

I

LIBRETTO DI ISTRUZIONI

Elpro·13 exp

PROGRAMMATORE ELETTRONICO A
MICROPROCESSORE PER AUTOMAZIONI SU
CANCELLI A SINGOLA O DOPPIA ANTA BATTENTE

- AUTOMATICO / SEMIAUTOMATICO
- USCITA ELETTROSERRATURA
- FUNZIONE PASSO PASSO
- FUNZIONE COLPO D'ARIETE
- APERTURA PEDONALE
- CON FUNZIONE OROLOGIO

pag. 1,2,3,4,5

GB

INSTRUCTIONS

Elpro·13 exp

ELECTRONIC MICROPROCESSOR PROGRAMMER
FOR OPERATORS ON SINGLE
OR DOUBLE SWING LEAF GATES

- AUTOMATIC/SEMI-AUTOMATIC FUNCTION
- ELECTRIC LOCK OUTPUT
- STEP-BY-STEP FUNCTION
- STROKE REVERSING PULSE FUNCTION
- PEDESTRIAN OPENING
- WITH CLOCK FUNCTION

page 1,6,7,8,9

F

MANUEL D'INSTRUCTIONS

Elpro·13 exp

PROGRAMMATEUR ELECTRONIQUE A
MICROPROCESSEUR POUR AUTOMATISATIONS DE
PORTAILS A SIMPLE OU DOUBLE BATTANT

- AUTOMATIQUE / SEMIAUTOMATIQUE
- SORTIE SERRURE ELECTRIQUE
- FONCTION PAS A PAS
- FONCTION COUP DE BELIER
- OUVERTURE PIETONNE
- AVEC FONCTION HORLOGE

page 1,10,11,12,13

D

ANLEITUNG

Elpro·13 exp

ELEKTRONISCHE MIKROPROZESSORSTEUERUNG
FÜR EIN- ODER ZWEIFLÜGELIGE DREHTORANTRIEBE

- AUTOMATIK- ODER HALBAUTOMATIKBETRIEB
- AUSGANG ELEKTROSCHLOSS
- IMPULSBETRIEB
- SCHLOSSENTLASTUNGSFUNKTION
- GEHTÜRFUNKTION
- MIT UHR-FUNKTION

Seite 1,14,15,16,17

E

FOLLETO DE INSTRUCCIONES

Elpro·13 exp

PROGRAMADOR ELECTRÓNICO DE
MICROPROCESADOR PARA AUTOMACIONES EN
VERJAS DE BATIENTE DE UNA SOLA O DE DOBLE HOJA

- AUTOMÁTICO / SEMIAUTOMÁTICO
- SALIDA ELECTROCERRADURA
- FUNCIÓN PASO-PASO
- FUNCIÓN GOLPE DE ARIETE
- ABERTURA PEATONAL
- FUNCIÓN RELOJ

pág. 1,18,19,20,21

NL

GEBRUIKERSHANDLEIDING

Elpro·13 exp

ELEKTRONISCHE PROGRAMMEERINRICHTING MET
MICROPROCESSOR VOOR AUTOMATISERINGEN OP
DRAAIHEKKEN MET ENKELE OF DUBBELE VLEUGEL

- AUTOMATISCH / HALFAUTOMATISCH
- UITGANG ELEKTROSLOT
- STAP-VOOR-STAP FUNCTIE
- EINDSTOOTFUNCTIE
- VOETGANGERSDOORGANG
- MET KLOKFUNCTIE

