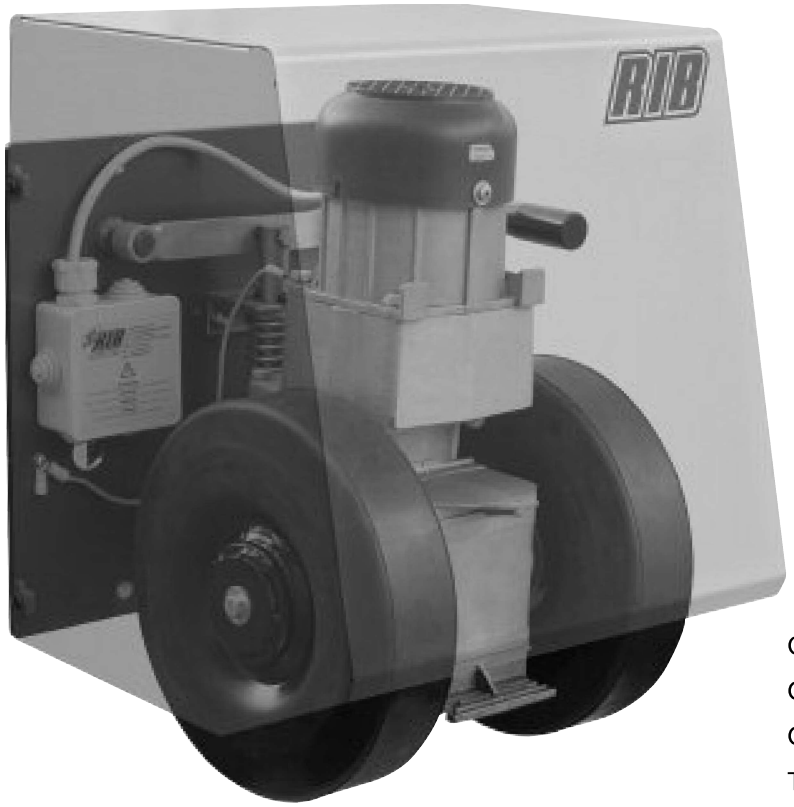
# R50

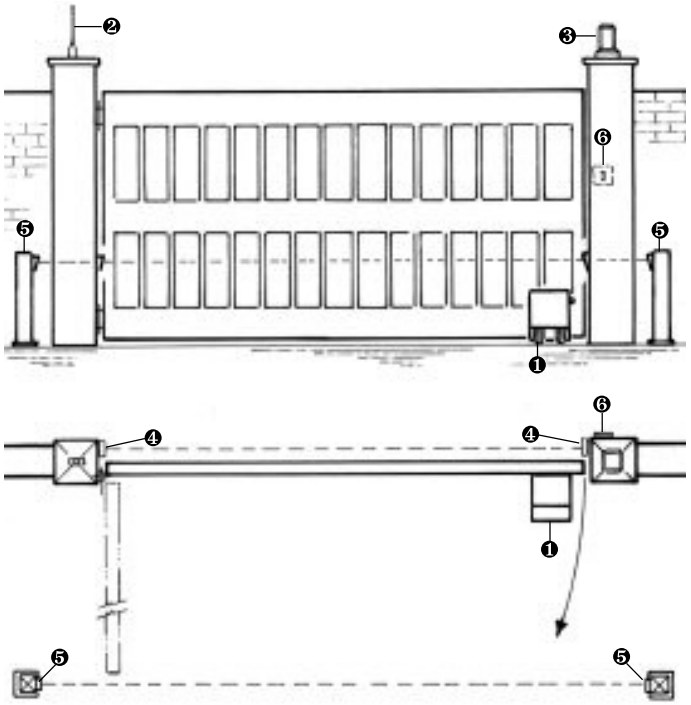



OPERATORE PER PORTONI INDUSTRIALI
OPERATEUR POUR PORTAILS INDUSTRIELS
OPERATOR FOR INDUSTRIAL DOORS
TORANTRIEB FÜR INDUSTRIETORE

| Operatore<br>Operateur<br>Operator<br>Torantrieb | Alimentazione<br>Alimentation<br>Power Supply<br>Stromspannung | Peso max cancello<br>Poids maxi portail<br>Max gate weight<br>Max Torgewicht | codice<br>code<br>code<br>code |
|---|---|---|---|
| R50 | 230V 50/60Hz | 2000 kg / 4460 lbs | AA21580 |

