



Latest version of this manual

IP2479EN • 2025/12/05

Ditec



Ditec NeoS Green

Sliding gates

(translation of the original instructions)

GENERAL SAFETY INSTRUCTIONS



WARNING! Important safety instructions • Follow the instructions carefully • Failure to observe the information given in this manual may lead to serious injury or serious damage to the equipment • Keep these instructions for future reference.



WARNING! Before carrying out any cleaning or maintenance operations, disconnect the power supply. This manual and the manuals of any accessories can be downloaded from the website: www.ditecautomations.com

USER SAFETY INSTRUCTIONS

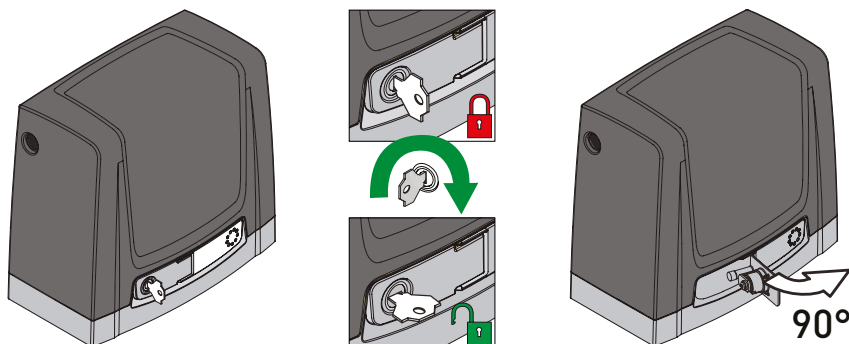
These warnings are an integral and essential part of the product and must be supplied to the user. Read them carefully as they contain important indications for safe installation, use and maintenance • Keep these instructions and pass them on to anyone else who uses the system • This device must only be used for the specific purpose for which it was designed; any other use is to be considered improper and therefore dangerous. The manufacturer cannot be held responsible for any damage caused by improper, incorrect or unreasonable use • Do not work near hinges or moving mechanical parts. Do not enter within the operating range of the motorised door or gate while it is moving. Do not obstruct the movement of the motorised door or gate, as this may lead to a dangerous situation • Only lock and release the door wings with the motor switched off. Do not enter within the operating range of the motorised door or gate • When working in "hold-to-run" mode, the relative command devices must be positioned so as to ensure a direct, complete view of the door or gate during operations, far away from moving parts, at a minimum height of 1.5 m, and not accessible by the public • The motorised door or gate may be used by children over the age of 8 and people with a reduced physical, sensorial or mental capacity, or without the necessary knowledge and experience, as long as they are supervised or have received instructions regarding safe use and the inherent risks • Children must be supervised to ensure they do not play with the device itself, nor play or remain within the operating range of the motorised door or gate. Keep the remote controls and/or any other control device out of the reach of children, to avoid any accidental activation of the motorised door or gate • The cleaning and maintenance tasks that are the responsibility of the user must not be carried out by unsupervised children • In the event of a fault or malfunctioning of the device, disconnect the power supply switch; do not attempt to make any repairs or intervene directly in any way. Any repairs or technical interventions must be carried out by qualified personnel. Failure to respect the indications above may lead to dangerous situations • To ensure the system works efficiently and correctly, it is essential to respect the manufacturer's indications and have scheduled maintenance on the motorised door or gate carried out by qualified personnel. In particular, regular checks must be made to ensure all the safety devices are working properly • Written evidence of all installation, maintenance and repair tasks must be made available to the user.

SAFETY PRECAUTIONS FOR TECHNICAL PERSONNEL

 This installation manual is intended for qualified personnel only • The installation, electrical connections and adjustments must be carried out by qualified personnel in compliance with Good Practice and in compliance with the regulations in force • Before starting with installation, check the integrity of the product • The packaging materials (plastic, polystyrene, etc.) must not be dispersed in the environment and must not be left within the reach of children as they are a potential source of danger • Do not install the product in an explosive environment or atmosphere: the presence of flammable gases or fumes constitutes a serious safety hazard • Make sure that the operating temperature range indicated in the technical data is compatible with the place of use • Before installing the motor drive, check that the existing structure, as well as the support and guide elements, have the necessary robustness and stability requirements, check the stability and sliding of the guided part and make sure that there is no risk of derailment or falling. Make all the structural modifications necessary in order to create safety clearance and to guard or isolate all the crushing, shearing, trapping and general danger areas. The manufacturer of the motor drive is not responsible for non-compliance with Good Practice in the construction of the frames to be motorised, as well as for any deformations that may occur during use • The safety devices (photocells, safety edges, emergency stops, etc.) must be installed taking into account the regulations and directives in force, the criteria of Good Practice, the installation environment, the operating logic of the system and the forces developed by the motorised door or gate • The safety devices must protect any crushing areas, shearing, conveying and danger in general, of the motorised door or gate • Apply the signs required by the regulations in force to identify the dangerous areas • Every installation must have the indication of the identification data of the motorised door or gate visible

 • Before connecting the power supply, make sure that the plate data corresponds to the data of the electricity distribution network • Provide an omnipolar switch/disconnector on the power supply network with a contact opening distance equal to or greater than 3 mm • Check that there is a suitable circuit breaker and overcurrent protection upstream of the system in compliance with Good Practice and the regulations in force • When required, connect the motorised door or gates to an effective earthing system carried out as indicated by the current safety regulations • Before delivering the system to the end user, make sure that the automation is properly adjusted to meet the functional and safety requirements, and that all the command, safety and manual release devices are working correctly • During the maintenance and repair operations, disconnect the power supply before opening the cover to access the electrical parts • The removal of the automation protection casing may only be carried out by qualified personnel • The handling of the electronic parts must be carried out by means of anti-static conductive arms connected to the ground. The motorisation device manufacturer disclaims all responsibility if components incompatible in terms of safety and good operation are installed • Only original spare parts must be used when repairing or replacing the device • The installer must provide the system user with all the information regarding the automatic, manual and emergency operation of the motorised door or gate, along with the operating and safety instructions.

MANUAL RELEASE PROCEDURE



Carry out locking and unlocking operations with the motor and wing stopped. When the panel is closed but the key is still horizontal, the release microswitch is open and all manoeuvres are prevented.

Machinery Directive

Pursuant to the Machinery Directive (2006/42/EC), the installer who motorises a door or gate has the same obligations as the manufacturer of machinery and as such must:

- Prepare the technical file that must contain the documents indicated in Annex V of the Machinery Directive (The technical file must be kept and placed at the disposal of competent national authorities for at least ten years from the date of manufacture of the motorised door);
- Draw up the EC Declaration of Conformity in accordance with Annex II-A of the Machinery Directive and deliver it to the customer;
- Affix the CE marking on the motorised door or gate, in accordance with point 1.7.3 of Annex I of the Machinery Directive.
- Ensure that the motorised door or gate complies with the safety regulations, installing the necessary safety devices.
- Carry out the safety test **S4**, modifying parameters **D8** and **D9** (if used) from the menu **P8**.
- Refer to the installation manual of the CS12MG control panel for the operating force adjustments, in compliance with EN12453 and EN12445.



This symbol indicates notes and/or information useful or the correct operation of the product.



This symbol indicates a note regarding safety, to which special attention must be paid.



This symbol indicates the default value of the parameters

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EC Declaration of incorporation

(Directive 2006/42/EC, Annex II-B)

We:

ASSA ABLOY Entrance Systems AB
Lodjursgatan 10
SE-261 44 Landskrona
Sweden

declare under our sole responsibility that the type of equipment:

Ditec NEOS500G - NEOS800G - NEOS1000G - NEOS1000GJ
Automations for sliding gates

complies with the following directives and as amended:

2006/42/EC	Machinery Directive (MD) for the following essential health and safety requirements: 1.1.2, 1.1.3, 1.2.1, 1.2.2, 1.2.3, 1.2.4.2, 1.2.6, 1.3.9, 1.4.3, 1.7.2, 1.7.3, 1.7.4, 1.7.4.1, 1.7.4.2.
2014/30/EU	Electromagnetic Compatibility Directive (EMCD)
2014/53/EU	Radio Equipment Directive (RED)
2011/65/EU	Restriction of Hazardous Substances (RoHS 2)
2015/863/EU	Restriction of Hazardous Substances (modification to RoHS 2)

Harmonised European standards which have been applied:

EN IEC 55014-1:2021	EN IEC 55014-2:2021
EN IEC 61000-6-1:2019	EN IEC 61000-6-3:2021
ETSI EN 301 489-1 V2.3.2:2019	ETSI EN 301 489-3 V2.3.2:2023
ETSI EN 300 220-1 V3.1.1:2017	ETSI EN 300 220-2 V3.2.1:2018
EN 60335-1:2012 +A11:2014	EN 60335-2-103:2015
+A13:2017 +A1:2019	
+A14:2019 +A2:2019	
+A15:2021 +A16:2023	

Other standards or technical specifications which have been applied:

EN 60529:1991+A1:2000+A2:2013

The production process guarantees the conformity of the device with the technical data sheet.

The equipment must not be put into service until the finished automatic entry system installed has been declared compliant with the Machinery Directive 2006/42/EC.

Relevant Technical Documentation Manager:

Matteo Fino - Ditec S.p.A.
Largo U. Boccioni, 1
21040 Origgio (VA)
Italy

Signed on behalf of ASSA ABLOY Entrance Systems AB by:

Place	Date	Signature	Position
Origgio	2025/12/05	Matteo Fino	CEO Ditec



UK Declaration of Conformity

We:

ASSA ABLOY Entrance Systems AB
Lodjursgatan 10
SE-261 44 Landskrona
Sweden

Declare under our sole responsibility that the types of equipment with names:

Ditec NeoS Green NEOS500G - NEOS800G - NEOS1000G - NEOS1000GJ
Automations for sliding gates

Complies with the following directives and their amendments:

- Supply of Machinery (Safety) Regulations 2016
- Electromagnetic Compatibility Regulations 2016
- Radio Equipment Regulations 2017
- The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (RoHS)

Harmonized European standards that have been applied:

EN IEC 55014-2:2021	BS EN IEC 55014-2:202	EN IEC 61000-6-1:2019
BS EN IEC 61000-6-1:2019	EN IEC 61000-6-3:2021	BS EN IEC 61000-6-3:2021
ETSI EN 301 489-1 V2.2.3	ETSI EN 301 489-3 V2.3.2	ETSI EN 301 489-17 V3.2.4
ETSI EN 300 220-1 V3.1.1	ETSI EN 300 220-2 V3.2.1	ETSI EN 300 328 V2.2.2
EN IEC 62311:2020		

Other standards or technical specifications that have been applied:

EN 60335-1:2012 + AC:2014 + A11:2014 + A13:2017 + A1:2019 + A2:2019 + A14:2019 + A15:2021
BS EN 60335-1:2012 + A15:2021 EN 60335-2-103:2015
BS EN 60335-2-103:2015 EN IEC 62368-1:2020 + A11:2020 + AC:2020
IEC 62368-1:2018 + COR1:2020

The manufacturing process ensures the compliance of the equipment with the technical file.

Responsible for technical file:

Matteo Fino
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Italy

Signed for and on behalf of ASSA ABLOY Entrance Systems AB by:

Place	Date	Signature	Position
Origgio	2025/12/05	Matteo Fino	CEO Ditec



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1. TECHNICAL SPECIFICATIONS

	NEOS500G	NEOS800G	NEOS1000G	NEOS1000GJ
Maximum stroke	20 m			
Maximum gate weight	500 kg	800 kg	1000 kg	
Gate speed	0.1÷0.25 m/s	0.1÷0.24 m/s	0.1÷0.19 m/s	
Thrust	500 N	800 N	1000 N	
Power supply	230 V~, 50-60Hz			120 V~, 50-60Hz
Power absorption	1.5 A		2 A	4 A
Fuse	F2 A		F2.5 A	F6.3 A
Intermittence	S2 = 30 min S3 = 60% (25°C)			
Cycles / hour *	26 (T= 25°C)			
Consecutive cycles	22 (T= 25°C)			
Service class	INTENSE (tested up to 150,000 cycles)			
Usage temperature	 -20°C	 +55°C	 -35°C	 +55°C With active NIO
Protection rating	IP24			
Control panel	CS12MG			
Motor output	24V  10 A max.			
Accessories power supply	24V  0.6 A max.			
Standby	< 0.5 W			
Radio frequency	default - 433.92 MHz 868.35 MHz			RCB50E receiver module included.
Radio codes storable	(code BIXMR2) 100 / 200			
Weight	12.7 Kg	14 Kg	14.6 Kg	
Noise level LpA	≤70 dB (A)			

* Indicative cycles consider a wing width of 6 m and factory settings (default speed of 20 cm/s). NeoS Green allows a max speed of 30cm/s (configurable). Cycle refers to an opening operation followed by a closing operation.

