

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 G120 software V4.5 incl. SSP for STARTER

ARTSPPlusRQ	Brief description	Circumstances	Possible work-around	Affected DO	Since version
SINAMICS_SW - General					
AP00921575	Acknowledgment of faults using the "OK button in the menu "DIAGNOSTICS/FAULTS" at the BOP-2 does not result in the deletion of the alarm list.	Acknowledgment of faults using the "OK button in the menu "DIAGNOSTICS/FAULTS" at the BOP-2 does not result in the deletion of the alarm list.	In order to delete the alarm list, p2111 "Alarm counter" must be set to 0.		4.5
AP01296829	For the CU240B-2 and CU240B-2 DP, for p0015 "Macro drive unit" = 19 " 3-wire (enable/forwards/reverse)" and p0015 = 20 " 3-wire (enable/on/reverse)", alarm acknowledgment is incorrectly wired. As a consequence, alarm acknowledgment via digital inputs is not possible.	For the CU240B-2 and CU240B-2 DP, for p0015 "Macro drive unit" = 19 " 3-wire (enable/forwards/reverse)" and p0015 = 20 " 3-wire (enable/on/reverse)", alarm acknowledgment is incorrectly wired. As a consequence, alarm acknowledgment via digital inputs is not possible.	Alarms can be acknowledged via the interconnection p2103 "BI: 1. Acknowledge faults" at p0722 "CO/BO: CU digital inputs status" bit 3 "DI 3 (term. 8)".		4.5
SINAMICS_SW - EPOS					
AP01160054	If the setpoint position is frequently changed incrementally via MDI, for example, using a handwheel, and the target positions are located behind the software limit switch, then the monitoring F07481 "EPOS: Axis position < software limit switch minus" or F07482 "EPOS: Axis position > software limit switch plus" can respond.	If the setpoint position is frequently changed incrementally via MDI, for example, using a handwheel, and the target positions are located behind the software limit switch, then the monitoring F07481 "EPOS: Axis position < software limit switch minus" or F07482 "EPOS: Axis position > software limit switch plus" can respond.	None.	Servo/Vector	4.5
SINAMICS_SW - General communication					
AP01290772	PROFINET parameter r8960 "PN subslot control assignment" is erroneously displayed on non-PROFINET modules.	PROFINET parameter r8960 "PN subslot control assignment" is erroneously displayed on non-PROFINET modules.	None		4.5
SINAMICS_SW - CAN communication					
AP01068349	Display of the fault F8701(1) "NMT state change" in r8611 "CAN: Pre-defined error field" after CANopen NMT command "Reset node" on the G120.	After CANopen NMT command "Reset node" on the G120, in which the drive is in the "Operation" state, fault F8701(1) "NMT state change" is displayed after the restart in r8611 "CAN: Pre-defined error field".	If the CANopen command NMT command "Reset Node" on the G120, in which the drive is in the "Operation" state, is issued, the error F8701(1) "NMT state change" must be acknowledged after the restart so that it is no longer displayed in r8611 CAN: Pre-defined error field".		4.4 HF2
SINAMICS_SW - PROFIBUS communication					
AP01317637	"Additional telegram 700, PZD-0/3" missing in the GSD for CU250D-2 DP F.	"Additional telegram 700, PZD-0/3" missing in the GSD for CU250D-2 DP F.	Use "Additional telegram PZD-2/4".		4.5
SINAMICS_SW - PROFINET communication					
AP01307504	In the devices concerned, PROFIenergy can only be operated with the parameter values in the factory setting. Parameters p5602[1] "Pe energy-saving mode wait time minimum", p5606[1] "Pe energy-saving mode active time maximum" and p5612[1] "Pe energy-saving properties dependent on the mode" cannot be changed. Further, r5600 "Pe energy-saving mode ID" instead of 2, "Energy-saving mode 2" incorrectly shows a value of 1.	In the devices concerned, PROFIenergy can only be operated with the parameter values in the factory setting. Parameters p5602[1] "Pe energy-saving mode wait time minimum", p5606[1] "Pe energy-saving mode active time maximum" and p5612[1] "Pe energy-saving properties dependent on the mode" cannot be changed. Further, r5600 "Pe energy-saving mode ID" instead of 2, "Energy-saving mode 2" incorrectly shows a value of 1.	None.		4.5

ARTSPPlusRQ	Brief description	Circumstances	Possible work-around	Affected DO	Since version
SINAMICS_SW - PROFINET communication					
AP01312464	"Diagnostics channels PN" function can be configured using HW Config, but cannot be used with firmware version V4.5 due to communication interruptions.	"Diagnostics channels PN" function can be configured using HW Config, but cannot be used with firmware version V4.5 due to communication interruptions.	None.		4.5
SINAMICS_SW - Closed-loop control					
