### Guide to the Product

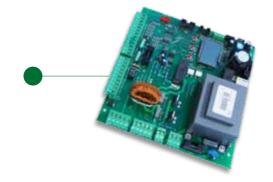
### Gate 1 DG

FOR 1 SLIDING GATE, SWING GATE, BARRIER, BOLLARDS

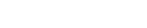


Gate 2 DG

FOR 2 SLINDING GATES, SWING GATES, BARRIERS BOLLARDS



57



User 1 24V DG

FOR 1 BARRIER OR SLIDING GATE, GARAGE DOOR



User 2 24V DG

FOR 2 SWING GATES



Gate 2 Pre - Wired

FOR 2 SWING GATES WITH METAL CABINET DIMENSIONS 20"X11"X5" (W)





# Gate 1 DG

### CONTROL UNIT FOR ONE MOTOR **DIGITAL PROGRAMMING**



2300A110G1DGR GATE 1 DG 110V Replace (only circuit)



# Gate 2 DG

CONTROL UNITS FOR TWO MOTORS **DIGITAL PROGRAMMING** 

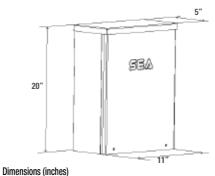


2302A110G2DG GATE 2 DG 110V with plastic enclosure 2302A110G2DGR GATE 2 DG 110V Replace (only circuit)

2302A110G2DGPW GATE 2 DG 110V Prewired with metal enclosure 3R 20"x11"x 5"(w)

2302A220G2DGR GATE 2 DG 220V Replace (only circuit) 12711200 3R Metal enclosure - dimensions 20"x11"x5"(w)





- Management of one 115 Vac motor
- Adjustable slowdown in opening and closing
- Adjustable pedestrian opening
- Led warning lamp
- Connector for radio RF receiver plug-in
- Working time self-learning
- Encoder management
- Simplified programming with buttons and display
   Inversion on obstacle with encoder
- Balanced or standard safety edge management
- Separate torque adjustment for opening and closing
- Programming through JOLLY 3 palm also
- Automatic, security and step by step type 1, step by step type 2, 2 buttons, dead-man logics
- Motor inversion and limit switch (right/left hand mounting)
- Automatic closing adjustment
- Start in pause adjustment
- Prepared for Master/Slave function
- Adjustable courtesy light output up to 4 minutes
- Setting number of cycles for assistance
- Settable photocell inputs
- Extractable terminals
- Photocell self-test

..and many other functions

- Management of two 115 Vac motors with or without limit switch
- Adjustable pedestrian opening
- Automatic logic (6 modes), half-automatic (6 modes), dead-man, open and close logic
- Adjustable slowdown in opening and closing for each leaf and direction
- Adjustable motor torque for each leaf and direction
- Working times self-learning
- Photocells self-test
- Self-diagnostics
- Settable photocells inputs
- Adjustable courtesy light output up to 4 minutes
- Electro-lock management
- Led warning lamp
- Extractable terminals
- Connector for RF radio receiver plug-in
- Encoder/Amperometric sensitivity adjustment (for electromechanical operators)
- Programming through JOLLY 3 palm also
- Working time adjustable for each leaf and for opening and closing
- Leaf delay differentiated for opening and closing
- Number of performances for assistance
- PUSH-OVER function management with optional periodical push over
- 24V Aux output management
- Safety edge management in opening and
- Optional external module for traffic light management

. and many other functions



# CIII CA

### User 1 24V DG

### 24V LOW VOLTAGE FOR SLIDING GATES AND BARRIERS **DIGITAL PROGRAMMING**



CODE NAM

2300A24U1DGR

Control Units

USER 1 - 24V DG Replace (only circuit)

2300A24U1MDGR USER 1 - 24V DG MAXI Replace (only circuit)



# User 2 24V DG

### 24V LOW VOLTAGE FOR SWING GATES **DIGITAL PROGRAMMING**



E

NAME

2302A24U2DG 2302A24U2DGR 2302A24U2DGPW USER 2 - 24V DG with plastic enclosure USER 2 - 24V DG Replace (only circuit)

