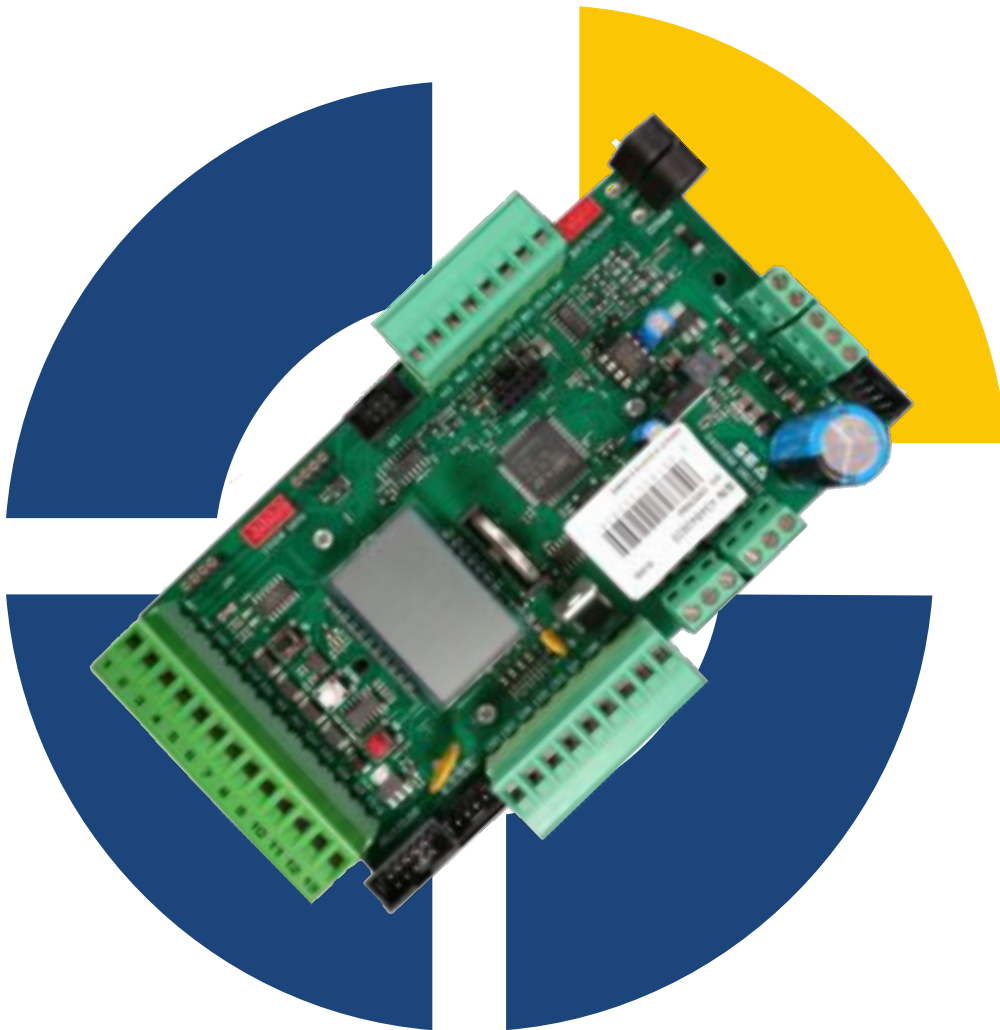


UNIGATE

STS120/121/122



QUICK START

Unigate inverter
Unigate 2MP - 4PM
Unigate 24V
Unigate BR (36v)

automation

by **nestor**
company

Focus on **expertise**,
supplier of **security**

Meer weten over ons compleet assortiment?
Contacteer uw vertegenwoordiger of bezoek ons kenniscentrum.

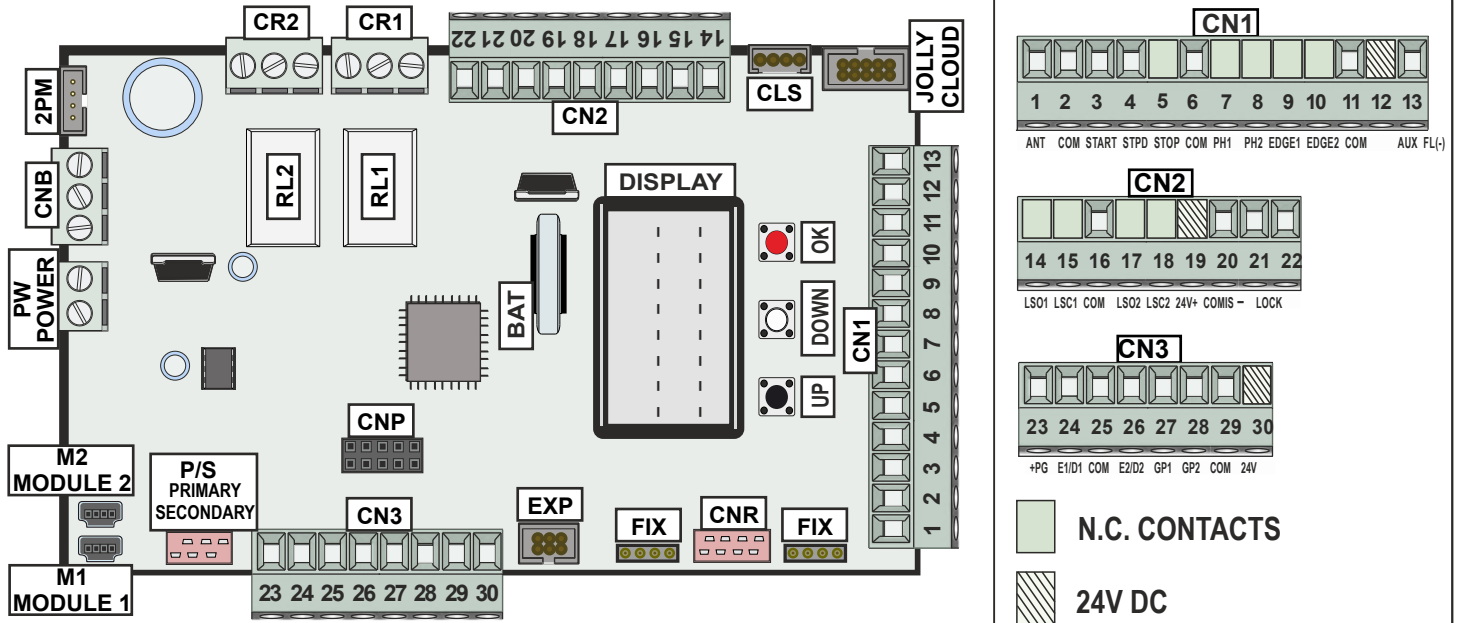
nestor company
E3-laan 93 9800 Deinze - Tel. 32 (0)9 380 40 20
sales@nestorcompany.be - www.nestorcompany.be

THE UNIGATE REQUIRES THE PROGRAMMING OF THE WORKING TIMES (CHAPTER 13);

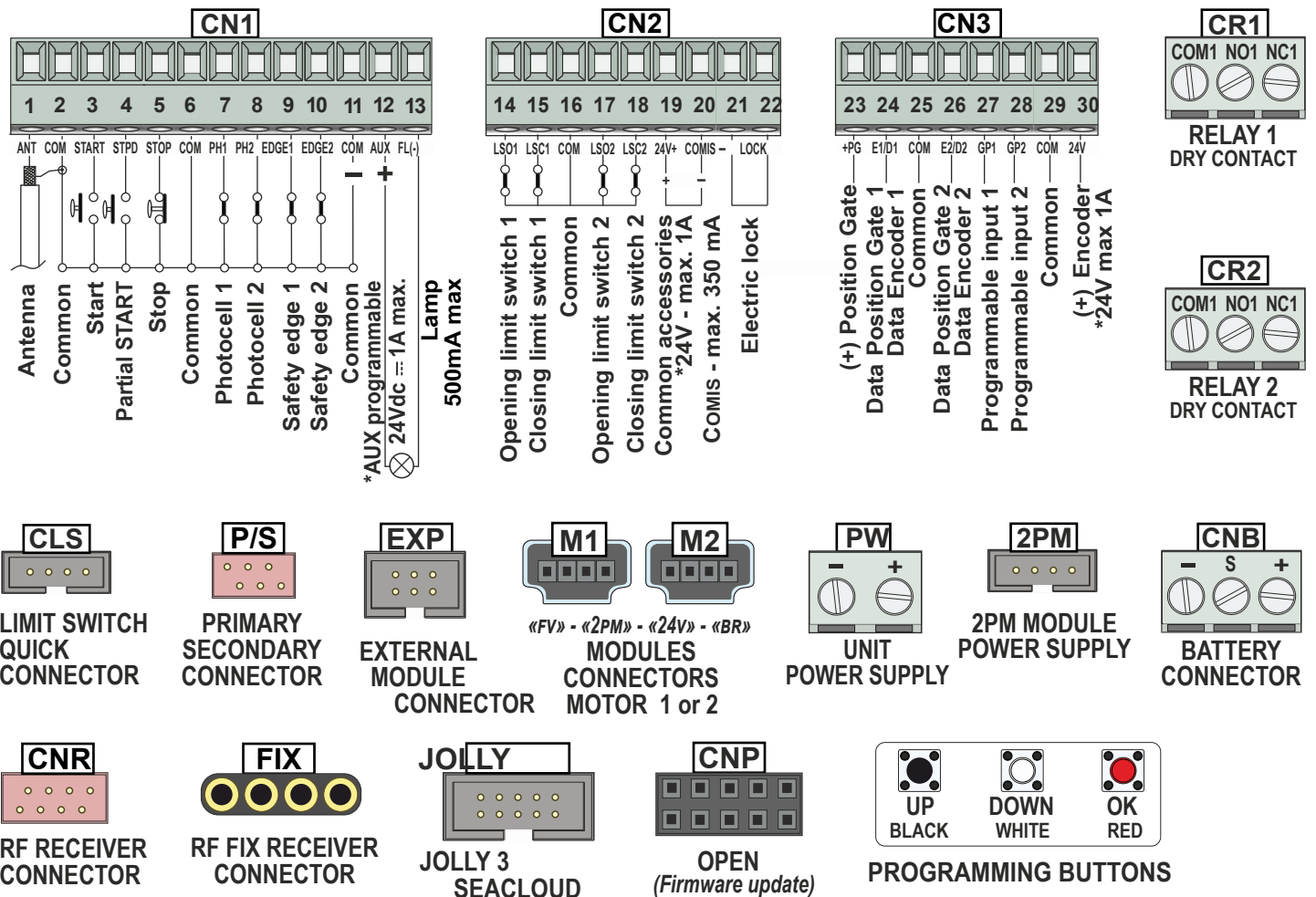
IT IS NOT POSSIBLE TO START THE OPERATOR CORRECTLY WITHOUT FIRST PROGRAMMING THE CONTROL UNIT!

«UNILOGIC» MAIN MODULE - COMPONENTS

WARNING: CONNECT ALL DEVICES WHEN THE CONTROL UNIT IS SWITCHED-OFF



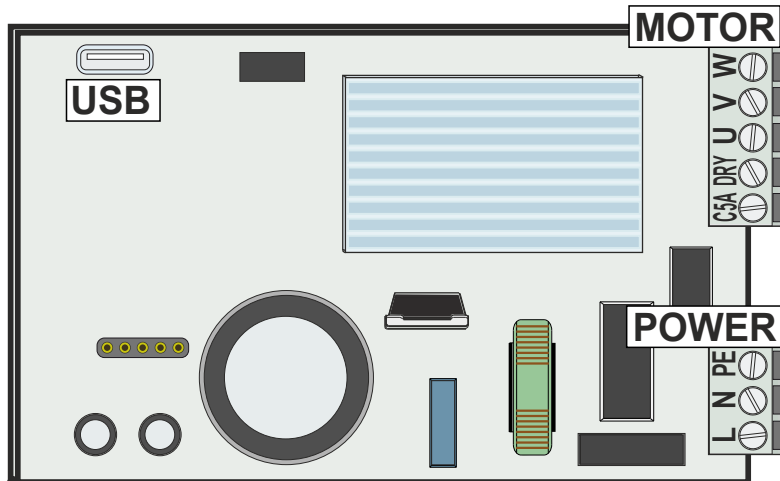
● AUTOMATIC RECOGNITION OF THE N.C. INPUTS NOT IN USE - NO JUMPERS REQUIRED ON THE N.C. CONTACTS



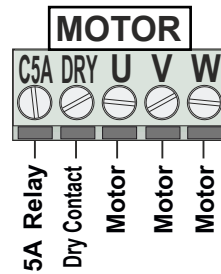
* ALL THE 24V INPUTS SUPPORT A MAXIMUM LOAD OF 1A REFERRED TO THE SUM OF THE LOADS OF ALL 24V ACCESSORIES CONNECTED, INCLUDING THE ABSORPTION OF THE RECEIVER ON BOARD (30 mA)

UNIGATE INVERTER - «FV» MODULE

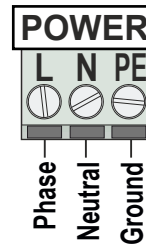
CONNECTIONS ON «FV» MODULE



MOTOR
CONNECTOR
AND DRY
CONTACT RELAY



INVERTER
POWER
SUPPLY
230V/115VAC



USB
CONNECTOR
TO
«UNILOGIC»



➔ COMPONENTS ALSO VALID FOR «FV-BIG» MODULE



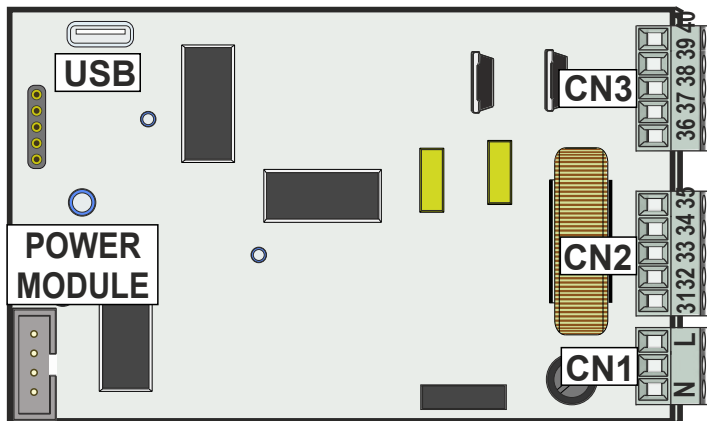
DO NOT CONNECT THE CAPACITORS!



