

RASWIN Module SRS Input + Programmable Relay + Output

Previous knowledge requirements

SRS Module

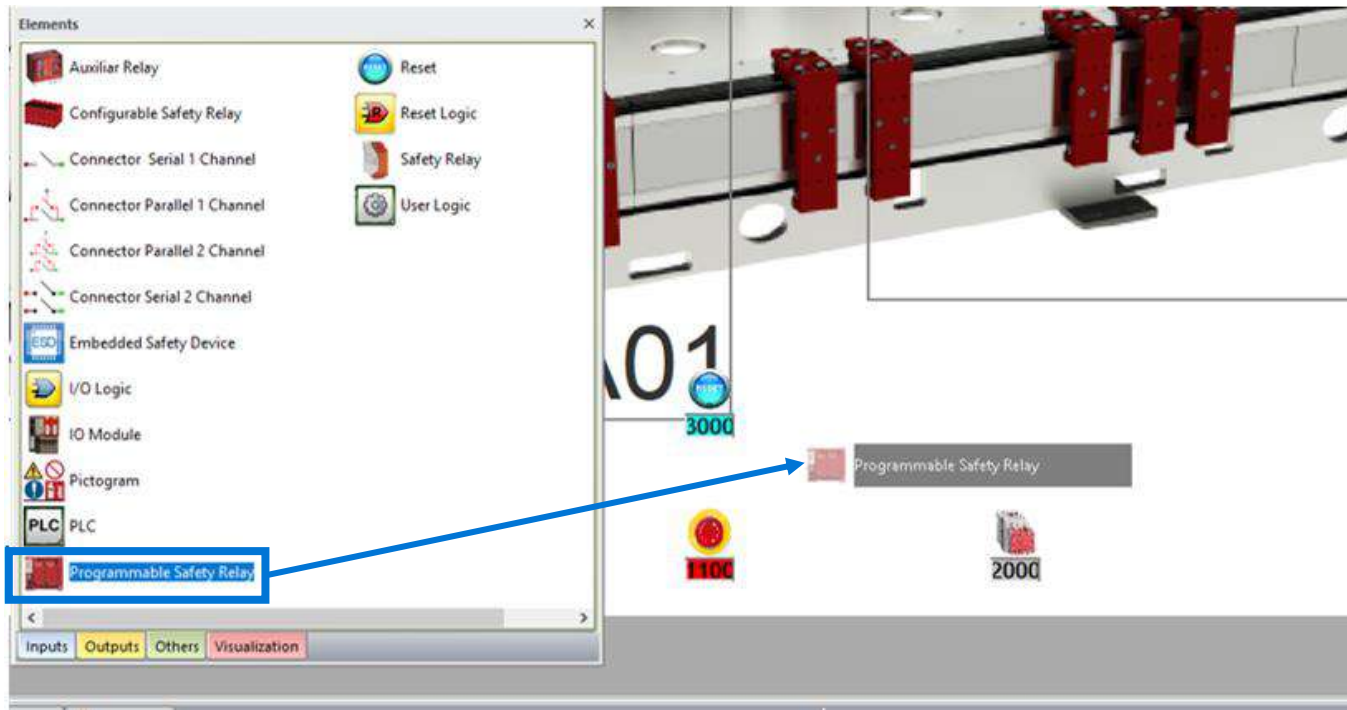
1_SRS Input_Output



Previous knowledge requirements

How to create a Safety Matrix in RASWin?