AP01278534	If the technology controller is parameterized as signal source for ESM, and the technology controller uses an analog input as actual value signal (P2264), then in ESM operation a wire breakage (A3505) is not detected. The ESM is then not switched over to the alternative setpoint source (P3882). ESM continues to use the PID controller as signal source. P3889 ?CO/BO: ESM status word? bit 2 ?Setpoint signal lost? remains at 0. P3889 ?CO/BO: ESM status word? bit 3 ?Technology controller actual value (p2264) lost? remains at 0.	If the technology controller is parameterized as signal source for ESM, and the technology controller uses an analog input as actual value signal (P2264), then in ESM operation a wire breakage (A3505) is not detected. The ESM is then not switched over to the alternative setpoint source (P3882). ESM continues to use the PID controller as signal source. P3889 ?CO/BO: ESM status word? bit 2 ?Setpoint signal lost? remains at 0. P3889 ?CO/BO: ESM status word? bit 3 ?Technology controller actual value (p2264) lost? remains at 0.	In order to ensure that the correct speed setpoint is used for the ESM operation in all circumstances, P3881 "ESM setpoint source" should be set to 1 "Fixed speed setpoint 15 (p1015)".		4.5
AP01289858	Parameter description for p1051 "Speed limit RFG positive direction" and p1052 "Speed limit RFG negative direction" is incomplete.	The parameter p1051 "Speed limit RFG positive direction" and p1052 "Speed limit RFG negative direction" act as speed limits immediately before the ramp-function generator. If a value is entered via one of the two speed limits, which results in a change in the ramp-function generator output, then the OFF3 ramp is active for the ramp-function generator. This behavior is not documented.	None.	Servo/vector	4.5
SINAMICS_SW - Safety Integrated					
AP01065442	In the V/f control mode, messages C01711/C30711 "SI Motion P1: Defect in a monitoring channel" sporadically occur during a flying restart with enabled Safety Extended functions and deselection of STO and ON/OFF1 in rapid succession.	If the flying restart function for enabled Safety Extended functions in V/f control is used, sporadically the messages C01711/C30711 "SI motion P1: Defect in a monitoring channel" occur. It is irrelevant whether a safety function has been selected during the execution of the flying restart function.	When using the flying restart function or mot. ID, increase the value of parameter p9542/p9342 "SI motion actual value comparison tolerance". Alternatively: Acknowledge messages C01711/C30711 "SI motion P1: Defect in a monitoring channel" using "safe acknowledgment" (Internal Event Acknowledge).		4.4 HF2
AP01241570	In the event that the infeed loses a phase and the functions ?automatic restart? with safety sensorless, then the drive signals safety alarms 1711.3 and 30711.3 "Defect in a monitoring channel". This behavior only occurs for U/f operation and the function ?automatic restart? of the motor.	In the event that the infeed loses a phase, in U/f operation, the functions ?automatic restart? and safety sensorless cannot be operated together without safety alarms 1711.3 or 30711.3 occurring and must be separately acknowledged.	Increase p9542 ?SI motion actual value comparison tolerance?.		4.5
AP01279705	For N30620, N30621, A30666 and A30693, the message type cannot be re-parameterized.	For the following messages it is not possible to re-parameterize the message type (F = fault, A = alarm, N = no message) contrary to the information provided in the List Manual: N30620 (F, A) SI MM: Safe torque off active N30621 (F, A) SI MM: Safe Stop 1 active A30666 (F) SI Motion MM: Static 1 signal at the F-DI for safety-relevant acknowledgment A30693 (F) SI MM: Safety parameter settings changed, warm restart/POWER ON required.	None.	Servo/vector	4.5
AP01280202	A value of 0 is not immediately accepted in p9587/p9387 "SI motion actual value acquisition encoderless filter time". The old value is retained and is effective for r9714[0] "SI motion diagnostics velocity".	The parameterization of 0 ms in p9587 "SI motion actual value acquisition encoderless filter time" is intended to ensure that the PT1 filter, which acts on the actual velocity value of safety sensorless, is deactivated immediately. It doesn't become immediately effective. After 0 ms has been parameterized, the old smoothing time continues to be active and therefore the low pass. 0 is only accepted in p9587 and the filter deactivated after power on.	After setting p9587/p9387 "SI motion actual value acquisition encoderless filter time" to the value 0, carry out power off/on.		4.5

ARTSPPlusRQ	Brief description	Circumstances	Possible work-around	Affected DO	Since version
SINAMICS_SW - Safety Integrated					
