CENTRALE DI COMANDO A MICROPROCESSORE PER CANCELLI A BATTENTE

MICROPROCESSOR CONTROL UNIT FOR HINGED GATES

ARMOIRE DE COMMANDE À MICROPROCESSEUR POUR PORTAILS BATTANTS

CENTRAL DE MANDO CON MICROPROCESADOR PARA PORTONES DE TIPO BATIENTE

MIKROPROZESSOR-STEUEREINHEIT FÜR FLÜGELTORE

JA574

ISTRUZIONI PER L'USO – NORME DI INSTALLAZIONE

USE AND INSTALLATION INSTRUCTIONS

INSTRUCTIONS POUR L'EMPLOI – NORMES D'INSTALLATION

INSTRUCCIONES PARA EL USO – NORMAS DE INSTALACIÓN

BETRIEBSANLEITUNG - INSTALLATIONSVORSCHRIFTEN

GENIUS®

COMPANY
WITH QUALITY SYSTEM
CERTIFIED BY DNV
=ISO 9001/2000=

CE

CONTROL BOARD JA574

1. WARNINGS

Important: Before attempting any work on the control board (connections, maintenance), always turn off power.

- **Install, upstream of the system, a differential thermal breaker (Residual Current Device) with adequate tripping threshold.**
- **Connect the earth cable to the appropriate terminal on the J3 connector of the equipment (see fig.2).**
- **Always separate power cables from control and safety cables (push-button, receiver, photocells, etc.). To avoid any electric noise, use separate sheaths or a shielded cable (with earthed shield).**

2. TECHNICAL SPECIFICATIONS

Power supply	230 V~ (+6% -10%) - 50 Hz
Absorbed power	10 W
Motor max. load	800 W
Accessories max. load	0,5 A
Operating ambient temperature	-20 °C +55 °C
Protection fuses	2 (see fig. 1)
Function logics	Automatic / Semi-automatic / "Stepped" safety devices / Semi-automatic B / Dead-man C / "Stepped" semi-automatic
Opening/closing time	Programmable (from 0 to 120 s)
Pause time	0, 10, 20, 30, 60, 120 s
Closing leaf delay	0, 5, 10, 20 s
Opening leaf delay	2 s (Can be disabled with the dip-switch)
Thrust force	Dip-switch adjustable on 8 levels for each motor
Terminal board inputs	Open / Open free leaf / Stop / Opening safety devices / Closing safety devices / Power supply + Earth
Terminal board outputs	Flashing lamp - Motors - 24 Vdc accessories power supply - Fail safe
Rapid connector	Rapid connector 5 pins
Selectable functions	Logics and pause times - Thrust force - Opening and closing leaf delay - Reversing stroke - Fail safe - Closing safety devices logic - Pre-flashing
Programming key	*Simple* or *Advanced* work time learning (independent work times + opening and closing deceleration)

3. LAYOUT AND COMPONENTS

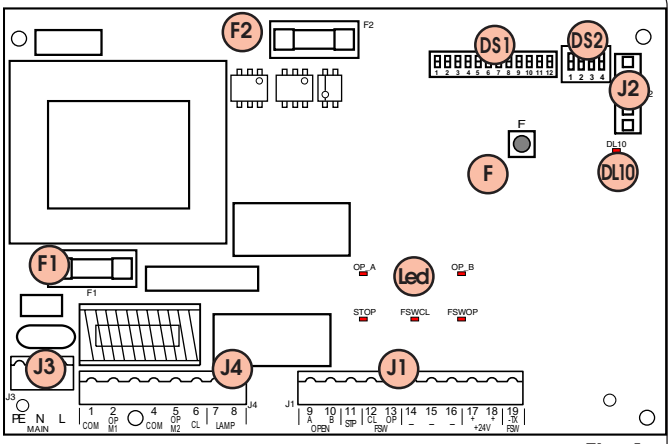
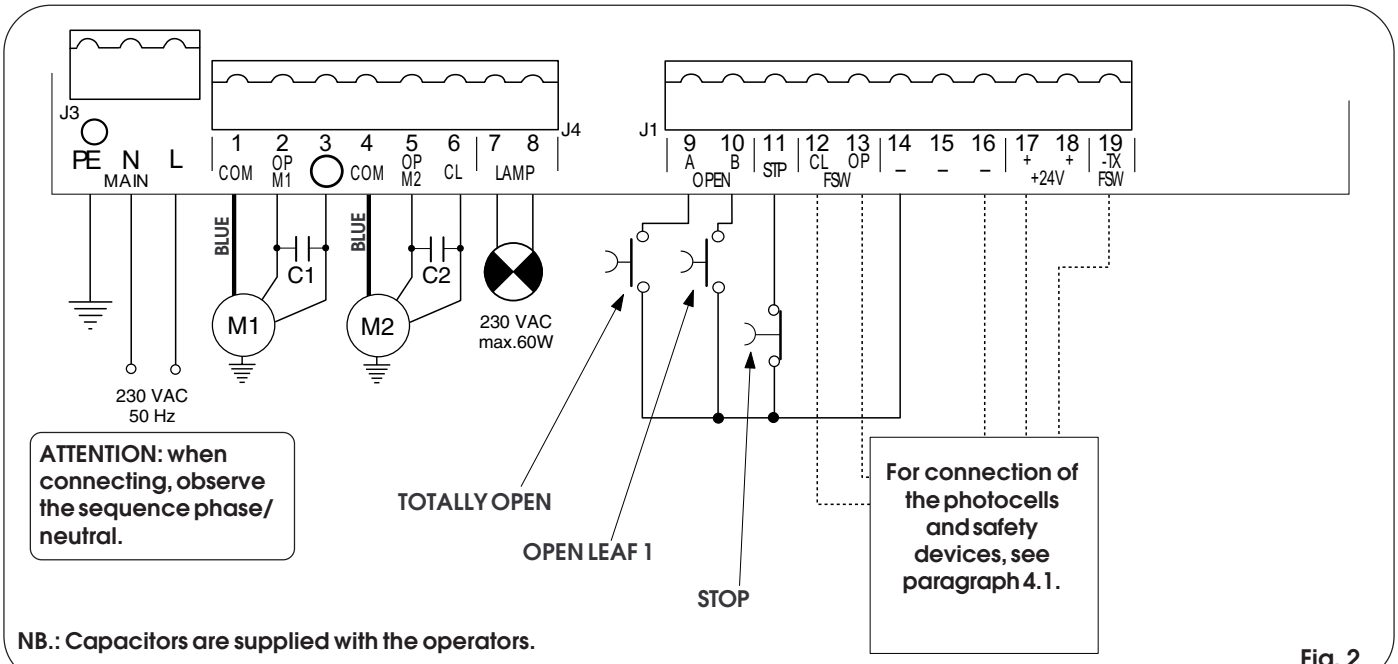


