SIEMENS

Data sheet for SINAMICS G120X

Article No. :

6SL3230-3YH26-0AB0



Figure similar

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

Rate	ed data	
Input		
Number of phases	3 AC	
Line voltage	500 690 V +10	0 % -20 %
Line frequency	47 63 Hz	
Rated voltage	690V IEC	600V NEC
Rated current (LO)	14.00 A	14.00 A
Rated current (HO)	12.10 A	12.10 A
Output		
Number of phases	3 AC	
Rated voltage	690V IEC	600V NEC ¹⁾
Rated power (LO)	11.00 kW	10.00 hp
Rated power (HO)	7.50 kW	10.00 hp
Rated current (LO)	14.00 A	14.00 A
Rated current (HO)	11.00 A	11.00 A
Rated current (IN)	15.00 A	
Max. output current	19.00 A	
Pulse frequency	2 kHz	
Output frequency for vector control	0 200 Hz	
Output frequency for V/f control	0 550 Hz	
Overload capability		

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 600 s cycle time

General tech. specifications		
Power factor λ	0.90 0.95	
Offset factor $\cos \phi$	0.99	
Efficiency η	0.97	
Sound pressure level (1m)	70 dB	
Power loss ³⁾	0.360 kW	
Filter class (integrated)	RFI suppression filter for Category C2	
EMC category (with accessories)	Category C2	
Safety function "Safe Torque Off"	without SIRIUS device (e.g. via S7- 1500F)	
Communication		

Communication

USS, Modbus RTU, BACnet MS/TP

ltem 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	
$1 \rightarrow 0$	1.6 V	
Analog outputs		
Number	1 (Non-isolated output)	
PTC/ KTY interface		
1 motor temperature sensor input, ser Thermo-Click, accuracy ±5 °C	nsors that can be connected PTC, KTY and	
Closed-loop co	ntrol techniques	

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	

SIEMENS

Data sheet for SINAMICS G120X

Article No. :

6SL3230-3YH26-0AB0

Ambient	conditions	
Standard board coating type	Class 3C3, according to IEC 60721-3-3: 2002	
Cooling	Air cooling using an integrated fan	
Cooling air requirement	0.055 m³/s (1.942 ft³/s)	
Installation altitude	1,000 m (3,280.84 ft)	
Ambient temperature		
Operation	-20 45 °C (-4 113 °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	
Conn	ections	
Signal cable		
Conductor cross-section	0.15 1.50 mm² (AWG 24 AWG 16)	
Line side		
Version	screw-type terminal	
Conductor cross-section	10.00 35.00 mm² (AWG 8 AWG 2)	
Motor end		
Version	Screw-type terminals	
Conductor cross-section	10.00 35.00 mm² (AWG 8 AWG 2)	
DC link (for braking resistor)		
PE connection	Screw-type terminals	
Max. motor cable length		
Shielded	100 m (328.08 ft)	

Me	chanical data	
Degree of protection	IP20 / UL open	type
Frame size	FSD	
Net weight	18.3 kg (40.34	ł lb)
Dimensions		
Width	200 mm (7.87	in)
Height	472 mm (18.5	8 in)
Depth	248 mm (9.76	in)
	Standards	
Compliance with standards	UL, cUL, CE, C- SEMI F47, REA	Tick (RCM), EAC, KCC, CH
CE marking		2004/108/EC, Low- ive 2006/95/EC
Converter lo	osses to IEC61800-	9-2*
Efficiency class	IE2	
Comparison with the reference converter (90% / 100%)	41.6 %	
Ⅰ ▲ 315.0 W (1.9 %)	333.0 W (2.0 %)	360.0 W (2.2 %)
	•	
238.0 W (1.4 %)	246.0 W (1.5 %)	255.0 W (1.5 %)
J0 70		
	213.0 W (1.3 %)	
210.0 W (1.3 %)	215.0 W (1.5 %)	
210.0 W (1.3 %)	213.0 ₩ (1.3 %)	

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

90% **f**

50%

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.

*converted values

¹⁾The output current and HP ratings are valid for the voltage range 550V-600V

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

SIEMENS

Data sheet for SINAMICS G120X

Article No. :

6SL3230-3YH26-0AB0

	Operator panel: Intelli	gent
	Screen	
Display design	LCD color	
Screen resolution	320 x 240 Pixel	
	Mechanical data	
Degree of protection	IP55 / UL type 12	
Net weight	0.134 kg (0.30 lb)	
Dimensions		
Width	70.00 mm (2.76 in)	
Height	106.85 mm (4.21 in)	
Depth	19.65 mm (0.77 in)	

Ai	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	ing	
Max. operation	95 %	
	Approvals	