

Error list

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Prepared by:	A.Gebhard/H.Saeed/D. Jankowski/M. Paukner
Released by:	M.Paukner

Change history

Nr.	Chapter/Page	Date	Changed by	Version	Changes
1	All	03-01-2018	A. Gebhard	04E	Document created from error list SMX100 and German error list SCU V04E
2		22-03-2019	H. Saeed	05E	Error list from 3431 till 3484
3	ALL	26-03-2019	S. Brust	06E	Naming
4	ALL	26-03-2020	H. Saeed	07E	IO extension and new Errors.
5	ALL	04-06-2020	H. Saeed	08E	A9417 and A9419
6	All	09-08-2021	D. Jankowski/ M. Paukner	09E	SARC Errors A9205 ... A9244, A9261 ... A9296, A9321 ... A9356, F1421 ... F1424, F2270 ... F2299
7	All	16-08-2021	M. Paukner	09F	Review of SARC Errors
8	36,37	04-10-2021	M. Paukner	10E	Add alarm numbers for MUL, ABS, NEG
9	All	07-06-2022	M.Khemiri	11E	Update document, add format templates, new errors

10	All	04-03-2024	Z. Sokaria	12E	Update document
11	All, 85	06-03-2024	M.Khemiri	13E	Add Logbook codes, Update document
12	All	20-03-2024	M.Paukner	13F	Review

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1 General

1.1 Technical status

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

Firmware version **V3.1.2.21**

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
Info	Info Logbook	Info logbook, additional information about device start/stop, User requirement, alarm and fatal error	

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, — 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!

Solving the cause of the error must be preferred to muting the alarm.

2 Alarm List

Alarm Code	A 1211 / A1212
Alarm message	New Configuration file is available on the SD card
Cause	Configuration file on the device and on the SD card are not identical
Remedy	<ul style="list-style-type: none">• Start the firmware upload after confirmation alarm from front button• Check firmware update file and key file on the SD card

Alarm Code	A 1213 / A1214
Alarm message	New FW update file is available on the SD card.
Cause	New valid firmware update is available on the SD card.
Remedy	<ul style="list-style-type: none">• Start the firmware upload after confirmation alarm from front button• Check firmware update file and key file on the SD card

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

Alarm code	A 3001 / A 3002
Alarm message	Ticker error
Cause	Mismatch ticker b/w CPUA and CPUB
Remedy	<ul style="list-style-type: none">• The FW may be not correctly flashed• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Check 24V input voltage of all OSSD inputs• Power Reset

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

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

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

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

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

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

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

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

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

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

Alarm Code	A 3655 / A 3656
Alarm message	Error dynamic test Main Switch 2 of the HighSide outputs 3 and 4
Cause	<ul style="list-style-type: none">• Wrong wiring (short circuit)• Hardware defect
Remedy	<ul style="list-style-type: none">• Check wiring of the output (short circuit)• Check Hardware

Alarm Code	A 3723 / A 3724
Cause	SARC calculation time exceeded
Remedy	Faulty SARC calculation.
Alarm message	<ul style="list-style-type: none">• Configure higher cycle time• Check SARC program

Alarm Code	A 3725 / A 3726
Cause	Invalid SARC licensing
Remedy	Missing SARC license
Alarm message	<ul style="list-style-type: none">• Check SARC licensing

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Alarm code	A 4001 / A 4002
Alarm message	Anticlockwise and clockwise rotation SDI1 have been activated simultaneously
Cause	<p>Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SDI1 are activated simultaneously</p>
Remedy	<ul style="list-style-type: none"> • Check the logic of the SDI function blocks in the application program • Check the levels of the connected inputs for the application program • 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	<p>Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SDI2 are activated simultaneously</p>
Remedy	<ul style="list-style-type: none"> • Check the logic of the SDI function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SDI3 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SDI function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SDI4 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SDI function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SDI5 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SDI function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SDI6 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SDI function blocks in the application program • Check the levels of the connected inputs for the application program • 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	<ul style="list-style-type: none"> • Check the logic of the SDI function blocks in the application program • Check the levels of the connected inputs for the application program • 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	<ul style="list-style-type: none"> • Check the logic of the SDI function blocks in the application program • Check the levels of the connected inputs for the application program • 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	<ul style="list-style-type: none"> • Check the logic of the SDI function blocks in the application program • Check the levels of the connected inputs for the application program • 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	<ul style="list-style-type: none"> • Check the logic of the SDI function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SDI11 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SDI function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SDI12 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SDI function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLP1 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLP function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLP2 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLP function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLP3 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLP function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLP4 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLP function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLP5 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLP function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLP6 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLP function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLP7 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLP function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLP8 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLP function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLP10 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLP function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLP10 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLP function blocks in the application program • Check the levels of the connected inputs for the application program • Analyse the input and logic signals using the device function block diagnosis

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

Alarm code	A 4623 / A 4624
Alarm message	Monitoring range left and right of SLP12 activated at the same time
Cause	Multiple activation CW (Clockwise) and CCW (Counter clockwise) input on function block SLP12 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLP function blocks in the application program • Check the levels of the connected inputs for the application program • 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	<ul style="list-style-type: none"> • Check input configuration • 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	<ul style="list-style-type: none"> • Check input configuration • 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	<ul style="list-style-type: none"> • Check input configuration • 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	<ul style="list-style-type: none"> • Check input configuration • 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	<ul style="list-style-type: none">• Check input configuration• 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	<ul style="list-style-type: none">• Check input configuration• 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	<ul style="list-style-type: none">• Check input configuration• 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	<ul style="list-style-type: none">• Check input configuration• 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	<ul style="list-style-type: none">• Check input configuration• 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	<ul style="list-style-type: none">• Check input configuration• 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	<ul style="list-style-type: none">• Check input configuration• 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	<ul style="list-style-type: none">• Check input configuration• Check switching sequence

