

## Error list

<b>System:</b>	37500 SCU
<b>Document:</b>	EN Error list SCU
<b>Doc.-Reference:</b>	HB-37500-813-02
<b>Issue:</b>	10F
<b>Date:</b>	04-10-2021
<b>Prepared by:</b>	A.Gebhard/H.Saeed/D. Jankowski
<b>Released by:</b>	M. Paukner

## Change history

Nr.	Chapter /Page	Date	Changed by	Version	Changes
1	All	03-01-2018	A. Gebhard	04E	Document created from error list SMX100 and German error list SCU V04E
2		22-03-2019	H. Saeed	05E	Error list from 3431 till 3484
3	ALL	26-03-2019	S. Brust	06E	Naming
4	ALL	26-03-2020	H. Saeed	07E	IO extension and new Errors.
5	ALL	04-06-2020	H. Saeed	08E	A9417 and A9419
6	All	09-08-2021	D. Jankowski/M. Paukner	09E	SARC Errors A9205 ... A9244, A9261 ...A9296, A9321 ...A9356, F1421 ... F1424, F2270 ... F2299
7	All	16-08-2021	M. Paukner	09F	Review of SARC Errors
8	36,37	04-10-2021	D. Jankowski	10E	Add alarm numbers for MUL, ABS, NEG
9	36,37	05-10-2021	M. Paukner	10F	Review of added SARC Errors

## Contents

<b>CHANGE HISTORY .....</b>	<b>1</b>
<b>1 GENERAL .....</b>	<b>3</b>
1.1 Technical status .....	3
1.2 Error types .....	3
1.3 Error display .....	4
1.4 Alarm muting.....	4
<b>2 ALARM LIST .....</b>	<b>5</b>
<b>3 FATAL ERROR .....</b>	<b>42</b>

# 1 General

## 1.1 Technical status

This error list is valid for all SCU variants up to:

Firmware version <b>V3.1.1.3</b>
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In addition to the error/alarm states listed in the installation manual, errors of the peripheral HW and configuration errors have also been included. Possibly there are errors included which require replacement of the device.

## 1.2 Error types

The SCU distinguishes two types of errors in accordance with the following allocation:

Error type	Description	Impact on the system	Reset condition
Fatal Error	Fatal exception caused by an internal program or hardware failure. Safe operation is no longer possible.	All outputs will be switched off!	Resettable by switching off/on the device (POR).
Alarm	Functional error, caused by an external process. Both systems keep on running in a cyclical manner and fulfil all requirements of the communication interfaces. The scanning of the external process will also be maintained.	All outputs will be switched off!	Reset by parametrizable input / FSoE / CoE
ECS Alarm	When using the ECS function on the programming interface, the sensor alarm messages are marked with 'E' instead of 'A'.	ECS-function block result is „0“	Reset by parametrizable input / FSoE / CoE

## 1.3 Error display

The error code is displayed via the 7-segment display.

There is also the possibility to view the error code via the SafePLC2 software.

The sequence of the error code display is as following:

F, A or E      Error code


Note 1) Detection of Error System A (odd) and System B (even).

## 1.4 Alarm muting

Several functions exist to mute alarm messages:

- ICS: Muting of digital input related alarms
- ECS: Muting of encoder input alarms

If an error can be muted using one of the latter functions it is marked inside the error description.

	<p>Suppressing an alarm using one of the muting functions can have a negative impact on the safety of the application and can only be done after evaluating the safety regulations!</p> <p>Solving the cause of the error must be preferred to muting the alarm.</p>
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## 2 Alarm List

<b>Alarm code</b>	<b>A 2301</b>
Alarm message	Communication Error SPI Interface
Cause	Incorrect data transmission External EMC
Remedy	<ul style="list-style-type: none"> <li>• Check EMC regulations</li> <li>• Power Cycle</li> <li>• Replace device</li> </ul>

<b>Alarm code</b>	<b>A 3001 / A 3002</b>
Alarm message	Ticker error
Cause	Mismatch ticker b/w CPUA and CPUB
Remedy	<ul style="list-style-type: none"> <li>• The FW may be not correctly flashed</li> <li>• HW problem. One of the CPU is started but the other is not</li> </ul>

<b>Alarm code</b>	<b>A 3193 / A 3194</b>
Alarm message	Digital input Test
Cause	The input failure on the relay board.
Remedy	<ul style="list-style-type: none"> <li>• The input diagnoses caused this error</li> </ul>

<b>Alarm code</b>	<b>A 3195 / A 3196</b>
Alarm message	The 24 V supply test of Digital input
Cause	The DI tests its supply and this test was not successful
Remedy	<ul style="list-style-type: none"> <li>• Check 24V input voltage of all OSSD inputs</li> <li>• Power Reset</li> </ul>

<b>Alarm code</b>	<b>A 3197 / A 3198</b>
Alarm message	Incorrect OSSD input check
Cause	OSSD test incorrect
Remedy	<ul style="list-style-type: none"> <li>• Check 24V input voltage of all OSSD inputs</li> <li>• Power Reset</li> </ul>

<b>Alarm code</b>	<b>A 3431 / A 3432</b>
Alarm message	External encoder speed axis 1 out of specified range
Cause	Speed value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3433 / A 3434</b>
Alarm message	External encoder speed axis 2 out of specified range
Cause	Speed value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3435 / A 3436</b>
Alarm message	External encoder speed axis 3 out of specified range
Cause	Speed value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3437 / A 3438</b>
Alarm message	External encoder speed axis 4 out of specified range
Cause	Speed value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3439 / A 3440</b>
Alarm message	External encoder speed axis 5 out of specified range
Cause	Speed value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3441 / A 3442</b>
Alarm message	External encoder speed axis 6 out of specified range
Cause	Speed value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3443 / A 3444</b>
Alarm message	External encoder speed axis 7 out of specified range
Cause	Speed value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3445 / A 3446</b>
Alarm message	External encoder speed axis 8 out of specified range
Cause	Speed value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3447 / A 3448</b>
Alarm message	External encoder speed axis 9 out of specified range
Cause	Speed value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3449 / A 3450</b>
Alarm message	External encoder speed axis 10 out of specified range
Cause	Speed value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3451 / A 3452</b>
Alarm message	External encoder speed axis 11 out of specified range
Cause	Speed value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3453 / A 3454</b>
Alarm message	External encoder speed axis 12 out of specified range
Cause	Speed value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3461 / A 3462</b>
Alarm message	External encoder position axis 1 out of specified mess length
Cause	Position value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3463 / A 3464</b>
Alarm message	External encoder position axis 2 out of specified mess length
Cause	Position value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3465 / A 3466</b>
Alarm message	External encoder position axis 3 out of specified mess length
Cause	Position value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3467 / A 3468</b>
Alarm message	External encoder position axis 4 out of specified mess length
Cause	Position value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3469 / A 3470</b>
Alarm message	External encoder position axis 5 out of specified mess length
Cause	Position value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3471 / A 3472</b>
Alarm message	External encoder position axis 6 out of specified mess length
Cause	Position value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3473 / A 3474</b>
Alarm message	External encoder position axis 7 out of specified mess length
Cause	Position value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3475 / A 3476</b>
Alarm message	External encoder position axis 8 out of specified mess length
Cause	Position value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3477 / A 3478</b>
Alarm message	External encoder position axis 9 out of specified mess length
Cause	Position value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3479 / A 3480</b>
Alarm message	External encoder position axis 10 out of specified mess length
Cause	Position value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3481 / A 3482</b>
Alarm message	External encoder position axis 11 out of specified mess length
Cause	Position value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>



<b>Alarm code</b>	<b>A 3483 / A 3484</b>
Alarm message	External encoder position axis 12 out of specified mess length
Cause	Position value invalid
Remedy	<ul style="list-style-type: none"> <li>• Reset the alarm</li> <li>• Check configuration of axis</li> </ul>

<b>Alarm code</b>	<b>A 3603 / A 3604</b>
Alarm message	First Relay output not working
Cause	The relay output is not working
Remedy	<ul style="list-style-type: none"> <li>• Check the HW</li> </ul>

<b>Alarm code</b>	<b>A 3605 / A 3606</b>
Alarm message	Second Relay output not working
Cause	The relay output is not working
Remedy	<ul style="list-style-type: none"> <li>• Check the HW</li> </ul>

<b>Alarm code</b>	<b>A 3627 / A 3628</b>
Alarm message	Error static testing of HighSide output 1
Cause	Faulty switching of the output <ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3629 / A 3630</b>
Alarm message	Error static testing of HighSide output 2
Cause	Faulty switching of the output <ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3631 / A 3632</b>
Alarm message	Error static testing of HighSide output 3
Cause	Faulty switching of the output <ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3633 / A 3634</b>
Alarm message	Error static testing of HighSide output 4
Cause	Faulty switching of the output <ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3635 / A 3636</b>
Alarm message	Error static testing of Main Switch 1 of HighSide outputs 1 and 2
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3637 / A 3638</b>
Alarm message	Error static testing of Main Switch 2 of HighSide outputs 3 and 4
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3653 / A 3654</b>
Alarm message	Error dynamic testing of Main Switch 1 of HighSide outputs 1 and 2
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3801 / A 3802</b>
Alarm message	Error on first input of the first io extension board
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3803 / A 3804</b>
Alarm message	Error on second input of the first io extension board
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3805 / A 3806</b>
Alarm message	Error on third input of the first io extension board
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3807 / A 3808</b>
Alarm message	Error on fourth input of the first io extension board
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3809 / A 3810</b>
Alarm message	Error on fifth input of the first io extension board
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3811 / A 3812</b>
Alarm message	Error on sixth input of the first io extension board
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3813 / A 3814</b>
Alarm message	Error on seventh input of the first io extension board
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3815 / A 3816</b>
Alarm message	Error on eight input of the first io extension board
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3817 / A 3818</b>
Alarm message	Error on ninth input of the first io extension board
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3819 / A 3820</b>
Alarm message	Error on tenth input of the first io extension board
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3901 / A 3902</b>
Alarm message	Error on first output of the second io extension board
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3903 / A 3904</b>
Alarm message	Error on second output of the second io extension board
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3905 / A 3906</b>
Alarm message	Error on third output of the second io extension board
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3907 / A 3908</b>
Alarm message	Error on fourth output of the second io extension board
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3909 / A 3910</b>
Alarm message	Error on fifth output of the second io extension board
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3911 / A 3912</b>
Alarm message	Error on sixth output of the second io extension board
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3913 / A 3914</b>
Alarm message	Error on seventh output of the second io extension board
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3915 / A 3916</b>
Alarm message	Error on eight output of the second io extension board
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3917 / A 3918</b>
Alarm message	Error on ninth output of the second io extension board
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 3919 / A 3920</b>
Alarm message	Error on tenth output of the second io extension board
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the output (short circuit)</li> <li>• Check Hardware</li> </ul>

<b>Alarm code</b>	<b>A 4001 / A 4002</b>
Alarm message	Anticlockwise and clockwise rotation SDI1 have been activated simultaneously
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SDI1 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SDI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4003 / A 4004</b>
Alarm message	Anticlockwise and clockwise rotation SDI2 have been activated simultaneously
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SDI2 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SDI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4005 / A 4006</b>
Alarm message	Anticlockwise and clockwise rotation SDI3 have been activated simultaneously
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SDI3 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SDI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4007 / A 4008</b>
Alarm message	Anticlockwise and clockwise rotation SDI4 have been activated simultaneously
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SDI4 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SDI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4009 / A 4010</b>
Alarm message	Anticlockwise and clockwise rotation SDI5 have been activated simultaneously
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SDI5 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SDI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4011 / A 4012</b>
Alarm message	Anticlockwise and clockwise rotation SDI6 have been activated simultaneously
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SDI6 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SDI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4013 / A 4014</b>
Alarm message	Anticlockwise and clockwise rotation SDI7 have been activated simultaneously
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SDI7 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SDI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4015 / A 4016</b>
Alarm message	Anticlockwise and clockwise rotation SDI8 have been activated simultaneously
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SDI8 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SDI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4017 / A 4018</b>
Alarm message	Anticlockwise and clockwise rotation SDI9 have been activated simultaneously
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SDI9 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SDI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4019 / A 4020</b>
Alarm message	Anticlockwise and clockwise rotation SDI10 have been activated simultaneously
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SDI10 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SDI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4021 / A 4022</b>
Alarm message	Anticlockwise and clockwise rotation SDI11 have been activated simultaneously
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SDI11 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SDI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4023 / A 4024</b>
Alarm message	Anticlockwise and clockwise rotation SDI12 have been activated simultaneously
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SDI12 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SDI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4601 / A 4602</b>
Alarm message	Monitoring range left and right of SLP1 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLP1 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLP function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4603 / A 4604</b>
Alarm message	Monitoring range left and right of SLP2 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLP2 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLP function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>



