# AUTOMATION FOR GARAGE DOORS

RAPID SELECTION GUIDE

116

CARDIN AUTOMATION GL



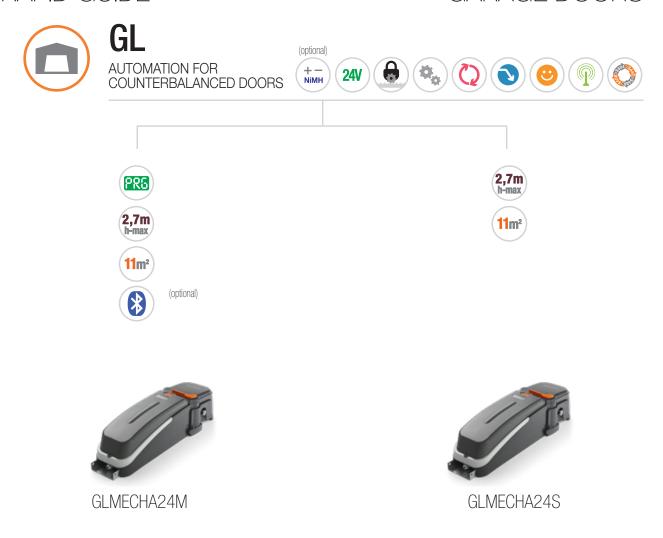
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AUTOMATION FOR SECTIONAL DOORS



### RAPID GUIDE

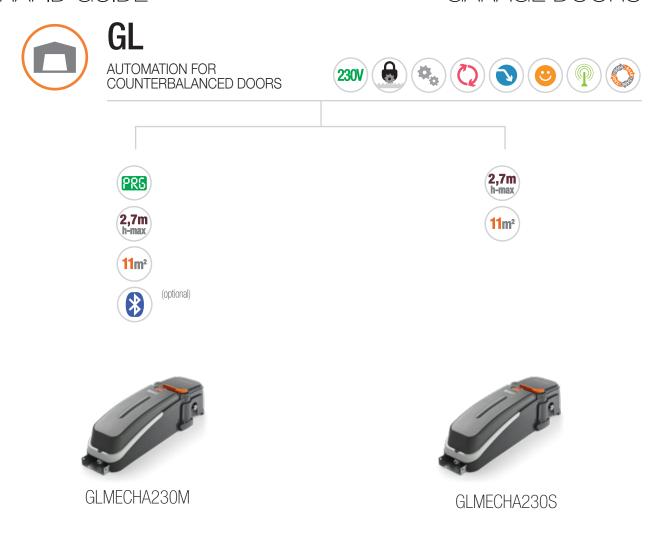
### GARAGE DOORS

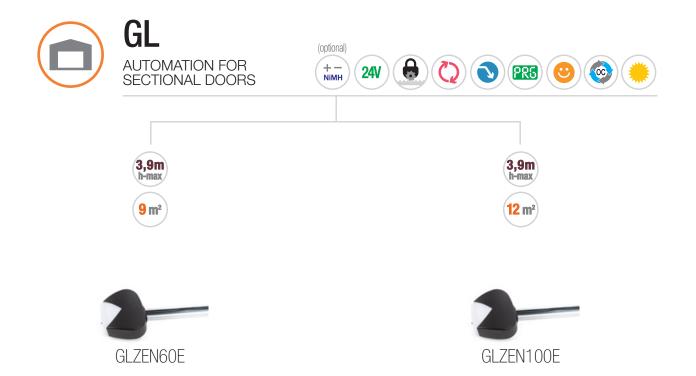




### RAPID GUIDE

### GARAGE DOORS





## CHAIN-GUIDED AUTOMATION FOR SECTIONAL DOORS





















### CARDIN AUTOMATION SERIES GL

The chain guided automation GL124 is made up of two elements complete in all their parts, which are assembled by simply slotting them together. An efficient and aesthetically designed high performance propulsion unit, featuring new technical solutions, and fitted with all the elements for operation under all working conditions it slots together with an extruded aluminium chain driven transmission. The motor attachment and chain drive head on the guide are structurally optimised using nylon fibre. The compact and robust propulsion unit is commanded by state of the art logic based on encoder control, which tracks the movement of the door, and on a self-learning programming procedure.

