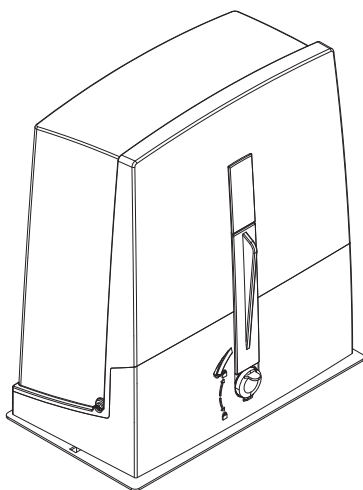




**Sliding gate operator
BXL series**



FA01085-EN



BXL04AGS

INSTALLATION OPERATION AND MAINTENANCE MANUAL

EN English



===== Hand these instructions to the end user =====

MANUALLY RELEASING THE GEAR MOTOR

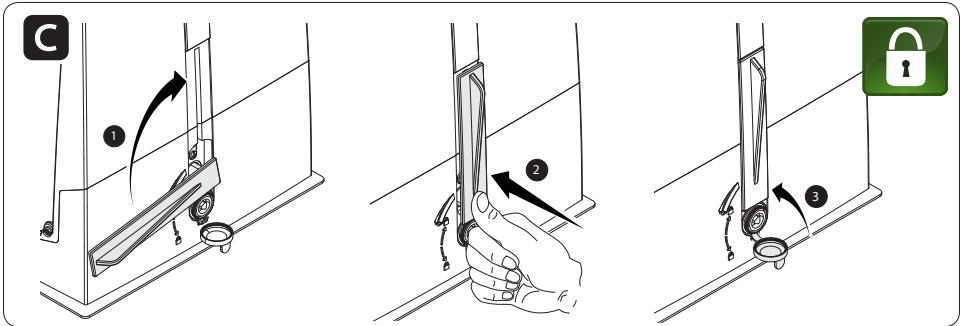
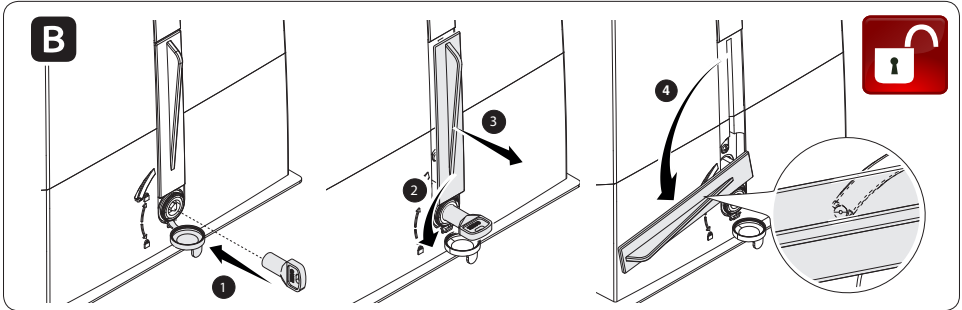
⚠ **Manually releasing the gate may cause an uncontrolled movement of the gate due to possible mechanical anomalies or unbalancing.**

RELEASE (figure B)

- Fit the key and turn it clockwise.
- Pull outwards and activate the release handle.

LOCKING (figure C)

To lock the operator back up, lower the lever, reposition it and turn the key clockwise.



WHAT TO DO IF ...

ISSUES	POSSIBLE CAUSES	POSSIBLE FIXES
It neither opens nor closes	<ul style="list-style-type: none"> • Power supply is missing • The gear motor is stuck • The transmitter is emitting a weak signal or no signal at all • Control buttons or selectors stuck 	<ul style="list-style-type: none"> • Check main power supply • Lock the gearmotor • Replace the batteries • Check integrity of devices and/ or of electrical cables
The gate opens but does not close	<ul style="list-style-type: none"> • The photocells are working 	<ul style="list-style-type: none"> • Check that there are no obstructions in the photocells' area of operation

⚠ **If the problem cannot be solved by following the fixes in the table or if any malfunctions, anomalies, noises, vibrations or suspicious and unexpected behavior is experienced on the system, call for qualified assistance.**

Fabricante / Manufacturer / Hersteller / Fabricant / Fabricante / Fabricante
/ Wytwórca / Fabrikant

Came S.p.a.

Indirizzo / address / adresse / adresse / dirección / endreço / adres / adres

Via Martiri della Libertà 15 - 31030 Dosson di Casier, Treviso - Italy

CAME 

DICHARA CHE L'AUTOMAZIONE PER CANCELLI SCORREVOLI / DECLARES THAT THE DRIVE FOR SLIDING GATES /
ERKLÄRT DASS DIE AUTOMATISIERUNG FÜR SCHIEBETÖRE / DECLARE QUE LES AUTOMATISATIONS POUR PORTAILS
COULISSANTS / DECLARA QUE LAS AUTOMATIZACIONES PARA PUERTAS CORREDERAS / DECLARA QUE
AS AUTOMATIZAÇÕES PARA PORTÕES DE CORRER / OSWADZCA ZE AUTOMATYKA DO BRAM PRZESUWNYCH /
VERKLAART DAT DE AUTOMATISERING VOOR SCHUIFHEKKE

BXL04AGS

E' CONFORME ALLE DISPOSIZIONI DELLE SEGUENTI DIRETTIVE / IT COMPLIES WITH THE PROVISIONS OF THE FOLLOWING
DIRECTIVES / DEN VORGABEN DER FOLGENDEN RICHTLINIEN ENTSPRECHEN / IL EST CONFORMES AUX DISPOSITIONS
DES DIRECTIVES SUIVANTES / CUMPLEN CON LAS DISPOSICIONES DE LAS SIGUIENTES DIRECTIVAS / ESTÁ DE ACORDO
COM AS DISPOSIÇÕES DAS SEGUINTE DIRETIVAS / SA ZGODNE Z POSTANOWIENIAMI NASTĘPUJĄCYCH DYREKTYW
EUROPEJSKICH / VOLDOEN AAN DE VOORSCHRIFTEN VAN DE VOLGENDE RICHTLINIEN:

- COMPATIBILITA' ELETTROMAGNETICA / ELECTROMAGNETIC COMPATIBILITY / ELEKTROMAGNETISCHE
VERTRÄGLICHKEIT / COMPATIBILITÉ ELECTROMAGNETIQUE / COMPATIBILIDAD ELECTROMAGNETICA / COMPATIBIL-
IDADE ELETTROMAGNETICA / KOMPATYBILNOŚCI ELEKTROMAGNETYCZNEJ / ELEKTROMAGNETISCHE COMPATIBI-
LITEIT : 2014/30/UE.

Riferimento norme armonizzate ed altre norme tecniche / Refer to
European regulations and other technical regulations / Harmonisierte
Bezugsnormen und andere technische Vorgaben / Référence aux normes
harmonisées et aux autres normes techniques / Referencia normas
armonizadas y otras normas técnicas / Referência de normas harmoniza-
das e outras normas técnicas / Odnosne normy ujednolcone i inne normy
techniczne / Geharmoniseerde en andere technische normen waarnaar is
verwezen

EN 61000-6-2:2005

EN 61000-6-3:2007+A1:2011

EN 62233:2008

EN 60335-1:2012+A1:2014

EN 60335-2:103:2015

RISPETTA I REQUISITI ESSENZIALI APPLICATI / MEET THE APPLICABLE ESSENTIAL REQUIREMENTS / DEN WESENTLIJEN
AANGEWANDTEN ANFORDERUNGEN ENTSPRECHEN / RESPECTENT LES CONDITIONS REQUISES NECESSAIRES APPLIQUEES:
/ CUMPLIEN CON LOS REQUISITOS ESSENCIALES APLICADOS / RESPEITAM O REQUISITOS ESSENCIAIS APLICADOS /
SPEŁNIAJĄ PODSTAWOWE WYMAGANIA WYRUNKI / VOLDOEN AAN DE TOEPASSER MINIMUM EISEN:

1.1.3; 1.1.5; 1.2.1; 1.2.2; 1.3.2; 1.3.7; 1.3.8.1; 1.4.1; 1.4.2; 1.5.1; 1.5.6; 1.5.8; 1.5.9; 1.5.9; 1.5.13; 1.6.1; 1.6.3; 1.6.4;

1.7.1; 1.7.2; 1.7.4

PERSONA AUTORIZZATA A COSTITUIRE LA DOCUMENTAZIONE TECNICA PERTINENTE / PERSON AUTHORIZED TO COMPLY THE RELEVANT TECHNICAL DOCUMENTATION /
PERSONE DIE BEWILLIGT IST, DIE RELEVANT TECHNISCHEN UNTERLAGEN ZUSAMMENZUSTELLEN / DOCUMENTATION TECHNIQUE SPECIFIQUE D'AUTORISATION
A CONSTITUIRE DE / PERSONA FACULTADA PARA ELABORAR LA DOCUMENTACIÓN TÉCNICA PERTINENTE / PESSOA AUTORIZADA A CONSTITUIR A DOCUMENTAÇÃO TÉCNICA
PERTINENTE / OSOBA UPOWIĄZONIA DO ZREDAGOWANIA DOKUMENTACJI TECHNICZNEJ / DEGENE DIE GEMACHTIGT IS DE RELEVANTE TECHNISCHE DOCUMENTEN
SAMEN TE STELLEN.