<b>Alarm code</b>	<b>A 4605 / A 4606</b>
Alarm message	Monitoring range left and right of SLP3 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLP3 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLP function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4607 / A 4608</b>
Alarm message	Monitoring range left and right of SLP4 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLP4 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLP function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4609 / A 4610</b>
Alarm message	Monitoring range left and right of SLP5 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLP5 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLP function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4611 / A 4612</b>
Alarm message	Monitoring range left and right of SLP6 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLP6 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLP function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4613 / A 4614</b>
Alarm message	Monitoring range left and right of SLP7 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLP7 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLP function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4615 / A 4616</b>
Alarm message	Monitoring range left and right of SLP8 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLP8 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLP function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4617 / A 4618</b>
Alarm message	Monitoring range left and right of SLP9 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLP2 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLP function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4619 / A 4620</b>
Alarm message	Monitoring range left and right of SLP10 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLP2 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLP function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4621 / A 4622</b>
Alarm message	Was monitoring the area left and right of the SLP11 activated simultaneously
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLP11 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLP function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4623 / A 4624</b>
Alarm message	Was monitoring the area left and right of the SLP12 activated simultaneously
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLP12 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLP function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4625 / A 4626</b>
Alarm message	SLP1 teach in Status error
Cause	SET and QUIT input have a faulty switching sequence
Remedy	<ul style="list-style-type: none"> <li>• Check input configuration</li> <li>• Check switching sequence</li> </ul>

<b>Alarm code</b>	<b>A 4627 / A 4628</b>
Alarm message	SLP2 teach in Status error
Cause	SET and QUIT input have a faulty switching sequence
Remedy	<ul style="list-style-type: none"> <li>• Check input configuration</li> <li>• Check switching sequence</li> </ul>

<b>Alarm code</b>	<b>A 4629 / A 4630</b>
Alarm message	SLP3 teach in Status error
Cause	SET and QUIT input have a faulty switching sequence
Remedy	<ul style="list-style-type: none"> <li>• Check input configuration</li> <li>• Check switching sequence</li> </ul>

<b>Alarm code</b>	<b>A 4631 / A 4632</b>
Alarm message	SLP4 teach in Status error
Cause	SET and QUIT input have a faulty switching sequence
Remedy	<ul style="list-style-type: none"> <li>• Check input configuration</li> <li>• Check switching sequence</li> </ul>

<b>Alarm code</b>	<b>A 4633 / A 4634</b>
Alarm message	SLP5 teach in Status error
Cause	SET and QUIT input have a faulty switching sequence
Remedy	<ul style="list-style-type: none"> <li>• Check input configuration</li> <li>• Check switching sequence</li> </ul>

<b>Alarm code</b>	<b>A 4635 / A 4636</b>
Alarm message	SLP6 teach in Status error
Cause	SET and QUIT input have a faulty switching sequence
Remedy	<ul style="list-style-type: none"> <li>• Check input configuration</li> <li>• Check switching sequence</li> </ul>

<b>Alarm code</b>	<b>A 4637 / A 4638</b>
Alarm message	SLP7 teach in Status error
Cause	SET and QUIT input have a faulty switching sequence
Remedy	<ul style="list-style-type: none"> <li>• Check input configuration</li> <li>• Check switching sequence</li> </ul>

<b>Alarm code</b>	<b>A 4639 / A 4640</b>
Alarm message	SLP8 teach in Status error
Cause	SET and QUIT input and have a faulty switching sequence
Remedy	<ul style="list-style-type: none"> <li>• Check input configuration</li> <li>• Check switching sequence</li> </ul>

<b>Alarm code</b>	<b>A 4641 / A 4642</b>
Alarm message	SLP9 teach in Status error
Cause	SET and QUIT input and have a faulty switching sequence
Remedy	<ul style="list-style-type: none"> <li>• Check input configuration</li> <li>• Check switching sequence</li> </ul>

<b>Alarm code</b>	<b>A 4643 / A 4644</b>
Alarm message	SLP10 teach in Status error
Cause	SET and QUIT input and have a faulty switching sequence
Remedy	<ul style="list-style-type: none"> <li>• Check input configuration</li> <li>• Check switching sequence</li> </ul>

<b>Alarm code</b>	<b>A 4645 / A 4646</b>
Alarm message	SLP11 teach in Status error
Cause	SET and QUIT input and have a faulty switching sequence
Remedy	<ul style="list-style-type: none"> <li>• Check input configuration</li> <li>• Check switching sequence</li> </ul>

<b>Alarm code</b>	<b>A 4647 / A 4648</b>
Alarm message	SLP12 teach in Status error
Cause	SET and QUIT input and have a faulty switching sequence
Remedy	<ul style="list-style-type: none"> <li>• Check input configuration</li> <li>• Check switching sequence</li> </ul>

<b>Alarm code</b>	<b>A 4649 / A 4650</b>
Alarm message	SLP1 Teach In position error
Cause	Teach In Position out of range
Remedy	<ul style="list-style-type: none"> <li>• Check TeachIn Position</li> <li>• Adapt configuration of SLP block to the real physics</li> </ul>

<b>Alarm code</b>	<b>A 4651 / A 4652</b>
Alarm message	SLP2 Teach In position error
Cause	Teach In Position out of range
Remedy	<ul style="list-style-type: none"> <li>• Check TeachIn Position</li> <li>• Adapt configuration of SLP block to the real physics</li> </ul>

<b>Alarm code</b>	<b>A 4653 / A 4654</b>
Alarm message	SLP3 Teach In position error
Cause	Teach In Position out of range
Remedy	<ul style="list-style-type: none"> <li>• Check TeachIn Position</li> <li>• Adapt configuration of SLP block to the real physics</li> </ul>

<b>Alarm code</b>	<b>A 4655 / A 4656</b>
Alarm message	SLP4 Teach In position error
Cause	Teach In Position out of range
Remedy	<ul style="list-style-type: none"> <li>• Check TeachIn Position</li> <li>• Adapt configuration of SLP block to the real physics</li> </ul>

<b>Alarm code</b>	<b>A 4657 / A 4658</b>
Alarm message	SLP5 Teach In position error
Cause	Teach In Position out of range
Remedy	<ul style="list-style-type: none"> <li>• Check TeachIn Position</li> <li>• Adapt configuration of SLP block to the real physics</li> </ul>

<b>Alarm code</b>	<b>A 4659 / A 4660</b>
Alarm message	SLP6 Teach In position error
Cause	Teach In Position out of range
Remedy	<ul style="list-style-type: none"> <li>• Check TeachIn Position</li> <li>• Adapt configuration of SLP block to the real physics</li> </ul>

<b>Alarm code</b>	<b>A 4661 / A 4662</b>
Alarm message	SLP7 Teach In position error
Cause	Teach In Position out of range
Remedy	<ul style="list-style-type: none"> <li>• Check TeachIn Position</li> <li>• Adapt configuration of SLP block to the real physics</li> </ul>

<b>Alarm code</b>	<b>A 4663 / A 4664</b>
Alarm message	SLP8 Teach In position error
Cause	Teach In Position out of range
Remedy	<ul style="list-style-type: none"> <li>• Check TeachIn Position</li> <li>• Adapt configuration of SLP block to the real physics</li> </ul>

<b>Alarm code</b>	<b>A 4665 / A 4666</b>
Alarm message	SLP9 Teach In position error
Cause	Teach In Position out of range
Remedy	<ul style="list-style-type: none"> <li>• Check TeachIn Position</li> <li>• Adapt configuration of SLP block to the real physics</li> </ul>

<b>Alarm code</b>	<b>A 4667 / A 4668</b>
Alarm message	SLP10 Teach In position error
Cause	Teach In Position out of range
Remedy	<ul style="list-style-type: none"> <li>• Check TeachIn Position</li> <li>• Adapt configuration of SLP block to the real physics</li> </ul>

<b>Alarm code</b>	<b>A 4669 / A 4670</b>
Alarm message	SLP11 Teach In position error
Cause	Teach In Position out of range
Remedy	<ul style="list-style-type: none"> <li>• Check TeachIn Position</li> <li>• Adapt configuration of SLP block to the real physics</li> </ul>

<b>Alarm code</b>	<b>A 4671 / A 4672</b>
Alarm message	SLP12 Teach In position error
Cause	Teach In Position out of range
Remedy	<ul style="list-style-type: none"> <li>• Check TeachIn Position</li> <li>• Adapt configuration of SLP block to the real physics</li> </ul>

<b>Alarm code</b>	<b>A 4673 / A 4674</b>
Alarm message	SLP1 Teach in SOS activation error
Cause	During „teach in“ the drive has operated (SOS error)
Remedy	When using the „teach in“ function, the drive must be off Check whether SOS has already actuated

<b>Alarm code</b>	<b>A 4675 / A 4676</b>
Alarm message	SLP2 Teach in SOS activation error
Cause	During „teach in“ the drive has operated (SOS error)
Remedy	When using the „teach in“ function, the drive must be off Check whether SOS has already actuated

<b>Alarm code</b>	<b>A 4677 / A 4678</b>
Alarm message	SLP3 Teach in SOS activation error
Cause	During „teach in“ the drive has operated (SOS error)
Remedy	When using the „teach in“ function, the drive must be off Check whether SOS has already actuated

<b>Alarm code</b>	<b>A 4679 / A 4680</b>
Alarm message	SLP4 Teach in SOS activation error
Cause	During „teach in“ the drive has operated (SOS error)
Remedy	When using the „teach in“ function, the drive must be off Check whether SOS has already actuated

<b>Alarm code</b>	<b>A 4681 / A 4682</b>
Alarm message	SLP5 Teach in SOS activation error
Cause	During „teach in“ the drive has operated (SOS error)
Remedy	When using the „teach in“ function, the drive must be off Check whether SOS has already actuated

<b>Alarm code</b>	<b>A 4683 / A 4684</b>
Alarm message	SLP6 Teach in SOS activation error
Cause	During „teach in“ the drive has operated (SOS error)
Remedy	When using the „teach in“ function, the drive must be off Check whether SOS has already actuated

<b>Alarm code</b>	<b>A 4685 / A 4686</b>
Alarm message	SLP7 Teach in SOS activation error
Cause	During „teach in“ the drive has operated (SOS error)
Remedy	When using the „teach in“ function, the drive must be off Check whether SOS has already actuated

<b>Alarm code</b>	<b>A 4687 / A 4688</b>
Alarm message	SLP8 Teach in SOS activation error
Cause	During „teach in“ the drive has operated (SOS error)
Remedy	When using the „teach in“ function, the drive must be off Check whether SOS has already actuated

<b>Alarm code</b>	<b>A 4689 / A 4690</b>
Alarm message	SLP9 Teach in SOS activation error
Cause	During „teach in“ the drive has operated (SOS error)
Remedy	When using the „teach in“ function, the drive must be off Check whether SOS has already actuated

<b>Alarm code</b>	<b>A 4691 / A 4692</b>
Alarm message	SLP10 Teach in SOS activation error
Cause	During „teach in“ the drive has operated (SOS error)
Remedy	When using the „teach in“ function, the drive must be off Check whether SOS has already actuated

<b>Alarm code</b>	<b>A 4693 / A 4694</b>
Alarm message	SLP11 Teach in SOS activation error
Cause	During „teach in“ the drive has operated (SOS error)
Remedy	When using the „teach in“ function, the drive must be off Check whether SOS has already actuated

<b>Alarm code</b>	<b>A 4695 / A 4696</b>
Alarm message	SLP12 Teach in SOS activation error
Cause	During „teach in“ the drive has operated (SOS error)
Remedy	When using the „teach in“ function, the drive must be off Check whether SOS has already actuated

<b>Alarm code</b>	<b>A 4901 / A 4902</b>
Alarm message	CCW and CW rotation monitoring SLI1 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLI1 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4903 / A 4904</b>
Alarm message	CCW and CW rotation monitoring SLI2 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLI2 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>



<b>Alarm code</b>	<b>A 4905 / A 4906</b>
Alarm message	CCW and CW rotation monitoring SLI3 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLI3 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4907 / A 4908</b>
Alarm message	CCW and CW rotation monitoring SLI4 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLI4 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4909 / A 4910</b>
Alarm message	CCW and CW rotation monitoring SLI5 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLI5 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4911 / A 4912</b>
Alarm message	CCW and CW rotation monitoring SLI6 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLI6 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4913 / A 4914</b>
Alarm message	CCW and CW rotation monitoring SLI7 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLI7 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4915 / A 4916</b>
Alarm message	CCW and CW rotation monitoring SLI8 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLI8 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4917 / A 4918</b>
Alarm message	CCW and CW rotation monitoring SLI9 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLI9 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4919 / A 4920</b>
Alarm message	CCW and CW rotation monitoring SLI10 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLI10 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4921 / A 4922</b>
Alarm message	CCW and CW rotation monitoring SLI11 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLI11 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 4923 / A 4924</b>
Alarm message	CCW and CW rotation monitoring SLI12 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLI12 are activated simultaneously
Remedy	<ul style="list-style-type: none"> <li>• Check the logic of the SLI function blocks in the application program</li> <li>• Check the levels of the connected inputs for the application program</li> <li>• Analyse the input and logic signals using the device function block diagnosis</li> </ul>

