Connection of a CES-AR-..., CET-AR-... or MGB-AR-... to Beckhoff controls

The outputs of the above mentioned devices have for monitoring of an internal fault and monitoring of a cross-connection on the cable pulsed signals. These pulses cannot be processed directly in a Beckhoff control (Twinsafe). With a small auxiliary program filtering these pulses the devices are working properly.

The connection of the safety part (AR-device) has to follow the instructions in this manual. The following example shows how to filter he pulses.

ATTENTION:
Signal processing with this program will delay the switch off signal for 100 ms.

IMPORTANT:
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Connection of O_A
In this example at clamp no. 2 (KL1904)

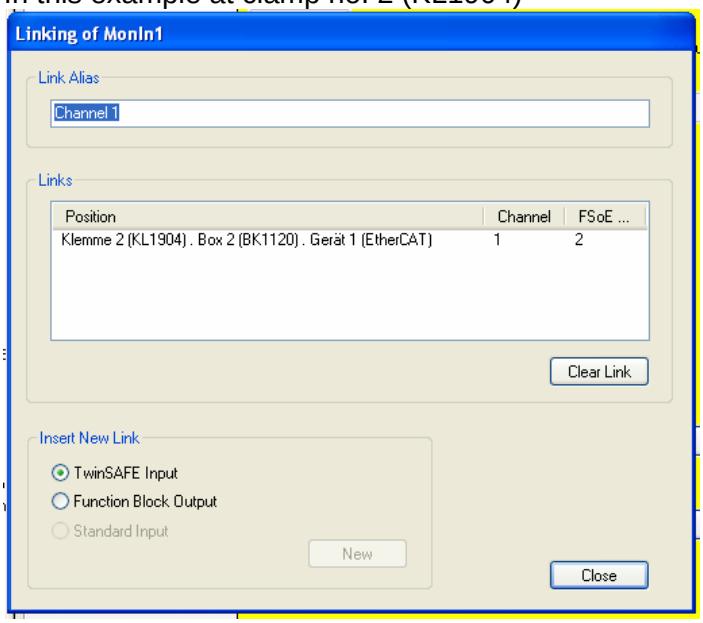

Figure 1
Output: <Channel 1>

Time delay Channel 1

Input: <Channel 1>

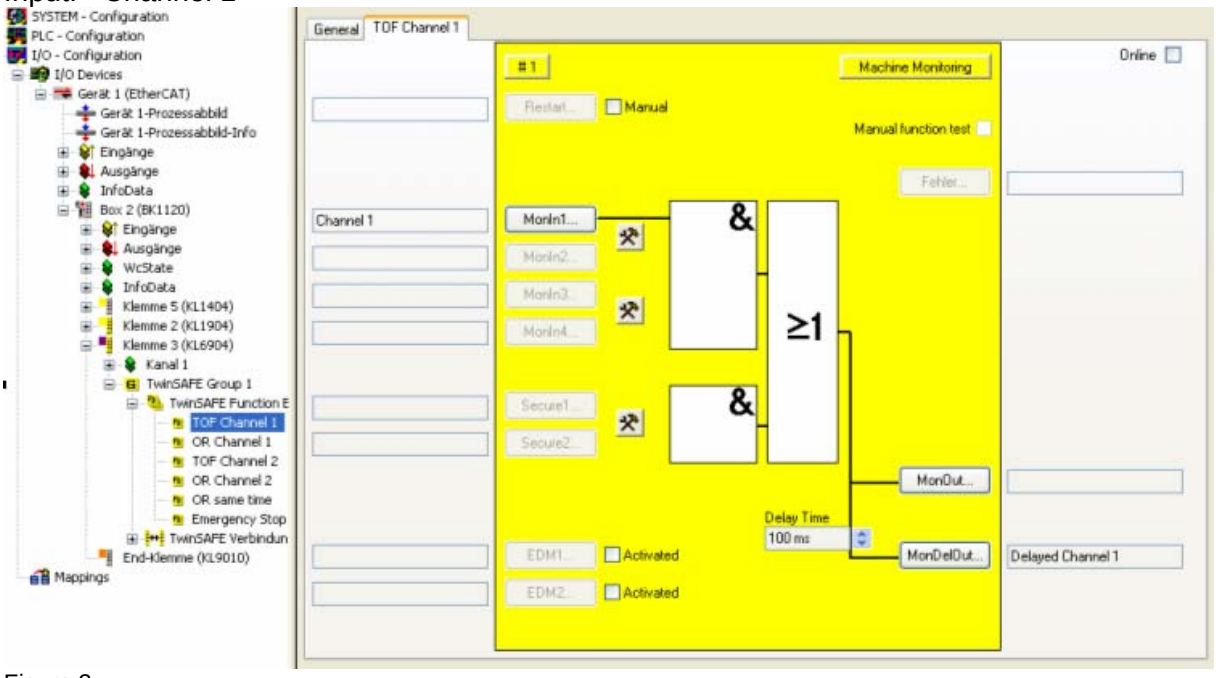

Figure 2

Output: <Delayed Channel 1>

OR Channel 1

Inputs: <Delayed Channel 1>, <Channel 1>

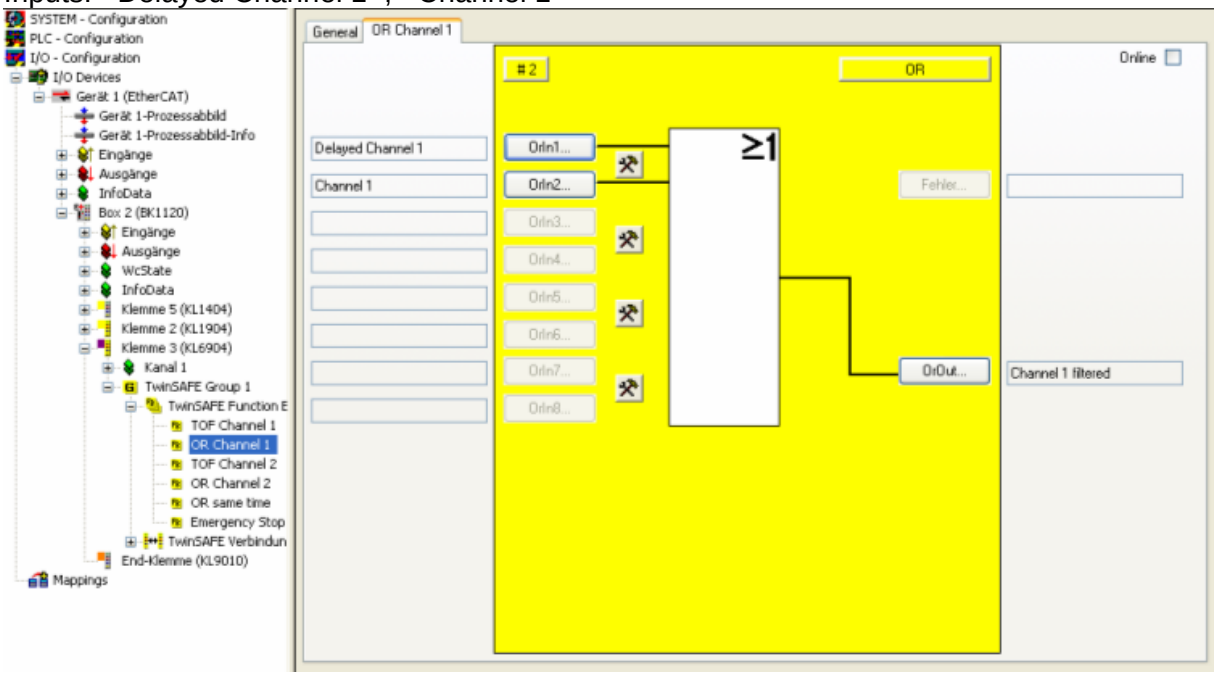

Figure 3

Output: <Channel 1 filtered>

Connection of O_B

In this example at clamp 2 (KL1904)