pag. 1,22,23,24,25

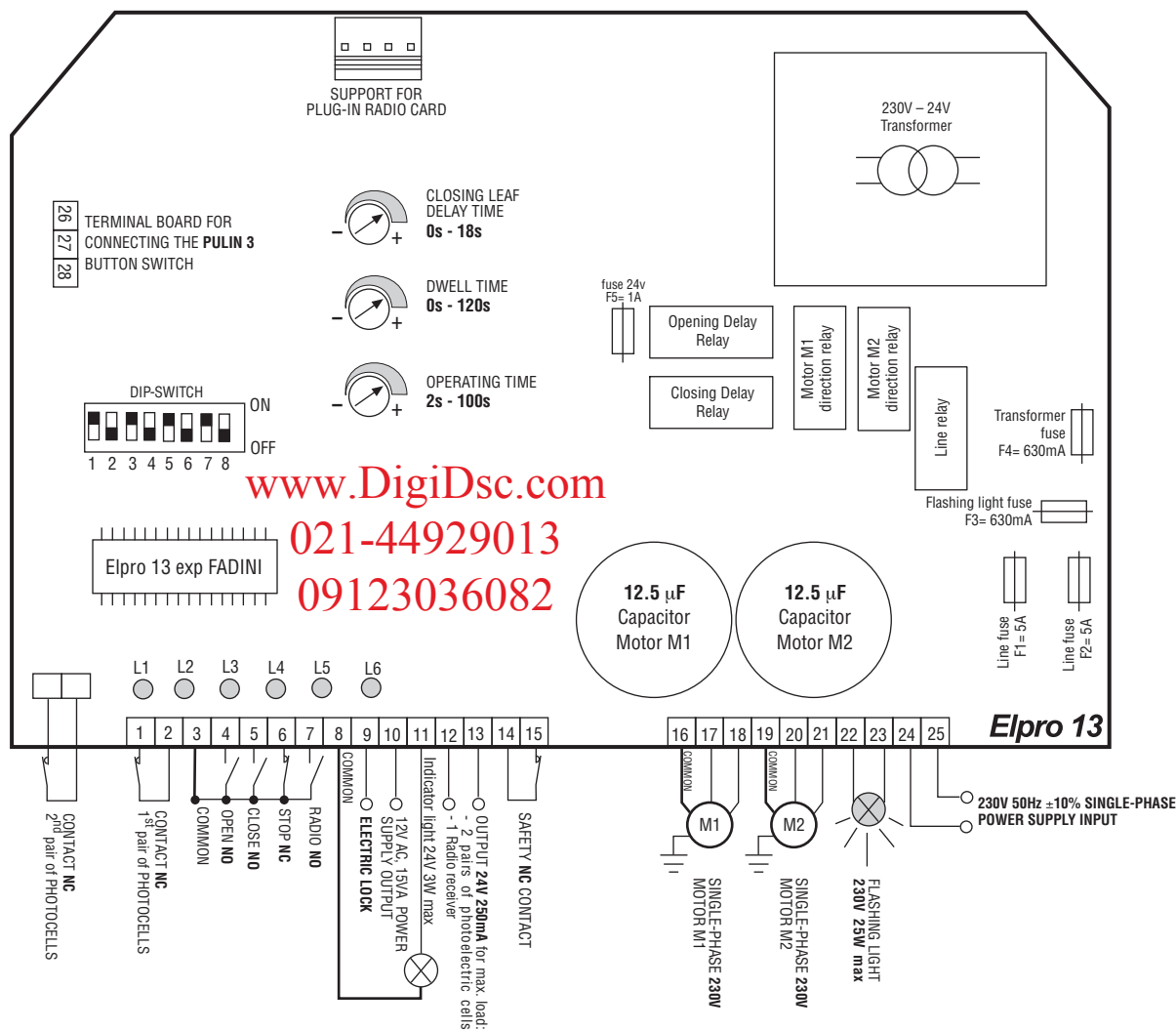


FADINI®
the gate opener
Made in Italy

GB

Elpro · 13 exp

230V SINGLE-PHASE PROGRAMMER FOR SWING GATE OPERATORS



General description: The Elpro 13 exp is an electronic microprocessor programmer for controlling and managing single-phase gate openers fitted on swinging gates. With its single-phase 230V±10% 50Hz power supply, it satisfies the Low Voltage 2006/95/CE and Electro Magnetic Compatibility regulations 2004/108/CE - 92/31/CEE safety standards and should therefore be installed by a qualified technician in compliance with applicable regulations. Programmed operation logic: automatic function, semi-automatic, pre-flashing, step-by-step by radio remote control, input for 2nd pair of photocells, electric lock output, pedestrian opening function, stroke reversing pulse function, operator status indicator light.

The Manufacturer declines responsibility for improper use of the programmer and reserves the right to amend and update this manual and the programmer without prior notice. Non-compliance with installation rules can cause serious damage to properties and people.



