

FADINI
l'apricancello
Made in Italy

LIBRETTO DI ISTRUZIONI

I

Elpro • 10 D.S.A.

PER AUTOMAZIONI TRIFASE/MONOFASE
SU CANCELLI SCORREVOLI

- **D.S.A.** (Dispositivo Sicurezza Autotest)
- FRENO ELETTRONICO
- FUNZIONE PASSO PASSO
- UOMO PRESENTE
- APERTURA PEDONALE

pag. 1, 2, 3, 4, 11, 12

INSTRUCTIONS

GB

Elpro • 10 D.S.A.

TO SUIT THREE- AND SINGLE-PHASE
AUTOMATIONS FOR SLIDING GATES

- **D.S.A.** (Autotest Safety Device)
- ELECTRONIC BRAKE
- STEP BY STEP
- HOLD-ON SWITCHED (DEADMAN) CONTROL
- PEDESTRIAN OPENING

page 1, 5, 6, 7, 11, 12

MANUEL D'INSTRUCTION

F

Elpro • 10 D.S.A.

POUR AUTOMATIONS TRIPHASEES/MONOPHASEES
SUR PORTAILS COULISSANTS

- **D.S.A.** (Dispositif Sécurité Autotest)
- FREIN ELECTRONIQUE
- FONCTION PAS-PAS
- HOMME MORT
- OUVERTURE PIETON

page 1, 8, 9, 10, 11, 12

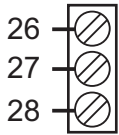
Dis. N. 3442



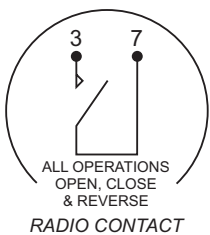
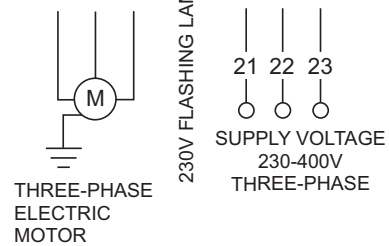
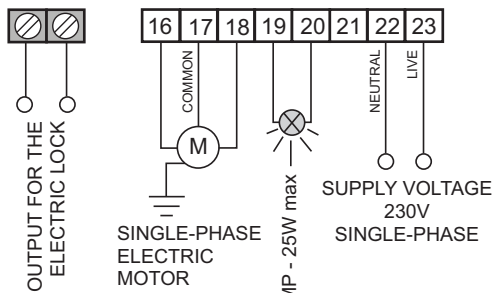
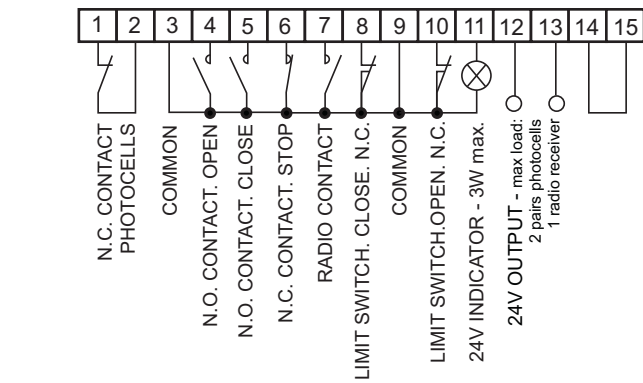
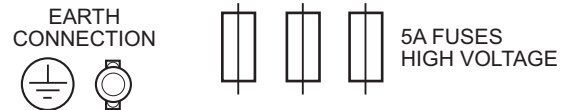
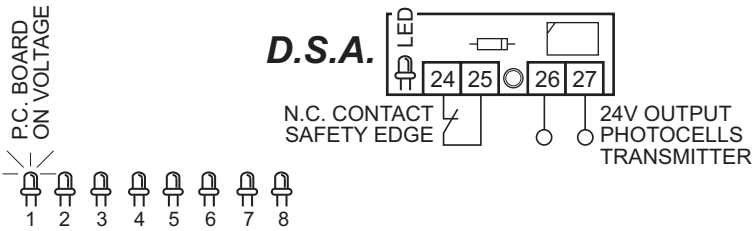
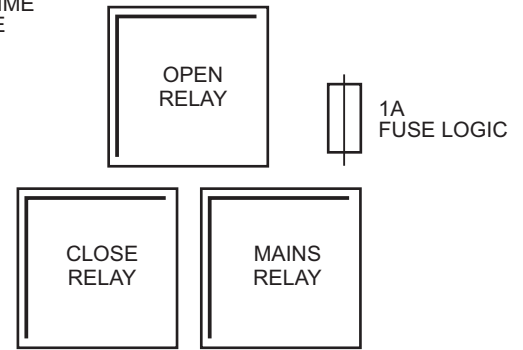
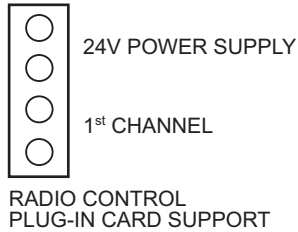
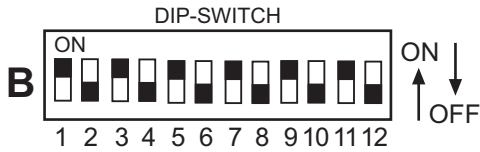
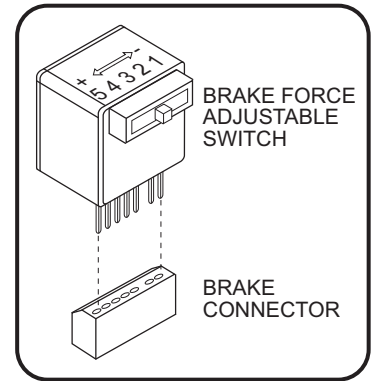
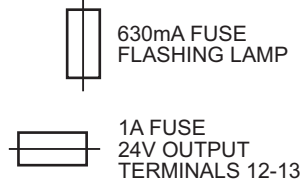
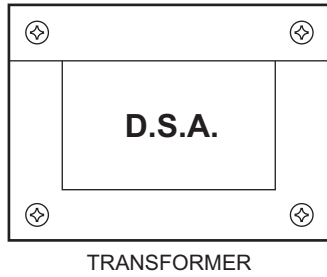
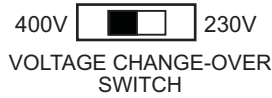
meccanica
FADINI
s.n.c.

