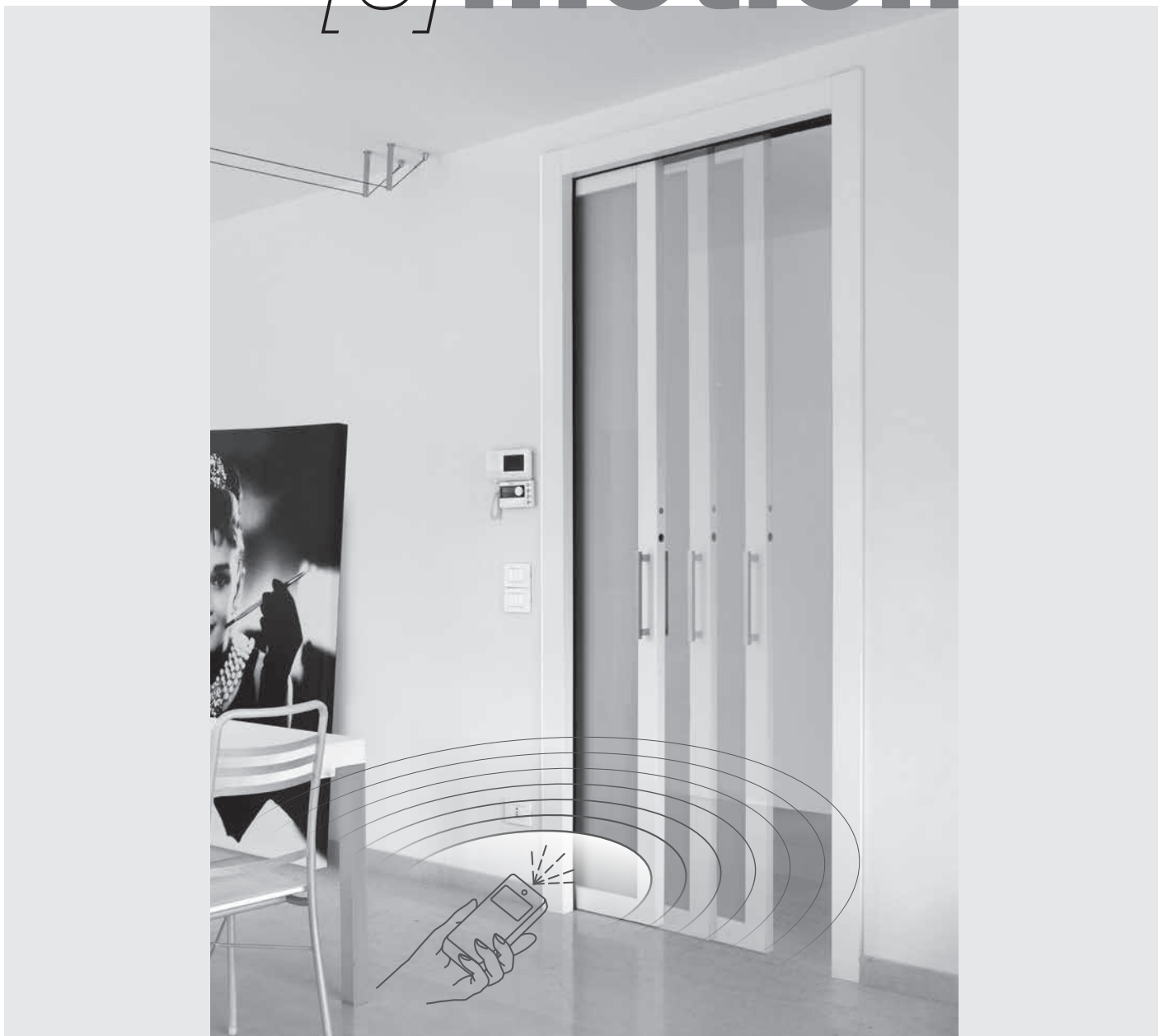


# [e]motion



## PART II

### Use and maintenance manual

Automatic guide E-Motion for a single automatic sliding door Pocket sliding system UNICO, LUCE SD, UNILATERALE, EWOLUTO®

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### 2.1 DETAILS

This part of the manual is dedicated ONLY to the final user.