CE

# SYSTEM LAY-OUT



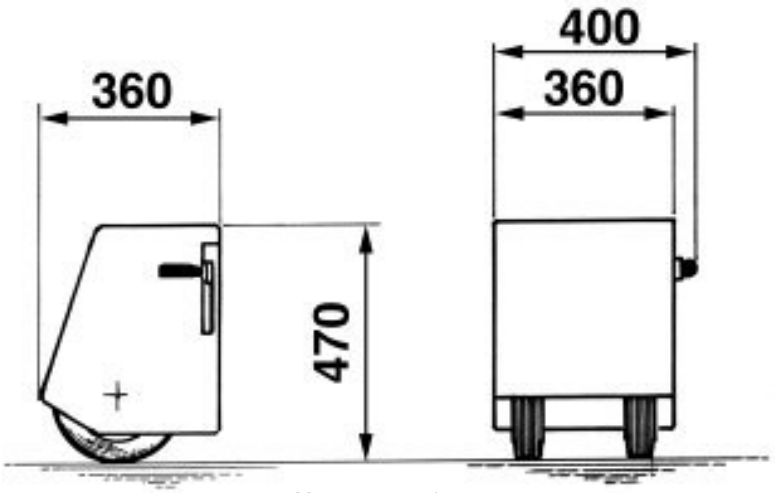

❶ R50 operator
❷ Radio antenna
❸ Blinker
❹ Photoelectric cells (external)
❺ Photoelectric cells (internal)
❻ Key selector

1

## TECHNICAL FEATURES

Gearmotor for operating industrial swing gates with overall maximum weight of 2000 kg.
The R50 is an irreversible electric gearmotor with adjustable drive force, regulated by changing the pressure exerted by the drive wheels on the ground.
The drive wheels are able to run over surface irregularities of up to 6 cm (approx.), because the gearmotor unit slides along a vertical track. The pressure setting between the drive wheels and the ground can vary from 30 to 130 kg maximum and is maintained by an adjustable spring.

| TECHNICAL DATA | | R50 |
|---|---|---|
| Max. leaf length | m | 10 |
| Max. leaf weight | kg | 200 |
| Average opening time 90° | s. | 78 |
| Operating speed | m/s. | 0,180 |
| EEC Power supply | | **230V~ 50/60Hz** |
| Motor capacity | W | 295 |
| Power absorbed | A | 1,96 |
| Capacitor | µF | 16 |
| EEC Power supply | | **120V~ 60Hz** |
| Motor capacity | W | 251 |
| Power absorbed | A | 2,26 |
| Capacitor | µF | 40 |
| 230/50-60 Normative cycles | n° | 3 - 78s/2s |
| 120/60 Normative cycles | n° | 8 - 78s/2s |
| Daily cycles suggested | n° | 300 |
| Service | | 60% |
| Consecutive cycles guaranteed | n° | 4/78s |
| Lubrification | | IP MELLANA 100 |
| Actuator weight | kg | 45 |
| Operating temperature | °C | -10 ÷ +55°C |
| Protection grade | IP | 547 |




Measurements in mm

2

## PRE-INSTALLATION CHECKS

The leaf must be fixed firmly on the hinges to the pillars, must not be flexible during the movement and must move without frictions. The ground on which the R50 wheels run must be solid and compact with minimum gradient.

**Gate features must be uniformed with the standards and laws in force.** The door/gate can be automated only if it is in a good condition and its conditions comply with the EN 12604 norm.

- The door/gate leaf does not have to have a pedestrian opening. In the opposite case it is necessary to take the appropriate steps, in accordance with EN 12453 norm (for instance; by preventing the operation of the motor when the pedestrian opening is opened, by installing a safety microswitch connected with the control panel).
- No mechanical stop shall be on top of the gate, since mechanical stops are not safe enough.

