

General conditions and function limitations, notes for configuration and operation

These notes take precedence over statements contained in other documents.

Because these notes contain important information for the installation and use of the software, please read them carefully.

SINAMICS S120 / S150 software V4.7 incl. SSP for STARTER

TFS	Brief description	Circumstances	Possible work-around	Affected DO	Since version
SINAMICS_SW - General					
TFS313093	Deleting an OA application with inserted memory card	When deleting an OA application in the drive using Starter, only the OA application saved in the flash is deleted – and not the OA application on the memory card. At the next power cycle, the OA application is copied from the memory card back to the flash.	After the OA has been deleted, before the next power cycle, also the OA application directory (OEM/OA name) must be deleted on the memory card.		4.7 HF1
TFS315275	The component number display in the alarm window in the web server is incorrect.	The component number display in the alarm window in the web server in the Component column is incorrect, and cannot be used.	None		4.7 HF1
SINAMICS_SW - Upload/Download					
TFS315790	"Load to file system" is not executed	The "Load to file system" function is not executed in the drive unit if the configuration was carried out by the OEM, and the Profibus address was set greater than 99. The drive unit then remains in the "Carry out first commissioning" state.	Assign Profibus addresses less than 100.		4.7 HF1
SINAMICS_SW - DRIVE-CLiQ					
TFS313140	The function for recognizing that two or more Control Units are connected to one DRIVE-CLiQ line is not reliable.	The function for recognizing that two or more Control Units are connected to one DRIVE-CLiQ line is not reliable. Depending on topology and the time of the connection, scheduled fault F01357 "Topology: Two Control Units identified on the DRIVE-CLiQ line" may not be issued. Instead, the Control Unit that was inserted later is ignored, or one of the Control Units will not be able to be operated once the system has been switched on.	None.	S120M	4.7 HF1
TFS313142	For an illegal DRIVE-CLiQ ring wiring, the message F01375 "Topology: Actual topology, duplicate connection between two components" is issued, which is correct. However, the message is not only issued for the drive object involved, but for all drive objects, which is incorrect.	For an illegal DRIVE-CLiQ ring wiring, the message F01375 "Topology: Actual topology, duplicate connection between two components" is issued, which is correct. However, the message is not only issued for the drive object involved, but for all drive objects, which is incorrect. If the ring wiring is disconnected, the faults cannot be acknowledged.	Remove the DRIVE-CLiQ ring wiring, and then switch off/switch on.		4.7 HF1
SINAMICS_SW - EPOS					
TFS313170	MDI traversing curve is interrupted when withdrawing SATZANW.15=0.	MDI traversing curve is interrupted when withdrawing SATZANW.15=0 (deactivate MDI).	Only set SATZANW.15 to 0 (deactivate MDI) after message r2684.15 = 0 (traversing command not active).		4.7 HF1
TFS313175	Encoder adjustment freezes when the position controller is activated and without EPOS	Absolute encoder adjustment is not possible using p2507 "LR absolute encoder adjustment status" when the closed-loop position control function module is activated and the basic positioner function module is deactivated as well as the position controller enabled. After activating the adjustment (p2507 "LR absolute encoder adjustment status" = 2), the drive remains in the state. The adjustment is not carried out and is exited.	Before starting the absolute encoder adjustment, withdraw the position control enable using p2550 "LR enable 2".		4.7 HF1
TFS313176	In the operating mode traversing blocks and reference point approach, a message is not output if the position controller has not been enabled	In the operating mode traversing blocks and reference point approach, message A07496 "EPOS: Enable not possible" is not output if the position controller has not been enabled at the instant in time that the traversing blocks or reference point approach mode was selected.	A workaround is not required, as the axis is not moved. The message can be monitored in the alarm buffer.		4.7 HF1