<b>Alarm code</b>	<b>A 5001 / A 5002</b>
Alarm message	Test deactivation of digital inputs 1...14 faulty
Cause	Inputs are still active after deactivation
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Power Cycle</li> <li>• Replace device</li> </ul>

<b>Alarm code</b>	<b>A 5101 / A 5102</b>
Alarm message	Pulse fault Input.1 on CPU board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5103 / A 5104</b>
Alarm message	Pulse fault Input.2 on CPU board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5105 / A 5106</b>
Alarm message	Pulse fault Input.3 on CPU board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5107 / A 5108</b>
Alarm message	Pulse fault Input.4 on CPU board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5109 / A 5110</b>
Alarm message	Pulse fault Input.5 on CPU board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5111 / A 5112</b>
Alarm message	Pulse fault Input.6 on CPU board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5113 / A 5114</b>
Alarm message	Pulse fault Input.7 on CPU board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5115 / A 5116</b>
Alarm message	Pulse fault Input.8 on CPU board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5117 / A 5118</b>
Alarm message	Pulse fault Input.9 on CPU board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5119 / A 5120</b>
Alarm message	Pulse fault Input.10 on CPU board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5121 / A 5122</b>
Alarm message	Pulse fault Input.11 on CPU board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5123 / A 5124</b>
Alarm message	Pulse fault Input.12 on CPU board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5125 / A 5126</b>
Alarm message	Pulse fault Input.13 on CPU board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5127 / A 5128</b>
Alarm message	Pulse fault Input.14 on CPU board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5141 / A 5142</b>
Alarm message	Pulse fault Input.1 on first io extension board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5143 / A 5144</b>
Alarm message	Pulse fault Input.2 on first io extension board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5145 / A 5146</b>
Alarm message	Pulse fault Input.3 on first io extension board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5147 / A 5148</b>
Alarm message	Pulse fault Input.4 on first io extension board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5149 / A 5150</b>
Alarm message	Pulse fault Input.5 on first io extension board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5151 / A 5152</b>
Alarm message	Pulse fault Input.6 on first io extension board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5153 / A 5154</b>
Alarm message	Pulse fault Input.7 on first io extension board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5155 / A 5156</b>
Alarm message	Pulse fault Input.8 on first io extension board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5157 / A 5158</b>
Alarm message	Pulse fault Input.9 on first io extension board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5159 / A 5160</b>
Alarm message	Pulse fault Input.10 on first io extension board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5161 / A 5162</b>
Alarm message	Pulse fault Input.1 on second io extension board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5163 / A 5164</b>
Alarm message	Pulse fault Input.2 on second io extension board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5165 / A 5166</b>
Alarm message	Pulse fault Input.3 on second io extension board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5167 / A 5168</b>
Alarm message	Pulse fault Input.4 on second io extension board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5169 / A 5170</b>
Alarm message	Pulse fault Input.5 on second io extension board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5171 / A 5172</b>
Alarm message	Pulse fault Input.6 on second io extension board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5173 / A 5174</b>
Alarm message	Pulse fault Input.7 on second io extension board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5175 / A 5176</b>
Alarm message	Pulse fault Input.8 on second io extension board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5177 / A 5178</b>
Alarm message	Pulse fault Input.9 on second io extension board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 5179 / A 5180</b>
Alarm message	Pulse fault Input.10 on second io extension board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of digital inputs</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 6001 / A 6002</b>
Alarm message	Digital input Test
Cause	The input failure on the first IO extension board.
Remedy	<ul style="list-style-type: none"> <li>• The input diagnoses caused this error</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 6003 / A 6004</b>
Alarm message	Digital input Test
Cause	The input failure on the second IO extension board.
Remedy	<ul style="list-style-type: none"> <li>• The input diagnoses caused this error</li> <li>• Check configuration of digital inputs</li> </ul>

<b>Alarm code</b>	<b>A 6009 / A 6010</b>
Alarm message	The 24 V supply test of Digital input
Cause	The DI tests on first extension board its supply and this test was not successful
Remedy	<ul style="list-style-type: none"> <li>• Check 24V input voltage of all OSSD inputs</li> <li>• Power Reset</li> </ul>

<b>Alarm code</b>	<b>A 6011 / A 6012</b>
Alarm message	The 24 V supply test of Digital input
Cause	The DI tests on second extension board its supply and this test was not successful
Remedy	<ul style="list-style-type: none"> <li>• Check 24V input voltage of all OSSD inputs</li> <li>• Power Reset</li> </ul>

<b>Alarm code</b>	<b>A 6701 / A 6702</b>
Alarm message	Timeout fault MET
Cause	<ul style="list-style-type: none"> <li>• Input unit with time supervision faulty</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check the wiring of the input unit</li> <li>• Check the type of the Input element</li> <li>• Input element faulty</li> </ul>



<b>Alarm code</b>	<b>A 7601 / A 7602</b>
Alarm message	Invalid FSoE command
Cause	Wrong FSoE configuration
Remedy	Check FSoE configuration

<b>Alarm code</b>	<b>A 7603 / A 7604</b>
Alarm message	Unknown FSoE command
Cause	Wrong FSoE configuration
Remedy	Check FSoE configuration

<b>Alarm code</b>	<b>A 7605 / A 7606</b>
Alarm message	Invalid connection ID
Cause	Wrong FSoE configuration
Remedy	Check FSoE configuration

<b>Alarm code</b>	<b>A 7607 / A 7608</b>
Alarm message	Invalid CRC
Cause	Wrong FSoE configuration
Remedy	Check FSoE configuration

<b>Alarm code</b>	<b>A 7609 / A 7610</b>
Alarm message	Watchdog expired
Cause	Wrong FSoE configuration
Remedy	Check FSoE configuration

<b>Alarm code</b>	<b>A 7611 / A 7612</b>
Alarm message	Invalid slave address
Cause	Wrong FSoE configuration
Remedy	Check FSoE configuration

<b>Alarm code</b>	<b>A 7613 / A 7614</b>
Alarm message	Invalid process data
Cause	Wrong FSoE configuration
Remedy	Check FSoE configuration

<b>Alarm code</b>	<b>A 7615 / A 7616</b>
Alarm message	Invalid parameter data length communication
Cause	Wrong FSoE configuration
Remedy	Check FSoE configuration

<b>Alarm code</b>	<b>A 7617 / A 7618</b>
Alarm message	Invalid watchdog timeout
Cause	Wrong FSoE configuration
Remedy	Check FSoE configuration

<b>Alarm code</b>	<b>A 7619 / A 7620</b>
Alarm message	Invalid parameter data length application
Cause	Wrong FSoE configuration
Remedy	Check FSoE configuration

<b>Alarm code</b>	<b>A 7621 / A 7622</b>
Alarm message	Invalid parameter data application
Cause	Wrong FSoE configuration
Remedy	Check FSoE configuration

<b>Alarm code</b>	<b>A 7631 / A 7632</b>
Alarm message	Internal FSoE Master Error
Cause	Wrong FSoE configuration
Remedy	Check FSoE configuration

<b>Alarm code</b>	<b>A 7633 / A 7634</b>
Alarm message	Invalid FSoE Master instance
Cause	Wrong FSoE configuration
Remedy	Check FSoE configuration

<b>Alarm code</b>	<b>A 7689 / A 7690</b>
Alarm message	FSoE Disconnect Block timeout error
Cause	FSoE slave doesn't react during the configured time
Remedy	Wrong timeout time Check FSoE slave

<b>Alarm code</b>	<b>A 7691 / A 7692</b>
Alarm message	Synchronisation of two slave devices is wrong
Cause	Slave devices don't run synchronously
Remedy	Restart the system

<b>Alarm code</b>	<b>A 9205 / A 9206</b>
Alarm message	SARC calculation error block "ADD"
Cause	Wrong SARC block calculation
Remedy	Check SARC configuration data or application

<b>Alarm code</b>	<b>A 9207 / A 9208</b>
Alarm message	SARC calculation error block "DIV"
Cause	Wrong SARC block calculation
Remedy	Check SARC configuration data or application

<b>Alarm code</b>	<b>A 9209 / A 9210</b>
Alarm message	SARC calculation error block "SQRT"
Cause	Wrong SARC block calculation
Remedy	Check SARC configuration data or application

<b>Alarm code</b>	<b>A 9211 / A 9212</b>
Alarm message	SARC calculation error block "SIN"
Cause	Wrong SARC block calculation
Remedy	Check SARC configuration data or application

<b>Alarm code</b>	<b>A 9213 / A 9214</b>
Alarm message	SARC calculation error block "ASIN"
Cause	Wrong SARC block calculation
Remedy	Check SARC configuration data or application

<b>Alarm code</b>	<b>A 9215 / A 9216</b>
Alarm message	SARC calculation error block "COS"
Cause	Wrong SARC block calculation
Remedy	Check SARC configuration data or application

<b>Alarm code</b>	<b>A 9217 / A 9218</b>
Alarm message	SARC calculation error block "ACOS"
Cause	Wrong SARC block calculation
Remedy	Check SARC configuration data or application

<b>Alarm code</b>	<b>A 9219 / A 9220</b>
Alarm message	SARC calculation error block "TAN"
Cause	Wrong SARC block calculation
Remedy	Check SARC configuration data or application

<b>Alarm code</b>	<b>A 9221 / A 9222</b>
Alarm message	SARC calculation error block "ATAN"
Cause	Wrong SARC block calculation
Remedy	Check SARC configuration data or application

<b>Alarm code</b>	<b>A 9223 / A 9224</b>
Alarm message	SARC calculation error block "MMUL"
Cause	Wrong SARC block calculation
Remedy	Check SARC configuration data or application

<b>Alarm code</b>	<b>A 9225 / A 9226</b>
Alarm message	SARC calculation error block "LD"
Cause	Wrong assignment to block
Remedy	Check SARC configuration data or application

<b>Alarm code</b>	<b>A 9227 / A 9228</b>
Alarm message	SARC calculation error block "ST"
Cause	Wrong assignment to block
Remedy	Check SARC configuration data or application

<b>Alarm code</b>	<b>A 9227 / A 9228</b>
Alarm message	SARC calculation error block "ST"
Cause	Wrong assignment to block
Remedy	Check SARC configuration data or application

<b>Alarm code</b>	<b>A 9231 / A 9232</b>
Alarm message	Different virtual speed calculated
Cause	Wrong SARC calculation
Remedy	Check SARC configuration data or application

<b>Alarm code</b>	<b>A 9233 / A 9234</b>
Alarm message	Different virtual position calculated
Cause	Wrong SARC calculation
Remedy	Check SARC configuration data or application

<b>Alarm code</b>	<b>A 9241 / A 9242</b>
Alarm message	Calculated virtual speed out of range
Cause	Wrong SARC calculation
Remedy	Check SARC configuration data or application

<b>Alarm code</b>	<b>A 9251 / A 9252</b>
Alarm message	SARC calculation error block "MUL"
Cause	Wrong assignment to block
Remedy	Check SARC configuration data or application

<b>Alarm code</b>	<b>A 9253 / A 9254</b>
Alarm message	SARC calculation error block "ABS"
Cause	Wrong assignment to block
Remedy	Check SARC configuration data or application

<b>Alarm code</b>	<b>A 9255 / A 9256</b>
Alarm message	SARC calculation error block "NEG"
Cause	Wrong assignment to block
Remedy	Check SARC configuration data or application

