# Error list

| System: | 37500 SCU |
|---|---|
| Document: | EN Error list SCU |
| Doc.-Reference: | HB-37500-813-02 |
| Issue: | 11F |
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| Released by: | S. Brust |

## 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 | M. Paukner | 10E | Add alarm numbers for MUL, ABS, NEG |
| 9 | All | 07-06--2022 | M.Khemiri | 11E | Update document format templates, Correction F 3632 |

## Contents

# 1 General

## 1.1 Technical status

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

| Firmware version **V3.1.1.7** |
| :---: |

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.

| ⚠ | 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!<br><br>Solving the cause of the error must be preferred to muting the alarm. |
|---|---|

## 2 Alarm List

| Alarm code | **A 2301** |
| --- | --- |
| Alarm message | Communication Error SPI Interface |
| Cause | Incorrect data transmission<br>External EMC |
| Remedy | • Check EMC regulations<br>• Power Cycle<br>• Replace device |

| Alarm code | **A 3001 / A 3002** |
| --- | --- |
| Alarm message | Ticker error |
| Cause | Mismatch ticker b/w CPUA and CPUB |
| Remedy | • The FW may be not correctly flashed<br>• HW problem. One of the CPU is started but the other is not |

| Alarm code | **A 3193 / A 3194** |
| --- | --- |
| Alarm message | Digital input Test |
| Cause | The input failure on the relay board. |
| Remedy | • The input diagnoses caused this error |

| Alarm code | **A 3195 / A 3196** |
| --- | --- |
| Alarm message | The 24 V supply test of Digital input |
| Cause | The DI tests its supply and this test was not successful |
| Remedy | • Check 24V input voltage of all OSSD inputs<br>• Power Reset |

| Alarm code | **A 3197 / A 3198** |
| --- | --- |
| Alarm message | Incorrect OSSD input check |
| Cause | OSSD test incorrect |
| Remedy | • Check 24V input voltage of all OSSD inputs<br>• Power Reset |

| Alarm code | **A 3431 / A 3432** |
| --- | --- |
| Alarm message | External encoder speed axis 1 out of specified range |
| Cause | Speed value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | **A 3433 / A 3434** |
| --- | --- |
| Alarm message | External encoder speed axis 2 out of specified range |
| Cause | Speed value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | A 3435 / A 3436 |
|---|---|
| Alarm message | External encoder speed axis 3 out of specified range |
| Cause | Speed value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | A 3437 / A 3438 |
|---|---|
| Alarm message | External encoder speed axis 4 out of specified range |
| Cause | Speed value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | A 3439 / A 3440 |
|---|---|
| Alarm message | External encoder speed axis 5 out of specified range |
| Cause | Speed value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | A 3441 / A 3442 |
|---|---|
| Alarm message | External encoder speed axis 6 out of specified range |
| Cause | Speed value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | A 3443 / A 3444 |
|---|---|
| Alarm message | External encoder speed axis 7 out of specified range |
| Cause | Speed value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | A 3445 / A 3446 |
|---|---|
| Alarm message | External encoder speed axis 8 out of specified range |
| Cause | Speed value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | A 3447 / A 3448 |
|---|---|
| Alarm message | External encoder speed axis 9 out of specified range |
| Cause | Speed value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | A 3449 / A 3450 |
|---|---|
| Alarm message | External encoder speed axis 10 out of specified range |
| Cause | Speed value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | A 3451 / A 3452 |
|---|---|
| Alarm message | External encoder speed axis 11 out of specified range |
| Cause | Speed value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | A 3453 / A 3454 |
|---|---|
| Alarm message | External encoder speed axis 12 out of specified range |
| Cause | Speed value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | A 3461 / A 3462 |
|---|---|
| Alarm message | External encoder position axis 1 out of specified mess length |
| Cause | Position value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | A 3463 / A 3464 |
|---|---|
| Alarm message | External encoder position axis 2 out of specified mess length |
| Cause | Position value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | A 3465 / A 3466 |
|---|---|
| Alarm message | External encoder position axis 3 out of specified mess length |
| Cause | Position value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | A 3467 / A 3468 |
|---|---|
| Alarm message | External encoder position axis 4 out of specified mess length |
| Cause | Position value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | A 3469 / A 3470 |
|---|---|
| Alarm message | External encoder position axis 5 out of specified mess length |
| Cause | Position value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | A 3471 / A 3472 |
|---|---|
| Alarm message | External encoder position axis 6 out of specified mess length |
| Cause | Position value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | A 3473 / A 3474 |
|---|---|
| Alarm message | External encoder position axis 7 out of specified mess length |
| Cause | Position value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | A 3475 / A 3476 |
|---|---|
| Alarm message | External encoder position axis 8 out of specified mess length |
| Cause | Position value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | A 3477 / A 3478 |
|---|---|
| Alarm message | External encoder position axis 9 out of specified mess length |
| Cause | Position value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | A 3479 / A 3480 |
|---|---|
| Alarm message | External encoder position axis 10 out of specified mess length |
| Cause | Position value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | A 3481 / A 3482 |
|---|---|
| Alarm message | External encoder position axis 11 out of specified mess length |
| Cause | Position value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | **A 3483 / A 3484** |
| --- | --- |
| Alarm message | External encoder position axis 12 out of specified mess length |
| Cause | Position value invalid |
| Remedy | • Reset the alarm<br>• Check configuration of axis |

| Alarm code | **A 3603 / A 3604** |
| --- | --- |
| Alarm message | First Relay output not working |
| Cause | The relay output is not working |
| Remedy | • Check the HW |

| Alarm code | **A 3605 / A 3606** |
| --- | --- |
| Alarm message | Second Relay output not working |
| Cause | The relay output is not working |
| Remedy | • Check the HW |

| Alarm code | **A 3627 / A 3628** |
| --- | --- |
| Alarm message | Error static testing of HighSide output 1 |
| Cause | Faulty switching of the output<br>• Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | **A 3629 / A 3630** |
| --- | --- |
| Alarm message | Error static testing of HighSide output 2 |
| Cause | Faulty switching of the output<br>• Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | **A 3631 / A 3632** |
| --- | --- |
| Alarm message | Error static testing of HighSide output 3 |
| Cause | Faulty switching of the output<br>• Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | **A 3633 / A 3634** |
| --- | --- |
| Alarm message | Error static testing of HighSide output 4 |
| Cause | Faulty switching of the output<br>• Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | A 3635 / A 3636 |
|---|---|
| Alarm message | Error static testing of Main Switch 1 of HighSide outputs 1 and 2 |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | A 3637 / A 3638 |
|---|---|
| Alarm message | Error static testing of Main Switch 2 of HighSide outputs 3 and 4 |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | A 3653 / A 3654 |
|---|---|
| Alarm message | Error dynamic testing of Main Switch 1 of HighSide outputs 1 and 2 |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | A 3801 / A 3802 |
|---|---|
| Alarm message | Error on first input of the first io extension board |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | A 3803 / A 3804 |
|---|---|
| Alarm message | Error on second input of the first io extension board |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | A 3805 / A 3806 |
|---|---|
| Alarm message | Error on third input of the first io extension board |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | A 3807 / A 3808 |
|---|---|
| Alarm message | Error on fourth input of the first io extension board |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | A 3809 / A 3810 |
| --- | --- |
| Alarm message | Error on fifth input of the first io extension board |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | A 3811 / A 3812 |
| --- | --- |
| Alarm message | Error on sixth input of the first io extension board |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | A 3813 / A 3814 |
| --- | --- |
| Alarm message | Error on seventh input of the first io extension board |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | A 3815 / A 3816 |
| --- | --- |
| Alarm message | Error on eight input of the first io extension board |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | A 3817 / A 3818 |
| --- | --- |
| Alarm message | Error on ninth input of the first io extension board |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | A 3819 / A 3820 |
| --- | --- |
| Alarm message | Error on tenth input of the first io extension board |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | A 3901 / A 3902 |
|---|---|
| Alarm message | Error on first output of the second io extension board |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | A 3903 / A 3904 |
|---|---|
| Alarm message | Error on second output of the second io extension board |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | A 3905 / A 3906 |
|---|---|
| Alarm message | Error on third output of the second io extension board |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | A 3907 / A 3908 |
|---|---|
| Alarm message | Error on fourth output of the second io extension board |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | A 3909 / A 3910 |
|---|---|
| Alarm message | Error on fifth output of the second io extension board |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | A 3911 / A 3912 |
|---|---|
| Alarm message | Error on sixth output of the second io extension board |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | A 3913 / A 3914 |
|---|---|
| Alarm message | Error on seventh output of the second io extension board |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | **A 3915 / A 3916** |
|---|---|
| Alarm message | Error on eight output of the second io extension board |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | **A 3917 / A 3918** |
|---|---|
| Alarm message | Error on ninth output of the second io extension board |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | **A 3919 / A 3920** |
|---|---|
| Alarm message | Error on tenth output of the second io extension board |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check wiring of the output (short circuit)<br>• Check Hardware |