CAME S.p.a.

La documentazione tecnica pertinente è stata compilata in conformità all'allegato VII B. / The pertinent technical documentation has been drawn up in compliance with attached
document VII B. / Die relevante technische Dokumentation wurde entsprechend der Anlage VII B ausgestellt. / La documentation technique spécifique a été remplie conformément à
l'annexe IIB / La documentación técnica pertinente ha sido redactada en cumplimiento con el anexo VII B. / A documentação técnica pertinente foi preenchida de acordo com o anexo
VII B. / Odnosna dokumentacja techniczna została zredagowana zgodnie z załącznikiem VII B. / De technische documentatie terzake is opgesteld in overeenstemming met de bijlage VII B.

CAME S.p.a. si impegna a trasmettere, in risposta a una richiesta adeguatamente motivata dalle autorità nazionali, informazioni pertinenti sulle quasi macchine, e / Came S.p.a., following
a duly motivated request from national authorities, undertakes to provide information related to the quasi machines, and / Die Firma Came S.p.a. verpflichtet sich auf eine angemessen
motivierete Anfrage der staatlichen Behörden Informationen über die unvollständigen Maschinen, zu übermitteln, und / Came S.p.a. s'engage à transmettre, en réponse à une demande
bien fondée de la part des autorités nationales, les renseignements relatifs aux quasi machines / Came S.p.a. se compromette a transmitir, como respuesta a una solicitud adecuadamente
fundada por parte de las autoridades nacionales, informaciones relacionadas con las cuasimáquinas / Came S.p.a. compromete-se em transmitir, em resposta a uma solicitação motivada
apropriadamente pelas autoridades nacionais, informações pertinentes às partes que compoem máquinas / Came S.p.a. zobowiązuje się do udzielenia informacji dotyczących maszyn
niezakończonych na odpowiednio umotywowaną prośbę, złożoną przez kompetentne organy państwowe / Came S.p.a. verbindt zich ertoe om op met redenen omkleed verzoek van de
nationale autoriteiten de relevante informatie voor de niet voltooidde machine te verstrekken.

VIETA / FORBIDS / VERBODIET / INTERDIT / PROHIBE / PROIBO / ZABRANIA SIE / VERBODIET

la messa in servizio finché la macchina finale in cui deve essere incorporata non è stata dichiarata conforme, se del caso alla 2006/42/CE. / commissioning of the above mentioned until such
moment when the final machine into which they must be incorporated, has been declared compliant, if pertinent, to the 2006/42/CE / die Inbetriebnahme bevor die „Endmaschine“ in die die
unvollständige Maschine eingebaut wird, als konform erklärt wurde, gegebenenfalls gemäß der Richtlinie 2006/42/EG. / la mise en service tant que la machine finale dans laquelle elle doit
être incorporée n'a pas été déclarée conforme, le cas échéant, à la norme 2006/42/CE. / la puesta en servicio hasta que la máquina final en la que será incorporada no haya sido declarada
de conformidad de acuerdo a la 2006/42/CE / a colocação em funcionamento, até que a máquina final, onde deve ser incorporada, não for declarada em conformidade, se de acordo
com a 2006/42/CE. / Uruchomienia urządzenia do czasu, kiedy maszyna, do której ma być wbudowany, nie zostanie oceniona jako zgodna z wymogami dyrektywy 2006/42/WE, jeśli taka
procedura była konieczna, i / de in werking te stellen zolang de eindmachine waarin de niet voltooidde machine moet worden ingebouwd in overeenstemming is verklaard, indien toepasselijk
met de richtlijn 2006/42/EG.

Dosson di Casier (TV)
30 Novembre / November / November /
Novembre / Novembre / Novembro /
Listopad / November 2017

Legale Rappresentante / Legal Representative / Gesetzlicher
Vertreter / Representant Legal / Representante Legal /
Representante Legal / Prawny Przedstawiciel / Juridische
Vertegenwoordiger

Paolo Menuzzo



Fascicolo tecnico a supporto / Supporting technical dossier / Unterstützung technische Dossier / soutien dossier technique / apoyo expediente
técnico / apólar dossier técnico / wspieranie dokumentacji technicznej / ondersteunende technische dossier: 801MS-0140

Came S.p.a.

Via Martiri della Libertà, 15 - 31030 Dosson di Casier - Treviso - Italy - Tel. (+39) 0422 4940 - Fax (+39) 0422 4941
Info@came.it - www.came.com

Cap. Soc. 1.610.000,00 € - C.F. e P.I. 03481280265 - VAT IT 03481280265 - REA TV 275359 - Reg Imp. TV 03481280265

WARNING! Important safety instructions.

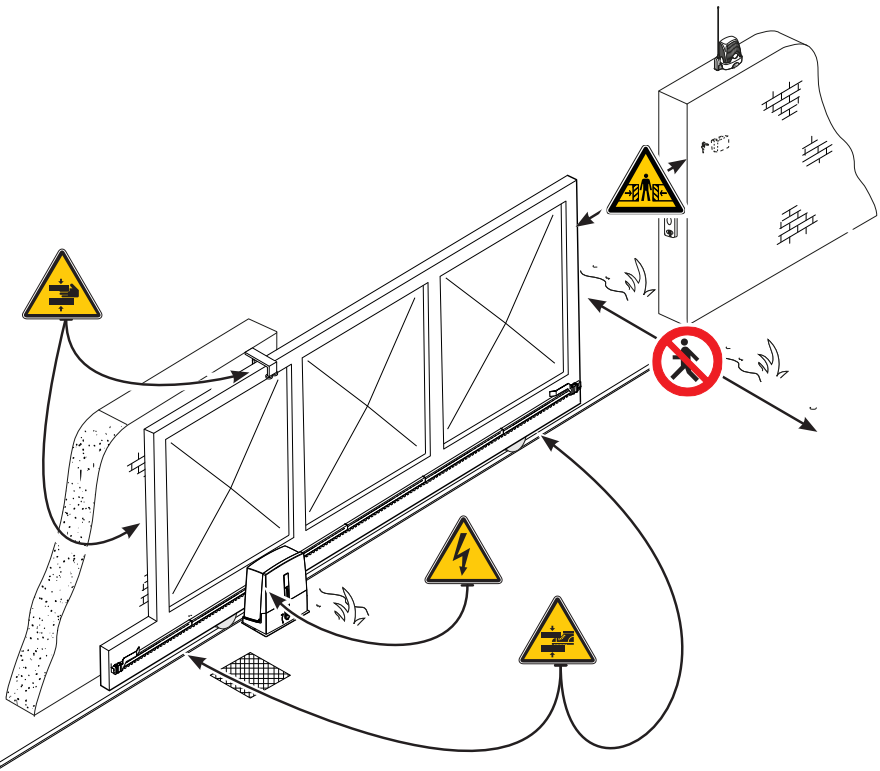
Follow all of these instructions. Improper installation can cause serious bodily harm.

Before continuing, also read the general precautions for users.

