

Article No. : 6SL3520-3XN02-2AA0



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                       | 5.18 A                    |
| Output                              |                           |
| Number of phases                    | 3 AC                      |
| Rated voltage                       | 400 V                     |
| Rated power IEC 400V (HO)           | 2.20 kW                   |
| Rated power NEC 480V (HO)           | 3.00 hp                   |
| Rated current (HO)                  | 5.90 A                    |
| Max. output current                 | 11.80 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 <sup>1)</sup>   | 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 ... 0.90                          |
| Offset factor cos φ  | 0.99                                   |
| Efficiency η   | 0.97                                   |
| Power loss   | 0.096 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           | FSB                  |
| Net weight           | 8.38 kg (18.44 lb)   |
| Dimensions           |                      |
| Width                | 425 mm (16.73 in)    |
| Height               | 240 mm (9.45 in)     |
| Depth                | 134 mm (5.28 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 | AS-Interface |
| Version       | M12          |

### Control option

|                |  |
|----------------|--|
| Control option | Repair switch and local remote control |
|----------------|--|

## Data sheet for SINAMICS G115D

Article No. : 6SL3520-3XN02-2AA0

### Connections

#### Connection type

Version Connector with daisy chain

#### 3AC 400V supply

Version 2x Q4/2

#### 24 V DC power supply

Variant 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

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

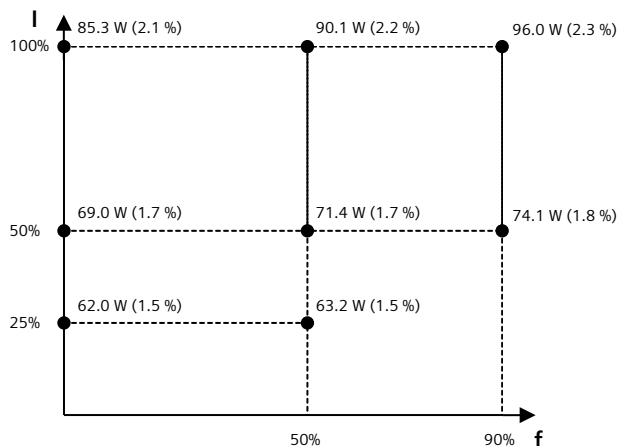
### Converter losses to IEC61800-9-2\*

Efficiency class

IE2

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

32.09 %



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