AP01292542	When selecting the SLS safety function via fail-safe digital inputs, for very small velocity differences between the actual and newly selected SLS level or for an extremely steep parameterized safe braking ramp, after the SBR delay time has expired, the SBR function does not become active.	When selecting the SLS safety function via fail-safe digital inputs, for a very small velocity difference between the actual and newly selected SLS level (p9531 "SI motion SLS limit values") or for an extremely steep parameterized safe braking ramp (p9581 "SI Motion brake ramp reference value", p9583 "SI motion braking ramp monitoring time"), after the SBR delay time has expired (p9582 "SI motion braking ramp delay time") the SBR function does not become active. The newly selected SLS level immediately becomes active after the SBR delay time has expired (p9582 "SI motion braking ramp delay time").	- Possibly set the safe braking ramp so that it is flatter (p9581 "SI Motion braking ramp reference value", p9583 "SI motion braking ramp monitoring time") - possibly set p9500 "SI motion monitoring cycle clock" to a lower value.		4.5
AP01294633	When the message C01711 "SI motion CU: Defect in a monitoring channel" occurs, with a fault value greater or equal to 1000, parameter r9725[0] ("SI motion diagnostics STOP F") is not updated.	When the message C01711 "SI motion CU: Defect in a monitoring channel" is output with a fault value greater or equal to 1000, the diagnostics display of the STOP F that has occurred is not displayed in parameter r9725 [0] ("SI motion diagnostics STOP F").	None. The diagnostic information is also contained in message C01711 and in the safety message buffer (r9747 and ff.).		4.5
AP01299425	For the factory setting of p9585/9385 "SI motion actual value acquisition without encoder fault tolerance" = -1, its diagnostic value, r9787 "SI motion possible fault tolerance without encoder", shows an invalid value.	For the factory setting of p9585/9385 "SI motion actual value acquisition without encoder fault tolerance" = -1, its diagnostic value, r9787 "SI motion possible fault tolerance without encoder", shows an invalid value.	For synchronous motors, set the p9585/9385 "SI motion actual value acquisition without encoder fault tolerance" to 4 – and for induction motors, to 0.	Servo/vector	4.5
LH9 Listenh G120 CU230P-2 - General					
AP01064437	When parameterizing the unit changeover, a certain sequence must be observed. Otherwise some parameters are not converted.	When parameterizing the unit changeover, a certain sequence must be observed. Otherwise some parameters are not converted.	For the conversion of % into any other unit, P596 must first be set and then P595 must be changed over from 1 to the desired unit. For the conversion of a referred quantity (with unit) into %, P595 must be first set from the unit into % and then P596 must be set to 1.		4.5
LH11 Listenh G120 CU240B/E-2 - General					
AP01130452	The note in the function block diagram 2510 that the signal r0052 "CO/BO: Status word 1" bit 3 "Fault present" is inverted if it is connected to a digital output, is incorrect. This is a recommendation to invert the digital output via p0748 CU "Invert digital outputs" to protect against wire breakage.	The note in the function block diagram 2510 that the signal r0052 "CO/BO: Status word 1" bit 3 "Fault present" is inverted if it is connected to a digital output, is incorrect. This is a recommendation to invert the digital output via p0748 CU "Invert digital outputs" to protect against wire breakage.	Invert digital output via p0748.		4.5
LH11 Listenh G120 CU240B/E-2 - Safety Integrated					
AP01283996	In F01611/F30611 "SI P1: Defect in a monitoring channel", for fault value 1000 "Watchdog timer has expired." there is no possible remedy	In F01611/F30611 "SI P1: Defect in a monitoring channel", for fault value 1000 "Watchdog timer has expired." there is no possible remedy	Remedy for fault value 1000: Check the tolerance time of the F-DI changeover and if required, increase the value (p9650, p9850).		4.5
LH14 Listenh G120D - General					
AP01229100	In the List Manual "SINAMICS G120D", in the description of p0970 "Reset drive parameters", for CU250D-2, the following sentence does not apply: "Parameter reset has been completed if p0970 and p0010 have been set to 0."	In the List Manual "SINAMICS G120D", in the description of p0970 "Reset drive parameters", for CU250D-2, the following sentence does not apply: "Parameter reset has been completed if p0970 and p0010 have been set to 0."	The following sentence is correct: "Parameter reset has been completed if p0970 has been set to 0 and p0010 has been set to 1."		4.5
PNIO_MC - PROFINET communication					
AP01316001	If the telegram "Additional data, Safety Info Channel, PZD-0/3" is configured, then alarm A08511 "PROFINET: Receive configuration data invalid" is output with alarm value 2 "Too many PZD data words for output or input to a drive object. Maximum 12 words are possible". The BF-LED flashes and cyclic data transfer is not possible.	If the telegram "Additional data, Safety Info Channel, PZD-0/3" is configured, then alarm A08511 "PROFINET: Receive configuration data invalid" is output with alarm value 2 "Too many PZD data words for output or input to a drive object. Maximum 12 words are possible". The BF-LED flashes and cyclic data transfer is not possible.	Use "Additional telegram PZD-2/4".	DEV_CUxxx	4.5