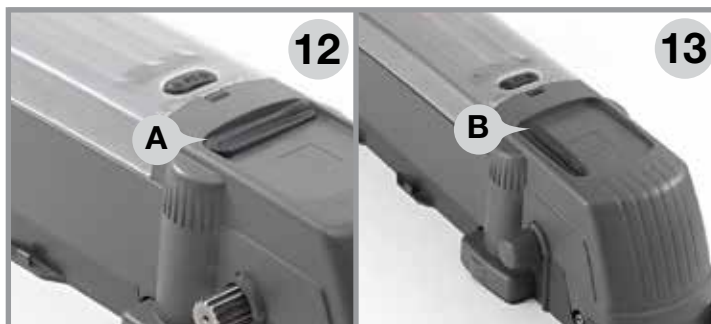


MANUAL RELEASE (fig. 12-13)

The self-locking automation is fitted with a manual release mechanism that allows you to move the garage door manually during blackouts. To release the motor (for both the master and slave units) move the lever "A" (fig. 12) that is built into the carter.

The lever is connected to a special transmission transfer mechanism (force multiplier) which makes the manoeuvre fluid and easy to operate.

- Lever horizontal "A" (fig. 12), automatic operation (gears active).
- Lever vertical "B" (fig. 13), manual operation (gears released).



MOUNTING THE TRANSMISSION COMPONENTS (fig. 14-17)

The transmission transfer mechanism connected to the lever allows the motor to be released from a remote position (without using the lever on the motor). The second activation point is located on the base of the frame (both to the left and to the right of the motor body) and this permits the use of different manual release systems:

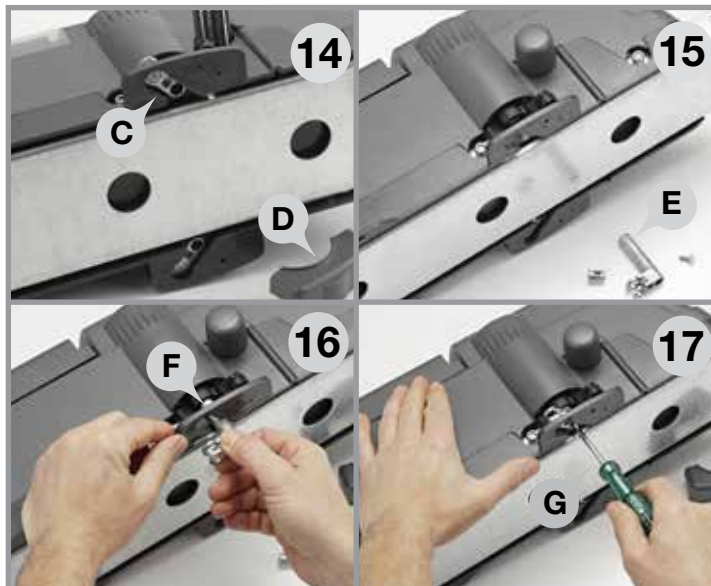
- 1) Using an 8 mm hexagonal key, operating from outside the garage, you pass the key through a hole drilled into the garage door panel (fig. 14).
- 2) Using a steel manual release cord (with sheath) attached to the door handle (optional kit, see paragraph "Manual release cord").

Note: The two-sided release activation mechanism allows garage door manufacturers to build the release transmission mechanism into the door itself using rigid bars.

Operations to carry out before installing the motor on the door panel.

To use the remote transmission mechanism (for the different systems) you must first install the alloy transmission component "C" fig. 14 supplied with the kit.

- According to the characteristics of the system work out the best position for the transmission component right or left.
- Remove the protective carter "D" fig. 14.
- Insert the alloy component "E" fig. 15 in the chosen position and fasten it to the rotating pin "F" fig. 16 (internal hexagon) using the supplied self-tapping screw, then tighten down "G" fig. 17.
- Make sure the component is correctly fitted and rotates freely by rotating the manual manoeuvring lever integrated into the motor's carter.



OPTIONAL MANUAL RELEASE CORD (fig. 18-25)

Mounting the manual release cord

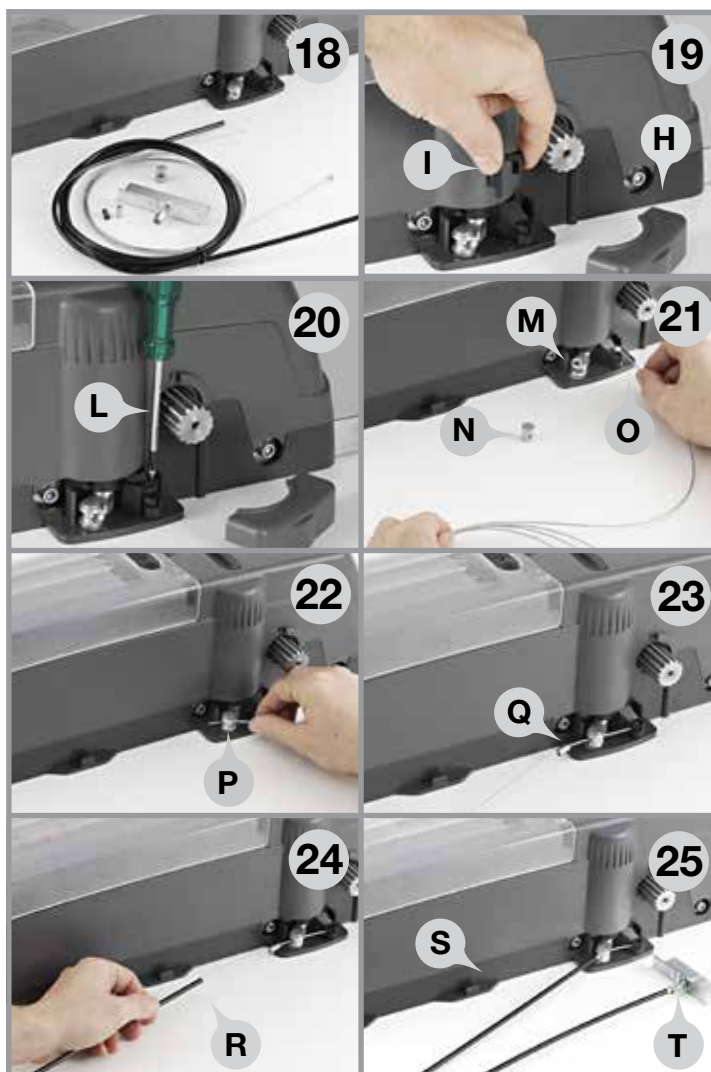
- According to the characteristics of the system work out the best position for the manual release cord right or left.
- Remove the protective carter "H" fig. 19.
- Insert the plastic travel limit component "I" fig. 19 into its seat and fasten down using the supplied self-tapping screw "L" fig. 20.

Note: The travel limit component is indispensable if you need to relock the door externally using a door handle attached to a manual release cord. Once the travel limit component has been inserted the manual release lever integrated into the motor's carter can only rotate partially (about 45°).

