

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 software V4.7 incl. SSP for STARTER

TFS	Brief description	Circumstances	Possible work-around	Affected DO	valid since version	Drive Family																						
						D4x2	DC Master	ET200Pro FC-2	G110M	G120 CU230P-2	G120 CU240B-2	G120 CU240E-2	G120 CU250S-2	G120C	G120D CU250D-2	G120D CU240D-2	G130	G150	GL150	GM150	S120	S120-ACDrive	S150	SINAMICS_Doku	SL150	SM120	SM150	
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.			-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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		V 4.7	-	-	-	-	-	-	-	-	-	-	X	X	X	X	X	X	X	X	-	X	X	-	
SINAMICS_SW - Drive wizard																												
TFS315913	Commissioning 1FK7 encoderless only online	When commissioning the 1FK7 encoderless motor series offline, the alarm thresholds for the motor temperature are not correct.	To commission 1FK7 encoderless, use the online wizards		V 4.7	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	
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.		V 4.7	-	-	-	-	-	-	-	-	-	-	X	X	X	X	X	X	X	-	X	X	X	X	
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	V 4.5 HF1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	
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.		V 4.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	
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).		V 4.7	-	-	-	-	-	-	X	-	X	-	-	-	-	-	X	X	X	-	-	-	-	-	

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						Dae5-2	DC Master	ET200Pro FC-2	G110M	G120 CU230P-2	G120 CU240B-2	G120 CU240E-2	G120 CU250S-2	G120C	G120D CU250D-2	G120D CU240D-2	G130	G150	GL150	GM150	S120	S120-ACdrive	S150	SINAMICS Doku	SL150	SM120	SM150			
SINAMICS_SW - EPOS																														
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".		V 4.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	X	-	-	-	-		
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.		V 4.5 HF21	-	-	-	-	-	-	-	X	-	X	-	-	-	-	-	-	X	X	X	-	-	-	-		
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,			-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TFS313098	ET200Pro-2 FC does not support data set 255.	ET200Pro-2 FC does not support reading out I&M0 data via data set 255. The behavior is identical with ET2000Pro FC(old).	Data set DS231 can be used for this purpose.		V 4.7	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TFS313102	BACnet connector removed during communication	For BACnet bus systems with several participants, disturbances can occur on the bus or communication can be interrupted if the connector is withdrawn and reinserted during communication.	The bus connector can only be inserted when the module is switched off. The module must only be switched on again after the connector has been inserted.		V 4.7	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TFS313116	Transferring values of the CU analog inputs (r0752) via PZD	If, in p922 "PROFIdrive PZD telegram selection" the free telegram configuration (999) is selected, then the transfer via PZD does not function. The values of analog inputs (p2051.x = r752.y; x,y = [0,1]) are incorrect. The measured values are only transferred in the range from -2 V2 V.	For PZD transfer, r755 (p922=999 and p2051.x = r755.y; x,y = [0,1]) (percentage value) must be set and used instead of r752 (actual value).		V 4.6	-	-	-	X	X	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-	-	-			
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.		V 4.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	X	-	-	-			
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		V 4.7	-	-	-	-	-	-	-	-	-	-	-	X	X	-	-	X	X	X	-	-	-	-			
TFS314802	Initialization for telegrams p0922= 35x	When using telegrams that use the STW3 (350er telegram), sporadically it is possible that an external fault F7860 is incorrectly output after the Control Unit powers up.	The error can be acknowledged.		V 4.7	-	-	-	X	X	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-	-	-			

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SINAMICS_SW - CAN communication																											
TFS313107	Partial saving does not function if a memory card is inserted.	Partial saving does not function if a memory card is inserted.	Partial saving only without inserted card or complete saving with inserted card.		V 4.4	-	-	-	X	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SINAMICS_SW - PROFIBUS communication																											
TFS313100	Alarm A01920 "PROFIBUS: PROFIBUS: Interruption cyclic connection" remains active sporadically after frequent brief interruptions of the PROFIBUS connection even though PROFIBUS communication has been reestablished and is working normally.	Alarm A01920 "PROFIBUS: PROFIBUS: Interruption cyclic connection" remains active sporadically after frequent brief interruptions of the PROFIBUS connection even though PROFIBUS communication has been reestablished and is working normally.	Turn the module off and back on again.		V 4.6 HF8	-	-	-	X	X	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-	-	-
TFS313137	Depending on the configuration, SIMOTION technology fault 20005 with type 2, reason 0x200 may occur for the _aktivatdpSlave SIMOTION programming command.	Depending on the configuration, SIMOTION technology fault 20005 with type 2, reason 0x200 may occur for the _aktivatdpSlave SIMOTION programming command.	Acknowledge the fault.		V 2.6	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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.		V 4.7	X	-	-	-	-	-	-	-	-	-	-	X	X	X	X	X	X	X	-	X	X	-
SINAMICS_SW - PROFIdrive communication																											
TFS313215	Unsmoothed speed actual value for telegram 353	For telegram 353, as PZD2, an unsmoothed speed actual value is interconnected (NIST_A, r0063[0] "CO: speed actual value"). The documentation describes the interconnection of a smoothed speed actual value (NIST_A_GLATT, r0063[1] "CO: speed actual value").	Set p0922 "PROFIdrive PZD telegram selection" to a value of 999, and manually change the wiring from r0063[0] to r0063[1].		V 4.7	-	-	-	X	X	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-	-	-
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.		V 4.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	X	-	-	-	-
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.		V 4.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	X	-	-	-	-