IMPORTANT:

- The programmer must be installed in a protected, dry place with its own protective case
- Apply a high sensitivity differential Thermo magnet switch type 0.03 A to the programmer's power supply
- Make sure that the electronic programmer has a 230V ±10% 50Hz power supply
- For power supply, flashing light use cable with wires with a section of 1.5 mm² up to a distance of 50m; for Limitswitches and other accessories, use cables with wires with 1mm² sections.
- If the Photocells are not used, insert a jumper between terminals 1 and 2 and if the 2nd pair is not used, jumper the relative terminals
- If no Button switches or key switches without stop button are used, insert a jumper between terminals 3 and 6 NC contact

IF THE PROGRAMMER DOES NOT WORK:

- Ensure that the electronic programmer has a 230V ±10% power supply
- Ensure that the electric motor has a 230V ±10% power supply
- For distances of over 50 metres, increase the section of the wires.
- Check the single-phase 230V supply voltage
- Check the fuses
- Check all normally closed NC contacts of the programmer
- Check that there is no drop in voltage between the programmer and the electric motor

Diagnostic LEDs

- L1= ON if the programmer is powered
- L2= Photocell, normally ON, switches off with obstacle present
- L3= Open, normally OFF, lights when Open pulse is received
- L4= Close, normally OFF, lights when Close pulse is received
- L5= Stop, normally ON, switches off when Stop impulse is given
- L6= Radio, normally OFF, lights when Radio pulse is received

DIP-SWITCH

- 1= **ON** 1st pair of Photocells stop gates during opening
 2= **ON** Radio does not invert during opening
 3= **ON** Closes in Automatic mode
 4= **ON** Pre-flashing of flashing light
 5= **ON** Step-by-step by radio with intermediate stop
 6= **ON** Single pedestrian when gate is closed
 7= **ON** Stroke reversing pulse function enabled when opening from closed gate position
 8= **ON** Eliminates the Leaf delay when opening. The motors start together


www.DigiDsc.com

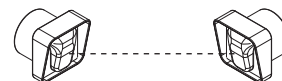
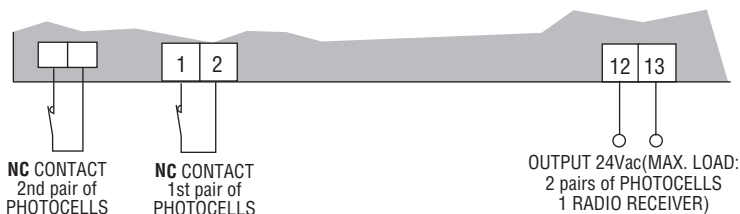
021-44929013

09123036082

LOW VOLTAGE ELECTRICAL CONNECTIONS

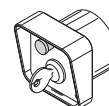
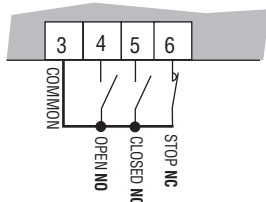
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Photocells: The 1st pair of Photocells (device installed on gate posts) is managed by Dip-Switch 1
 The 2nd pair of photocells (device installed inside entrance) stops during opening and changes direction when closing once the obstacle has been removed



DIP-SWITCH 1 (only for 1st pair of Photocells):

- ON:** Photocell stops gate on opening and changes direction when closing once the obstacle has been removed
1 OFF: Photocell no stop on opening and changes direction when closing in case of an obstacle

Pushbutton switch:**Radio contact:**

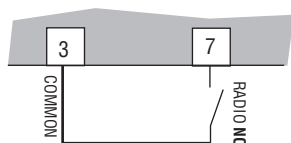
- Open/Close (normal) changes direction at each pulse
- Step-by-step with intermediate stop

DIP-SWITCH 2:

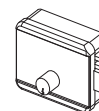
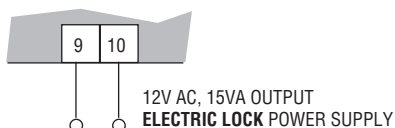
- ON:** Does not change direction during opening
2 OFF: Changes direction at each pulse

DIP-SWITCH 5:

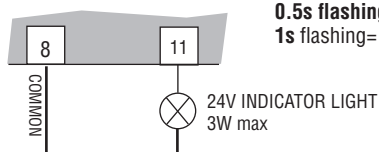
- ON:** Step-by-step with intermediate stop
5 OFF: Normal operation



