

COMUNELLO

AUTOMATION

INSTALLATION AND USER'S MANUAL

CU - 24V - HP

Control unit





comunello.com

ISTRUZIONI D'USO E DI INSTALLAZIONE
INSTALLATIONS-UND GEBRAUCHSANLEITUNG
INSTRUCIONS D'UTILISATION ET D'INSTALLATION
INSTRUCCIONES DE USO Y DE INSTALACION
ИНСТРУКЦИЯ ПО МОНТАЖУ





Cod.91300177 - Rev. 01 - 25.03.15



MENÙ LIST
MAIN MENÙ

| ID | LED | ON  | OFF  |
|-----|--------------|--|---|
| L1 | STEP BY STEP | Step-by-Step | Automatic |
| L2 | CODE TX | Code entered | No code |
| L3 | CONDO | ON | OFF |
| L4 | MOTOR TIME | Programmed time | 30 sec. |
| L5 | PAUSE TIME | With automatic closure | Without automatic closure |
| L6 | DELAY | ON | OFF |
| L7 | AUTO PROGRAM | ON | OFF |
| LEV | MENÙ | ON | |

EXTENDED MENÙ 1

| ID | LED | ON  | OFF  |
|-----|-------------------------------------|--|---|
| L1 | HOLD-TO-RUN | ON | OFF |
| L2 | PEDESTRIAN / SINGLE LEAF PUSHBUTTON | SINGLE LEAF | PEDESTRIAN PUSHBUTTON |
| L3 | PEDESTRIAN PUSHBUTTON / DS3 | DS3 | PEDESTRIAN PUSHBUTTON |
| L4 | FOTOTEST | ON | OFF |
| L5 | DS2 STP IN CLOSING | ON | OFF |
| L6 | DS1 PARTIAL REVERSAL | ON | OFF |
| L7 | NC AS 8K2 | ON | OFF |
| LEV | MENU LEVEL | 1 FLASH | |

EXTENDED MENÙ 2

| ID | LED | ON  | OFF  |
|-----|-----------------|--|---|
| L1 | BRAKE | ON | OFF |
| L2 | DECELERATION | OFF | ON |
| L3 | ALWAYS CLOSE | ON | OFF |
| L4 | FOLLOW ME | ON | OFF |
| L5 | PEDESTRIAN TIME | ON | OFF |
| L6 | 2°CH MONOSTABLE | ON | OFF |
| L7 | REMOTE PROG. | ON | OFF |
| LEV | MENU LEVEL | 2 FLASHES | |

EXTENDED MENÙ 3



| ID | LED | ON  | OFF  |
|-----|---------------------------|--|---|
| L1 | SOFT STOP | ON | OFF |
| L2 | SOFT START | ON | OFF |
| L3 | RELEASE STROKE | ON | OFF |
| L4 | SLAM LOCK | ON | OFF |
| L5 | ELS / PED CMD | ON | OFF |
| L6 | FLASHING/ COURTESY LIGHT | ON | OFF |
| L7 | PREFLASH / PAUSE FLASHING | ON | OFF |
| LEV | MENU | 3 FLASHES | |

FIG. 4

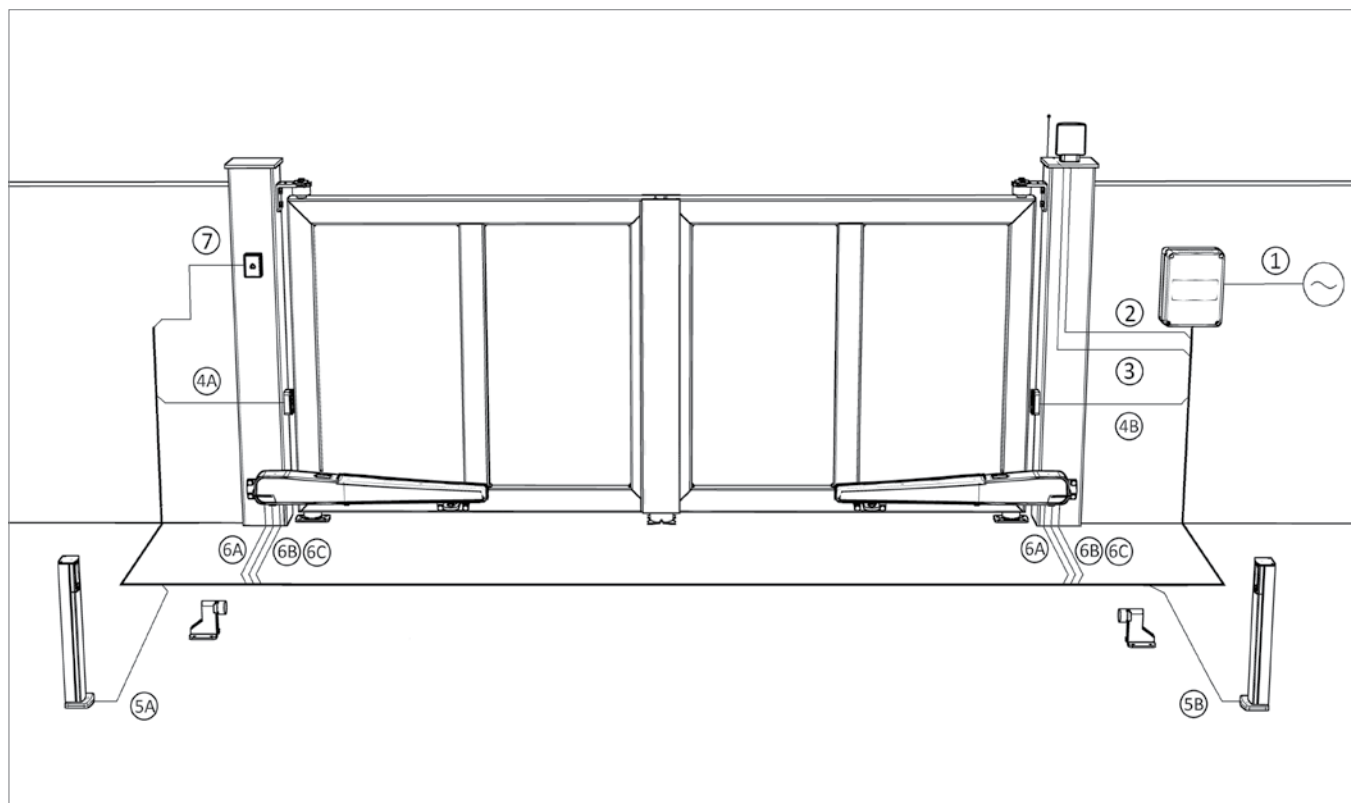
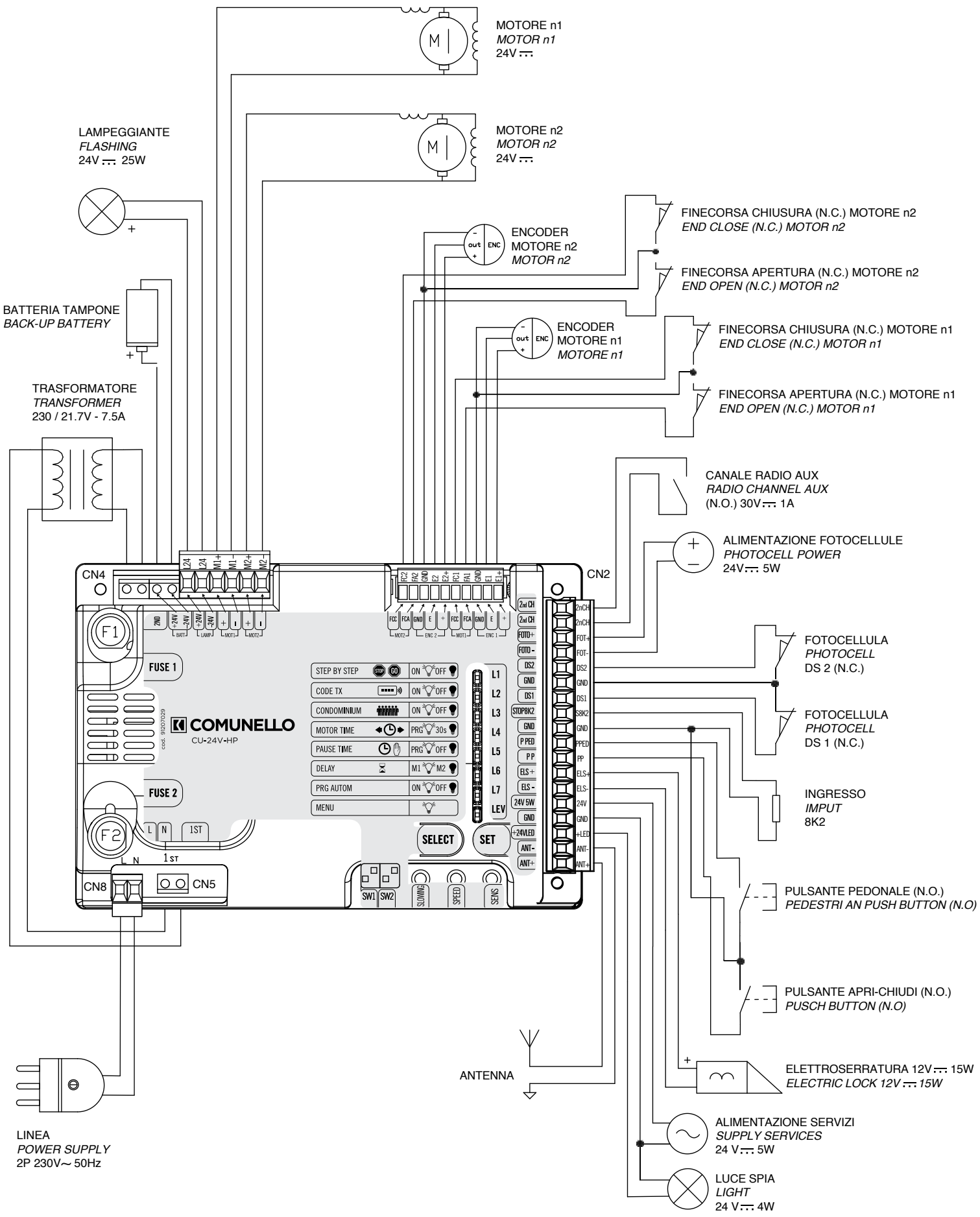


TABELLA CONNESSIONI CAVI AG01 - WIRES CONNECTION TABLE AG01

HP 24V – (CU 24V HP)

| ID | Description | Cable type | Lenght (1m to 20m) | Lenght (20m to 50m) |
|---------|--------------------|------------------------------------|----------------------|----------------------|
| 1 | Main power supply | FROR CEI 20-22 CEI EN 50267-2-1 | 2x1,5mm ² | 2x2,5mm ² |
| 6A | Motor power supply | | 2x2,5mm ² | 2x4,0mm ² |
| 2 | Flashing light | | 2x0,5mm ² | 2x1,0mm ² |
| 4A , 5A | Photocell TX | | 2x0,5mm ² | 2x1,0mm ² |
| 4B , 5B | Photocell RX | | 4x0,5mm ² | 4x1,0mm ² |
| 7 | Key selector | | 3x0,5mm ² | 3x1,0mm ² |
| 6B | Limit switch | | 3x0,5mm ² | 3x1,0mm ² |
| 6C | Encoder | | 3x0,5mm ² | 3x1,0mm ² |
| 3 | Antenna | RG58 | max 20m | |



MOTORE n1
MOTOR n1
24V ~

MOTORE n2
MOTOR n2
24V ~

LAMPEGGIANTE
FLASHING
24V ~ 25W

BATTERIA TAMPONE
BACK-UP BATTERY

TRASFORMATORE
TRANSFORMER
230 / 21.7V - 7.5A

ENCODER
MOTORE n2
MOTOR n2

ENCODER
MOTORE n1
MOTOR n1

FINECORSA CHIUSURA (N.C.) MOTORE n2
END CLOSE (N.C.) MOTOR n2

FINECORSA APERTURA (N.C.) MOTORE n2
END OPEN (N.C.) MOTOR n2

FINECORSA CHIUSURA (N.C.) MOTORE n1
END CLOSE (N.C.) MOTOR n1

FINECORSA APERTURA (N.C.) MOTORE n1
END OPEN (N.C.) MOTOR n1

CANALE RADIO AUX
RADIO CHANNEL AUX
(N.O.) 30V ~ 1A

ALIMENTAZIONE FOTOCELLULE
PHOTOCELL POWER
24V ~ 5W

FOTOCPELLULA
PHOTOCELL
DS 2 (N.C.)

FOTOCPELLULA
PHOTOCELL
DS 1 (N.C.)

INGRESSO
INPUT
8K2

PULSANTE PEDONALE (N.O.)
PEDESTRIAN PUSH BUTTON (N.O.)

PULSANTE APRI-CHIUDI (N.O.)
PUSCH BUTTON (N.O.)

