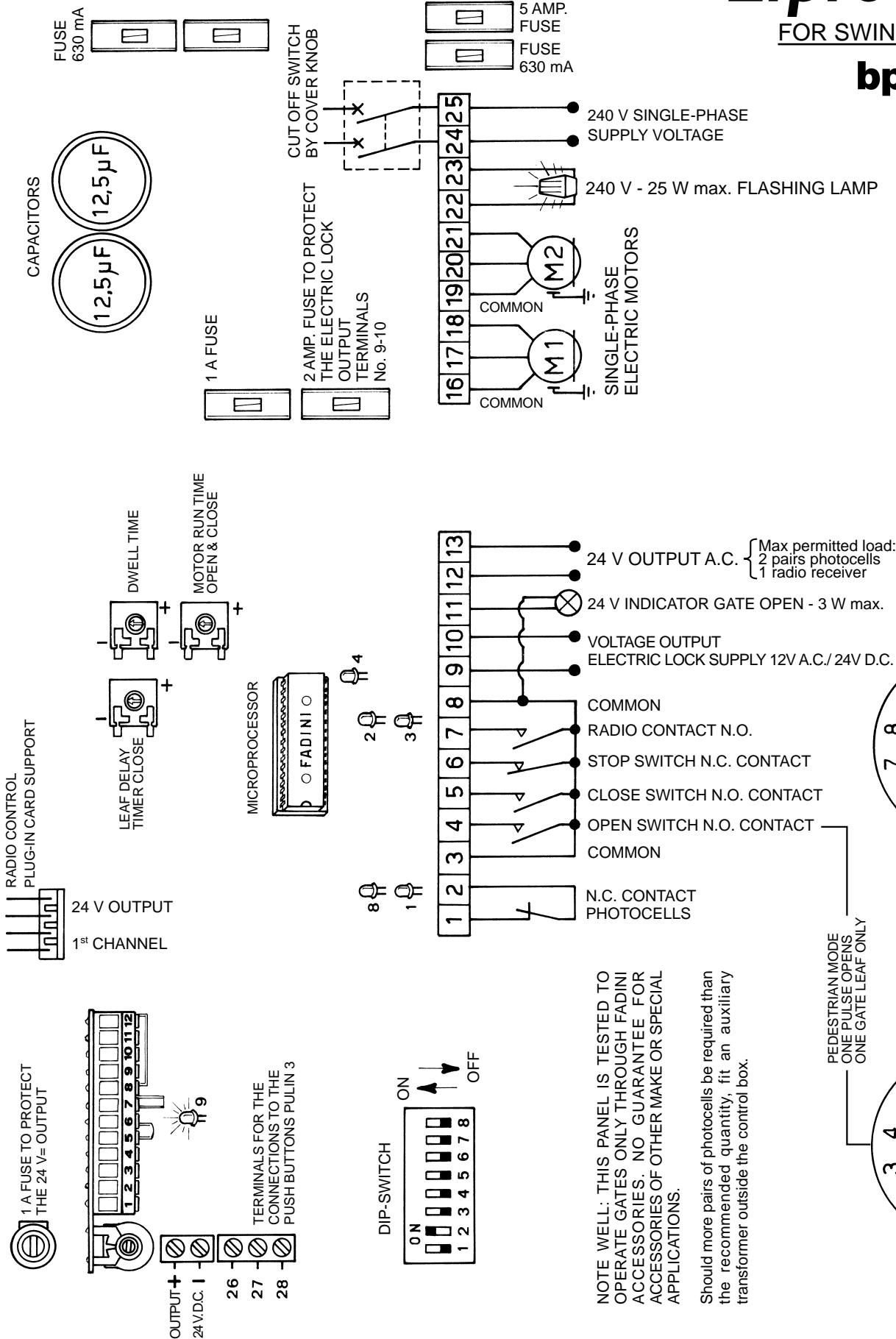


Elpro · 23 CEI

FOR SWING GATES

bpt

NOTE WELL: For special applications, ie. to switch on lights - CCTV etc., SOLID STATE RELAYS are recommended to be used only. Standard relays would affect the micro-processor.