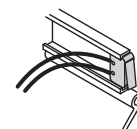
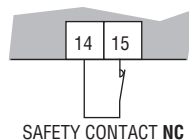
Electric lock: Mechanical accessory that locks the gate in closed position, recommended for installation with leaves over 1.80 m in length and non locking operators.
 Operating time: power supply for **2 seconds**, 100ms in advance before leaf movement starts

**24V 3W Indicator light showing leaf in movement:**

Indicator light **On** = Gate open
 Indicator light **Off** = Gate closed
0.5s flashing (fast) = closing movement
1s flashing = opening movement

**Safety contact:**

Microswitch on housing lid. If not used, short-circuit terminals 14 and 15



ELECTRIC POWER CONNECTIONS

16 17 18 19 20 21 22 23 24 25

Motors: Having terminated the electrical connections of the Motors, the three timers must be adjusted: **Leaf delay** on closing, **Dwell Time** and **Operating Time**



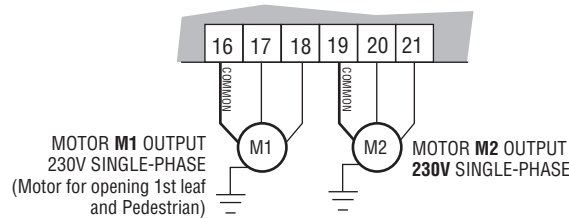
CLOSING LEAF DELAY TIME
0s - 18s



DWELL TIME (If Dip-Switch 3=ON)
0s - 120s



OPERATING TIME
2s - 100s



DIP-SWITCH 8:

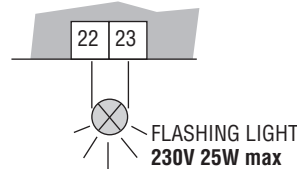
☐ ON: Eliminates the Leaf delay when opening.
The motors start together
☐ 8 OFF: Leaf delay when opening enabled

DIP-SWITCH 3

☐ ON = Closes in Automatic mode
☐ 3 OFF = Does not close in Automatic mode
Semi-automatic function

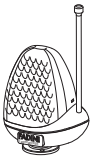
Flashing light:

Pre-flashing Dip-Switch 4=ON: Once the control pulse has been given the flashing light switches on and the operator starts 3 seconds later.



DIP-SWITCH 4:

☐ ON: Pre-flashing
☐ 4 OFF: Without pre-flashing



Programmer power supply:

Apply a high sensitivity differential Thermo magnet switch type 0.03A to the programmer's power supply.

The card requires a 230V 50Hz $\pm 10\%$ single-phase power supply once all the low voltage and power connections have been completed.



FUNCTIONS

Automatic / Semi-automatic function:

Automatic cycle: when an open pulse is given, the leaves open, they stop in dwell for the time set on the timer, after which they close automatically.

Semi-automatic cycle: when an open pulse is given, the leaves open. To close the leaves, give the close pulse.



DIP-SWITCH 3

☐ ON = Closes in Automatic mode
☐ 3 OFF = Does not close in Automatic mode
Semi-automatic function

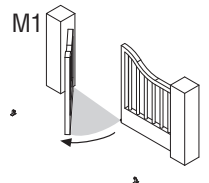
Pedestrian opening:

Pedestrian opening of a completely closed gate leaf is obtained giving an Open command, with **Dip-Switch no. 6=ON**, to terminals 3-4:

- a first opening command opens the **Motor 1** leaf
 - with a second command to terminals 3 and 4, the second leaf also opens.
- The transmitter is always enabled for both leaves with Radio Contact 7-8

DIP-SWITCH 6

☐ ON= Single-leaf pedestrian service
☐ 6 OFF= Normal service



Stroke reversing pulse:

Function (**Dip-Switch no. 7=ON**) that facilitates disengagement of the electric lock when the gate is completely closed, even in Pedestrian Opening mode: with the gate leaves closed, before opening they are pushed to close for **2 seconds**.