Fig. 1

Led OP_A	TOTALLY OPEN LED
Led OP_B	LED: OPEN LEAF 1 / CLOSE
Led STOP	LED STOP
Led FSWCL	LED: CLOSING SAFETY DEVICES
Led FSWOP	LED: OPENING SAFETY DEVICES
DL10	LED: TIME LEARNING SIGNALLING
J1	LOW VOLTAGE TERMINAL BOARD
J2	RAPID CONNECTOR 5 PINS
J3	230 VAC POWER SUPPLY TERMINAL BOARD
J4	MOTORS AND FLASHING LAMP CONNECTION TERMINAL BOARD
F1	MOTORS AND TRANSFORMER PRIMARY WINDING FUSE (F 5A)
F2	LOW VOLTAGE AND ACCESSORIES FUSE (T 800mA)
F	TIME LEARNING SELECTION PUSH-BUTTON
DS1	1ST GROUP OF MICROSWITCH PROGRAMMING
DS2	2ND GROUP OF MICROSWITCH PROGRAMMING

4. ELECTRIC CONNECTIONS



NB.: Capacitors are supplied with the operators.

Fig. 2

4.1. Connection of photocells and safety devices

Before connecting the photocells (or other devices) we advise you to select the type of operation according to the movement area they have to protect (see fig.3):

Opening safety devices: they operate only during the gate opening movement and, therefore, they are suitable for protecting the area between the opening leaves and fixed obstacles (walls, etc) against the risk of impact and crushing.

Closing safety devices: they operate only during the gate closing movement and, therefore, they are suitable for protecting the closing area against the risk of impact.

Opening/closing safety devices: they operate during the gate opening and closing movements and, therefore, they are suitable for the opening and closing areas against the risk of impact.

It is recommends use of the lay-out in fig. 4 (in the event of fixed obstacles at opening) or in fig. 5 (no fixed obstacles).

N.B. If two or more devices have the same function (opening or closing), they should be connected to each other in series (see fig. 12). N.C. contacts must be used.

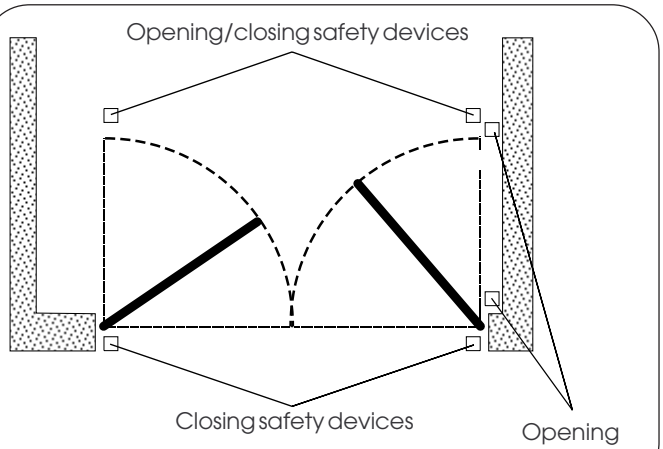


Fig. 3

Connection of a pair of closing photocells, a pair of opening photocells and a pair of opening/closing photocells (recommended lay-out)

