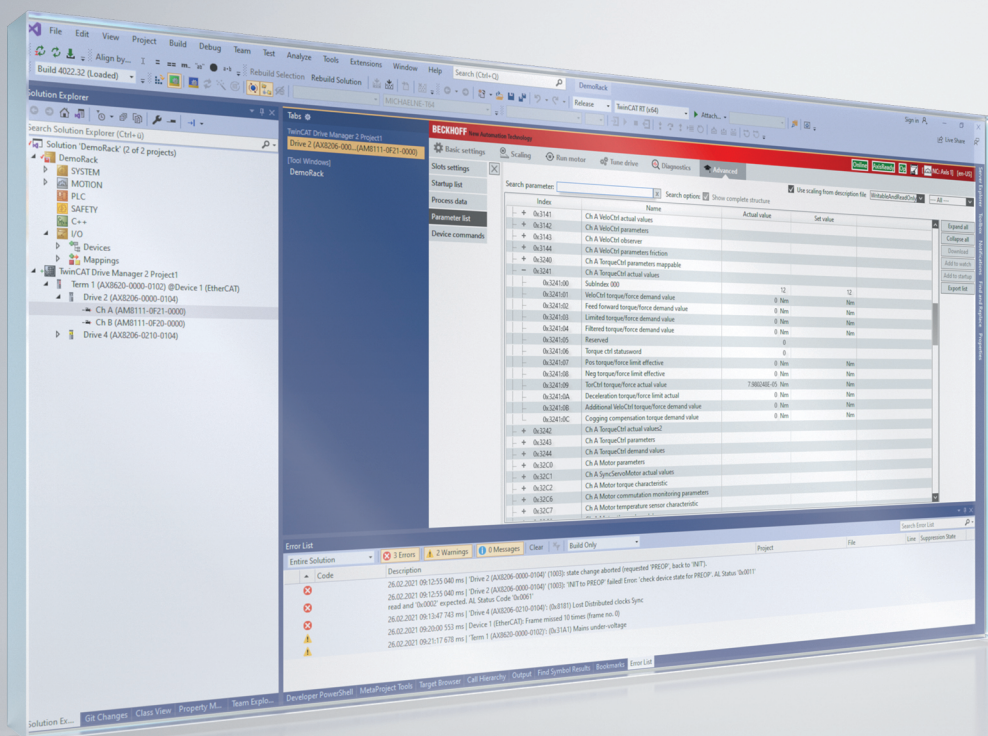


BECKHOFF New Automation Technology

Diagnostic Messages | EN

AMP8620 | AMP8805 | AX883x | AX8600



1	Standard-Messages	5
1.1	0000, No errors	5
1.2	2310, Continuous overcurrent. Output: UU	5
1.3	2380, Continuous overcurrent (total DC link out current)	5
1.4	2381, Continuous overcurrent. Output: UU. Reaction: Generative brake order	6
1.5	2382, Continuous overcurrent (total DC link out current). Reaction: Generative brake order	6
1.6	2383, Continuous overcurrent. Output: UU. Reaction: Torque off	6
1.7	2385, Peak overcurrent. Output: UU	7
1.8	2386, Peak overcurrent (total DC link out current)	7
1.9	2387, Short circuit. Output: UU	7
1.10	2388, Short circuit (total DC link out current)	8
1.11	23A0, Continuous overcurrent. Output: UU	8
1.12	23A1, Continuous overcurrent (total DC link out current)	8
1.13	3110, Mains overvoltage	9
1.14	3130, Mains phase failure	9
1.15	3180, Mains voltage higher than brake resistor operating voltage	9
1.16	3181, Mains phase failure. Reaction: Generative brake order	10
1.17	3182, Wrong mains type	10
1.18	31A0, Mains overvoltage	10
1.19	31A1, Mains undervoltage	11
1.20	3210, DC link overvoltage	11
1.21	3220, DC link undervoltage	11
1.22	3281, DC link overvoltage with Torque off	12
1.23	3282, DC link undervoltage with Torque off	12
1.24	3283, DC link timeout at state UU	12
1.25	32A0, DC link undervoltage	13
1.26	4210, Excess temperature device: SS	13
1.27	4280, Excess temperature device: SS. Reaction: Generative brake order	13
1.28	42A0, Excess temperature device: SS	14
1.29	5180, 24 V supply overcurrent: SS	14
1.30	5183, 24 V dcdc supply, first stage: SS	14
1.31	5187, 24V dcdc supply, second stage: SS	15
1.32	518A, 24 V supply out of range: SS	15
1.33	51A0, 24 V supply overcurrent: SS	15
1.34	5560, Read data failed: SS	16
1.35	5561, Missing data: SS	16
1.36	556C, Write data failed: SS	16
1.37	5570, Reset data failed: SS	17
1.38	5590, SS EEPROM device address is incompatible with this firmware	17
1.39	5592, SS Firmware index is incompatible with this firmware	17
1.40	5593, SS Structure version is incompatible with this firmware	18
1.41	5595, SS Component type is incompatible with this firmware	18
1.42	5596, Product is incompatible with this firmware	18
1.43	5598, BIC update failed: SS	19

