PADIN ${ }^{\circ}$
l'apricancello Made in Italy

LIBRETTO DI ISTRUZIONI

- PER APRICANCELLI SCORREVOLI CON FINECORSA - pag. 3
- PER APRICANCELLI OLEODINAMICI A BATTENTE A 102 ANTE - pag. 4 - PER APRIBASCULANTI A 102 MOTORI CON 0 SENZA FINECORSA - pag. 5
- FOR SLIDING GATES WHERE LIMIT SWITCHES ARE REQUIRED - page 7
- FOR SINGLE OR DOUBLE OIL-HYDRAULIC SWINGING GATES - page 8
- FOR SINGLE OR DOUBLE MOUNT GARAGE DOOR APPLICATIONS WITH OR WITHOUT LIMIT SWITCHES - page 9
page 1,6,7,8,9


## NOTICES D'INSTRUCTION

Elpro•X
PROGRAMMATEUR ELECTRONIQUE POUR PRODUITS FADINI 230V 50/60Hz MONOPHASE

- POUR OUVRE PORTAILS COULISSANTS AVEC FIN DE COURSE - page 11
- POUR OUVRE PORTAILS A BATTANT OLEODYNAMIQUES A 1 OU 2 VANTAUX - page 12
- POUR OUVRE PORTES BASCULANTES AVEC OU SANS FIN DE COURSE A 1 OU 2 MOTEURS - page 13
pag. 1,2,3,4,5
page 1,10,11,12,13
- FÜR SCHIEBETORANTRIEBE MIT ENDSCHALTERN - Seite 15 - FÜR ÖL-HYDRAULISCHE EIN- ODER ZWEIFLÜGELDREHTORE - Seite 16 - FÜR GARAGENTORE MIT EINEM ODER ZWEI ANTRIEBEN, MIT ODER OHNE ENDSCHALTER - Seite 17

FOLLETO DE INSTRUCCIONES

- PARA ABRE-VERJAS DESLIZANTES CON TOPES DE RECORRIDO - pág. 19
- PARA ABRE-VERJAS DE HOJA CON UNA 0 DOS HOJAS - pág. 20
- PARA ABRE-VERJAS BASCULANTES, EQUIPADOS DE 102 MOTORES CON 0 SIN TOPES DE RECORRIDO - pág. 21
pág. 1,18,19,20,21

UNIVERSELE ELEKTRONISCHE PROGRAMMEERINRICHTING VOOR FADINI PRODUCTEN EENFASE $230 \mathrm{~V} 50 / 60 \mathrm{~Hz}$

- VOOR OLIEHYDRAULISCHE OPENERS VAN DRAAIHEKKEN MET 1 OF 2 VLEUGELS - pag. 23
- VOOR OPENERS VAN SCHUIFHEKKEN MET EINDSCHAKELAARS - pag. 24 - VOOR OPENERS VAN KANTELDEUREN MET 1 OF 2 MOTOREN MET OF ZONDER EINDSCHAKELAARS - pag. 25
pag. 1,22,23,24,25
- FOR SLIDING GATES WHERE LIMIT SWITCHES ARE REQUIRED
- FOR SINGLE OR DOUBLE OIL-HYDRAULIC SWINGING GATE OPERATORS WITH ADJUSTABLE VALVES
- FOR SINGLE OR DOUBLE MOUNT GARAGE DOOR APPLICATIONS WITH OR WITHOUT LIMIT SWITCHES WITH ADJUSTABLE VALVES


The electronic control box ELPRO X has been designed to provide a solution to the installer who may be in the situation where he has to service any kind of automatic gates: single or double swinging gates automated by electro-hydraulic operators adjustment of which is by valves, sliding gate systems where limit switches are involved, garage doors automated by 1 or 2 operators, with or without limit switches. Voltage supply is $230 \mathrm{~V} 50 / 60 \mathrm{~Hz}$ single-phase, fully conforming to the Low Voltage 2006/95/CE and Electro Magnetic Compatibility regulations 2004/108/EEC $92 / 31 / E E C$. Qualified technical people are required to install this equipment, in compliance with the existing safety norms. The manufacturer declines any responsability for incorrect handling, use and applications, and also reserves the right to change or update the product any time. Failure to follow the installation regalations may result in serious damages to properties and persons.