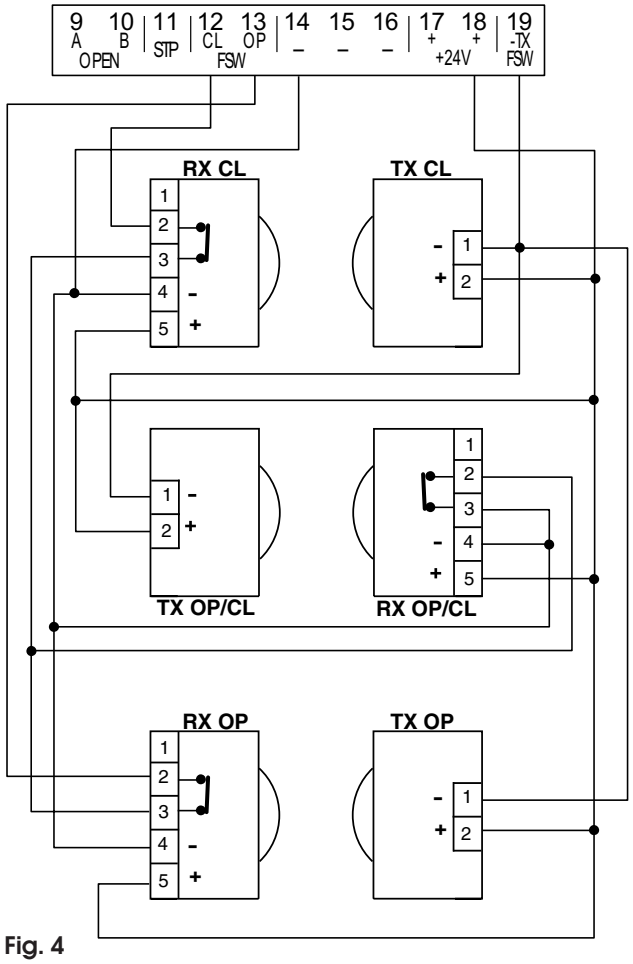


Fig. 4

Connection of a pair of closing photocells and a pair of opening/closing photocells (recommended lay-out)