- Insert the sheath holding cylinder "N" into its seat on the alloy transmission component "M" fig. 21.
- Insert the round head of the cable "O" fig. 21 into its relative seat.
- Pass the cable through the eye hole on the sheath holding cylinder "P" fig. 22.
- Slide the ferrule "Q" fig. 23 on to the steel cable.

Note: The use of the ferrules is fundamental for the correct working order of the cord operated release system.

- Lubricate the cable to improve the sliding effect, pass the sheath "R" fig. 24 over the steel cable until it reaches the cylinder.
- Position the sheath in the holding slots "S" fig. 25 on the side of the motor.
- Fasten the cord holding plate "T" fig. 25 near to the fixed part of the internal door handle making sure that the setting elements are positioned in such a way so as to allow to adjust the tension of the cord afterwards.
- Choose the route for the cord and fasten it to the door panel.
- Make sure the steel ferrules have been inserted and then pass the cord through the setting nuts and fasten it to the cord holding plate, pull the cable tight until it reaches the mobile part of the door handle. Fasten the cable to the handle.
- Tighten the cable by rotating the setting nuts.
- Carry out several trials releasing and blocking the motor from inside and outside the garage door.
- If your installation requires a double motor, fit the second manual release cord by following the instructions in the same sequence.



ELECTRONIC PROGRAMMER

Electronic control unit for dc motors with an incorporated encoder and radio receiver card, which allows the memorisation of **300 user codes**. The "rolling code" type decoder uses **433.92 MHz (S449)** transmitters. The motor rotation speed is electronically controlled, starting slowly and increasing in speed; the speed is reduced as it nears the travel limit so as to enable a controlled smooth stop. Programming is carried out using one button and allows you to set the system, the current sensor and the entire door travel distance. The intervention of the anticrush/antidrag sensor during the closing and opening stages causes travel direction inversion.



• 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 controlled load output (binding post 22) is aimed at reducing battery power consumption (if they are installed) during blackouts; photocells and other safety devices should be connected to this output.

• When a command is received, via radio or via wire, the electronic programmer routes voltage to the **CTRL 30 Vdc** output. It then evaluates the state of the safety devices and if they are at rest it will activate the motor.

• Connecting devices to the **controlled output** contact also allows you to carry out the autotest function (enabled using DIP 5) and check that the safety devices are functioning correctly.

• 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.

• 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 agents.

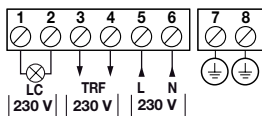
• The terminal wires must be positioned in such a way that both the wire and the insulating sheath are tightly fastened (a plastic jubilee clip is sufficient).



ELECTRICAL CONNECTION 230 Vac

- Press the lever "A" and remove the transparent panel (fig. 26).
- Remove the screws "B" and "C" using a posidrive screwdriver (fig. 27).
- Insert a flat screwdriver into the slot "D", release the catch and remove the electronic programmer protective panel "E" (fig. 28).
- Remove the extractable terminal block "F" (courtesy light connection) and store the panel in a safe place.
- Connect the control and security device wires by passing them through the cable clamp "G" fig. 30 then following the wiring diagram on the following page.
- Pass the power supply wires through the cable clamp "I" or insert the pipe clamp holder "H" supplied with kit, insert the pipe clamps and wire the cable to binding posts 5 and 6 connect the earth wire to one of the two binding posts marked with the symbol ⊕.

- connect the neutral to binding post **N**
- connect the earth to binding post **⊕**
- connect the live to binding post **L**



COURTESY LIGHT CONNECTION 230 Vac 500 W

To connect a single **230 V max 500 W** garage light, run the cables to binding posts 1 and 2.

MOTORS AND COURTESY LIGHT CONNECTION 24 Vdc

The motor "M1" and its relative **24 Vac** courtesy light are pre-wired. To add a second motor without on board electronics (see fig. 7) run a channel made of isolating material containing the four wires that are to be connected to the binding posts **9** and **10** indicated by the word "M2" (the black wire from the second motor to the symbol -; the red wire from the second motor to the symbol +) for the motor and to binding posts "17" and "19" for the courtesy light.

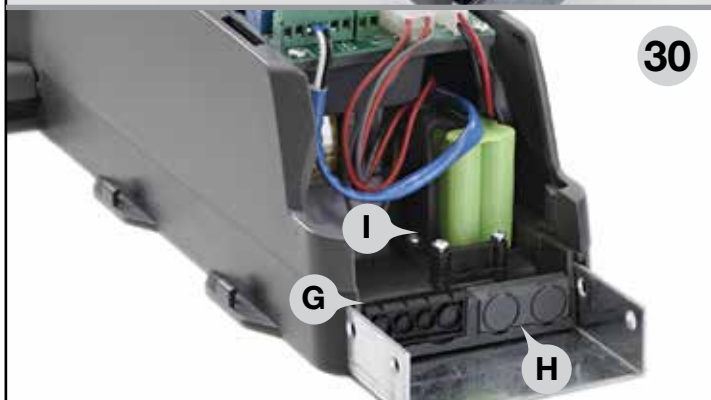
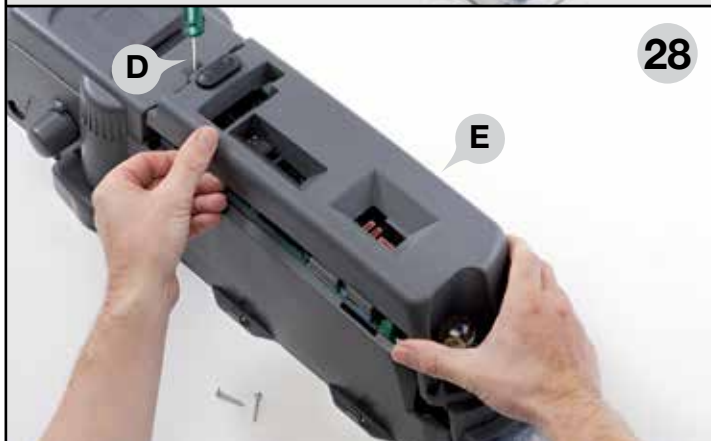
Selecting one or two motors is carried out using **dip 3** (fig. 31, page 23).

ENCODER CONNECTION

Blue Blue cable **Green** Green cable
Grey Grey cable **Yellow** Yellow cable

The encoder is also pre-wired. If you need to disconnect the encoder (for maintenance interventions etc.) you must replace the cable following the colour order of the wires as shown on the card.

- Once the electrical connection is complete; replace the courtesy light terminal block, replace the protective panel, fasten down the screws and replace the transparent cover.



