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# Data sheet for SINAMICS Power module PM240P-2

**Article No. :** **6SL3210-1RE31-8UL0**



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) | 172.00 A | |
| Rated current (HO) | 154.00 A | |
| **Output** | | |
| Number of phases | 3 AC | |
| **Rated voltage** | **400V IEC** | **480V NEC [1)]** |
| Rated power (LO) | 90.00 kW | 100.00 hp |
| Rated power (HO) | 75.00 kW | 75.00 hp |
| Rated current (LO) | 178.00 A | |
| Rated current (HO) | 145.00 A | |
| Max. output current | 241.00 A | |
| Pulse frequency | 2 kHz | |
| Output frequency for vector control | 0 ... 200 Hz | |
| Output frequency for V/f control | 0 ... 550 Hz | |
| **Overload capability** | | |
| Low Overload (LO) | | |
| 1.1 x rated output current (i.e. 110 % overload) for 57 s with a cycle time of 300 s 1.35 × rated output current (i.e. 135 % overload) for 3 s with a cycle time of 300 s | | |
| High Overload (HO) | | |
| 1.5 × output current rating (i.e., 150 % overload) for 60 s with a cycle time of 300 s | | |

## General tech. specifications

| | |
|---|---|
| Power factor λ | 0.95 |
| Offset factor cos φ | 0.99 |
| Efficiency η | 0.98 |
| Sound pressure level (1m) | 68 dB |
| Power loss | 2.07 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 (AWG 2 ... AWG -3) |
| **Motor end** | |
| Version | M10 bolt |
| Conductor cross-section | 35.00 ... 120.00 mm² (AWG 2 ... AWG -3) |
| **Max. motor cable length** | |
| Shielded | 300 m (984.25 ft) |
| Unshielded | 450 m (1,476.38 ft) |

## Mechanical data

| | |
|---|---|
| Degree of protection | IP20 / UL open type |
| Frame size | FSF |
| Net weight | 57.00 kg (125.66 lb) |
| **Dimensions** | |
| Width | 305 mm (12.01 in) |
| Height | 708 mm (27.87 in) |
| Depth | 357 mm (14.06 in) |

## Standards

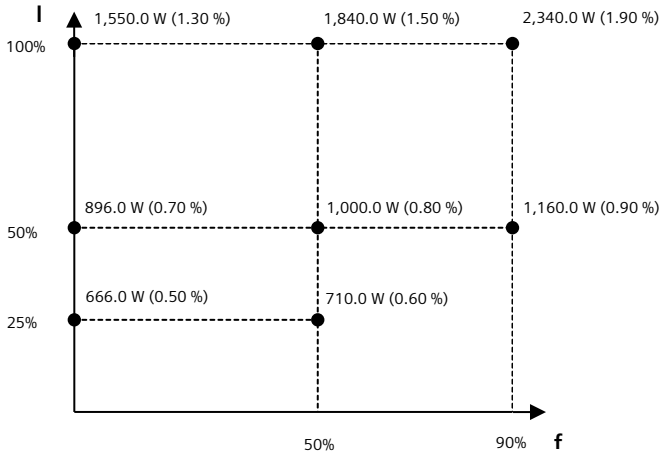
| | |
|---|---|
| Compliance with standards | UL, cUL, CE, SEMI F47 |
| CE marking | Low-voltage directive 2006/95/EC |

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## Data sheet for SINAMICS Power module PM240P-2

**Article No. :** **6SL3210-1RE31-8UL0**

| Converter losses to IEC61800-9-2* | |
|---|---|
| Efficiency class | IE2 |
| Comparison with the reference converter (90% / 100%) | 46.10 % |




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