## SIEMENS

## Data sheet for SINAMICS Power module PM240-2

6SL3210-1PH23-5UL0 Article No.:

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





| Rated data |                                     |                 |             |  |  |  |
|------------|-------------------------------------|-----------------|-------------|--|--|--|
| Input      |                                     |                 |             |  |  |  |
|            | Number of phases                    | 3 AC            |             |  |  |  |
|            | Line voltage                        | 500 690 V ±10 9 | %           |  |  |  |
|            | Line frequency                      | 47 63 Hz        |             |  |  |  |
|            | Rated current (LO)                  | 33.00 A         |             |  |  |  |
|            | Rated current (HO)                  | 28.00 A         |             |  |  |  |
| Output     |                                     |                 |             |  |  |  |
|            | Number of phases                    | 3 AC            |             |  |  |  |
|            | Rated voltage                       | 690V IEC        | 600V NEC 1) |  |  |  |
|            | Rated power (LO)                    | 30.00 kW        | 30.00 hp    |  |  |  |
|            | Rated power (HO)                    | 22.00 kW        | 25.00 hp    |  |  |  |
|            | Rated current (LO)                  | 35.00 A         |             |  |  |  |
|            | Rated current (HO)                  | 27.00 A         |             |  |  |  |
|            | Max. output current                 | 54.00 A         |             |  |  |  |
|            | Pulse frequency                     | 2 kHz           |             |  |  |  |
|            | Output frequency for vector control | 0 200 Hz        |             |  |  |  |
|            | Output frequency for V/f control    | 0 550 Hz        |             |  |  |  |
| o          | 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 1.5  $\times$  rated output current (i.e. 150 % overload) for 3 s with a cycle time

High Overload (HO)

 $1.5\times$  output current rating (i.e., 150 % overload) for 57 s with a cycle time of 300 s 2  $\times$  output current rating (i.e., 200 % overload) for 3 s with a cycle time of 300 s

| General tech. specifications |         |  |  |  |
|------------------------------|---------|--|--|--|
| Power factor λ               | 0.90    |  |  |  |
| Offset factor $\cos\phi$     | 0.99    |  |  |  |
| Efficiency η                 | 0.98    |  |  |  |
| Sound pressure level (1m)    | 72 dB   |  |  |  |
| Power loss                   | 0.72 kW |  |  |  |
| Filter class (integrated)    | -       |  |  |  |

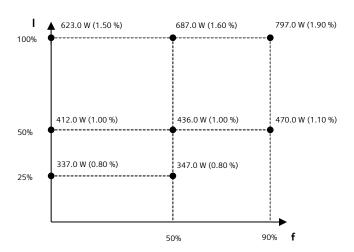
| Ambient conditions             |  |  |  |  |  |
|--------------------------------|--|--|--|--|--|
| Cooling                        | Internal air cooling                               |  |  |  |  |
| Cooling air requirement        | 0.055 m <sup>3</sup> /s (1.942 ft <sup>3</sup> /s) |  |  |  |  |
| 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        | 10.00 35.00 mm <sup>2</sup><br>(AWG 8 AWG 2)       |  |  |  |  |
| Motor end                      |  |  |  |  |  |
| Version                        | Screw-type terminals                               |  |  |  |  |
| Conductor cross-section        | 10.00 35.00 mm <sup>2</sup><br>(AWG 8 AWG 2)       |  |  |  |  |
| DC link (for braking resistor) |  |  |  |  |  |
| Version                        | Screw-type terminals                               |  |  |  |  |
| Conductor cross-section        | 2.50 16.00 mm <sup>2</sup> (AWG 14 AWG 6)          |  |  |  |  |
| 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                     | FSD  |  |  |  |  |
| Net weight                     | 17.00 kg (37.48 lb)                                |  |  |  |  |
| Dimensions                     |  |  |  |  |  |
| Width                          | 200 mm (7.87 in)                                   |  |  |  |  |
| Height                         | 472 mm (18.58 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

Article No.: 6SL3210-1PH23-5UL0

| Converter losses to IEC61800-9-2*                    |         |  |
|--|---------|--|
| Efficiency class                                     | IE2     |  |
| Comparison with the reference converter (90% / 100%) | 39.80 % |  |



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 550V-600V