USER 2 - 24V DG Prewired with metal enclosure 3R 20"x11"x 5"(w)





- Management of one 24V motor
- Adjustable slowdown in opening and closing
- Motor speed adjustment
- Adjustable pedestrian opening
- 24V Led warning lamp
- Emergency battery management through optional battery charging card
- Connector for RF radio receiver plug -in
- Working times self-learning
- Simplified programming through buttons and display
- Programming through JOLLY 3 palm also
- Adjustable amperometric type inversion on obstacle
- Photocells self-test
- Balanced or standard safety edge management
- Extractable terminals
- Separate torque adjustment for opening and closing
- Slowdown speed adjustment
- Automatic, security and step by step type 1, step by step type 2, 2 buttons, dead-man logics
- Motor inversion and limit switch (right/left hand mounting)
- Automatic closing setting
- Start in pause setting
- Prepared for Master/Slave function
- Low consumption in standby-by
- Adjustable courtesy light output up to 4 minutes
- Setting number of cycles for assistance
- Settable photocell inputs

...and many other functions

- Management of two 24V motors
- Adjustable slowdown in opening and closing
   Separate motors speed adjustment for each leaf
- Version with rectifying jumper on board
- Adjustable pedestrian opening
- 24V Led warning lamp
- Electro-lock management
- Emergency battery management through optional battery charging card
- Working times self-learning
- Connector for RF radio receiver plug-in
- Prepared for encoder management
- Simplified programming through buttons and display
- Programming through JOLLY 3 palm also
- Photocells self-test
- Adjustable ammeter type inversion on obstacle
- Balanced or standard safety edge management
- Extractable terminals
- Separate torque adjustment for each leaf and for opening and closing
- Leaf delay adjustment differentiated between opening and closing
- Dead-man, automatic, security, step by step type1, step by step type 2, half-automatic1, half-automatic 2.
- Adjustable courtesy light output up to 4 minutes
   Setting number of cycles for assistance
- Settable photocells inputs
- Low consumption in standby-by
- Duch over
- Optional external module for traffic light management

...and many other functions



### Gate 2 DG Pre - Wired

### CONTROL UNITS FOR TWO MOTORS DIGITAL PROGRAMMING

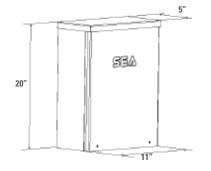


2302A110G2DGPW

DESCRIPTION

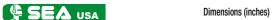
GATE 2 DG PREWIRED 110V with metal enclosure 3R 20"x11"x5"(w)

- Management of two 115 Vac motors with or without limit switches
- Automatic logic (6 modes), half-automatic (6 modes), dead-man, open and close logic
- Reversing sensor management
- Main switchAlarm input
- Calfallanput
- Self- diagnosis
- Four logic modeEasy connection
- Lasy Connection
- Motor torque regulation
- 115V outlet for accessory
- Connector for RF radio receiver plug-in
- Self learning working time
- Slow down in opening and in closing
- Water proof and heavy duty enclosure
   Tree lean detector plug in managements
- Tree loop detector plug-in management
- Electric lock or magnetic lock management
   2P metal anglesure with anticorrection
- 3R metal enclosure with anticorroption trethment and powered coating



Dimensions (inches)





### Kit Master/Slave

### FOR GATE 1 DG AND USER 24V DG ELECTRONIC CONTROL UNITS

• KIT to connect an installation with 2 electronic control units and 2 motors in Master/Slave mode

CODE

KIT MASTER SLAVE (nr. 2 pcs.) for GATE 1 DG and USER 1 24V DG 23001220

### Probe

Control Units

### ONLY FOR GATE 1 DG AND GATE 2 DG BOARDS

- The heater PROBE KIT allows the adjustment of the temperature variable from -20 ° C to +50 ° C and once reached the set temperature an oil heating mechanism is activated to prevent that at very low temperatures the hydraulic motors are moving with difficulty or change very much speed
- KIT PROBE, which combined with the control units GATE 2 DG and GATE 1 DG and with motors in oil bath allows a proper movement of the automations even in extremely cold conditions.
- KIT PROBE: temperature probe kit, with LE card and 6 feet cable to be combined with all hydraulic motors for the management of the temperature.





