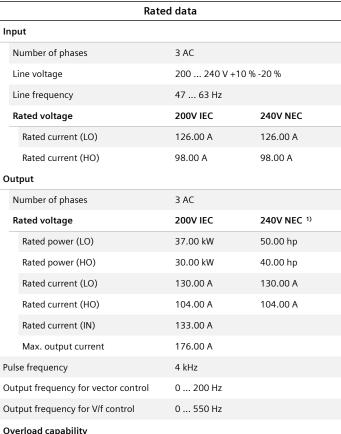


### **Data sheet for SINAMICS G120X**

Article No.: 6SL3230-2YC36-0UB0

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



Overload	capability
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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)	72 dB
Power loss 3)	1.450 kW
Filter class (integrated)	Unfiltered
EMC category (with accessories)	without
Safety function "Safe Torque Off"	without SIRIUS device (e.g. via S7- 1500F)

Communication

USS, Modbus RTU, BACnet MS/TP 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	

Resolution	10 bit
Switching threshold as digital input	
0 → 1	4 V
1 → 0	1.6 V
Analog outputs	

2 (Differential input)

1 (Non-isolated output)

#### Number PTC/ KTY interface

Number as transistor

Analog / digital inputs

Number

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



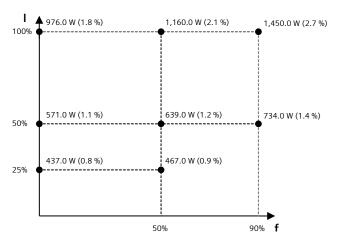
### **Data sheet for SINAMICS G120X**

Article No.: 6SL3230-2YC36-0UB0

Class 3C3, according to IEC 6072 2002  Cooling Air cooling using an integrated far Cooling air requirement 0.153 m³/s (5.403 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), condensational icing not permissible  Connections  Signal cable  0.15 1.50 mm²	n
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Connections  Signal cable  0.15 1.50 mm <sup>2</sup>	tion
Signal cable	
0.15 1.50 mm <sup>2</sup>	
0.15 1.50 mm <sup>2</sup>	
Conductor cross-section (AWG 24 AWG 16)	
Line side	
Version M10 screw	
Conductor cross-section 35.00 2 x 120.00 mm <sup>2</sup> (AWG 1 AWG 2 x 4/0)	
Motor end	
Version M10 screw	
Conductor cross-section $ 35.00 \dots 2 \times 120.00 \text{ mm}^2 $ (AWG 1 AWG 2 x 4/0)	
DC link (for braking resistor)	
PE connection M10 screw	
Max. motor cable length	
Shielded 300 m (984.25 ft)	

Mecha	nical data
Degree of protection	IP20 / UL open type
Frame size	FSF
Net weight	18.8 kg (41.45 lb)
Dimensions	
Width	305 mm (12.01 in)
Height	709 mm (27.91 in)
Depth	369 mm (14.53 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%)	56.2 %



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.

\*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.: 6SL3230-2YC36-0UB0

	Operator pane	l: 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)	iviax. operation
Height	106.85 mm (4.21 in)	
Depth	19.60 mm (0.77 in)	Certificate of suitability

Ambient conditions		
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	

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