**Princip of the Function „Input Delay Time“ by the S3000 (antivalent/complementary Mode):**

1. **Input Delay Time e.g. 130ms**
2. **Signal A1**
3. **Signal A2**
4. **Signal B1**
5. **Signal B2**

**In this time it is not necessary what happen, but in the end of the „window“ the correct signals must be at the Inputs of the S3000, if not, you will get ERR „n3“.**

The Input Delay Timer is starting, when one of the Static Inputs has a change. (e.g. A1)

Bouncing of the Relay contact B2, will cause an Error (red line)

At this time the Inputs will be read in again (2 times sampling), and the signal must be correct and stabil, if not, an Error will be shown.

After this time you can switch the Inputs again, and the procedure starts again.

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**Input delay**

If the control device via which you switch the static control inputs cannot switch within 10 ms (for 60 ms basic response time) or 20 ms (for 120 ms basic response time) to the related input condition (e.g., due to switch bounce times), you must choose an input delay.

For the input delay, choose the time in which your defined control device can switch to a corresponding input condition.

Independent of the basic response time chosen for the S3000, you can increase the input delay in 30 ms steps (for 60 ms basic response time) or 60 ms steps (for 120 ms basic response time).

The following figures, derived from experience, are a guide for the various switching methods given.

<table>
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<th>Switching method</th>
<th>Input delay required</th>
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<td>Electronic switching using controller or complementary electronic outputs with 0 to 10 ms bounce time</td>
<td>10 ms</td>
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<tr>
<td>Contact (relay) contacts</td>
<td>30–150 ms</td>
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<td>Control using independent sensors</td>
<td>130–480 ms</td>
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