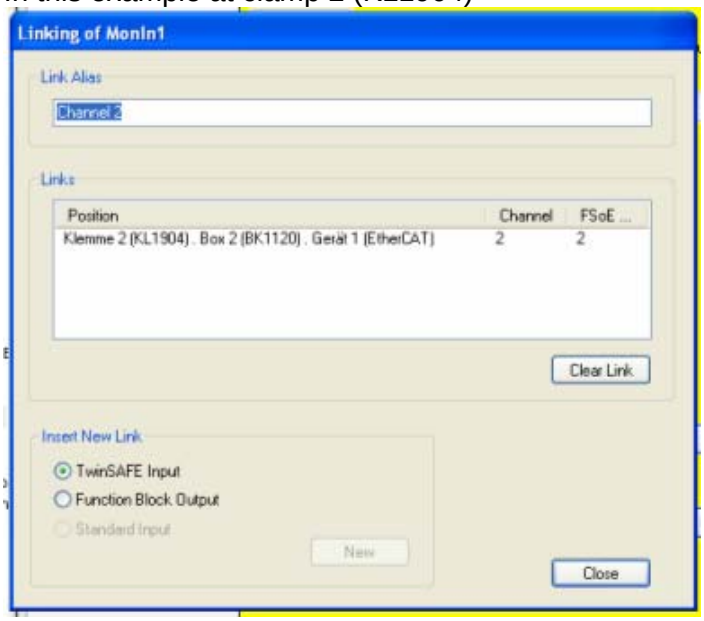

Figure 4

Output: <Channel 2>

Time Delay Channel 2

Input: <Channel 2>

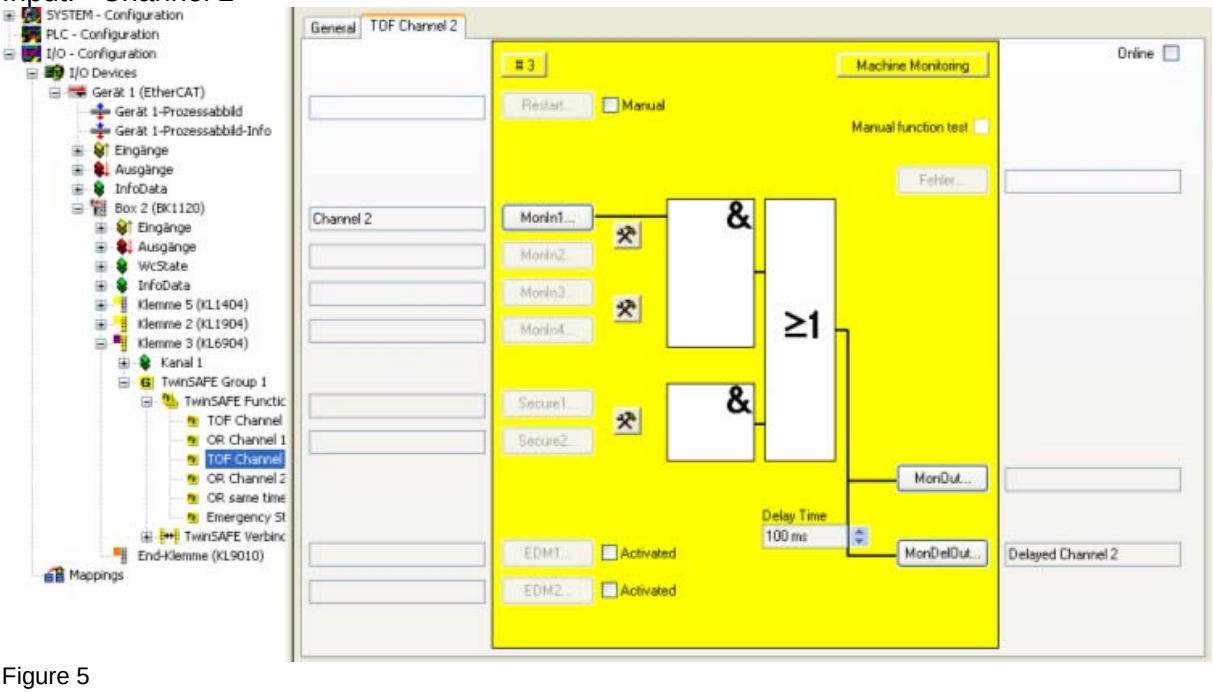

Figure 5

Output: <Delayed Channel 2>

ODER Channel 2

Inputs: <Delayed Channel 2>, <Channel 2>

