

Data sheet for SINAMICS Power module PM240-2

Article No. : 6SL3210-1PE31-8UL0



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 \pm 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	125.00 hp
Rated power (HO)	75.00 kW	100.00 hp
Rated current (LO)	178.00 A	
Rated current (HO)	145.00 A	
Max. output current	290.00 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
1.5 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	0.95
Offset factor $\cos \varphi$	0.99
Efficiency η	0.98
Sound pressure level (1m)	68 dB
Power loss	2.31 kW
Filter class (integrated)	-

Ambient 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
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Connections

Line side

Version	M10 bolt
Conductor cross-section	35.00 ... 120.00 mm ² (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)

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

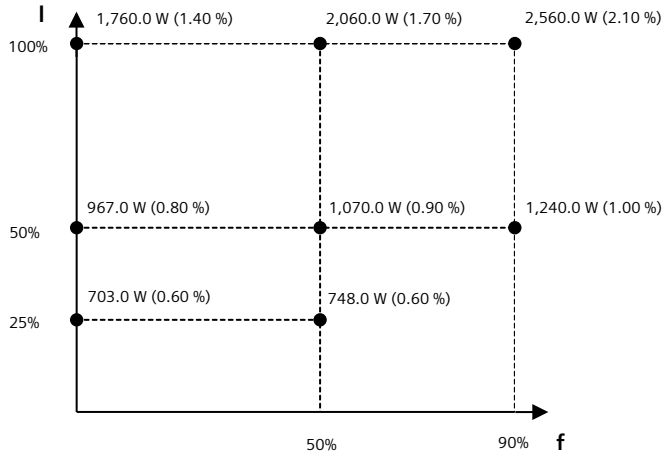
Compliance with standards	UL, cUL, CE, C-Tick (RCM), SEMI F47
CE marking	Low-voltage directive 2006/95/EC

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Converter losses to IEC61800-9-2*

Efficiency class	IE2
Comparison with the reference converter (90% / 100%)	50.60 %



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

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