| Alarm code | **A 4001 / A 4002** |
|---|---|
| Alarm message | Anticlockwise and clockwise rotation SDI1 have been activated simultaneously |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SDI1 are activated simultaneously |
| Remedy | • Check the logic of the SDI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | **A 4003 / A 4004** |
|---|---|
| Alarm message | Anticlockwise and clockwise rotation SDI2 have been activated simultaneously |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SDI2 are activated simultaneously |
| Remedy | • Check the logic of the SDI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 4005 / A 4006 |
|---|---|
| Alarm message | Anticlockwise and clockwise rotation SDI3 have been activated simultaneously |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SDI3 are activated simultaneously |
| Remedy | • Check the logic of the SDI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 4007 / A 4008 |
|---|---|
| Alarm message | Anticlockwise and clockwise rotation SDI4 have been activated simultaneously |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SDI4 are activated simultaneously |
| Remedy | • Check the logic of the SDI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 4009 / A 4010 |
|---|---|
| Alarm message | Anticlockwise and clockwise rotation SDI5 have been activated simultaneously |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SDI5 are activated simultaneously |
| Remedy | • Check the logic of the SDI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 4011 / A 4012 |
|---|---|
| Alarm message | Anticlockwise and clockwise rotation SDI6 have been activated simultaneously |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SDI6 are activated simultaneously |
| Remedy | • Check the logic of the SDI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 4013 / A 4014 |
|---|---|
| Alarm message | Anticlockwise and clockwise rotation SDI7 have been activated simultaneously |
| Cause | Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SDI17 are activated simultaneously |
| Remedy | • Check the logic of the SDI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 4015 / A 4016 |
|---|---|
| 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 | • Check the logic of the SDI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 4017 / A 4018 |
|---|---|
| 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 | • Check the logic of the SDI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 4019 / A 4020 |
|---|---|
| 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 | • Check the logic of the SDI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | **A 4021 / A 4022** |
|---|---|
| Alarm message | Anticlockwise and clockwise rotation SDI11 have been activated simultaneously |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SDI11 are activated simultaneously |
| Remedy | • Check the logic of the SDI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | **A 4023 / A 4024** |
|---|---|
| Alarm message | Anticlockwise and clockwise rotation SDI12 have been activated simultaneously |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SDI12 are activated simultaneously |
| Remedy | • Check the logic of the SDI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | **A 4601 / A 4602** |
|---|---|
| Alarm message | Monitoring range left and right of SLP1 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLP1 are activated simultaneously |
| Remedy | • Check the logic of the SLP function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | **A 4603 / A 4604** |
|---|---|
| Alarm message | Monitoring range left and right of SLP2 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLP2 are activated simultaneously |
| Remedy | • Check the logic of the SLP function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 4605 / A 4606 |
|---|---|
| Alarm message | Monitoring range left and right of SLP3 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLP3 are activated simultaneously |
| Remedy | • Check the logic of the SLP function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 4607 / A 4608 |
|---|---|
| Alarm message | Monitoring range left and right of SLP4 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLP4 are activated simultaneously |
| Remedy | • Check the logic of the SLP function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 4609 / A 4610 |
|---|---|
| Alarm message | Monitoring range left and right of SLP5 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLP5 are activated simultaneously |
| Remedy | • Check the logic of the SLP function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 4611 / A 4612 |
|---|---|
| Alarm message | Monitoring range left and right of SLP6 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLP6 are activated simultaneously |
| Remedy | • Check the logic of the SLP function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 4613 / A 4614 |
|---|---|
| Alarm message | Monitoring range left and right of SLP7 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLP7 are activated simultaneously |
| Remedy | • Check the logic of the SLP function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 4615 / A 4616 |
|---|---|
| Alarm message | Monitoring range left and right of SLP8 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLP8 are activated simultaneously |
| Remedy | • Check the logic of the SLP function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 4617 / A 4618 |
|---|---|
| Alarm message | Monitoring range left and right of SLP9 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLP2 are activated simultaneously |
| Remedy | • Check the logic of the SLP function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 4619 / A 4620 |
|---|---|
| Alarm message | Monitoring range left and right of SLP10 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLP2 are activated simultaneously |
| Remedy | • Check the logic of the SLP function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 4621 / A 4622 |
|---|---|
| Alarm message | Was monitoring the area left and right of the SLP11 activated simultaneously |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLP11 are activated simultaneously |
| Remedy | • Check the logic of the SLP function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 4623 / A 4624 |
|---|---|
| Alarm message | Was monitoring the area left and right of the SLP12 activated simultaneously |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLP12 are activated simultaneously |
| Remedy | • Check the logic of the SLP function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 4625 / A 4626 |
|---|---|
| Alarm message | SLP1 teach in Status error |
| Cause | SET and QUIT input have a faulty switching sequence |
| Remedy | • Check input configuration<br>• Check switching sequence |

| Alarm code | A 4627 / A 4628 |
|---|---|
| Alarm message | SLP2 teach in Status error |
| Cause | SET and QUIT input have a faulty switching sequence |
| Remedy | • Check input configuration<br>• Check switching sequence |

| Alarm code | A 4629 / A 4630 |
|---|---|
| Alarm message | SLP3 teach in Status error |
| Cause | SET and QUIT input have a faulty switching sequence |
| Remedy | • Check input configuration<br>• Check switching sequence |

| Alarm code | A 4631 / A 4632 |
|---|---|
| Alarm message | SLP4 teach in Status error |
| Cause | SET and QUIT input have a faulty switching sequence |
| Remedy | • Check input configuration<br>• Check switching sequence |

| Alarm code | **A 4633 / A 4634** |
|---|---|
| Alarm message | SLP5 teach in Status error |
| Cause | SET and QUIT input have a faulty switching sequence |
| Remedy | • Check input configuration<br>• Check switching sequence |

| Alarm code | **A 4635 / A 4636** |
|---|---|
| Alarm message | SLP6 teach in Status error |
| Cause | SET and QUIT input have a faulty switching sequence |
| Remedy | • Check input configuration<br>• Check switching sequence |

| Alarm code | **A 4637 / A 4638** |
|---|---|
| Alarm message | SLP7 teach in Status error |
| Cause | SET and QUIT input have a faulty switching sequence |
| Remedy | • Check input configuration<br>• Check switching sequence |

| Alarm code | **A 4639 / A 4640** |
|---|---|
| Alarm message | SLP8 teach in Status error |
| Cause | SET and QUIT input and have a faulty switching sequence |
| Remedy | • Check input configuration<br>• Check switching sequence |

| Alarm code | **A 4641 / A 4642** |
|---|---|
| Alarm message | SLP9 teach in Status error |
| Cause | SET and QUIT input and have a faulty switching sequence |
| Remedy | • Check input configuration<br>• Check switching sequence |

| Alarm code | **A 4643 / A 4644** |
|---|---|
| Alarm message | SLP10 teach in Status error |
| Cause | SET and QUIT input and have a faulty switching sequence |
| Remedy | • Check input configuration<br>• Check switching sequence |

| Alarm code | **A 4645 / A 4646** |
|---|---|
| Alarm message | SLP11 teach in Status error |
| Cause | SET and QUIT input and have a faulty switching sequence |
| Remedy | • Check input configuration<br>• Check switching sequence |

| Alarm code | **A 4647 / A 4648** |
|---|---|
| Alarm message | SLP12 teach in Status error |
| Cause | SET and QUIT input and have a faulty switching sequence |
| Remedy | • Check input configuration<br>• Check switching sequence |

| Alarm code | **A 4649 / A 4650** |
|---|---|
| Alarm message | SLP1 Teach In position error |
| Cause | Teach In Position out of range |
| Remedy | • Check TeachIn Position<br>• Adapt configuration of SLP block to the real physics |

| Alarm code | **A 4651 / A 4652** |
|---|---|
| Alarm message | SLP2 Teach In position error |
| Cause | Teach In Position out of range |
| Remedy | • Check TeachIn Position<br>• Adapt configuration of SLP block to the real physics |

| Alarm code | **A 4653 / A 4654** |
|---|---|
| Alarm message | SLP3 Teach In position error |
| Cause | Teach In Position out of range |
| Remedy | • Check TeachIn Position<br>• Adapt configuration of SLP block to the real physics |

| Alarm code | **A 4655 / A 4656** |
|---|---|
| Alarm message | SLP4 Teach In position error |
| Cause | Teach In Position out of range |
| Remedy | • Check TeachIn Position<br>• Adapt configuration of SLP block to the real physics |

| Alarm code | **A 4657 / A 4658** |
|---|---|
| Alarm message | SLP5 Teach In position error |
| Cause | Teach In Position out of range |
| Remedy | • Check TeachIn Position<br>• Adapt configuration of SLP block to the real physics |

