



ENTRE//MATIC



QIK60EH-QIK70EH

IP2083EN- rev. 2011-01-19



**Installation and
maintenance manual for
electromechanical barrier.**
(Translation of the original instructions)



DITEC S.p.A.

Via Mons. Banfi, 3 - 21042 Caronno Pertusella (VA) - ITALY

Tel. +39 02 963911 - Fax +39 02 9650314

www.ditec.it - ditec@ditecva.com

ISO 9001
Cert. n° 0957

INDEX

Subject	Page
1. General safety precautions	3
2. EC declaration of conformity	4
3. Technical data	5
3.1 Operating instructions	5
3.2 Dimensions	6
4. Standard installation	7
5. Main components	8
6. Mechanical installation	9
7. QIK60EH rod installation	10
8. QIK70EH rod installation	11
9. QIK60EH rod balancing	12
10. QIK70EH rod balancing	13
11. Choice of opening direction	14
12. Access to control panel	15
13. Electrical connections	15
14. Routine maintenance plan	15
15. Operating instructions	16
15.1 General safety precautions	16
15.2 Manual release instructions	17

CAPTION



This symbol indicates instructions or notes regarding safety issues which require particular attention.



This symbol indicates informations which are useful for correct product function.



This symbol indicates instructions or notes intended for technical and expert personnel.



This symbol indicates operations not to be effected for not compromise the correct operation of the automation.



This symbol indicates options and parameters which are only available with the indicated item.



This symbol indicates options and parameters which are not available with the indicated item.

All right reserved

All data and specifications have been drawn up and checked with the greatest care. The manufacturer cannot however take any responsibility for eventual errors, omissions or incomplete data due to technical or illustrative purposes.

1. GENERAL SAFETY PRECAUTIONS



This installation manual is intended for professionally competent personnel only.

Installation, electrical connections and adjustments must be performed in accordance with Good Working Methods and in compliance with applicable regulations.

Before installing the product, carefully read the instructions. Bad installation could be hazardous. The packaging materials (plastic, polystyrene, etc.) should not be discarded in the environment or left within reach of children, as these are a potential source of hazard.

Before installing the product, make sure it is in perfect condition.

Do not install the product in an explosive environment and atmosphere: gas or inflammable fumes are a serious hazard risk.

Before installing the motors, make all structural changes relating to safety clearances and protection or segregation of all areas where there is risk of being crushed, cut or dragged, and danger areas in general.

Make sure the existing structure is up to standard in terms of strength and stability. The motor manufacturer is not responsible for failure to use Good Working Methods in building the frames to be motorized or for any deformation occurring during use.

The safety devices (photocells, safety edges, emergency stops, etc.) must be installed taking into account: applicable laws and directives, Good Working Methods, installation premises, system operating logic and the forces developed by the motorized barrier.

The safety devices must protect any areas where the risk exists of being crushed, cut or dragged, or where there are any other risks generated by the motorized barrier.

Apply hazard area notices required by applicable regulations.

Each installation must clearly show the identification details of the motorized barrier.



Before making power connections, make sure the plate details correspond to those of the power mains.

Fit an omnipolar disconnection switch with a contact opening gap of at least 3 mm.

Make sure an adequate residual current circuit breaker and overcurrent cutout are fitted upstream of the electrical system. When necessary, connect the motorized barrier to a reliable earth system made in accordance with applicable safety regulations.

During installation, maintenance and repair, interrupt the power supply before opening the lid to access the electrical parts.



To handle electronic parts, wear earthed antistatic conductive bracelets. The motor manufacturer declines all responsibility in the event of component parts being fitted that are not compatible with the safe and correct operation.

For repairs or replacements of products only original spare parts must be used. The installer shall provide all information relating to automatic, manual and emergency operation of the motorized barrier, and provide the user with operating instructions.

2. EC DECLARATION OF CONFORMITY

Manufacturer: DITEC S.p.A.

Address: Via Mons. Banfi, 3 21042 Caronno P.Ia (VA) - ITALY

Declares that the motorised barrier product, such as QIK60EH-QIK70EH conforms to the essential requisites of the following EC directives:

- Electromagnetic Compatibility Directive 2004/108/EC
- Machine Directive 2006/42/EC
- Building Products Directive 89/106/EC

conforms to the following characteristics of the standard EN 13241-1 (Attachment ZA):

- Production controls in the factory (in conformity)
- Release of dangerous substances (in conformity)
- Resistance to wind load (Class 5)
- Safe opening (in conformity)
- Mechanical resistance and stability (in conformity)
- Manoeuvring forces (in conformity)

Organization notified: Treviso Tecnologia - CERT

Registration number: 1600

Address: Via Pezza Alta, 34 31046 Rustignè di Oderzo (TV)

Caronno Pertusella, 19-01-2010

Silvano Angaroni
(Managing Director)

3. TECHNICAL DATA

	QIK60EH	QIK70EH
Power supply	230 V~ / 50-60 Hz	230 V~ / 50-60 Hz
Absorption	1 A	1 A
Torque	70 Nm	70 Nm
Opening time	2÷6 s/90°	2÷6 s/90°
Closing time	2÷6 s/90°	2÷6 s/90°
Rod length (max)	5550 mm	6000 mm
Service class	5 - VERY INTENSE	5 - VERY INTENSE
Intermittence	S2 = 60 min S3 = 60%	S2 = 60 min S3 = 60%
Temperature	-20° C / +55° C	-20° C / +55° C
Degree of protection	IP24D	IP24D
Control panel	EL31R	EL31R