### Sem2

- Card with connection cable (for DG control units) with timed traffic light or courtesy light function if not available on the control unit
- Possibility to connect up to SEM 2 in series.
- Traffic light function
- Vertical lock control
- Negative brake control
- Electrolock control
- Flashlight control Courtesy light control
- External accessory control through transmitter
- Limit switch status indication

CODE	NAME		
23021105	SEM2		

### l se

- Multifunction control unit manage:
- linear encoder
- 4 limit switches
- heater function

CODE	NAME	
23001255	LSE	









### Jolly 3

### PROGRAMMER FOR CONTROL UNITS DG SERIES

- 4x20 characters display, for easy reading
- New programmer for control units DG, transmitters and receivers
- Combined function Jolly and Open
- Backlit
- Same menu display of DG control units
- STAR button
- Possibility to download up to 10 different firmware releases
- Automatically takes control unit revision when plugged in

CODE	DESCRIPTION
23105279	JOLLY3 palm for DG control units, transmitters and receivers functions management



**CONTROL BOARD** 

### Sea Cloud Board

Remote management system for electronic control units with possibility of visualization on the display of the control unit and remote operation as if you were there.

CODE	DESCRIPTION
23022500	SEA CLOUD BOARD



### Bingo

- 2x8 characters display, for easy reading
- Universal for DG ( USER and GATE) control units
- Easily applicable to DG units produced with revision (see communicated via newsletter) and with removable display
- Possibility to select the display language
- Numbering of the functions
- Readable even if inclined