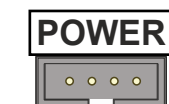
IT IS MANDATORY TO CONNECT THE GROUND CABLE ON THE «PE» INPUT

UNIGATE 2PM / 4PM - «2PM» MODULE

CONNECTIONS ON «2PM» MODULE

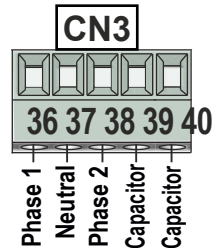
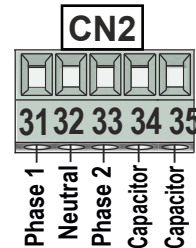


POWER SUPPLY
CONNECTOR



CONNECTOR TO
«UNILOGIC»

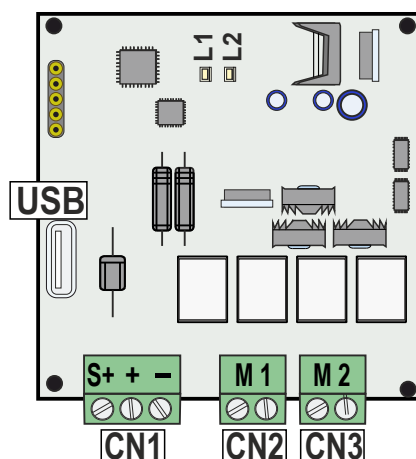
MOTOR 1 and MOTOR 2
CONNECTORS



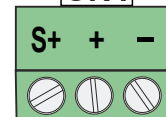
USB CONNECTOR
TO «UNILOGIC»

UNIGATE 24V - «24V» MODULE

CONNECTIONS ON «24V» MODULE

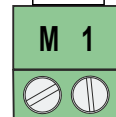


CN1



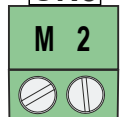
POWER SUPPLY
CONNECTOR

CN2



MOTOR 1 and MOTOR 2
CONNECTORS

CN3



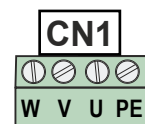
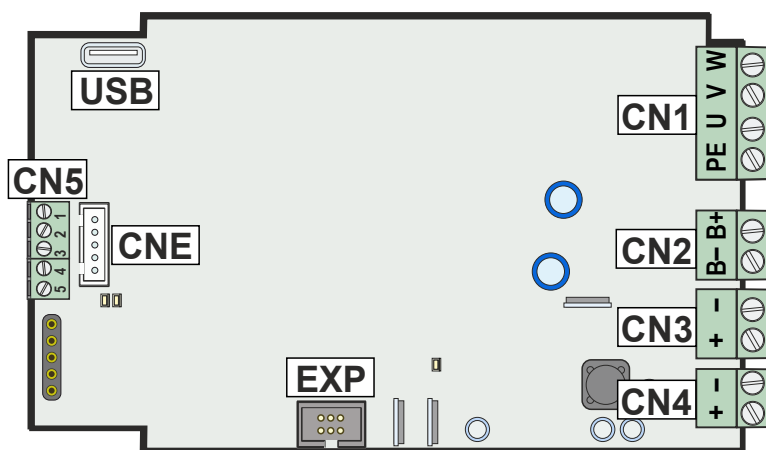
USB



USB CONNECTOR
TO «UNILOGIC»

UNIGATE BR - «BR» MODULE

CONNECTIONS ON «BR» MODULE



MOTOR CONNECTOR



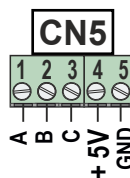
BATTERY CONNECTOR



POWER
20V / 48V



OUTPUT
24V - 2A



ENCODER
RAPID
CONNECTOR



EXTERNAL
MODULE
CONNECTOR



USB
CONNECTOR
TO
«UNILOGIC»



IT IS MANDATORY TO CONNECT THE GROUND CABLE ON THE «PE» INPUT

QUICK START

1 MAKE ALL THE CONNECTIONS WHEN THE CONTROL UNIT IS SWITCHED-OFF: ACCESSORIES (**CHAP. 1**), MOTORS (**CHAP. 2 - 5**), POWER SUPPLY (**CHAP. 6 - 10**)

2 DO NOT JUMPER THE N.C. CONTACTS (**AUTOMATIC DETECTION OF THE N.C. CONTACTS NOT IN USE**)

3 POWER ON THE CONTROL UNIT AND CHECK THE CORRECT STATUS OF THE INPUTS (**CHAP. 11**)

00111110
11111111

START AND PARTIAL START MUST BE N.O. (0) - ALL OTHER CONTACTS MUST BE N.C. (1)

4 OPTIONAL - SET UP THE «START» COMMAND ON THE TRANSMITTER (**CHAPTER 12**)

5 SET A PAUSE TIME TO OPERATE IN «AUTOMATIC» LOGIC, OTHERWISE THE LOGIC WILL BE «SEMI-AUTOMATIC» (**AUTOMATIC RECLOSING DISABLED**)

7
PAUSE
TIME

6 CHOOSE THE MOTOR TYPE ON MENU 3 (**SEE THE MENU TABLE**)

3
MOTOR

7 MOVE THE OPERATOR USING THE MENUS **192 MOVE GATE 1** OR **193 MOVE GATE 2**; IF THE GATE OPENS BY PRESSING AND IF THE GATE CLOSURES BY PRESSING THE MOTORS RUN CORRECTLY, OTHERWISE SWAP THE MOTORS CABLES

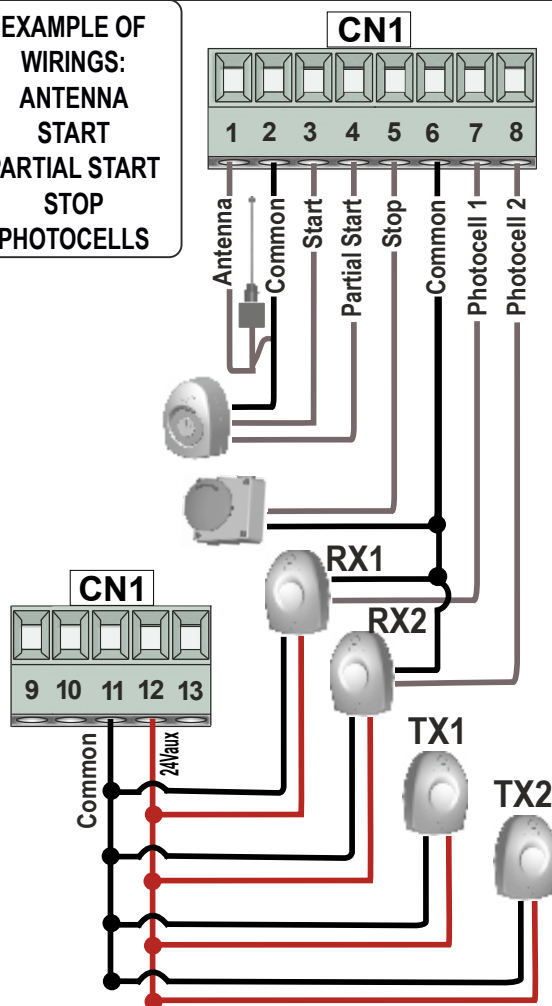
8 START THE WORKING TIMES LEARNING BY FOLLOWING THE PROCEDURE IN **CHAPTER 13**

→ THE UNIGATE UNIT HAS HUNDREDS OF SPECIFIC FUNCTIONS AND SETTINGS THAT ALLOW ITS USE IN VARIOUS APPLICATIONS AND CONDITIONS; IT ALSO ALLOWS THE CONNECTION OF MANY ACCESSORIES, SUCH AS DIFFERENT TYPES OF ENCODERS OR LIMIT SWITCHES, POTENTIOMETERS, BUTTONS, VARIOUS SAFETY DEVICES, ETC.

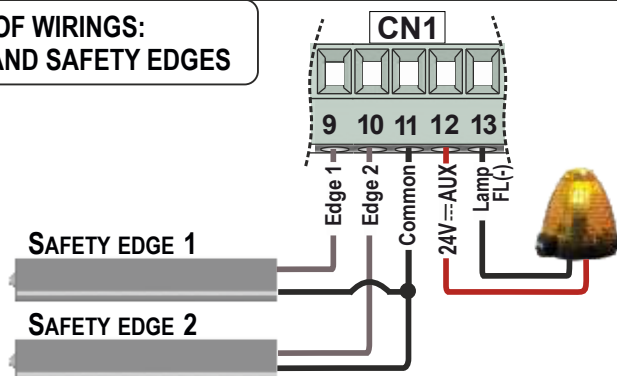
! FOR ALL THESE REASONS, SEA RECOMMENDS TO BROWSE THE COMPLETE TECHNICAL MANUAL BEFORE USE!

1 - MAIN WIRINGS ON «UNILOGIC» MODULE

EXAMPLE OF WIRINGS:
ANTENNA
START
PARTIAL START
STOP
PHOTOCELLS

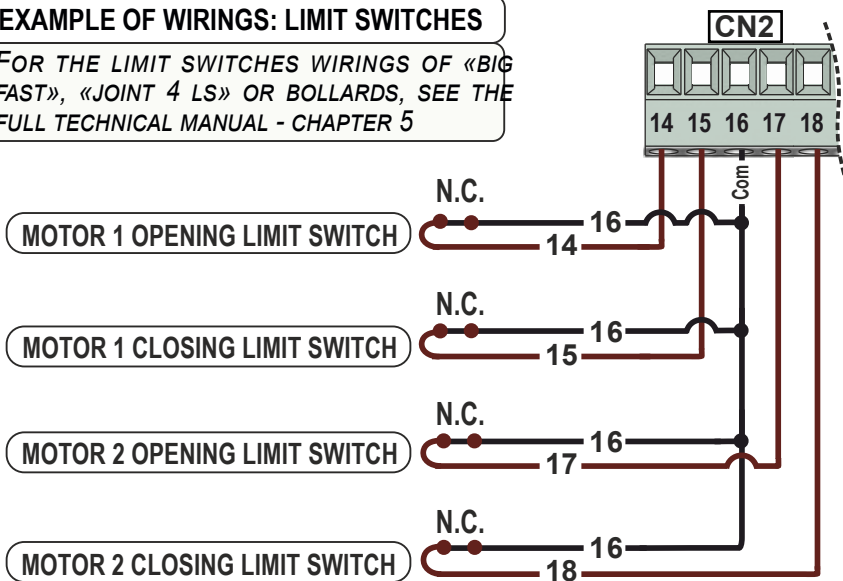


EXAMPLE OF WIRINGS:
FLASHING LAMP AND SAFETY EDGES

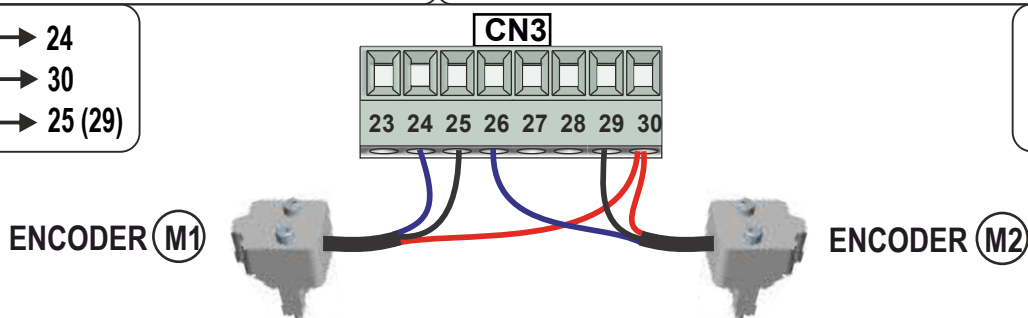


EXAMPLE OF WIRINGS: LIMIT SWITCHES

FOR THE LIMIT SWITCHES WIRINGS OF «BIG FAST», «JOINT 4 LS» OR BOLLARDS, SEE THE FULL TECHNICAL MANUAL - CHAPTER 5



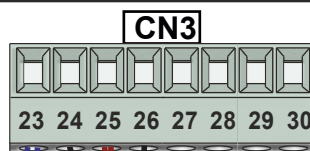
BLUE/WHITE → 24
RED/BROWN → 30
BLACK/GREEN → 25 (29)