ELETTROSERRATURA 12V ~ 15W
ELECTRIC LOCK 12V ~ 15W

ALIMENTAZIONE SERVIZI
SUPPLY SERVICES
24V ~ 5W

LUCE SPIA
LIGHT
24V ~ 4W

LINEA
POWER SUPPLY
2P 230V ~ 50Hz

ANTENNA

COMUNELLO
CU-24V-HP

STEP BY STEP [STEP] [GO] ON/OFF [OFF]

CODE TX [CODE] ON/OFF [OFF]

CONDOMINIUM [CONDOMINIUM] ON/OFF [OFF]

MOTOR TIME [MOTOR TIME] PRG 30s ON/OFF [OFF]

PAUSE TIME [PAUSE TIME] PRG OFF ON/OFF [OFF]

DELAY [DELAY] M1/M2 ON/OFF [OFF]

PRG AUTOM [PRG AUTOM] ON/OFF [OFF]

MENU [MENU]

SELECT [SELECT] SET [SET]

SW1 SW2 SLOWING SPEED SENS

24V SW +24VLED ANT- ANT+

24V CH 24V CH

FOTD+ OSZ GND OS1 STOPPRK2 GND P PED P P ELS+ ELS- 24V SW GND +24VLED ANT- ANT+

24V CH 24V CH

FOTD+ OSZ GND OS1 STOPPRK2 GND P PED P P ELS+ ELS- 24V SW GND +24VLED ANT- ANT+

CN4

CN2

FUSE 1

FUSE 2

1st

CN8

CN5

L N 1st

L N 1st

L N 1st

L N 1st

L N 1st

L N 1st

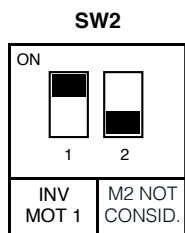
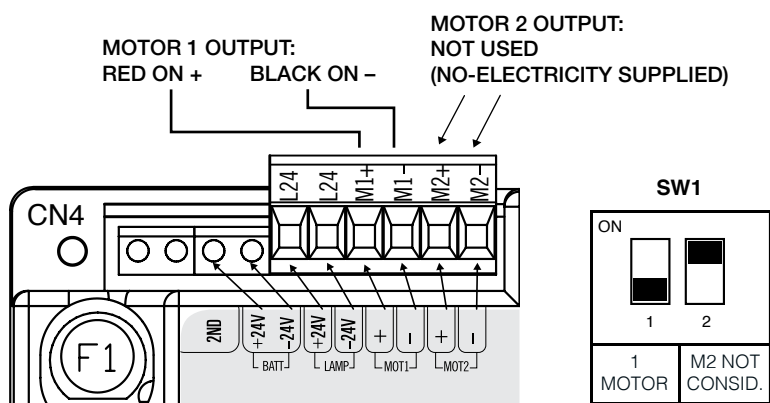
L N 1st

L N 1st

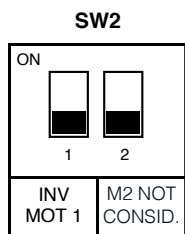
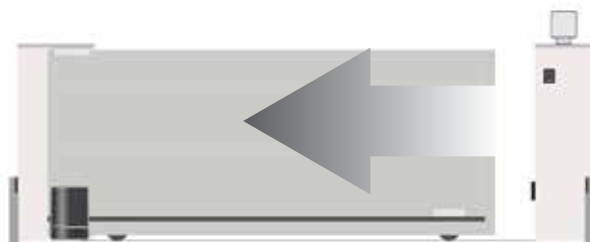
L N 1st

L N 1st

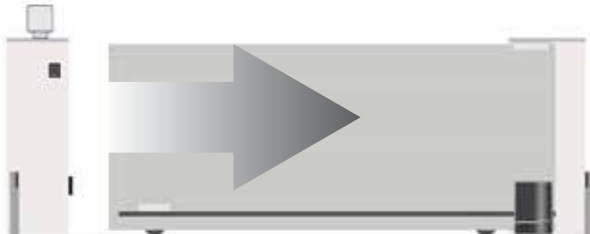
1 MOTOR CONFIGURATION FORT



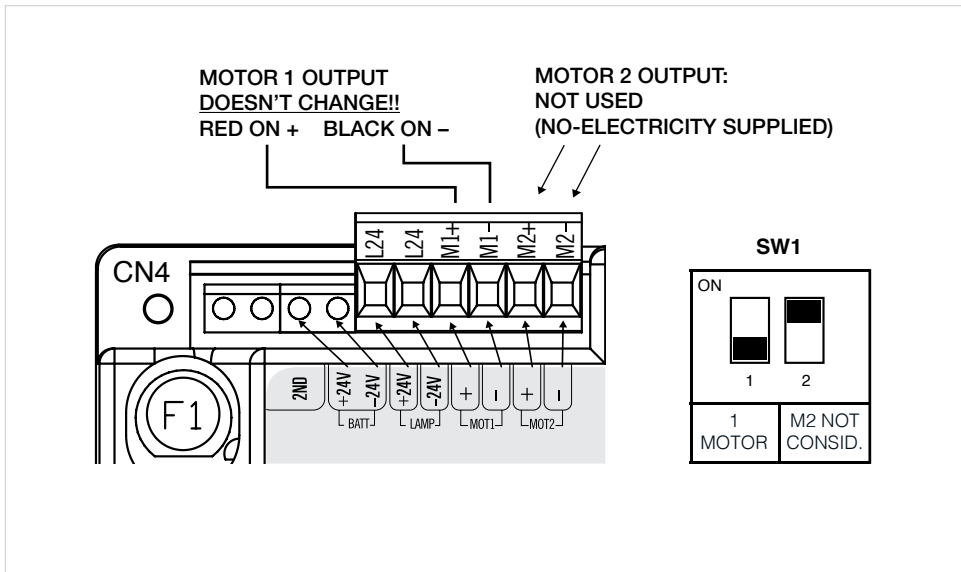
FORT opens to LEFT
Inner side view



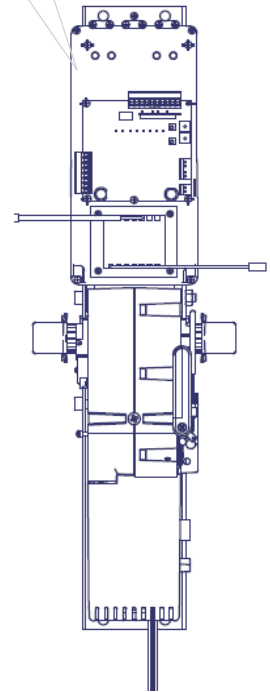
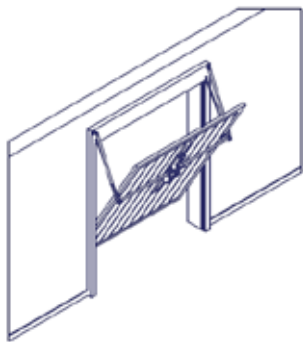
FORT opens to RIGHT
Inner side view



SALIENT



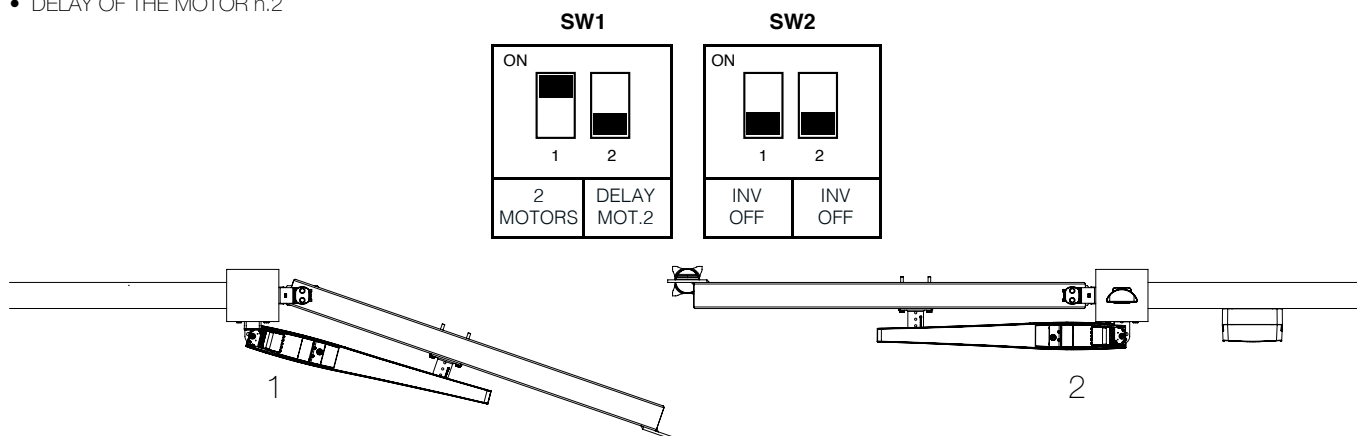
SALIENT: **DO NOT CHANGE the configuration**
Opens to left, closes to right (left profile view, as in the image).



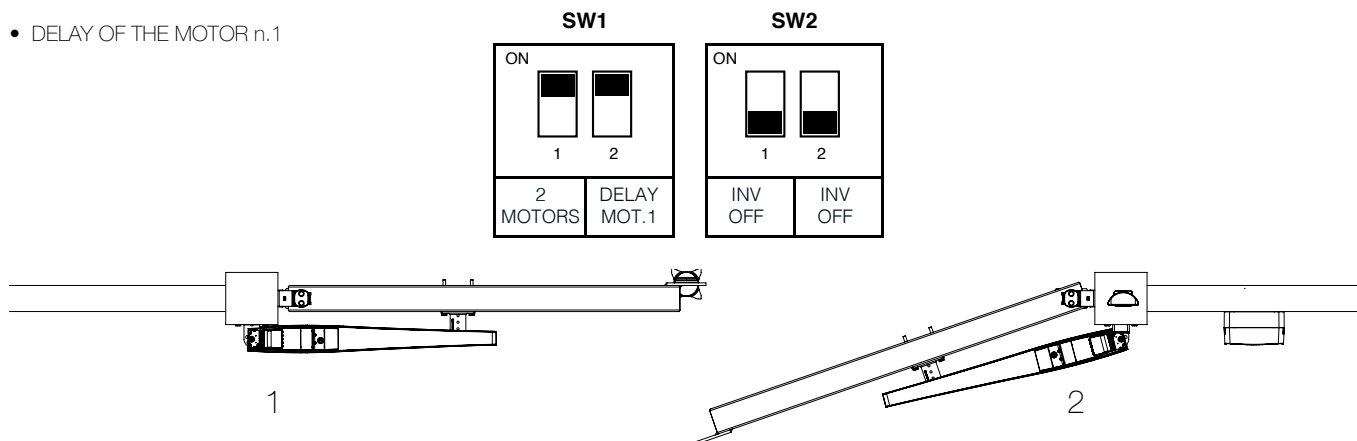
2 MOTORS CONFIGURATION

ABACUS - connection diagram of the motors

- DELAY OF THE MOTOR n.2



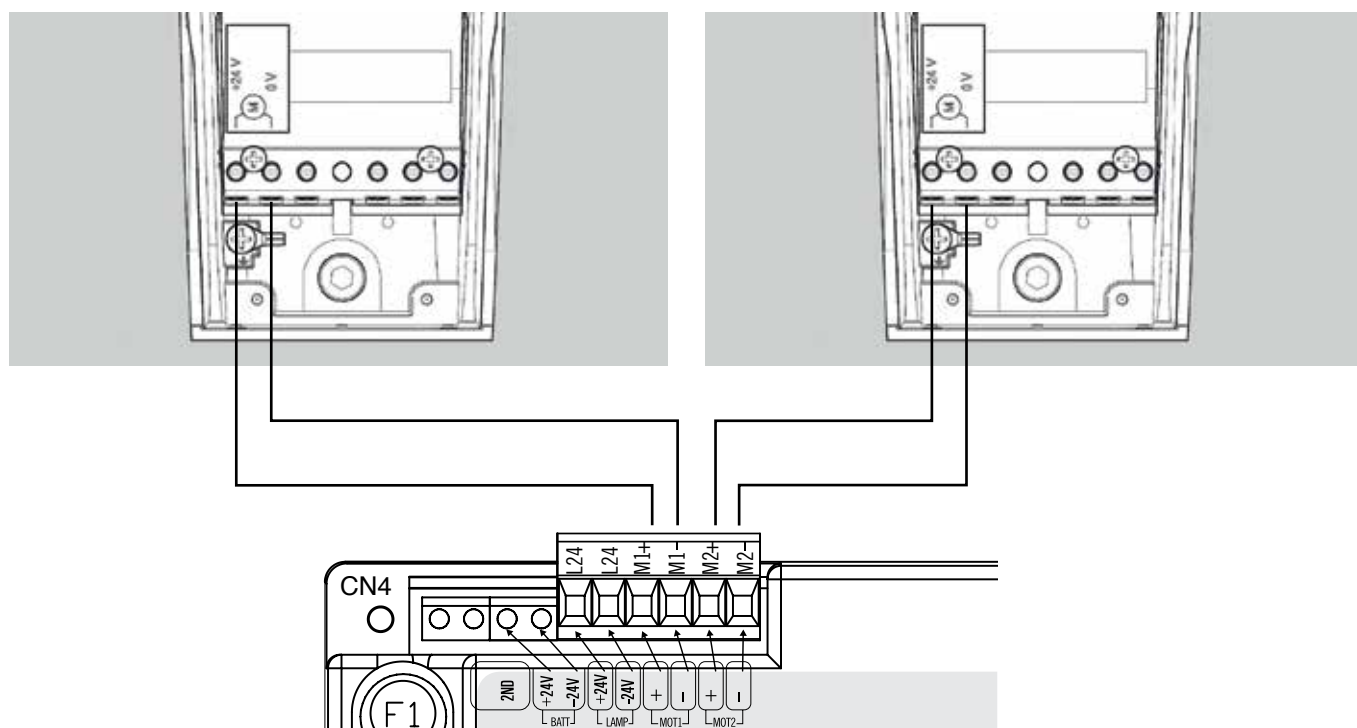
- DELAY OF THE MOTOR n.1



Configuration:

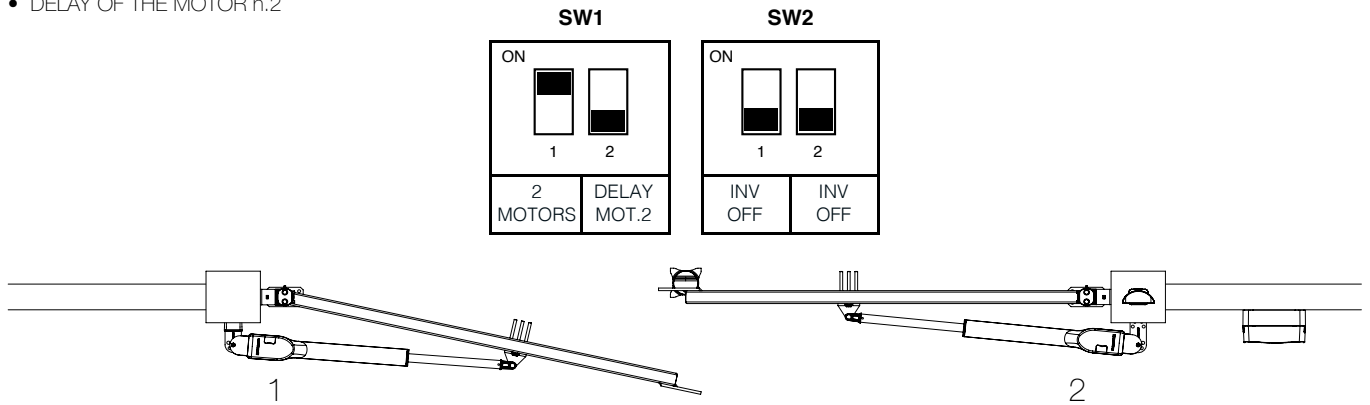
24V with M1+
0V with M1-

24V with M2+
0V with M2-

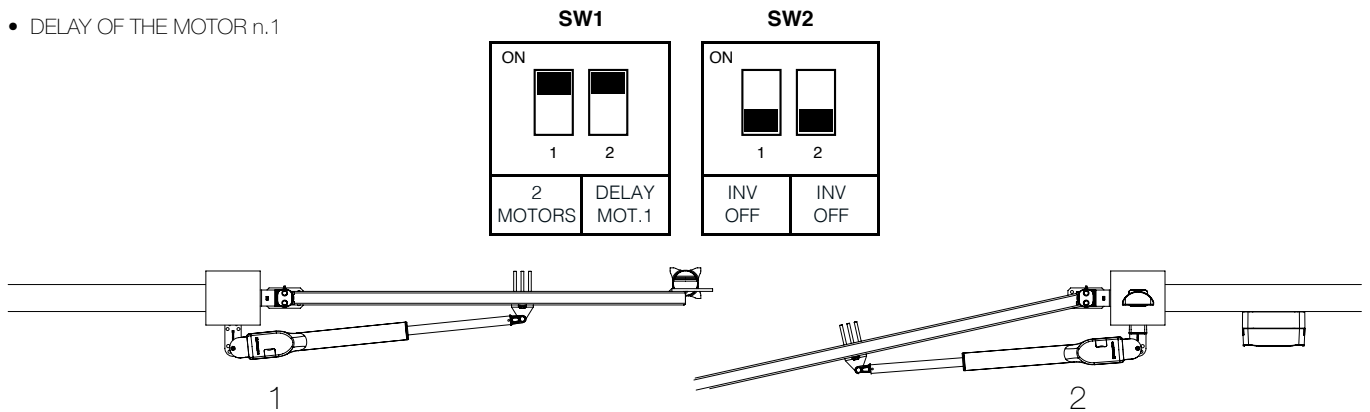


RAM - connection diagram of the motors

- DELAY OF THE MOTOR n.2



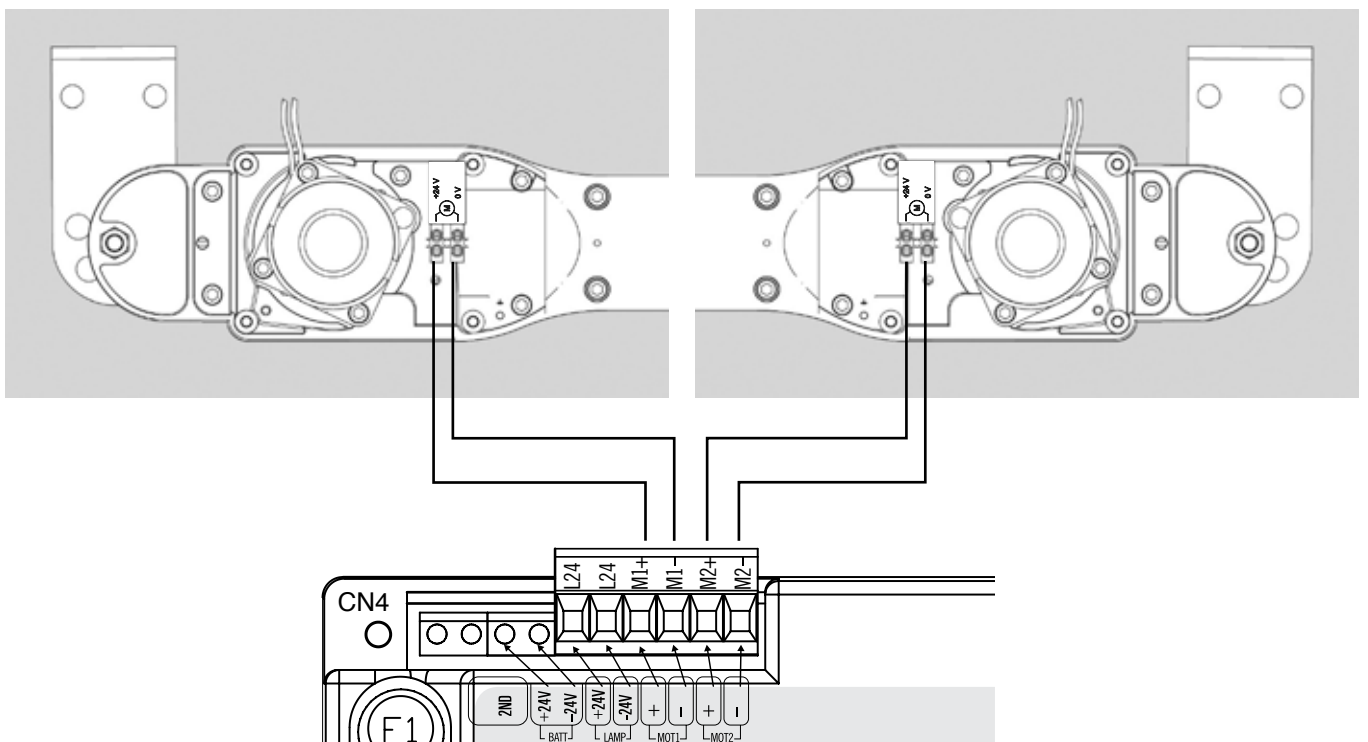
- DELAY OF THE MOTOR n.1



Configuration:

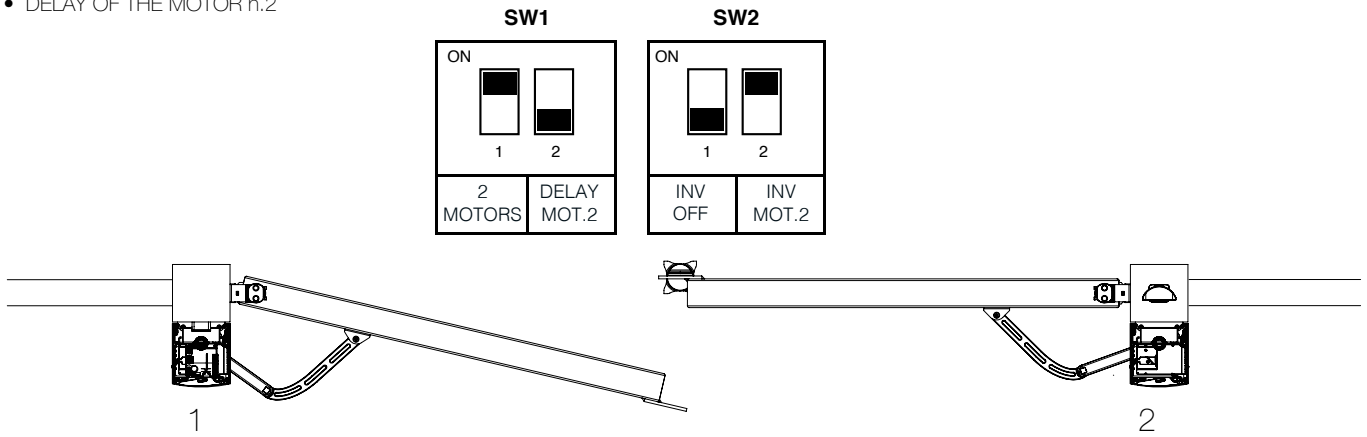
24V with M1+
0V with M1 -

24V with M2+
0V with M2-

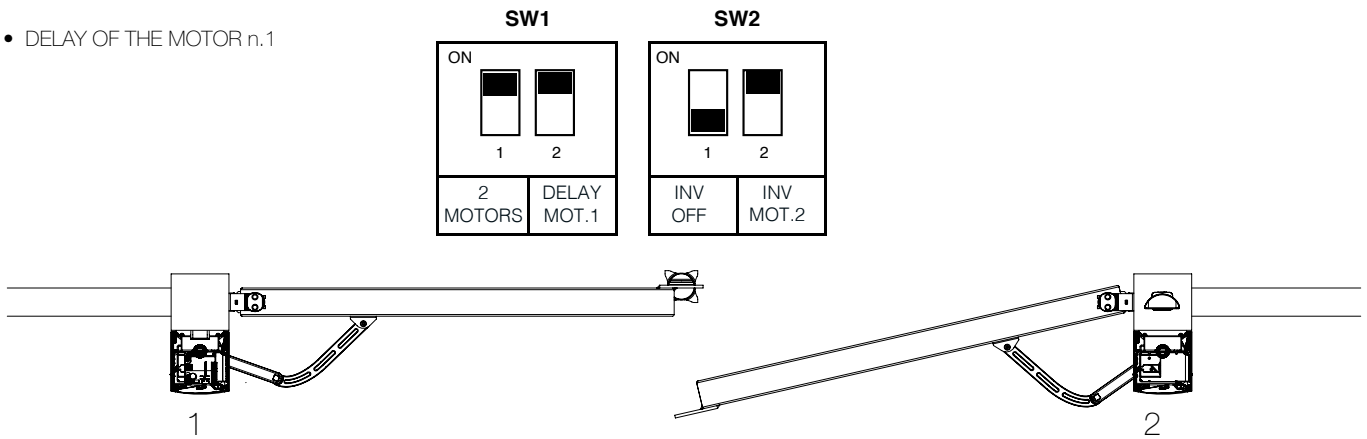


CONDOR - connection diagram of the motors [1/2]

- DELAY OF THE MOTOR n.2



- DELAY OF THE MOTOR n.1



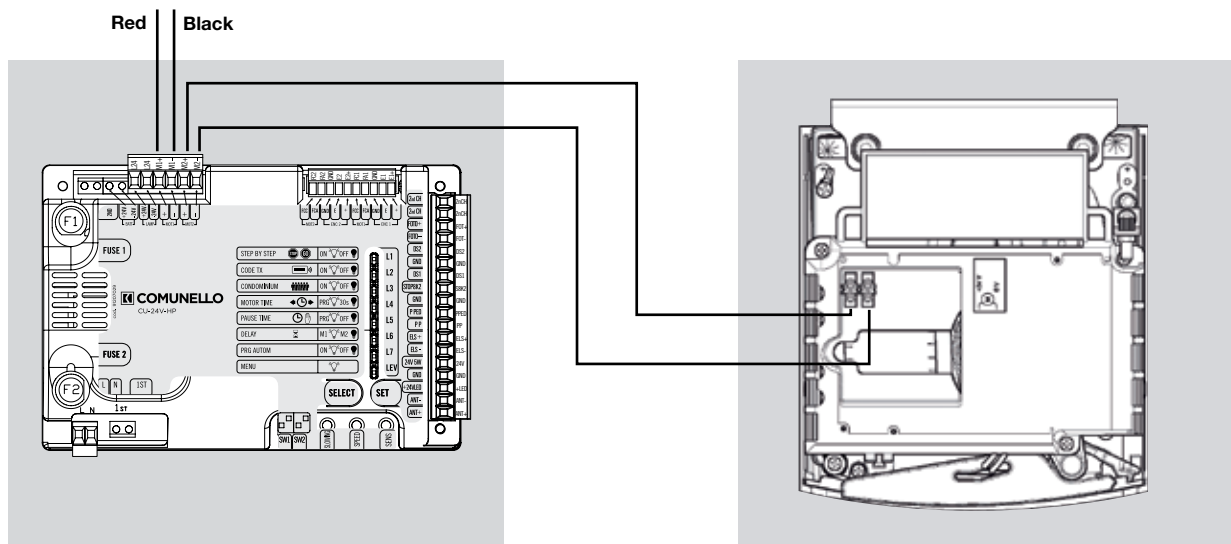
Configuration - MASTER ON THE LEFT, SLAVE ON THE RIGHT