NOTE WELL: THIS PANEL IS TESTED TO OPERATE GATES ONLY THROUGH FADINI ACCESSORIES. NO GUARANTEE FOR ACCESSORIES OF OTHER MAKE OR SPECIAL APPLICATIONS.

Should more pairs of photocells be required than the recommended quantity, fit an auxiliary transformer outside the control box.



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FEATURES OF THE ELECTRONIC PROGRAMMER FOR SWINGING GATES

All the electrical connections are to be made as per the following instructions and diagrams. Supply the terminals 24-25 with 240V- 50 Hz single-phase voltage. The "Red LED" switches on and stays on as long as the board is properly supplied. Through the timer No. 9 you can control the running time of the motor in both cycles, OPEN and CLOSE. Set it so that the running time of the motor is longer than the actual travel of the gate; set the timer No. 8 - DWELL - ie. the interval between open and re-closing, so that you can meet the required interval of time. The timer No. 7 - LEAF DELAY in "close" cycle - is to be set as follows: on to "-" (less) the delay is out of service; clockwise on to "+" (more) the delay is operative.

- With the electric motor connected to terminals 19-20-21: the delay is operative in the "open" cycle, with a factory pre-set time.
- With the electric motor connected to 16-17-18: the delay is operative in "close" cycle and can be adjusted through the timer No. 7 on to "less" or "more".

LOGIC OF THE ELECTRONIC PROGRAMMER: When a pulse is given, the flashing light switches on. After three seconds the motors start. During the interval before re-closing, the light stays on. When the gates are fully re-closed, the light keeps on flashing for three more seconds and then switches off automatically.

The 3 second interval (pre-flashing) which precedes the actual start of the motors can be eliminated by means of the DIP-SWITCH "A" No. 4.

LED No. 1: "OPEN". It switches on when the respective switch is activated.

LED No. 2: "CLOSE". It switches on when the respective switch is activated.

LED No. 3: "RADIO". It switches on whenever a pulse is given, either from remote control, keyswitch or push buttons.

LED No. 4: "STOP". Normally on. It switches off when the respective switch is activated.

LED No. 8: "PHOTOCELLS". Normally on. It switches off when the photocells are obstructed.

LED No. 9: It switches on when voltage is supplied.

DIP-SWITCH SETTING IN ELPRO 23 type "A"

N° 1 OFF = PHOTOCELLS. NO STOP IN OPEN CYCLE. REVERSE/CLOSE
N° 2 OFF = REMOTE CONTROL. REVERSE
N° 3 OFF = NO AUTOMATIC RECLOSING
N° 4 OFF = NO PRE-FLASHING
N° 5 OFF = REMOTE CONTROL. NO STOP AND HOLD AS LONG AS BUTTON DOWN. IT OPENS STRAIGHT AWAY
N° 6 OFF = BOTH LEAFS ARE OPERATED
N° 7 OFF = S. R. P. OUT OF SERVICE
N° 8 OFF = LEAF DELAY OPEN CYCLE. ONE STARTS BEFORE THE OTHER

N° 1 ON = STOP DURING OPEN CYCLE
N° 2 ON = NO REVERSE DURING OPEN CYCLE
N° 3 ON = AUTOMATIC RECLOSING
N° 4 ON = PRE-FLASHING
N° 5 ON = STOP AND HOLD AS LONG AS THE BUTTON IS KEPT DOWN
N° 6 ON = PEDESTRIAN. ONE LEAF ONLY GATES IN CLOSE POSITION
N° 7 ON = S. R. P. IN SERVICE GATES IN CLOSE POSITION
N° 8 ON = NO LEAF DELAY BOTH MOTORS START TOGETHER

LAMP ON = GATE OPEN
LAMP FLASHES SLOWLY = GATE OPENING
LAMP FLASHES FAST = GATE CLOSING
LAMP OFF = GATE CLOSED

1) It is advisable not to expose the control box directly to weather conditions; if mounted outside, a suitable enclosure is recommended to protect it from sunshine and rain.

2) Bridge terminals 1 - 2 if you do not require any photocells.

3) Should two sets of photocells be required, these are to be series connected to terminals 1 - 2, contact normally closed.

4) Bridge terminals 6 - 8 if you do not require any keyswitch or push buttons.