BLUE/WHITE → 26
RED/BROWN → 30
BLACK/GREEN → 25 (29)

WHITE/BLACK → 24
GREEN/BLUE → 23
BROWN → 25 (29)

POTENTIOMETER (M1) POTENTIOMETER (M2)



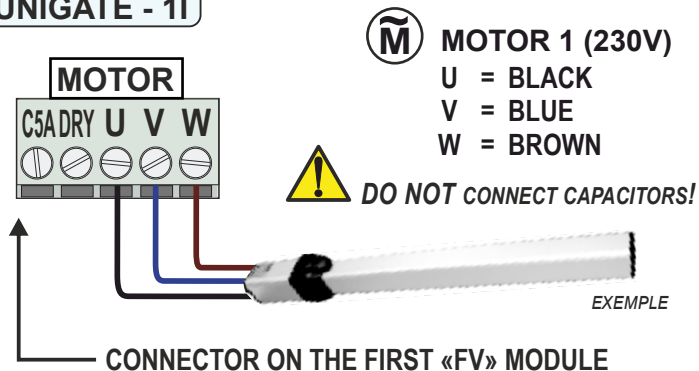
WHITE/BLACK → 26
GREEN/BLUE → 23
BROWN → 25 (29)

FOR THE WIRINGS OF OTHER ENCODER TYPES AND FOR ENCODER/POTENTIOMETER ADJUSTMENTS, SEE THE FULL TECHNICAL MANUAL

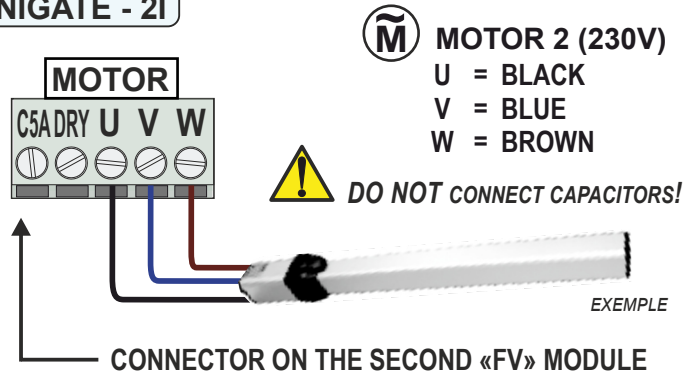
FOR THE CONNECTION OF FURTHER ACCESSORIES, FOR MORE DETAILS ON THE SPECIAL INPUTS «COMIS», «GP1», «GP2», «RELAY 1» AND «RELAY 2» AND FOR ALL DETAILS ON ACCESSORIES SETTINGS, SEE THE FULL TECHNICAL MANUAL

2 - MOTOR WIRINGS ON «FV» INVERTER MODULE

UNIGATE - 1I

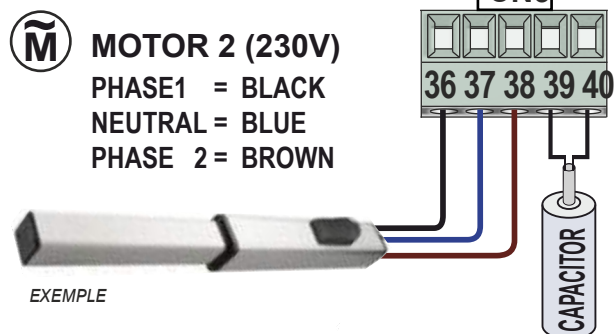
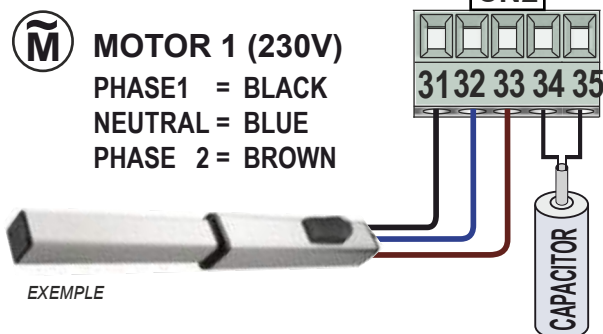


UNIGATE - 2I



3 - MOTOR WIRINGS ON «2PM» MODULE

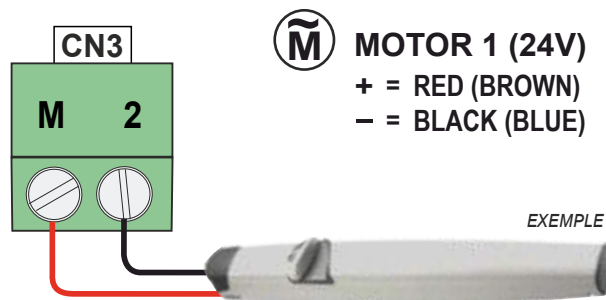
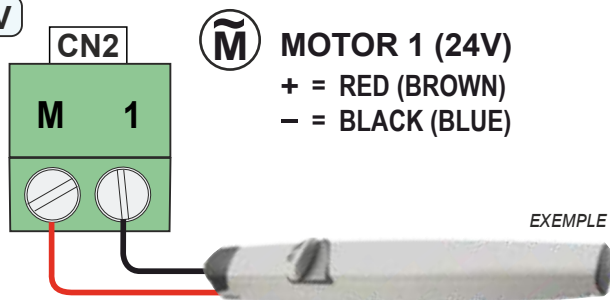
UNIGATE 2PM



➔ **UNIGATE 4PM: CONNECT THE OTHER TWO OPERATORS ON CN2 AND CN3 OF THE SECOND 2PM MODULE**

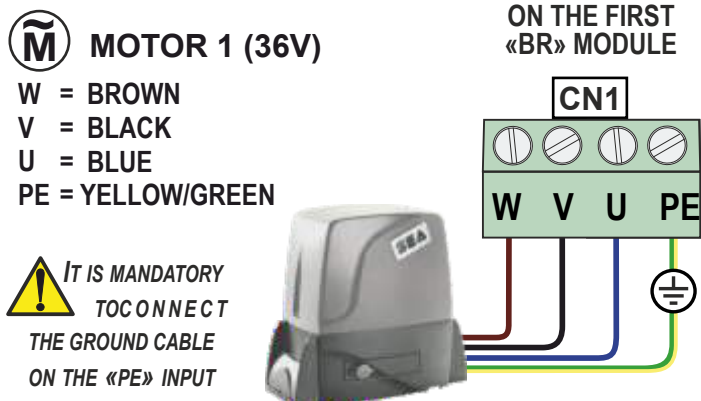
4 - MOTOR WIRINGS ON «24V» MODULE

UNIGATE 24V

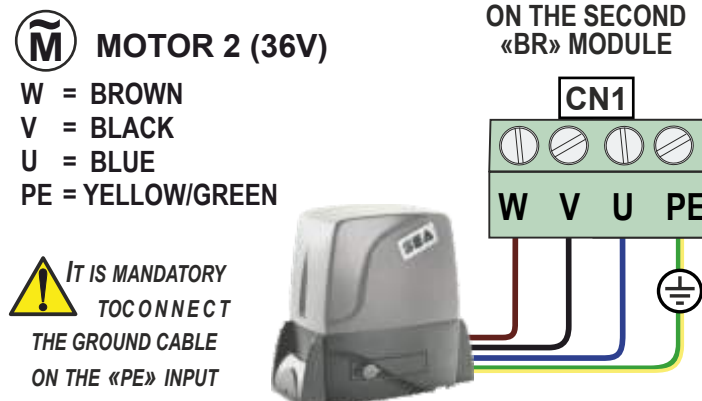


5 - MOTOR WIRINGS ON «BR» 36V MODULE

UNIGATE BR



UNIGATE 2BR

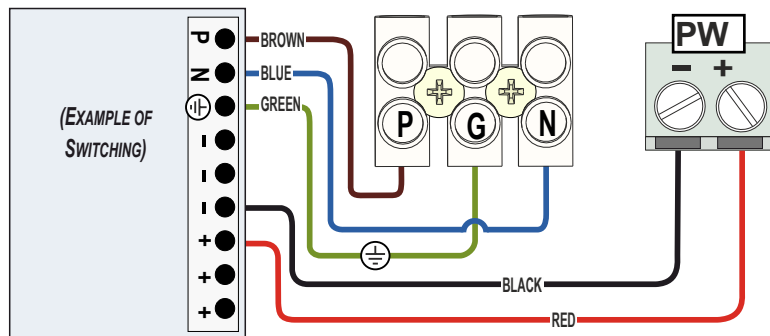


6 - «UNILOGIC» MODULE POWER SUPPLY WIRINGS

SWITCHING

MAIN
POWER SUPPLY

TERMINAL
ON «UNILOGIC»

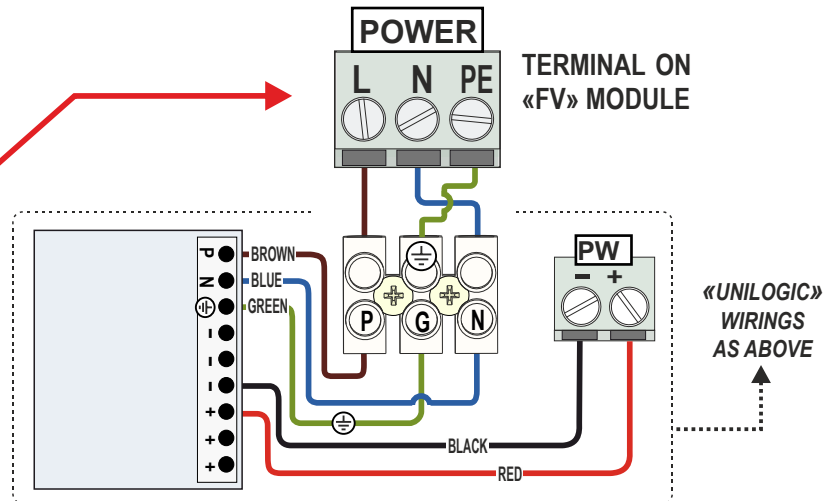
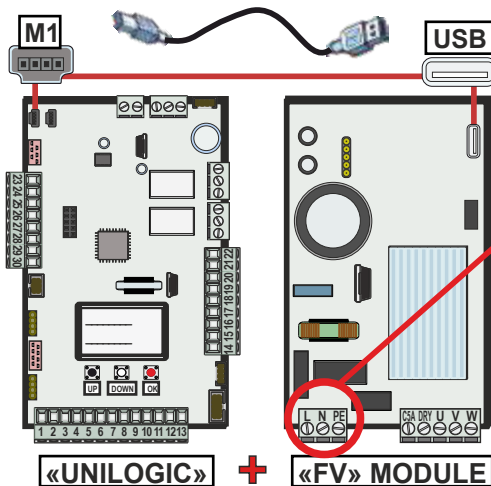


- FUSE 16AT DELAYED ON 230V~ POWER SUPPLY
FUSE 16AT DELAYED ON 115V~ POWER SUPPLY
- USE A 10A DIFFERENTIAL SWITCH TO PROTECT THE POWER SUPPLY SYSTEM
- IN CASE OF UNSTABLE POWER SUPPLY, THE USE OF AN EXTERNAL UPS OF MIN.800VA IS RECOMMENDED