THIS PRODUCT MUST ONLY BE USED FOR ITS SPECIFICALLY INTENDED PURPOSE. ANY OTHER USE IS DANGEROUS. CAME S.P.A. IS NOT LIABLE FOR ANY DAMAGE CAUSED BY IMPROPER, WRONGFUL AND UNREASONABLE USE. • THIS MANUAL'S PRODUCT IS DEFINED BY MACHINERY DIRECTIVE 2006/42/CE AS "PARTLY-COMPLETED MACHINERY". QUASI-COMPLETED MACHINERY IS PARTLY-COMPLETED MACHINERY IS A SET THAT ALMOST CONSTITUTES A MACHINE, BUT WHICH, ALONE, CANNOT ENSURE A CLEARLY DEFINED APPLICATION. PARTLY-COMPLETED MACHINERY IS ONLY DESTINED TO BE INCORPORATED OR ASSEMBLED TO OTHER MACHINERY OR OTHER PARTLY-COMPLETED MACHINERY OR APPARATUSES TO BUILD MACHINERY THAT IS REGULATED BY DIRECTIVE 2006/42/CE. THE FINAL INSTALLATION MUST BE COMPLIANT WITH EUROPEAN DIRECTIVE 2006/42/CE AND CURRENT EUROPEAN REFERENCE STANDARDS. GIVEN THESE CONSIDERATIONS, ALL PROCEDURES STATED IN THIS MANUAL MUST BE EXCLUSIVELY PERFORMED BY EXPERT, QUALIFIED STAFF. • THE MANUFACTURER DECLINES ANY LIABILITY FOR USING NON-ORIGINAL PRODUCTS; WHICH WOULD RESULT IN WARRANTY LOSS • KEEP THIS MANUAL INSIDE THE TECHNICAL FOLDER ALONG WITH THE MANUALS OF ALL THE OTHER DEVICES USED FOR YOUR AUTOMATION SYSTEM. • CHECK THAT THE TEMPERATURE RANGE SHOWN ON THE OPERATOR IS SUITABLE TO THE LOCATIONS WHERE IT WILL BE INSTALLED. • LAYING THE CABLES, INSTALLATION AND TESTING MUST FOLLOW STATE-OF-THE-ART PROCEDURES AS DICTATED BY REGULATIONS • IF THE POWER-SUPPLY CABLE IS DAMAGED, IT MUST BE IMMEDIATELY REPLACED BY THE MANUFACTURER OR BY AN AUTHORIZED TECHNICAL ASSISTANCE CENTER, OR IN ANY CASE, BY QUALIFIED STAFF, TO PREVENT ANY RISK • DURING ALL PHASES OF THE INSTALLATION MAKE SURE YOU HAVE CUT OFF THE MAINS POWER SOURCE. • THE OPERATOR CANNOT BE USED WITH GATES FITTED WITH PEDESTRIAN DOORS, UNLESS ITS OPERATION CAN BE ACTIVATED ONLY WHEN THE PEDESTRIAN DOOR IS IN SAFETY POSITION. • MAKE SURE THAT PEOPLE ARE NOT ENTRAPPED BETWEEN THE GATE'S MOVING AND FIXED PARTS DUE TO THE GATE'S MOVEMENT. BEFORE INSTALLING THE OPERATOR, CHECK THAT THE GATE IS IN PROPER MECHANICAL CONDITION, THAT IT IS PROPERLY BALANCED AND THAT IT PROPERLY CLOSES: IF ANY OF THESE CONDITIONS ARE NOT MET, DO NOT CONTINUE BEFORE HAVING MET ALL SAFETY REQUIREMENTS. • MAKE SURE THE GATE IS STABLE AND THE CASTORS FUNCTION PROPERLY AND ARE WELL-GREASED, AND THAT IT OPENS AND CLOSES SMOOTHLY. • THE GUIDE RAIL MUST BE WELL-FASTENED TO THE GROUND, ENTIRELY ABOVE THE SURFACE AND FREE OF ANY IMPEDIMENTS TO THE GATE'S MOVEMENT. • THE RAILS OF THE UPPER GUIDE MUST NOT CAUSE ANY FRICTION. • MAKE SURE THAT OPENING AND CLOSING LIMITERS ARE FITTED • MAKE SURE THE OPERATOR IS INSTALLED ONTO A STURDY SURFACE THAT IS PROTECTED FROM ANY COLLISIONS • MAKE SURE THAT MECHANICAL STOPS ARE ALREADY INSTALLED • IF THE OPERATOR IS INSTALLED LOWER THAN 2.5 FROM THE GROUND OR FROM ANY OTHER ACCESS LEVEL, FIT ANY PROTECTIONS AND SIGNS TO PREVENT HAZARDOUS SITUATIONS. • DO NOT FIT THE OPERATOR UPSIDE DOWN OR ONTO ELEMENTS THAT COULD YIELD TO ITS WEIGHT. IF NECESSARY, ADD REINFORCEMENTS TO THE FASTENING POINTS • DO NOT INSTALL DOOR OR GATE LEAVES ON TILTED SURFACES • CHECK THAT NO LAWN WATERING DEVICES SPRAY THE OPERATOR WITH WATER FROM THE BOTTOM UP. • ANY RESIDUAL RISKS MUST BE INDICATED CLEARLY WITH PROPER SIGNAGE AFFIXED IN VISIBLE AREAS. ALL OF WHICH MUST BE EXPLAINED TO END USERS. • SUITABLY SECTION OFF AND DEMARCATATE THE ENTIRE INSTALLATION SITE TO PREVENT UNAUTHORIZED PERSONS FROM ENTERING THE AREA, ESPECIALLY MINORS AND CHILDREN. • AFFIX CAUTIONARY SIGNS, SUCH AS THE DOOR PLATE, THE GATE PLATE, WHEREVER NEEDED AND IN PLAIN SIGHT. • USE PROPER PROTECTIONS TO PREVENT MECHANICAL HAZARDS WHEN PEOPLE ARE LOITERING AROUND THE MACHINERY'S RANGE OF ACTION, FOR EXAMPLE TO PREVENT FINGER CRUSHING BETWEEN THE RACK AND PINION) • THE ELECTRICAL CABLES MUST RUN THROUGH THE CABLE GLANDS AND MUST NOT TOUCH ANY HEATED PARTS, SUCH AS THE MOTOR, TRANSFORMER, AND SO ON). • MAKE SURE YOU HAVE SET UP A SUITABLE DUAL POLE CUT OFF DEVICE ALONG THE POWER SUPPLY THAT IS COMPLIANT WITH THE INSTALLATION RULES. IT SHOULD COMPLETELY CUT OFF THE POWER SUPPLY ACCORDING TO CATEGORY III SURCHARGE CONDITIONS. • ALL OPENING CONTROLS MUST BE INSTALLED AT LEAST 1.85 M FROM THE PERIMETER OF THE GATE'S WORKING AREA, OR WHERE THEY CANNOT BE REACHED FROM OUTSIDE THE GATE. • ALL SWITCHES IN MAINTAINED ACTION MODE MUST BE POSITIONED SO THAT THE MOVING GATES LEAVES, THE TRANSIT AREAS AND VEHICLE THRU-WAYS ARE COMPLETELY VISIBLE, AND YET THE SWITCHES MUST BE ALSO AWAY FROM ANY MOVING PARTS • UNLESS THE ACTION IS KEY OPERATED, THE CONTROL DEVICES MUST BE FITTED AT, AT LEAST, 1.5 M FROM THE GROUND AND MUST NOT BE ACCESSIBLE TO THE PUBLIC. • TO PASS THE COLLISION FORCE TEST USE A SUITABLE SENSITIVE SAFETY-EDGE. INSTALL IT PROPERLY AND ADJUST AS NEEDED. • BEFORE HANDING OVER TO USERS, CHECK THAT THE SYSTEM IS COMPLIANT WITH THE 2006/42/CE UNIFORMED MACHINERY DIRECTIVE. MAKE SURE THE SETTINGS ON THE OPERATOR ARE ALL SUITABLE AND THAT ANY SAFETY AND PROTECTION DEVICES, AND ALSO THE MANUAL RELEASE, WORK PROPERLY. • AFFIX A PERMANENT TAG,

THAT DESCRIBES HOW TO USE THE MANUAL RELEASE MECHANISM, CLOSE TO THE MECHANISM. • MAKE SURE TO HAND OVER TO THE END USER, ALL OPERATING MANUALS FOR THE PRODUCTS THAT MAKE UP THE FINAL MACHINERY.

- THE NEXT FIGURE SHOWS THE MAIN HAZARD POINTS FOR PEOPLE -



Danger of high voltage;



Danger of crushing;



Danger of foot crushing;






Danger of hand entrapment;



Do not transit through during maneuvering.

KEY

-  This symbol shows which parts to read carefully.
-  This symbol shows which parts describe safety issues
-  This symbol shows which parts to tell users about.


The measurements, unless otherwise stated, are in millimeters.

DESCRIPTION

Operator with control board, movement control and obstruction detecting device plus mechanical stops for sliding gates of up to 400 kg and 10 m in length.

INTENDED USE

The operator is designed to power sliding gates in residential and apartment block settings.

 Do not install or use this device in any way, except as specified in this manual.

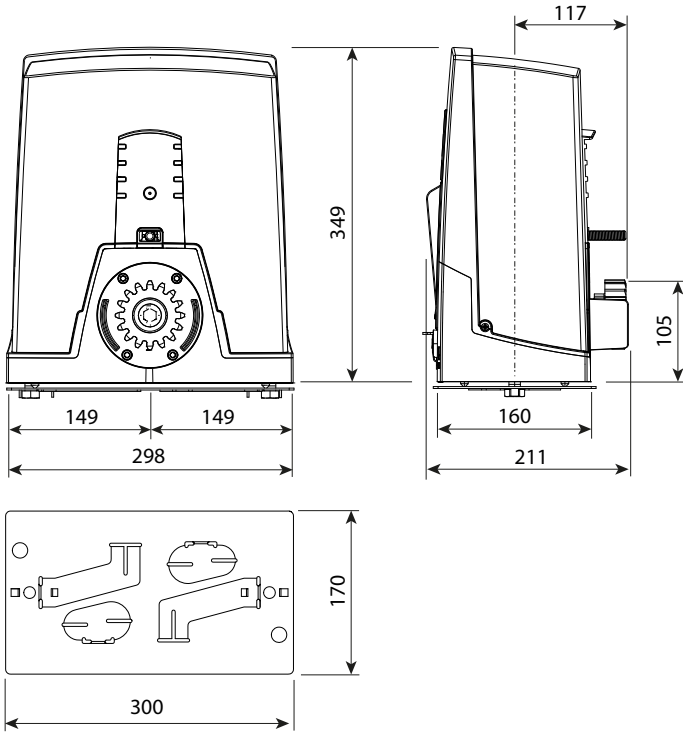
LIMITS TO USE

Type	BXL04AGS
Maximum gate-leaf length (m)	10
Maximum gate-leaf weight (kg)	400
Pinion module	4

