

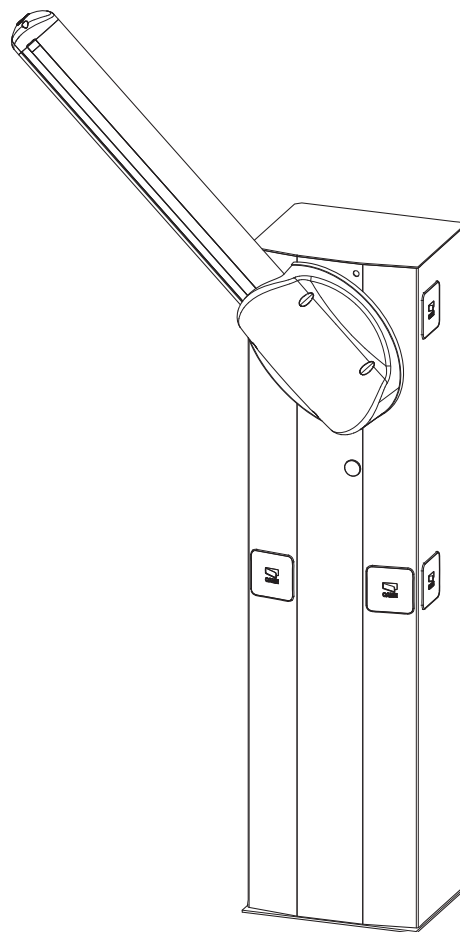


CE

119GV18EN

STREET BARRIERS

GARD
SERIES



INSTALLATION MANUAL

G3250



English

EN

Index

Legend of symbols	p. 4
Intended use and limits to use	p. 4
Intended use	p. 4
Limits to use	p. 4
Description	p. 4
Technical data	p. 4
Description of parts	p. 5
Dimensions	p. 6
Installation	p. 6
Preliminary checks	p. 6
Tools and materials	p. 6
Types of cables and thicknesses	p. 7
Standard installation	p. 7
Preparing the anchoring base	p. 8
Installing the operator	p. 9
Arm balancing	p. 14
Adjusting endpoints	p. 15
Manual release of the barrier arm	p. 16
Description of the control panel	p. 16
Technical data	p. 16
Main component parts	p. 17
Electrical connections	p. 17
Gearmotor and endstops	p. 17
Power source and accessories	p. 18
Command devices	p. 18
Warning devices	p. 19
Safety devices	p. 19
Adjusting manoeuvring and braking speeds	p. 19
Selecting functions	p. 20
Adjustments	p. 20
Activating the radio command	p. 21
Antenna	p. 21
Radiofrequency card	p. 21
Transmitters	p. 21
Memorisation	p. 22
Connecting two coupled barriers	p. 23
Safety instructions	p. 24
Maintenance	p. 24
Periodic maintenance	p. 24
Extraordinary maintenance	p. 25
Troubleshooting	p. 26
Dismantling and disposal	p. 26
CE Compliance statement	p. 27



WARNING!
important safety instructions:
READ CAREFULLY!



Introduction

- Use this product only for the specific purpose for which it is designed. Any other use is, therefore, dangerous. CAME Cancelli Automatici S.p.A. is not liable for any damage resulting from improper, wrongful or unreasonable use.
- The guarantee and proper installation of the product are made possible by respecting the corresponding technical specifications, state-of-the-art installation, and safety and compliance requirements of the with intended use - all of which is stated in the technical documentation supplied with the products.
- Keep these warnings together with their relevant installation and user's manuals.

Before installing

(check what's there: if you find something wrong, proceed only after correcting the problem so the equipment is safe to use)

- Installation and testing must only be done by skilled staff
- The cables set up, installation, connection and testing must all be performed by following proper technical practices and in respect of current laws;
- Before starting any job or operation, please read all of the instructions carefully; improper installation can lead to hazards for people and things
- Check that the boom is in good mechanical, working order, and that it is balanced and level, and that it opens and closes properly. You should also install, if necessary, suitable protections or use additional safety sensors
- If the operator will be installed less than 2.5 m from the floor or from any other access level, check whether you need additional protections and/ or warnings
- Make sure that when opening, the automated barrier does not constitute a hazard
- Do not mount the operator upside down or onto elements that could fold. If necessary, add suitable reinforcements at the fastening points
- Do not install on sloping ground (only install on flat ground)
- Check that any watering devices cannot wet the gearmotor from the bottom upwards.

Installation

- Properly signal and demarcate the entire site to prevent any careless people from entering the works area
- Be careful when handling operators that weigh more than 20 kg (see installation manual. If such is the case, make sure you have proper hoisting equipment
- The safety devices, that is, photocells, sensitive plates, sensitive edges, emergency buttons, and so on, bearing the EC conformity mark, must be installed as established in the current regulations and according to proper technical practices, while considering the surroundings and what type of service is required, as well as the operating load sustained by the moving barriers. Any points that constitute hazards, such as, crushing, shearing, and dragging, should be protected by corresponding sensors
- Any residual risks must be properly indicated
- All opening commands, such as, key-switch selectors, magnetic readers and so on, must be installed at least 1.85 m from the gate's area of movement, or so that they are unreachable from the outside. Moreover, the direct commands (from buttons, swipe cards, and so on) must be installed 1.5 m high off the ground and must not be reachable by the public
- The automated barrier must clearly bear its corresponding identification data
- Before connecting it to the power supply, make sure the data on the identification plate matches that of the power network
- The automatic barrier must be connected to an efficient grounding system that is up to code.

The manufacturing company declines any liability for the use of non-original products; This means the guarantee is null

- All hold-to-run commands must be placed in spots from which one can see the barrier in operation as well as all of the transit and parking areas.
- Apply a permanent label that shows the position of the device.

- Before turning over the installation to the user, check that the system conforms to standards EN 12453 and EN12445 (impact testing), making sure the device has been properly adjusted and that the safety and protection and release devices function properly
- Where necessary apply the Warning Signs so that they are clearly visible (for example, the gate plate).

Instructions and special recommendations for users

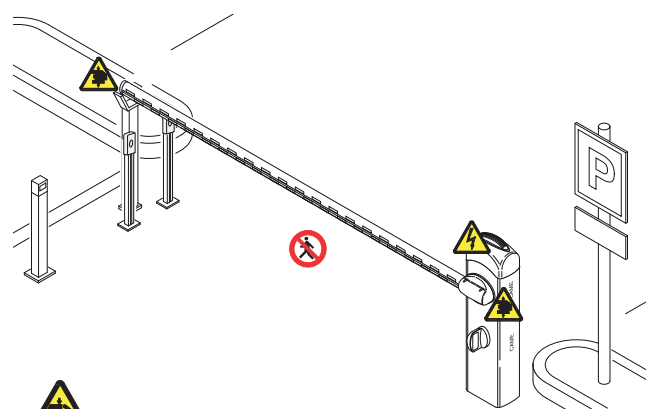
- Keep the barrier's areas of operations unobstructed. Keep the photocells' range of operation free of vegetation
- Do not allow children to play with the fixed command devices, or in the barrier's area of operation. Keep transmitters and any other command devices away from children, to prevent the operator

from being activated by mistake.

- Frequently check the system, to scan for any anomalies or wear and tear in the moving structures, the operator's components, all fastening points and devices, the cables and accessible connections. Maintain all hinges and joints well-greased and the boom-attachment flange clean and free of grit. Ensure proper cleaning of the glass on the photocells (use a slightly damp cloth); do not use any solvents or other chemical products that may ruin the devices)
- Should any repairs or changes to the system settings be needed, release the operator and refrain from using it until safety conditions have been restored
- Cut the power off before releasing the operator for manual opening. Check the instructions
- It is FORBIDDEN for users to perform ANY OPERATIONS THAT ARE NOT EXPRESSLY REQUESTED OF SAID USERS in the manuals. Any repairs, adjustments or extra-ordinary maintenance, EXCLUSIVELY CALL TECHNICAL ASSISTANCE
- Log any service jobs onto the periodic maintenance journal.

Additional special recommendations for everyone

- Stand clear of the boom or other mechanical, moving parts
- Stay clear of the operating range of the moving barrier
- Do not counter the operator's movement, as this can result in hazardous situations
- Be especially careful at all times around the dangerous points; these shall be marked with corresponding pictograms and/or black and yellow stripes
- When using a selector switch or transmitter in hold-to-run mode, continue checking that no persons come within the working range of the moving parts, until the command is released
- The barrier may move at any moment without warning
- Always cut off the electrical power when doing any maintenance or cleaning of the barrier.



Hand crushing Hazard



Danger high voltage



No transit during operation

Legend of symbols



This symbol means parts must be read carefully.



This symbol means the parts describe safety issues.



This symbol tells you what to notify to the user.

Intended use and limits to use

Intended use

The 001G3250 barrier is designed and built by © CAME Cancelli Automatici S.p.A. in compliance with current regulations on safety concerning the use of parking facilities in private, public, residential and areas with high flow densities.



Any installation or use other than that indicated in this manual is forbidden.

Limits to use

Passage width up to 3.25 metres with 2 to 6 seconds opening time.

Description

The cabinet is made of 2mm-thick galvanised steel varnished with epoxy powders. Features to complement with dedicated Came accessories.

The anchoring base is made of galvanised steel and has four clamps with securing nuts. The arm-attachment flange makes for quick and safe blocking of the arm. Inside there are: control panel, mechanical safety stops, endpoint assembly, balancing spring and irreversible gearmotor with die-cast aluminium case. The gearmotor features an endless screw based reduction system which is lubricated by permanent fluid grease with rotating parts on lubricated bearings.

001G3250 - varnished galvanised steel barrier ready to fit accessories.

NB - You must request right or left-side barriers when ordering. In this manual only left-hand barriers are shown.

Required accessories:

001G03250 - White varnished semi-elliptical aluminium arm L = 3.5 m, complete with cable cover profile, anti-impact profile, internal reinforcement, luminous cord, cord connection cable and red reflective adhesive strips.

001G03250DX - White varnished semi-elliptical aluminium arm L = 3.5 m, complete with cable cover profile, anti-impact profile, internal reinforcement, right hand joint and red reflective adhesive strips.

001G03250SX - White varnished semi-elliptical aluminium arm L = 3.5 m, complete with cable cover profile, anti-impact profile, internal reinforcement, right hand joint and red reflective adhesive strips.

Optional accessories:

001G0468 - Support for applying DELTA-I and DELTA-SI photocells;

001G04601 - Adaptor for applying flashers of the Kiaro series via its relative 001KIAROS support.

002LB38 Card for connecting three 12 V - 7 Ah emergency batteries.

Important! Check that the command, safety equipment and accessories are CAME originals; this will ensure easy installation and maintenance of your system.

Technical data

Motor power supply (V: 24 V DC 50 / 60 50/60 Hz

Maximum draw: 15 A

Power: 300 W

Maximum Torque: 200 Nm

Reduction ratio: 1/202

Opening time: 2÷6 sec.

Duty cycle Intensive use

IP protection rating: IP54

Weight: 47 kg

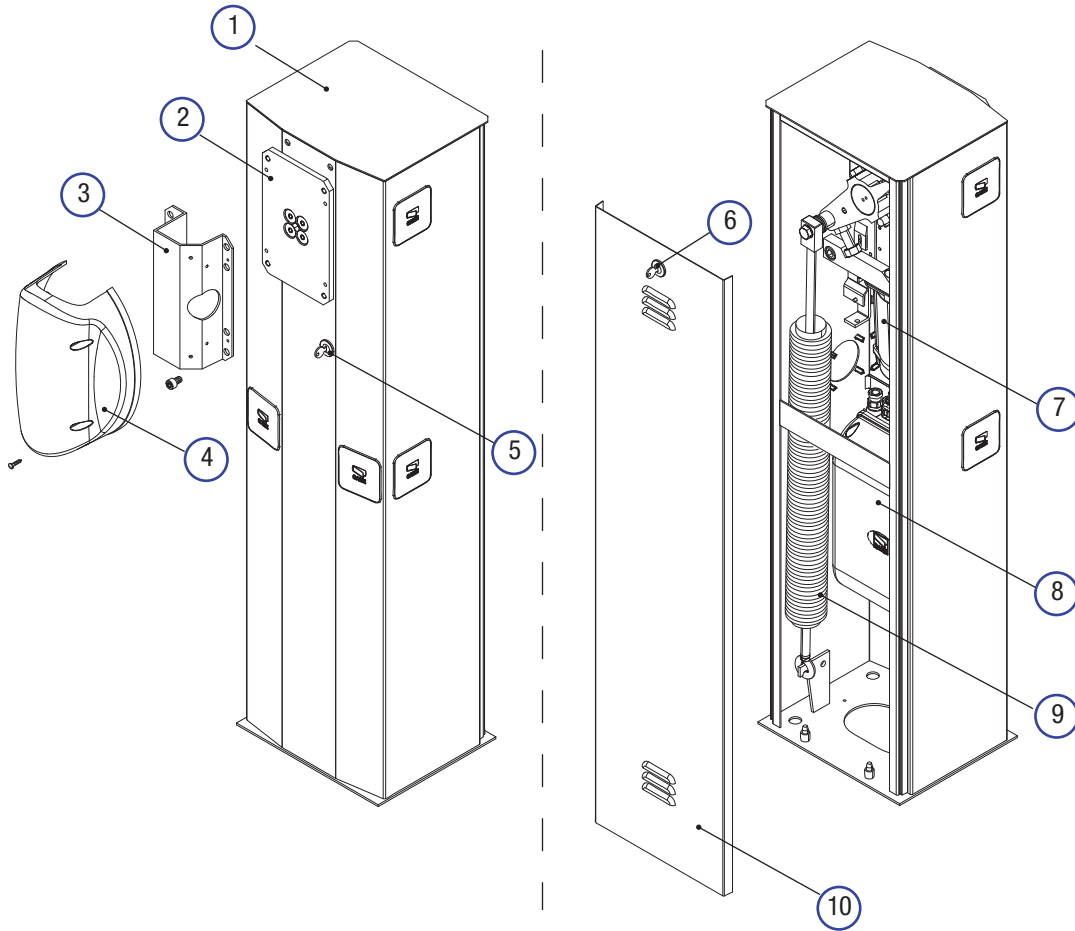
Insulation class: I



Description of parts

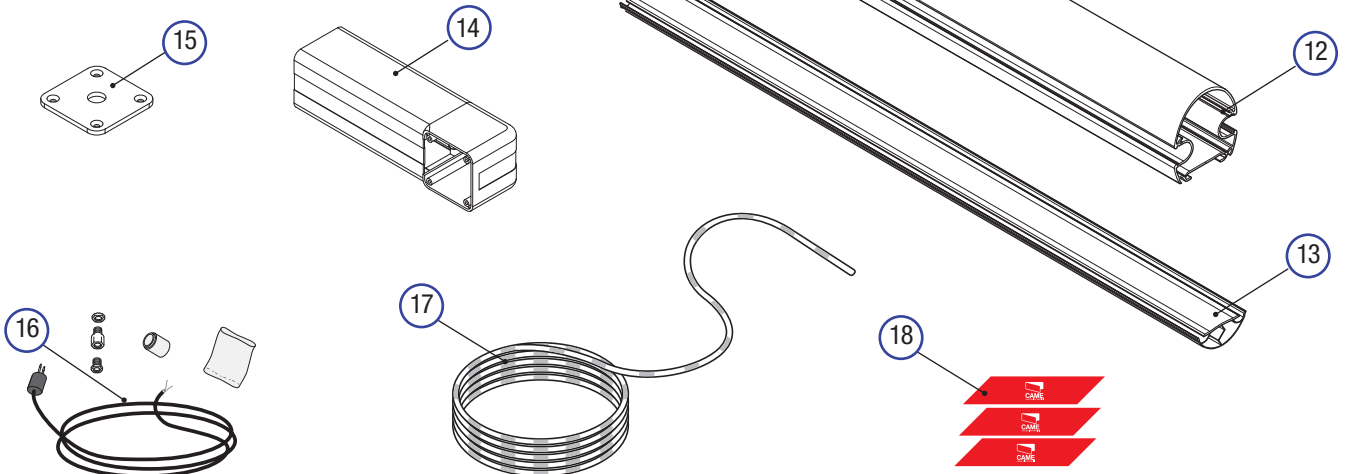
BARRIER

1. Cabinet
2. Transmission shaft
3. Arm-attachment cover
4. Anti-shearing protective cover
5. Gearmotor release with customised key
6. Hatch lock with customised key
7. Gearmotor
8. Quadro comando
9. Balancing spring
10. Inspection hatch

