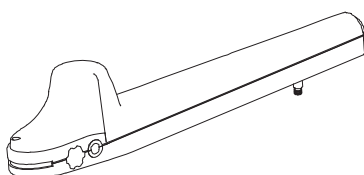


use and maintenance manual

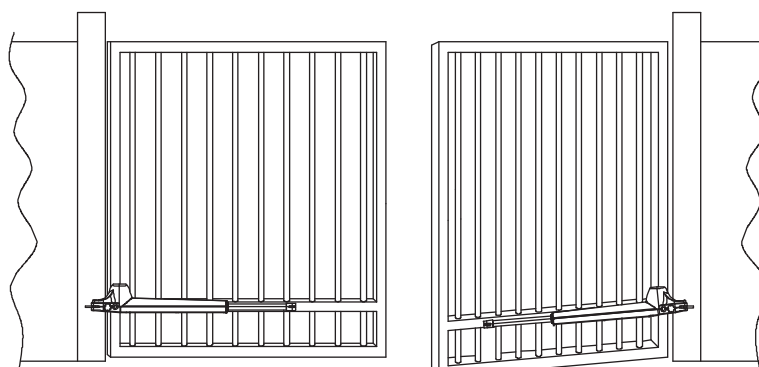
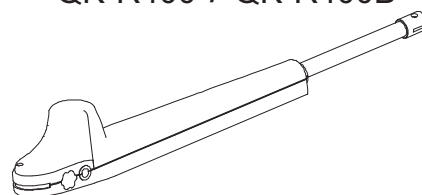
# ROTELLO

SWING GATE OPENER (230/110/24V)

QK-R300 / QK-R300B



QK-R400 / QK-R400B



**qui»lö**<sup>®</sup>  
opening solutions

TECHNICAL FEATURES	QK-R300	QK-R400 QK-R400FCC	QK-R300B	QK-R400B QK-R400BFCC
Power	230Vac 50 / 60Hz	230Vac 50 / 60Hz	24Vdc	24Vdc
Current absorbed (motor) (A)	0,9 - 1,4	0,9 - 1,4	1,7 - 6,64	1,7 - 6,64
Power absorbed (W)	320	320	160	160
Capacitor (µF)	10	10	-	-
Protection level (IP)	54	54	54	54
Opening time (sec)	18	18	18	18
Stroke (mm)	300	400	300	400
Max. thrust (N)	3000	3000	2000	2000
Working temp. (°C Min/Max)	-30/+70	-30/+70	-30/+70	-30/+70
Thermal cut-out (°C)	140	140	-	-
Working cycle (%)	50	50	100	100
Motor weight (kg)	9	9	9	9
Max. leaf length (m)	3	4,5	3	4,5

Also available in 110V. Please add "110" to the item code for 110Vac version  
For 110Vac version, 230Vac in this user manual must be intended as 110Vac.

	Installation limits per leaf Limiti di'impiego per anta Contraintes d'utilisation					
	2m	2,5m	3m	3,5m	4m	4,5m
QK-R300	800kg	600kg	400kg	-	-	-
QK-R300B	500kg	400kg	300kg	-	-	-
QK-R400 / QK-R400FCC	900kg	700kg	500kg	475kg	450kg	400kg
QK-R400B / QK-R400BFCC	600kg	500kg	400kg	375kg	350kg	300kg

The values shown within the table above can be considerably reduced in windy areas.  
I valori mostrati nella tabella sopra possono essere ridotti considerevolmente in zone ventose.  
Les valeurs indiquées dans le tableau peuvent être considérablement réduits dans les zones venteuses.

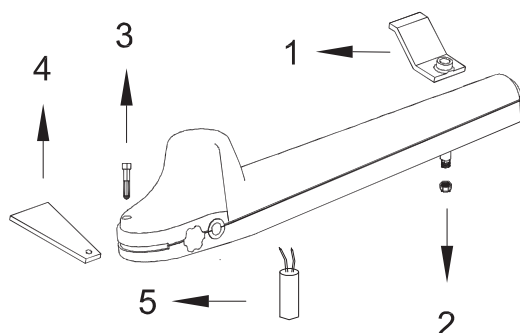
## PRE-INSTALLATION CONTROL

Before installing the automation, you must check that the gate's shutter:

- can turn without sticking in the ground;
- does not swing during its movement;
- is kept in axis by the special hinges;
- owns stoppages when opening and closing.