DIP-SWITCH 7:

☐ ON: Stroke reversing pulse function enabled
when opening from closed gate
☐ 7 OFF: Stroke reversing pulse deactivated

Step-by-step function:

Dip-Switch no. 5=ON At each pulse on the radio contact the gate performs open-stop-close-stop

DIP-SWITCH 5:

☐ ON: Step-by-step function enabled
☐ 5 OFF: Step-by-step function deactivated

External clock (Optional):

CLOCK: The Elpro 13 exp Programmer makes it possible to connect a normal clock for opening-closing

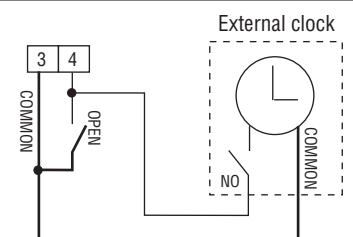
Wiring: connect in parallel the NO contact of the Clock with terminal no. 4 OPEN and no. 3 COMMON, activating automatic re-closing with the Dip-Switch no. 3=ON and setting the dwell time on the trimmer

Operation: programme the opening time on the clock, at the time set the gate will open and remain open (the flashing light switches off and the indicator light gives the signal with two quick flashes followed by a longer dwell) and will not accept any further command (including radio commands) until the time set on the clock has elapsed, at the end of which, following the dwell time, automatic reclosure will take place.