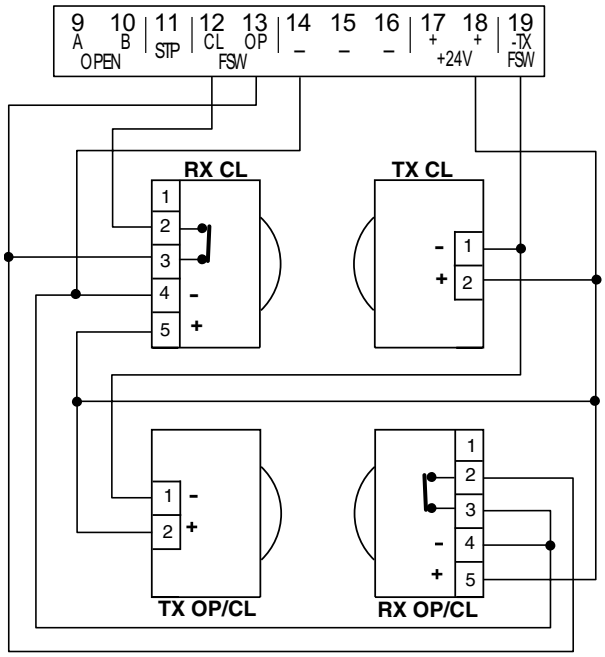


Fig. 5

Connection of a closing safety device and an opening safety device

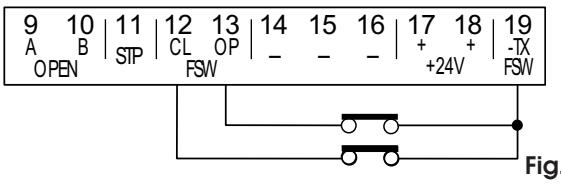


Fig. 6

Connection of no safety device

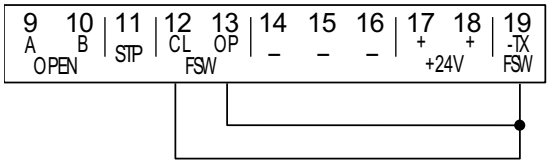


Fig. 7

Connection of 1 pair of opening photocells

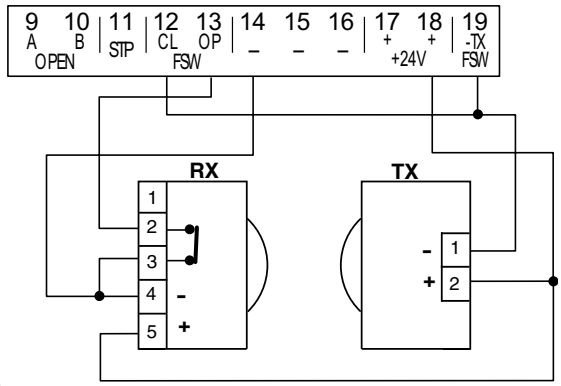


Fig. 8

Connection of 1 pair of closing photocells

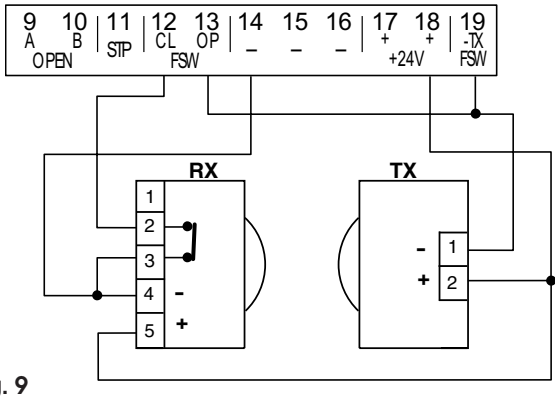


Fig. 9

Connection of a pair of opening photocells and a pair of closing photocells

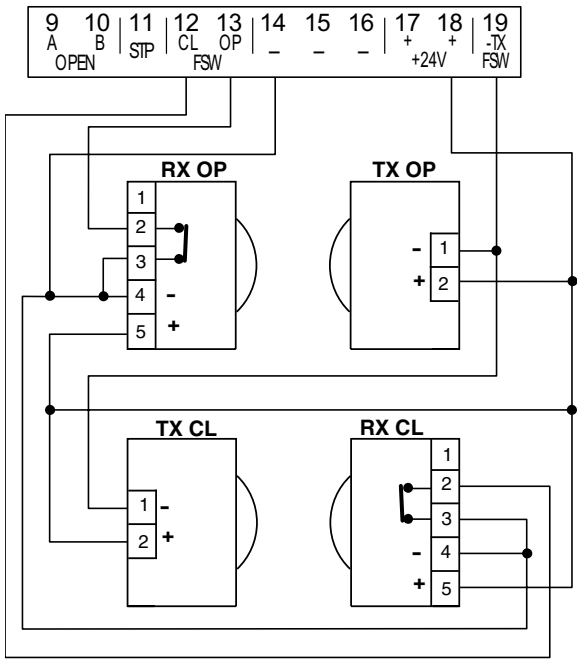


Fig. 10

Connection of two pairs of closing photocells

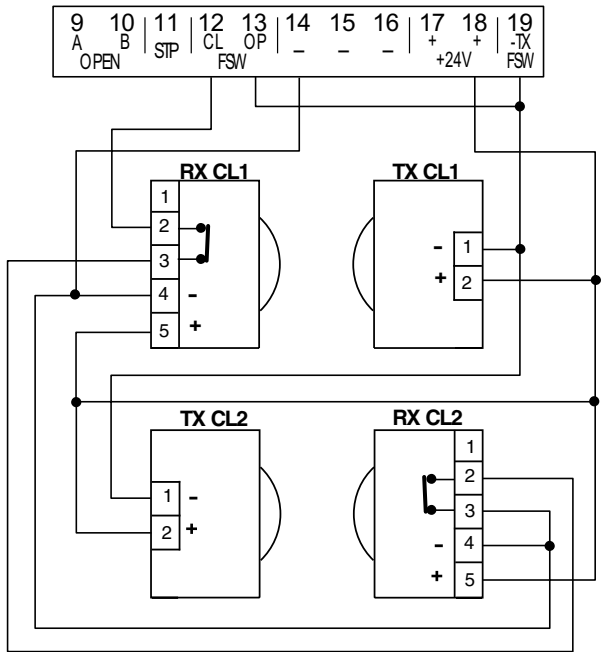


Fig. 11

Connection of 2 N.C. contacts in series
(e.g. Photocells, Stop)

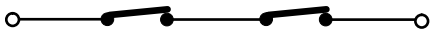


Fig. 12

Connection of 2 N.O. contacts in parallel
(e.g. Open A, Open B)

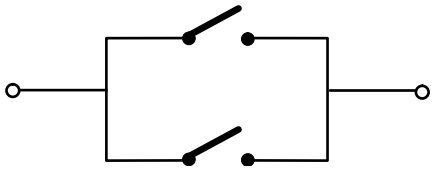


Fig. 13

4.2. Terminal board J3 - Power supply (fig. 2)

PE: Earth connection
N : 230 V~ power supply (Neutral)
L : 230 V~ power supply (Line)

NB.: *For correct operation, the board must be connected to the earth conductor in the system. Install an adequate differential thermal breaker (RCD) upstream of the system.*

4.3. Terminal board J4 - Motors and flashing lamp (fig. 2)

M1 : Terminal 1/2/3 = COM / OP / CL: Connection to Motor 1
Can be used in the single-leaf application
M2 : Terminal 4/5/6 = COM / OP / CL: Connection to Motor 2
Cannot be used in the single-leaf application
LAMP : Terminal 7/8 = Flashing lamp output (230 V ~)

4.4. Terminal board J1 - Accessories (fig. 2)

OPEN A - Terminal 9 plus a negative = "Total Opening" command (N.O.): any pulse generator (push-button, detector, etc.) which, by closing a contact, commands opening and/or closing of both gate leaves.

To install several full opening pulse generators, connect the N.O. contacts in parallel (see fig. 13).

OPEN B - Terminal 10 plus a negative = "Partial Opening" command (N.O.) / Closing: any pulse generator (push-button, detector, etc.) which, by closing a contact, commands opening and/or closing of the leaf driven by motor M1. In the **B** and **C** logics, it always commands closing of both leaves.

To install several partial opening pulse generators, connect the N.O. contacts in parallel (see fig. 13).

STP - Terminal 11 plus a negative = STOP contact (N.C.): any device (e.g. a push-button) which, by opening a contact, is able to stop gate movement.
To install several STOP devices, connect the N.C. contacts in series (see fig. 12).

***NB.:** If STOP devices are not connected, jumper connect the **STP** terminals and **-** common.*

CL FSW - Terminal 12 plus a negative = Closing safety devices contact (N.C.): The purpose of the closing safety devices are to protect the leaf movement area during closing. During closing, in the **A-SP-E-EP** logics, the safety devices reverse the movement of the gate leaves, or stop and reverse the movement when they are released (see programming of microswitch **DS2 - SW2**). During the closing cycle in logics **B** and **C**, they interrupt movement. They never operate during the opening cycle. If the **closing safety devices** operate when the gate is open, they prevent the leaf closing movement.