Architecture: Input + Programmable Safety Relay + Output

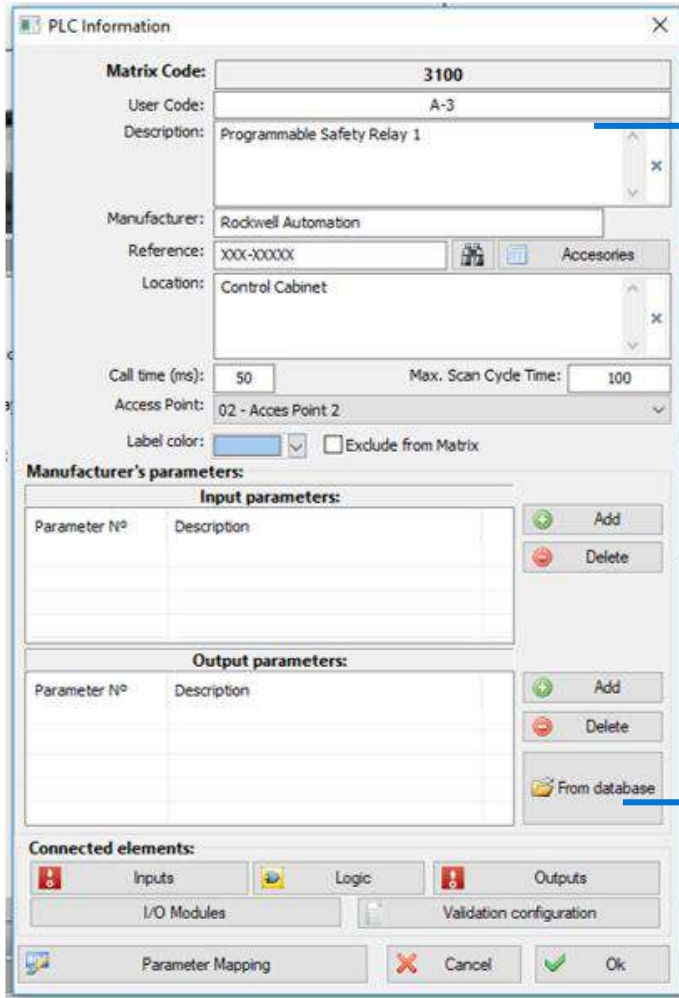


1. Select "Others" on the Element Pane.
2. Select a "Programmable Safety Relay" and drag it on the layout.

Step 1: Add a Programmable Safety Relay

How to create a Safety Matrix in RASWin?

Architecture: Input + Configurable Safety Relay + Output



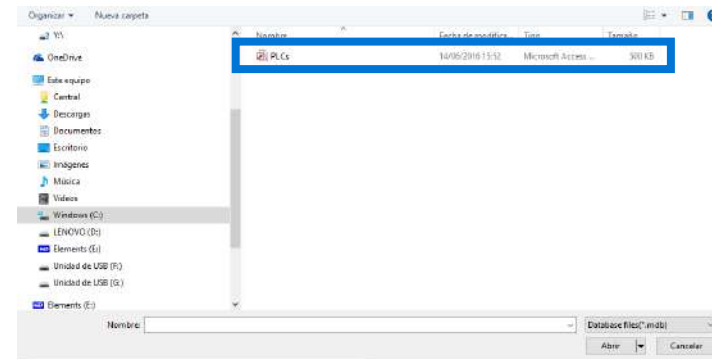
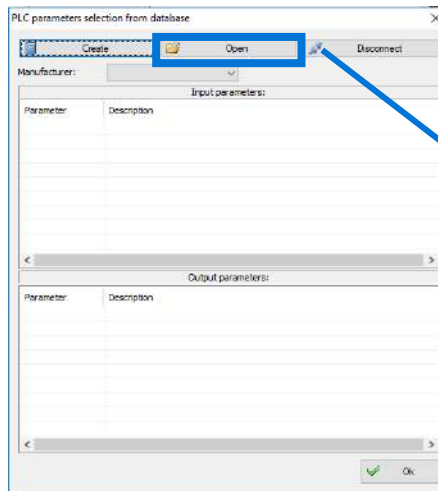
1. Complete the following information:

- Description
- Manufacturer
- Reference
- Location
- Call Time (ms)
- Max. Scan Cycle Time

