

Manufacturer's Declaration

Nr. / No. SINAMICS_G120_668.DCOBC1116.40.034

Manufacturer: SIEMENS Aktiengesellschaft

Address: SIEMENS Aktiengesellschaft; DF MC
Frauenauracher Straße 80
D-91056 Erlangen
Germany

Product description: **SINAMICS G120**
(for included hardware and software releases see annex)

The functional safety functions "Basic Functions" (STO, SS1) and "Extended Functions" (SLS, SSM, SDI, SBC) of the above mentioned product fulfil the requirements of SIL 2 according to [1] and [4], PL d according to [2] and category 3 according to [2].

The functional safety function "STO via Power Module Terminals" implemented in power modules PM240-2 FSD-F noted below fulfil the requirements of SIL 3 according to [1] and [4], PL e according to [2] and category 3 according to [2].

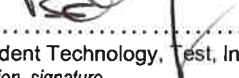
The functions STO and SS1 correspond to stop category 0 and stop category 1 according to [3], respectively.

Reference number

- | | |
|-----|-------------------------------|
| [1] | IEC 61508, part 1 to 3 (2010) |
| [2] | ISO13849 part 1 (2015) |
| [3] | IEC 60204 (2005) |
| [4] | IEC 61800-5-2 (2016) |

Erlangen, 16-11-21

G. Bock

i.V. 
Vice President Technology, Test, Infrastructure & Process
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1 Software

1.1 SINAMICS Control Units

CU240E-2 6SL3244-0BB12-1BA0 CU240E-2 DP 6SL3244-0BB12-1PA0 CU240E-2 F 6SL3244-0BB13-1BA0 CU240E-2 DP-F 6SL3244-0BB13-1PA0	CU240E-2 F 6SL3244-0BB13-1BA1 CU240E-2 DP-F 6SL3244-0BB13-1PA1 CU240E-2 PN ¹ 6SL3244-0BB12-1FA0 CU240E-2 PN-F 6SL3244-0BB13-1FA0 CU240E-2 ¹ 6SL3244-0BB12-1BA1 CU240E-2 DP ¹ 6SL3244-0BB12-1PA1	CU250S-2 PN 6SL3246-0BA22-1FA0 CU250S-2 DP 6SL3246-0BA22-1PA0 CU250S-2 USS 6SL3246-0BA22-1BA0 CU250S-2 CAN 6SL3246-0BA22-1CA0	Safety-Firmware- Version (Basic)	Safety-Firmware- Version (Extended)
V 4.3 SP2 HF1 V 4.3 SP2 HF3	---	---	04.30.14.00	04.30.17.00
---	V 4.4 HF5 V 4.4 HF13	---	04.40.23.03	04.40.23.04
---	V 4.5 V 4.5 HF1 V 4.5 HF99 ²	---	04.50.30.00	04.50.24.00
---	V 4.5 HF15	---	04.50.30.05	04.50.30.14
---	V 4.6 V 4.6 HF1	---	04.60.19.00	04.60.20.00
---	V 4.6 HF3 V 4.6 HF4	V 4.6 HF4	04.60.21.06	04.60.20.00
---	V 4.6 HF6 V 4.6 HF7 V 4.6 HF8 V 4.6 HF11 V 4.6 HF17 V 4.6 HF22 V 4.6 HF99	V 4.6 HF6 V 4.6 HF7 V 4.6 HF8 V 4.6 HF11 V 4.6 HF14 V 4.6 HF17 V 4.6 HF22 V 4.6 HF99	04.60.21.06	04.60.21.13
---	V 4.7 HF3 V 4.7 HF6	V 4.7 HF3	04.70.35.07	04.70.29.00
---	V 4.7 HF8	V 4.7 HF8	04.70.35.18	04.70.35.18
---	V 4.7 HF11	V 4.7 HF11	04.70.35.18	04.70.35.21
---	V 4.7 SP3 V 4.7 SP3 HF1 V 4.7 SP3 HF2 V 4.7 SP3 HF3 V 4.7 SP3 HF6 V 4.7 SP6 HF1 V 4.7 SP6 HF99	V 4.7 SP3 V 4.7 SP3 HF1 V 4.7 SP3 HF2 V 4.7 SP3 HF3 V 4.7 SP3 HF6 V 4.7 SP6 HF1	04.70.53.00	04.70.53.00

¹ STO only

² For CU240E-2 (6SL3244-0BB12-1BA1) and CU240E-2 DP (6SL3244-0BB12-1PA1) only

2 Hardware

2.1 SINAMICS G120 Control Units

Description	Purchase-No. (MLFB)	Version
CU240E-2 (STO only)	6SL3244-0BB12-1BA0	A04, A05, A06, A07
	6SL3244-0BB12-1BA1	A01, A03, A04, A05, A06, B01, C01, D01
CU240E-2 DP (STO only)	6SL3244-0BB12-1PA0	A04, A05, A06, A07
	6SL3244-0BB12-1PA1	A01, A02, A03, A04, A05, B01, C01, D01
CU240E-2 F	6SL3244-0BB13-1BA0	A04, A05, A06, A07
	6SL3244-0BB13-1BA1	A01, A03, A04, A05, A06, B01, C01, D01
CU240E-2 DP-F	6SL3244-0BB13-1PA0	A04, A05, A06, A07
	6SL3244-0BB13-1PA1	A01, A02, A03, A04, A05, B01, C01, D01
CU240E-2 PN (STO only)	6SL3244-0BB12-1FA0	A01, A02, A03, A04, B01, C01, D01
CU240E-2 PN-F	6SL3244-0BB13-1FA0	A01, A02, A03, A04, B01, C01, D01
CU250S-2 PN	6SL3246-0BA22-1FA0	04, 05, 06, 07, 08, 09, 10
CU250S-2 DP	6SL3246-0BA22-1PA0	04, 05, 06, 07, 08, 09, 10
CU250S-2 USS	6SL3246-0BA22-1BA0	04, 05, 06, 07, 08, 09, 10
CU250S-2 CAN	6SL3246-0BA22-1CA0	04, 05, 06, 07, 08, 09, 10