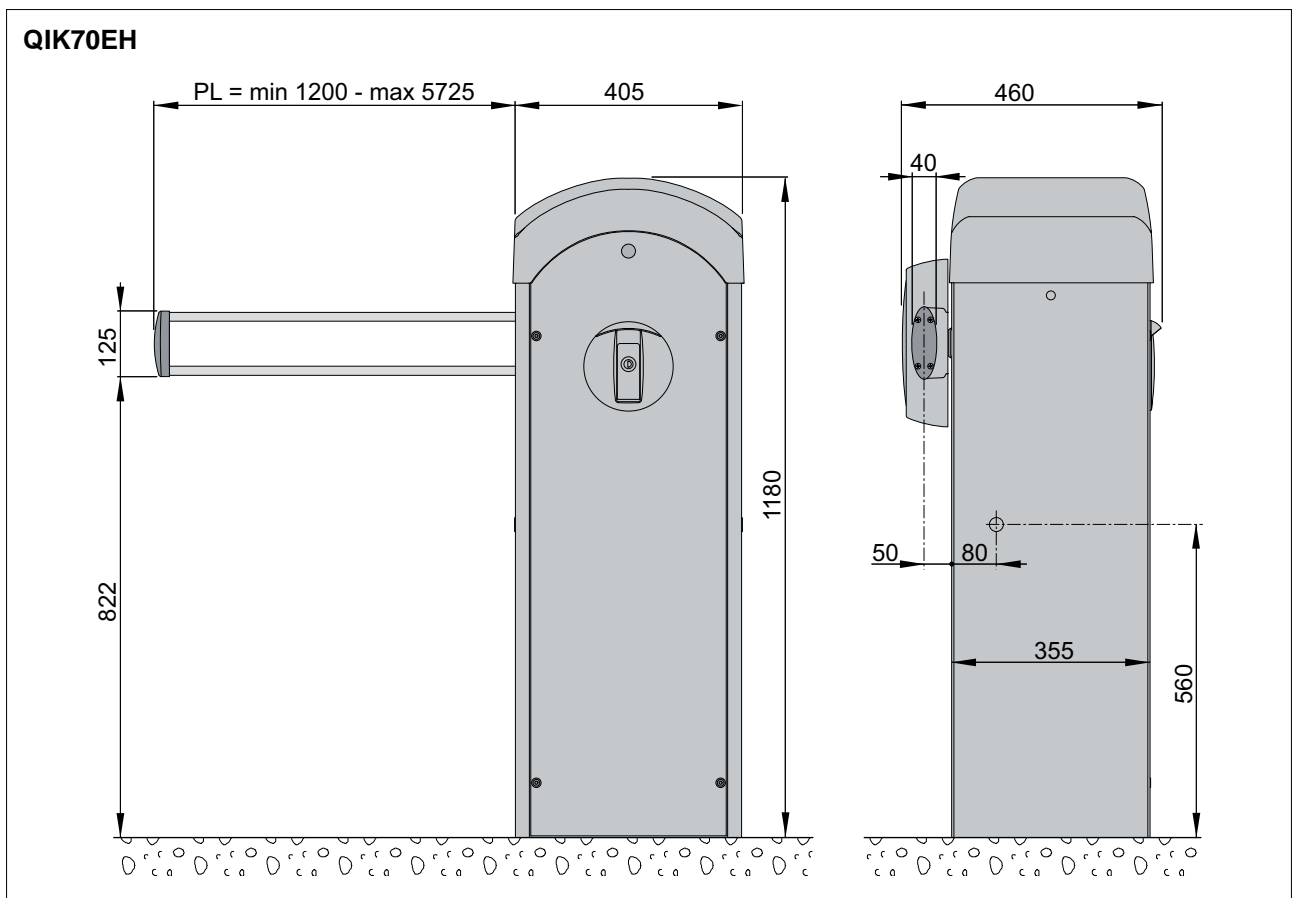
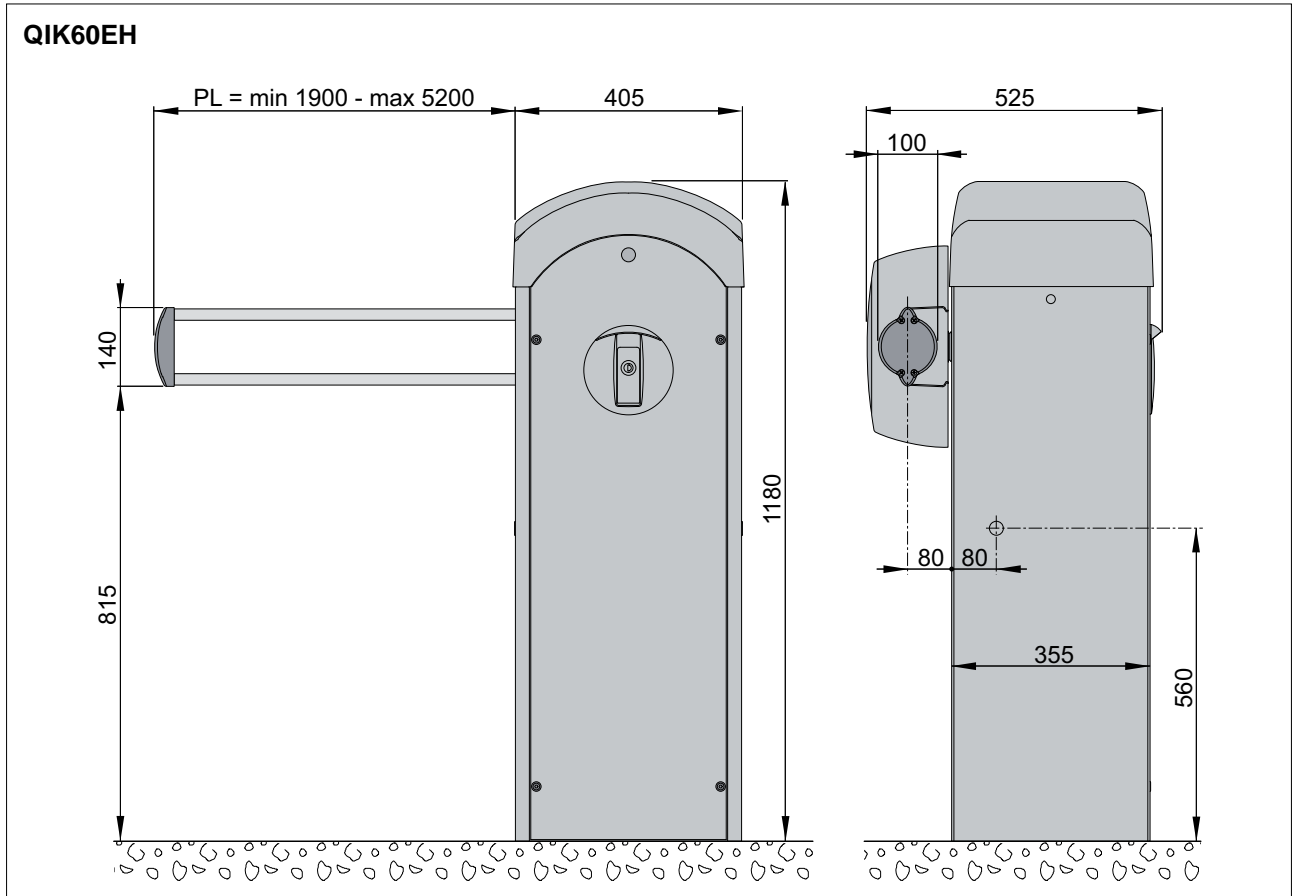
3.1 Operating instructions

Service class: 5 (minimum 5 years of working life with 600 cycles per day).

Applications: VERY INTENSE (for condominium, industrial and commercial entrances, parking spaces with very intense vehicle or pedestrian access).