TERMINAL BOARD CONNECTIONS

- 17-18 **LC/ELS** Kerti világítás kimenet **24 Vdc 15 W** vagy kimenet egy 12V elektromos zárhoz. Funkció választása: **DIP 6**.
- 19 CMN közös pont minden bemenethez és kimenethez
- 20 **LAMP** 24 Vdc kimenet figyelmeztető fényekhez, 25 W villogó jelzés (50%), 12,5 W folyamatos világítás esetén
- 21 30Vdc kimenet külső eszközök tápellátására
- 22 30Vdc kimenet, vezérelt külső terhelések tápellátására
- 23-24 CMN közös pont minden bemenethez és kimenethez
- 25-26 CMN közös pont minden bemenethez és kimenethez
- 27 **FTCI (N.C./8.2 kΩ)⁽²⁾** biztonsági és vezérlő eszközök bemenete. A kontaktus nyitása záraskor a menetirány megváltozását eredményezi.
- 28 **TB (N.C./8.2 kΩ)⁽²⁾** blokkolás gomb bemenete (a kontaktus nyitása blokkolja a kapu mozgását újabb parancs érkezéséig).
- 29 **TD** (NO kontakt) dinamikus gomb bemenete
- 30 **CSP (N.C./8.2 kΩ)⁽²⁾** biztonsági szegély bemenet. A kontaktus nyitása zárás közben is megszakítja a kapu mozgását.
- 31-32 **CH2** (N.O. potenciálmentes kontakt, második rádió csatorna
- 33 Feszültség kimenet **0 Vdc** digitális biztonsági szegélyhez
- 34 Feszültség kimenet 12 Vdc digitális biztonsági szegélyhez
- 35 **CSPF** jelzés bemenet a digitális biztonsági szegélytől
- 36 Antenna kábel árnyékolás
- 37 Antenna kábel vezető (amennyiben külső antennát szerel, használjon **RG58** koaxiális kábelt **50Ω** impedanciával).
- 38 **EMRG1⁽⁴⁾** (N.O. contact) vészhelyzeti manőver input 1
- 39 **EMRG2⁽⁴⁾** (N.O. contact) vészhelyzeti manőver input 2
- 40 **CMN** közös pont a vészhelyzeti gombokhoz

Note⁽¹⁾ A külső eszközök tápláléllátás kimenete 5W terhelhetőségű
Note⁽²⁾ A kontaktus választás (N.C. or 8.2 kΩ) a hat digités kijelzőn fog

megtörténni (parameter "SC").

Note⁽³⁾ The special safety edge is disabled by default; to enable the function set the parameter "CSPF" to "1" in the menu.

Note⁽⁴⁾ These inputs are disabled by default; to enable the functions cut the two contacts "EM".

MINDEN NEM HASZNÁLT NC KONTAKTUST ÁT KELL HIDALNI és egyben a biztonsági eszköz teszt funkciót kikapcsolni (**TFTC – DIP 5**). Ha az **FTCI** tesztet be akarjuk kapcsolni az adó és a vevő oldalon is, akkor a fotocellákat a "**CTRL 30 Vdc**" kimenetről kell megtáplálni. Ha a teszt aktív, lesz egy 1 másodperces késleltetés a távvezérlő parancsa és az ajtó elindulása közt.

Kapcsolja be a tápfeszültséget és győződjön meg arról, hogy a visszajelző LEDek az alábbi állapotban vannak:

- **L1** Hiba akkumulátor bekötés **ki⁽⁵⁾**
- **L2** tápfeszültség **be**
- **L3** Digitális biztonsági szegély aktív **ki⁽⁶⁾**
- **L4** Távvezérlő kód programozás **ki**
- **L5** Visszafejtő fotocella aktív "**FTCI**" **be⁽⁷⁾**
- **L6** Stop bemenet aktív "**TB**" **be⁽⁷⁾**
- **L7** Biztonsági szegély bemenet aktív "**CSP**" **be⁽⁷⁾**
- **L8** Digitális biztonsági szegély állapot "**CSPF**" **be⁽⁷⁾**
- **L9** Indítási parancs aktív "**TD/CH1**" **ki**

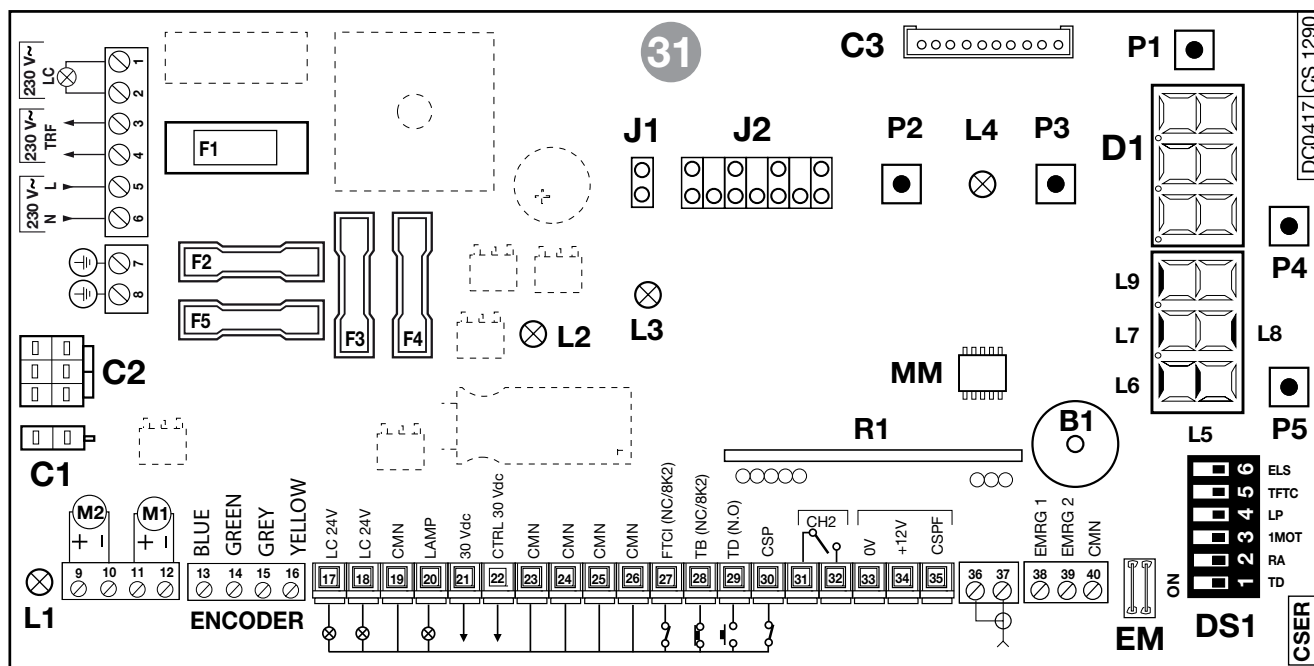
Note⁽⁶⁾ If this LED is "lit" invert the battery power cables immediately.

Note⁽⁶⁾ This LED is "lit" if the digital edge is connected and at rest.

Note⁽⁷⁾ The LEDs are "lit" when the relative safety device is inactive.

Check that the activation of the safety devices (those which have not been bridged) switch the corresponding LEDS off. If the **green power on LED "L2"** doesn't light up check the condition of the fuses and the power cable connection at the transformer. If **one or more of the safety LEDS** do not light up check the contacts of the relative security devices and check that the unused safety device contacts have been bridged.