2.2 SINAMICS G120 Power Modules (blocksize – SIL2)

Description	Purchase-No. (MLFB)	Version
PM230 IP20 FSA-C		
PM230 IP20 FSA UNFLT 370W	6SL3210-1NE11-3UG1	01
PM230 IP20 FSA UNFLT 550W	6SL3210-1NE11-7UG1	01
PM230 IP20 FSA UNFLT 750W	6SL3210-1NE12-2UG1	01
PM230 IP20 FSA UNFLT 1.1KW	6SL3210-1NE13-1UG1	01
PM230 IP20 FSA UNFLT 1.5KW	6SL3210-1NE14-1UG1	01
PM230 IP20 FSA UNFLT 2.2KW	6SL3210-1NE15-8UG1	01
PM230 IP20 FSA UNFLT 3.0KW	6SL3210-1NE17-7UG1	01
PM230 IP20 FSA FLT 370W	6SL3210-1NE11-3AG1	01
PM230 IP20 FSA FLT 550W	6SL3210-1NE11-7AG1	01
PM230 IP20 FSA FLT 750W	6SL3210-1NE12-2AG1	01
PM230 IP20 FSA FLT 1.1KW	6SL3210-1NE13-1AG1	01
PM230 IP20 FSA FLT 1.5KW	6SL3210-1NE14-1AG1	01
PM230 IP20 FSA FLT 2.2KW	6SL3210-1NE15-8AG1	01
PM230 IP20 FSA FLT 3.0KW	6SL3210-1NE17-7AG1	01
PM230 IP20 PT FSA UNFLT 3.0KW	6SL3211-1NE17-7UG1	01
PM230 IP20 PT FSA FLT 3.0KW	6SL3211-1NE17-7AG1	01

PM230 IP20 FSB UNFLT 4.0KW	6SL3210-1NE21-0UG1	01
PM230 IP20 FSB UNFLT 5.5KW	6SL3210-1NE21-3UG1	01
PM230 IP20 FSB UNFLT 7.5KW	6SL3210-1NE21-8UG1	01
PM230 IP20 FSB FLT 4.0KW	6SL3210-1NE21-0AG1	01
PM230 IP20 FSB FLT 5.5KW	6SL3210-1NE21-3AG1	01
PM230 IP20 FSB FLT 7.5KW	6SL3210-1NE21-8AG1	01
PM230 IP20 PT FSB UNFLT 7.5KW	6SL3211-1NE21-8UG1	01
PM230 IP20 PT FSB FLT 7.5KW	6SL3211-1NE21-8AG1	01
PM230 IP20 FSC UNFLT 11KW	6SL3210-1NE22-6UG1	01
PM230 IP20 FSC UNFLT 15KW	6SL3210-1NE23-2UG1	01
PM230 IP20 FSC UNFLT 18.5KW	6SL3210-1NE23-8UG1	01
PM230 IP20 FSC FLT 11KW	6SL3210-1NE22-6AG1	01
PM230 IP20 FSC FLT 15KW	6SL3210-1NE23-2AG1	01
PM230 IP20 FSC FLT 18.5KW	6SL3210-1NE23-8AG1	01
PM230 IP20 PT FSC UNFLT 18.5KW	6SL3211-1NE23-8UG1	01
PM230 IP20 PT FSC FLT 18.5KW	6SL3211-1NE23-8AG1	01
PM230 IP55 FSA-C		
PM230 IP55 FSA 370W CA	6SL3223-0DE13-7AG1	01
PM230 IP55 FSA 550W CA	6SL3223-0DE15-5AG1	01
PM230 IP55 FSA 750W CA	6SL3223-0DE17-5AG1	01
PM230 IP55 FSA 1.1KW CA	6SL3223-0DE21-1AG1	01
PM230 IP55 FSA 1.5KW CA	6SL3223-0DE21-5AG1	01
PM230 IP55 FSA 2.2KW CA	6SL3223-0DE22-2AG1	01
PM230 IP55 FSA 3.0KW CA	6SL3223-0DE23-0AG1	01
PM230 IP55 FSA 370W CB	6SL3223-0DE13-7BG1	01
PM230 IP55 FSA 550W CB	6SL3223-0DE15-5BG1	01
PM230 IP55 FSA 750W CB	6SL3223-0DE17-5BG1	01
PM230 IP55 FSA 1.1KW CB	6SL3223-0DE21-1BG1	01
PM230 IP55 FSA 1.5KW CB	6SL3223-0DE21-5BG1	01
PM230 IP55 FSA 2.2KW CB	6SL3223-0DE22-2BG1	01
PM230 IP55 FSA 3.0KW CB	6SL3223-0DE23-0BG1	01
PM230 IP55 FSB 4.0KW CA	6SL3223-0DE24-0AG1	01
PM230 IP55 FSB 5.5KW CA	6SL3223-0DE25-5AG1	01
PM230 IP55 FSB 7.5KW CA	6SL3223-0DE27-5AG1	01
PM230 IP55 FSB 4.0W CB	6SL3223-0DE24-0BG1	01
PM230 IP55 FSB 5.5W CB	6SL3223-0DE25-5BG1	01
PM230 IP55 FSB 7.5W CB	6SL3223-0DE27-5BG1	01
PM230 IP55 FSC 11KW CA	6SL3223-0DE31-1AG1	01
PM230 IP55 FSC 15KW CA	6SL3223-0DE31-5AG1	01