Alarm code	A 4649 / A 4650
Alarm message	SLP1 Teach In position error
Cause	Teach In Position out of range
Remedy	<ul style="list-style-type: none">• Check TeachIn Position• 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	<ul style="list-style-type: none">• Check TeachIn Position• 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	<ul style="list-style-type: none">• Check TeachIn Position• 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	<ul style="list-style-type: none">• Check TeachIn Position• 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	<ul style="list-style-type: none">• Check TeachIn Position• 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	<ul style="list-style-type: none">• Check TeachIn Position• 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	<ul style="list-style-type: none">• Check TeachIn Position• 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	<ul style="list-style-type: none">• Check TeachIn Position• 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	<ul style="list-style-type: none">• Check TeachIn Position• 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	<ul style="list-style-type: none">• Check TeachIn Position• 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	<ul style="list-style-type: none">• Check TeachIn Position• 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	<ul style="list-style-type: none">• Check TeachIn Position• 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	<ul style="list-style-type: none">• When using the „teach in“ function, the drive must be off• 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	<ul style="list-style-type: none">• When using the „teach in“ function, the drive must be off• 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	<ul style="list-style-type: none">• When using the „teach in“ function, the drive must be off• 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	<ul style="list-style-type: none">• When using the „teach in“ function, the drive must be off• 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	<ul style="list-style-type: none">• When using the „teach in“ function, the drive must be off• 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	<ul style="list-style-type: none">• When using the „teach in“ function, the drive must be off• 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	<ul style="list-style-type: none">• When using the „teach in“ function, the drive must be off• 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	<ul style="list-style-type: none">• When using the „teach in“ function, the drive must be off• 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	<ul style="list-style-type: none">• When using the „teach in“ function, the drive must be off• 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	<ul style="list-style-type: none">• When using the „teach in“ function, the drive must be off• 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	<ul style="list-style-type: none">• When using the „teach in“ function, the drive must be off• 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	<ul style="list-style-type: none">• When using the „teach in“ function, the drive must be off• 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLI1 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLI function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLI2 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLI function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLI3 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLI function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLI4 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLI function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLI5 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLI function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLI6 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLI function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLI7 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLI function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLI8 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLI function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLI9 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLI function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLI10 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLI function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLI11 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLI function blocks in the application program • Check the levels of the connected inputs for the application program • 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 CW (Clockwise) and CCW (Counter clockwise) input on function block SLI12 are activated simultaneously
Remedy	<ul style="list-style-type: none"> • Check the logic of the SLI function blocks in the application program • Check the levels of the connected inputs for the application program • 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	<ul style="list-style-type: none">• Check wiring of digital inputs• Power Cycle• Replace device
Alarm code	A 5101 / A 5102
Alarm message	Pulse fault Input.1 on CPU board
Cause	Unexpected status of pulse input
Remedy	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• Check wiring of digital inputs• 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	<ul style="list-style-type: none">• The input diagnoses caused this error• 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	<ul style="list-style-type: none">• The input diagnoses caused this error• 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	<ul style="list-style-type: none">• Check 24V input voltage of all OSSD inputs• 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	<ul style="list-style-type: none">• Check 24V input voltage of all OSSD inputs• Power Reset

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

Alarm code	A 7601 / A 7602
Alarm message	Invalid FSoe command
Cause	Wrong FSoe configuration
Remedy	<ul style="list-style-type: none">• Check FSoe configuration

Alarm code	A 7603 / A 7604
Alarm message	Unknown FSoe command
Cause	Wrong FSoe configuration
Remedy	<ul style="list-style-type: none">• Check FSoe configuration

Alarm code	A 7605 / A 7606
Alarm message	Invalid connection ID
Cause	Wrong FSoe configuration
Remedy	<ul style="list-style-type: none">• Check FSoe configuration

Alarm code	A 7607 / A 7608
Alarm message	Invalid CRC
Cause	Wrong FSoe configuration
Remedy	<ul style="list-style-type: none">• Check FSoe configuration

Alarm code	A 7609 / A 7610
Alarm message	Watchdog expired
Cause	Wrong FSoe configuration
Remedy	<ul style="list-style-type: none">• Check FSoe configuration

Alarm code	A 7611 / A 7612
Alarm message	Invalid slave address
Cause	Wrong FSoe configuration
Remedy	<ul style="list-style-type: none">• Check FSoe configuration

Alarm code	A 7613 / A 7614
Alarm message	Invalid process data
Cause	Wrong FSoe configuration
Remedy	<ul style="list-style-type: none">• Check FSoe configuration

Alarm code	A 7615 / A 7616
Alarm message	Invalid parameter data length communication
Cause	Wrong FSoe configuration
Remedy	<ul style="list-style-type: none">• Check FSoe configuration