Maintenance operations that are not described in this part of the manual must be executed ONLY by qualified and competent technical staff with technical instruments provided of by the law in force in the installation country.

## 2.2 RISK ANALYSIS

### 2.2.1 DETAILS

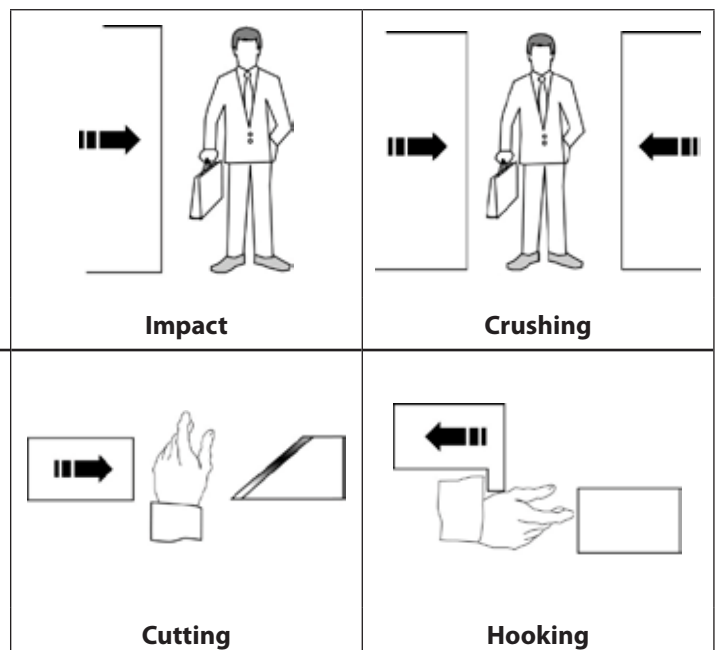
Sliding door risk zones (see photo)



Under the Directive on Machinery:

“**Danger zone**” means any zone within and/or around machinery in which a person is subject to a risk to his health or safety;

“**Exposed person**” means any person wholly or partially in a danger zone.



## 2. 2. 2 RESIDUAL RISKS



Even if E-Motion automatic guide has been designed and developed in order to have a safe functioning and even if all necessary protection measures has been taken, some residual risks may persist.

Automatic doors include crushing, cut and bruise risks. Depending on structural conditions, door version and safety measures, these risks may not be completely eliminated.

According to law prEN 16005 the area where an automatic sliding must always be protected in order to avoid, when it's possible, an impact with people. In order to eliminate these risks E-motion automatic guide takes these measures:

- Possible use of safety sensors, which detect the movement and presence of people and objects in the main closing edge.
- Mode "Low Energy". Depending on the door weight, the guide's speed while closing reduced to a prearranged value. This way the door's dynamic energy and the impact force are inferior to the values established by the Directive.
- In order to assure a high security level, most of all in installation where risk groups request it, E-motion automatic guide allows the simultaneous use of both previous solutions.

The qualified technical staff must verify the correct installation, connection, regulation and functioning of security sensors and/or Low Energy system, as expected from the law.

## 2.3 USE INSTRUCTIONS

### 2.3.1 CORRECT FUNCTIONING METHODS

E-motion automatic guide comes complete with all electronic driving and control elements of the motor, such as the cable/radio signal receiver and controller.

It includes the following characteristics:

#### ❖ **Plug & Play**

E-motion is provided assembled and ready to be installed. You just need to connect the guide to the AC 230V power supply and push the "ON" button to set it going.

#### ❖ **Self Setting**

E-motion has an electronic device that begins, at the first start, a Self-learning process composed of a complete cycle low speed. This process detects automatically the total course and the door weight parameters.

The values memorized by the electronic device automatically determine the open-close cycle of the door (speed and acceleration).

#### ❖ **Adjustable**

Once the self-learning process is over, the qualified installer can make the following regulations:

- Opening speed
- Obstacle detection sensitivity
- How much time you want the door to remain opened (min. 0 sec / max. 20 sec).

### 2.3.2 FUNCTIONING TERMS

E-motion automatic guide has been designed to function as follows:

#### 2.3.2.1 BASIC FUNCTIONING:

##### 1. **Automatic:**

With an impulse generated by one of the possible activation elements (button-radio control-radar etc.), the door makes a complete opening, remains opened for an adjustable time and starts the closing cycle.

