

RASWIN Module SRS PL Calculation: Automatic Mode

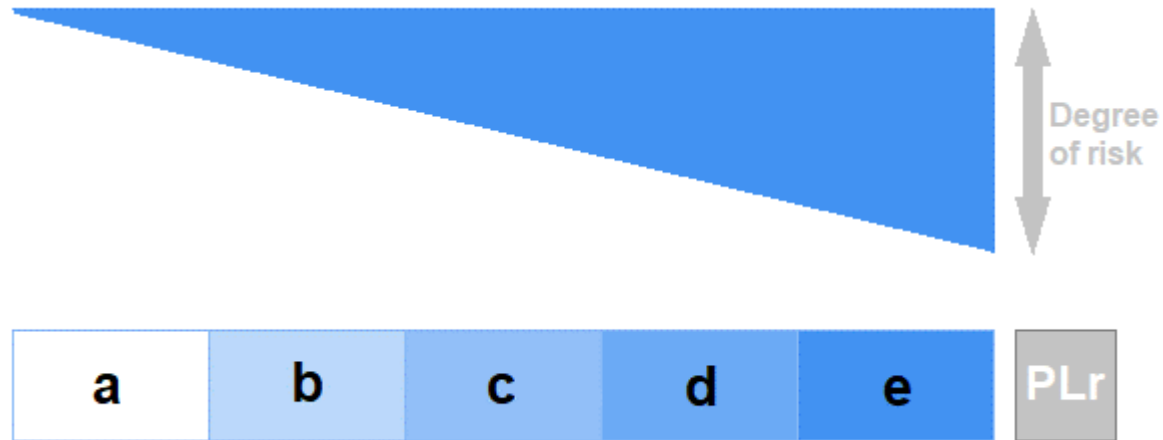
Performance Level?

PL Gfx Module

PL is a measure of the reliability of a safety function. This value depends on different parameters as Probability of failure or Mean time to failure.

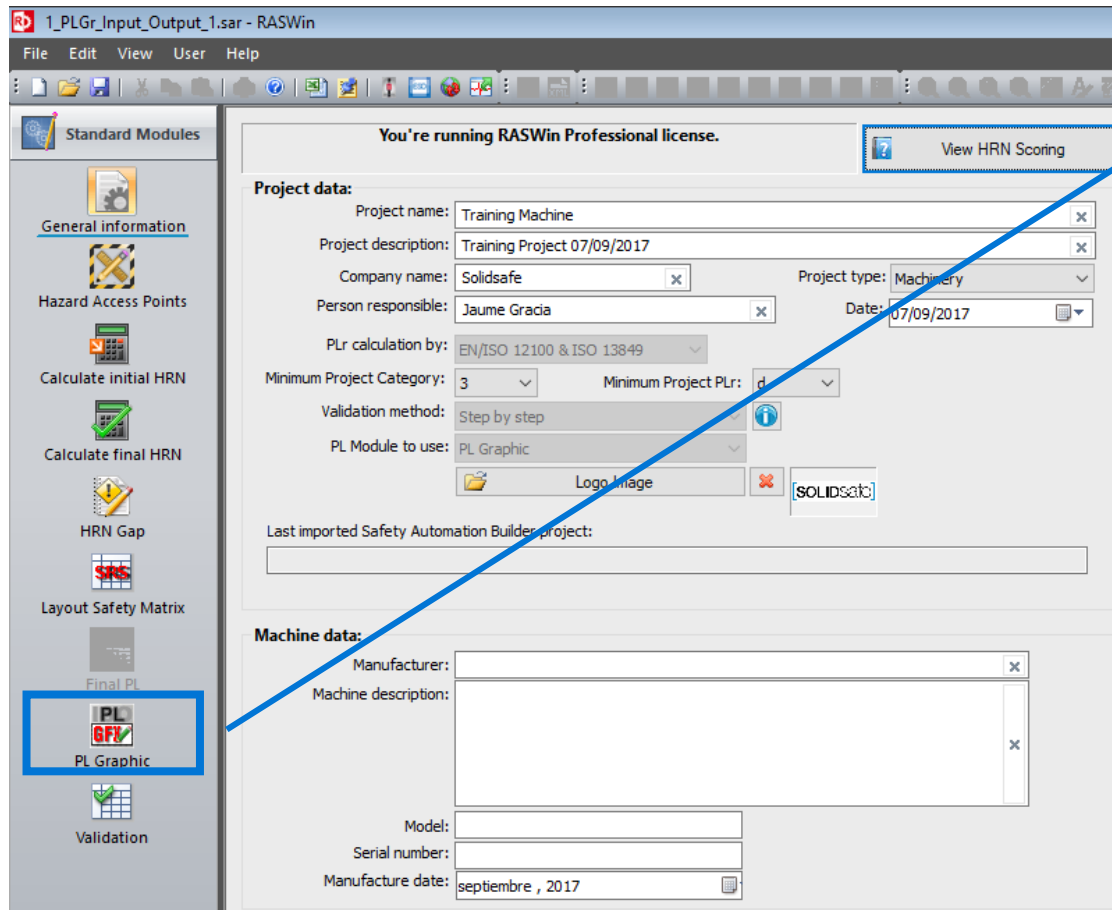
PL is divided into five levels (a-e).