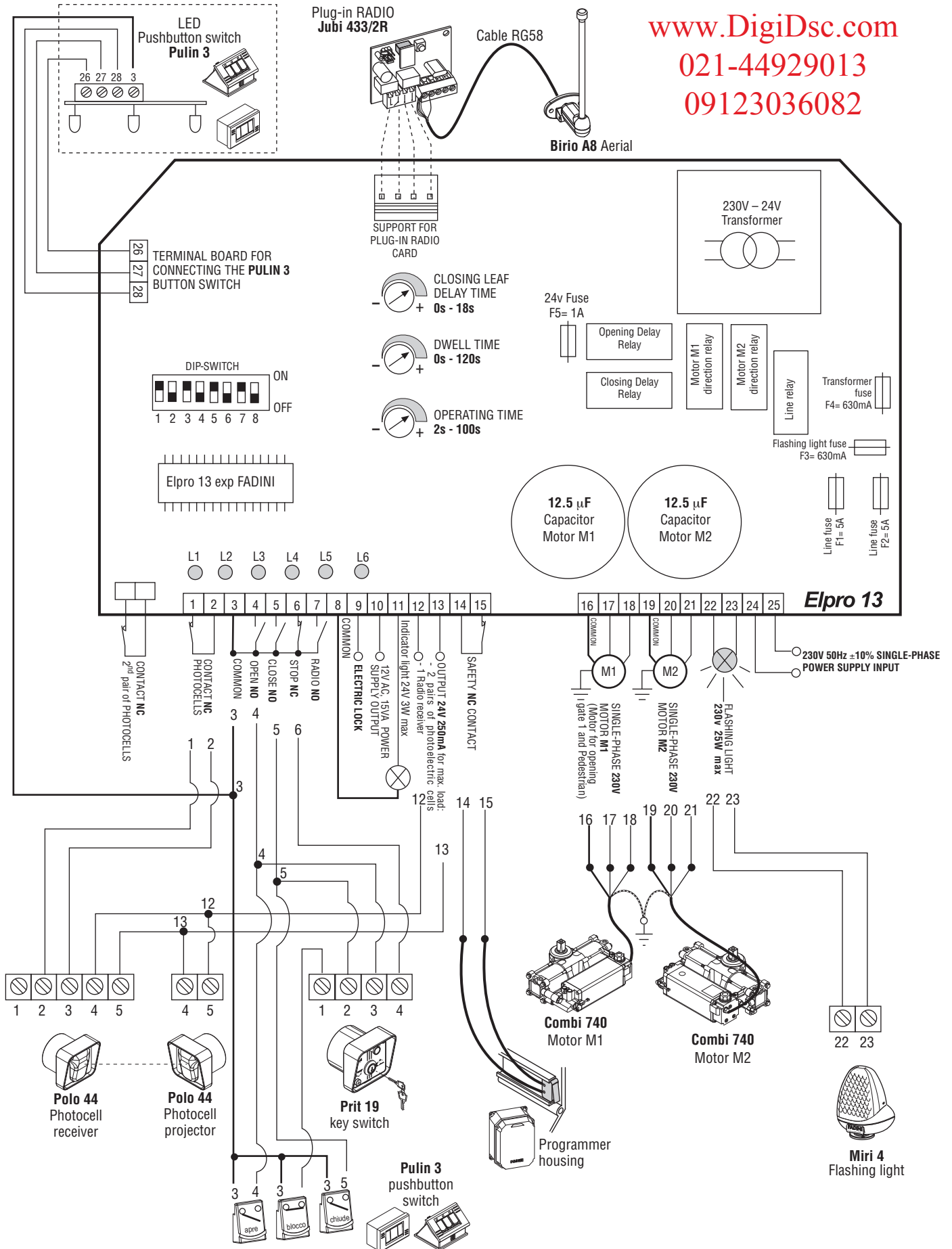


DIP-SWITCH No. 3=ON Automatic Closing

☐ ON = Closes in Automatic mode
☐ 3 OFF = Does not close in Automatic mode
Semi-automatic function



www.DigiDsc.com
 021-44929013
 09123036082





FADINI®
l'apricancello
Made in Italy

Elpro·13 exp

I

DICHIARAZIONE DI CONFORMITÀ

Ditta Costruttrice:



Via Mantova 177/A - C.P. 126 - 37053 Cerea (VR) Italy Tel. 0442 330422 - Fax 0442 331054
e-mail: info@fadini.net - www.fadini.net

DICHIARA SOTTO LA PROPRIA RESPONSABILITÀ CHE:

Modello: **Elpro·13 exp** programmatore elettronico a microprocessore

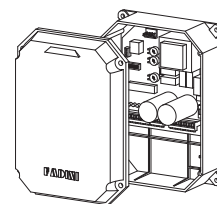
È CONFORME ALLA DIRETTIVA MACCHINE2006/42/CE

L'Elpro 13 exp 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/CE e 92/31 CEE



www.DigiDsc.com

021-44929013

09123036082

Al fine di certificare il prodotto il Costruttore dichiara sotto la propria responsabilità il rispetto della NORMATIVA DI PRODOTTOEN 13241-1

Data: 03-03-10

Meccanica Fadini s.n.c.
Direttore Responsabile

Il Responsabile



GB

MANUFACTURER'S DECLARATION OF CONFORMITY

Manufacturer:



Via Mantova 177/A - C.P. 126 - 37053 Cerea (VR) Italy Tel. 0442 330422 - Fax 0442 331054
e-mail: info@fadini.net - www.fadini.net

HEREBY DECLARES UNDER ITS OWN RESPONSIBILITY THAT:

Model: **Elpro·13 exp** electronic microprocessor programmer

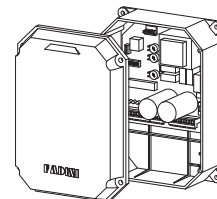
COMPLIES WITH MACHINERY DIRECTIVE2006/42/CE

Elpro 13 exp 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 Directive2006/95 CE
- Electromagnetic Compatibility Directive2004/108/CE & 92/31 CEE



In order to certify the product, the Manufacturer declares under its own responsibility that it complies with PRODUCT STANDARDEN 13241-1

Date: 03-03-10

Meccanica Fadini s.n.c.
Direttore Responsabile

Supervisor



F

DECLARATION DE CONFORMITE

Constructeur:



Via Mantova 177/A - C.P. 126 - 37053 Cerea (VR) Italy Tel. 0442 330422 - Fax 0442 331054
e-mail: info@fadini.net - www.fadini.net

DECLARE SOUS SA PROPRE RESPONSABILITE QUE :

Modèle **Elpro·13 exp** programmeur électronique à microprocesseur

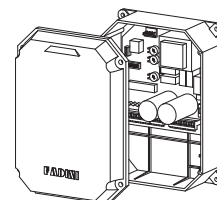
EST CONFORME A LA DIRECTIVE MACHINES.....2006/42/CE

L'Elpro 13 exp 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 improprie du produit.