5) Fit the mains to the control box with a high sensitivity, differential, magnetic-thermal switch, 0.03 Amps.

6) NOTE WELL

FAULT FINDING:

- Check supply voltage with a tester: it must be 240V, single-phase
- Check the high voltage fuses
- Check if the photocells contacts are normally closed
- Check voltage from the control box to the electric motor(s): power might have dropped
- Check the low voltage fuse
- The section of the electric cables to the motor(s) must not be less than 1.5 mm²

* 24 V ~ output. Terminals 12-13. It can supply power for 2 pairs of photocells plus 1 radio receiver. Terminal 11 provides a power output for a lamp. 24 V - 3 W max. Flashing lamp output. Terminals 22-23. Maximum available power 25 W max.

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FEATURES AND TECHNICAL SPECIFICATIONS

"ELPRO 23" represents the latest state of the art technology for control panels. It is extremely versatile and can meet the most various requirements.

It has the same functions as ELPRO 9 and incorporates additional advantages as follows: Stroke Reversing Pulse, Pedestrian Operating Mode (where one leaf only can be operated allowing people to walk in/out), STOP and HOLD function by keeping the remote control button pressed down).

Further improvements can be noted in the "ELPRO 23" panel:

- Addition of a 1 A fuse to the 24 V circuit as a protection for the accessories (remote control - photocells - etc.) which are connected to the terminals 12 - 13 and for the panel itself in that it can prevent short circuit during installation.
- The pulse to the electric lock has an adjustable time so that the electric lock can be released with an anticipation of 100 mS before the gate starts moving.
- A 24V 3W lamp indicates gate operations (Gate CLOSED = Lamp OFF - Gate in OPEN cycle = Lamp flashes slowly - Gate OPEN = Lamp stays ON without flashing - Gate in CLOSE cycle = Lamp flashes fast).
- It provides a better switching intelligence design to enhance the reliability of the relays.
- The Motor Run Time is independent from the Leaf Delay Time in close cycle (the delay time is automatically added to the duration of the opening time).
- The 8 DIP-switches can be arranged into any of the possible patterns to achieve the required operating modes without any risk of interference with one another.

"STROKE REVERSING PULSE" and "S.1A.P.":

Set DIP switch No. 7 to ON. The "Stroke Reversing Pulse" (S.R.P.) is activated only with the gate in the CLOSE position. The pulse operates the gate in the CLOSE direction first and then immediately reverses into OPEN (this will help the gate lock to release). All the other operations will be performed in the standard way. No danger comes from the Stroke Reversing Pulse. This function remains in service with the panel set to "Pedestrian Mode".

Set DIP switch No. 6 to ON for "Pedestrian Mode" (S.1A.P.), terminals 3-4. Only one leaf is operated when the OPEN button is pressed down. Automatic reclosing. If the OPEN button is pressed twice in a row, both leafs are opened. The S.1A.P. function is activated only when the gate is in the fully CLOSE position. The remote control always operates both gates, contact 7 - 8.

DIP-SWITCH SETTING IN ELPRO 23 type "A"

N° 1 OFF = PHOTOCELLS. NO STOP IN OPEN CYCLE. REVERSE/CLOSE	N° 1 ON = STOP DURING OPEN CYCLE
N° 2 OFF = REMOTE CONTROL. REVERSE	N° 2 ON = NO REVERSE DURING OPEN CYCLE
N° 3 OFF = NO AUTOMATIC RECLOSING	N° 3 ON = AUTOMATIC RECLOSING
N° 4 OFF = NO PRE-FLASHING	N° 4 ON = PRE-FLASHING
N° 5 OFF = REMOTE CONTROL. NO STOP AND HOLD AS LONG AS BUTTON DOWN. IT OPENS STRAIGHT AWAY	N° 5 ON = STOP AND HOLD AS LONG AS THE BUTTON IS KEPT DOWN
N° 6 OFF = BOTH LEAFS ARE OPERATED	N° 6 ON = PEDESTRIAN. ONE LEAF ONLY GATES IN CLOSE POSITION
N° 7 OFF = S. R. P. OUT OF SERVICE	N° 7 ON = S. R. P. IN SERVICE GATES IN CLOSE POSITION
N° 8 OFF = LEAF DELAY OPEN CYCLE. ONE STARTS BEFORE THE OTHER	N° 8 ON = NO LEAF DELAY BOTH MOTORS START TOGETHER

