

XCSDMP/C/R switch + XPSMCM unit

Solution to monitor both versions 5 & 7 of the XCSDMP/C/R magnetic switches by the XPSMCM controller, including led versions
How to configurate the function



Simply easy!™



Telemecanique

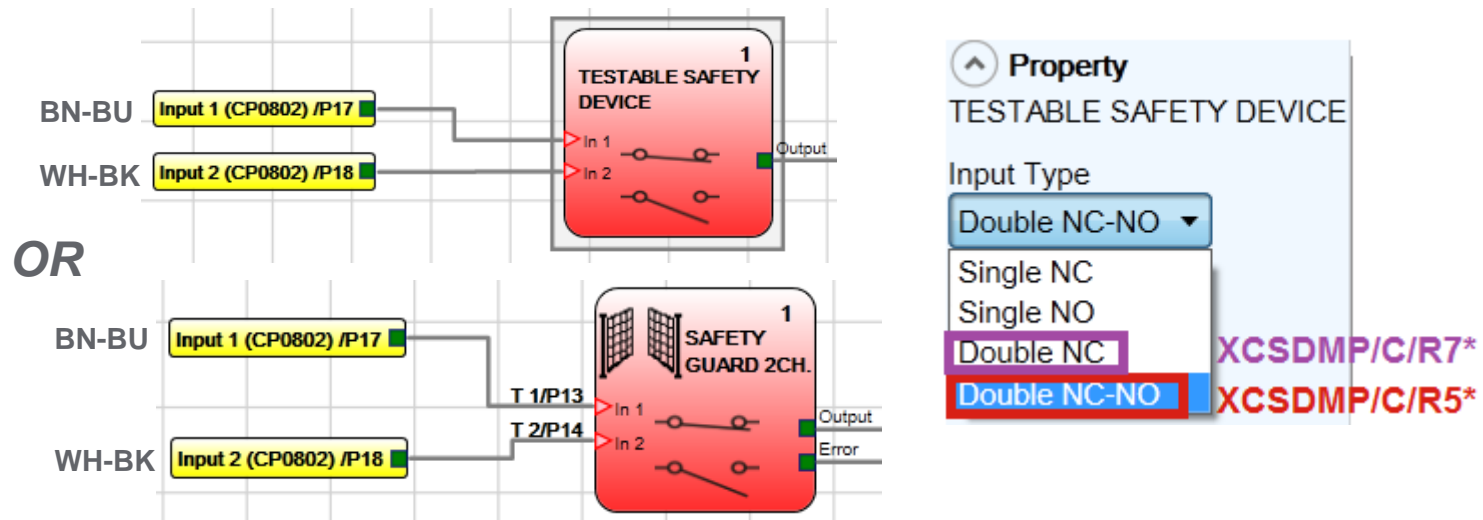
Sensors

XCSDMP/C/R switch + XPSMCM unit



• XCSDMP/C/R switches

- Function to use (configurable 2 NC or NC-NO)



• Function parameters to select

- **Filter** : from 5ms to 10ms (to filter contact bouncing – 5ms is enough normally)
- **Simultaneity time window** : from 2000ms to 7000ms (maxi value)
This time needs to be enough high in case of door closure at very low speed
- Configuration example