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



Collegamento encoder a 4 fili

Connecting 4-wire encoder

Branchement encoder à 4 fils

Anschluss der Encoder mit 4 Drähten

Conexión encoder con 4 conductores

BLUE
GREEN
GREY
YELLOW

COLORE
CABLAGGI
Blue
Verde
Grigio
Giallo

CABLE COLOUR
CODE
Blue
Green
Grey
Yellow

COLORATION
DES CÂBLAGES
Bleu
Vert
Gris
Jaune

KABEL-
FARBEN
Blau
Grün
Grau
Gelb

COLORACIÓN
CABLEADOS
Azul
Verde
Gris
Amarillo

B1 Signal buzzer "via radio" mode

C1 Battery connection NiMH

C2 Transformer secondary connection

C3 Battery charger connection

CSER Serial connection (only for diagnostics)

D1 Six-segment LED display

DS1 Selection dip-switch

EM Emergency manoeuvre enable

F1 Fuse **3,15AT (230 Vac)** circuit protection)

F2 Fuse **10A** (motor power supply protection)

F3 Fuse **10A** (motor power protection during battery operation)

F4 Fuse **4A (24V)** circuit protection during battery operation)

F5 Fuse **4A (24V)** circuit protection)

J1 Jumper enabling remote transmitter memorisation

J2 Second radio channel selection jumper

MM Transmitter code memory module

P1 Programming button (PROG)

P2 Transmitter code cancellation button (DEL)

P3 Transmitter code memorization button (MEMO)

P4 Dynamic button "TD"

P5 Blocking button "TB"

R1 Radio frequency module, **433 MHz** for **S449** transmitters

PROGRAMOZÁSI FOLYAMAT (Vezérlő és áramerősség beállítás)



- Győződjön meg arról, hogy a biztonsági eszközök nyugalmi állapotban vannak, és hogy az elektronikus vezérlőegység kap tápellátást, ellenkező esetben nem tudja megkezdeni a programozást.

Dip-kapcsolók beállításai D1

FIGYELEM: Ha megváltoztatja a DIP kapcsolók állását, azokat rögzíteni kell: nyomja meg a **"PROG"** gombot, "dIP" felirat megjelenik a kijelzőn, jelezve, hogy a változtatások mentve lettek.

Dinamikus parancs TD/CH1 (DIP1)

Dip 1 "ON" /BE/ = "nyitás-zárás" dinamikus parancs

Menetirány változtatása csak a zárás alatt.

Dip 1 "OFF" /KI/ = "nyitás-stop-zárás-stop" dinamikus parancs



Automata zárás (DIP 2)

Dip 2 "ON" /BE/ = Automata zárás bekapcsolva

Dip 2 "OFF" /KI/ = Automata zárás kikapcsolva



Működés 1 vagy 2 motorral (DIP3)

Dip 3 "ON" = Egy motoros működés

Dip 3 "OFF" = Két motoros működés



Figyelmeztető jelzőfény kimenet (DIP 4)

Dip 4 "ON" /BE/ = Villogó figyelmeztető jelzés

Dip 4 "OFF" /KI/ = Folyamatos figyelmeztető jelzés



FTCI teszt (DIP 5)

Dip 7 "ON" /BE/ = FTCI teszt aktív

Dip 7 "OFF" /KI/ = FTCI teszt kikapcsolva



Elektromos zár (DIP6)

Dip 6 "ON" = Elektromos zár engedélyezve

Dip 6 "OFF" = Elektromos zár tiltva



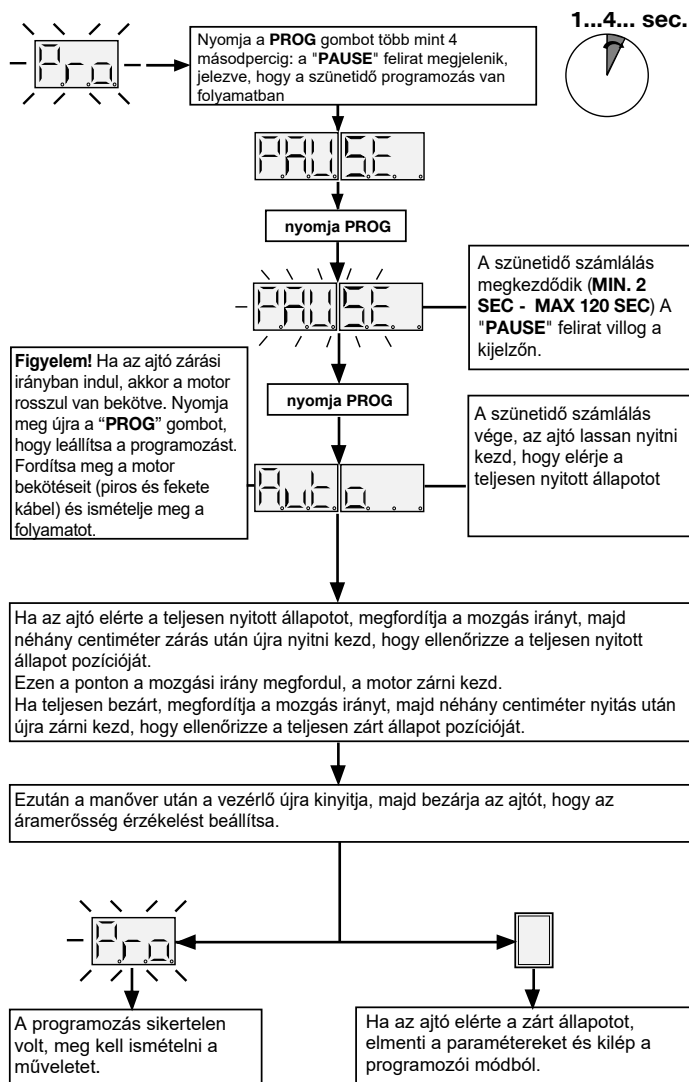
Ha az elektromos zár funkciót használja az LC24 (17-18-) kimeneten, akkor az nem használható kerti világítás kimenetként. Vezérel egy 12Vdc elektromos zárat az alábbiak szerint: mielőtt az ajtó nyitni kezd, aktiválódik, és bekapcsolva marad, amíg az ajtó néhány centiméterrel zárt állapot előtt van.

Ha az FTCI tesztet be akarjuk kapcsolni az adó és a vevő oldalon is, akkor a fotocellákat a "CTRL 30 Vdc" kimenetről kell meg táplálni. Ha a teszt aktív, lesz egy 1 másodperces késleltetés a távvezérlő parancsa és az ajtó elindulása közt.

Áramerősség érzékelés

A vezérlő figyelni a motor áramfelvételét, érzékeli az áramerősség növekedését, további biztonsági eszközként működve, ha a kapu útjában akadály van.

Ha az áramfelvétel magasabb a beállítottnál, a kapu automatikusan irányt vált.



AUTOMATIKUS ÚJRAPOZÍCIONÁLÁS

Ha a vezérlő encoder hiba miatt, vagy vezérlő újraindítás miatt, vagy kézi kioldás (pozíció vesztes) miatt, vagy motor probléma miatt hiba jelez, a hiba elhárulása utáni indítási parancsra (10 másodperc elővillogás után) automatikus újrapozícionálást hajt végre. A kapu lassan teljesen bezár, majd kétszer ismétli, mint programozásnál, hogy megtalálja a teljesen zárt pozíciót. Ettől kezdve a vezérlő újra normál üzemben van.