PM230 IP55 FSC 18.5KW CA	6SL3223-0DE31-8AG1	01
PM230 IP55 FSC 11KW CB	6SL3223-0DE31-1BG1	01
PM230 IP55 FSC 15KW CB	6SL3223-0DE31-5BG1	01
PM240		
PM240 (3AC, 400V, unfiltered, 0.37kW)	6SL3224-0BE13-7UA0	A01, A02, B01, C01, C02, D02
PM240 (3AC, 400V, unfiltered, 0.55kW)	6SL3224-0BE15-5UA0	A01, A02, B01, C01, C02, D02
PM240 (3AC, 400V, unfiltered, 0.75kW)	6SL3224-0BE17-5UA0	A01, A02, B01, C01, C02, D02
PM240 (3AC, 400V, unfiltered, 1.10kW)	6SL3224-0BE21-1UA0	A01, A02, B01, C01, C02, D02
PM240 (3AC, 400V, unfiltered, 1.50kW)	6SL3224-0BE21-5UA0	A01, A02, B01, C01, C02, D02
PM240 (3AC, 400V, unfiltered, 2.20kW)	6SL3224-0BE22-2UA0	A01, A02, B01, C01, C02, D02
PM240 (3AC, 400V, unfiltered, 3.00kW)	6SL3224-0BE23-0UA0	A01, A02, B01, C01, C02, D02
PM240 (3AC, 400V, unfiltered, 4.00kW)	6SL3224-0BE24-0UA0	A01, A02, B01, C01, C02, D02
PM240 (3AC, 400V, unfiltered, 5.50kW)	6SL3224-0BE25-5UA0	A01, A02, B01, C01, C02, D02
PM240 (3AC, 400V, unfiltered, 7.50kW)	6SL3224-0BE27-5UA0	A01, A02, B01, B02, C01, C02, D02
PM240 (3AC, 400V, unfiltered, 11.0kW)	6SL3224-0BE31-1UA0	A01, A02, B01, B02, C01, C02, D02
PM240 (3AC, 400V, unfiltered, 15.0kW)	6SL3224-0BE31-5UA0	A, B, C, D, E, F, G, H
PM240 (3AC, 400V, unfiltered, 18,5kW)	6SL3224-0BE31-8UA0	A, B, C, D, E, F, G, H, J
PM240 (3AC, 400V, unfiltered, 22.0kW)	6SL3224-0BE32-2UA0	A, B, C, D, E, F, G, H
PM240 (3AC, 400V, unfiltered, 30.0kW)	6SL3224-0BE33-0UA0	A, B, C, D, E, F, G, H, J
PM240 (3AC, 400V, unfiltered, 37.0kW)	6SL3224-0BE33-7UA0	A, B, C, D, E, F, G, H, J, K
PM240 (3AC, 400V, unfiltered, 45.0kW)	6SL3224-0BE34-5UA0	A, B, C, D, E, F, H, J, K
PM240 (3AC, 400V, unfiltered, 55.0kW)	6SL3224-0BE35-5UA0	A, B, C, D, E, F, G, H, J, K, M, N
PM240 (3AC, 400V, unfiltered, 75.0kW)	6SL3224-0BE37-5UA0	A, B, C, D, E, F, G, H, J, K, M, N
PM240 (3AC, 400V, unfiltered, 90.0kW)	6SL3224-0BE38-8UA0	A, B, C, D, E, F, G
PM240 (3AC, 400V, unfiltered, 110kW)	6SL3224-0BE41-1UA0	A, B, C, D, E, F, G
PM240 (3AC, 400V, unfiltered, 132kW)	6SL3224-0XE41-3UA0	A, B
PM240 (3AC, 400V, unfiltered, 160kW)	6SL3224-0XE41-6UA0	A, B
PM240 (3AC, 400V, unfiltered, 200kW)	6SL3224-0XE42-0UA0	A, B
PM240 (3AC, 400V, filtered, 2.20kW)	6SL3224-0BE22-2AA0	A01, A02, B01, C01, C02, D02
PM240 (3AC, 400V, filtered, 3.00kW)	6SL3224-0BE23-0AA0	A01, A02, B01, C01, C02, D02
PM240 (3AC, 400V, filtered, 4.00kW)	6SL3224-0BE24-0AA0	A01, A02, B01, C01, C02, D02
PM240 (3AC, 400V, filtered, 5.50kW)	6SL3224-0BE25-5AA0	A01, A02, B01, B02, C01, C02, D02
PM240 (3AC, 400V, filtered, 7.50kW)	6SL3224-0BE27-5AA0	A01, A02, B01, B02, C01, C02, D02
PM240 (3AC, 400V, filtered, 11.0kW)	6SL3224-0BE31-1AA0	A01, A02, B01, B02, C01, C02, D02
PM240 (3AC, 400V, filtered, 15.0kW)	6SL3224-0BE31-5AA0	A, B, C, D, E, F, G, H, J
PM240 (3AC, 400V, filtered, 18,5kW)	6SL3224-0BE31-8AA0	A, B, C, D, E, F, G, H, J, K
PM240 (3AC, 400V, filtered, 22.0kW)	6SL3224-0BE32-2AA0	A, B, C, D, E, F, G, H, J
PM240 (3AC, 400V, filtered, 30.0kW)	6SL3224-0BE33-0AA0	A, B, C, D, E, F, G, H, J
PM240 (3AC, 400V, filtered, 37.0kW)	6SL3224-0BE33-7AA0	A, B, C, D, E, F, G, H, J, K