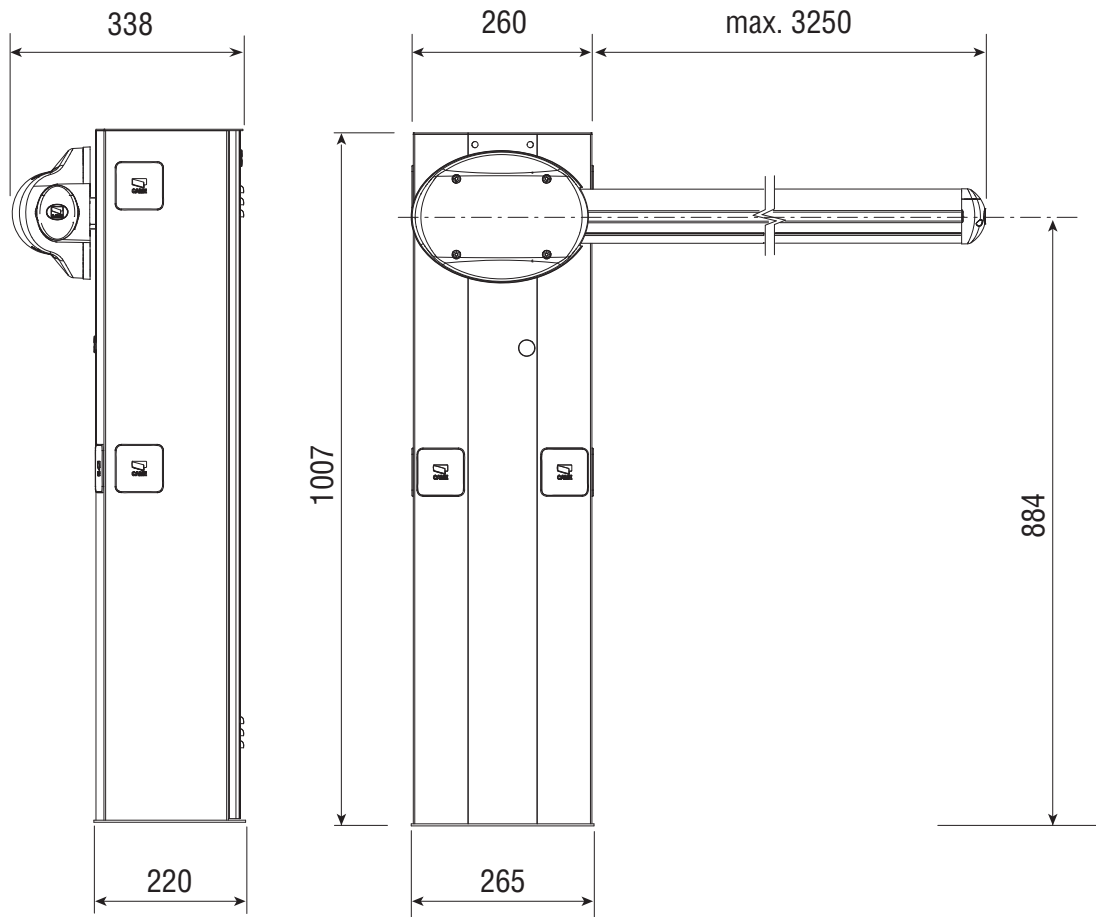


ACCESSORIES

11. Cable cover profile
12. Semi-elliptical tube arm
13. Anti-impact profile
14. Support for RX photocells
15. Adapter for RX photocells support
16. Cable for luminous cord connection
17. Luminous cord
18. Red reflective strips



Dimensions




Installation

 Installation must be carried by skilled, qualified technicians in accordance with current regulations.

Preliminary checks

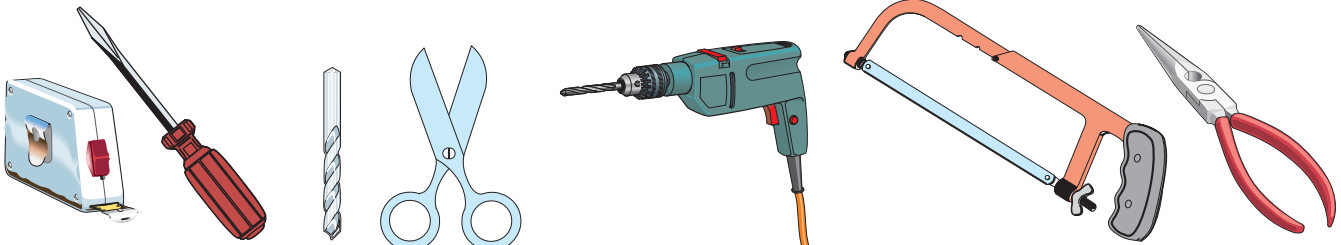
 Before beginning to install, the following is necessary:

Set up proper omnipolar cut-off device, with more than 3mm of distance between contacts, with sectioned power source;

- Set up proper conduits and electric cable raceways, making sure these are protected from any mechanical damage;
- Set up a drainage tube to prevent stagnation of moisture that can lead to oxidation;
-  Verificare che le eventuali connessioni interne al contenitore (eseguite per la continuità del circuito di protezione) siano provviste di isolamento supplementare rispetto ad altre parti conduttrici interne;

Tools and materials

Make sure you have all the tools and materials needed to carry out the installation in total safety and in accordance with current regulations. The figure shows some examples of equipment used by installers



Types of cables and thicknesses

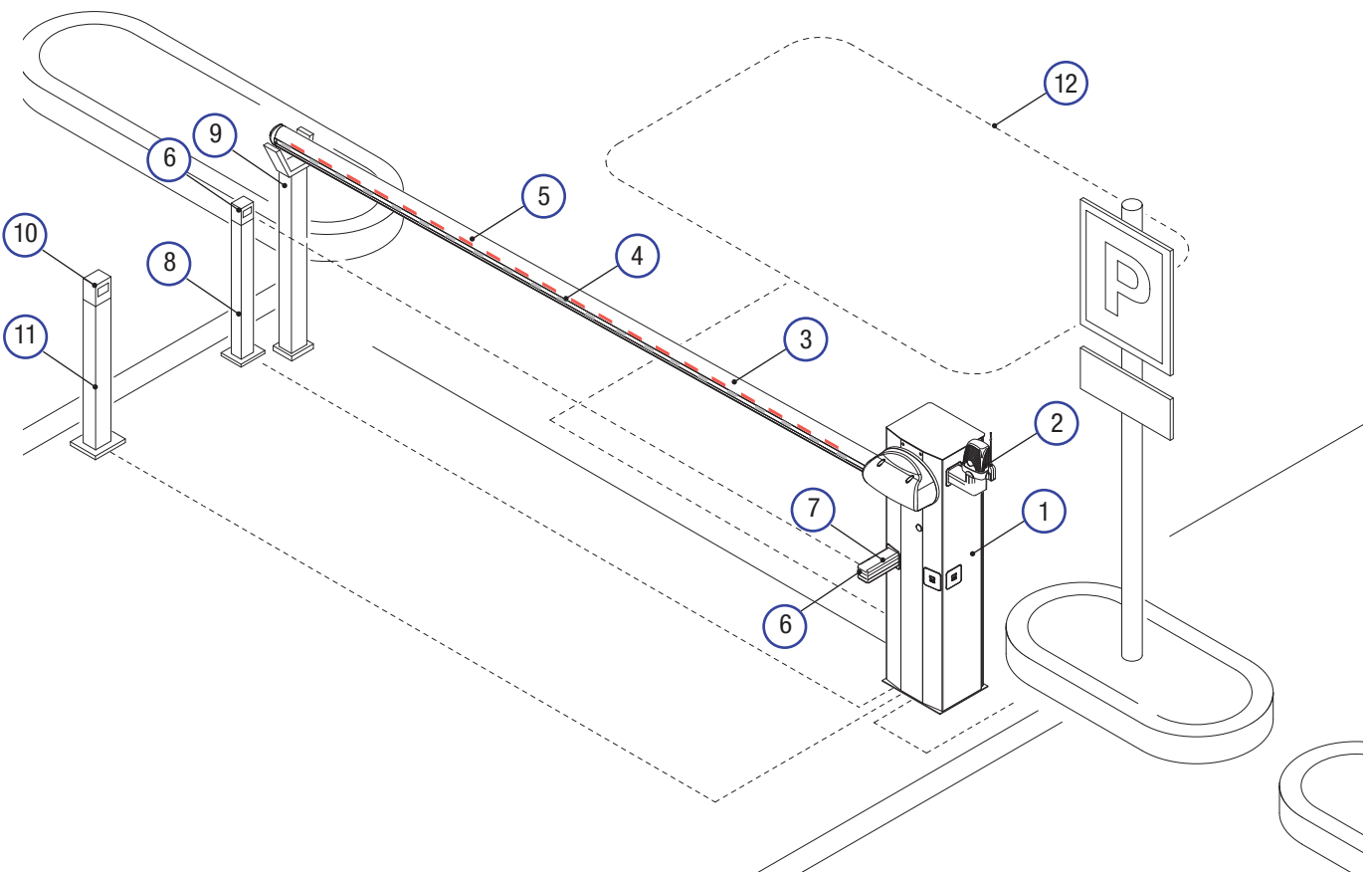
Connection	Cable type	Cable length 1 < 10 m	Cable length 10 < 20 10 ÷ 20 m	Cable length 20 < 30 20 ÷ 30 m
230 V power source to control panel	FROR CEI 20-22 CEI EN 50267-2-1	3G x 1.5 mm ²	3G x 1.5 mm ²	3G x 2.5 mm ²
Motor power supply (V) 24 V		3G x 1.5 mm ²	3G x 1.5 mm ²	3G x 2.5 mm ²
Flashing light		2 x 1.5 mm ²	2 x 1.5 mm ²	2 x 1.5 mm ²
TX photocells		2 0.5 x 1.5 0.5 mm ²	2 x 0.5 mm ²	2 0.5 x 1.5 0.5 mm ²
RX photocells		4 x 1.5 0.5 mm ²	4 x 1.5 0.5 mm ²	4 x 1.5 0.5 mm ²
Accessories power source		2 0.5 x 1.5 0.5 mm ²	2 0.5 x 1.5 0.5 mm ²	2 x 1 mm ²
Safety and command devices		2 0.5 x 1.5 0.5 mm ²	2 0.5 x 1.5 0.5 mm ²	2 0.5 x 1.5 0.5 mm ²
	RG58 Antenna	max. 10 < 10 m		

N.B.: If cables are of a different length than that shown in the table, determine the cable section based on the actual draw and the number of connected devices and according to what is set forth in the CEI EN 60204-1 code of regulations.

For connections featuring several loads on the same line (i.e. sequential ones), the dimensions shown on the table must be reconsidered according to the total draw and actual distances. When connecting products not featured in this manual, only refer to the literature accompanying such products.

Installation: Type

1. Barriers 001G3250
2. Flashing light
3. Semi elliptical rod
4. Luminous cord
5. Red reflective strips
6. RX photocells
7. Support for photocells
8. Small post for photocells
9. Fixed support
10. Command device (i.e. keyboard, magnetic key, transponder, etc.)
11. Stand for command device
12. Metal mass detector



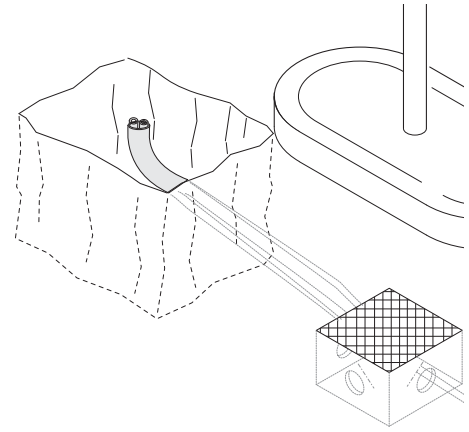
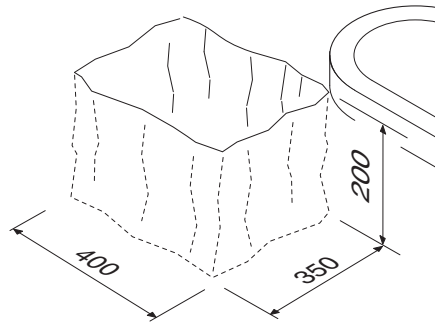
Preparing the anchoring base

! The following illustrations are just examples, in that the space for securing the operator and accessories depends on the overall measurements. It is up to the installer to choose the most suited solution.

ENGLISH

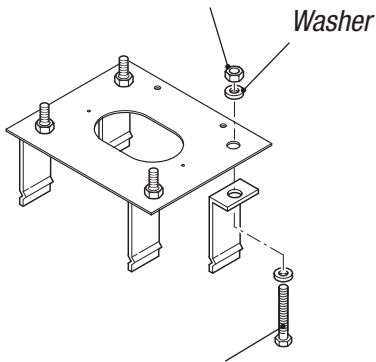
Dig a hole for the anchoring base, set the any corrugated tubes for connections coming from the junction pit.

N.B.: the number of tubes depends on the type of accessories featured.

