

## Data sheet for SINAMICS Power module PM240-2

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



Figure similar

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

Item no. :  
Consignment no. :  
Project :

### Rated data

<b>Input</b>	
Number of phases	3 AC
Line voltage	380 ... 480 V ±10 %
Line frequency	47 ... 63 Hz
Rated current (LO)	104.00 A
Rated current (HO)	94.00 A

<b>Output</b>	
Number of phases	3 AC
<b>Rated voltage</b>	<b>400V IEC</b> <b>480V NEC <sup>1)</sup></b>
Rated power (LO)	55.00 kW      75.00 hp
Rated power (HO)	45.00 kW      60.00 hp
Rated current (LO)	110.00 A
Rated current (HO)	90.00 A
Max. output current	180.00 A
Pulse frequency	4 kHz
Output frequency for vector control	0 ... 200 Hz
Output frequency for V/f control	0 ... 550 Hz

<b>Overload capability</b>	
Low Overload (LO)	
1.1 × rated output current (i.e. 110 % overload) for 57 s with a cycle time of 300 s 1.5 × rated output current (i.e. 150 % overload) for 3 s with a cycle time of 300 s	
High Overload (HO)	
1.5 × output current rating (i.e., 150 % overload) for 57 s with a cycle time of 300 s 2 × 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 φ	0.99
Efficiency η	0.98
Sound pressure level (1m)	71 dB
Power loss	1.55 kW
Filter class (integrated)	Class A

### Ambient conditions

Cooling	Internal air cooling
Cooling air requirement	0.083 m³/s (2.931 ft³/s)
Installation altitude	1,000 m (3,280.84 ft)
<b>Ambient temperature</b>	
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)

<b>Relative humidity</b>	
Max. operation	95 % RH, condensation not permitted

### Connections

<b>Line side</b>	
Version	screw-type terminal
Conductor cross-section	25.00 ... 70.00 mm² (AWG 4 ... AWG -1)

<b>Motor end</b>	
Version	Screw-type terminals
Conductor cross-section	25.00 ... 70.00 mm² (AWG 4 ... AWG -1)

<b>DC link (for braking resistor)</b>	
Version	Screw-type terminals
Conductor cross-section	10.00 ... 35.00 mm² (AWG 8 ... AWG 2)
Cable length	10 m (32.81 ft)
PE connection	Screw-type terminals

<b>Max. motor cable length</b>	
Shielded	200 m (656.17 ft)
Unshielded	300 m (984.25 ft)

### Mechanical data

Degree of protection	IP20 / UL open type
Frame size	FSE
Net weight	28.00 kg (61.73 lb)
<b>Dimensions</b>	
Width	275 mm (10.83 in)
Height	551 mm (21.69 in)
Depth	237 mm (9.33 in)

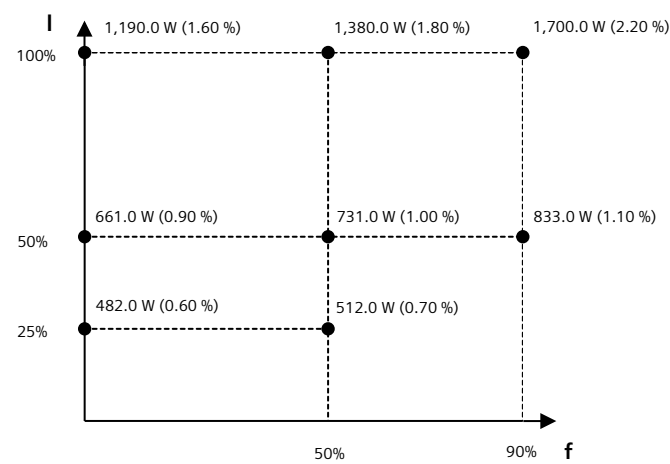
### Standards

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%)	47.50 %



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.

\*converted values

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