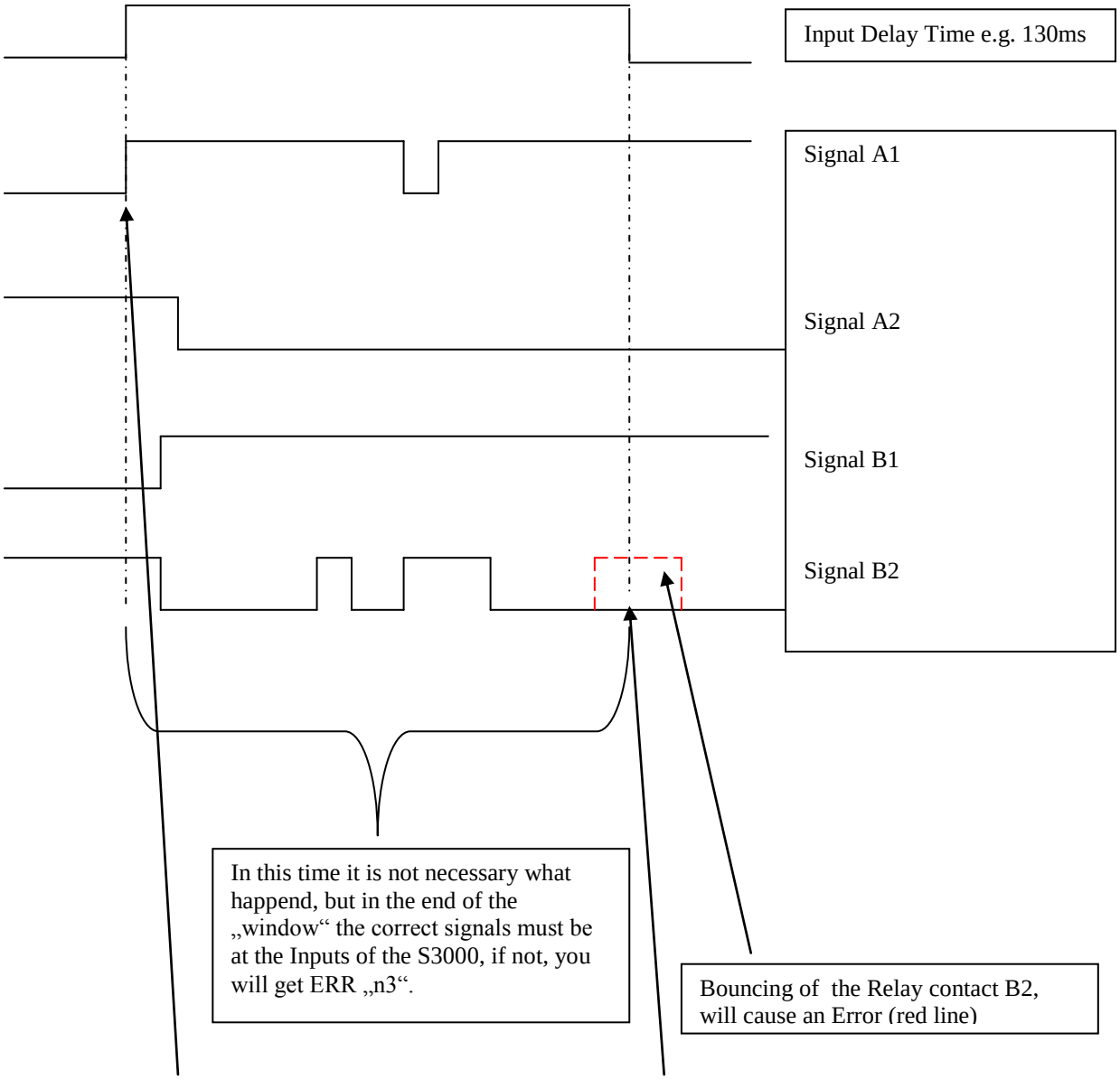
Princip of the Function „Input Delay Time“ by the S3000 (antivalent/complementary Mode):



In this time it is not necessary what happend, 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“.

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

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

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.

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.

Switching method	Input delay required
Electronic switching using controller or complementary electronic outputs with 0 to 10 ms bounce time	10 ms
Contact (relay) controls	30–150 ms
Control using independent sensors	130–480 ms