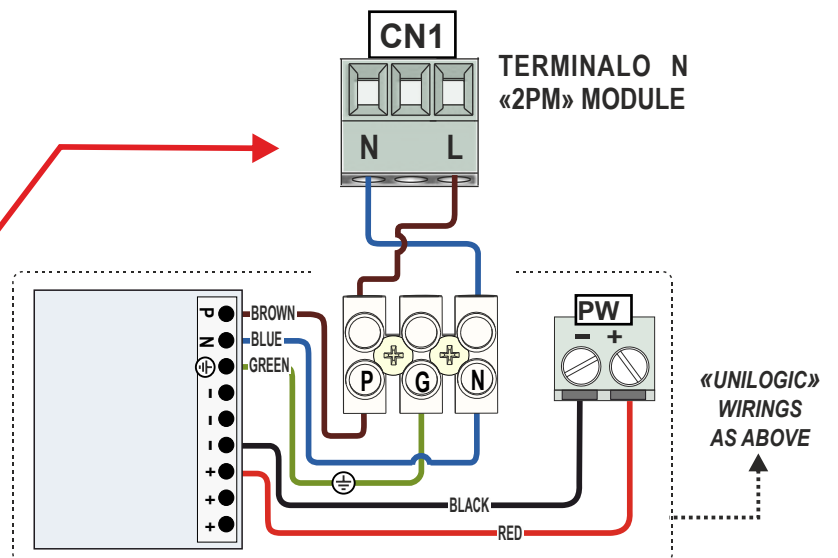
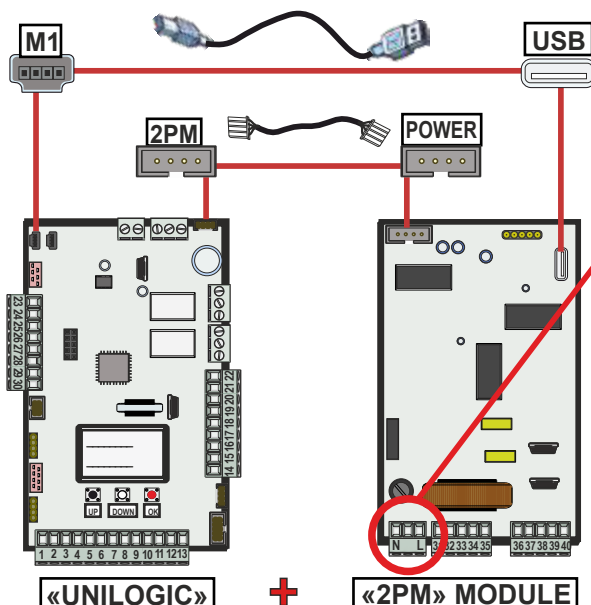


**FOR THE CONNECTION TO THE POWER GRID
RESPECT THE LAWS IN FORCE**

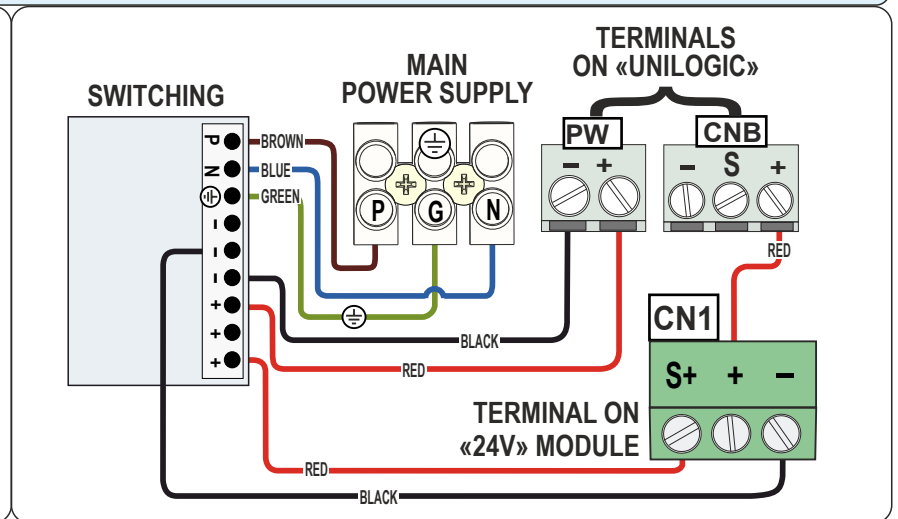
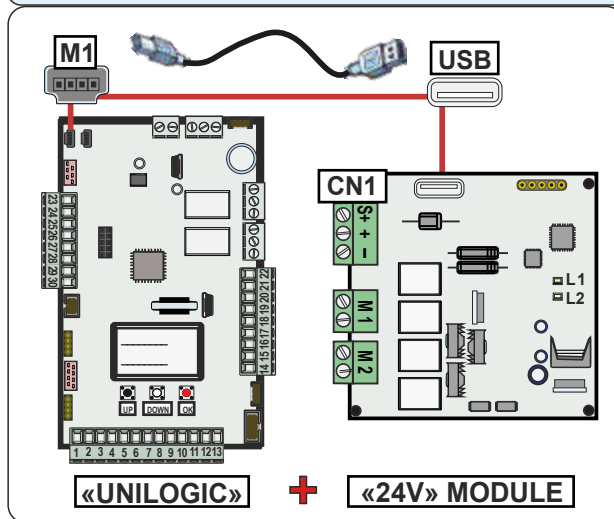
7 - «FV» MODULE POWER SUPPLY WIRINGS



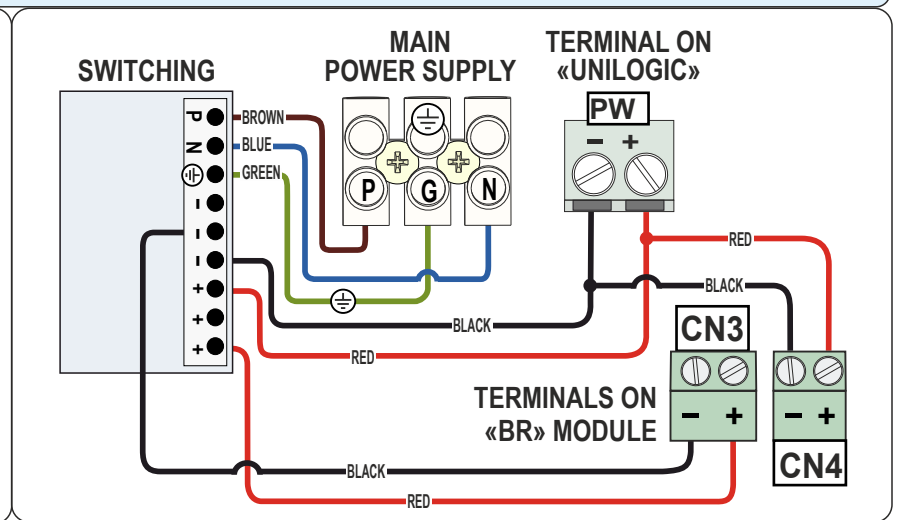
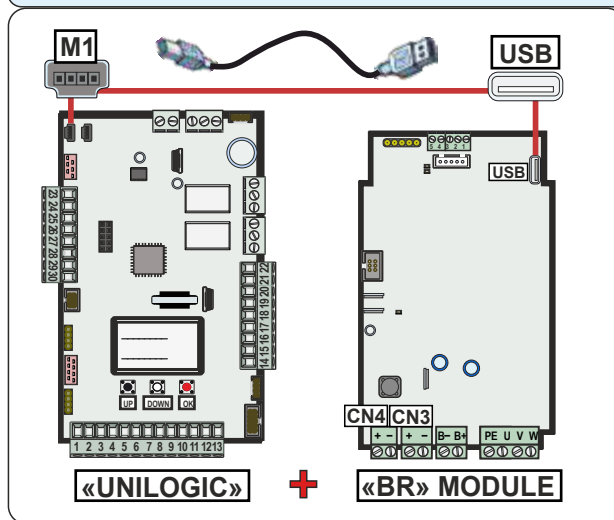
8 - «2PM» MODULE POWER SUPPLY WIRINGS



9 - «24V» MODULE POWER SUPPLY WIRINGS



10 - «BR» MODULE POWER SUPPLY WIRINGS



11 - INPUTS STATUS

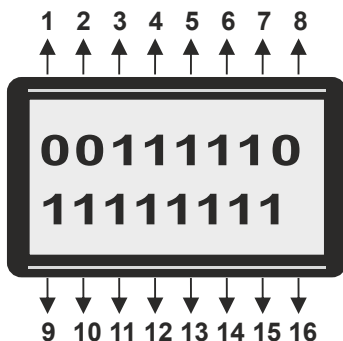
- EVERY INPUT CORRESPONDS TO A POSITION ON THE DISPLAY, ACCORDING TO THE DIAGRAM BELOW
- EVERY INPUT CAN BE: **NORMALLY OPEN (0)** - **NORMALLY CLOSED (1)**

0

N.O. - NORMALLY OPEN

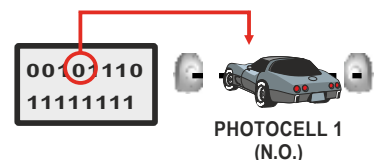
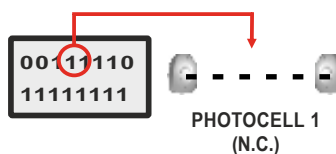
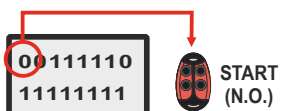
1

N.C. - NORMALLY CLOSED



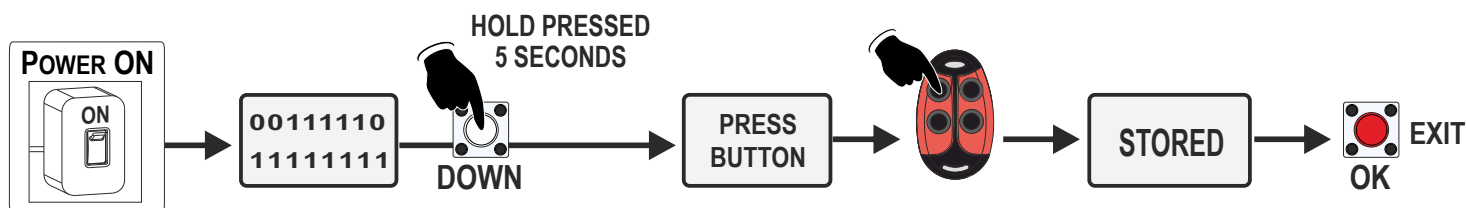
- | | |
|-----------------|---------------------------------|
| 1 START (**) | 9 MOTOR 1 OPENING LIMIT SWITCH |
| 2 PARTIAL START | 10 MOTOR 1 CLOSING LIMIT SWITCH |
| 3 STOP | 11 MOTOR 2 OPENING LIMIT SWITCH |
| 4 PHOTOCELL 1 | 12 MOTOR 2 CLOSING LIMIT SWITCH |
| 5 PHOTOCELL 2 | 13 E1/D1 (DATA M1) (*) |
| 6 SAFETY EDGE 1 | 14 E2/D2 (DATA M2) (*) |
| 7 SAFETY EDGE 2 | 15 GP1 (*) |
| 8 NOT IN USE | 16 GP2 (*) |

* INPUTS AVAILABLE ONLY IF THE SLOWDOWN LIMIT SWITCHES ARE CONNECTED
FOR MORE DETAILS, SEE THE FULL TECHNICAL MANUAL



START AND PARTIAL START MUST BE N.O. (0) - ALL OTHER CONTACTS MUST BE N.C. (1)

12 - «START» COMMAND ON TRANSMITTER QUICK LEARNING



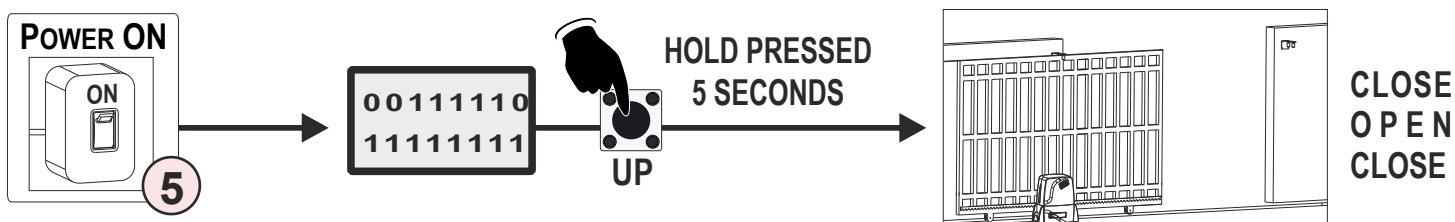
13 - WORKING TIMES LEARNING



DANGER!