2101121	DINICO
DDE	NAME





# **Control Units**

			110V	110V		DQ.	DQ.
Index	Total	DESCRIPTION	GATE 1 DG 110V	GATE 2 DG 110V	SLIDE DG	USER 1 24V DG	USER 2 24V DG
1	MENU_Language	Choice of language	•	•	•	•	•
2	MENU_TRANSMITTERS	Transmitter programming	•	•	•	•	•
3	MENU_MOTOR	Motor type choice	•	•	•	•	•
4	MENU_ONE SINGLE LEAF	Single leaf adjustment		•			•
5	MENU_REVERSE MOTOR	Motor rotation	•	•	•	•	•
6	MENU_LOGIC	Allows to select the type of movement of the gate	٠	٠	•	٠	•
7	MENU_PAUSE TIME	Allows to set the automatic reclosing	•	•	•	•	•
8	MENU_START IN PAUSE	Allows to reclose interrupting the time of automatic relcosing	•	•	•	٠	•
9	MENU_PROGRAMMING	Used to store the working times of the automation	•	•	•	•	•
10	MENU_TEST START	Allows to give a test start	٠	٠	•	٠	•
15	MENU_END	Allows to exit the basic menu to display the status of inputs	•	•	•	•	•
16	MENU_SPECIAL MENU	Allows to access the special menu	•	•	•	•	•
17	MENU_OPENING SPEED 1	Adjsuts the opening speed of Motor 1				•	•
18	MENU_CLOSING SPEED 1	Adjusts the closing speed of motor 1		•		•	•
19	MENU_OPENING SPEED 2	Adjsuts the opening speed of motor 2					•
20	MENU_CLOSING SPEED 2	Adjusts the closing speed of motor 2					•
21	MENU_OPENING SLOWDOWN SPEED 1	Adjusts the slowdown speed in opening of motor 1				•	•
22	MENU_CLOSING SLOWDOWN SPEED 1	Adjusts the slowdown speed in closing of motor 1				•	•
23	MENU_OPENING SLOWDOWN SPEED 2	Adjsuts the slowdown speed in opening of motor 2					•
24	MENU CLOSING SLOWDOWN SPEED 2	Adjusts the slowdown speed in closing of motor 2					•
25	MENU_LEARNING SPEED	Adjsuts the selflearning speed				•	•
26	MENU LEAF DELAY IN OPENING	Adjusts the leaf delay in opening		•			•
27	MENU LEAF DELAY IN CLOSING	Adjsuts the leaf delay in closing		•			•
28	MENU_OPENING TORQ 1	Adjusts the motor torque or the required force for		•		•	•
29	MENU CLOSING TORQ 1	the inversion in opening for motor1  Adjusts the motor torque or the required force for					•
	_	the inversion in closing for motor1  Adjusts the motor torque or the required force for					
30	MENU_OPENING TORQ 2	the inversion in opening for motor 2		•			•
31	MENU_CLOSING TORQ 2	Adjusts the motor torque or the required force for the inversion in closing for motor 2		•			•
32	MENU_Encoder	Allows to activate the encoder	•	•	•	•	•
33	MENU_OPENING SENSITIVITY MOTOR1	Manages the obstacle detecting time in opening for motor 1	•	•	•	•	•
34	MENU_CLOSING SENSITIVITY MOTOR1	Manages the obstacle detecting time in closing for motor 1	•	•	•	•	•
35	MENU_OPENING SENSITIVITY MOTOR2	Manages the obstacle detecting time in opening for motor 2		•			•
36	MENU CLOSING SENSITIVITY MOTOR2	Manages the detecting time of the obstacle in closing for					
37	MENU SLOW DOWN Off SENSITIVITY	motor 2  Manages the obstacle detecting time in slowdown		•			
		Manages the obstacle detecting time in slowdown  Manages the intervention threshold on the obstacle of the		•			•
38	MENU_POT. THRESHOLD OPENING 1	"Postion Gate ", for motor 1 in opening	•	•			Hydro
39	MENU_POT. THRESHOLD CLOSING 1	Manages the intervention threshold on the obstacle of the "Position Gate", for motor 1 in closing	•	•			Hydro
40	MENU_POT. THRESHOLD OPENING 2	Manages the intervention threshold on the obstacle of the " position gate ", for motor 2 in opening		•			Hydro
41	MENU_POT. THRESHOLD CLOSING 2	Manages the intervention threshold on the obstacle of the "position gate", for motor 2 in closing		•			• Hydro
42	MENU_POT. SLOWDOWN THRESHOLD OPENING1	Manages the intervention threshold on the obstacle of the	•				• Hydro
43	MENU POT. SLOWDOWN THRESHOLD CLOSING1	"Position Gate", for motor 1 in opening slowdown  Manages the intervention threshold on the obstacle of the	•	•			• Hydro
	_	"position gate ", for motor 1 in closing slowdown.  Manages the intervention threshold on the obstacle of the					•
44	MENU_POT. SLOWDOWN THRESHOLD OPENING 2	"position gate", for motor 2 in opening slowdown  Manages the intervention threshold on the obstacle of the		•			Hydro
45	MENU_POT. SLOWDOWN THRESHOLD CLOSING 2	Manages the intervention threshold on the obstacle of the "Position Gate", for motor 2 in closing slowdown		•			Hydro
46	MENU_INVERSION	Adjusts the intervertion space after the obstacle					Hydro
47	MENU_EncoderPar1	Displays the current pulses of the encoder on motor 1	•	•	•	•	Hydro
48	MENU_EncoderTot1	Displays the total pulses stored by the encoder for motor 1	٠	•	•	•	Hydro
49	MENU_EncoderPar2	Displays the current pulses of the encoder on motor 2		•			