Alarm code	A 7617 / A 7618
Alarm message	Invalid watchdog timeout
Cause	Wrong FSoE configuration
Remedy	<ul style="list-style-type: none">• Check FSoE configuration
Alarm code	A 7619 / A 7620
Alarm message	Invalid parameter data length application
Cause	Wrong FSoE configuration
Remedy	<ul style="list-style-type: none">• Check FSoE configuration
Alarm code	A 7621 / A 7622
Alarm message	Invalid parameter data application
Cause	Wrong FSoE configuration
Remedy	<ul style="list-style-type: none">• Check FSoE configuration
Alarm code	A 7631 / A 7632
Alarm message	Internal FSoE Master Error
Cause	Wrong FSoE configuration
Remedy	<ul style="list-style-type: none">• Check FSoE configuration
Alarm code	A 7633 / A 7634
Alarm message	Invalid FSoE Master instance
Cause	Wrong FSoE configuration
Remedy	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Wrong timeout time• 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	<ul style="list-style-type: none">• Restart the system
Alarm code	A 9205 / A 9206
Alarm message	SARC calculation error block "ADD"
Cause	Wrong SARC block calculation
Remedy	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">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	<ul style="list-style-type: none">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	<ul style="list-style-type: none">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	<ul style="list-style-type: none">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	<ul style="list-style-type: none">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	<ul style="list-style-type: none">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	<ul style="list-style-type: none">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	<ul style="list-style-type: none">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	<ul style="list-style-type: none">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	<ul style="list-style-type: none">Check SARC configuration data or application
Alarm code	A 9231 / A 9232
Alarm message	Different virtual speed calculated
Cause	Wrong SARC calculation
Remedy	<ul style="list-style-type: none">Check SARC configuration data or application
Alarm code	A 9233 / A 9234
Alarm message	Different virtual position calculated
Cause	Wrong SARC calculation
Remedy	<ul style="list-style-type: none">Check SARC configuration data or application
Alarm Code	A 9235 / A 9236
Alarm message	The virtual analog value deviates from the calculated value
Cause	Incorrect SARC calculation
Remedy	<ul style="list-style-type: none">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	<ul style="list-style-type: none">Check SARC configuration data or application
Alarm code	A 9243 / A 9244
Alarm message	Calculated virtual speed outside of the range.
Cause	Wrong SARC calculation
Remedy	<ul style="list-style-type: none">Check SARC configuration data or application
Alarm code	A 9245 / A 9246
Alarm message	Calculated virtual analog value outside of the range.
Cause	Wrong SARC calculation
Remedy	<ul style="list-style-type: none">Check SARC configuration data or application
Alarm code	A 9247 / A 9248
Alarm message	Calculated value outside of the matrix
Cause	Wrong SARC calculation
Remedy	<ul style="list-style-type: none">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	<ul style="list-style-type: none">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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Check SARC configuration data or application
Alarm Code	A 9257 / A 9258
Alarm message	SARC calculation error in block 'IF'.
Cause	Incorrect assignment to the block
Remedy	<ul style="list-style-type: none">• Check SARC configuration data or application.
Alarm Code	A 9259 / A 9260
Alarm message	SARC calculation error in block "MUX"
Cause	Incorrect assignment to the block
Remedy	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Check configuration of virtual axis
Alarm code	A 9297 / A 9298
Alarm message	Virtual speed of Axis 18 out of configured max. speed range
Cause	Virtual speed outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.
Alarm code	A 9299 / A 9300
Alarm message	Virtual speed of Axis 19 out of configured max. speed range
Cause	Virtual speed outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.
Alarm code	A 9301 / A 9302
Alarm message	Virtual speed of Axis 20 out of configured max. speed range
Cause	Virtual speed outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.
Alarm code	A 9303 / A 9304
Alarm message	Virtual speed of Axis 21 out of configured max. speed range
Cause	Virtual speed outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.
Alarm code	A 9305 / A 9306
Alarm message	Virtual speed of Axis 22 out of configured max. speed range
Cause	Virtual speed outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9307 / A 9308
Alarm message	Virtual speed of Axis 23 out of configured max. speed range
Cause	Virtual speed outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.
Alarm code	A 9309 / A 9310
Alarm message	Virtual speed of Axis 24 out of configured max. speed range
Cause	Virtual speed outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.
Alarm code	A 9311 / A 9312
Alarm message	Virtual speed of Axis 25 out of configured max. speed range
Cause	Virtual speed outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.
Alarm code	A 9313 / A 9314
Alarm message	Virtual speed of Axis 26 out of configured max. speed range
Cause	Virtual speed outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.
Alarm code	A 9315 / A 9316
Alarm message	Virtual speed of Axis 27 out of configured max. speed range
Cause	Virtual speed outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.
Alarm code	A 9317 / A 9318
Alarm message	Virtual speed of Axis 28 out of configured max. speed range
Cause	Virtual speed outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.
Alarm code	A 9319 / A 9320
Alarm message	Virtual speed of Axis 29 out of configured max. speed range
Cause	Virtual speed outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Check configuration of virtual axis
Alarm code	A 9357 / A 9358
Alarm message	Virtual position of Axis 18 outside the configured measurement range.
Cause	Virtual position outside the configured range.
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.
Alarm code	A 9359 / A 9360
Alarm message	Virtual position of Axis 19 outside the configured measurement range.
Cause	Virtual position outside the configured range.
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9361 / A 9362
Alarm message	Virtual position of Axis 20 outside the configured measurement range.
Cause	Virtual position outside the configured range.
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.
Alarm code	A 9363 / A 9364
Alarm message	Virtual position of Axis 21 outside the configured measurement range.
Cause	Virtual position outside the configured range.
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.
Alarm code	A 9365 / A 9366
Alarm message	Virtual position of Axis 22 outside the configured measurement range.
Cause	Virtual position outside the configured range.
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.
Alarm code	A 9367 / A 9368
Alarm message	Virtual position of Axis 23 outside the configured measurement range.
Cause	Virtual position outside the configured range.
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.
Alarm code	A 9369 / A 9370
Alarm message	Virtual position of Axis 24 outside the configured measurement range.
Cause	Virtual position outside the configured range.
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.
Alarm code	A 9371 / A 9372
Alarm message	Virtual position of Axis 25 outside the configured measurement range.
Cause	Virtual position outside the configured range.
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.
Alarm code	A 9373 / A 9374
Alarm message	Virtual position of Axis 26 outside the configured measurement range.
Cause	Virtual position outside the configured range.
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.
Alarm code	A 9375 / A 9376
Alarm message	Virtual position of Axis 27 outside the configured measurement range.
Cause	Virtual position outside the configured range.
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9377 / A 9378
Alarm message	Virtual position of Axis 28 outside the configured measurement range.
Cause	Virtual position outside the configured range.
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9379 / A 9380
Alarm message	Virtual position of Axis 29 outside the configured measurement range.
Cause	Virtual position outside the configured range.
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9381 / A 9382
Alarm message	Virtual position of Axis 30 outside the configured measurement range.
Cause	Virtual position outside the configured range.
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9383 / A 9384
Alarm message	Virtual position of Axis 31 outside the configured measurement range.
Cause	Virtual position outside the configured range.
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9417 (Internal)
Alarm message	Invalid SRA parameter from Safeplc received. The SRA parameter length must not be zero
Cause	Faulty firmware
Remedy	<ul style="list-style-type: none">• Update firmware

