## **SIEMENS**

## Data sheet for SINAMICS Power module PM240-2

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

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





Rated data		
Input		
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	
Output		
Number of phases	3 AC	
Rated voltage	400V IEC	480V NEC 1)
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	
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 $\lambda$	0.95	
Offset factor $\cos\phi$	0.99	
Efficiency η	0.98	
Sound pressure level (1m)	71 dB	
Power loss	1.55 kW	
Filter class (integrated)	Class A	

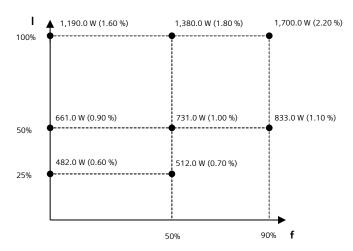
Ambien	Ambient conditions		
Cooling	Internal air cooling		
Cooling air requirement	0.083 m³/s (2.931 ft³/s)		
Installation altitude	1,000 m (3,280.84 ft)		
Ambient temperature	,,		
Operation LO	-20 40 °C (-4 104 °F)		
Operation HO	-20 50 °C (-4 122 °F)		
Transport	-40 70 °C (-40 158 °F)		
Storage	-40 70 °C (-40 158 °F)		
Relative humidity	10 111 / 0 2 ( 10 111 130 1 /		
Max. operation	95 % RH, condensation not permitted		
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Connections			
Line side			
Version	screw-type terminal		
Conductor cross-section	25.00 70.00 mm <sup>2</sup> (AWG 4 AWG -1)		
Motor end			
Version	Screw-type terminals		
Conductor cross-section	25.00 70.00 mm <sup>2</sup> (AWG 4 AWG -1)		
DC link (for braking resistor)			
Version	Screw-type terminals		
Conductor cross-section	10.00 35.00 mm <sup>2</sup> (AWG 8 AWG 2)		
Cable length	10 m (32.81 ft)		
PE connection	Screw-type terminals		
Max. motor cable length			
Shielded	200 m (656.17 ft)		
Unshielded	300 m (984.25 ft)		
Mecha	anical data		
Degree of protection	IP20 / UL open type		
Frame size	FSE		
Net weight	28.00 kg (61.73 lb)		
Dimensions			
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		



## Data sheet for SINAMICS Power module PM240-2

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

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.

\*calculated values

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