Via Mantova, 177/A - 37053 Cerea (Verona) Italy
Tel. +39 0442 330422 r.a. - Fax +39 0442 331054
e-mail: info@fadini.net - www.fadini.net





TERMINALS FOR THE CONNECTION OF THE PUSH BUTTONS PULIN 3



N.W.: should more pairs of photocells be required than the recommended quantity, fit an auxiliary transformer outside the control box.

N.W.: this panel is tested to operate gates only through fadini accessories. no warranty is acknowledged by the manufacturer in case that other accessories are used or non conforming applications are made without the manufacturer's approval.



FADINI
the gate opener
Made in Italy

GB

Elpro • 10 D.S.A.

FOR SLIDING GATES THREE- AND SINGLE-PHASE,
FITTED WITH ELECTRONIC BRAKE AND **D.S.A.**

ELECTRONIC CONTROL PANEL ELPRO 10 D.S.A. FOR SINGLE/THREE-PHASE SLIDING GATE SYSTEMS

FUNCTIONS: AUTOMATIC - HOLD ON SWITCHED CONTROL (DEADMAN CONTROL) - PARTIAL PEDESTRIAN OPENING - STEP BY STEP BY THREE PUSH BUTTONS
- SAFETY PHOTO CELL SELFTESTING (AUTOTEST) - ANTI-CRUSH SAFETY EDGE - ELECTRIC LOCK OUTPUT - ADJUSTABLE ELECTRONIC BRAKE CONTROL.