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SINAMICS_SW - Closed-loop control																											
TFS313111	Fast flying restart of SIMOTICS FD motors with 100Hz rated frequency.	For Simotics FD motors, a fast flying restart of a motor is not reliable if a rating plate is parameterized with a rated frequency of 100Hz.	Instead of a rated frequency of 100Hz, the 4-pole motor can also be parameterized with a rated frequency of 50Hz (see the rating plate). To reach 100Hz, the maximum speed must be subsequently increased to 100Hz*60/pole pair number. For PM330 (G120P) power units, flying restart with voltage measurement should be used (this is active as default). Note: Simotics FD drives should always be operated with the vector control (U/f control, only for diagnostic purposes).		V 4.7	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TFS313117	Functionality of parameters p1440 and r1443 is not supported	The functionality of parameter p1440 "CI: Speed controller speed actual value" and r1443 "CO: Speed controller speed actual value at actual value input" is not supported.	None		V 4.7	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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.		V 4.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	X	-	-	-	-	-
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	V 4.7	-	-	-	-	-	-	-	-	-	-	-	X	-	-	X	-	-	-	-	-	-	-
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*p0115 "Sampling time for internal control loops"), 1/(4*p0115 "Sampling time for internal control loops"), 1/(8*p0115 "Sampling time for internal control loops") etc."		V 4.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	X	-	-	-	-	-
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.		V 4.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-

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SINAMICS_SW - Topology																											
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	V 4.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
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).		V 4.7	-	-	X	-	X	X	X	X	X	X	X	X	-	-	X	X	X	-	-	-	-	-
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...)			X	-	-	-	X	-	-	-	-	X	X	-	-	-	-	X	X	X	X	-	-	-
LH11 Listenh G120 CU240B/E-2																											
TFS305624	Fault F01611 "Defect in a monitoring channel", fault value 1950, is not documented	In the List Manual – in the description for fault F01611 "Defect in a monitoring channel" – fault value 1950 is not documented. The documentation states: (cause) "1950: Module temperature outside the permissible temperature range." (Remedy) "- Check the air intake for the Control Unit. - Check the Control Unit fan."	None required.		V 4.60	X	-	-	-	X	X	X	X	-	X	X	-	-	-	-	-	-	-	X	-	-	-
TFS306554	F07405 (N, A) drive: kinetic buffering, minimum speed fallen below	For fault F07405, in some foreign languages, the translation is incorrect. The correct message is as follows: F07405 (N, A) "Drive: Kinetic buffering, minimum speed not reached".	None		V 4.70	X	-	-	-	X	X	X	X	-	X	X	-	-	-	-	-	-	-	X	-	-	-
LH11 Listenh G120 CU240B/E-2 - General																											
TFS299300	p1151 RFG tracking	The ramp-function generator configuration p1151 is not available for the G120. The references in function block diagrams 3070 and 3080 to this parameter are therefore invalid	None		V 4.7	-	-	X	X	X	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-	-	-
PNIO_MC - General communication																											
TFS313280	Telegram setting change (p0922) is not accepted	Change to the telegram setting in p0922 "PROFIdrive PZD telegram selection" is not accepted in operation.	Change the telegram setting in p0922. Then carry out a RAM to ROM p0971 "Save parameter" and restart the Control Unit.	EIP	V 4.7	-	-	X	X	X	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-	-	-

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LH15 Listenh G120 CU250S-2																														
AP01444417	All information on p0009 provided in List Manual G120 CU250S-2 is not relevant.	All information on p0009 provided in List Manual G120 CU250S-2 is not relevant.	Ignore all information on p0009 provided in List Manual G120 CU250S-2.		V 4.60	X	-	-	-	X	-	-	X	-	X	X	-	-	-	-	-	-	-	-	X	-	-	-		
LH20 Listenh ET200pro																														
TFS200994	References to r1439 and r1518 are incorrect	References to r1439 are made in r1438 "Speed controller speed setpoint / n_ctrl n_set" and to r1518 in p1496 "Acceleration pre-control scaling / a_prectrl scal", which have not been enabled for ET200Pro FC-2.	Ignore the references.		V 4.7	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TFS48903	ET 200pro FC-2 only supports two DDS (drive data sets)	ET 200pro FC-2 only supports two DDS (drive data sets). Notes regarding 4 DDS in the List Manual are not correct.	None		V 4.7	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		