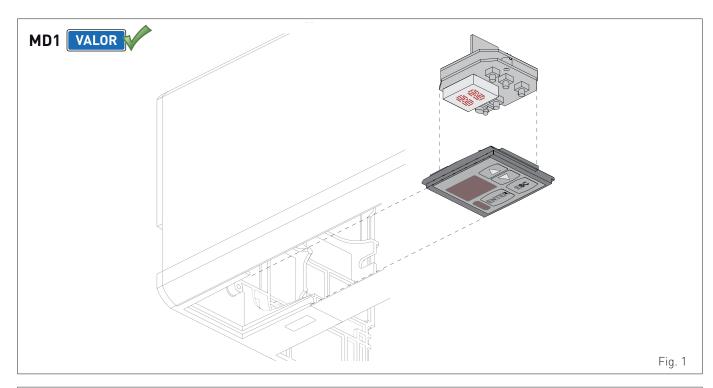
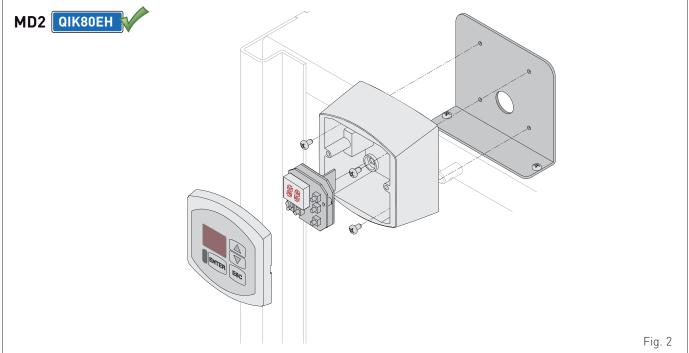


Ditec MD1-MD2

IP1938EN

Installation manual for display module for diagnostics and advanced controls.





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Caption



This symbol indicates instructions or notes regarding safety issues which require particular attention.



This symbol indicates informations which are useful for correct product function.



This symbol indicates instructions or notes intended for technical and expert personnel.



This symbol indicates operations not to be effected for not compromise the correct operation of the automation.



This symbol indicates options and parameters which are only available with the indicated item.



This symbol indicates options and parameters which are not available with the indicated item.

1. General safety precautions

This installation manual is intended for qualified personnel only.

Installation, electrical connections and adjustments must be performed in accordance with Good Working Methods and in compliance with applicable regulations.

Before installing the product, carefully read the instructions. Bad installation could be hazardous.

The packaging materials (plastic, polystyrene, etc.) should not be discarded in the environment or left within reach of children, as these are a potential source of hazard.

Before installing the product, make sure it is in perfect condition.

The protective casing of the automation must be removed by qualified personnel only.

For repairs or replacements of products only original spare parts must be used. The installer shall provide all information relating to automatic, manual and emergency operation of the motorized door, and provide the user with operating instructions.

2. Technical data

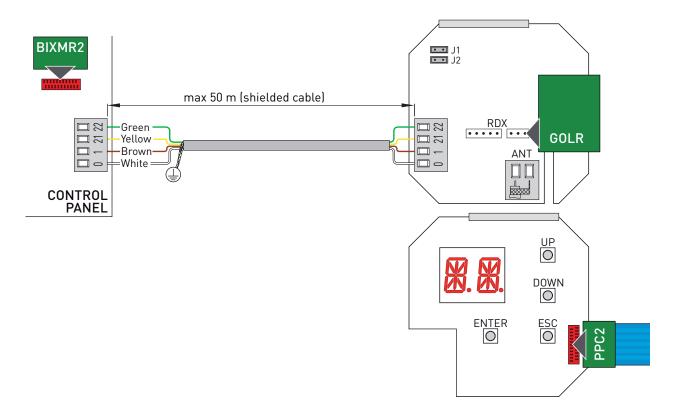
	MD1	MD2
Temperature	-20 °C - +55 °C	-20 °C - +55 °C
Degree of protection	IP20	IP33

3. Installation

(Fig. 1) On VALOR automations, fix the MD1 display module as prearranged on the automation head, or (alternatively) using the MDA support near the automation itself.