**Parts to install meeting the EN 12453 standard**

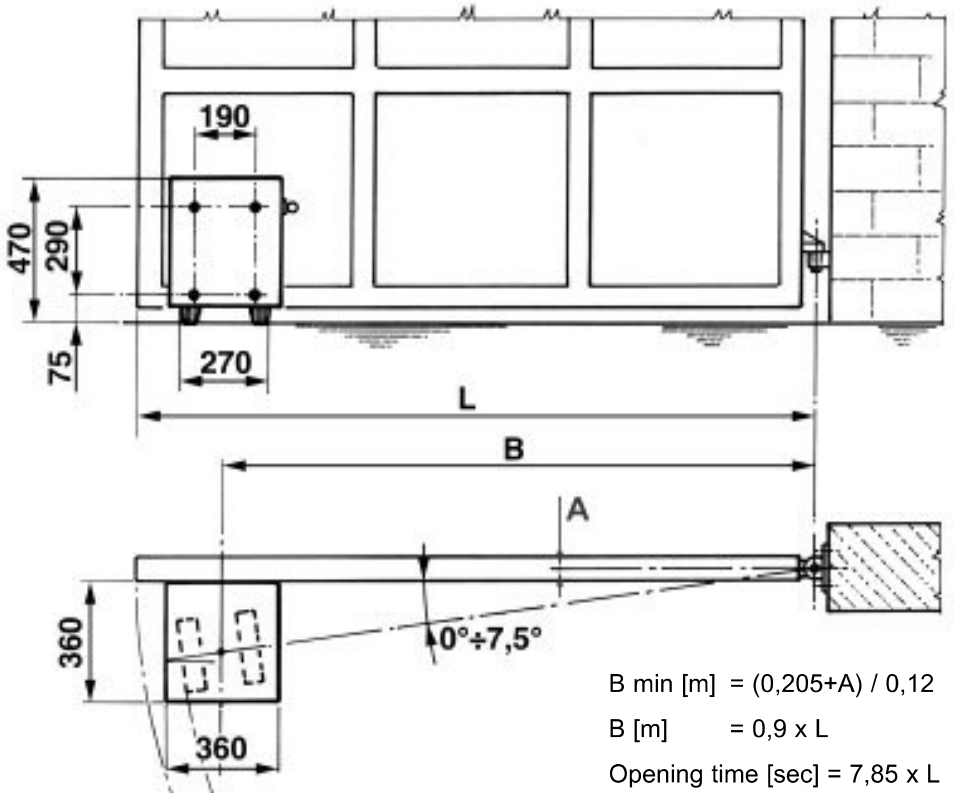
| COMMAND TYPE | USE OF THE SHUTTER | | |
|---|---|---|---|
| | Skilled persons (out of public area*) | Skilled persons (public area) | Unrestricted use |
| with manned operation | A | B | non possibile |
| with visible impulses (e.g. sensor) | C or E | C or E | C and D, or E |
| with not visible impulses (e.g. remote controldevice) | C or E | C and D, or E | C and D, or E |
| automatic | C and D, or E | C and D, or E | C and D, or E |

* a typical example are those shutters which do not have access to any public way
A: Command button with manned operation (that is, operating as long as activated), like code ACG2013
B: Key selector with manned operation, like code ACG1010
C: Adjustable power of the motor
D: Safety edges, like code ACG3010 and/or other safety devices to keep thrust force within the limits of EN12453 regulation - Appendix A.
E: Photocells, like code ACG8026 (To apply every 60÷70 cm for all the height of the column of the gate up to a maximum of 2,5 m - EN 12445 point 7.3.2.1)

## R50 INSTALLATION

The ground should be compact and without any excessive differences in level along the tract destined for wheel run.
Secure the gearmotor plate to the corner of the gate leaf and ensure that the drive wheels rest on the ground.
Drill four Ø 6.5 mm holes in the leaf, then tap them with M8 male threading.
Insert four M8 bolts and tighten with a No. 13 wrench.
Remove the elastic pin which prevents the wheels from turning (Fig. 6).
If the drive wheels slide on the ground during operation, turn the set screw on the spring clockwise to increase the pressure between the wheels and the ground.

To reduce wheel wear during operation, loosen nuts (D) with a No. 13 wrench and tilt the rubber wheels so that the axles coincide with the center of the gate leaf pivot point.
The wheels may be tilted by 0° to 7.5°. Retighten the two nuts.
The R50 is equipped with two waterproof, armored limit stops to electrically control gate travel.
The limit stops should be positioned in accordance with installer requirements.