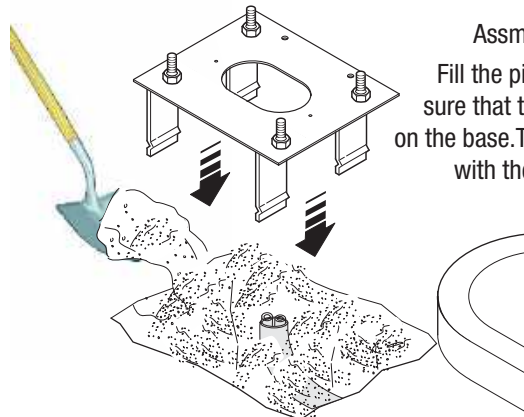


M12 UNI 5588 nut

Washer

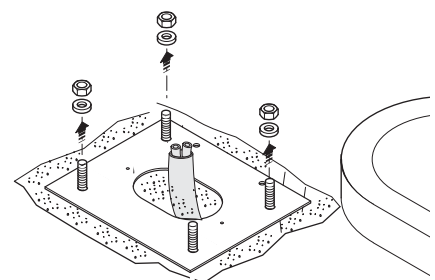
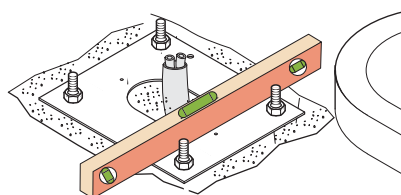


M12 x 40 UNI 5739 screw



Assemble the four clamps to the anchoring base.
Fill the pit with cement, submerge the base making sure that the corrugated tubes pass through the hole on the base. The base must be perfectly level, clean and with the bolt threading completely on the surface.

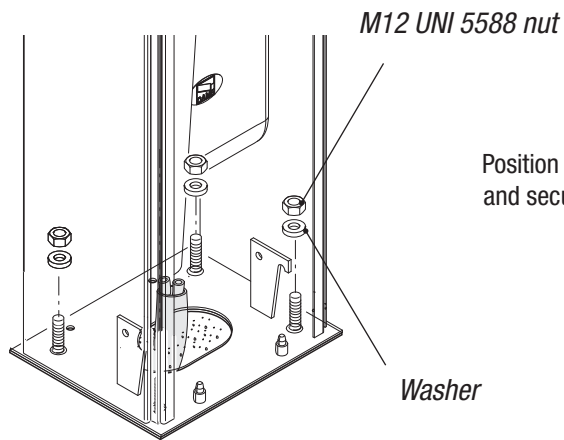
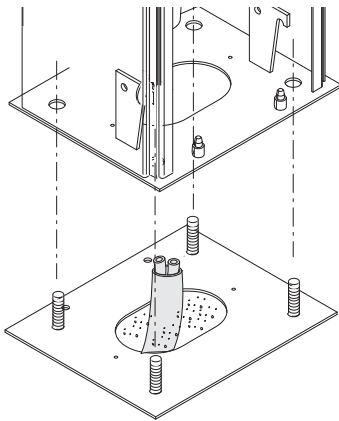
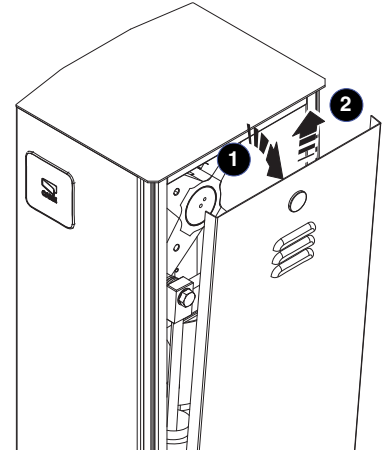
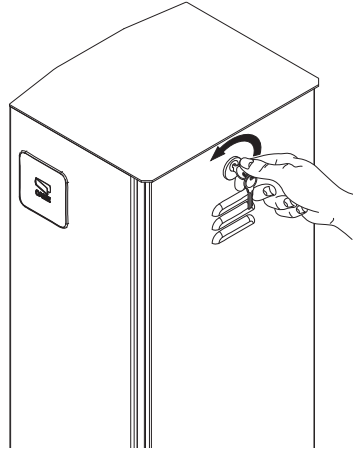
Wait at least 24 hrs for everything to solidify.
Remove the nuts and washers from the threaded screws.



Installing the operator

⚠ Warning: the barrier must be mounted by at least two persons. Use proper hoisting equipment when transporting the barrier. During mounting phase, the barrier may be unstable. Do rest against barrier until fully mounted, to avoid any tumbling over.

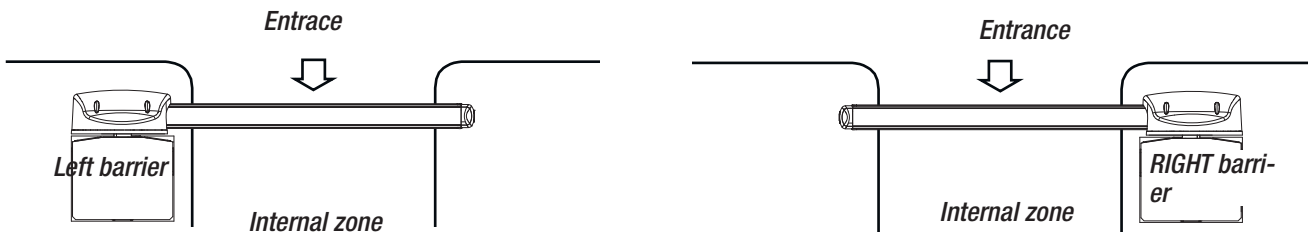
Insert the customised key into the lock and turn it counterclockwise. Remove the inspection door from the cabinet.

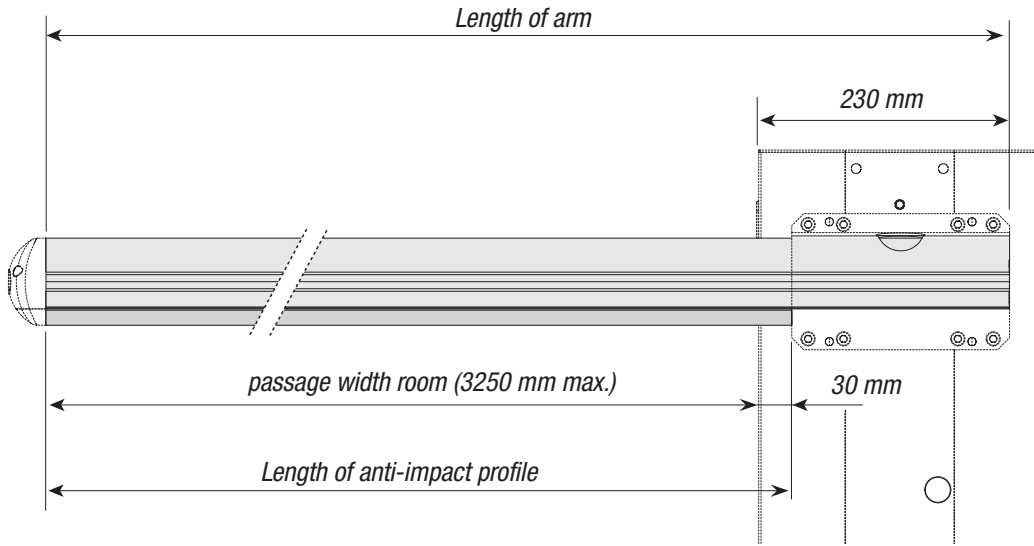


Position the cabinet to the anchoring base and secure it using the washers and nuts.

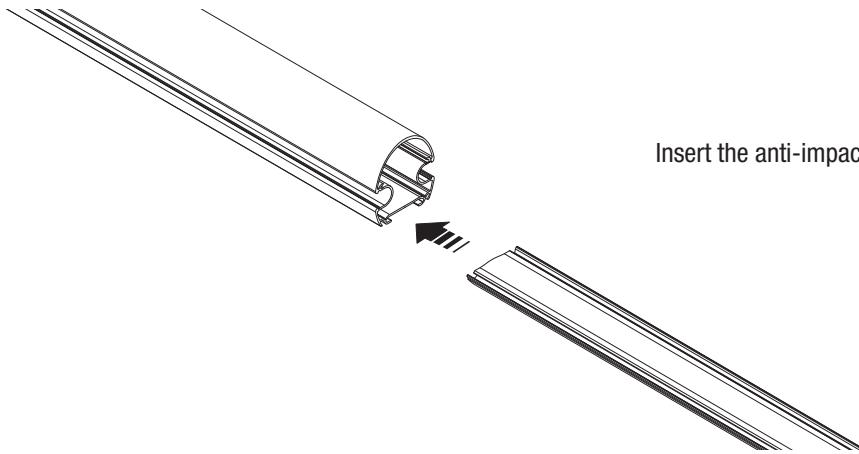
N.B.: install the cabinet with the inspection door facing an easily accessible direction.

To change rotation at a later date, request documentation from authorised dealer or directly contact the Came office near you (see last page or www.came.com)

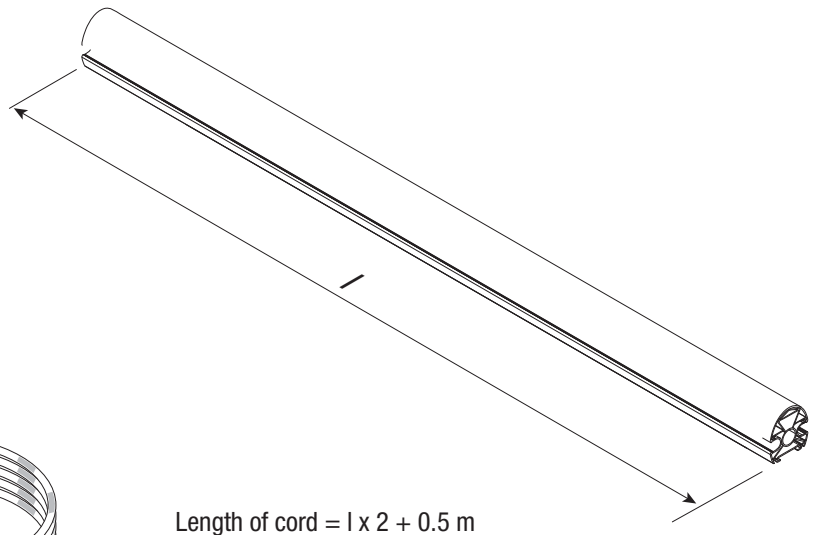
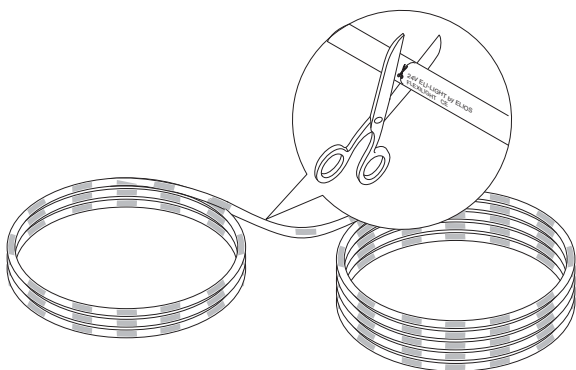




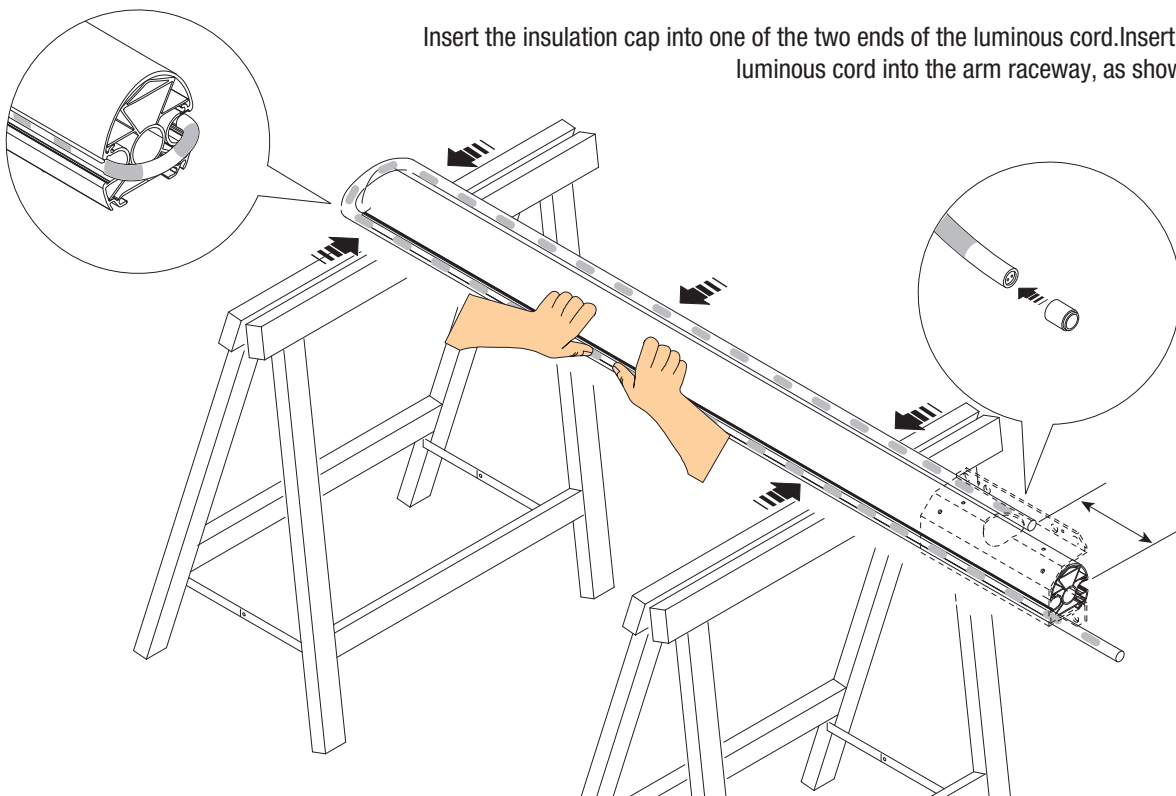
Calculate the arm length and that of the anti-impact profile by using as reference the passage width room. If necessary, cut any extra parts.



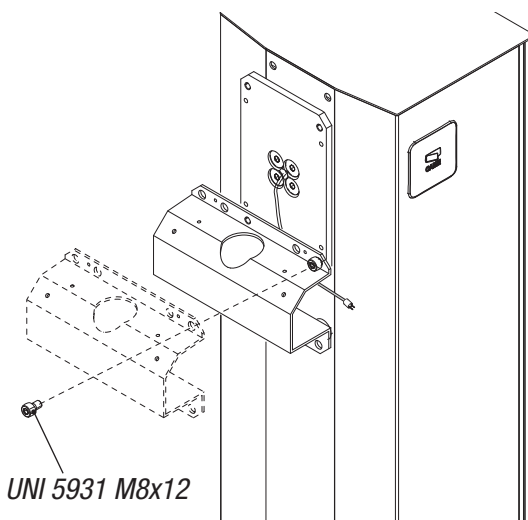
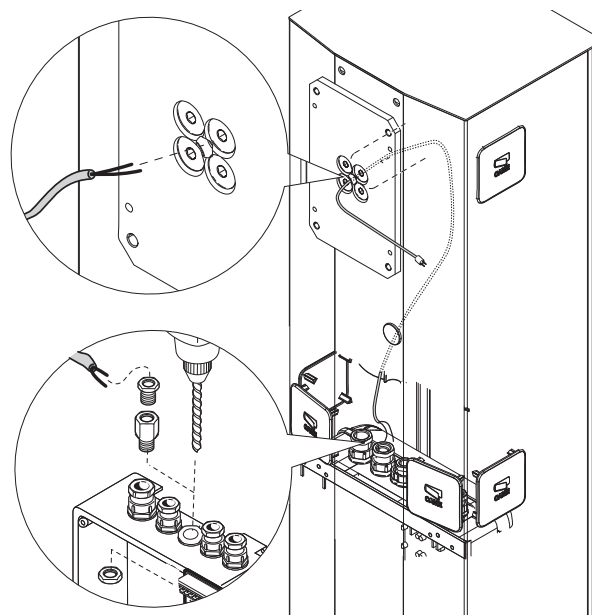
The luminous cord may be cut only at the points indicated by the scissors (i.e. at each meter) ✕



Insert the insulation cap into one of the two ends of the luminous cord. Insert by pressure the luminous cord into the arm raceway, as shown in the figure..