PL e gives the best reliability and is equivalent to the required at the highest level of risk



How to calculate the PL in RASWin?

PL Gfx Module



1. Click on PL Gfx Module icon.

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PL Gfx Module

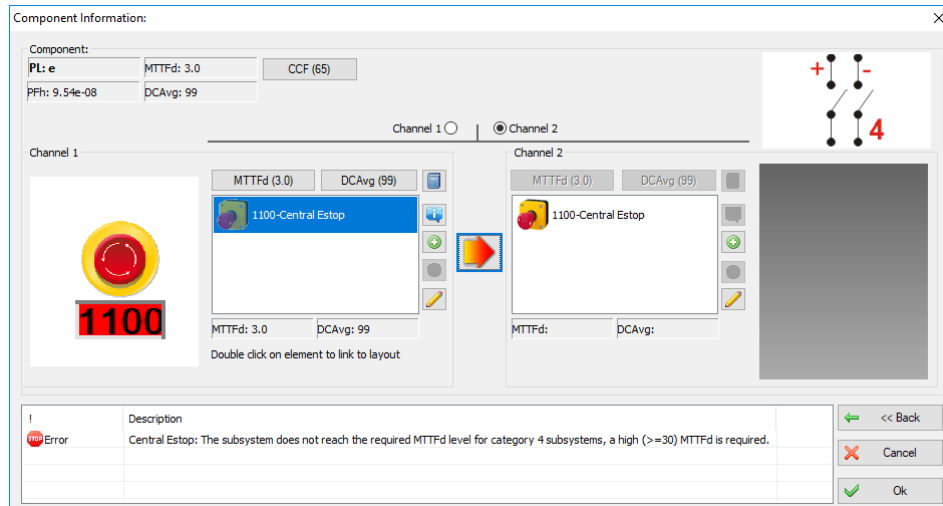
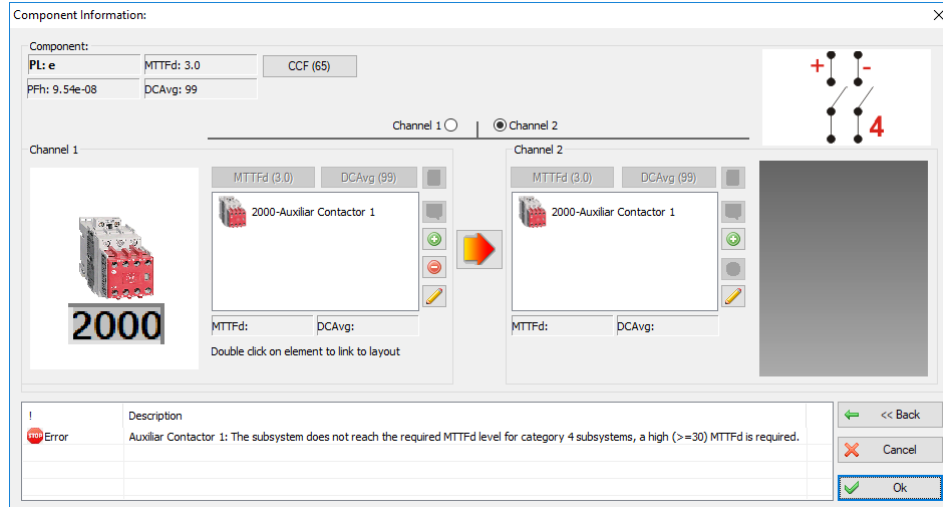


There are two options to calculate the PL of a Safety Function:

1. Automatically (from SRS Links)
2. Manually

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PL Gfx Module



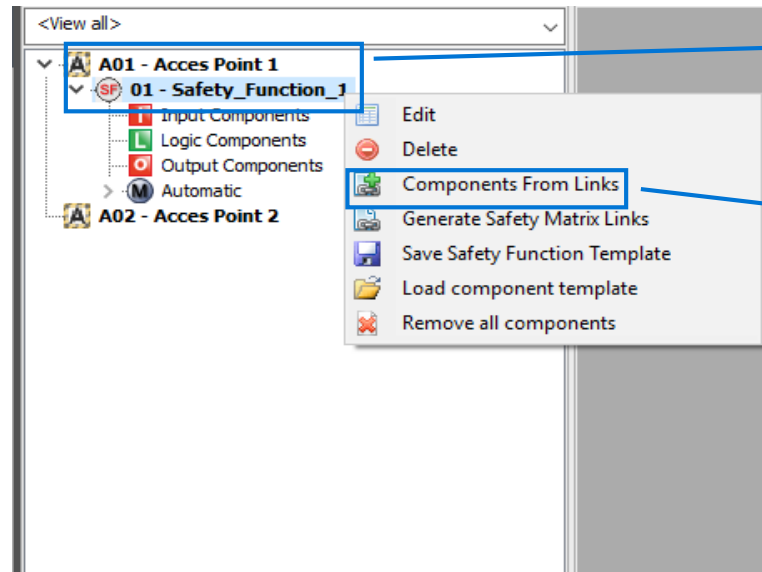
1. Add element to the layout
2. Enter the Safety Parameters of the elements

Step 0: Previous Knowledge

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PL Gfx Module

Option 1: Automatically (From SRS Links)



1. Select the Safety Function.

2. Right click.

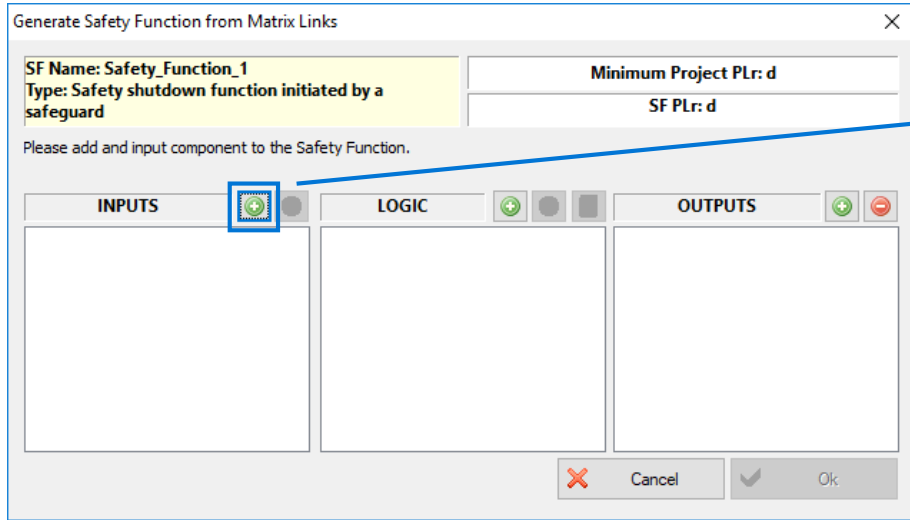
3. Click on Components from links

Step 1: Add components from links

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Step 2: Add elements of the Safety Function



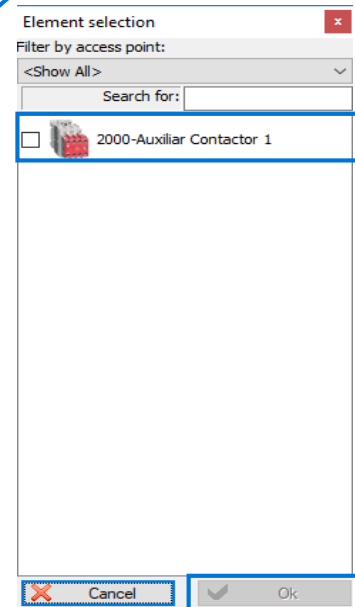
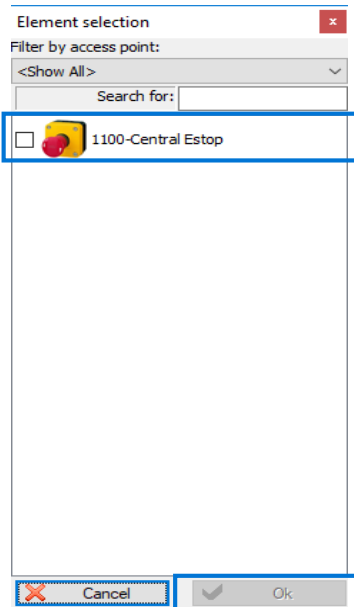
1. Add a input element.