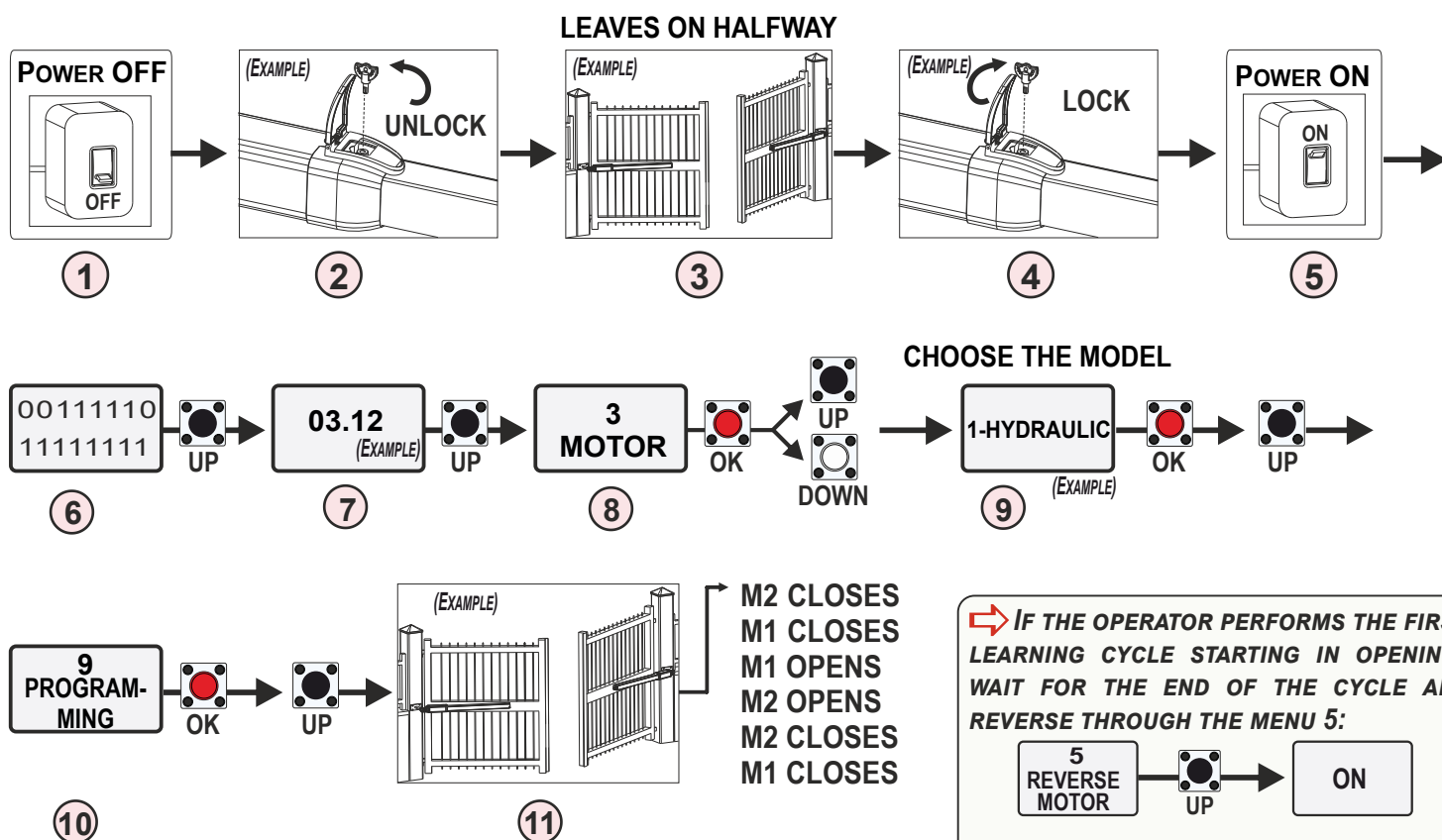
HAVE A QUALIFIED SERVICE PERSON TO CARRY OUT THE OPERATIONS IN SAFE CONDITIONS

QUICK START - ONLY FOR SEA SLIDING OPERATORS

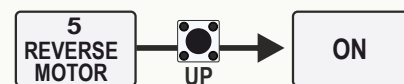


⚠️ MOVE THE GATE ON ITS HALFWAY BEFORE STARTING! SEE FROM POINT ① TO POINT ⑤ OF THE PROCEDURE BELOW

PROCEDURE - MORE DETAILS IN THE FULL TECHNICAL MANUAL



➡ IF THE OPERATOR PERFORMS THE FIRST LEARNING CYCLE STARTING IN OPENING, WAIT FOR THE END OF THE CYCLE AND REVERSE THROUGH THE MENU 5:



THEN REPEAT THE LEARNING PROCEDURE

➡ THE WORKING TIMES LEARNING COULD REQUIRE THE INSTALLATION OF LIMIT SWITCHES OR ENCODER OR POTENTIOMETER; FOR THE NECESSARY SETTINGS, CONSULT THE FULL TECHNICAL MANUAL

MENU FUNCTIONS TABLE - UNIGATE

LEGEND

INVERTER - FUNCTION AVAILABLE ON MODEL UNIGATE WITH "FV" INVERTER MODULE (1I - 2I - 1I BIG - 2I BIG) **2PM** - FUNCTION AVAILABLE ON MODEL UNIGATE WITH 2PM MODULE

24V - FUNCTION AVAILABLE ON MODEL UNIGATE WITH 24V MODULE

BR - FUNCTION AVAILABLE ON MODEL UNIGATE WITH BR MODULE

ALL - COMMON FUNCTIONS - AVAILABLE ON ALL UNIGATE MODELS

MEN U		SET	DESCRIPTION	MODEL	DEFAULT	NOTE
1	LANGUAGE	Italiano	Italian	ALL	English	
		English	English			
		Français	French			
		Español	Spanish			
		Dutch	Dutch			
2	TRANSMITTERS	Start	Start	ALL	Start Partial opening	
		Partial opening	Partial opening			
		External module	External module			
		Stop	Stop			
		Relay 1	To Activate Relay 1 for 3 seconds. This function requires menu "Relay 1" set on "TX Relay"			
		Relay 2	To Activate Relay 2 for 3 seconds. This function requires menu "Relay 2" set on "TX Relay"			
		Bistable Stop	Pressed once, it stops the gate. Pressed twice, it reactivates the START			
		Latch opening	One impulse opens and keep open. A second impulse restore the movement			
		Latch closing	One impulse closes and keep closed. A second impulse restore the movement			
		Unlock	To store a command for unlocking the electric brake			
		Delete a transmitter	To delete a single transmitter (TX)			
		Move to EEP	To transfer the transmitters stored on the control unit to the external EEPROM (MEM), if connected			
		Clear memory	To delete the full TX memory on the receiver			
		End	To exit the menu "transmitters"			
3	MOTOR	1- Hydraulic	Hydraulic operators - Series I (INVERTER)	INVERTER 2PM	Hydraulic	
		2- Sliding	Sliding operators - Series I (INVERTER)			
		3- Reversible Sliding	Reversible sliding operators - Series I (INVERTER)			
		4- Electromechanic swing	Electromechanic swing operators - Series I (INVERTER)			
		5- Three-phase - Bollards	Three-phase operators and Bollards Series I BIG (INVERTER with BIG module)			
		7- Barrier	Barriers - Series I (INVERTER)	INVERTER		
		8- BIG Fast BIG Super Fast 4LS	Sliding operators - Series I BIG (INVERTER with BIG module)			
		9- BIG	Sliding operators - Series I BIG (INVERTER with BIG module)			
		10- JOINT 4LS	Hydraulic operator with 4 limit switch Series I (INVERTER)			
		60- BIG RS 485	Sliding operators - Series I BIG (INVERTER with BIG module)			
		61- SEAGEAR RS 485	Sliding operators - Series I BIG (INVERTER with BIG module)			
		62- RAPID DOOR	Electromechanic operator - Series I (INVERTER)			
		64- LEPUS FAST *	Sliding operators - Series I (INVERTER)			

continues...

MENU		SET	DESCRIPTION	MODEL	DEFAULT	NOTE
3	MOTOR	32- ORION BOX FAST	24Vdc electromechanic operator	24V	SURF	
		35- SURF	24Vdc electromechanic operator			
		39- HT 270/390 24VDC	24Vdc hydraulic operator			
		43- SURF FAST	24Vdc electromechanic operator			
		65 KITE LS	24Vdc electromechanic operator			
		50- HALF TANK BR	Hydraulic operator - Series BR (BRUSHLESS)	BR	HALF TANK BR	
		51- SURF BR	Electromechanic swing operator - Series BR (BRUSHLESS)			
		52- SATURN BR	Electromechanic operator - Series BR (BRUSHLESS)			
		54- SPRINT BR	Hydraulic barrier - Series BR (BRUSHLESS)			
		55 KITE LS BR	Operatore elettromeccanico - Serie BR (BRUSHLESS)			
		56- COMPACT BR	Hydraulic operator - Series BR (BRUSHLESS)			
		57- JOINT BR	Operatore idraulico - Serie BR (BRUSHLESS)			
		58- LEPUS BR (ABC)	Scorrevole con Encoder ABC - Serie BR (BRUSHLESS)			
* Only for LEPUS FAST 220V. In case of LEPUS FAST 110V, choose the option 2-Sliding						
4	GATES NUMBER	From 1 to 2	To set the number of motors to be managed	INVERTER 24V - BR	1	
		From 1 to 4		2PM	2	
5	REVERSE MOTOR	On	To reverse the opening with the closing or vice-versa (both motors and limit-switches are reversed)	ALL	Off	
		Off	Off			
6	LOGIC	Automatic	Automatic	ALL	Auto-matic	
		Open-stop-close-stop-open	Step by step type 1			
		Open-stop-close-open	Step by step type 2			
		2 button	Two buttons			
		Safety	Safety			
		Dead man	Dead man			
7	PAUSE TIME	Off	Semi-automatic logic - (a START command opens and another START closes - automatic closing disabled)	ALL	Off	
		1 240	Setting from 1 second to 4 minutes			
8	START IN PAUSE	Off	The Start command is not accepted during pause	ALL	Off	
		On	The Start command is accepted during pause			
9	PROGRAMMING	Off On	To start the working times self-learning	ALL	Off	
		Choose direction	This menu is shown only if an Encoder RS 485 is connected - it allows to program one or two operators with RS 485 Encoder, in automatic or manual mode	INVERTER 24V BR		
10	TEST START	Off On	To give a Start command for testing the automation	ALL	Off	
11	BEAM LENGTH	3m - 4m - 5m - 6m 7m - 7,5m - 8m	This menu will be shown only if the option 7-Barrier is set in the menu 3-MOTORS. It allows to choose the beam length (values in meters)	INVERTER BR	----	
12	SLOWDOWN LIMIT SWITCH	Off On	This menu will be shown only if the option 5-Threephase/Bollards is set in the menu 3-MOTORS. It allows to activate the slowdown limit switch on bollards	INVERTER	Off	
13	LATCH PAUSE	Off On	If "ON" the operator complies with the pause time set when the function "LATCH OPENING" is disabled. When "OFF" the pause	INVERTER 24V BR	Off	

MENU		SET	DESCRIPTION	MODEL	DEFAULT	NOTE
14	RESET		A count-down of 5 seconds will start by holding the UP button; at its end "INIT" will appear on the display as confirmation of the control board reset			
192	MOVE GATE 1 *		Allows the movement of the gate in a temporary "dead man" mode <i>(for example to test the correct running of the motor)</i> HOLD UP PRESSED = THE GATE OPENS HOLD DOWN PRESSED = THE GATE CLOSES  	INVERTER 24V BR	----	
193	MOVE GATE 2 *		Allows the movement of the gate in a temporary "dead man" mode <i>(for example to test the correct running of the motor)</i> HOLD UP PRESSED = THE GATE OPENS HOLD DOWN PRESSED = THE GATE CLOSES  	INVERTER 24V BR	----	
* The command is accepted only at the end of the cycle or after a STOP; it is not accepted during the cycle and during the pause						
15	END		Press OK to return to the display of the firmware version and to the one of inputs state			
16	SPECIAL MENU		Press OK to enter the special menu			



UP DOWN

SPECIAL MENU

PRESS AT THE SAME TIME FOR 5 SECONDS TO ENTER OR TO EXIT THE SPECIAL MENU

LEGEND**INVERTER** - FUNCTION AVAILABLE ON MODEL UNIGATE WITH "FV" INVERTER MODULE (1I - 2I - 1I BIG - 2I BIG)**2PM** - FUNCTION AVAILABLE ON MODEL UNIGATE WITH 2PM MODULE**24V** - FUNCTION AVAILABLE ON MODEL UNIGATE WITH 24V MODULE**BR** - FUNCTION AVAILABLE ON MODEL UNIGATE WITH BR MODULE**ALL** - COMMON FUNCTIONS - AVAILABLE ON ALL UNIGATE MODELS