2. Click "from Database"

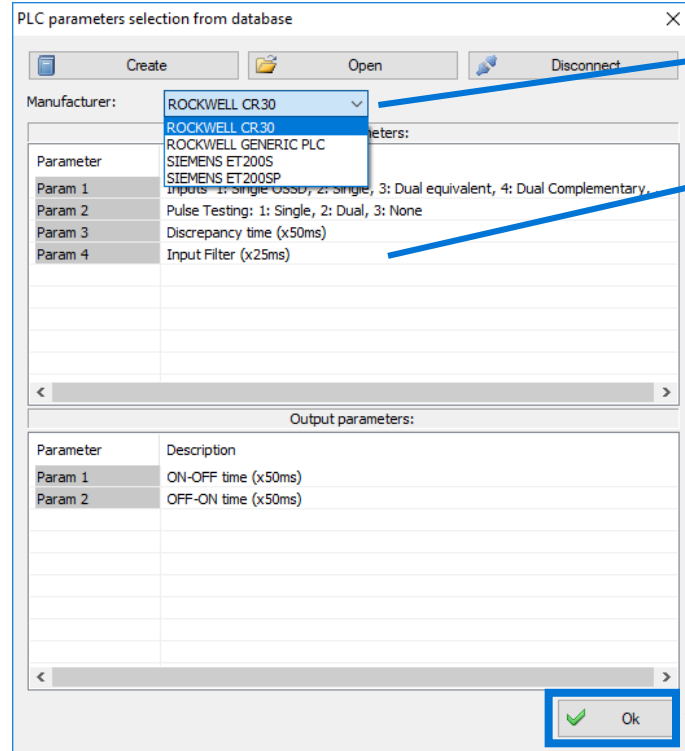
3. Click "Open".

4. Select the file "PLC's" and click "Ok".



How to create a Safety Matrix in RASWin?

Architecture: Input + Configurable Safety Relay + Output



1. Select the Programmable Safety Relay (CR30)

2. The Input and Output parameters of the device will appear.

3. Click "Ok".

How to create a Safety Matrix in RASWin?

Architecture: Input + Safety PLC+ Output

PLC Information

Matrix Code: 3100
User Code: A-3
Description: Programmable Safety Relay 1
Manufacturer: Rocwell Automation
Reference: XXX-XXXX
Location: Control Cabinet
Call time (ms): 50 Max. Scan Cycle Time: 100
Access Point: <Not assigned>
Label color: Exclude from Matrix

Manufacturer's parameters:

Input parameters:

Parameter N°	Description
Param 1	Inputs 1: Single OSSD, 2: Single, 3: Dual equip
Param 2	Pulse Testing: 1: Single, 2: Dual, 3: None
Param 3	Discrepancy time (x50ms)

Output parameters:

Parameter N°	Description
Param 1	ON-OFF time (x50ms)
Param 2	OFF-ON time (x50ms)

Connected elements:

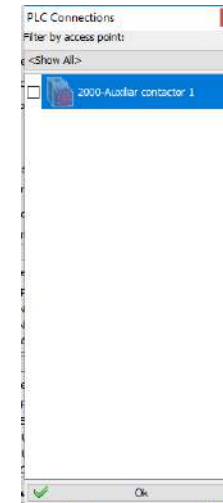
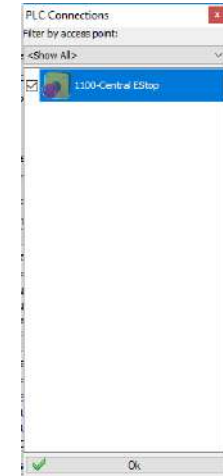
Inputs Logic Outputs
I/O Modules Validation configuration

Parameter Mapping Cancel Ok

1. The parameters of the Programmable Safety Relay, will appear on Manufacture's parameters window.

3. Click in inputs. Select Inputs controlled by PLC and OK

4. Click in outputs. Select Outputs and ok.



Step 3: Link the I/O elements with the Programmable Safety Relay

How to create a Safety Matrix in RASWin?

Architecture: Input + Safety PLC+ Output



1. Double Click in Estop 1100.
2. Click in "PLC configuration"
3. Fill the information.

Element information:

Matrix Code: 1100 1100 - 1199

User Code: PBE-1

Description: Central EStop

Manufacturer: Rocwell Automation

Reference: XXX-XXXXX Accessories

Location: Operator Station 2

Access Point: <Not assigned>

Label color: ■ Exclude from Matrix PLC

Auto reset

Validation configuration

PLC Configuration

Additional Information

Edit links Cancel Ok

PLC Parameters

Connect element to PLC: 3100 - Programmable Safety R

Parameter	Value
Inputs: 1: Single OSSD, 2: Single, 3: Dual equivalent, 4: Dual Complementary, 5: Dual OSSD	3
Pulse Testing: 1: Single, 2: Dual, 3: None	2
Discrepancy time (x50ms)	10
Input Filter (x25ms)	0

Feedback Parameters:

Parameter	Value
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Copy from: Copy To...