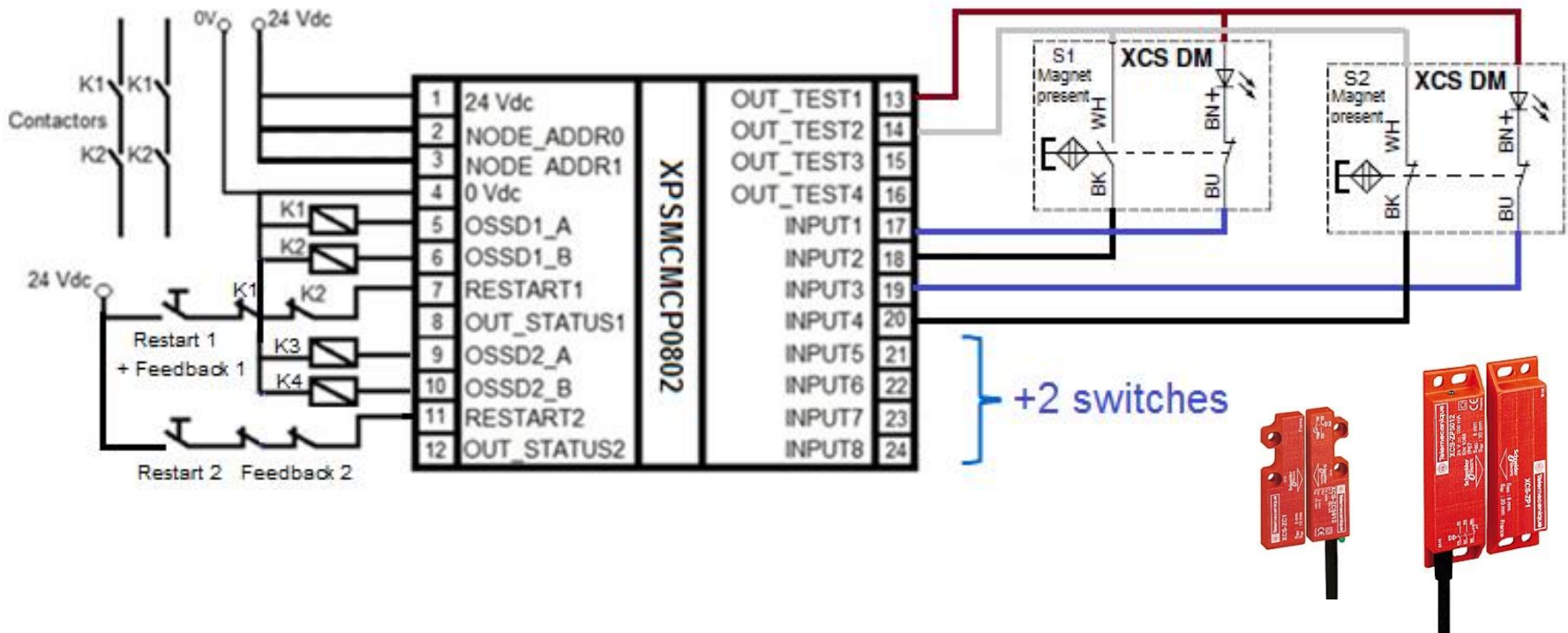


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- Wiring diagram with both versions XCSDM*5* and XCSDM*7*
 - Such solution can reach **PLe cat.4** according to ISO 13849-1 standard, with 1 switch per input group of 2, or **SIL3** according to the IEC 62061 standard



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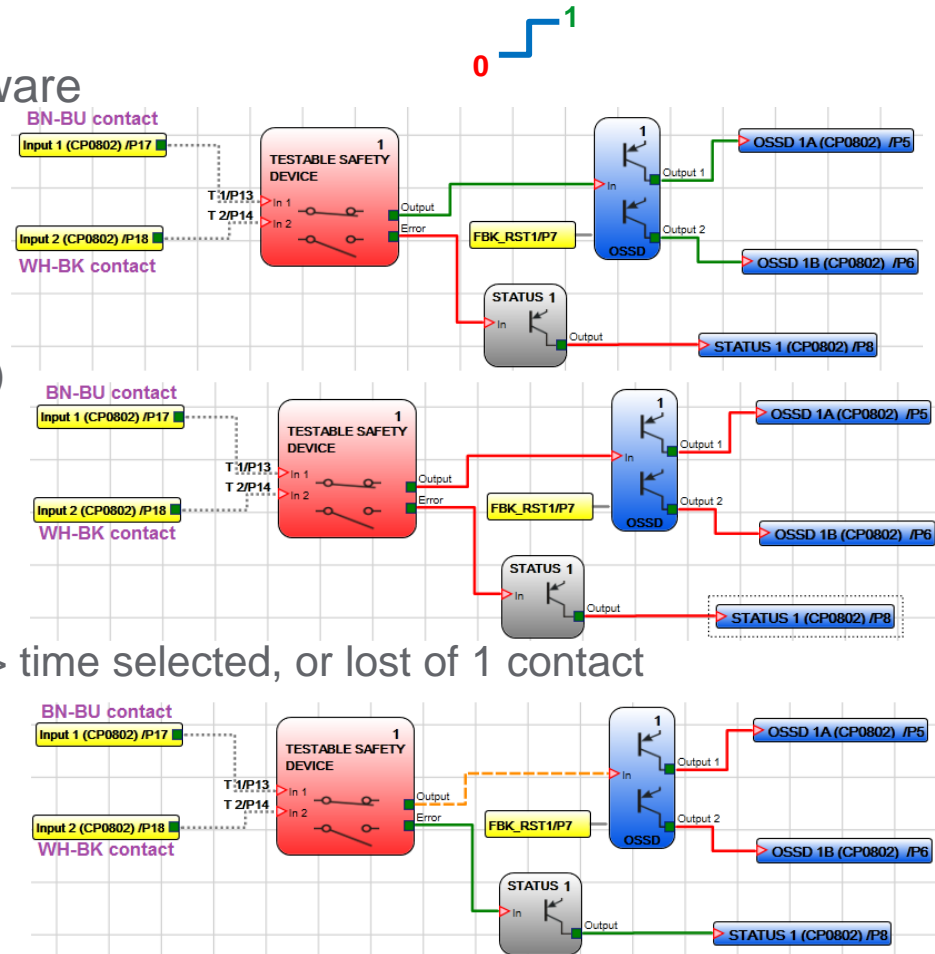
● XCSDMP/C/R5* switches