Újrapozícionálás alatt nem fogad el parancsot a vezérlő. A biztonsági bemenetek ezalatt is működnek.

- Az újrapozícionálás megszakításához nyomja meg a **"PROG"**, **"TB"** vagy **"TD"** gombot.

Ha kioldja a reteszt és kézzel mozgatja a kaput, majd visszazárja de nem az eredeti pozícióban, akkor a motor elveszti a kapu állapotát.

A következő alkalommal, amikor mozgási parancsot kap, a vezérlő végrehajt egy automatikus újrapozícionálást, hogy megtalálja a nyitott vagy zárt állapotot.



Figyelem: Ha a zárási manőver alatt akadály érzékelés történik, akkor a vezérlő az alábbiak szerint folytatja:

- 1) automatikus zárás engedélyezve
 - a kapu teljesen visszanyit
 - a szünetidő letelte után újra zárni kezd.
- 2) automatikus zárás tiltva
 - a kapu teljesen visszanyit
 - 20 másodperc szünetidőt tart
 - 10 másodperc figyelmeztető villogás után zárni kezd

Az újra zárási művelet háromszor vagy egyszer indul el a **"drA="** beállításnak megfelelően. Ha ezután is sikertelen a zárás, az ajtó nyitva marad a következő parancsig.

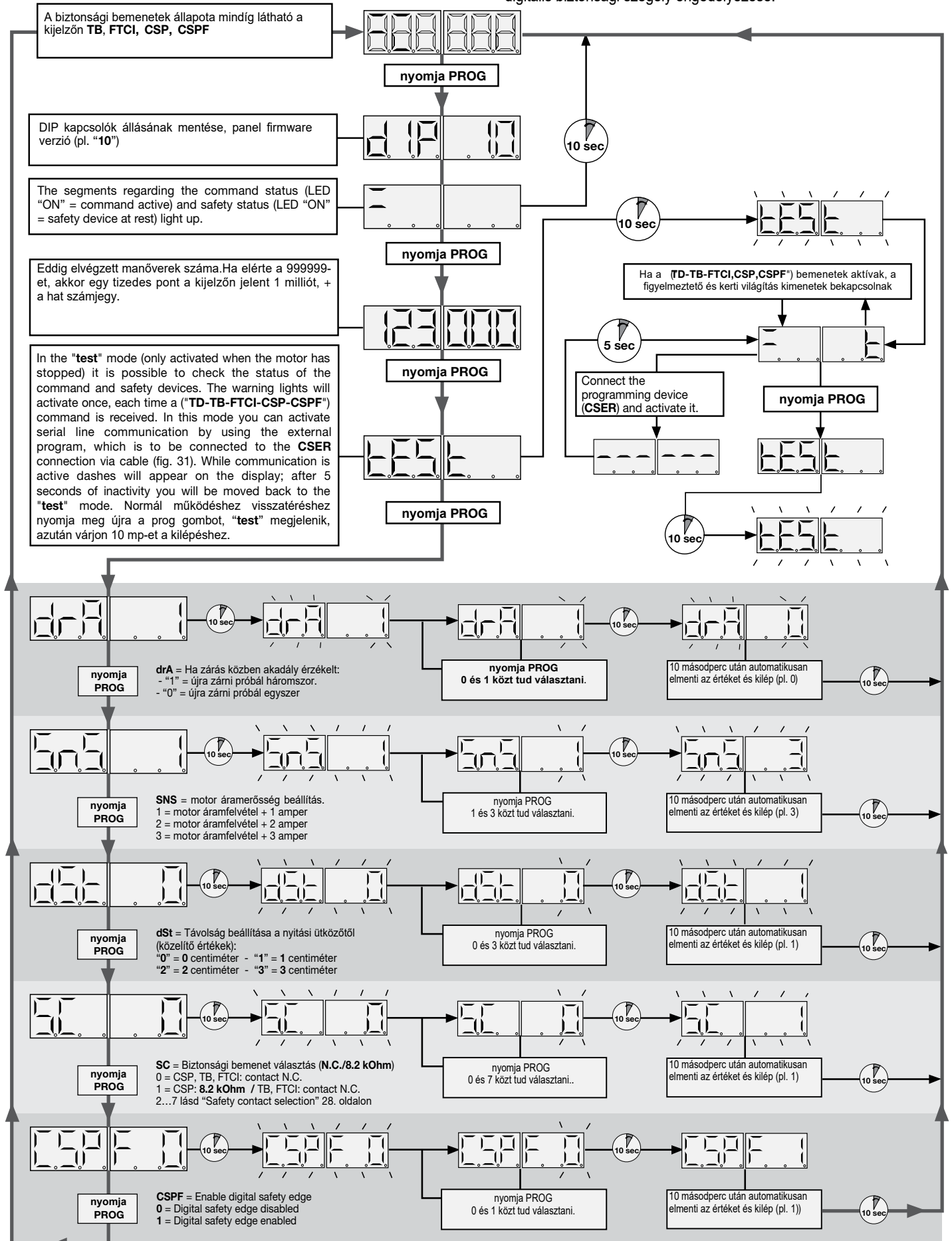
Az újrapozícionálási manőver alatt az áramerősség figyelés **"SnS"** érték eltérhet az ajtó megfelelő záródásának érdekében. A manőver végén visszaáll az eredetileg beállított értékre.

KIJELZŐ ÜZEMMÓDJAI

A **PROG** gomb segítségével a következő funkciókat éri el:

- dip kapcsolók állapotának mentése;
- parancs és biztonsági bemenetek állapotának kijelzése;
- eddig elvégzett manőverek száma;

- teszt módba belépés;
- akadály esetén az automata zárás engedélyezése, tiltása;
- áramerősség érzékelő szintjének állítása;
- nyitási útközző előtt megállás távolsága;
- biztonsági bemenet típusának választása (**N.C./8.2 kΩ**);
- digitális biztonsági szegély engedélyezése.



REMOTE CONTROL (fig. 6, 7 - pages 7, 8)

The system can be remotely activated using radio control devices; to set the two functions to channels **A-B-C-D** use the selection jumper "J2":

- position "1" function 1 selected, **SEQUENTIAL COMMAND**;
- position "2" function 2 selected, **CH2 (binding posts 31,32)**.

The sequential command may be set (dip "1") to "open-block-close-block" or "open-close".

Memory module (MM)

This is extractable, furnished with a non volatile EEPROM type memory and contains the transmitter codes and allows you to memorise up to **300 codes**. The programmed codes are maintained in this module even during blackouts.



Note: Before memorising the transmitters for the first time remember to cancel the entire memory content. If the electronic card has to be replaced due to failure, the module can be extracted from it and inserted into the new card. Make sure that the module is correctly inserted as shown on pages 7, 8.

Signal LEDs "L4" (pages 7, 8):

Flashing quickly: cancels a single code

Flashing slowly: memorises a single code

Permanently lit: memory full.