1.1 OPERATING INSTRUCTIONS

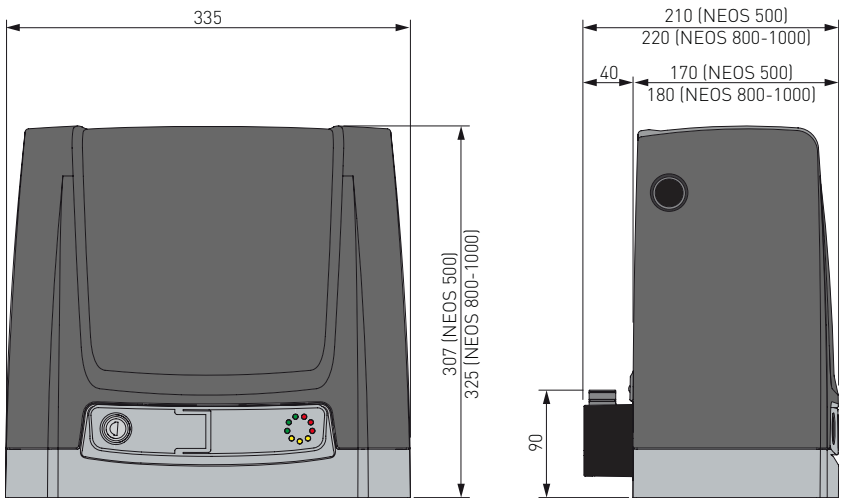
Applications: INTENSE (for apartment block, industrial and commercial entrances and car parks with vehicle access or access for intense pedestrian use).

- Service class, running times, and the number of consecutive cycles are to be taken as indicative. They have been statistically determined under average operating conditions and therefore not necessarily applicable to specific conditions of use.
- Each automatic entrance has variable elements such as: friction, balancing and environmental factors, all of which may substantially alter the service life as well as the performance of the automatic entrance or its components (including the automatic devices). The installer should adopt suitable safety conditions for each particular installation.

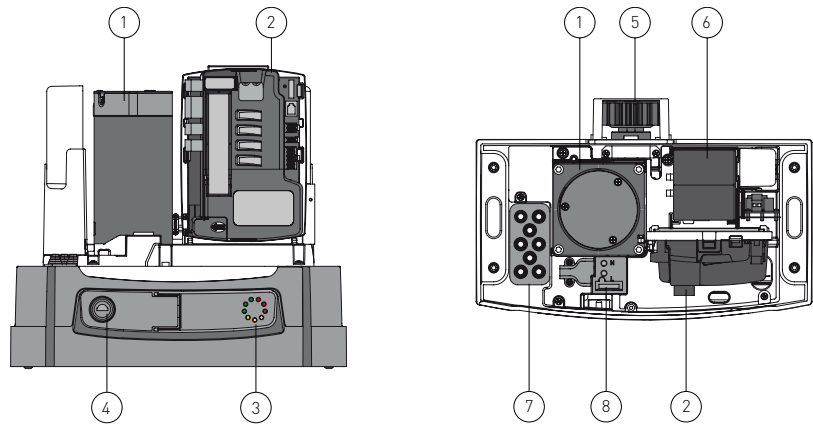


Unless otherwise specified, all measurements are expressed in mm.

1.2 DIMENSIONS



1.3 MAIN COMPONENTS



Ref.	Description
1	Motor
2	Control panel
3	Diagnostic circuit
4	Key release
5	Pinion
6	Battery kit
7	Cable inlet
8	Power supply terminal

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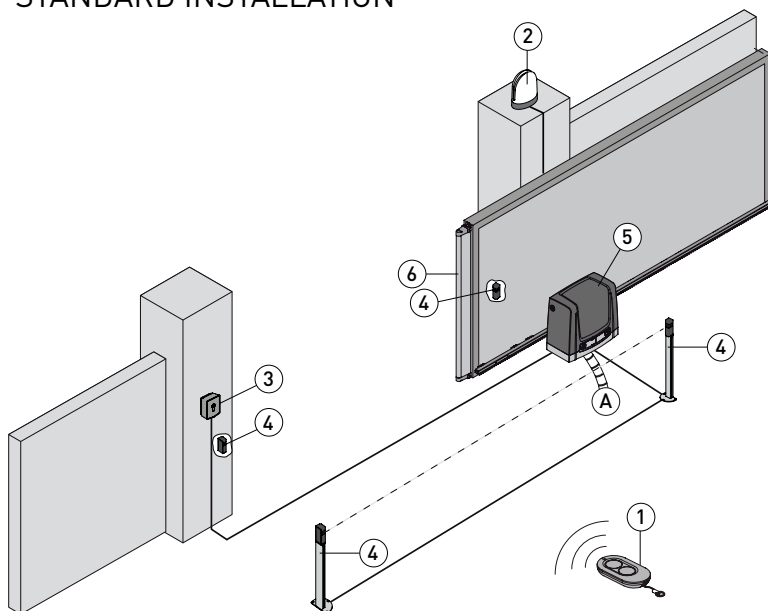
2. INSTALLATION

Check the stability of the wing (derailing and lateral falls) and the sliding wheels and that the upper guides do not cause any friction. The sliding guide must be fixed to the ground for the full length within doorway and must have no irregularities that could hinder the movement of the wing. The opening and closing stops must be fitted. If the gate has slits, make sure they are covered to prevent shearing points or install active safety edges on the columns.



Carry out the following installation operations with the power supply disconnected.

2.1 STANDARD INSTALLATION



Ref.	Description	Cable
1	Transmitter	/
2	Flashing light	2 x 1mm ²
	Antenna (integrated in the flashing light)	coaxial 58 Ω
3	Key-operated selector switch	4 x 0.5mm ²
	Digital combination wireless keypad	/
4	Photocells	4 x 0.5mm ²
5	NEOS actuator complete with control panel	3G x 1.5mm ²
6	Safety edge	2 x 0.5mm ²
A	Connect the power supply to a type-approved omnipolar switch (not supplied), with a contact opening distance of at least 3 mm. Connection to the mains must be via an independent channel, separated from the connections to the command and safety devices.	

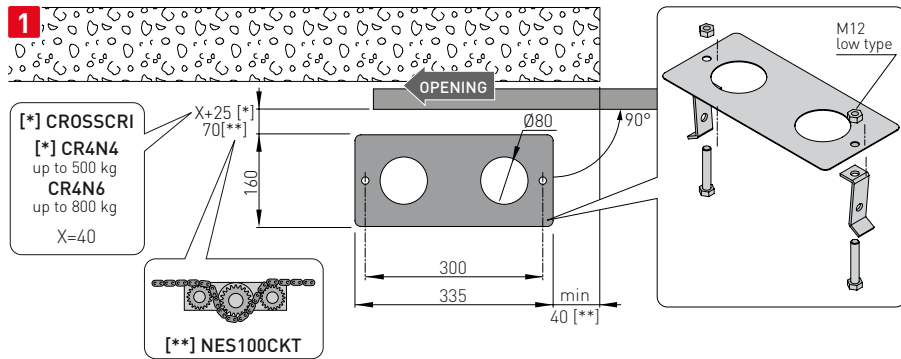


The given operating and performance features can only be guaranteed with the use of DITEC devices.

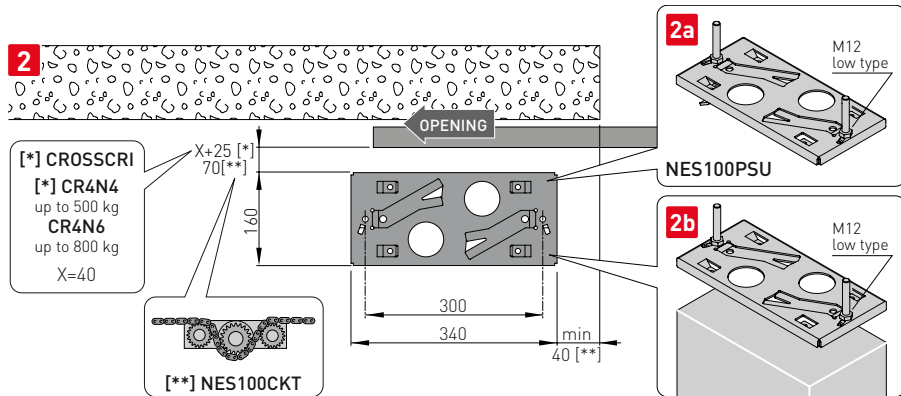
2.2 BASE PLATE POSITION

Prepare a concrete base:

1. Insert the anchor ties onto the base plate and fix them with the supplied nuts;



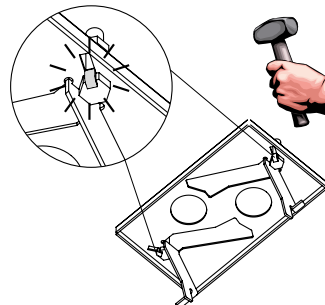
2. Insert the screws in the base plate, secure them with the nuts and then bend the metal tab to prevent the screw from coming out;



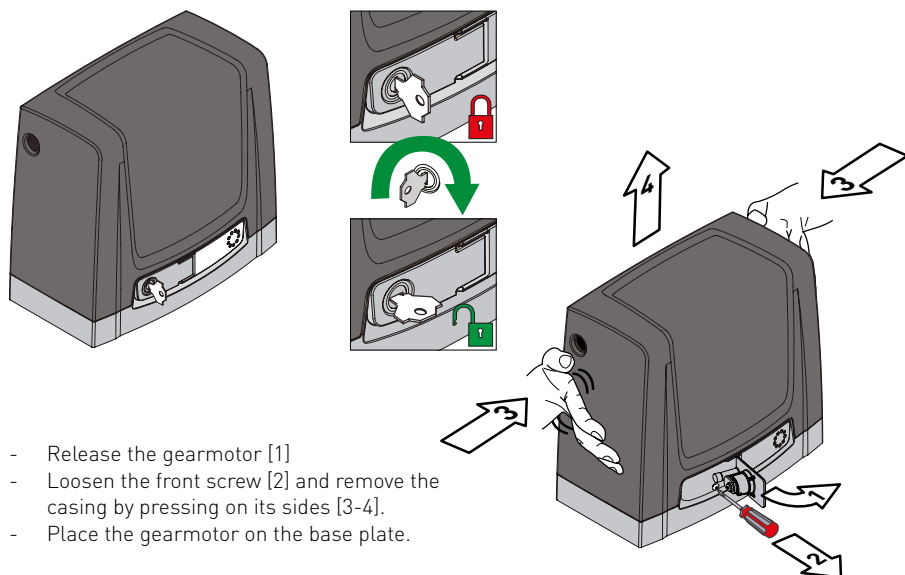
Extract the preformed ties with a downwards movement using a hammer to ensure correct anchorage to the concrete.

Prepare a concrete base with the anchor ties and base plate embedded, which must be level and clean, following the indicated measurements..

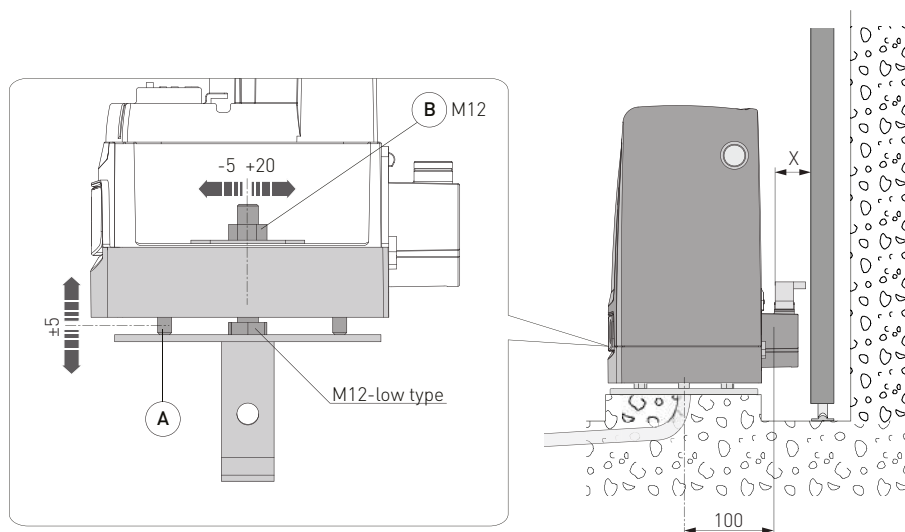
i If the concrete base has already been made, base plate [2] can be fixed using M8 plugs (not supplied).



