

Cp91 AC controller



Summary of features

- Proven lightning protection
- High noise immunity
- Microcontroller platform allows customization
- Trigger input with local test button
- Pedestrian opening input
- Safety beam input
- Safety beam input
- Local and remote multi function gate status LED
- Free-exit input (only opens gate)
- Timed potential-free contact (e.g. courtesy lights)
- Low voltage switching of potential-free contact
- Selectable/adjustable Autoclose timer via trigger input
- Local diagnostic LEDs

Specifications

Supply voltage:

Maximum motor rating: Protection fuses: 220-240V AC ± 10% 650W @ 220V AC

Motor fuse F1 -5A Fast Blow

Electronic fuse F2 -1A Fast Blow

Manufactured by:

Centurion Systems (Pty) Ltd

Conit (0) when dialing from outside South Africa) Unit 13 Northlands Production Park Epsom Avenue North Riding Johannesburg 2196 PO. Box 506 Cramerview 2060 South Africa

www.centsys.com.au email: sales@centsys.co.za info@centsys.co.za

CENTSYS CP91 AC Controller

The CP91 AC controller is a versatile controller designed to drive single phase 220V AC motor systems.

As well as offering many desirable features, reliability is enhanced through comprehensive surge and lightning protection, high noise immunity and zero cross switching.

Installation Notes

General

- 1. Different versions of micro controller firmware are available for different applications. Consult Centurion Systems (Pty) Ltd for further details. (Standard version is 91V1.05)
- 2. All signals are switched to common.
- 3. Limit switch and infrared beam inputs are normally-closed. (Standard firmware version)
- 4. If an infrared beam is not used, a link must be used to simulate the normally-closed beam contact. This link must be between PL2/4 and PL2/5.
- 5. Trigger, pedestrian and free-exit inputs are normally-open.
- 6. The test pushbutton on the card simulates a closure of the trigger input.
- 7. An internal cutout timer limits gate travel time to 1 minute.

Diagnostic and Status LEDs

- 1. Diagnostic LEDs on the card light up to indicate the presence of valid signals at the trigger, pedestrian, infrared beam and limit switch inputs. These LEDs are useful when troubleshooting a system.
- 2. The Gate Status LED will indicate the following conditions:

Gate open:	LED on
Gate closed:	LED off
Gate opening:	LED flashes slowly
Gate closing:	LED flashes quickly
Pedestrian opening:	LED flashes very quickly

3. The green MAINS ON LED indicates the presence of mains voltage on the card. Please exercise caution when working on a live system.

Autoclose

- 1. The Autoclose function is enabled by fitting the jumper J1 across the two selection pins. If Autoclose is not required, place the jumper onto just one pin, thereby ensuring that the jumper does not get lost.
- 2. If Autoclose is enabled, holding the trigger down for 4 seconds or more will temporarily disable the Autoclose. The gate will stop, and remain so until the trigger is released, then it will continue opening. This provides visual feedback that the override request has been registered. The Autoclose will be re-instated when the gate is next closed.

Power Connections

- 1. The motor capacitor must be fitted between PL1/1 and PL1/3. These pins must also be connected to the two motor direction leads respectively. The common motor lead must be connected to PL1/2.
- 2. If motor direction is wrong, swap the two motor direction wires, as well as the two limit switch wires. This will effectively reverse the direction of the system. (When gate is on closed limit, gate status LED must be off)
- 3. The light relay is potential-free, and closes every time the gate is operated. The contact remains closed for two minutes after the last gate transaction. The contact also flashes before pedestrian opening, providing a visual warning that the gate is going to start moving.

Signal Inputs

- 1. The pedestrian input will open the gate approximately 1.2m. The gate will Autoclose after 5 seconds. The gate will remain in the pedestrian open position as long as the switch is held closed. A short delay is provided before opening to allow the pedestrian to remove his key. The pillar lights (if fitted) will flash during this period.
- 2. The trigger input functions as a START STOP REVERSE control.
- 3. The free-exit input will only open the gate, and can be used for free-exit, or as the primary trigger in cases where it is not desirable for the user to close the gate himself, e.g. multi user systems etc. The free-exit input is not able to override Autoclose.
- The beam input will prevent the gate from closing when the beam is broken. A closing gate will stop and reverse if the beam is broken. Each time the beam is broken, the Autoclose timer is reset.
- The LIT input is used to close the potential-free contact via a remote toggle switch (On/Off switch). This allows remote low voltage switching of high voltage loads.