Alarm code	A 9419 (Internal)
Alarm 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	<ul style="list-style-type: none">• Do not send the Faulty ack to the SCU

Alarm code	A 9451 / A 9452
Alarm message	Virtual analog value Index 0 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9453 / A 9454
Alarm message	Virtual analog value Index 1 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9454 / A 9455
Alarm message	Virtual analog value Index 2 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9456 / A 9457
Alarm message	Virtual analog value Index 3 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9458 / A 9459
Alarm message	Virtual analog value Index 4 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9461 / A 9462
Alarm message	Virtual analog value Index 5 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9463 / A 9464
Alarm message	Virtual analog value Index 6 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9465 / A 9466
Alarm message	Virtual analog value Index 7 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9467 / A 9468
Alarm message	Virtual analog value Index 8 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9469 / A 9470
Alarm message	Virtual analog value Index 9 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9471 / A 9472
Alarm message	Virtual analog value Index 10 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9473 / A 9474
Alarm message	Virtual analog value Index 11 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9475 / A 9476
Alarm message	Virtual analog value Index 12 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9477 / A 9478
Alarm message	Virtual analog value Index 13 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9479 / A 9480
Alarm message	Virtual analog value Index 14 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9481 / A 9482
Alarm message	Virtual analog value Index 15 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9483 / A 9484
Alarm message	Virtual analog value Index 16 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9485 / A 9486
Alarm message	Virtual analog value Index 17 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9487 / A 9488
Alarm message	Virtual analog value Index 18 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9489 / A 9490
Alarm message	Virtual analog value Index 19 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9491 / A 9492
Alarm message	Virtual analog value Index 20 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9493 / A 9494
Alarm message	Virtual analog value Index 21 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9495 / A 9496
Alarm message	Virtual analog value Index 22 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9497 / A 9498
Alarm message	Virtual analog value Index 23 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9499 / A 9500
Alarm message	Virtual analog value Index 24 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9501 / A 9502
Alarm message	Virtual analog value Index 25 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9503 / A 9504
Alarm message	Virtual analog value Index 26 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9505 / A 9506
Alarm message	Virtual analog value Index 27 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9507 / A 9508
Alarm message	Virtual analog value Index 28 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9509 / A 9510
Alarm message	Virtual analog value Index 29 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9511 / A 9512
Alarm message	Virtual analog value Index 30 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9513 / A 9514
Alarm message	Virtual analog value Index 31 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9601 / A 9602
Alarm message	Virtual speed value Index 30 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

Alarm code	A 9603 / A 9604
Alarm message	Virtual speed value Index 31 outside the configured measurement range.
Cause	Virtual analog value outside the configured range
Remedy	<ul style="list-style-type: none">• Check configuration of the virtual axis.

3 Fatal Error

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

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

Fatal Error Code	F 1031 / F1032
Fault message	Faulty PMT offset table within the TOC.
Cause	The PMT data is faulty.
Remedy	<ul style="list-style-type: none"> • Ensure that compatible programming software was used. • Resend the configuration to the device.

Fatal Error Code	F 1033 / F1034
Fault message	Maximum number of PMT parameters exceeded.
Cause	The number of allowable PMT parameters exceeds the maximum limit.
Remedy	<ul style="list-style-type: none"> • Reduce the number of PMT parameters (<1000). • Ensure that compatible programming software was used. • Resend the configuration to the device.

