

SINAMICS G120C compact inverters

0.55 kW to 18.5 kW (0.75 hp to 25 hp)

Line-side components > Line reactors

Overview



Line reactor for SINAMICS G120C, frame size FSB

Line reactors smooth the current drawn by the inverter and thus reduce harmonic components in the line current. Through the reduction of the current harmonics, the thermal load on the power components in the rectifier and in the DC-link capacitors is reduced as well as the harmonic effects on the supply. The use of a line reactor increases the service life of the inverter.

If the ratio of the rated inverter power to the line supply short-circuit power is less than 1 %, then it is recommended to use a line reactor to reduce the current peaks.

Selection and ordering data

Rated power		SINAMICS G120C		Line reactor
kW	hp	Type 6SL3210-...	Frame size	Article No.
Line voltage 380 ... 480 V 3 AC				
0.55	0.75	1KE11-8..2	FSA	6SL3203-0CE13-2AA0
0.75	1	1KE12-3..2		
1.1	1.5	1KE13-2..2		
1.5	2	1KE14-3..2	FSA	6SL3203-0CE21-0AA0
2.2	3	1KE15-8..2		
3	4	1KE17-5..1	FSA	
4	5	1KE18-8..1		
5.5	7.5	1KE21-3..1	FSB	6SL3203-0CE21-8AA0
7.5	10	1KE21-7..1		
11	15	1KE22-6..1	FSC	6SL3203-0CE23-8AA0
15	20	1KE23-2..1		
18.5	25	1KE23-8..1		

Technical specifications

Line voltage 380 ... 480 V 3 AC		Line reactor			
		6SL3203-0CE13-2AA0	6SL3203-0CE21-0AA0	6SL3203-0CE21-8AA0	6SL3203-0CE23-8AA0
Rated current	A	4	11.3	22.3	47
Power loss at 50/60 Hz	W	23/26	36/40	53/59	88/97
Line supply/load connection 1L1, 1L2, 1L3 2L1, 2L2, 2L3		Screw terminals	Screw terminals	Screw terminals	Screw terminals
• Conductor cross-section	mm ²	4	4	10	16
PE connection		M4 × 8; U washer; spring lock washer	M4 × 8; U washer; spring lock washer	M5 × 10; U washer; spring lock washer	M5 × 10; U washer; spring lock washer
Degree of protection		IP20	IP20	IP20	IP20
Dimensions					
• Width	mm (in)	125 (4.92)	125 (4.92)	125 (4.92)	190 (7.48)
• Height	mm (in)	120 (4.72)	140 (5.51)	145 (5.71)	220 (8.66)
• Depth	mm (in)	71 (2.80)	71 (2.80)	91 (3.58)	91 (3.58)
Weight, approx.	kg (lb)	1.1 (2.4)	2.1 (4.6)	2.95 (6.5)	7.8 (17.2)
Suitable for SINAMICS G120C	Type	6SL3210-1KE11-8..2 6SL3210-1KE12-3..2 6SL3210-1KE13-2..2	FSA 6SL3210-1KE14-3..2 6SL3210-1KE15-8..2 FSA 6SL3210-1KE17-5..1 6SL3210-1KE18-8..1	6SL3210-1KE21-3..1 6SL3210-1KE21-7..1	6SL3210-1KE22-6..1 6SL3210-1KE23-2..1 6SL3210-1KE23-8..1
• Frame size		FSA	FSA/FSA	FSB	FSC

SINAMICS G120 standard inverters

0.37 kW to 250 kW (0.5 hp to 400 hp)

Line-side components > Line reactors

Selection and ordering data

Rated power		PM240-2 Power Module standard variant		Line reactor
kW	hp	Type 6SL3210-...	Frame size	Article No.
200 ... 240 V 3 AC				
0.55	0.75	1PB13-0 . L0	FSA	6SL3203-0CE13-2AA0
0.75	1	1PB13-8 . L0		
1.1	1.5	1PB15-5 . L0	FSB	6SL3203-0CE21-0AA0
1.5	2	1PB17-4 . L0		
2.2	3	1PB21-0 . L0		6SL3203-0CE21-8AA0
3	4	1PB21-4 . L0	FSC	
4	5	1PB21-8 . L0		6SL3203-0CE23-8AA0
5.5	7.5	1PC22-2 . L0	FSC	
7.5	10	1PC22-8 . L0		
380 ... 480 V 3 AC				
0.55	0.75	1PE11-8 . L1	FSA	6SL3203-0CE13-2AA0
0.75	1	1PE12-3 . L1		
1.1	1.5	1PE13-2 . L1		6SL3203-0CE21-0AA0
1.5	2	1PE14-3 . L1	FSA	
2.2	3	1PE16-1 . L1		6SL3203-0CE21-8AA0
3	4	1PE18-0 . L1	FSB	
4	5	1PE21-1 . L0		6SL3203-0CE23-8AA0
5.5	7.5	1PE21-4 . L0		
7.5	10	1PE21-8 . L0		
11	15	1PE22-7 . L0	FSC	
15	20	1PE23-3 . L0		