<b>Alarm code</b>	<b>A 9261 / A 9262</b>
Alarm message	Virtual speed axis0 out of configured max. speed range
Cause	Virtual speed out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9263 / A 9264</b>
Alarm message	Virtual speed axis1 out of configured max. speed range
Cause	Virtual speed out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9265 / A 9266</b>
Alarm message	Virtual speed axis2 out of configured max. speed range
Cause	Virtual speed out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9267 / A 9268</b>
Alarm message	Virtual speed axis3 out of configured max. speed range
Cause	Virtual speed out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9269 / A 9270</b>
Alarm message	Virtual speed axis4 out of configured max. speed range
Cause	Virtual speed out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9271 / A 9272</b>
Alarm message	Virtual speed axis5 out of configured max. speed range
Cause	Virtual speed out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9273 / A 9274</b>
Alarm message	Virtual speed axis6 out of configured max. speed range
Cause	Virtual speed out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9275 / A 9276</b>
Alarm message	Virtual speed axis7 out of configured max. speed range
Cause	Virtual speed out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9277 / A 9278</b>
Alarm message	Virtual speed axis8 out of configured max. speed range
Cause	Virtual speed out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9279 / A 9280</b>
Alarm message	Virtual speed axis9 out of configured max. speed range
Cause	Virtual speed out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9281 / A 9282</b>
Alarm message	Virtual speed axis10 out of configured max. speed range
Cause	Virtual speed out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9283 / A 9284</b>
Alarm message	Virtual speed axis11 out of configured max. speed range
Cause	Virtual speed out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9285 / A 9286</b>
Alarm message	Virtual speed axis12 out of configured max. speed range
Cause	Virtual speed out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9287 / A 9288</b>
Alarm message	Virtual speed axis13 out of configured max. speed range
Cause	Virtual speed out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9289 / A 9290</b>
Alarm message	Virtual speed axis14 out of configured max. speed range
Cause	Virtual speed out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9291 / A 9292</b>
Alarm message	Virtual speed axis15 out of configured max. speed range
Cause	Virtual speed out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9293 / A 9294</b>
Alarm message	Virtual speed axis16 out of configured max. speed range
Cause	Virtual speed out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9295 / A 9296</b>
Alarm message	Virtual speed axis17 out of configured max. speed range
Cause	Virtual speed out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9321 / A 9322</b>
Alarm message	Virtual position axis0 out of configured messlen
Cause	Virtual position out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9323 / A 9324</b>
Alarm message	Virtual position axis1 out of configured messlen
Cause	Virtual position out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9325 / A 9326</b>
Alarm message	Virtual position axis2 out of configured messlen
Cause	Virtual position out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9327 / A 9328</b>
Alarm message	Virtual position axis3 out of configured messlen
Cause	Virtual position out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9329 / A 9330</b>
Alarm message	Virtual position axis4 out of configured messlen
Cause	Virtual position out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9331 / A 9332</b>
Alarm message	Virtual position axis5 out of configured messlen
Cause	Virtual position out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9333 / A 9334</b>
Alarm message	Virtual position axis6 out of configured messlen
Cause	Virtual position out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9335 / A 9336</b>
Alarm message	Virtual position axis7 out of configured messlen
Cause	Virtual position out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9337 / A 9338</b>
Alarm message	Virtual position axis8 out of configured messlen
Cause	Virtual position out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9339 / A 9340</b>
Alarm message	Virtual position axis9 out of configured messlen
Cause	Virtual position out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9341 / A 9342</b>
Alarm message	Virtual position axis10 out of configured messlen
Cause	Virtual position out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9343 / A 9344</b>
Alarm message	Virtual position axis11 out of configured messlen
Cause	Virtual position out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9345 / A 9346</b>
Alarm message	Virtual position axis12 out of configured messlen
Cause	Virtual position out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9347 / A 9348</b>
Alarm message	Virtual position axis13 out of configured messlen
Cause	Virtual position out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9349 / A 9350</b>
Alarm message	Virtual position axis14 out of configured messlen
Cause	Virtual position out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9351 / A 9352</b>
Alarm message	Virtual position axis15 out of configured messlen
Cause	Virtual position out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9353 / A 9354</b>
Alarm message	Virtual position axis16 out of configured messlen
Cause	Virtual position out of configured range
Remedy	Check configuration of virtual axis



<b>Alarm code</b>	<b>A 9355 / A 9356</b>
Alarm message	Virtual position axis17 out of configured messlen
Cause	Virtual position out of configured range
Remedy	Check configuration of virtual axis

<b>Alarm code</b>	<b>A 9417 (Internal)</b>
Fault message	Invalid SRA parameter from Safeplc received. The SRA parameter length must not be zero
Cause	Faulty firmware
Remedy	Update firmware

<b>Alarm code</b>	<b>A 9419 (Internal)</b>
Fault message	Invalid Acknowledge received from the EtherCAT master or the Slave. e.g. if the SCU makes login request and it receive the ACK from another request 5 times then this alarm will occur
Cause	Faulty ack for the coe request
Remedy	Do not send the Faulty ack to the SCU

### 3 Fatal Error

<b>Fatal Error Code</b>	<b>F 1001/ F 1002</b>
Fault message	Configuration data were loaded faultily into the supervision device
Cause	<ul style="list-style-type: none"> <li>• Connection fault during the download of the program</li> <li>• Transmission of wrong or incomplete binary file</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Send configuration data again</li> <li>• Check tooling connection</li> <li>• Power Cycle</li> </ul>

<b>Fatal Error Code</b>	<b>F 1003 / F1004</b>
Fault message	Configuration data for software version assembly group invalid!
Cause	Assembly group has been configured with a wrong software version of the programming interface.
Remedy	<ul style="list-style-type: none"> <li>• Check FW Version and Version of the application software</li> <li>• Configured device with released application software</li> <li>• Power Cycle</li> </ul>

<b>Fatal Error Code</b>	<b>F 1007 / F1008</b>
Fault message	Device has not been programmed with the correct programming interface
Cause	<ul style="list-style-type: none"> <li>• A wrong device type was selected during programming</li> <li>• Binary data from different device type were used to send</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Select the correct device type before programming the device</li> <li>• Select the necessary device variant according to your hardware requirement</li> </ul>

<b>Fatal Error Code</b>	<b>F 1311 / F 1312 (Internal)</b>
Error message	Error while erasing the configuration flash
Cause	-
Remedy	<ul style="list-style-type: none"> <li>• Check FW Version and Version of the application software</li> <li>• Send the configuration again</li> <li>• Power Cycle</li> <li>• Replace device</li> </ul>

<b>Fatal Error Code</b>	<b>F 1401 / F 1402 (Internal)</b>
Error message	Test counter CRC config data
Cause	-
Remedy	<ul style="list-style-type: none"> <li>• Power Cycle</li> <li>• Replace device</li> </ul>

<b>Fatal Error Code</b>	<b>F 1403 / F 1404</b>
Error message	CRC of configuration data invalid!
Cause	Configuration data transmitted incorrectly
Remedy	<ul style="list-style-type: none"> <li>• Check FW Version and Version of the application software</li> <li>• Re-compile program</li> <li>• Re-transmit configuration to device</li> <li>• Power Cycle</li> </ul>

<b>Fatal Error Code</b>	<b>F 1409 / F 1409</b>
Error message	CRC of PLC program invalid (AWL list)
Cause	<ul style="list-style-type: none"> <li>Programming software does not support connected hardware</li> <li>Error transmitting configuration</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>Check version of programming software</li> <li>Check FW Version and Version of the application software</li> <li>Re-Transmit configuration data</li> </ul>

<b>Fatal Error Code</b>	<b>F 1411 / F 1412</b>
Error message	Configuration data differences in System A and B
Cause	Error transmitting configuration
Remedy	<ul style="list-style-type: none"> <li>Re-Transmit configuration data</li> <li>Power Cycle</li> </ul>

<b>Fatal Error Code</b>	<b>F 1413 / F 1414 (Internal)</b>
Fault message	Error sequentially calculating the CRC's configuration data
Cause	Error configuration crc test length
Remedy	<ul style="list-style-type: none"> <li>Re-Transmit configuration data</li> <li>Power Cycle</li> </ul>

<b>Fatal Error Code</b>	<b>F 1415 / F 1416</b>
Fault message	System A has a different AWL Linker program than System B
Cause	Configuration data or program data were incorrectly transferred
Remedy	Transfer configuration data or program data again

<b>Fatal Error Code</b>	<b>F 1417 / F 1418</b>
Fault message	System A has a different AWL Fastchannel Linker program than System B
Cause	Configuration data or program data were incorrectly transferred
Remedy	Transfer configuration data or program data again

<b>Fatal Error Code</b>	<b>F 1421 / F 1422</b>
Fault message	Linker error unknown command
Cause	Wrong linker code or not supported functionality
Remedy	Transfer configuration data or program data again Check configuration data for supported functionality

<b>Fatal Error Code</b>	<b>F 1423 / F 1424</b>
Fault message	Linker error fastchannel unknown command
Cause	Wrong linker code fastchannel or not supported functionality
Remedy	Transfer configuration data or program data again Check configuration data for supported functionality

<b>Fatal Error Code</b>	<b>F 1501 / F 1502 (Internal)</b>
Error message	Firmware parameter CRC test counter
Cause	-

Remedy	<ul style="list-style-type: none"> <li>• Power Cycle</li> <li>• Replace device</li> </ul>
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<b>Fatal Error Code</b>	<b>F 1503 / F 1504 (Internal)</b>
Error message	Wrong firmware parameter CRC
Cause	-
Remedy	<ul style="list-style-type: none"> <li>• Power Cycle</li> <li>• Replace device</li> </ul>

<b>Fatal Error Code</b>	<b>F 1505 / F 1506 (Internal)</b>
Error message	Error while sending firmware parameter to CPU B
Cause	-
Remedy	<ul style="list-style-type: none"> <li>• Power Cycle</li> <li>• Replace device</li> </ul>

<b>Fatal Error Code</b>	<b>F 1511 / F 1512 (Internal)</b>
Error message	Error at sequential calculation of KRS process data CRC
Cause	Wrong CRC calculation
Remedy	Check firmware of device.

<b>Fatal Error Code</b>	<b>F 1513 / F 1514 (Internal)</b>
Error message	CRC of the static KRS process data is invalid
Cause	Static process data were changed
Remedy	Transfer firmware data again. Check FRAM Hardware.

<b>Fatal Error Code</b>	<b>F 1515 / F 1516 (Internal)</b>
Error message	CRC of the static KRS process data to System B is invalid
Cause	Different static process data in System A and B
Remedy	Transfer firmware data again. Check FRAM Hardware.

<b>Fatal Error Code</b>	<b>F 1520 - F 1524 (Internal)</b>	
Error message	Range check error of configuration data SMMC	
Cause	1520	IDSMMC invalid
	1521	General flag is wrong for SMMC
	1522	Cycle is wrong for SMMC it must be greater than 16
	1523	Timeout is wrong for SMMC it must be greater than 16
	1524	SMMC address is wrong it must be in between 0 and 3
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1525 - F 1530 (Internal)</b>	
Error message	Range check error of configuration data SLAVE AXIS CFG from profile	
Cause	1525	IDSLAVEAXIS invalid
	1526	General flag is wrong for SLAVE AXIS
	1527	SLAVE AXIS axis is wrongly configured
	1528	SLAVE AXIS modes is wrong
	1529	SLAVE AXIS the factor speed is zero
	1530	SLAVE AXIS the factor position is zero
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1531 - F 1536 (Internal)</b>	
Error message	Range check error of configuration data SLA	
Cause	1531	IDSLA invalid
	1532	General flag is wrong for SLA
	1533	SLA mode is wrongly configured
	1534	SLA Speed Max is wrongly configured
	1535	SLA max acceleration is wrongly configured
	1536	SLA Axis is wrong configured
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1540 - F 1554 (Internal)</b>	
Error message	Range check error of configuration data FBus Slave	
Cause	1540	invalid classID
	1541	FBus type not supported
	1542	FBus address invalid
	1543	FBus Alarm Reset is invalid
	1544	Length of process data is invalid
	1545	Length of binary data PAE/PAA is invalid
	1546	Process data profile PAE is invalid
	1547	Process data profile PAA is invalid
	1548	Scaling factor process data is invalid
	1549	FBus Block Reset is invalid
	1550	Not used
	1551	Not used
1552	Not used	
1553	Not used	
1554	Not used	
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1555 - F 1564 (Internal)</b>	
Error message	Range check error of configuration data SRS.	
Cause	1555	classID invalid
	1556	Limit of GeneralFlag exceeded
	1557	Axis mapping is invalid
	1558	Not used
	1559	Not used
	1560	Not used
	1561	Not used
	1562	Not used
	1563	Not used
	1564	Not used
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1565 - F 1574 (Internal)</b>	
Error message	Range check error of configuration data FlipFlop.	
Cause	1565	classID invalid
	1566	Limit of GeneralFlag exceeded
	1567	Invalid mode
	1568	Type not supported
	1569	Not used
	1570	Not used
	1571	Not used
	1572	Not used
	1573	Not used
	1574	Not used
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1575 - F 1584 (Internal)</b>	
Error message	Range check error of configuration data slave devices.	
Cause	1575	classID invalid
	1576	Limit of GeneralFlag exceeded
	1577	Second encoder box is not supported
	1578	Profile number of slave device is not supported
	1579	Slave configuration CRC is unequal to FSoE SafeParam configuration CRC
	1580	Not used
	1581	Not used
	1582	Not used
	1583	Not used
	1584	Not used
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1585 - F 1599 (Internal)</b>	
Error message	Range check error of configuration data FDB.	
Cause	1585	classID invalid
	1586	Limit of GeneralFlag exceed
	1587	Configured address invalid (!= 0)
	1588	Configured address is already configured (Address is duplicate)
	1589	Configured timer value is invalid (!= 0)
	1590	Not used
	1591	Not used
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1601 - F 1614 (Internal)</b>	
Error message	Range check error of configuration data SCA.	
Cause	1601	classID invalid
	1602	Maximum values of GeneralFlag exceeded
	1603	Maximum values of mapped axis exceeded
	1604	Maximum values of speed threshold exceeded
	1605	Maximum values of low position limit exceeded
	1606	Maximum values of high position limit exceeded
	1607	Maximum values of maximum acceleration with active integral filter exceeded
	1608	Maximum values of modes exceeded
	1609	Maximum values of direction exceeded
	1610	ELC doesn't exist or doesn't match with the axis
	1611	Not used
	1612	Not used
	1613	Not used
1614	Not used	
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1615 - F 1629 (Internal)</b>	
Error message	Range check error of configuration data SSX.	
Cause	1615	classID invalid
	1616	Maximum values of GeneralFlag exceeded
	1617	Maximum values of mapped axis exceeded
	1618	Maximum values of type exceeded
	1619	Maximum values of TypCurve exceeded
	1620	Maximum values of latency time exceeded
	1621	Maximum values of speed tolerance exceeded
	1622	Maximum values of maximum acceleration exceeded
	1623	Maximum values of acceleration change exceeded
	1624	Not used
	1625	Not used
	1626	Not used
	1627	Not used
1628	Not used	
1629	Not used	
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1630 - F 1644 (Internal)</b>	
Error message	Range check error of configuration data SEL.	
Cause	1630	classID invalid
	1631	Maximum values of GeneralFlag exceeded
	1632	Maximum values of mapped axis exceeded
	1633	Maximum values of TypCurve exceeded
	1634	Maximum values of position exceeded
	1635	Not used
	1636	Maximum values of latency time exceeded
	1637	Maximum values of maximum speed exceeded
	1638	Maximum values of maximum acceleration exceeded
	1639	Not used
	1640	Not used
	1641	Not used
	1642	Not used
1643	Not used	
1644	Not used	
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1645 - F 1659 (Internal)</b>	
Error message	Range check error of configuration data SLP.	
Cause	1645	classID invalid
	1646	Maximum values of GeneralFlag exceeded
	1647	Maximum values of TypCurve exceeded
	1648	Maximum values of Modes exceeded
	1649	Maximum values of upper position limit exceeded
	1650	Maximum values of latency time exceeded
	1651	Maximum values of maximum speed exceeded
	1652	Maximum values of mapped axis exceeded
	1653	Maximum values of maximum acceleration exceeded
	1654	Maximum values of acceleration change exceeded
	1655	Maximum values of ActivationSource exceeded
	1656	Maximum values of direction exceeded
	1657	Nicht verwendet
1658	Nicht verwendet	
1659	Nicht verwendet	
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1660 - F 1669 (Internal)</b>	
Error message	Range check error of configuration data SOS.	
Cause	1660	classID invalid
	1661	Maximum values of GeneralFlag exceeded
	1662	Maximum values of mapped axis exceeded
	1663	Maximum values of Modes exceeded
	1664	Maximum values of speed limit or position limit exceeded
	1665	Maximum values of acceleration exceeded
	1666	Not used
	1667	Not used
	1668	Not used
	1669	Not used
Remedy	Check configuration data and transfer them again.	