(Fig. 2) On QIK80EH automations, fix the MD2 display module as prearranged inside the barrier cabinet using the bracket supplied, or (alternatively) near the automation itself.

4. Electrical connections



Make the electrical connections as shown in the figure.



WARNING: after having connected the display module to the control panel, turn on the power and wait 30 s for autoconfiguration of the display module and recognition of the automation.

The MD1-MD2 display module has a housing for a plug-in card, such as GOLR radio receiver. If present, the GOLR radio receiver must be installed on the MD1-MD2 display module.



WARNING: the plug-in cards must be inserted and removed with the power supply disconnected.



WARNING: do not connect storage modules BIXMR2 or BIXMR.

4.1 Use method selection



	0FF ■■	ON 💷
J1		Maintenance mode. It is possible to visualise and modify the values and parameters present. The entry in maintenance mode is indicated by the permanent switching on of the right-hand point.
J2	FUTURE USE	

5. Commands



NOTE: the pressure on the keys can be quick (less than 2 s) or prolonged (longer than 2 s). Unless specified otherwise, quick pressure is intended.

To confirm the setting of a parameter, prolonged pressure is necessary.

5.1 Switching on and off

The procedure to switch on the display is as follows:

- press the ENTER key



- start of display functioning check







- visualization of first level menu



The procedure to switch off the display is as follows:

- press the ESC key and keep it pressed





NOTE: the display switches off automatically after 60 s of inactivity.

5.2 Key combinations

The simultaneous pressing of the keys $\mbox{\ensuremath{\square}}$ and ENTER performs an opening command.



The simultaneous pressing of the keys \square and ENTER performs a closing command.

The simultaneous pressing of the keys \square and \square performs a POWER RESET command. (Interruption of the power supply and restart of the automation).



6. Menu

6.1 Main menu

- use the keys lacktriangle and lacktriangle to select the required function





- press the ENTER key to confirm



Display	Description
BC.	BC - Basic Configurations. The menu allows to visualize and modify the main settings of the control panel.
BA.	BA - Basic Adjustments. The menu allows to visualize and modify the main adjustments of the control panel.
RO.	RO - Radio Operations. The menu allows to manage the radio operations of the control panel.
5F.	SF - Special Functions. The menu allows to set the password and manage the special functions in the control panel.
	CC - Cycles Counter. The menu allows to visualize the number of operations carried out by the automation, and manage the maintenance interventions.
EM.	EM - Energy Management. The menu allows you to manage the use of the batteries.
RP.	AP - Advanced Parameters. The menu allows to visualize and modify the advanced settings and adjustments of the control panel.

After confirming the selection, you access the second level menu.



6.2 Second level menu - BC (Basic Configurations)

- use the keys lacktriangle and lacktriangle to select the required function







	Display	Application	Description	
	AC.		AC - Enabling of automatic closing. OF - Disabled ON - Enabled	OF ON
	<u> </u>		C5 - Step-by-step/opening command operation. 1-5 - Step-by-step 1-3 - Opening	I-5 I-3
,	RM		RM - Radio receiver operation. 1-5 - Step-by-step 1-3 - Opening	<u> </u>
			OD - Opening direction selection. LF - Opens towards left. RT - Opens towards right. The opening direction is intended by viewing the automation from the side being examined.	LFRT
BC	55.		SS - Selection of automation status at power on. OP - Open CL - Closed Indicates how the control panel considers automation when powered up or after a POWER RESET command.	OPCL
	50.		SO - Enabling reversal safety switch function. OF - Disabled ON - Enabled When enabled (ON) with the automation blocked, if the contact 1-8 is open, any operation is impossible. When disabled (OF) with the automation blocked, if the contact 1-8 is open, it is possible to activate the opening operation.	OF ON
	NI.		NI - Enabling of NIO electronic antifreeze system. OF - Disabled ON - Enabled (ON) it maintains the efficiency of the motors even in low temperatures. NOTE: for correct operation, the control panel must be exposed to the same ambient temperature as the motors. WARNING: it is necessary to set DIP5=OFF on the control panel in order to make enabling/disabling of the NIO electronic anti-freeze system available from the display module.	OF ON
	PG		PG - Enabling opening control reservation with interlocked barriers.	OF ON
			OF - Disabled ON - Enabled When enabled (ON), it requests the barrier 1 opening command if barrier 2 is engaged in completing the operation.	OF ON