| Alarm code | **A 4659 / A 4660** |
|---|---|
| Alarm message | SLP6 Teach In position error |
| Cause | Teach In Position out of range |
| Remedy | • Check TeachIn Position<br>• Adapt configuration of SLP block to the real physics |

| Alarm code | A 4661 / A 4662 |
|---|---|
| Alarm message | SLP7 Teach In position error |
| Cause | Teach In Position out of range |
| Remedy | • Check TeachIn Position<br>• Adapt configuration of SLP block to the real physics |

| Alarm code | A 4663 / A 4664 |
|---|---|
| Alarm message | SLP8 Teach In position error |
| Cause | Teach In Position out of range |
| Remedy | • Check TeachIn Position<br>• Adapt configuration of SLP block to the real physics |

| Alarm code | A 4665 / A 4666 |
|---|---|
| Alarm message | SLP9 Teach In position error |
| Cause | Teach In Position out of range |
| Remedy | • Check TeachIn Position<br>• Adapt configuration of SLP block to the real physics |

| Alarm code | A 4667 / A 4668 |
|---|---|
| Alarm message | SLP10 Teach In position error |
| Cause | Teach In Position out of range |
| Remedy | • Check TeachIn Position<br>• Adapt configuration of SLP block to the real physics |

| Alarm code | A 4669 / A 4670 |
|---|---|
| Alarm message | SLP11 Teach In position error |
| Cause | Teach In Position out of range |
| Remedy | • Check TeachIn Position<br>• Adapt configuration of SLP block to the real physics |

| Alarm code | A 4671 / A 4672 |
|---|---|
| Alarm message | SLP12 Teach In position error |
| Cause | Teach In Position out of range |
| Remedy | • Check TeachIn Position<br>• Adapt configuration of SLP block to the real physics |

| Alarm code | A 4673 / A 4674 |
|---|---|
| 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<br>Check whether SOS has already actuated |

| Alarm code | A 4675 / A 4676 |
|---|---|
| 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<br>Check whether SOS has already actuated |

| Alarm code | A 4677 / A 4678 |
|---|---|
| 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<br>Check whether SOS has already actuated |

| Alarm code | A 4679 / A 4680 |
|---|---|
| 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<br>Check whether SOS has already actuated |

| Alarm code | A 4681 / A 4682 |
|---|---|
| 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<br>Check whether SOS has already actuated |

| Alarm code | A 4683 / A 4684 |
|---|---|
| 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<br>Check whether SOS has already actuated |

| Alarm code | A 4685 / A 4686 |
|---|---|
| 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<br>Check whether SOS has already actuated |

| Alarm code | A 4687 / A 4688 |
|---|---|
| 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<br>Check whether SOS has already actuated |

| Alarm code | **A 4689 / A 4690** |
|---|---|
| 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<br>Check whether SOS has already actuated |

| Alarm code | **A 4691 / A 4692** |
|---|---|
| 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<br>Check whether SOS has already actuated |

| Alarm code | **A 4693 / A 4694** |
|---|---|
| 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<br>Check whether SOS has already actuated |

| Alarm code | **A 4695 / A 4696** |
|---|---|
| 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<br>Check whether SOS has already actuated |

| Alarm code | **A 4901 / A 4902** |
|---|---|
| Alarm message | CCW and CW rotation monitoring SLI1 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLI1 are activated simultaneously |
| Remedy | • Check the logic of the SLI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | **A 4903 / A 4904** |
|---|---|
| Alarm message | CCW and CW rotation monitoring SLI2 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLI2 are activated simultaneously |
| Remedy | • Check the logic of the SLI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | **A 4905 / A 4906** |
|---|---|
| Alarm message | CCW and CW rotation monitoring SLI3 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLI3 are activated simultaneously |
| Remedy | • Check the logic of the SLI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | **A 4907 / A 4908** |
|---|---|
| Alarm message | CCW and CW rotation monitoring SLI4 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLI4 are activated simultaneously |
| Remedy | • Check the logic of the SLI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | **A 4909 / A 4910** |
|---|---|
| Alarm message | CCW and CW rotation monitoring SLI5 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLI5 are activated simultaneously |
| Remedy | • Check the logic of the SLI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | **A 4911 / A 4912** |
|---|---|
| Alarm message | CCW and CW rotation monitoring SLI6 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLI6 are activated simultaneously |
| Remedy | • Check the logic of the SLI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | **A 4913 / A 4914** |
|---|---|
| Alarm message | CCW and CW rotation monitoring SLI7 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLI7 are activated simultaneously |
| Remedy | • Check the logic of the SLI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | **A 4915 / A 4916** |
|---|---|
| Alarm message | CCW and CW rotation monitoring SLI8 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLI8 are activated simultaneously |
| Remedy | • Check the logic of the SLI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | **A 4917 / A 4918** |
|---|---|
| Alarm message | CCW and CW rotation monitoring SLI9 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLI9 are activated simultaneously |
| Remedy | • Check the logic of the SLI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | **A 4919 / A 4920** |
|---|---|
| Alarm message | CCW and CW rotation monitoring SLI10 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLI10 are activated simultaneously |
| Remedy | • Check the logic of the SLI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 4921 / A 4922 |
|---|---|
| Alarm message | CCW and CW rotation monitoring SLI11 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLI11 are activated simultaneously |
| Remedy | • Check the logic of the SLI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 4923 / A 4924 |
|---|---|
| Alarm message | CCW and CW rotation monitoring SLI12 activated at the same time |
| Cause | Multiple activation<br>CW (Clockwise) and CCW (Counter clockwise) input on function block SLI12 are activated simultaneously |
| Remedy | • Check the logic of the SLI function blocks in the application program<br>• Check the levels of the connected inputs for the application program<br>• Analyse the input and logic signals using the device function block diagnosis |

| Alarm code | A 5001 / A 5002 |
|---|---|
| Alarm message | Test deactivation of digital inputs 1...14 faulty |
| Cause | Inputs are still active after deactivation |
| Remedy | • Check wiring of digital inputs<br>• Power Cycle<br>• Replace device |

| Alarm code | A 5101 / A 5102 |
|---|---|
| Alarm message | Pulse fault Input.1 on CPU board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5103 / A 5104 |
|---|---|
| Alarm message | Pulse fault Input.2 on CPU board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5105 / A 5106 |
|---|---|
| Alarm message | Pulse fault Input.3 on CPU board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5107 / A 5108 |
|---|---|
| Alarm message | Pulse fault Input.4 on CPU board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5109 / A 5110 |
|---|---|
| Alarm message | Pulse fault Input.5 on CPU board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5111 / A 5112 |
|---|---|
| Alarm message | Pulse fault Input.6 on CPU board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5113 / A 5114 |
|---|---|
| Alarm message | Pulse fault Input.7 on CPU board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5115 / A 5116 |
|---|---|
| Alarm message | Pulse fault Input.8 on CPU board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5117 / A 5118 |
|---|---|
| Alarm message | Pulse fault Input.9 on CPU board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5119 / A 5120 |
|---|---|
| Alarm message | Pulse fault Input.10 on CPU board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5121 / A 5122 |
|---|---|
| Alarm message | Pulse fault Input.11 on CPU board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5123 / A 5124 |
|---|---|
| Alarm message | Pulse fault Input.12 on CPU board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5125 / A 5126 |
|---|---|
| Alarm message | Pulse fault Input.13 on CPU board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5127 / A 5128 |
|---|---|
| Alarm message | Pulse fault Input.14 on CPU board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5141 / A 5142 |
|---|---|
| Alarm message | Pulse fault Input.1 on first io extension board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5143 / A 5144 |
|---|---|
| Alarm message | Pulse fault Input.2 on first io extension board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5145 / A 5146 |
|---|---|
| Alarm message | Pulse fault Input.3 on first io extension board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5147 / A 5148 |
|---|---|
| Alarm message | Pulse fault Input.4 on first io extension board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5149 / A 5150 |
|---|---|
| Alarm message | Pulse fault Input.5 on first io extension board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5151 / A 5152 |
|---|---|
| Alarm message | Pulse fault Input.6 on first io extension board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5153 / A 5154 |
|---|---|
| Alarm message | Pulse fault Input.7 on first io extension board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5155 / A 5156 |
|---|---|
| Alarm message | Pulse fault Input.8 on first io extension board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5157 / A 5158 |
|---|---|
| Alarm message | Pulse fault Input.9 on first io extension board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5159 / A 5160 |
|---|---|
| Alarm message | Pulse fault Input.10 on first io extension board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5161 / A 5162 |
|---|---|
| Alarm message | Pulse fault Input.1 on second io extension board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5163 / A 5164 |
|---|---|
| Alarm message | Pulse fault Input.2 on second io extension board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5165 / A 5166 |
|---|---|
| Alarm message | Pulse fault Input.3 on second io extension board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5167 / A 5168 |
|---|---|
| Alarm message | Pulse fault Input.4 on second io extension board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5169 / A 5170 |
|---|---|
| Alarm message | Pulse fault Input.5 on second io extension board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5171 / A 5172 |
|---|---|
| Alarm message | Pulse fault Input.6 on second io extension board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5173 / A 5174 |
|---|---|
| Alarm message | Pulse fault Input.7 on second io extension board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5175 / A 5176 |
|---|---|
| Alarm message | Pulse fault Input.8 on second io extension board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5177 / A 5178 |
|---|---|
| Alarm message | Pulse fault Input.9 on second io extension board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 5179 / A 5180 |
|---|---|
| Alarm message | Pulse fault Input.10 on second io extension board |
| Cause | Unexpected status of pulse input |
| Remedy | • Check wiring of digital inputs<br>• Check configuration of digital inputs |