1.44	55D0, Restored error messages from persistent memory	19
1.45	6010, Software reset (watchdog)	19
1.46	6081, Watchdog exceeded (Id: UU).....	20
1.47	6310, Loss of parameters	20
1.48	6320, Parameter error	20
1.49	7111, Brake chopper failure	21
1.50	7112, Brake chopper overcurrent.....	21
1.51	7180, Brake resistor not found	22
1.52	7183, Brake resistor overloaded	22
1.53	71A0, Brake resistor overloaded.....	23
1.54	7580, I2C communication failure SS	23
1.55	7581, Data collector not running	23
1.56	7582, Data collector SS version is incompatible with this firmware	24
1.57	7584, Data collector communication failed: SS.....	24
1.58	7585, Data collector update failed: SS	24
1.59	75A0, Data collector communication failed: SS	25
1.60	87D0, PLL sync lost	25
1.61	FF1D, Charge resistor overloaded with error reaction torque off.....	25
1.62	FF1E, Fan malfunction	26
1.63	FF1F, Fan malfunction. Reaction: Generative brake order	26
1.64	FFA0, Fan malfunction	26
1.65	FFC0, SS executed successfully	27

1 Standard-Messages

1.1 0000, No errors

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
0000	0
Class	Type
Info	Information
Standard Reaction	Reset
No	Information: No reset required.

1.2 2310, Continuous overcurrent. Output: UU.

The requested current in one channel permanently exceeds the rated current.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
2310	8976
Class	Type
Error	Error
Standard Reaction	Reset
NC-Handling order	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
The system may be in an undefined position. The drive may be mechanically blocked.	Check the system.

1.3 2380, Continuous overcurrent (total DC link out current)

The requested DC link current permanently exceeds the rated current.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
2380	9088
Class	Type
Error	Error
Standard Reaction	Reset
NC-Handling order	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
The requested DC link current exceeds the error threshold.	The total power required by the connected devices in the system is too high.

1.4 2381, Continuous overcurrent. Output: UU. Reaction: Generative brake order

The requested current in one channel permanently exceeds the rated current.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
2381	9089
Class	Type
Error	Error
Standard Reaction	Reset
Generative brake ramp order to the axis	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
The system may be in an undefined position. The drive may be mechanically blocked.	Check the system.

1.5 2382, Continuous overcurrent (total DC link out current). Reaction: Generative brake order

The requested DC link current permanently exceeds the rated current.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
2382	9090
Class	Type
Error	Error
Standard Reaction	Reset
Generative brake ramp order to the axis	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
The requested DC link current exceeds the error threshold.	The total power required by the connected devices in the system is too high.

1.6 2383, Continuous overcurrent. Output: UU. Reaction: Torque off

The requested current in one channel permanently exceeds the rated current.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
2383	9091
Class	Type
Error	Error
Standard Reaction	Reset
Torque off order to the axis	A reset is not possible. The PSM detected a fatal hardware or software error.
Possible Causes	Solutions
The system may be in an undefined position. The drive may be mechanically blocked.	Check the system.

1.7 2385, Peak overcurrent. Output: UU

The requested current in one channel exceeds the peak current.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
2385	9093
Class	Type
Error	Error
Standard Reaction	Reset
Generative brake ramp order to the axis	A reset is not possible. The PSM detected a fatal hardware or software error.
Possible Causes	Solutions
The requested current in one channel exceeds the peak current.	Reduce the acceleration of the axis.

