# AUTOMATION FOR GARAGE DOORS



## GARAGE AUTOMATION FOR COUNTERBALANCED DOOF





















(optional)

## CARDIN PRO SERIES GL

A complete automatic device suitable for moving all types of counterbalanced garage doors. The compact and solid form makes this product a versatile machine that may be used safely and efficiently on all types of counterbalanced garage doors.

The automation consists of a compact single-piece geared reduction unit (with an incorporated encoder and bilateral manual release system) and is fitted with a reduction system made from materials that allow maximum efficiency and minimum noise. All the components making up the device: geared motor, transformer, electronic programmer and batteries (optional) are mounted on a robust chassis made of shockproof plastic and are separated and protected by a double carter that completely covers all the moving parts and safely houses all the cables and wiring. The second removable cover allows access to all the setting and program functions in complete safety. Internally, the carter contains the mechanism required to activate the manual release system and this allows the manoeuvre to be fluid and manageable under all working conditions whilst at the same time covering all possible manual release mechanisms installed by the door manufacturers: a handle directly installed on the geared motor, an external release cord or via a hexagonal key operated mechanism that is accessed through the door panel both to the right and to the left of the motor. The door position is encoder controlled and self-programming thus reducing installation times to a minimum and optimising the programming procedure. Repositioning takes place automatically whenever foreign objects get in the way of the door as it is moving.

The electronic control unit is completed by the anti-crush and "soft start" and "soft stop" functions and a display that monitors the programming stages and counts the number of manoeuvres carried out by the machine.

#### Multi-decoding:

The product range is factory fitted with a multi-decoding remote control module (system S449 - S486 - S504 - S508).

For garage doors larger than 4 metres and for garage doors with an in-built pedestrian door (mounted laterally) a second slave motor is required.



MANUAL RELEASE GLB249



REMOTE RELEASE RIGHT/LEFT



PROGRAMMER PROTECTION



SELF-PROGRAMMING



OPTIONAL NIMH BATTERIES

## CARDIN PRO SERIES GL



#### PRODUCT DESCRIPTION

#### ORDER NUMBER

### SELF-PROGRAMMING ELECTROMECHANICAL UNIT WITH A 24 MOTOR (433MHz)

Self-locking encoder-controlled Master automation with an in-built electronic programmer.

Operator arms are to be ordered separately.

Kit battery charger + batteries to be ordered separately.







### SELF-PROGRAMMING ELECTROMECHANICAL UNIT WITH A 24Vdc MOTOR (868MHz)

Self-locking encoder-controlled Master automation with an in-built electronic programmer.

Operator arms are to be ordered separately.

Kit battery charger + batteries to be ordered separately.







#### **ELECTROMECHANICAL UNIT WITH A 24V MOTOR**

Self-locking slave automation.

Use to supplement the GLB249M - GLB248M units for particular installations that require two motors.

Operator arm to be ordered separately.





#### GLB249M



#### **GLB248M**



#### **GLB249S**



## CARDIN PRO SERIES GL



ACCESSORY DESCRIPTION

ORDER NUMBER

**AXLE SHAFTS** 

Pair of axle shafts for central motor positioning, 1500mm long.

Pair of axle shafts for central motor positioning, 2200mm long.

GLOTG GLOTG20 1

JOINTS FOR LATERAL MOTOR POSITIONING

GLOCGL



**TELESCOPIC ARMS** 

Right curved telescopic arm.

Left curved telescopic arm.

Straight telescopic arm, 700mm.

Straight telescopic arm, 700mm (2 pcs.).

Straight telescopic arm, 1000mm.

Straight telescopic arm, 1000mm (2 pcs.).

GL03A GL04A

**GL02AD** 

GL02AD2

GL06A

GL06A2



SUPPORT BRACKET

Motor support extension bracket, 2000mm.

GL0PS2



**EXTERNAL RELEASE CORD** 

Length 2000mm.