SPECIAL MENU		SET	DESCRIPTION	MODEL	DEFAULT	
17	OPENING SPEED 1	10 100	Speed in opening Motor 1	NOTE INVERTER	80	
		20 100		24V		
		30 100		BR		
18	CLOSING SPEED 1	10 100	Speed in closing Motor 1	INVERTER	80	
		20 100		24V		
		30 100		BR		
19	OPENING SPEED 2	10 100	Speed in opening Motor 2	INVERTER	80	
		20 100		24V		
		30 100		BR		
20	CLOSING SPEED 2	10 100	Speed in closing Motor 2	INVERTER	80	
		20 100		24V		
		30 100		BR		
21	SLOWDOWN SPEED IN OPENING 1	From 10% to 60% of the maximum speed	slowdown speed in opening Motor 1	INVERTER 24V - BR	30	
22	SLOWDOWN SPEED IN CLOSING 1	From 10% to 60% of the maximum speed	slowdown speed in closing Motor 1	INVERTER 24V - BR	30	
23	SLOWDOWN SPEED IN OPENING 2	From 10% to 60% of the maximum speed	slowdown speed in opening Motor 2	INVERTER 24V - BR	30	
24	SLOWDOWN SPEED IN CLOSING 2	From 10% to 60% of the maximum speed	slowdown speed in closing Motor 2	INVERTER 24V - BR	30	
25	LEARNING SPEED	10% 100 %	To adjust the time self-learning speed. This parameter can change according to the motor type set	INVERTER	50	
		20% 100 %		24V BR		

NOTE: The range of values that can be set in all the SPEED menus may vary according to the operator model

26	LEAF DELAY IN OPENING	Off 6 Total	Adjustable from Off to 6 seconds to "Total" (if on "Total" the Motor2 will start opening only after the Motor1 has completed the movement)	INVERTER 24V BR	1,5	
		Off 6	Adjustable from OFF (disabled) to 6 seconds	2PM		
27	LEAF DELAY IN CLOSING	Off 20 Total	Adjustable from Off to 20 seconds to "Total" (if on "Total" the Motor1 will start closing only after the Motor2 has completed the movement)	INVERTER 24V BR	2,5*	
		Off 20	Adjustable from OFF (disabled) to 20 seconds	2PM		
28	OPENING TORQUE 1	50% 100 %	Motor 1 opening torque: by increasing the torque, more strength will be required to execute the inversion in case of obstacle	INVERTER	100%	
		10% 100 %		2PM		
		5% 100 %		24V BR		
29	CLOSING TORQUE 1	50% 100 %	Motor 1 closing torque: by increasing the torque, more strength will be required to execute the inversion in case of obstacle	INVERTER	100%	
		10% 100 %		2PM		
		5% 100 %		24V BR		
30	OPENING TORQUE 2	50% 100 %	Motor 2 opening torque: by increasing the torque, more strength will be required to execute the inversion in case of obstacle	INVERTER	100%	
		10% 100 %		2PM		
		5% 100 %		24V BR		
31	CLOSING TORQUE 2	50% 100 %	Motor 2 closing torque: by increasing the torque, more strength will be required to execute the inversion in case of obstacle	INVERTER	100%	
		10% 100 %		2PM		
		5% 100 %		24V BR		

NOTE: The range of values that can be set in all the TORQUE menus may vary according to the operator model

SPECIAL MENU			DESCRIPTION	MODEL NOTE	DEFAULT	
32	ENCODER	On	ON = Encoder enabled OFF = Encoder disabled (when OFF, the working times learnt are only shown)	ALL	It depends on motor	
		Enc ABC	To enable the rotary Encoder for the management of the brushless operator and its position	BR	It depends on motor	
	47 ENCODER PAR.1	xxx.	Impulses read by Encoder during operation (Motor1)			
	48 ENCODER TOT. 1	xxx.	Impulses stored during programming (Motor 1)			
	49 ENCODER PAR.1	xxx.	Impulses read by Encoder during operation (Motor2)			
	50 ENCODER TOT. 2	xxx.	Impulses stored during programming (Motor 2)			
32	ENCODER	Potentiometer	To enable the reading of the potentiometer	ALL	Off	
		Absolute	To enable the reading of the absolute Encoder	INVERTER BR		
		RS 485	To enable the reading of the absolute rotative Encoder	INVERTER 24V - BR		
	51 I.PAR.M1 *	-----	To show the current position of the potentiometer on the leaf moved by Motor 1 . This parameter is useful to see if the potentiometer is correctly read			
	52 I.AP.M1	From the value learnt to ± 100 pulses	To show the impulses stored by the control unit when the leaf moved by Motor 1 is fully open			
	53 I.CH.M1	From the value learnt to ± 100 pulses	To show the impulses stored by the control unit when the leaf moved by Motor 1 is fully close			
	54 I.PAR.M2 *	-----	To show the current position of the potentiometer on the leaf moved by Motor 2 . This parameter is useful to see if the potentiometer is correctly read			
	55 I.AP.M2	From the value learnt to ± 100 pulses	To show the impulses stored by the control unit when the leaf moved by Motor 2 is fully open			
	56 I.CH.M2	From the value learnt to ± 100 pulses	To show the impulses stored by the control unit when the leaf moved by Motor 2 is fully close			
* While the partial impulses are displayed, it is possible to OPEN (by pressing UP) or CLOSE (by pressing DOWN) the corresponding operator to verify the correct reading of the potentiometer after installation or simply for checking						
32	ENCODER	Off	ON = Encoder enabled OFF = Encoder disabled (when OFF, the working times learnt are only shown)	ALL	Off	
	65 OPENING TIME M1	xxx.s	To display the learnt value during the working times self learning, in opening and closing (Motor 1) . With UP or DOWN it is possible to increase or reduce the working times			
	66 CLOSING TIME M1	xxx.s				
	67 OPENING TIME M2	xxx.s	To display the learnt value during the working times self learning, in opening and closing (Motor 2) . With UP or DOWN it is possible to increase or reduce the working times			
	68 CLOSING TIME M2	xxx.s				
33	OPENING SENSITIVITY MOTOR 1	10% (Fast intervention) 99% (Slow intervention)	To adjust the Encoder or Potentiometer intervention time on Motor 1 in opening	ALL	Off	
		Off (Intervention excluded)	Disabled			
34	CLOSING SENSITIVITY MOTOR 1	10% (Fast intervention) 99% (Slow intervention)	To adjust the Encoder or Potentiometer intervention time on Motor 1 in closing	ALL	Off	
		Off (Intervention excluded)	Disabled			
35	OPENING SENSITIVITY MOTOR 2	10% (Fast intervention) 99% (Slow intervention)	To adjust the Encoder or Potentiometer intervention time on Motor 2 in opening	ALL	Off	
		Off (Intervention excluded)	Disabled			
36	CLOSING SENSITIVITY MOTOR 2	10% (Fast intervention) 99% (Slow intervention)	To adjust the Encoder or Potentiometer intervention time on Motor 2 in closing	ALL	Off	
		Off (Intervention excluded)	Disabled			

SPECIAL MENU		SET	DESCRIPTION	MODEL NOTE	DEFAULT	
37	SLOWDOWN SENSITIVITY MOTOR	10% (Fast intervention) 99% (Slow intervention)	To adjust the amperometric sensitivity in slowdown Function available only on electro-mechanic operators	ALL	Off	
		With potentiometer	To set the inversion time in slow-down from 0 to 5 seconds (= 99%) - Only with potentiometer enabled		30%	
38	POTENTIOMETER 1 THRESHOLD IN OPENING	1 1000 (only if the Menu 32 is set on "Potentiometer")	To adjust the threshold of the potentiometer intervention. This parameter self-determines during the working times learning but can also be adjusted later, on the condition that the set value is higher than the value shown in VP1 or VP2 (instantaneous speed values which can be shown by accessing the DEBUG menu). NOTE: The lower the threshold value, the slower will be the response of the potentiometer.	ALL	----	
39	POTENTIOMETER 1 THRESHOLD IN CLOSING					
40	POTENTIOMETER 2 THRESHOLD IN OPENING					
41	POTENTIOMETER 2 THRESHOLD IN CLOSING					
42	POTENTIOMETER 1 OPENING SLOW DOWN THRESHOLD	1 100 (only if the Menu 32 is set on "Potentiometer")	To adjust the threshold of the potentiometer intervention in slowdown. By default this value is set on 10. but can be manually increased on the condition that the set value is higher than the value shown in VP1 or VP2 (instantaneous speed values which can be shown by accessing the DEBUG menu)	ALL	15	
43	POTENTIOMETER 1 CLOSING SLOW DOWN THRESHOLD					
44	POTENTIOMETER 2 OPENING SLOW DOWN THRESHOLD					
45	POTENTIOMETER 2 CLOSING SLOW DOWN THRESHOLD					
46	CLOSING INVERSION	Total	In case of obstacle or safety edge it totally reverses the movement during closing. If active, the automatic reclosing will be attempted for 5 times	ALL	Total	
		Partial	In case of obstacle, safety edge or potentiometer, it partially reverses direction (of about 30 cm) then stops			
For menu 47 and 50 see menu 32-Encoder = On						
For menu from 51 to 56 see menu 32-Encoder = Potentiometer						
57	WORKING CURRENT 1	 Ampere	To display the absorbed current during Motor 1 working	INVERTER 24V BR	----	
58	WORKING CURRENT 2	 Ampere	To display the absorbed current during Motor 2 working	INVERTER 24V BR	----	
59	OPENING SLOWDOWN 1	0 50	From 0% to 50% of the stroke (0% = slowdown excluded)	ALL	30	
60	CLOSING SLOWDOWN 1	0 50	From 0% to 50% of the stroke (0% = slowdown excluded)	ALL	30	
61	OPENING SLOWDOWN 2	0 50	From 0% to 50% of the stroke (0% = slowdown excluded)	ALL	30	
62	CLOSING SLOWDOWN 2	0 50	From 0% to 50% of the stroke (0% = slowdown excluded)	ALL	30	
63	DECELERATION	0 % 100% 	To adjust the change from normal speed to slowdown speed	ALL	It depends on	
64	ACCELERATION	0,1 s 5 s 	Acceleration ramp. To adjust the motor start	ALL	motor depends on	
For menu from 65 to 68 see menu 32-Encoder = Off (They are visible even with 32-Encoder set ON) motor						

SPECIAL MENU		SET	DESCRIPTION	MODEL NOTE	DEFAULT		
69	ANTI OVERLAP	Off	To disable the anti-overlapping control of theleaves allowing their separate control	ALL	Off		
		On	To enable the anti-overlapping control of the leaves				
70	OPENING POSITION RECOVERY	0 20 seconds (only if 32-Encoder is OFF)	To retrieve the inertia of the motor in opening after the Stop or the reversing	ALL	It depends on motor		
71	CLOSING POSITION RECOVERY	0 20 seconds (only if 32-Encoder is OFF)	To retrieve the inertia of the motor in closing after the Stop or the reversing	ALL	It depends on motor		
72	OPENING TOLE- RANCE MOTOR 1	0% 100%	To adjust the Motor 1 tolerance between the stop and the obstacle, in opening	ALL	20%		
73	CLOSING TOLE- RANCE MOTOR 1	0% 100%	To adjust the Motor 1 tolerance between the stop and the obstacle, in closing	ALL	20%		
74	OPENING TOLE- RANCE MOTOR 2	0% 100%	To adjust the Motor 2 tolerance between the stop and the obstacle, in opening	ALL	20%		
75	CLOSING TOLE- RANCE MOTOR 2	0% 100%	To adjust the Motor 2 tolerance between the stop and the obstacle, in closing	ALL	20%		
76	PUSHING STROKE	Time Pushing Off - 3 sec Stroke	Before opening, the motor starts in closing for the time set, in order to simplify the lock release	ALL	Off		
		Repeat Lock Off – On Release	If ON, the lock will be released both before andafter the pushing stroke				
		End					
77	LOCK TIME	Off 5	To adjust the lock release time from 0 to 5 seconds	ALL	3		
78	LOCK	Only opening	Lock enabled only before opening	ALL	Only opening		
		Only closing	Lock enabled only before closing				
		Opening and closing	Lock enabled before opening and closing				
79	ANTI INTRUSION	Only opening	If the gate is forced manually, the control unit starts the motor and restores the state of the gate before forcing (function only available if limit switches are installed)	ALL	Off		
		Only closing Opening					
		and closing Off					
		Off					
80	PUSHOVER	Opening and closing	The gate leaf makes an extra movement atthe maximum torque to ensure the tightening of the gate	ALL	Off		
		Only closing					
		Only opening					
81	PERIODICAL PUSHOVER	Off 8h (only if 80-Pushover is ON)	To activate the repetition of the pushover function at a distance of time adjustable from 0 to 8 hours, at hourly intervals	ALL	Off		
82	MOTOR RELEASE	Opening 1 Off - 3 s	If different from OFF, the operator slightly reversesits direction at the end of the cycle	ALL	It depends on motor		
		Closing 1 Off - 3 s					
		Opening 2 Off - 3 s					
		Closing 2 Off - 3 s					
		End					
83	EXTRA TIME	Opening1 Off - 10s	If the limit switches are installed, it is possible to add an extra time (max. 10 seconds) to the movement of the operators after the reading of the limit switches	INVERTER 24V BR	1.0 s		
		Closing 1 Off - 10s					
		Opening2 Off - 10s					
		Closing 2 Off - 10s EXIT		2PM			
		0.0 s 10 s					
85	PRE-FLASHING	Only closing	To enable the pre-flashing only before closing (to access: push DOWN button when 0.0 value is shown)	ALL	0.0 s		
		0.0 5.0 s	To set the pre-flashing duration				