DESCRIPTION OF THE FUNCTIONING WITH SLIDING GATES

D.S.A. PHOTOTEST SAFETY DEVICE:

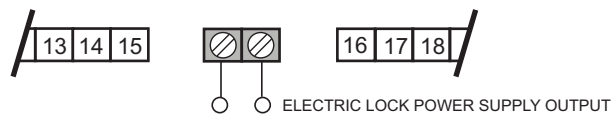
By connecting the D.S.A. card to the terminals 26 - 27 the photo cell transmitter is 24V power supplied. In case of more photocells, connections are in parallel, the receivers are connected to the 24V output, terminals 12 - 13. Always bring contact to terminal 1 - 2 in the main board for all the photocells of the systems. Once satisfied that the electrical connections are all right, set 9 and 10 of Dip-switch "B" as described in the section setting the safety devices of the system.

ADJUSTING D.S.A. SAFETY EDGE:

The N.C. connection of the D.S.A. card to terminals 24 - 25 allows control of the safety edge. Should more safety edges be required, these are to be series connected. Whenever an obstacle touches the safety edge, the system reverses the gate travel direction for a short spell to allow the removal of the obstacle. Reversing can be set by Dip-switch "B" No. 11 - 12 as described in the respective section.

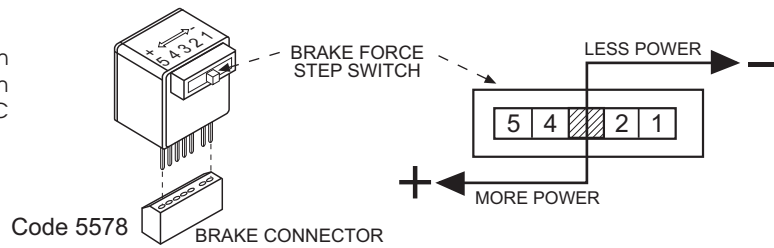
ELECTRIC LOCK:

Connection is by the provided terminals.



ADJUSTING BRAKE POWER:

The force of the brake can be controlled by a step switch from step 1 to step 5. (Optional) the switch can be fitted in the provided connector positioned on the electronic PC board.



FUNCTION LOGIC OF THE CONTROL PANEL:

The motor run OPEN/CLOSE time must be set to a longer time than that of the actual travel of the gate. The DWELL ie. wait time before re-closing is to meet the site requirements. On pulsing to open, the lamp goes on first and after three seconds the motor starts. On dwell time the flashing lamp is still on, after the gate has reached the fully closed position the lamp continues to stay on for three more seconds. Pre-flashing can be eliminated by Dip-switch "B" No.4.

FAULT DETECTION LED INDICATORS:

- LED No. 1: It switches on when voltage is supplied.
- LED No. 2: "Photocells" normally on. It switches off when the photo cells are obstructed.
- LED No. 3: "Open" normally off. It switches on when the respective switch is activated.
- LED No. 4: "Close" normally off. It switches on when the respective switch is activated.
- LED No. 5: "Stop" normally on. It switches off when the respective switch is activated.
- LED No. 6: "Radio" normally off. It switches on by pulsing either the remote control, keyswitch or push buttons.
- LED No. 7: "Limit switch. Close" normally on. It switches off when the gate is fully closed.
- LED No. 8: "Limit switch. Open" normally on. It switches off when the gate is fully open.

NOTES TO WIRING OPERATIONS:

- 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) Earth the equipment.
- 3) Bridge terminals 1 - 2 if you do not require any photocells.
- 4) Should two sets of photo cells be required, these are to be series connected to terminals 1 - 2, contact normally closed. If mounted to the same side of the gate, cross install them ie. projector of one pair next to the receiver of the second pair.
- 5) Bridge terminals 3 - 6 if you do not require any keyswitch or push buttons.
- 6) Fit the mains to the control box with a 0.03A high sensitivity magnetic-thermal circuit breaker.
- 7) For single-phase motors the cable square section must not be inferior to 1,5 mm².
- 8) The 24 V~ output ie. terminals 9 - 10 can take 2 pairs of photocells and 1 radio receiver maximum. Should extra photo cells or receivers be required, fit an auxiliary transformer outside the control box.