| Alarm code | A 6001 / A 6002 |
|---|---|
| Alarm message | Digital input Test |
| Cause | The input failure on the first IO extension board. |
| Remedy | • The input diagnoses caused this error<br>• Check configuration of digital inputs |

| Alarm code | A 6003 / A 6004 |
|---|---|
| Alarm message | Digital input Test |
| Cause | The input failure on the second IO extension board. |
| Remedy | • The input diagnoses caused this error<br>• Check configuration of digital inputs |

| Alarm code | A 6009 / A 6010 |
|---|---|
| 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 | • Check 24V input voltage of all OSSD inputs<br>• Power Reset |

| Alarm code | A 6011 / A 6012 |
|---|---|
| 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 | • Check 24V input voltage of all OSSD inputs<br>• Power Reset |

| Alarm code | A 6701 / A 6702 |
|---|---|
| Alarm message | Timeout fault MET |
| Cause | Input unit with time supervision faulty |
| Remedy | • Check the wiring of the input unit<br>• Check the type of the Input element<br>• Input element faulty |

| Alarm code | A 7601 / A 7602 |
| --- | --- |
| Alarm message | Invalid FSoE command |
| Cause | Wrong FSoE configuration |
| Remedy | • Check FSoE configuration |

| Alarm code | A 7603 / A 7604 |
| --- | --- |
| Alarm message | Unknown FSoE command |
| Cause | Wrong FSoE configuration |
| Remedy | • Check FSoE configuration |

| Alarm code | A 7605 / A 7606 |
| --- | --- |
| Alarm message | Invalid connection ID |
| Cause | Wrong FSoE configuration |
| Remedy | • Check FSoE configuration |

| Alarm code | A 7607 / A 7608 |
| --- | --- |
| Alarm message | Invalid CRC |
| Cause | Wrong FSoE configuration |
| Remedy | • Check FSoE configuration |

| Alarm code | A 7609 / A 7610 |
| --- | --- |
| Alarm message | Watchdog expired |
| Cause | Wrong FSoE configuration |
| Remedy | • Check FSoE configuration |

| Alarm code | A 7611 / A 7612 |
| --- | --- |
| Alarm message | Invalid slave address |
| Cause | Wrong FSoE configuration |
| Remedy | • Check FSoE configuration |

| Alarm code | A 7613 / A 7614 |
| --- | --- |
| Alarm message | Invalid process data |
| Cause | Wrong FSoE configuration |
| Remedy | • Check FSoE configuration |

| Alarm code | A 7615 / A 7616 |
| --- | --- |
| Alarm message | Invalid parameter data length communication |
| Cause | Wrong FSoE configuration |
| Remedy | • Check FSoE configuration |

| Alarm code | A 7617 / A 7618 |
| --- | --- |
| Alarm message | Invalid watchdog timeout |
| Cause | Wrong FSoE configuration |
| Remedy | • Check FSoE configuration |

| Alarm code | A 7619 / A 7620 |
|---|---|
| Alarm message | Invalid parameter data length application |
| Cause | Wrong FSoE configuration |
| Remedy | • Check FSoE configuration |

| Alarm code | A 7621 / A 7622 |
|---|---|
| Alarm message | Invalid parameter data application |
| Cause | Wrong FSoE configuration |
| Remedy | • Check FSoE configuration |

| Alarm code | A 7631 / A 7632 |
|---|---|
| Alarm message | Internal FSoE Master Error |
| Cause | Wrong FSoE configuration |
| Remedy | • Check FSoE configuration |

| Alarm code | A 7633 / A 7634 |
|---|---|
| Alarm message | Invalid FSoE Master instance |
| Cause | Wrong FSoE configuration |
| Remedy | • Check FSoE configuration |

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

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

| Alarm code | A 9205 / A 9206 |
|---|---|
| Alarm message | SARC calculation error block "ADD" |
| Cause | Wrong SARC block calculation |
| Remedy | • Check SARC configuration data or application |

| Alarm code | A 9207 / A 9208 |
|---|---|
| Alarm message | SARC calculation error block "DIV" |
| Cause | Wrong SARC block calculation |
| Remedy | • Check SARC configuration data or application |

| Alarm code | A 9209 / A 9210 |
|---|---|
| Alarm message | SARC calculation error block "SQRT" |
| Cause | Wrong SARC block calculation |
| Remedy | • Check SARC configuration data or application |

| Alarm code | A 9211 / A 9212 |
|---|---|
| Alarm message | SARC calculation error block "SIN" |
| Cause | Wrong SARC block calculation |
| Remedy | • Check SARC configuration data or application |

| Alarm code | A 9213 / A 9214 |
|---|---|
| Alarm message | SARC calculation error block "ASIN" |
| Cause | Wrong SARC block calculation |
| Remedy | • Check SARC configuration data or application |

| Alarm code | A 9215 / A 9216 |
|---|---|
| Alarm message | SARC calculation error block "COS" |
| Cause | Wrong SARC block calculation |
| Remedy | • Check SARC configuration data or application |

| Alarm code | A 9217 / A 9218 |
|---|---|
| Alarm message | SARC calculation error block "ACOS" |
| Cause | Wrong SARC block calculation |
| Remedy | • Check SARC configuration data or application |

| Alarm code | A 9219 / A 9220 |
|---|---|
| Alarm message | SARC calculation error block "TAN" |
| Cause | Wrong SARC block calculation |
| Remedy | • Check SARC configuration data or application |

| Alarm code | A 9221 / A 9222 |
|---|---|
| Alarm message | SARC calculation error block "ATAN" |
| Cause | Wrong SARC block calculation |
| Remedy | • Check SARC configuration data or application |

| Alarm code | A 9223 / A 9224 |
|---|---|
| Alarm message | SARC calculation error block "MMUL" |
| Cause | Wrong SARC block calculation |
| Remedy | • Check SARC configuration data or application |

| Alarm code | A 9225 / A 9226 |
|---|---|
| Alarm message | SARC calculation error block "LD" |
| Cause | Wrong assignment to block |
| Remedy | • Check SARC configuration data or application |

| Alarm code | A 9227 / A 9228 |
|---|---|
| Alarm message | SARC calculation error block "ST" |
| Cause | Wrong assignment to block |
| Remedy | • Check SARC configuration data or application |

| Alarm code | **A 9231 / A 9232** |
|---|---|
| Alarm message | Different virtual speed calculated |
| Cause | Wrong SARC calculation |
| Remedy | • Check SARC configuration data or application |

| Alarm code | **A 9233 / A 9234** |
|---|---|
| Alarm message | Different virtual position calculated |
| Cause | Wrong SARC calculation |
| Remedy | • Check SARC configuration data or application |

| Alarm code | **A 9241 / A 9242** |
|---|---|
| Alarm message | Calculated virtual speed out of range |
| Cause | Wrong SARC calculation |
| Remedy | • Check SARC configuration data or application |

| Alarm code | **A 9251 / A 9252** |
|---|---|
| Alarm message | SARC calculation error block "MUL" |
| Cause | Wrong assignment to block |
| Remedy | • Check SARC configuration data or application |

| Alarm code | **A 9253 / A 9254** |
|---|---|
| Alarm message | SARC calculation error block "ABS" |
| Cause | Wrong assignment to block |
| Remedy | • Check SARC configuration data or application |

| Alarm code | **A 9255 / A 9256** |
|---|---|
| Alarm message | SARC calculation error block "NEG" |
| Cause | Wrong assignment to block |
| Remedy | • Check SARC configuration data or application |

