


SIL MODULE



SATODEV

SAFETY TOOLS DEVELOPMENT

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GRIF SIL MODULE 2018

EXCEL DATABASE

Column management

Base of components: C:\Users\cfolleau\Desktop\GRIF2018.Alpha22-19012018-x64\Bin\SIL\Components-DB_rev1.xlsx

Base of sensorsBase of actuatorsBase of solver

Manufacturer: AllInstrument type: AllFind :

ID	D...	Type	M...	S...	Ch...	Law	T...	T...	Method	λ	...	λ DU	λ DD	λ SU	λ SD	...	Y	X	λ*	...	σ	...	D...
1	E...	Pressure...	E...	E...	Ty...	When...	0	Y	6	Y	Simple	3.E...	3E-7	4.5...	0	2.2...	h	0	0	...	1	...	0
2	E...	Relay	E...	E...	Ty...	When...	0	Y	6	Y	Simple	0.6...	0	6E-7	0	0	0	0	0	...	1	...	0
100	S...	Relay	P...	P...	Ty...	When...	6	Y	6	Y	Develo...	1.1...	2.0...	5.2...	1.4...	9.8...	h	0	0	...	1	...	0
101	S...	Relay	P...	P...	Ty...	When...	6	Y	6	Y	Develo...	1.5...	0	5.3...	0.0	1.5...	0.0	0	0	...	1	...	0
102	S...	Relay	P...	P...	Ty...	When...	6	Y	6	Y	Develo...	1.0...	8.8...	4.9...	17.9...	4.9...	h	0	0	...	1	...	0

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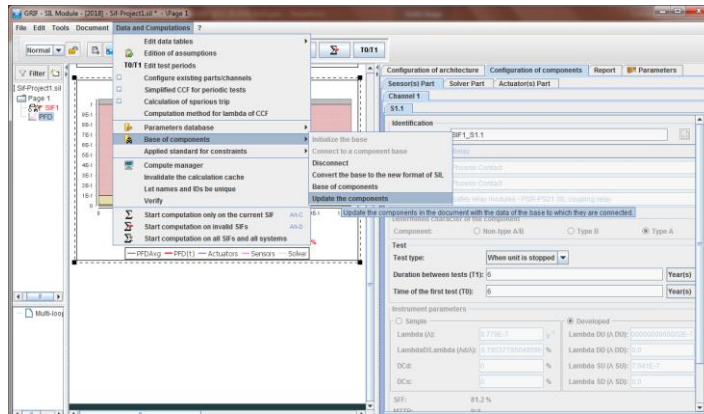
ID	Description	Type	Manufacturer	Source
1	Emerson 2051C- données INS60...	Pressure transmitter	Emerson	Emerson
2	Exida Generic relay	Relay	EXIDA	EXIDA
100	Safety relay modules - PSR-PS20 ...	Relay	Phoenix Contact	Phoenix Contact
101	Safety relay modules - Safety relay...	Relay	Phoenix Contact	Phoenix Contact
102	Safety relay modules - PSR-PS21 ...	Relay	Phoenix Contact	Phoenix Contact
103	Safety relay modules - PSR-PS21 ...	Relay	Phoenix Contact	Phoenix Contact
104	Safety relay modules - PSR-PS40 ...	Relay	Phoenix Contact	Phoenix Contact

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EXCEL DATABASE

Synchronization



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FILE ATTACHMENT

- You can add a certificate for each component
- You can include certificates in PDF reports

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PROOF TEST (NOT PROOF)

- Issue: sensors tests doesn't detect all failures.
 - More frequent tests can detect X% of failures, less frequent tests detect 100%
 - When you do a fault-tree, you assume the 2 failures modes are independent.
- What is the approximation ?
 - Research work comparing with dynamic models (Markov and Petri)
 - To be done ...



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THE END ☺



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