TRANSMITTER CODE MANAGEMENT

Memorising a channel (pages 7, 8):

- 1) Press and hold down button "**P3**" **MEMO**: The LED "**L4**" will flash slowly.
- 2) At the same time activate the transmitter which is to be memorised.
- 3) Hold down button "**P3**" **MEMO** until LED "**L4**" starts to flash again.
- 4) Release the "**P3**" **MEMO** button: The LED will continue to flash.
- 5) Activate the transmitter again (same transmitter, same channel; if the channel is different or it is a different transmitter the memorisation attempt will abort without success).
- 6) End of memorisation: the LED "**L4**" will remain lit for 2 seconds, indicating that the transmitter has been correctly memorised.

Note: It is not possible to memorise a code which is already in memory: if you attempt this, the LED will switch off when you activate the transmitter (point 2). Only after releasing the button "**P3**" **MEMO** will you be able to continue the memorising procedure. If after activating the transmitter for the first time you wait for more than fifteen seconds without activating the transmitter a second time the memorisation attempt will abort without success.

Cancelling a channel (pages 7, 8):

1. Press and hold down the button "**P2**" **DEL**: the LED "**L4**" will flash quickly.
2. Activate the transmitter channel which is to be cancelled.
3. The LED will remain lit for 2 seconds indicating that the transmitter has been cancelled.

Note: If the user that you wish to cancel is not in memory, the LED will stop flashing; only after releasing the button "**P2**" will you be able to continue the cancellation procedure.

For both the memorisation and cancellation procedures, if the button is released before activating the transmitter the procedure will abort.

C) Cancelling all user codes from memory (pages 7, 8):

- 1) Keep both buttons pressed down ("**P2+P3**") for more than four seconds.
- 2) LED "**L4**" will remain lit during the entire cancellation time (about 8 seconds).
- 3) LED "**L4**" switches off when the cancellation procedure has terminated.

Note: When the memory is almost full the time required to search for a user code could take up to 1 second from when the command was received. If led "**L4**" remains lit memory is completely full.

To memorise a new transmitter you will first have to cancel a code from memory.

D) Memorising ulterior channels via radio

- Memorisation can be activated by radio (without opening the receiver container) if jumper "**J1**" has been inserted (pages 7, 8).

- 1) Make sure that the jumper "**J1**" has been inserted (pages 7, 8).
- 2) Using a transmitter, in which at least one channel button "**A, B, C** or **D**" has already been memorised in the receiver, press the button in the transmitter as shown in figure.

Note: all the receivers within range when the channel button is pressed (and which have at least one of the transmitter channel buttons memorised) will activate their signal buzzer "**B1**" (pages 7, 8).



- 3) Press one of the channel buttons on the same transmitter. The receivers which do not contain that channel code will sound a five-second long "beep" and will then deactivate.

The receivers which contain the channel code will sound a one-second long "beep" and will enter the "**programming via radio**" mode.

- 4) Press the previously chosen channel buttons on the transmitter which you wish to memorise; the receiver will sound 2 "beeps" of half a second each after which the receiver will be ready to receive another code.
- 5) To leave the programming mode wait for 3 seconds without pressing any buttons.

The receiver will sound a five-second long "beep" and will then exit the programming mode.

Note: When the memory is entirely occupied the buzzer will sound 10 rapid "beeps" and will automatically leave the "**programming via radio**" mode. Led "**L4**" will remain lit on the receiver.

The same signal is given each time you try to enter "**programming via radio**" when the memory is full.

CONNECTING THE ANTENNA

Connect an **ANS400** tuned antenna using a coaxial cable **RG58** (impedance **50Ω**) with a maximum length of **15 m**.

FUNCTION MODES

1) Automatic

This is selected by enabling automatic reclosing (dip "2" in position "ON"). Starting from the completely closed position the sequential command starts a complete function cycle that terminates with automatic reclosing. Automatic reclosing starts after the programmed pause period has elapsed when the opening cycle has been completed or straight away after the intervention of a photoelectric cell (the intervention of a photoelectric cell causes the pause time to be reset).

During the pause time the symbol  will flash on the display and pressing the blocking button during this period will stop automatic reclosing and consequently stop the display from flashing.

Note: the courtesy light switches on each time a movement command is given (both via cable or via radio) and switches off 30 seconds after the manoeuvre has been completed.

2) Semiautomatic

Selected by deactivating automatic reclosing (dip "2" in position "OFF"). Work cycle control using separate opening and closing commands.

When the door has reached the completely open position the system will wait until it receives a closing command either via an external control button or via radio control, before completing the cycle.

3) Manual manoeuvring with released motors

Releasing the motors the door can be moved by hand; in this stage the programmer does not control the position of the door leaves and so when the next movement command is given (after the motors have been blocked again) automatic repositioning (according to necessity) will take place due to the positioning error.



Attention! If a command is given while the motor is released the symbol  will appear on the display.

4) Emergency manoeuvre

If the electronic programmer no longer responds to commands due to a malfunction you may use the **EMRG1** or **EMRG2** inputs to move the door manually.

The **EMRG1** or **EMRG2** inputs directly command the motor relays without passing through the logic control.

The door will be moved at normal speed and the movement direction will be as follows:

Command **EMRG1**: close

Command **EMRG2**: open

The inputs **EMRG1**: and **EMRG2**: are disabled by default: To enable them you must cut both contacts "**EM**" (see page 23)



Attention! During the emergency manoeuvre all safety devices are disabled and there is no door positioning control: release the commands before you are at the mechanical travel buffer. Only use the emergency manoeuvre in cases of extreme necessity.

After you have carried out an emergency manoeuvre the electronic programmer will lose the position of the door ( on the display) and therefore when normal operation is restored it will carry out an automatic repositioning manoeuvre (see page 24).

BATTERY POWERED OPERATION (OPTIONAL)

This device allows the propulsion unit to work during blackouts.

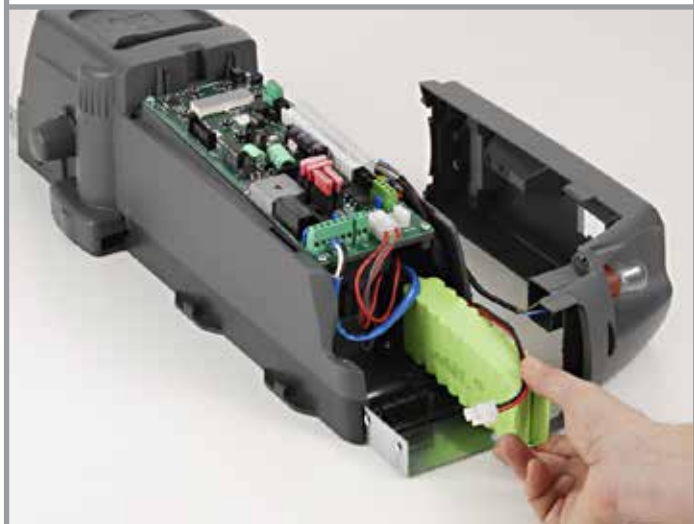
- An optional battery charger for **NiMH 24V** batteries that is managed by a dedicated micro controller can be inserted into the connector "**C3**". The control chip adjusts the voltage according to the condition of the batteries.