| Alarm code | **A 9261 / A 9262** |
|---|---|
| Alarm message | Virtual speed axis0 out of configured max. speed range |
| Cause | Virtual speed out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | **A 9263 / A 9264** |
|---|---|
| Alarm message | Virtual speed axis1 out of configured max. speed range |
| Cause | Virtual speed out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | **A 9265 / A 9266** |
|---|---|
| Alarm message | Virtual speed axis2 out of configured max. speed range |
| Cause | Virtual speed out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | A 9267 / A 9268 |
|---|---|
| Alarm message | Virtual speed axis3 out of configured max. speed range |
| Cause | Virtual speed out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | A 9269 / A 9270 |
|---|---|
| Alarm message | Virtual speed axis4 out of configured max. speed range |
| Cause | Virtual speed out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | A 9271 / A 9272 |
|---|---|
| Alarm message | Virtual speed axis5 out of configured max. speed range |
| Cause | Virtual speed out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | A 9273 / A 9274 |
|---|---|
| Alarm message | Virtual speed axis6 out of configured max. speed range |
| Cause | Virtual speed out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | A 9275 / A 9276 |
|---|---|
| Alarm message | Virtual speed axis7 out of configured max. speed range |
| Cause | Virtual speed out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | A 9277 / A 9278 |
|---|---|
| Alarm message | Virtual speed axis8 out of configured max. speed range |
| Cause | Virtual speed out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | A 9279 / A 9280 |
|---|---|
| Alarm message | Virtual speed axis9 out of configured max. speed range |
| Cause | Virtual speed out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | A 9281 / A 9282 |
|---|---|
| Alarm message | Virtual speed axis10 out of configured max. speed range |
| Cause | Virtual speed out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | A 9283 / A 9284 |
|---|---|
| Alarm message | Virtual speed axis11 out of configured max. speed range |
| Cause | Virtual speed out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | **A 9285 / A 9286** |
|---|---|
| Alarm message | Virtual speed axis12 out of configured max. speed range |
| Cause | Virtual speed out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | **A 9287 / A 9288** |
|---|---|
| Alarm message | Virtual speed axis13 out of configured max. speed range |
| Cause | Virtual speed out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | **A 9289 / A 9290** |
|---|---|
| Alarm message | Virtual speed axis14 out of configured max. speed range |
| Cause | Virtual speed out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | **A 9291 / A 9292** |
|---|---|
| Alarm message | Virtual speed axis15 out of configured max. speed range |
| Cause | Virtual speed out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | **A 9293 / A 9294** |
|---|---|
| Alarm message | Virtual speed axis16 out of configured max. speed range |
| Cause | Virtual speed out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | **A 9295 / A 9296** |
|---|---|
| Alarm message | Virtual speed axis17 out of configured max. speed range |
| Cause | Virtual speed out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | **A 9321 / A 9322** |
|---|---|
| Alarm message | Virtual position axis0 out of configured measuring length |
| Cause | Virtual position out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | **A 9323 / A 9324** |
|---|---|
| Alarm message | Virtual position axis1 out of configured measuring length |
| Cause | Virtual position out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | **A 9325 / A 9326** |
|---|---|
| Alarm message | Virtual position axis2 out of configured measuring length |
| Cause | Virtual position out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | A 9327 / A 9328 |
|---|---|
| Alarm message | Virtual position axis3 out of configured measuring length |
| Cause | Virtual position out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | A 9329 / A 9330 |
|---|---|
| Alarm message | Virtual position axis4 out of configured measuring length |
| Cause | Virtual position out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | A 9331 / A 9332 |
|---|---|
| Alarm message | Virtual position axis5 out of configured measuring length |
| Cause | Virtual position out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | A 9333 / A 9334 |
|---|---|
| Alarm message | Virtual position axis6 out of configured measuring length |
| Cause | Virtual position out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | A 9335 / A 9336 |
|---|---|
| Alarm message | Virtual position axis7 out of configured measuring length |
| Cause | Virtual position out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | A 9337 / A 9338 |
|---|---|
| Alarm message | Virtual position axis8 out of configured measuring length |
| Cause | Virtual position out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | A 9339 / A 9340 |
|---|---|
| Alarm message | Virtual position axis9 out of configured measuring length |
| Cause | Virtual position out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | A 9341 / A 9342 |
|---|---|
| Alarm message | Virtual position axis10 out of configured measuring length |
| Cause | Virtual position out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | A 9343 / A 9344 |
|---|---|
| Alarm message | Virtual position axis11 out of configured measuring length |
| Cause | Virtual position out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | **A 9345 / A 9346** |
|---|---|
| Alarm message | Virtual position axis12 out of configured measuring length |
| Cause | Virtual position out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | **A 9347 / A 9348** |
|---|---|
| Alarm message | Virtual position axis13 out of configured measuring length |
| Cause | Virtual position out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | **A 9349 / A 9350** |
|---|---|
| Alarm message | Virtual position axis14 out of configured measuring length |
| Cause | Virtual position out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | **A 9351 / A 9352** |
|---|---|
| Alarm message | Virtual position axis15 out of configured measuring length |
| Cause | Virtual position out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | **A 9353 / A 9354** |
|---|---|
| Alarm message | Virtual position axis16 out of configured measuring length |
| Cause | Virtual position out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | **A 9355 / A 9356** |
|---|---|
| Alarm message | Virtual position axis17 out of configured measuring length |
| Cause | Virtual position out of configured range |
| Remedy | • Check configuration of virtual axis |

| Alarm code | **A 9417 (Internal)** |
|---|---|
| Fault message | Invalid SRA parameter from Safeplc received. The SRA parameter length must not be zero |
| Cause | Faulty firmware |
| Remedy | • Update firmware |

| Alarm code | **A 9419 (Internal)** |
|---|---|
| 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

| Fatal Error Code | F 1001/ F 1002 |
|---|---|
| Fault message | Configuration data were loaded faultily into the supervision device |
| Cause | • Connection fault during the download of the program<br>• Transmission of wrong or incomplete binary file |
| Remedy | • Send configuration data again<br>• Check tooling connection<br>• Power Cycle |

| Fatal Error Code | F 1003 / F1004 |
|---|---|
| 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 | • Check FW Version and Version of the application software<br>• Configured device with released application software<br>• Power Cycle |

| Fatal Error Code | F 1007 / F1008 |
|---|---|
| Fault message | Device has not been programmed with the correct programming interface |
| Cause | • A wrong device type was selected during programming<br>• Binary data from different device type were used to send |
| Remedy | • Select the correct device type before programming the device<br>• Select the necessary device variant according to your hardware requirement |

| Fatal Error Code | F 1311 / F 1312 (Internal) |
|---|---|
| Error message | Error while erasing the configuration flash |
| Cause | - |
| Remedy | • Check FW Version and Version of the application software<br>• Send the configuration again<br>• Power Cycle<br>• Replace device |

| Fatal Error Code | F 1401 / F 1402 (Internal) |
|---|---|
| Error message | Test counter CRC config data |
| Cause | - |
| Remedy | • Power Cycle<br>• Replace device |

| Fatal Error Code | F 1403 / F 1404 |
|---|---|
| Error message | CRC of configuration data invalid! |
| Cause | Configuration data transmitted incorrectly |
| Remedy | • Check FW Version and Version of the application software<br>• Re-compile program<br>• Re-transmit configuration to device<br>• Power Cycle |

| Fatal Error Code | F 1409 / F 1410 |
|---|---|
| Error message | CRC of PLC program invalid (AWL list) |
| Cause | • Programming software does not support connected hardware<br>• Error transmitting configuration |
| Remedy | • Check version of programming software<br>• Check FW Version and Version of the application software<br>• Re-Transmit configuration data |

| Fatal Error Code | F 1411 / F 1412 |
|---|---|
| Error message | Configuration data differences in System A and B |
| Cause | Error transmitting configuration |
| Remedy | • Re-Transmit configuration data<br>• Power Cycle |

| Fatal Error Code | F 1413 / F 1414 (Internal) |
|---|---|
| Fault message | Error sequentially calculating the CRC's configuration data |
| Cause | Error configuration crc test length |
| Remedy | • Re-Transmit configuration data<br>• Power Cycle |

| Fatal Error Code | F 1415 / F 1416 |
|---|---|
| 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 |

| Fatal Error Code | F 1417 / F 1418 |
|---|---|
| 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 |

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

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

| Fatal Error Code | F 1501 / F 1502 (Internal) |
|---|---|
| Error message | Firmware parameter CRC test counter |
| Cause | - |
| Remedy | • Power Cycle<br>• Replace device |

| Fatal Error Code | F 1503 / F 1504 (Internal) |
|---|---|
| Error message | Wrong firmware parameter CRC |
| Cause | - |
| Remedy | • Power Cycle<br>• Replace device |

| Fatal Error Code | F 1505 / F 1506 (Internal) |
|---|---|
| Error message | Error while sending firmware parameter to CPU B |
| Cause | - |
| Remedy | • Power Cycle<br>• Replace device |