1.8 2386, Peak overcurrent (total DC link out current)

The requested DC link current exceeds the peak current.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
2386	9094
Class	Type
Error	Error
Standard Reaction	Reset
Generative brake ramp order to the axis	A reset is not possible. The PSM detected a fatal hardware or software error.
Possible Causes	Solutions
The requested DC link current exceeds the peak current.	Make sure that all axes in the system are not accelerated at the same time.

1.9 2387, Short circuit. Output: UU

A short circuit was detected in one channel.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
2387	9095
Class	Type
Error	Error
Standard Reaction	Reset
Generative brake ramp order to the axis	A reset is not possible. The PSM detected a fatal hardware or software error.
Possible Causes	Solutions
A short circuit was detected in one channel.	Please check the motor connection on the given output.

1.10 2388, Short circuit (total DC link out current)

A short circuit in the DC link was detected.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
2388	9096
Class	Type
Error	Error
Standard Reaction	Reset
Generative brake ramp order to the axis	A reset is not possible. The PSM detected a fatal hardware or software error.
Possible Causes	Solutions
An internal hardware error occurred.	Restart the device. If this error happens repeatedly, please contact your Beckhoff office.

1.11 23A0, Continuous overcurrent. Output: UU

The requested current in one channel exceeds the warning threshold.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
23A0	9120
Class	Type
Warning	Warning
Standard Reaction	Reset
No	Warning: No reset required.
Possible Causes	Solutions
The system may be in an undefined position. The drive may be mechanically blocked.	Check the system.

1.12 23A1, Continuous overcurrent (total DC link out current)

The requested DC link current exceeds the warning threshold.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
23A1	9121
Class	Type
Warning	Warning
Standard Reaction	Reset
No	Warning: No reset required.
Possible Causes	Solutions
The requested DC link current exceeds the warning threshold.	The total power required by the connected devices in the system is too high.

1.13 3110, Mains overvoltage

The actual mains voltage exceeds the parameterized mains voltage by more than 20% or by more than the parameterized positive tolerance if this higher than 20%.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
3110	12560
Class	Type
Error	Error
Standard Reaction	Reset
NC-Handling order	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
The actual mains voltage is too high.	Check the connected mains voltage.

1.14 3130, Mains phase failure

One phase has failed in the 3-phase supply.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
3130	12592
Class	Type
Error	Error
Standard Reaction	Reset
NC-Handling order	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
The mains voltage supply is faulty.	Analyze the mains voltage supply.
You have connected a single-phase mains supply but parameterized three phases.	Check and adjust the mains type parameterization. Switch the mains voltage off and on again.
The mains voltage supply is repeatedly exposed to interference.	Try to use a mains filter.

1.15 3180, Mains voltage higher than brake resistor operating voltage

The mains voltage has voltage peaks that cause the brake chopper to be switched on.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
3180	12672
Class	Type
Error	Error
Standard Reaction	Reset
Relays are disabled	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
Voltage peaks occur in the mains voltage.	Analyze the mains voltage supply.

1.16 3181, Mains phase failure. Reaction: Generative brake order

One phase has failed in the 3-phase supply.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
3181	12673
Class	Type
Error	Error
Standard Reaction	Reset
Generative brake ramp order to the axis	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
The mains voltage supply is faulty.	Analyze the mains voltage supply.
You have connected a single-phase mains supply but parameterized three phases.	Check and adjust the mains type parameterization. Switch the mains voltage off and on again.
The mains voltage supply is repeatedly exposed to interference.	Try to use a mains filter.

1.17 3182, Wrong mains type

The connected mains type (3Ph/AC, 1Ph/AC or DC) does not match with the parameterized value of mains type.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
3182	12674
Class	Type
Error	Error
Standard Reaction	Reset
PSM is not ready to operate	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
Wrong mains type parameterized.	Check the mains parameterization and adjust its value.
The power supply is not connected correctly.	Check and adjust the mains supply connection. Switch the mains voltage off and on again.

1.18 31A0, Mains overvoltage

The connected mains voltage exceeds the parameterized warning threshold.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
31A0	12704
Class	Type
Warning	Warning
Standard Reaction	Reset
No	Warning: No reset required.
Possible Causes	Solutions
The actual mains voltage is too high.	Check the connected mains voltage.