MOTOR n.1 WITH CONTROL UNIT (on the left)

RED with M1+
BLACK with M1-

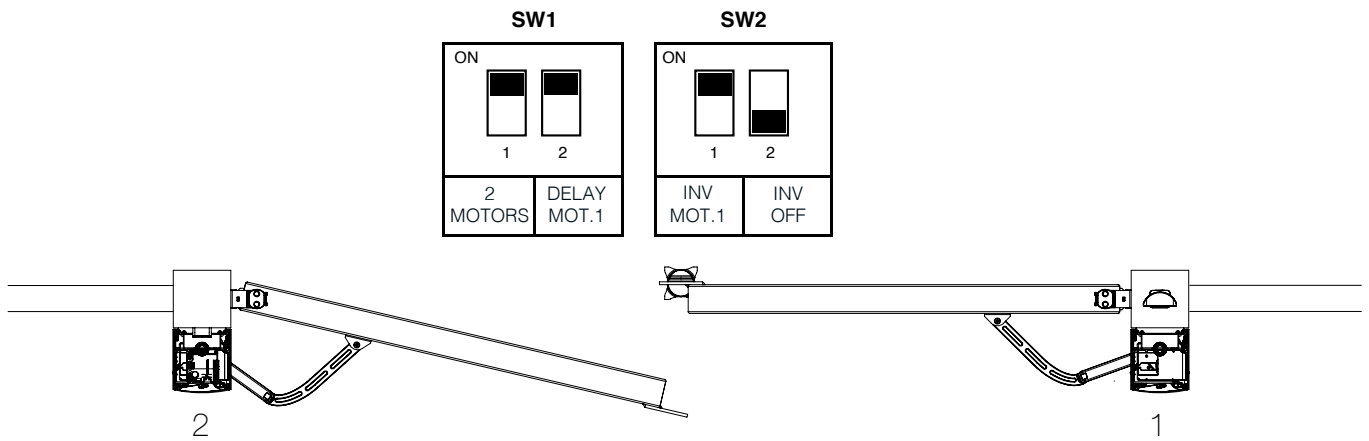
MOTOR n.2 WITHOUT CONTROL UNIT (on the right)

24V with M2+
0V with M2-

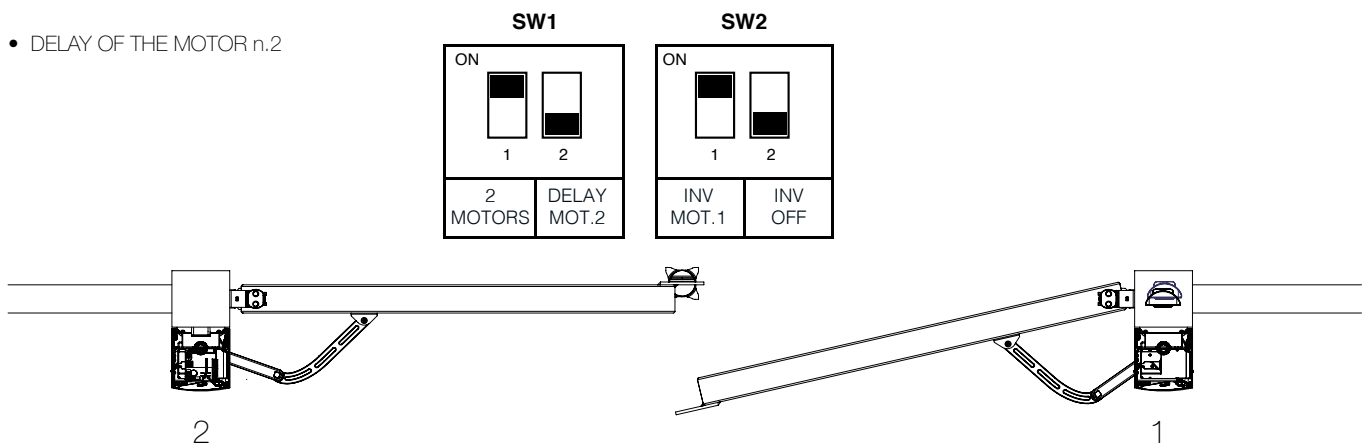


CONDOR - [2/2]

- DELAY OF THE MOTOR n.1



- DELAY OF THE MOTOR n.2



Configuration - **MASTER ON THE RIGHT, SLAVE ON THE LEFT**

MOTOR n.2 WITHOUT CONTROL UNIT (on the left)

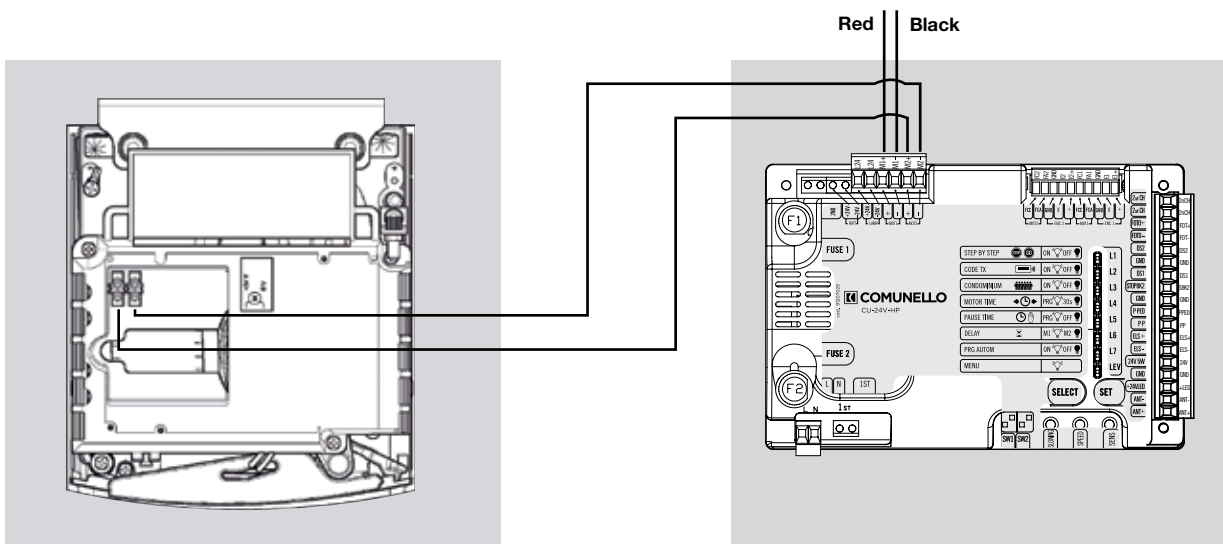
24V with M1+

0V with M1-

MOTOR n.1 WITH CONTROL UNIT (on the right)

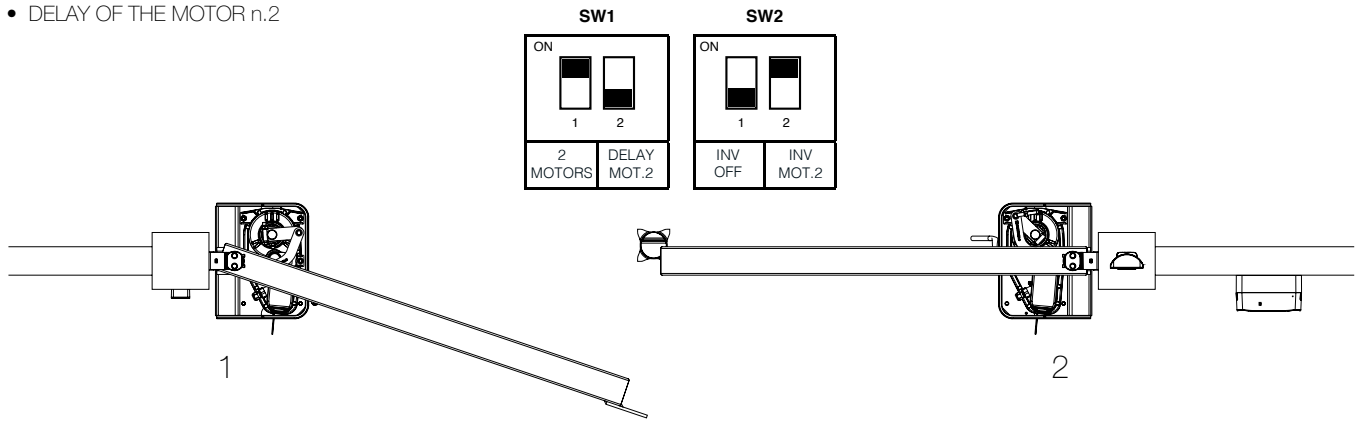
24V with M2+

0V with M2-

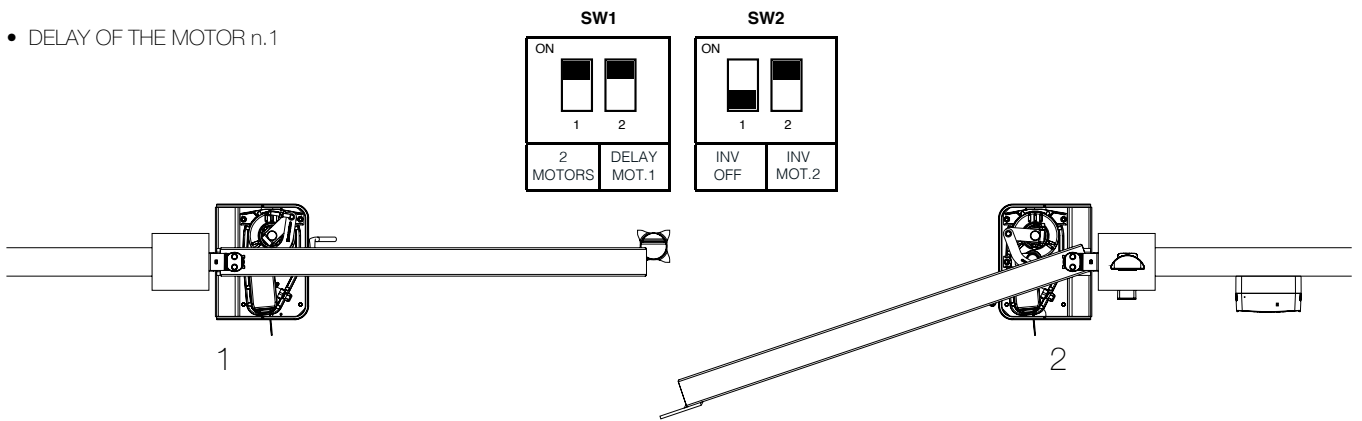


EAGLE - connection diagram of the motors

- DELAY OF THE MOTOR n.2



- DELAY OF THE MOTOR n.1



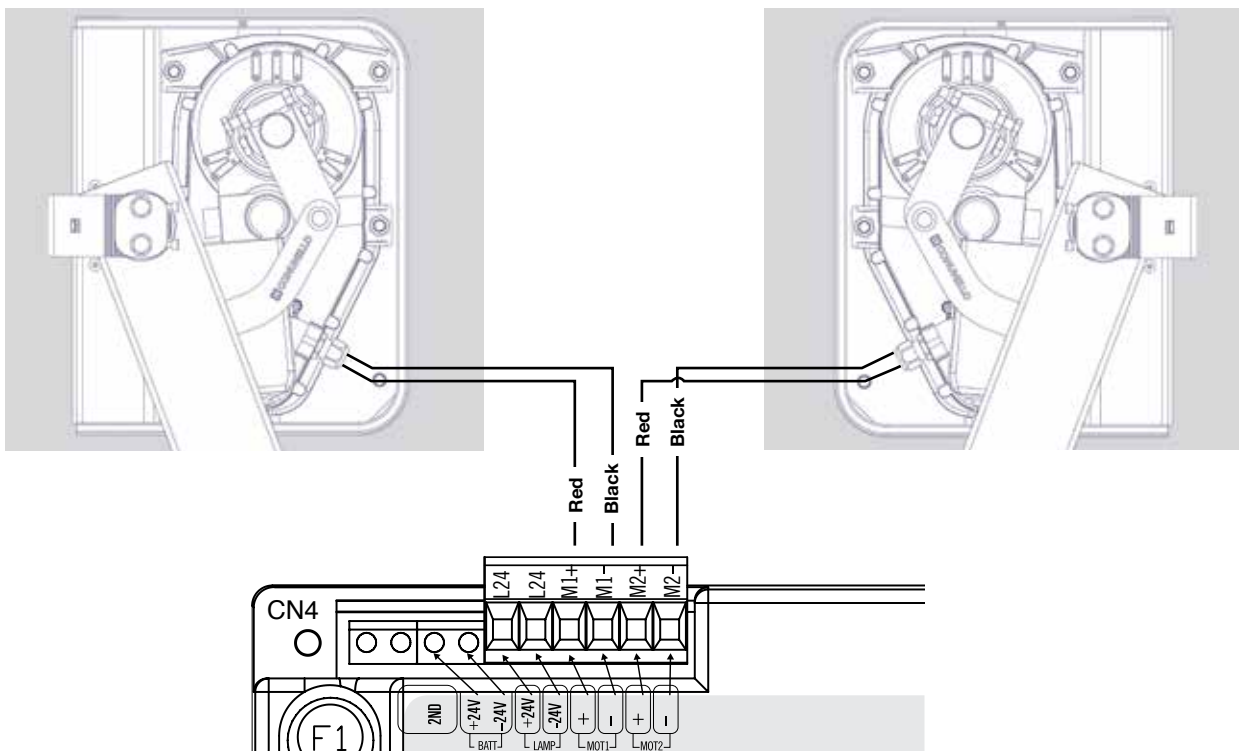
Configuration - MASTER ON THE LEFT, SLAVE ON THE RIGHT