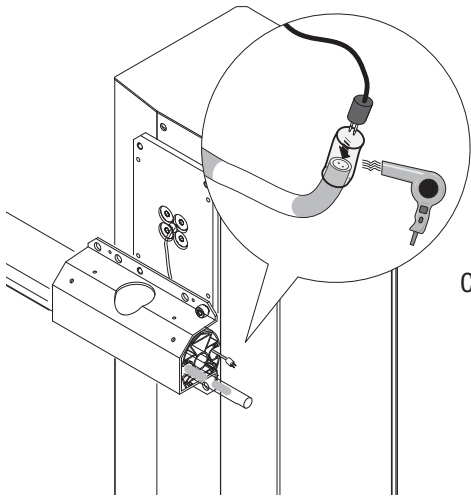
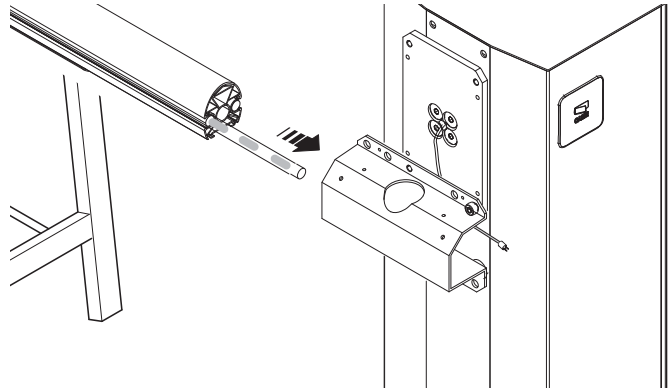


Insert the power cable through the central hole in the transmission arm plate. Perforate the control panel at one of the pre-perforated points and fit the cable gland; introduce and connect cables (see electrical connections paragraph)

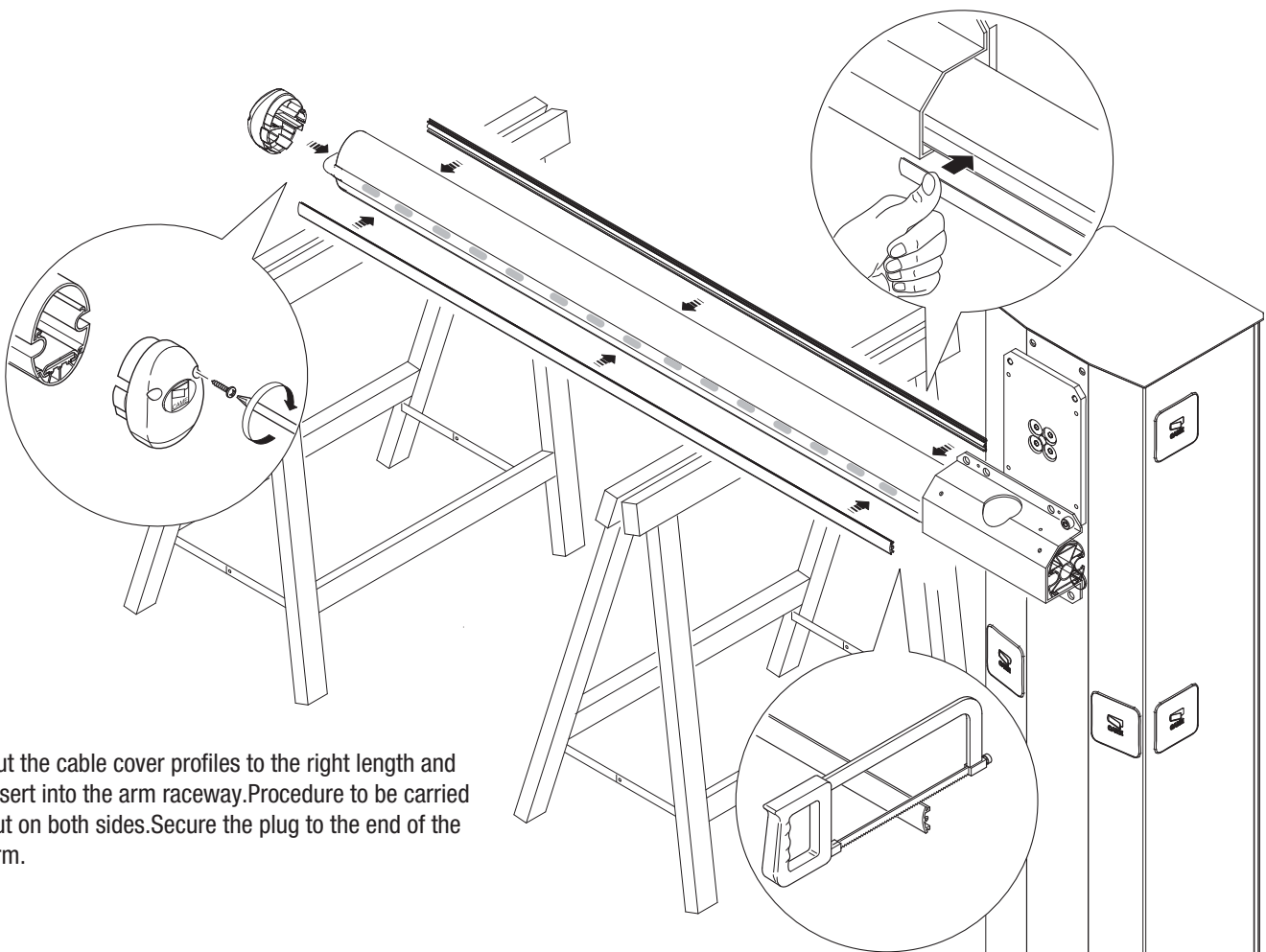


Position the arm-attachment cap against the transmission shaft plate with just one screw and leave this loose.

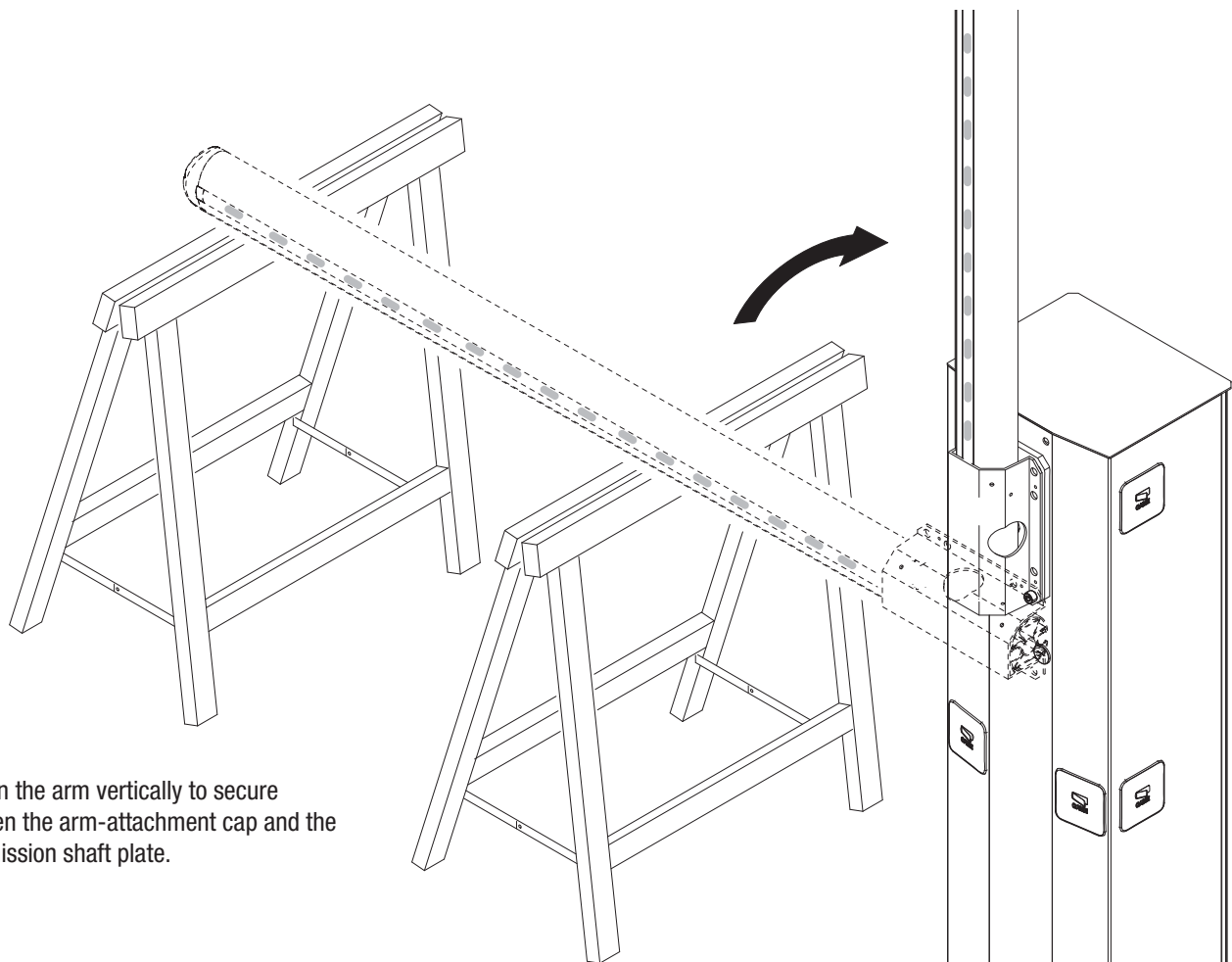
Insert the arm into the arm-attachment cap making sure that the power cable is inside the arm raceway.



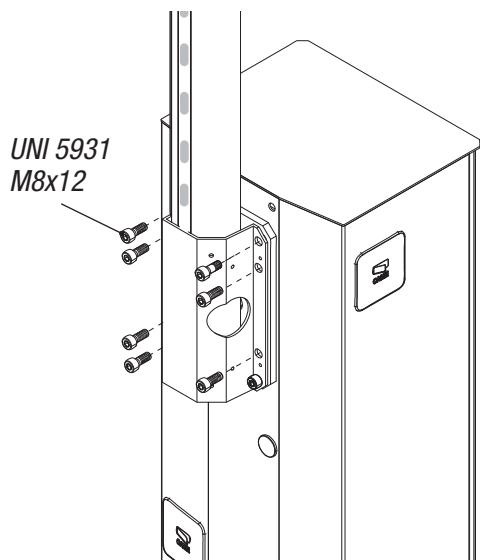
Connect the power cable jack to the luminous cord. If the luminous cord does not work invert/turn the jack, then isolate the junction point with a thermo shrinking sheath.



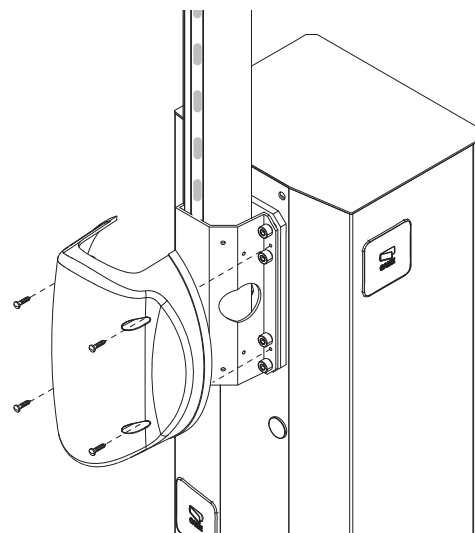
Cut the cable cover profiles to the right length and insert into the arm raceway. Procedure to be carried out on both sides. Secure the plug to the end of the arm.



Position the arm vertically to secure between the arm-attachment cap and the transmission shaft plate.



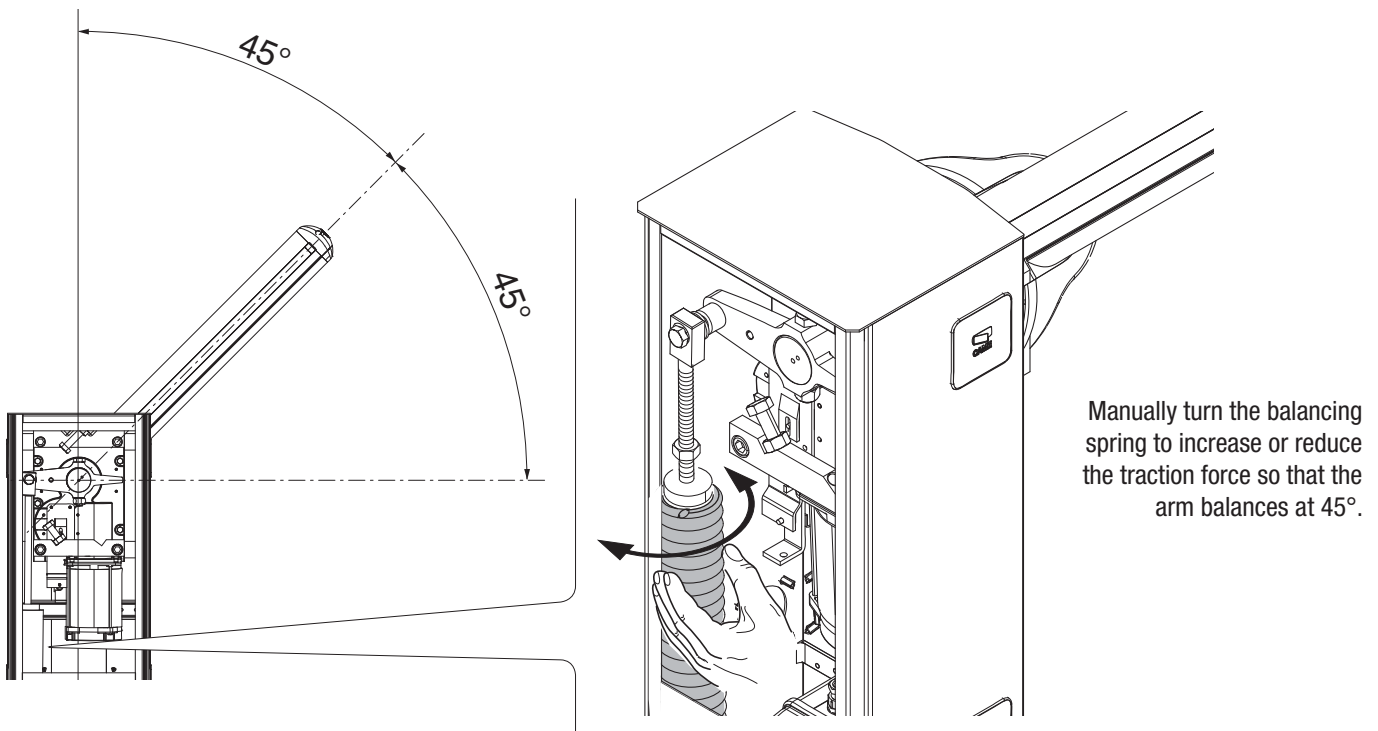
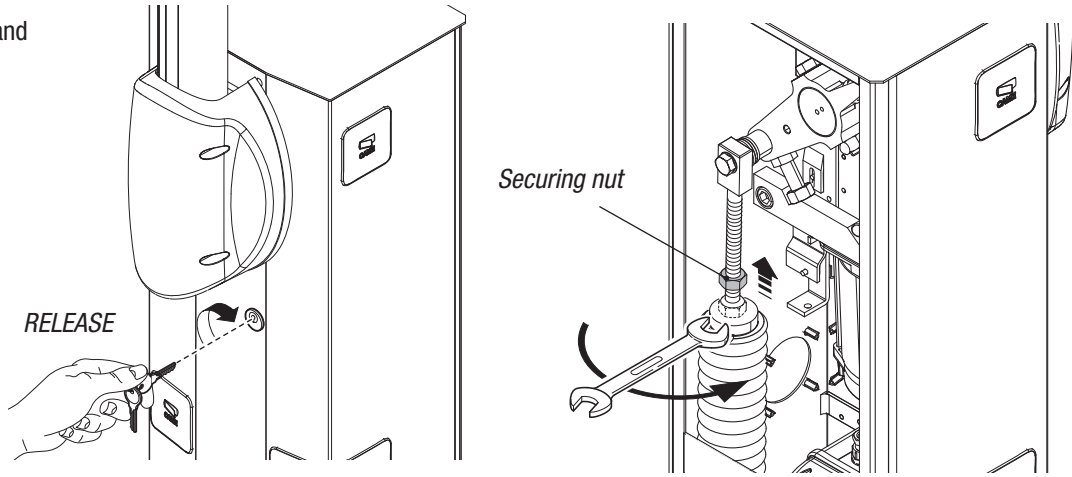
Secure the rod with