##### 2. **Push&Go:**

Applying a light manual push on the door (in the opening side), an open-close cycle starts automatically.

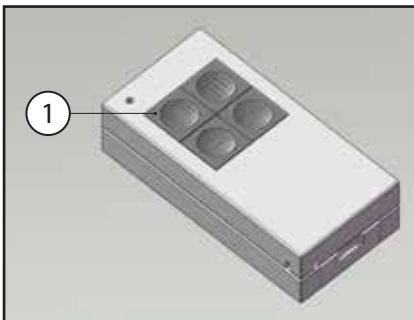
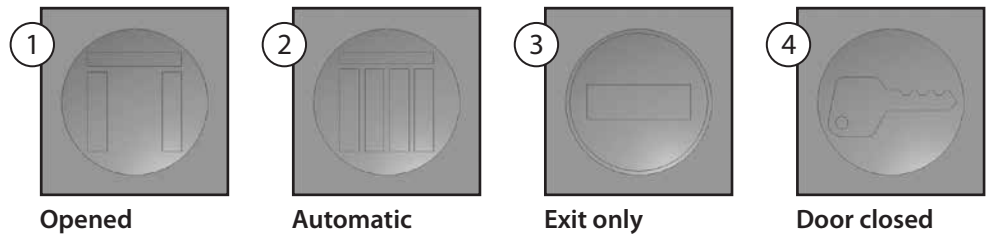
##### 3. **Opened:**

Keeping the button pushed until the complete door, the door remains opened.

Pushing the button again the "automatic cycle" mode is re-established.

This mode allows the door to be opened and closed manually.

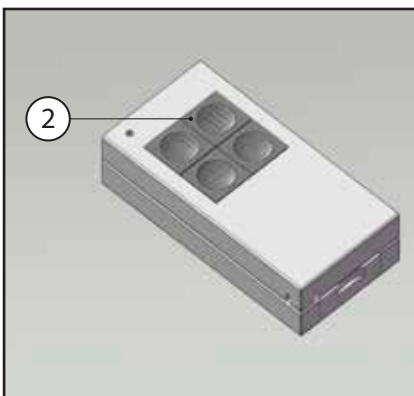
### 2.3.2.2 COMPLETE FUNCTIONING (with Remote Control and Electromechanical Block Optional)



#### 1. Opened:

Keeping the button 1 pushed until the door is completely opened, the door remains opened. This mode allows the door to be opened and closed manually.

“Opened” mode unlocks or cancels mode 3 “Exit only”.

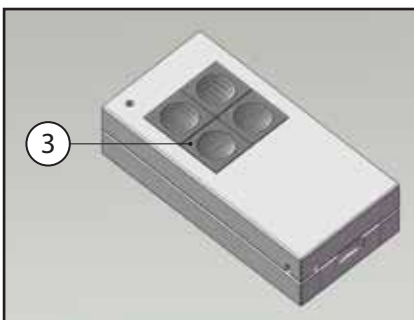


#### 2. Automatic:

Keeping the button 2 pushed the guide is in “Automatic” mode. With an impulse generated by one of the possible activation elements (button-radio control-radar etc.), the door makes a complete opening, remains opened for an adjustable time and starts the closing cycle. “Automatic” mode unlocks or cancels mode 1 “Opened”, 3 “Exit only” and 4 “Door closed”.

If you press the button “Opened” during the closing process, the door will not open until the first round of opening / closing is ended.

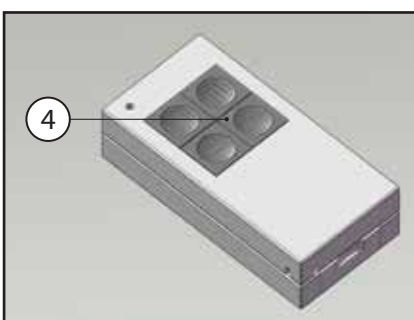
**2. 1. Push&Go:** Applying a light manual push on the door (in the opening side), an open-close cycle starts automatically.



#### 3. Exit only, with Electromechanical Block (Optional)

An electromechanical device automatically blocks the door. The door opens only with activation elements from the inside. Eventual external controls are inhibited.