TFS	Brief description	Circumstances	Possible work-around	Affected DO	Since version
SINAMICS_SW - General communication					
TFS313091	Differences between offline and online parameters in telegram 390	For the following parameters there are differences between offline and online parameterization for telegram 390: r2081[8] "BI: Binector-connector converter status word 2" , p2082[0,1,2,3,8,9,10,11] "BI: Binector-connector converter, status word 3"	For indices p2082[0,1,2,3,8,9,10,11] "BI: Binector-connector converter status word 3" the corresponding interconnections must be manually established to the corresponding bits at the DC_CTRL DO according to the table: 2082, 0, 53010, 8, 2082, 1, 53010, 10, 2082, 2, 53010, 12, 2082, 3, 53010, 14, 2082, 8, 53010, 0, 2082, 9, 53010, 2, 2082, 10, 53010, 4, 2082, 11, 53010, 6,		4.7 HF1
TFS313153	Select p2079 "IF1 PROFIdrive PZD telegram selection extended" = 396 results in error message when downloading.	Select p2079 "IF1 PROFIdrive PZD telegram selection extended" = 396 results in error message when downloading. On the CU, with p2079 "IF1 PROFIdrive PZD telegram selection extended", erroneously, more telegrams are listed than are actually supported. In case of doubt, the same selection as for p0922 applies.	P2079 "IF1 PROFIdrive PZD telegram selection extended", do not set IF1 PROFIdrive PZD telegram selection" = 396.		4.7 HF1
TFS313183	For diagnostic alarms via Profibus, when simultaneously acknowledging several faults, the ID-related diagnostics is not correctly set.	This only involves PROFIBUS if diagnostic alarms are activated. If, when acknowledging, several faults are simultaneously signaled as going, then while acknowledging, a bit in the Profibus telegram is not consistent for a brief time. Users are not aware of this, as the fault display in Step7 (HWCn) or TIA does not use the ID-related diagnostics, but the status is derived from other telegram data (ChannelErrorVector DS1).	None		4.7 HF1
SINAMICS_SW - PROFIBUS communication					
TFS313137	Depending on the configuration, SIMOTION technology fault 20005 with type 2, reason 0x200 may occur for the _aktivatedpSlave SIMOTION programming command.	Depending on the configuration, SIMOTION technology fault 20005 with type 2, reason 0x200 may occur for the _aktivatedpSlave SIMOTION programming command.	Acknowledge the fault.		4.7 HF1
TFS313636	Downloading a project to a SIMOTION with a modified DP clock cycle	If a CU320-2DP, configured using GSD, is operated with clock cycle synchronism via PROFIBUS connected to a SIMOTION control system, after being downloaded to SIMOTION with modified DP clock cycle, SIMOTION technology error 20005 type 1, basic 0x1h can be output. Faults are present at the CU320-2DP, which cannot be acknowledged.	Switch off the CU320-2DP and switch on again.		4.7 HF1
SINAMICS_SW - PROFINET communication					
TFS313152	Fault F01653 "SI P1 (CU): PROFINET configuration error" can be sporadically output for PROFINET Shared Device after powering up.	Fault F01653 "SI P1 (CU): PROFINET configuration error" with supplementary information 300 "A safety slot for the send data to the control has not been configured." can sporadically occur for PROFINET Shared Device after powering up.	Switch the module off and on again. Ensure that the connection of the two PROFINET controllers is established at different times.		4.7 HF1
TFS313155	Additional PROFINET port in the TIA-Portal topology comparison for SINAMICS CU3x0-2PN X150	For an offline/online comparison of the PROFINET topology, in the TIA-Portal online, an additional port for SINAMICS CU3x0-2PN X150 is displayed.	Ignore the additionally displayed port.		4.7 HF1
SINAMICS_SW - Closed-loop control					
TFS313139	Fast flying restart with du/dt filter not always possible.	With the setting "Fast flying restart" active (p1780 "Motor model adaptations configuration" bit 11 "Fast flying restart with voltage model for induction motor" =1) and a system with long motor cable (e.g. 100m) and a du/dt filter, starting and flying restart for low speeds do not function. Fault F30001 "Power unit overcurrent".	In this case, a fast flying restart cannot be used, and it must therefore be deactivated, p1780 bit11 = 0.		4.7 HF1
TFS313166	Deactivating a BLM for a parallel connection	Deactivating a BLM using p0895[x] "BI: Activate/de-activate power unit component" or p7001[x] "Par_circuit power units enable" leads to an incorrect Vdc display (r0070) as well as alarm messages (A06810 "Infeed: DC link voltage alarm threshold", A05053 "Parallel circuit: Inadmissible DC link voltage dissymmetry ") or error messages (e.g. F06310 "Infeed: Supply voltage (p0210) incorrectly parameterized").	Deactivate the power unit using p0125[x] "Activate/de-activate power unit component".	Vector	4.7 HF1