TECHNICAL DATA

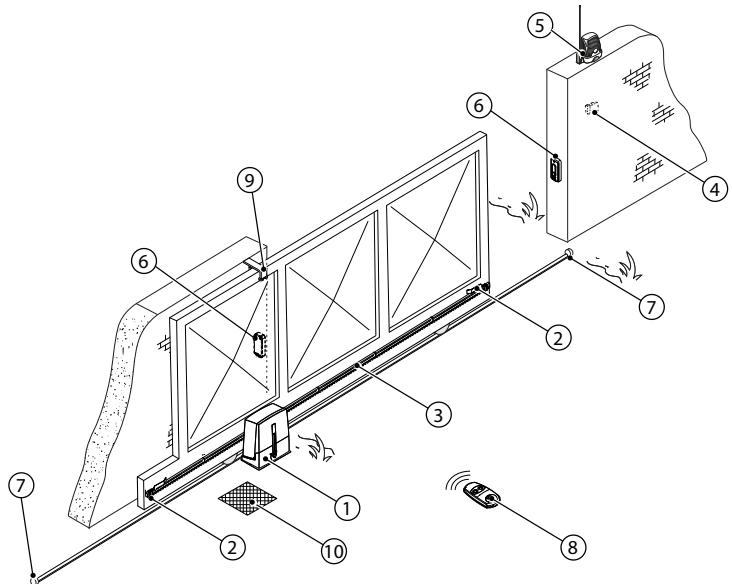
Type	BXL04AGS
Protection rating (IP)	44
Power supply (V - 50/60 Hz)	230 AC
Input voltage motor (V)	24 DC
Max draw (A)	7
Stand-by consumption (W)	7.4
Stand-by consumption with the RGP1 (W) module	1.2
Maximum power (W)	150
Duty cycle (%)	50
Operating temperature (°C)	-20 to +55
Apparatus class	I
Weight (Kg)	7.7

DIMENSIONS (MM)



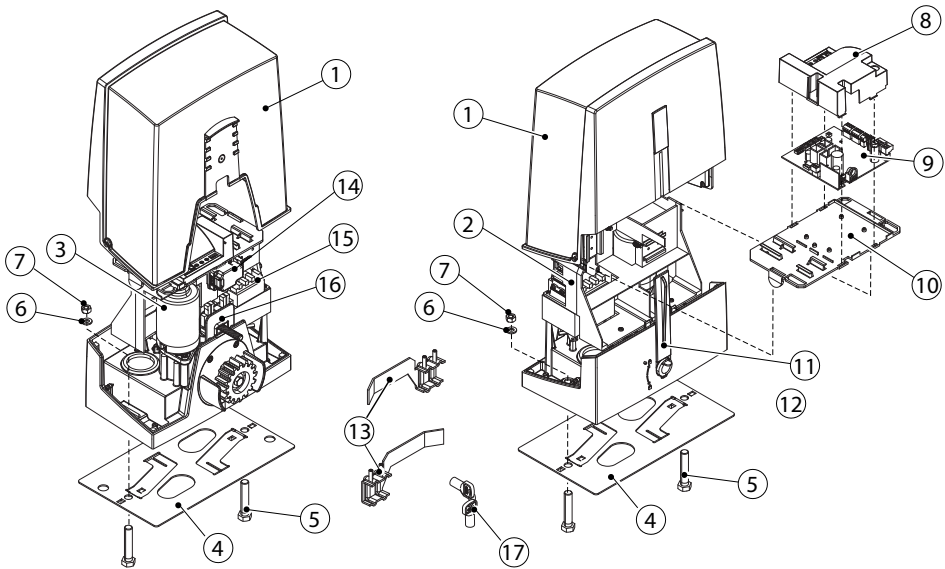
STANDARD INSTALLATION

1. Operator
2. Limit-switch fins
3. Rack
4. Key-switch selector
5. Flashing light
6. Photocells
7. Mechanical gate stop
8. Transmitter
9. Slide guides
10. Junction pit



DESCRIPTION OF PARTS

1. Cover
2. Board-fitting support
3. Gear motor
4. Anchoring plate
5. Fastening bolts UNI 5739 M12X60
6. Washer \varnothing 12
7. Nut UNI 5588 M12
8. Board protecting cover
9. Control board
10. Board-housing
11. Release lever
12. Lock
13. Limit-switch fins
14. EMC02 card
15. Transformer
16. Endstop device
17. Release key



GENERAL INSTALLATION INDICATIONS

△ Only skilled, qualified staff must install this product.

PRELIMINARY CHECKS

△ Before beginning the installation, do the following:

- check that the upper slide-guides are friction-free;
- make sure there are opening and closing mechanical gate stops;
- make sure that the point where the gearmotor is fastened is protected from any impacts and that the surface is solid enough;
- set up suitable tubes and conduits for the electric cables to pass through, making sure they are protected from any mechanical damage.

TOOLS AND MATERIALS

Make sure you have all the tools and materials you will need for installing in total safety and in compliance with applicable regulations. The figure shows some of the equipment installers will need.

CABLE TYPES AND MINIMUM SECTIONS

Connection	cable length	
	< 20 m	20 < 30 m
Input voltage for 230 V AC control board (1P+N+PE)	3G x 1.5 mm ²	3G x 2.5 mm ²
Signaling devices	2 x 0.5 mm ²	
Command and control devices	2 x 0.5 mm ²	
Safety devices (photocells)	(TX = 2 x 0.5 mm ²) (RX = 2 x 0.5 mm ²)	

📖 When operating at 230 V and outdoors, use H05RN-F-type cables that are 60245 IEC 57 (IEC) compliant; whereas indoors, use H05VV-F-type cables that are 60227 IEC 53 (IEC) compliant. For power supplies up to 48 V, you can use FROR 20-22 II-type cables that comply with EN 50267-2-1 (CEI).

📖 To connect the antenna, use the RG58 (we suggest up to 5 m).

📖 For paired connection and CRP, use a UTP CAT5-type cable (up to 1,000 m long).

📖 If cable lengths differ from those specified in the table, establish the cable sections depending on the actual power draw of the connected devices and according to the provisions of regulation CEI EN 60204-1.

📖 For multiple, sequential loads along the same line, the dimensions on the table need to be recalculated according to the actual power draw and distances. For connecting products that are not contemplated in this manual, see the literature accompanying said products

INSTALLATION

△ The following illustrations are mere examples. Consider that the space available where to fit the barrier and accessories will vary depending on the area where it is installed. It is up to the installer to find the most suitable solution.

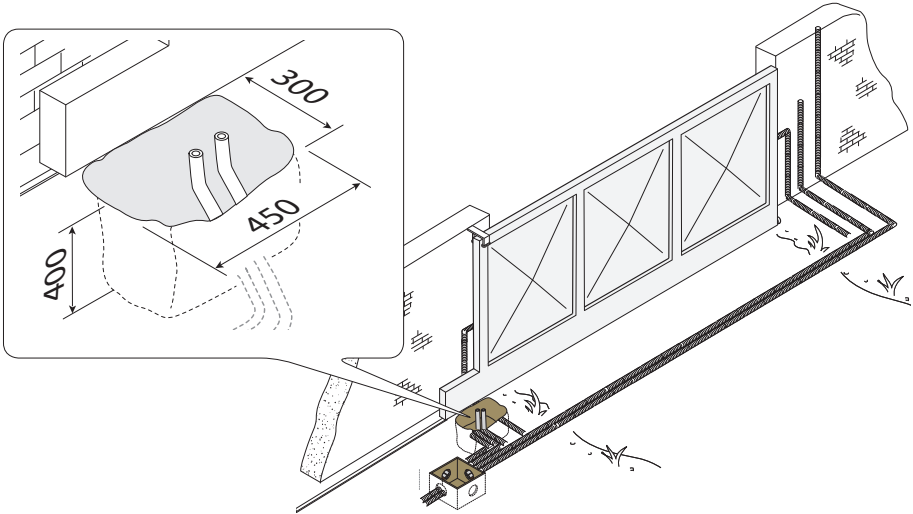
CORRUGATED TUBE LAYING

Dig a hole for the foundation frame.

Set up the corrugated tubes needed for the wiring coming out of the junction pit.

For connecting the gearmotor we suggest using a $\varnothing 40$ mm corrugated tube, whereas for the accessories we suggest $\varnothing 25$ mm tubes.

📖 The number of tubes depends on the type of system and the accessories you are going to fit.