## PLEASE NOTE:

- The control panel must be installed in a sheltered, dry place, inside the box provided with it

Make sure that the power supply to the electronic programmer is $230 \mathrm{~V} \pm 10 \%$

- Make sure that the power supply to the Electric Motor is $230 \mathrm{~V} \pm 10 \%$
- For distances of over 50 metres we recommend using electric cables with bigger sections.
- Fit the mains to the control panel with a 0.03 A high performance circuit breaker.
- Use $1.5 \mathrm{~mm}^{2}$ section wires for voltage supply, electric motor and flashing lamp. Maximum recommended distance 50 m .

Use $1 \mathrm{~mm}^{2}$ section wires for limit switches, photocells, push-buttons/key-switch and accessories.

- Bridge terminals 1 and 2 if no photocells are required.

Bridge terminals 3 and 6 if no key- or push-button switches are required.

- Open/Close Motor Run Time to be set longer than actual gate travel time by the specific Trimmer switch.
N.W.: To fit extra accessories such as lights, CCTV etc. use only solid state relays to prevent damages to the microprocessor


## IN CASE OF FAILURE

- Nake sure that the power supply to the electronic programmer is $230 \mathrm{~V} \pm 10 \%$
- Make sure that the power supply to the Electric Motor is $230 \mathrm{~V} \pm 10 \%$
- Check fuses.
- Check photocells. Contact normally closed.

Check voltage consistency. No power drop between motor and control panel must occur.

## FUNCTIONING FEATURES COMMON TO ALL KINDS OF INSTALLATIONS

TIME CLOCK INSTALLATION: The control box ELPRO X allows a time clock to be connected to it to open/close a gate at any required time.
Connections: parallel connect the N.O. contact of the clock to terminals No. 4 OPEN and No. 3 COMMON in the main terminal board, set Dip-switch A No. 3 to ON, automatic reclosing.
Functioning: set the clock to the required opening time; at the pre-set time the gate will be automatically operated to open and will stay open (the gate flashing lamp switches off, the PC board indication light signals the operation by emitting two short flashes of light, followed by a longer pause time). No other commanding pulses will be accepted by the system (not even by remote control) until the pre-set clock time has expired; on expiring of the clock pre-set time, the gate will close, after the pre-set dwell time of the control box main PC board.

INDICATION LIGHT: ELPRO $X$ has a 24 V max. 3 W output, terminals No .11 and No .3, for a light to provide gate status indications.
Functioning: Gate is closed=Light is off. Gate is opening=Light blinks slowly. Gate is open=Light is on. Gate is closing=Light blinks fast.

COURTESY LIGHT: ELPRO X has a 230V max. 100W output for a courtesy light to be connected to it. This light switches on at the beginning of the gate operations and stays on for a fixed time, ie. 90 seconds, after the end of the duty cycle. (see drawing)

## Led Status Indications:

L1 = Confirms proper voltage supply, 230V, and F1, F2, F3 and F4 integrity
$\mathrm{L} 2=2^{\text {nd }}$ pair photocells or safety edge, normally alight
$\mathrm{L} 3=1^{\text {st }}$ pair photocells, normally alight
$L 4=$ Open. It illuminates on pulsing to open

[^0]
## GB

Elpro•X
4 ON OFF


## ELECTRIC POWER CONNECTIONS

Capacitor and 230V Connect to M1 or M2 both if two sliding single-phase motor: : gate operators are required (if set to Sliding single-phase motor: Gate, motors start together)


IMPORTANT: connect up to $0.5 \mathrm{HP}(0.36 \mathrm{KW})$ motors to either terminal output,
connect up to $1.0 \mathrm{HP}(0.73 \mathrm{KW})$ motors in parallel with with the following terminals:
terminal 16 with 19 ; terminal 17 with 20 ; terminal 18 with 21 .
N.W: With 1.0HP motors, replace F1 and F2 fuses with 6.3 A ones

