

Data sheet for SINAMICS Power module PM240-2

Article No. : 6SL3210-1PE21-4UL0



Figure similar

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

Item no. :
Consignment no. :
Project :

Rated data

| Input | |
|-------------------------------------|---|
| Number of phases | 3 AC |
| Line voltage | 380 ... 480 V ±10 % |
| Line frequency | 47 ... 63 Hz |
| Rated current (LO) | 17.20 A |
| Rated current (HO) | 15.30 A |
| Output | |
| Number of phases | 3 AC |
| Rated voltage | 400V IEC 480V NEC ¹⁾ |
| Rated power (LO) | 5.50 kW 7.50 hp |
| Rated power (HO) | 4.00 kW 5.00 hp |
| Rated current (LO) | 13.20 A |
| Rated current (HO) | 10.20 A |
| Max. output current | 20.40 A |
| Pulse frequency | 4 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
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
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 | 0.85 |
| Offset factor $\cos \varphi$ | 0.95 |
| Efficiency η | 0.97 |
| Sound pressure level (1m) | 72 dB |
| Power loss | 0.15 kW |
| Filter class (integrated) | - |

Ambient conditions

| Cooling | Internal air cooling |
|-------------------------|--|
| Cooling air requirement | 0.009 m ³ /s (0.325 ft ³ /s) |
| Installation altitude | 1,000 m (3,280.84 ft) |
| Ambient temperature | |
| Operation LO | -10 ... 40 °C (14 ... 104 °F) |
| Operation HO | -10 ... 50 °C (14 ... 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 | Plug-in screw terminals |
| Conductor cross-section | 1.50 ... 6.00 mm ² (AWG 16 ... AWG 10) |

Motor end

| | |
|-------------------------|--|
| Version | Plug-in screw terminals |
| Conductor cross-section | 1.50 ... 6.00 mm ² (AWG 16 ... AWG 10) |

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 | FSB |
| Net weight | 2.90 kg (6.39 lb) |
| Dimensions | |
| Width | 100 mm (3.94 in) |
| Height | 292 mm (11.50 in) |
| Depth | 165 mm (6.50 in) |

Standards

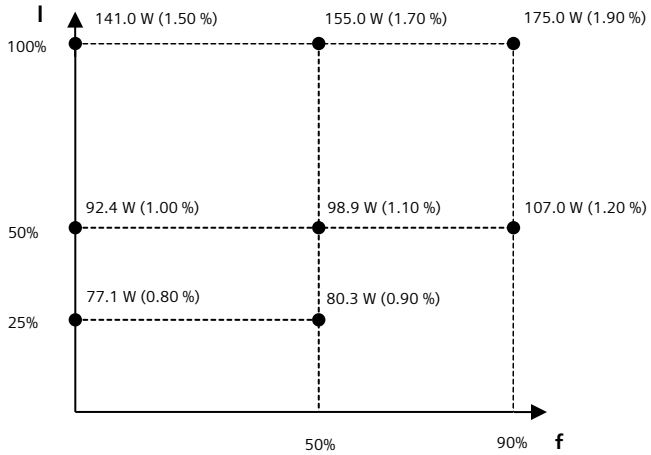
| | |
|---------------------------|-------------------------------------|
| Compliance with standards | UL, cUL, CE, C-Tick (RCM), SEMI F47 |
| CE marking | Low-voltage directive 2006/95/EC |

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Converter losses to IEC61800-9-2*

| | |
|--|---------|
| Efficiency class | IE2 |
| Comparison with the reference converter (90% / 100%) | 32.80 % |



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

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