# **Control Units**

Index	Total	DESCRIPTION	GATE 1 DG 110V	GATE 2 DG 110V	SLIDE DG	USER 1 24V DG	USER 2 24V DG
50	MENU_EncoderTot2	Displays the total pulses stored by the encoder for motor 2		•			
51	MENU_I.PAR.M1	Displays the actual position of the "Position Gate" for motor 1	•	•			•
52	MENU_I.AP.M1	Displays the opening position stored by the "Position Gate" for motor 1 in opening	•	•			•
53	MENU_I.CH.M1	Displays the closing position stored by the "Position Gate" for motor 1 in closing	•	•			•
54	MENU_I.PAR.M2	Displays the actual postion of the "Position Gate " for motor 2		•			•
55	MENU_I.AP.M2	Displays the opening postion stored by the "Postion Gate " for motor 2 in opening		•			•
56	MENU_I.CH.M2	Displays the closing postion stored by the "Gate Position" for motor 2 in closing		•			•
57	MENU_WORKING CURRENT 1	Adjusts the el. current threshold for the inversion on obstacle for motor 1 in opening				•	
58	MENU WORKING CURRENT 1	Adjusts the el. current threshold for the inversion on obstacle					
59	MENU OPENING SLOWDOWN 1	for motor 1 in closing  Adjsuts the slowdown space in opening for motor 1	•	•	•	•	•
60	MENU CLOSING SLOWDOWN 1	Adjusts the slowdown space in closing for motor 1	•	•	•	•	
61	MENU_OPENING SLOWDOWN 2	Adjsuts the slowdown space in opening for motor 2		•			•
62	MENU_CLOSING SLOWDOWN 2	Adjusts the slowdown space in closing for motor 2		•			•
63	MENU_DECELERATION	Adjusts the transition ramp between maximum speed and slowdown speed	•	•	•	•	•
64	MENU_ACCELERATION	Adjusts the length of the acceleration ramp	•	•		•	
65	MENU_OPENING TIME MOTOR1	Allows to adjust the working time in opening of motor 1 acquired in programming	•	•	•		
66	MENU CLOSING TIME MOTOR1	Allows to adjust the working time in closing of motor 1 acquired	•		•		
67	MENU OPENING TIME MOTOR2	in programming Allows to adjust the working time in opening of motor 2 acquired					
	_	in programming  Allows to adjust the working time in closing of motor 2 acquired					
68	MENU_CLOSING TIME MOTOR2	in programming  Allows the leaf to not overlap. Leaf 2 will start slowdown		•			
69	MENU_ANTI OVERLAP	together with leaf 1		•			
70	MENU_OPENING POSITION RECOVERY	Allows to add an inertial recovery time in case of stop or inversion of the motor in opening	•	•	•	•	•
71	MENU_CLOSING POSITION RECOVERY	Allows to add an inertia recovery time in case of stop or inversion of the motor in closing	•	•	•	•	•
72	MENU_OPENING TOLERANCE MOTOR1	Allows to adjust the space for which the mechanical stop in opening of motor 1 is detected with respect to the obstacle	•	•	•	•	•
73	MENU_CLOSING TOLERANCE MOTOR1	Allows to adjust the space for which the mechanical stop in closing of motor 1 is detected with respect to the obstacle	•	•	•	•	
74	MENU OPENING TOLERANCE MOTOR2	Allows to adjust the space for which the mechanical stop in		•			
75	MENU CLOSING TOLERANCE MOTOR2	opening of motor 2 is detected with respect to the obstacle Allows to adjust the space for which the mechanical stop in					
76	MENU PUSHING STROKE	closing of motor 2 is detected with respect to the obstacle  Makes lock release easier	•				
77	MENU LOCK TIME	Adjust the click time of the lock					
78	MENU_LOCK	Allows to have the click of the lock always or only before					
	_	opening or closing  If with motor stopped on the limit switch the opening is forced,					
79	MENU_ANTI INTRUSION	it activates the motor in reclosing  Allows the motor to have a tightening stroke at maximum	•	•		•	•
80	MENU_PUSHOVER	torque after complete closing or opening	•	•	•		•
81	MENU_PERIODICAL Off PUSHOVER	Repeats with an adjsutable time interval the pushover function	•	•	•		•
82	MENU_MOTOR RELEASE	At the end of closing makes turn back the motor for the set time to facilitate the mechanical release	•	•	•	•	•
83	MENU_EXTRA TIME	Adds an adjustable time to the movement after the reading of the limit switch		•			•
84	MENU_BRAKE	Makes braking on the limit switch easier to eliminate the inertia	•	•	•		
85	MENU_PREFLASHING	Adjusts the pre-flashing time before opening or closing	•	•	•	•	•
86	MENU_FLASHING LIGHT	Regulates the functions of the flashing lamp	•	•	•	•	•
87	MENU_FLASHING LIGHT AND TIMER	Allows to choose whether to keep turned ON or OFF the flashing lamp with active Timer	•	•	•	•	•
88	MENU_COURTESY LIGHT	Adjusts the lighting time of the courtesy light	•	•	•	•	•
89	MENU_TRAFFIC LIGHT RESERVATION	If the SEM2 card is present it manages the priorities of input / output on the traffic light	•	•		•	•
90	MENU_PARTIAL OPENING	Adjusts the space of pedestrian opening	•	•	•	•	•
91	MENU_PARTIAL PAUSE	Adjust the automatic closing of pedestrian opening	•	•	•	•	•
92	MENU_TIMER	Transforms the photocell 2 input or the pedestrian input into a Timer input	•	•	•	•	•
93	MENU_FIRE SWITCH	Manages an emergency opening holding the gate open until reset	•		•		
94	MENU_24VAUX	Allows o choose when the 24Vaux output has to be active	•	•	•	•	•

