SIEMENS

Data sheet for SINAMICS Power module PM240-2

Article No.: 6SL3210-1PE31-5AL0

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





Figure simila

| Rated data | | |
|-------------------------------------|-----------------|-------------|
| Input | | |
| Number of phases | 3 AC | |
| Line voltage | 380 480 V ±10 % | |
| Line frequency | 47 63 Hz | |
| Rated current (LO) | 140.00 A | |
| Rated current (HO) | 117.00 A | |
| Output | | |
| Number of phases | 3 AC | |
| Rated voltage | 400V IEC | 480V NEC 1) |
| Rated power (LO) | 75.00 kW | 100.00 hp |
| Rated power (HO) | 55.00 kW | 75.00 hp |
| Rated current (LO) | 145.00 A | |
| Rated current (HO) | 110.00 A | |
| Max. output current | 220.00 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 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 | 0.95 | |
| Offset factor $\cos\phi$ | 0.99 | |
| Efficiency η | 0.98 | |
| Sound pressure level (1m) | 68 dB | |
| Power loss | 1.79 kW | |
| Filter class (integrated) | Class A | |

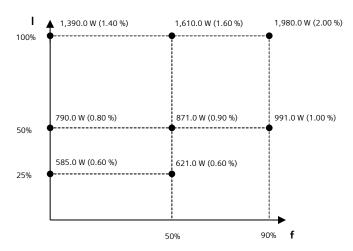
| Amb | ient conditions | |
|--------------------------------|--|--|
| Cooling | Internal air cooling | |
| Cooling air requirement | 0.153 m ³ /s (5.403 ft ³ /s) | |
| Installation altitude | 1,000 m (3,280.84 ft) | |
| Ambient temperature | | |
| Operation LO | -20 40 °C (-4 104 °F) | |
| Operation 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 | |
| C | Connections | |
| Line side | | |
| Version | M10 bolt | |
| Conductor cross-section | 35.00 120.00 mm² (AWG 2 AWG -3) | |
| Motor end | | |
| Version | M10 bolt | |
| Conductor cross-section | 35.00 120.00 mm ² (AWG 2 AWG -3) | |
| DC link (for braking resistor) | | |
| Version | Screw-type terminals | |
| Conductor cross-section | 25.00 70.00 mm ² (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) | |
| Me | chanical data | |
| Degree of protection | IP20 / UL open type | |
| Frame 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) | |
| 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.: 6SL3210-1PE31-5AL0

| Converter losses to IEC61800-9-2* | | |
|--|---------|--|
| Efficiency class | IE2 | |
| Comparison with the reference converter (90% / 100%) | 42.30 % | |



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

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