Rated power		PM240-2 Power Module push-through variant		Line reactor
kW	hp	Type 6SL3211-...	Frame size	Article No.
200 ... 240 V 3 AC				
0.75	1	1PB13-8 . L0	FSA	6SL3203-0CE13-2AA0
2.2	3	1PB21-0 . L0	FSB	6SL3203-0CE21-0AA0
4	5	1PB21-8 . L0	FSC	6SL3203-0CE21-8AA0
380 ... 480 V 3 AC				
3	4	1PE18-0 . L1	FSA	6SL3203-0CE21-0AA0
7.5	10	1PE21-8 . L0	FSB	6SL3203-0CE21-8AA0
15	20	1PE23-3 . L0	FSC	6SL3203-0CE23-8AA0

Rated power		PM240 Power Module		Line reactor
kW	hp	Type 6SL3224-...	Frame size	Article No.
380 ... 480 V 3 AC				
160	250	0XE41-3UA0	FSGX	6SL3000-0CE33-3AA0
200	300	0XE41-6UA0	FSGX	6SL3000-0CE35-1AA0
250	400	0XE42-0UA0		

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Technical specifications

Line voltage 200 ... 240 V 3 AC or 380 ... 480 V 3 AC		Line reactor			
		6SL3203-OCE13-2AA0	6SL3203-OCE21-0AA0	6SL3203-OCE21-8AA0	6SL3203-OCE23-8AA0
Rated current	A	4	11.3	22.3	47
Power loss at 50/60 Hz	W	23/26	36/40	53/59	88/97
Line supply/load connection 1L1, 1L2, 1L3 2L1, 2L2, 2L3		Screw terminals	Screw terminals	Screw terminals	Screw terminals
• Conductor cross-section	mm ²	4	4	10	16
PE connection		M4 × 8; U washer; spring lock washer	M4 × 8; U washer; spring lock washer	M5 × 10; U washer; spring lock washer	M5 × 10; U washer; spring lock washer
Degree of protection		IP20	IP20	IP20	IP20
Dimensions					
• Width	mm (in)	125 (4.92)	125 (4.92)	125 (4.92)	190 (7.48)
• Height	mm (in)	120 (4.72)	140 (5.51)	145 (5.71)	220 (8.66)
• Depth	mm (in)	71 (2.8)	71 (2.8)	91 (3.58)	91 (3.58)
Weight, approx.	kg (lb)	1.1 (2.43)	2.1 (4.63)	2.95 (6.5)	7.8 (17.2)
Suitable for PM240-2 Power Module standard variant 200 ... 240 V 3 AC	Type	6SL3210-1PB13-0 . L0 6SL3210-1PB13-8 . L0	6SL3210-1PB15-5 . L0 6SL3210-1PB17-4 . L0 6SL3210-1PB21-0 . L0	6SL3210-1PB21-4 . L0 6SL3210-1PB21-8 . L0	6SL3210-1PC22-2 . L0 6SL3210-1PC22-8 . L0
• Frame size		FSA	FSB	FSC	FSC
Suitable for PM240-2 Power Module standard variant 380 ... 480 V 3 AC	Type	6SL3210-1PE11-8 . L1 6SL3210-1PE12-3 . L1 6SL3210-1PE13-2 . L1	6SL3210-1PE14-3 . L1 6SL3210-1PE16-1 . L1 6SL3210-1PE18-0 . L1	6SL3210-1PE21-1 . L0 6SL3210-1PE21-4 . L0 6SL3210-1PE21-8 . L0	6SL3210-1PE22-7 . L0 6SL3210-1PE23-3 . L0
• Frame size		FSA	FSA	FSB	FSC
Suitable for PM240-2 Power Module push-through variant 200 ... 240 V 3 AC	Type	6SL3211-1PB13-8 . L0	6SL3211-1PB21-0 . L0	6SL3211-1PB21-8 . L0	–
• Frame size		FSA	FSB	FSC	–
Suitable for PM240-2 Power Module push-through variant 380 ... 480 V 3 AC	Type	–	6SL3211-1PE18-0 . L1	6SL3211-1PE21-8 . L0	6SL3211-1PE23-3 . L0
• Frame size		–	FSA	FSB	FSC
Line voltage 380 ... 480 V 3 AC		Line reactor			
		6SL3000-OCE33-3AA0		6SL3000-OCE35-1AA0	
Rated current	A	331		508	
Power loss at 50/60 Hz, approx.	W	267		365	
Line supply connection U1, V1, W1		1 × hole for M10 Provided for busbar connection		1 × hole for M12 Provided for busbar connection	
Load connection		Provided for busbar connection		Provided for busbar connection	
PE connection		M6 screw		M6 screw	
Degree of protection		IP00		IP00	
Dimensions					
• Width	mm (in)	270 (10.63)		300 (11.81)	
• Height	mm (in)	248 (9.76)		269 (10.59)	
• Depth	mm (in)	200 (7.87)		212 (8.35)	
Weight, approx.	kg (lb)	27.8 (61.3)		38 (83.8)	
Suitable for PM240 Power Module	Type	6SL3224-0XE41-3UA0		6SL3224-0XE41-6UA0 6SL3224-0XE42-0UA0	
• Frame size		FSGX		FSGX	