**Quiiko Italy Sas** is liable only for products it manufactures and commercializes. Once automated, the gate becomes a machine and is therefore subjected to the rules of the " Machinery Directive". It is on the installer to verify its security. **WARNING:** Quiiko Italy Sas is not liable for any damages to people, animals or things due to unauthorised modifications, alterations or betterments on its products by third parties.

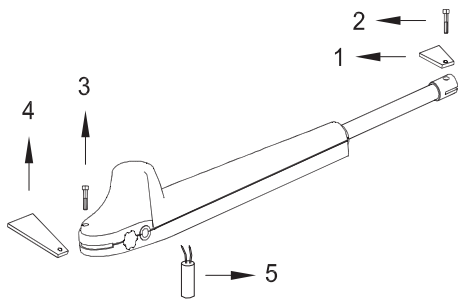
## MATERIALS FOR INSTALLATION



### QK-R300 & QK-R300B

- 1 – Galvanized bracket
- 2 – Fixing bolt
- 3 – 8x50mm stainless steel screw
- 4 – Galvanized bracket
- 5 – Capacitor (only for QK-R300 mod.)

## QK-R400 & QK-R400B

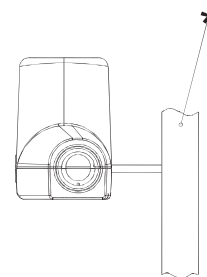
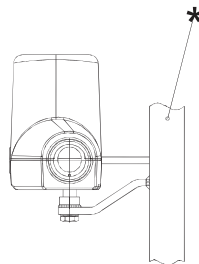


- 1 – Galvanized bracket
- 2 – 8x30mm stainless steel screw
- 3 – 8x50mm stainless steel screw
- 4 – Galvanized bracket
- 5 – Capacitor (only for QK-R400 mod.)

### MEASURES TO BE RESPECTED

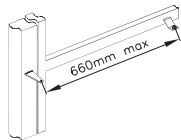
#### QK-R300 & QK-R300B

#### QK-R400 & QK-R400B

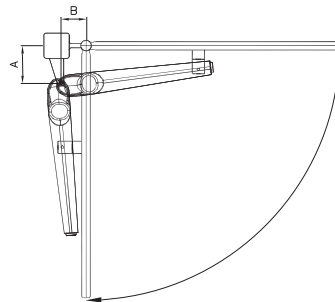


\* brackets must be installed so that the actuator, once pegged on them, comes out in a horizontal position.

#### QK-R300 / QK-R300B

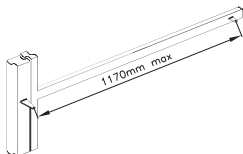


#### QK-R300 / QK-R300B

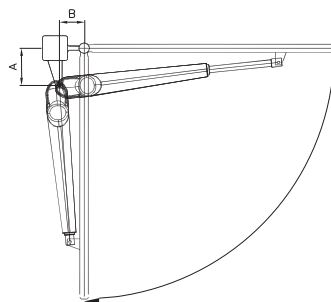


QK-R300 AND QK-R300B					
$\alpha = 90^\circ$			$\alpha = 100^\circ$		
A (mm)	B (mm)		A (mm)	B (mm)	
	min	max		min	max
100	120	170	120	130	170
110	120	170	130	130	170
120	120	160	140	130	170
130	120	150	150	130	170
140	120	150			
150	120	150			
160	120	150			
170	120	140			
180	120	130			