6.3 Second level menu - BA (Basic Adjustment)

use the keys lacktriangle and lacktriangle to select the required function







Display	Application	Description		
RF.		RF - Force adjustment. [%] 00 - Minimum 99 - Maximum		99
R 1.		R1 - Thrust on obstacles adjustment. [%] The control panel is equipped with a safety device that stops motion if an obstacle is encountered during an opening operation and either stops or reverses motion during a closing operation. 00 - Minimum thrust 99 - Maximum thrust		99
RP.		RP - Partial opening adjustment. [%] Adjusts the percentage of operation in relation to the total opening of the automation. 05 - Minimum 90 - Maximum	05	90
		VA - Setting opening speed. [cm/s]	MIN	MAX
VA.		Setting opening speed. [°/s] NOTE: adjustment occurs with a sensitivity interval of 0.5 °/s, indicated by the switching on of the right-hand point. Example: 15 = 16 degrees per second [°/s] 16,5 degrees per second [°/s]	09	20
		VC - Setting closing speed. [cm/s]	MIN	MAX
VE.		VC - Setting closing speed. [°/s] NOTE: adjustment occurs with a sensitivity interval of 0.5 °/s, indicated by the switching on of the right-hand point. Example: 16 degrees per second [°/s] 16,5 degrees per second [°/s]	09	20
		TC - Setting automatic closing time. [s] 00 - Minimum 30 - Maximum		30
T C.		TC - Setting automatic closing time. [s] Adjustment occurs with intervals of varying sensitivity from 0" to 59" with 1 second intervals; - from 1' to 2' with 10 seconds intervals.		<u>59</u> 2'

D'andan	A	B			
Display	Application	Description RT - Setting the escape route mode test execution period [h] 0,5 - Minimum 24 - Maximum	0.5	24	
TE.	EL21	TE - Setting the escape route mode temporary reinstatement time. [min] 01 - Minimum 05 - Maximum	01	05	
IR.		DA - Setting the bi-directional mode duration time with delayed STOP. [s] 05 - Minimum 60 - Maximum	0 5	5 0	
FF.		FF - Setting function of 0-14 exit. OF - Exit disabled 01 - Flashing light 02 - Flashing light and electromagnetic block (see QIK80EH installation manual) 03 - Electromagnetic block	0F 02	1 1 3	ВА
AM.		AM - AUX1 coupling board operation. 1-5 - Step-by-step 1-3 - Opening 3A - Opening from inner side	I-5 3A	I- 3	
AN.		AN - AUX2 coupling board operation. 1-5 - Step-by-step 1-3 - Opening 3A - Opening from inner side	I-5 3A	I- 3	