IN CASE OF FAILURE OF THE PANEL:

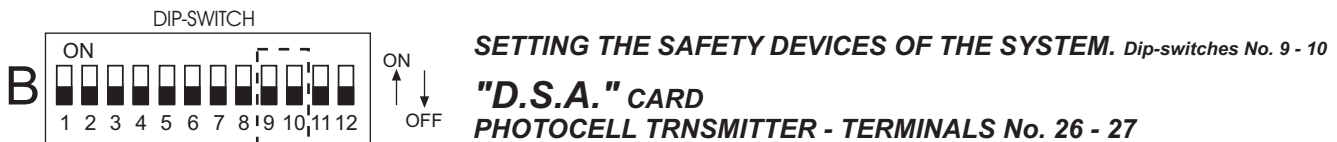
- 1) Check voltage: it must be 230V single-phase / 400V three-phase.
- 2) Check high voltage fuses.
- 3) Check low voltage fuses.
- 4) Check photocells: contact must be normally closed.
- 5) Check voltage from the control box to the electric motor in case power has dropped.

SETTING A PROGRAM WITH ELPRO 10 D.S.A. DIP-SWITCH

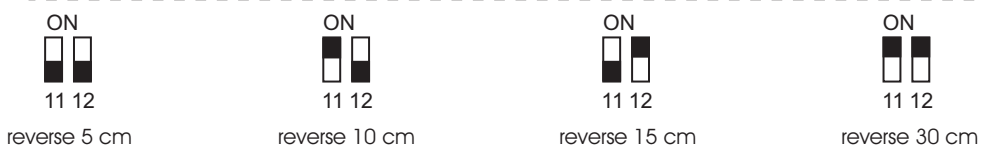
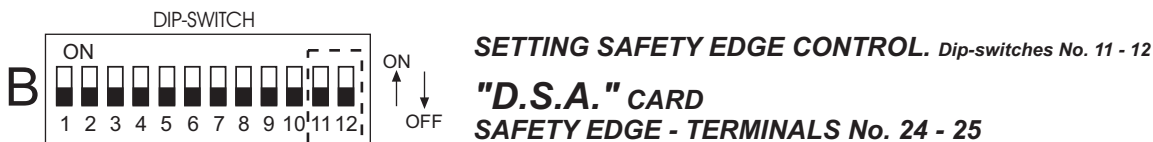


- No. 1 ON = PHOTOCELLS. STOP DURING "OPEN" CYCLE
- No. 1 OFF = PHOTOCELLS. NO STOP DURING "OPEN" CYCLE. REVERSE ON CLOSING
- No. 2 ON = REMOTE CONTROL. NO REVERSE TRAVEL ON OPENING
- No. 2 OFF = REMOTE CONTROL. REVERSE TRAVEL
- No. 3 ON = AUTOMATIC RE-CLOSING
- No. 3 OFF = NO AUTOMATIC RE-CLOSING
- No. 4 ON = PRE-FLASHING
- No. 4 OFF = NO PRE-FLASHING
- No. 5 ON = REMOTE CONTROL. STEP BY STEP. STOP IN BETWEEN
- No. 5 OFF = REMOTE CONTROL. GATE CAN BE REVERSED WHILE TRAVELLING
- No. 6 ON = "DEADMAN CONTROL" (HOLD-ON SWITCHED), SET No.3 TO OFF
- No. 6 OFF = OUT OF SERVICE. NORMAL OPERATING MODE

"HOLD ON SWITCHED CONTROL": any open or close operations require that the respective switch button or key is hold on pressed or turned until the end of the operation.