Import info from other element Export info to other element

Step 4: Fill Inputs Parameters information

How to create a Safety Matrix in RASWin?

Architecture: Input + Safety PLC+ Output



1. Double Click in Estop 1100.
2. Click in "PLC configuration"
3. Fill the information.

Element information:

Matrix Code: 2000 2000 - 2049

User Code: KA1

Description: Auxiliar contactor 1

Manufacturer: Rocwell Automation

References: XXX-XXXXX Accessories

Location: Electric Case

Access Point: <Not assigned>

Label color: [dropdown] Exclude from Matrix PLC

Validations and configuration:

PLC Configuration Validation configuration

Additional Information Additional Feedback Information

Edit links Cancel Ok

PLC Parameters

Connect element to PLC: 3100 - Programmable Safety R

Parameter	Value
ON-OFF time (x50ms)	0
OFF-ON time (x50ms)	1

Feedback Parameters:

Parameter	Value
Inputs 1: Single OSSD, 2: Single, 3: ...	0
Pulse Testing: 1: Single, 2: Dual, 3: N...	3
Discrepancy time (x50ms)	0
Input Filter (x25ms)	0

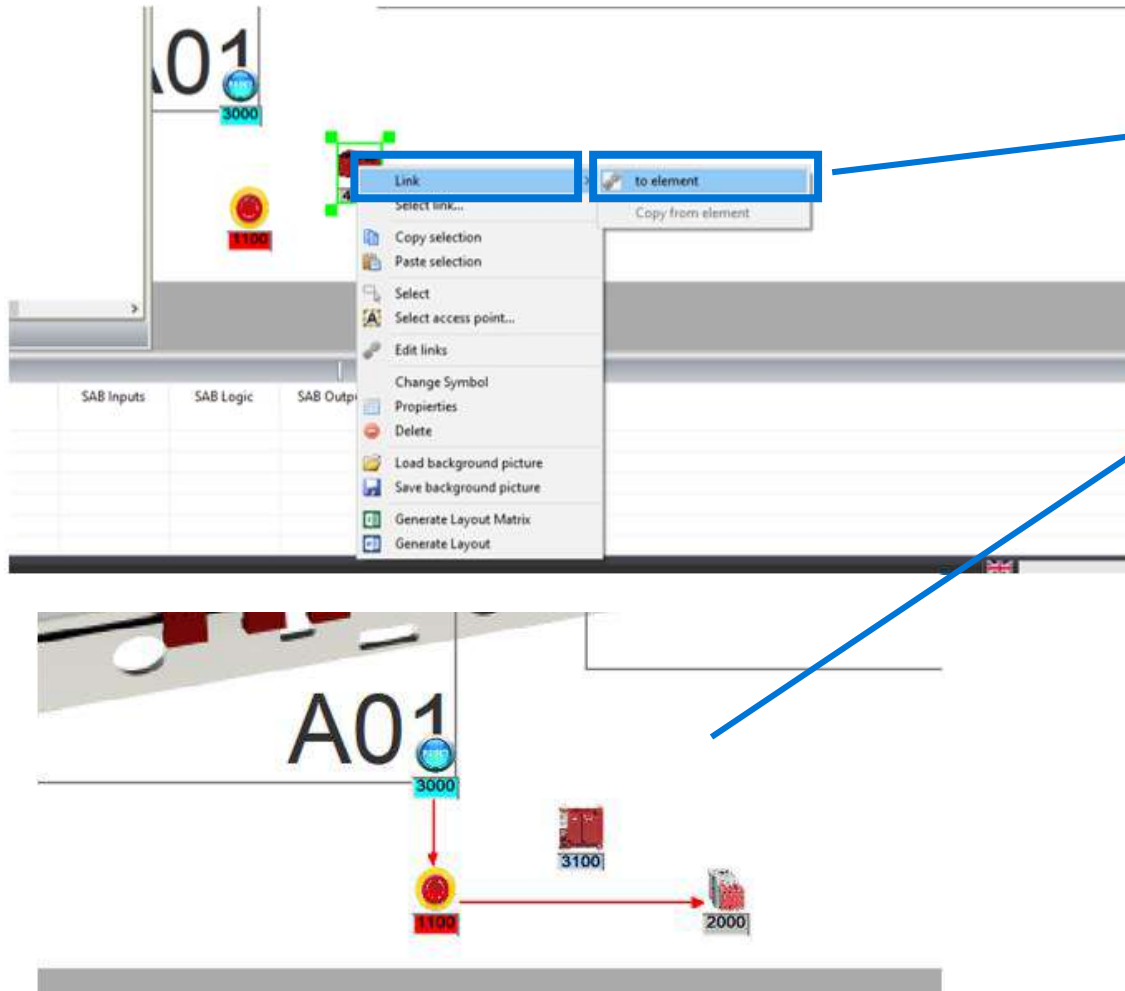
Copy from: Copy To...