The unit is fitted with a direct current motor which uses an efficient system of kinematics protected by a special anti drag element that cancels out vibrations and variations in movement that can occur during the work cycle. The automation is fitted with courtesy lights and NiMH batteries that guarantee emergency operation during blackouts. The integrated electronic programmer is housed in a protective well that only leaves access to the programming controls,

The carriage slides along the chain guide on specially lubricated castors. The manual release mechanism used to detach the carriage from the chain guide is carried out using a release cord that separates the door from the automation. 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.

Chain guide to be ordered apart.

display and circuit protection fuses.



COURTESY LIGHT



ALUMINIUM CHAIN GUIDE



INTEGRATED ELECTRONICS



DIP-SWITCH SETTING



SELF-PROGRAMMING



### SELF-PROGRAMMING ELECTROMECHANICAL UNIT WITH A 24V MOTOR

Encoder controlled integral automation fitted with an electronic programmer, an S449 radio receiver card, battery charger and NiMH batteries.

Digital work time control. Command inputs: TA, TC and TB. Safety inputs: photocells, safety edge (N.C. contact or  $8.2k\Omega$ ). Chain guide to be ordered apart.





#### For sectional doors:

- maximum height 2.7m with a 3000mm chain guide;
- maximum height 3.2m with a 3500mm chain guide;
- maximum height 4.2m with a 4500mm chain guide;
- maximum height 5.7m with a 6000mm chain guide.

#### **OPTIONAL SLOT-IN CARD**

#### Functions:

- traffic light output for 2 traffic lights (red, green);
- programmable potential free output, impulsive or continuous (courtesy light 100 W);
- digital safety edge management input.

#### **GL124EBSS**



YPR124SCL00





#### **ALUMINIUM CHAIN GUIDE**

length 3000mm

length 3500mm

length 4500mm

length 6000mm

GL124S30

GL124S35

GL124S45

GL124S60



#### **ADAPTER**

Allows the chain guided automation to be used on counterbalanced garage doors.

**GLBO** 



#### **EXTERNAL RELEASE CORD**

length 2000mm

length 4000mm

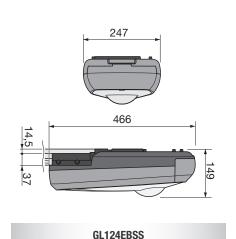
GL20SB

GL20SB4





| MOTOR SPECIFICATIONS        |       | GL124EBSS |
|-----------------------------|-------|-----------|
| Motor power supply          | Vdc   | 24        |
| Nominal electrical input    | А     | 3         |
| Power input                 | W     | 130       |
| Duty cycle                  | %     | 70        |
| Drag speed                  | m/min | 7         |
| Maximum travel distance     | mm    | 5700      |
| Operating temperature range | °C    | -20°+55   |
| Protection grade            | IP    | 40        |
| PROGRAMMER SPECIFICATIONS   |       |           |
| Power supply                | Vac   | 230       |
| Nominal electrical input    | А     | 0,9       |
| Maximum power yield         | W     | 190       |
| BUILT-IN RECEIVER CARD      |       |           |
| Reception frequency         | MHz   | 433.92    |
| Number of channels          | No    | 4         |
| Number of functions         | No    | 2         |
| Number of stored codes      | No    | 300       |

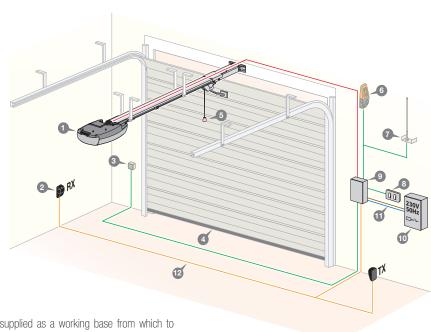


#### INSTALLATION EXAMPLE

#### LEGEND

- **1** Geared motor + built-in programmer
- 2 Photoelectric cells
- **3** Mechanical selector switch
- 4 Anticrush safety edge
- 5 Release cord
- 6 External warning lights
- 7 External 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.