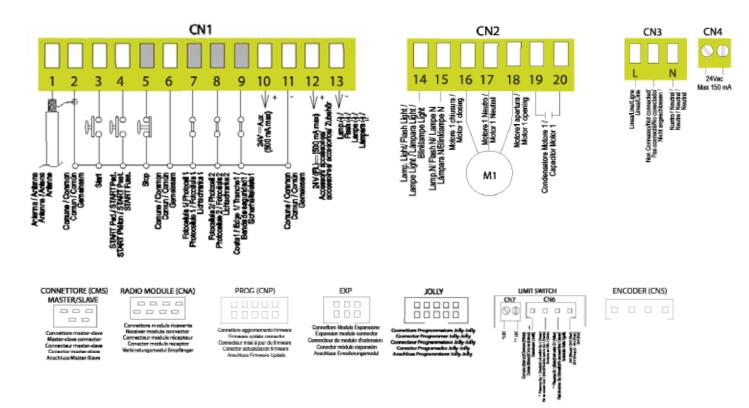


### **Control Units**

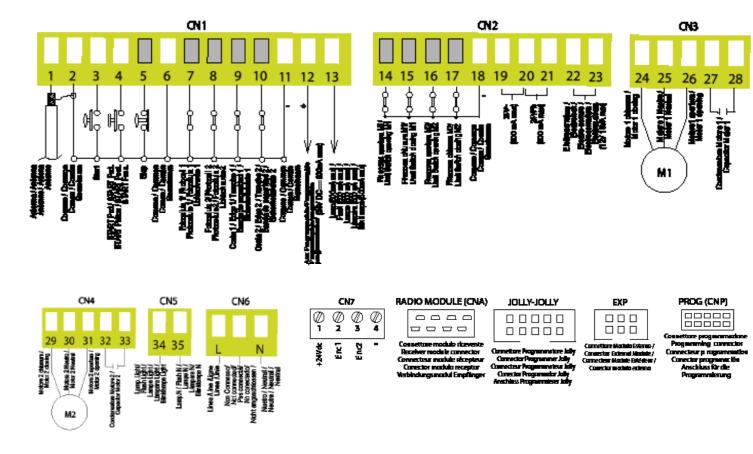
Index	Total	DESCRIPTION	GATE 1 DG 110V	GATE 2 DG 110V	SLIDE DG	USER 1 24V DG	USER 2 24V DG
95	MENU_FOTOTEST	Activates a control on the transmitter of the photocell before the gate movement	•	•		•	•
96	MENU_EDGE AUTOTEST	Activates a control on the transmitter of the safety edge before the gate movement		•			
97	MENU_PHOTO1 - LOOP1	Allows to choose when activating the control of photocell 1	•	•	•	•	•
98	MENU_PHOTO2 - LOOP2	Allows to choose when activating the control of photocell 2	•	•		•	•
99	MENU_PHOTO OFF IN CLOSING	Disables the photocell in closing for a adjustable stroke				•	
100	MENU_EDGE1	Allowsto activate a resistive control on safety edge 1	•	•		•	•
101	MENU_EDGE2	Allows to activate a resistive control on safety edge 2		•			
102	MENU_EDGE1	Allows to choose in which movement direction the safety edge 1 must be activated	•	•	•	•	•
103	MENU_EDGE2	Allows to choose in which movement direction the safety edge 2 must be activated		•			
104	MENU_SELECT LIMIT SWITCH	Allows to choose which limit switch must be activated	•	•	•	•	•
105	MENU_MASTER-SLAVE	Allows the card setting for the connection in Master / Slave with another control unit	•			•	
106	MENU_DIAGNOSTICS	Allows to verify the last 10 events	•	•	•	•	•
107	MENU_MAINTENANCE CYCLES	Allows to set a maximum number of cycles for maintenance	•	•	•	•	•
108	MENU_PERFORMED CYCLES	Displays the number of performed cycles	•	•	•	•	•
109	MENU_THERMOMETER	Detects the motor temperature through a sonde	•	•			
110	MENU_LOWER TRESH TEMPERATURE	Sets the low temperature threshold for which activating the motor heating	•	•			
111	MENU_UPPER TRESH TEMPERATURE	Sets the high temperature threshold for which activating the motor heating	•	•			
112	MENU_PASSWORD	Allows to set a password that locks parameter changes on the control unit	•	•	•	•	•
113	MENU_EMERGENCY	Allows to open the gate when the power is off (only with battery)				•	•
120	MENU_BASIC MENU	Allows to return to the basic menu	•	•	•	•	•