#### QK-R400 / QK-R400B

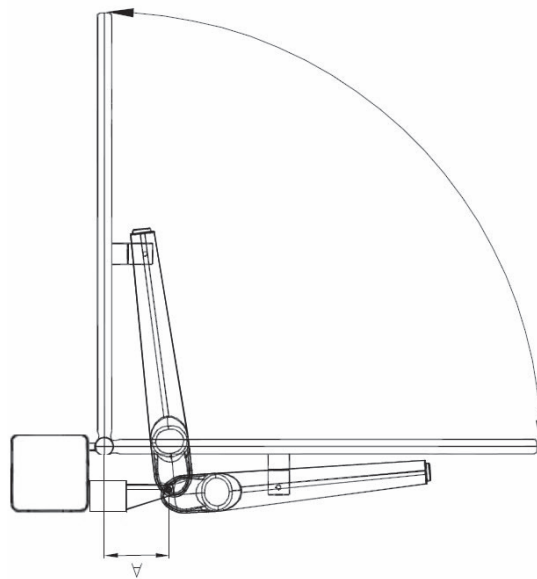


#### QK-R400 / QK-R400B



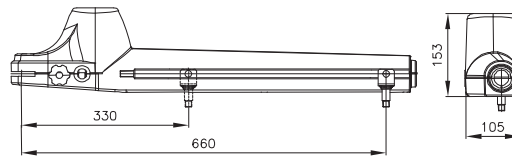
QK-R400 AND QK-R400B					
$\alpha = 90^\circ$			$\alpha = 100^\circ$		
A (mm)	B (mm)		A (mm)	B (mm)	
	min	max		min	max
110	120	250	120	120	220
120	120	250	130	120	220
130	120	250	140	120	220
140	120	250	150	120	210
150	120	250	160	120	210
160	120	230	170	120	200
170	120	230	180	120	190
180	120	220	190	120	180
190	120	200	200	120	170
200	120	190	210	120	160
210	120	190	220	120	160
220	120	180	230	120	130
230	120	160	240	120	120
240	120	160	250	120	120
250	120	150			
260	120	140			
270	120	130			
280	120	120			

If necessary, extending the bracket on the column/pillar, it is possible to install the motor internally and let the gate open externally (push to open) as shown within the image below:

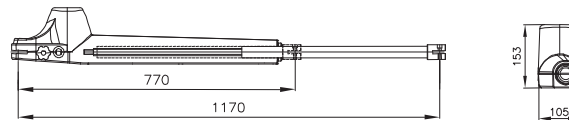


### MEASURES OF THE ACTUATOR (mm)

#### QK-R300 / QK-R300B



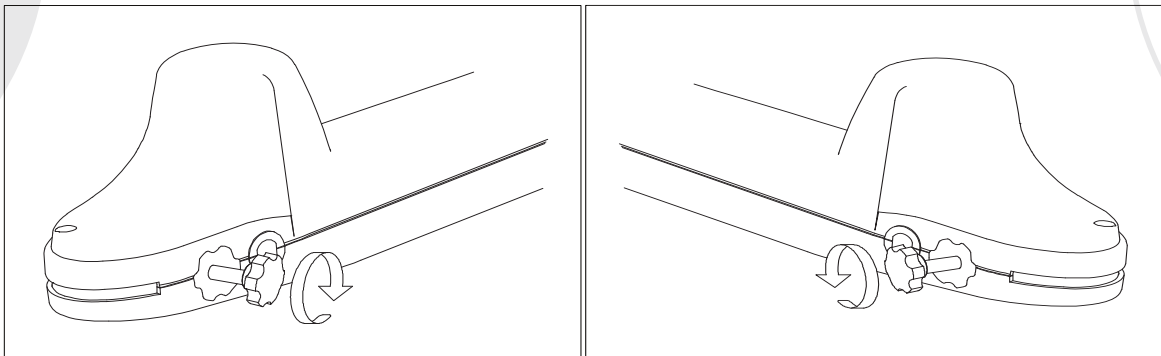
#### QK-R400 / QK-R400B



**MAXIMUM ALLOWED EXTENSION**

As per the drawing on the left, QK-R400 output tube maximum allowed extension is 1170mm. Make sure that, once installed on the gate, this measure isn't exceeded.