2. Select de input element

3. Click "Ok"

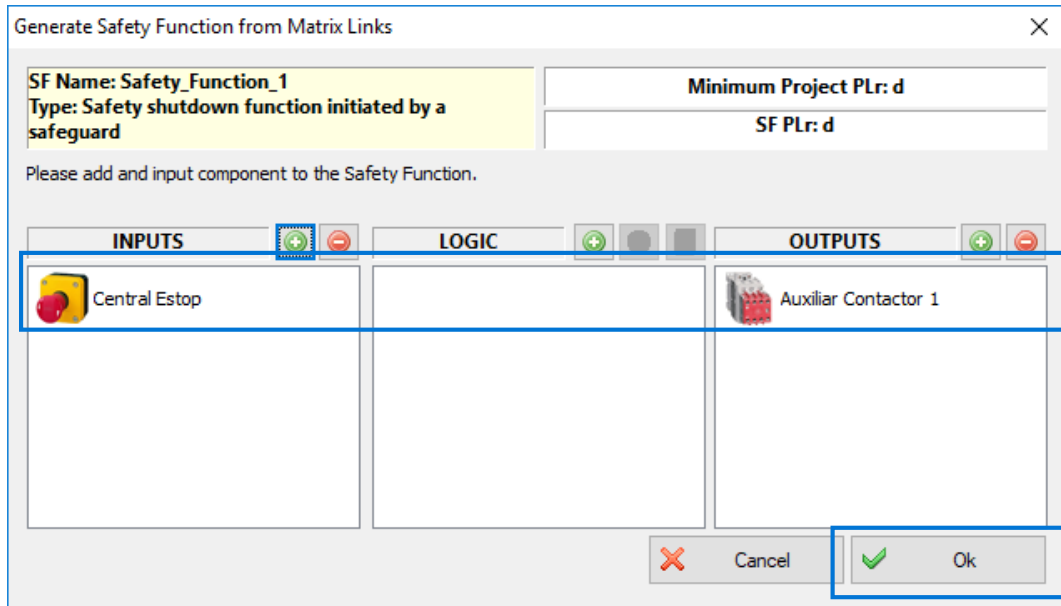
4. Select the Output element

5. Click "Ok".

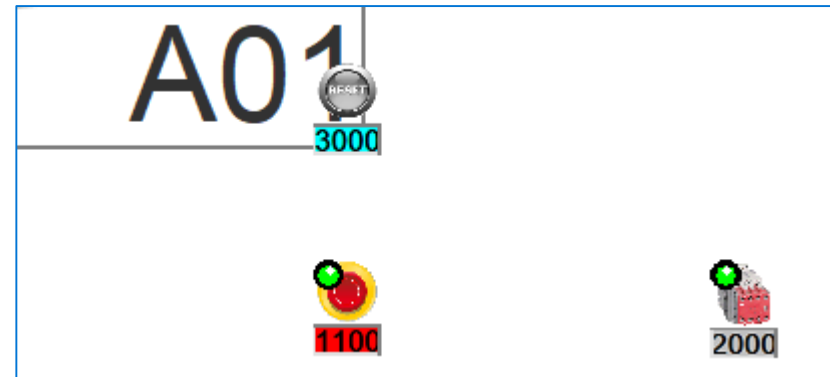


How to calculate the PL in RASWin?