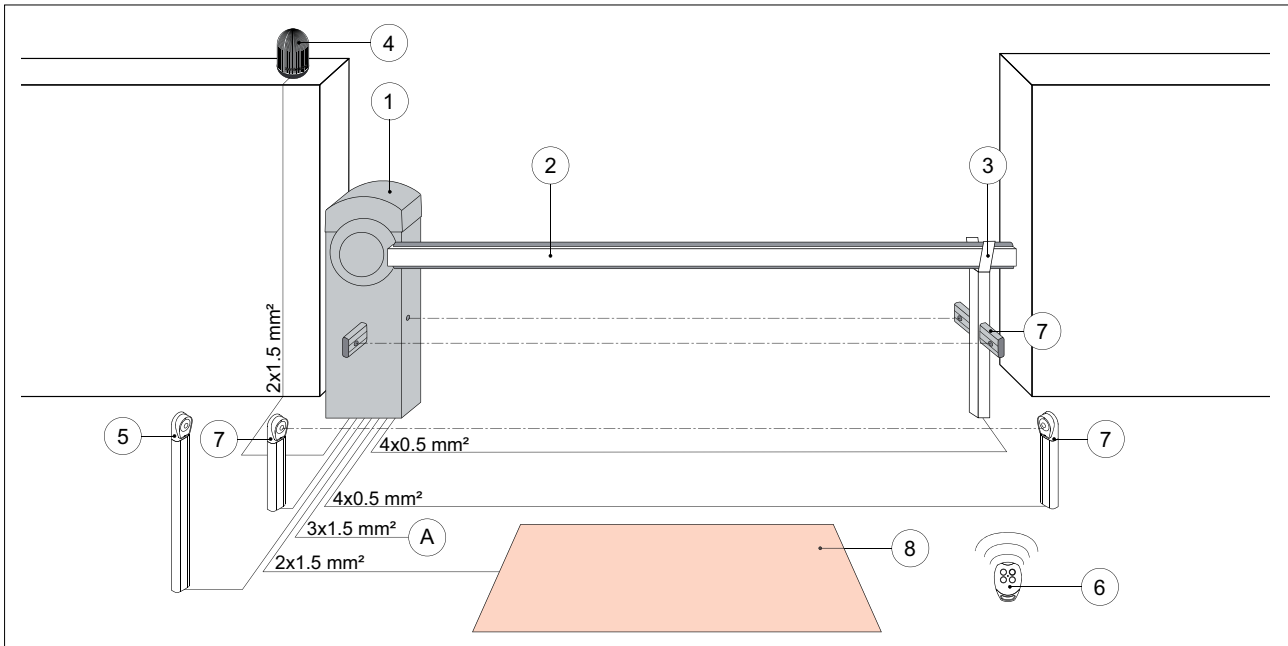
- Performance characteristics are to be understood as referring to the recommended weight (approx. 2/3 of maximum permissible weight). When used with the maximum permissible weight a reduction in the above mentioned performance can be expected.
- Service class, running times, and the number of consecutive cycles are to be taken as merely indicative Having been statistically determined under average operating conditions, and are therefore not necessarily applicable to specific conditions of use.
- Each automatic entrance has variable elements such as: friction, balancing and environmental factors, all of which may substantially alter the performance characteristics of the automatic entrance or curtail its working life or parts thereof (including the automatic devices themselves). The installer should adopt suitable safety conditions for each particular installation.

3.2 Dimensions



NOTE: unless otherwise specified, all measurements are expressed in millimetres (mm).

4. STANDARD INSTALLATION

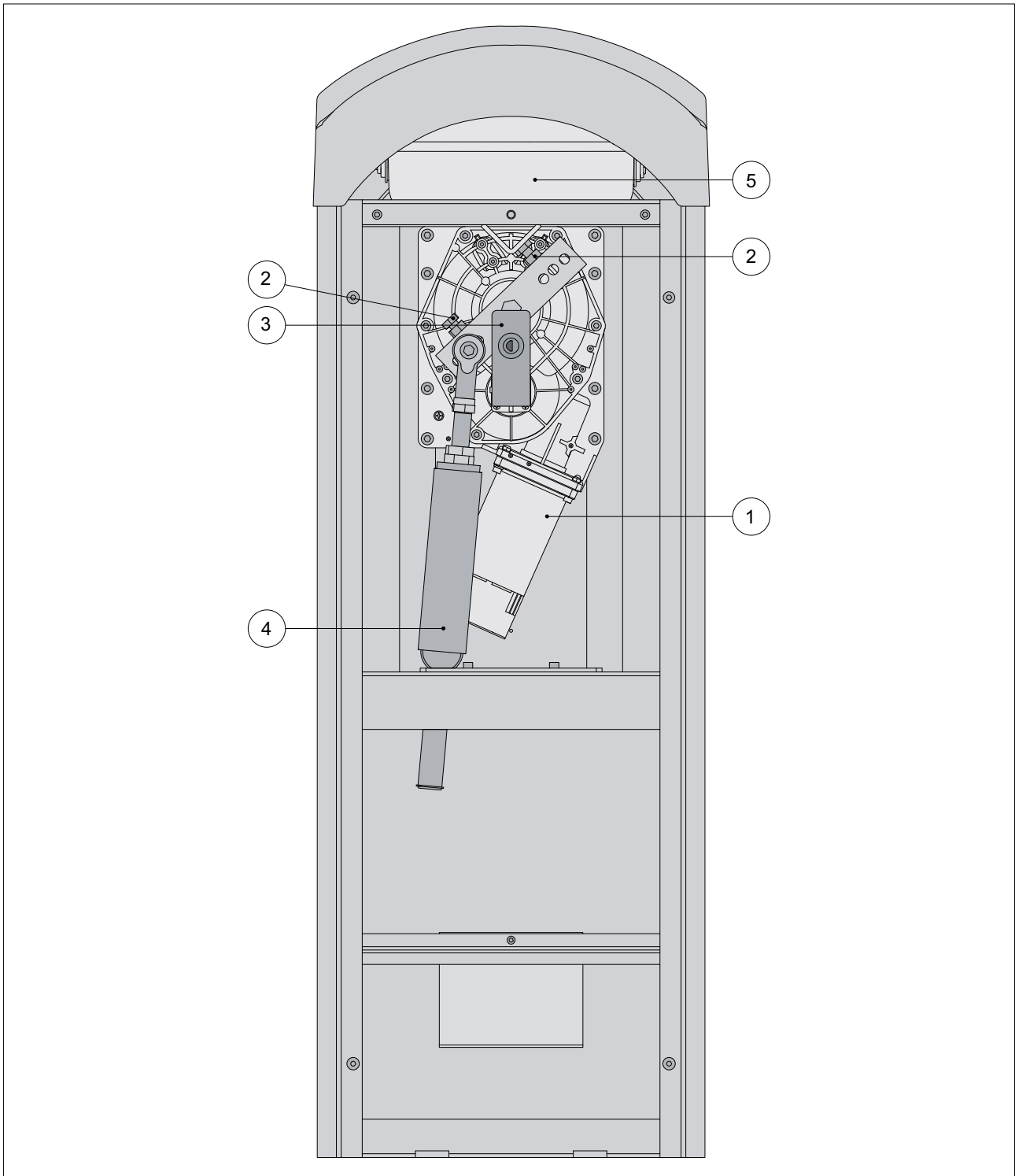


Ref.	Code	Description
1	QIK60EH QIK70EH QIK80Z	Barrier enclosure Barrier enclosure Enclosure fastening base
2	QIKB27 QIKB37 QIKB50 QIKB60 QIKC40 QIKC55 QIKSN QIKBG QIKCG QIKLUX QIKC QIKAM QIKGR	Elliptic rod 2700 mm Elliptic rod 3700 mm Elliptic rod 5000 mm Elliptic rod 6000 mm Circular rod 3975 mm Circular rod 5550 mm Articulation for elliptic rod Joint for elliptic rod Joint for circular rod Light kit for rod 10 reflectors box for rod Mobile support Aluminium barrier 2000 mm
3	QIKAF QIKAFE QIKAFZ	Fixed support Fixed support with electromagnetic block Fixed support fastening base
4	LAMPH	Flashing light
5	XEL5 LAN4 LAN7 XELCA	Key selector switch Combination keyboard Card decoder Column for control accessories
6	GOL4	Radio
7	XEL2 XELCQ XELCB	Photocells Photocell container Photocell column
8	LAB9	Magnetic loop detection device for traffic monitoring
A		Connect the power supply to an approved omnipolar switch with an opening distance of the contacts of at least 3mm (not supplied). The connection to the mains must be made via an independent channel, separated from the connections to command and safety devices.