To unlock push button 2 “Automatic”.



#### 4. Closed door, with Electromechanical block (Optional)

Pushing button 4 “Door closed” an electromechanical device automatically blocks the door. It inhibits activation elements installed on the door (block all elements).

To unlock push button 2 “Automatic”.

In case of power failure, for your safety, the device stops automatically and the door can be opened manually.

### 2.3.2.3 FUNCTIONING IN CASE OF POWER FAILURE

#### 1. Manual open

In case of power failure E-motion automatic guide allows the door to be opened manually just with a push, obtaining a simple opening.

### 2.3.3 USE RESTRICTION

It's useful to show, assist and advise the client on the correct use of internal sliding doors with E-motion automatic guide, if they are installed where there are people with physical, sensorial and mental reduced capacities, children and old people.

Do not allow children to play in the door passage, and keep the remote control out of their reach.

## 2.4 MAINTENANCE

The product doesn't need particular periodic maintenance operations. It's necessary, under the § 4.2 of prEN 16005 law, verifying at least once a year the correct functioning of the security devices.

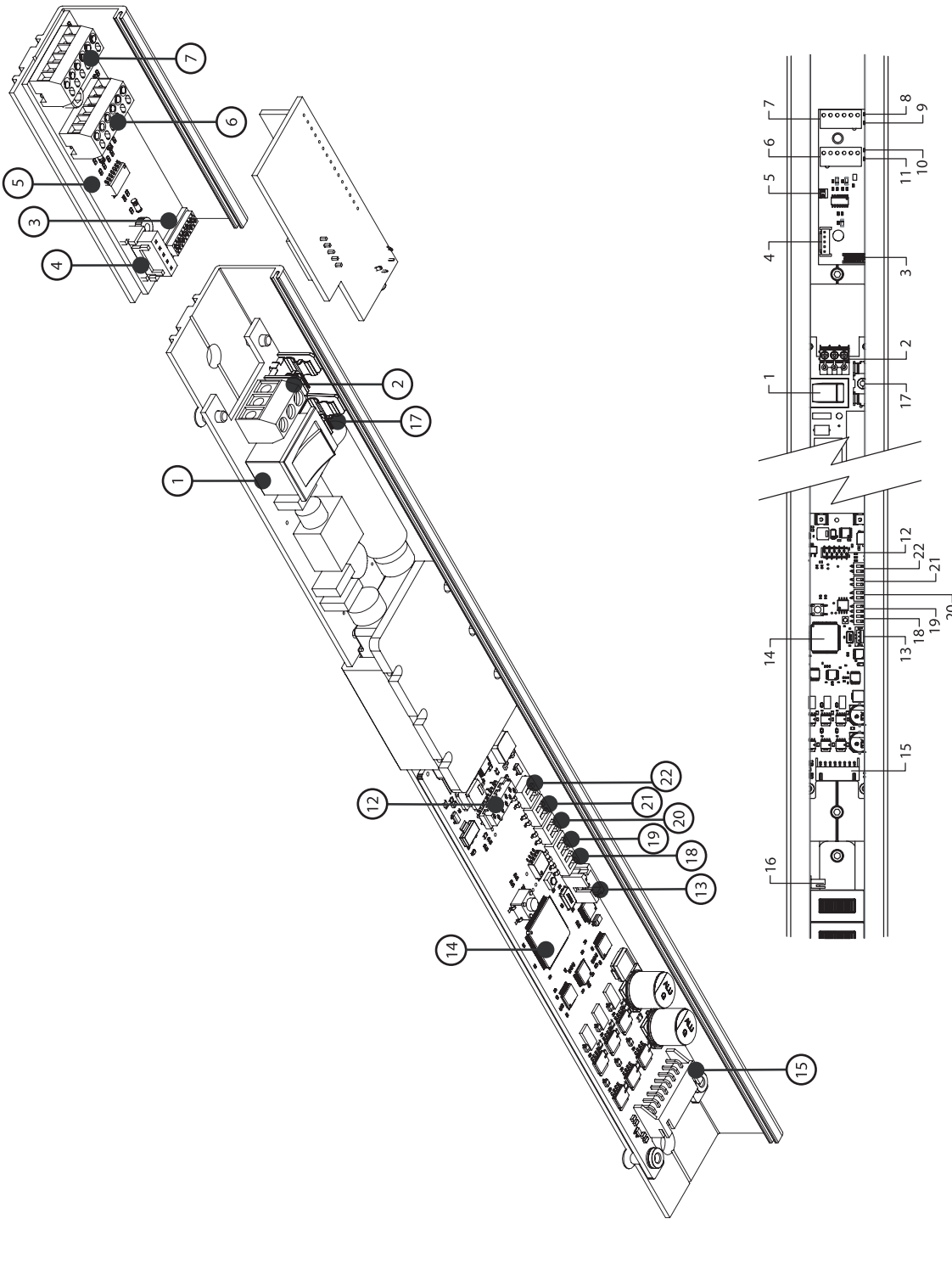
## 2.5 PROBLEMI E SOLUZIONI

PROBLEM	POSSIBLE CAUSE	SOLUTION
"On / off" button light doesn't switch on.	The automatic guide isn't connected to the power grid (connector, direct terminal box, thermic connection / differential, etc.)	Control the connection and verify the correct voltage, 230V - 50Hz.
	Defective internal connection.	Control the internal connection. <b>IMPORTANT!</b> Carry out these operations with the guide disconnected!
	The fuse is burned.	Verify the fuse with a tester.
	The switch isn't on ON position.	Move the switch on ON position.
The door doesn't move and no light switches on.	The system isn't powered (internal failure).	Contact the technical staff.
The door doesn't move and the lights switch on in start-up sequence.	Defective motor connection.	Contact the technical staff, control internal connections between motor and control card.
The door doesn't move correctly (self-regulation).	The door is too heavy.	Change that door with a lighter one.
	The door installation is not correct (it isn't perpendicular to the floor, the guide produces friction on the floor, the floor is irregular...)	Verify that the door installation is correct.