1.19 31A1, Mains undervoltage

The connected mains voltage fell below the parameterized warning threshold.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
31A1	12705
Class	Type
Warning	Warning
Standard Reaction	Reset
No	Warning: No reset required.
Possible Causes	Solutions
The actual mains voltage is too low.	Check the connected mains voltage.

1.20 3210, DC link overvoltage

The DC link voltage has risen above the permitted DC link voltage.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
3210	12816
Class	Type
Error	Error
Standard Reaction	Reset
Non-generative brake ramp order to the axis	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
The connected motors generate too much electromotive force, causing the DC link voltage to rise.	You need to reduce the electromotive force. You also can use brake chopper or energy recovery systems to prevent this error.
The configured DC link max voltage might be too low.	Check the configured DC link max voltage.

1.21 3220, DC link undervoltage

The DC link voltage has fallen below the permitted DC link voltage.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
3220	12832
Class	Type
Error	Error
Standard Reaction	Reset
Generative brake ramp order to the axis	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
An unknown error has caused the DC link generation to be deactivated.	Check the error history for pending errors.

1.22 3281, DC link overvoltage with Torque off

The DC link voltage has risen above the permitted DC link voltage.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
3281	12929
Class	Type
Error	Error
Standard Reaction	Reset
Torque off order to the axis	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
The connected motors generate too much electromotive force, causing the DC link voltage to rise.	You need to reduce the electromotive force. You also can use brake chopper or energy recovery systems to prevent this error.
The configured DC link max voltage might be too low.	Check the configured DC link max voltage.

1.23 3282, DC link undervoltage with Torque off

The DC link voltage has fallen below the permitted DC link voltage.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
3282	12930
Class	Type
Error	Error
Standard Reaction	Reset
Torque off order to the axis	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
An unknown error has caused the DC link generation to be deactivated.	Check the error history for pending errors.

1.24 3283, DC link timeout at state UU

There is a problem with the generation of the DC link voltage.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
3283	12931
Class	Type
Error	Error
Standard Reaction	Reset
No	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
An internal error occurred.	Restart the device. If this error happens repeatedly, please contact your Beckhoff office.

1.25 32A0, DC link undervoltage

The DC link voltage has fallen below the permitted DC link voltage.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
32A0	12960
Class	Type
Warning	Warning
Standard Reaction	Reset
No	Warning: No reset required.
Possible Causes	Solutions
The DC link voltage level was under the configured minimum.	Check the minimum DC link voltage parameter.

1.26 4210, Excess temperature device: SS

The device temperature exceeds the permitted maximal value.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
4210	16912
Class	Type
Error	Error
Standard Reaction	Reset
NC-Handling order	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
Your application has produced a thermic overload in the power supply module.	Analyze your system and check the ambient temperature, for example.

1.27 4280, Excess temperature device: SS. Reaction: Generative brake order

The device temperature exceeds the permitted maximal value.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
4280	17024
Class	Type
Error	Error
Standard Reaction	Reset
Generative brake ramp order to the axis	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
Your application has produced a thermic overload in the power supply module.	Analyze your system and check the ambient temperature, for example.

1.28 42A0, Excess temperature device: SS

The actual device temperature exceeds the parameterized warning threshold.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
42A0	17056
Class	Type
Warning	Warning
Standard Reaction	Reset
No	Warning: No reset required.
Possible Causes	Solutions
Your application has produced a thermic overload in the power supply module.	Analyze your system and check the ambient temperature, for example.

1.29 5180, 24 V supply overcurrent: SS

The requested current on 24 V power supply permanently exceeds the rated current.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
5180	20864
Class	Type
Error	Error
Standard Reaction	Reset
NC-Handling order	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
There is a problem with an EtherCAT P device in your system.	Check all EtherCAT P devices.
There are too many EtherCAT P devices in your system.	Optimize the EtherCAT P system, for example use the EtherCAT P junction with refresh.

1.30 5183, 24 V dcdc supply, first stage: SS

Error on 24V power supply - first stage.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
5183	20867
Class	Type
Error	Error
Standard Reaction	Reset
Generative brake ramp order to the axis	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
There is an internal problem.	Restart your device.

1.31 5187, 24V dc/dc supply, second stage: SS

Error on 24 V power supply - second stage.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
5187	20871
Class	Type
Error	Error
Standard Reaction	Reset
No	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
There is an internal problem.	Restart your device.