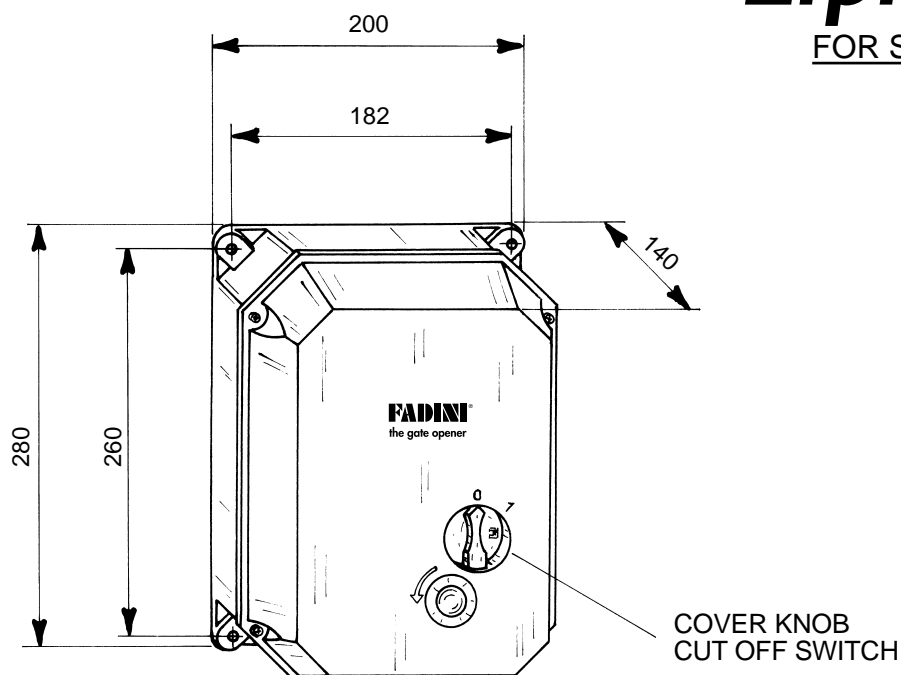
ADDITIONAL FEATURES:

- OPEN and CLOSE pulses to allow one cycle only in case a button is stuck down.
- "HOLD OPEN GATES" feature. The panel set on automatic reclosing mode; it is possible to connect a switch or timeclock to the OPEN terminal to hold the gate open for the required period of time.
- Auxiliary 24 V D.C. 150 mA max. OUTPUT.
- In addition to the features which you already know and the LED indication outputs that are standard with the existing panel, the following additional features have been included with the new unit:
 - 1 No. 5A-150 mA change-over contact. This can be used to connect signal lights such as traffic lights (for instance you can connect two external lamps 1 red, 1 green).
 - 4 Nos. N.O. solid state switch outputs designed to allow the connection of 24 V D.C. relay coils without protecting diodes. The 4 switches are excited individually to indicate the following gate status: OPENING - OPEN - CLOSING - CLOSED.
 - 12 V A.C. / 24 V D.C. electric lock output. The duration of the pulse to the lock can be adjusted by means of a potentiometer.
 - 12 V D.C./A.C. relay with N.O. contacts for the connection of an Intercom Entry System.