	Defective motor connection.	Contact the technical staff, control internal connections between motor and control card.
	Control card malfunction (internal error)	Contact the technical staff.
	Irregular sliding functioning (wheel, track, dirt...)	Control the correct sliding moving the door manually.
The door doesn't move correctly (DOOR MODE)	Self-regulation has not been executed correctly.	Repeat self-regulation.
	There is an obstacle.	Remove the obstacle.
	There is no obstacle.	Regulate sensitivity.



PROBLEM	POSSIBLE CAUSE	SOLUTION
Sending a signal by an external device (accessories) the door doesn't open and in the controller card the green light doesn't switches on.	The internal signal is defective.	Verify the connection card and the control card connection.  Verify that the guide is on Mode that activates the door with the accessories.
The automatic guide doesn't respond to remote control's signals.	Receiver module RF is not correctly connected.	Control the RF module connection.
	RF module is not inserted.	Insert RF module.
	Defective receiver.	Replace the RF receiver module
	RF module didn't register the remote control.	Register remote control on RF module.
	Remote control doesn't send signal.	Replace the remote control batteries.

## 2.6 TECHNICAL AND ASSISTANCE DATA



- |   |  |    |  |    |   |
|---|--|----|--|----|---|
| 1 | ON/OFF Button                            | 9  | Orange led (button signal active)        | 17 | Protection fuse 2 A                     |
| 2 | Power supply input 220V-50 Hz            | 10 | Green led (external radar signal active) | 18 | Operation                               |
| 3 | Accessories circuit connection           | 11 | Red led (lock signal active)             | 19 | Regulation of opening speed             |
| 4 | RF receiver connection                   | 12 | Accessories circuit connection           | 20 | Regulation of opening sensitivity force |
| 5 | Domotics connection (reserved)           | 13 | PC connection (reserved)                 | 21 | Regulation of door opened time          |
| 6 | External radar and lock connection       | 14 | Microprocessor                           | 22 | Dip switches (door Weight)              |
| 7 | Internal radar and buttons connection    | 15 | Motor/ receiver connection               |    |   |
| 8 | Green led (internal radar signal active) | 16 | Motor/ receiver connection               |    |   |

