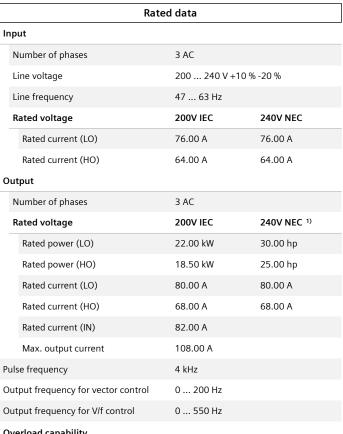


#### **Data sheet for SINAMICS G120X**

6SL3220-2YC32-0UF0 Article No.:

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 600 s cycle time

General tech. specifications	
Power factor $\lambda$	0.90 0.95
Offset factor $\cos\phi$	0.99
Efficiency η	0.97
Sound pressure level (1m)	70 dB
Power loss 3)	0.937 kW
Filter class (integrated)	Unfiltered
EMC category (with accessories)	without
Safety function "Safe Torque Off"	without SIRIUS device (e.g. via S7- 1500F)
Communication	

PROFINET, EtherNet/IP Communication



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		
Analog / digital inputs		
Analog / digital inputs  Number	2 (Differential input)	
<u> </u>	2 (Differential input) 10 bit	
Number		
Number Resolution		
Number Resolution Switching threshold as digital input	10 bit	
Number Resolution Switching threshold as digital input  0 → 1	10 bit 4 V	
Number Resolution Switching threshold as digital input $0 \rightarrow 1$ $1 \rightarrow 0$	10 bit 4 V	

### PTC/ KTY interface

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



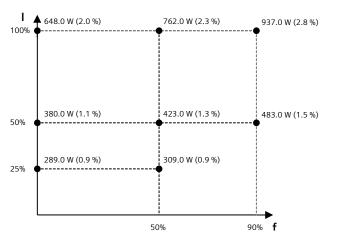
#### **Data sheet for SINAMICS G120X**

Article No.: 6SL3220-2YC32-0UF0

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	0.083 m <sup>3</sup> /s (2.931 ft <sup>3</sup> /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
Conne	ections
Signal cable	
Conductor cross-section	0.15 1.50 mm <sup>2</sup> (AWG 24 AWG 16)
Line side	
Version	screw-type terminal
Conductor cross-section	25.00 70.00 mm <sup>2</sup> (AWG 6 AWG 3/0)
Motor end	
Version	Screw-type terminals
Conductor cross-section	25.00 70.00 mm <sup>2</sup> (AWG 6 AWG 3/0)
DC link (for braking resistor)	
PE connection	Screw-type terminals
Max. motor cable length	
Shielded	200 m (656.17 ft)
Unshielded	300 m (984.25 ft)

Mechanical data		
Degree of protection IP20 / UL open type		
Frame size	FSE	
Net weight	16.6 kg (36.60 lb)	
Dimensions		
Width	275 mm (10.83 in)	
Height	551 mm (21.69 in)	
Depth	248 mm (9.76 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	





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

 $<sup>^{1)}</sup>$ The output current and HP ratings are valid for the voltage range 220V-240V

<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.



## **Data sheet for SINAMICS G120X**

Article No.: 6SL3220-2YC32-0UF0

	Operator pane	el: Basic Operator Panel (BOP-2)
	Screen	
Display design	LCD, monochrome	Ambient temperature
	Mechanical data	Operation
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

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	

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Siemens:

6SL32202YC320UF0