Fatal Error Code	F 1035 / F1036
Fault message	PMT parameter list does not match configuration.
Cause	The number of parameters in the parameter list exceeds the available parameters in the configuration.
Remedy	<ul style="list-style-type: none"> • Ensure that compatible programming software was used and that the correct PMT project is being used. • Ensure that the assembly has been initialized with the PMT project. • Resend the configuration to the device.

Fatal Error Code	F 1037 / F1038
Fault message	The CRC of the PMT parameter list is incorrect.
Cause	The checksum of the PMT parameters is incorrect.
Remedy	<ul style="list-style-type: none"> • Ensure that compatible programming software was used. • Transfer the PMT parameters to the device again. • Power cycle the device.

Fatal Error Code	F 1041 / F1042
Fault message	PMT parameter structure not found.
Cause	PMT is enabled by export, but no parameter structure is present.
Remedy	<ul style="list-style-type: none"> • Ensure that the device is loaded with the correct PMT project. • Send the PMT parameters to the device via the PMT software.

Fatal Error Code	F 1051 / F1052
Fault message	CRC AFB discrepancy (invalid or mismatched PMT project).
Cause	CRC_AFB from CRC table does not match TOC CRC in flash.
Remedy	<ul style="list-style-type: none"> • Ensure that the device is loaded with a correct PMT project. • Ensure that the used PMT project is consistent. • Transfer the PMT parameters to the device again.

Fatal Error Code	F 1053 / F1054
Fault message	CRC LDV discrepancy (invalid or mismatched PMT project).
Cause	The calculated CRC_LDV does not match the CRC_LD from the CRC table (logic data, PLC program).
Remedy	<ul style="list-style-type: none"> • Ensure that the device is loaded with a correct PMT project. • Ensure that the used PMT project is consistent. • Transfer the PMT parameters to the device again.

Fatal Error Code	F 1055 / F1056
Fault message	CRC PDV discrepancy (invalid or mismatched PMT project).
Cause	The calculated TOC overall CRC after PMT application does not match the transferred CRC from the CRC table.
Remedy	<ul style="list-style-type: none"> • Ensure that the device is loaded with a correct PMT project. • Ensure that the used PMT project is consistent. • Transfer the PMT parameters to the device again.

Fatal Error Code	F 1057 / F1058
Fault message	CRC PEV discrepancy (invalid or mismatched PMT project).
Cause	The calculated TOC overall CRC after PMT application does not match the transferred CRC from the CRC table.
Remedy	<ul style="list-style-type: none"> • Ensure that the device is loaded with a correct PMT project. • Ensure that the used PMT project is consistent. • Transfer the PMT parameters to the device again.

Fatal Error Code	F 1059 / F1060
Fault message	PMT parameter could not be written/found in configuration.
Cause	An error occurred while writing a parameter. The parameter could not be found or written.
Remedy	<ul style="list-style-type: none"> • Ensure that compatible programming software was used. • Transfer the PMT parameters to the device again. • Ensure that the correct PMT project is used for the device.

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

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

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

Fatal Error Code	F 1406
Error message	Faulty data packet: firmware parameter.
Cause	Invalid data packet size.
Remedy	<ul style="list-style-type: none"> • Resend firmware parameters. • Transfer configuration data again. • Power cycle the device.

Fatal Error Code	F 1409 / F 1410
Error message	CRC of PLC program invalid (AWL list)
Cause	<ul style="list-style-type: none"> • Programming software does not support connected hardware • Error transmitting configuration
Remedy	<ul style="list-style-type: none"> • Check version of programming software • Check FW Version and Version of the application software • 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	<ul style="list-style-type: none"> • Re-Transmit configuration data • 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	<ul style="list-style-type: none"> • Re-Transmit configuration data • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Transfer configuration data or program data again • 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	<ul style="list-style-type: none"> • Transfer configuration data or program data again • Check configuration data for supported functionality

Fatal Error Code	F 1501 / F 1502 (Internal)
Error message	Firmware parameter CRC test counter
Cause	-
Remedy	<ul style="list-style-type: none"> • Power Cycle • Replace device

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

Fatal Error Code	F 1505 / F 1506 (Internal)
Error message	Error while sending firmware parameter to CPU B
Cause	-
Remedy	<ul style="list-style-type: none"> • Power Cycle • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Transfer firmware data again. • 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	<ul style="list-style-type: none"> • Transfer firmware data again. • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Check configuration data and transfer them again. 	

Fatal Error Code	F 1585 - F 1594 (Internal)	
Error message	Range check error of configuration data FDB.	
Cause	1585	classID invalid
	1586	Limit of GeneralFlag exceed
	1587	Configured address invalid ($\neq 0$)
	1588	Configured address is already configured (Address is duplicate)
	1589	Configured timer value is invalid ($\neq 0$)
	1590	Not used
	1591	Not used
	1592	Not used
	1593	Not used
	1594	Not used
Remedy	<ul style="list-style-type: none"> Check configuration data and transfer them again. 	

Fatal Error Code	F 1595 - F 1597 (Intern)	
Error message	Range check of configuration data FDB faulty.	
Cause	1595	classID invalid
	1596	Limit of GeneralFlag exceed
	1597	All configurable bools pass through if (mode > 3).
Remedy	<ul style="list-style-type: none"> Check configuration data and resend. 	

