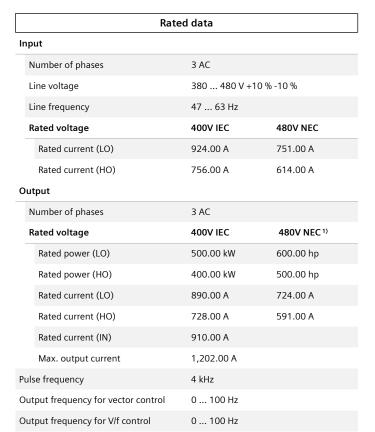


Data sheet for SINAMICS G120X

Article No.: 6SL3220-3YE64-0CB0

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



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 tech. specifications		
Power factor λ	0.75 0.93	
Offset factor $\cos\phi$	0.96	
Efficiency η	0.98	
Sound pressure level (1m) 74 dB		
Power loss 3)	10.500 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

Communication USS, Modbus RTU, BACnet MS/TP



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 $\pm 5~^{\circ}\text{C}$

Closed-loop control 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	



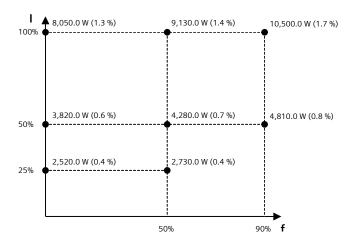
Data sheet for SINAMICS G120X

Article No.: 6SL3220-3YE64-0CB0

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	0.450 m ³ /s (15.892 ft ³ /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	
Со	nnections	
Signal cable		
Conductor cross-section	0.15 1.50 mm ² (AWG 24 AWG 16)	
Line side		
Version	M12 screw	
Conductor cross-section	6 x 240.00 mm ² (MCM 4 x 500 MCM 6 x 500)	
Motor end		
Version	M12 screw	
Conductor cross-section	6 x 240.00 mm ² (MCM 4 x 500 MCM 8 x 500)	
DC link (for braking resistor)		
PE connection	M12 screw	
PE connection Max. motor cable length	M12 screw	
	M12 screw 150 m (492.13 ft)	

Mechanical data		
Degree of protection	e of protection IP20 / UL open type	
Frame size	FSJ	
Net weight	250 kg (551.16 lb)	
Dimensions		
Width	801 mm (31.54 in)	
Height	1,621 mm (63.82 in)	
Depth	393 mm (15.47 in)	
Standards		
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 losses to IEC61800-9-2*	
Efficiency class	IE2
Comparison with the reference converter (90% / 100%)	40.7 %



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

 $^{^{1)}}$ The output current and HP ratings are valid for the voltage range 440V-480V

³⁾Typical value. More information can be found in the element group "Converter losses to IEC 61800-9-2" in this datasheet.



Data sheet for SINAMICS G120X

Article No.: 6SL3220-3YE64-0CB0

	Operator panel:	Intelligent Operator Panel (IOP-2)
	Screen	
Display design	LCD color	Ambient temperature
Screen resolution	320 x 240 Pixel	Operation
	Mechanical data	Storage
Degree of protection	IP55 / UL type 12	Transport
Net weight	0.134 kg (0.30 lb)	Relative humidity at 25°C
Dimensions		Max. operation
Width	70.00 mm (2.76 in)	max operation
Height	106.85 mm (4.21 in)	
Depth	19.65 mm (0.77 in)	Certificate of suitability

<u> </u>		
Ambient conditions		
Ambient temperature		
Operation	0 50 °C (32 122 °F)	
	55 °C only with door installation kit	
Storage	-40 70 °C (-40 158 °F)	
Transport	-40 70 °C (-40 158 °F)	
Relative humidity at 25°C duri	ng	
Max. operation	95 %	
	Approvals	
Approvals		
Certificate of suitability	CE, cULus, EAC, KCC, RCM	



MLFB-Ordering data

6SL3000-0CE41-0AA0



Figure similar

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

Offer no. :

Remarks :

Ra	ted data		Connections
nput			
Number of phases	3 AC		
Line voltage	380 480 V		
Output		Load side	
Rated current	1060.0 A	Version	1 x hole for M12
Mech	anical data		
Dimensions			
Width	350.0 mm (13.8 in)	PE connection	
Height	321.0 mm (12.6 in)	Version	M6 screw
Depth	211.5 mm (8.3 in)		
Degree of protection	IP00		
Net weight	69.6 kg (153.0 lb)		