PM240 (3AC, 400V, filtered, 45.0kW)	6SL3224-0BE34-5AA0	A, B, C, D, E, F, G, H, J, K
PM240 (3AC, 400V, filtered, 55.0kW)	6SL3224-0BE35-5AA0	A, B, C, D, E, F, G, H, J, K, M, N
PM240 (3AC, 400V, filtered, 75.0kW)	6SL3224-0BE37-5AA0	A, B, C, D, E, F, G, H, J, K, M, N
PM250		
PM250 (3AC, 400V, unfiltered, 15.0kW)	6SL3225-0BE31-5UA0	A, B, C, D
PM250 (3AC, 400V, unfiltered, 18.5kW)	6SL3225-0BE31-8UA0	A, B, C, D
PM250 (3AC, 400V, unfiltered, 22.0kW)	6SL3225-0BE32-2UA0	A, B, C, D
PM250 (3AC, 400V, unfiltered, 30.0kW)	6SL3225-0BE33-0UA0	A, B, C, D
PM250 (3AC, 400V, unfiltered, 37.0kW)	6SL3225-0BE33-7UA0	A, B, C, D
PM250 (3AC, 400V, unfiltered, 45.0kW)	6SL3225-0BE34-5UA0	A, B, C, D
PM250 (3AC, 400V, unfiltered, 55.0kW)	6SL3225-0BE35-5UA0	A, B, C, D
PM250 (3AC, 400V, unfiltered, 75.0kW)	6SL3225-0BE37-5UA0	A, B, C, D
PM250 (3AC, 400V, filtered, 5.50kW)	6SL3225-0BE25-5AA0 6SL3225-0BE25-5AA1	A05, B01 A01, A02, B01, D01, D02, E01
PM250 (3AC, 400V, filtered, 7.50kW)	6SL3225-0BE27-5AA0 6SL3225-0BE27-5AA1	A05, B01 A01, A02, B01, C01, C02, E01
PM250 (3AC, 400V, filtered, 11.0kW)	6SL3225-0BE31-1AA0 6SL3225-0BE31-1AA1	A05, B01 A01, A02, B01, C01, D02, E01
PM250 (3AC, 400V, filtered, 15.0kW)	6SL3225-0BE31-5AA0	A, B, C, D, E, F, G, H, J
PM250 (3AC, 400V, filtered, 18.5kW)	6SL3225-0BE31-8AA0	A, B, C, D, E, F, G, H, J
PM250 (3AC, 400V, filtered, 22.0kW)	6SL3225-0BE32-2AA0	A, B, C, D, E, F, G, H, J
PM250 (3AC, 400V, filtered, 30.0kW)	6SL3225-0BE33-0AA0	A, B, C, D, E, F, G
PM250 (3AC, 400V, filtered, 37.0kW)	6SL3225-0BE33-7AA0	A, B, C, D, E, F, G
PM250 (3AC, 400V, filtered, 45.0kW)	6SL3225-0BE34-5AA0	A, B, C, D, E, F, G
PM250 (3AC, 400V, filtered, 55.0kW)	6SL3225-0BE35-5AA0	A, B, C, D, E, F, G
PM250 (3AC, 400V, filtered, 75.0kW)	6SL3225-0BE37-5AA0	A, B, C, D, E, F, G
PM260		
PM260 (3AC, 600V, unfiltered, 7.50kW)	6SL3225-0BH27-5UA1	A, B
PM260 (3AC, 600V, unfiltered, 11.0kW)	6SL3225-0BH31-1UA1	A, B
PM260 (3AC, 600V, unfiltered, 15.0kW)	6SL3225-0BH31-5UA1	A, B
PM260 (3AC, 600V, unfiltered, 22.0kW)	6SL3225-0BH32-2UA1	A, B
PM260 (3AC, 600V, unfiltered, 30.0kW)	6SL3225-0BH33-0UA1	A, B
PM260 (3AC, 600V, unfiltered, 37.0kW)	6SL3225-0BH33-7UA1	A, B
PM260 (3AC, 600V, filtered, 7.50kW)	6SL3225-0BH27-5AA1	A, B
PM260 (3AC, 600V, filtered, 11.0kW)	6SL3225-0BH31-1AA1	A, B
PM260 (3AC, 600V, filtered, 15.0kW)	6SL3225-0BH31-5AA1	A, B
PM260 (3AC, 600V, filtered, 22.0kW)	6SL3225-0BH32-2AA1	A, B
PM260 (3AC, 600V, filtered, 30.0kW)	6SL3225-0BH33-0AA1	A, B
PM260 (3AC, 600V, filtered, 37.0kW)	6SL3225-0BH33-7AA1	A, B