Fatal Error Code	F 1601 - F 1614 (Internal)	
Error message	Range check error of configuration data SCA.	
Cause	1600	classID invalid
	1601	Maximum values of GeneralFlag exceeded
	1602	Maximum values of mapped axis exceeded
	1603	Maximum values of speed threshold exceeded
	1604	Maximum values of low position limit exceeded
	1605	Maximum values of high position limit exceeded
	1606	Maximum values of maximum acceleration with active integral filter exceeded
	1607	Maximum values of modes exceeded
	1608	Maximum values of direction exceeded
	1609	SEL doesn't exist or doesn't match with the axis
	1610	SLP doesn't exist or doesn't match with the axis
	1611	Reset invalid
	1612	Position processing invalid
	1613	Not used
	1614	Not used
Remedy	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> • 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	Limit values for minimum position invalid
	1635	Limit values for maximum position invalid
	1636	Maximum values of latency time exceeded
	1637	Limit values for max. speed exceeded
	1638	Limit values for max. acceleration exceeded
	1639	Limit values for max. change in acceleration exceeded
	1640	Reset invalid
	1641	Not used
	1642	Not used
	1643	Not used
	1644	Not used
Remedy	<ul style="list-style-type: none"> • 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 mapped axis exceeded
	1648	Maximum values of TypCurve exceeded
	1649	TeachIn function not supported
	1650	Maximum values of upper position limit exceeded
	1651	Maximum values of latency time exceeded
	1652	Maximum values of maximum speed exceeded
	1653	Maximum values of maximum acceleration exceeded
	1654	Maximum values of AccDiffMax exceeded
	1655	Not used
	1656	Maximum values of direction exceeded
	1657	Reset invalid
	1658	Not used
	1659	Not used
Remedy	<ul style="list-style-type: none"> • 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 for axis mapping
	1663	Maximum values of Modes exceeded
	1664	Maximum values of speed limit or position limit exceeded
	1665	Maximum values of acceleration exceeded
	1666	Reset invalid
	1667	Not used
	1668	Not used
	1669	Not used
Remedy	<ul style="list-style-type: none"> 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 mapped axis exceeded
	1673	Maximum values of Modes exceeded
	1674	Maximum values of maximum speed value exceeded
	1675	Maximum values of maximum acceleration value exceeded
	1676	Mode SLS via SSX invalid
	1677	Reset invalid
	1678	Not used
	1679	Not used
Remedy	<ul style="list-style-type: none"> 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	Reset invalid
	1686	Not used
	1687	Not used
	1688	Not used
	1689	Not used
Remedy	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 mapped axis exceeded
	1703	Maximum values of Limit (Position) exceeded
	1704	Maximum values of step width (Position) exceeded
	1705	Maximum values of ActivationSource exceeded
	1706	Reset invalid
	1707	Not used
	1708	Not used
	1709	Not used
Remedy	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	AxisID 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	<ul style="list-style-type: none"> • 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 configured 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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.
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		classID 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		<ul style="list-style-type: none"> • 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).
1795		classID invalid
1796		Maximum values of GeneralFlag exceeded
1797		Not used
1798		Invalid scaling value for position
1799		Invalid scaling value for speed
1800		Not used
1801		Not used
1802		Not used
1803		Not used
1804		Not used
1805		Not used
1806		Not used
1807		Not used
1808		Not used
1809		Not used
1810		Not used
1811		Not used
1812		Not used
1813		Not used
1814		Not used
1815		Not used
1816		Not used
1817		Not used
1818		Not used
1819		Not used
Remedy		<ul style="list-style-type: none"> • 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		<ul style="list-style-type: none"> • 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		<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 invalid
	1874	Not used
Remedy	<ul style="list-style-type: none"> • 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	PDI/PDO size more than allowed 256 bytes. Reduce the number of FSoE slaves
	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	<ul style="list-style-type: none"> • 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		<ul style="list-style-type: none"> • 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		<ul style="list-style-type: none"> • 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		<ul style="list-style-type: none"> • 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		<ul style="list-style-type: none"> • 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	Invalid mode (save permanently)
	1974	Not used
Remedy	<ul style="list-style-type: none"> 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
Cause	1980	AWL Counter is not plausible
	1981	Wrong ID functional inputs
	1982	Not used
	1983	Not used
	1984	Not used
Remedy	<ul style="list-style-type: none"> 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
Cause	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
Cause	1995	Not used
	1996	Not used
	1997	Not used
	1998	Not used
	1999	Not used
Remedy	<ul style="list-style-type: none"> 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
Remedy	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Check wiring on device Check EMC requirements Power Cycle Replace device 	

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

Fatal Error Code	F 2021 (Internal)
Error message	Timeout during write access to FRAM
Cause	Signal wires to FRAM are faulty
Remedy	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	Number of constant blocks exceeded
	2282	Not used
	2283	Not used
	2284	Not used
Remedy	<ul style="list-style-type: none"> 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 Number of virtual axes invalid 2282 Position factor out of range 2283 Speed factor out of range 2284 Unit invalid
Remedy	<ul style="list-style-type: none"> • 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 Number of SARC commands exceeded 2291 SARC Code invalid 2292 SARC type invalid 2293 SARC Index invalid 2294 Number of matrices invalid 2295 Not used 2296 Not used 2297 Not used 2298 Not used 3399 Not used
Remedy	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Check firmware

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Fatal Error Code	F 3623
Error message	Incorrect switching of ouputs Main switch
Cause	<ul style="list-style-type: none"> • Wrong wiring of device • Short circuit
Remedy	<ul style="list-style-type: none"> • Check output wiring of device • Check power supply of device • Check wiring for short circuit • Power Cycle • Replace Device

