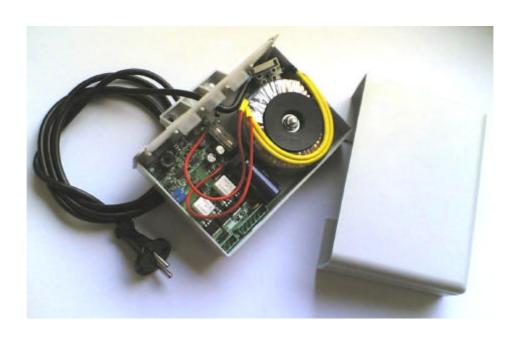


# DRIVER FOR ONE LINEAR ACTUATOR with 24Vdc MOTOR

# **PF0014**

Board and AC/DC toroidal converter



# **PF0015**

Infrared remote control + receiver kit





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# DRIVER FOR 1 LINEAR ACTUATOR with 24Vdc MOTOR

### **SERVICE SPECIFICATIONS**

**PF0014** driver, allows the bidirectional control of **one linear actuator** with 24Vdc motor – 90W max, closing 2 contacts (push buttons) at very low current (0.5 mA).

For each rotation direction of the motor there is an adjustable Current Limitation Circuit that stops the actuator when the set current values are reached: the desired current values can be set up independently by means of two Trimmers positioned on the board.

The Current Limitation Circuit is adjustable up to 5A (9A starting peak).

Once the Current Limitation Circuits have been activated, to restart the motor release and than push again the button.

Until one of the buttons is pressed the other one, that handles the opposite rotation, is disenabled.

While the motor is rotating in one sense a buzzer rings with a specific signal modulation: when it runs in the opposite direction there is a different sound modulation.

Within the terminals there is a power supply for an external lamp (24V –100 mA max) that blinks with the same frequency of the buzzer.

A 2 channels infrared remote control + receiver kit (PF0015) is available as option:

The receiver has the standard dimensions of a B-Ticino model and can easily be embedded in a wall case beside the buttons.

More buttons can be put in parallel (together with the receiver) allowing motor activation from different points.

□ Current limitation is adjustable by means of 2 independent trimmers seated on the board (one for each actuator motor rotation sense)

### **TECHNICAL DATA AND AVAILABLE FUNCTIONS**

Driver Power Supply A toroidal AC/DC converter transforms the AC supply in 24Vdc for the actuator

> Actuator Motor 24Vdc – 5A max

- Input for Actuator OPENING Control
- > Input for Actuator CLOSING Control
- Output for Actuator driving ON-OFF type (inversion of polarity)
- > Trimmer for current limitation adjustment for Actuator (Trimming range 0,5....5,0 A)
- Delay circuits for Current Limitation devices in order to avoid their intervention at Actuator's starting peak currents.

Dimensions:
180 x 14 x 70 mm (board + converter box)

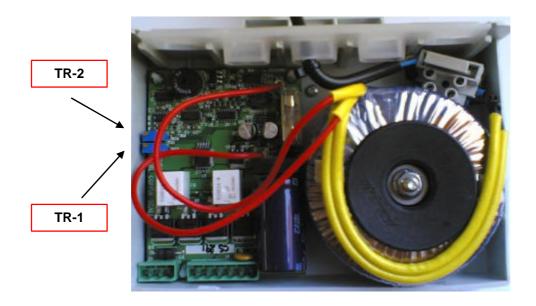
100 x 75 x 30 mm (board)

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### **\$LAY-OUT OF BOARD PROGRAMMING ELEMENTS**



### **SOLUTION ADJUSTMENT**

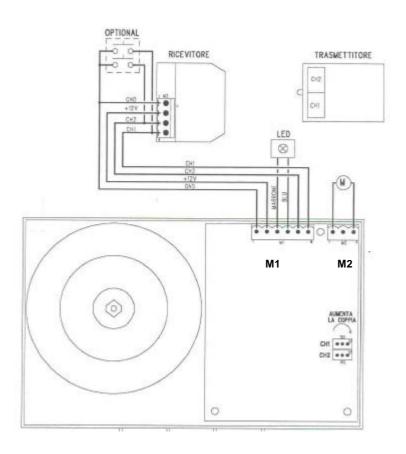
Adjusting the Trimmers TR-1 and TR-2 it's possible to obtain any value of limitation currents within **0,5A and 5,0A** 

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## **BOARD WIRING DIAGRAM**



#### **POWER SUPPLY WIRING**

Driver input power supply (net electric plug)

230 Vac +/- 10%

#### **ACTUATOR WIRING**

Terminal M2 -1 Actuator Motore Supply
Terminal M2 -3 Actuator Motore Supply

### **WIRING OF CONTROL INPUTS AND SIGNALING OUTPUTS**

#### By means of the Infrared remote control or Terminal board

Terminal M1 -1 Common Control inputs

**Terminal M1 -2** Positive 12V power supply for receiver

Terminal M1 -3 Positive modulated output 24V-max 100mA (for lamp switching on)
Terminal M1 -4 Negative modulated output 24V-max 100mA (for lamp switching on)

Terminal M1 -5 Input for Actuator OPENING
Terminal M1 -6 Input for Actuator CLOSING

#### **WARNING FOR INFRARED RECEIVER MOUNTING**

When the red led positioned on the receiver is on it means that an infrared 38 kHz carrier signal is detected. If the led goes on while the receiver is off it means that there is an interference.

This interference could be produced by neon lamps emitting on this carrier band. In this case position the receiver protected from neon direct light.

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