B min [m] = (0,205+A) / 0,12

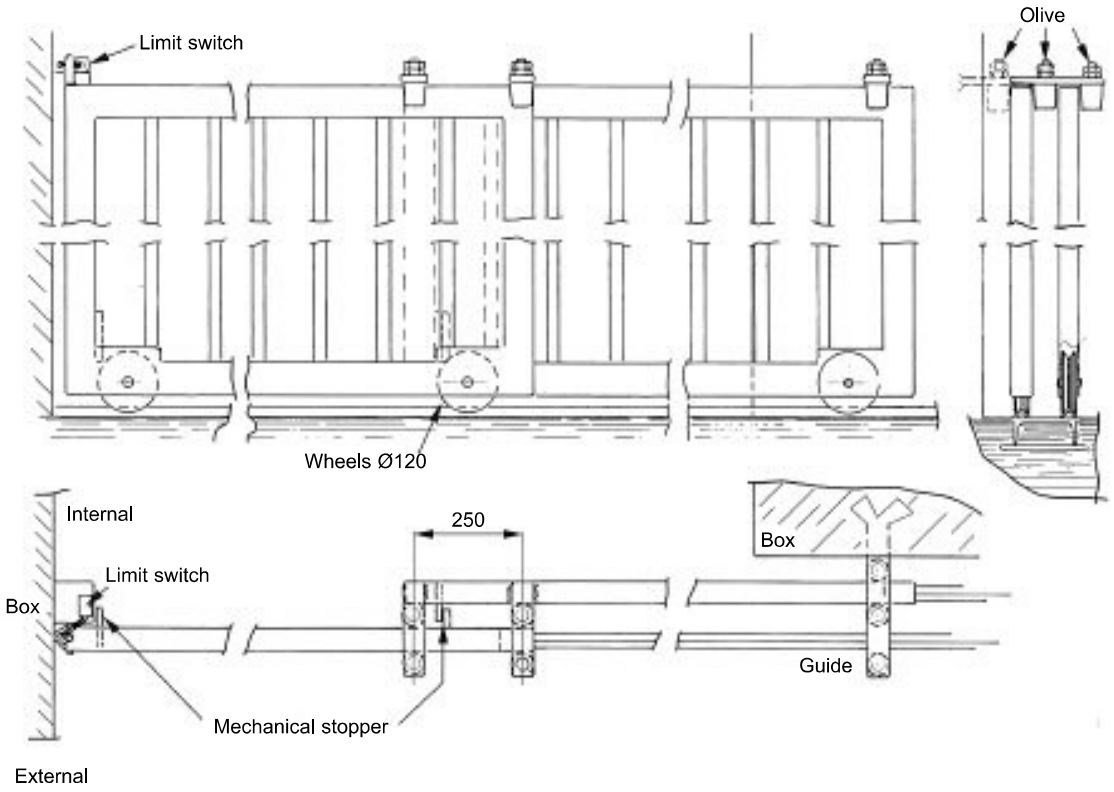
B [m] = 0,9 x L

Opening time [sec] = 7,85 x L

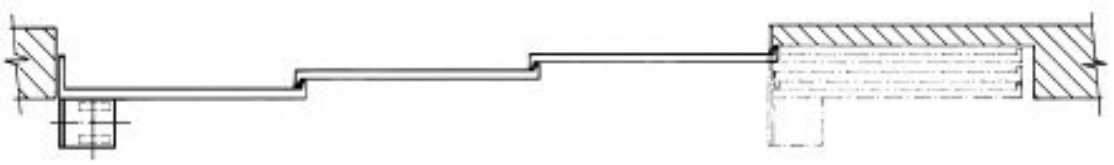
3

## R50 APPLICATION ON MULTIPLE PANEL DOORS

In this case the R50 must be installed on the first leaf.




4



5

## EMERGENCY RELEASE

**To be undertaken after disconnecting power supply.**

In the event of a power failure, raise the side handle to lift the wheels off the ground.