### USE OF MANUAL UNLOCKING

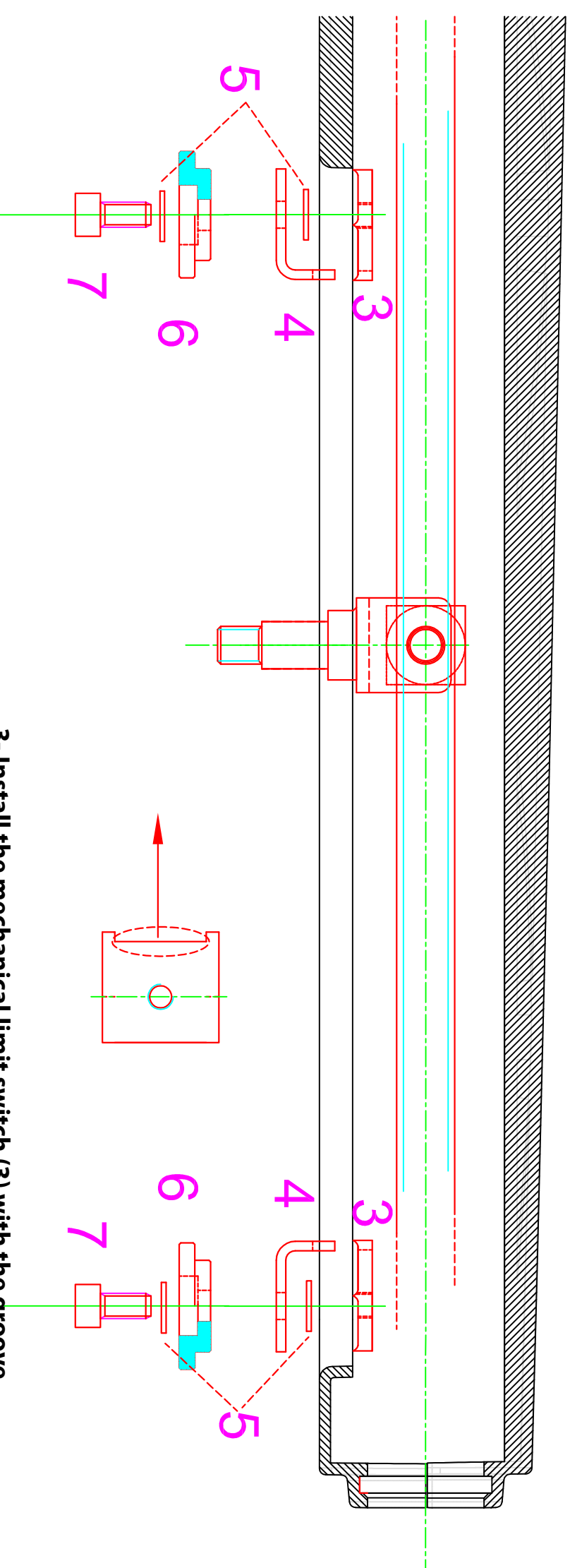


- 1- Insert key into the lock, press the knob with the thumb, turn the key clockwise for the left actuator, anti-clockwise for the right actuator;
- 2- pull the knob outside and turn it clockwise for the left actuator, anti-clockwise for the right one;
- 3- avoid to let the knob re-enter when it is in the unlocked position.

## QK-FCR300

Mechanical limit switch for opening  
or closing for one QK-R300 gearmotor

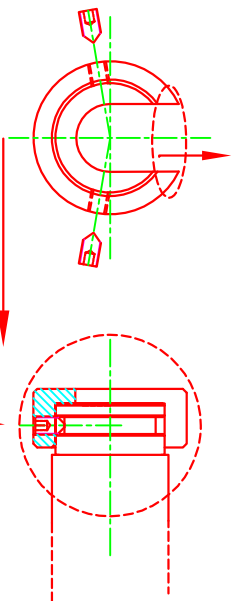
OPTIONAL



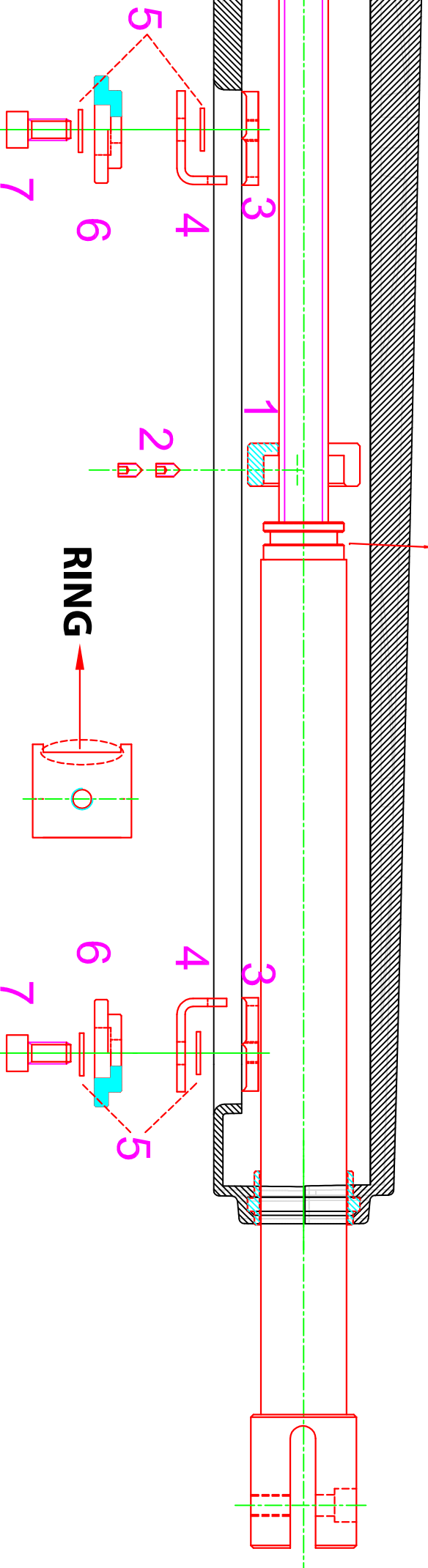
**3- Install the mechanical limit switch (3) with the groove facing the spindle nut as shown in image above. Fix it with supplied screw (7) along with its other components (4-5-6).**