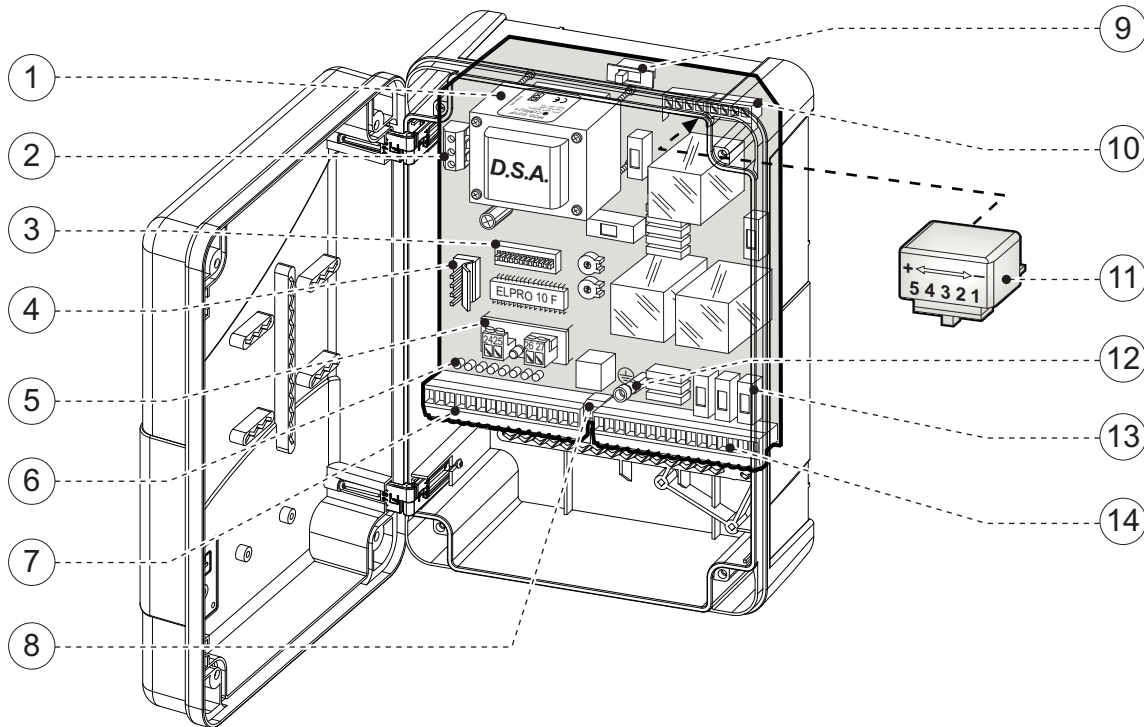


- No. 9 ON = PHOTOCCELL CONTROL TEST BEFORE GATE OPERATION
(ie. phototest with the photocell transmitter connected to the provided output)
- No. 9 OFF = PHOTOTEST OUT OF SERVICE
- No.10 ON = PHOTOCCELL ALIGNMENT CONTROL TEST - NO OBSTRUCTION BEFORE GATE OPERATION
- No.10 OFF = TEST OUT OF SERVICE



N.W.: The electronic control panel Elpro 10 D.S.A. has been designed to suit any FADINI sliding gate operator and accessories. The manufacturer is not responsible for incorrect use of Elpro 10 D.S.A. with other applications or with accessories that are not FADINI compatible, for misuse of the electronic P.C. board and damages derived from it.

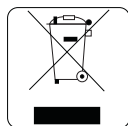
All the electrical connections are to be made as per the instructions and diagrams here described. Supply the terminals 21 - 22 - 23 with 230/400V, 50Hz voltage. The "red led" No.1 switches on and stays on as long as the board is properly supplied. Set DIP-SWITCHES "B" to meet the site requirements.