1.32 518A, 24 V supply out of range: SS

The 24 V power supply is not in the permitted voltage range.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
518A	20874
Class	Type
Error	Error
Standard Reaction	Reset
Generative brake ramp order to the axis	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
There is an internal problem.	Restart your device.

1.33 51A0, 24 V supply overcurrent: SS

The requested current on the 24 V power supply permanently exceeds the rated current.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
51A0	20896
Class	Type
Warning	Warning
Standard Reaction	Reset
No	Warning: No reset required.
Possible Causes	Solutions
There is a problem with an EtherCAT P device in your system.	Check all EtherCAT P devices.
There are too many EtherCAT P devices in your system.	Optimize the EtherCAT P system, for example use the EtherCAT P junction with refresh.

1.34 5560, Read data failed: SS

An error occurred while reading data from the EEPROM during initialization.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
5560	21856
Class	Type
Error	Error
Standard Reaction	Reset
PSM is not ready to operate and transition PREOP to SAFEOP disabled	A reset is not possible. The PSM detected a fatal hardware or software error.
Possible Causes	Solutions
An internal communication error occurred.	Restart the device. If this error happens repeatedly, please contact your Beckhoff office.

1.35 5561, Missing data: SS

An error occurred while reading data from the EEPROM during initialization.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
5561	21857
Class	Type
Error	Error
Standard Reaction	Reset
PSM is not ready to operate and transition PREOP to SAFEOP disabled	A reset is not possible. The PSM detected a fatal hardware or software error.
Possible Causes	Solutions
An internal communication error occurred.	Restart the device. If this error happens repeatedly, please contact your Beckhoff office.

1.36 556C, Write data failed: SS

An error occurred while writing data to the EEPROM.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
556C	21868
Class	Type
Error	Error
Standard Reaction	Reset
PSM is not ready to operate	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
An internal communication error occurred.	Restart the device. If this error happens repeatedly, please contact your Beckhoff office.

1.37 5570, Reset data failed: SS

An error occurred while resetting the EEPROM data.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
5570	21872
Class	Type
Error	Error
Standard Reaction	Reset
PSM is not ready to operate	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
An internal communication error occurred.	Restart the device. If this error happens repeatedly, please contact your Beckhoff office.

1.38 5590, SS EEPROM device address is incompatible with this firmware

Detected incompatible PCB for this firmware.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
5590	21904
Class	Type
Error	Error
Standard Reaction	Reset
PSM is not ready to operate	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
An internal communication error occurred.	Restart the device. If this error happens repeatedly, please contact your Beckhoff office.

1.39 5592, SS Firmware index is incompatible with this firmware

Detected incompatible PCB for this firmware.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
5592	21906
Class	Type
Error	Error
Standard Reaction	Reset
PSM is not ready to operate	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
An internal communication error occurred.	Restart the device. If this error happens repeatedly, please contact your Beckhoff office.

1.40 5593, SS Structure version is incompatible with this firmware

Detected incompatible structure version for this firmware.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
5593	21907
Class	Type
Error	Error
Standard Reaction	Reset
PSM is not ready to operate	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
An internal communication error occurred.	Restart the device. If this error happens repeatedly, please contact your Beckhoff office.

1.41 5595, SS Component type is incompatible with this firmware

Detected incompatible component type for this firmware.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
5595	21909
Class	Type
Error	Error
Standard Reaction	Reset
PSM is not ready to operate	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
An internal communication error occurred.	Restart the device. If this error happens repeatedly, please contact your Beckhoff office.

1.42 5596, Product is incompatible with this firmware

The firmware is not valid for this hardware.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
5596	21910
Class	Type
Error	Error
Standard Reaction	Reset
PSM is not ready to operate	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
There is an internal problem.	Restart your device.

1.43 5598, BIC update failed: SS

The update of the BIC has failed.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
5598	21912
Class	Type
Error	Error
Standard Reaction	Reset
PSM is not ready to operate	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
An internal communication error occurred.	Restart the device. If this error happens repeatedly, please contact your Beckhoff office.

1.44 55D0, Restored error messages from persistent memory

The persistent memory contains an error log. The messages are restored during power on phase.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
55D0	21968
Class	Type
Info	Information
Standard Reaction	Reset
No	Information: No reset required.