PL Gfx Module

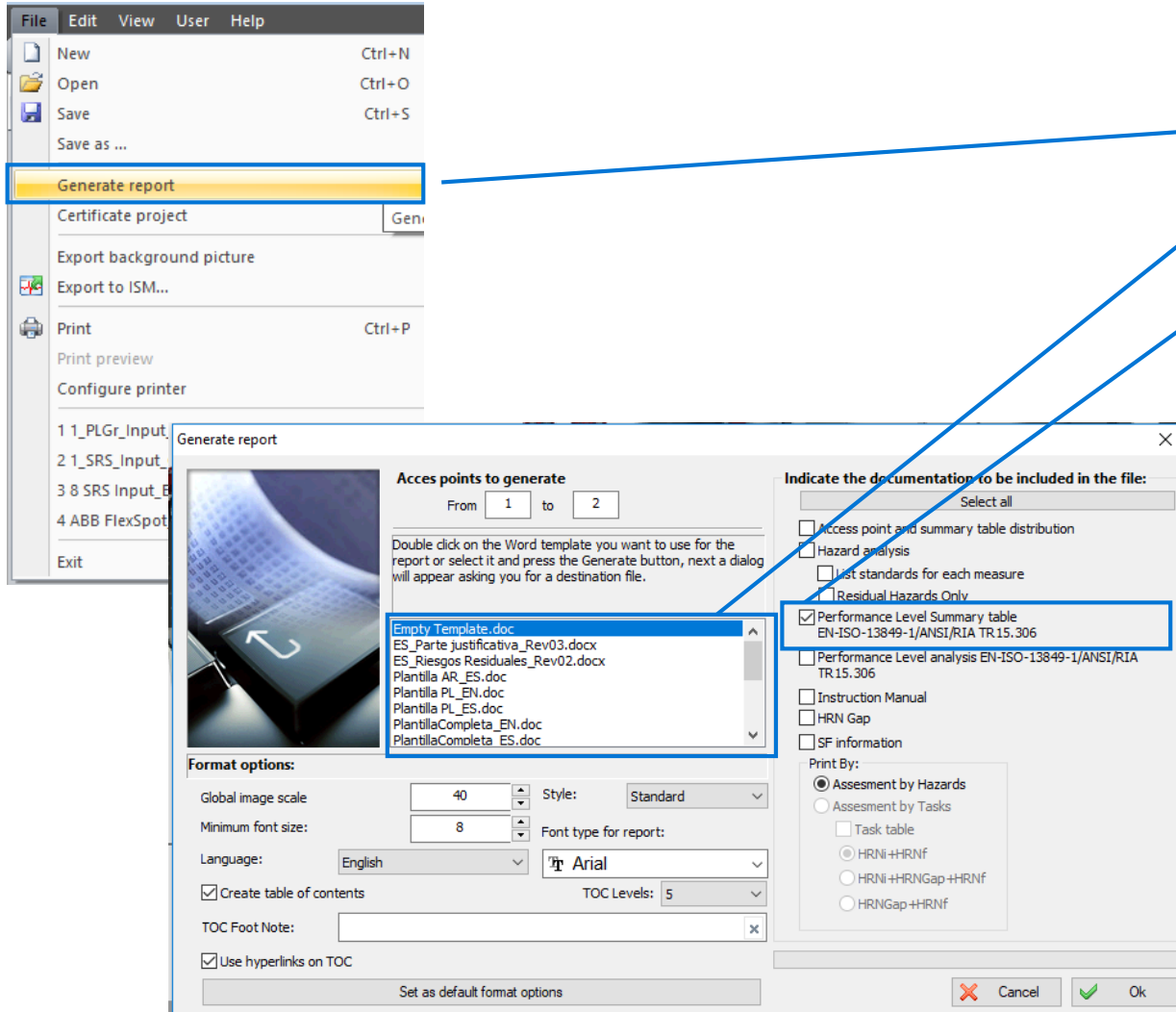


1. The Input – Logic – Output Safety Function has been created.
2. Click “Ok”
3. The elements linked will appear in green

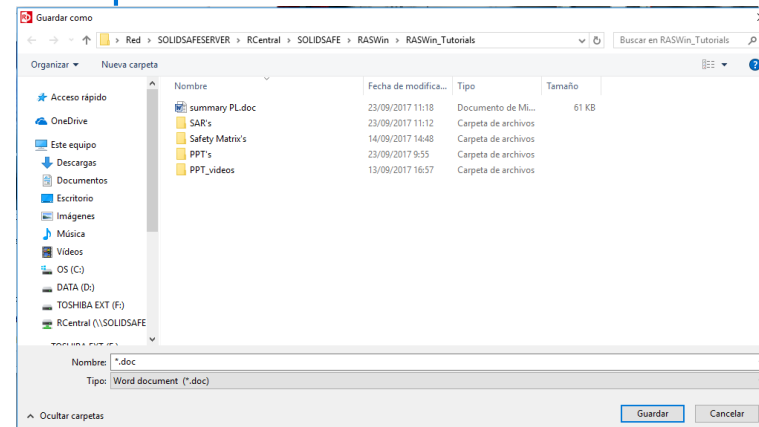


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1. Click on “File”
2. Select “Generate report”
3. Select the Word Template
4. Select “Performance level Summary table”
5. Click “Ok”
6. Save the document



Step 4: Generating report

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PL Gfx Module

Access point	Function	Subsystem	PL _r	PL	PFh
A01-Access Point 1	A01.01 - Safety_Function_1		d	e	4.00e-09
		Central Estop			3.10e-09
		Auxiliar Contactor 1			9.06e-10

The summary of the PL has been created

PL Summary generated