## **SIEMENS**

## Data sheet for SINAMICS Power module PM240P-2

Article No.: 6SL3210-1RH31-2UL0

Client order no. : Order no. : Offer no. : Remarks : Item no. : Consignment no. : Project :



Figure simil

| Rated data                          |               |             |
|-------------------------------------|---------------|-------------|
| Input                               |               |             |
| Number of phases                    | 3 AC          |             |
| Line voltage                        | 500 690 V ±10 | %           |
| Line frequency                      | 47 63 Hz      |             |
| Rated current (LO)                  | 111.00 A      |             |
| Rated current (HO)                  | 106.00 A      |             |
| Output                              |               |             |
| Number of phases                    | 3 AC          |             |
| Rated voltage                       | 690V IEC      | 600V NEC 1) |
| Rated power (LO)                    | 110.00 kW     | 100.00 hp   |
| Rated power (HO)                    | 90.00 kW      | 100.00 hp   |
| Rated current (LO)                  | 115.00 A      |             |
| Rated current (HO)                  | 100.00 A      |             |
| Max. output current                 | 156.00 A      |             |
| Pulse frequency                     | 2 kHz         |             |
| Output frequency for vector control | 0 200 Hz      |             |
| Output frequency for V/f control    | 0 550 Hz      |             |
| Overload capability                 |               |             |

## Overload capability

Low Overload (LO)

 $1.1\times$  rated output current (i.e. 110 % overload) for 57 s with a cycle time of 300 s 1.35  $\times$  rated output current (i.e. 135 % 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 60 s with a cycle time of 300 s

| General tech. specifications |         |  |
|------------------------------|---------|--|
| Power factor λ               | 0.90    |  |
| Offset factor $\cos\phi$     | 0.99    |  |
| Efficiency η                 | 0.99    |  |
| Sound pressure level (1m)    | 68 dB   |  |
| Power loss                   | 1.95 kW |  |
| Filter class (integrated)    | -       |  |

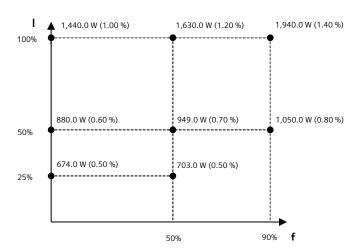
| Ambient conditions        |  |  |  |
|---------------------------|--|--|--|
| Cooling                   | Internal air cooling                           |  |  |
| Cooling air requirement   | 0.153 m³/s (5.403 ft³/s)                       |  |  |
| Installation altitude     | 1,000 m (3,280.84 ft)                          |  |  |
| 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            |  |  |
| 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 mm <sup>2</sup><br>(AWG 2 AWG -3) |  |  |
| Max. motor cable length   |  |  |  |
| Shielded                  | 300 m (984.25 ft)                              |  |  |
| Unshielded                | 450 m (1,476.38 ft)                            |  |  |
| Me                        | chanical data                                  |  |  |
| Degree of protection      | IP20 / UL open type                            |  |  |
| Frame size                | FSF  |  |  |
| Net weight                | 60.00 kg (132.28 lb)                           |  |  |
| Dimensions                |  |  |  |
| Width                     | 305 mm (12.01 in)                              |  |  |
| Height                    | 708 mm (27.87 in)                              |  |  |
| Depth                     | 357 mm (14.06 in)                              |  |  |
|                           | Standards                                      |  |  |
| Compliance with standards | UL, cUL, CE, SEMI F47                          |  |  |
| CE marking                | Low-voltage directive 2006/95/EC               |  |  |
|                           |  |  |  |



## Data sheet for SINAMICS Power module PM240P-2

Article No.: 6SL3210-1RH31-2UL0

| Converter losses to IEC61800-9-2*                    |         |  |
|--|---------|--|
| Efficiency class                                     | IE2     |  |
| Comparison with the reference converter (90% / 100%) | 34.40 % |  |



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