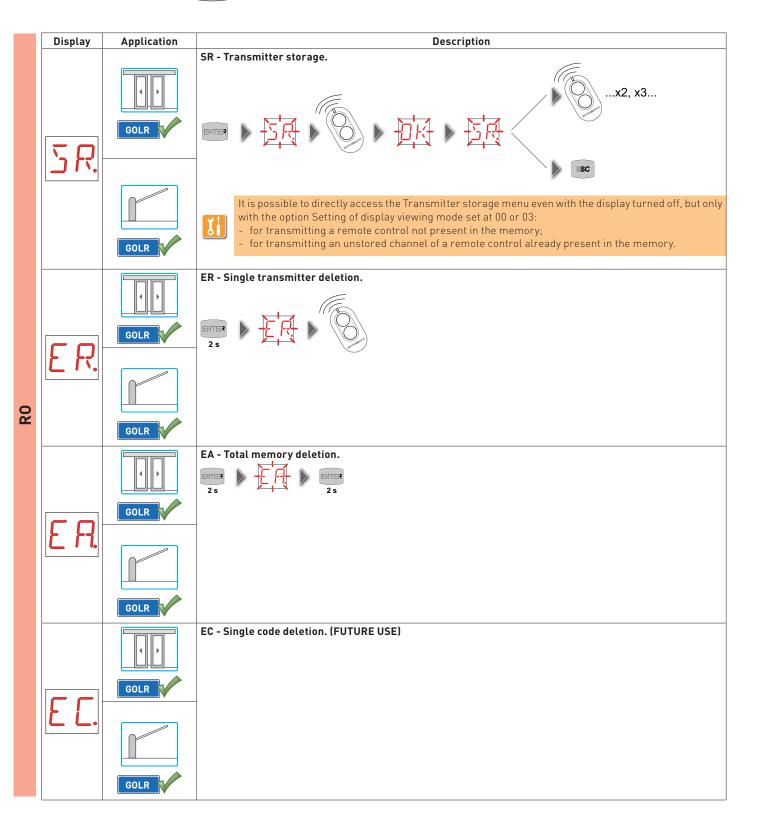
6.4 Second level menu - RO (Radio Operation)

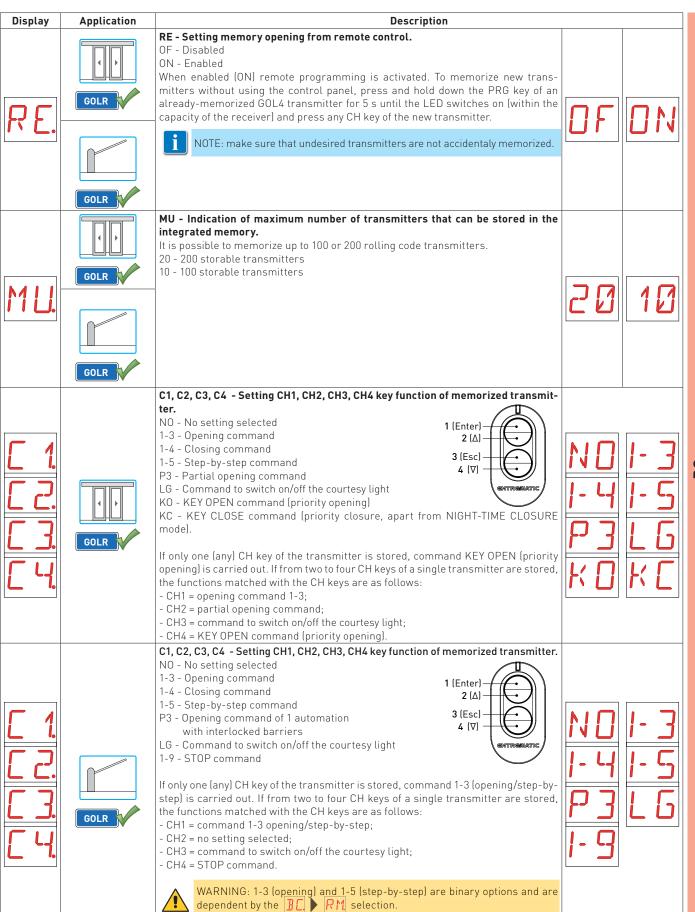
- use the keys lacktriangle and lacktriangle to select the required function

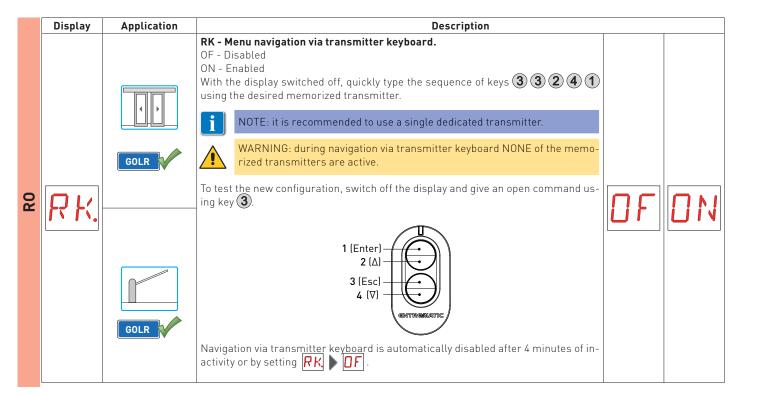












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6.5 Second level menu - SF (Special Functions)