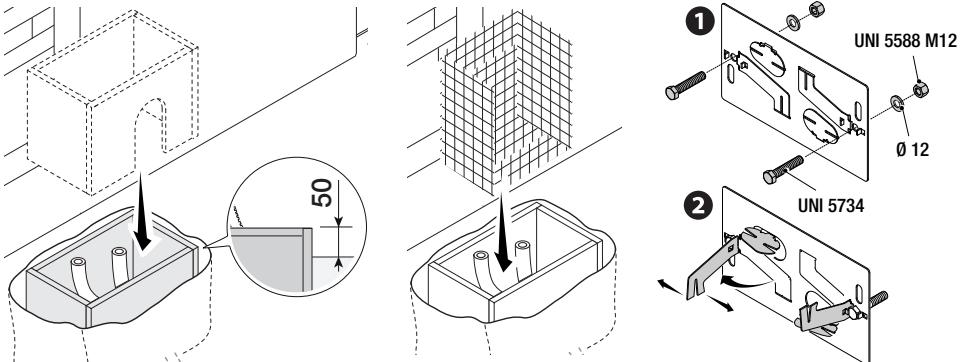


LAYING THE ANCHORING PLATE

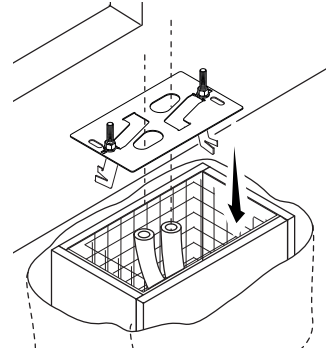
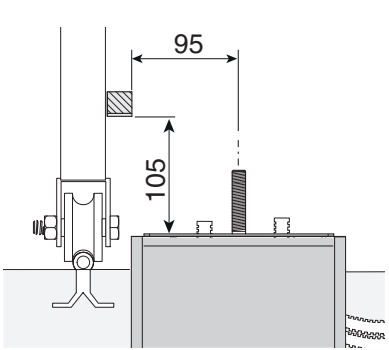
Set up a foundation frame that is larger than the anchoring plate and sink it into the dug hole. The foundation frame must jut out by 50 mm above ground level.

Fit an iron cage into the foundation frame to reinforce the concrete.

Fit the bolts into the anchoring plate and lock them using the washers and nuts. Remove the pre-shaped clamps using a screw driver or pliers.



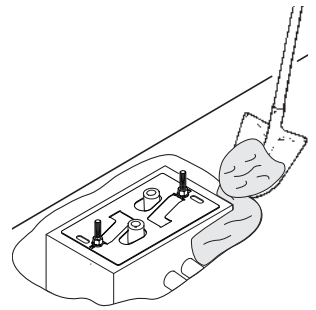
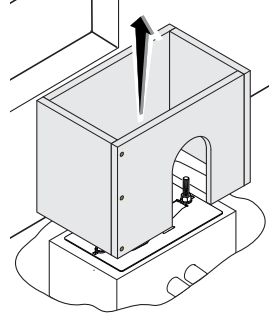
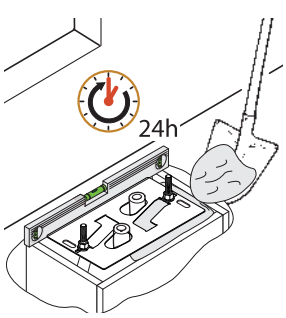
If the rack is already there, place the anchoring plate, being careful to respect the measurements shown in the drawing.
 Careful! The tubes must pass through their corresponding holes.



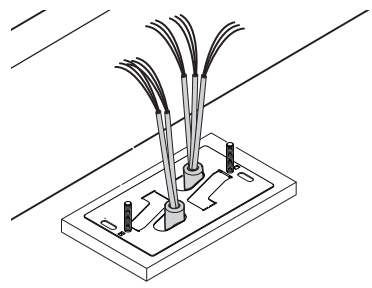
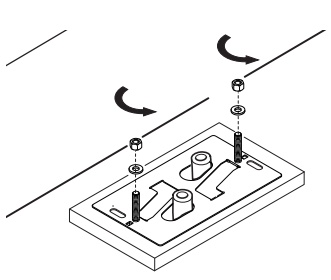
Fill the foundation frame with concrete. The plate must be perfectly level with the bolts which are entirely above surface.

Wait at least 24 hrs for the concrete to solidify.

Remove the foundation frame and fill the hole with earth around the concrete block.

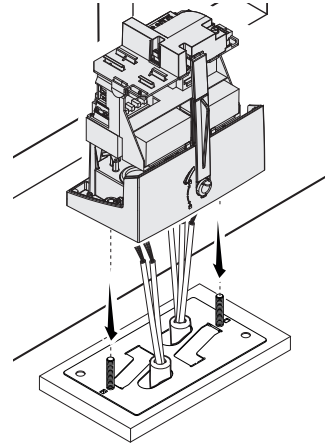
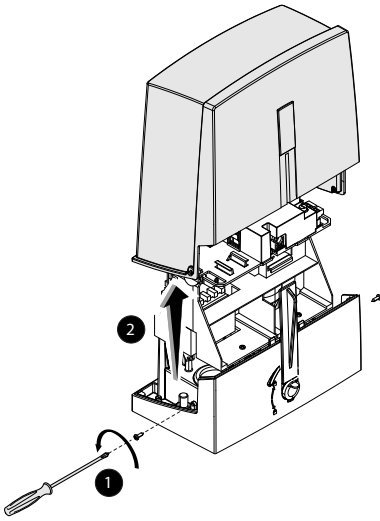


Remove the nut and washer from the bolts
 Fit the electric cables into the tubes so that they come out about 600 mm.

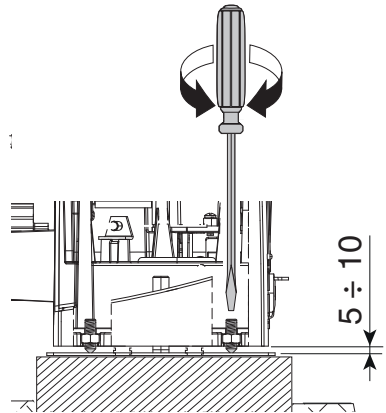
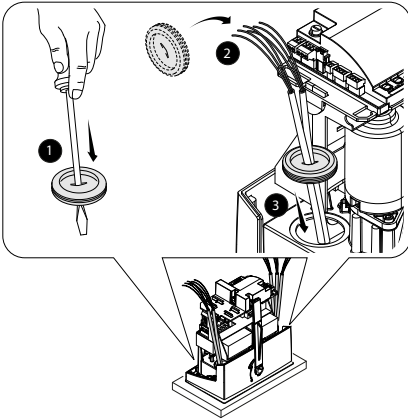


SETTING UP THE GEARMOTOR

Remove the gearmotor cover by turning the side bolts.
Place the gearmotor above the anchoring plate.
Careful! The electric cables must pass under the gearmotor case.



Perforate the cable gland and fit it into its housing after threading the cables.
Lift the gearmotor by 5 to 10 mm from the plate by adjusting the threaded steel feet to allow any subsequent adjustments between pinion and rack.

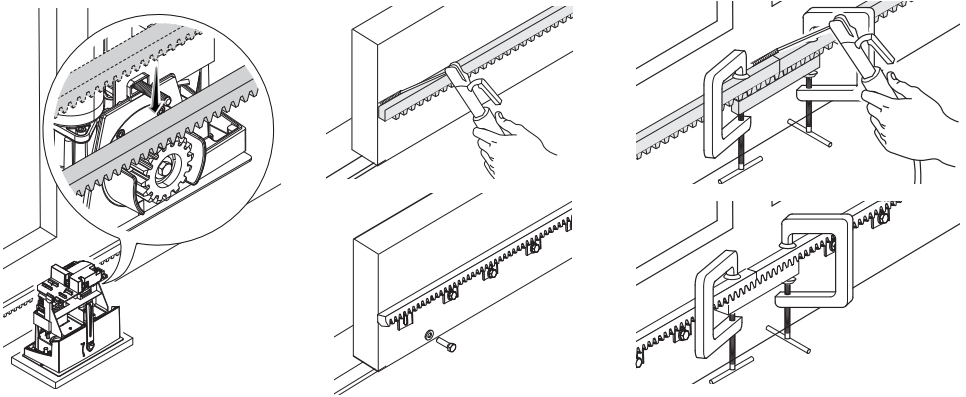


FASTENING THE RACK

📖 If the rack is already set up, the next step should be to adjust the rack-and-pinion coupling distance, otherwise, fasten it:

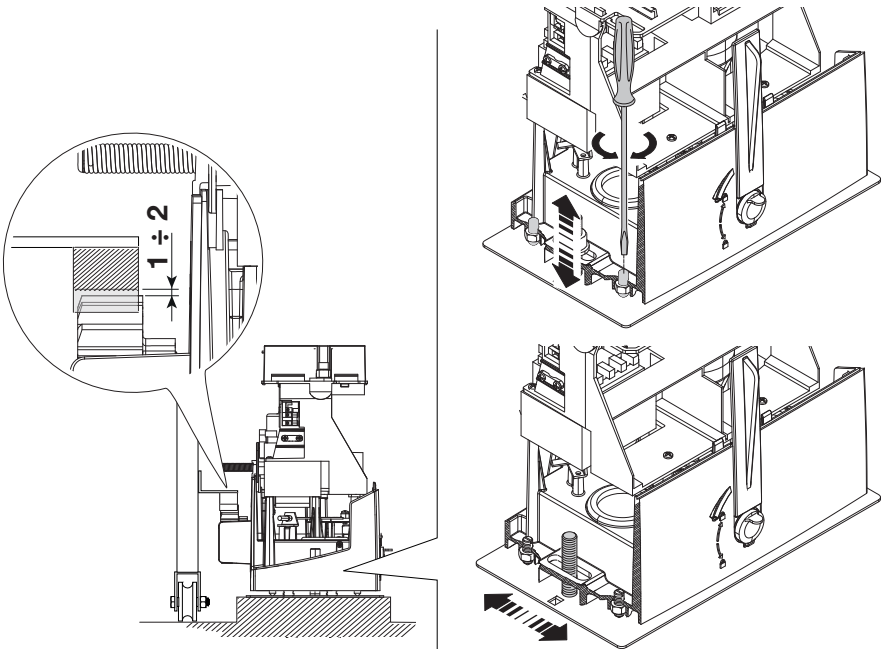
- release the gearmotor (see RELEASING THE GEARMOTOR paragraph);
- rest the rack above the gearmotor pinion;
- weld or fasten the rack to the gate along its entire length.