SPECIAL MENU		SET	DESCRIPTION	MODEL	DEFAULT	NOTE
86	FLASHING LIGHT	<i>Normal</i>	Normal	ALL	Normal	
		<i>Light</i>	Warning lamp function			
		<i>Always</i>	Always ON			
		<i>Buzzer</i>	Buzzer			
87	FLASHING LIGHT AND TIMER	<i>Off</i>	The flashing light will be OFF with enabled timer and open gate	ALL	Off	
		<i>On</i>	The flashing light will be ON with enabled timer and open gate			
88	COURTESY LIGHT	<i>Off</i>	Disabled	ALL	In cycle	
		<i>1 240</i>	Adjustable from 1 second to 4 minutes			
		<i>In cycle</i>	Courtesy light only in cycle			
89	TRAFFIC LIGHT RESERVATION	<i>Off On</i>	To get the priority in entry or exit. Available by the use of the partial opening contact	ALL	Off	
90	PARTIAL OPENING	<i>5% 100%</i>	Adjustable from 5% to 100%	ALL	50%	
91	PARTIAL PAUSE	<i>= Start</i>	The pause in partial opening is the same as in total opening	ALL	= Start	
		<i>Off</i>	Disabled			
		<i>1 240</i>	Adjustable from 1 second to 4 minutes			
92	TIMER	<i>Off</i>	To turn the selected input into an input to which connect an external clock	ALL	Off	
		<i>On photo2</i>				
		<i>On partial input</i>				
		<i>Clock</i>				
93	FIRE SWITCH	<i>Off</i>	Disabled	ALL	Off	
		<i>On Photo2</i>	Function enabled on the Photocell 2 input			
		<i>On partial input</i>	Function enabled on the partial opening Start input			
94	24V AUX (Max. 500 mA)	<i>Always</i>	AUX output always powered	ALL	Always	
		<i>In cycle</i>	AUX output powered only during cycle			
		<i>Opening</i>	AUX output powered only during opening			
		<i>Closing</i>	AUX output powered only during closing			
		<i>In pause</i>	AUX output powered only during pause			
		<i>Phototest</i>	AUX output powered for safety devices testing			
		<i>In cycle and phototest</i>	AUX output powered during cycle only and for safety devices testing			
		<i>In cycle and pause</i>	AUX output powered during cycle and during pause			
		<i>Courtesy light (connected via relay)</i>	To connect an additional courtesy light via relay. Management according to the Menu-88 settings			
		<i>Barrier and Bollard LED lights</i>	Closed operator - the light is switched-on Open operator - the light is switched-off Moving operator - the light blinks			
		<i>Open gate warning light (connected via relay)</i>	1 flash per second during opening 2 flashes per second during closing Steady lit in "Stop" or "Open" status			
		<i>Fan (connected via relay)</i>	AUX output powered during cycle and for 2 additional minutes after the end of the cycle	INVERTER		

SPECIAL MENU		SET	DESCRIPTION	MODEL	DEFAULT	NOTE
95	PHOTO-TEST	<i>Photo 1</i>	Self-test enabled only on photocell 1	ALL	Off	
		<i>Photo 2</i>	Self-test enabled only on photocell 2			
		<i>Photo 1 and 2</i>	Self-test enabled on photocells 1 and 2			
		<i>Off</i>	Disabled			
96	SAFETY EDGE SELF-TEST	<i>Edge 1</i>	Self-test enabled only on safety edge 1	ALL	Off	
		<i>Edge 2</i>	Self-test enabled only on safety edge 2			
		<i>Edges 1 and 2</i>	Self-test enabled on safety edges 1 and 2			
		<i>Off</i>	Disabled			
97	PHOTOCELL 1	<i>Closing</i>	If the photocell is occupied during closing, the gate reverses the movement; If the photocell is occupied during the pause, it prevents the gate reclosing	ALL	Closing	
		<i>Opening and closing</i>	If the photocell is occupied during opening or closing, it stops the gate movement; when the photocell is released, the movement continues			
		<i>Stop</i>	If the photocell is occupied before the Start input, the Start will be ignored. If the photocell is occupied after the Start input, the photocell will be ignored. If the photocell is occupied during closing, the gate will reopen			
		<i>Stop and close</i>	If the photocell is occupied during closing, it stops the gate movement; when released, the closing movement continues			
		<i>Close</i>	The photocell stops the gate until it is occupied in both opening and closing; when released, the photocell gives a closing command (the gate closes one second after the photocell release)			
		<i>Closing Pause reloading</i>	If the photocell is occupied during the pause, it reloads the same pause time set. If the photocell is occupied in closing, it reverses the gate movement			
		<i>Opening and Closing Pause reloading</i>	If the photocell is occupied during the pause, it reloads the pause time set. If the photocell is occupied during the closing, it reverses the gate movement; If the photocell is occupied during the opening, it stops the gate and when released, the opening movement continues			
		<i>Shadow loop *</i>	When the gate is open, the shadow loop prevents the reclosing until it is occupied. The Shadow loop is switched off during closing			
		<i>Delete pause time</i>	If the photocell is occupied during opening, pause or closing, the gate reopens completely and closes without observing the pause time set			
		<i>Shadow loop PR (pause reloading) *</i>	When the gate is open, the shadow loop prevents the reclosing until it is occupied. When released, the gate repeats the pause time set, then it closes. The Shadow loop is switched off during closing			

* If the module 2PM is in use, the shadow loop does not enable when the menu-121 is set to "Photo 1 10K"

SPECIAL MENU		SET	DESCRIPTION	MODEL NOTE	DEFAULT	
98	PHOTOCELL 2	Closing	If the photocell is occupied during closing, the gate reverses the movement; If the photocell is occupied during the pause, it prevents the gate reclosing	ALL	Opening and closing	
		Opening and closing	If the photocell is occupied during opening or closing, it stops the gate movement; when the photocell is released, the movement continues			
		Stop	If the photocell is occupied before the Start input, the Start will be ignored. If the photocell is occupied after the Start input, the photocell will be ignored. If the photocell is occupied during closing, the gate reopens			
		Stop and close	If the photocell is occupied during closing, it stops the gate; when released, the closing movement continues			
		Close	The photocell stops the gate until it is occupied in both opening and closing; when released, the photocell gives a closing command (<i>the gate closes one second after the photocell release</i>)			
		Opening Pause reloading	If the photocell is occupied during the pause, it recharges the same pause time set. If the photocell is occupied during the opening, the gate stops and when released, the movement continues			
		Pause reload Photo closing	If the photocell is occupied during the pause, it reloads the pause time set. If the photocell is occupied during closing, the gate reverses the movement			
		Opening and Closing Pause reloading	If the photocell is occupied during the pause, it reloads the pause time set. If the photocell is occupied during the closing, it reverses the movement; If the photocell is occupied during the opening, it stops the gate and when released, the opening continues			
		Shadow loop *	When the gate is open, the shadow loop prevents the reclosing until it is occupied. The Shadow loop is switched off during closing			
		Delete pause time	If the photocell is occupied during opening, pause or closing, the gate reopens completely and closes without observing the pause time set			
		Shadow loop PR (pause reloading) *	When the gate is open, the shadow loop prevents the reclosing until it is occupied. When released, the gate repeats the pause time set, then it closes. The Shadow loop is switched off during closing			
		Stop and open	If the photocell is occupied during opening, the gate stops; when released, the gate continues the opening movement. The photocell is ignored during closing			
* If the module 2PM is in use, the shadow loop does not enable when the menu-121 is set to "Photo 1 10K"						
99	PHOTO OFF IN CLOSING	0% 50%	In closing, this function excludes the photocell reading for the space percentage set	INVERTER 24V	0%	
100	SAFETY EDGE 1	Normal	Normal N.C. contact	ALL	Normal	
		8K2 N.C.	Safety edge protected by a 8K2 resistor enabled			
		8K2 N.C. Double	Two safety edges protected by 8K2 resistor enabled			
		8K2 RES	Resistive edge protected by 8K2 resistor enabled			
		8K2 RES Double	Two resistive edges protected by 8K2 RES enabled			
101	SAFETY EDGE 2	Normal	Normal N.C. contact	ALL	Normal	
		8K2 N.C.	Safety edge protected by a 8K2 resistor enabled			
		8K2 N.C. Double	Two safety edges protected by 8K2 resistor enabled			
		8K2 RES	Resistive edge protected by 8K2 resistor enabled			
		8K2 RES Double	Two resistive edges protected by 8K2 RES enabled			

SPECIAL MENU		SET		DESCRIPTION	MODEL	DEFAULT	NOTE
102	SAFETY EDGE 1 DIRECTION	Opening and closing		Safety edge enabled in opening and closing	ALL	Opening and Closing	
		Only opening		Safety edge enabled only in opening			
		Only closing		Safety edge enabled only in closing			
103	SAFETY EDGE 2 DIRECTION	Opening and closing		Safety edge enabled in opening and closing	ALL	Opening and Closing	
		Only opening		Safety edge enabled only in opening			
		Only closing		Safety edge enabled only in closing			
104	SELECT LIMIT SWITCH	N. C.		Limit switch type N.C. (Normally Closed) Example: inductive limit switch or with lever	INVERTER 24V	N.C.	
		Ext		Limit switch connected on the external interface for 4 cams limit switches			
		N.O.		Limit switch type N.O. (Normally Open) Example: magnetic limit switch			
		Automatic		Automatic detection of the limit switch	2PM	Automatic	
		Opening only		Limit switch enabled only in opening			
		Closing only		Limit switch enabled only in closing			
		Ext		Limit switch connected on the external interface for 4 cams limit switches			
		Motor internal		To be enabled if the operator is equipped with an inner limit switch that stops the motor phase			
105	PRIMARY/SECONDARY (MASTER/SLAVE)	Primary		To set the control unit as PRIMARY on applications with two operators in primary/secondary mode	INVERTER BR	Off	
		Secondary		To set the control unit as SECONDARY on applications with two operators in primary/secondary mode			
		Off		Disabled			
106	DIAGNOSTICS	1	10	To display the last event (See alarms table)	ALL	----	
107	MAINTENANCE CYCLES	100	240000	Adjustable from 100 to 240000 cycles	ALL	100000	
108	PERFORMED CYCLES	0	240000	To display the executed cycles. Hold pressed OK to reset the cycles	ALL	0	
109	THERMOMETER	xx °C	(xx °C)	To display the temperature if a probe is connected on GP1 or GP2 (and the menus 130 and 131 are set on "Thermometer") The connection of up to two temperature probes is allowed; (display will show both temperatures detected)	ALL	Off	
110	LOWER THRESHOLD TEMPERATURE	From -20° to +50°		To adjust the temperature threshold of the oilheater probe activation (This menu is shown only if the menu 109-Thermometer is set to ON)	ALL	-10°	
111	UPPER THRESHOLD TEMPERATURE	From -20° to +50°		To adjust the temperature threshold of the oilheater probe deactivation (This menu is shown only if the menu 109-Thermometer is set to ON)	ALL	0°	
112	PASSWORD	Note: "0000" setting is not allowed		To enter a password for blocking the control unit parameters modification	ALL	----	

SPECIAL MENU		SET	DESCRIPTION	MODEL	DEFAULT	NOTE
113	EMERGENCY	Off	Disabled	ALL	Off	
		Emergency	In case of power failure and with batteries connected and charged, the gate opens completely and remains open until the power is restored			
		Last opening	In case of power failure, as soon as the battery charge drops below 22V, the gate opens one last time and remains open until the power is restored			
		Last closing	In case of power failure, as soon as the battery charge drops below 22V, the gate closes one last time and remains closed until the power is restored			
115	DECELERATION RAMP	0,1 s 5s	Deceleration management in case of inversion or Stop command	INVERTER 24V BR	0,5 s	
116	REPEAT LEAF DELAY	On Off	In case of a STOP command when the gate is on its halfway, the leaves will repeat the "leaf delay" set on menus 26-27	ALL	On	
117	ALWAYS CLOSE	Off 240 seconds	In case of power failure, if the gate has been manually open, it closes only after the set time has elapsed (from 0 to 240 seconds) as soon as the power is restored	ALL	Off	
118	LATCH	Off	Disabled	ALL	Off	
		Opening	The gate opens and stay open till a new Start input. The latch function uses the "Safety Edge 1" N.O. input (Safety Edge 1 function is so disabled)			
		Closing	The gate closes and stay closed till a new Start input. The latch function uses the "Safety Edge 2" N.O. input (Safety Edge 2 function is so disabled)			
		Opening and closing	To enables both the opening and closing functions above described. The latch function uses the "Safety Edge 1" and "Safety Edge 2" N.O. inputs (both safety edges are so disabled)			
119	DISPLAY WRITING SPEED	From 30% to 100%	See Note 2 at the end of the table	ALL	80%	
120	BASIC MENU	Press OK to exit the special menu. The special menu switches off automatically after 20 minutes				
121	PHOTO 1 TYPE	Normal	Standard photocell without 10K control	ALL	Normal	
		Photo 1 10K	Photocell with 10K control			
		Photo 1 10K DOUBLE	Double photocell with 10K control	2PM		
122	PHOTO 2 TYPE	Normal	Standard photocell without 10K control	ALL	Normal	
		Photo 2 10K	Photocell with 10K control			
		Photo 2 10K DOUBLE	Double photocell with 10K control	2PM		
123	DATE AND TIME	Mon - Sun dd/mm/yyyy Time	To set the day, the date and the time for the management of the programmed openings. (Only with full charge buffer battery)	ALL	----	
124	CLOCK 1	Opening time	To set a first time band in which keeping the gate open. It is possible to set, in order: opening time, closing time and the days on which you want to open and keep the gate open	ALL	Off	
		Closing time				
		Days				
		Modify	To modify the pre-set time and day			
		Exit	Exit from menu			