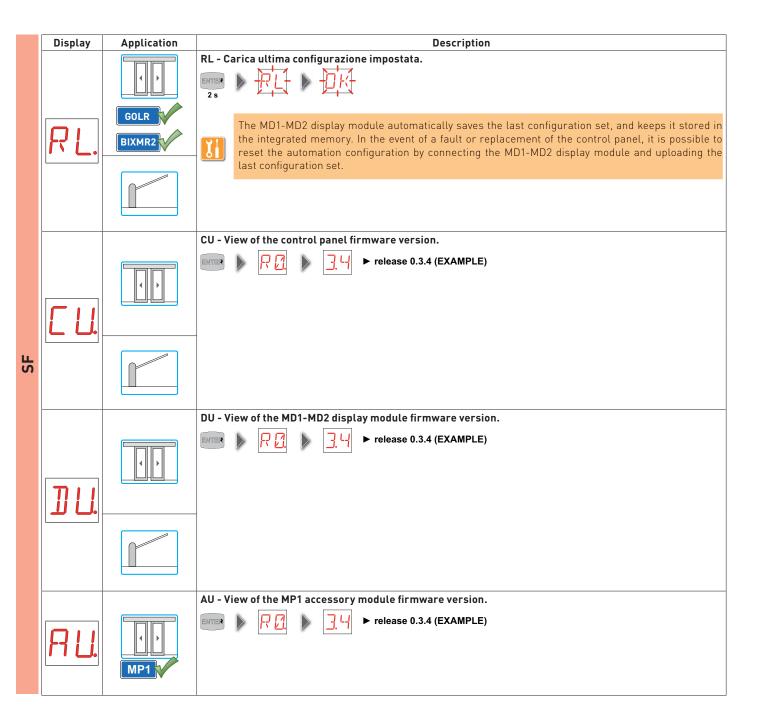
- use the keys lacktriangle and lacktriangle to select the required function







Display	Application	Description
Display	Apparention	SP - Setting the password.
		EXTER (EXAMPLE) ENTER (EXAMPLE)
۲۰ د		NOTE: this setting is only possible when the password is not set. The setting of the password prevents unauthorised personnel from accessing selections and adjustments.
		It is possible to cancel the set password by selecting the sequence J1=0N, J1=0FF, J1=0N.
ТП		IP - Inserting the password. EXAMPLE
ir.		NOTE: this setting is only possible when the password is set. When the password is not inserted, it is possible to access the visualization mode regardless of the selection made with J1. When the password is inserted, it is possible to access the maintenance mode.
		RD - Resetting factory settings (SETTINGS RESET).
D II		2 s
		SV - Saving user configuration on control panel storage module.
	4	(EXAMPLE) 2 s
51/	GOLR	Selecting RD MU 10 it is possible to save up to 3 personalized configurations in the memory positions U1, U2 and U3 only with the storage module present on the control panel.
_ ' ' ·	BIXMR2	A WARNING if were then 100 brossmitten and a are stand on the central result stands are duly it will
		not be possible to save any user configuration.
		RC - Loading configuration.
		EXTER D 1 D C CEXAMPLE) 2 S
RC.	GOLR BIXMR2	It is possible to load the user configurations previously saved on the control panel storage module, or load the predefined settings available in memory positions 11, 12 and 13.



