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FAQ

SINAMICS G120C in FSAA: Option compatibility with MICROMASTER 4 option modules

SINAMICS G120C

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1. Line side components

The SINAMICS G120C in Frame Size AA (FSAA) is compatible with the following MICROMASTER 4 Line side components.

1.1. EMC filter

SINAMICS G120C in FSAA is compatible with the following MICROMASTER 4 EMC filter system components.

1.1.1. Filter class A

SINAMICS G120C Article Number	Rating LO (VT)	EMC filter LO (VT) Article Number	Rating HO (CT)	EMC filter HO (CT) Article Number
6SL3210-1KE11-8UX2 1)	0.55kW / 1.7A	6SE6400-2FA00-6AD0	0.37kW / 1.3A	6SE6400-2FA00-6AD0
6SL3210-1KE12-3UX2 1)	0.75kW / 2.2A	6SE6400-2FA00-6AD0	0.55kW / 1.7A	6SE6400-2FA00-6AD0
6SL3210-1KE13-2UX2 1)	1.1kW / 3.1A	6SE6400-2FA00-6AD0	0.75kW / 2.2A	6SE6400-2FA00-6AD0
6SL3210-1KE14-2UX2 1)	1.5kW / 4.1A	6SE6400-2FA00-6AD0	1.1kW / 3.1A	6SE6400-2FA00-6AD0
6SL3210-1KE15-8UX2 1)	2.2kW / 5.6A	2)	1.5kW / 4.1A	6SE6400-2FA00-6AD0

1) X = B for USS communication, P for PROFIBUS DP communication, and F for PROFINET communication
2) Not suitable for HO overload condition, operation under these conditions exceeds MICROMASTER 4 FSA option rated input current and could result in damage

1.1.2. Filter class B

SINAMICS G120C Article Number	Rating LO (VT)	EMC filter LO (VT) Article Number	Rating HO (CT)	EMC filter HO (CT) Article Number
6SL3210-1KE11-8UX2 1)	0.55kW / 1.7A	6SE6400-2FB00-6AD0	0.37kW / 1.3A	6SE6400-2FB00-6AD0
6SL3210-1KE12-3UX2 1)	0.75kW / 2.2A	6SE6400-2FB00-6AD0	0.55kW / 1.7A	6SE6400-2FB00-6AD0
6SL3210-1KE13-2UX2 1)	1.1kW / 3.1A	6SE6400-2FB00-6AD0	0.75kW / 2.2A	6SE6400-2FB00-6AD0
6SL3210-1KE14-2UX2 1)	1.5kW / 4.1A	6SE6400-2FB00-6AD0	1.1kW / 3.1A	6SE6400-2FB00-6AD0
6SL3210-1KE15-8UX2 1)	2.2kW / 5.6A	2)	1.5kW / 4.1A	6SE6400-2FB00-6AD0

1) X = B for USS communication, P for PROFIBUS DP communication, and F for PROFINET communication
2) Not suitable for HO overload condition, operation under these conditions exceeds MICROMASTER 4 FSA option rated input current and could result in damage

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1.2. Input reactor (Line commutation choke).

The SINAMICS G120C in FSAA is compatible with the following MICROMASTER 4 Input reactor (Line commutation choke) system components.

SINAMICS G120C Article Number	Rating LO (VT)	Input reactor LO (VT) Article Number	Rating HO (CT)	Input reactor HO (CT) Article Number
6SL3210-1KE11-8YX2 [1]	0.55kW / 1.7A	6SE6400-3CC00-2AD3	0.37kW / 1.3A	6SE6400-3CC00-2AD3
6SL3210-1KE12-3YX2 [1]	0.75kW / 2.2A	6SE6400-3CC00-4AD3	0.55kW / 1.7A	6SE6400-3CC00-2AD3
6SL3210-1KE13-2YX2 [1]	1.1kW / 3.1A	6SE6400-3CC00-4AD3	0.75kW / 2.2A	6SE6400-3CC00-4AD3
6SL3210-1KE14-2YX2[1]	1.5kW / 4.1A	6SE6400-3CC00-6AD3	1.1kW / 3.1A	6SE6400-3CC00-4AD3
6SL3210-1KE15-8YX2 [1]	2.2kW / 5.6A	[2]	1.5kW / 4.1A	6SE6400-3CC00-6AD3

1) X = B for USS communication, P for PROFIBUS DP communication, and F for PROFINET communication
2) Not suitable for HO overload condition, operation under these conditions exceeds MICROMASTER 4 FSA option rated input current and could result in damage

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2. Load side components

The SINAMICS G120C in Frame Size AA (FSAA) is compatible with the following MICROMASTER 4 Load side components.

2.1. Output reactor (Output choke).

The SINAMICS G120C in FSAA is compatible with the following MICROMASTER 4 Output reactor (Output choke) system components.

