## **SIEMENS**

## **Data sheet for SINAMICS Power module PM240**

Article No.: 6SL3224-0BE31-5AA0

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





Figure simil

| Rated data                          |                 |             |
|-------------------------------------|-----------------|-------------|
| Input                               |                 |             |
| Number of phases                    | 3 AC            |             |
| Line voltage                        | 380 480 V ±10 % |             |
| Line frequency                      | 47 63 Hz        |             |
| Rated current with line reactor     | 40.00 A         |             |
| Rated current without line reactor  | 46.00 A         |             |
| Output                              |                 |             |
| Number of phases                    | 3 AC            |             |
| Rated voltage                       | 400V IEC        | 480V NEC 1) |
| Rated power (LO)                    | 18.50 kW        | 25.00 hp    |
| Rated power (HO)                    | 15.00 kW        | 20.00 hp    |
| Rated current (LO)                  | 38.00 A         |             |
| Rated current (HO)                  | 32.00 A         |             |
| Max. output current                 | 64.00 A         |             |
| Pulse frequency                     | 4 kHz           |             |
| Output frequency for vector control | 0 200 Hz        |             |
| Output frequency for V/f control    | 0 550 Hz        |             |
| Overland annahility                 |                 |             |

## 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 of 300 s

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               | 0.85    |  |
| Offset factor $\cos\phi$     | 0.95    |  |
| Efficiency η                 | 0.97    |  |
| Sound pressure level (1m)    | 60 dB   |  |
| Power loss                   | 0.42 kW |  |
| Filter class (integrated)    | Class A |  |

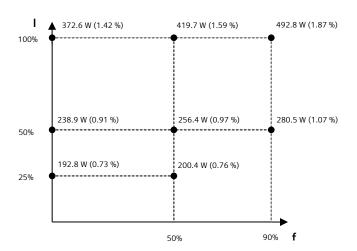
| Amb                            | ient conditions                              |  |
|--------------------------------|--|--|
| Cooling                        | Internal air cooling                         |  |
| Cooling air requirement        | 0.055 m³/s (1.942 ft³/s)                     |  |
| Installation altitude          | 1,000 m (3,280.84 ft)                        |  |
| Ambient temperature            |  |  |
| Operation LO                   | 0 40 °C (32 104 °F)                          |  |
| Operation HO                   | 0 50 °C (32 122 °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                        | M6 bolt                                      |  |
| Conductor cross-section        | 10.00 50.00 mm <sup>2</sup><br>(AWG 8 AWG 1) |  |
| Motor end                      |  |  |
| Version                        | M6 bolt                                      |  |
| Conductor cross-section        | 10.00 50.00 mm <sup>2</sup><br>(AWG 8 AWG 1) |  |
| DC link (for braking resistor) |  |  |
| Version                        | M6 bolt                                      |  |
| Conductor cross-section        | 10.00 50.00 mm <sup>2</sup> (AWG 8 AWG 1)    |  |
| PE connection                  | On housing with M6 screw                     |  |
| Max. motor cable length        |  |  |
| Shielded                       | 50 m (164.04 ft)                             |  |
| Unshielded                     | 100 m (328.08 ft)                            |  |
| Mechanical data                |  |  |
| Degree of protection           | IP20 / UL open type                          |  |
| Frame size                     | FSD  |  |
| Net weight                     | 16.00 kg (35.27 lb)                          |  |
| Dimensions                     |  |  |
| Width                          | 275 mm (10.83 in)                            |  |
| Height                         | 512 mm (20.16 in)                            |  |
| Depth                          | 204 mm (8.03 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

Article No.: 6SL3224-0BE31-5AA0

| Converter losses to IEC61800-9-2*                    |         |  |
|--|---------|--|
| Efficiency class                                     | IE2     |  |
| Comparison with the reference converter (90% / 100%) | 63.12 % |  |



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