Le produit est conforme aux normes suivantes:

- Directive Basse Tension2006/95 CE
- Directive Compatibilité Electromagnétique2004/108/CE et 92/31 CEE



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

Date: 03-03-10

Meccanica Fadini s.n.c.
Direttore Responsabile

Le Responsable



I DATI TECNICI

Alimentazione	230V - 50Hz
Uscita tensione	230V - 50Hz
Uscita bassa tensione	24V - 10W
Potenza di uscita	1'100W
Fusibili di linea	5A
Grado di protezione	IP 437
Condensatori	n°2 da 12,5µF - 400V

Trasformatore

Potenza	20VA
Nucleo magnetico	1,5W / spess. 0,5
Tensione	0 - 230V
Isolamento	4Kv x 1'

GB TECHNICAL FEATURES

Power supply	230V - 50Hz
Voltage output	230V - 50Hz
Low voltage output	24V - 10W
Power output	1'100W
Line fuses	5A
Protection Class	IP 437
Capacitors	2 x 12.5µF - 400V

Transformer

Power	20VA
Magnetic core	1.5W / thick. 0,5
Voltage	0 - 230V
Insulation	4Kv x 1'

F DONNEES TECHNIQUES

Alimentation	230V - 50Hz
Sortie tension	230V - 50Hz
Sortie basse tension	24V - 10W
Puissance sortie	1'100 W
Fusibles de ligne	5A
Degré de protection	IP 437
Condensateurs	2 de 12,5µF - 400V

Transformateur

Puissance	20VA
Noyau magnétique	1,5W / épaisseur. 0,5
Tension	0 - 230V
Isolation	4kV x 1'

D TECHNISCHE DATEN

Stromversorgung	230V - 50 Hz
Spannung, Ausgang	230V - 50 Hz
Niedrigspannung, Ausgang	24V - 10W
Leistung, Abgabe	1'100W
Linienicherungen	5A
Schutzart	IP 437
Kondensatoren	2 Stück 12,5µF - 400V

Transformator

Leistung	20 VA
Magnetkern	1,5W / Dicke 0,5
Spannung	0 - 230V
Isolierung	4 KV x 1'

E DATOS TÉCNICOS

Alimentación	230V - 50Hz
Salida tensión	230V - 50Hz
Salida baja tensión	24V - 10W
Potencia de salida	1'100W
Fusibles de línea	5A
Grado de protección	IP 437
Condensadores	n°2 de 12,5µF - 400V

Transformador

Potencia	20VA
Núcleo magnético	1,5W / esp. 0,5
Tensión	0 - 230V
Aislamiento	4Kv x 1'

NL TECHNISCHE GEGEVENS

Voeding	230V - 50Hz
Uitgangsspanning	230V - 50Hz
Laagspanningsuitgang	24V - 10W
Uitgangsvermogen	1'100W
Lijnzekeringen	5A
Beveiligingsgraad	IP 437
Condensatoren	2 van 12,5µF - 400V

Transformator

Vermogen	20VA
Magnetische kern	1,5W / dikte 0,5
Spanning	0 - 230V
Isolatie	4Kv x 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.



I Direttiva 2002/96/CE
Smaltimento dei materiali
elettrici ed elettronici
VIETATO GETTARE NEI RIFIUTI
MATERIEI NOCIVI PER L'AMBIENTE

GB 2002/96/CE Directive
for waste electrical and
electronic equipments
DISPOSE OF PROPERLY
ENVIRONMENT NOCIOUS
MATERIALS



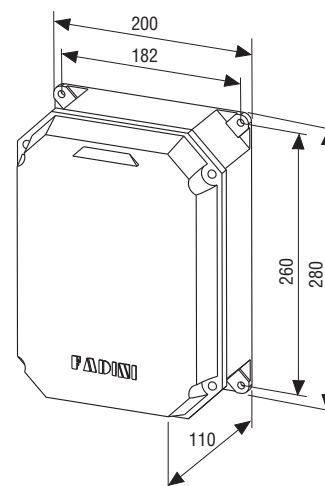
**meccanica
FADINI**
s.r.l.

Via Mantova, 177/A - C.P. 126 - 37053 Cerea (Verona) Italy

Tel. +39 0442 330422 r.a. - Fax +39 0442 331054

e-mail: info@fadini.net - www.fadini.net

La ditta costruttrice si riserva di apportare modifiche al presente libretto senza preavviso



www.DigiDsc.com

021-44929013

09123036082