***NB.: If no closing safety devices are connected, jumper connect terminals CL and -TX FSW** (fig. 7).*

OP FSW - Terminal 13 plus a negative = Opening safety devices contact (N.C.): The purpose of the opening safety devices are to protect the leaf movement area during opening. During opening, in the **A-SP-E-EP** logics, the safety devices stop the movement of the gate leaves and reverse the movement when they are released. During the opening cycle in logics **B** and **C**, they interrupt movement. They never operate during the closing cycle.
If the **opening safety devices** operate when the gate is closed, they prevent the leaf opening movement.

***NB.: If no opening safety devices are connected, jumper connect inputs OP and -TX FSW** (fig. 7).*

− - Terminals 14/15/16 = Negative for power supply to accessories, are all negative.

+ - Terminals 17/18 = 24 Vdc - Positive for power supply to accessories, are all positive.
Important: Accessories max. load is 500 mA. To calculate absorption values, refer to the instructions for individual accessories.

-TX FSW - Terminal 19 = Negative for power supply to photocell transmitters.
If you use this terminal for connecting the negative for supplying power to the photocell transmitters, you may, if necessary, also use the FAIL SAFE function (see programming of microswitch **DS2 - SW3**).
If this function is enabled, the equipment checks operation of the photocells before every opening or closing cycle.

4.5. Connettor J2 - Rapid connection

This is used for rapid connection. Connect the accessory, with the components side facing the inside of the card. Insert and remove only after switching off power.

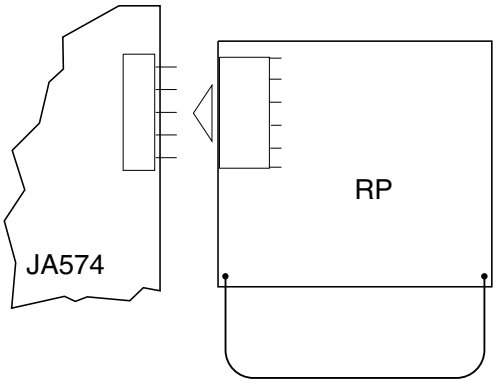
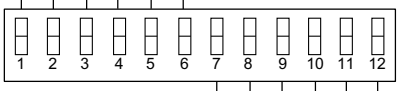


Fig. 16

5. MICROSWITCH PROGRAMMING

LEAF 1 FORCE	SW1	SW2	SW3
1 (MIN)	ON	ON	ON
2	OFF	ON	ON
3	ON	OFF	ON
4	OFF	OFF	ON
5	ON	ON	OFF
6	OFF	ON	OFF
7	ON	OFF	OFF
8 (MAX)	OFF	OFF	OFF

LEAF 2 FORCE	SW4	SW5	SW6
1 (MIN)	ON	ON	ON
2	OFF	ON	ON
3	ON	OFF	ON
4	OFF	OFF	ON
5	ON	ON	OFF
6	OFF	ON	OFF
7	ON	OFF	OFF
8 (MAX)	OFF	OFF	OFF



LOGIC	PAUSE (s)	SW7	SW8	SW9	SW10
E	/	ON	ON	ON	ON
EP	/	OFF	ON	ON	ON
B	/	ON	OFF	ON	ON
C	/	OFF	OFF	ON	ON
A	0	ON	ON	OFF	ON
A	10	OFF	ON	OFF	ON
A	20	ON	OFF	OFF	ON
A	30	OFF	OFF	OFF	ON
A	60	ON	ON	ON	OFF
A	120	OFF	ON	ON	OFF
S	0	ON	OFF	ON	OFF
S	10	OFF	OFF	ON	OFF
S	20	ON	ON	OFF	OFF
S	30	OFF	ON	OFF	OFF
S	60	ON	OFF	OFF	OFF
S	120	OFF	OFF	OFF	OFF

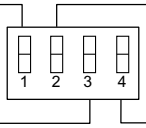
CLOSING LEAF DELAY (s)	SW11	SW12
20	ON	ON
10	OFF	ON
5	ON	OFF
0	OFF	OFF

DS1

Fig. 17

OPENING LEAF DELAY (s)	SW1
2	ON
0	OFF

CLOSING PHOTOCELL LOGIC	SW2
REVERSES ON RELEASE	ON
REVERSES IMMEDIATELY	OFF



FAIL SAFE	SW3
YES	ON
NO	OFF

REVERSING STROKE + OVER-PUSHING STROKE	SW4
YES	ON
NO	OFF

DS2

Fig. 18

The equipment is endowed with two groups of microswitches - DS1 (fig. 17) and DS2 (fig.18) - which make it possible to program the gate operation parameters.

5.1. MICROSWITCHES DS1 (fig. 17)

Leaf 1 and 2 force

By using microswitches SW1, SW2 and SW3, the force (and thus anti-crushing safety) of the operator connected to leaf 1 can be programmed. The same operation has to be repeated on the motor connected to leaf 2, by using microswitches SW4, SW5 and SW6.

Function logic

The automated system's function logic can be selected with microswitches SW7, SW8, SW9 and SW10. By selecting an automatic logic (A, SP), the combination of microswitches enables selection of pause time too (waiting time, in opening position, before automatic re-closing).
The available logics - their operation is described in tables 3/a-b-c-d-e-f, are as follows: A - S (Automatic), E - EP - B (Semi-automatic), C (Dead-man).

Closing leaf delay

Programming of microswitches SW11 and SW12 enables delay of the closing start of leaf 1 with respect to leaf 2, in order to avoid the leaves overlapping during movement, and thus increase the safety of the system.