PM240-2		
PM240-2 (3AC, 400V, filtered, 0.55kW)	6SL3210-1PE11-8AL0	A05
PM240-2 (3AC, 400V, filtered, 0.75kW)	6SL3210-1PE12-3AL0	A05
PM240-2 (3AC, 400V, filtered, 1.10kW)	6SL3210-1PE13-2AL0	A05
PM240-2 (3AC, 400V, filtered, 1.50kW)	6SL3210-1PE14-3AL0	A05
PM240-2 (3AC, 400V, filtered, 2.20kW)	6SL3210-1PE16-1AL0	A05
PM240-2 (3AC, 400V, unfiltered, 0.55kW)	6SL3210-1PE11-8UL0	A05
PM240-2 (3AC, 400V, unfiltered, 0.75kW)	6SL3210-1PE12-3UL0	A05
PM240-2 (3AC, 400V, unfiltered, 1.10kW)	6SL3210-1PE13-2UL0	A05
PM240-2 (3AC, 400V, unfiltered, 1.50kW)	6SL3210-1PE14-3UL0	A05
PM240-2 (3AC, 400V, unfiltered, 2.20kW)	6SL3210-1PE16-1UL0	A05
PM240-2 (3AC, 400V, unfiltered, 3.00kW)	6SL3210-1PE18-0UL0	A05
PM240-2 (3AC, 400V, filtered, PT ³ , 2.20kW)	6SL3211-1PE16-1AL0	A05
PM240-2 (3AC, 400V, unfiltered, PT ³ , 3.00kW)	6SL3211-1PE18-0UL0	A05
PM240-2 FSA/B/C 400V		
PM240-2 (FSA, 3AC, 400V, IP20, FLT, 0.55kW)	6SL3210-1PE11-8AL1	03, 04, 05, 06
PM240-2 (FSA, 3AC, 400V, IP20, FLT, 0.75kW)	6SL3210-1PE12-3AL1	03, 04, 05, 06
PM240-2 (FSA, 3AC, 400V, IP20, FLT, 1.10kW)	6SL3210-1PE13-2AL1	03, 04, 05, 06
PM240-2 (FSA, 3AC, 400V, IP20, FLT, 1.50kW)	6SL3210-1PE14-3AL1	03, 05, 06
PM240-2 (FSA, 3AC, 400V, IP20, FLT, 2.20kW)	6SL3210-1PE16-1AL1	03, 05, 06
PM240-2 (FSA, 3AC, 400V, IP20, FLT, PT ³ , 2.20kW)	6SL3211-1PE16-1AL1	03
PM240-2 (FSA, 3AC, 400V, IP20, UFLT, 0.55kW)	6SL3210-1PE11-8UL1	03, 04, 05, 06
PM240-2 (FSA, 3AC, 400V, IP20, UFLT, 0.75kW)	6SL3210-1PE12-3UL1	03, 04, 05, 06
PM240-2 (FSA, 3AC, 400V, IP20, UFLT, 1.10kW)	6SL3210-1PE13-2UL1	03, 04, 05, 06
PM240-2 (FSA, 3AC, 400V, IP20, UFLT, 1.50kW)	6SL3210-1PE14-3UL1	03, 05, 06
PM240-2 (FSA, 3AC, 400V, IP20, UFLT, 2.20kW)	6SL3210-1PE16-1UL1	03, 05, 06
PM240-2 (FSA, 3AC, 400V, IP20, UFLT, 3.00kW)	6SL3210-1PE18-0UL1	03, 05, 06
PM240-2 (FSA, 3AC, 400V, IP20, UFLT, PT ³ , 3.00kW)	6SL3211-1PE18-0UL1	03
PM240-2 (FSA, 3AC, 400V, IP20, FLT, 3.00kW)	6SL3210-1PE18-0AL1	03, 05, 06
PM240-2 (FSA, 3AC, 400V, IP20, FLT, PT, 3.00kW)	6SL3211-1PE18-0AL1	03
PM240-2 (FSB, 3AC, 400V, IP20, FLT, 4.00kW)	6SL3210-1PE21-1AL0	03
PM240-2 (FSB, 3AC, 400V, IP20, FLT, 5.50kW)	6SL3210-1PE21-4AL0	03
PM240-2 (FSB, 3AC, 400V, IP20, FLT, 7.50kW)	6SL3210-1PE21-8AL0	03
PM240-2 (FSB, 3AC, 400V, IP20, FLT, PT ³ , 7.50kW)	6SL3211-1PE21-8AL0	03
PM240-2 (FSB, 3AC, 400V, IP20, UFLT, 4.00kW)	6SL3210-1PE21-1UL0	03
PM240-2 (FSB, 3AC, 400V, IP20, UFLT, 5.50kW)	6SL3210-1PE21-4UL0	03
PM240-2 (FSB, 3AC, 400V, IP20, UFLT, 7.50kW)	6SL3210-1PE21-8UL0	03
PM240-2 (FSB, 3AC, 400V, IP20, UFLT, PT ³ , 7.50kW)	6SL3211-1PE21-8UL0	03

