

Article No. : 6SL3210-1PE31-1AL0



Figure similar

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

Item no. :  
Consignment no. :  
Project :

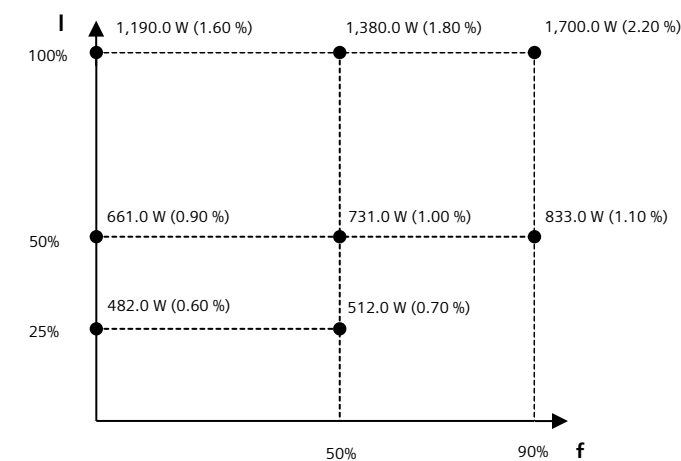
| Rated data                                                                                                                                                                    |                     |                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------------------|
| Input                                                                                                                                                                         |                     |                        |
| Number of phases                                                                                                                                                              | 3 AC                |                        |
| Line voltage                                                                                                                                                                  | 380 ... 480 V ±10 % |                        |
| Line frequency                                                                                                                                                                | 47 ... 63 Hz        |                        |
| Rated current (LO)                                                                                                                                                            | 104.00 A            |                        |
| Rated current (HO)                                                                                                                                                            | 94.00 A             |                        |
| Output                                                                                                                                                                        |                     |                        |
| Number of phases                                                                                                                                                              | 3 AC                |                        |
| Rated voltage                                                                                                                                                                 | 400V IEC            | 480V NEC <sup>1)</sup> |
| Rated power (LO)                                                                                                                                                              | 55.00 kW            | 75.00 hp               |
| Rated power (HO)                                                                                                                                                              | 45.00 kW            | 60.00 hp               |
| Rated current (LO)                                                                                                                                                            | 110.00 A            |                        |
| Rated current (HO)                                                                                                                                                            | 90.00 A             |                        |
| Max. output current                                                                                                                                                           | 180.00 A            |                        |
| Pulse frequency                                                                                                                                                               | 4 kHz               |                        |
| Output frequency for vector control                                                                                                                                           | 0 ... 200 Hz        |                        |
| Output frequency for V/f control                                                                                                                                              | 0 ... 550 Hz        |                        |
| Overload capability                                                                                                                                                           |                     |                        |
| Low Overload (LO)                                                                                                                                                             |                     |                        |
| 1.1 x rated output current (i.e. 110 % overload) for 57 s with a cycle time of 300 s<br>1.5 x rated output current (i.e. 150 % overload) for 3 s with a cycle time of 300 s   |                     |                        |
| High Overload (HO)                                                                                                                                                            |                     |                        |
| 1.5 x output current rating (i.e., 150 % overload) for 57 s with a cycle time of 300 s<br>2 x output current rating (i.e., 200 % overload) for 3 s with a cycle time of 300 s |                     |                        |
| General tech. specifications                                                                                                                                                  |                     |                        |
| Power factor λ                                                                                                                                                                | 0.95                |                        |
| Offset factor cos φ                                                                                                                                                           | 0.99                |                        |
| Efficiency η                                                                                                                                                                  | 0.98                |                        |
| Sound pressure level (1m)                                                                                                                                                     | 71 dB               |                        |
| Power loss                                                                                                                                                                    | 1.55 kW             |                        |
| Filter class (integrated)                                                                                                                                                     | Class A             |                        |

| Ambient conditions             |                                           |
|--------------------------------|-------------------------------------------|
| Cooling                        | Internal air cooling                      |
| Cooling air requirement        | 0.083 m³/s (2.931 ft³/s)                  |
| Installation altitude          | 1,000 m (3,280.84 ft)                     |
| Ambient temperature            |                                           |
| Operation LO                   | -20 ... 40 °C (-4 ... 104 °F)             |
| Operation HO                   | -20 ... 50 °C (-4 ... 122 °F)             |
| Transport                      | -25 ... 55 °C (-13 ... 131 °F)            |
| Storage                        | -25 ... 55 °C (-13 ... 131 °F)            |
| Relative humidity              |                                           |
| Max. operation                 | 95 % RH, condensation not permitted       |
| Connections                    |                                           |
| Line side                      |                                           |
| Version                        | screw-type terminal                       |
| Conductor cross-section        | 25.00 ... 70.00 mm²<br>(AWG 4 ... AWG -1) |
| Motor end                      |                                           |
| Version                        | Screw-type terminals                      |
| Conductor cross-section        | 25.00 ... 70.00 mm²<br>(AWG 4 ... AWG -1) |
| DC link (for braking resistor) |                                           |
| Version                        | Screw-type terminals                      |
| Conductor cross-section        | 10.00 ... 35.00 mm²<br>(AWG 8 ... AWG 2)  |
| Cable length                   | 10 m (32.81 ft)                           |
| 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                     | 28.00 kg (61.73 lb)                       |
| Dimensions                     |                                           |
| Width                          | 275 mm (10.83 in)                         |
| Height                         | 551 mm (21.69 in)                         |
| Depth                          | 237 mm (9.33 in)                          |
| Standards                      |                                           |
| Compliance with standards      | UL, cUL, CE, C-Tick (RCM), SEMI F47       |
| CE marking                     | Low-voltage directive 2006/95/EC          |

Data sheet for SINAMICS Power module PM240-2

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| Converter losses to IEC61800-9-2*                    |         |
|------------------------------------------------------|---------|
| Efficiency class                                     | IE2     |
| Comparison with the reference converter (90% / 100%) | 47.50 % |



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

<sup>1)</sup>The output current and HP ratings are valid for the voltage range 440V-480V