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6.6 Second level menu - CC (Cycles Counter)

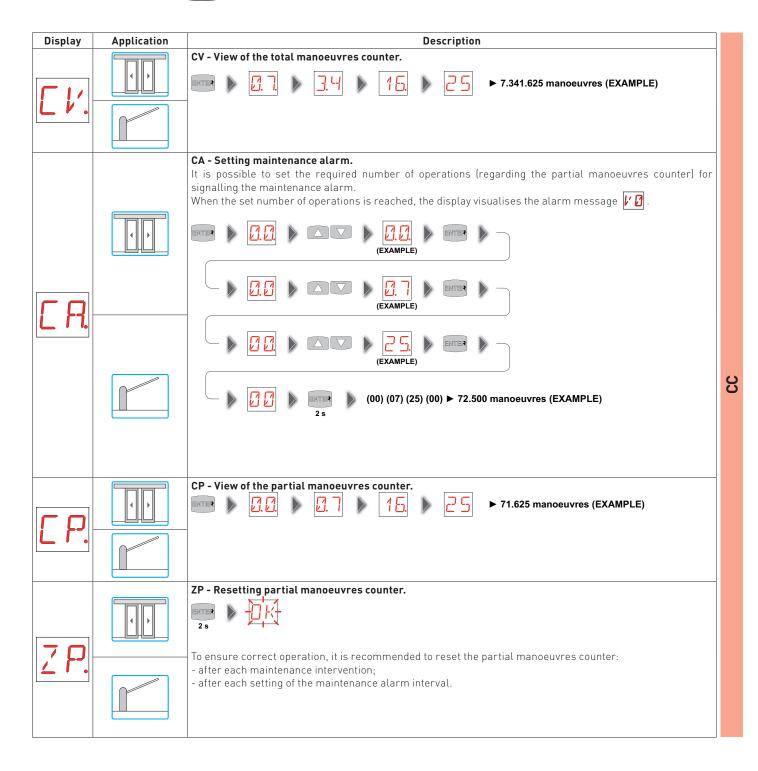
- use the keys ▲ and ▼ to select the required function





- press the ENTER key to confirm







6.7 Second level menu - EM (Energy Management)

- use the keys ▲ and ▼ to select the required function





- press the ENTER key to confirm



	Display	Application	Description			
	BE.		BE - Advanced battery test enabling. OF - Disabled ON - Enabled The advanced battery test checks correct operation of the battery kit installed on the automation.	0F	01	7
	3 T.	EL21	BT - Selecting the battery mode. 00 - Anti-panic batteries with emergency opening. 01 - Continuity batteries with last opening operation. 02 - Continuity batteries with last closing operation.	02		1
	ו דו	LB - Signalling of flat batterie 00 - Display	LB - Signalling of flat batteries. 00 - Display			
EΜ	L J.		LB - Signalling of flat batteries. 00 - Display 01 - QIKLUX light kit			1
	LL.		LL - Setting the flat batteries signalling voltage threshold. [V] (FUTURE USE) NOTE: adjustment occurs with a sensitivity interval of 0.5 V, indicated by the switching on of the right-hand point.	MIN	MAX	
	B 1.		BD - Setting the batteries disconnection voltage threshold. [V] NOTE: adjustment occurs with a sensitivity interval of 0.5 V, indicated by the switching on of the right-hand point.	MIN	MAX	
	E 5.		ES - Accessory power supply disconnection with automation stopped or in stand- by mode. (FUTURE USE)	0F]