To assemble the rack modules, use an extra piece and rest it under the joint, then fasten it using two clamps.



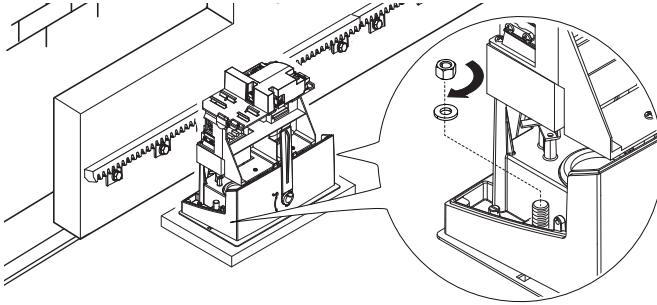
ADJUSTING THE PINION-RACK COUPLING

Manually open and close the gate and adjust the pinion-rack coupling distance using the threaded feet (vertical adjustment) and the holes (horizontal adjustment). This prevents the gate's weight from bearing down on the operator.



FASTENING THE GEARMOTOR

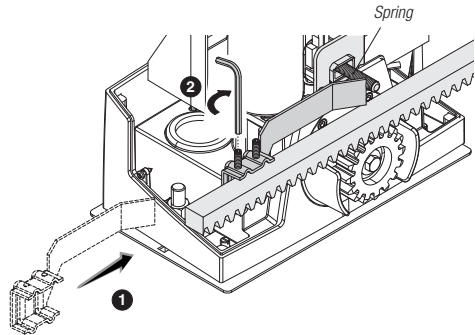
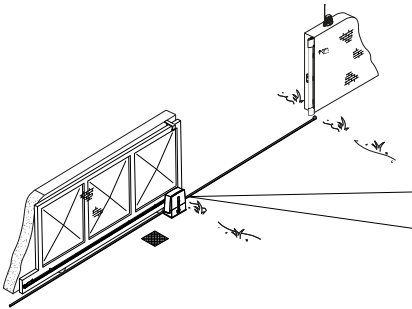
Complete the adjusting, fasten the gearmotor to the plate using the washers and nuts.



ESTABLISHING THE LIMIT-SWITCH POINTS

For opening:

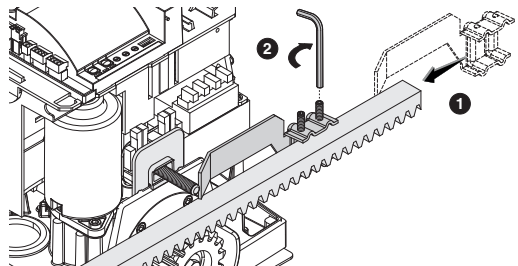
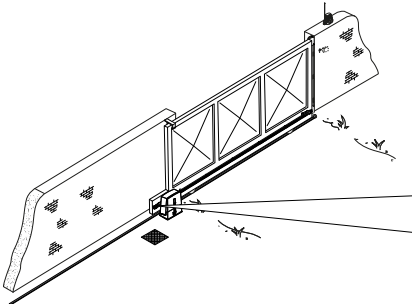
- completely open the gate;
- fit the opening endstop fin onto the rack until the micro switch activates (spring);
- fasten it using the allen screws



For closing:

- completely close the gate;
- fit the closing endstop fin onto the rack until the micro switch activates (spring);
- fasten it using the allen screws

⚠ Don't let the gate get to the mechanical stop, whether it is the opening or closing one.



ELECTRICAL CONNECTIONS AND PROGRAMMING

⚠ **Caution! Before working on the control panel, cut off the mains power supply and remove any batteries.**

Powering up the control board and command and control devices: 24 V AC/DC.

⚠ **Careful!** The accessories connected onto 10-11 must never exceed 20 W overall.

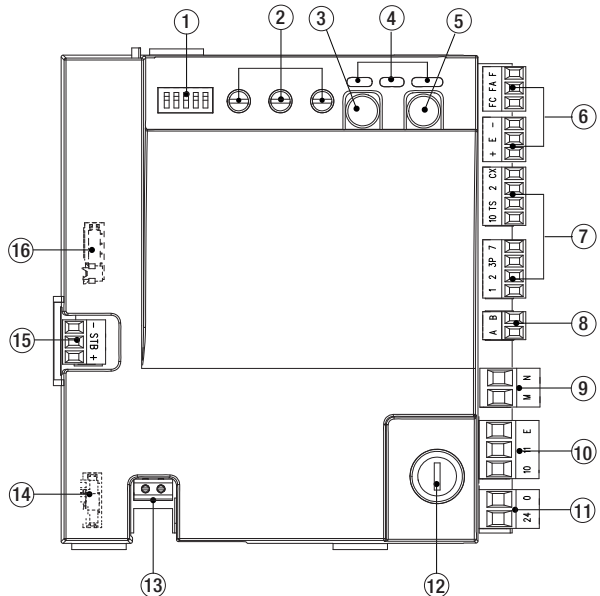
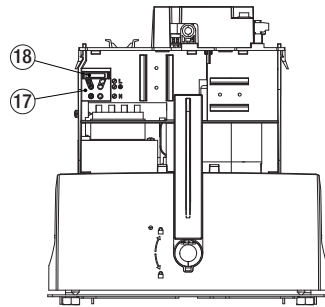
Use DIP switches to set functions and the trimmer for adjustments.

All wiring connections are quick-fuse protected.

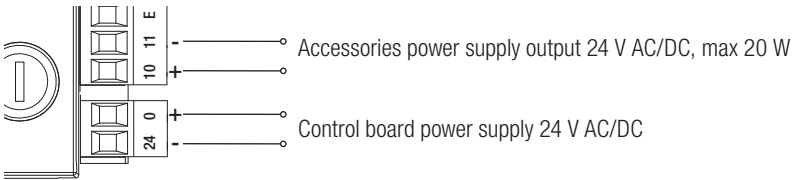
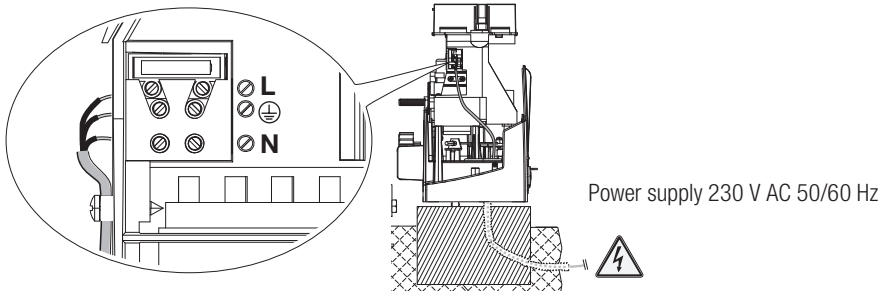
Fuses	ZN6
LINE - Line	1.6 A-F
ACCESSORIES - Accessories	2 A-F

DESCRIPTION OF PARTS

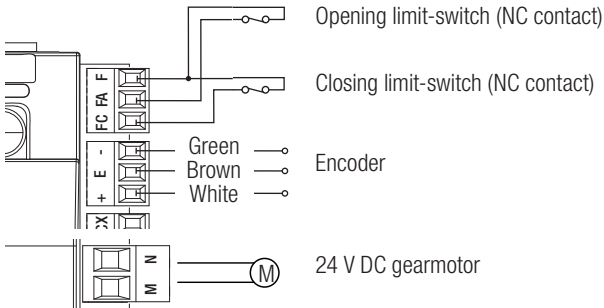
1. DIP-SWITCH
2. Trimmer
3. Programming button
4. Alert LED
5. Button Button (7)
6. Encoder and endstop terminals
7. Command and safety devices terminals
8. Keypad selector terminal
9. Terminal for gearmotors
10. Power supply to accessories terminal
11. Power supply to control board terminal
12. Accessories / board fuse
13. Antenna terminal
14. AF card slot
15. Green power module terminal
16. R800 card connector
17. Power supply terminal board
18. Line fuse



