

## Data sheet for SINAMICS Power module PM240-2

Article No. : 6SL3210-1PE31-8AL0

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

Item no. :  
Consignment no. :  
Project :

[Figure similar](#)



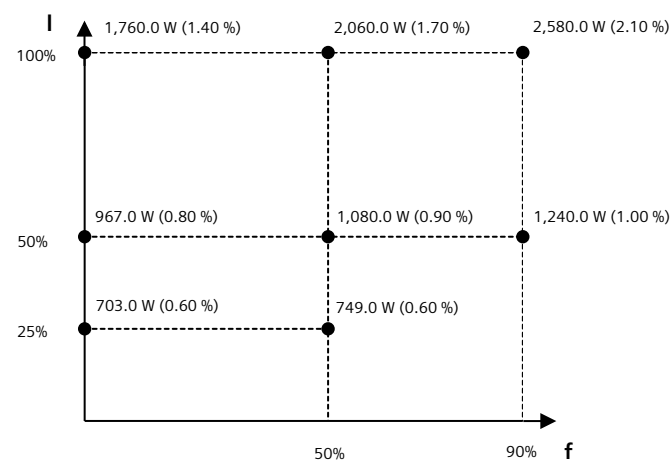
| Rated data                                                                                                                                                                    |                     |           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------|
| Input                                                                                                                                                                         |                     |           |
| Number of phases                                                                                                                                                              | 3 AC                |           |
| Line voltage                                                                                                                                                                  | 380 ... 480 V ±10 % |           |
| Line frequency                                                                                                                                                                | 47 ... 63 Hz        |           |
| Rated current (LO)                                                                                                                                                            | 172.00 A            |           |
| Rated current (HO)                                                                                                                                                            | 154.00 A            |           |
| Output                                                                                                                                                                        |                     |           |
| Number of phases                                                                                                                                                              | 3 AC                |           |
| Rated voltage                                                                                                                                                                 | 400V IEC            | 480V NEC  |
| Rated power (LO)                                                                                                                                                              | 90.00 kW            | 125.00 hp |
| Rated power (HO)                                                                                                                                                              | 75.00 kW            | 100.00 hp |
| Rated current (LO)                                                                                                                                                            | 178.00 A            |           |
| Rated current (HO)                                                                                                                                                            | 145.00 A            |           |
| Max. output current                                                                                                                                                           | 290.00 A            |           |
| Pulse frequency                                                                                                                                                               | 2 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)                                                                                                                                                     | 68 dB               |           |
| Power loss                                                                                                                                                                    | 2.33 kW             |           |
| Filter class (integrated)                                                                                                                                                     | Class A             |           |

| Ambient conditions             |                                            |
|--------------------------------|--------------------------------------------|
| Cooling                        | Internal air cooling                       |
| Cooling air requirement        | 0.153 m³/s (5.403 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                      | -40 ... 70 °C (-40 ... 158 °F)             |
| Storage                        | -40 ... 70 °C (-40 ... 158 °F)             |
| Relative humidity              |                                            |
| Max. operation                 | 95 % RH, condensation not permitted        |
| Mechanical data                |                                            |
| Degree of protection           | IP20 / UL open type                        |
| Size                           | FSF                                        |
| Net weight                     | 63.00 kg (138.89 lb)                       |
| Dimensions                     |                                            |
| Width                          | 305 mm (12.01 in)                          |
| Height                         | 708 mm (27.87 in)                          |
| Depth                          | 357 mm (14.06 in)                          |
| Connections                    |                                            |
| Line side                      |                                            |
| Version                        | M10 bolt                                   |
| Conductor cross-section        | 35.00 ... 120.00 mm²<br>(AWG 2 ... AWG -3) |
| Motor end                      |                                            |
| Version                        | M10 bolt                                   |
| Conductor cross-section        | 35.00 ... 120.00 mm²<br>(AWG 2 ... AWG -3) |
| DC link (for braking resistor) |                                            |
| Version                        | Screw-type terminals                       |
| Conductor cross-section        | 25.00 ... 70.00 mm²<br>(AWG 4 ... AWG -1)  |
| Cable length                   | 10 m (32.81 ft)                            |
| PE connection                  | M10 screw studs                            |
| Max. motor cable length        |                                            |
| Shielded                       | 300 m (984.25 ft)                          |
| Unshielded                     | 450 m (1,476.38 ft)                        |

Data sheet for SINAMICS Power module PM240-2

Article No. : 6SL3210-1PE31-8AL0

| Converter losses to IEC61800-9-2*                    |         |
|------------------------------------------------------|---------|
| Efficiency class                                     | IE2     |
| Comparison with the reference converter (90% / 100%) | 50.90 % |



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

| Standards                 |                                     |
|---------------------------|-------------------------------------|
| Compliance with standards | UL, cUL, CE, C-Tick (RCM), SEMI F47 |
| CE marking                | Low-voltage directive 2006/95/EC    |