Insert and secure the anti-shearing protective cover onto the arm-attachment cap.

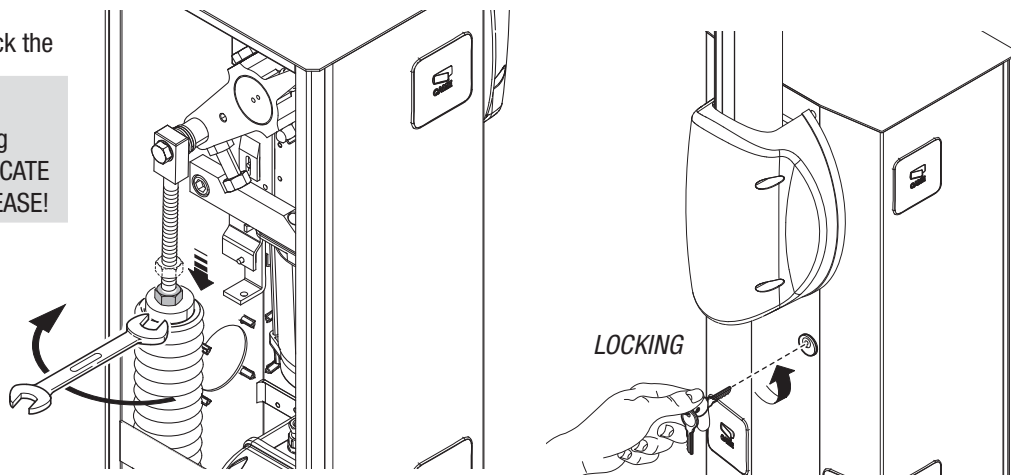
Arm balancing

Release the gearmotor and loosen nut on the rod.



Secure the nut of the bar and lock the gearmotor.

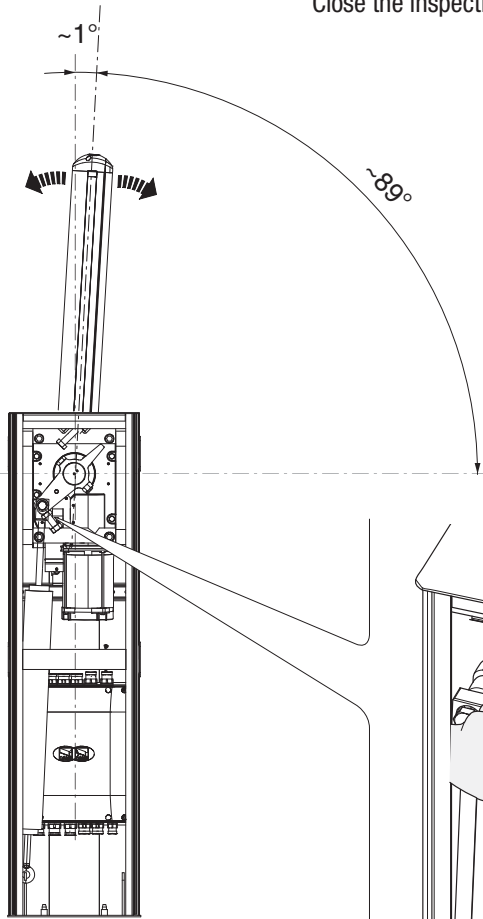
⚠ WARNING! When balancing procedures are finished, LUBRICATE THE SPRINGS WITH SPRAY GREASE!



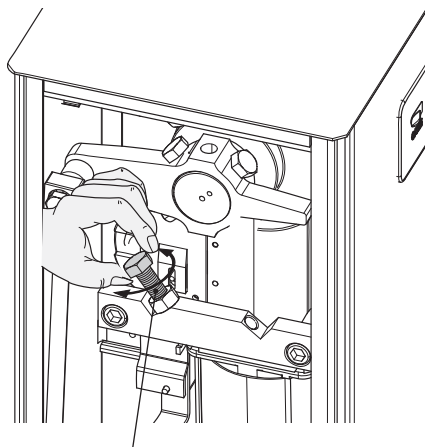
Adjusting endpoints

N.B.: to do after electrical connections are made to the control panel.

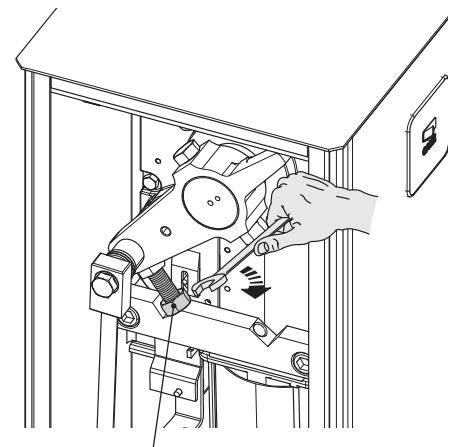
Close the inspection door and power up the system. Activate the arm to check whether it is parallel to the road surface when close and at about 89° when open.



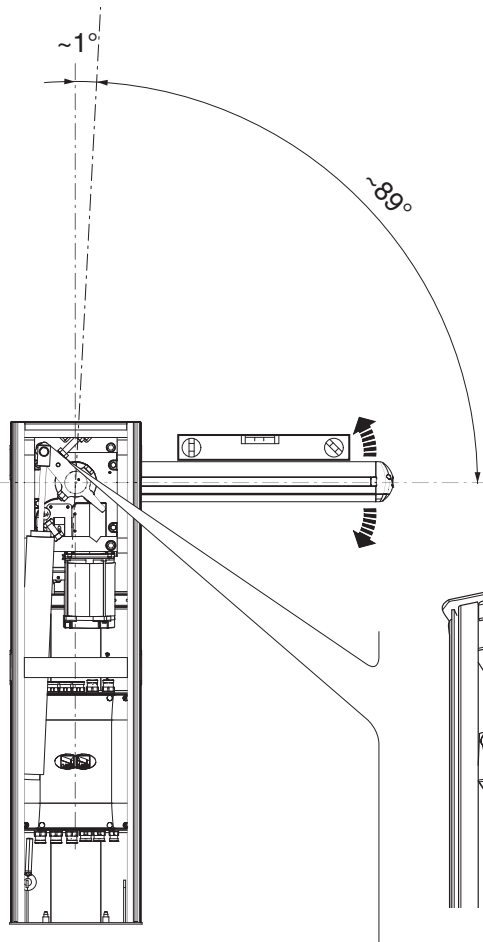
To correct the vertical position (=opening), lower the barrier arm, open the inspection door and turn the opening mechanical stop either clockwise or counterclockwise, then secure the stop with the counter nut.



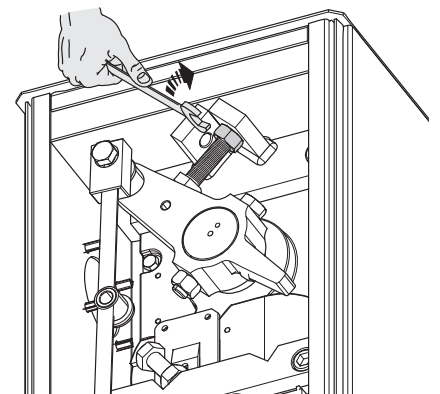
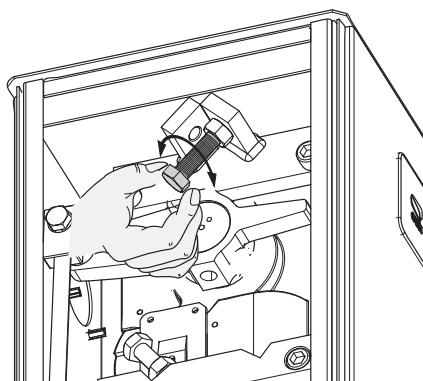
Mechanical stop



counter nut



To correct the horizontal position (=closing), raise the bar, adjust the mechanical closing stop and secure it with the counter nut.

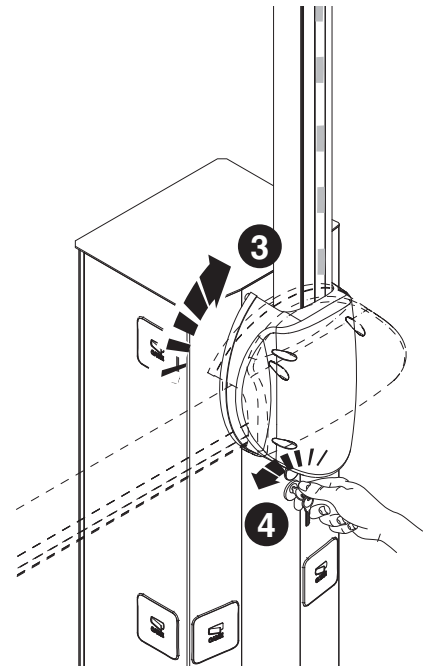
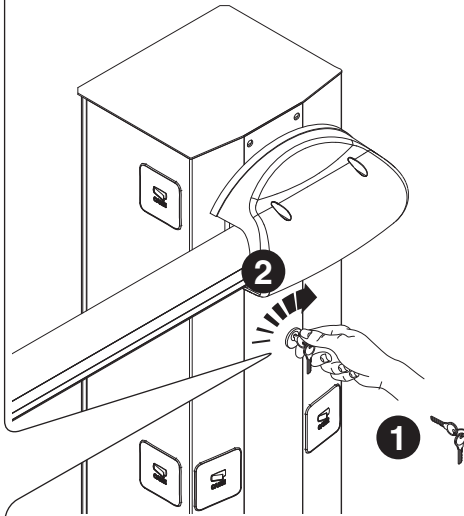


Manual release of the barrier arm

- Insert the key into the lock and turn it clockwise. Manually lift the barrier arm and re-lock it by turning the key counter-clockwise.



⚠ WARNING! The release action may result in danger for the user, when, for whatever reason - the arm is improperly fixed to the pin during mounting, the arm is broken or cracked during an accident, etc.- the tension springs no longer provide balance! **This may result in sudden rotating movements of arm attachment and/or of the arm itself.**



Description of the control panel

Designed and made by CAME Cancelli Automatici S.p.A. The control panel is powered by 230 V AC, at 50 / 60 Hz frequency. The command devices and accessories are powered by 24V. **Warning!** The accessories must not exceed 40 W overall. The control panel features an amperometric device which constantly controls the motor thrust data.

When the barrier arm runs into an obstacle, the amperometric sensor detects an overload in the thrust and acts on the movement:

- when opening: by stopping the arm;
- when closing: the arm inverts its direction of travel and opens completely; the automatic closing activates.

Warning! After three consecutive inversions, the barrier arm stays open and excludes automatic closing: to close press the command button or transmitter key.

All connections are protected by quick fuses, see table.

The card handles the following functions:

- automatic closing after an opening command;
- immediate closing;
- Preflashing by the flashing light;
- obstacle detection with barrier arm stopped in any position;
- Slave function;
- increased braking action of the barrier arm.

Types of command:

- opening/closing;
- opening/closing with maintained action;
- opening;
- total stop.

Specific trimmers regulate:

- the working time for automatic closing;
- the sensibility of the amperometric device;

Optional accessories:

- flashing cupola and luminous cord;
- flashing light for open barrier arm: it turns off when barrier arm is closed;
- the 002LB38 card for emergency operation in case of power outages and battery recharging. (see technical documentation for 002LB38 technical sheet).

⚠ Warning! Before doing any work on the control panel, cut off the main power and/or disconnect the batteries.