5.2. MICROSWITCHES DS2 (fig. 18)

Opening leaf delay

Programming of microswitch SW1 enables delay of the opening start of leaf 2 with respect to leaf 1, in order to avoid the leaves obstructing each other during the initial stage of movement.

Closing photocells logic

By using microswitch SW2, you can select the type of behaviour of the automated system if the photocells protecting the gate closing movement are engaged. You can obtain either immediate reversing of the leaves or a stop followed by reversing when the photocells are disengaged.

Fail safe

Programming the microswitch SW3 makes it possible to activate or de-activate the photocells control test. When Fail safe is active, the equipment checks the photocells before every opening or closing movement.

Reversing stroke + over-pushing stroke

By using the microswitch SW4, you can activate the "reversing stroke" and the "over-pushing stroke". The "reversing stroke" pushes the leaves to close for a few moments before opening the gate. The "over-pushing stroke" commands a closing thrust at full force when the gate has already reached its stop limit.

6. START-UP

6.1. LED CHECK

The table below shows the status of the LEDs in relation to to the status of the inputs.
Note the following: ***LED LIGHTED*** = closed contact
LED OFF = open contact
Check the state of the LEDs as per Table.

Operation of the status signalling LEDs

LEDs	LIGHTED	OFF
OP_A	Command activated	**Command inactive**
OP_B	Command activated	**Command inactive**
STOP	**Command inactive**	Command activated
FSWCL	**Safety devices disengaged**	Safety devices engaged
FSWOP	**Safety devices disengaged**	Safety devices engaged

NB.: The status of the LEDs while the gate is at rest are shown in bold.

Furthermore, the DL10 LED is on the board and functions as detailed in the following table:

DL10		
Gate closed at rest: OFF	***Gate moving or on pause:*** like indicator-light	***Time learning:*** flashes rapidly

6.2. ROTATION DIRECTION AND FORCE CHECK

1) Program the microswitches of the control board according to need, as shown in Chapter 5.
2) Cut power to the electronic control equipment.
3) Release the operators and manually move the gate to the mid-point of the opening angle.
4) Re-lock the operators.
5) Restore power.
6) Send and opening command on the OPEN A input (fig.2) and check if the gate leaves are being commanded to open.

N.B.: If the first OPEN A pulse commands a closing, cut power and change over the phases of the electric motor (brown and black wires) on the terminal board.

7) Check power setting of the motors and, if necessary, modify it (see Chapter 5.1).
8) Stop leaf movement with a STOP command.
9) Release the operators, close the leaves and re-lock the operators.

6.3. LEARNING OF OPERATING TIMES

WARNING: *during the learning procedure, the safety devices are disabled! Therefore any transit must be avoided in the leaf movement area when this operation is carried out.*

Opening/closing time is established by a learning procedure which can be effected in two different ways depending on the type of system.
Simple learning makes it possible to effect a single rapid operation to supply work times to the board, without using deceleration. It is not recommended if the speeds of the leaves differ considerably from each other (different operators, different opening dimensions or angles).
Complete learning makes it possible to exploit all functions of the equipment, and thus program different work times for each leaf, and also opening and closing deceleration.

- SIMPLE LEARNING:
Check if the leaves are closed, and then press F push-button for one second: DL10 LED begins flashing and the leaves begin the opening movement.
Wait for the leaf to reach the opening stop limit and then supply an OPEN A pulse (with the radio control or with the key controlled push-button) to stop the movement: the leaves stop and the DL10 LED stops flashing.
The procedure has ended and the gate is ready to operate.
Next pulse closes leaves and they stop on automaticaly reaching closed position.

- ADVANCED COMPLETE LEARNING:
Check if the leaves are closed, and then press F push-button for more than 3 seconds: DL10 LED begins flashing and the leaf 1 begins the opening movement. The following functions can be commanded by the OPEN A pulses (by radio control or key controlled push-button):

1° OPEN - Deceleration at opening of leaf 1
2° OPEN - Leaf 1 stops at opening and leaf 2 begins its opening movement
3° OPEN - Deceleration at opening of leaf 2
4° OPEN - Leaf 2 stops at opening and immediately begins its closing movement
5° OPEN - Deceleration at closing of leaf 2
6° OPEN - Leaf 2 stops at closing and leaf 1 begins its closing movement
7° OPEN - Deceleration at closing of leaf 1
8° OPEN - Leaf 1 stops at closing

The DL10 LED stops flashing and the gate is ready for normal operation.

Notes:
- *If you wish to eliminate deceleration in certain stages, wait for the leaf to reach its stop-limit and supply 2 consecutive Open pulses (by 1 second).*
- *If only one leaf is present, the entire sequence must nevertheless be effected. When the leaf has finished opening, supply 5 Open pulses until the leaf begins to close, and then resume normal operation.*
- *It wind effected areas it is best to allow 2 second after the leaf reaches open stop befor supplying Open A to ensure full closing.*
- *Use of slow-down is not recommended for condominium entries.*
- *If, during closing / opening, the cycle stops for more consecutive times, the leaf could not reach the limit stop with slow-down. At the first complete cycle without interruptions, the system recognizes the limit stops and carries out again the programmed slow-downs.*

6.4. PRE-FLASHING

If you wish to increase the equipment's safety level, you can activate the pre-flashing function which enables the flashing lamp to go on 5 seconds before the leaf starts to move.
Pre-flashing activation procedure:

1 - check if the gate is closed
2 - open and keep open the **Stop** contact
3 - check if the **DL10** LED is OFF (if lighted, pre-flashing is already active)
4 - briefly press the **F** push-button and check if the **DL10** LED lights up.
5 - close the **Stop** contact (DL10 goes OFF).

