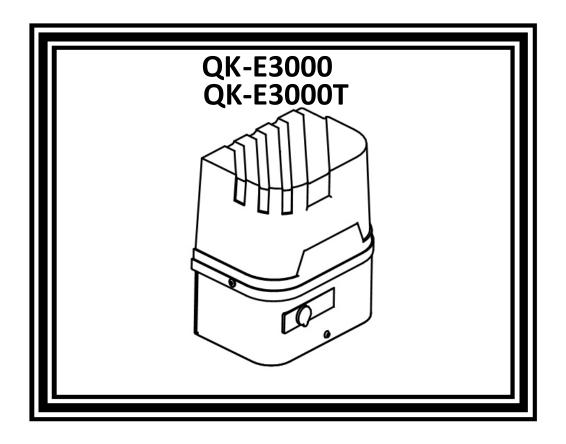


# 230V /400V MOTOR FOR SLIDING GATES

# **ERCOLE**



**USE AND MAINTENANCE MANUAL** 

V01\_2011 www.quikoitaly.com

# $\begin{picture}(20,10) \put(0,0){$C$} \put(0,0){$O$} \put(0,0){$N$} \put(0,0){$T$} \put(0,0){$E$} \put(0,0){$S$} \put(0,0){$T$} \put(0,0){$S$} \put(0,0){$T$} \put(0,$

TECHNICAL FEATURES	2
DIMENSIONS	2
PRE-INSTALLATION CONTROL	2
MATERIALS FOR INSTALLATION	3
INSTALLING THE COUNTERPLATE	3
POSITIONING THE GEARMOTOR	4
INSTALLING THE RACK	4
FASTENING AND ADJUSTING OF THE END LIMIT SWITCHES	5
UNLOCKING THE MOTOR MANUALLY	5
ADJUSTING THE CLUTCH	5
GENERAL ADVICE	6
USE	6
MAINTENANCE	6
TYPICAL SYSTEM	7
DECLARATION OF COMPLIANCE	7



### **TECHNICAL FEATURES**

	QK-E3000 QK-E3000T
POWER	230V
	400V THREE-PHASE
ABSORBED POWER	850W
	1000W
ABSORBED CURRENT	3,3A
	2,8A
OPERATING TEMPERATURE	-20/+70 °C
LUBRICATION	OIL
GATE SPEED	0,17m/ "
PROTECTION LEVEL	IP44
WORKING CICLE	80%
MOTOR WEIGHT	23 Kg
MOTOR SPEED	1400 rpm
REDUCTION RATIO	1/30
MAX GATE WEIGHT	3000 Kg

# **DIMENSIONS**

DIMENSIONS	QK-E3000 QK-E3000T
LENGTH	32 cm
WIDTH	24 cm
HEIGHT	35 cm

# PRE-INSTALLATION CONTROL

Before installing the automation, you must check that:

- The wheels of the gate are attached to make the gate stable and must be in good condition;
- The entire length of the fixed runway must be free of obstacles, straight and clean and have control levers at the ends;
- The upper guide, parallel to the rail and lubricated, must allow for a clearance of about 1 mm from the door

**Quiko Italy** 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:** Quiko Italy Sas is not liable for any damages to people, animals or things due to unauthorized modifications, alterations or betterments on its products by third parties.



# **MATERIALS FOR INSTALLATION**

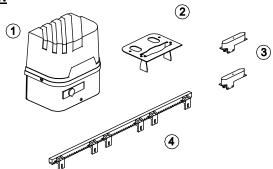


Fig. B

- 1. Gear-motor
- 2. Counter plate
- 3. 2 end cams (or runners)
- 4. Nylon rack

# **INSTALLING THE COUNTERPLATE**

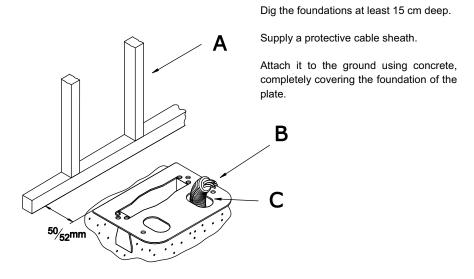
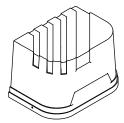


Fig. C

- A. Gate;
- B. Protective cable sheath;
- **C.** Foundation counter plate.

### **POSITIONING THE GEARMOTOR**



Once the concrete has hardened, insert the screws to fasten to the counterplate or, eventually, the concrete.

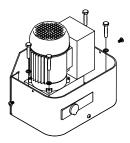
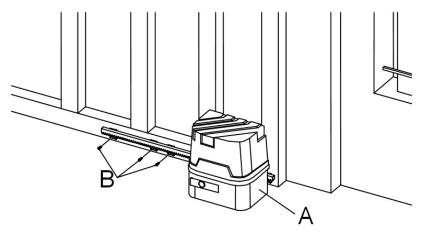


Fig. D

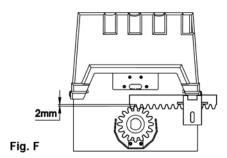
# **INSTALLING THE RACK**



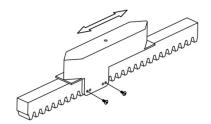
- A. Gear motor
- B. Screws

Fig. E

Once a hole has been made in the door, fasten the rack to the gate with self-threading screws based on the measurements listed in Figure F



### FASTENING AND ADJUSTING OF THE END LIMIT SWITCHES (CAMMES)



Position the end limit switches as in fig. G, each of them near an end of the rack.