MOTOR n.1 (on the left)

RED with M1+
BLACK with M1-

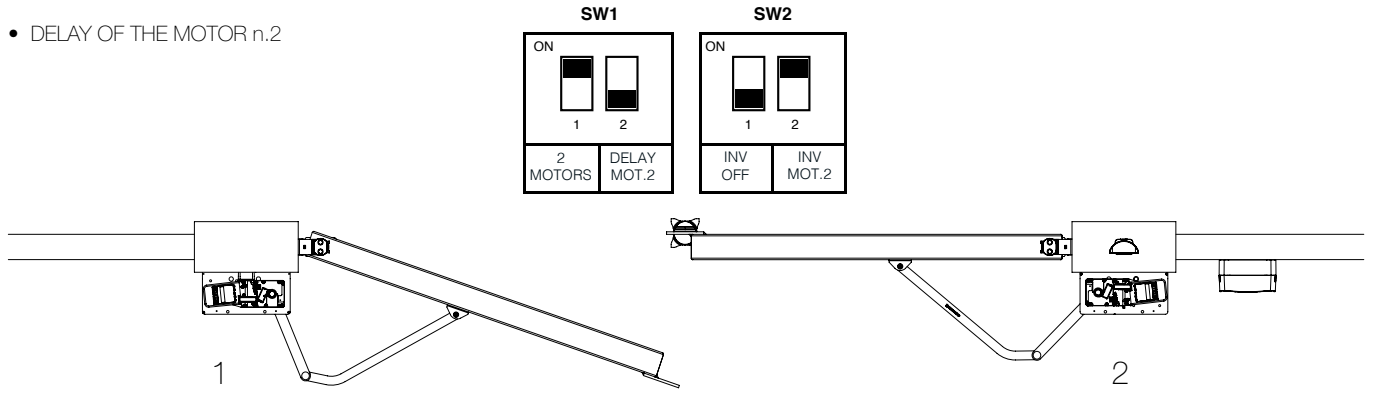
MOTOR n.2 (on the right)

RED with M2+
BLACK with M2-

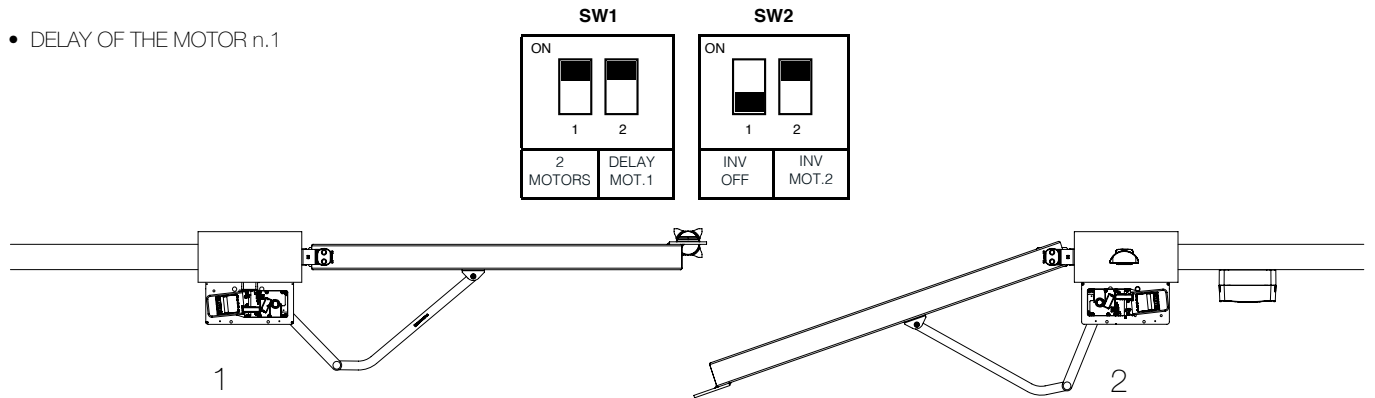


CONDOR 500 - connection diagram of the motors

- DELAY OF THE MOTOR n.2



- DELAY OF THE MOTOR n.1



Configuration - MASTER ON THE LEFT, SLAVE ON THE RIGHT

MOTOR n.1 (on the left)

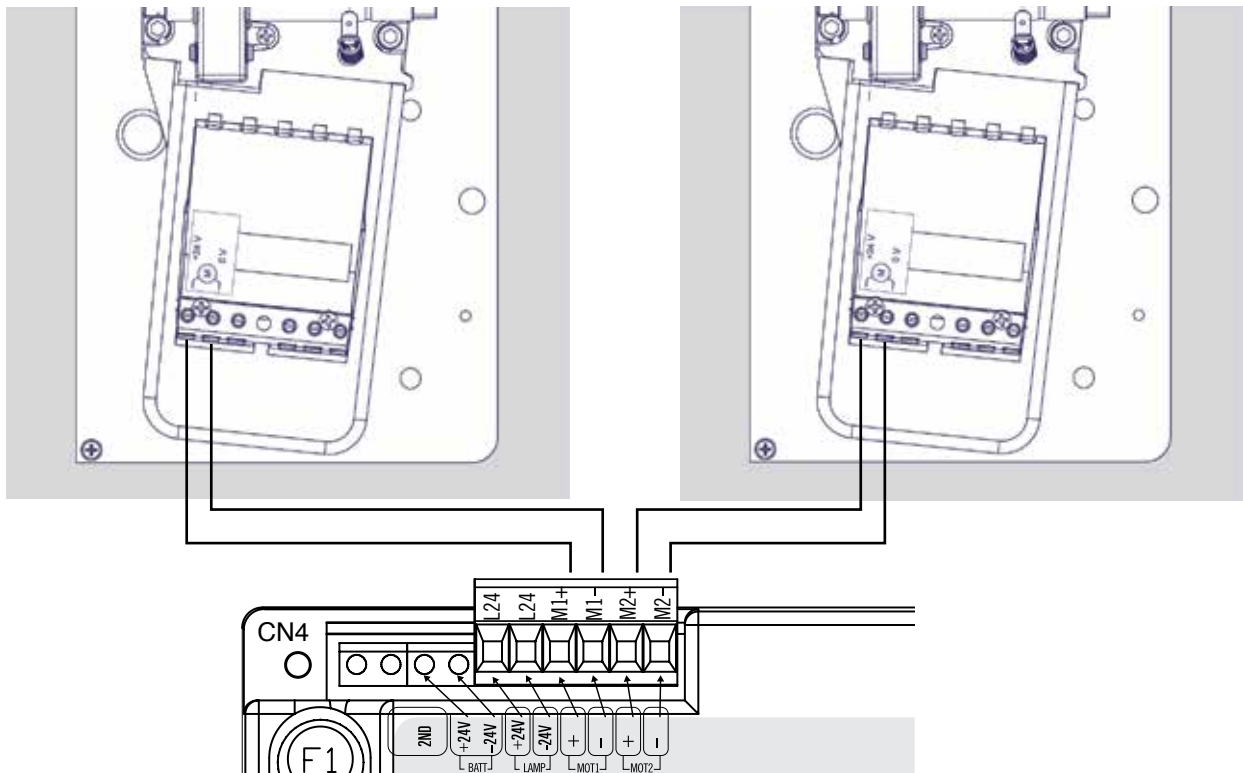
24V with M1+

0V with M1-

MOTOR n.2 (on the right)

24V with M2+

0V with M2-



INSTALLATION AND USER'S MANUAL

CU - 24V - HP

EC DECLARATION OF CONFORMITY:

The undersigned **Mr. Luca Comunello**, representing the following manufacturer,

Fratelli COMUNELLO Spa
Via Cassola 64, 36027 Rosà (VI) – Italy

DECLARES that the equipment described below:

Description: **Electronic control unit**
Model: **CU 24V HP**

Is in compliance with the provisions set down in the following directives:

- 2004/108 EC Directive (EMC Directive)
- 2006/95/CE Directive

and that all the rules and/or technical specifications shown below have been applied:

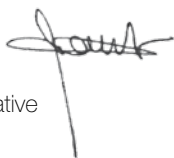
EN61000-6-2 + EN61000-6-3
EN62233 :2008
EN301489-1 + EN301489-3 + EN300220-2
EN60335-1 :2002
and the following amendments.

Last two digits of the year in which the EC marking has been affixed **14**

Rosà (VI) – Italia
01-09-2014

and he also declares that it is not allowed to commission the device until the machinery where it will be incorporated or whose it will become a component will have been identified and will have been declared in compliance with the conditions of the 2006/42 EC Directive and with the national legislation that transpose it.

Mr. Luca Comunello
Fratelli Comunello Legal Representative



Fratelli Comunello S.p.A.
Company with certified Quality Management System
UNI EN ISO 9001:2008.

(Certificate n° 50 100 11235 Rev. 01)

PRESCRIPTIONS

- The control unit is not equipped with a device for disconnection of the 230 Vac power supply line. It is therefore the responsibility of the installer to fit a disconnection device in the electrical system. The disconnection device must be composed of a category III overvoltage all-pole circuit breaker. This device must be positioned in consideration of the need to be protected against inadvertent reconnection in compliance with the requirements of EN 12453 point 5.2.9. Wiring of the external electrical devices to the control unit must be carried out in compliance with the prescriptions of EN 60204-1 as amended by EN 12453 point 5.2.7. The maximum diameter of power feeding cables is 14 mm; fixing of power feeding and connection cables must be assured by fitting cable glands, which can be supplied as optionals.
- The power input cables must be of the standardized flexible type with polychloroprene sheath (H05RN-F) having minimum conductor size of 1 mm².
- During the installation operations, take care to use cable with double insulation only (sheathed cables) for both of mains voltage connections (230V) and extra-low voltage connections (SELV). Use exclusively plastic cable trays, separated for mains voltage wiring (230V) and extra-low voltage wiring (SELV).
- The extra low voltage conductors must be physically separated (at least 4 mm in air) from the mains voltage wires, or shall be adequately insulated with extra insulation with a thickness of at least 1 mm.
- Upstream of main supply, install a device that ensures the complete omnipolar disconnection (cut-off switch) of the power supply, with a contact opening gap of at least 3mm in each pole. These disconnecting devices shall be placed in the power supply wiring in compliance with the installation standards and must be directly connected to the supply terminals.
- When drilling the outer case to insert the power and connection cables and when fitting the cable glands, take care to install all the parts in a manner that maintains the IP protection characteristics of the box unchanged as far as possible. Ensure the cables are fixed in a stable and secure manner.
- The rear of the box is equipped with knockouts for wall fixing (knockouts for fixing holes using anchor bolts or holes for fixing with screws). Take all the measures required to ensure the installation procedures do not affect the IP rating.
- If required, a pushbutton panel for manual control of the gate must be installed in a position such as to ensure the user is not placed in danger.

- The operator utilized to move the gate must be in compliance with the prescriptions of EN 12453, point 5.2.7.
- Power Supply output D.S. must be used for photocells. Alternative uses of this output are not permitted.
- At each operating cycle, the control unit can test the photocells operation to ensure protection against failure of anti-crushing protective devices according to Category 2 in compliance with the prescriptions of EN 12453 point 5.1.1.6. It follows that if the safety devices are not connected or are faulty, operation of the control unit will be inhibited.
- The device can be used by children no older than 8 years old and people with reduced physical, sensory or mental capabilities, or lack of experience or without the required knowledge, but only under surveillance or after having received instructions about the safe use of the device and the hazards inherent in it. Children should not play with the device. Cleaning and maintenance should not be carried out by children without supervision.

For correct operation of the radio receiver section, when using two or more control units it is good practice to install them at a minimum distance of 3 metres from one another.

All operations that require the control unit box to be opened (connection of cables, programming, etc.) must be carried out by expert personnel at the time of installation.

IMPORTANT INFORMATION FOR USERS

- The device must not be used by minors or psychologically-physically differently-abled persons unless they are supervised or duly instructed on the operation and methods of use.
- Do not let children play with the device and keep the remotes out of their reach.
- **IMPORTANT:** keep this instruction manual and comply with the safety prescriptions set down herein. Failure to comply with the prescriptions may cause damage and serious accidents.

Frequently examine the system to identify any signs of damage. Do not use the device if the enclosure is in need of repair (re-programming, repair or modification of the installation); contact technical service.