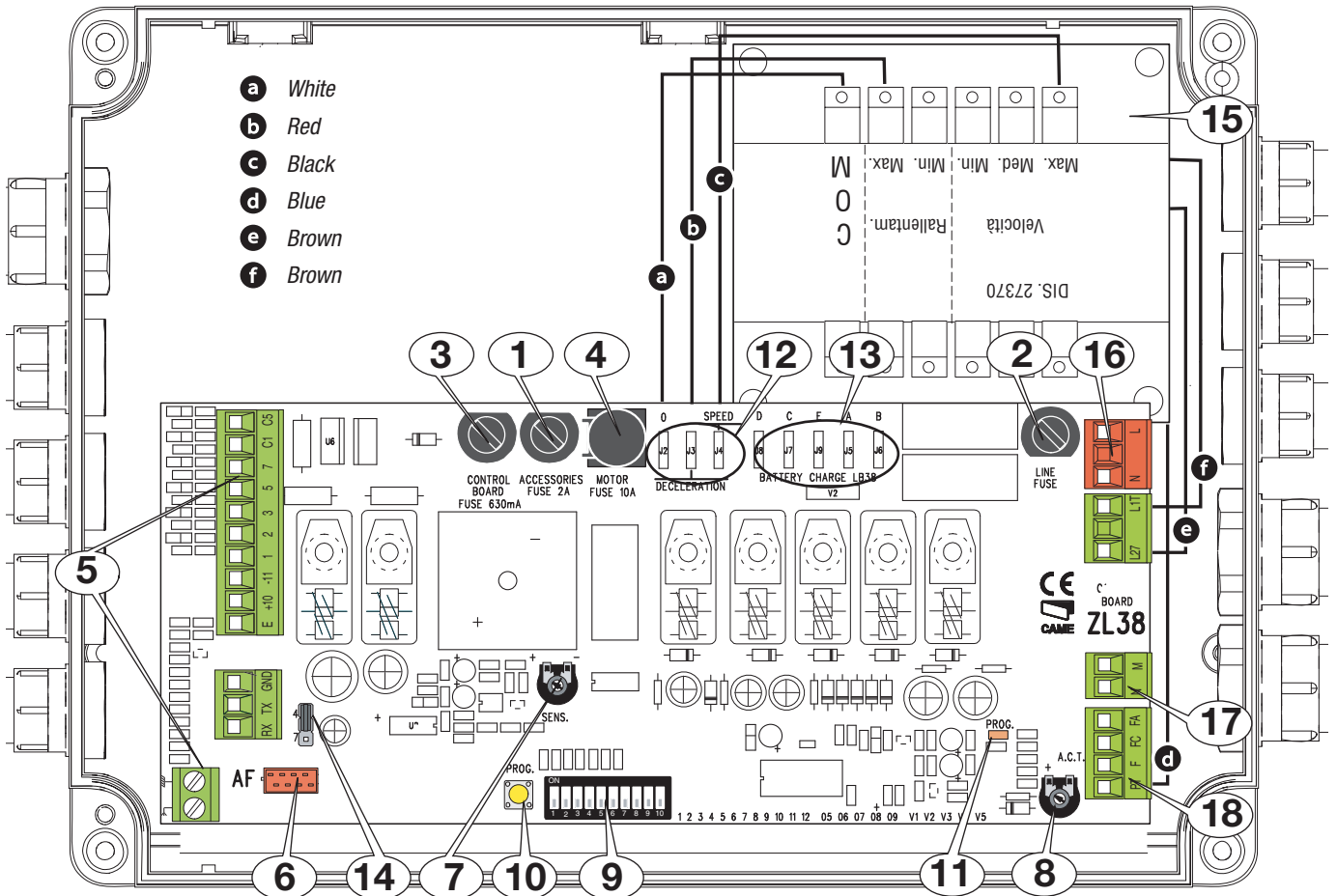
Technical data

TECHNICAL DATA	
power source	230 V - 50/60 Hz
max power	400 W
power draw when idle	110 mA
maximum power for 24 V accessories	40 W
circuit insulation class	II
container material	ABS
container protection rating	IP54
working temperature	-20 / +55°C

FUSE TABLE	
to protect:	fuses for:
Electronic card (line)	3.15 3.15 A-F
24 V Accessories	2 A-F
Command devices (control panel)	630 mA-F
Motor	10 10.15 A-F

Main component parts

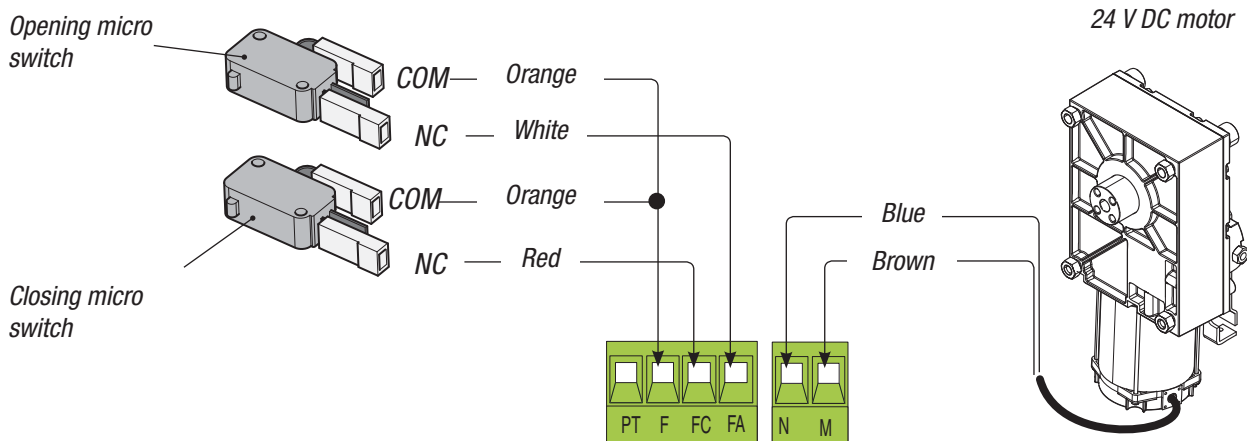
- 1 - Accessories fuse
- 2 - Line fuse
- 3 - control panel fuse
- 4 - motor fuse
- 5 - Accessories terminals
- 6 - Radiofrequency card connector
- 7 - SENS Trimmer:adjusting amperometric sensitivity
- 8 - TCA Trimmer:adjusting automatic closing time
- 9 - Functions selection Dip switch
- 10 - Code memorisation button
- 11 - Warning LED for radio code/automatic closing
- 12 - Adjustment connectors for speed and deceleration
- 13 - Connection connectors for 002LB38 card (battery charger)
- 14 - Selection jumper for command type for button on 2-7
- 15 - Transformer
- 16 - Power source terminals
- 17 - Motor terminals
- 18 - endpoint terminals



Electrical connections

Gearmotor and endstops

Show is the connection for a left-hand barrier. A right-hand barrier has gearmotor cables inverted on terminals M-N.

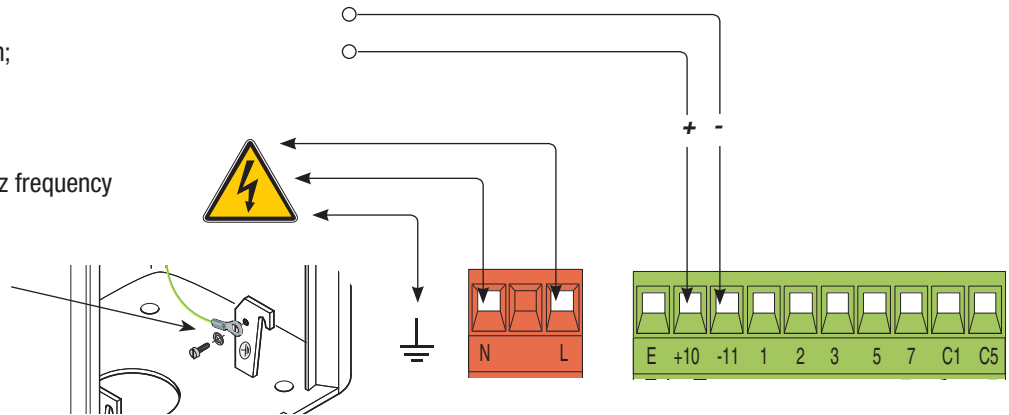


Power source and accessories

Terminals for powering accessories:
 - for 24 V AC at normal operation;
 - for 24 V DC with battery operation;
 Overall allowed power: 40 W

230 V AC power source, 50/60 MHz frequency

Eyelet with screw and washer for ground connection of



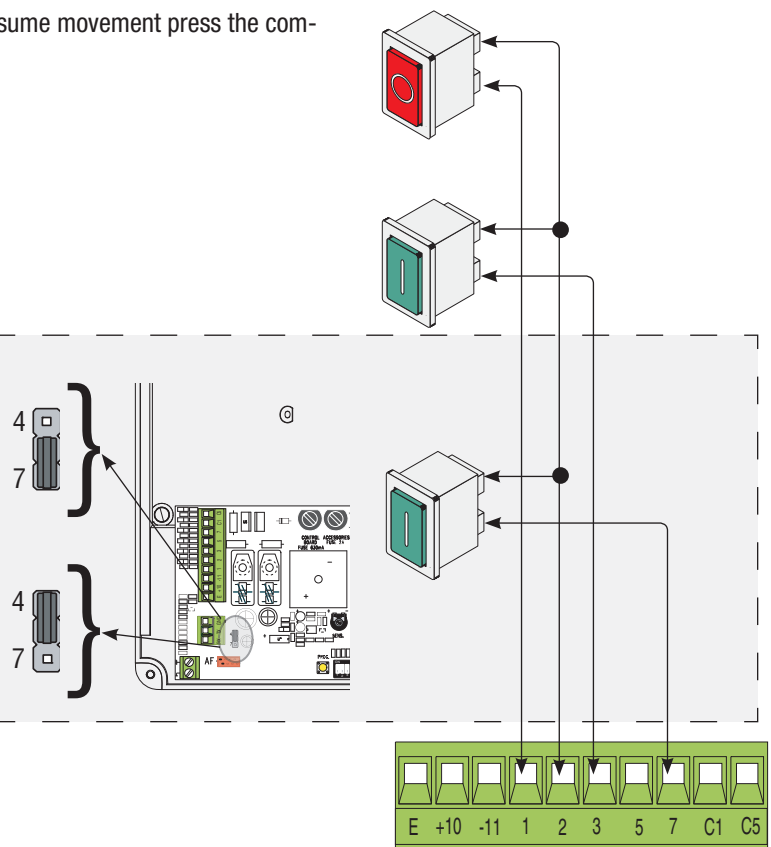
Command devices

Stop button (N.C. contact) Excludes automatic closing, to resume movement press the command button or transmitter key.
 if unused, set Dip switch 9 to ON.

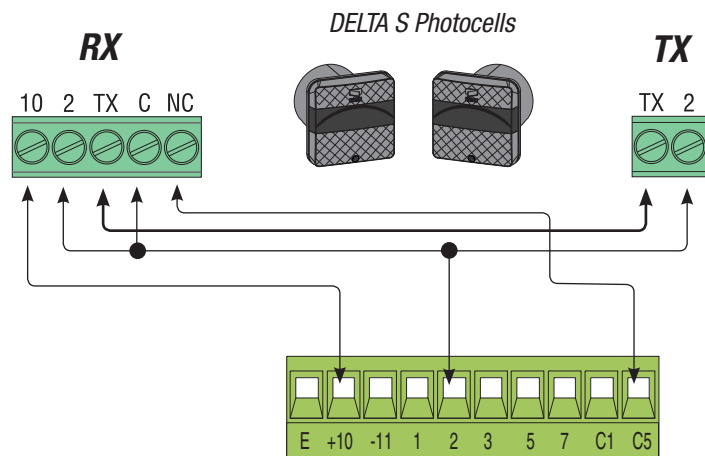
Opening button (N.O. contact)

Button for barrier opening and closing commands (N.O. contact) (The barrier opens or inverts its movement depending on what is selected on Dip switch 2.)
 Check position of Jumper (14, on page 17) to be set as shown in figure.

Closing button (N.O. contact) this is obligatory with Maintained Action function.
 Position the jumper as shown in the figure.



Immediate closing (N.C.) Contact
 Immediately closes the barrier after vehicle has passed within the operating range of the safety devices.
if unused, set Dip switch 8 to ON.

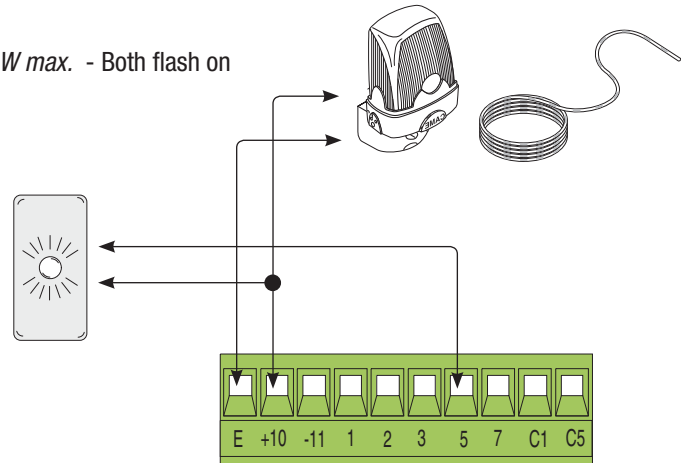


Warning devices

Flashing light and luminous cord (contact voltage rating: 24V -23 W max. - Both flash on and off during barrier opening and closing.

Warning light when barrier arm is open(contact voltage rating: 24V -3W max.)

Warns that the barrier arm is open.

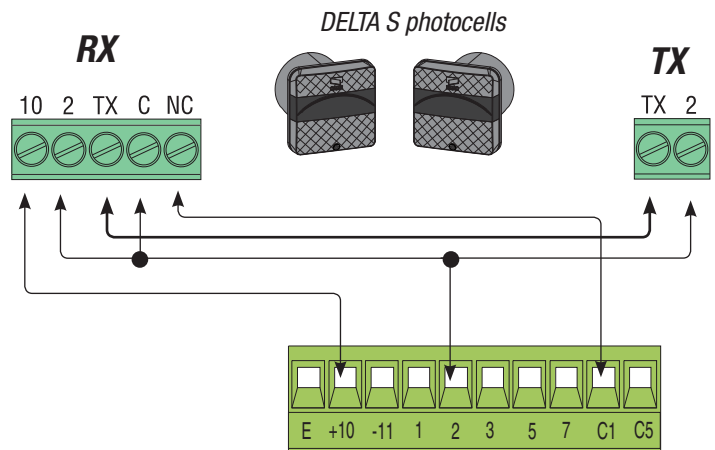


Safety devices

Reopening when closing (N.C.) Contact

Input for safety devices like photocells, compliant with law EN 12978. When the barrier is closing, opening the contact causes it to invert its movement.

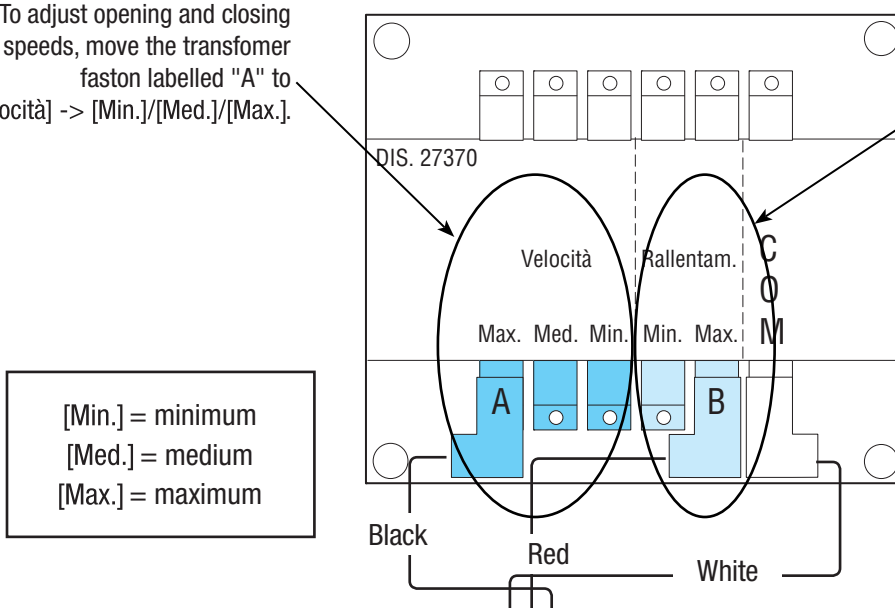
if unused, short-circuit contact 2-C1.