By manually moving the door, place the end limit switches so they activate the spring connected to the micro-switch just before the mechanical stops at the end of the rail; now tighten the screws.

# UNLOCKING THE MOTOR MANUALLY

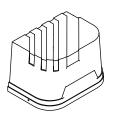




Fig. H

Fig. I

# **ADJUSTING THE CLUTCH**





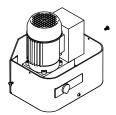


Fig. L



#### **GENERAL ADVICE**

Install a gate's safety system that complies with current regulations. Choose short routes for cables and keep power cables separate from control ones. Install the control card in a waterproof box.

Please refer to current regulations when setting the gear motor's maximum torque.

We advice you to install an outdoor switch, in compliance with European standards on the issue of safety, to turn the electricity off when servicing the gate.

Check that each single installed device is efficient and effective.

Affix easily readable signs warning about the presence of a motorized gate

#### USE

It is absolutely forbidden to use the device for any other purposes. The installed control board (which must have built-in electric friction), allows to select the following functions:

automatic: one control impulse will open or close the gate;

semi-automatic: one control impulse will open or close the gate.

In case of a blackout, manual operation is possible by activating the unlocking device.

Having an automatic and electric power device requires special attention in a few situations:

- not to touch the device with wet hands and/or wet or bare feet;
- to turn off electricity before opening the control box and/or actuator;
- not to pull the lead to pull the plug out;
- to put the gate in movement only when it is completely visible;
- to keep out of the gate's range of action if it is moving. Wait until it has stopped;
- not to let children or animals play near the gate;
- not to let children use the remote control or other operating devices;
- to carry out routine maintenance;
- in case of failure, to turn off electricity and operate the gate manually only if it is possible and safe. Refrain from touching the gate and call an authorized technician.

#### **MAINTENANCE**

The ERCOLE is a gear motor for long-term use. Nonetheless, their normal operation can be compromised by the conditions of the gate; therefore, we will list some operations to keep the gate efficient.

**Warning:** Non-specialized staff cannot operate the gate during maintenance. You are advised to cut the network power in order to avoid accidents or shocks. If the power must be on for various inspections, you are advised to check and/or deactivate any possible control devices (remote controls, keyboards, etc...) except for the devise used by the maintenance operator.

#### Routine maintenance

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

### Gate

- Lubricate the gate's sliding wheels;
- Check the cleanliness and air-tightness of the rack.

#### **Automation System**

- Check the operation of the safety devices (photo-cells, ribs, torque limiter) using the methods described by the suppliers

### **Extraordinary Maintenance**

If special maintenance is required for mechanical parts, you are advised to send the gear motor out for repairs to be performed by the technicians at the manufacturer.

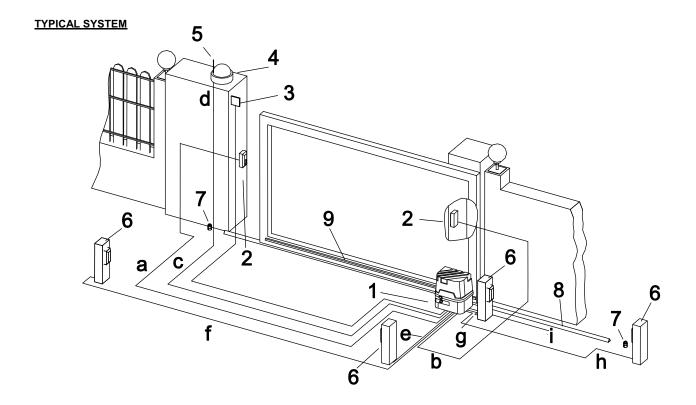


### **MAIN COMPONENTS**

- 1 GEAR MOTOR
- 2 PHOTOCELLS
  3 KEY SELECTOR
  4 FLASHING LIGHT

- 5 AERIAL RG59 6 PHOTOCELLS ON LITTLE COLUMNS
- 7 GATE STOPPERS 8 RAIL
- 9 RACK

ELECTRICAL CABLES' CROSS SECTION
a - 2x0,5 mm <sup>2</sup>
b - 4x0,5 mm <sup>2</sup>
c - 3x0,5 mm²
d - 3x1 mm²
e - 2x0,5 mm²
f - 4x0,5 mm <sup>2</sup>
g - 4x0,5 mm²
h - 2x0,5 mm²
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 the products: QK-E3000, QK-E3000T

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

- ✓ Electromagnetic 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:
Location:
are in compliance with the essential safety requirements of the regulations:
✓ Electro magnetic Compatibility Directive2004/108/EC ✓ Low Voltage Directive2006/95/EC
✓ Machinery Directive2006/42/EC
and also declares that the related and/or specific national technical regulations have been followed:
<ul> <li>✓ EN 12453/EN 12445 on Industrial, Commercial and Residential Gates and Doors – Safe Use of Motorized Doors – Requirements and Classification – Test Methods;</li> <li>✓ EN 12604/ EN 12605 on Industrial, Commercial and Residential Gates and Doors – Mechanical Aspects – Requirements and Classification – Test Methods;</li> <li>✓ CEI 64/8 Electrical Systems Using Nominal Tension Not Higher Than 1000V a.c. and 1500 V d.c.;</li> <li>✓ EN 13241-1 (Industrial, commercial and garage doors and gates), conformity evaluation (6.3).</li> </ul>
Notes:
Place and date:



opening solutions





# **QUIKO ITALY**

Via Seccalegno, 19 36040 Sossano (VI) - Italy Tel. +39 0444 785513 Fax +39 0444 782371 info@quiko.biz www.quikoitaly.com