GL24SB



KIT BATTERY CHARGER + NIMH BATTERIES

Allows the GLB249M unit to work during blackouts.

KBNIMH-2



**CABLE GLANDS Ø16mm** 

GLB24PC

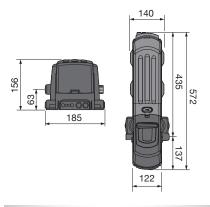


## SERIES GL

#### TECHNICAL DATA

MOTOR SPECIFICATIONS		GLB249M-GLB248M
Motor power supply	Vdc	24
Nominal electrical input	А	2
Power input	W	100
Duty cycle	%	70
Geared motor speed	revs/min	1,7
Maximum torque	Nm	170
Operating temperature range	°C	-20°+55
Protection grade	IP	54
PROGRAMMER SPECIFICATIONS		
Power supply	Vac	230
Nominal electrical input	А	0,5
Maximum power yield	W	120
BUILT-IN RECEIVER CARD		
Reception frequency	MHz	433.92 / 868,3
Number of channels	No	4
Number of functions	No	2
Number of stored codes	No	300

#### OVERALL DIMENSIONS



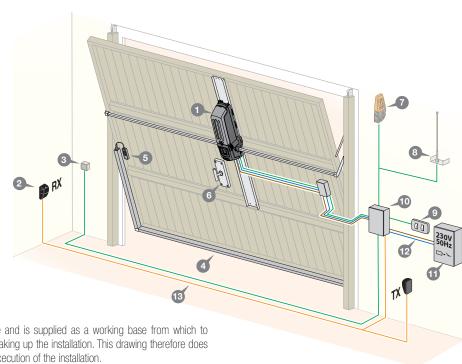
GLB249M - GLB248M

#### INSTALLATION EXAMPLE

#### **LEGEND**

- 1 Geared motor
- 2 Photoelectric cells
- 3 Mechanical selector switch
- 4 Anticrush safety edge
- **5** Radioshield
- 6 Release cord
- 7 External warning lights
- 8 External aerial
- 9 Wall mounted switch TB TD
- **10** Shunt box
- 11 All pole circuit breaker
- **12** Mains cable 230Vac
- 13 Channelling route for low voltage wires

Attention: The drawing is purely indicative and is supplied as a working base from which to choose the Cardin electronic components making up the installation. This drawing therefore does not lay down any obligations regarding the execution of the installation.



## GARAGE AUTOMATION FOR COUNTERBALANCED DOORS













## CARDIN TRADE SERIES GL STAR

230V automatic device suitable for counterbalanced garage doors up to 10 m<sup>2</sup>. For garage doors larger than 4 metres and for garage doors with an in-built pedestrian door (mounted laterally) a second slave motor is required.

GL STAR is a complete automation system suitable for use with all types of counterbalanced overhead garage doors. The appliance has been designed and realised to be reliable day after day and throughout the passage of time. It is for this reason that the panelling and external particulars are made out of cast aluminium and galvanised steel, the internal moving parts are made of tempered steel and the carter is made of shock-proof plastic.

These solutions offer guaranteed resistance to atmospheric agents, and after installing, an absolutely maintenance free future. The installer is guaranteed a valid and reliable product. The user is guaranteed first rate service and a silent, consistent and regular action which will safeguard the automated structure throughout the years of service to come.

The manual release system allows the manoeuvre to be fluid and manageable under all working conditions whilst at the same time covering all possible manual release mechanisms installed by the door manufacturers whether it be a handle fitted directly to the door or an external cord release system.

The integrated programmer allows encoder and limit switch controlled gate positioning and self-programming thus reducing installation times to a minimum and optimising the programming procedure.

The electronic control unit controls are completed by the anti-crush and "soft start" and "soft stop" functions.

#### Open collector:

The product range is factory set for the insertion of an open collector receiver card that guarantees compatibility with all the radio control series available in the Cardin catalogue.