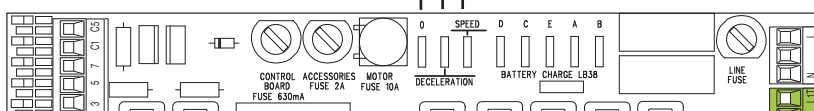
Adjusting manouvring and braking speeds

To adjust opening and closing speeds, move the transformer faston labelled "A" to [Velocità] -> [Min.]/[Med.]/[Max.].

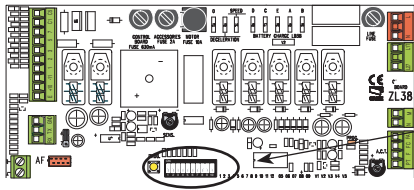
to adjust braking actions, move the "B" faston to [Rallentam.] -> [Min.]/[Max.].



[Min.] = minimum
[Med.] = medium
[Max.] = maximum



Selecting functions

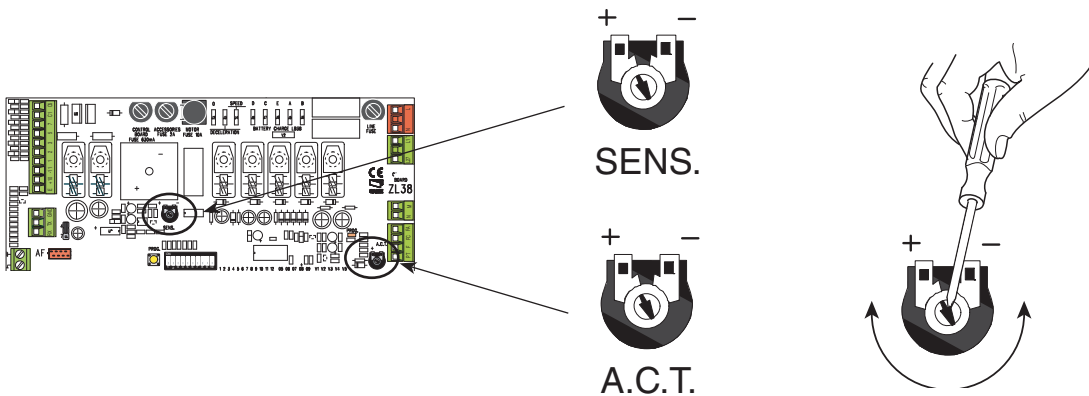


Default setting



- 1 ON - **Automatic closing** - The automatic closing timer activates upon full opening. The preset time is adjustable, but it's in any case subject to any safety device intervention and does not activate after a Total Stop or in case of power failure (1 OFF - deactivated);
- 2 OFF - Open-Close with button (2-7) and/or transmitter (requires radiofrequency card).
- 2 ON - Open only with button (2-7) and/or radio transmitter (requires radiofrequency card).
- 3 ON - 24 V exit on contact (10-E): barrier-arm in movement and in closed position;
- 3 OFF - 24 V exit on contact (10-E): barrier-arm in movement
- 4 ON - **Maintained action** - the barrier works by pressing the button, one opening button 2-3, and one 2-7 closing button (position jumper 14 as shown in the figure on page 16).
- 5 ON - **Pre-flashing when opening and closing** following an open or close command, the flashing light and/or luminous cord which is/are connected on [10-E], flashes or flash for 5 seconds before performing manoeuvre.
- 6 ON - **Obstacle detection** - With motor stopped (barrier arm closed, open or after a total stop command), prevents any manoeuvre if the safety devices (i.e. photocells) detect an obstacle..
- 7 ON - **Slave function** - To be activated when having two combined barriers (see *Connecting two combined barriers paragraph*);
- 8 OFF - **Immediate closing** Automatic closing of the barrier arm after vehicle has passed within the detection range of the safety devices. Insert the safety device on [2-C5]; if unused, set DIP switch to ON.
- 9 OFF - **Total stop** - Barrier arm stop and exclusion of automatic closing; to resume movement press command button or transmitter key. Connect button on [1-2]; if unused, set DIP switch to ON.
- 10 ON - **Braking action** - Increase braking action of the closing barrier arm (10 OFF - deactivated)

Adjustments



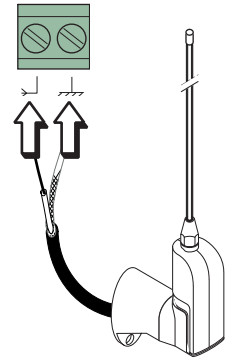
LIST OF ADJUSTMENT TRIMMERS:

- «**A.C.T.**» Adjusts opening waiting time. Once time is elapsed, the barrier closes automatically. The waiting time may be adjusted between 1 and 120 seconds.
- «**SENS**» Adjusts the amperometric sensitivity which controls the force developed by the motor during movement; if the force exceeds the adjusted level, the system intervenes and inverts the direction of travel.

Activating the radio command

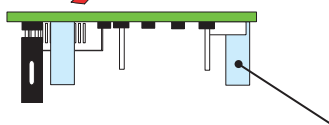
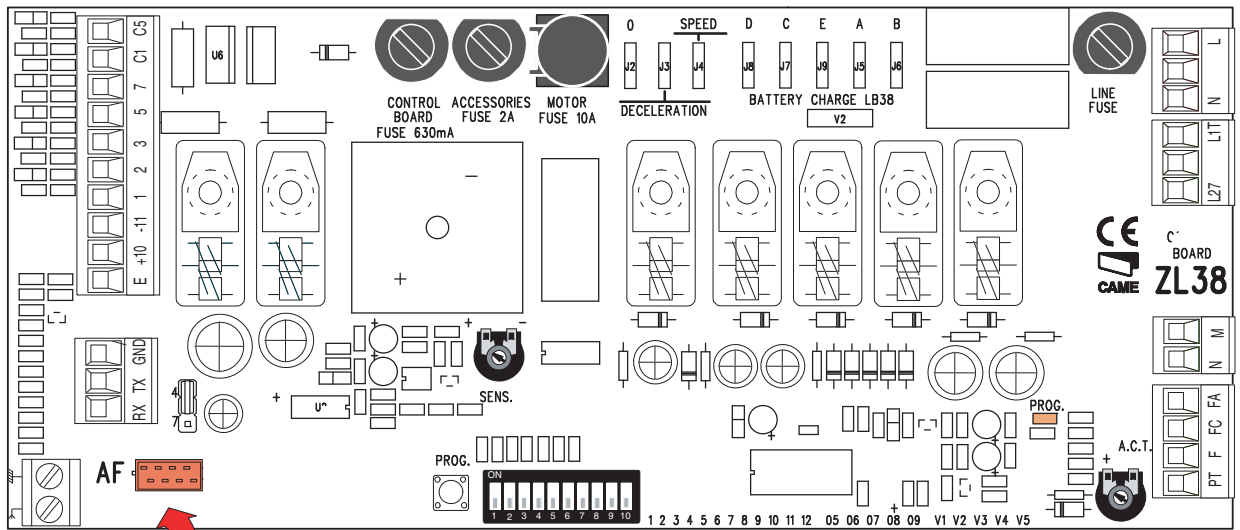
Antenna

Connect RG58 antenna cable to the apposite terminals.



Radiofrequency card

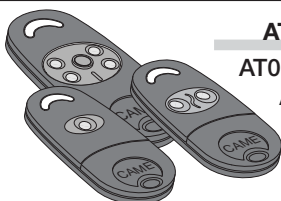
Cut off main power and/or disconnect batteries and insert the radiofrequency card.
 N.B.: The electronic card accepts the radiofrequency card only when powered.



AF card

Frequency MHz	Radiofrequency card	Series of transmitters
FM 26.995	AF130	TFM
FM 30.900	AF150	TFM
AM 26.995	AF26	TOP
AM 30.900	AF30	TOP
AM 40.685	AF40	TOUCH
AM 433.92	AF43S / AF43SM	TAM / TOP
	AF43SR	ATOMO
	AF43S / AF43TW	TWIN
AM 868.35	AF868	TOP

Transmitters

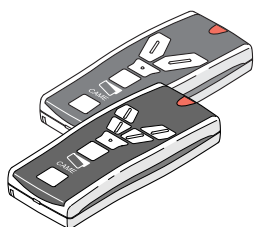


ATOMO
 AT01 • AT02
 AT04

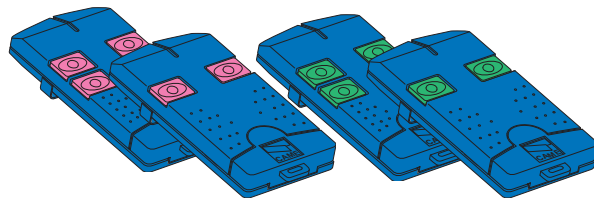
see instruction sheet inside 001AF43SR radiogre-
 quency card package box

see instructions on package

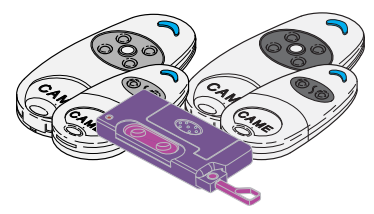
TOUCH
TCH 4024 • TCH 4048



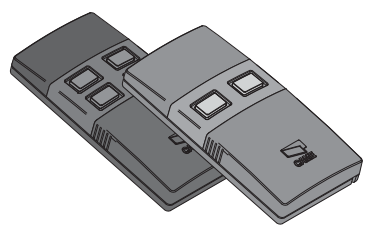
TOP
TOP-432A • TOP-434A
TOP-302A • TOP-304A



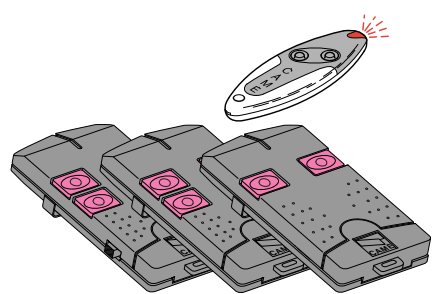
TOP
TOP-432NA • TOP-434NA
TOP-862NA • TOP-864NA
TOP-432S



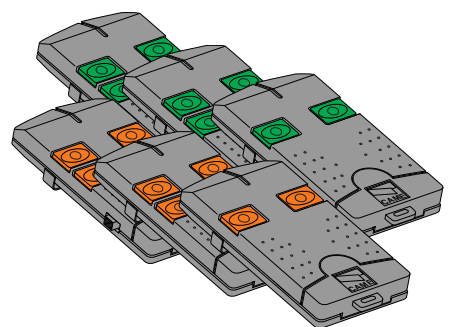
TWIN
TWIN 2 • TWIN 4



TAM
T432 • T434 • T438
TAM-432SA

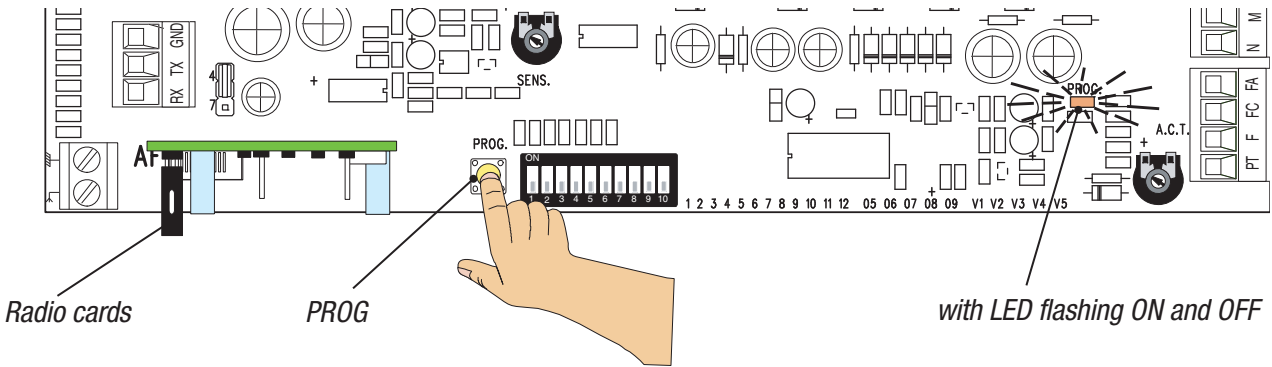


TFM
T132 • T134 • T138
T152 • T154 • T158

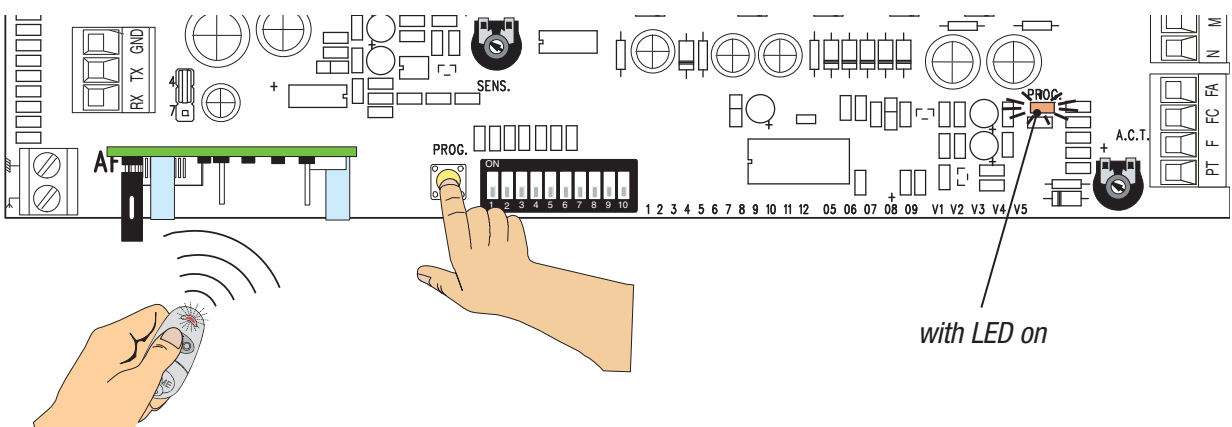


Memorisation

Keep button pressed on the electronic card. The LED flashes ON and OFF.