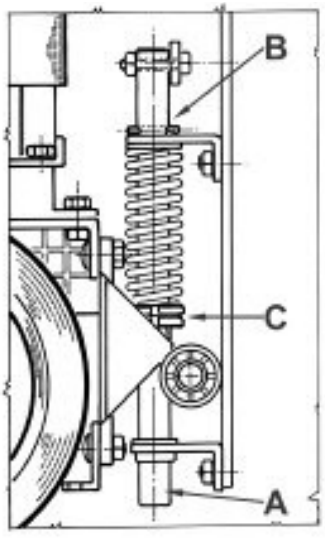
In order to carry out the manual operation of the gate leaf the followings must be checked:

- That the gate is endowed with appropriate handles;
- That these appropriate handles are placed so to avoid safety risks for the operator;
- That the physical effort necessary to move the gate leaf should not be higher than 225 N, for doors/gates for private dwellings, and, 390N for doors/gates for commercial and industrial sites ( values indicated in 5.3.5 of the EN 12453 norm

**A** : Maximum stroke 60 mm during movement (holes or uneven ground)

**B** : Remove the elastic pin, after the unit is secured, to release the spring.

**C** : Spring set screw.




6

## ELECTRICAL SAFETY DEVICES

The installation must be installed according to the current regulations and laws.
Use the KS2 electronic control unit.
For connections and technical data of accessories refer to the appropriate booklets.

## MAINTENANCE

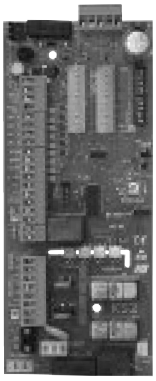
**To be undertaken by specialized staff after disconnecting power supply.**
Clean the wheel contact surfaces carefully once a week.
Check wheel/ground pressure and condition of motor wheels every six months.
The motor should be overhauled every two years and the oil replaced.

## ACCESSORIES - For the connections and the technical data of the optional equipments follow the relevant handbooks.

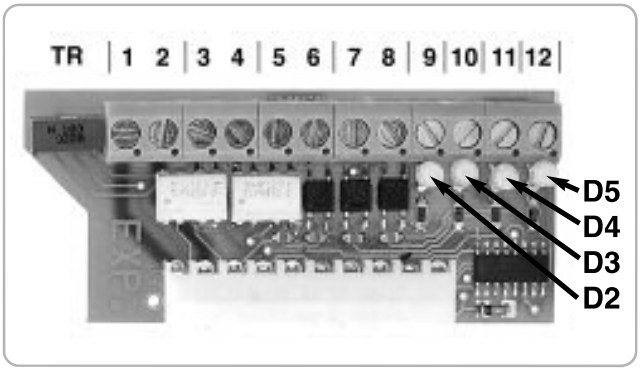
## KS2

Automatic travel and timing code learning system
Automatic closure
Pre-blinking
Slow speed in close position approach
Electronic adjustment of the force
Radio command - step by step or automatic
Single command - step by step or automatic
Directional open and close commands (with timer control)
Electric lock release operation
Stop command
Connectable to encoder to detect obstacle - photocells - strips - blinker - key selector - buzzer - electric lock

code ABKS105 => 230V
code ABKS104 => 120V



## EXPANDER CARD

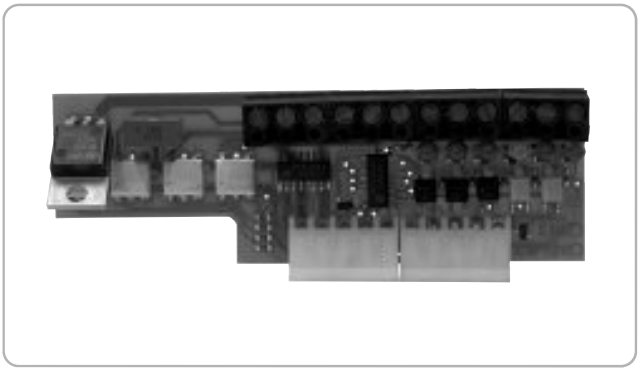



**!! FEED THE EXP CARD IN WHEN POWER IS NOT SUPPLIED !!**

**- PEDESTRIAN OPENING COMMAND**
**- AUTOMATIC PEDESTRIAN CLOSING**
**- MANAGEMENT OF THE SAFETY EDGE**
**- 24VAC ACCESSORIES FEEDING**
**- MANAGEMENT OF THE TRAFFIC LIGHT CONTR**
**- MANAGEMENT OF THE COURTESY LIGHT**
**- CLOSING COMMAND AFTER PASSING THROUGH THE PHOTOCELLS***

code ACG5470

## EXPANDER PLEX CARD



**LIKE EXPANDER BOARD, BUT IN ADDITION WITH:**
**- AUTOTEST OF 4 PHOTOCELLS**
**- AUTOTEST STRIPS**
***NOT FOR EXPANDER PLEX**