## CHAIN-GUIDED AUTOMATION FOR SECTIONAL DOORS



TÜV APPROVED















CARDIN AUTOMATION SERIES GLZEN

Chain guided automation for residential sectional and counterbalanced doors up to  $12m^2$ . An efficient and robust 24V propulsion unit with an in-built programmer fitted with all the elements for operation under all working conditions, it slots together with a steel chain driven transmission guide available in various lengths.

The propulsion unit is commanded by state of the art logic based on encoder control, with deceleration in the opening and closing directions, which tracks the movement of the door. The system is based on a self-learning programming procedure with function setting using dip-switches.

The automation is fitted with courtesy lights and an input specifically tailored for 8K2 safety edges.

The manual release mechanism used to detach the carriage from the chain guide is carried out using a release cord that separates the door from the automation. 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.

The complete range of products have been designed and constructed in accordance with the safety standards in force and feature automatic, semi-automatic, manual and remote control 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.

Chain guide to be ordered apart.











BELT GUIDE

INTEGRATED ELECTRONICS

ROBUST PROTECTIVE CASING



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

for residential use, with an encoder controlled 24V motor and in-built electronic programmer with LED courtesy lights. Maximum drag force 600N.





#### **GLZEN60E**



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

for residential use, with an encoder controlled 24V motor and in-built electronic programmer with LED courtesy lights. Maximum drag force 1000N.





#### **GLZEN100E**



#### **BELT GUIDE**

Pre-assembled single unit belt guide and accessories. (length 3200mm)

2 piece pre-assembled belt guide and accessories. (length 1600mm - 1600mm)

3 piece pre-assembled belt guide and accessories. (length 1600mm - 1600mm - 1060mm)

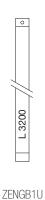


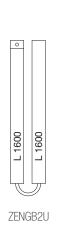
















**EXTERNAL RELEASE CORD KIT** 

with a personalised key for counterbalanced or sectional garage doors.

**KSN** 



**ADAPTER** 

Allows the chain guided automation to be used on counterbalanced garage doors.

**GLBO** 



**FASTENING BRACKETS** 

ZENST2



HOLDING BRACKET

Large holding bracket for heavy doors.

**SUPZEN** 



KIT BATTERY CHARGER + NIMH BATTERIES

Allows the 24V programmers to work during blackouts.

**KBNIMH-T2** 



**POWER SUPPLY KIT** 

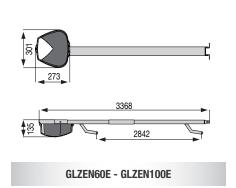
Solar panels for use with all 24Vdc automation.

SUNPOWER





| MOTOR SPECIFICATIONS        |       | GLZEN60E | GLZEN100E |
|-----------------------------|-------|----------|-----------|
| Motor power supply          | Vdc   | 24       | 24        |
| Nominal electrical input    | А     | 4        | 5         |
| Power input                 | W     | 100      | 130       |
| Duty cycle                  | %     | 60       | 60        |
| Drag speed                  | m/min | 9        | 9         |
| Maximum thrust              | N     | 600      | 1000      |
| Max. travel distance        | mm    | 3900     | 3900      |
| Operating temperature range | °C    | -20°+55  | -20°+55   |
| Protection grade            | IP    | 30       | 30        |
| PROGRAMMER SPECIFICATIONS   |       |          |           |
| Power supply                | Vdc   | 24       | 24        |
| Nominal electrical input    | А     | 4        | 4         |
| Maximum power yield         | W     | 230      | 260       |



#### 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 + built-in programmer
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- **3** Mechanical selector switch
- 4 Anticrush safety edge
- **5** Release cord
- 6 External warning lights with aerial
- 7 Wall mounted switch TB TD
- 8 Shunt box
- 9 All pole circuit breaker
- **10** Mains cable 230Vac
- 11 Channelling route for low voltage wires
- 12 Sun Power
- 13 Solar panels

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