Import info from other element Export info to other element

Step 5: Fill Outputs Parameters information

How to create a Safety Matrix in RASWin?

Architecture: Input + Programmable Safety Relay + Output



1. Link the elements on the layout (The Programmable Safety Relay, doesn't have to be linked).

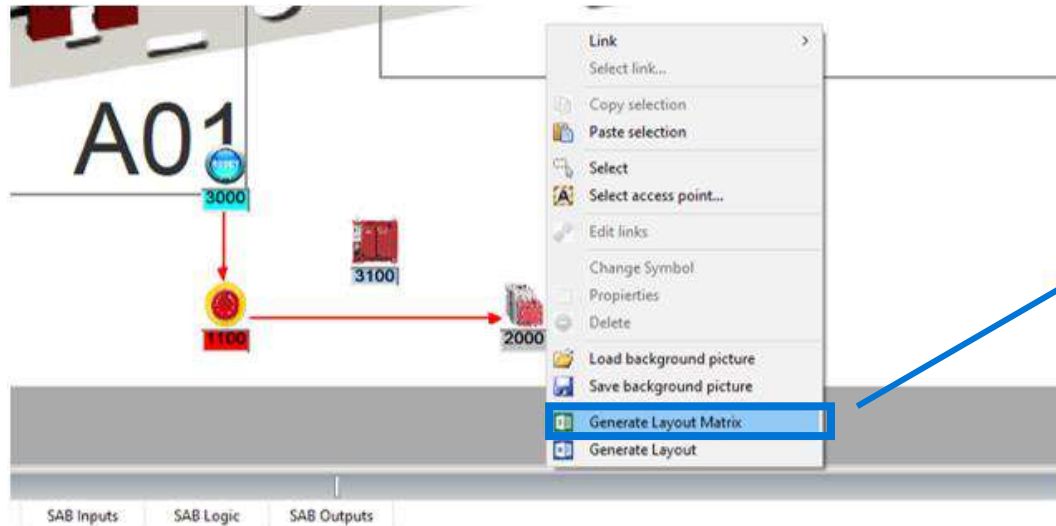
5. The links will be displayed in red color.