TECHNICAL SPECIFICATIONS

| | |
|------------------------------|-----------------------------------|
| Back-up Battery input: | 24 V $\overline{=}$ 7A/h max. |
| Flashing light output: | 24 V $\overline{=}$ 25 W max. |
| Operator outputs: \sim | 24 V $\overline{=}$ 2 x 50 W max. |
| Electric lock output: \sim | 24 V $\overline{=}$ 12W max. |
| Photocells power supply: | 24 V $\overline{=}$ 5 W max. |
| Indicator light output: | 24 V $\overline{=}$ 4 W max. |
| Working temperature: | -20 \div 55 °C |

| | |
|--------------------------------|-------------------------------|
| Radio receiver: | 433 Mhz |
| Transmitters: | 18 Bit or Rolling Code |
| Max TX codes stored in memory: | 120 (CODE or PED/2nd CH CODE) |
| Board dimensions: | 160 x 107 mm. |

PRELIMINARY CHECKS

- Check that the product in the pack is intact and in good condition.
- Check that the place of installation is suitable and in compliance with the minimum dimensions shown in FIG. 1.

INSTALLATION

- Drill the box in the four corners and then fix the control unit to the wall (FIG. 2).
- Drill a hole in the underside of the box for the cable inlet. (FIG. 3). The use of gable glands is recommended.

CONNECTIONS

CN1:

| | |
|-----------|-----------------------------|
| BATT+24V: | Back-up Battery + input |
| BATT-24V: | Back-up Battery – input |
| LAMP+24V: | 25W Flashing Light + output |
| LAMP-24V: | 25W Flashing Light – output |
| MOT1+: | Operator 1 + Output. |
| MOT1-: | Operator 1 – Output. |
| MOT2+: | Operator 2 + Output. |
| MOT2-: | Operator 2 – Output. |

CN2:

| | |
|---------------------|--|
| 2 nd CH: | Aux Radio CH Output (Free Contact max load 30V \equiv 1A). |
| 2 nd CH: | Aux Radio CH Output (Free Contact max load 30V \equiv 1A). |
| FOTO+: | Photocells Control and Power Supply (24 V \equiv 5W) |
| FOTO-: | Common GND input. |
| DS2: | Safety Device 2 Input (NC). |
| GND: | Common GND input. |
| DS1: | Safety Device 1 Input (NC). |
| STOP 8K2: | Emergency Stop Input (NC). |
| GND: | Common GND input. |
| P PED: | Pedestrian Pushbutton/Single Leaf/open input (NO). |
| PP: | Open-close / close command Pushbutton input (NO). |
| ELS+: | Electric Lock Output 12 V \equiv 15 W (+12V). |
| ELS-: | Electric Lock Output 12 V \equiv 15 W (GND). |
| 24V 5W: | User output (24 V \equiv 5W) |
| GND: | Common GND input. |
| SPIA+24V LED: | Indicator light output (+24 V \equiv 4 W) |
| ANT: | Antenna Ground Input. |
| ANT+: | Antenna Hot pole Input. |

CN3:

| | |
|-----------|---|
| ENC1 +: | Operator 1 Encoder Power Input. |
| ENC1 E: | Operator 1 Encoder Signal Input. |
| ENC1 GND: | Common GND input. |
| MOT1 FCA: | Operator 1 Opening Limit Switch Input (NC). |
| MOT1 FCC: | Operator 1 Closing Limit Switch Input (NC). |
| ENC2 +: | Operator 2 Encoder Power Input. |
| ENC2 E: | Operator 2 Encoder Signal Input. |
| ENC2 GND: | Common GND input. |
| MOT2 FCA: | Operator 2 Opening Limit Switch Input (NC). |
| MOT2 FCC: | Operator 2 Closing Limit Switch Input (NC). |

CN8:

| | |
|----|-----------------------------|
| L: | 230 V line input (phase) |
| N: | 230 V line input (neutral). |

FUNCTIONAL CHARACTERISTICS

AUTOMATIC OPERATION:

When either the remote or the low voltage pushbutton panel is used to control the gate, operation is as follows:
the first command opens the gate until motor time elapses or until the gate reaches its opening limit position; the second command closes the gate; if another command is transmitted before motor time has elapsed or before one of the two limiters has been reached, the control unit reverses the movement direction during both opening and closing.

STEP-BY-STEP OPERATION:

When either the remote or the low voltage control pushbuttons are used to control the gate, operation is as follows:

the first command opens the gate until motor time or until the gate reaches its opening limit position; the second command closes the gate; if another command is transmitted before motor time has elapsed or before one of the limit stops has been reached, the control unit stops the movement. Another command causes the gate to start moving again in the opposite direction.

Step-by-step 1 operations:

When either the remote or the low voltage control pushbuttons are used to control the gate, operation is as follows:

the first command opens the gate until motor time or until the gate reaches its opening limit position; the second command closes the gate; if another command is transmitted before motor time has elapsed or before one of the limit stops has been reached, the control unit stops the movement during both opening and closing. Another command causes the gate to start moving again in the opposite direction.

AUTOMATIC CLOSING:

The control unit can be set up to close the gate automatically without sending any additional commands.

The selection of this type of operation is described in Pause time programming mode.

PEDESTRIAN OPENING:

The control unit allows activation of exclusively Operator 1 for a programmable time via either the remote or the Pedestrian pushbutton.

SINGLE LEAF:

Despite being utilized in the configuration for a 2-operator gate, the control unit allows the Pedestrian/Single Leaf pushbutton (refer to Menu 2 for the correct pushbutton configuration) to start exclusively Operator 1, in accordance with the times programmed at the time of motor times programming.

EMERGENCY STOP INPUT:

The control unit allows the connection of an emergency stop pushbutton (NC). Pressing this pushbutton irrespective of the current operating mode of the control unit will cause immediate stopping of the gate movement. An additional gate movement command will be valid provided the emergency stop input is deactivated and, in any case, the control unit will execute the gate opening cycle with 5 seconds preflashing.

IMPORTANT: Jumper this input if it is not to be used.

PHOTOCELLS:

Photocells can be powered by and connected to the control unit in accordance with directive EN 12453.

Input DS1 (NC)

Tripping of the photocells during opening is disregarded, while during closing it causes reversal of the direction of movement.

Input DS2 (NC)

Tripping during opening causes momentary stopping of the gate; once the passage is free, the control unit resumes the opening movement. Tripping during closing causes reversal of the direction of movement.

Programmable input DS3 (NC), see Menu 2.

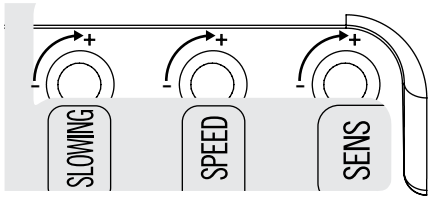
Tripping during opening causes reversal of the direction of movement. Tripping during closing is disregarded.

To allow operation in compliance with EN 13849-1 Category 2 a photocell test is performed before each movement. In order to perform this test it is essential to power the transmitter of each pair of photocells on the specific "Photocells Power and Control" output (outputs 3 and 5 of terminal strip CN2), while the receiver of each pair must be powered via the "Users Output" (outputs 14 and 15 of terminal board CN2). The control unit enables the movement only if the test is passed; if it is not, the control unit inhibits all movements and an alarm condition is signalled by blinking of all the programming LEDs on transmission of each command.

OPENING AND CLOSING LIMIT SWITCHES:

The control unit allows for the connection of two Opening and Closing limit switches (NC). Tripping in the associated operating stages causes immediate stopping of movement for both Operator 1 and 2 outputs.

IMPORTANT: Do not jumper these inputs if they are not used.



OPERATOR SPEED ADJUSTMENT (SPEED):

The electronic control unit is equipped with a "SPEED" trimmer for operator speed adjustment, completely managed by the microprocessor. Adjustment can be performed in a range of between 50% and 100% of maximum speed.

Initial starting torque can be set for each movement by feeding the operator at full power for 2 seconds, even if operator force adjustment is enabled.

Note: initial starting torque is disabled automatically if the Soft Start function is enabled.

IMPORTANT: If the "SPEED" trimmer is adjusted the self-learning procedure must be repeated because the movement and deceleration times may change.

OBSTACLE DETECTION (SENS):

The electronic control unit is equipped with a "SENS" trimmer, completely managed by the microprocessor, for adjustment of the opposing Force required to detect the presence of an obstacle.

The adjustment can be made with a trip time from a minimum of 0.1 seconds to a maximum of 7 seconds.

IMPORTANT:

- If limit switches are connected to the control unit detection of an obstacle will always result in movement reversal during closing and reversal for 2 seconds during opening.
- If there are no limit switches connected to the control unit detection of an obstacle will always result in movement reversal during closing (except in the final 5 seconds of the movement, when it will cause a Stop) and reversal for 2 seconds during opening (except in the final 5 seconds of the movement, when it will cause a Stop).

Obstacle detection system also works with automations without encoder.

OPERATOR 1 AND OPERATOR 2 ENCODER:

The control unit allows connection of an Encoder for each operator. The use of Encoders facilitates the work of the control unit in the Obstacles Detection function and ensures enhanced precision during execution of the gate movements.

DECELERATION (SLOWING):

The operators deceleration function is used on gates to prevent the moving leaves from slamming at speed into the limit stops at the end of the opening and closing strokes.

During Motor Time programming (see Main menu) the control unit allows programming of deceleration in the required points (immediately before full opening and full closing); in addition, using the "SLOWING" trimmer the force intensity can be adjusted during the deceleration phase in three fine adjustment level settings.

If the "Automatic Programming" function is used (see main menu) it is anyway possible to disable the deceleration stage (see Extended menu 2).

INDICATOR LIGHT:

The control unit allows a 24 V=== indicator light to be connected to display the status of the gate.

Indicator light off: gate closed

Indicator light on: gate open

Indicator light slow blinking: opening movement; rapid blinking: closing movement.

Convertible as flashing light output.

OPERATION WITH TIMER:

The control unit allows a timer to be connect in place of the open – close pushbutton.

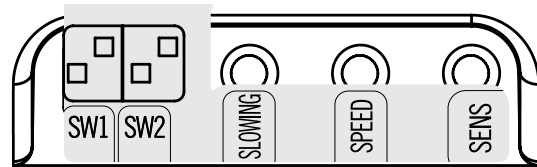
E.g.: at 08.00 am the timer closes the contact and the control unit commands an opening movement; at 06.00 pm the timer opens the contact and the control unit commands a closing movement. From 08.00 am – 06.00 pm at the end of the opening cycle the control unit disables the flashing light, automatic closing and the remotes.

ELECTRIC LOCK CONTROL OUTPUT:

The control unit features an output to control a 12Vdc 15W max electric lock. The command is switched on at each initial opening movement for a period of 2 seconds.

BACK-UP BATTERY:

The control unit has an integrated 13.7 V=== battery charger (so also for 24V Operators a 12V battery must be fitted). The control unit allows connection of a back-up battery with maximum capacity of 7Ah, which will allow the execution of several complete opening and closing cycles at reduced speed in emergency mode. If fitted, a Flashing Light will operate only for the first 4 seconds of the movement when mains power is absent.



DIRECTION OF RUN CONTROL IN OPERATOR 1 AND OPERATOR 2

| SW1 | | SW1 | | SW1 | |
|-------|---------|--------|---------|--------|---------|
| ON | | ON | | ON | |
| 1 | 2 | 1 | 2 | 1 | 2 |
| 1 | NOT | 2 | MOTOR | 2 | MOTOR |
| MOTOR | CONSID. | MOTORS | 2 DELAY | MOTORS | 1 DELAY |

Important Note: Warning: change the settings of dip-switches SW1 and SW2 with the control unit off and only subsequently repeat the control unit programming procedure.

The electronic control unit is equipped with a SW2 dip-switch that can be used to change the direction of run of each connected operator without rewiring the electrical connections: dip-switch 1 of WS2 controls operator 1 while dip-switch 2 of SW2 controls operator 2.

M1 OR M2 DELAY CONTROL AND ENABLING OF 1 OR 2 MOTORS

| SW2 | | SW2 | | SW2 | | SW2 | |
|-----|-----|-------|-----|-----|-------|-------|-------|
| ON | | ON | | ON | | ON | |
| 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| INV | INV | INV | INV | INV | INV | INV | INV |
| OFF | OFF | MOT 1 | OFF | OFF | MOT 2 | MOT 1 | MOT 2 |

The electronic control unit is equipped with a SW1 dip-switch that is used to select operation with 1 or 2 operators and to define which of the two starts first and which starts second.

PROGRAMMING:

SELECT key: selects the type of function to store; the selection is indicated by blinking of the LED.



Press the key twice to go to the required function. The selection remains active for 10 seconds shown by blinking of the LED; when this interval elapses the control unit returns to the original state.

SET key: programs the information in accordance with the function type preselected with the SEL key. **IMPORTANT:** The SET key function can be replaced by the remote if programmed beforehand (CODE LED on).

Programming enabled only when safety devices are not active.

