SIEMENS

Data sheet for SINAMICS G120C

Article No. :

6SL3210-1KE32-1UF1



Figure similar

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

	Rated data					
Input						
	Number of phases	3 AC				
	Line voltage	380 480 V +10 %	-20 %			
	Line frequency	47 63 Hz				
	Rated current (LO)	187.00 A				
	Rated current (HO)	169.00 A				
0	utput					
	Number of phases	3 AC				
	Rated voltage	400V IEC	480V NEC ¹⁾			
	Rated power (LO)	110.00 kW	125.00 hp			
	Rated power (HO)	90.00 kW	100.00 hp			
	Rated current (LO)	201.00 A				
	Rated current (HO)	164.00 A				
	Rated current (IN)	201.00 A				
	Max. output current	328.00 A				
	Pulse frequency	2 kHz				
	Output frequency for vector control	0 240 Hz				
	Output frequency for V/f control	0 550 Hz				

Overload capability

Low Overload (LO)

150 % base load current IL for 3 s, followed by 110 % base load current IL for 57 s in a 300 s cycle time

High Overload (HO)

200 % base load current IH for 3 s, followed by 150 % base load current IH for 57 s in a 300 s cycle time

General tech. specifications				
Power factor λ	0.90 0.95			
Offset factor $\cos \phi$	0.99			
Efficiency η	0.99			
Sound pressure level (1m)	68 dB			
Power loss	2,310.0 W			
Filter class (integrated)	Unfiltered			
Communication				

Communication

PROFINET, EtherNet/IP

ltem no. : Consignment no. : Project :

Inputs / outputs							
s	Standard digital inputs						
	Number	6					
	Switching level: $0 \rightarrow 1$	11 V					
	Switching level: $1 \rightarrow 0$	5 V					
	Max. inrush current	15 mA					
F	ail-safe digital inputs						
	Number	1					
D	ligital outputs						
	Number as relay changeover contact	1					
	Output (resistive load)	DC 30 V, 0.5 A					
	Number as transistor	1					
	Output (resistive load)	DC 30 V, 0.5 A					
Analog / digital inputs							
	Number	1 (Differential input)					
	Resolution	10 bit					
s	Switching threshold as digital input						
	0→1	4 V					
	1→0	1.6 V					
Analog outputs							
	Number	1 (Non-isolated output)					
Ρ	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



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Ambient conditions				
Cooling	Air cooling using an integrated fan			
Cooling air requirement	0.153 m³/s (5.403 ft³/s)			
Installation altitude	1,000 m (3,280.84 ft)			
Ambient temperature				
Operation	-20 40 °C (-4 104 °F)			
Transport	-40 70 °C (-40 158 °F)			
Storage	-40 70 °C (-40 158 °F)			
Relative humidity				
Max. operation	95 % RH, condensation not permitted			
Connections				
Signal cable				
Conductor cross-section	0.15 1.50 mm² (AWG 24 AWG 16)			
Line side				
Version	screw-type terminal			
Conductor cross-section	35.00 120.00 mm² (AWG 2 AWG -3)			
Motor end				
Version	Screw-type terminals			
Conductor cross-section	35.00 120.00 mm ² (AWG 2 AWG -3)			
DC link (for braking resistor)				
Version	Screw-type terminals			
Conductor cross-section	35.00 120.00 mm² (AWG 2 AWG -3)			
Line length, max.	10 m (32.81 ft)			
PE connection	Screw-type terminals			
Max. motor cable length				
Shielded	300 m (984.25 ft)			
Unshielded	450 m (1,476.38 ft)			
Me	echanical data			
Degree of protection	IP20 / UL open type			
Frame size	FSF			
Net weight	61.50 kg (135.58 lb)			
Dimensions				
Width	305 mm (12.01 in)			
Height	708 mm (27.87 in)			
Depth	357 mm (14.06 in)			
Standards				
Compliance with standards	UL, cUL, CE, C-Tick (RCM)			
CE marking	EMC Directive 2004/108/EC, Low- Voltage Directive 2006/95/EC			



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.

*converted values

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