GATE 1 DG



GATE 2 DG







 $\emptyset$   $\emptyset$   $\emptyset$ 

JOLLY-JOLLY (CN3)

battery charger with MPPT technology optimizing the performance of the photovoltaic panel and the recharging efficiency.

For installations without current and / or with

The calculation of the best configurations of

SUNNY SUPER SUNNY

The solar panel kit comes with a new 10A max

solar panel it is recommended to use a control unit with energy saving function of the DG series and the use of accessories connected to an AUX input allowing the stand-by mode after each

panel power and battery power is left to the customer based on power consumption of the system and the energy efficiency of the place.

Kit Sunny MPPT: MAXIMUM POWER POINT TRACKING Recharging adjusters allow to constantly manage and to exploit the max power point, delivered by the photovoltaic panel according to the solar radiation to which it is exposed.

a>10° a= Rotation angle

CODE

Parigi

Milano Roma

Madrid

Bruxelles Londra

Washington

Amsterdam Berlino

23106430 KIT SUPER SUNNY DC 80W/33Ah (for USER 24V control unit) without plastic box

INCLINATION DEGREE

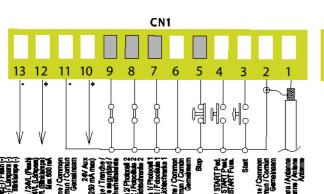
50°

46°

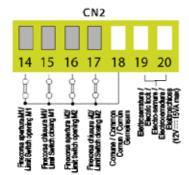
45°

41°

52°



CN1

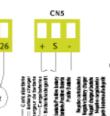


USER 2 - 24V DG ALL IN



LIMIT SWITCH (CN2)

EXP



MASTER/SLAVE (CN4) POWER (CN8)

000

RADIO MODULE (CNA)

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\_ \_ \_

24V~

М

PROG

LIGHT (CN5) MOTOR (CN6)



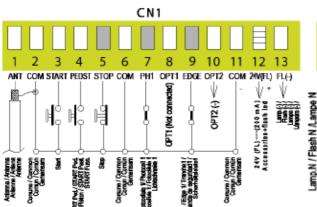




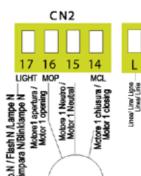




SLIDE DG

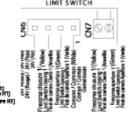


SEA



М1





CNA RADIO MODULE RF (SERIES UNI) 0000 0000

### TECHNICAL DATA

### Photovoltaic panel



Nominal tension	24V
Max. current	10A
Battery capacity	18-33Ah
Size	1213 x 547 x 35 mm 47,7 x 21,5 x 1,3 inches

KIT SUPER SUNNY 85 W sold without box











N. 1 batteries charger ESUN PLUS N. 1 Mounting accessories kit