MAIN MENU

The control unit is factory set to allow the selection of several important functions.

| | | ON  | OFF  |
|-----|--------------|--|---|
| L1 | STEP-BY-STEP | Step-by-Step | Automatic |
| L2 | CODE TX | Code entered | No code |
| L3 | CONDO | ON | OFF |
| L4 | MOTOR TIME | Programmed time | 30 sec. |
| L5 | PAUSE TIME | With automatic closure | Without automatic closure |
| L6 | DELAY | ON | OFF |
| L7 | AUTOM PRG | ON | OFF |
| LEV | MENU | ON | |

1. STEP-BY-STEP:

In the default configuration the control unit is set with "Automatic" operating logic enabled (LED n1 off); if the "Step-by-Step" operating logic is required (LED n1 on), proceed as follows; use the SELECT key to select blinking LED n1 and then press the SET key: LED n1 becomes steady on and programming will be completed.

If the "Step-by-Step 1" operating logic is required, repeat the operation above described, by pressing the SEL key twice instead only one (to obtain the quick blinking of LED). Repeat the procedure if you wish to restore the previous configuration.

2. TX CODE: (Radio control code):

Up to 120 remotes with different codes of either the fixed or rolling code type can be saved on the control unit.

Programming:

Programming of the transmission code is performed as follows: use the SELECT key to select blinking LED L2. Press SET once; the LED will change its blinking mode (longer 1 0 1 0) to show that the first level is being saved. On sending the selected code with the required remote, the CODE LED will remain steady on to indicate that programming has been completed.

To save the code for pedestrian opening / single leaf proceed as follows: use the SELECT key to select blinking CODE LED L2. Press SET twice consecutively; the LED will change its blinking mode (1 1 0 1 1 0) to show that

the pedestrian code is being saved. On sending the selected code with the required remote, the CODE LED L2 will remain steady on to indicate that programming will be completed.

To save the code for the 2nd AUX channel proceed as follows: use the SEL key to select blinking LED L2. Press SET three times consecutively; the LED will change its blink mode (1 1 1 0 1 1 1 0) to show that the 2nd AUX channel code is being saved. On sending the selected code with the desired remote, LED L2 will remain steady on to indicate that programming will be completed.

If all 120 codes have been saved, repeating the programming operation will cause all the programming LEDs to start blinking to signal that no further codes can be saved.

Deletion:

Use SEL to go to LED L2; activate blinking of the code to be deleted (CODE or PEDESTRIAN or 2nd AUX channel as identified by the associated blinking mode); press and hold down SET for > 5 s. After this interval the LED will switch off for 2 seconds and the procedure is completed. If all CODE and PEDESTRIAN codes are deleted, the LED will remain off.

If only PEDESTRIAN or 2nd CH codes remain stored, the LED blinking mode will change (1 1 1 1 0 1 1 1 1 0)

Rule of the first saved Remote control:

When programming remotes the following rule is applied: if the first remote to be saved is of the rolling code type, the receiver will subsequently accept only rolling code remotes, thus providing enhanced anti-intrusion security; if the first remote to be saved is of the fixed code type, the receiver will subsequently accept both fixed code remotes and rolling code remotes.

3. CONDO:

The Condominium function means that during the opening movement or during the pause time the control unit will not respond to commands sent by Pushbuttons or remotes. In contrast, during the closing movement a command sent by the Pushbuttons or the remotes will reverse the direction of movement. This operating mode is invaluable when the automation includes a loop detector.

In the default configuration the control unit is set with the Condominium

function disabled; if the Condominium function is to be enabled, proceed as follows: use the SELECT key to select blinking LED L3 and then press the SET key: LED L3 becomes steady on and programming will be completed. Repeat the procedure if you wish to restore the previous configuration.

4. MOTOR TIME (Motor time programming, max 4 minutes):

The control unit is factory set with Operator run time of 30 seconds without deceleration.

If the motor time of Operators 1 and 2 must be changed, programming must be carried out with the gate closed as follows: use the SEL key to select blinking LED L4 and then press the SET key momentarily; Operator 1 will start the opening cycle; when the required deceleration starting point is reached press the SET key again; LED L4 will start blinking more slowly and Operator 1 will decelerate; on reaching the required position press SET to terminate the Opening cycle. At this point LED L4 will revert to the normal blinking rate Operator 2 will start the opening cycle: repeat the run time programming operation for Operator 2. When motor times programming for the opening cycle is terminated Operator 2 restarts immediately in the closing cycle: repeat the operations described above for the Closing cycle of Operator 2 followed by Operator 1.

If you do not require the control unit to perform the deceleration, during programming, when the opening and closing cycles have been completed press the SET key twice consecutively rather than just once.

If the control unit is used in the single operator configuration (dip-switch SW1 OFF), programming of the run time of Operator 2 is not executed.

During programming, instead of the SET key on the control unit you can use the button on the remote, providing the remote has been saved beforehand.

5. PAUSE TIME (Automatic closing time programming 4 min. max.):

The control unit is factory set with automatic closing disabled. If you wish to enable automatic closing proceed as follows: use the SEL key to select blinking LED L5 and press the SET key momentarily; now wait for a time equivalent to the required time; press the SET key again momentarily and at the same time the automatic closing time will be saved and LED L5 will remain steady on. If you wish to restore the initial condition (no automatic closing) select blinking LED L5 and then press the SET key twice consecutively in an interval of 2 seconds. The LED will switch off and the operation will be completed.

During programming, instead of the SET key on the control unit you can use the button on the remote, providing the remote has been saved beforehand

6. LEAVES DELAY (15 sec. max leaf delay programming):

The control unit is factory set with leaves opening and closing delay disabled (4 sec.). If the control unit is used in the configuration for an automation with 2 operators, it may be necessary to set a different leaves delay time; programming must be performed with the gate closed as follows: press the SELECT key to select blinking LED L6 then press the SET key momentarily; now wait for a time equivalent to the desired time interval and then press the SET key again momentarily, at the same time the fixed 4 second leaves opening delay and the closing delay for the programmed time will be saved and LED L6 will remain steady on.

If you want to deactivate this function (without leaves delay), select blinking LED L6 and then press the SET key twice consecutively in a time interval of 2 seconds, at the same time the LED will switch off and the operation will be terminated.

7. AUTOMATIC PROGRAMMING:

The control unit allows Automatic Programming (SIMPLIFIED).



Press the SEL key to select blinking LED L7 and then press the SET key and hold it down; Operator 2 will perform the closing movement until reaching the limit switch or end stop, thereafter the Operator 1 movement will be repeated. If the Operators move in the opposite direction to the described direction, release the SET key, disconnect the control unit from the power supply and change the setting of dip-switch SW2 to change the direction of run of the required operator without having to rewire the connections. If the Operators sequence is correct, the control unit completes the Auto programming stage by performing a complete opening and closing cycle (keep the SET key pressed until the end of the Auto Programming procedure). During the Auto Programming procedure the Deceleration cycle is set automatically at approximately 15% of the complete cycle.

During Automatic Programming, instead of the SET key on the control unit you can use the button on the remote, providing the remote has been saved beforehand.

Warning: Automatic Programming is not available without limit switches.

EXTENDED MENU 1

The control unit is factory set to allow direct selection exclusively of the main menu functions. If you wish to enable the functions described in Extended Menu 1, proceed as follows: select blinking LED L1 and press the SET key once. The LED will start blinking. This means there will be 30 seconds to select the functions of Extended Menu 1 using the SELECT and SET keys; once an additional 30 seconds have elapsed the control unit reverts to the main menu.

| | | ON  | OFF  |
|-----|-------------------------------------|--|---|
| L1 | HOLD-TO-RUN | ON | OFF |
| L2 | PEDESTRIAN / SINGLE LEAF PUSHBUTTON | SINGLE LEAF | PEDESTRIAN PUSHBUTTON |
| L3 | PEDESTRIAN PUSHBUTTON / DS3 | DS3 | PEDESTRIAN PUSHBUTTON |
| L4 | FOTOTEST | ON | OFF |
| L5 | DS2 STP IN CLOSING | ON | OFF |
| L6 | DS1 PARTIAL REVERSAL | ON | OFF |
| L7 | NCAS 8K2 | ON | OFF |
| LEV | MENU LEVEL | 1 FLASH | |

1. HOLD-TO-RUN:

The control unit allows to set the "Hold-to-run" function. If you wish to enable the function, proceed as follows: ensure you have enabled Extended Menu 1 (alternate blinking 1 0 1 0 1 0 of LED LEV) and then use the SEL key to select blinking LED L1 and press the SET key; LED L1 becomes steady on and the operation will be completed. With hold-to-run enabled, using either the remotes or the Pushbuttons to operate the gate, the following operation will be obtained: the command must be maintained constantly to move the gate. When the command is released movement will stop immediately. Repeat the procedure if you wish to restore the previous configuration.

2. SINGLE LEAF OR PED. BUTTON = OPEN, PED. BUTTON = CLOSE:

The control unit allows a NO Pushbutton to be connected (CN2 input no. 10) to activate the gate in Pedestrian Opening mode. It is however possible to use this input to connect a NO pushbutton operating in a different manner. If you wish to enable the "Single Leaf" function, proceed as follows: ensure you have enabled Extended Menu 1 (alternate blinking 1 0 1 0 1 0 of LED LEV) and then use the SEL key to select blinking LED L2 and press the SET key; LED L2 becomes steady on and the operation will be completed. With this function enabled the Pushbutton can be used to activate exclusively Operator 1 (refer to the heading "Single Leaf"). In contrast, if you wish to enable "OPEN-CLOSE" mode in order to use the Pedestrian Pushbutton to control exclusively opening of the gate and the P/P Pushbutton to (CN2 input no. 11) to control exclusively closing of the gate, repeat the operation described above, pressing the SEL key twice (LED L2 will blink rapidly) rather than just once. Repeat the procedure if you wish to restore the initial configuration.

3. PEDESTRIAN PUSHBUTTON / DS3:

The control unit allows a NO Pushbutton to be connected (CN2 input no. 10) to activate the gate in Pedestrian Opening mode. However, this input can be used to connect a DS3 photocell (NC): make sure you have enabled Extended Menu 1 (alternate blinking 1 0 1 0 1 0 of LED LEV) and then use the SEL key to select blinking LED L3 and press the SET key; LED L3 becomes steady on and the operation will be completed. Repeat the procedure if you wish to restore the previous configuration.

4. FOTOTEST (Photocells test):

The control unit is factory set with the photocells test disabled. If you wish to enable the photocells test proceed as follows: ensure you have enabled Extended Menu 1 (blinking 1 0 1 0 1 of LED LEV) and then use the SEL key to select blinking LED L4 and press the SET key; LED L4 becomes steady on and the operation will be completed. Repeat the procedure if you wish to restore the previous configuration.

5. DS2 STOP DURING THE CLOSING CYCLE:

The control unit allows the operation of input DS2 to be modified. If you want DS2 to trip also during closing (stopping of the gate leaf). If in Automatic operating mode and once the passage is free closing movement of the gate is resumed, proceed as follows: ensure you have enabled Extended Menu 1 (alternate blinking 1 0 1 0 1 0 of LED LEV) and

then use the SEL key to select blinking LED L5 and press the SET key; LED L5 becomes steady on and the operation will be completed. Repeat the procedure if you wish to restore the initial configuration.

6. DS1 PARTIAL REVERSAL:

The control unit allows the operation of input DS1 to be modified. If you want DS1 to cause a partial reversal (short reversal) of the gate leaf instead of a total reversal, proceed as follows: ensure you have enabled Extended Menu 1 (alternate blinking 1 0 1 0 1 0 of LED LEV) and then use the SEL key to select blinking LED L6 and press the SET key; LED L6 becomes steady on and the operation will be completed. Repeat the procedure if you wish to restore the initial configuration.



7. EMERGENCY STOP = 8K2:

The control unit allows the connection of a NC Emergency Stop pushbutton (CN2 input no.8). However, this input can be switched to an 8.2 KOhm resistive input: ensure you have enabled Extended Menu 1 (alternate blinking 1 0 1 0 1 0 of LED LEV) and then use the SEL key to select blinking LED L7 and press the SET key; LED L7 becomes steady on and programming will be completed. A change of the value read on the input will cause the control unit to shut down irrespective of the gate movement currently in progress. An additional gate movement command will be valid provided the correct input value is restored and irrespective of the prior status the control unit will execute the gate opening cycle. Repeat the procedure if you wish to restore the initial configuration.

EXTENDED MENU 2

The control unit is factory set to allow direct selection exclusively of the main menu functions.

If you wish to enable the functions described in Extended Menu 2, proceed as follows: select blinking LED no.8 and press SET twice. The LED will start blinking alternately 1 1 0 1 1 0. This means there will be 30 seconds to select the functions of Extended Menu 2 using the SEL and SET keys; once an additional 30 seconds have elapsed the control unit reverts to the main menu.

| | | ON  | OFF  |
|-----|-----------------|--|---|
| L1 | BRAKE | ON | OFF |
| L2 | DECELERATION | OFF | ON |
| L3 | ALWAYS CLOSE | ON | OFF |
| L4 | FOLLOW ME | ON | OFF |
| L5 | PEDESTRIAN TIME | ON | OFF |
| L6 | 2°CH MONOSTABLE | ON | OFF |
| L7 | REMOTE PROG. | ON | OFF |
| LEV | MENU LEVEL | 2 FLASHES | |

1. BRAKE

The control unit is factory set with the electronic brake function disabled. If you wish to enable this function, proceed as follows: ensure you have enabled Extended Menu 2 (alternate blinking 1 1 0 1 1 0 of LED LEV) and then use the SEL key to select blinking LED L1 and press the SET key; LED L1 becomes steady on and the operation will be completed.

