

Article No. : 6SL3520-1XN00-7AF0



Figure similar

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

Item no. :
Consignment no. :
Project :

Rated data

Input

| | |
|------------------|---------------------------|
| Number of phases | 3 AC |
| Line voltage | 380 ... 480 V +10 % -10 % |
| Line frequency | 45 ... 66 Hz |
| Rated current | 1.99 A |

Output

| | |
|-------------------------------------|--------------|
| Number of phases | 3 AC |
| Rated voltage | 400 V |
| Rated power IEC 400V (HO) | 0.75 kW |
| Rated power NEC 480V (HO) | 1.00 hp |
| Rated current (HO) | 2.20 A |
| Max. output current | 4.40 A |
| Pulse frequency | 4 kHz |
| Output frequency for vector control | 0 ... 240 Hz |
| Output frequency for V/f control | 0 ... 550 Hz |

Overload capability

High Overload (HO)
200% × base load current IH for 3 s, followed by 150% for 57 s within a cycle time of 300s

Inputs / outputs

Standard digital inputs

| | |
|------------------------|-------|
| Number ¹⁾ | 4 |
| Switching level: 0 → 1 | 11 V |
| Switching level: 1 → 0 | 5 V |
| Max. inrush current | 15 mA |

Fail-safe digital inputs

| | |
|--------|---|
| Number | 1 |
|--------|---|

Digital inputs / outputs parameterizable

| | |
|--------|---|
| Number | 2 |
|--------|---|

PTC/ KTY interface

1 motor temperature sensor input, possible sensor PTC, KTY, PT1000, thermo click, accuracy ±5 °C

General tech. specifications

| | |
|--|--|
| Power factor λ | 0.00 ... 0.87 |
| Offset factor cos φ | 0.99 |
| Efficiency η | 0.96 |
| Power loss | 0.043 kW |
| Filter class (integrated) | RFI suppression filter for Category C2 |
| Brake voltage | 180V DC (default) |
| Integrated braking resistor (continuous braking power P_DB / peak power P_max) | 10W / 100W |

Ambient conditions

| | |
|----------------------------|--------------------------------|
| Cooling | Natural convection cooling |
| Installation altitude | 1,000 m (3,280.84 ft) |
| Ambient temperature | |
| Operation | -30 ... 55 °C (-22 ... 131 °F) |
| Transport | -40 ... 70 °C (-40 ... 158 °F) |
| Storage | -40 ... 70 °C (-40 ... 158 °F) |

Relative humidity

| | |
|----------------|--|
| Max. operation | 95 % At 40 °C (104 °F), condensation and icing not permissible |
|----------------|--|

Mechanical data

| | |
|----------------------|----------------------|
| Degree of protection | IP65/66 / UL type 4X |
| Frame size | F5A |
| Net weight | 6.6 kg (14.51 lb) |
| Dimensions | |
| Width | 380 mm (14.96 in) |
| Height | 216 mm (8.50 in) |
| Depth | 129 mm (5.08 in) |

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 | Yes |
| Torque control, with encoder | No |

Communication

| | |
|---------------|-----------------------|
| Communication | PROFINET, EtherNet/IP |
| Version | M12 |

Control option

| | |
|----------------|---------------|
| Control option | Repair switch |
|----------------|---------------|

Data sheet for SINAMICS G115D

Article No. : 6SL3520-1XN00-7AF0

Connections

Connection type

Version Connector with daisy chain

3AC 400V supply

Version 2x Q4/2

24 V DC power supply

Variants integrated

Version integrated

Digital I/O

Version M12

Motor

Version Q8/0

External brake resistor

Version Cable gland (Standard)

PE connection

Version On housing with M5 screw

Max. motor cable length

Shielded 15 m (49.21 ft)

Standards

Compliance with standards

UL, cUL, CE, C-Tick (RCM), EAC, KCC, SEMI F47, REACH

CE marking

EMC Directive 2014/30/EC, Low-Voltage Directive 2014/35/EC

¹⁾4 inputs PNP, not isolated, additional 2x switchable DI/DO

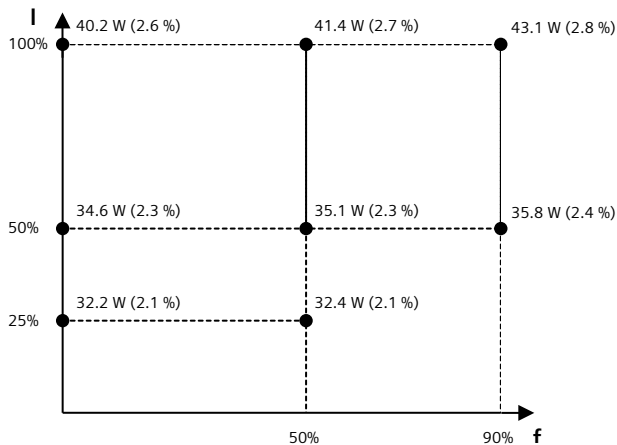
Converter losses to IEC61800-9-2*

Efficiency class

IE2

Comparison with the reference converter (90% / 100%)

26.44 %



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.

*calculated values