³ Push Through

PM240-2 (FSC, 3AC, 400V, IP20, FLT, 11.00kW)	6SL3210-1PE22-7AL0	03
PM240-2 (FSC, 3AC, 400V, IP20, FLT, 15.00kW)	6SL3210-1PE23-3AL0	03
PM240-2 (FSC, 3AC, 400V, IP20, FLT, PT ³ , 15.00kW)	6SL3211-1PE23-3AL0	03
PM240-2 (FSC, 3AC, 400V, IP20, UFLT, 11.00kW)	6SL3210-1PE22-7UL0	03
PM240-2 (FSC, 3AC, 400V, IP20, UFLT, 15.00kW)	6SL3210-1PE23-3UL0	03
PM240-2 (FSC, 3AC, 400V, IP20, UFLT, PT ³ , 15.00kW)	6SL3211-1PE23-3UL0	03
PM240-2 FSA/B/C 200V		
PM240-2 (FSA, 1/3AC, 200V, IP20, FLT, 0.55kW)	6SL3210-1PB13-0AL0	03, 04
PM240-2 (FSA, 1/3AC, 200V, IP20, FLT, 0.75kW)	6SL3210-1PB13-8AL0	03, 04
PM240-2 (FSA, 1/3AC, 200V, IP20, FLT, 0.75kW, PT ³)	6SL3211-1PB13-8AL0	03, 04
PM240-2 (FSB, 1/3AC, 200V, IP20, FLT, 1.10kW)	6SL3210-1PB15-5AL0	03, 04
PM240-2 (FSB, 1/3AC, 200V, IP20, FLT, 1.50kW)	6SL3210-1PB17-4AL0	03, 04
PM240-2 (FSB, 1/3AC, 200V, IP20, FLT, 2.2kW)	6SL3210-1PB21-0AL0	03, 04
PM240-2 (FSB, 1/3AC, 200V, IP20, FLT, 2.2kW, PT ³)	6SL3211-1PB21-0AL0	03, 04
PM240-2 (FSC, 1/3AC, 200V, IP20, FLT, 3kW)	6SL3210-1PB21-4AL0	03, 04
PM240-2 (FSC, 1/3AC, 200V, IP20, FLT, 4kW)	6SL3210-1PB21-8AL0	03, 04
PM240-2 (FSC, 1/3AC, 200V, IP20, FLT, 4kW, PT ³)	6SL3211-1PB21-8AL0	03, 04
PM240-2 (FSC, 1/3AC, 200V, IP20, FLT, 5.5kW)	6SL3210-1PC22-2AL0	03, 04
PM240-2 (FSC, 1/3AC, 200V, IP20, FLT, 5.5kW, PT ³)	6SL3211-1PC22-2AL0	01
PM240-2 (FSC, 1/3AC, 200V, IP20, FLT, 7.5kW)	6SL3210-1PC22-8AL0	03, 08
PM240-2 (FSC, 1/3AC, 200V, IP20, FLT, 7.5kW, PT ³)	6SL3211-1PC22-8AL0	01
PM240-2 (FSA, 1/3AC, 200V, IP20, UFLT, 0.55kW)	6SL3210-1PB13-0UL0	03, 04
PM240-2 (FSA, 1/3AC, 200V, IP20, UFLT, 0.75kW)	6SL3210-1PB13-8UL0	03, 04
PM240-2 (FSA, 1/3AC, 200V, IP20, UFLT, 0.75kW, PT ³)	6SL3211-1PB13-8UL0	03, 04
PM240-2 (FSB, 1/3AC, 200V, IP20, UFLT, 1.10kW)	6SL3210-1PB15-5UL0	03, 04
PM240-2 (FSB, 1/3AC, 200V, IP20, UFLT, 1.50kW)	6SL3210-1PB17-4UL0	03, 04
PM240-2 (FSB, 1/3AC, 200V, IP20, UFLT, 2.2kW)	6SL3210-1PB21-0UL0	03, 04
PM240-2 (FSB, 1/3AC, 200V, IP20, UFLT, 2.2kW, PT ³)	6SL3211-1PB21-0UL0	03, 04
PM240-2 (FSC, 1/3AC, 200V, IP20, UFLT, 3kW)	6SL3210-1PB21-4UL0	03, 04
PM240-2 (FSC, 1/3AC, 200V, IP20, UFLT, 4kW)	6SL3210-1PB21-8UL0	03, 04
PM240-2 (FSC, 1/3AC, 200V, IP20, UFLT, 4kW, PT ³)	6SL3211-1PB21-8UL0	03, 04
PM240-2 (FSC, 1/3AC, 200V, IP20, UFLT, 5.5kW)	6SL3210-1PC22-2UL0	03, 04
PM240-2 (FSC, 1/3AC, 200V, IP20, UFLT, 5.5kW, PT ³)	6SL3211-1PC22-2UL0	01
PM240-2 (FSC, 1/3AC, 200V, IP20, UFLT, 7.5kW)	6SL3210-1PC22-8UL0	03, 04
PM240-2 (FSC, 1/3AC, 200V, IP20, UFLT, 7.5kW, PT ³)	6SL3211-1PC22-8UL0	01