Up to $1.0 \mathrm{HP}(0.72 \mathrm{KW})$ motor MOTOR
RUN TIME


Capacitor C1
Motor M1


Flashing Lamp:


DIP-SWITCH A No. 4

| $\square$ |
| :--- |
|  |
|  |
| ON: Pre-flashing |
| OFF: No pre-flashing |

$$
\text { DIP-SWITCH A No. } 10
$$

| ON: Flashing lamp out of service during |
| :--- |
| Dwell Time, Automatic Mode |
| 10OFF: Flashing lamp in service during <br> Dwell Time, Automatic Mode |

Power Supply:

| 24 | 25 |
| :---: | :---: |
| 荾 | $\stackrel{\Gamma}{\square}$ |

POWER SUPPLY
$230 \mathrm{~V} \pm 10 \% 50 / 60 \mathrm{~Hz}$ SINGLE-PHASE

FUNCTIONS OF DIP-SWITCH B
Deadman Control:


## FUNCTIONS OF DIP-SWITCH A

## Dip-Switch A

$1=0 N$. Photocells. Stop during Opening
$2=0 \mathrm{~N}$. Radio. No reversing during Opening
$3=0 \mathrm{~N}$. Automatic Closing
4= ON. Pre-flashing. In service
$5=0 N$. Radio. Step by step
$6=0 \mathrm{~N}$. One gate opens for pedestrians
7= ON. Stroke Reversing Pulse. Opening
$8=0 \mathrm{~N}$. No delay on Opening. Motors start together
$9=0 \mathrm{~N} .2^{\text {nd }}$ pair Photocells in service
$10=0 \mathrm{~N}$. Flashing lamp out of service during Dwell
11= ON. Reversing to Close during Open and Dwell cycles after photocell obstruction
12= ON. Memory of the Times in Sevice

## Safety Edge:

If the safety edge is activated during Open or Close cycles, gate travel is shortly reversed; this is controlled by Dip-Switch A No.8=ON Reversing Operation Time can be increased

| DIP-SWITCH $\mathbf{A}$ No. 8 |
| :--- |
| ON: Increase Reversing Time |
| OFF: No time increase |
| IIP-SWITCH A No. 9 |
| ON: Reverse Gate Travel |
| OFF: No reversing |
| 9 N..: Ino safety edge is fitted, no need to |
| link out the respective terminals |

## Pedestrian Opening:

On selecting Sliding Gate Mode, the
Gate Delay Closing Trimmer is changed to control Pedestrian mode
Gate in fully closed position; an Open pulse opens the gate a span equals to the time set by Pedestrian Trimmer

DIP-SWITCH A No. 6

| 4 | ON: Pedestrian Service <br> OFF: Standard Operating Mode |
| :---: | :--- |

PEDESTRIAN


## Re-closing on passing by the photocells:

Automatic/ Semi-automatic
Dip-SwiTCH A No. 3

## DIP-SWITCH A No. 11

\(\left.\begin{array}{|c|c|}\hline ON: \& Gate is reversed to close during Open and <br>
Dwell cycles. Dip-Switch A No. 11=0N <br>
Closing is 3 seconds after the photocell <br>

beam has been cleared\end{array}\right\}\)| OFF: Standard Operating Mode |
| :--- |

GB Elpro•X OIL-HYDRAULIC SWINGING GATE (DIP-SWITCH B No.1=OFF)

再

## LOW VOLTAGE ELECTRICAL CONNECTIONS

## Photocells:



DIP-SWITCH A No. 1

| $\begin{aligned} & \text { ON: } \begin{array}{l} 1^{\text {st }} \text { pair photocells stop gate while opening } \\ \text { reverse it once obstacle is removed } \end{array} \\ & \text { OFF: } \begin{array}{l} 2^{\text {nd }} \text { pair photocells do no stop gate while } \\ \text { opening, reverse it on closing if obstructed } \end{array} \end{aligned}$ |  |
| :---: | :---: |
|  |  |
| DIP-SWITCH A No. 9 |  |
| ON: $2^{\text {nd }}$ pair photocells in service OFF: $2^{\text {nd }}$ pair photocells not required 9 (no need to link out terminals) |  |