**Mechanical limit switch can be installed in either open or closed position as show in image above.**

**1- Install the ring (1) with the open side facing the UP position as shown in figure below.**



**2- Fix the ring with the supplied grub screws in the position shown within image below.**



**3- Install the mechanical limit switch (3) with the groove facing the ring as shown in image above. Fix it with supplied screw (7) along with its other components (4-5-6).**

Mechanical limit switch can be installed in either open or closed position as show in image above.

## MAINTENANCE

Actuators need very little maintenance; however their function depends also on the gate conditions, hence here are operations to be done to keep the gate efficient at all times.

Warning: no one but the maintenance man, who must be a specialised technician, must be able to control the automatic gate while it is being serviced. For this reason please turn off electricity, avoiding also electric shocks hazard. If on the contrary electricity must be on for certain checks, remember to check or disable any control device (remote controls, push button panels etc.) except the one used by the service man.

### Routine maintenance

Each of the following operations must be done when needed and in all cases at least every 6 months:

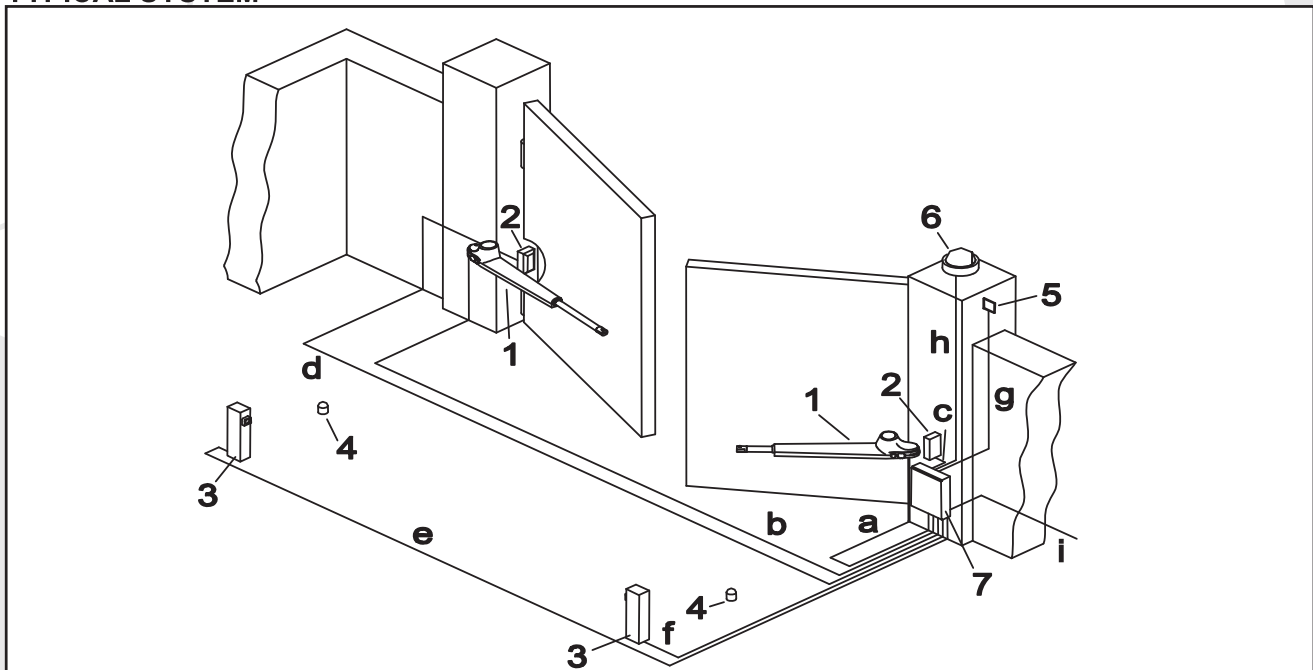
#### 1) Mechanical maintenance

- Lubricate (with oiler) the hinges on which the gate swings
- check the good conditions of brackets and motor's hinges
- do an unlocking operation to be sure the mechanism is always efficient.

#### 2) Electrical maintenance

- Check the proper working of the safety devices
- check the electronic friction's efficacy
- check the earth system's (differential's) efficacy. Try the differential switcher once a month by pushing the special test button on the switcher.

## TYPICAL SYSTEM



### MAIN COMPONENTS

- 1 – ACTUATORS
- 2 – PHOTOCELLS
- 3 – PHOTOCELLS ON LITTLE COLUMNS
- 4 – GATE KNOCKERS
- 5 – KEY SELECTOR
- 6 – FLASHING LIGHT
- 7 – CONTROL BOARD

### MOTOR CABLES

BLU= NEUTRAL

BLACK= PHASE 1

BROWN= PHASE 2

## ELECTRICAL CABLES' CROSS SECTION

QK-R300B & QK-R400B	QK-R300 & QK-R400
A = 2x1.5 mm <sup>2</sup>	A = 4x1.5 mm <sup>2</sup>