With the brake enabled the control unit reduces coasting of the gate due to inertia at the time of a stop or direction reversal command. Repeat the procedure if you wish to restore the previous configuration.

2. DECELERATION:

As indicated above, the control unit allows a deceleration stage to be programmed during opening and closing, while with the Automatic Programming function the deceleration stage is included automatically. However, if no deceleration is required it can be excluded. In this manner, when using Automatic Programming the Deceleration stage will no longer be included, while if the Motor Times Programming function is used the option of programming a deceleration stage during opening and closing will no longer be available. If, before excluding the deceleration stage it had already been programmed using the Motor Times Programming function, programming must be repeated from the beginning. If you wish to exclude the deceleration stage proceed as follows: ensure you have enabled Extended Menu 2 (blinking 1 1 0 1 1 0 of LED LEV) and then use the SEL key to select blinking LED L2 and press the SET key; LED L2 becomes steady on and the operation will be completed. Repeat the procedure if you wish to restore the previous configuration.

3. ALWAYS CLOSE:

The control unit allows setting "Always Close" operation: this function,

which is programmable only if a Pause Time has already been programmed, is activated after a power loss; if the gate open condition is confirmed, a closing movement is started automatically, preceded by 5 seconds of preflashing. If you wish to perform this operation mode, proceed as follows: ensure you have enabled Extended Menu 2 (blinking 1 1 0 1 1 0 of LED LEV) and then use the SEL key to select blinking LED L3 and press the SET key; LED L3 becomes steady on and the operation will be completed. Repeat the procedure if you wish to restore the previous configuration.

4. FOLLOW ME:

The control unit allows the "Follow me" function to be configured; programmable only if a Pause Time has already been set, this function reduces the Pause Time to 5 seconds after freeing the DS1 photocell, meaning the gate re-closes 5 seconds after transit of the user. In order to enable this function proceed as follows: ensure you have enabled Extended Menu 2 (blinking 1 1 0 1 1 0 of LED LEV) and then use the SEL key to select blinking LED L4 and press the SET key; LED L4 becomes steady on and the operation will be completed. Repeat the procedure if you wish to restore the previous configuration.

5. PED. MOT. T: (Programming of pedestrian opening motor time of max 4 minutes)

The control unit is factory set with Motor time (Pedestrian opening) of 10 seconds without deceleration.

If pedestrian motor time must be changed, programming must be carried out with the gate closed as follows: ensure you have enabled Extended Menu 2 (blinking 1 1 0 1 1 0 of LED LEV) use the SEL key to select blinking LED L5 and then press the SET key momentarily; the Operator will start the opening movement; when the desired deceleration starting point is reached press the SET key again; LED L5 will start blinking more slowly and the Operator will decelerate; on reaching the desired position press SET to terminate the Opening cycle. At this point LED L5 returns to the normal blinking speed and the Operator restarts in the Closing movement; repeat the operations described above for the Closing movement.

If you do not require the control unit to perform the deceleration, during programming, when the open-close cycle has been completed press the SET key twice consecutively rather than just once.

During programming, instead of the SET key on the control unit you can use the button on the remote, providing the remote has been saved beforehand.

6. AUXILIARY RADIO CHANNEL OPERATING LOGIC:

The control unit allows the operating logic of the Auxiliary Radio Channel to be selected.

The control unit is factory set with "Monostable" operation of the Auxiliary Radio Channel. If you wish to enable "Bistable" operation proceed as follows: ensure you have enabled Extended Menu 2 (blinking 1 1 0 1 1 0 of LED LEV) and then use the SEL key to select blinking LED L6 and press the SET key; LED L6 becomes steady on and the operation will be completed. If you wish to enable "3 Minutes Timed" operation, repeat the operation described above; pressing the SEL key twice (LED L6 will blink rapidly) rather than once. Repeat the procedure if you wish to restore the initial configuration.

7. REMOTE RADIO CONTROL PROGRAMMING:

The control unit allows the transmission code to be programmed remotely without acting directly on the control unit SEL key.



Remote programming of a Radio remote control is performed as follows: send, continuously for a time in excess of 10 seconds, the code of a previously saved remote control; at the same time the control unit switches to programming mode as described above for the LED L2 in the main menu. If a previously saved code is transmitted continuously the control unit will enter programming mode of a new pedestrian code and LED L2 will blink as though acquisition of the pedestrian code were active (1 1 0 1 1 0 1 1 0); if the code is associated with the 2nd CH/AUX input the LED will blink as though acquisition of the 2nd CH code were active (1 1 1 0 1 1 1 0 1 1 0). To enable the remote programming function, proceed as follows:

ensure you have enabled Extended Menu 2 (blinking 1 1 0 1 1 0 of LED LEV) and then use the SEL key to select blinking LED L7 and press the SET key; LED L7 becomes steady on and the operation will be completed. Repeat the procedure if you wish to restore the initial configuration.

EXTENDED MENU 3

The control unit is factory set to allow direct selection exclusively of the main menu functions.

If you wish to enable the functions described in Extended Menu 3, proceed as follows: select blinking LED LEV and press SET 3 times. The LED will start blinking alternately 1 1 1 0 1 1 1 0. This means there will be 30 seconds to select the functions of Extended Menu 3 using the SEL and SET keys; once an additional 30 seconds have elapsed the control unit reverts to the main menu.

| | | ON  | OFF  |
|-----|-------------------------|--|---|
| L1 | SOFT STOP | ON | OFF |
| L2 | SOFT START | ON | OFF |
| L3 | RELEASE STROKE | ON | OFF |
| L4 | SLAM LOCK | ON | OFF |
| L5 | ELS / PED CMD | ON | OFF |
| L6 | FLASHING/COURTESY LIGHT | ON | OFF |
| L7 | PREFLASH/PAUSE FLASHING | ON | OFF |
| LEV | MENU | 3 FLASHES | |

1. SOFT STOP:

The control unit is factory set with the Soft Stop function disabled. If you wish to enable the function, proceed as follows: ensure you have enabled Extended Menu 3 (blinking 1 1 1 0 1 1 1 0 of LED LEV) and then use the SEL key to select blinking LED L1 and press the SET key; at the same time LED L1 becomes steady on and programming will be completed. With the Soft Stop function enabled, at the end of the movement the control unit will reduce operator force to zero gradually in a 2 second interval. Repeat the procedure if you wish to restore the previous configuration.

2. SOFT START:

The control unit is factory set with the Soft Start function disabled. If you wish to enable the function, proceed as follows: ensure you have enabled Extended Menu 3 (blinking 1 1 1 0 1 1 1 0 of LED LEV) and then use the SEL key to select blinking LED L2 and press the SET key; LED L2 becomes steady on and programming will be completed. With the Soft Start function enabled, at the start of each movement the control unit will regulate start-up of the operator, gradually increasing the force from the minimum to the value set by the "FORCE" trimmer during the first 2 seconds of operation. Repeat the procedure if you wish to restore the previous configuration.

Note: when the Soft Start function is enabled the control unit automatically disables the Starting Torque function, while if Soft Start is disabled then Starting Torque is automatically enabled.

3. RELEASE STROKE:

The control unit is factory set with the release stroke function disabled. This function comprises sending a closing command for 2 seconds at the start of an opening cycle: this facilitates release of the lock to allow correct execution of the opening cycle. If you wish to enable the Release Stroke function at the maximum power, proceed as follows: ensure you have enabled Extended Menu 3 (blinking 1 1 1 0 1 1 1 0 of LED LEV) and then use the SEL key to select blinking LED L3 and press the SET key; LED L3 becomes steady on and programming will be completed. If you wish to enable the Release Stroke function at the power set with the "FORCE" Trimmer, repeat the operation described by pressing the SELECT key twice (LED L3 will blink rapidly) rather than once. Repeat the procedure if you wish to restore the initial configuration.

4. SLAM LOCK:

The control unit is factory set with the Slam Lock function disabled. With deceleration during the closing cycle, this function adds 1 extra second at the maximum power or at the power selected with trimmer VR1, in such a way as to ensure positive engagement of the gate lock, if installed. If you wish to enable the Slam Lock function at the maximum power, proceed as follows: ensure you have enabled Extended Menu 3 (blinking 1 1 1 0 1 1 1 0 of LED LEV) and then use the SEL key to select blinking LED L4 and press the SET key; LED L4 becomes steady on and programming will be completed. If you wish to enable the Slam Lock function at the power set with the "FORCE" Trimmer, repeat the operation described above, pressing the SEL key twice (LED L4 will blink rapidly) rather than once. Repeat the procedure if you wish to restore the initial configuration.

5. PED CMD Electric Lock Activation (ELS/CMD PED):

The control unit is factory set with the function for electric lock activation via the Pedestrian command disabled. The function for electric lock activation via the Pedestrian command is used when, for example, the application consists of a sliding gate with a pedestrian gate alongside. With this

function enabled the sliding gate can be opened using the commands from the P/P Pushbutton and the remotes, and the pedestrian gate can be opened by activating the electric lock via the PED commands. To enable this function proceed as follows: ensure you have enabled Extended Menu 3 (blinking 1 1 1 0 1 1 1 0 of LED LEV) and then use the SEL key to select blinking LED L5 then press the SET key; LED L5 becomes steady on and programming will be completed. Repeat the procedure if you wish to restore the previous configuration.

6. FLASHING LIGHT OPERATION/COURTESY LIGHT:

The control unit is factory set with Flashing Light during Pause Time disabled. If you wish to enable this function proceed as follows: ensure you have enabled Extended Menu 3 (blinking 1 1 1 0 1 1 1 0 of LED LEV) and then use the SEL key to select blinking LED L6 and press the SET key; LED L6 becomes steady on and programming will be completed. Repeat the procedure if you wish to restore the previous configuration.

Courtesy Light Operation: The 24 Vac 4W max. Courtesy Light output will switch on for 3 minutes whenever an opening command is transmitted

7. PREFLASHING/PAUSE FLASHING:

The control unit is factory set with the Preflashing and Pause Flashing functions disabled. If you wish to enable the Preflashing function, proceed as follows: ensure you have enabled Extended Menu 3 (blinking 1 1 1 0 1 1 1 0 of LED LEV) and then use the SEL key to select blinking LED L7 and press the SET key LED L7 becomes steady on and programming will be completed. If you wish to enable the Pause Flashing function repeat the operation described above, pressing the SET key twice (LED L7 will blink rapidly) rather than once. Repeat the procedure if you wish to restore the initial configuration.

Preflashing Operation: The 230 Vac and 24V flashing light output will always switch on 3 seconds before the gate starts the closing operation..

Pause Flashing Operation: The 230 Vac and 24V Flashing Light output will switch on if previously programmed The Pause Time.

RESET:

If it becomes necessary to reset the control unit to restore the factory settings, press the SEL and SET keys together; this will cause all the RED indicator LEDs to light simultaneously followed immediately by the control unit switching off.

DIAGNOSTICS:

Photocell Test:

The control unit is prearranged for connection of safety devices in compliance with standard EN 12453 point 5.1.1.6. At each operating cycle a functional test of the connected photocell is performed. In the case of an open circuit and/or malfunctioning of the photocell, the control unit does not enable movement of the gate and visually signals the test failed condition by causing all the indicator LEDs to blink simultaneously. As soon as correct operation of the photocell is restored the control unit is ready for normal use. This operating mode guarantees failure mode monitoring in compliance with EN 954-1 Category 2.

Commands input test:

In correspondence with each low voltage command input the control unit is equipped with an indicator LED so that the status of the input can be checked at a glance.

Operating logic: LED on input closed, LED off input open.

WARRANTY

Fratelli Comunello SpA provides a warranty for 24 months for the correct functioning of the actuators from the date of manufacture, provided that the performance specifications indicated in the product instruction manuals are respected. Free of charge repair and replacement of components that are found to be faulty according to the indisputable judgment of the company's technical staff shall be guaranteed at the sole discretion of Fratelli Comunello Spa, and so excluding any claim for damages made by others. Warranty material shall be returned to Fratelli Comunello S.p.a. headquarters carriage paid and will then be shipped to the customer carriage unpaid. The material found to be faulty and returned to Fratelli Comunello S.p.a. shall remain property of the Seller. Any cost resulting from any work needed to repair the defect or to replace the material shall be charged to the Buyer. No compensation shall be allowed for the period of device inactivity. Work under warranty does not prolong the warranty period. The defect of the product shall be reported by the Buyer within 8 (eight) days from its discovery or from the date of delivery of the goods,

under penalty of invalidation of the warranty. Such claim shall be noted in writing.

Warranty does not cover:

Any product defect or damage that may have been incurred during transport; any defect or damage arising from any fault and/or from neglect, inadequacy and misuse of the electrical wiring in the Buyer's property; any defect or damage caused by any repairs carried out by non authorised personnel or by incorrect use/installation (with reference to this, system maintenance is recommended every 6 months) or if not original spare parts are used; any defect caused by chemicals or atmospheric conditions. The warranty does not cover any cost neither for consumable materials nor for alleged defects or convenient surveys.

Product Features Fratelli Comunello SpA products are subjected to continue changes and improvements; their technical features and image may therefore change without previous notice.

Competent court

Since the contract of sale is conformed by an Order Confirmation drawn up in Rosà, any such dispute shall be settled by the laws of Italy and by the court of Vicenza (VI).

COMUNELLO 
AUTOMATION

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