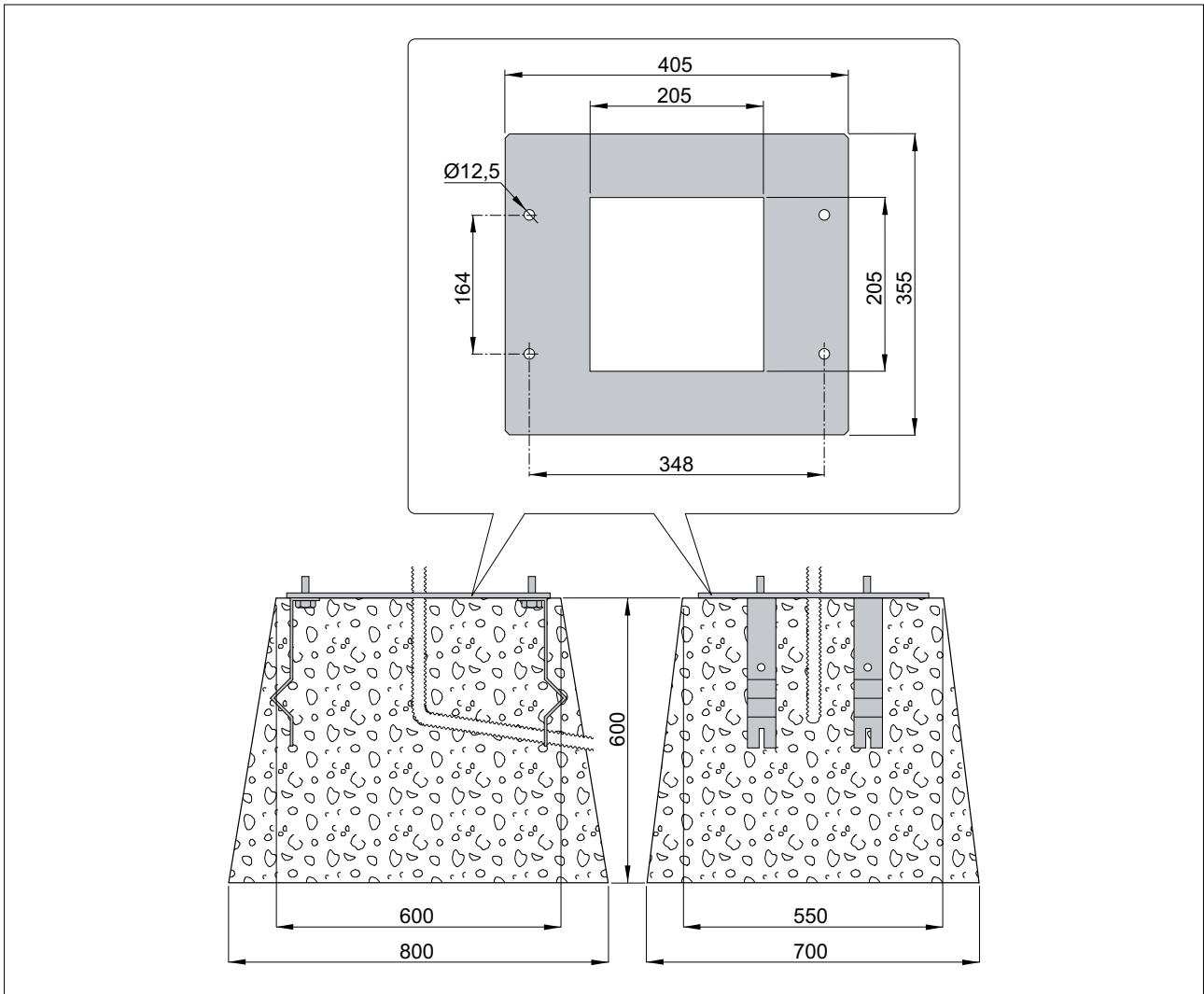
NOTE: the given operating and performance features can only be guaranteed with the use of DITEC accessories and safety devices.

5. MAIN COMPONENTS



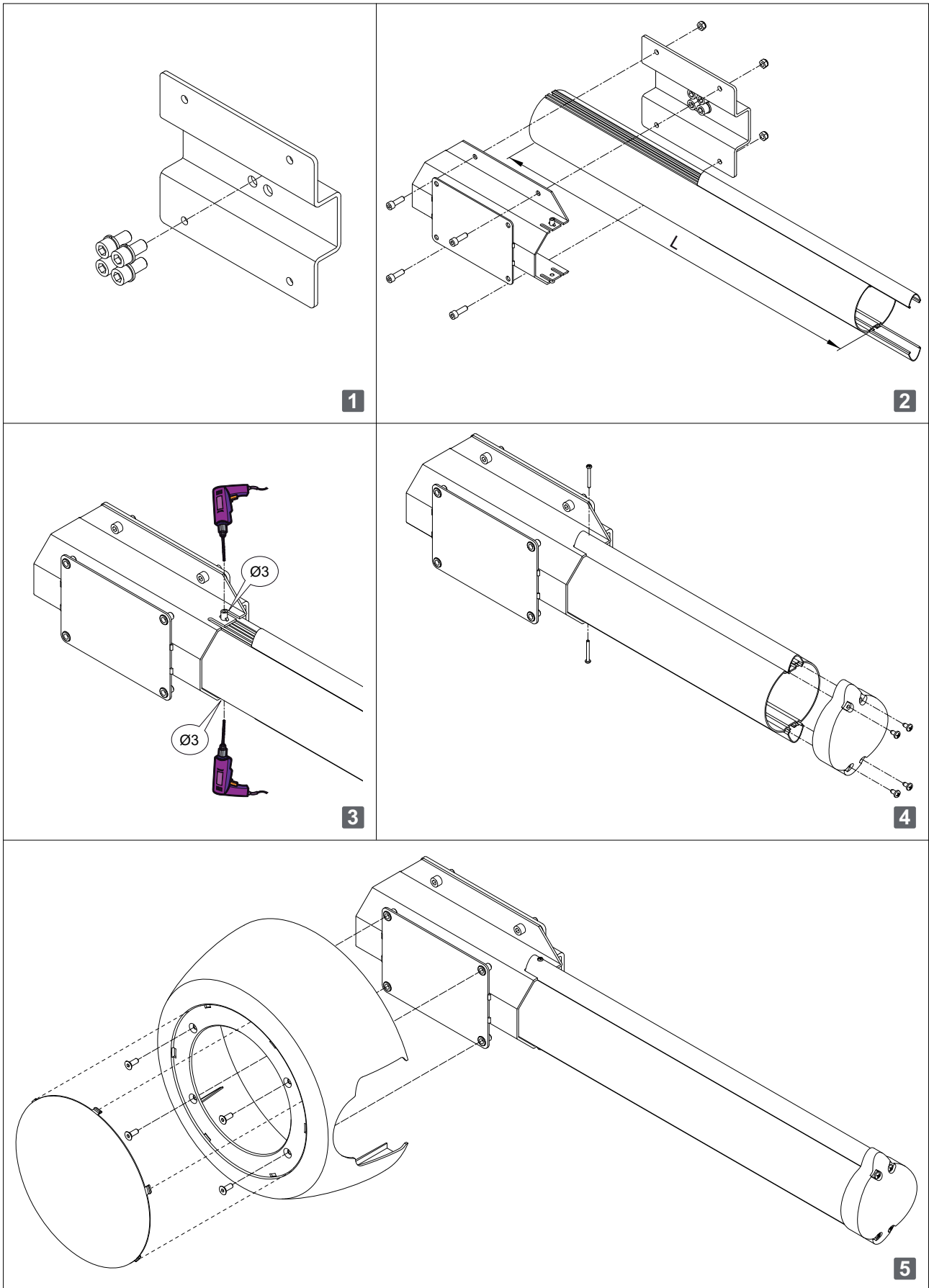
Ref.	Code	Description
1		24 V= motor with encoder
2		Mechanical stop adjusting
3		Key release
4	QIKM1	Grey spring
	QIKM2	Green spring
	QIKM3	Red spring Ø38 mm
	QIKM4	Red spring Ø51 mm
5		Control panel