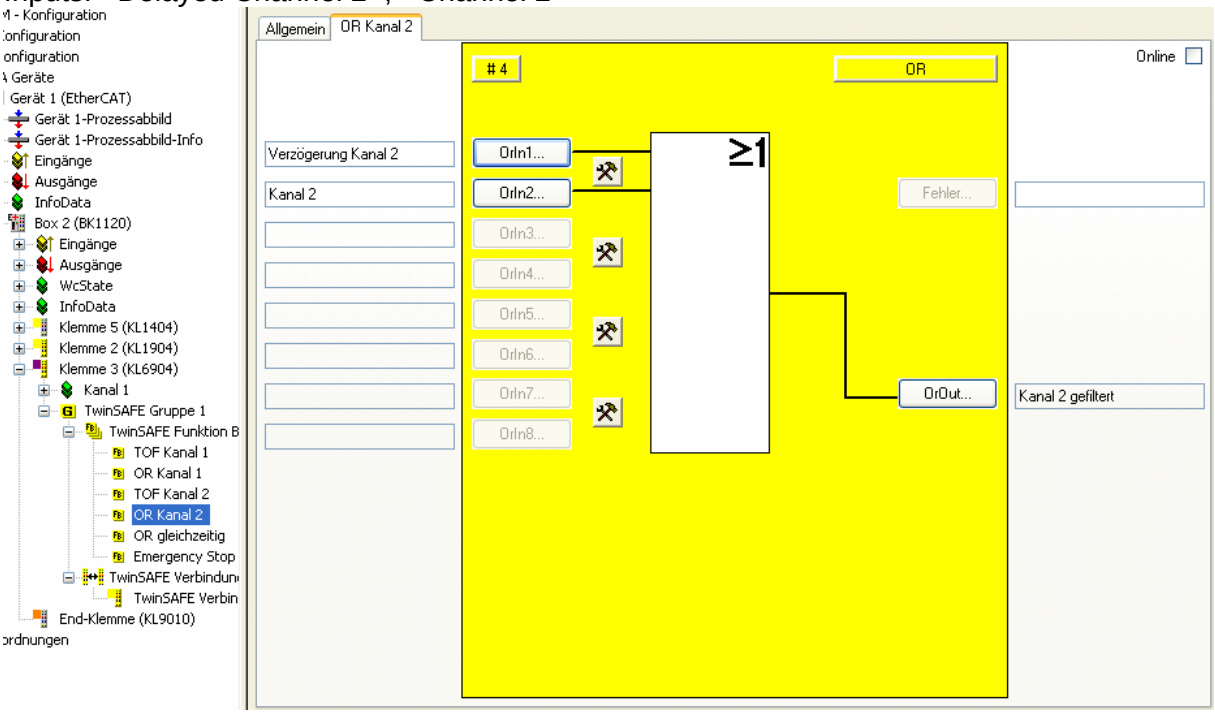

Figure 6

Output: <Channel 2 filtered>

Interconnection <Channel 1 > and <Channel 2 >

Inputs: <Channel 1 >, <Channel 2 >

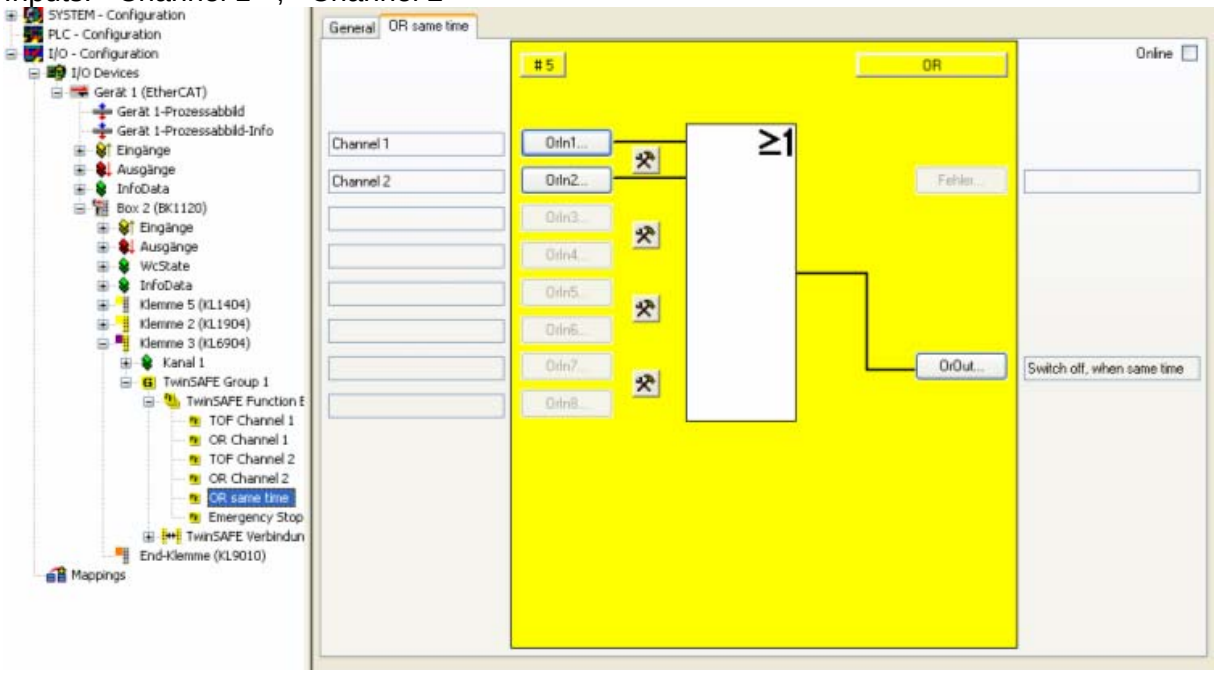

Figure 7

Output: <Switch off when same time>