<b>Fatal Error Code</b>	<b>F 1670 - F 1679 (Internal)</b>	
Error message	Range check error of configuration data SLS.	
Cause	1670	classID invalid
	1671	Maximum values of GeneralFlag exceeded
	1672	Maximum values of Modes exceeded
	1673	Maximum values of maximum speed value exceeded
	1674	Maximum values of maximum acceleration value exceeded (at Position)
	1675	Maximum values of maximum acceleration value exceeded (at acceleration)
	1676	Maximum values of mapped axis exceeded
	1677	ESS doesn't exist or doesn't match with the axis
	1678	Not used
1679	Not used	
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1680 - F 1689 (Internal)</b>	
Error message	Range check error of configuration data SDI.	
Cause	1680	classID invalid
	1681	Maximum values of GeneralFlag exceeded
	1682	Invalid axis mapping
	1683	Maximum values of Modes exceeded
	1684	Maximum values for speed or position exceeded
	1685	Not used
	1686	Not used
	1687	Not used
	1688	Not used
	1689	Not used
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1690 - F 1699 (Internal)</b>	
Error message	Range check error of configuration data SAC.	
Cause	1690	classID invalid
	1691	Maximum values of GeneralFlag exceeded
	1692	Maximum values of LimitMin exceeded
	1693	Maximum values of LimitMax exceeded
	1694	Maximum values of LimitHyst exceeded
	1695	Maximum values of source exceeded
	1696	Maximum values of Mode exceeded
	1697	Not used
	1698	Not used
	1699	Not used
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1700 - F 1709 (Internal)</b>	
Error message	Range check error of configuration data SLI.	
Cause	1700	classID invalid
	1701	Maximum values of GeneralFlag exceeded
	1702	Maximum values of Limit (Position) exceeded
	1703	Maximum values of step width (Position) exceeded
	1704	Maximum values of ActivationSource exceeded
	1705	Maximum values of mapped axis exceeded
	1706	Maximum values of direction exceeded
	1707	Not used
	1708	Not used
	1709	Not used
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1710 - F 1719 (Internal)</b>	
Error message	Range check error of configuration data STO.	
Cause	1710	classID invalid
	1711	Maximum values of GeneralFlag exceeded
	1712	Not used
	1713	Not used
	1714	Not used
	1715	Not used
	1716	Not used
	1717	Not used
	1718	Not used
1719	Not used	
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1720 - F 1729 (Internal)</b>	
Error message	Range check error of configuration data SSM.	
Cause	1720	classID invalid
	1721	Maximum values of GeneralFlag exceeded
	1722	Maximum values of supervision time exceeded
	1723	Maximum values of Parameter_1 exceeded
	1724	Maximum values of Parameter_2 exceeded
	1725	Not used
	1726	Not used
	1727	Not used
	1728	Not used
1729	Not used	
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1730 - F 1739 (Internal)</b>	
Error message	Range check error of configuration data SLT.	
Cause	1730	classID invalid
	1731	Maximum values of GeneralFlag exceeded
	1732	Maximum values of torque threshold exceeded
	1733	Maximum values of Mode exceeded
	1734	Not used
	1735	Not used
	1736	Not used
	1737	Not used
	1738	Not used
1739	Not used	
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1740 - F 1749 (Internal)</b>	
Error message	Range check error of configuration data SREF.	
Cause	1740	classID invalid
	1741	Maximum values of GeneralFlag exceeded
	1742	AchsID is invalid
	1743	Mode is invalid
	1744	EOS Number is invalid
	1745	Reference position is outside of value range
	1746	Tolerance reference position is outside of value range
	1747	Entry EOS SDC/SSB configuration is invalid
	1748	Not used
1749	Not used	
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1750 - F 1759 (Internal)</b>	
Error message	Range check error of configuration data I/O Reset.	
Cause	1750	classID invalid
	1751	Maximum values of GeneralFlag exceeded
	1752	Maximum values of digital inputs exceeded
	1753	Wrong Reset input
	1754	Reset input is invalid
	1755	Not used
	1756	Not used
	1757	Not used
	1758	Not used
1759	Not used	
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1760 - F 1769 (Internal)</b>	
Error message	Range check error of configuration data Fastchannel.	
Cause	1760	classID invalid
	1761	Fastchannel Mode is invalid
	1762	Fastchannel input data first slave are invalid
	1763	Fastchannel input data second slave are invalid
	1764	Fastchannel output data Master are invalid
	1765	Fastchannel output data first slave are invalid
	1766	Fastchannel output data second slave are invalid
	1767	Not used
	1768	Not used
1769	Not used	
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1770 - F 1794 (Internal)</b>	
Error message	Range check error of configuration data Slave Axis Device.	
Cause	1770	classID invalid
	1771	Maximum values of GeneralFlag exceeded
	1772	Not used
	1773	Maximum values of Reset Mask exceeded
	1774	Error in SMX_Link_TYP structure
	1775	Error in EA_def
	1776	Error in structure EMU_TYP
	1777	Not used
	1778	Error in structure SBT_TYP
	1779	Error in EA_def_extended
	1780	Error in Fastchannel_Input_Mode
	1781	Error in Fastchannel_Output_Mode
	1782	KlassenID is invalid
	1783	Maximum values of General Flag exceeded
	1784	Maximum values of nominal torque exceeded
	1785	Maximum values of torque constant exceeded
	1786	Maximum values of torque filter time constant exceeded
	1787	Maximum values of deviation exceeded
	1788	Maximum values of motor pole pair number exceeded
	1789	Maximum values of Encoder Offset exceeded
	1790	Error in structure EOR-TYP
	1791	Not used
	1792	Not used
1793	Not used	
1794	Not used	
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1795 - F 1819 (Internal)</b>	
Error message	Range check error of configuration data Slave Axis Device (axis data).	
Cause	1795	classID invalid
	1796	Maximum values of GeneralFlag exceeded
	1797	Maximum values of Modes exceeded
	1798	Error AxisCfgID
	1799	Maximum values of measuring range exceeded
	1800	Not used
	1801	Not used
	1802	Not used
	1803	Not used
	1804	Maximum values of Abschaltswelle_pos exceeded
	1805	Maximum values of Abschaltswelle_speed exceeded
	1806	Maximum values of unit exceeded
	1807	Not used
	1808	KlassenID is invalid
	1809	Maximum values of GeneralFlag exceeded
	1810	Maximum values of Modes exceeded
	1811	Maximum values of MutingTime exceeded
	1812	Maximum values of DefaultPos exceeded
	1813	Maximum values of axis exceeded
1814	Not used	
1815	Not used	
1816	Not used	
1817	Not used	
1818	Not used	
1819	Not used	
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1820 - F 1844 (Internal)</b>	
Error message	Range check error of configuration data Slave Axis Device (encoder data).	
Cause	1820	classID invalid
	1821	Maximum values of GeneralFlag exceeded
	1822	Maximum values of Modes exceeded
	1823	Not used
	1824	Maximum values of scaling (position) exceeded
	1825	Maximum values of scaling (speed) exceeded
	1826	Maximum values of Shiftval (position) exceeded
	1827	Maximum values of Shiftval (speed) exceeded
	1828	Maximum values of Statuslength exceeded
	1829	Maximum values of StatusIndex exceeded
	1830	Maximum values of SinCos tolerance exceeded
	1831	Maximum values of resolver parameter exceeded
	1832	Maximum values of offset exceeded
	1833	Maximum values of resolution exceeded
	1834	Maximum values of filter time exceeded
	1835	Maximum values of data length exceeded
	1836	Maximum values of DatenIndex exceeded
	1837	Maximum values of StatusMaskErr exceeded
	1838	Maximum values of StatusMaskDef exceeded
	1839	Maximum values of frame length exceeded
	1840	Not used
1841	Not used	
1842	Not used	
1843	Not used	
1844	Not used	
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1845 - F 1859 (Internal)</b>	
Error message	Range check error of configuration data Slave Axis Device (Encoder scaling).	
Cause	1845	Factorpos = 0
	1846	Measuring range exceeded
	1847	passed measuring range exceeded
	1848	scaled position
	1849	Not used
	1850	Factorspeed = 0
	1851	maximum speed exceeded
	1852	passed speed exceeded
	1853	scaled speed
	1854	Not used
	1855	Not used
	1856	Not used
1857	Not used	
1858	Not used	
1859	Not used	
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1860 - F 1869 (Internal)</b>	
Error message	Range check error of configuration data EDM.	
Cause	1860	classID invalid
	1861	Maximum values of GeneralFlag exceeded
	1862	Maximum values of rising time exceeded
	1863	Maximum values of decay time exceeded
	1864	Number of set bits at reply exceeded
	1865	Number of set bits at activation exceeded
	1866	Not used
	1867	Not used
	1868	Not used
	1869	Not used
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1870 - F 1874 (Internal)</b>	
Error message	Range check error of Restart Block	
Cause	1870	classID invalid
	1871	Maximum values of GeneralFlag exceeded
	1872	Mode invalid
	1873	Time value invalid
	1874	Not used
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1905 - F 1924 (Internal)</b>	
<b>Error message</b>	Range check error of configuration data FBUS.	
<b>Cause</b>	1905	classID invalid
	1906	Maximum values of GeneralFlag exceeded
	1907	Connection ID is invalid
	1908	Slave address is invalid
	1909	Application parameter are invalid
	1910	Watchdog Timeout is invalid
	1911	PAE length is invalid
	1912	PAA length is invalid
	1913	Not used
	1914	Not used
	1915	Not used
	1916	Not used
	1917	Not used
	1918	Not used
1919	Not used	
<b>Remedy</b>	1920	Not used
	1921	Not used
	1922	Not used
	1923	Slave address is not unique
	1924	Connection ID is not unique
<b>Remedy</b>		Check configuration data and transfer them again.

<b>Fatal Error Code</b>	<b>F 1935 - F 1949 (Internal)</b>	
<b>Error message</b>	Range check error of configuration data FDataExchange.	
<b>Cause</b>	1935	classID invalid
	1936	Maximum values of GeneralFlag exceeded
	1937	Process data input length position is invalid
	1938	Process data input length speed is invalid
	1939	Process data input length acceleration is invalid
	1940	Not used
	1941	Not used
	1942	Not used
	1943	Not used
	1944	Not used
	1945	Not used
	1946	Not used
	1947	Not used
	1948	Not used
1949	Not used	
<b>Remedy</b>	1935	Not used
	1936	Not used
	1937	Not used
	1938	Not used
	1939	Not used
<b>Remedy</b>		Check configuration data and transfer them again.