SINAMICS G120C Article Number	Rating LO (VT)	Output reactor LO (VT) Article Number	Rating HO (CT)	Output reactor HO (CT) Article Number
6SL3210-1KE11-8YX2 [1]	0.55kW / 1.7A	6SE6400-3TC00-4AD2	0.37kW / 1.3A	6SE6400-3TC00-4AD2
6SL3210-1KE12-3YX2 [1]	0.75kW / 2.2A	6SE6400-3TC00-4AD2	0.55kW / 1.7A	6SE6400-3TC00-4AD2
6SL3210-1KE13-2YX2 [1]	1.1kW / 3.1A	6SE6400-3TC00-4AD2	0.75kW / 2.2A	6SE6400-3TC00-4AD2
6SL3210-1KE14-2YX2[1]	1.5kW / 4.1A	6SE6400-3TC00-4AD2	1.1kW / 3.1A	6SE6400-3TC00-4AD2
6SL3210-1KE15-8YX2 [1]	2.2kW / 5.6A	[2]	1.5kW / 4.1A	6SE6400-3TC00-4AD2

1) X = B for USS communication, P for PROFIBUS DP communication, and F for PROFINET communication
   Y = U for unfiltered, and A for internal class A filter
2) Not suitable for HO overload condition, operation under these conditions exceeds MICROMASTER 4 FSA option rated input current and could result in damage

2.2. LC filter (Sinusoidal filter).

The SINAMICS G120C in FSAA is compatible with the following MICROMASTER 4 LC filter (Sinusoidal filter) system components.

SINAMICS G120C Article Number	Rating LO (VT)	LC filter LO (VT) Article Number	Rating HO (CT)	LC filter HO (CT) Article Number
6SL3210-1KE11-8YX2 [1]	0.55kW / 1.7A	6SE6400-3TD00-4AD0	0.37kW / 1.3A	6SE6400-3TD00-4AD0
6SL3210-1KE12-3YX2 [1]	0.75kW / 2.2A	6SE6400-3TD00-4AD0	0.55kW / 1.7A	6SE6400-3TD00-4AD0
6SL3210-1KE13-2YX2 [1]	1.1kW / 3.1A	6SE6400-3TD00-4AD0	0.75kW / 2.2A	6SE6400-3TD00-4AD0
6SL3210-1KE14-2YX2[1]	1.5kW / 4.1A	6SE6400-3TD00-4AD0	1.1kW / 3.1A	6SE6400-3TD00-4AD0
6SL3210-1KE15-8YX2 [1]	2.2kW / 5.6A	[2]	1.5kW / 4.1A	6SE6400-3TD00-4AD0

1) X = B for USS communication, P for PROFIBUS DP communication, and F for PROFINET communication
   Y = U for unfiltered, and A for internal class A filter
2) Not suitable for HO overload condition, operation under these conditions exceeds MICROMASTER 4 FSA option rated input current and could result in damage

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2.3. Brake Resistor

The SINAMICS G120C in FSAA is compatible with the following MICROMASTER 4 Brake resistor system components.

SINAMICS G120C Article Number	Rating LO (VT)	Brake Resistor LO (VT) Article Number	Rating HO (CT)	Brake Resistor HO (CT) Article Number
6SL3210-1KE11-8YX2 [1]	0.55kW / 1.7A	6SE6400-4BD11-0AA0	0.37kW / 1.3A	6SE6400-4BD11-0AA0
6SL3210-1KE12-3YX2 [1]	0.75kW / 2.2A	6SE6400-4BD11-0AA0	0.55kW / 1.7A	6SE6400-4BD11-0AA0
6SL3210-1KE13-2YX2 [1]	1.1kW / 3.1A	6SE6400-4BD11-0AA0	0.75kW / 2.2A	6SE6400-4BD11-0AA0
6SL3210-1KE14-2YX2[1]	1.5kW / 4.1A	6SE6400-4BD11-0AA0	1.1kW / 3.1A	6SE6400-4BD11-0AA0
6SL3210-1KE15-8YX2 [1]	2.2kW / 5.6A	[2]	1.5kW / 4.1A	6SE6400-4BD11-0AA0

1) X = B for USS communication, P for PROFIBUS DP communication, and F for PROFINET communication
Y = U for unfiltered, and A for internal class A filter
2) Not suitable for HO overload condition, operation under these conditions exceeds MICROMASTER 4 FSA option rated input current and could result in damage

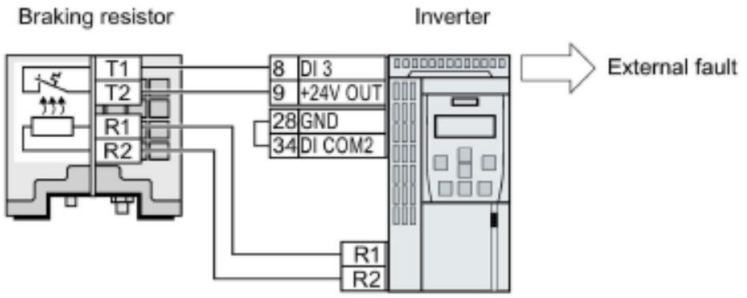
SINAMICS G120C Brake resistor modules 6SL3201-0BE14-3AA0 and 6SL3201-0BE21-0AA0 are designed to fail safe in the unlikely event of an inverter Brake transistor failing short circuit. Hence the thermal overload switch may just be connected to a digital input on the inverter.

CAUTION

Procedure

Proceed as follows to monitor the braking resistor temperature:

1. Connect the temperature monitoring system of the braking resistor (terminals T1 and T2 on the braking resistor) to a free digital input on the inverter.



Example: Temperature monitoring of the braking resistor via digital input DI 3 on the Control Unit

2. Define the function of the digital input used as an external fault with p2106.
   As an example with temperature monitoring via digital input DI 3: p2106 = 722.3.

You have ensured that the temperature is monitored.

For MICROMASTER 4 option please follow the guidance in the supplied documentation and configure the thermal switch to an mains input contactor or configure the control system to remove power to the inverter on over temperature.

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