6. Press "Esc" button or right mouse button to stop link.

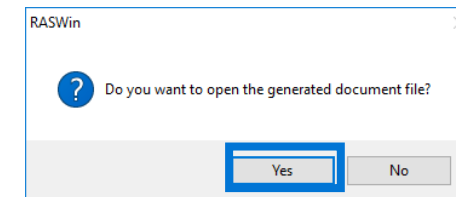
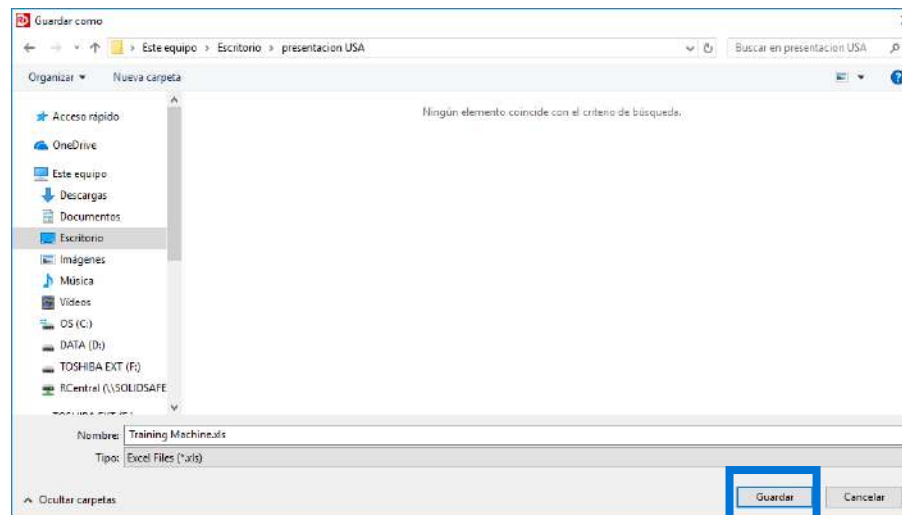
Step 6: Link the elements

How to create a Safety Matrix in RASWin?

Architecture: Input + Programmable Safety Relay + Output

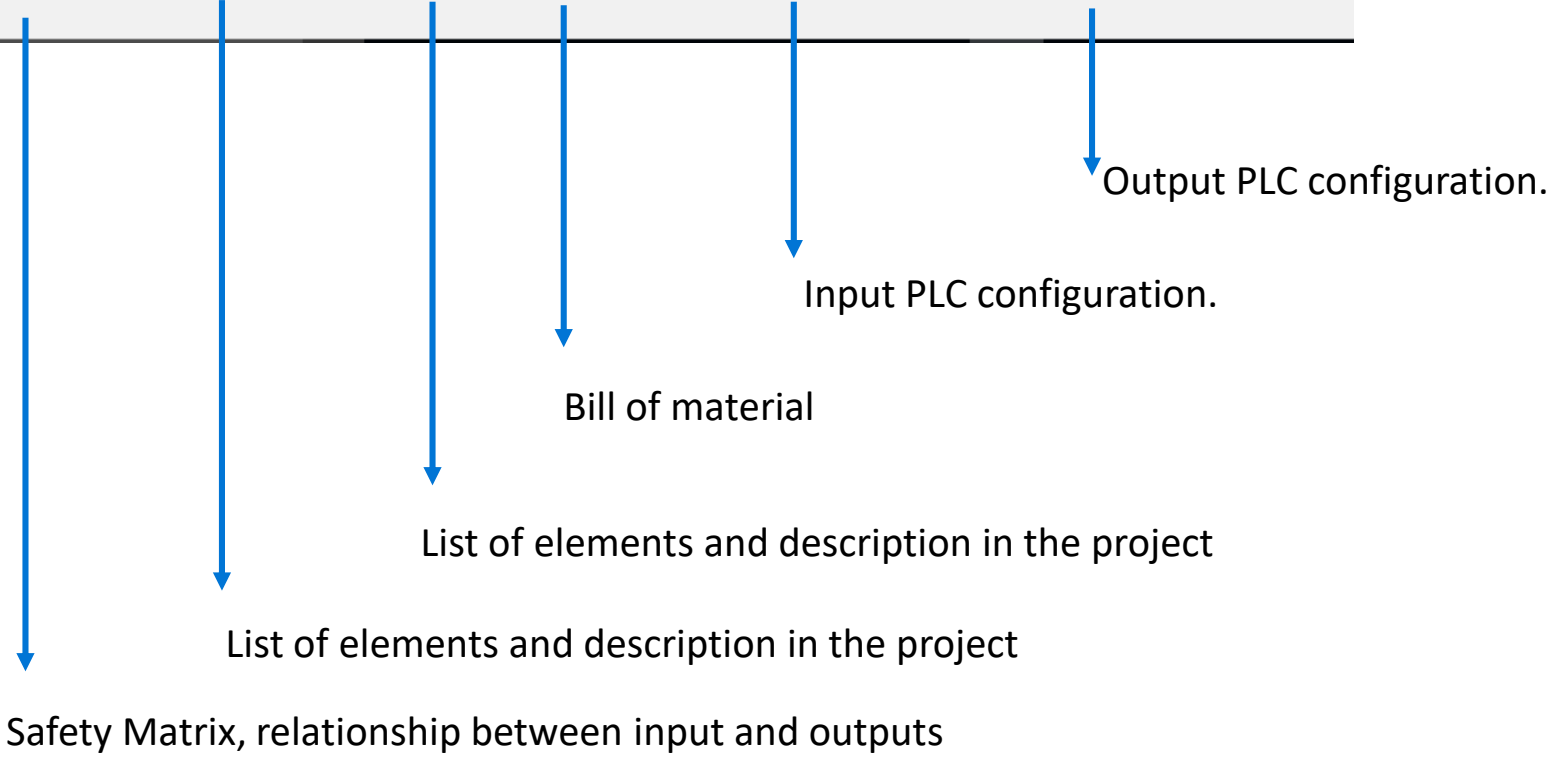
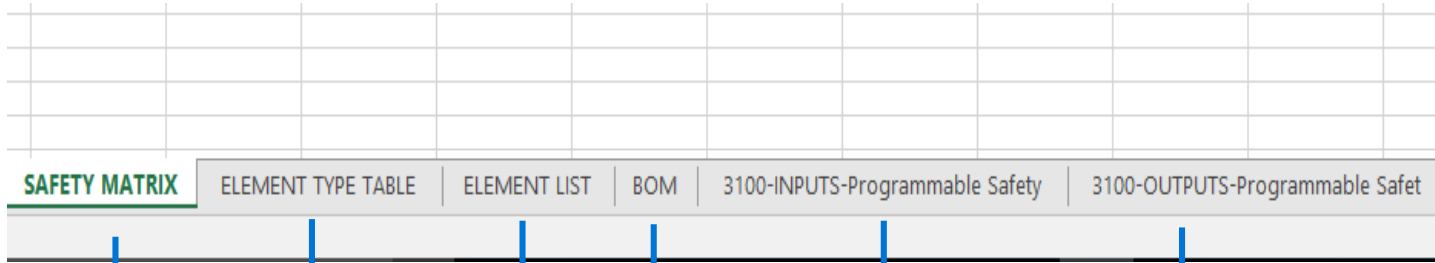


