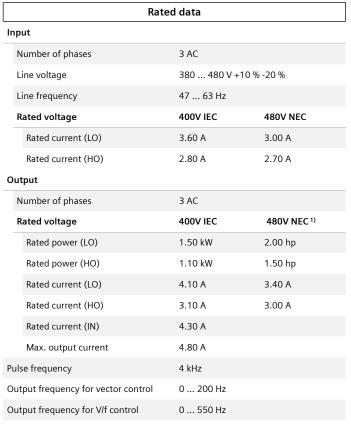


Data sheet for SINAMICS G120X

Article No.: 6SL3230-2YE14-0AB0

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 λ | 0.70 0.85 |
| Offset factor $\cos\phi$ | 0.96 |
| Efficiency η | 0.97 |
| Sound pressure level (1m) | 55 dB |
| Power loss 3) | 0.072 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



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 |



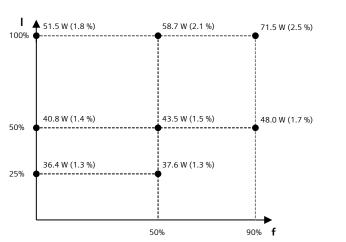
Data sheet for SINAMICS G120X

Article No.: 6SL3230-2YE14-0AB0

| Ambie | ent conditions |
|---------------------------------------------------------|----------------------------------------------------------------|
| Standard board coating type | Class 3C3, according to IEC 60721-3-3: 2002 |
| Cooling | Air cooling using an integrated fan |
| Cooling air requirement | 0.005 m ³ /s (0.177 ft ³ /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 |
| Co | nnections |
| Signal cable | |
| Conductor cross-section | 0.15 1.50 mm ² (AWG 24 AWG 16) |
| Line side | |
| Version | screw-type terminal |
| Conductor cross-section | 1.50 2.50 mm ² (AWG 16 AWG 14) |
| Motor end | |
| Version | Screw-type terminals |
| | 4.50 0.50 3 |
| Conductor cross-section | 1.50 2.50 mm² (AWG 16 AWG 14) |
| Conductor cross-section DC link (for braking resistor) | |
| | |
| DC link (for braking resistor) | (AWG 16 AWG 14) |
| DC link (for braking resistor) PE connection | (AWG 16 AWG 14) |

| Me | chanical data |
|---------------------------|-----------------------------------------------------------------|
| Degree of protection | IP20 / UL open type |
| Frame size | FSA |
| Net weight | 3.4 kg (7.50 lb) |
| Dimensions | |
| Width | 73 mm (2.87 in) |
| Height | 232 mm (9.13 in) |
| Depth | 218 mm (8.58 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%) | 35.0 % |



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

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.: 6SL3230-2YE14-0AB0

| Operator panel: B | 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 |

| | <u> </u> | |
|----------------------------------|--------------------------|--|
| 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:

6SL32302YE140AB0