2.3 GEARMOTOR INSTALLATION



- Release the gearmotor [1]
- Loosen the front screw [2] and remove the casing by pressing on its sides [3-4].
- Place the gearmotor on the base plate.



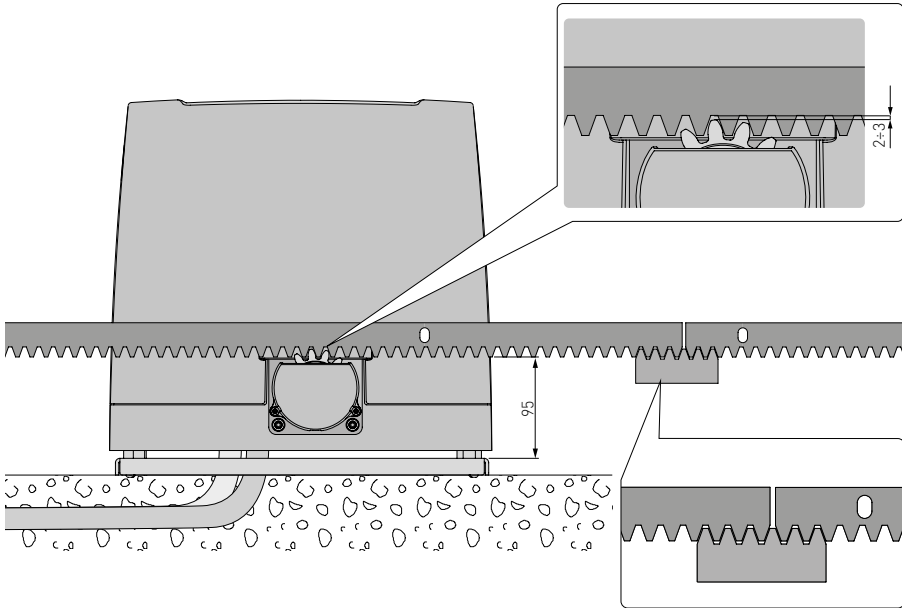
- Adjust the gearmotor horizontally by sliding it along the slots of the gearmotor base and vertically with four levelling screws [A].



During the vertical adjustment, keep the gearmotor slightly raised from the base plate so that the rack can be fixed and subsequent adjustments are possible

- When adjusting is complete, fix the gearmotor using [B].

2.4 RACK INSTALLATION



- Release the gearmotor (see the USER INSTRUCTIONS) and open the gate.
- Place the rack against the pinion and sliding the gate manually fix it along its entire length.



To make it easier to align the rods correctly, use a scrap piece of rack and rest it underneath the junction point, as shown in the figure detail.

- Once fixed, vertically adjust the gearmotor to give a play of about 2 to 3 mm between the pinion and the rack.
- Secure the gearmotor.
- Slightly lubricate the rack and pinion after assembly.
Manually check that the gate slides evenly and without friction.

2.5 OPERATION WITH VIRTUAL ENCODER

NeoS gearmotors do not require limit switches because they have a virtual encoder.

Mechanical opening and closing end stops must be installed.

The gate automatically slows when approaching the end stops.

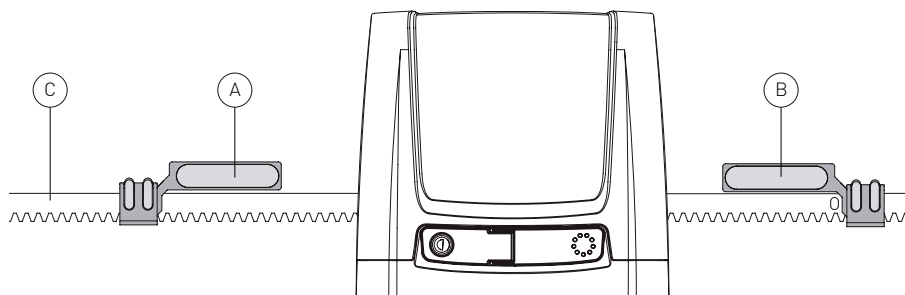


When the gate reaches the opening or closing limit stop, it reverses briefly to facilitate manual release of the gearmotor.

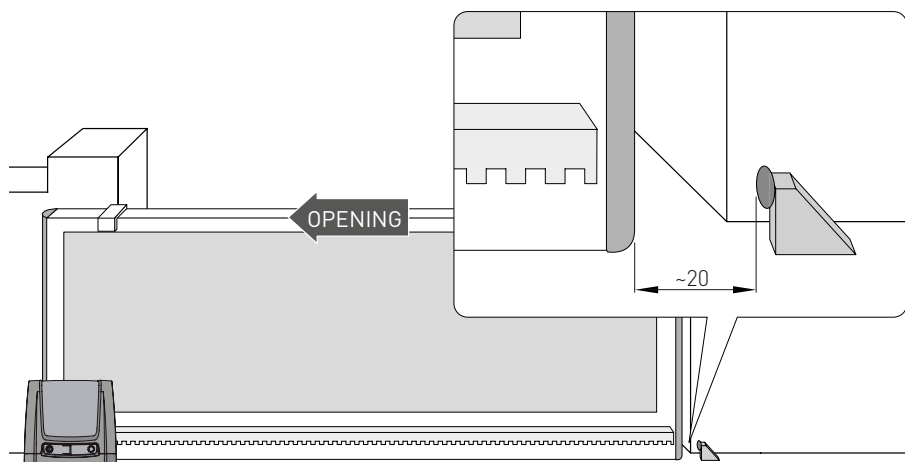
2.6 MAGNETIC LIMIT SWITCH INSTALLATION

For the installation of the limit switch kit, refer to the NES100FCM manual.

- Manually place the wing in the open position and fix limit switch brackets [A] and [B] on rack [C]. Repeat this operation with the wing in the closed position.

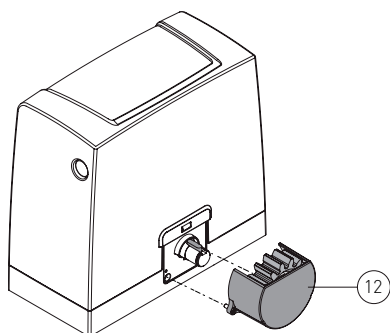


- After a few manoeuvres, adjust the position of limit switch brackets [A] and [B] so that the gate stops about 20 mm before reaching the opening and closing mechanical stops.

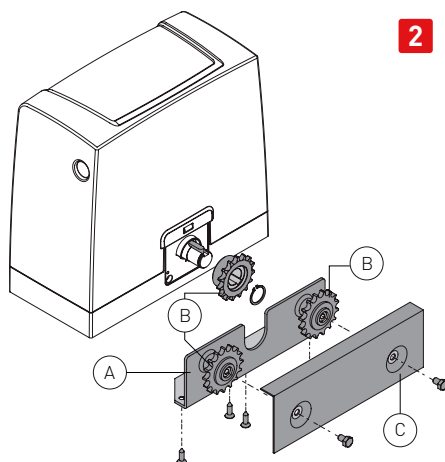


The limit switch kit is optional and is used to stop the gate before it reaches the opening and closing mechanical stops. With a limit switch installed, slowdown is carried out at regulated power to overcome possible friction.

2.7 CHAIN DRIVE KIT INSTALLATION



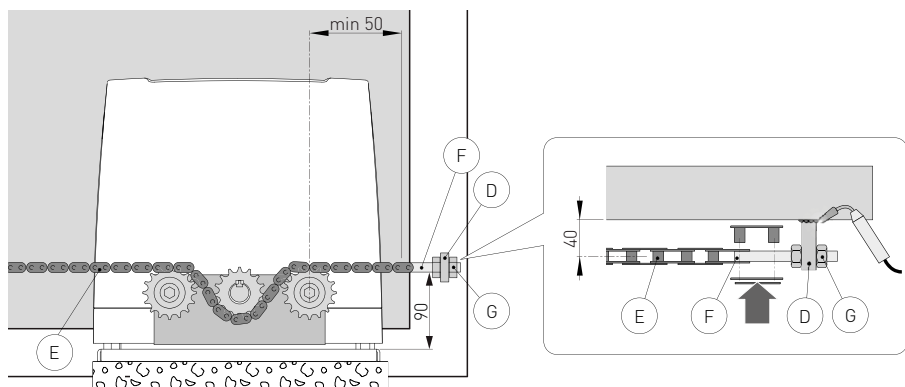
1



2

i Install the chain drive kit before securing the gearmotor to the base plate.

- Release the gearmotor.
- [1] Remove pinion [12] and fix pinion supporting plate [A] to gearmotor [2].
- Insert pinions [B] as shown in the diagram and pass the chain between pinions [3] by hand.
- Fix cover plate [C].



- Manually move the wing into the open position and fix brackets [D] on the wing as shown in the diagram and connect chain [E], which was previously assembled on the gearmotor, to tie rod [F] and fix it to bracket [D].
- Fix bracket [D] on the opposite side of the gate. Connect chain [E] to tie rod [F] and fix it to bracket [D] (cut the excess chain), permanently lock the chain with nuts [G].

i Make sure that the distance between the pinion centre and tie rod [F] is correct when the gate is fully open and closed.

- Tighten the chain [E] with tie rods [F].
- Slightly lubricate the chain [E] and pinions after assembly.



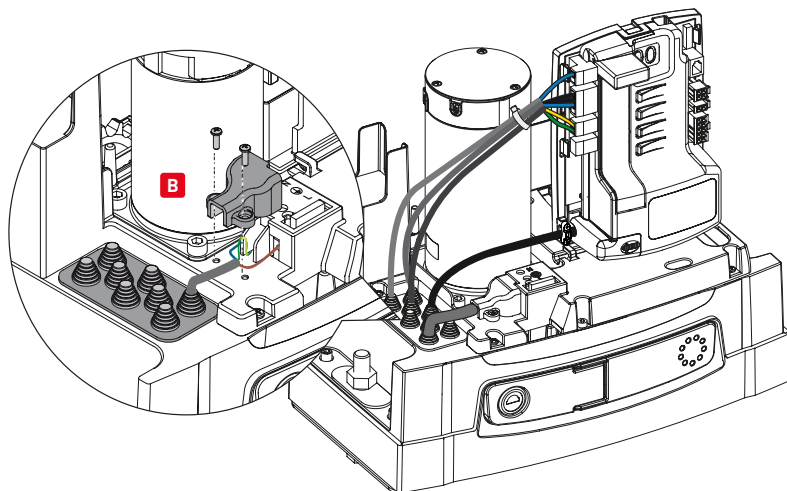
When the chain traction kit is fitted, the gearmotor drive direction is inverted.

3. ELECTRICAL CONNECTIONS

 Before connecting the power supply, make sure the plate data correspond to those of the mains power supply. An omnipolar disconnection switch with a contact opening distance of at least 3 mm must be fitted on the mains supply. Check there is an adequate residual current circuit breaker and overcurrent cut-out upstream of the electrical system. For the power supply, use a H05RN-F 3G1.5 type electric cable. Connect it to terminals L (brown), N (blue),  (yellow/green) inside the automation.



The maximum permitted wire section is AWG14 (2mm²).



Make sure the conductor  (yellow/green) is at least 30 mm longer than conductors L (brown) and N (blue)

Unsheathe the power supply cable in line with the terminal, and use a cable fastener to hold it in place (see ref. B). In order to comply with the essential requisites of the standards in force, reclose the cover once the connections with the terminal have been made.

In the external automation section, the connections to the mains power supply and any other low voltage wires (230V) must be made on an independent channel separated from the connections to the command and safety devices (SELV = Safety Extra Low Voltage).

The channel must penetrate the automation through the holes on the base plate by a few centimetres.