ADJUSTABLE SEQUENTIAL COMMAND



MANUAL RELEASE MECHANISM



LOW SPEED SHAFT PROTECTION





LED COURTESY LIGHTS



MASTER MOTOR
IN-BUILT FLECTRONICS

## CARDIN TRADE SERIES GL



PRODUCT DESCRIPTION

ORDER NUMBER

#### **SELF-LOCKING GARAGE DOOR MOTOR**

with a 230V slave motor





#### **GL STAR1E**



#### **SELF-LOCKING GARAGE DOOR MOTOR**







#### **GL STAR2E**



#### **SELF-LOCKING GARAGE DOOR MOTOR**

with a 230V encoder-controlled motor complete with electronic travel limits, an in-built electronic programmer with autotransformer and torque limitation.







#### **GL STAR2AE**



## CARDIN TRADE SERIES GL



#### ACCESSORY DESCRIPTION

#### ORDER NUMBER

#### SUPPORT BRACKETS

in zinc-plated metal, 60cm.

in zinc-plated metal, 200cm.

**ADJUSTABLE BRACKETS** 

Axle shaft supports.

SS60STARA SS200STARA

**SRSTAR** 



#### TRANSMISSION SHAFTS

20cm including support bracket.

150cm including support bracket.

200cm including support bracket.

**AT20** 

AT150

AT200



#### TRANSMISSION ARMS

Two straight arms with round bushing for AT shafts.

One straight arm with grooved bushing for motor drive shaft.

Two curved arms with round bushing for AT shafts.

**BDB** 

**BDBUS** 

**BCB** 



#### **EXTERNAL RELEASE CORD KIT**

with a personalised key for counterbalanced or sectional garage doors.

**EXTERNAL RELEASE CORD KIT** 

to connect to the door handle.

**KSZEN** 



**KSE** 



#### **LOCK**

Lock cylinder for an external release cord attached to the motor.

NOS



#### **ELECTRONIC PROGRAMMER**

for one 230V encoder-controlled motor complete with torque limitation and deceleration. Factory set for the insertion of an open collector receiver card.

**S101B** 



#### TRAVEL LIMIT KIT

Travel limit switch kit and encoder for GL STAR1E.

FCGL STAR1E



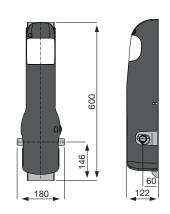
## CARDIN TRADE SERIES GL



#### TECHNICAL DATA

MOTOR SPECIFICATIONS		GL STAR1E - 2E - 2AE
Motor power supply	Vac	230
Frequency	Hz	50
Nominal electrical input	А	1,7
Power input	W	360
Duty cycle	%	40
Geared motor speed	revs/min	1,8
Maximum torque	Nm	530
Operating temperature range	°C	-20°+55
Protection grade	IP	30
PROGRAMMER SPECIFICATIONS		
Power supply	Vac	230
Nominal electrical input	А	2
Maximum power yield	W	360

#### OVERALL DIMENSIONS



GL STAR1E - GL STAR2E - GL STAR2AE

#### **OPTIONAL RECEIVER CARD**

The product range is factory set for the insertion of an open collector receiver card that guarantees compatibility with all the radio control series available in the Cardin catalogue.

#### INSTALLATION EXAMPLE

#### **LEGEND**

- 1 Geared motor
- 2 Photoelectric cells
- **3** Mechanical selector switch
- 4 Anticrush safety edge
- **5** Radioshield
- 6 Release cord
- 7 Warning light with aerial
- 8 Wall mounted switch TB TD
- 9 Shunt box
- **10** All pole circuit breaker
- **11** Mains cable 230Vac
- 12 Channelling route for low voltage wires

**Attention:** The drawing is purely indicative and is supplied as a working base from which to choose the Cardin electronic components making up the installation. This drawing therefore does not lay down any obligations regarding the execution of the installation.

