

SLD

Slider Control Board

Features

- For Single 240VAC Motor
- Built-in transformer, auto close, open only, security close & special security close

Application

- Control an automatic door or gate with 240VAC motor & limit switches



Description







The SLD is similar in features to the COBO30. The difference is that the SLD is made for a single 240VAC motor and does not have an electronic lock output. This makes it more economical to use the SLD when a single 240VAC motor is used. The SLD has a built-in transformer, autoclose, open only, security close and special security close.

The SLD card is used to control automatic door/gate that has a 240VAC motor with limit switches. It is used for a single door or gate.

The SLDE is the SLD with an enclosure (C220) and motor capacitor (10uF).

The SLD has a built-in wireless operation with a remote control transmitter, push button, down only, photocell control, limit switch connection and 24VAC Output.

Options, Auto Close, Open Only, Security Close and Special Security Close are user selectable using the on board 4-way dip switch. See table below:

Switch on 4-way code switch	ON	OFF
	Enables Auto Close	Disables Auto Close
	Enables Auto Close and Open Only	Disables Auto Close and Open Only
	Enables Auto Close, Open Only and Security Close	Disables Auto Close, Open Only and Security Close
	Auto Close, Open Only and Special Security Close	Disables Special Security Close
	Enables Open Only	Disables Open Only
	Enables Open Only and Security Close	Disables Open Only and Security Close

Auto Closing

Enabled when switch 1 is on. The AC timer can be adjusted from 3 to approximately 60 seconds by the on board trimpot called AC. Auto Close timer starts when the door is opened and stopped. Input from the Photo Cell terminal will hold-off the closing cycle.

Open Only

Enabled when switch 2 or 1 and 4 are on. This feature enables the user to open the door/gate but when the door/gate is opening the remote control is disabled and the door will fully opened. Door closes when auto close timer expires.

Security Closing

Enabled when switch 3 is on. The door/gate immediately closes after the photo beam is broken and the vehicle moves away from the photo beam, even if the door/gate is not fully open.

If the door/gate is opening and no vehicle passes through the door/gate then Auto Close will close the door/gate. An Auto Close time of 3 to 60 seconds can be set on the SLD board using the trimpot marked AC.

Special Security Close

Enabled when switch 4 is on. Same as Security Close except door does not reverse to open when Photo beam is broken. This is to prevent car-tailing on more secure sites.

Other Features

Replaceable Fuse

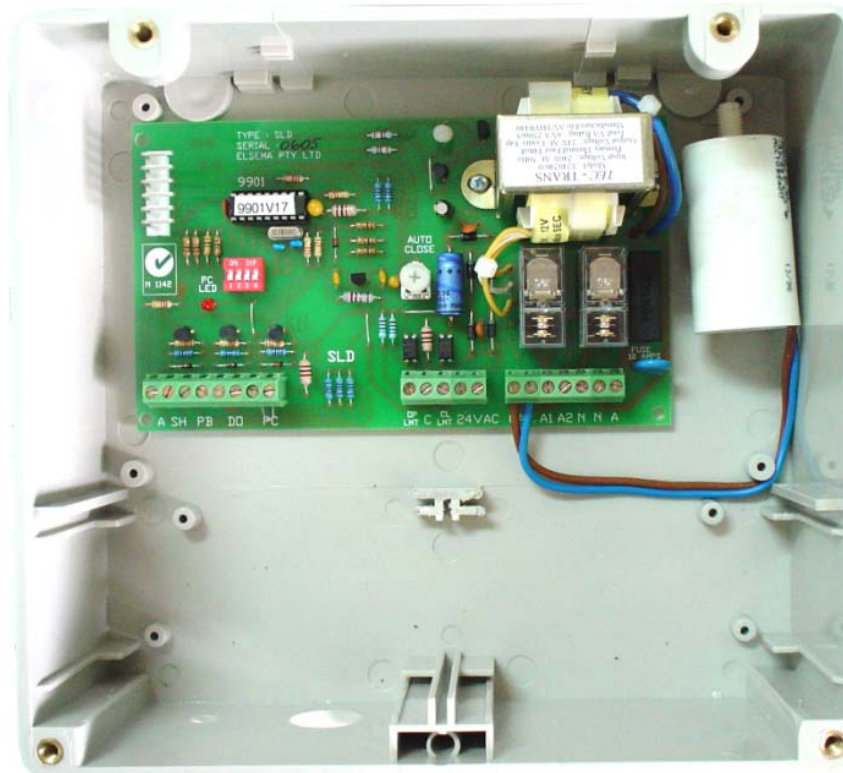
Replaceable 240VAC 5Amp fuse.

Safety Feature

The SLD has a built-in switch off protection. The motor will switch-off after 60 seconds on continuous running. This is called the maximum run timer.

SLDE Single 240V Motor Drive Controller with Case

The SLDE is with an enclosure. The enclosed unit includes Elsema's C220 box, 10uf motor capacitor and the SLD card.



