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.General information

The signal control word allows individual control bits, that are available in different parameters, to be written by a freely configurable collective parameter. The configurable signal control word is used to accept a maximum of 16 bits of other drive parameters.

.Possible applications

This functionality can be used, for example,

- for setting bits in drive parameters and for starting commands via the cyclic channel (master communication),
- for defining an application-specific combination of 16-bit wide control and status words which can then be transmitted in the cyclic data channel.

.Commissioning



For all master communications, the parameter "S-0-0145, Signal control word" has to be configured in the cyclic data so that the configured control bits can be selected.

.Selection list

Only parameters contained in "S-0-0399, IDN list of configurable data in signal control word" can be assigned to the parameter "S-0-0027, Configuration list signal control word".

.Configuring the IDNs

In parameter "S-0-0027, Configuration list signal control word", the IDNs of those parameters are specified that are to be configured using the signal control word (= targets).

The position of an IDN in this list defines which bit is assigned to which IDN (targets) in the signal control word. For example, the first list element determines which target parameter bit 0 of the signal control word is assigned to.



A maximum of 16 bits can be configured.

.Configuring the bit numbers

Which bit of the selected parameters (= targets in parameter S-0-0027) is set (or cleared) by the signal control word, has to be defined in parameter "S-0-0329, Assignment list signal control word".

Bit numbers from "0" (LSB) to "31" (MSB) can be entered. However, depending on the parameter, not all bit numbers are evaluated. The bit assignment of the target parameters is specified in the parameter description of the respective parameter.

.Exceptions

- If the assigned parameter is a command, the bit number in parameter "S-0-0329, Assignment list signal control word" is irrelevant.

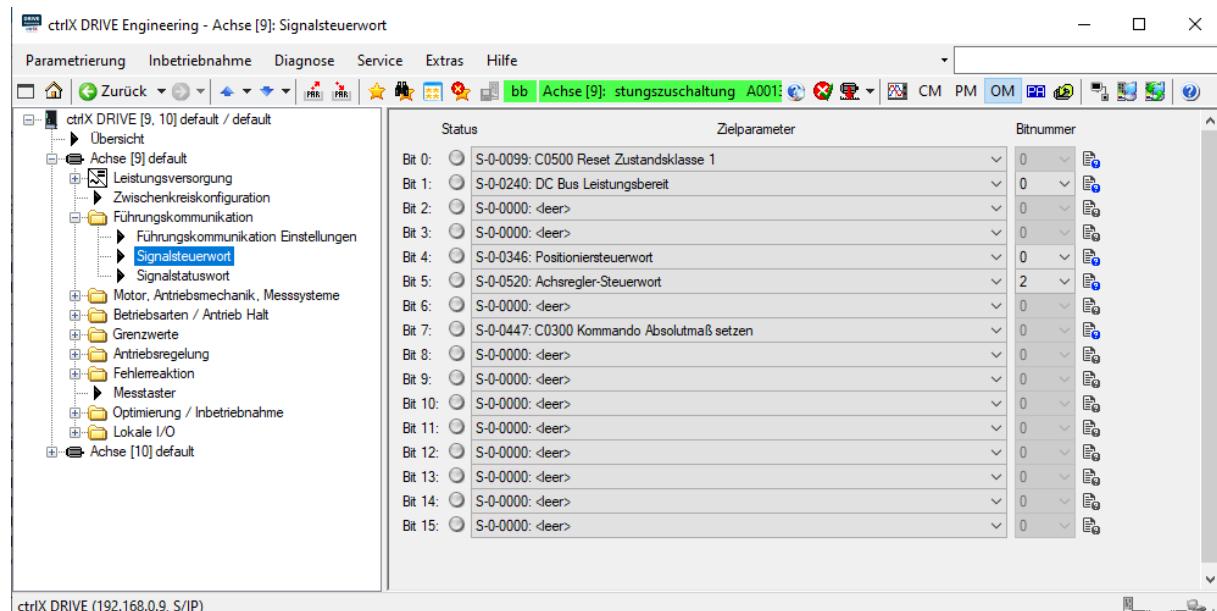


Fig. 75: Example of a configuration of the signal status word



The number of entries in S-0-0329 determines how many entries are processed of S-0-0027. Make sure that the lists in S-0-0027 and S-0-0329 have the same length.

.Additional information and details

Diagnostic messages and error messages

When entering the target parameters in the list of parameter "S-0-0027, Configuration list signal control word" the following check is run:

- If an IDN specified in parameter S-0-0027 is not contained in parameter "S-0-0399, IDN list of configurable data in signal control word", an error message will be generated.



In this case, only those inputs up to the faulty element are accepted!

Parameters involved

- **S-0-0027**, Configuration list signal control word
- **S-0-0145**, Signal control word
- **S-0-0329**, Assignment list signal status word
- **S-0-0399**, IDN list of configurable data in signal control word