1.45 6010, Software reset (watchdog)

A timeout has occurred.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
6010	24592
Class	Type
Error	Error
Standard Reaction	Reset
PSM is not ready to operate and transition PREOP to SAFEOP disabled	A fatal error occurred. A device reboot is required.
Possible Causes	Solutions
Too many objects in the PDO mapping.	Check the number of objects in the PDO mapping.
An unknown hardware or software error has occurred.	Switch off the mains voltage and the 24 V supply. Switch them on again. If this error happens repeatedly, please contact your Beckhoff office.

1.46 6081, Watchdog exceeded (Id: UU)

A watchdog problem has been exceeded.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
6081	24705
Class	Type
Error	Error
Standard Reaction	Reset
Generative brake ramp order to the axis	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
The execution time of a task is too long.	Check the number of objects in the PDO mapping.
An unknown hardware or software error has occurred.	Switch off the mains voltage and the 24 V supply. Switch them on again. If this error happens repeatedly, please contact your Beckhoff office.

1.47 6310, Loss of parameters

Default values of parameters could not be loaded.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
6310	25360
Class	Type
Error	Error
Standard Reaction	Reset
PSM is not ready to operate and transition PREOP to SAFEOP disabled	A reset is not possible. The PSM detected a fatal hardware or software error.

1.48 6320, Parameter error

A parameterization error has occurred.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
6320	25376
Class	Type
Error	Error
Standard Reaction	Reset
PSM is not ready to operate and transition PREOP to SAFEOP disabled	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
There is a problem with the parameterization.	Check your parameterization. Use the standard parameters and reset your parameters.

1.49 7111, Brake chopper failure

Brake chopper failure.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
7111	28945
Class	Type
Error	Error
Standard Reaction	Reset
Torque off order to the axis	A reset is not possible. The PSM detected a fatal hardware or software error.
Possible Causes	Solutions
Brake chopper is damaged.	Switch off the mains voltage and the 24 V supply. Switch on them again. Try again.

1.50 7112, Brake chopper overcurrent

Your connected brake resistor (internal or external) was overloaded.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
7112	28946
Class	Type
Error	Error
Standard Reaction	Reset
Brake chopper is disabled	A reset is not possible. The PSM detected a fatal hardware or software error.
Possible Causes	Solutions
The connected brake resistor was placed under too much load. The brake resistor may be damaged.	Switch off the mains voltage and the 24 V supply. Check whether your brake resistor is damaged, if an external one is connected. Try to operate power supply module again. If this error happens repeatedly, please contact your Beckhoff office.

1.51 7180, Brake resistor not found

No connected brake resistor can be detected.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
7180	29056
Class	Type
Error	Error
Standard Reaction	Reset
PSM is not ready to operate	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
Internal or external brake resistor is faulty.	Switch off the mains voltage and the 24 V supply. Switch on them again. If this error happens repeatedly, please contact your Beckhoff office.
The connection bridge for the internal brake resistor is missing or an external brake resistor is not connected.	Plug in the connection bridge or connect an external brake resistor.

1.52 7183, Brake resistor overloaded

The brake resistor load utilization exceeds the 100% threshold.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
7183	29059
Class	Type
Error	Error
Standard Reaction	Reset
Non-generative brake ramp order to the axis	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
Too much energy was dissipated at the brake resistor during operation of the chopper. Incorrect parameterization of the brake resistor could be a reason.	Check the parameterization of the brake resistor. If necessary, connect a more powerful brake resistor.

1.53 71A0, Brake resistor overloaded

The brake resistor load utilization exceeds the parameterized warning threshold.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
71A0	29088
Class	Type
Warning	Warning
Standard Reaction	Reset
No	Warning: No reset required.
Possible Causes	Solutions
Too much energy was dissipated at the brake resistor during operation of the chopper. Incorrect parameterization of the brake resistor could be a reason.	Check the parameterization of the brake resistor. If necessary, connect a more powerful brake resistor.

1.54 7580, I2C communication failure SS

A communication problem occurred on the I2C bus.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
7580	30080
Class	Type
Error	Error
Standard Reaction	Reset
PSM is not ready to operate	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
An internal communication error occurred.	Switch off the mains voltage and the 24 V supply. Switch them on again. If this error happens repeatedly, please contact your Beckhoff office.