<b>Fatal Error Code</b>	<b>F 1950 - F 1954 (Internal)</b>	
<b>Error message</b>	Range check error of configuration data LinkTable.	
<b>Cause</b>	1950	classID invalid
	1951	Maximum values of GeneralFlag exceeded
	1952	Maximum values of object number exceeded
	1953	Not used
<b>Remedy</b>	1954	Not used
	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1955 - F 1959 (Internal)</b>	
Error message	Range check error of configuration data Device Descriptor.	
Cause	1955	classID invalid
	1956	Maximum values of GeneralFlag exceeded
	1957	Not used
	1958	Not used
	1959	Not used
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1960 - F 1969 (Internal)</b>	
Error message	Range check error of configuration data Diagnosis.	
Cause	1960	classID invalid
	1961	Maximum values of GeneralFlag exceeded
	1962	Maximum values of fieldbus typ exceeded
	1963	Maximum values of send cycle exceeded
	1964	Not used
	1965	Not used
	1966	Not used
	1967	Not used
	1968	Not used
1969	Not used	
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1970 - F 1974 (Internal)</b>	
Error message	Range check error of configuration data PLC Timer.	
Cause	1970	classID invalid
	1971	Maximum values of GeneralFlag exceeded
	1972	Maximum values of PLC-Timer exceeded
	1973	Nicht verwendet
	1974	Nicht verwendet
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1975 - F 1984 (Internal)</b>	
Error message	Range check error of configuration data PLC AWL list.	
Cause	1975	classID invalid
	1976	Maximum values of GeneralFlag exceeded
	1977	Maximum values of PLC length exceeded
	1978	Maximum values of OpCode exceeded
	1979	EOF ID is wrong
	1980	AWL Counter is not plausible
	1981	Wrong ID functional inputs
	1982	Wrong access to AWL in PAA
	1983	Not used
	1984	Not used
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1985 - F 1997 (Internal)</b>	
Error message	Range check error of configuration data DEM.	
Cause	1985	classID invalid
	1986	Maximum values of GeneralFlag exceeded
	1987	Maximum values of mapped axis exceeded
	1988	Maximum values of speed threshold exceeded
	1989	Maximum values of hysteresis exceeded
	1990	Maximum values of hysteresis + speed threshold exceeded
	1991	Maximum values of speed threshold < maximum value SOS
	1992	Maximum values of speed threshold < maximum value SLS
	1993	Maximum values of speed threshold < maximum value SCA
	1994	Maximum values of speed threshold < maximum value SDI
	1995	Not used
	1996	Not used
	1997	Not used
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 1998 - F 1999 (Internal)</b>	
Error message	Range check error of configuration data PLC AWL List.	
Cause	1998	ConfigID invalid
	1999	DeviceID invalid
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 2001 / F 2002</b>	
Error message	CRC of DPR cross communication CPU A-B wrong	
Cause	Interference on DPR cross communication between both CPUs	
Remedy	<ul style="list-style-type: none"> <li>• Check wiring on device</li> <li>• Check EMC requirements</li> <li>• Power Cycle</li> <li>• Replace device</li> </ul>	

<b>Fatal Error Code</b>	<b>F 2003 / F 2004</b>	
Error message	Timeout during transmission of configurations and firmware data	
Cause	Interference on DPR cross communication between both CPUs	
Remedy	<ul style="list-style-type: none"> <li>• Check wiring on device</li> <li>• Check EMC requirements</li> <li>• Power Cycle</li> <li>• Replace device</li> </ul>	

<b>Fatal Error Code</b>	<b>F 2009 / F 2010</b>	
Error message	Timeout at DPR transfer fastchannel System A to B	
Cause	Wrong transfer of system data	
Remedy	Replace system	

<b>Fatal Error Code</b>	<b>F 2019/2020 (Internal)</b>	
Error message	Timeout at transfer of receive data	
Cause	Wrong transfer of system data	
Remedy	Replace system	



<b>Fatal Error Code</b>	<b>F 2021 (Internal)</b>
Error message	Timeout during write access to FRAM
Cause	Signal wires to FRAM are faulty
Remedy	Check Hardware of device

<b>Fatal Error Code</b>	<b>F 2023/2024 (Internal)</b>
Error message	Timeout during Start of a new system cycle
Cause	Wrong transfer of system data
Remedy	Replace system

<b>Fatal Error Code</b>	<b>F 2230 - F 2244 (Internal)</b>
Error message	Range check error of configuration data MPM
Cause	2230 classID invalid
	2231 Maximum values of GeneralFlag exceeded
	2232 Wrong mode
	2233 Number of MPM axis invalid
	2234 Axis number invalid
	2235 Position factor/Messlen master axis invalid
	2236 Axis number slave axis invalid
	2237 Position tolerance out of range
	2238 Position factor slave axis invalid
	2239 Gear ratio out of range
	2240 Offset slave axis out of range
	2241 Not used
2242 Not used	
2243 Not used	
2244 Not used	
Remedy	Check configuration data and transfer them again.

<b>Fatal Error Code</b>	<b>F 2245 - F 2259 (Internal)</b>
Error message	Range check error of configuration data fastchannel awl list.
Cause	2245 classID invalid
	2246 Maximum values of GeneralFlag exceeded
	2247 Maximum values of PLC fastchannel length exceeded
	2248 Maximum values of fastchannel opcode exceeded
	2249 EOF ID is wrong
	2250 AWL Counter is not plausible
	2251 Linker error to opcode
	2252 Used opcode not supported by fastchannel
	2253 AWL counter not correct
	3354 Not used
	3355 Not used
	3356 Not used
	3357 Not used
	3358 Not used
3359 Not used	
Remedy	Check configuration data and transfer them again.

<b>Fatal Error Code</b>	<b>F 2260 - F 2269 (Internal)</b>
Error message	Range check error of configuration data "IF" Block.
Cause	2260 classID invalid
	2261 Maximum values of GeneralFlag exceeded
	2262 Not used
	2263 Not used
	2264 Not used
	2265 Not used
	2266 Not used

	2267	Not used
	2268	Not used
	3369	Not used
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 2270 - F 2279 (Internal)</b>	
Error message	Range check error of configuration data "SWM" Block.	
Cause	2270	ClassID invalid
	2271	Maximum values of GeneralFlag exceeded
	2272	Invalid mode
	2273	Invalid axis or factor pos for used axis not equal
	2274	Invalid position start value
	2275	Invalid value for object
	2276	Not used
	2277	Not used
	2278	Not used
	3379	Not used
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 2280 - F 2284 (Internal)</b>	
Error message	Range check error of configuration data SARC "CST" Block.	
Cause	2280	ClassID invalid
	2281	Maximum values of GeneralFlag exceeded
	2282	Not used
	2283	Not used
	2284	Not used
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 2285 - F 2289 (Internal)</b>	
Error message	Range check error of configuration data virtual axis.	
Cause	2280	ClassID invalid
	2281	Maximum values of GeneralFlag exceeded
	2282	Position factor out of range
	2283	Speed factor out of range
	2284	Unit invalid
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 2290 - F 2299 (Internal)</b>	
Error message	Range check error of configuration data SARC.	
Cause	2290	ClassID invalid
	2291	Len invalid
	2292	Code not supported
	2293	Invalid type for load or store
	2294	Index code invalid
	2295	Not used
	2296	Not used
	2297	Not used
	2298	Not used
	3399	Not used
Remedy	Check configuration data and transfer them again.	

<b>Fatal Error Code</b>	<b>F 2403 (Internal)</b>	
Error message	Pointer error at transfer of configuration data	
Cause	Size of configuration data doesn't match	
Remedy	Check firmware	

<b>Fatal Error Code</b>	<b>F 3001 / F 3002 (Internal)</b>
Error message	Ticker sync error
Cause	-
Remedy	<ul style="list-style-type: none"> <li>• Check wiring on device</li> <li>• Check EMC requirements</li> <li>• Power Cycle</li> <li>• Replace device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3201 / F 3202</b>
Fault message	Processor voltage 2.5V outside defined range
Cause	<ul style="list-style-type: none"> <li>• Supply voltage for module not correct!</li> <li>• Component fault in module</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check device supply voltage!</li> <li>• Switch device off/on.</li> </ul>

<b>Fatal Error Code</b>	<b>F 3203</b>
Fault message	Supply voltage 24V module faulty.
Cause	<ul style="list-style-type: none"> <li>• Supply voltage for module not correct!</li> <li>• Component fault in module</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check device supply voltage!</li> <li>• Switch device off/on.</li> </ul>

<b>Fatal Error Code</b>	<b>F 3217 / F 3218</b>
Error message	Internal supply voltage 3.3V incorrect.
Cause	<ul style="list-style-type: none"> <li>• Supply voltage of assembly group incorrect!</li> <li>• Component error in assembly group</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check device supply voltage!</li> <li>• Switch off/on device.</li> </ul>

<b>Fatal Error Code</b>	<b>F 3241 / F 3242</b>
Error message	Internal supply voltage 1.5V incorrect.
Cause	<ul style="list-style-type: none"> <li>• Supply voltage of assembly group incorrect!</li> <li>• Component error in assembly group</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check device supply voltage!</li> <li>• Switch off/on device.</li> </ul>

<b>Fatal Error Code</b>	<b>F 3243 / F 3244</b>
Error message	Internal supply voltage 1.2V incorrect.
Cause	<ul style="list-style-type: none"> <li>• Supply voltage of assembly group incorrect!</li> <li>• Component error in assembly group</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check device supply voltage!</li> <li>• Switch off/on device.</li> </ul>

<b>Fatal Error Code</b>	<b>F 3245 / F 3246</b>
Error message	Internal supply voltage VDDIM incorrect.
Cause	<ul style="list-style-type: none"> <li>• Supply voltage of assembly group incorrect!</li> <li>• Component error in assembly group</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check device supply voltage!</li> <li>• Switch off/on device.</li> </ul>

<b>Fatal Error Code</b>	<b>F 3249 / F 3250</b>
Error message	Internal supply voltage 5.0V incorrect.
Cause	<ul style="list-style-type: none"> <li>• Supply voltage of assembly group incorrect!</li> <li>• Component error in assembly group</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check device supply voltage!</li> <li>• Switch off/on device.</li> </ul>

<b>Fatal Error Code</b>	<b>F 3251 / F 3252</b>
Error message	Supply voltage 24V of first IO extension board faulty.
Cause	<ul style="list-style-type: none"> <li>• Supply voltage for module not correct!</li> <li>• Component fault in module</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check device supply voltage!</li> <li>• Switch device off/on.</li> </ul>

<b>Fatal Error Code</b>	<b>F 3253 / F 3254</b>
Error message	Supply voltage 24V of second IO extension board faulty.
Cause	<ul style="list-style-type: none"> <li>• Supply voltage for module not correct!</li> <li>• Component fault in module</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check device supply voltage!</li> <li>• Switch device off/on.</li> </ul>