6. MECHANICAL INSTALLATION



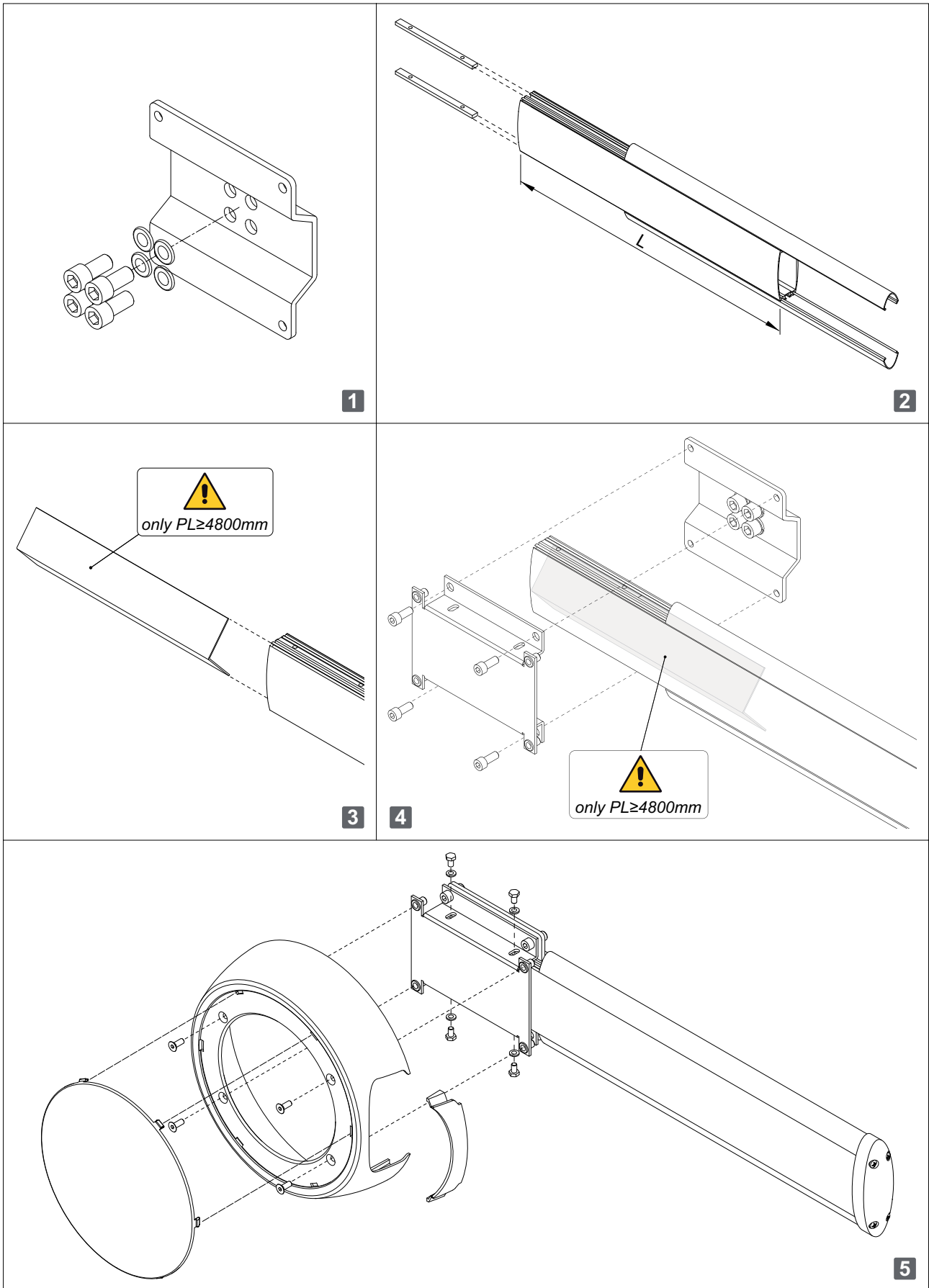
- If the surface does not permit strong, firm fastening of the enclosure, prepare a concrete base with the anchor ties and base plate QIK80Z embedded which must be level and clean.
- Insert elements made of iron or other material through the anchor ties so that the ties are attached to the concrete reinforcement.
- Pass the cable ducts through the central hole of the plate.
WARNING: make sure that the fastening is strong and firm.
- Secure the enclosure.
NOTE: to open the enclosure, release the automation as described on page 17 and unscrew the 4 screws on the front.

7. QIK60EH ROD INSTALLATION



- Cut the length of the rod to $L=PL+350$ mm.
- Install the rod as shown in the figure.

8. QIK70EH ROD INSTALLATION



- Cut the length of the rod to $L=PL+275$ mm.
- Install the rod as shown in the figure.

9. QIK60EH ROD BALANCING

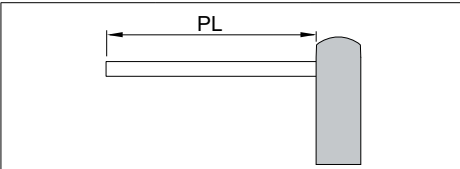
- Release the automation as described on page 17 and place the bar in the vertical opening position.
- Place the spring in the correct position depending on the choice of opening direction as described on page 14.
- Using the nuts placed above the spring (see ref. [B] on page 14), compress the spring until the rod is balanced at an angle of 5°-30° to the floor (in this position, the rod must be stationary or point slightly upwards).

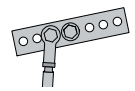
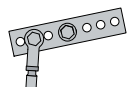
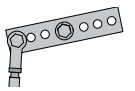
WARNING: compression of the spring must comply with measurement A indicated on page 14.

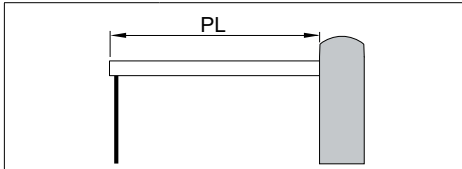
- Make sure that the rod remains still when in the open or closed position.

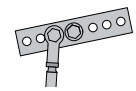
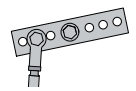
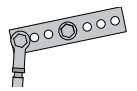


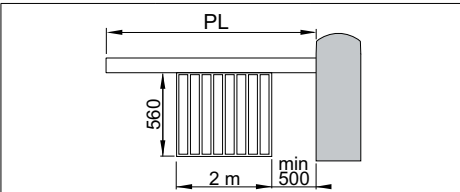
WARNING: never use the force of the motor to support the weight of the rod. Always use the balancing spring.