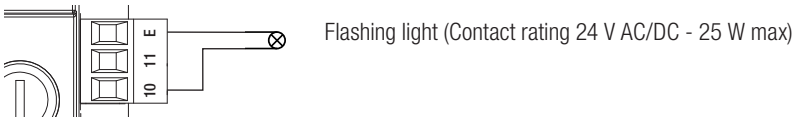
INPUT VOLTAGE



CONNECTING THE GEARMOTOR WITH ENCODER AND ENDSTOPS

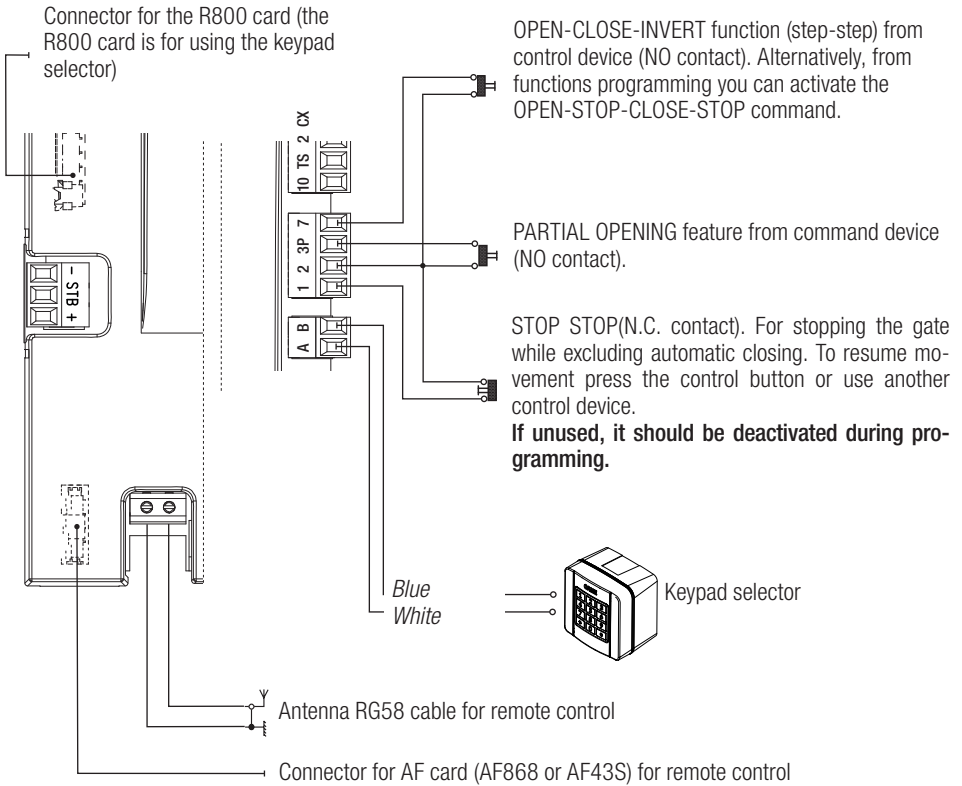


SIGNALING DEVICES

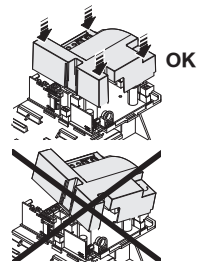
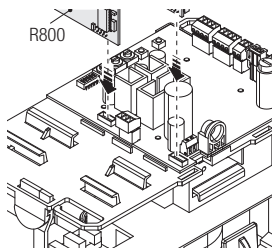
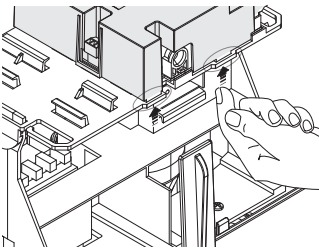


COMMAND AND CONTROL DEVICES

⚠ WARNING! For the system to work properly, before fitting any plug-in card, such as the AF or R800 one, you **MUST CUT OFF THE MAINS POWER SUPPLY** and, if present, disconnect any batteries.



To be able to snap in the cards into the dedicated connectors, raise the card cover.




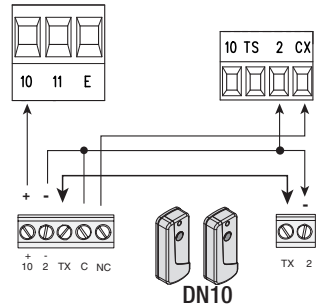
SAFETY DEVICES

Photocells

Configure the CX contact (NC), input for safety devices such as photocells. When programming the functions the CX input may be set up as:

- C1 reopening during closing. When the gate is closing, opening the contact triggers the inversion of movement until the gate is fully open again;
- C4 obstruction wait. Stopping of the gate, if it is moving, which resumes movement once the obstruction is removed.

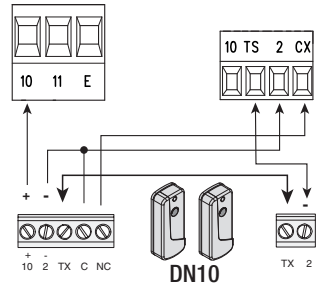
 If unused, the CX contact should be deactivated during programming.



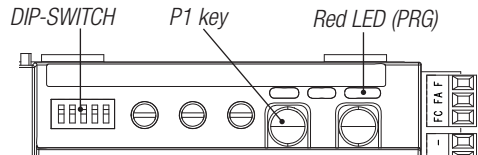
Connecting the safety devices (i.e. the safety test)

At each opening and closing command, the control board checks the efficacy of the safety devices (such as photocells).


Any anomalies will inhibit all commands.
Enable this function when programming.



FUNCTIONS PROGRAMMING



 **IMPORTANT!** Start programming while respecting the order of the features shown on the list below.

 Only program functions when the operator is stopped.
When programming is finished, set all Dip-switches to OFF.

 You can save up to 25 users.

 **IMPORTANT!** Start programming by first running the Opening direction, TOTAL STOP and Self-learning functions, respectively.

DIP-SWITCH Description of functions

Opening direction

By default, the operator is programmed for being installed on the left.

For installing on the right:

select the DIP switches as shown and press the P1 key on the control board. The LED stays on and the buzzer sounds off for one second.

Press P1 to return to the default parameters. The LED blinks and the buzzer sounds off twice.



TOTAL STOP from button (contact 1-2)

By default, the feature is enabled.

To disable it:

select the DIP switches as shown and press the P1 key on the control board. The LED blinks and the buzzer sounds off twice.

To return to the default parameters, press P1 again. The LED stays lit and the buzzer sounds off for 1 second.



Self-learning of the gate-leaf travel

Select the DIP switches as shown and press the P1 key on the control board.

The gate will perform a series of maneuvers to determine the endstop slow-down points.

During calibration the red LED blinks. Once the calibration is complete, the buzzer sounds off for 1 second.

If the calibration has not succeeded, the LED blinks quickly and the buzzer sounds off 4 times.

You can interrupt the gate travel's self-learning operation by pressing key P1.



Input on contact 2-CX

By default, the feature is disabled.

To enable it:

select the DIP switches as shown and press the P1 key on the control board. The LED stays on and the buzzer sounds off for one second.

To return to the default setting, press P1 again. The LED blinks and the buzzer sounds off twice.



Reopening during closing or obstruction wait (contact 2-CX)

By default, the feature is set to reopening during closing.

To enable on obstruction wait:

select the DIP switch as shown and press the P1 key on the control board. The LED stays on and the buzzer sounds off for one second.

To return to the default settings, press P1 again. The LED blinks and the buzzer sounds off twice.



Self-learning of the partial gate-travel

Using the control button (7) on the control board, take the gate to the desired partial opening position.

Select the DIP switches as shown and press the P1 key on the control board. The LED stays on and the buzzer sounds off for one second.

To return to the default setting, press P1 again. The LED blinks and the buzzer sounds off twice.

If the partial opening is not within the minimum and maximum limits set by default, the LED blinks quickly and the buzzer sounds off 4 times.



OPEN-CLOSE-INVERT or OPEN-STOP-CLOSE-STOP with button (contact 2-7)

By default, the feature is OPEN-CLOSE-INVERT.

To enable it to OPEN-STOP-CLOSE-STOP:

select the DIP switches as shown and press the P1 key on the control board. The LED stays on and the buzzer sounds off for one second.

To return to the default settings, press P1 again. The LED blinks and the buzzer sounds off twice.



Automatic closing

By default, the feature is disabled.

To enable it:

select the DIP switches as shown and press the P1 key on the control board. The LED stays on and the buzzer sounds off for one second.

To return to the default setting, press P1 again. The LED blinks and the buzzer sounds off twice.

The wait before the automatic closing starts when the opening limit-switch point is reached - for a time that is settable on the A.C.T. trimmer.

△ The automatic closing does not activate if the safety devices are triggered due to obstacle detection, after a total stop or if the power supply is missing.



Automatic closing after partial stop

By default, the feature is enabled.

To disable it:

select the DIP switch as shown and press the P1 key on the control board. The LED blinks and the buzzer sounds off twice.

To return to the default parameters, press P1 again. The LED stays lit and the buzzer sounds off for 1 second.

△ When the feature is disabled, after an opening command, the gate automatically closes until the previously set partial opening point.

To completely close the gate send a 2-7 command from a button or transmitter.

Services test

By default, the feature is disabled.

To enable it:

select the DIP switches as shown and press the P1 key on the control board. The LED stays on and the buzzer sounds off for one second.

To return to the default setting, press P1 again. The LED blinks and the buzzer sounds off twice.



Obstruction detection with motor stopped

By default, the feature is disabled.

To enable it:

Select the DIP switches as shown and press the P1 key on the control board. The LED stays on and the buzzer sounds off for one second.

To return to the default setting, press P1 again. The LED blinks and the buzzer sounds off twice.



Encoder

By default, this function is enabled.