● Simulation in the configuration software

- Switch On state (magnet detection)
Controller OSSD On (1)
Error Off (0)

- Switch Off state (no magnet detection)
Controller OSSD Off (0)
Error Off (0)

- Simultaneity time at guard closure > time selected, or lost of 1 contact
Controller OSSD Off (0)
Error On (1)

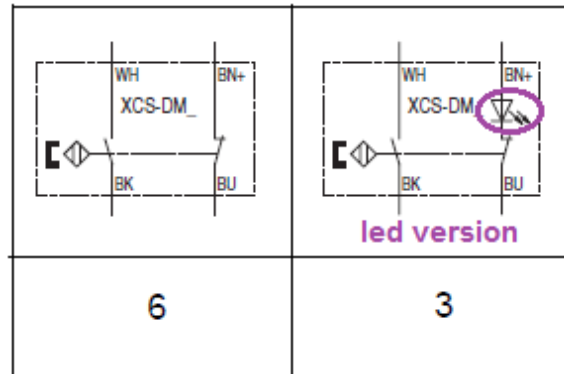


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- How many switches in serie

- For both versions XCSDMP/C/R5 and XCSDMP/C/R7, same answer as in the XPSDMB/E units, suitable for XPSMP or XPSMC controller too.



- In such case of products in serie-parallel (**XCSDM*5**) or in series for both channels (**XCSDM*7**), the PL or the SIL of the application is reduced (PLd cat. 3 or SIL2) because of the « *fault masking* » precised into the ISO 14119 standard.

Table valid for guard operation less than once per hour

Number of guards (switches)	1	2	3	4	5	6
Performance Level	e	d/e	d/e	d/e	d	d
Category ISO 13849-1	4	3/4	3/4	3/4	3	3

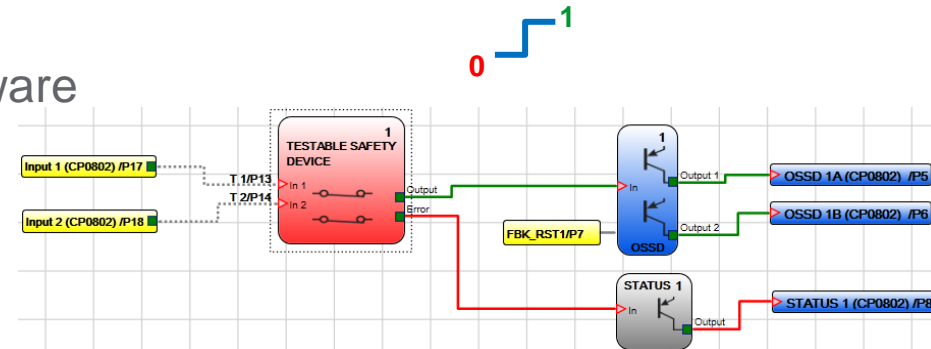
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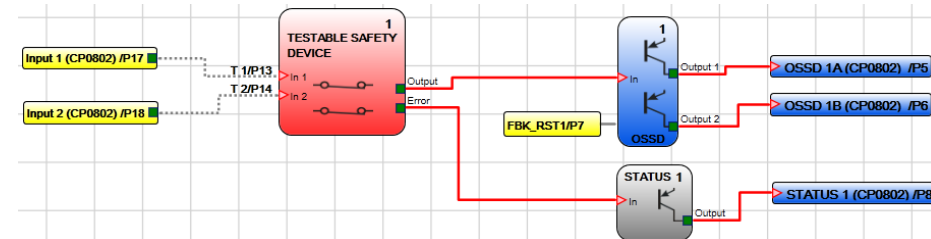
- XCSDMP/C/R7* switches

- Simulation in the configuration software

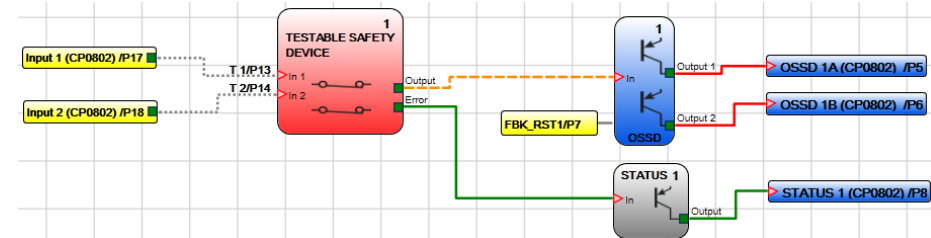
- Switch On state (magnet detection)
- Controller OSSD On (1)
Error Off (0)



- Switch Off state (no magnet detection)
- Controller OSSD Off (0)
Error Off (0)



- Simultaneity time at guard closure > time selected, or lost of 1 contact
- Controller OSSD Off (0)
Error On (1)



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- How to time-delay OSSD outputs