code ACG5472

## RADIO TRANSMITTER MOON

**MOON 433 - MOON 91** **MOON CLONE**

433 code ACG6081 433 code ACG6082 code ACG6093
91 code ACG7025 91 code ACG7026

## CODE LEARNIG SYSTEM RADIORECEIVERS

RX91/A quarzata and coupling code ACG5005
RX91/A quarzata and terminal board code ACG5004
RX433/A super eterodyne and coupling code ACG5055
RX433/A super eterodyne and terminal board code ACG5056
RX433/A 2CH super eterodyne, 2 channel and coupling code ACG5051
RX433/A 2CH super eterodyne, 2 channel and terminal board code ACG5052

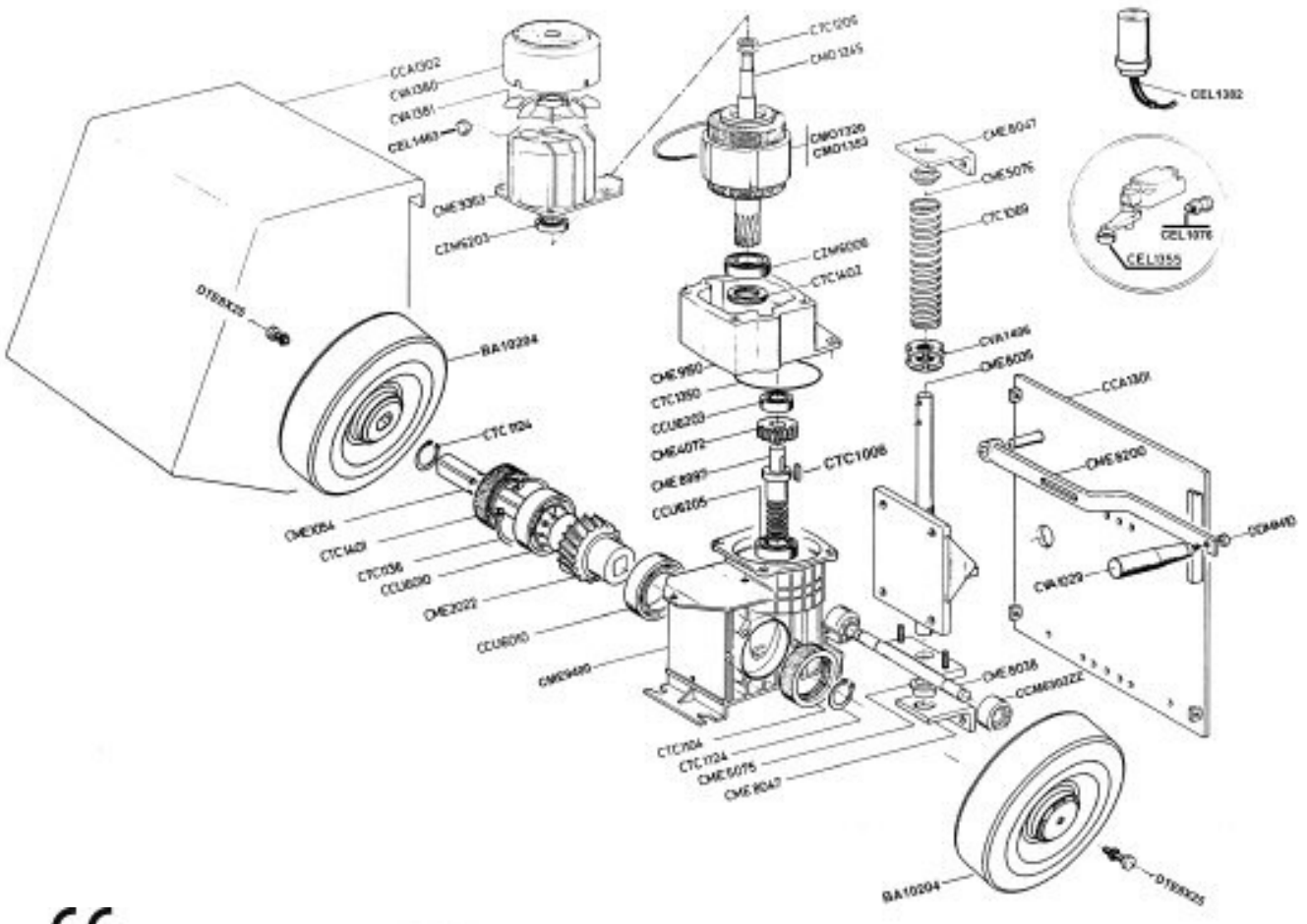
## SPARK

In order to make the systems mentioned above give the best performances, you need to install an antenna tuned on the frequency of the radio receiver installed.
**N.B. Pay attention to not let the central wire of the cable to came Into contact with the external copper sheath, since this would prevent the antenna from working.**
Install the antenna vertically and in such a way the remote control can reach it.
**SPARK ANTENNA 91** code ACG5454
**SPARK ANTENNA 433** code ACG5452
**SPARK BLINKER WITH IN-BUILT INTERMITTENT CARD** code ACG7059

## FIT SYNCRO

**FIT SYNCRO PHOTOCELLS** for the wall-installation code ACG8026
The range you can set is 10-20 m, 30÷60ft.
You can fit many couples close together thanks to the synchronising circuit.
Add the **SYNCRO TRANSMITTER** code ACG8028
for more than 2 photocells couples (up to 4).
**COUPLE OF BUILT-IN BOXES FOR THE FIT SYNCRO** code ACG8051

# R50




CE
MADE IN ITALY

**Questo prodotto è stato completamente progettato e costruito in Italia · Ce produit a été complètement développé et fabriqué en Italie · This product has been completely developed and built in Italy · Dieses Produkt wurde komplett in Italien entwickelt und hergestellt**

| Codice | Denominazione Particolare | Codice | Denominazione Particolare | Codice | Denominazione Particolare |