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

Fatal Error Code	F 3625 / F 3626
Error message	Incorrect switching of output main switch
Cause	<ul style="list-style-type: none"> • Wrong wiring on device • Short circuit • Time WD incorrect
Remedy	<ul style="list-style-type: none"> • Check output wiring of device • Check power supply of device • Check wiring for short circuit • Switch device off/on • 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	<ul style="list-style-type: none"> • Wrong wiring on device (short circuit) • Faulty hardware
Remedy	<ul style="list-style-type: none"> • Check wiring for short circuit • 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	<ul style="list-style-type: none"> • Wrong wiring on device (short circuit) • Faulty hardware
Remedy	<ul style="list-style-type: none"> • Check wiring for short circuit • Check Hardware

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

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

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

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

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

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

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

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

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

Fatal Error Code	F 3703 / F 3704 (Internal)
Error message	CRC error process image initialization CPU A to CPU B
Cause	Different process images of System A to System B
Remedy	<ul style="list-style-type: none"> • Power Cycle

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

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

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

Fatal Error Code	F 6809 / F 6810 (Internal)
Error message	CRC error during testing of input elements
Cause	Unknown switch type
Remedy	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> Check PLC application (AWL)
Fatal Error Code	F 6813 / F 6814 (Internal)
Error message	PLC kernel raised a fatal error
Cause	-
Remedy	<ul style="list-style-type: none"> Check FW Version and Version of application software for compatibility Re-transmit configuration Power Cycle
Fatal Error Code	F 7001 / F 7002 (Internal)
Error message	Internal FSofE slave stack failure
Cause	Error in configuration data
Remedy	<ul style="list-style-type: none"> Check configuration data
Fatal Error Code	F 7003 / F 7004 (Internal)
Error message	Wrong FSofE instance
Cause	Error in configuration data
Remedy	<ul style="list-style-type: none"> Check configuration data
Fatal Error Code	F 7429 / F7430 (Intern)
Error message	Failure in PROFIsafe stack
Cause	Program counter of PROFIsafe stack wrong
Remedy	<ul style="list-style-type: none"> check configuration 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	<ul style="list-style-type: none"> Reduce the number of used PLC operands by simplifying your program Remove unused blocks from application Power Cycle
Fatal Error Code	F 8207 / F 8208 (Internal)
Error message	Logical Program counter exceeds maximum
Cause	-
Remedy	<ul style="list-style-type: none"> Re-transmit configuration to device Power Cycle
Fatal Error Code	F 8213 / F 8220 (Internal)
Error message	Runtime overflow interrupt
Cause	-
Remedy	<ul style="list-style-type: none"> Re-transmit configuration to device Power Cycle

Fatal Error Code	F 8214
Error message	EC_B_PTI_OVERFLOW
Cause	
Remedy	

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	<ul style="list-style-type: none"> • Reduce the number of used PLC operands by simplifying your program • Remove unused blocks from application • Power Cycle

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

Fatal Error Code	F 8225 (Internal)
Error message	Expectation main program loop to PPI doesn't match
Cause	Run time exceeded
Remedy	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Master -> raise configurable cycle time

Fatal Error Code	F 8229 / F 8230 (Internal)
Error message	Run time supervision Iplzi PPI is wrong
Cause	Interrupt running time differs
Remedy	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	Firmware update was unsuccessful
Remedy	<ul style="list-style-type: none"> 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_Iplz is not calling all the functions it is supposed to.
Remedy	<ul style="list-style-type: none"> 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_Iplz[0] is not calling all the functions it is supposed to.
Remedy	<ul style="list-style-type: none"> Check the FSOE stack
Fatal Error Code	F 9001 / F 9002 (Internal)
Error message	CPU self test error
Cause	-
Remedy	<ul style="list-style-type: none"> Check EMC requirements Power Cycle Replace device
Fatal Error Code	F 9007 / F 9008 (Internal)
Error message	CPU RAM test returned with error
Cause	-
Remedy	<ul style="list-style-type: none"> Check EMC requirements Power Cycle Replace device
Fatal Error Code	F 9009 / F 9010 (Internal)
Error message	Firmware CRC mismatch
Cause	-
Remedy	<ul style="list-style-type: none"> Power Cycle Replace device
Fatal Error Code	F 9011 / F 9012 (Internal)
Error message	Internal stack test returned with an error
Cause	-
Remedy	<ul style="list-style-type: none"> Power Cycle 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	<ul style="list-style-type: none"> Check FRAM

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

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

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

Fatal Error Code	F 9023 / F 9024 (Internal)
Error message	Error at ECC RAM test
Cause	Faulty RAM
Remedy	<ul style="list-style-type: none">• Replace CPU

Fatal Error Code	F 9025 / F 9026 (Internal)
Error message	Error at ECC RAM test
Cause	Faulty RAM
Remedy	<ul style="list-style-type: none">• Replace CPU

Fatal Error Code	F 9027 / F 9028 (Internal)
Error message	Error at ECC RAM test
Cause	Faulty RAM
Remedy	<ul style="list-style-type: none">• Replace CPU

Fatal Error Code	F 9031 / F 9032
Error message	Faulty pointer calculation.
Cause	Faulty firmware execution.
Remedy	<ul style="list-style-type: none">• Replace device

