

**ALCOR**

D811028 02-10-00 Vers. 02

## **CONTROL UNIT**



Thank you for buying this product, our company is sure that you will be more than satisfied with the product's performance.

The product is supplied with a "WARNINGS" leaflet and an "INSTRUCTION MANUAL". These should both be read carefully as they provide important information about safety, installation, operation and maintenance.

This product complies with the recognised technical standards and safety regulations.

We declare that this product is in conformity with the following European Directives: 89/336/EEC and 73/23/EEC (amended by RL 91/263/EEC, 92/31/EEC and 93/68/EEC).

## 1) GENERAL OUTLINE

ALCOR mod. control unit has been designed to be applied on swing gates. It can control one or two controllers.

## 2) TECHNICAL SPECIFICATIONS

Power supply	: 230V ±10% 50Hz. (*)
Loadless absorption	: 100 mA
Accessory output power	: 24Vac 200 mA max
Max. absorbed power	: 500W
Control panel dimensions	: See fig. 1
Case protection	: IP54
Working temperature	: -20 +55 °C

(\*) Special voltages on request.

## 3) TERMINAL BOARD CONNECTIONS (fig. 2)

Keep the low voltage connections definitely separated from the power supply connections.

### M1A

- 1-2 Power supply 230V +/- 10% 50/60 Hz (Neutral wire to terminal 1).
- 3-4-5 M1 motor connection (terminal 4 common wire, terminals 3-5 motor and capacitor operation).
- 1-4 Blinker connection 230V
- 6-7-8 M2r motor connection (terminal 7 common wire, terminals 6-8 motor and capacitor operation).
- 1-7 Electric lock connection 230V mod. EBP.

### M1B

- 9-10 Open-close push button and key selector (N.O.).
  - 9-11 Stop button (N.O.). If not used, leave jumped.
  - 9-12 Photocell or pneumatic edge input (N.C.). If not used, leave bridged.
  - 9-13 Opening limit switch (N.C.). If not used, leave jumped.
  - 9-14 Closing limit switch (N.C.). If not used, leave jumped.
  - 15-16 24 Vac power supply output for photocell and additional devices.
  - 17-18 Second radio channel output of the double-channel receiver board (N.O.)
  - 19-20 Antenna input for radio-receiver board (20 braid - 19 signal).
- CON1 Radio-receiver board connector, 1-2 channels.  
Fig. 7 shows a general wiring diagram.

## 4) LED (fig. 3)

The ALCOR control unit is provided with a series of self-diagnosis LEDs which control all the functions.

The functions of the LEDs are the following:

- LD1 Stop - goes off when a stop command is given.
- (LD2 off, LD7 on) - Gate opening
- (LD2 off, LD7 off) - Gate stop
- (LD2 on, LD7 on) - Gate closing
- LD3 Start - goes on when a start command is given.
- LD4 Photocell - goes off when the photocells are not aligned or in the presence of obstacles.
- LD5 Opening limit switch - goes off when the opening limit switch is operated.
- LD6 Closing limit switch - goes off when the closing limit switch is operated.

## 5) FUNCTIONING LOGIC

### 5.1) 4-step logic: (Dip-Fix IBL ON)

The following actions take place after a start command:

closed gate	: opens
opening	: stops and operates the TCA (Dip-Fix TCA ON)
open gate	: closes
closing	: stops (stops and does not operate the TCA)
after the stop	: opens

With Dip-Fix IBL ON, any start command given during opening has no effect.

### 5.2) 2-step logic: (on request).

The following actions take place after a start command:

closed gate	: opens
opening	: stops and operated the TCA (Dip-Fix TCA ON)
open gate	: closes
closing	: opens

after the stop : opens

## 6) DIP-FIX SELECTION (fig. 3)

TCA Automatic closing time TCA.

ON: Automatic closing on.

OFF: Automatic closing off.

IBL Blocks impulses

ON: START commands are not accepted during the opening phase.

OFF: START commands are accepted during the opening phase.

FCH Photocells

ON: Photocells are only active in the closing phase. If an object is detected by the photocells during the closing phase, the gate reverses the current movement.

OFF: Photocells are active both in the closing and opening phase. If an object is detected by the photocells on closing or opening, the gate stops; once the object has been removed, the gate opens.

## 7) TRIMMER ADJUSTMENT (fig. 3)

TCA (Dip-Fix TCA ON)

It is used to set the automatic closing time, after which the gate closes automatically (adjustable from 0 to 90 sec.).

TW

It is used to set the motor working time, after which the motor stop (adjustable from 0 to 90 sec.). When using electrical limit switches, increase the motor stopping time by a few seconds with respect to the leaf closing time.

DELAY M2

It is used to set the delay closing time of the second motor (M2r).

## 8) ACCESSORIES

SPL (fig. 4)

Pre-heating optional board. Recommended for temperatures below -10°C.

ME (fig. 5)

Optional board used to connect a 12Vac electric lock.

SS (fig. 6)

Optional board signalling gate open. Operates only with electrical limit switches.

EBP (fig. 2)

The EBP electric lock with continuous service can be connected directly to terminals 1 and 7.