<b>Fatal Error Code</b>	<b>F 3603 / F 3604</b>
Fault message	Faulty switching of relay K1
Cause	Internal relay activation incorrect
Remedy	<ul style="list-style-type: none"> <li>• Check output wiring of device</li> <li>• Check environmental conditions of device</li> <li>• Power Cycle</li> <li>• Replace Device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3605 / F 3606</b>
Fault message	Faulty switching of relay K2
Cause	Internal relay activation incorrect
Remedy	<ul style="list-style-type: none"> <li>• Check output wiring of device</li> <li>• Check environmental conditions of device</li> <li>• Power Cycle</li> <li>• Replace Device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3609</b>
Fault message	Faulty switching of "0V" driver DO1_L
Cause	Switching status output incorrect
Remedy	<ul style="list-style-type: none"> <li>• Check output wiring of device</li> <li>• Check wiring for short circuit</li> <li>• Power Cycle</li> <li>• Replace Device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3610</b>
Fault message	Faulty switching of "24V" driver DO1_H
Cause	Switching status output incorrect
Remedy	<ul style="list-style-type: none"> <li>• Check output wiring of device</li> <li>• Check wiring for short circuit</li> <li>• Power Cycle</li> <li>• Replace Device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3611</b>
Fault message	Faulty switching of "0V" driver DO2_L
Cause	Switching status output incorrect
Remedy	<ul style="list-style-type: none"> <li>• Check output wiring of device</li> <li>• Check wiring for short circuit</li> <li>• Power Cycle</li> <li>• Replace Device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3612</b>
Fault message	Faulty switching of "24V" driver DO2_H
Cause	Switching status output incorrect
Remedy	<ul style="list-style-type: none"> <li>• Check output wiring of device</li> <li>• Check wiring for short circuit</li> <li>• Power Cycle</li> <li>• Replace Device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3613</b>
Fault message	Faulty switching of "0V" driver DO1_L
Cause	Switching status output incorrect
Remedy	<ul style="list-style-type: none"> <li>• Check output wiring of device</li> <li>• Check wiring for short circuit</li> <li>• Power Cycle</li> <li>• Replace Device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3614</b>
Fault message	Faulty testing of "24V" driver DO1_H
Cause	Switching status output incorrect
Remedy	<ul style="list-style-type: none"> <li>• Check output wiring of device</li> <li>• Check wiring for short circuit</li> <li>• Power Cycle</li> <li>• Replace Device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3615</b>
Fault message	Faulty testing of "0V" driver DO2_L
Cause	Switching status output incorrect
Remedy	<ul style="list-style-type: none"> <li>• Check output wiring of device</li> <li>• Check wiring for short circuit</li> <li>• Power Cycle</li> <li>• Replace Device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3616</b>
Fault message	Faulty testing of "24V" driver DO2_H
Cause	Switching status output incorrect
Remedy	<ul style="list-style-type: none"> <li>• Check output wiring of device</li> <li>• Check wiring for short circuit</li> <li>• Power Cycle</li> <li>• Replace Device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3617</b>
Error message	Incorrect switching power switch DO1_L
Cause	Wrong wiring on device
Remedy	<ul style="list-style-type: none"> <li>• Check output wiring of device</li> <li>• Check wiring for short circuit</li> <li>• Power Cycle</li> <li>• Replace Device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3618</b>
Error message	Incorrect switching power switch DO1_H
Cause	Wrong wiring on device
Remedy	<ul style="list-style-type: none"> <li>• Check output wiring of device</li> <li>• Check wiring for short circuit</li> <li>• Power Cycle</li> <li>• Replace Device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3619</b>
Error message	Incorrect switching power switch DO2_L
Cause	Wrong wiring on device
Remedy	<ul style="list-style-type: none"> <li>• Check output wiring of device</li> <li>• Check wiring for short circuit</li> <li>• Power Cycle</li> <li>• Replace Device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3620</b>
Error message	Incorrect switching power switch DO2_H
Cause	Wrong wiring on device
Remedy	<ul style="list-style-type: none"> <li>• Check output wiring of device</li> <li>• Check wiring for short circuit</li> <li>• Power Cycle</li> <li>• Replace Device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3621</b>
Error message	Incorrect switching of NO/NC contact relay AK1
Cause	Wrong wiring on device
Remedy	<ul style="list-style-type: none"> <li>• Check output wiring of device</li> <li>• Check wiring for short circuit</li> <li>• Power Cycle</li> <li>• Replace Device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3622</b>
Error message	Incorrect switching of NO/NC contact relay AK2
Cause	Wrong wiring on device
Remedy	<ul style="list-style-type: none"> <li>• Check output wiring of device</li> <li>• Check wiring for short circuit</li> <li>• Power Cycle</li> <li>• Replace Device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3623</b>
Error message	Error testing WD circuit during startup
Cause	<ul style="list-style-type: none"> <li>• WD isn't triggered correctly</li> <li>• Short circuit</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check output wiring of device</li> <li>• Check power supply of device</li> <li>• Power Cycle</li> <li>• Replace Device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3624</b>
Error message	Error testing WD circuit during startup
Cause	<ul style="list-style-type: none"> <li>• WD isn't triggered correctly</li> <li>• Short circuit</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check output wiring of device</li> <li>• Check power supply of device</li> <li>• Power Cycle</li> <li>• Replace Device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3625 / F3626</b>
Error message	Incorrect switching of output main switch
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring on device</li> <li>• Short circuit</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check output wiring of device</li> <li>• Check wiring for short circuit</li> <li>• Power Cycle</li> <li>• Replace Device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3653 / A 3654</b>
Error message	Error at dynamic testing of Main Switch 1 of HighSide outputs 1 and 2
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring on device (short circuit)</li> <li>• Faulty hardware</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring for short circuit</li> <li>• Check Hardware</li> </ul>

<b>Fatal Error Code</b>	<b>F 3655 / A 3656</b>
Error message	Error at dynamic testing of Main Switch 2 of HighSide outputs 3 and 4
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring on device (short circuit)</li> <li>• Faulty hardware</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring for short circuit</li> <li>• Check Hardware</li> </ul>

<b>Fatal Error Code</b>	<b>F 3657 / A 3658</b>
Error message	Error at dynamic testing of HighSide 1
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring on device (short circuit)</li> <li>• Faulty hardware</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring for short circuit</li> <li>• Check Hardware</li> </ul>

<b>Fatal Error Code</b>	<b>F 3659 / A 3660</b>
Error message	Error at dynamic testing of HighSide 2
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring on device (short circuit)</li> <li>• Faulty hardware</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring for short circuit</li> <li>• Check Hardware</li> </ul>

<b>Fatal Error Code</b>	<b>F 3661 / A 3662</b>
Error message	Error at dynamic testing of HighSide 3
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring on device (short circuit)</li> <li>• Faulty hardware</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring for short circuit</li> <li>• Check Hardware</li> </ul>

<b>Fatal Error Code</b>	<b>F 3663 / A 3664</b>
Error message	Error at dynamic testing of HighSide 4
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring on device (short circuit)</li> <li>• Faulty hardware</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check wiring for short circuit</li> <li>• Check Hardware</li> </ul>

<b>Fatal Error Code</b>	<b>F 3665 / F 3666</b>
Fault message	Static test loss of ground HighSide 2
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check the wiring</li> <li>• Power Cycle</li> </ul>



<b>Fatal Error Code</b>	<b>F 3667 / F 3668</b>
Fault message	Static test loss of ground HighSide 4
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check the wiring</li> <li>• Power Cycle</li> </ul>

<b>Fatal Error Code</b>	<b>F 3669 / F 3670</b>
Fault message	Dynamic test loss of ground HighSide 2
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check the wiring</li> <li>• Power Cycle</li> </ul>

<b>Fatal Error Code</b>	<b>F 3671 / F 3672</b>
Fault message	Dynamic test loss of ground HighSide 4
Cause	<ul style="list-style-type: none"> <li>• Wrong wiring (short circuit)</li> <li>• Hardware defect</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check the wiring</li> <li>• Power Cycle</li> </ul>

<b>Fatal Error Code</b>	<b>F 3701 / F 3702 (Internal)</b>
Error message	Error comparing process images CPU A – CPU B
Cause	-
Remedy	<ul style="list-style-type: none"> <li>• Check EMC requirements</li> <li>• Power Cycle</li> <li>• Replace device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3703 / F 3704 (Internal)</b>
Error message	CRC error process image initialization System A to System B
Cause	Different process images of System A to System B
Remedy	Power Cycle

<b>Fatal Error Code</b>	<b>F 3705 / F 3706 (Internal)</b>
Error message	Error comparing process images fastchannel CPU A – CPU B
Cause	-
Remedy	<ul style="list-style-type: none"> <li>• Check EMC requirements</li> <li>• Power Cycle</li> <li>• Replace device</li> </ul>

<b>Fatal Error Code</b>	<b>F 3707 / F 3708 (Internal)</b>
Error message	CRC error process image fastchannel initialization System A to System B
Cause	Different process images of System A to System B
Remedy	Power Cycle

<b>Fatal Error Code</b>	<b>F 3841 / F 3842</b>
Error message	Dynamic test failed for HighSide1 on the first io extension board
Cause	The dynamic test is failed
Remedy	<ul style="list-style-type: none"> <li>• Check the power supply</li> <li>• Check the HW</li> </ul>

<b>Fatal Error Code</b>	<b>F 3843 / F 3844</b>
Error message	Dynamic test failed for HighSide2 on the first io extension board
Cause	The dynamic test is failed
Remedy	<ul style="list-style-type: none"> <li>• Check the power supply</li> <li>• Check the HW</li> </ul>

<b>Fatal Error Code</b>	<b>F 3845 / F 3846</b>
Error message	Dynamic test failed for HighSide3 on the first io extension board
Cause	The dynamic test is failed
Remedy	<ul style="list-style-type: none"> <li>• Check the power supply</li> <li>• Check the HW</li> </ul>

<b>Fatal Error Code</b>	<b>F 3847 / F 3848</b>
Error message	Dynamic test failed for HighSide4 on the first io extension board
Cause	The dynamic test is failed
Remedy	<ul style="list-style-type: none"> <li>• Check the power supply</li> <li>• Check the HW</li> </ul>

<b>Fatal Error Code</b>	<b>F 3849 / F 3850</b>
Error message	Dynamic test failed for HighSide5 on the first io extension board
Cause	The dynamic test is failed
Remedy	<ul style="list-style-type: none"> <li>• Check the power supply</li> <li>• Check the HW</li> </ul>

<b>Fatal Error Code</b>	<b>F 3851 / F 3852</b>
Error message	Dynamic test failed for HighSide6 on the first io extension board
Cause	The dynamic test is failed
Remedy	<ul style="list-style-type: none"> <li>• Check the power supply</li> <li>• Check the HW</li> </ul>

<b>Fatal Error Code</b>	<b>F 3853 / F 3854</b>
Error message	Dynamic test failed for HighSide 7 on the first io extension board
Cause	The dynamic test is failed
Remedy	<ul style="list-style-type: none"> <li>• Check the power supply</li> <li>• Check the HW</li> </ul>

<b>Fatal Error Code</b>	<b>F 3855 / F 3856</b>
Error message	Dynamic test failed for HighSide8 on the first io extension board
Cause	The dynamic test is failed
Remedy	<ul style="list-style-type: none"> <li>• Check the power supply</li> <li>• Check the HW</li> </ul>

<b>Fatal Error Code</b>	<b>F 3857 / F 3858</b>
Error message	Dynamic test failed for HighSide9 on the first io extension board
Cause	The dynamic test is failed
Remedy	<ul style="list-style-type: none"> <li>• Check the power supply</li> <li>• Check the HW</li> </ul>

<b>Fatal Error Code</b>	<b>F 3859 / F 3860</b>
Error message	Dynamic test failed for HighSide10 on the first io extension board
Cause	The dynamic test is failed
Remedy	<ul style="list-style-type: none"> <li>• Check the power supply</li> <li>• Check the HW</li> </ul>

<b>Fatal Error Code</b>	<b>F 3891 / F 3892</b>
Error message	Main switch of first IO missing
Cause	The power supply to the first io extension is wrong.
Remedy	Check the power supply

<b>Fatal Error Code</b>	<b>F 3893 / F 3894</b>
Error message	Main switch of second IO missing
Cause	The power supply to the first io extension is wrong.
Remedy	Check the power supply

<b>Fatal Error Code</b>	<b>F 3971 / F 3972</b>
Error message	Main switch of second IO missing
Cause	The power supply to the first io extension is wrong.
Remedy	Check the power supply

<b>Fatal Error Code</b>	<b>F 3973 / F 3974</b>
Error message	Main switch of second IO missing
Cause	The power supply to the first io extension is wrong.
Remedy	Check the power supply

<b>Fatal Error Code</b>	<b>F 3975 / F 3976</b>
Error message	Main switch of second IO missing
Cause	The power supply to the first io extension is wrong.
Remedy	Check the power supply

<b>Fatal Error Code</b>	<b>F 3977 / F 3978</b>
Error message	Main switch of second IO missing
Cause	The power supply to the first io extension is wrong.
Remedy	Check the power supply

<b>Fatal Error Code</b>	<b>F 4501 / F 4502</b>
Error message	SSX Acceleration is out of range
Cause	SSX acceleration is generator then 2'15
Remedy	Check the safety monitoring function

<b>Fatal Error Code</b>	<b>F 5201 / F 5202</b>
Error message	Dynamic test for HighSide1 on the second io extension board
Cause	Dynamic test failed
Remedy	<ul style="list-style-type: none"> <li>• Check the power supply</li> <li>• Check the HW</li> </ul>

<b>Fatal Error Code</b>	<b>F 5203 / F 5204</b>
Error message	Dynamic test for HighSide2 on the second io extension board
Cause	Dynamic test failed
Remedy	<ul style="list-style-type: none"> <li>• Check the power supply</li> <li>• Check the HW</li> </ul>

<b>Fatal Error Code</b>	<b>F 5205 / F 5206</b>
Error message	Dynamic test for HighSide3 on the second io extension board
Cause	Dynamic test failed
Remedy	<ul style="list-style-type: none"> <li>• Check the power supply</li> <li>• Check the HW</li> </ul>

<b>Fatal Error Code</b>	<b>F 5207 / F 5208</b>
Error message	Dynamic test for HighSide4 on the second io extension board
Cause	Dynamic test failed
Remedy	<ul style="list-style-type: none"> <li>• Check the power supply</li> <li>• Check the HW</li> </ul>

<b>Fatal Error Code</b>	<b>F 5209 / F 5210</b>
Error message	Dynamic test for HighSide5 on the second io extension board
Cause	Dynamic test failed
Remedy	<ul style="list-style-type: none"> <li>• Check the power supply</li> <li>• Check the HW</li> </ul>