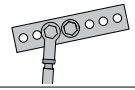
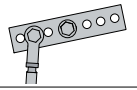
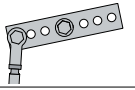


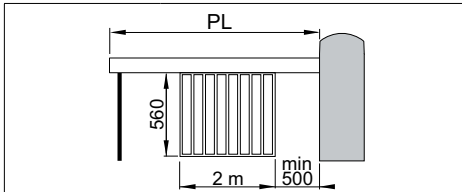
PL (mm)			
1900 - 2099	QIKM2	/	/
2100 - 2499	/	QIKM2	/
2500 - 2799	/	/	QIKM2
2800 - 3599	QIKM3	/	/
3600 - 4599	QIKM4	/	/
4600 - 5200	/	QIKM4	/

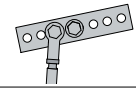
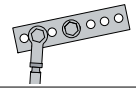
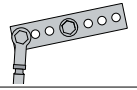


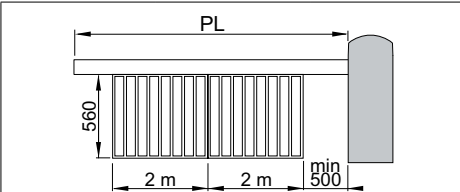
PL (mm)			
1900 - 2399	/	QIKM2	/
2400 - 2699	/	/	QIKM2
2700 - 3299	QIKM3	/	/
3300 - 4499	QIKM4	/	/
4500 - 5200	/	QIKM4	/

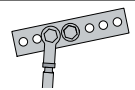
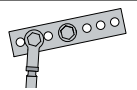
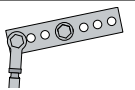


PL (mm)			
2500 - 3299	QIKM3	/	/
3300 - 3600	/	QIKM3	/



PL (mm)			
2700 - 3199	QIKM3	/	/
3200 - 3600	/	QIKM3	/



PL (mm)			
4600 - 4800	/	QIKM4	/

WARNING: for PL ≥ 4000 mm, you must use the fixed support QIKAF-QIKAFE or mobile support QIKAM.



With the fixed support with the electromagnetic block QIKAFE installed, use the configurations indicated for the mobile support QIKAM.

10. QIK70EH ROD BALANCING

- Release the automation as described on page 17 and place the bar in the vertical opening position.
- Place the spring in the correct position depending on the choice of opening direction as described on page 14.
- Using the nuts placed above the spring (see ref. [B] on page 14), compress the spring until the rod is balanced at an angle of 5°-30° to the floor (in this position, the rod must be stationary or point slightly upwards).

WARNING: compression of the spring must comply with measurement A indicated on page 14.

- Make sure that the rod remains still when in the open or closed position.



WARNING: never use the force of the motor to support the weight of the rod. Always use the balancing spring.

PL (mm)			
1200 - 1599	QIKM1	/	/
1600 - 1899	/	QIKM1	/
1900 - 2399	QIKM2	/	/
2400 - 2899	/	QIKM2	/
2900 - 3399	/	/	QIKM2
3400 - 4399	QIKM3	/	/
4400 - 5099	/	QIKM3	/
5100 - 5725	/	QIKM4	/

PL (mm)			
1800 - 1899	/	/	QIKM1
1900 - 2199	QIKM2	/	/
2200 - 2799	/	QIKM2	/
2800 - 3099	/	/	QIKM2
3100 - 3999	QIKM3	/	/
4000 - 4699	/	QIKM3	/
4700 - 5725	/	QIKM4	/

PL (mm)			
2500 - 2899	/	/	QIKM2
2900 - 3500	QIKM3	/	/

PL (mm)			
2700 - 3299	QIKM3	/	/
3300 - 3500	/	QIKM3	/

PL (mm)			
4600 - 4900	/	QIKM4	/

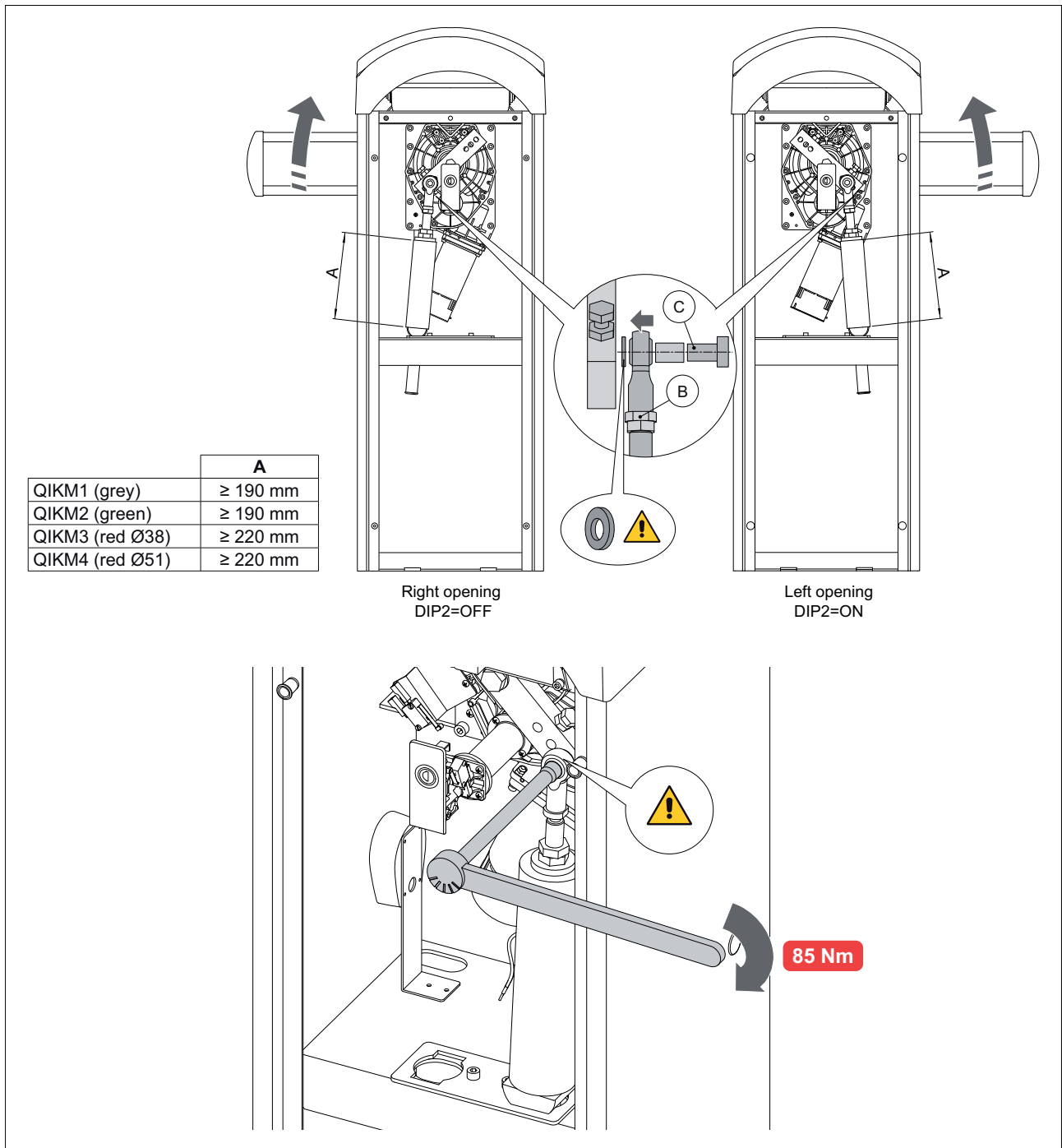
PL (mm)			
2000 - 2299	QIKM2	/	/
2300 - 2899	/	QIKM2	/
2900 - 3199	/	/	QIKM2
3200 - 4099	QIKM3	/	/
4100 - 4450	/	QIKM3	/

WARNING: for $PL \geq 4000$ mm, you must use the fixed support QIKAF-QIKAFE or mobile support QIKAM.



