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Selection and ordering data

SINAMICS G120X converters · Degree of protection IP20/UL Open Type · 500 ... 690 V 3 AC ➡ Configuration with line-side components (see right page)

Rated power [1]		Rated output current [2]		Base-load current I_H [3]		Rated input current [4]	Frame size	SINAMICS G120X Degree of protection IP20/UL Open Type without integrated line filter	SINAMICS G120X Degree of protection IP20/UL Open Type with integrated line filter
690 V	600 V	690 V	600 V	690 V	600 V	690 V			
kW	hp	A	A	A	A	A		Article No.	Article No.
500 ... 690 V 3 AC · Rated pulse frequency 2 kHz · Input frequency 47 ... 63 Hz									
3	4	5	5	4	4	5	FSD	**6SL32 ■ 0-■ YH18-■ U ■ 0**	**6SL32 ■ 0-■ YH18-■ A ■ 0**
4	5	6.3	6.3	5	5	6	FSD	**6SL32 ■ 0-■ YH20-■ U ■ 0**	**6SL32 ■ 0-■ YH20-■ A ■ 0**
5.5	7.5	9	9	6.3	6.3	9	FSD	**6SL32 ■ 0-■ YH22-■ U ■ 0**	**6SL32 ■ 0-■ YH22-■ A ■ 0**
7.5	10	11	11	9	9	11	FSD	**6SL32 ■ 0-■ YH24-■ U ■ 0**	**6SL32 ■ 0-■ YH24-■ A ■ 0**
11	10	14	14	11	11	14	FSD	**6SL32 ■ 0-■ YH26-■ U ■ 0**	**6SL32 ■ 0-■ YH26-■ A ■ 0**
15	15	19	19	14	14	18	FSD	**6SL32 ■ 0-■ YH28-■ U ■ 0**	**6SL32 ■ 0-■ YH28-■ A ■ 0**
18.5	20	23	23	19	19	22	FSD	**6SL32 ■ 0-■ YH30-■ U ■ 0**	**6SL32 ■ 0-■ YH30-■ A ■ 0**
22	25	27	27	23	23	25	FSD	**6SL32 ■ 0-■ YH32-■ U ■ 0**	**6SL32 ■ 0-■ YH32-■ A ■ 0**
30	30	35	35	27	27	33	FSD	**6SL32 ■ 0-■ YH34-■ U ■ 0**	**6SL32 ■ 0-■ YH34-■ A ■ 0**
37	40	42	42	35	35	40	FSD	**6SL32 ■ 0-■ YH36-■ U ■ 0**	**6SL32 ■ 0-■ YH36-■ A ■ 0**
45	50	52	52	42	42	50	FSE	**6SL32 ■ 0-■ YH38-■ U ■ 0**	**6SL32 ■ 0-■ YH38-■ A ■ 0**
55	60	62	62	52	52	59	FSE	**6SL32 ■ 0-■ YH40-■ U ■ 0**	**6SL32 ■ 0-■ YH40-■ A ■ 0**
75	75	80	80	62	62	78	FSF	**6SL32 ■ 0-■ YH42-■ U ■ 0**	**6SL32 ■ 0-■ YH42-■ C ■ 0**
90	100	100	100	80	80	97	FSF	**6SL32 ■ 0-■ YH44-■ U ■ 0**	**6SL32 ■ 0-■ YH44-■ C ■ 0**
110	125	125	125	100	100	121	FSF	**6SL32 ■ 0-■ YH46-■ U ■ 0**	**6SL32 ■ 0-■ YH46-■ C ■ 0**
132	150	144	144	125	125	138	FSF	**6SL32 ■ 0-■ YH48-■ U ■ 0**	**6SL32 ■ 0-■ YH48-■ C ■ 0**
160	150	171	171	144	144	171	FSG [5]	–	**6SL32 ■ 0-■ YH50-■ C ■ 0**
200	200	208	208	171	171	205	FSG [5]	–	**6SL32 ■ 0-■ YH52-■ C ■ 0**
250	250	250	250	208	208	249	FSG [5]	–	**6SL32 ■ 0-■ YH54-■ C ■ 0**
315	350	330	345	272	282	343	FSH	–	**6SL32 2 0-■ YH56-■ C ■ 0**
355	400	385	388	314	317	401	FSH	–	**6SL32 2 0-■ YH58-■ C ■ 0**
400	450	420	432	348	357	437	FSH	–	**6SL32 2 0-■ YH60-■ C ■ 0**
450	500	470	487	394	408	489	FSH	–	**6SL32 2 0-■ YH62-■ C ■ 0**
500	500	520	546	444	462	540	FSJ	–	**6SL32 2 0-■ YH64-■ C ■ 0**
560	600	580	610	476	498	602	FSJ	–	**6SL32 2 0-■ YH66-■ C ■ 0**
630	700	650	679	532	554	675	FSJ	–	**6SL32 2 0-■ YH68-■ C ■ 0**

Article No. supplements

	Without integrated line filter	With integrated line filter
Environmental class/harmful chemical substances acc. to IEC 60721-3-3: 2002		
Class 3C2	**2**	**2**
Class 3C3	**3**	**3**
Operator Panel		
Without Operator Panel	**1**	**1**
With BOP-2 Basic Operator Panel (numeric 2-line display)	**2**	**2**
With IOP-2 Intelligent Operator Panel (graphic color display)	**3**	**3**
Extension with SINAMICS G120X I/O Extension Module		
Without extension	**0**	**0**
With SINAMICS G120X I/O Extension Module	**1**	**1**
Line filter		
Without integrated line filter (for IT systems [6])	**U**	
With integrated line filter Category C2		**A**
With integrated line filter Category C3		**C**
Communication		
USS, Modbus RTU, BACnet MS/TP	**B**	**B**
PROFINET, EtherNet/IP	**F**	**F**
PROFIBUS DP	**P**	**P**

1) Rated power based on the base-load current I_L. The base-load current I_L is based on the duty cycle for low overload (LO).