Generate switch off signal of AR-device

Inputs: <Channel 1 filtered>, <Channel 2 filtered>, <Switch off when same time>

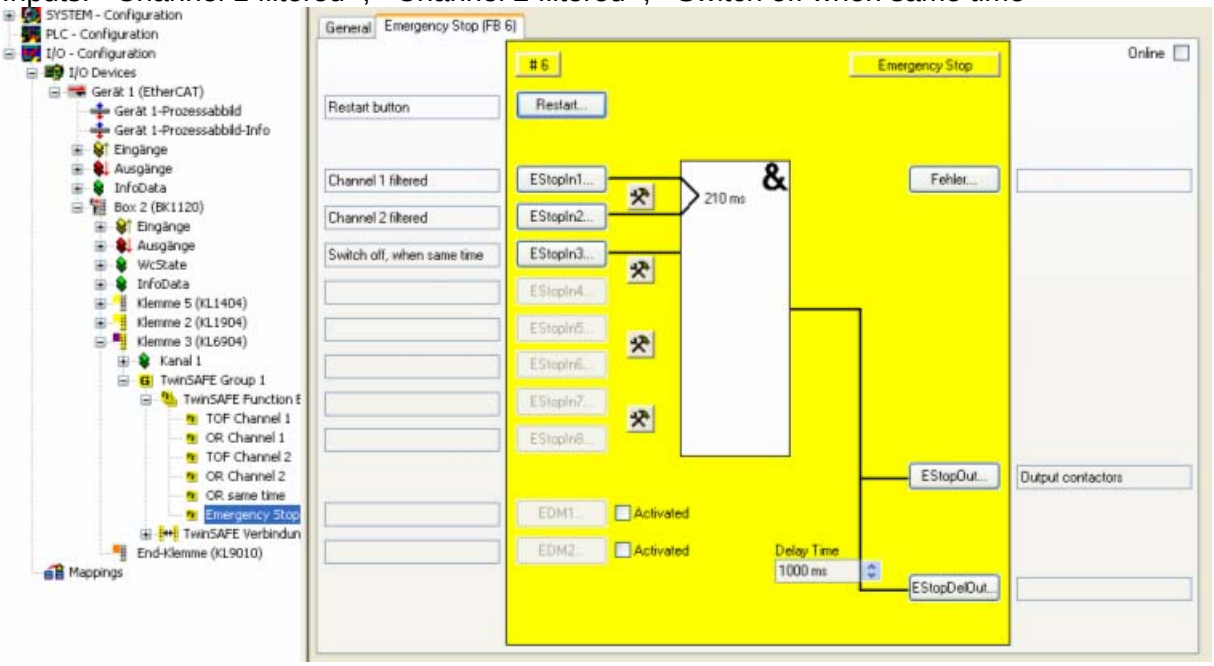

Figure 8

Output: <Output contactors>

With signal the switching off can be programmed.