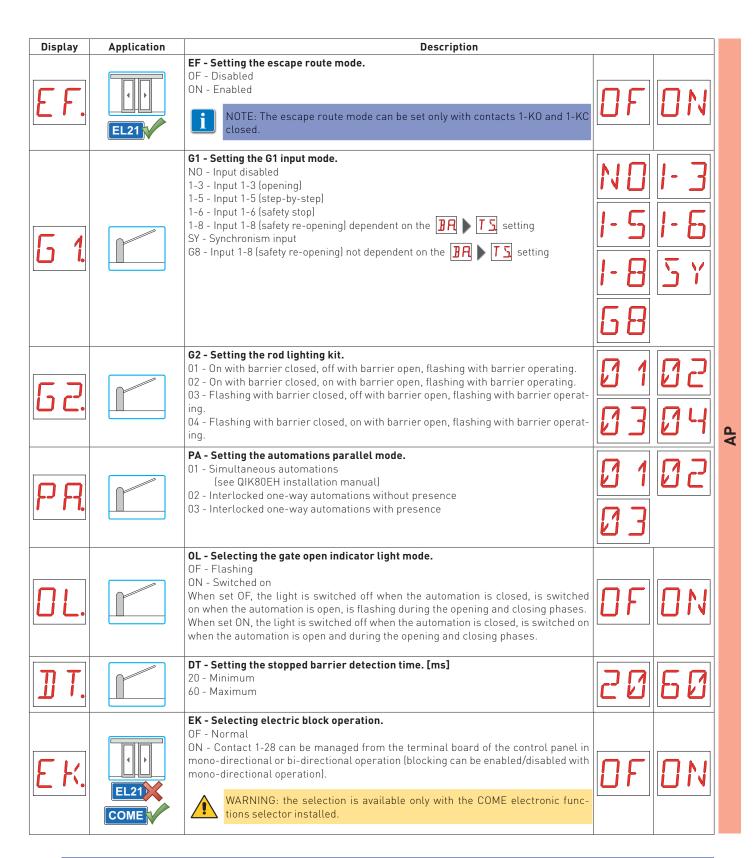








Display	Application	Description			
AA.		AA - Activation of AP (Advanced Parameters) menu. OF - Disabled ON - Enabled NOTE: activation is necessary before being able to scroll through the AP (Advanced Parameters) menu.	OF		
		DO - Setting of disengagement on obstacle during opening. [°] 00 - Minimum 10 - Maximum		10	
II C.		DC - Setting of disengagement on obstacle during closing. [°] 00 - Minimum 10 - Maximum		10	
PP.		PP - Setting of step-by-step sequence after command 1-5. OF - Opening-Stop-Closing-Opening ON - Opening-Stop-Closing-Stop-Opening	OF		
55.		S5 - Duration of STOP in step-by-step sequence after command 1-5. OF - Temporary ON - Permanent	OF		-
R 9.		R9 - Activation of automatic closing after command 1-9 (STOP). OF - Disabled ON - Enabled When enabled (ON) after a command 1-9 the automation carries out the automatic closing (if enabled), after the set time.	OF		AP
TA		TA - Setting the acceleration time. [%] 00 - Fast acceleration 99 - Slow acceleration		99	-
		TP - Setting of automatic closing time after partial opening. [s] 00 - Minimum 30 - Maximum		30	
TP.		TP - Setting the automatic closing time after opening by P3 remote control (opening of 1 automation with inter-locked barriers). [s] Adjustment occurs with intervals of varying sensitivity from 0" to 59" with 1 second intervals; - from 1' to 2' with 10 seconds intervals.		59 2'	
TK.	MP1 EL21	TK - Setting of automatic closing time after key-operated opening. [s] 00 - Minimum 30 - Maximum		30	



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7. Display viewing mode



NOTE: it is possible that, owing to the type of automation and control panel, certain menus are not available.

7.1 Viewing of Selector settings

To enable the display mode Selector settings, select \boxed{AP} \boxed{JS} \boxed{J} \boxed{J}

Display	Application	Description
		Automation closed.
		Automation open.
].[Night function enabled.
TX		Bi-directional total opening.
PX		Bi-directional partial opening.
7 7		Mono-directional total opening.
ba		Mono-directional partial opening.
TA		Reversed mono-directional total opening.
Pa		Reversed mono-directional partial opening.

7.2 Viewing of Automation status

To enable the display mode Automation status, select | AP | D | D |

Display	Application	Description
JC		Automation closed.
		Automation open.
		Automation stopped in intermediate position.