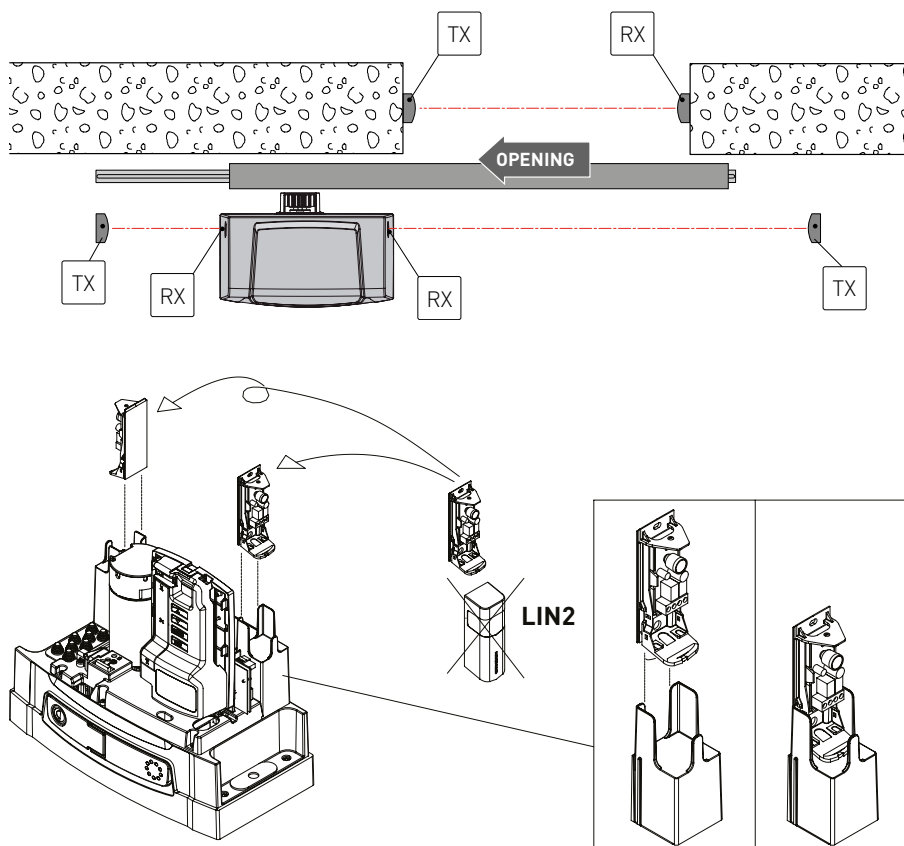


Make sure there are no sharp edges that may damage the power supply cable.

Make sure the mains power wires (230V) and the accessory wires (24V) are separated. The cables must be double insulated.

Unsheathe them in line with the relative connection terminals, and use cable fasteners (see ref. A) or straps (not supplied) to hold them in place.

3.1 INTERNAL PHOTOCELL INSTALLATION



It is possible to install additional photocells inside the Ditec casingNeoS Green, for the protection of both the closing and opening movement, using the LIN2 photocell.

Mount a receiver (RX) or a transmitter (TX) as shown in the figure.

The installation of the photocells must comply with the requirements of EN12453 and EN12445.



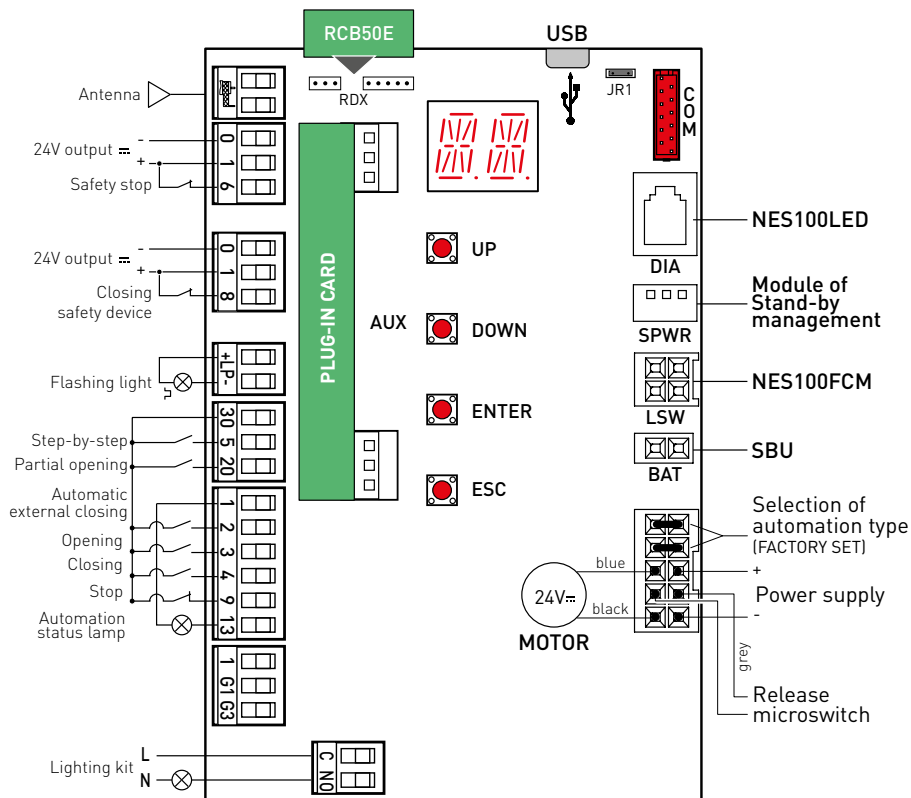
The receiver (RX) and the transmitter (TX) can also be installed at different heights (maximum difference 300 mm).

Connect the NC contact of the photocell to the safety contacts of the control panel.



For more information, refer to the photocell installation manual.

4. CS12MG BOARD



Always respect the L-N polarity and close all unused terminals.



- All devices connected to terminal **1** are disconnected after 10 min with **ES=0N**. If the devices must be permanently powered, set ES = OFF or connect them to 30.
- All devices connected to terminal **30** remain powered with **ES=0N**.

4.1 JUMPER SETTINGS

Jumper	Description	OFF	ON
JR1	Select mode display.	Display mode. The values and parameters are read-only.	Maintenance mode. The values and parameters present can be displayed and modified. The activation of maintenance mode is indicated by the right point on the display switching on fixed.

4.2 INPUTS



All devices connected to terminal **1** are disconnected after 10 min with **ES=ON**.
If the devices must be permanently powered, set ES = OFF or connect them to 30.
All devices connected to terminal **30** remain powered with **ES=ON**.

Function	Command	Description
N.O. CLOSING AUTOMATIC	30  2	Permanent closing of the contact enables automatic closing if AC → I-2 .
N.O. OPENING	30  3	Closing the contact activates an opening operation.
N.O. CLOSING	30  4	Closing of the contact activates a closing operation.
N.O. STEP-BY-STEP	30  5	When selecting BC → CS → I-5 , closing the contact activates a sequential opening or closing operation: opening-stop-closing-opening.  if automatic closing is enabled, the duration of the stop is selected via the selection BC → SS .
N.O. OPENING		The sequence "opening-stop-closing-opening" can be changed to "opening-stop-closing-stop-opening" BC → PP . When selecting BC → CS → I-3 , closing the contact activates an opening operation.
N.C. SAFETY STOP	1  6	The opening of the safety contact stops and prevents any movement.  To set different safety contact functions, refer to the settings of parameter PM → SM .
N.C. CLOSING SAFETY DEVICE	1  8	The opening of the safety contact triggers a reversal of the movement (reopening) during the closing operation. With BC → SO → ON , the opening of the contact prevents any operation when the automation is stationary. Selecting BC → SO → OF , with the automation idle, the opening of the contact prevents only the closing operation.
N.C. STOP	30  9	The opening of the safety contact causes the stop of the movement and automatic closure is disabled. In this state, the opening (1-3/1-20) and closing (1-4) controls function only if held in the pressed position, and the automation stops when the controls are released.
N.C. EMERGENCY STOP	30  9	Connect the opening and closing controls to terminal 9 instead of terminal 1 (9-3, 9-4, 9-20). The opening of the safety contact (for example connected to an emergency command) causes the movement to stop, further commands are disabled.
N.O. MAINTAINED ACTION CONTROL	30  9	Opening of contact 1-9 enables the operator present function: - opening with operator present 1-3 / 30-3; - closing with operator present 1-4 / 30-4; - partial opening with operator present 1-20 / 30-20.  Any safety devices, automatic closure and plug-in board in the AUX housing are disabled.
N.O. PARTIAL OPENING	30  20	The closure of the contact activates a partial opening operation. Once the automation stops, the partial opening command performs the opposite operation to the one performed before the stop.

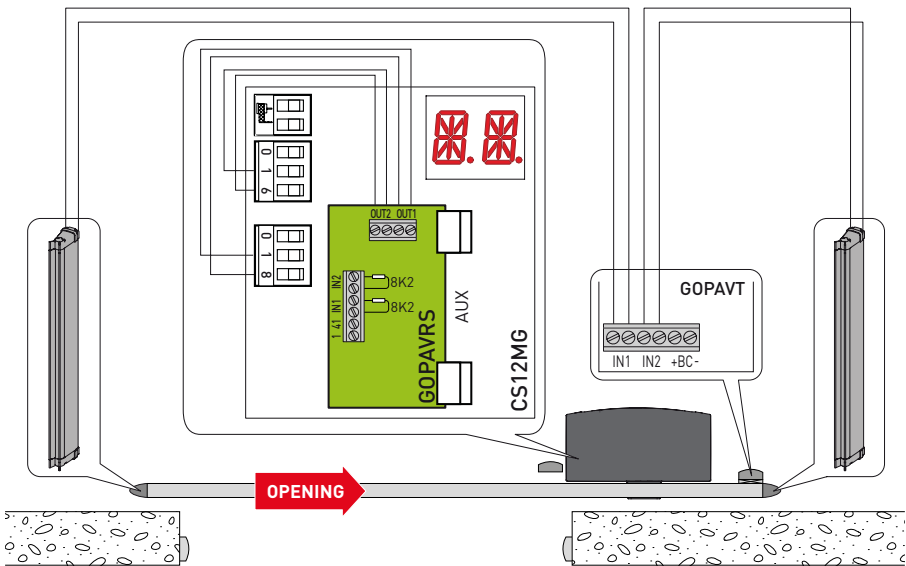
4.3 AUTO-CONTROLLED SAFETY EDGE INPUTS

Function		Command	Description
	SAFETY TEST		Place the GOPAVRS device in its seat for AUX plug-in cards. If the test fails, an alarm message appears on the display.
NO	SAFETY STOP	1  6	When selecting   →  →  , connect the output contact of the safety device to terminals 1-6 on the control panel (in series with the output contact of the photocell, if installed).
NC	CLOSING SAFETY DEVICE	1  8	When selecting   →  →  , connect the output contact of the safety device to terminals 1-8 on the control panel (in series with the photocell output contact, if installed).



GOPAVRS safety devices can only be used with  disabled.
Jumper all NC contacts if not in use. Terminals with the same number are equal.

4.3.1 Examples of installation - self-controlled safety edge



4.4 OUTPUTS AND ACCESSORIES

Function	Output	Accessories	Description
Accessories power supply		24 V~ 0.5 A Max	Output for power supply to external accessories. The accessories connected to this output will be disconnected with ES=ON (after 10 min.)
Accessories power supply		24 V~ 0.3 A Max	Output for power supply to external accessories. All accessories connected to this output will remain powered with ES=ON
Configurable output		24V~ 0.1 A Max	Automation status lamp (proportional) The light comes on when the automation is open BC → OL → ON The light goes off when the automation is closed. The light flashes with a variable frequency while the automation is operating BC → OL → OF .
Output configurable		FL24 24 V~ 25 W	Flashing light. The preflashing settings can be selected from the third level menu RE → WO and/or RE → WC .
		10mA max	G1 - General Purpose Input Operating of the G1 input can be selected from the menu RE → G1 . G3 - General Purpose Output Operating of the G3 output depends on the type of G1 input selection. SY - If G1 → SY , G3 acts as a sync output for parallel or interlocked automations. ES - Energy Saving mode is not available with this configuration. 41 - If the safety test (S9 or P9) is enabled on one or both inputs S9 and P9 , G3 acts as an output for the safety device test. 30 - In applications with solar panels, G3 operates as a permanent positive at 24 V max 10 mA to be connected with the NO contact to G1 (opening and/or step-by-step).
		230V~ 400W	External courtesy light. An external courtesy light that turns on for 180 seconds with every opening (total or partial), step-by-step and closing command can be connected. The C-NO terminal can be accessed by removing the cover on the left side at the base of the control panel. In order to comply with the essential requisites of the standards in force, reclose the cover once the connections with the terminal have been made. Use a double insulated cable and secure it using the supplied cable tie. The courtesy light output settings can be modified by selecting RE → US or RE → LU or RE → LG .
			Mains power supply, motor, release microswitch and automation wiring connection (factory settings)
		USB	It can be connected to a PC for firmware file updates, which can be downloaded from the website www.ditecautomations.com , with AMI-GO software using a Standard-A plug, or Micro-B plug USB cable. Disconnect the USB card and cable from the USB input only after setting RE → ED → NO. The display will show U1.
Radio antenna			When using the standard antenna, the following measures are recommended: 433 MHz (175 mm) - 868 MHz (90 mm). Use an RG-58 coaxial cable (50 Ω) to connect an external antenna (ref. GOL148REA)



The total sum of the current values delivered from the 24 V~ 1 and 30 outputs may not exceed 0.6 A.