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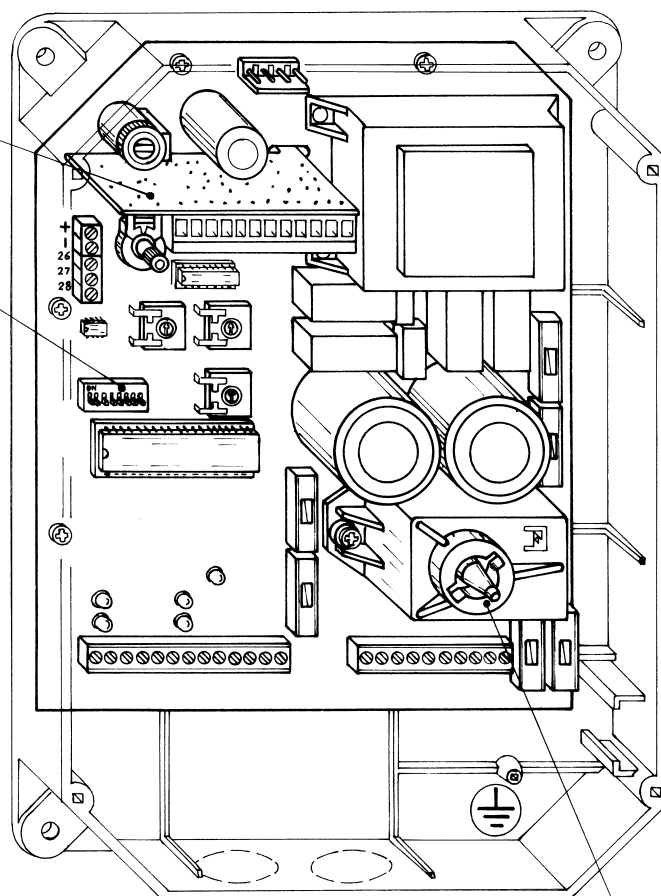
FOR SWING GATES

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ADDITIONAL CARD

8 WAY DIP-SWITCH




TECHNICAL DATA

- Supply Voltage 240 V - 50 Hz
- Voltage Output 240 V - 25 Hz
- Low Voltage Output 24 V - 10 W
- E.M. Power Output 1'100 W
- Line Fuses 5 A
- Secondary Fuses 0.5 A
- Command Open - Stop - Close - Other functions
- Dimensions of the Container 280x200x140 mm
- IP Standards IP 437

Open Contact Relay

Approval Mark

- Capacitor

IMQ -  - S-S-10 A - 240 V
12 µF - 400 V

Transformer

- Power 20 VA
- Magnetic Core 1.5 W / Thickness 0.50
- Supply Voltage 0 - 240 V
- Output 0 - 18 - 24 V
- Working Frequency 50 - 60 Hz
- Insulation 4 Kv x 1'



Drwg. No. 2125



meccanica FADINI
S.N.C.

AUTOMATIC GATE MANUFACTURERS

Via Mantova, 177/A - 37053 Cerea (Verona) Italy
Tel. 0442 330422 r.a. - Fax 0442 331054
e-mail: info@fadini.net - www.fadini.net