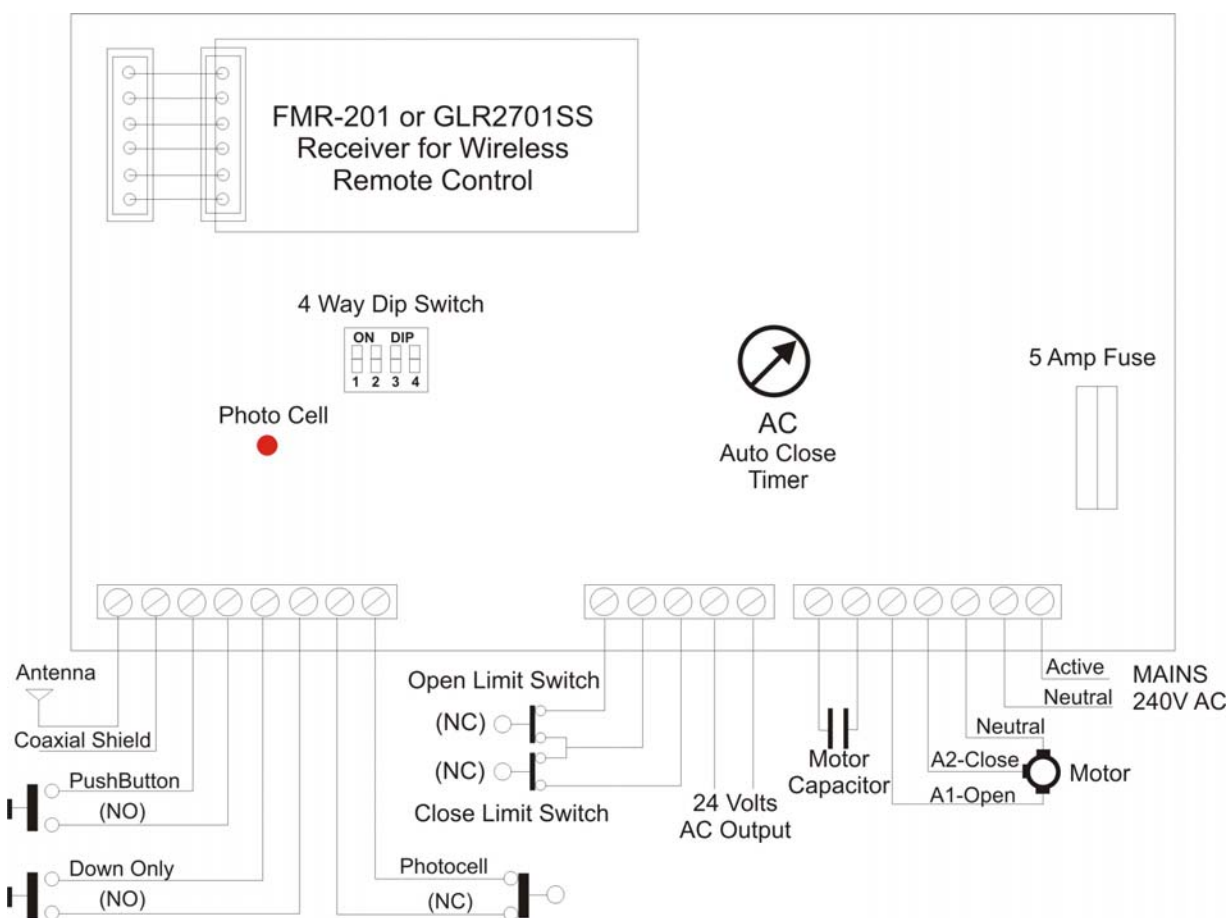
WIRING AND INSTALLATION INSTRUCTIONS

Care should be taken not to cross printed circuit board with 240V wires over or under the board. This would induce spikes onto the sensitive circuitry of the printed circuit board.

When SLD PCB is used to switch contactors (see warning note below), a VDR (Voltage Dependent Resistor 275V AC) must be connected across the coil of contactor.

Warning Note

When connecting contactors directly to the card you must removed the motor capacitors from the cards capacitor terminal blocks. Motor capacitor should be connected directly to the motors. The motors should also have a thermal overload.



Wiring Connections

Antenna

The antenna connection is used to connect an antenna for the plug in FMR-201 or GLR2701SS. The antenna can be a 50 ohms 27 MHz CB-Antenna or piece of approximately 1 metre of wire.

Push Button Input

Push button is a normally open contact. When pressed it will start the opening or closing cycle. This push button should be waterproof for internal and external use. Waterproofing will prevent false activations, which normally occurs due to moisture inside the button. Door or gate can be held open permanently when push button is pressed continuously.

Down Only Input

Down only input is a normally open contact. This is a push button input. When pressed it will start closing (down) the door/gate. The down only push button input will never open (up) the door; it will always close the door/gate.

Photo Cell Input

Photo Cell input is normally closed contact. The photocell is used as a safety feature. If the motor is closing and photo beam is broken, motor will stop instantly and then open fully. Should an object be blocking the motor (i.e. photo cell is broken), closing cycle or auto closing is disabled. A red LED on the controller card labeled as "PC" indicates photo beam is broken. A handy feature when photocell is not near the box.

Limit Switches

The limit switches are normally closed. SLD uses a three wire configuration of limit switches, use two outside holes of terminal block and middle (positive) of the limit switch terminal block (see wiring diagram). Low voltage wiring (24V) can be used for the limit switches.

24 Volts AC Output

This terminal is used to supply an external device, such as a Loop Detector or photocell that uses 24 VAC. This output can source 100mA.

Cap

Motor starting capacitor (10 μ F) should be connected to this terminal. This capacitor value depends on motor specifications by the manufacturer.

Motor

Motor should be rated for 240 VAC. The motor should have three wires, i.e. two actives and one neutral. One active is for opening and the other is for closing.

Power

Connect 240 VAC to the terminal block marked N A . N is neutral and A is active.

Remote Control

Remote control is achieved by inserting Elsema's FMR-201, GLR2701SS or GLR43301SS. Power to the SLD printed circuit board should be switched off during the installation of a receiver. The transmitter can be an FMT-301, GLT2701 or GLT43301 respectively.

Technical Data

Current Consumption:	40mA with relay activated 10mA Standby
PCB Dimension	163 X 94 X 42 mm
Mounting Hole Size	3.97 mm or 5/32"
Mounting Hole Spacing	Length 156 mm Width 85 mm