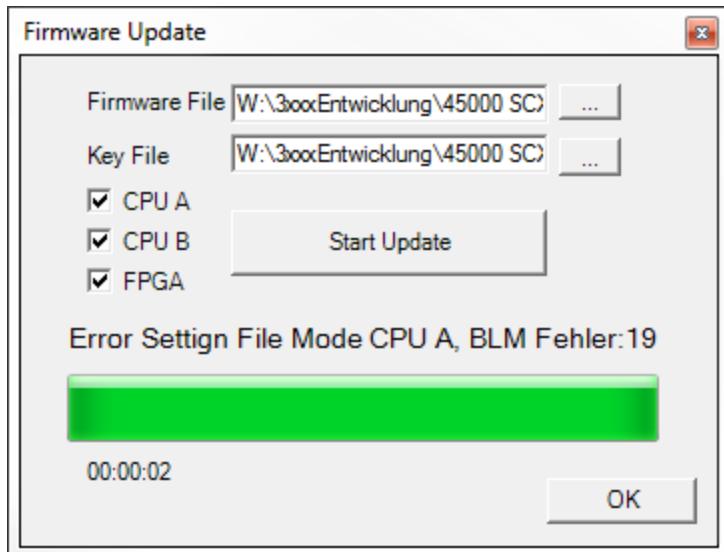
Fatal Error Code	F 9033 / F 9034
Error message	Faulty pointer calculation.
Cause	Faulty firmware execution.
Remedy	<ul style="list-style-type: none">• Replace device

Fatal Error Code	F 9309/ F 9310 (Internal)
Error message	Cycletime of first SDC/SSB is different to second SDC/SSB
Cause	Faulty firmware
Remedy	<ul style="list-style-type: none"> • Update firmware
Fatal Error Code	F 9311/ F 9312 (Internal)
Error message	Invalid SDC/SSB Assignment in function call KrsHNFGGetRobotPosSampleTime()
Cause	Faulty firmware
Remedy	<ul style="list-style-type: none"> • Update firmware
Fatal Error Code	F 9401 (Internal)
Fault message	Invalid FSoE status for startup connection SCU to SDC/SSB
Cause	Faulty firmware
Remedy	<ul style="list-style-type: none"> • Update firmware
Fatal Error Code	F 9403 (Internal)
Error message	Invalid CoE status for startup connection SCU to SDC/SSB
Cause	Faulty firmware
Remedy	<ul style="list-style-type: none"> • Update firmware
Fatal Error Code	F 9405 (Internal)
Error message	Invalid command for startup connection SCU to SDC/SSB
Cause	Faulty firmware
Remedy	<ul style="list-style-type: none"> • Update firmware
Fatal Error Code	F 9407 (Internal)
Error message	Invalid device for startup connection SCU to SDC/SSB
Cause	Faulty firmware
Remedy	<ul style="list-style-type: none"> • Update firmware
Fatal Error Code	F 9409 (Internal)
Error message	Invalid connection for startup connection SCU to SDC/SSB
Cause	Faulty firmware
Remedy	<ul style="list-style-type: none"> • Update firmware
Fatal Error Code	F 9411 (Internal)
Error message	Invalid memory range for startup connection SCU to SDC/SSB
Cause	Faulty firmware
Remedy	<ul style="list-style-type: none"> • Update firmware
Fatal Error Code	F 9413 (Internal)
Error message	Invalid command for startup connection SCU to SDC/SSB
Cause	Faulty firmware
Remedy	<ul style="list-style-type: none"> • Update firmware

Fatal Error Code	F 9415 (Internal)
Error message	Invalid CoE status for startup connection SCU to SDC/SSB
Cause	Faulty firmware
Remedy	<ul style="list-style-type: none">• Update firmware

4 Firmware update error messages

Error messages are only displayed in the firmware update window.



BLM Error	Description
15	Keyfile invalid (data in keyfile not readable)
16	Keyfile invalid (checksum in keyfile not correct)
17	Keyfile does not match the device ID (wrong device type)
18	Keyfile does not match the device serial number
19	Keyfile does not match the FW version Device

BLM Error	15
Message	Keyfile invalid (data in keyfile not readable)
Cause	Faulty keyfile
Remedy	<ul style="list-style-type: none"> • Request new keyfile

BLM Error	16
Message	Keyfile invalid (checksum in keyfile not correct)
Cause	Faulty keyfile
Remedy	<ul style="list-style-type: none"> • Request new keyfile

BLM Error	17
Message	Keyfile does not match the device ID (wrong device type)
Cause	Faulty keyfile
Remedy	<ul style="list-style-type: none"> • Request new keyfile • Select correct key file for device

BLM Error	18
Message	Keyfile does not match the serial number Device
Cause	Faulty keyfile
Remedy	<ul style="list-style-type: none">• Request new keyfile• Select correct key file for device

BLM Error	19
Message	Keyfile does not match the FW version device
Cause	Faulty keyfile
Remedy	<ul style="list-style-type: none">• Request new keyfile• Select correct key file for device

5 Logbook

Code	10001
Message	LOG_DOWNLOAD
Cause	Download configuration data

Code	10002
Message	LOG_Validation
Cause	Validation of configuration data executed

Code	10003
Message	LOG_MUTING
Cause	Muting error

Code	10004
Message	LOG_STATE_POR
Cause	POR assembly

Code	10005
Message	LOG_STATE_START
Cause	Assembly in RUN

Code	10006
Message	LOG_STATE_STOP
Cause	Assembly switched to STOP