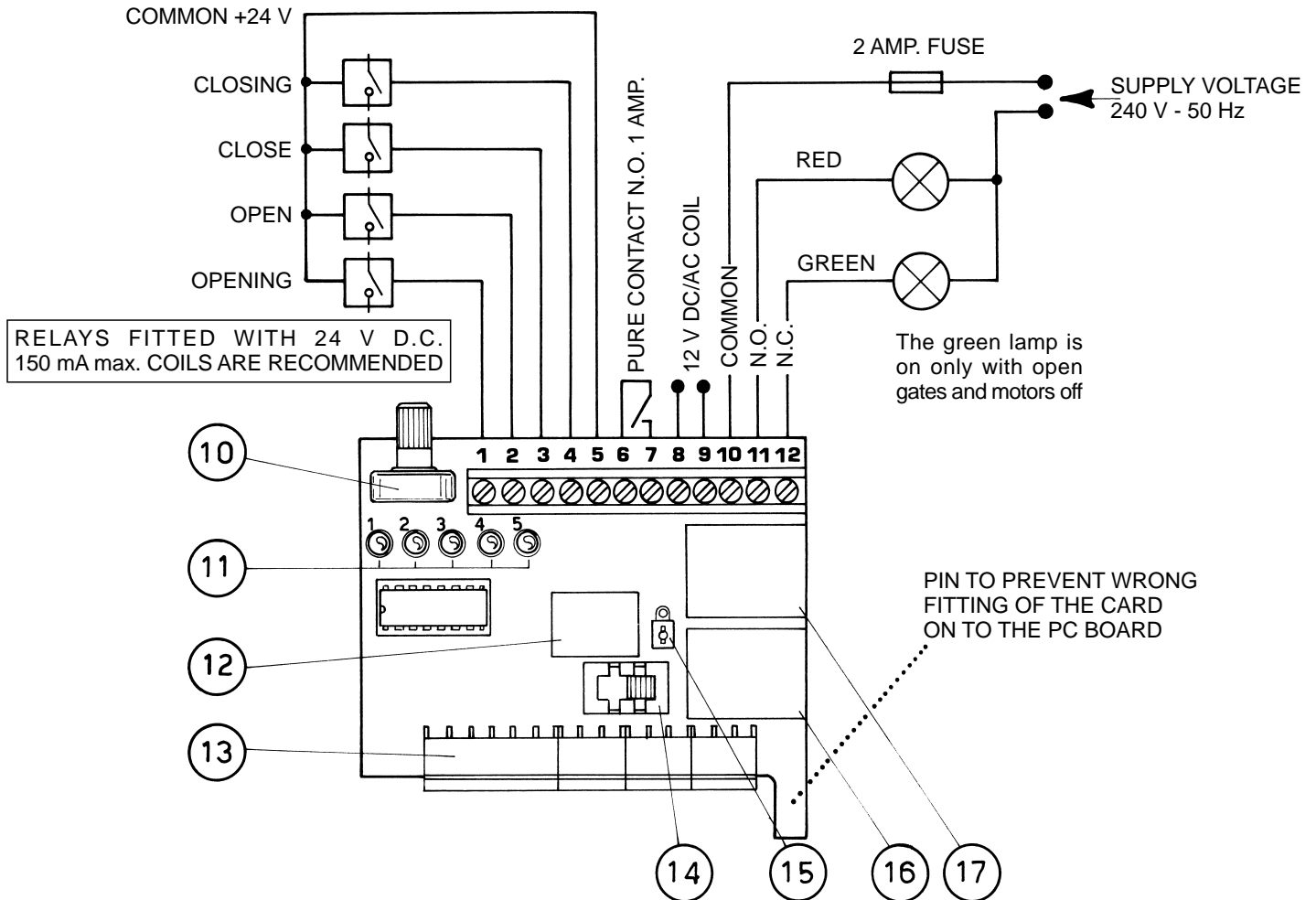


FADINI
the gate opener
Made in Italy

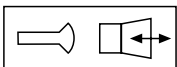
FOR SWING GATES

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CONNECTION DIAGRAM AND FEATURES OF THE ADDITIONAL CARD



- 10) ELECTRIC LOCK TIME ADJUSTMENT
CLOCKWISE = MORE
ANTI-CLOCKWISE = LESS
- 11) GATE STATUS INDICATION LEDs
1-LED OPENING / 2-LED OPEN / 3-LED CLOSE / 4-LED CLOSING / 5-LED TRAFFIC LIGHTS
- 12) 12V RELAY TO CONNECT ONE INTERCOM UNIT
- 13) CONNECTORS
- 14) SWITCH TO CHANGE VOLTAGE TO ELEC.LOCK FROM 12 V A.C. - TO 24V D.C.
- 15) LINK DOWN, PULSE TO THE 12 V A.C. ELECTRIC LOCK
LINK UP, PULSE TO THE 24V D.C. ELECTRIC LOCK
- 16) RELAY FOR THE GATE LOCK
- 17) RELAY FOR THE TRAFFIC LIGHTS



AUDIO/VIDEO CONNECTION

For audio/video connection 12 V AC Lock Output connect to terminals 8 & 9 plug in additional card. Connect to main terminals 7 & 8 radio/common from additional card 6 & 7 relay contact.

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FOR SWING GATES

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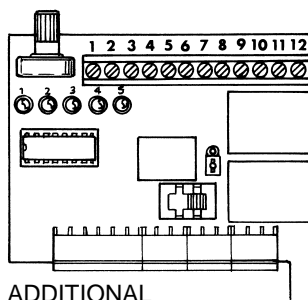
ADDITIONAL FEATURES:

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 - "HOLD OPEN GATES" feature. The panel set on automatic reclosing mode; it is possible to connect a switch or timeclock to the OPEN terminal to hold the gate open for the required period of time.
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12 V D.C./A.C. relay with N.O. contacts for the connection of an Intercom Entry System.



ADDITIONAL CARD

