



SELF-PROGRAMMING CHAIN GUIDED AUTOMATION FOR SECTIONAL DOORS

WITH A 24 Vdc MOTOR



Mains power supply / Motor power supply
230 Vac / 24 Vdc

Electronic programmer
incorporated

Receiver card
incorporated

buffer batteries
incorporated

electronic travel limit
optical encoder



GL124

The fruit of an innovative project Cardin's chain guided automation 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 buffer 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, display and circuit protection fuses. A well ordered and functional wiring system connects the electronics card, along with its integrated battery charger and radio reception parts, to the toroidal transformer and the motor. 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 the separates the door from the automation.

USE

The motor unit drives sectional doors with a maximum height of 5,7 m and offers high performance thanks to its complete propulsion unit one of the most efficient present on today's market. The guide and drag unit is available in different lengths (max. 6 m) and is able to cover all the requirements of a modern day installation. The supplied system of support brackets with their special technical solutions leads to a rapid installation in all structural contexts. The position of the door is controlled by encoder and the programming cycle uses a self-learning system, which reduces the installation time to a minimum by allowing high precision adjustment of the automation. Whenever operational anomalies alter the position of the door the programmer uses an automatic repositioning system to reset it.

The programmer also features an anti-crush system (with travel direction inversion in the presence of obstacles) and "soft start" and "soft stop" functions. The system functions are set using dip-switches and the integrated display visualizes the programming stages, the status of the automation and the number of manoeuvres carried out by the machine.

courtesy light

aluminium chain guide

integrated electronics

dip-switch

display



TECHNICAL DESCRIPTION

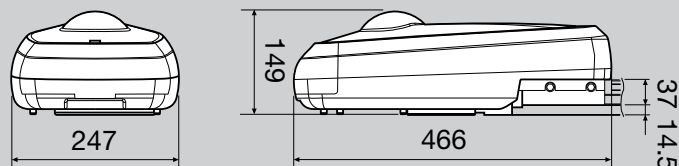
- 311/GL124EBSS Propulsion unit complete with a radio control receiver, buffer batteries and encoder controlled travel limits.
- Low voltage motor power supply.
- The reduction unit stator is made of die cast aluminium and contains a never ending screw and a helicoidal crown wheel made of thermoplastic, lubricated with permanently fluid grease.
- Electronic programmer with a battery charger and an incorporated radio receiver.
- Buffer battery NiMH for emergency movement.
- Courtesy light.
- Carter in reinforced fibre ABS fitted with:
 - safety closing system for the battery well;
 - accessible programming zone;
 - removable terminal board cover;
 - rubber cable clamp;
 - tool for programming and removing the fuses.
- Protective cover and transparent inspection panel in shockproof polycarbonate.

ACCESSORIES

- 320/GL124S30 Chain guide 3 m
- 320/GL124S35 Chain guide 3,5 m
- 320/GL124S45 Chain guide 4,5 m
- 320/GL124S60 Chain guide 6 m
- Chain guide in extruded aluminium.
- Chain drive head in nylon fibre.
- Drive pinion in stainless steel.
- Transmission with chain tightener.
- Drag carriage in nylon fibre with wheel translation.
- Adjustable ceiling fitting.

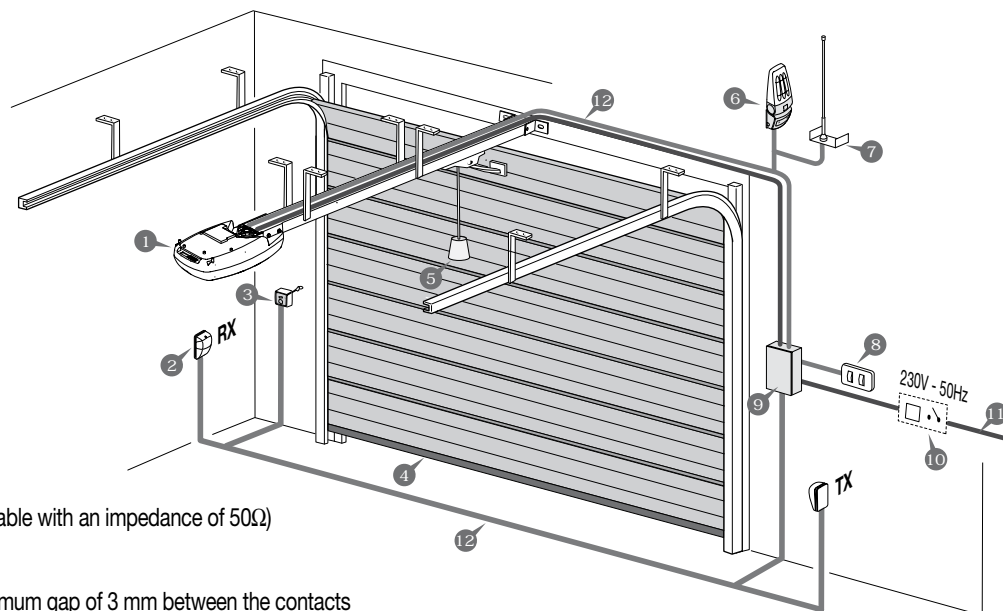
TECHNICAL SPECIFICATIONS

Power supply	V	230
Frequency	Hz	50
Current input	A	0,9
Power input	W	190
Duty cycle	%	70
Drag speed	m/min	7
Operating temperature range	°C	-20°...+55
Protection grade	IP	40
Maximum travel	mm	5700
Motor data:		
Motor power supply (max)	Vdc	38
Maximum power yield	W	130
Nominal current input	A	3
Incorporated receiver card:		
Reception frequency	MHz	433.92
Number of channels	Nr.	4
Number of functions	Nr.	2
Number of storable codes (S449)	Nr.	300



INSTALLATION

INSTALLATION EXAMPLE



LEGEND

- 1 Propulsion unit
- 2 Internal photoelectric cells
- 3 Mechanical selector switch
- 4 Contact safety edge
- 5 Manual release cord
- 6 Flashing warning lights
- 7 External antenna (RG58 coaxial cable with an impedance of 50Ω)
- 8 Wall mounted switches TB - TD
- 9 Shunt box
- 10 All pole circuit breaker with a minimum gap of 3 mm between the contacts
- 11 Mains cable 230 Vac
- 12 Channelling route for low voltage wires

Attention: The drawing is purely indicative and is supplied as 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.



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inside