1. Right click anywhere on the layout.
2. Select “Generate Layout Matrix”.
3. Save the Matrix.
4. And click “Yes”, to open the Safety Matrix.



How to create a Safety Matrix in RASWin?

Architecture: Input + Programmable Safety Relay + Output



Step 8: Safety Matrix

How to create a Safety Matrix in RASWin?

Architecture: Input + Programmable Safety Relay + Output

SAFETY MATRIX				
CODE	INPUT ELEMENT DESCRIPTION	USER CODE	OUTPUT	RESET
			Acces Point 2	
			Auxiliar contactor 1	
			2000	
1100	Central EStop	PBE-1	OFF	R3000

Once the file is opened, the following safety matrix will appear .

SAFETY INPUT ELEMENTS																
				ELEMENT				HARDWARE CONFIGURATION				RESET		DRAWING PAGES		
1100	PBE-1	02-Access Point 2	Central Estop	XXX-XXXX			Operator Station 2			3	2	5	0	R3000		
R3000	R120	01-Access Point 1	Estop Reset button	XXX-XXXXX			Operator Station 2									
F2000	KA1	02-Access Point 2	Auxiliar Contactor 1	XXX-XXXXX			Electric Case			0	3	0	0			

Programmable Safety Relay Input configuration.

SAFETY OUTPUT COMPONENTS																
				ELEMENT				HARDWARE CONFIGURATION				FEEDBACK D.		DRAWING PAGES		
2000	KA1	02-Access Point 2	Auxiliar Contactor 1	XXX-XXXXX			Electric Case			0	1		0	0		


Programmable Safety Relay Output configuration.

Previous Presentation

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