Procedure for disabling the function:

1 - check if the gate is closed
2 - open and keep open the **Stop** contact
3 - check if the **DL10** LED is lighted (if OFF, pre-flashing is already disabled)
4 - briefly press the **F** push-button and check if the **DL10** LED is OFF.
5 - close the **Stop** contact

7. AUTOMATED SYSTEM TEST

When you have finished programming, check if the system is operating correctly.
Most important of all, check if the force is adequately adjusted and if the safety devices are operating correctly.

Table 3/a

LOGIC "A"	PULSES					
GATE STATUS	OPEN-A	OPEN-B	STOP	OPENING SAFETY DEVICES	CLOSING SAFETY DEVICES	OP/CLOS. SAFETY DEVICE
CLOSED	Opens leaves and closes them after pause time (1)	Opens the free leaf and closes after pause time (1)	No effect (OPEN disabled)		No effect	No effect (OPEN disabled)
OPEN on PAUSE	Reloads pause time (1)	Reloads pause time (1)	Stops operation	No effect	Freezes pause until release (2) (OPEN disabled)	
AT CLOSING	Re-opens the leaves immediately (1)	Re-opens the leaf immediately (1)		No effect (saves OPEN)	see paragraph 5.2.	Locks and, on release, reverses at opening
AT OPENING	No effect (1)			Reverses at closing	No effect	Locks and, on release, continues opening
LOCKED	Closes the leaf/leaves		No effect (OPEN disabled)	No effect	No effect (OPEN disabled)	

Table 3/b

LOGIC "S"	PULSES					
GATE STATUS	OPEN-A	OPEN-B	STOP	OPENING SAFETY DEVICES	CLOSING SAFETY DEVICES	OP/CLOS. SAFETY DEVICE
CLOSED	Opens leaves and closes them after pause time	Opens the free leaf and closes after pause time	No effect (OPEN disabled)		No effect	No effect (OPEN disabled)
OPEN on PAUSE	Stops operation	Stops operation	Stops operation	No effect	Closes after 5" (OPEN disabled)	
AT CLOSING	Re-opens the leaves immediately	Re-opens the leaf immediately		No effect (saves OPEN)	see paragraph 5.2.	Locks and, on release, reverses at opening
AT OPENING	Stops operation	Stops operation		Reverses at closing	No effect	Locks and, on release, continues opening
LOCKED	Closes the leaf/leaves		No effect (OPEN disabled)	No effect	No effect (OPEN disabled)	

Table 3/c

LOGIC "E"	PULSES					
GATE STATUS	OPEN-A	OPEN-B	STOP	OPENING SAFETY DEVICES	CLOSING SAFETY DEVICES	OP/CLOS. SAFETY DEVICE
CLOSED	Opens the leaves	Opens the free leaf	No effect (OPEN disabled)		No effect	No effect (OPEN disabled)
OPEN	Re-closes the leaves immediately	Re-closes the leaf immediately	Stops operation	No effect	No effect (OPEN disabled)	
AT CLOSING	Re-opens the leaves immediately	Re-opens the leaf immediately (1)		No effect (saves OPEN)	see paragraph 5.2.	Locks and, on release, reverses at opening
AT OPENING	Stops operation			Reverses at closing	No effect	Locks and, on release, continues opening
LOCKED	Closes the leaf/leaves (with CLOSING SAFETY DEVICES active, opens at 2nd pulse)		No effect (OPEN disabled)	No effect	No effect (OPEN disabled)	

Table 3/d

LOGIC "EP"	PULSES					
GATE STATUS	**OPEN-A**	**OPEN-B**	**STOP**	**OPENING SAFETY DEVICES**	**CLOSING SAFETY DEVICES**	**OP/CLOS. SAFETY DEVICE**
CLOSED	Opens the leaves	Opens the free leaf	No effect (OPEN disabled)		No effect	No effect (OPEN disabled)
OPEN	Re-closes the leaf/leaves immediately		Stops operation	No effect (OPEN disabled)	No effect (OPEN disabled)	
AT CLOSING	Stops operation			No effect (saves OPEN)	see paragraph 5.2.	Locks and, on release, reverses at opening
AT OPENING	Stops operation			Reverses at closing	No effect	Locks and, on release, continues opening
LOCKED	Restarts moving in reverse direction (always closes after a Stop)		No effect (OPEN disabled)	No effect (if it must open, it disables OPEN)	No effect (if it must close, it disables OPEN)	No effect (OPEN disabled)

Table 3/e

LOGIC "B"	PULSES					
GATE STATUS	**OPEN-A**	**OPEN-B**	**STOP**	**OPENING SAFETY DEVICES**	**CLOSING SAFETY DEVICES**	**OP/CLOS. SAFETY DEVICE**
CLOSED	Opens the leaf or leaves	No effect	No effect (OPEN-A disabled)	No effect (OPEN-A disabled)	No effect (OPEN-B disabled)	No effect (OPEN-A disabled)
OPEN	No effect	Closes the leaves or leaf	No effect (OPEN-B disabled)	No effect (OPEN-A disabled)	No effect (OPEN-B disabled)	No effect (OPEN-B disabled)
AT CLOSING	Reverses at opening	No effect	Stops operation	No effect	Stops operation (OPEN-B disabled)	Stops operation (OPEN-A/B disabled)
AT OPENING	No effect	No effect		No effect (OPEN-A disabled)	No effect	Stops operation (OPEN-A/B disabled)
LOCKED	Opens the leaf or leaves	Closes the leaves or leaf	No effect (OPEN-A/B disabled)	No effect (OPEN-A disabled)	No effect (OPEN-B disabled)	No effect (OPEN-A/B disabled)