I	GB	F
COMPONENTI	COMPONENTS	COMPOSANTS
1 - Trasformatore ($V_{in}=230-400V - V_{out} 24V - 1A$) 2 - Morsetto per il collegamento della pulsantiera Pulin 3 3 - Dip-switch B 4 - Innesco scheda radio comando 5 - Scheda D.S.A. (Dispositivo Sicurezza Autotest) 6 - Led di autodiagnostica 7 - Morsetti per il collegamento elettrico 8 - Morsetto per il collegamento elettroserratura 9 - Levetta cambio tensione 400V - 230V 10 - Connettore freno 11 - Regolatore forza freno a scatto 12 - Morsetto per il collegamento massa a terra 13 - Fusibili alta tensione 14 - Morsetti per il collegamento elettrico	1 - Transformer ($V_{in}=230-400V - V_{out} 24V - 1A$) 2 - Terminal to connect the push buttons Pulin 3 3 - Dip-switch B 4 - Remote control card connector 5 - D.S.A. card (Autotest Safety Device) 6 - Fault detecting leds 7 - Terminal board 8 - Electric lock terminals 9 - Voltage changeover switch 400V - 230V 10 - Brake connector 11 - Brake force adjustable switch 12 - Earth connection 13 - High voltage fuses 14 - Terminal board	1 - Transformateur ($V_{in}=230-400V - V_{out} 24V - 1A$) 2 - Borne pour le raccordement du bornier Pulin 3 3 - Dip-switch B 4 - Enfichage carte radio commande 5 - Carte D.S.A. (Dispositif Sécurité Autotest) 6 - Led de auto-contrôle 7 - Bornes pour le raccordement électrique 8 - Borne pour le raccordement de la serrure électrique 9 - Commutateur change tension 400V - 230V 10 - Connecteur frein 11 - Reglage force frein 12 - Borne pour la mise à la terre 13 - Fusibles haute tension 14 - Bornes pour le raccordement électrique
DATI TECNICI	TECHNICAL SPECIFICATIONS	DONNEES TECHNIQUES
Alimentazione 230/400V - 50Hz Uscita tensione 230V - 25W Uscita bassa tensione 24V - 10W Potenza in uscita M.E. mass. 1'100W Fusibili di linea 5A Fusibili secondari 1A - 630mA Comando Apre - Stop - Chiude Dimensioni contenitore 280 x 200 x 110mm Grado di protezione IP 473 Relè Elesta marchio VDE-CSA-DEMCO-SEV 10A - 230V 4A - 400V	Supply voltage 230/400V - 50Hz Voltage output 230V - 25W Low voltage output 24V - 10W E.M. max. power output 1'100W Mains fuses 5A Secondary fuses 1A - 630mA Logic Open - Stop - Close Box dimensions 280 x 200 x 110mm Protection standards IP 473 Elesta relay approval marks VDE-CSA-DEMCO-SEV 10A - 230V 4A - 400V	Alimentation 230/400V - 50Hz Sortie tension 230V - 25W Sortie basse tension 24V - 10W Puissance en sortie M.E. max. 1'100W Fusibles de ligne 5A Fusibles supplémentaires 1A - 630mA Commande Ouvre - Arrêt - Ferme Dimensions boîte progr. 280 x 200 x 110mm Degré de protection IP 473 Relais Elesta marque VDE-CSA-DEMCO-SEV 10A - 230V 4A - 400V
TRASFORMATORE	TRANSFORMER	TRANSFORMATEUR
Potenza 80VA Nucleo magnetico 1,5W / Spess. 0,50 Tensione 0 - 230V Uscita 0 - 12 - 18 - 24V Frequenza di esercizio 50 / 60Hz Isolamento 4 Kv x 1'	Power rate 80VA Magnetic core 1,5W / 0.50 Thick. Voltage 0 - 230V Outputs 0 - 12 - 18 - 24V Working frequency 50 / 60Hz Insulation 4 Kv x 1'	Puissance 80VA Noyau magnétique 1,5W / Epaiss. 0,50 Tension 0 - 230V Sortie 0 - 12 - 18 - 24V Fréquence de service 50 / 60Hz Isolement 4 Kv x 1'
N.B.:	N.W.:	N.B.:
per applicazioni speciali, ad esempio accensioni luci, telecamere, ecc..., bisogna usare RELÈ STATICI, altrimenti con relè normali si creano disturbi al microprocessore.	For special applications ie. to switch on lights - CCTV etc..., SOLID STATE RELAYS are recommended to prevent the micro-processor from being affected.	pour des applications spéciales, comme allumage des lumières, caméras, ecc..., il faut utiliser des RELAIS STATIQUES. Avec les relais normaux on peut avoir des brouillages sur le microprocesseur.



- 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.



I Direttiva **2003/108/CE**
Smaltimento dei materiali
elettrici ed elettronici

**VIETATO GETTARE NEI RIFIUTI
MATERIALI NOCIVI PER L'AMBIENTE**

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

**DISPOSE OF PROPERLY
ENVIRONMENT-NOXIOUS
MATERIALS**

F Directive **2003/108/CE**
Elimination des matériels
Electriques et Electroniques

**INTERDIT JETER DANS LE DECHETS
LES MATERIELS NUISIBLES POUR
L'ENVIRONNEMENT**



Via Mantova 177/A - 37053 Cerea (Verona) Italy - Tel. +39 0442 330422 - 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