2) The rated output current is based on the duty cycle for low overload (LO). These current values are valid for 690 V or 600 V.

3) The base-load current I_H is based on the duty cycle for high overload (HO). These current values are valid for 690 V or 600 V.

4) The input current depends on the motor load and line impedance. The input currents apply for a load at rated power (based on I_L) for a line impedance corresponding to u_K = 1 %. The current values are specified on the rating plate of the converter.

5) The 690 V versions of frame size FSG are only available with an integrated line filter Category C3. To operate the converters also within TN systems with grounded outer conductor, you must remove the grounding screw.

6) Non-filtered devices are designed for operation in IT systems or in conjunction with an RCD. The customer must provide suitable RI suppression equipment to ensure that these devices comply with the limits defined for Category C3.

Line-side components (Configuration with load-side power components see next double page)

Line filters		Line reactors	Recommended line-side overcurrent protection devices [1]			
Category C2	Category C1	For frame sizes FSH and FSJ mandatory when using an external line filter Category C2	Fuses IEC-compliant		Fuses UL/cUL-compliant Rated voltage 600 V AC [2]	
	Article No.	Article No.	Current A	Article No.	Fuse type Class/Article No.	Current A
SINAMICS G120X available with integrated line filter Category C2	–	A DC link reactor is integrated for frame sizes FSA to FSG – therefore no line reactor is required.	16	**3NA3805-6**	J	8
	–		16	**3NA3805-6**	J	10
	–		16	**3NA3805-6**	J	15
	–		16	**3NA3805-6**	J	15
	–		20	**3NA3807-6**	J	20
	–		25	**3NA3810-6**	J	25
	–		32	**3NA3812-6**	J	30
	–		40	**3NA3817-6KJ**	J	35
	–		50	**3NA3820-6KJ**	J	50
	–		63	**3NA3822-6**	J	60
	–		80	**3NA3824-6**	J	80
	–		80	**3NA3824-6**	J	80
–	–		100	**3NA3830-6**	J	110
–	–		125	**3NA3132-6**	J	150
–	–		160	**3NA3136-6**	J	150
–	–		200	**3NA3140-6**	J	200
–	–		250	**3NE1227-0**		250
–	–		315	**3NE1230-0**		315
–	–		350	**3NE1331-0**		350
6SL3760-0MS00-0AA0	–	**6SL3000-0CH34-8AA0**	450	**3NE1333-2**		450
	–		500	**3NE1334-2**		500
	–		560	**3NE1435-2**		560
	–	**6SL3000-0CH36-0AA0**	630	**3NE1436-2**		630
	–		710	**3NE1437-2**		710
	–	**6SL3000-0CH38-4AA0**	800	**3NE1438-2**		800
	–		850	**3NE1448-2**		850

[1] Further information at https://support.industry.siemens.com/cs/document/109762895

[2] The Short Circuit Current Rating (SCCR) according to UL for industrial control panel installations to NEC Article 409 or UL 508A/508C or UL 61800-5-1 is 100 kA for SINAMICS G120X.

2

Selection and ordering data

SINAMICS G120X converters · Degree of protection IP20/UL Open Type · 500 ... 690 V 3 AC ➡ Configuration with load-side power components (see right page)

Rated power [1]		Rated output current [2]		Base-load current I_H [3]		Rated input current [4]	Frame size	SINAMICS G120X Degree of protection IP20/UL Open Type without integrated line filter	SINAMICS G120X Degree of protection IP20/UL Open Type with integrated line filter
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kW	hp	A	A	A	A	A		Article No.	Article No.
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Article No. supplements

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With BOP-2 Basic Operator Panel (numeric 2-line display)	**2**
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Line filter	
Without integrated line filter (for IT systems [6])	**U**
With integrated line filter Category C2	**A**
With integrated line filter Category C3	**C**
Communication	
USS, Modbus RTU, BACnet MS/TP	**B**
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Load-side power components (Configuration with line-side components see double page before)

Output reactors The prefix "**JTA:**" is part of a Siemens internal order code that does not belong to the product number of the original manufacturer Mdexx Magnetronic Devices s. r. o.. Article No.	Sine-wave filters Article No.	dv/dt filters plus VPL The prefix "**JTA:**" is part of a Siemens internal order code that does not belong to the product number of the original manufacturer Mdexx Magnetronic Devices s. r. o.. Article No.
JTA:TEU2532-0FP00-4EA0	–	**JTA:TEF1203-0GB**
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JTA:TEU9932-0FP00-4EA0	–	**JTA:TEF1203-0HB**
	–	
	–	
JTA:TEU9932-0FS00-0EA0	–	**JTA:TEF1203-0JB**
	–	
JTA:TEU9932-1FC00-1BA0	–	**JTA:TEF1203-0KB**
	–	
JTA:TEU9932-0FV00-1BA0	–	**JTA:TEF1203-0LB**
	–	
JTA:TEU4732-0FA00-0BA0	–	**JTA:TEF1203-0MB**
	–	
	–	
6SL3000-2AH34-7AA0	–	**6SL3000-2DH35-8AA0**
	–	
6SL3000-2AH35-8AA0	–	
6SL3000-2AH38-1AA0	–	**6SL3000-2DH38-1AA0**
	–	
	–	
	–	