7.3 Viewing of Commands and safeties

To enable the display mode Commands and safeties, select \overrightarrow{HP} \blacktriangleright $\boxed{15}$ \blacktriangleright $\boxed{03}$

	he display mode Commands and safeties, select HP III III
Display	Description
1-2	Automatic closing activation command.
1-3	Opening command.
1-4	Closing command.
1-5	Step-by-step command.
1-5	Safety with slowed opening.
I- B	Safety with closing reversal.
1-9	STOP command.
28	Block activation command.
38	Inner side opening command.
33	Outer side opening command.
36	Hold-to-run opening command.
чP	Hold-to-run closing command.
5 A	Safety with slowed opening sensor A.
5 B	Safety with slowed opening sensor B.
88	Safety with closing reversal sensor A.
83	Safety with closing reversal sensor B.
ВП	Auxiliary opening command.
	Opening command with interlocked barriers reservation.

Display	Description
5 1	Microswitch 1 command.
52	Microswitch 2 command.

7.4 Viewing of alarms and faults

NOTE: the signaling of alarm messages takes priority over all other displays.

Type of alarm	Display	Description	Remedy
Accessories alarm	RO	Test of safety sensor installed on terminal 6 failed.	Check the wiring and correct operation of the safety sensor.
	A 1	Test of safety sensor installed on terminal 6A failed.	Check the wiring and correct operation of the safety sensor.
	R2	Test of safety sensor installed on terminal 6B failed.	Check the wiring and correct operation of the safety sensor.
	R 3	Test of safety sensor installed on terminal 8 failed.	Check the wiring and correct operation of the safety sensor.
	R4	Test of safety sensor installed on terminal 8A failed.	Check the wiring and correct operation of the safety sensor.
	R 5	Test of safety sensor installed on terminal 8B failed.	Check the wiring and correct operation of the safety sensor.
	R5	Integrated photocells malfunctioning.	Check that the photocells are clean and operating correctly.
	A 7	Incorrect connection of terminal 9 to terminal 41.	Connect contact 1-9 as shown.
	R8	Shortcircuiting of the flashing light driver.	Contact Technical Assistance.
	89	Current overload on flashing light output.	Check correct connection of the flashing light to terminals 0-14.
	RB	Short-circuit detection on open gate indicator light	Check the wiring and the correct functioning of the gate indicator light.
Batteries alarm	30	Batteries almost flat.	Restore power supply or replace the battery kit.
	B 1	Flat batteries.	Restore power supply or replace the battery kit.
	3	Batteries not connected or absent.	Check correct connection of the battery kit to the control panel or disable the advanced battery test (if not present).

Type of alarm	Display	Description	Remedy
Blocking device alarm		Door wings release failed.	Check the wiring of the blocking device and microswitch.
			Check microswitch operation.
			Check blocking device movement.
		Door wings locking failed.	Check the wiring of the blocking device and microswitch.
	L 		Check microswitch operation.
			Check blocking device movement.
	! 7	Auxiliary coil short circuit.	Check the wiring of the bistable blocking device.
			Check operation of the bistable blocking device.
	L 3	Auxiliary coil not connected.	Check the wiring of the bistable blocking device.
	LH	Main coil not connected.	Check the wiring of the blocking device.
	! 5	Main coil short circuit.	Check the wiring of the blocking device.
			Check operation of the blocking device.
	M	Automation blocked.	Check operation of the blocking device.
Ē			Check for the presence of obstacles near the mechanical stops.
Mechanical alarm	MLJ	Motor short circuit.	Check correct connection of the motor.
chani			Check correct operation of the motor.
Mec	MB	Door dimension error. Door too long.	Check the transmission belt.
E	M9	Door dimension error. Door too short.	Manually check that the door wings move freely.
	MA	Stop exceed error.	Perform POWER RESET with command 1-29 or using the functions selector (if present).
	MB	Absence of motor during an operation.	Check correct connection of the motor.
Mechanical alarm	MI	Irregular operation of the opening limit switch.	Check correct connection of the opening limit switch.
Med	ME	Irregular operation of the closing limit switch.	Check correct connection of the closing limit switch.
	MH	Incorrect functioning of the elastic in the EL21 control panel.	Check the elastic on the door.
	MI	Detection of the third consecutive obstacle.	Check for the presence of permanent obstacles along the stroke of the automation.
Power supply alarm	PO	No power supply.	Check that the control panel is powered correctly.
	P 1	Mains voltage too low.	Check the automation power supply voltage.

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