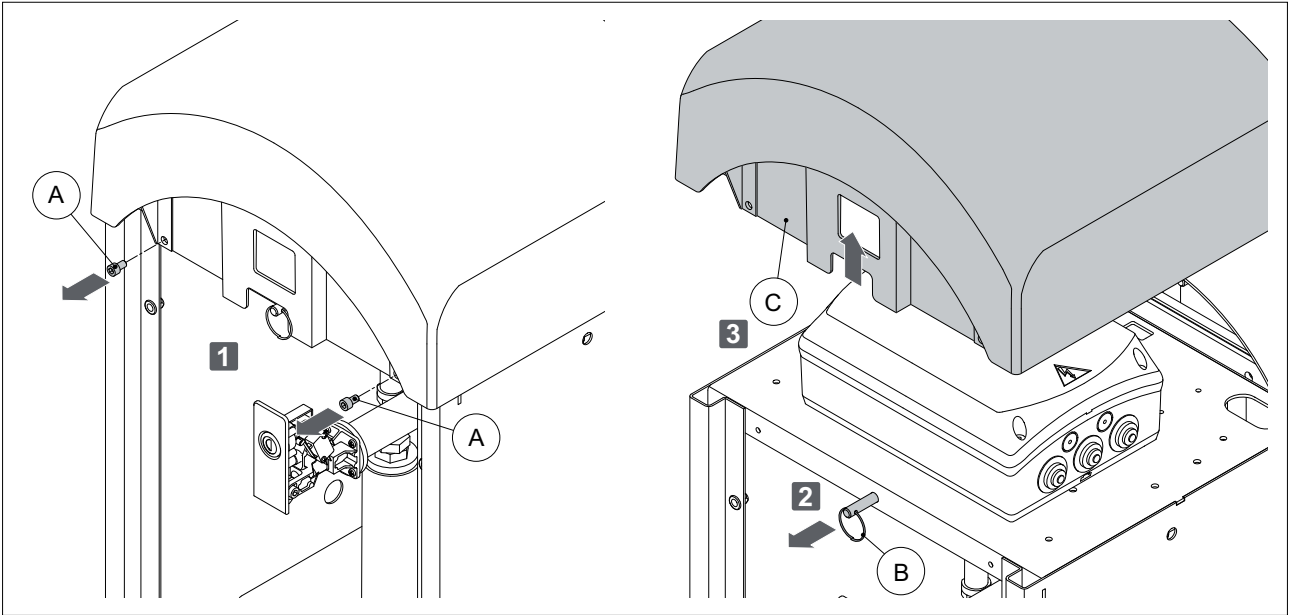
With the fixed support with the electromagnetic block QIKAFE installed, use the configurations indicated for the mobile support QIKAM.

11. CHOICE OF OPENING DIRECTION



- Select the opening direction as shown in the figure.
- Assemble the spring using the special screw M12x40 [C], apply a thread locking compound and tightly fasten as shown in the figure.
- Set DIP2A on the EL31R control panel as shown in the figure.
- Once you have installed the rod, adjust the compression of the spring using the nuts [B] until measurement A in the table is obtained.

12. ACCESS TO CONTROL PANEL

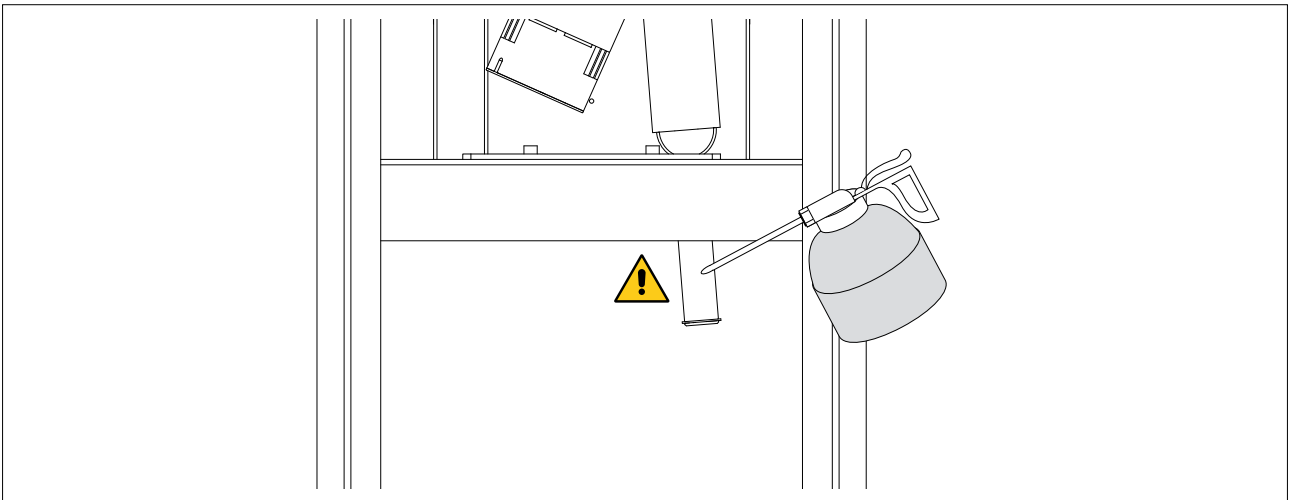


- Unscrew and remove the front screws [A].
- Pull the ring [B] and lift the enclosure cover [C].

13. ELECTRICAL CONNECTIONS

The electrical connections and start-up are illustrated in the installation manual of the EL31R control panel.

14. ROUTINE MAINTENANCE PLAN



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

Disconnect the 230 V~ power supply and batteries (if present):

- Clean and oil the levers and check the nuts and screws are all well tightened.
- Clean and grease the spring-post as shown in the figure.
- Check the electrical connections.
- Check that the manual release is operating correctly.
- Check that the rod is balanced correctly as shown on page 12-13.