ELECTRIC CHARACTERISTICS

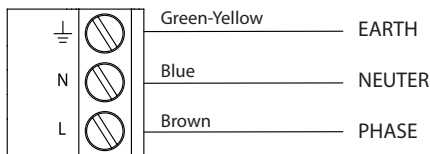
Power supply	
Voltage	230 V AC
Power	150 W
Intensity	0,75 A
Frequency	50/60 Hz

Normative	
	2006/42/CE
	2004/108/CE
	2006/95/CE
	EN 60335

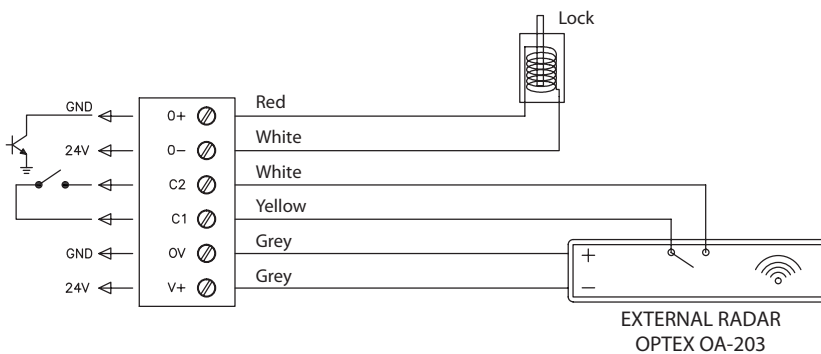
Linear Motor			
Type:	"PMSM" Permanent magnet synchronous motor Iron core. 3 Phases - 4 Poles - 24 V		
Magnets:	Neodymium 35 H	Pitch Pole 25 mm	
Consumption:	Peak	150 W	Force: 80 N
	Medium	80 W	IP: IP 22
	Stand-By	15 W	Class: I

Accessories			
Power:	25 W	Power supply	24 V DC
		Consumption	1 A

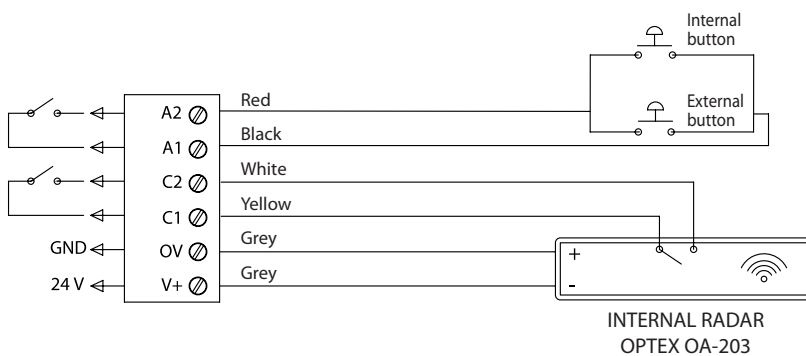
2 → POWER SUPPLY INPUT



6 → EXTERNAL RADAR AND LOCK CONNECTION



7 → INTERNAL RADAR AND BUTTON CONNECTION



## 2.7 CONFORMANCE STATEMENT



### CONFORMANCE STATEMENT (Directive 2006/42/CE - Directive on Machinery)

I declare, under my own supervision, that the described model and product possess the essential health and safety requirements as expected in the following directives for the law harmonisation at European Union level:

Product: Automatic guide for internal sliding door

Model: E-motion

Serial Number: Starts with 00

Producer: Eclisse S. r. l.  
Via Sernaglia, 76  
31053 Pieve di Soligo  
Treviso – Italia

Laws: Directive 2006/42/CE – “Directive on Machinery”

- EN ISO 12100-1
- EN ISO 12100-2
- EN ISO 13857
- EN ISO 14121-1

Directive 2004/108/CE – “Electromagnetic Compatibility (EMC) Directive”\*

- EN 61000: 3-2
- EN 61000: 3-3
- EN 61000: 6-1 2002
- EN 61000: 6-3 2002

Directive 2006/95/CE – “Low Voltage Directive (LVD)”.\*

- EN 60335-1
- EN 60335-2/103

Designer:  
Ing. Oriol Guilera

Legal Representative:  
Sig. Luigi De Faveri

\* Laboratorio Ensayos: IDNEO  
Polígono Industrial Can Mitjans s/n  
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