Function	Output	Accessories	Description
Seat for plug-in accessories	AUX	BIXR2 BIXPR2 LAB9 LAN7S GOPAVRS	The control panel has a housing for plug-in control and safety cards. The action of the control card can be selected by selecting BC → AM . When using slot-in radio boards, remove the RDX module. The display will show RV .
Radio receiver module		RDX 	The control panel is equipped with a RCB50E radio receiver with a two-function jumper: open (433.92MHz) / closed (868.35MHz).

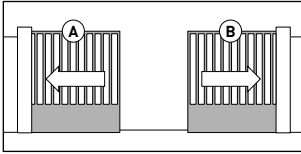


The storage module and the radio receiver must be inserted and removed with the power supply disconnected, and paying attention to the positioning direction.

Module memory remote controls	COM 	BIXMR2	COM - This allows the functioning configurations to be saved using the function SF → SV . The saved configurations can be recalled using the function SF → RC . COM - The storage module allows the remote controls to be stored. If the control panel is replaced, the storage module being used can be inserted in the new control panel.																					
DIA 			DIA - Connection of automation diagnostic LED. <table><tr><td></td><td>OFF</td><td>No power supply.</td></tr><tr><td></td><td>1 flash every 5s</td><td>Mains power supply present, but gate stopped and waiting for commands. Any external faults are not detected by the diagnostic LEDs.</td></tr><tr><td></td><td>flashing in sync with FL24</td><td>Mains power supply present, normal operation. Flashing LED in sync with output +LP- (FL24)</td></tr><tr><td></td><td>1 flash every 10s</td><td>No mains power supply, battery-powered operation.</td></tr><tr><td></td><td>steady on</td><td>Request for maintenance (V0 alarm)</td></tr><tr><td></td><td>steady on</td><td>Release door open.</td></tr><tr><td></td><td>1 flash every 1s</td><td>Permanent alarm (see ALARMS and/or TROUBLESHOOTING)</td></tr></table>		OFF	No power supply.		1 flash every 5s	Mains power supply present, but gate stopped and waiting for commands. Any external faults are not detected by the diagnostic LEDs.		flashing in sync with FL24	Mains power supply present, normal operation. Flashing LED in sync with output +LP- (FL24)		1 flash every 10s	No mains power supply, battery-powered operation.		steady on	Request for maintenance (V0 alarm)		steady on	Release door open.		1 flash every 1s	Permanent alarm (see ALARMS and/or TROUBLESHOOTING)
	OFF	No power supply.																						
	1 flash every 5s	Mains power supply present, but gate stopped and waiting for commands. Any external faults are not detected by the diagnostic LEDs.																						
	flashing in sync with FL24	Mains power supply present, normal operation. Flashing LED in sync with output +LP- (FL24)																						
	1 flash every 10s	No mains power supply, battery-powered operation.																						
	steady on	Request for maintenance (V0 alarm)																						
	steady on	Release door open.																						
	1 flash every 1s	Permanent alarm (see ALARMS and/or TROUBLESHOOTING)																						
BAT 	SBU 2x12V 2Ah		BAT - Battery operation (only with ES=OFF) The batteries are kept charged when the power supply is on. If the power supply is off, the panel is powered by the batteries until the power is re-establish or until the battery voltage drops below the safety threshold. The control panel turns off in the last case.  The operating temperature of the rechargeable batteries is from +5°C to +40°C.  The batteries must always be connected to the control panel for charging. Periodically check the efficiency of the batteries. For advanced control of battery-powered operation, refer to the menu EM .																					
LSW 	NES100 FCM	LSW - Magnetic limit switch kit (optional on Ditec NEOS500G).																						
	SPWR	Terminal for connecting the stand-by management module.  Terminal not used for versions: Neos/Neos+																						

4.5 EXAMPLES OF APPLICATION

4.5.1 Parallel automations



With the parallel connection, the opening, closing, reopening when an obstacle is encountered during closing and flashing of flashing lights are synchronised.

The obstacle during opening and safety devices (safety edges) must be installed each one on its own door and act independently of each other.

Establish which one is the MASTER automation and which one is the SLAVE automation. The MASTER automation could be the one you decide to open partially (1-20 connected).

1. Disconnect connectors 1-G1-G3 from the control panels.
2. Set the following parameters on both automations via the display:

Setting advanced parameters

AT ▶ AA ▶ ▶ OK

Setting input mode

AP ▶ G1 ▶ SY

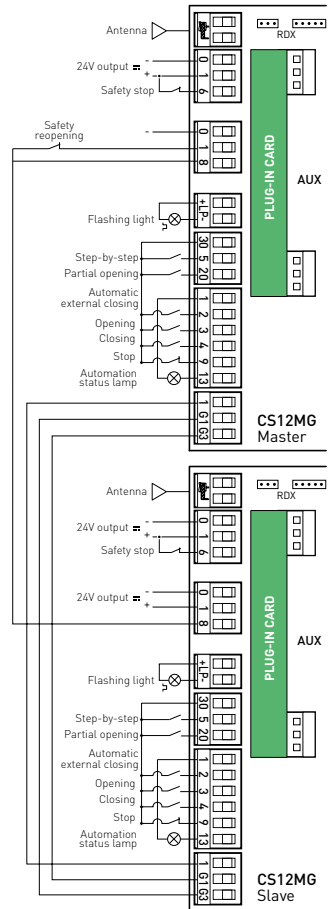
Setting automation parallel mode

AP ▶ PA ▶ 01 - 00 ▶ 50 ▶ 0F

If 50 > ON, if one door is closed and the other is closing, a command 1-8 causes the movement of the moving door to stop without reopening the closed door.

You are advised NOT to change the setting of parameter AP ▶ SM ▶ 00

3. Reconnect connectors 1-G1-G3.
4. Enable automatic closing only on the MASTER automation with 00 > 00 > ON or (if you want to use a timer) with 00 > 00 > 00.
5. Set the desired automatic closing time (00 > 00) on the MASTER automation high enough to allow the SLAVE automation to fully open. With these settings the automations will perform the closing operation at the same time as the time set with the MASTER automatic 00 expires).
6. Install only one ZENRS/ZENPRS radio receiver on the MASTER automation.



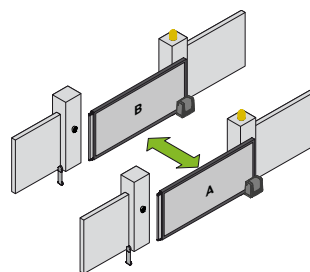
4.5.2 Interlocked one/two-way transit automations without presence detection

With these settings, command 1-3 starts an opening operation of the automation that it is connected to which will close after the time set with **BB** > **TD**.

Once the delay time set with **BB** > **TD** has elapsed, the other automation will open and will close after the time set with **BB** > **TD**.

Commands 1-5, 1-4 and 1-20 can be used in special cases, for example, to allow very long vehicles to pass through.

Command 1-9 can interrupt the interlock sequence, i.e., cancel the command given to automation B.



1. Disconnect connectors 1-G1-G3 from the control panels.
2. Set the following parameters on both automations via the display:

Setting advanced parameters

AT ▶ **AA** ▶ **ENTER** ▶ **OK**

Setting input mode

AP ▶ **G1** ▶ **SY**

Setting automation parallel mode

AP ▶ **PA** ▶ **02**

3. Reconnect connectors 1-G1-G3.
4. Set **BB** > **RM** > **1-3** on both automations.

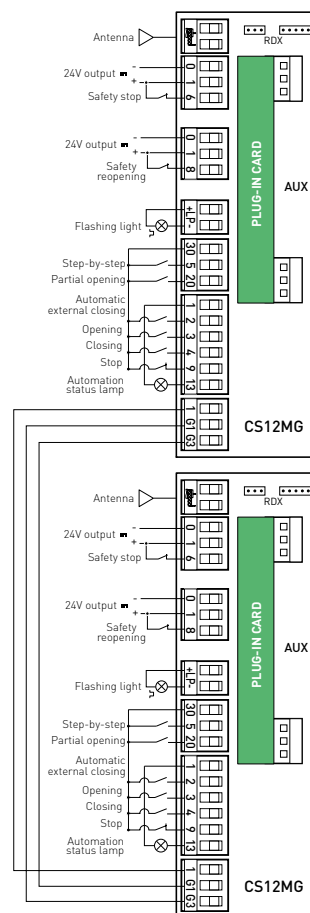


We recommend storing two different keys and not the same transmitter key (example: key 1 opens automation A and key 2 opens automation B).

5. If necessary, enable automatic closing **BB** > **AD** > **ON** on both automations.
6. Set the desired automatic closing time (**BB** > **TD**) on both automations.
7. Set the delay time **BB** > **TD** (from 0 to 30 s) on both automations.
8. The reservation function **BB** > **PG** > **ON** can be enabled on both automations if a vehicle arrives from the same direction while another one is still in transit. A second opening command is stored and executed as soon as the cycle in progress terminates.



We recommend using the reservation function only for one-way transit or two-way transit with limited flow.



4.5.3 Interlocked one-way transit automations with presence detection

With these settings, command 1-3 starts an opening operation of the MASTER automation which will close after the time set with **BB > TC** only when the vehicle activates the detection device installed between the two automations (e.g. magnetic loop).

Once the delay time set with **BB > TC** has elapsed, the SLAVE automation will open and will close after the time set with **BB > TC**.

Commands 1-5, 1-4 and 1-20 can be used in special cases, for example, to allow very long vehicles to pass through.

Command 1-9 can interrupt the interlock sequence, i.e., cancel the command given to the SLAVE automation.

1. Disconnect connectors 1-G1-G3 from the control panels.
2. Set the following parameters on both automations via the display:

Setting advanced parameters

AT ▶ AA ▶  ▶ OK

Setting input mode

AP ▶ G1 ▶ SY

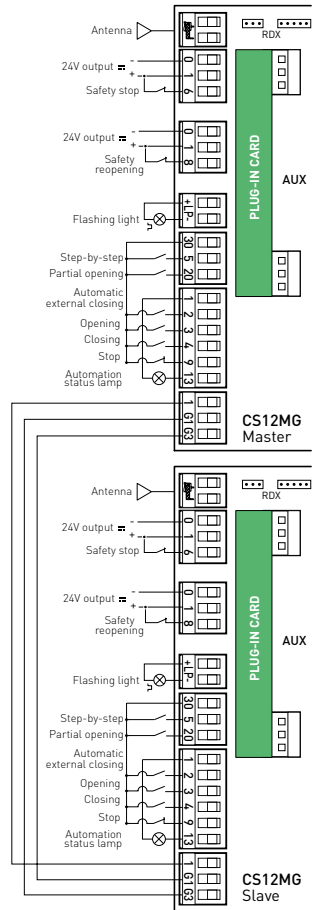
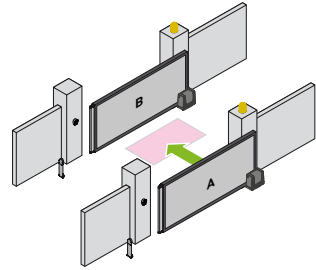
Setting automation parallel mode

AP ▶ PA ▶ 03

With this setting the SLAVE automation will not close until contact 1-2 of the MASTER automation is activated.

3. Reconnect connectors 1-G1-G3.
4. Set **BB > RM > 1-3** on the MASTER automation.
5. Enable automatic closing on the MASTER automation with **BB > BB > 1-2** and on the SLAVE automation with **BB > BB > ON**.
6. Set the desired automatic closing time (**BB > TC**) on both automations.
7. Although it is not obligatory, we recommend installing only one ZENRS/ZENPRS radio receiver on the MASTER automation.
8. Set the delay time **BB > TC** (from 0 to 30 s) on the MASTER automation.
9. The reservation function **BB > PG > ON** can be enabled on the MASTER automation if a vehicle arrives from the same direction while another one is still in transit.

A second opening command is stored and executed as soon as the cycle in progress terminates.



5. USING THE MENUS



Pressing the keys can be quick (less than 2 s) or prolonged (longer than 2 s). Unless specified otherwise, quick pressure is intended. To confirm the setting of a parameter, prolonged pressing or prolonged double pressing is necessary.

5.1 SWITCHING THE DISPLAY ON AND OFF

The procedure for switching on the display is as follows:



- By default, the display will show the point in the centre;
- Press the ENTER button;
- Switching on the display functioning check;
- Display of first level menu.