2.3 SINAMICS G120 Power Modules (blocksize – SIL3)

PM240-2 FSD/E/F 200V		
PM240-2 (FSD, 3AC, 200V, IP20, UFLT, 11kW)	6SL3210-1PC24-2UL0	04, 05, 10

PM240-2 (FSD, 3AC, 200V, IP20, UFLT, 15kW)	6SL3210-1PC25-4UL0	04, 05, 10
PM240-2 (FSD, 3AC, 200V, IP20, UFLT, 18.5kW)	6SL3210-1PC26-8UL0	04, 05, 10
PM240-2 (FSE, 3AC, 200V, IP20, UFLT, 22kW)	6SL3210-1PC28-0UL0	04, 05, 10
PM240-2 (FSE, 3AC, 200V, IP20, UFLT, 30kW)	6SL3210-1PC31-1UL0	04, 05, 10
PM240-2 FSF 3AC 200V 37 UFLT IP20	6SL3210-1PC31-3UL0	04, 07
PM240-2 FSF 3AC 200V 45 UFLT IP20	6SL3210-1PC31-6UL0	04, 07
PM240-2 FSF 3AC 200V 55 UFLT IP20	6SL3210-1PC31-8UL0	04, 07
PM240-2 FSD/E/F 400V		
PM240-2 (FSD, 3AC, 400V, IP20, FLT, 18.5kW)	6SL3210-1PE23-8AL0	04, 05, 10
PM240-2 (FSD, 3AC, 400V, IP20, UFLT, 18.5kW)	6SL3210-1PE23-8UL0	04, 05, 10
PM240-2 (FSD, 3AC, 400V, IP20, FLT, 22kW)	6SL3210-1PE24-5AL0	04, 05, 10
PM240-2 (FSD, 3AC, 400V, IP20, UFLT, 22kW)	6SL3210-1PE24-5UL0	04, 05, 10
PM240-2 (FSD, 3AC, 400V, IP20, FLT, 30kW)	6SL3210-1PE26-0AL0	04, 05, 10
PM240-2 (FSD, 3AC, 400V, IP20, UFLT, 30kW)	6SL3210-1PE26-0UL0	04, 05, 10
PM240-2 (FSD, 3AC, 400V, IP20, FLT, 37kW)	6SL3210-1PE27-5AL0	04, 05, 10
PM240-2 (FSD, 3AC, 400V, IP20, UFLT, 37kW)	6SL3210-1PE27-5UL0	04, 05, 10
PM240-2 (FSE, 3AC, 400V, IP20, FLT, 45kW)	6SL3210-1PE28-8AL0	04, 05, 10
PM240-2 (FSE, 3AC, 400V, IP20, UFLT, 45kW)	6SL3210-1PE28-8UL0	04, 05, 10
PM240-2 (FSE, 3AC, 400V, IP20, FLT, 55kW)	6SL3210-1PE31-1AL0	04, 05, 10
PM240-2 (FSE, 3AC, 400V, IP20, UFLT, 55kW)	6SL3210-1PE31-1UL0	04, 05, 10
PM240-2 FSF 3AC 400V 75 FILA IP20	6SL3210-1PE31-5AL0	04, 07
PM240-2 FSF 3AC 400V 75 UFLT IP20	6SL3210-1PE31-5UL0	04, 07
PM240-2 FSF 3AC 400V 90 FILA IP20	6SL3210-1PE31-8AL0	04, 07
PM240-2 FSF 3AC 400V 90 UFLT IP20	6SL3210-1PE31-8UL0	04, 07
PM240-2 FSF 3AC 400V 110 FILA IP20	6SL3210-1PE32-1AL0	04
PM240-2 FSF 3AC 400V 110 UFLT IP20	6SL3210-1PE32-1UL0	04
PM240-2 FSF 3AC 400V 132 FILA IP20	6SL3210-1PE32-5AL0	04
PM240-2 FSF 3AC 400V 132 UFLT IP20	6SL3210-1PE32-5UL0	04
PM240-2 FSD/E/F 690V		
PM240-2 (FSD, 3AC, 690V, IP20, FLT, 11kW)	6SL3210-1PH21-4AL0	04, 05, 10
PM240-2 (FSD, 3AC, 690V, IP20, UFLT, 11kW)	6SL3210-1PH21-4UL0	04, 05, 10
PM240-2 (FSD, 3AC, 690V, IP20, FLT, 15kW)	6SL3210-1PH22-0AL0	04, 05, 10
PM240-2 (FSD, 3AC, 690V, IP20, UFLT, 15kW)	6SL3210-1PH22-0UL0	04, 05, 10
PM240-2 (FSD, 3AC, 690V, IP20, FLT, 18.5kW)	6SL3210-1PH22-3AL0	04, 05, 10
PM240-2 (FSD, 3AC, 690V, IP20, UFLT, 18.5kW)	6SL3210-1PH22-3UL0	04, 05, 10
PM240-2 (FSD, 3AC, 690V, IP20, FLT, 22kW)	6SL3210-1PH22-7AL0	04, 05, 10
PM240-2 (FSD, 3AC, 690V, IP20, UFLT, 22kW)	6SL3210-1PH22-7UL0	04, 05, 10
PM240-2 (FSD, 3AC, 690V, IP20, FLT, 30kW)	6SL3210-1PH23-5AL0	04, 05, 10
PM240-2 (FSD, 3AC, 690V, IP20, UFLT, 30kW)	6SL3210-1PH23-5UL0	04, 05, 10