Table 3/f

LOGIC "C"	COMMANDS ALWAYS PRESSED		PULSES			
GATE STATUS	**OPEN-A**	**OPEN-B**	**STOP**	**OPENING SAFETY DEVICES**	**CLOSING SAFETY DEVICES**	**OP/CLOS. SAFETY DEVICE**
CLOSED	Opens the leaf or leaves	No effect	No effect (OPEN-A disabled)	No effect (OPEN-A disabled)	No effect (OPEN-B disabled)	No effect (OPEN-A disabled)
OPEN	No effect	Closes the leaves or leaf	No effect (OPEN-B disabled)	No effect (OPEN-A disabled)	No effect (OPEN-B disabled)	No effect (OPEN-B disabled)
AT CLOSING	Stops operation		Stops operation	No effect	Stops operation (OPEN-B disabled)	Stops operation (OPEN-A/B disabled)
AT OPENING		Stops operation		Stops operation (OPEN-A disabled)	No effect	Stops operation (OPEN-A/B disabled)

(1) If maintained, it prolongs the pause until disabled by the command (timer function)
(2) If remaining pause time is shorter than 5 sec., when safety devices are released, it closes after 5 sec.
NB.: Effects on other active pulse inputs in brackets.

DICHIARAZIONE CE DI CONFORMITÁ

Fabbricante: GENIUS S.p.A.

Indirizzo: Via Padre Elzi, 32
24050 - Grassobbio
BERGAMO - ITALIA

Dichiara che: L'apparecchiatura elettronica JA574

- è conforme ai requisiti essenziali di sicurezza delle seguenti direttive:
  73/23 CEE e successiva modifica 93/68/CEE.
  89/336 CEE e successiva modifica 92/31 CEE e 93/68/CEE

Note aggiuntive:
questi prodotti sono stati sottoposti a test in una configurazione tipica omogenea (tutti i prodotti di costruzione GENIUS s.r.l.).

Grassobbio, 01-06-2005

L'Amministratore Delegato
D. Gianantoni

EC COMPLIANCE DECLARATION

Manufacturer: GENIUS S.p.A.

Address: Via Padre Elzi, 32
24050 - Grassobbio
BERGAMO - ITALY

Declares that: the JA574 electronic

- complies with the essential safety requirements of the following Directives:
  73/23 EEC and subsequent amendment 93/68 EEC.
  89/336 EEC and subsequent amendments 92/31 EEC and 93/68 EEC.

Notes:
these products have been subject to testing procedures carried out under standardised conditions (all products manufactured by GENIUS s.r.l.).

Grassobbio, 01-06-2005

Managing Director
D. Gianantoni

DÉCLARATION CE DE CONFORMITÉ

Fabricant: GENIUS S.p.A.

Adresse: Via Padre Elzi, 32
24050 - Grassobbio
BERGAMO - ITALIE

Déclare que: L'appareillage électronique JA574

- est conforme aux règles de sécurité visées par les directives suivantes:
  73/23 CEE, modifiée 93/68 CEE.
  89/336 CEE, modifiée 92/31 CEE et 93/68 CEE.

Note supplémentaire:
ces produits ont été soumis à des essais dans une configuration typique homogène (tous les produits sont fabriqués par GENIUS s.r.l.).

Grassobbio, le 01-06-2005

L'Administrateur Délégué
D. Gianantoni

DECLARACIÓN CE DE CONFORMIDAD

Fabricante: GENIUS S.p.A.

Dirección: Via Padre Elzi, 32
24050 - Grassobbio
BERGAMO - ITALIA

Declara que: El equipo electrónico JA574

- Cumple los requisitos esenciales de seguridad de las siguientes directivas:
  73/23 CEE y sucesiva modificación 93/68 CEE,
  89/336 CEE y sucesivas modificaciones 92/31 CEE y 93/68 CEE.

Nota:
los productos mencionados han sido sometidos a pruebas en una configuración típica homogénea (todo productos fabricado por GENIUS s.r.l.).

Grassobbio, 01-06-2005.

Administrador Delegado
D. Gianantoni

EG-KONFORMITÄTSERKLÄRUNG

Hersteller: GENIUS S.p.A.

Adresse: Via Padre Elzi, 32
24050 - Grassobbio
BERGAMO - ITALIEN

erklärt: das elektronisch Gerät JA574

- entspricht den wesentlichen Sicherheitsbestimmungen folgender Richtlinien:
  73/23 EWG und nachträgliche Änderung 93/68 EWG
  89/336 EWG und nachträgliche Änderung 92/31 EWG sowie 93/68 EWG

Anmerkung:
die o.g. produkte sind in einer typischen und einheitlichen weise getestet (alle von GENIUS s.r.l. gebaute produkte).

Grassobbio, 01-06-2005

Der Geschäftsführer
D. Gianantoni

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