To avoid the risk of overheating only use batteries supplied by the manufacturer **SPN 999540**. If the batteries show signs of damage they must be replaced immediately.



The batteries must only be installed/removed by qualified personnel. Used batteries must not be thrown into domestic rubbish bins and they must be disposed of according to the local standards and regulations in force.



- To indicate that the programmer is working off battery power when the door is completely closed a hyphen  flowing around the perimeter of the display will appear.

If the battery is under charged a hyphen  flowing around the lower half of the display will appear. When the battery is almost completely flat the symbol  will appear and the programmer will be blocked.

- The unit returns to normal operation once the power supply brought back on line. To use the batteries again they must first be allowed to recharge. The battery charge time with batteries in good condition can take up to a maximum of **12 hours**.

If the time required is greater you should consider replacing the batteries. You are however advised to replace the batteries every three years.

- When the door has stopped the controlled external devices (**CTRL 30 Vdc**) do not receive power in order to increase the autonomy of the battery.

When a command is received however (via radio or via cable) the programmer sends power to the controlled external devices and checks their security status.

It follows therefore that the command will be carried out (security devices at rest) with a one second delay to give time to restore the correct operation of the devices.

If after this period a security device is found to be in alarm the command will not be carried out, power to the external devices will be cut off and the programmer will return to stand-by.

Note! If you wish to use an external receiver it must be wired to the binding post 21 (fig. 6, 7) otherwise a command sent **via radio** will not be able to activate the door.

- The self-sufficiency of the system when it is running on battery power is dependent on the ambient conditions and on the load connected at binding post 21 (power is always routed there during blackouts).



When the batteries are completely flat (during blackouts) the programmer will lose the position of the door and therefore when power returns (after the first command given) you will have to carry out the repositioning procedure (see page 24). For this reason you should avoid leaving the **electronic programmer without power** for lengthy periods (more than two days).

- You cannot enter the programming mode when running off battery power.
- During blackouts the battery supplies power to both the logic and the motor control parts of the programmer.

Signal LEDs

- L1** On the main board (fig. 31)
 - Lit when the battery is not properly connected during blackouts.
- L2** On the optional battery charger card.
 - Indicates the function mode as follows:
 - Off**: missing batteries or the electronic programmer is running off battery power (during a blackout)
During the first 20 seconds of operation from the start up of the electronic programmer the battery charger is blocked and will not supply any function indications;
 - Brief flashing**: voltage variation has been detected at the battery charger binding posts (e.g. when the batteries are being connected or removed);
 - Single flashes**: this repeats every 2 seconds indicating that the batteries are being topped up to maintain their level;
 - Remains lit**: the batteries are charging. The charge time can last from 5 to a maximum of 12 hours.

Battery check

With the door in the completely closed position and the display switched off: Check that LED "**L10**" (battery charging) flashes once; Switch off the power at the mains and make sure that the symbol  appears on the display. Give a movement command and measure the overall voltage for both batteries. The reading should be about **24 Vdc**.

MAINTENANCE



To use the **24 month** or **50000** manoeuvre guarantee, read the following notes carefully.

The motor does not normally require particular maintenance; in any case the **24 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 "**garage door**":

- correct lubrication (greasing) of the moving parts.

bekapcsolási kijelzések

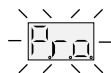


Látszik 2 sec:
"GLB249" = ECU model;



Jelzi a dip kapcsoló állás mentést és a firmware verziót

Riasztási kijelzések



A vezérlő nincs felprogramozva

Fel kell programozni a vezérlést.



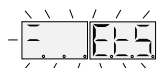
Pozíció vesztes

Normál üzemben jelzi, hogy ha indítási parancsot kap, 10 másodperces elő villogás után újrapozícionálási folyamat fog elindulni.



Biztonsági bemenet blokkolás programozás alatt

Akkor jelenik meg, ha egy biztonsági bemenet **N.C./8.2 kΩ** aktiválva lett (**TB, FTCl, CSP, CSPF**) programozás vagy automatikus újrapozícionálás alatt. Ha a jelzés megszűnt, a folyamat automatán folytatódik. Programozás alatti áramszünet is ezt okozza.



Biztonsági teszt hiba

Ellenőrizze a biztonsági bemenetek és az oda bekötött eszközök működőképességét. Probléma esetén cserélje ki az adott eszközt, vagy hidalja át a bemenetet (ha már nincs ott az eszköz) és kapcsolja ki a biztonsági tesztet (dip 5).



Motor táplálás hiba

A vezérlés parancsot ad a motornak, de a motor nem indul. Ellenőrizze a motor vezetékeit és az F2, F3 biztosítékokat. Adjon indítási parancsot a vezérlőnek, az újrapozícionálás elkezdődik; ha a motor továbbra sem indul, mechanikai vagy elektromos probléma van, keresse a szakszervízt.



Kioldott motor

Akkor jelenik meg, ha ki van oldva a motor, de indítási parancsot kap a vezérlő. Zátja vissza a motort, és adjon új indítási parancsot, az újrapozícionálás elindul.



Encoder hiba

Ha normál üzemben jelenik meg, akkor encoder hiba van. Ellenőrizze az encoder vezetékeket, és végezze el a motor újrapozícionálást. Ellenőrizze a DIP3 megfelelő beállítását.



Áramerősség mérő hiba

Ha a kapu nem mozog, akkor probléma van az áramerősség méréssel.

Működési kijelzések



Szünet idő programozás



Automatikus programozás folyamatban



Soros kapcsolat (CSER) aktív
(csak diagnosztika)



Nyitási folyamat



Blokkolás



Automata zárás előtti szünetidő
(ha be van kapcsolva)



Zárási folyamat



Áramerősség mérő értékének frissítése



Nyitás + áramerősség kompenzáció



Zárás + áramerősség kompenzáció



Teszt mód



Akkumulátoros üzem, feltöltött akkuk



Akkumulátoros üzem, lemerült akkuk



Blokkolva teljesen lemerült akkumulátor
miatt

Biztonsági bemenet típus választás

SC	TB	FTCl	CSP
0	N.C.	N.C.	N.C.
1	N.C.	N.C.	8.2 kΩ
2	N.C.	8.2 kΩ	N.C.
3	N.C.	8.2 kΩ	8.2 kΩ
4	8.2 kΩ	N.C.	N.C.
5	8.2 kΩ	N.C.	8.2 kΩ
6	8.2 kΩ	8.2 kΩ	N.C.
7	8.2 kΩ	8.2 kΩ	8.2 kΩ.