The procedure for switching off the display is as follows:



- Press the ESC key;



The display switches off automatically after 60 s of inactivity.

5.2 NAVIGATION KEYS



- Use the ↑ and keys ↓ to select the required function



- Press the ENTER key to confirm

- Keep the UP ↑ or DOWN ↓ key pressed to begin fast menu scrolling.

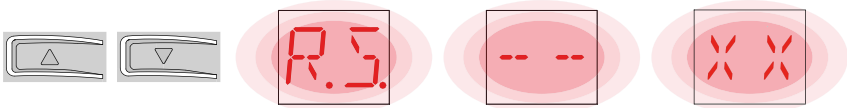
5.3 SHORTCUTS



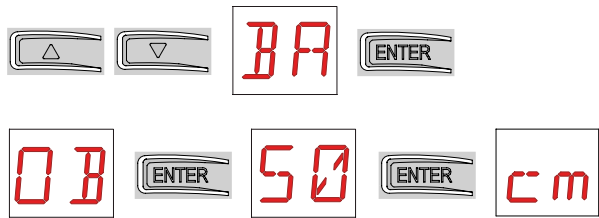
- The simultaneous pressing of the keys ↑ and ENTER performs an opening command.



- Simultaneous pressing of the keys ↓ and ENTER performs a closing command.



- The simultaneous pressing of the keys ↑ and ↓ performs a POWER RESET command. (interruption of the power supply and restart of the automation).



- In some menus, the parameter unit of measurement can be displayed by pressing the ENTER key once the value has been displayed (in the example, 50 cm).

6. MAIN MENU

Display	Description
	AT - Automatic configurations It allows you to manage the automatic configurations of the control panel.
	BC - Basic configurations It allows you to display and modify the main settings of the control panel.
	BA - Basic Adjustments It allows you to display and modify the main adjustments of the control panel.
	RO - Radio operations It allows you to manage the radio operations of the control panel.
	SF - Special Functions It allows you to set the password and manage the special functions in the control panel.
	CC - Cycle Counter It allows you to display the number of operations carried out by the automation and manage the maintenance interventions.
	EM - Energy Management It allows you to display and modify energy saving settings and adjustments.
	AP - Advanced Parameters It allows you to display and modify the advanced settings and adjustments of the control panel.



Some settings require at least three operations before they are set correctly.

6.1 AT SECOND LEVEL MENU

Display	Description	
	RT - Opening to right.	
	LF - Opening to left.	
	H0 - Predefined setting, residential use 0. This selection loads predefined values for certain standard parameters: AC - enabling of automatic closure : 1-2 C5 - step-by-step/opening command operation : step-by-step RM - remote control operation: : step-by-step AM - AUX plug-in card operation: : step-by-step SS - selection of automation status at start-up: : open	
	H1 - Predefined setting, residential use 1. This selection loads predefined values for certain standard parameters: AC - enabling of automatic closure : enabled TC - setting of automatic closing time : 1 minute C5 - step-by-step/opening command operation : step-by-step RM - remote control operation : step-by-step AM - AUX plug-in card operation : step-by-step SS - selection of automation status at start-up : closed	
	C0 - Predefined setting, condominium use 0. This selection loads predefined values for certain standard parameters: AC - enabling of automatic closure : enabled TC - setting of automatic closing time : 1 minute C5 - step-by-step/opening command operation : opening RM - remote control operation : opening AM - AUX plug-in card operation : opening SS - selection of automation status at start-up : closed	
	RD - Resetting of general settings (SETTINGS RESET).	
 →  ⌀2"		
 	 →  ⌀2"	 
After activation you can scroll through the third level menus. The third level menus are activated for 30 min.		

6.2 BC SECOND LEVEL MENU

BC - Basic configurations	Display	Description		
	AC	AC - Enabling of automatic closure. ON - Enabled 1-2 - Dependent on input 1-2	ON	1.2
	SS	SS - Selection of automation status at start-up. OP - Open CL - Closed Indicates how the control panel considers the automation at the time of switch-on, or after a POWER RESET command.	OP	CL
	SO	SO - Enabling of reversal safety contact functioning. ON - Enabled OF - Disabled When enabled (ON) with the automation idle, if the contact 1-8 is open, all operations are prevented. When disabled (OF) with the automation idle, if the contact 1-8 is open, opening operations are permitted.	ON	OF
	NI	NI - Enabling of NIO electronic anti-freeze system. ON - Enabled OF - Disabled When enabled (ON) it maintains motor efficiency even at low ambient temperatures, increases the starting time ST to the maximum value and reduces the acceleration time TA to the minimum value.  For correct operation, the control panel must be exposed to the same ambient temperature as the motors. The intervention temperature for the NIO system can be set by selecting AP → TN .	ON	OF

6.2.1 Additional BC level parameters available with **AT** → **AA** enabled

BC	OL	OL - Automation open indicator light mode ON - Steady on OF - Flashing	ON	OF
	CS	C5 - Step-by-step/opening command operation. 1-5 - Step-by-step 1-3 - Opening	1.5	1.3
	RM	RM - Radio receiver operation. 1-5 - Step-by-step 1-3 - Opening	1.5	1.3
	AM	AM - AUX plug-in control card operation. 1-5 - Step-by-step 1-3 - Opening	1.5	1.3

BC	PP	PP - Setting step-by-step sequence from command 1-5. ON - Opening-Stop-Closing-Stop-Opening OF - Opening-Stop-Closing-Opening	ON	OF
	SS	SS - Duration of STOP in step-by-step sequence from command 1-5. ON - Permanent OF - Temporary	ON	OF
	OD	OD - Selecting opening direction. LF - Opening to left. RT - Opening to right. The opening direction is intended by viewing the automation from the side being examined.  Modification of status from RT to LF and vice versa causes an automatic RESET of the card.	LF	RT

6.3 BA SECOND LEVEL MENU

BA - Basic adjustment	Display	Description		
	MT	MT - Display of type of automation. N4 - NEOS 500 G motor N6 - NEOS 800 G motor N1 - NEOS 1000 G motor  This parameter is READ-ONLY.	N6	N4 N1
	TC	TC - Setting of automatic closing time. [s] It is set with different intervals of sensitivity. • from 0" to 59" with intervals of 1 second; • from 1' to 2' with intervals of 10 seconds.	00	59 11
	RP	RP - Adjustment of partial opening measurement [%] Adjusts the percentage of operation in relation to the total opening of the automation. 10 - Minimum 99 - Maximum	10	99 30
	TP	TP - Setting of automatic closing time after partial opening [s]. It is set with different intervals of sensitivity. • from 0" to 59" with intervals of 1 second; • from 1' to 2' with intervals of 10 seconds.	00	59 11
	VA	VA - Setting of opening speed. [cm/s] 19 - Maximum with MT → N1 24 - Maximum with MT → N6 25 - Maximum with MT → N4	10	25 15
	VC	VC - Setting of closing speed. [cm/s] 19 - Maximum with MT → N1 24 - Maximum with MT → N6 25 - Maximum with MT → N4	10	25 15

BA - Basic adjustment	R2	R2 - Thrust on obstacles and current during opening [%] The control panel is equipped with a safety device that stops movement if an obstacle is detected during an opening operation with disengagement of 10 cm. 00 - Minimum thrust 99 - Maximum thrust	00 ▶ 99 50
	R1	R1 - Thrust on obstacles and current during closing [%] The control panel is fitted with a safety device which stops or reverses movement when an obstacle is detected during a closing operation. 00 - Minimum thrust 99 - Maximum thrust	00 ▶ 99 50
	DT	DT - Obstacle recognition time [s/100] 10 - Minimum 60 - Maximum <i>i</i> The parameter is adjusted in hundredths of a second.	10 ▶ 60 40



Make adjustments gradually and only after performing at least three complete operations, to allow the panel to be set correctly and detect any friction during operations.

6.3.1 Additional BA level parameters available with **AT** → **AA** enabled

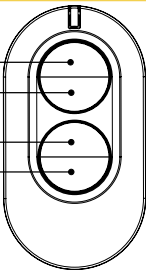
BA	MP	MP - Start at maximum power ON - During start-up it increases the thrust on obstacles to the maximum. Off - During start-up the thrust on obstacles is that adjusted by R1 - R2	ON OFF —
	ST	ST - Adjustment of start-up time. [s] 0.5 - Minimum 3.0 - Maximum	0.5 ▶ 3.0 2.0
	TA	TA - Adjustment of acceleration time. [s] 0.5 - Minimum (start speed = 75% of VA - VC) 2.0 - Maximum	0.5 ▶ 2.0
	TD	TD - Adjustment of deceleration time. [%] 10 - Minimum 99 - Maximum	10 ▶ 99 75
	OB	OB - Deceleration distance during opening [cm] Indicates the distance from the end of the opening stroke where the deceleration ramp begins. 05 - Minimum 99 - Maximum	05 ▶ 99 40
	CB	CB - Deceleration distance during closing. [cm] Indicates the distance from the end of the closing stroke where the deceleration ramp begins. 05 - Minimum 99 - Maximum	05 ▶ 99 40

	P0 - Approach speed during opening. [cm/s] Indicates the speed from the end of the deceleration ramp to the end of the stroke. 02 - Minimum 10 - Maximum	
	PC - Approach speed during closing. [cm/s] Indicates the speed from the end of the deceleration ramp to the end of the stroke. 02 - Minimum 10 - Maximum	
	00 - Obstacle detection limit during opening [cm] Indicates the distance from the end of the opening stroke after which each obstacle is considered a stop. 05 - Minimum 99 - Maximum This parameter is active only if → →	
	OC - Obstacle detection limit during closing [cm] Indicates the distance from the end of the closing stroke after which each obstacle is considered a stop. 05 - Minimum 99 - Maximum This parameter is active only if → →	



Reduce the deceleration space, in case rapid chattering occurs in heavy gates installed on a slight slope.

6.4 RO SECOND LEVEL MENU

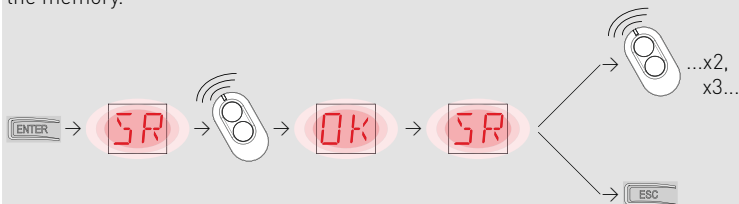
R0 - Radio operations	Display	Description	
	RK	RK - Menu navigation using remote control keyboard. ON - Enabled OF - Disabled With the display turned off, quickly type in the sequence of keys ③③②④① from the stored remote control you want to use. Make sure all the CH keys are stored. ⚠ During navigation with a remote control keyboard, ALL the stored remote controls are inactive. 1 (Enter) 2 (Δ) 3 (Esc) 4 (▽)  ON OF	
		To aid vision and adjustment (avoiding the need to continuously press the remote control), press the UP ↑ or DOWN ↓ key once to begin slowly scrolling through the parameters. Parameter scrolling is started faster if the UP ↑ or DOWN ↓ key is pressed twice. To stop the scrolling, press ENTER. To confirm your choice of parameter, press ENTER again. To test any new setting, switch off the display and issue an opening command using key ③. Navigation using a remote control keyboard is automatically disabled after 4 minutes of inactivity or by setting RK → OF.	
		TX - Visualisation of counter showing stored remote controls. ENTER → 00 → 16 → 16 radio remote controls (example)	
	MU	MU - Indication of maximum number of remote controls that can be stored in the integrated memory. You can store a maximum of 100 or 200 remote control codes. ENTER → 10 / 20 → ENTER → OK ⌀2" ⌀2"	20 10

SR - Remote control storage.

You can directly access the Remote control storage menu even with the display turned off, but only with the Display visualisation mode option set to 00 or 03:

- for transmitting a remote control not present in the memory;
- for transmitting an uninstalled channel of a remote control already present in the memory.

SR



If the display shows **NO** flashing, the remote control may already be stored.

6.4.1 Additional R0 level parameters available with **AT** → **AA** enabled

C1, C2, C3, C4 - Selection of CH1, CH2, CH3, CH4 function of stored remote control.

NO - No setting selected

1-3 - Opening command

1-4 - Closing command

1-5 - Step-by-step command

P3 - Partial opening command

LG - Courtesy light on/off command

1-9 - STOP command

If even just one (any) CH key of the remote control is stored, the opening or step-by-step command is implemented.



The **1-3** (opening) and **1-5** options are available as alternatives and depend on the selection **BC** → **RM**.