## Push Button Switch:




PLEASE NOTE WELL: If no limit switches are fitted, link out terminals 8 and 10 with common 9 or 3

Electric lock output lock fitted to gate operated by M1 motor (delayed on closing)

## Pulin3 Button Switch



Leds indicating Open - Stop - Close pulses

## ELECTRIC POWER CONNECTIONS

Capacitor and Single-phase Motor (230V):


## 24V 3W Gate Status Light:


Light $\mathbf{O n}=0$ pen gate Light Off = Closed gate Light flashes fast= Closing gate Light flashes normally= opening gate Light flashes slowly= gate is stopped
$\square_{8}^{0}$ ${ }_{8}$ OFF: One gate is delayed by 2 seconds

## WITH SINGLE SWINGING GATES:

 1) Connect motor to M1 (terminals 16-17-18)2) Set to No Delay during Opening

Dip-Switch A No.8=ON
3) Set Delay-on-Closing Trimmer to zero (lowest-) by turning it anti-clockwise completely



## Flashing Lamp:

DIP-SWITCH A No. 4


Power Supply:


POWER SUPPLY $230 \mathrm{~V} \pm 10 \% 50 / 60 \mathrm{~Hz}$ SINGLE-PHASE

## FUNCTIONS OF DIP-SWITCH A

## Dip-Switch A

$1=0 \mathrm{~N}$. Photocells. Stop during Opening
$2=0 N$. Radio. No reversing during Opening
$3=$ ON. Automatic Closing
4= ON. Pre-flashing. In service


4= ON. Pre-flashing. In service
5= ON. Radio. Step by step
123456789101112
$6=0 \mathrm{~N}$. One gate opens for pedestrians
$7=0 \mathrm{~N}$. Stroke Reversing Pulse. Opening
$8=0 \mathrm{~N}$. No delay on Opening. Motors start together
$9=0 \mathrm{~N} .2^{\text {nd }}$ pair Photocells in service
$10=0 \mathrm{~N}$. Flashing lamp out of service during Dwell
$11=0 \mathrm{~N}$. Reversing to Close during Open and Dwell cycles after photocell obstruction
12= ON. Memory of the Times in Service

## Stroke Reversing Pulse <br> Opening:

DIP-SWITCH A No. 7
ON: Stroke Reversing Pulse.
In service on Opening Gates in closed position
7 OFF: Stroke Reversing Pulse out of service

## Re-closing on passing by the photocells:

| DIP-SWITCH A No. 11 | ON: Re-closing during Open and Dwell cycles. Dip-Switch A No.11=ON Re-closing is after 3 seconds after the photocell beam has been cleared <br> 11 OFF: Standard Operating Mode |
| :---: | :---: |
| DIP-SWITCH A No. 9 | ON: If a $2^{\text {nd }}$ pair of photocells have been fitted 9 OFF: If only $1^{\text {st }}$ pair photocells have been fitted |

## Pedestrian Opening (M1 Motor):

With gate in closed position, on pulsing Open one gate leaf only is opened:

- The first Open pulse operates M1 Motor
- A second Open pulse operates the M2 motor

DIP-SWITCH A No. 6

$\uparrow \square$ON: 1 gate opens for pedestrian $\square$ OFF: Standard Operating Mode 6

## For heavy duty applications

There can be cases where reversing operations are very frequent (block of flats or factories). A function can be activated in such cases, and the remaining motor run time is accounted for when reversing or photocell crossing occur.


ON: Memory of the Times in service OFF: Standard Operating Mode

## FUNCTIONS OF DIP-SWITCH B

## Deadman Control:

DIP-SWITCH B No. 2

2 OFF: Standard Operating Mode


## Elpro•X

## DICHIARAZIONE DI CONFORMITÀ

Ditta Costruttrice:
meccanica
Via Mantova 177/A - 37053 Cerea (VR) Italy Tel. 0442330422 - Fax 0442331054 e-mail: info@fadini.net - www.fadini.net

## DICHIARA SOTTO LA PROPRIA RESPONSABILITÀ CHE:

Modello: $\qquad$
FADIN:


L'Elpro X viene commercializzato per essere installato come "impianto automatizzato", con accessori e componenti originali indicati dalla Ditta Costruttrice.
La ditta costruttrice non si assume responsabilità circa l'uso improprio del prodotto.
Il prodotto risulta conforme alle seguenti normative specifiche:

- Direttiva Bassa Tensione..