<b>Fatal Error Code</b>	<b>F 5211 / F 5212</b>
Error message	Dynamic test for HighSide6 on the second io extension board
Cause	Dynamic test failed
Remedy	<ul style="list-style-type: none"> <li>• Check the power supply</li> <li>• Check the HW</li> </ul>

<b>Fatal Error Code</b>	<b>F 5213 / F 5214</b>
Error message	Dynamic test for HighSide7 on the second io extension board
Cause	Dynamic test failed
Remedy	<ul style="list-style-type: none"> <li>• Check the power supply</li> <li>• Check the HW</li> </ul>

<b>Fatal Error Code</b>	<b>F 5215 / F 5216</b>
Error message	Dynamic test for HighSide8 on the second io extension board
Cause	Dynamic test failed
Remedy	<ul style="list-style-type: none"> <li>• Check the power supply</li> <li>• Check the HW</li> </ul>

<b>Fatal Error Code</b>	<b>F 5217 / F 5218</b>
Error message	Dynamic test for HighSide9 on the second io extension board
Cause	Dynamic test failed
Remedy	<ul style="list-style-type: none"> <li>• Check the power supply</li> <li>• Check the HW</li> </ul>

<b>Fatal Error Code</b>	<b>F 5219 / F 5220</b>
Error message	Dynamic test for HighSide10 on the second io extension board
Cause	Dynamic test failed
Remedy	<ul style="list-style-type: none"> <li>• Check the power supply</li> <li>• Check the HW</li> </ul>

<b>Fatal Error Code</b>	<b>F 6705 (Internal)</b>
Error message	Master switch status error
Cause	Invalid state while evaluating the master switch
Remedy	<ul style="list-style-type: none"> <li>• Check wiring of the outputs</li> <li>• Check the wiring of input elements</li> <li>• Power Cycle</li> </ul>

<b>Fatal Error Code</b>	<b>F 6807 / F 6808 (Internal)</b>
Error message	PLC timer overflow
Cause	<ul style="list-style-type: none"> <li>• Incompatible application software</li> <li>• On or more PLC timer values are not multiples of the cycle time</li> </ul>
Remedy	<ul style="list-style-type: none"> <li>• Check FW Version and Version of application software for compatibility</li> <li>• Check every PLC timer to be a multiple of 8ms</li> <li>• Re-transmit configuration</li> <li>• Power Cycle</li> </ul>

<b>Fatal Error Code</b>	<b>F 6809 / F 6810 (Internal)</b>
Error message	CRC error during testing of input elements
Cause	Unknown switch type
Remedy	Check PLC application (AWL)

<b>Fatal Error Code</b>	<b>F 6811 / F 6812 (Internal)</b>
Error message	ID of input elements is invalid
Cause	Unknown switch type
Remedy	Check PLC application (AWL)

<b>Fatal Error Code</b>	<b>F 6813 / F 6814 (Internal)</b>
Error message	PLC kernel raised a fatal error
Cause	-
Remedy	<ul style="list-style-type: none"> <li>• Check FW Version and Version of application software for compatibility</li> <li>• Re-transmit configuration</li> <li>• Power Cycle</li> </ul>

<b>Fatal Error Code</b>	<b>F 7001/ F 7002 (Internal)</b>
Error message	Internal FSoE slave stack failure
Cause	Error in configuration data
Remedy	Check configuration data

<b>Fatal Error Code</b>	<b>F 7003/ F 7004 (Internal)</b>
Error message	Wrong FSoE instance
Cause	Error in configuration data
Remedy	Check configuration data

<b>Fatal Error Code</b>	<b>F 7429/ F7430 (Intern)</b>
Error message	Failure in PROFIsafe stack
Cause	Program counter of PROFIsafe stack wrong
Remedy	<ul style="list-style-type: none"> <li>• check configuration</li> <li>• Power Cycle</li> </ul>

<b>Fatal Error Code</b>	<b>F 8205 / F 8206 (Internal)</b>
Error message	Maximum cycle length exceeded
Cause	Processing the application would exceed the maximum cycle time of the device
Remedy	<ul style="list-style-type: none"> <li>• Reduce the number of used PLC operands by simplifying your program</li> <li>• Remove unused blocks from application</li> <li>• Power Cycle</li> </ul>

<b>Fatal Error Code</b>	<b>F 8207 / F 8208 (Internal)</b>
Error message	Logical Program counter exceeds maximum
Cause	-
Remedy	<ul style="list-style-type: none"> <li>• Re-transmit configuration to device</li> <li>• Power Cycle</li> </ul>

<b>Fatal Error Code</b>	<b>F 8213 / F 8220 (Internal)</b>
Error message	Runtime overflow interrupt
Cause	-
Remedy	<ul style="list-style-type: none"> <li>• Re-transmit configuration to device</li> <li>• Power Cycle</li> </ul>

<b>Fatal Error Code</b>	<b>F 8221 / F 8222 (Internal)</b>
Error message	Maximum runtime complementary channel exceeded
Cause	Processing the application would exceed the maximum cycle time of the device
Remedy	<ul style="list-style-type: none"> <li>• Reduce the number of used PLC operands by simplifying your program</li> <li>• Remove unused blocks from application</li> <li>• Power Cycle</li> </ul>

<b>Fatal Error Code</b>	<b>F 8223 / F 8224 (Internal)</b>
Error message	Inconsistent logical Interrupt program counter
Cause	-
Remedy	<ul style="list-style-type: none"> <li>• Re-transmit configuration to device</li> <li>• Power Cycle</li> </ul>

<b>Fatal Error Code</b>	<b>F 8225 (Internal)</b>
Error message	Expectation main program loop to PPI doesn't match
Cause	Run time exceeded
Remedy	Master -> raise configurable cycle time

<b>Fatal Error Code</b>	<b>F 8227 (Internal)</b>
Error message	Run time supervision PPI System A is wrong
Cause	Interrupt running time differs
Remedy	Master -> raise configurable cycle time

<b>Fatal Error Code</b>	<b>F 8229 / 8230 (Internal)</b>
Error message	Run time supervision lplzi PPI is wrong
Cause	Interrupt running time differs
Remedy	Check firmware

<b>Fatal Error Code</b>	<b>F 8231 / F 8232 (Internal)</b>
Error message	Error at waiting for last interrupt in main program
Cause	Run time exceeded
Remedy	Check firmware

<b>Fatal Error Code</b>	<b>F 8233 / F 8234 (Internal)</b>
Error message	Overshooting/Undershooting of cycletime 16 ms +/- 5%
Cause	cycle time not between lower and upper limit
Remedy	Master -> raise configurable cycle time

<b>Fatal Error Code</b>	<b>F 8235 / F 8236 (Internal)</b>
Error message	Version of System A differs from version of System B
Cause	Firmwareupdate was unsuccessful
Remedy	Update Firmware again

<b>Fatal Error Code</b>	<b>F 8237 / F 8238 (Internal)</b>
Error message	LPLZ FSoE master is not same as the defined counter.
Cause	FSoE_Master_lplz is not calling all the functions it is supposed to.
Remedy	Check the FSoE stack

<b>Fatal Error Code</b>	<b>F 8239 / F 8240 (Internal)</b>
Error message	LPLZ FSoE slave is not same as the defined counter.
Cause	fsoe_lplz[0] is not calling all the functions it is supposed to.
Remedy	Check the FSoE stack

<b>Fatal Error Code</b>	<b>F 9001 / F 9002 (Internal)</b>
Error message	CPU self test error
Cause	-
Remedy	<ul style="list-style-type: none"> <li>• Check EMC requirements</li> <li>• Power Cycle</li> <li>• Replace device</li> </ul>

<b>Fatal Error Code</b>	<b>F 9007 / F 9008 (Internal)</b>
Error message	CPU RAM test returned with error
Cause	-
Remedy	<ul style="list-style-type: none"> <li>• Check EMC requirements</li> <li>• Power Cycle</li> <li>• Replace device</li> </ul>

<b>Fatal Error Code</b>	<b>F 9009 / F 9010 (Internal)</b>
Error message	Firmware CRC mismatch
Cause	-
Remedy	<ul style="list-style-type: none"> <li>• Power Cycle</li> <li>• Replace device</li> </ul>

<b>Fatal Error Code</b>	<b>F 9011 / F 9012 (Internal)</b>
Error message	Internal stack test returned with an error
Cause	-
Remedy	<ul style="list-style-type: none"> <li>• Power Cycle</li> <li>• Replace device</li> </ul>



<b>Fatal Error Code</b>	<b>F 9013 (Internal)</b>
Error message	Testaddress Galpat Test was saved incorrectly
Cause	Memory address for RAM Test was saved incorrectly
Remedy	Check FRAM

<b>Fatal Error Code</b>	<b>F 9015 / F 9016 (Internal)</b>
Error message	Error CPU RAM test
Cause	-
Remedy	<ul style="list-style-type: none"> <li>• Power Cycle</li> <li>• Replace device</li> </ul>

<b>Fatal Error Code</b>	<b>F 9017 / F 9018 (Internal)</b>
Error message	Error CPU register test
Cause	-
Remedy	<ul style="list-style-type: none"> <li>• Power Cycle</li> <li>• Replace device</li> </ul>

<b>Fatal Error Code</b>	<b>F 9019 / F 9020 (Internal)</b>
Error message	Switch default
Cause	-
Remedy	<ul style="list-style-type: none"> <li>• Power Cycle</li> <li>• Replace device</li> </ul>

<b>Fatal Error Code</b>	<b>F 9021 / F 9022 (Internal)</b>
Error message	Error at evaluation of „soft variables“ of selftest class
Cause	Statically assigned variables are additionally saved inverted
Remedy	Check firmware

<b>Fatal Error Code</b>	<b>F 9023 / F 9024 (Internal)</b>
Error message	Error at ECC RAM test
Cause	Faulty RAM
Remedy	Replace CPU

<b>Fatal Error Code</b>	<b>F 9025 / F 9026 (Internal)</b>
Error message	Error at ECC RAM test
Cause	Faulty RAM
Remedy	Replace CPU

<b>Fatal Error Code</b>	<b>F 9027 / F 9028 (Internal)</b>
Error message	Error at ECC RAM test
Cause	Faulty RAM
Remedy	Replace CPU

<b>Fatal Error Code</b>	<b>F 9103 / F 9104 (Internal)</b>
Fault message	Network type for slave module undefined
Cause	Incorrect configuration of the network type
Remedy	<ul style="list-style-type: none"> <li>• Check FW Version and Version of application software for compatibility</li> <li>• Check every PLC timer to be a multiple of 8ms</li> <li>• Re-transmit configuration</li> <li>• Power Cycle</li> </ul>

<b>Fatal Error Code</b>	<b>F 9105/ F 9106 (Internal)</b>
Fault message	Incorrect pointer monitoring
Cause	Isolated pointer points to faulty memory area
Remedy	<ul style="list-style-type: none"> <li>• Check FW Version and Version of application software for compatibility</li> <li>• Power Cycle</li> </ul>

<b>Fatal Error Code</b>	<b>F 9309/ F 9310 (Internal)</b>
Fault message	Cycletime of first SDC/SSB is different to second SDC/SSB
Cause	Faulty firmware
Remedy	Update firmware

<b>Fatal Error Code</b>	<b>F 9311/ F 9312 (Internal)</b>
Fault message	Invalid SDC/SSB Assignment in function call KrsHNFGetRobotPosSampleTime()
Cause	Faulty firmware
Remedy	Update firmware

<b>Fatal Error Code</b>	<b>F 9401 (Internal)</b>
Fault message	Invalid FSoE status for startup connection SCU to SDC/SSB
Cause	Faulty firmware
Remedy	Update firmware

<b>Fatal Error Code</b>	<b>F 9403 (Internal)</b>
Fault message	Invalid CoE status for startup connection SCU to SDC/SSB
Cause	Faulty firmware
Remedy	Update firmware

<b>Fatal Error Code</b>	<b>F 9405 (Internal)</b>
Fault message	Invalid command for startup connection SCU to SDC/SSB
Cause	Faulty firmware
Remedy	Update firmware

<b>Fatal Error Code</b>	<b>F 9407 (Internal)</b>
Fault message	Invalid device for startup connection SCU to SDC/SSB
Cause	Faulty firmware
Remedy	Update firmware

<b>Fatal Error Code</b>	<b>F 9409 (Internal)</b>
Fault message	Invalid connection for startup connection SCU to SDC/SSB
Cause	Faulty firmware
Remedy	Update firmware

<b>Fatal Error Code</b>	<b>F 9411 (Internal)</b>
Fault message	Invalid memory range for startup connection SCU to SDC/SSB
Cause	Faulty firmware
Remedy	Update firmware

<b>Fatal Error Code</b>	<b>F 9413 (Internal)</b>
Fault message	Invalid command for startup connection SCU to SDC/SSB
Cause	Faulty firmware
Remedy	Update firmware

<b>Fatal Error Code</b>	<b>F 9415 (Internal)</b>
Fault message	Invalid CoE status for startup connection SCU to SDC/SSB
Cause	Faulty firmware
Remedy	Update firmware