|---|---|---|---|---|---|
| BA10204 | Ruota trascinamento R50 | CME8200 | Leva di sblocco manuale R50 | CVA1029 | Manopola MCG 28 85 GIR |
| | | CME8997 | Vite senza fine | CVA1380 | Copriventola motore |
| CCA1301 | Piastra di base | CME9150 | Controflangia | CVA1381 | Ventola |
| CCA1302 | Carter | CME9353 | Cappellotto | CVA1406 | Ghiera reg. friz. Prem. |
| | | CME9400 | Carcassina | | |
| CCU6010 | Cuscinetto 6010 | | | CZM6006 | Cuscinetto motore 6006ZZ |
| CCU6203 | Cuscinetto 6203 | CMO1245 | Rotore con albero | CZM6203 | Cuscinetto motore 6203ZZ |
| CCU6205 | Cuscinetto 6205 | CMO1320 | Statore 230V 50/60Hz 1P | | |
| | | CMO1353 | Statore 120V 60Hz 1P | DDMM10 | Dado 10MA medio |
| CEL1076 | Pressacavo PG13.5 | | | DTE8X25 | Vite TE 8X25 UNI5739 |
| CEL1463 | Blocca Cavo SR6P3-4 | CCM6302ZZ | Cuscinetto 6302ZZ | | |
| CEL1355 | Finecorsa 3SE3120-1G | | | | |
| CEL1382 | Condensatore 16$\mu$F 450V | CTC1006 | Chiavetta 6x6x20 | | |
| | | CTC1069 | Molla per R50 | | |
| CME1054 | Albero di traino | CTC1104 | Paraolio 50x72x10 | | |
| CME2022 | Corona con mozzi Z=38 | CTC1124 | Seeger E28 | | |
| CME4072 | Ingranaggio Z=29 | CTC1136 | Seeger I 80 | | |
| CME5075 | Bussola inf. R50 | CTC1206 | Molla a tazza | | |
| CME5076 | Bussola sup. R50 | CTC1350 | Anello di tenuta | | |
| CME8035 | Supporto motore R50 | CTC1401 | Paraolio 50x80x8 | | |
| CME8038 | Timone regolab. R50 | CTC1402 | Paraolio30x47x7 | | |
| CME8047 | Squadretta di guida R50 | | | | |

Cod. CVA1246 - 16012008 - Rev. 14

COMPANY
WITH QUALITY SYSTEM
CERTIFIED BY DNV
=ISO 9001/2000=

RIB®
automatismi per cancelli
automatic entry systems

25014 CASTENEDOLO (BS)-ITALY
Via Matteotti, 162
Telefono +39.030.2135811
Telefax +39.030.21358279-21358278
http://www.ribind.it - email: ribind@ribind.it

8 028265 070349