TFS	Brief description	Circumstances	Possible work-around	Affected DO	Since version
SINAMICS_SW - Safety Integrated					
TFS313160	Odd-numbered pulse frequency and safety without encoder	If odd-numbered dividers (for example: 1/3; 1/5 etc.) are used to calculate the pulse frequency, and set in p1800 "Pulse frequency setpoint", when using safety without encoder in the SERVO control, leads to Alarm C01711 "SI Motion P1 (CU): Defect in a monitoring channel"/C030711 "SI Motion P2: Defect in a monitoring channel" with fault value 3 or fault value 56.	In order to prevent alarm C01711 "SI Motion P1 (CU): Defect in a monitoring channel"/C030711 "SI Motion P2: Defect in a monitoring channel" with fault value 3 "Defect in a monitoring channel", the divider must use a multiple of two for the pulse frequency setting p1800 "Pulse frequency setpoint". Example: $1/(2 \cdot p0115 \text{ "Sampling time for internal control loops"})$, $1/(4 \cdot p0115 \text{ "Sampling time for internal control loops"})$, $1/(8 \cdot p0115 \text{ "Sampling time for internal control loops"})$ etc."		4.7 HF1
SINAMICS_SW - Topology					
TFS313177	After POWER ON, power units (S120M) are sporadically not identified.	After a POWER ON, sporadically it can occur that power units (S120M) are not identified after powering up, and Alarm F07800 "Drive: No power unit present" is output.	Carry out a power OFF/ON again. In this case, the infeed and the power units should not be operated on the same DQ line. Connect the adapter module with the S120M to its own dedicated DQ port of the CU.		4.7 HF1
TFS314635	Partial powering up with vector	If a motor module or a CUAx with power module, which are available in the reference topology, are inserted in cyclic operation (Control Unit has already powered up and is exchanging data), then an internal software error (F1000) that cannot be acknowledged is output.	Carry out a power off/on. When doing this, it must be ensured that the component is simultaneously switched on with the Control Unit.	Vector	4.7 HF1
TFS328185	No support for PM240-2 with older CUA31 and CUA32.	CUA31 supports PM240-2 only from HW version D on and higher. CUA32 supports PM240-2 only from HW version C on and higher.	Use current hardware.		4.7 HF1
SINAMICS_SW - Unit switchover					
TFS313168	Error when calculating closed-loop control parameters if a switchover to referred units was made prior to this	The drive remains in F1000 "Internal software error", if initially a switchover is made to a referred unit (% , p505 "Selecting the system of units" =2/4) and then the automatic calculation of the motor/closed-loop control parameter (p340 "Automatic calculation motor/control parameters" =1) is initiated. In so doing, reference parameter p2001 "Reference voltage" and the following are recalculated, and then the appropriate limit is exceeded for the new calculation of the dependent parameter.	First execute the automatic calculation of the motor/closed-loop control parameter (p340 "Automatic calculation motor/control parameters" = 1) or Mot-ID, and then switch over the unit to referred (% , p505 "Selecting the system of units" = 2).		4.7 HF1
LH1 Listenh S120/S150					
AP01126629	Drive alarms 1711 "SI Motion P1 (CU): Defect in a monitoring channel" and fault value 6165 or 6166, respectively 30711 and 6165 or 6166 cannot be acknowledged	Drive signals alarm 1711 " SI Motion P1 (CU): Defect in a monitoring channel" and fault value 6165 or 6166, respectively 30711 and 6165 or 6166. These alarms cannot be acknowledged. During the configuration of PROFIsafe, the settings on the I-Device and on the drive side can be changed separately. If a difference results between the I-Device and drive side during the changes, the specified alarms are triggered. According to the safety guidelines, these alarms cannot be acknowledged and the drive cannot be started.	When changes are made at PROFIsafe, a check should then be made whether the parameters are the same on the drive side and the I-Device. This can be performed, for example, via the checksums on the drive and I-Device (PROFIsafe tab in the I-Device and PROFIsafe tab on the appropriate drive). The checksums must then be the same. If the checksums are different, proceed as follows: Option 1: Export the I-Device again and then reinsert it. The configurations then have to be adapted (e.g. cycle clock settings, port settings, etc.) Option 2: The relevant parameters are aligned manually (F_Source, F_Dest...)		4.7 HF1