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

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

| Fatal Error Code | F 1515 / F 1516 (Internal) |
|---|---|
| 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.<br>• Check FRAM Hardware. |

| Fatal Error Code | F 1520 - F 1524 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1525 - F 1530 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1531 - F 1536 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1540 - F 1554 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1555 - F 1564 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1565 - F 1574 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1575 - F 1584 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1585 - F 1599 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1601 - F 1614 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1615 - F 1629 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1630 - F 1644 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1645 - F 1659 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1660 - F 1669 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1670 - F 1679 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1680 - F 1689 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1690 - F 1699 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1700 - F 1709 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1710 - F 1719 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1720 - F 1729 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1730 - F 1739 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1740 - F 1749 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1750 - F 1759 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1760 - F 1769 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1770 - F 1794 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1795 - F 1819 (Internal) | |
|---|---|---|
| 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 Abschaltschwelle_pos exceeded |
| | 1805 | Maximum values of Abschaltschwelle_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. | |

| Fatal Error Code | F 1820 - F 1844 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1845 - F 1859 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1860 - F 1869 (Internal) | |
|---|---|---|
| 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. | |

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

| Fatal Error Code | F 1905 - F 1924 (Internal) | |
|---|---|---|
| Error message | Range check error of configuration data FBUS. | |
| Cause | 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 |
| | 1920 | Not used |
| | 1921 | Not used |
| | 1922 | Not used |
| | 1923 | Slave address is not unique |
| | 1924 | Connection ID is not unique |
| Remedy | • Check configuration data and transfer them again. | |

| Fatal Error Code | F 1935 - F 1949 (Internal) | |
|---|---|---|
| Error message | Range check error of configuration data FDataExchange. | |
| Cause | 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 |
| Remedy | • Check configuration data and transfer them again. | |

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

| Fatal Error Code | F 1955 - F 1959 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1960 - F 1969 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1970 - F 1974 (Internal) | |
|---|---|---|
| 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 | Not used |
| | 1974 | Not used |
| Remedy | • Check configuration data and transfer them again. | |

| Fatal Error Code | F 1975 - F 1984 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1985 - F 1997 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 1998 - F 1999 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 2001 / F 2002 |
|---|---|
| Error message | CRC of DPR cross communication CPU A-B wrong |
| Cause | Interference on DPR cross communication between both CPUs |
| Remedy | • Check wiring on device<br>• Check EMC requirements<br>• Power Cycle<br>• Replace device |

| Fatal Error Code | F 2003 / F 2004 |
|---|---|
| Error message | Timeout during transmission of configurations and firmware data |
| Cause | Interference on DPR cross communication between both CPUs |
| Remedy | • Check wiring on device<br>• Check EMC requirements<br>• Power Cycle<br>• Replace device |

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

| Fatal Error Code | F 2019 / F 2020 (Internal) |
|---|---|
| Error message | Timeout at transfer of receive data |
| Cause | Wrong transfer of system data |
| Remedy | • Replace system |

| Fatal Error Code | F 2021 (Internal) |
|---|---|
| Error message | Timeout during write access to FRAM |
| Cause | Signal wires to FRAM are faulty |
| Remedy | • Check Hardware of device |

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

| Fatal Error Code | F 2230 - F 2244 (Internal) | |
|---|---|---|
| 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/ measuring length 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. | |

| Fatal Error Code | F 2245 - F 2259 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 2260 - F 2269 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 2270 - F 2279 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | F 2280 - F 2284 (Internal) | |
|---|---|---|
| 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. | |

| Fatal Error Code | **F 2285 - F 2289 (Internal)** | |
|---|---|---|
| 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. | |

| Fatal Error Code | **F 2290 - F 2299 (Internal)** | |
|---|---|---|
| Error message | Range check error of configuration data SARC. | |
| Cause | 2290 | ClassID invalid |
| | 2291 | Length 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. | |

| Fatal Error Code | **F 2403 (Internal)** |
|---|---|
| Error message | Pointer error at transfer of configuration data |
| Cause | Size of configuration data doesn't match |
| Remedy | • Check firmware |

| Fatal Error Code | **F 3001 / F 3002 (Internal)** |
|---|---|
| Error message | Ticker sync error |
| Cause | - |
| Remedy | • Check wiring on device<br>• Check EMC requirements<br>• Power Cycle<br>• Replace device |

| Fatal Error Code | **F 3201 / F 3202** |
|---|---|
| Fault message | Processor voltage 2.5V outside defined range |
| Cause | • Supply voltage for module not correct!<br>• Component fault in module |
| Remedy | • Check device supply voltage!<br>• Switch device off/on. |

| Fatal Error Code | **F 3203** |
|---|---|
| Fault message | Supply voltage 24V module faulty. |
| Cause | • Supply voltage for module not correct!<br>• Component fault in module |
| Remedy | • Check device supply voltage!<br>• Switch device off/on. |

| Fatal Error Code | F 3217 / F 3218 |
|---|---|
| Error message | Internal supply voltage 3.3V incorrect. |
| Cause | • Supply voltage of assembly group incorrect!<br>• Component error in assembly group |
| Remedy | • Check device supply voltage!<br>• Switch off/on device. |

| Fatal Error Code | F 3241 / F 3242 |
|---|---|
| Error message | Internal supply voltage 1.5V incorrect. |
| Cause | • Supply voltage of assembly group incorrect!<br>• Component error in assembly group |
| Remedy | • Check device supply voltage!<br>• Switch off/on device. |

| Fatal Error Code | F 3243 / F 3244 |
|---|---|
| Error message | Internal supply voltage 1.2V incorrect. |
| Cause | • Supply voltage of assembly group incorrect!<br>• Component error in assembly group |
| Remedy | • Check device supply voltage!<br>• Switch off/on device. |

| Fatal Error Code | F 3245 / F 3246 |
|---|---|
| Error message | Internal supply voltage VDDIM incorrect. |
| Cause | • Supply voltage of assembly group incorrect!<br>• Component error in assembly group |
| Remedy | • Check device supply voltage!<br>• Switch off/on device. |

| Fatal Error Code | F 3249 / F 3250 |
|---|---|
| Error message | Internal supply voltage 5.0V incorrect. |
| Cause | • Supply voltage of assembly group incorrect!<br>• Component error in assembly group |
| Remedy | • Check device supply voltage!<br>• Switch off/on device. |

| Fatal Error Code | F 3251 / F 3252 |
|---|---|
| Error message | Supply voltage 24V of first IO extension board faulty. |
| Cause | • Supply voltage for module not correct!<br>• Component fault in module |
| Remedy | • Check device supply voltage!<br>• Switch device off/on. |

| Fatal Error Code | F 3253 / F 3254 |
|---|---|
| Error message | Supply voltage 24V of second IO extension board faulty. |
| Cause | • Supply voltage for module not correct!<br>• Component fault in module |
| Remedy | • Check device supply voltage!<br>• Switch device off/on. |

| Fatal Error Code | F 3603 / F 3604 |
|---|---|
| Fault message | Faulty switching of relay K1 |
| Cause | Internal relay activation incorrect |
| Remedy | • Check output wiring of device<br>• Check environmental conditions of device<br>• Power Cycle<br>• Replace Device |

| Fatal Error Code | F 3605 / F 3606 |
|---|---|
| Fault message | Faulty switching of relay K2 |
| Cause | Internal relay activation incorrect |
| Remedy | • Check output wiring of device<br>• Check environmental conditions of device<br>• Power Cycle<br>• Replace Device |

| Fatal Error Code | F 3609 |
|---|---|
| Fault message | Faulty switching of "0V" driver DO1_L |
| Cause | Switching status output incorrect |
| Remedy | • Check output wiring of device<br>• Check wiring for short circuit<br>• Power Cycle<br>• Replace Device |

| Fatal Error Code | F 3610 |
|---|---|
| Fault message | Faulty switching of "24V" driver DO1_H |
| Cause | Switching status output incorrect |
| Remedy | • Check output wiring of device<br>• Check wiring for short circuit<br>• Power Cycle<br>• Replace Device |

| Fatal Error Code | F 3611 |
|---|---|
| Fault message | Faulty switching of "0V" driver DO2_L |
| Cause | Switching status output incorrect |
| Remedy | • Check output wiring of device<br>• Check wiring for short circuit<br>• Power Cycle<br>• Replace Device |

| Fatal Error Code | F 3612 |
|---|---|
| Fault message | Faulty switching of "24V" driver DO2_H |
| Cause | Switching status output incorrect |
| Remedy | • Check output wiring of device<br>• Check wiring for short circuit<br>• Power Cycle<br>• Replace Device |

| Fatal Error Code | **F 3613** |
|---|---|
| Fault message | Faulty switching of "0V" driver DO1_L |
| Cause | Switching status output incorrect |
| Remedy | • Check output wiring of device<br>• Check wiring for short circuit<br>• Power Cycle<br>• Replace Device |

