

#### **Data sheet for SINAMICS G120X**

Article No.: 6SL3220-2YE56-0CF0

Client order no. : Order no.: Offer no. : Remarks:

	Rated data			
lnı	Input			
	Number of phases	3 AC		
	Line voltage	380 480 V +10 % -10 %		
	Line frequency	47 63 Hz		
	Rated voltage	400V IEC	480V NEC	
	Rated current (LO)	585.00 A	486.00 A	
	Rated current (HO)	477.00 A	397.00 A	
Output				
	Number of phases	3 AC		
	Rated voltage	400V IEC	480V NEC 1)	
	Rated power (LO)	315.00 kW	400.00 hp	
	Rated power (HO)	250.00 kW	300.00 hp	
	Rated current (LO)	570.00 A	477.00 A	
	Rated current (HO)	468.00 A	390.00 A	
	Rated current (IN)	585.00 A		
	Max. output current	770.00 A		
Pu	lse frequency	4 kHz		
Output frequency for vector control		0 100 Hz		
Output frequency for V/f control		0 100 Hz		
Overload capability				

Low Overload (LO)

110% base load current IL for 60 s in a 300 s cycle time

High Overload (HO)

150% x base load current IH for 60 s within a 300 s cycle time

General tec	h. specifications
Power factor $\lambda$	0.75 0.93
Offset factor $\cos\phi$	0.96
Efficiency η	0.98
Sound pressure level (1m)	74 dB
Power loss 3)	6.830 kW
Filter class (integrated)	RFI suppression filter for Category C3
EMC category (with accessories)	Category C3
Safety function "Safe Torque Off"	without SIRIUS device (e.g. via S7- 1500F)

Communication

CommunicationPROFINET, EtherNet/IP



Item no.: Consignment no. : Project :

Inputs /	outputs
Standard digital inputs	
Number	6
Switching level: $0 \rightarrow 1$	11 V
Switching level: $1 \rightarrow 0$	5 V
Max. inrush current	15 mA
Fail-safe digital inputs	
Number	1
Digital outputs	
Number as relay changeover contact	2
Output (resistive load)	DC 30 V, 5.0 A
Number as transistor	0
Analog / digital inputs	
Number	2 (Differential input)
Resolution	10 bit
Switching threshold as digital input	
0 → 1	4 V
1 → 0	1.6 V
Analog outputs	
Number	1 (Non-isolated output)

### PTC/ KTY interface

1 motor temperature sensor input, sensors that can be connected PTC, KTY and Thermo-Click, accuracy ±5 °C

Closed-loop cor	ntrol techniques
V/f linear / square-law / parameterizable	Yes
V/f with flux current control (FCC)	Yes
V/f ECO linear / square-law	Yes
Sensorless vector control	Yes
Vector control, with sensor	No
Encoderless torque control	No
Torque control, with encoder	No



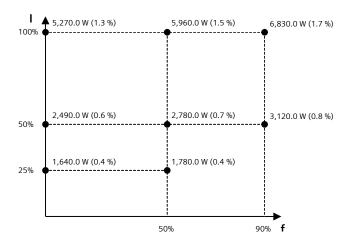
## **Data sheet for SINAMICS G120X**

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A L. *.		
Ambient conditions		
Standard board coating type	Class 3C2, according to IEC 60721-3-3: 2002	
Cooling	Air cooling using an integrated fan	
Cooling air requirement	0.362 m <sup>3</sup> /s (12.784 ft <sup>3</sup> /s)	
Installation altitude	1,000 m (3,280.84 ft)	
Ambient temperature		
Operation	0 45 °C (32 113 °F)	
Transport	-40 70 °C (-40 158 °F)	
Storage	-25 55 °C (-13 131 °F)	
Relative humidity		
Max. operation	95 % At 40 °C (104 °F), condensation and icing not permissible	
Сс	onnections	
Signal cable		
Conductor cross-section	0.15 1.50 mm <sup>2</sup> (AWG 24 AWG 16)	
Line side		
Version	M12 screw	
Conductor cross-section	4 x 240.00 mm <sup>2</sup> (MCM 2 x 500 MCM 4 x 500)	
Motor end		
Version	M12 screw	
Conductor cross-section	4 x 240.00 mm <sup>2</sup> (MCM 2 x 500 MCM 4 x 500)	
DC link (for braking resistor)		
PE connection	M12 screw	
Max. motor cable length		
Shielded	150 m (492.13 ft)	

	Mechanical data		
Degree of protection		IP20 / UL open type	
Frame size		FSH	
Net weight		151 kg (332.90 lb)	
Dimensions			
	Width	548 mm (21.57 in)	
	Height	1,695 mm (66.73 in)	
	Depth	393 mm (15.47 in)	
	Stan	dards	
Compliance with standards		UL, cUL, CE, C-Tick (RCM), EAC, KCC, SEMI F47, REACH	
CE marking		EMC Directive 2004/108/EC, Low- Voltage Directive 2006/95/EC	

Converter losse	s to IEC61800-9-2*
Efficiency class	IE2
Comparison with the reference converter (90% / 100%)	41.2 %



The percentage values show the losses in relation to the rated apparent power of the converter.

The diagram shows the losses for the points (as per standard IEC61800-9-2) of the relative torque generating current (I) over the relative motor stator frequency (f). The values are valid for the basic version of the converter without options/components.

\*calculated values

<sup>1)</sup> The output current and HP ratings are valid for the voltage range 440V-480V

<sup>&</sup>lt;sup>3)</sup>Typical value. More information can be found in the element group "Converter losses to IEC 61800-9-2" in this datasheet.



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	Operator pane	el: Basic Operator Panel (BOP-2)
	Screen	
Display design	LCD, monochrome	Ambient temperature
	Mechanical data	
Degree of protection	IP55 / UL type 12	Storage
Net weight	0.140 kg (0.31 lb)	Transport  Relative humidity at 25
Dimensions		Max. operation
Width	70.00 mm (2.76 in)	wax. operation
Height	106.85 mm (4.21 in)	
Depth	19.60 mm (0.77 in)	Certificate of suitability

Δ	shiout oouditions	
Ambient conditions		
Ambient temperature		
Operation	0 50 °C (32 122 °F)	
Storage	-40 70 °C (-40 158 °F)	
Transport	-40 70 °C (-40 158 °F)	
Relative humidity at 25°C during		
Max. operation	95 %	
Approvals		
Certificate of suitability	CE, cULus, EAC, KCC, RCM	



#### **MLFB-Ordering data**

Remarks :

6SL3000-0CE36-3AA0



Figure similar

Client order no. :Item no. :Order no. :Consignment no. :Offer no. :Project :

Ra	Rated data		Connections	
Input				
Number of phases	3 AC			
Line voltage	380 480 V			
Output		Load side		
Rated current	628.0 A	Version	1 x hole for M12	
Mech	Mechanical data			
Dimensions				
Width	300.0 mm (11.8 in)	PE connection		
Height	269.0 mm (10.6 in)	Version	M6 screw	
Depth	212.0 mm (8.3 in)			
Degree of protection	IP00			
Net weight	41.4 kg (91.3 lb)			