To disable it:

select the DIP switches as shown and press the P1 key on the control board. The LED blinks and the buzzer sounds off twice.

To return to the default parameters, press P1 again. The LED stays lit and the buzzer sounds off for 1 second.



Button-activated maintained action

By default, the feature is disabled.

To enable it:

select the DIP switches as shown and press the P1 key on the control board. The LED stays on and the buzzer sounds off for one second.

To return to the default setting, press P1 again. The LED blinks and the buzzer sounds off twice.

△ The gate opens and closes when the button is kept pressed.

Opening button connected on 2-3P (NO contact) and closing button connected on 2-7 (NO contact)

All other control devices, even radio-based ones, are excluded.



Pre-flashing (pre-flashing duration: 5 s)

By default, the feature is disabled.

To enable it:

select the DIP switches as shown and press the P1 key on the control board. The LED stays on and the buzzer sounds off for one second.

To return to the default setting, press P1 again. The LED blinks and the buzzer sounds off twice.



Adjusting the maneuver speed

The default maneuver speed is set to 100%.

To diminish the maneuver speed by 40%:

select the DIP switches as shown and press P1 on the control board. The red LED stays lit and buzzer sounds off for one second.

To return to the default setting, press P1 again. The LED blinks and the buzzer sounds off twice.



Saving the trimmer value

Use the trimmer to adjust the automatic closing time (A.C.T.), the slow- down speed (SP.RAL.) and the sensitivity (SENS.).

To save the values:

select the DIP switches as shown and press the P1 key on the control board. The LED stays on and the buzzer sounds off for one second.

Warning! If the data is not saved, the adjustments will be lost.

Transmitter activated partial opening

Select the DIP switches as shown and press the P1 key on the control board. The red LED blinks. Within 10 seconds, press a key on the transmitter you want to save.

Once the transmitter is saved, the red LED turns on the buzzer sounds off for 1 s.

If the transmitter has previously been saved, the LED blinks quickly and the buzzer sounds off 4 times.

Transmitter activated open only

Select the DIP switches as shown and press the P1 key on the control board. The red LED blinks. Within 10 seconds, press a key on the transmitter you want to save.

Once the transmitter is saved, the red LED stays lit and the buzzer sounds off for 1 s.

If the transmitter has previously been saved, the LED blinks quickly and the buzzer sounds off 4 times.

Transmitter activated OPEN-CLOSE-INVERT

Select the DIP switches as shown and press the P1 key on the control board. The red LED blinks. Within 10 seconds, press a key on the transmitter you want to save.

Once the transmitter is saved, the red LED stays lit and the buzzer sounds off for 1 s.

If the transmitter has previously been saved, the LED blinks quickly and the buzzer sounds off 4 times.

Transmitter activated OPEN-STOP-CLOSE-STOP

Select the DIP switches as shown and press the P1 key on the control board. The red LED blinks. Within 10 seconds, press a key on the transmitter you want to save.

Once the transmitter is saved, the red LED stays lit and the buzzer sounds off for 1 s.

If the transmitter has previously been saved, the LED blinks quickly and the buzzer sounds off 4 times.

Deleting all users

Select the DIP switches as shown and press the P1 key on the control board, for 5 seconds.

Once deleted, the red LED stays on and the buzzer sounds off for 1 s. stays lit and the buzzer sounds off for 1 second.

Resetting parameters

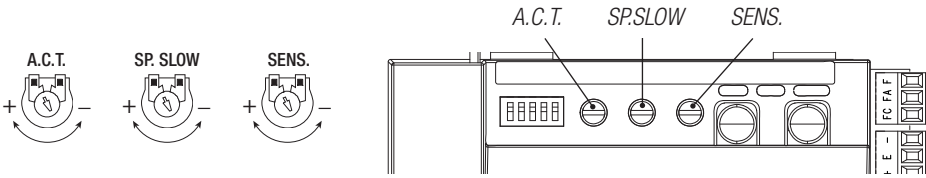
Select the DIP switches as shown and press the P1 key on the control board. The LED blinks and buzzer sounds off 2 times.

With this feature, users are not deleted.

SERVICING UP TO 25 USERS

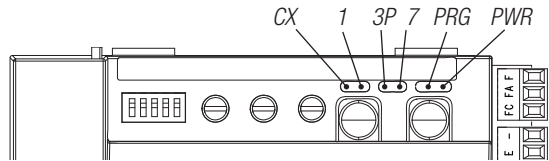


ADJUSTING THE TRIMMERS



Trimmer	Description of functions
A.C.T.	<p>Automatic Closing Time</p> <p>It sets the open gate's waiting time. Once this time elapses, the shutter automatically closes. The waiting time can be adjusted to between 1 and 120 s.</p>
SP. SLOW	<p>Slow-down speed</p> <p>It adjusts the gearmotors' speed when slowing down. The speed can be adjusted from 30% (-) to 60% (+) of maximum speed.</p>
SENS.	<p>Sensibility</p> <p>It adjusts the obstruction detection sensitivity during gate movement. Minimum sensitivity (-) or maximum sensitivity (+).</p>

ALERT LED



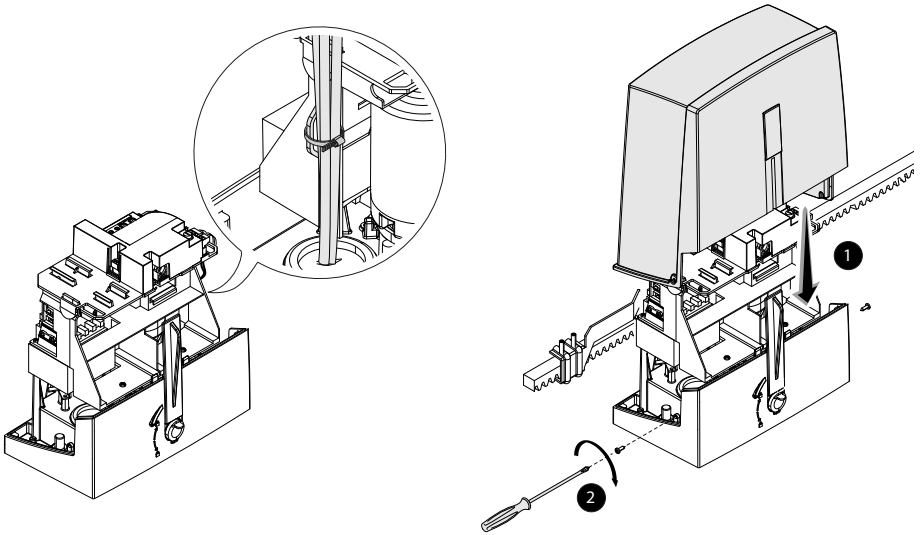
LEDs	Description
CX (Yellow)	It warns that contact 2-CX (NC) is open (photocells)
1 (Yellow)	It warns that contact 1-2 (NC) is open (STOP button)
3P (Yellow)	It warns that contact 2-3P (NO) is closed (partial opening button)
7 (Yellow)	It warns that contact 2-7 (NO) is closed (command button)
PRG (Red)	It warns about the features' programming phases, the automatic closing waiting time and of any errors/malfunctions
PWR (Green)	It warns about the voltage present in the control board

FINAL OPERATIONS

FASTENING THE COVER

Once the electrical connections are done and the set up is finished, fasten the cables to the gearmotor jumper using a cable tie.

Fit the cover and fasten it to the sides using the screws.



TROUBLESHOOTING

ISSUES	POSSIBLE CAUSES	FIXES
It neither opens nor closes	<ul style="list-style-type: none">• Power supply is missing• The gear motor is stuck• The transmitter doesn't work• The transmitter is broken• the stop button is either stuck or broken• The opening/closing button or the key-switch selector is stuck	<ul style="list-style-type: none">• Check main power supply• Lock the gearmotor• Replace the batteries• Call for assistance• Call for assistance• Call for assistance
The gate opens but does not close	<ul style="list-style-type: none">• The photocells are dirty	<ul style="list-style-type: none">• Clean and check proper functioning of the photocells

DISMANTLING AND DISPOSAL

👉 CAME CANCELLI AUTOMATICI S.p.A. applies a certified Environmental Management System at its premises, which is compliant with the UNI EN ISO 14001 standard to ensure the environment is safeguarded. Please continue safeguarding the environment. At CAME we consider it one of the fundamentals of our operating and market strategies. Simply follow these brief disposal guidelines:

♻️ DISPOSING OF THE PACKAGING

The packaging materials (cardboard, plastic, and so on) should be disposed of as solid household waste, and simply separated from other waste for recycling.

Always make sure you comply with local laws before dismantling and disposing of the product.

DISPOSE OF RESPONSIBLY!

♻️ DISMANTLING AND DISPOSAL

Our products are made of various materials. Most of these (aluminum, plastic, iron, electrical cables) are classified as solid household waste. They can be recycled by separating them before dumping at authorized city plants.

Whereas other components (control boards, batteries, transmitters, and so on) may contain hazardous pollutants. These must therefore be disposed of by authorized, certified professional services.

Before disposing, it is always advisable to check with the specific laws that apply in your area.

DISPOSE OF RESPONSIBLY!

The contents of this manual may change, at any time, and without notice.

CAME 

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