Reconnect the 230 V~ power supply and batteries (if present):

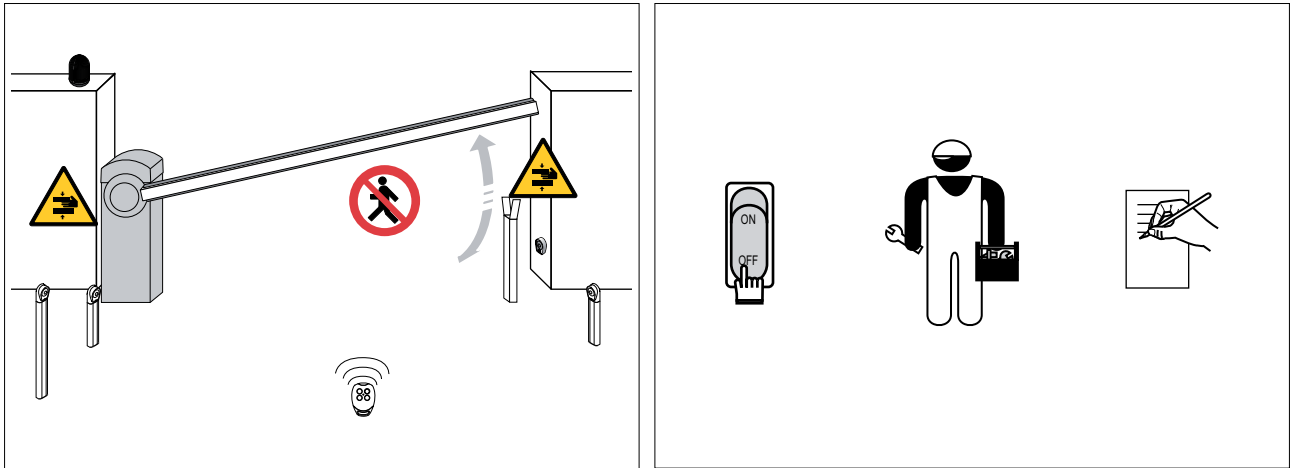
- Check that obstacle detection is operating correctly.
- Check that all control and safety functions are working correctly.



NOTE: for spare parts, see the spares price list.



15. OPERATING INSTRUCTIONS



15.1 General safety precautions

The following precautions are an integral and essential part of the product and must be supplied to the user. Read them carefully since they contain important information on safe installation, use and maintenance. These instructions must be kept and forwarded to all possible future users of the system.

This product must only be used for the specific purpose for which it was designed.

Any other use is to be considered improper and therefore dangerous. The manufacturer cannot be held responsible for any damage caused by improper, incorrect or unreasonable use.

Avoid operating in the proximity of the hinges or moving mechanical parts.

Do not enter within the operating range of the motorized barrier while it is moving.

Do not block the movement of the motorized barrier since this may be dangerous.

Do not allow children to play or stay within the operating range of the motorized barrier.

Keep remote controls and/or any other control devices out of the reach of children in order to avoid possible involuntary activation of the motorized barrier.

In the event of fault or malfunctioning of the product, turn off the power supply switch, do not attempt to repair or intervene directly and contact only professionally competent personnel.


Failure to comply with the above may cause a dangerous situation.

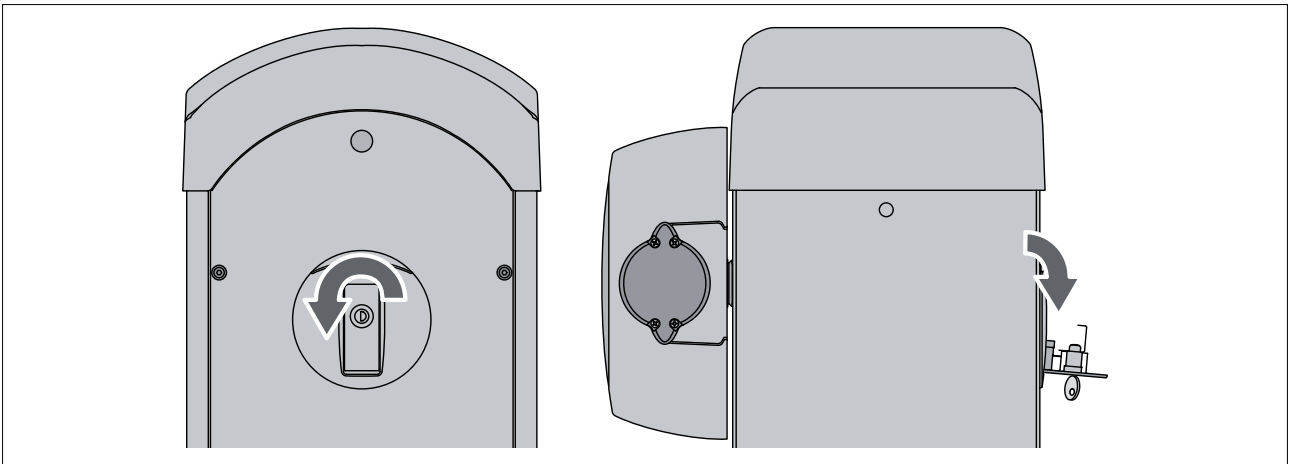
All cleaning, maintenance or repair work must be carried out by professionally competent personnel.

To ensure that the system works efficiently and correctly, the manufacturer's indications must be complied with and routine maintenance of the motorized barrier must be performed by professionally competent personnel.

In particular, regular checks are recommended in order to verify that the safety devices are operating correctly.

All installation, maintenance and repair work must be documented and made available to the user.

 For the correct disposal of electric and electronic equipment, waste batteries and accumulators, the user must take such products to the designated municipal collection facilities.



15.2 Manual release instructions

In the event of a fault or power failure, insert the key, turn it anticlockwise and completely open the hatch. Manually open the barrier.

To block the barrier again, close the hatch, turn the key clockwise and remove the key.

⚠ WARNING: *do not release with the springs under tension without rod. Perform rod locking and release with the motor switched off. Do not enter the operating range of the rod. When the barrier is released, the rod may move of its own accord.*

When the hatch is closed but the key is still horizontal, the release microswitch is open and all operations are stopped.

To deactivate the barrier, the power supply must be removed and the batteries disconnected (if present).



DITEC S.p.A.
Via Mons. Banfi, 3
21042 Caronno Pertusella (VA) - ITALY
Tel. +39 02 963911 - Fax +39 02 9650314
www.ditec.it - ditec@ditecva.com

Installer:



DITEC S.p.A. Via Mons. Banfi, 3 21042 Caronno P.Ia (VA) Italy Tel. +39 02 963911 Fax +39 02 9650314
www.ditec.it ditec@ditecva.com

DITEC BELGIUM LOKEREN Tel. +32 9 3560051 Fax +32 9 3560052 www.ditecbelgium.be **DITEC DEUTSCHLAND** OBERURSEL
Tel. +49 6171 914150 Fax +49 6171 9141555 www.ditec-germany.de **DITEC ESPAÑOLA** ARENYS DE MAR Tel. +34 937958399
Fax +34 937959026 www.ditecespanola.com **DITEC FRANCE** MASSY Tel. +33 1 64532860 Fax +33 1 64532861 www.ditecfrance.com
DITEC GOLD PORTA ERMESINDE-PORTUGAL Tel. +351 22 9773520 Fax +351 22 9773528/38 www.goldporta.com **DITEC SVIZZERA**
BALERNA Tel. +41 848 558855 Fax +41 91 6466127 www.ditecswiss.ch **DITEC ENTREMATIC NORDIC** LANDSKRONA-SWEDEN
Tel. +46 418 514 50 Fax +46 418 511 63 www.ditecentrematicnordic.com **DITEC TURCHIA** ISTANBUL Tel. +90 21 28757850
Fax +90 21 28757798 www.ditec.com.tr **DITEC AMERICA** ORLANDO-FLORIDA-USA Tel. +1 407 8880699 Fax +1 407 8882237
www.ditecamerica.com **DITEC CHINA** SHANGHAI Tel. +86 21 62363861/2 Fax +86 21 62363863 www.ditec.cn