

FAQ for SINAMICS DCM

Question:

What new functions are available from firmware V1.4?

Answer:

Devices have been delivered with the new firmware V1.4 since the beginning of August 2013. The new available functions are described below.

Note:

The new CUD is required for using firmware version V1.4

Item number	Designation	Order number (MLFB)	For firmware
C98043-A7100-L1	Standard CUD	6RY1803-0AA00	V1.1, V1.2, V1.3
C98043-A7100-L2	Advanced CUD	6RY1803-0AA05	V1.1, V1.2, V1.3
C98043-A7100-L100	Standard CUD painted	6RY1803-0AA20	V1.1, V1.2, V1.3
C98043-A7100-L200	Advanced CUD painted	6RY1803-0AA25	V1.1, V1.2, V1.3
C98043-A7100-L3	Standard CUD	6RY1803-0AA00-0AA1	All versions
C98043-A7100-L4	Advanced CUD	6RY1803-0AA05-0AA1	All versions
C98043-A7100-L103	Standard CUD painted	6RY1803-0AA20-0AA1	All versions
C98043-A7100-L204	Advanced CUD painted	6RY1803-0AA25-0AA1	All versions

New functions as of firmware V1.4

<p>BiCOs for IOs All analog & digital inputs now have BiCOs that can be used for setting for test and simulation purposes.</p>
<p>Know-how protection The know-how protection can be activated on SINAMICS DCM as a p-parameter read/write disable.</p>
<p>KP gain values greater than 200 KP values greater than 200 are now possible that are required for knife drives of cross cutters.</p>
<p>Adjustment option of offset angle for CM Control Module In some cases the synchronizing voltage will not be picked off at the power unit, but from the primary side of the converter transformer, i.e. by means of voltage transformers from the switchgear. The phase shift occurring in the converter transformer is taken into account by the software.</p>

<p>Heating applications Rms value current control or rms value power control by means of parameters r52126 Armature current actual value rms value, r52127 Armature voltage rms value and r52128 Active power for a pure ohmic load.</p>
<p>TM150 Support of TM150 Terminal Module on SINAMICS DCM.</p>
<p>Ethernet/IP Support of the Ethernet-based fieldbus of the Open Device Net Vendor Association (ODVA) - a fieldbus that is widely used in automation systems. Use of the additionally required CBE20 module also enables consistency between the office network and a controlled system for the SINAMICS DCM.</p>
<p>Automatic restart The "Automatic restart active" bit is made accessible for the SINAMICS DCM so that when this bit is set an automatic restart of the device is performed.</p>
<p>Homing with external zero mark Resetting the absolute position is now possible in the case of incremental encoders. As the SINAMICS DCM does not have any fast interrupt-driven measuring input inputs, on-the-fly measurement, reference mark search with external zero mark, and probe evaluation are still not possible.</p>
<p>Device option L15 Device option L15 is supplemented by a warning message that is output if the device is automatically derated on account of L15.</p>
<p>OALink Support of an additional OA application that can be activated for CUD (or CU320-2; license required), that enables data to be exchanged between several Control Units via Drive-CliQ cable at the relevant connections.</p>
<p>Extension of option list (allocation board) The option list is now extended to 24 additional options in total that can be written to the allocation board.</p>
<p>Function diagram screen forms Screen form(s) for digital inputs/outputs: Starter integration of function diagrams FP2050, FP2055, FP2060, FP2065 and FP2070. Screen form(s) for analog inputs/outputs: Starter integration of function diagrams FP2075, FP2080, FP2085, FP2090 and FP2095. Screen form(s) for definition of the fixed setpoints: Starter integration of function diagram FP3100. Screen form(s) for selection of the command data set: Starter integration of function diagram FP8560. Screen form(s) for selection of the drive data set: Starter integration of function diagram FP8565 and FP8570. Screen form(s) for absolute value in the case of incremental encoders: Starter integration of function diagram FP4750.</p>
<p>High-current electrolysis applications To support high-current electrolysis applications, parameter p50826 Field power unit compensation values has been included in the CM Control Module, and parameters p50079, p50103, p50104, p50111, p50148, p50150, p50151, p50159, p50160, p50161, p50179, p50192, p50260, p50541, p50543, p50546, p50550, p50563, p50961, p51592 and p51594 can now be changed during operation.</p>
<p>Compliance with the requirements of standard UL 508c Adaptation of the response of thermal motor model calculation to satisfy the requirements of standard UL 508c.</p>