If 2-4 CH keys of a single remote control are stored, the functions matched in the factory with the CH keys are as follows:

- **CH1** = opening/step-by-step command;
- **CH2** = partial opening command;
- **CH3** = courtesy light on/off command
- **CH4** = STOP command.

C1

C2

C3

C4

NO

1-3

1-5

P3

LG

1-3

1-4

1-5

1-9

ER

ENTER

02"

ER



EA

ENTER

02"

EA

ENTER

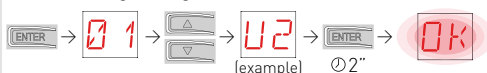
02"

ER - Deletion of a single remote control.**EA - Total memory deletion.**

RO	EC	EC - Cancelling a single code. (FOR FUTURE USE)		
	RE	RE - Setting memory opening from remote control. OF - Disabled ON - Enabled. When enabled (ON), the remote programming is activated. To store new remote controls without using the control panel, press the PRG key of an already stored GOL4 remote control for 5 seconds until the LED comes on (within the range of the receiver) and press any one of the CH keys on the new remote control.  Make sure you do not accidentally memorise unwanted remote controls.	ON 	OF 
	EP	EP - Setting the coded area messages If the possibility to receive coded messages is enabled, the electronic panel will be compatible with remote controls of the "ENCRYPTED" type.	ON 	OF 
	MS	MS - Setting of backward compatibility with old GOL4 remote control units. NOTE: Firmware version 2.0.7 or higher OF - Compatible with old generation GOL4 and new ZEN remote control units. ON - Compatible with ZEN series remote controls.  The use of MS=ON is recommended if only ZEN series remote controls are used on the system.	ON 	OF 

6.5 SF SECOND LEVEL MENU

Display	Description
CU	CU - Visualisation of the firmware version on the control panel.  →  →  → Release 1.1 (example)
SV	SV - Saving user conf. on control panel storage module.  →  →  →  →  →  (example) Ø2" By selecting  →  →  you can save up to 2 personalised configurations in memory positions  and  only with the storage module present on the control panel.  If more than 100 remote control codes are stored in the control panel storage module, you cannot save any user configuration.  If the display visualises  flashing, the memory module may not be installed.

RC - Loading configuration.

RC

You can upload the user configurations previously saved **U1** and **U2** on the control panel storage module, or upload the predefined settings available in memory positions **01**, **02**, **03** and **04**.

01 - parameter setting for passive edge on closure edge and stoping limit switch.

02 - parameter setting for passive edges on both edges and stoping limit switch.

03 - FUTURE USE

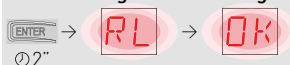
04 - FUTURE USE

01

02

03

04

RL - Loading the last configuration set.

RL

the control panel automatically saves the last configuration set, and keeps it memorised in the storage module. In the event of a fault or the replacement of the control panel, the last configuration of the automation can be restored by inserting the storage module and loading the last configuration set.

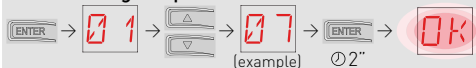
6.5.1 Additional SF level parameters available with **AT** → **AA** enabled**SP - Setting the password.**

SP

i this can only be selected when the password is not set.

Setting the password prevents unauthorised personnel from accessing selections and adjustments.

You can delete the set password by selecting the sequence JR1=ON, JR1=OFF, JR1=ON.

IP - Inserting the password.

IP

i this can only be selected when the password is not set.

When the password is not inserted, you can access the display mode regardless of the selection made with JR1.

When the password is inserted, you can access in maintenance mode.

EU - Deletion of user configurations and last configuration set in the storage module.

EU

SF		AL - Alarm counter. Used to view, in sequence, the counters of alarms that have been triggered at least once (alarm code + number of events). With  and  , you can scroll through all the counters and see all the alarms recorded.
		AH - Alarm log. Used to view, in sequence, alarms that have been triggered (up to a maximum of 20). With  and  , you can scroll through the entire alarm log. The display shows the alarm number and code, alternated. The highest number corresponds to the most recent alarm and the lowest number (0) corresponds to the oldest alarm.
		AR - Alarm reset. Resets all the alarms in the memory (counters and log).  →  02"
		AE - Writing of alarms on external USB memory. Creates a text file in the external USB memory, containing some information about the control panel, such as: firmware version, operation counters, hour counters, configuration and alarm parameters.  →  02"

 When the installation has been completed, you are advised to delete the alarms in order to facilitate future checks.

 The alarm counters and alarm log are associated with the number of the operation that was in progress when they were triggered.

6.6 CC SECOND LEVEL MENU

CC - Cycle Counter	Display	Description
		CV - Display of total operations counter.  →  →  →  → 182 operations (example)
		CP - Display of partial operations counter.  →  →  →  → 716 operations (example)
		CH - Display of power supply hour counter.  →  →  →  → 256 hours of power (example)

You can set the required number of operations (regarding the partial operations counter) for signalling the maintenance alarm.

Diagram illustrating the sequence of operations for the example:

- Initial state:  →  →  →  →  (example) →  →
- Next state: →  →  →  (example) →  →
- Final state: →  →  → {00} {07} {00} → 700 operations (example)

②?"

00 - Visualisation on display (alarm  .



0.4

The yellow LEDs light up fixed (see table page 13).

0.2

ENTER → 

02"

For correct functioning, you are advised to reset the partial operations counter:

- after maintenance work;
- after setting the maintenance alarm interval.

6.7 EM SECOND LEVEL MENU

EM - Energy Management	Display	Description		
			ON	OF
PV		PV - Solar panel power supply (not supplied) with SBU accessory. ON - Enabled OF - Disabled		
		ES - Accessory power supply disconnection "Energy Saving" mode with automation stopped or in stand-by. ON - Enabled (the LEDs are off, the red dot on the right flashes every 5 s on the display, the flashing light and the courtesy light are not managed). OF - Disabled The power supply disconnection mode is activated after 10 minutes with the gate closed or when the gate is closed and automatic closing is not enabled or when a 1-9 - STOP command intervenes. The automation resumes its normal operation following a command received via radio or following data commands on outputs 5, 20, 2, 3, 4, 9, G3-G1		
If ES is enabled, GOPAVRS security devices are not usable. - If ES is enabled, parallel or interlocked systems cannot be used. - The USB output is not active with ES enabled. - If ES is enabled, battery recharging is not active. - The operating hours counter CH is not active. - With ES enabled, some signals such as those relating to the maintenance alarm and the signal for discharged batteries, are not active.				

6.7.1 Additional EM level parameters available with **AT** → **AA** enabled

EM		LL - Voltage threshold for indicating that batteries are almost flat (V) 17 - Minimum 24 - Maximum It is set with an interval of sensitivity of 0.5 V shown when the decimal point on the right lights up.		
		LB - Indication that batteries are almost flat 00 - Visualisation on display (alarm message BO). 01 - Visualisation on flashing light (with the automation idle, 4 flashes are made and then repeated every hour) and on display (alarm message BO). 02 - Visualisation on "open gate" indicator light (with the automation closed, 4 flashes are made and then repeated every hour) and on display (alarm message BO).		

6.8 AP SECOND LEVEL MENU

AP - Advanced Parameters	Display	Description		
		FA - Opening limit switch mode. NO - None SX - Stop limit switch (after activation the wing stops its movement) PX - Proximity limit switch (after activation the wing continues as far as the end stop and any obstacle is considered a stop) (with standard limit switches)	 	
		FC - Closing limit switch mode. NO - None SX - Stop limit switch (after activation the door wing its movement) PX - Proximity limit switch (after activation the wing continues as far as the end stop and any obstacle is considered a stop) (with standard limit switches)	 	
		D6 - Device connected to terminals 1-6. NO - None SE - Safety edge (if contact 1-6 opens after stopping, there is a disengagement of 10 cm) S41 - Safety edge with safety test (if contact 1-6 opens after stopping, there is a disengagement of 10 cm) PH - Photocells P41 - Photocells with safety test	 	
		D8 - Device connected to terminals 1-8. NO - None SE - Safety edge S41 - Safety edge with safety test PH - Photocells P41 - Photocells with safety test	 	
		DS - Display visualisation mode. 00 - No visualisation 01 - Commands and safety devices with radio test (see paragraph 8.2). Display of countdown to automatic closing time. 02 - Automation status (see paragraph 8.1) 03 - Commands and safety devices (see paragraph 8.2) The visualisation of the reception of a radio transmission for range checks is given by the setting .	 	

Make adjustments gradually and only after performing at least three complete operations to allow the control panel to be set correctly and detect any friction during operations.

6.8.1 Additional AP level parameters available with $AT \rightarrow AA$ enabled

AP	ED	ED - Enabling of diagnostics Enables periodic saving of data via serial for diagnostic use. NO - Disabled 01 - Virtual encoder check (DO NOT USE) 02 - Alarm log	NO 02 01
	US	US - Type of C-N0 contact use 0F - Always open contact 01 - Courtesy light (LUoLG) 02 - Flashing LAMP [230V-] 03 - Gate closed 04 - Gate open 05 - Gate moving 06 - Gate opening 07 - Gate closing ON - Always closed contact	0F 02 04 06 ON 01 03 05 07
	LU	LU - Courtesy light switch-on time [s]. To enable the parameter, set $AP \rightarrow US \rightarrow 01$. It is set with different intervals of sensitivity. NO - Disabled - from 01" to 59" with intervals of 1 second; - from 1' to 2' with intervals of 10 seconds; - from 2' to 3' with intervals of 1 minute; ON - Permanently ON, switched off with remote control  The courtesy light switches on at the start of each operation.	NO 01 → 59 11 → 21 21 → 31 ON
	LG	LG - Switch-on time for independently commanded courtesy light. [s] To enable the parameter, set: $AA \rightarrow US \rightarrow 01$ It is set with different intervals of sensitivity. NO - Disabled - from 01" to 59" with intervals of 1 second; - from 1' to 2' with intervals of 10 seconds; - from 2' to 3' with intervals of 1 minute; ON - Switched on and off with remote control.  The switching on of the light does not depend on the start of an operation, but can be commanded separately using the special remote control key.	NO 01 → 59 11 → 21 21 → 31 ON

	PA - Automation parallel (see examples of application) Sets the type of automation parallel 01 - Simultaneous automations 02 - Interlocked automations with one-way or two-way transit, without presence detection 03 - Interlocked automations with one-way transit, with presence detection		
	G1 - Setting the G1 input mode N0 - Absent 1-3 - Opening 1-5 - Step-by-step 1-6 - Safety stop 1-8 - Input 1-8 (safety reopening) depending on setting  → TS . SY - Synchronism input		
	PG - Enabling interlocked automation opening control request (see examples of applications). ON - Enabled OF - Disabled When enabled (ON), it requests the automation 1 opening command if automation 2 is engaged in completing the operation.		
	T0 - Motor 2 delay time (s) (see examples of applications). This adjusts the opening delay time of the second interlocked automation. 00 - Minimum 30 - Maximum		
	PT - Fixed partial opening. ON - Enabled. OF - Disabled If ON, a partial opening command given on the partial opening position is ignored. With contact 1-20 closed (for example with the timer or manual selector), the gate will open partially. If it is then fully opened (command 1-3) and then reclosed (even with automatic closure), it will stop at the partial opening position.		
	D0 - Setting of disengagement on stop during opening. [mm] 00 - Minimum 10 - Maximum  Not active if  → 		
	DC - Setting of disengagement on stop during closing. [mm] 00 - Minimum 10 - Maximum  Not active if  → 		

	OT - Selection of type of obstacle. 00 - Overcurrent or door stopped 01 - Overcurrent 02 - Door stopped	 	 
	R9 - Enabling automatic closing after command 1-9 (STOP) from terminal board. 0F - Disabled. 0N - Enabled. NO - None. Disables safety device 1-9.	  	
	SM - Selection of operating mode of device connected to terminals 1-6. 00 - During the operation, the opening of the safety contact stops the movement (with disengagement if  → ). 01 - During the operation, the opening of the safety contact stops the movement (with disengagement if  → ). When the contact closes again, the operation is resumed. 02 - During the operation, the opening of the safety contact stops movement (with disengagement if  → ). When the contact closes again, an opening operation is performed. 03 - During the opening operation, the opening of the safety contact stops the movement (with disengagement if  → ). When the contact closes again, the interrupted opening operation is resumed. During the closing operation, the safety device is ignored. 04 - During the closing operation, the opening of the safety contact reverses the movement. During the opening operation, the safety device is ignored. 05 - During the closing operation, the opening of the safety contact stops and then reverses movement. During the opening operation, the opening of the safety contact stops the movement (with disengagement if  → ).	   	  
	TN - Setting of intervention temperature for NIO anti-freeze system. [°C] Adjustment of the working temperature of the control panel. The value does not refer to ambient temperature.	 	
	TB - Display of working temperature of control panel. DO NOT USE		
	W0 - Pre-flashing time on opening. [s] Adjustment of the lead time for the switch-on of the flashing light, in relation to the start of the opening operation from a voluntary command. 00 - Minimum 05 - Maximum	 	

AP	WC	WC - Pre-flashing time on closing. [s] Adjustment of the lead time for the switch-on of the flashing light, in relation to the start of the closing operation from a voluntary command. 00 - Minimum 05 - Maximum	00 → 05 —
	TS	TS - Setting of renewal of automatic closing time after safety device release. [%] 00 - Minimum 99 - Maximum	00 → 99 —
	VR	VR - Setting of learning speed. [cm/s]	05 → 10 05

7. DISPLAY VISUALISATION MODE



Depending on the type of automation and control panel, some menus may not be available.