| Fatal Error Code | **F 3614** |
|---|---|
| Fault message | Faulty testing of "24V" driver DO1_H |
| Cause | Switching status output incorrect |
| Remedy | • Check output wiring of device<br>• Check wiring for short circuit<br>• Power Cycle<br>• Replace Device |

| Fatal Error Code | **F 3615** |
|---|---|
| Fault message | Faulty testing of "0V" driver DO2_L |
| Cause | Switching status output incorrect |
| Remedy | • Check output wiring of device<br>• Check wiring for short circuit<br>• Power Cycle<br>• Replace Device |

| Fatal Error Code | **F 3616** |
|---|---|
| Fault message | Faulty testing of "24V" driver DO2_H |
| Cause | Switching status output incorrect |
| Remedy | • Check output wiring of device<br>• Check wiring for short circuit<br>• Power Cycle<br>• Replace Device |

| Fatal Error Code | **F 3617** |
|---|---|
| Error message | Incorrect switching power switch DO1_L |
| Cause | Wrong wiring on device |
| Remedy | • Check output wiring of device<br>• Check wiring for short circuit<br>• Power Cycle<br>• Replace Device |

| Fatal Error Code | **F 3618** |
|---|---|
| Error message | Incorrect switching power switch DO1_H |
| Cause | Wrong wiring on device |
| Remedy | • Check output wiring of device<br>• Check wiring for short circuit<br>• Power Cycle<br>• Replace Device |

| Fatal Error Code | F 3619 |
|---|---|
| Error message | Incorrect switching power switch DO2_L |
| Cause | Wrong wiring on device |
| Remedy | • Check output wiring of device<br>• Check wiring for short circuit<br>• Power Cycle<br>• Replace Device |

| Fatal Error Code | F 3620 |
|---|---|
| Error message | Incorrect switching power switch DO2_H |
| Cause | Wrong wiring on device |
| Remedy | • Check output wiring of device<br>• Check wiring for short circuit<br>• Power Cycle<br>• Replace Device |

| Fatal Error Code | F 3621 |
|---|---|
| Error message | Incorrect switching of NO/NC contact relay AK1 |
| Cause | Wrong wiring on device |
| Remedy | • Check output wiring of device<br>• Check wiring for short circuit<br>• Power Cycle<br>• Replace Device |

| Fatal Error Code | F 3622 |
|---|---|
| Error message | Incorrect switching of NO/NC contact relay AK2 |
| Cause | Wrong wiring on device |
| Remedy | • Check output wiring of device<br>• Check wiring for short circuit<br>• Power Cycle<br>• Replace Device |

| Fatal Error Code | F 3623 |
|---|---|
| Error message | Incorrect switching of ouputs Main switch |
| Cause | • Wrong wiring of device<br>• Short circuit |
| Remedy | • Check output wiring of device<br>• Check power supply of device<br>• Check wiring for short circuit<br>• Power Cycle<br>• Replace Device |

| Fatal Error Code | F 3624 |
|---|---|
| Error message | Error testing WD circuit during startup |
| Cause | • WD isn't triggered correctly<br>• Short circuit |
| Remedy | • Check output wiring of device<br>• Check power supply of device<br>• Power Cycle<br>• Replace Device |

| Fatal Error Code | F 3625 / F 3626 |
|---|---|
| Error message | Incorrect switching of output main switch |
| Cause | • Wrong wiring on device<br>• Short circuit |
| Remedy | • Check output wiring of device<br>• Check wiring for short circuit<br>• Power Cycle<br>• Replace Device |

| Fatal Error Code | F 3653 / F 3654 |
|---|---|
| Error message | Error at dynamic testing of Main Switch 1 of HighSide outputs 1 and 2 |
| Cause | • Wrong wiring on device (short circuit)<br>• Faulty hardware |
| Remedy | • Check wiring for short circuit<br>• Check Hardware |

| Fatal Error Code | F 3655 / F 3656 |
|---|---|
| Error message | Error at dynamic testing of Main Switch 2 of HighSide outputs 3 and 4 |
| Cause | • Wrong wiring on device (short circuit)<br>• Faulty hardware |
| Remedy | • Check wiring for short circuit<br>• Check Hardware |

| Fatal Error Code | F 3657 / F 3658 |
|---|---|
| Error message | Error at dynamic testing of HighSide 1 |
| Cause | • Wrong wiring on device (short circuit)<br>• Faulty hardware |
| Remedy | • Check wiring for short circuit<br>• Check Hardware |

| Fatal Error Code | F 3659 / F 3660 |
|---|---|
| Error message | Error at dynamic testing of HighSide 2 |
| Cause | • Wrong wiring on device (short circuit)<br>• Faulty hardware |
| Remedy | • Check wiring for short circuit<br>• Check Hardware |

| Fatal Error Code | F 3661 / F 3662 |
|---|---|
| Error message | Error at dynamic testing of HighSide 3 |
| Cause | • Wrong wiring on device (short circuit)<br>• Faulty hardware |
| Remedy | • Check wiring for short circuit<br>• Check Hardware |

| Fatal Error Code | F 3663 / F 3664 |
| --- | --- |
| Error message | Error at dynamic testing of HighSide 4 |
| Cause | • Wrong wiring on device (short circuit)<br>• Faulty hardware |
| Remedy | • Check wiring for short circuit<br>• Check Hardware |

| Fatal Error Code | F 3665 / F 3666 |
| --- | --- |
| Fault message | Static test loss of ground HighSide 2 |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check the wiring<br>• Power Cycle |

| Fatal Error Code | F 3667 / F 3668 |
| --- | --- |
| Fault message | Static test loss of ground HighSide 4 |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check the wiring<br>• Power Cycle |

| Fatal Error Code | F 3669 / F 3670 |
| --- | --- |
| Fault message | Dynamic test loss of ground HighSide 2 |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check the wiring<br>• Power Cycle |

| Fatal Error Code | F 3671 / F 3672 |
| --- | --- |
| Fault message | Dynamic test loss of ground HighSide 4 |
| Cause | • Wrong wiring (short circuit)<br>• Hardware defect |
| Remedy | • Check the wiring<br>• Power Cycle |

| Fatal Error Code | F 3701 / F 3702 (Internal) |
| --- | --- |
| Error message | Error comparing process images CPU A – CPU B |
| Cause | - |
| Remedy | • Check EMC requirements<br>• Power Cycle<br>• Replace device |

| Fatal Error Code | F 3703 / F 3704 (Internal) |
| --- | --- |
| 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 |

| Fatal Error Code | **F 3705 / F 3706 (Internal)** |
|---|---|
| Error message | Error comparing process images fastchannel CPU A – CPU B |
| Cause | - |
| Remedy | • Check EMC requirements<br>• Power Cycle<br>• Replace device |

| Fatal Error Code | **F 3707 / F 3708 (Internal)** |
|---|---|
| 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 |

| Fatal Error Code | **F 3841 / F 3842** |
|---|---|
| Error message | Dynamic test failed for HighSide1 on the first io extension board |
| Cause | The dynamic test is failed |
| Remedy | • Check the power supply<br>• Check the HW |

| Fatal Error Code | **F 3843 / F 3844** |
|---|---|
| Error message | Dynamic test failed for HighSide2 on the first io extension board |
| Cause | The dynamic test is failed |
| Remedy | • Check the power supply<br>• Check the HW |

| Fatal Error Code | **F 3845 / F 3846** |
|---|---|
| Error message | Dynamic test failed for HighSide3 on the first io extension board |
| Cause | The dynamic test is failed |
| Remedy | • Check the power supply<br>• Check the HW |

| Fatal Error Code | **F 3847 / F 3848** |
|---|---|
| Error message | Dynamic test failed for HighSide4 on the first io extension board |
| Cause | The dynamic test is failed |
| Remedy | • Check the power supply<br>• Check the HW |

| Fatal Error Code | **F 3849 / F 3850** |
|---|---|
| Error message | Dynamic test failed for HighSide5 on the first io extension board |
| Cause | The dynamic test is failed |
| Remedy | • Check the power supply<br>• Check the HW |

| Fatal Error Code | F 3851 / F 3852 |
|---|---|
| Error message | Dynamic test failed for HighSide6 on the first io extension board |
| Cause | The dynamic test is failed |
| Remedy | • Check the power supply<br>• Check the HW |

| Fatal Error Code | F 3853 / F 3854 |
|---|---|
| Error message | Dynamic test failed for HighSide 7 on the first io extension board |
| Cause | The dynamic test is failed |
| Remedy | • Check the power supply<br>• Check the HW |

| Fatal Error Code | F 3855 / F 3856 |
|---|---|
| Error message | Dynamic test failed for HighSide8 on the first io extension board |
| Cause | The dynamic test is failed |
| Remedy | • Check the power supply<br>• Check the HW |

| Fatal Error Code | F 3857 / F 3858 |
|---|---|
| Error message | Dynamic test failed for HighSide9 on the first io extension board |
| Cause | The dynamic test is failed |
| Remedy | • Check the power supply<br>• Check the HW |

| Fatal Error Code | F 3859 / F 3860 |
|---|---|
| Error message | Dynamic test failed for HighSide10 on the first io extension board |
| Cause | The dynamic test is failed |
| Remedy | • Check the power supply<br>• Check the HW |