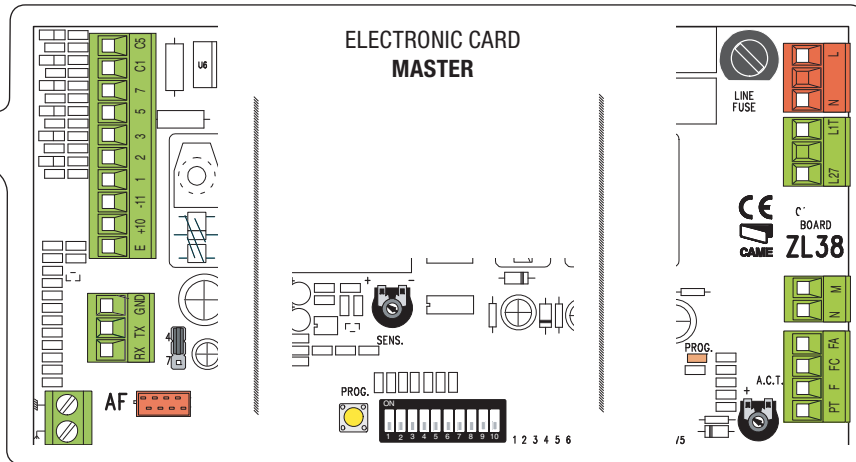
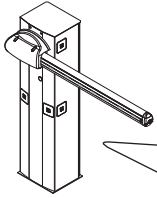
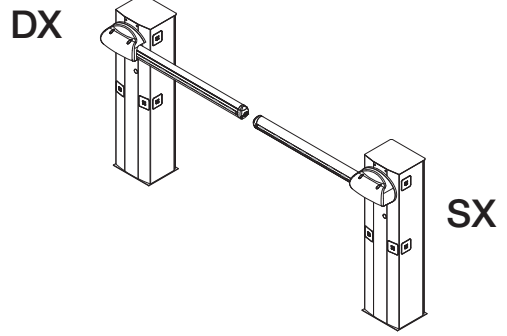


Press the button on the transmitter to be memorised. The LED will stay ON to confirm memorisation is OK.



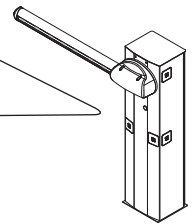
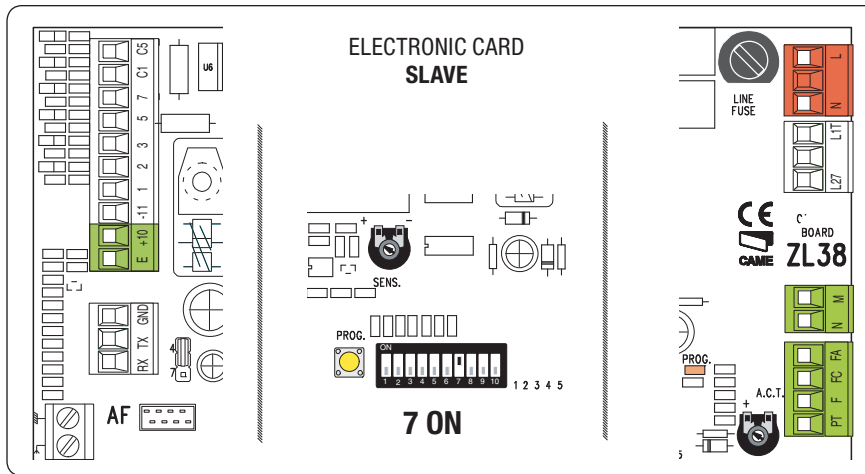
Connecting two coupled barriers

You must decide which is the **Master** barrier and which is the **Slave** barrier, because:

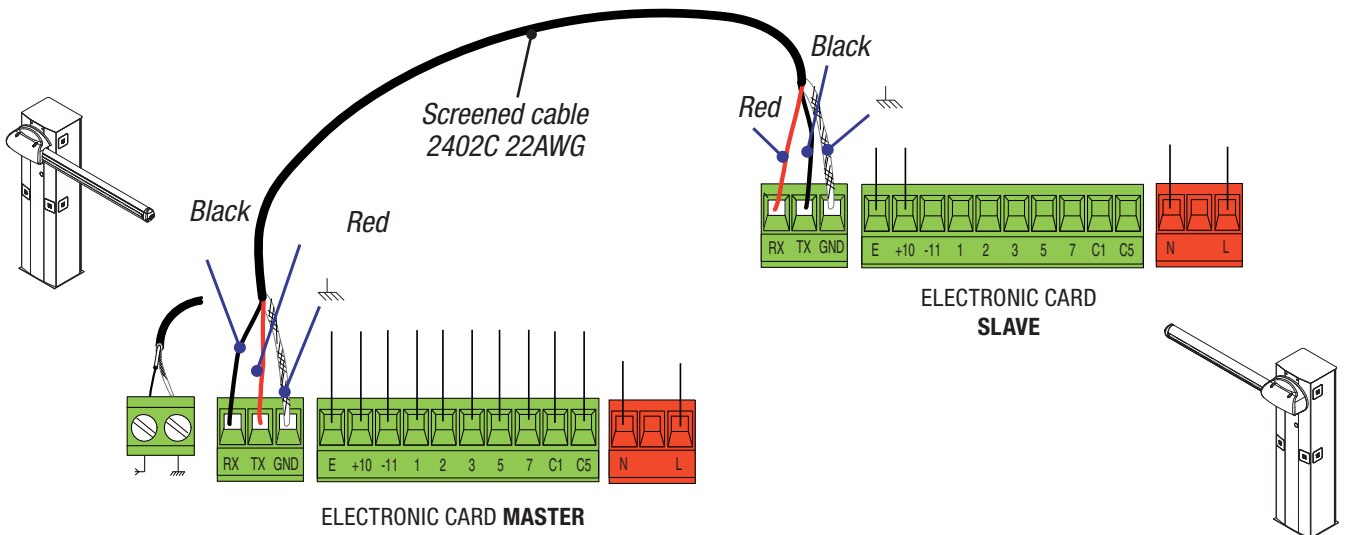


- on the Masterbarrier perform all connections, settings and adjustments needed on the installation; also activate the remote control.

- whereas, on the **Slave** barrier, just connect the power source (terminals L-N) and pertinent signal and warning devices (terminals 10-E); also, set Dip switch 7 to ON, adjust the travel and deceleration speeds as on the Master barrier.



At the end, connect the two cards together using the terminals RX-TX-GND.



Safety instructions

⚠ Important general safety instructions

This product is only intended to be used for the purpose it was designed. Any other use is therefore improper and dangerous. The manufacturer is not liable for any damage caused by improper, wrongful or unreasonable use.

Stay away from working mechanical parts. Stay out of the working range of the moving operator.

Do not oppose the movement of the operator as this may result in danger.



Do not allow children to play or loiter within the working range of the operator. Keep transmitters and any other command devices away from children, to prevent the operator from being activated by mistake.

Immediately stop using the operator if any anomaly is manifested.



Danger of hand crushing



Danger high voltage



Transit forbidden during operation

Maintenance

Periodic maintenance

 The periodic maintenance to be carried out by customers are: **cleaning the photocells' glass, checking the proper working state of the safety devices and making sure the operator is free of any impediments.**

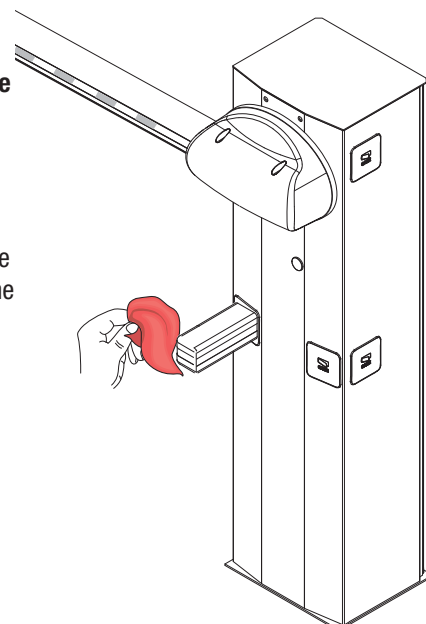
We also recommend to periodically check the lubrication the tightness of the bolts and screws on the operator.

To check that the safety devices are working properly, wave an object in front of the photocells during closing; if the operator inverts its direction of travel or blocks movement, then the photocells are working properly. This is the only maintenance job that should be done with the power source on.

Before doing any maintenance or repair job, cut off the main power, to prevent any dangerous situations.

To wipe clean the photocell glass, use a slightly damp cloth, and do not use any solvents or other chemical products that may ruin the device.


Check that there is not vegetation within range of the photocells, and that no objects interfere with the operation of the automated device.



Periodic maintenance log carried out by the customer (every 6 months)

Date	Notes	Signature

Extraordinary maintenance

 The following table is used to log extraordinary maintenance, repair and improvement jobs done by the specialised external firms.
N.B.: All extraordinary maintenance jobs must be carried out by skilled technicians.

Extraordinary maintenance log


Installer's stamp	Product name
	Date of job
	Technician's signature
	Customer's signature
Type of job _____ _____ _____	

Installer's stamp	Product name
	Date of job
	Technician's signature
	Customer's signature
Type of job _____ _____ _____	

Installer's stamp	Product name
	Date of job
	Technician's signature
	Customer's signature
Job carried out _____ _____ _____	

PROBLEM	Reference checks	CHECKS
The operator neither opens nor closes	1-2-3-4-6-8-18	1 - Lock the inspection door using the key and check the release lock 2 - Deactivate the Maintained Action function via the Dip switch 3 - Check the power source and fuses 4 - The N.C. safety contacts are open 6 - Deactivate the master-slave function 7 - Check the balancing and tension of the springs 8 - Deactivate the Obstacle Detection function via the Dip switch 9 - Check the opening endstops 10 - Check the closing endstops 11 - Activate the Automatic Closing via the Dip switch 12 - Check for proper direction of travel 13 - Check the command devices 14 - Cut off power supply then power up again the card or check the TOP/TAM jumper on the AF43S card 15 - Check the Arm Length/Applied Accessories ratio 16 - Memorise the new radio code 18 - Adjust the sensitivity 22 - Insert or duplicate the same code on all of the transmitters 23 - Activate the photocell via the Dip switch 24 - Connect the photocells in series and not in parallel fashion 25 - Check the batteries 26 - Respect the polarities when powering up the photocells
The operator opens but won't close	4-7-10	
The operator closes but won't open	4-7-9	
The operator won't perform automatic closing	11-12-13	
It does not work with the transmitter	2-14-16	
The operator inverts direction of travel	7-18	
Only one transmitter works	22	
The photocell doesn't work	12-23-24	
The LED flashes quickly	4	
The LED stays lit	13	
The operator does not complete a full run-cycle	7	
Cannot balance the barrier-arm	7-15	
The operator does not decelerate	7-15	
The operator does not work with the emergency batteries	8-25-26	
The operator is slow when starting	7	

Dismantling and disposal

 CAME CANCELLI AUTOMATICI S.p.A. employs at its plants an Environmental Management System certified and compliant with UNI EN ISO 14001 to safeguard the environment.

We kindly ask you to continue safeguarding the environment - at CAME we hold this to be fundamental market development strategy - just by following the few disposal instructions below:

DISPOSAL OF THE PACKAGING

The packaging components (cardboard, plastic, etc) are solid urban waste and may be disposed of without difficulty, simply throw them out in the corresponding recycle bins.

Before proceeding it is always a good idea to check your local legislation on the matter.

DO NOT DISPOSE OF IN THE NATURE!

PRODUCT DISPOSAL

Our products are made up of various materials. The majority of these (aluminium, plastic, iron, electrical wires) is solid urban waste. These can be disposed of at local solid waste management dumps or recycling plants.

Other components (electronic cards, transmitter batteries, etc.) may contain polluting substances.

These must therefore be handed over to the specially authorised disposal firms.

Before proceeding it is always a good idea to check your local legislation on the matter.

DO NOT DISPOSE OF IN THE NATURE!

**Came Cancelli Automatici s.p.a.**

address Via Martiri della Libertà Street n. 15 postal code 31030
location Dosson di Casier province Treviso state Italia

DECLARATION OF INCORPORATION

DECLARES THAT THE PARTLY COMPLETED MACHINERY**AUTOMATIC ROAD BARRIERS**

G2080Z; G2080IZ; G2081Z;
G4040Z; G4040IZ; G4041Z;
G2500; G2500N; G2510;
G3250; G3750; G3751;
G4000C; G4000D; G4000E; G4000N; G4001; G4001E; G4010; G4011;
G6000; G6000B; G6000E; G6001; G6001E; G6010; G6011;
G6500; G6501;
G12000; G12000A; G12000S

G02040; G04060; G06080
G02801; G02803;
G03755DX; G03755SX

MEET THE APPLICABLE ESSENTIAL REQUIREMENTS

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 - 1.4.2.1 - 1.5.1 - 1.5.6 - 1.5.8 -
1.5.9 - 1.5.13 - 1.6.1 - 1.6.3 - 1.6.4 - 1.7.1 - 1.7.2 - 1.7.4

COMPLIES WITH THE PROVISIONS OF THE FOLLOWING DIRECTIVES

DIRECTIVE 2006/42/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 17 May 2006 on machinery, and amending Directive 95/16/EC.

DIRECTIVE 2004/108/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 15 December 2004 on the approximation of the laws of the Member States relating to electromagnetic compatibility.

PERSON AUTHORISED TO COMPILE THE RELEVANT TECHNICAL DOCUMENTATION**Came Cancelli Automatici s.p.a.**

address Via Martiri della Libertà Street n. 15 postal code 31030
location Dosson di Casier province Treviso state Italia

The pertinent technical documentation has been drawn up in compliance with attached document IIB
Came Cancelli Automatici S.p.A., following a duly motivated request from the national authorities, undertakes to provide
information related to the quasi machines,

and FORBIDS

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 2006/42/CE.

Dosson di Casier (TV)
13 July 2010

Gianni Michielan
Managing Director

DDI B EN G001d ver. 4.1 21 April 2010
Translation of the Declaration in the original language

Came Cancelli Automatici 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

CAMEGROUP
CANCELLI AUTOMATICI



English - Manual Code: **119GV18** ver. **1.1** 12/2011 © CAME Cancelli Automatici S.p.a.
The data and information in this manual may be changed at any time and without obligation on the part of CAME Cancelli Automatici S.p.a. to notify said changes.

- IT** • Per ogni ulteriore informazione su azienda, prodotti e assistenza nella vostra lingua:
EN • For any further information on company, products and assistance in your language:
FR • Pour toute autre information sur la société, les produits et l'assistance dans votre langue :
DE • Weitere Infos über Unternehmen, Produkte und Kundendienst bei:
ES • Por cualquier información sobre la empresa, los productos y asistencia en su idioma:
NL • Voor meer informatie over het bedrijf, de producten en hulp in uw eigen taal:

- PT** • Para toda e qualquer informação acerca da empresa, de produtos e assistência técnica, em sua língua:
PL • Wszystkie inne informacje dotyczące firmy, produktów oraz usług i pomocy technicznej w Waszym języku znajdują się na stronie:
RU • Для получения дополнительной информации о компании, продукции и сервисной поддержке на вашем языке:
HU • A vállalatra, termékeire és a műszaki szervizre vonatkozó minden további információért az Ön nyelvén:
HR • Za sve dodatne informacije o poduzeću, proizvodima i tehničkoj podršci:
UK • Для отримання будь-якої іншої інформації про компанію, продукцію та технічну підтримку:



www.came.com



CAMEGROUP

CAME Cancelli Automatici S.p.a.

Via Martiri Della Libertà, 15
31030 **Dosson Di Casier** (TV)

☎ (+39) 0422 4940

☎ (+39) 0422 4941

Assistenza Tecnica/Numero Verde 800 295830