2006/95 CE

- Direttiva Compatibilità Elettromagnetica.

2004/108/CEE e 92/31 CEE

Al fine di certificare il prodotto il Costruttore dichiara sotto la propria responsabilità il rispetto della NORMATIVA DI PRODOTTO $\qquad$ EN 13241-1

Data: $\qquad$


HEREBY DECLARES UNDER ITS OWN RESPONSIBILITY THAT:
Model:
Elpro•X
electronic microprocessor programmer

## COMPLIES WITH MACHINERY DIRECTIVE

$\qquad$ .98/37/EC


Elpro X is sold for installation as an automated system, with original accessories and components indicated by the Manufacturer.
The Manufacturer declines all responsibility for improper use of the product.
The product is conforming to the following specific regulations:

- Low Voltage Directive
.2006/95 CE
- Electromagnetic Compatibility Directive ..2004/108/CEE \& 92/31 CEE

In order to certify the product, the Manufacturer declares under its own responsibility that it complies with PRODUCT STANDARD

EN 13241-1

Date: $\qquad$


## DECLARATION DE CONFORMITE

Via Mantova 177/A - 37053 Cerea (VR) Italy Tel. 0442 330422 - Fax 0442331054 e-mail: info@fadini.net - www.fadini.net

DECLARE SOUS SA PROPRE RESPONSABILITE QUE :
Modèle EIpro $X$ programmateur électronique à microprocesseur
EST CONFORME A LA DIRECTIVE MACHINES.
98/37/CE


L'Elpro X est vendu pour être monté comme «installation automatisée», avec les accessoires et les composants originaux indiqués par le Constructeur. Le fabricant décline toute responsabilité en cas d'usage impropre du produit.
Le produit est conforme aux normes suivantes:

- Directive Basse Tension

2006/95 CE

- Directive Compatibilité Electromagnétique $\qquad$

Afin de certifier le produit, le Fabricant déclare sous sa propre responsabilité qu'il est conforme à
la NORME DE PRODUIT. $\qquad$ EN13241-1



I - Prima dell'installazione da parte di personale tecnico qualificato, si consiglia di prendere visione del Libretto Normative di Sicurezza che la Meccanica Fadini mette a disposizione
GB - Please note that installation must be carried out by qualified technicians following Meccanica Fadini's Safety Norms Manual.
F - L'installation doit être effectuée par un technicien qualifié suivant le manuel des Normes de Sécurité de Meccanica Fadini.
D - Vor der Montage durch einen Fachmann, wird es empfohlen die Anleitung zur Sicherheitsnormen, die Meccanica Fadini zur Verfügung stellt, nachzulesen.
E - Antes de la instalación por el personal técnico calificado, se recomienda leer detenidamente el Folleto de la Reglamentación de Seguridad que la empresa Meccanica Fadini pone a su disposición.
NL - Voordat de installatie door gekwalificeerd technisch personeel wordt uitgevoerd, wordt geadviseerd om het boekje met veiligheidsvoorschriften dat Meccanica Fadini ter beschikking stelt door te lezen.


Direttiva 2003/108/CE
Smaltimento dei materiali elettrici ed elettronic

2003/108/CE Directive
GB
for waste electrical and electronic equipments

DISPOSE OF PROPERLY ENVIRONMENT-NOXIOUS MATERIALS

Via Mantova, 177/A - 37053 Cerea (Verona) Italy - Tel. +39 0442330422 r.a. - Fax +39 0442331054 e-mail: info@fadini.net - www.fadini.net


[^0]:    L5 = Close. It illuminates on pulsing to close
    $\mathrm{L} 6=$ Stop. It goes off on pulsing to stop
    L7 = Radio. It illuminates on pulsing a remote control button
    L8 = Close limit switch. It is off when gate is closed
    L9 = Open limit switch. It is off when gate is open