SPECIAL MENU		SET	DESCRIPTION	MODEL	DEFAULT	NOTE
125	CLOCK 2	Opening time	To set a second time band in which keeping the gate open. It is possible to set, in order: opening time, closing time and the days on which you want to open and keep the gate open	ALL	Off	
		Closing time				
		Days				
		Modify	To modify the pre-set time and day			
		Exit	Exit from menu			
126	CLOCK 3	Opening time	To set a third time band in which keeping the gate open. It is possible to set, in order: opening time, closing time and the days on which you want to open and keep the gate open	ALL	Off	
		Closing time				
		Days				
		Modify	To modify the pre-set time and day			
		Exit	Exit from menu			
127	CLOCK 4	Opening time	To set a fourth time band in which keeping the gate open. It is possible to set, in order: opening time, closing time and the days on which you want to open and keep the gate open	ALL	Off	
		Closing time				
		Days				
		Modify	To modify the pre-set time and day			
		Exit	Exit from menu			
130	GP1	Off	Disabled	ALL	Off	
		Open	To connect an opening button that allows the automation operating in "Dead Man" logic. The button will only work when the gate is closed or after a Stop command			
		Emergency open	To connect an opening button that allows the automation operating in "Dead Man" logic. The button will only work in case of safety devices failure or in case of stuck Start button			
		Thermometer	To connect a temperature probe for the detection of an external temperature which will be shown on the display by accessing menu 109-THERMOMETER (<i>i.e. probe for detection of hydraulic motor oil temperature</i>)			
		Cage	To control the Motor 1 only if the Motor 2 is closed	INVERTER 24V		
131	GP2	Off	Disabled	ALL	Off	
		Close	To connect a closing button that allows the automation operating in "Dead Man" logic. The button will only work when the gate is closed or after a Stop command			
		Emergency close	To connect an closing button that allows the automation operating in "Dead Man" logic. The button will only work in case of safety devices failure or in case of stuck Start button			
		Thermometer	To connect a temperature probe for the detection of an external temperature which will be shown on the display by accessing menu 109-THERMOMETER (<i>i.e. probe for detection of hydraulic motor oil temperature</i>)			
		Cage	To control the Motor 2 only if the Motor 1 is closed	INVERTER 24V		

SPECIAL MENU		SET	DESCRIPTION	MODEL	DEFAULT	NOTE
132	RELAY 1	<i>Off</i>	Disabled	ALL	Off	
		<i>Start 3s</i>	To enable the Relay 1 for 3 seconds at every Startor reopening command			
		<i>Traffic light 1</i>	Traffic light management: the green light is switched-on only when the gate is open			
		<i>Traffic light in entrance</i>	By a Start command the traffic light in entrance turns green and the access priority is acquired while the traffic light in exit turns red. (with menu 89-TRAFFIC LIGHT BY RESERVATION in ON)			
		<i>Traffic light in exit</i>	By a Start command the traffic light in exit turns green and the access priority is acquired while the traffic light in entrance turns red. (with menu 89-TRAFFIC LIGHT BY RESERVATION in ON)			
		<i>Lock copy</i>	The Relay 1 will be ON for the time set on 78-LOCK menu			
		<i>Flashing light copy</i>	The Relay 1 repeats the flashing-light functions			
		<i>Courtesy light copy</i>	The Relay 1 will be ON for the time set on 88-COURTESY LIGHT menu			
		<i>Fire-switch copy</i>	The Relay 1 repeats the menu 93-fireswitch functions			
		<i>Opening 1 limit switch</i>	The Relay 1 will be ON if the motor 1 opening limit switch is activated or if the motor 1 is in "Open" status			
		<i>Closing 1 limit switch</i>	The Relay 1 will be ON if the motor 1 closing limit switch is activated or if the motor 1 is in "Closed" status			
		<i>Opening 2 limit switch</i>	The Relay 1 will be ON if the motor 2 opening limit switch is activated or if motor 2 is in "Open" status			
		<i>Closing 2 limit switch</i>	The Relay 1 will be ON if the motor 2 closing limit switch is activated or if the motor 2 is in "Closed" status			
		<i>Tx Relay</i>	It is possible to activate the Relay 1 for 3 seconds by giving an impulse from the remote control			
		<i>Negative brake and Photocell 1 management</i>	The negative electric-brake is not active on the photocell intervention			
		<i>Negative brake 1 management</i>	Negative electric-brake (in ON with the gate incycle and 1 second before the Start input)			
		<i>Positive brake 1 management</i>	Positive electric-brake (in ON with stationary gate)			
		<i>Opening electric-valve</i>	The Relay 1 is active during opening			
		<i>Closing electric-valve</i>	The Relay 1 is active during closing			
		<i>Clock 1 and 2</i>	The Relay will be active in the same time band set on menus 124 e 125			

SPECIAL MENU		SET	DESCRIPTION	MODEL	DEFAULT	NOTE
133	RELAY 2	<i>Off</i>	Disabled	ALL	Off	
		<i>Start 3s</i>	To enable the Relay 2 for 3 seconds at every Startor reopening command			
		<i>Traffic light 1</i>	Traffic light management: the green light is switched-on only when the gate is open			
		<i>Traffic light in entrance</i>	By a Start command the traffic light in entrance turns green and the access priority is acquired while the traffic light in exit turns red. (with menu 89-TRAFFIC LIGHT BY RESERVATION in ON)			
		<i>Traffic light in exit</i>	By a Start command the traffic light in exit turns green and the access priority is acquired while the traffic light in entrance turns red. (with menu 89-TRAFFIC LIGHT BY RESERVATION in ON)			
		<i>Lock copy</i>	The Relay 2 will be ON for the time set on 78-LOCK menu			
		<i>Flashing light copy</i>	The Relay 2 repeats the flashing-light functions			
		<i>Courtesy light copy</i>	The Relay 2 will be ON for the time set on 88-COURTESY LIGHT menu			
		<i>Fire-switch copy</i>	The Relay 2 repeats the menu 93-fireswitch functions			
		<i>Opening 1 limit switch</i>	The Relay 2 will be ON if the motor 1 opening limit switch is activated or if the motor 1 is in "Open" status			
		<i>Closing 1 limit switch</i>	The Relay 2 will be ON if the motor 1 closing limit switch is activated or if the motor 1 is in "Closed" status			
		<i>Opening 2 limit switch</i>	The Relay 2 will be ON if the motor 2 opening limit switch is activated or if motor 2 is in "Open" status			
		<i>Closing 2 limit switch</i>	The Relay 2 will be ON if the motor 2 closing limit switch is activated or if the motor 2 is in "Closed" status			
		<i>Tx Relay</i>	It is possible to activate the Relay 2 for 3 seconds by giving an impulse from the remote control			
		<i>Negative brake and Photocell 2 management</i>	The negative electric-brake is not active on the photocell intervention			
		<i>Negative brake 2 management</i>	Negative electric-brake (in ON with the gate incycle and 1 second before the Start input)			
		<i>Positive brake 2 management</i>	Positive electric-brake (in ON with stationary gate)			
		<i>Opening electric-valve</i>	The relay 2 is active during opening			
		<i>Closing electric-valve</i>	The relay 2 is active during closing			
		<i>Clock 3 and 4</i>	The relay will be active in the same time band set on menus 126 e 127			

SPECIAL MENU		SET	DESCRIPTION	MODEL	DEFAULT	NOTE
134	RELAY FV 1 (Relay on the FV MODULE 1)	Off	Disabled	INVERTER	It depends on motor	
		Positive brake management	Positive electric-brake (The relay FV1 will be ON only with stopped gate)			
		Negative brake management	Negative electric-brake (The relay FV1 will be ON only during operator cycle, 1 second before start and in case of photocell intervention)			
		Negative brake management and Photocell	Negative electric-brake (The relay FV1 will be ON only during operator cycle and 1 second before start, except in case of photocell intervention)			
		Fan	The relay on FV MODULE will activate for the whole cycle duration plus 2 further minutes			
		Tail Gate	The Relay FV 1 will enable only if the gate is closed			
		Copy Start	The Relay FV 1 will enable at every START command			
135	RELAY FV 2 (Relay on the FV MODULE 2)	Off	Disabled	INVERTER	It depends on motor	
		Positive brake management	Positive electric-brake (The relay FV2 will be ON only with stopped gate)			
		Negative brake management	Negative electric-brake (The relay FV2 will be ON only during operator cycle, 1 second before start and in case of photocell intervention)			
		Negative brake management and Photocell	Negative electric-brake (The relay FV2 will be ON only during operator cycle and 1 second before start, except in case of photocell intervention)			
		Fan	The relay on FV MODULE will activate for the whole cycle duration plus 2 further minutes			
		Tail Gate	The Relay FV 2 will enable only if the gate is closed			
		Copy Start	The Relay FV 2 will enable at every START command			
136	EFO	0% 100%	EFO function will be visible only with menu 3-MOTORS set on "5-Threephase/Bollards" This function generates an emergency closing with a higher speed than the set percentage and without considering the safety devices connected. <u>It works only with BOLLARDS</u> and through a command on the PEDESTRIAN START input	INVERTER	50%	
137	COMIS	0 350 mA	It shows the absorption of the accessories connected on input 20 (it only works if an accessory is connected at least)	ALL	----	
138	COMIS THRESHOLD	Off 350mA	Allows to set a maximum absorption threshold over which an error message appears (error message appears also when over 350 mA)	ALL	Off	

SPECIAL MENU		SET	DESCRIPTION	MODEL	DEFAULT	NOTE
140	THRESHOLD A OPENING 1	1 10 Ampere	Adjusts the amperometric intervention threshold of motor 1 in opening (over the set threshold motor will detect an obstacle)	INVERTER	It depends on motor	
141	THRESHOLD A CLOSING 1	1 10 Ampere	Adjusts the amperometric intervention threshold of motor 1 in closing (over the set threshold motor will detect an obstacle)	INVERTER	It depends on motor	
142	THRESHOLD A OPENING 2	1 10 Ampere	Adjusts the amperometric intervention threshold of motor 2 in opening (over the set threshold motor will detect an obstacle)	INVERTER	It depends on motor	
143	THRESHOLD A CLOSING 2	1 10 Ampere	Adjusts the amperometric intervention threshold of motor 2 in closing (over the set threshold the motor will detect an obstacle)	INVERTER	It depends on motor	
144	THRESHOLD A OPENING SLOWDOWN 1	1 10 Ampere	Adjusts the amperometric intervention threshold of motor 1 in slowdown during opening	INVERTER	It depends on motor	
145	THRESHOLD A CLOSING SLOWDOWN 1	1 10 Ampere	Adjusts the amperometric intervention threshold of motor 1 in slowdown during closing	INVERTER	It depends on motor	
146	THRESHOLD A OPENING SLOWDOWN 2	1 10 Ampere	Adjusts the amperometric intervention threshold of motor 2 in slowdown during opening	INVERTER	It depends on motor	
147	THRESHOLD A CLOSING SLOWDOWN 2	1 10 Ampere	Adjusts the amperometric intervention threshold of motor 2 in slowdown during closing	INVERTER	It depends on motor	
190	BASIC MENU	Press OK to exit the special menu. The special menu switches off automatically after 20 minutes				

Note 1: after initialization, the parameters set on menu **3 - MOTOR** and **104 - SELECT LIMIT SWITCH** always remain set to the value chosen during the programming operation

Note 2: if the menu **119 - DISPLAY WRITING SPEED** is set to the minimum value of 30%, the display writing speed will be below. On the contrary, if it is set to the maximum value of 100%, the writing speed will be very high

Please note: the writing speed will not change on the JOLLY 3 programmer