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

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

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

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

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

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

| Fatal Error Code | **F 4501 / F 4502** |
|---|---|
| Error message | SSX Acceleration is out of range |
| Cause | SSX acceleration is generator then 2'15 |
| Remedy | • Check the safety monitoring function |

| Fatal Error Code | **F 5201 / F 5202** |
|---|---|
| Error message | Dynamic test for HighSide1 on the second io extension board |
| Cause | Dynamic test failed |
| Remedy | • Check the power supply<br>• Check the HW |

| Fatal Error Code | **F 5203 / F 5204** |
|---|---|
| Error message | Dynamic test for HighSide2 on the second io extension board |
| Cause | Dynamic test failed |
| Remedy | • Check the power supply<br>• Check the HW |

| Fatal Error Code | **F 5205 / F 5206** |
|---|---|
| Error message | Dynamic test for HighSide3 on the second io extension board |
| Cause | Dynamic test failed |
| Remedy | • Check the power supply<br>• Check the HW |

| Fatal Error Code | **F 5207 / F 5208** |
|---|---|
| Error message | Dynamic test for HighSide4 on the second io extension board |
| Cause | Dynamic test failed |
| Remedy | • Check the power supply<br>• Check the HW |

| Fatal Error Code | **F 5209 / F 5210** |
|---|---|
| Error message | Dynamic test for HighSide5 on the second io extension board |
| Cause | Dynamic test failed |
| Remedy | • Check the power supply<br>• Check the HW |

| Fatal Error Code | **F 5211 / F 5212** |
|---|---|
| Error message | Dynamic test for HighSide6 on the second io extension board |
| Cause | Dynamic test failed |
| Remedy | • Check the power supply<br>• Check the HW |

| Fatal Error Code | **F 5213 / F 5214** |
|---|---|
| Error message | Dynamic test for HighSide7 on the second io extension board |
| Cause | Dynamic test failed |
| Remedy | • Check the power supply<br>• Check the HW |

| Fatal Error Code | **F 5215 / F 5216** |
|---|---|
| Error message | Dynamic test for HighSide8 on the second io extension board |
| Cause | Dynamic test failed |
| Remedy | • Check the power supply<br>• Check the HW |

| Fatal Error Code | **F 5217 / F 5218** |
|---|---|
| Error message | Dynamic test for HighSide9 on the second io extension board |
| Cause | Dynamic test failed |
| Remedy | • Check the power supply<br>• Check the HW |

| Fatal Error Code | **F 5219 / F 5220** |
|---|---|
| Error message | Dynamic test for HighSide10 on the second io extension board |
| Cause | Dynamic test failed |
| Remedy | • Check the power supply<br>• Check the HW |

| Fatal Error Code | **F 6705 (Internal)** |
|---|---|
| Error message | Master switch status error |
| Cause | Invalid state while evaluating the master switch |
| Remedy | • Check wiring of the outputs<br>• Check the wiring of input elements<br>• Power Cycle |

| Fatal Error Code | F 6807 / F 6808 (Internal) |
| --- | --- |
| Error message | PLC timer overflow |
| Cause | • Incompatible application software<br>• On or more PLC timer values are not multiples of the cycle time |
| Remedy | • Check FW Version and Version of application software for compatibility<br>• Check every PLC timer to be a multiple of 8ms<br>• Re-transmit configuration<br>• Power Cycle |

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

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

| Fatal Error Code | F 6813 / F 6814 (Internal) |
| --- | --- |
| Error message | PLC kernel raised a fatal error |
| Cause | - |
| Remedy | • Check FW Version and Version of application software for compatibility<br>• Re-transmit configuration<br>• Power Cycle |

| Fatal Error Code | F 7001 / F 7002 (Internal) |
| --- | --- |
| Error message | Internal FSoE slave stack failure |
| Cause | Error in configuration data |
| Remedy | • Check configuration data |

| Fatal Error Code | F 7003 / F 7004 (Internal) |
| --- | --- |
| Error message | Wrong FSoE instance |
| Cause | Error in configuration data |
| Remedy | • Check configuration data |

| Fatal Error Code | F 7429 / F7430 (Intern) |
| --- | --- |
| Error message | Failure in PROFIsafe stack |
| Cause | Program counter of PROFIsafe stack wrong |
| Remedy | • check configuration<br>• Power Cycle |

| Fatal Error Code | F 8205 / F 8206 (Internal) |
| --- | --- |
| Error message | Maximum cycle length exceeded |
| Cause | Processing the application would exceed the maximum cycle time of the device |
| Remedy | • Reduce the number of used PLC operands by simplifying your program<br>• Remove unused blocks from application<br>• Power Cycle |

| Fatal Error Code | F 8207 / F 8208 (Internal) |
| --- | --- |
| Error message | Logical Program counter exceeds maximum |
| Cause | - |
| Remedy | • Re-transmit configuration to device<br>• Power Cycle |

| Fatal Error Code | F 8213 / F 8220 (Internal) |
| --- | --- |
| Error message | Runtime overflow interrupt |
| Cause | - |
| Remedy | • Re-transmit configuration to device<br>• Power Cycle |

| Fatal Error Code | F 8221 / F 8222 (Internal) |
| --- | --- |
| Error message | Maximum runtime complementary channel exceeded |
| Cause | Processing the application would exceed the maximum cycle time of the device |
| Remedy | • Reduce the number of used PLC operands by simplifying your program<br>• Remove unused blocks from application<br>• Power Cycle |

| Fatal Error Code | F 8223 / F 8224 (Internal) |
| --- | --- |
| Error message | Inconsistent logical Interrupt program counter |
| Cause | - |
| Remedy | • Re-transmit configuration to device<br>• Power Cycle |

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

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

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

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

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

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

| Fatal Error Code | F 8237 / F 8238 (Internal) |
|---|---|
| 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 |

| Fatal Error Code | F 8239 / F 8240 (Internal) |
|---|---|
| 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 |

| Fatal Error Code | F 9001 / F 9002 (Internal) |
|---|---|
| Error message | CPU self test error |
| Cause | - |
| Remedy | • Check EMC requirements<br>• Power Cycle<br>• Replace device |

| Fatal Error Code | F 9007 / F 9008 (Internal) |
|---|---|
| Error message | CPU RAM test returned with error |
| Cause | - |
| Remedy | • Check EMC requirements<br>• Power Cycle<br>• Replace device |

| Fatal Error Code | F 9009 / F 9010 (Internal) |
|---|---|
| Error message | Firmware CRC mismatch |
| Cause | - |
| Remedy | • Power Cycle<br>• Replace device |

| Fatal Error Code | F 9011 / F 9012 (Internal) |
|---|---|
| Error message | Internal stack test returned with an error |
| Cause | - |
| Remedy | • Power Cycle<br>• Replace device |

| Fatal Error Code | F 9013 (Internal) |
|---|---|
| Error message | Testaddress Galpat Test was saved incorrectly |
| Cause | Memory address for RAM Test was saved incorrectly |
| Remedy | • Check FRAM |

| Fatal Error Code | F 9015 / F 9016 (Internal) |
|---|---|
| Error message | Error CPU RAM test |
| Cause | - |
| Remedy | • Power Cycle<br>• Replace device |

| Fatal Error Code | F 9017 / F 9018 (Internal) |
|---|---|
| Error message | Error CPU register test |
| Cause | - |
| Remedy | • Power Cycle<br>• Replace device |

| Fatal Error Code | F 9019 / F 9020 (Internal) |
|---|---|
| Error message | Switch default |
| Cause | - |
| Remedy | • Power Cycle<br>• Replace device |

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

| Fatal Error Code | F 9023 / F 9024 (Internal) |
|---|---|
| Error message | Error at ECC RAM test |
| Cause | Faulty RAM |
| Remedy | • Replace CPU |

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

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

| Fatal Error Code | F 9103 / F 9104 (Internal) |
|---|---|
| Fault message | Network type for slave module undefined |
| Cause | Incorrect configuration of the network type |
| Remedy | • Check FW Version and Version of application software for compatibility<br>• Check every PLC timer to be a multiple of 8ms<br>• Re-transmit configuration<br>• Power Cycle |

| Fatal Error Code | F 9105/ F 9106 (Internal) |
|---|---|
| Fault message | Incorrect pointer monitoring |
| Cause | lculated pointer points to faulty memory area |
| Remedy | • Check FW Version and Version of application software for compatibility<br>• Power Cycle |

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

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

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

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

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

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

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

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

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

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