Il costruttore:

CARDIN ELETTRONICA S.p.A.
DICHIARA CHE L'APPARECCHIATURA DESTINATA AD ESSERE INSERITA IN
MACCHINE E NON FUNZIONANTE IN MODO INDIPENDENTE:

Nome dell'apparato	Motoriduttore GLB249
Tipo di apparato	Automazione a 24 Vdc per porte basculanti
Modello	GLB249M, GLB249S
Marchio	Cardin Elettronica
Anno di prima fabbricazione	2007

è conforme alle disposizioni delle seguenti direttive comunitarie:

- Direttiva 2004/108/CE (Compatibilità Elettromagnetica)
- Direttiva 2006/95/CE (Bassa Tensione)
- Direttiva 99/05/CE (B&TTE)

DICHIARA CHE L'APPARECCHIATURA È IDEATA PER ESSERE INCORPORATA IN UNA MACCHINA O PER ESSERE ASSEMBLATA CON ALTRI MACCHINARI PER COSTITUIRE UNA MACCHINA CONSIDERATA DALLA DIRETTIVA 2006/42/CE E SUCCESSIVI EMENDAMENTI. INOLTRE DICHIARA CHE NON È CONSENTITO METTERE IN SERVIZIO L' APPARECCHIATURA FINO A CHE LA MACCHINA NELLA QUALE SARÀ INCORPORATA E DELLA QUALE DIVENTERÀ COMPONENTE NON SIA STATA IDENTIFICATA E DICHIARATA LA CONFORMITÀ ALLE DISPOSIZIONI DELLA DIRETTIVA 2006/42/CEE E SUCCESSIVI EMENDAMENTI.

Cardin Elettronica si impegna a trasmettere, in risposta a una richiesta adeguatamente motivata delle autorità nazionali, informazioni pertinenti sulla quasi-macchina in oggetto.

[illegible]

San Vendemiano il 30/03/2012

Persona autorizzata a costituire la documentazione tecnica

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c.f. n. IVA 00681370268

Inq. A. Fiorotto (Responsabile tecnico R&D Laboratory)

Rappresentante legale dell'azienda

CARDIN ELETTRONICA SPA
Via Raffello, 36 31020 SAN VENDEMIANO
C.F. P. IVA 00681370268

Dott. Cristiano Cardin (Amministratore delegato)

The **CE conformity** declaration for Cardin products is available in original language from the site **www.cardin.it** under the section "Standards and Certification".
Les déclarations de **conformité CE** des produits Cardin sont disponibles dans la langue originale sur le site **www.cardin.it** dans la section "normes et certificats".
Die **CE-Konformitätserklärungen** für die Cardin-Produkte stehen in der Originalsprache auf der Homepage **www.cardin.it** im Bereich "Normen und Zertifizierung" zur Verfügung.
Las declaraciones de **conformidad CE** de los productos Cardin se encuentran disponibles en el idioma original en el sitio **www.cardin.it** en la sección "normas y certificaciones".

CARATTERISTICHE TECNICHE

- Alimentazione	V	230
- Frequenza	Hz	50
- Corrente nominale	A	0,5
- Potenza assorbita	W	100
- Ciclo di lavoro	%	70
- Velocità riduttore	giri/min	1,7
- Coppia	Nm	170
- Temperatura di esercizio	°C	-20...+55
- Grado di protezione	IP	54

Dati motore:

- Alimentazione motore	Vdc	24
- Potenza massima assorbita	W	120
- Corrente assorbita nominale	A	2

Ricevente incorporata:

- Frequenza di ricezione S449	MHz	433.92
- Numero di canali	N°	4
- Numero di funzioni gestibili	N°	2
- Numero di codici memorizzabili	N°	300

TECHNICAL SPECIFICATIONS

- Power supply	V	230
- Frequency	Hz	50
- Current input	A	0,5
- Power input	W	100
- Duty cycle	%	70
- Shaft revolutions	revs/min	1,7
- Torque	Nm	170
- Temperature range	°C	-20...+55
- Protection grade	IP	54

Motor data:

- Motor power supply	Vdc	24
- Maximum power yield	W	120
- Nominal current yield	A	2

Incorporated receiver card:

- Reception frequency S449	MHz	433.92
- Number of channels	Nr.	4
- Number of functions	Nr.	2
- Number of stored codes	Nr.	300

CARACTÉRISTIQUES TECHNIQUES

- Alimentation	Vac	230
- Fréquence	Hz	50
- Courant nominal	A	0,5
- Puissance absorbée	W	100
- Facteur de marche	%	70
- Vitesse d'entraînement	m/min	1,7
- Couple maxi.	Nm	170
- Température de fonctionnement	°C	-20...+55
- Indice de protection	IP	54

Caractéristiques du moteur

- Alimentation du moteur	Vdc	24
- Puissance maximum absorbée	W	120
- Courant nominal absorbé	A	2

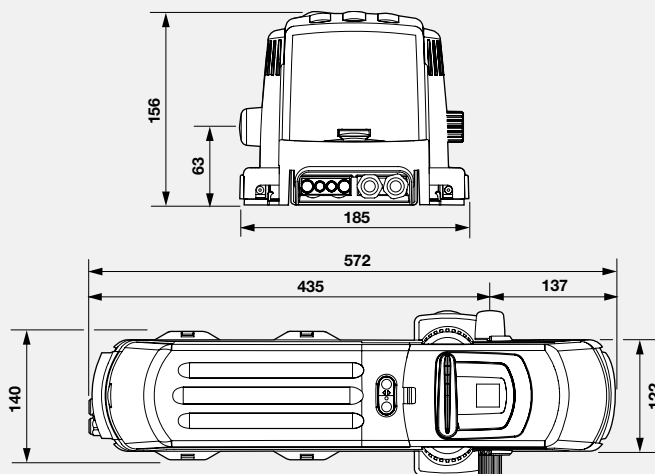
Récepteur incorporé

- Fréquence de réception S449	MHz	433.92
- Nombre de canaux	Nbre	4
- Nombre de fonctions disponibles	Nbre	2
- Nombre de codes mémorisables	Nbre	300

DIMENSIONI D'INGOMBRO - EXTERNAL DIMENSIONS

DIMENSIONS D'ENCOMBREMENT

AUSSENABMESSUNGEN - DIMENSIONES MÁXIMAS



TECHNISCHE DATEN

- Stromversorgung	Vac	230
- Frequenz	Hz	50
- Nennstrom	A	0,5
- Aufnahmeleistung	W	100
- Einschaltdauer	%	70
- Getriebsgeschwindigkeit	dreh./min	1,7
- Drehmoment	Nm	170
- Betriebstemperatur	°C	-20...+55
- Schutzgrad	IP	54

Motordaten

- Motorstromversorgung	Vdc	24
- Abgegebene Höchstleistung	W	120
- Nennstromaufnahme	A	2

Eingebauter Empfänger:

- Empfangsfrequenz S449	MHz	433.92
- Anzahl Kanäle	Nr.	4
- Anzahl Funktionen	Nr.	2
- Anzahl speicherbare Codenummern	Nr.	300

DATOS TÉCNICOS

- Alimentación	Vac	230
- Frecuencia	Hz	50
- Corriente nominal	A	0,5
- Potencia absorbida	W	100
- Intermitencia de trabajo	%	70
- Velocidad de arrastre	m/min	1,7
- Par máx.	Nm	170
- Temperatura de funcionamiento	°C	-20...+55
- Grado de protección	IP	54

Datos motor:

- Alimentación motor	Vdc	24
- Potencia máxima absorbida	W	120
- Corriente nominal absorbida	A	2

Receptor incorporado:

- Frecuencia de recepción S449	MHz	433.92
- Número de canales	N°	4
- Número de funciones gobernables	N°	2
- Número de códigos almacenables	N°	300



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