1.55 7581, Data collector not running

A problem occurred while starting the data collector.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
7581	30081
Class	Type
Error	Error
Standard Reaction	Reset
PSM is not ready to operate	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
An internal communication error occurred.	Switch off the mains voltage and the 24 V supply. Switch them on again. If this error happens repeatedly, please contact your Beckhoff office.

1.56 7582, Data collector SS version is incompatible with this firmware

The data collector version is incompatible with the given firmware version.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
7582	30082
Class	Type
Error	Error
Standard Reaction	Reset
PSM is not ready to operate	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
An internal communication error occurred.	Perform a firmware download again. Switch the system on again. If this error happens repeatedly, please contact your Beckhoff office.

1.57 7584, Data collector communication failed: SS

A problem occurred in communication to the data collector.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
7584	30084
Class	Type
Error	Error
Standard Reaction	Reset
Generative brake ramp order to the axis	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
An internal communication error occurred.	Switch off the mains voltage and the 24 V supply. Switch them on again. If this error happens repeatedly, please contact your Beckhoff office.

1.58 7585, Data collector update failed: SS

A problem occurred while updating the data collector.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
7585	30085
Class	Type
Error	Error
Standard Reaction	Reset
NC-Handling order	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
An internal communication error occurred.	Switch off the mains voltage and the 24 V supply. Switch them on again. If this error happens repeatedly, please contact your Beckhoff office.

1.59 75A0, Data collector communication failed: SS

A problem occurred with communication to the data collector.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
75A0	30112
Class	Type
Warning	Warning
Standard Reaction	Reset
No	Warning: No reset required.
Possible Causes	Solutions
An internal communication error occurred.	Switch off the mains voltage and the 24 V supply. Switch them on again. If this error happens repeatedly, please contact your Beckhoff office.

1.60 87D0, PLL sync lost

A problem has occurred in the communication between the EtherCAT master and slave.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
87D0	34768
Class	Type
Info	Information
Standard Reaction	Reset
No	Information: No reset required.
Possible Causes	Solutions
The slave has received no process data for over one EtherCAT cycle.	Check the realtime tasks of your EtherCAT master.

1.61 FF1D, Charge resistor overloaded with error reaction torque off

DC link charge resistor exceeds the permitted range of 90%.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
FF1D	65309
Class	Type
Error	Error
Standard Reaction	Reset
Torque off order to the axis	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
The charging process for the DC link takes too long or is used too often.	Check the devices connected to the DC link. Make sure that the DC link is not loaded too early or too much.

1.62 FF1E, Fan malfunction

A problem has occurred with the internal fan.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
FF1E	65310
Class	Type
Error	Error
Standard Reaction	Reset
NC-Handling order	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
The fan does not return a plausible feedback signal.	Switch off the mains voltage and the 24 V supply. Switch them on again. If this error happens repeatedly, please contact your Beckhoff office.

1.63 FF1F, Fan malfunction. Reaction: Generative brake order

A problem has occurred with the internal fan.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
FF1F	65311
Class	Type
Error	Error
Standard Reaction	Reset
Generative brake ramp order to the axis	Execute Reset-Command (Fault reset).
Possible Causes	Solutions
The fan does not return a plausible feedback signal.	Switch off the mains voltage and the 24 V supply. Switch them on again. If this error happens repeatedly, please contact your Beckhoff office.

1.64 FFA0, Fan malfunction

A problem has occurred with the internal fan.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
FFA0	65440
Class	Type
Warning	Warning
Standard Reaction	Reset
No	Warning: No reset required.
Possible Causes	Solutions
The fan does not return a plausible feedback signal.	Switch off the mains voltage and the 24 V supply. Switch them on again. If this error happens repeatedly, please contact your Beckhoff office.

1.65 FFC0, SS executed successfully

The requested command was executed successfully.

Diagnostic Code (Hex.)	Diagnostic Code (Dez.)
FFC0	65472

Class	Type
Info	Information

Standard Reaction	Reset
No	Information: No reset required.

More Information:
www.beckhoff.com

Beckhoff Automation GmbH & Co. KG
Hülshorstweg 20
33415 Verl
Germany
Phone: +49 5246 9630
info@beckhoff.com
www.beckhoff.com