B = 2x1.5 mm <sup>2</sup>	B = 4x1.5 mm <sup>2</sup>
C = 4x0.5 mm <sup>2</sup>	
D = 2x0.5 mm <sup>2</sup>	
E = 2x0.5 mm <sup>2</sup>	
F = 4x0.5 mm <sup>2</sup>	
G = 3x0.5 mm <sup>2</sup>	
H = 3x1 mm <sup>2</sup>	
I = 3x1.5 (supply line)	

## DECLARATION OF CONFORMITY

(OF THE MANUFACTURER)



**Manufacturer: QUIKO ITALY SAS**

Via Seccalegno, 19  
36040 Sossano (VI)  
Italia

hereby declares, under his liability, that products:  
QK-R 300, QK-R 300B, QK-R 400, QK-R400B

are in compliance with the essential safety requirements of the regulations:

- ✓ Electro-magnetic Compatibility Directive .....2004/108/EC
- ✓ Low Voltage Directive .....2006/95/EC
- ✓ Machinery Directive .....2006/42/EC

and their amendments and modifications, and with the regulations set forth by the National Legislative Body of the country in which the machinery is destined for use.

Sossano, 19/10/2011

Managing Director  
Luca Borinato



**DECLARATION OF CONFORMITY**  
(OF THE INSTALLER)

The undersigned:

---

Address:

---

in charge of the set-up, declares that the product:

Gate type:

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Location:

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are in compliance with the essential safety requirements of the regulations:

- ✓ Electro-magnetic Compatibility Directive .....2004/108/EC
- ✓ Low Voltage Directive .....2006/95/EC
- ✓ Machinery Directive .....2006/42/EC

and also declares that the related and/or specific national technical regulations have been followed:

- ✓ EN 12453/EN 12445 on Industrial, Commercial and Residential Gates and Doors – Safe Use of Motorized Doors – Requirements and Classification – Test Methods;
- ✓ EN 12604/ EN 12605 on Industrial, Commercial and Residential Gates and Doors – Mechanical Aspects – Requirements and Classification – Test Methods;
- ✓ CEI 64/8 Electrical Systems Using Nominal Tension Not Higher Than 1000V a.c. and 1500 V d.c.;
- ✓ EN 13241-1 (Industrial, commercial and garage doors and gates), conformity evaluation (6.3).

Notes:

Place and date: .....

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**info@quiko.biz**  
**www.quikoitaly.com**



*The Manufacturer can technically improve  
the quality of its products without  
any prior notice.*