PM240-2 (FSD, 3AC, 690V, IP20, FLT, 37kW)	6SL3210-1PH24-2AL0	04, 05, 10
PM240-2 (FSD, 3AC, 690V, IP20, UFLT, 37kW)	6SL3210-1PH24-2UL0	04, 05, 10
PM240-2 (FSE, 3AC, 690V, IP20, FLT, 45kW)	6SL3210-1PH25-2AL0	04, 05, 10
PM240-2 (FSE, 3AC, 690V, IP20, UFLT, 45kW)	6SL3210-1PH25-2UL0	04, 05, 10
PM240-2 (FSE, 3AC, 690V, IP20, FLT, 55kW)	6SL3210-1PH26-2AL0	04, 05, 10
PM240-2 (FSE, 3AC, 690V, IP20, UFLT, 55kW)	6SL3210-1PH26-2UL0	04, 05, 10
PM240-2 FSF 3AC 690V 75 FILA IP20	6SL3210-1PH28-0AL0	04
PM240-2 FSF 3AC 690V 75 UFLT IP20	6SL3210-1PH28-0UL0	04
PM240-2 FSF 3AC 690V 90 FILA IP20	6SL3210-1PH31-0AL0	04
PM240-2 FSF 3AC 690V 90 UFLT IP20	6SL3210-1PH31-0UL0	04
PM240-2 FSF 3AC 690V 110 FILA IP20	6SL3210-1PH31-2AL0	04
PM240-2 FSF 3AC 690V 110 UFLT IP20	6SL3210-1PH31-2UL0	04
PM240-2 FSF 3AC 690V 132 FILA IP20	6SL3210-1PH31-4AL0	04
PM240-2 FSF 3AC 690V 132 UFLT IP20	6SL3210-1PH31-4UL0	04
PM240P-2 FSD 400V		
PM240P-2 FSD 3AC 400V 18,5kW FILA	6SL3210-1RE23-8AL0	01
PM240P-2 FSD 3AC 400V 22kW FILA	6SL3210-1RE24-5AL0	01
PM240P-2 FSD 3AC 400V 30kW FILA	6SL3210-1RE26-0AL0	01
PM240P-2 FSD 3AC 400V 37kW FILA	6SL3210-1RE27-5AL0	01
PM240P-2 FSD 3AC 400V 18,5kW UFIL	6SL3210-1RE23-8UL0	01
PM240P-2 FSD 3AC 400V 22kW UFIL	6SL3210-1RE24-5UL0	01
PM240P-2 FSD 3AC 400V 30kW UFIL	6SL3210-1RE26-0UL0	01
PM240P-2 FSD 3AC 400V 37kW UFIL	6SL3210-1RE27-5UL0	01
PM240P-2 FSD 690V		
PM240P-2 FSD 3AC 690V 11kW FILA	6SL3210-1RH21-4AL0	01
PM240P-2 FSD 3AC 690V 15kW FILA	6SL3210-1RH22-0AL0	01
PM240P-2 FSD 3AC 690V 18,5kW FILA	6SL3210-1RH22-3AL0	01
PM240P-2 FSD 3AC 690V 22kW FILA	6SL3210-1RH22-7AL0	01
PM240P-2 FSD 3AC 690V 30kW FILA	6SL3210-1RH23-5AL0	01
PM240P-2 FSD 3AC 690V 37kW FILA	6SL3210-1RH24-2AL0	01
PM240P-2 FSD 3AC 690V 11kW UFIL	6SL3210-1RH21-4UL0	01
PM240P-2 FSD 3AC 690V 15kW UFIL	6SL3210-1RH22-0UL0	01
PM240P-2 FSD 3AC 690V 18,5kW UFIL	6SL3210-1RH22-3UL0	01
PM240P-2 FSD 3AC 690V 22kW UFIL	6SL3210-1RH22-7UL0	01
PM240P-2 FSD 3AC 690V 30kW UFIL	6SL3210-1RH23-5UL0	01
PM240P-2 FSD 3AC 690V 37kW UFIL	6SL3210-1RH24-2UL0	01
PM240P-2 FSE 400V		
PM240P-2 FSE 3AC 400V 45kW FILA	6SL3210-1RE28-8AL0	01
PM240P-2 FSE 3AC 400V 55kW FILA	6SL3210-1RE31-1AL0	01

PM240P-2 FSE 3AC 400V 45kW UFIL	6SL3210-1RE28-8UL0	01
PM240P-2 FSE 3AC 400V 55kW UFIL	6SL3210-1RE31-1UL0	01
PM240P-2 FSE 690V		
PM240P-2 FSE 3AC 690V 45kW FILA	6SL3210-1RH25-2AL0	01
PM240P-2 FSE 3AC 690V 55kW FILA	6SL3210-1RH26-2AL0	01
PM240P-2 FSE 3AC 690V 45kW UFIL	6SL3210-1RH25-2UL0	01
PM240P-2 FSE 3AC 690V 55kW UFIL	6SL3210-1RH26-2UL0	01
PM240P-2 FSF 400V		
PM240P-2 FSF 3AC 400V 110kW FILA	6SL3210-1RE32-1AL0	01
PM240P-2 FSF 3AC 400V 132kW FILA	6SL3210-1RE32-5AL0	01
PM240P-2 FSF 3AC 400V 75kW UFIL	6SL3210-1RE31-5UL0	01
PM240P-2 FSF 3AC 400V 90kW UFIL	6SL3210-1RE31-8UL0	01
PM240P-2 FSF 3AC 400V 110kW UFIL	6SL3210-1RE32-1UL0	01
PM240P-2 FSF 3AC 400V 132kW UFIL	6SL3210-1RE32-5UL0	01
PM240P-2 FSF 690V		
PM240P-2 FSF 3AC 690V 75kW FILA	6SL3210-1RH28-0AL0	01
PM240P-2 FSF 3AC 690V 90kW FILA	6SL3210-1RH31-0AL0	01
PM240P-2 FSF 3AC 690V 110kW FILA	6SL3210-1RH31-2AL0	01
PM240P-2 FSF 3AC 690V 132kW FILA	6SL3210-1RH31-4AL0	01
PM240P-2 FSF 3AC 690V 75kW UFIL	6SL3210-1RH28-0UL0	01
PM240P-2 FSF 3AC 690V 90kW UFIL	6SL3210-1RH31-0UL0	01
PM240P-2 FSF 3AC 690V 110kW UFIL	6SL3210-1RH31-2UL0	01
PM240P-2 FSF 3AC 690V 132kW UFIL	6SL3210-1RH31-4UL0	01

3 System Related Software

According to IEC61508-4 (2010) the related engineering system "SINAMICS Startdrive" is classified as T3 off-line support tool. Therefore, all required measures considering T3 off-line support tools as defined in [1] were applied.

Off-Line Support Tool	Version TIA Portal
SINAMICS Startdrive (TIA Portal)	V13 SP1 V14 V14 SP2