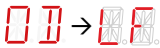
7.1 DISPLAY OF AUTOMATION STATUS



The automation status display mode is only visible with Display visualisation mode set to 02.

Display	Description
	Automation closed.
	Automation closed. Release door open.
	Automation open.
	Automation open. Release door open.
	Automation idle in intermediate position.
	Automation idle in intermediate position. Release door open.

	Automation closing.
	Automation that slows down during closing.
	Automation opening.
	Automation that slows down during opening.

	
Display	Description 
	Automation closed.
	Automation closed. Release door open.
	Automation open.
	Automation open. Release door open.
	Automation idle in intermediate position.
	Automation idle in intermediate position. Release door open.
	Automation closing.
	Automation that slows down during closing.
	Automation opening.
	Automation that slows down during opening.

7.2 DISPLAY OF SAFETY DEVICES AND COMMANDS

 The safety and command display mode is only visible with Display visualisation mode set at 01 or 03.

	
Display	Description
	1-2 - Automatic closing command.
	1-3 - Opening command.
	1-4 - Closing command.
	1-5 - Step-by-step command.
	1-6 - Safety device with opening and closing stop.
	1-8 - Safety device with closing reversal.
	1-9 - STOP command
	P3 - Partial opening command.
	3P - Opening command with operator present.
	4P - Closing command with operator present.
	RX - Radio reception (of any memorised key of a transmitter present in the memory).
	NX - Radio reception (of any non-memorised key).
	EX - Rolling-code radio reception out of sequence
	EP - Radio reception not compliant with parameter configuration  → 
	CX - Receipt of command from AUX card.

F1	F1 - Closing limit switch
F2	F2 - Opening limit switch
O1	O1 - Detection of an obstacle during closing
O2	O2 - Detection of an obstacle during opening
OO	OO - Reaching of obstacle detection limit during opening
OC	OC - Reaching of obstacle detection limit during closing
S1	S1 - Detection of stop during closing
S2	S2 - Detection of stop during opening
SW	SW - Release door open. When the release door is closed, the control panel performs a RESET (alarm XX)
RV	RV - Enabling/disabling of built-in radio receiver via RDX.
MQ	MQ - Learning operation of mechanical end stops in progress.
HT	HT - Heating of the motors (NIO function) in progress.
J1	J1 - Variation of the JR1 jumper status.
G1	G1 - General Purpose 1
PC	PC - Recognition of connected HOST (Personal Computer).
UB	UB - Recognition of connected USB memory stick
UD	UD - Disconnection of cable and USB memory stick
ES	ES - Switch to Energy Saving mode.
AO	AO - Interlocked automation opening control request.

7.3 DISPLAY OF ALARMS AND FAULTS



Alarms and faults can be displayed with any display selection. The signalling of alarm messages takes priority over all other displays.

Type of alarm	Display	Description	Operation	LED
Mechanical alarm		M0 - Selected motor not suitable.	Set correct motor wiring.	●
		M3 - Automation blocked (open/closed)	Check the mechanical parts	●
		M4 - Motor short circuit	Check that the motor is correctly connected. Check that the motor is working properly.	●
		M8 - Gate too long error (>25 m)	Check the rack / chain belt	●
		M9 - Gate too short error (< 200 mm)	Manually check that the wing moves freely.	●
		MB - Absence of motor during an operation.	Check connection of motor. Check motor brush contacts. If the problem persists, contact Technical Support.	●
		MD - Irregular functioning of motor opening limit switch.	Check connection of the motor opening limit switch.	
		ME - Irregular operation of the motor closure limit switch.	Check connection of the motor closing limit switch.	
		MI - Detection of fifth consecutive obstacle.	Check for the presence of permanent obstacles along the stroke of the automation.	●
Alarm operations alarm		ML - Inverted limit switches	Check limit switch connection.	●
		R0 - Insertion of a storage module containing over 100 stored remote controls. The setting → → is made automatically. The alarm is displayed 3 times only.	To save the system configurations on the storage module, delete any stored remote controls and bring the total to less than 100. Set → → .	
		R3 - Storage module not detected (with RDX inserted) .	Insert a working storage module or remove RDX.	
Alarm operations alarm		R5 - Storage module not working (regardless of RDX)	Replace the storage module.	
Alarm power supply		P0 - No mains voltage.	Check that the control panel is powered correctly. Check the line fuse. Check the mains power supply.	●
		P1 - Microswitch voltage insufficient	Check that the control panel is powered correctly.	
Battery		B0 - Battery almost flat	Check battery voltage. Replace battery.	●

Type of alarm	Display	Description	Operation	LED
Accessories alarm	A0	A0 - Failure of test of safety sensor on contact 6.	Check that the GOPAVRS device is working properly. If the supplementary card is not inserted, check that BB is not set to S41/P41	●
	A3	A3 - Failure of test of safety sensor on contact 8.	Check that the GOPAVRS device is working properly. If the supplementary card is not inserted, check that BB is not set to S41/P41	●
	A7	A7 - Incorrect connection of contact 9 to G3	Check that terminal 1 and 9 are correctly connected.	●
	A9	A9 - Flashing light output short circuit alarm	Check that the flashing light is working properly.	●
	AB	AB - Gate open indicator light short-circuit alarm	Check that the gate open indicator light is working correctly.	●
Control panel internal alarm	I2	I2 - No communication between parallel automations.	Check G1 (MASTER) - G3 (SLAVE) and G3 (MASTER) - G1 (SLAVE) connections. Reset. If the problem persists, contact Technical Support.	
	I7	I7 - Internal parameter outside limits error	Reset. If the problem persists, replace the control panel.	●
	I8	I8 - Program sequence error	Reset. If the problem persists, replace the control panel.	●
Control panel internal alarm	IA	IA - Internal parameter error (EEPROM)	Reset. If the problem persists, replace the control panel.	●
	IB	IB - Internal parameter error (RAM)	Reset. If the problem persists, replace the control panel.	●
	IC	IC - Operation time out error (>5 min or >7 min in acquisition mode)	Manually check that the wing moves freely. If the problem persists, replace the control panel.	●
	IH	IH - Overcurrent with motor switched off alarm	Reset. If the problem persists, replace the control panel.	●
Control panel internal alarm	IM	IM - Short-circuited motor MOSFET alarm	Reset. If the problem persists, replace the control panel.	●
	IO	IO - Interrupted power circuit (motor MOSFET open)	Reset. If the problem persists, replace the control panel.	●
	IR	IR- Motor relay malfunctioning	Reset. If the problem persists, replace the control panel.	●
	XX	XX - Firmware reset (SIGNAL ONLY)		
Service	V0	V0 - Request for maintenance.	Proceed with the scheduled maintenance intervention.	●
	NO	NO - Operation not allowed	Check that the remote control is not already stored. Check that the storage module is present.	

8. START-UP



The operations in point 5 are performed without safety devices. The display parameters can only be adjusted when the automation is idle. The automation slows down automatically when approaching the stop or stop limit switch. At every start-up the control panel receives a RESET and the first operation is performed at a reduced speed (automation position acquisition).

8.1 DISPLAY OF AUTOMATION STATUS

- 1- Jumper the NC safety contacts.
- 2- Adjust the opening and closing stop limit switches, if used.
NOTE: the limit switches must remain pressed until the operation is completed and placed as shown in the Ditec NEOS installation manual.
- 3- Set the desired opening direction from the menu **RT**.
- 4- Manually move the sliding gate and make sure the entire stroke is correct and without friction.
- 5- Switch on and check that the automation is operating correctly with the subsequent opening and closing commands (see paragraph 7.2).
Check that the limit switches are activated if used.
- 6- Connect the safety devices **DS** and **DS** → **SH** (removing the relative jumpers) and check they are working correctly.
- 7- To modify the operation and deceleration speed settings, the automatic closing times, and the thrust on obstacles, consult the menus.
- 8- Connect any other accessories and check that they are functioning.



Ensure that the forces exerted by the wings are compliant with EN12453-EN12445.

- 9- If required, store the remote controls using command **RD** → **SR**.
- 10- Once the start up and checks are completed, close the container.



In the event of maintenance or if the control panel is to be replaced, repeat the start-up procedure.

9. TROUBLESHOOTING

Problem	Possible cause	Alarm	Operation
The automation does not open or close.	No power.	P0	Check the power supply cable.
	Accessories short circuiting.	Disconnect all accessories from terminals 0-1 (voltage of 24V= must be present) and reconnect them one at a time. Contact Technical Service	
	Line fuse blown.	P0	Replace fuse.
	The safety contacts are open.	I-6 I-8	Check that the safety contacts are closed correctly (NC).
	Safety contacts not correctly connected or self-controlled safety edge not functioning correctly.	A0 A3 I-6 I-8	Check connections to terminals 6-8 on control panel and connections to the self-controlled safety edge.
	Microswitch SAFETY release SWITCH open.	SW	Check that the hatch is closed correctly and the microswitch makes contact.
	The photocells are activated.	I-6 I-8	Check that the photocells are clean and operating correctly.
	Automatic closing does not work.	Issue any command. If the problem persists, contact Technical Service	
		A7 I-9	Check terminal 9 on the control panel.
	Mechanical fault	M3 M8	Check the rack or transmission chain, and/or the mechanical parts.
	Faulty motor	M4 M8	Check motor connection, if the problem persists, contact Technical Service.
	Faulty control panel	I7 I8 I9 I8 I4 I8 I0 I8	Replace the control panel.

Problem	Possible cause	Alarm	Operation
The external safety devices are not activated.	Incorrect connections between photocells and control panel.		Check that I-6 / I-8 is displayed Connect NC safety contacts together in series and remove any jumpers on the control panel terminal board. Check the setting of 88 → 08 and 88 → 08 .
The automation opens / closes briefly and then stops.	There is a presence of friction.	M9 IC MI	Manually check that the automation moves freely and check the R1 / R2 adjustment. Contact Technical Service
The remote control has limited range and does not work with the automation moving.	The radio transmission is impeded by metal structures and reinforced concrete walls.		Install the antenna outside.
	Replace the transmitter batteries.		
The remote control does not work	No storage module or incorrect storage module.		Switch the automation off and plug in the correct storage module.
		R0	Check the correct memorisation of the transmitters on the built-in radio. If there is a fault with the radio receiver that is built into the control panel, the remote control codes can be read by removing the storage module.
		R3 R5	
The flashing light is not working	Bulb burnt or flashing light wires detached or short-circuited.	A9	Check the bulb and/or wires. Contact Technical Service
The gate open indicator light does not work	Bulb burnt or wires detached or short-circuited.	AB	Check the bulb and/or wires. Contact Technical Service

10. ROUTINE MAINTENANCE PLAN

Perform the following operations and checks every 6 months, according to the intensity of use of the automation.

Disconnect the 230V~ power supply or disconnect the batteries (if present) and release the gear-motor:

- Visually check that the gate, the fixing brackets and existing structure have suitable mechanical strength and are in good condition.
- Check the gate-gearmotor alignment, the distance (2-3 mm) between the groove of the pinion and the crest of the rack.
- Clean the wheel's sliding guide, the rack and pinion of the gearmotor and slightly lubricate the rack and pinion of the gearmotor. Manually check that the gate slides evenly and without friction.
- Check the electrical connections.
- Check that the manual release functions correctly.
- Check that the bar is balanced correctly.
- Check the capacity value of the motor condenser.
- Check the state of wear of the mechanical parts, in particular the spring after about 500,000 work cycles.

Restore the 230V~ power supply or reconnect the batteries (if present) and block the gearmotor:

- Make sure the limit switches are working correctly.
- Check the power adjustment.
- Check that the obstacle detection function is working correctly.
- Check that all control and safety functions are working correctly.



For spare parts, refer to the spare parts price list.

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