SIEMENS

Data sheet for SINAMICS Power module PM230

6SL3210-1NE31-1AL0 Article No.:

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





Rated data		
Input		
Number of phases	3 AC	
Line voltage	380 480 V ±10	0 %
Line frequency	47 63 Hz	
Rated current (LO)	102.00 A	
Rated current (HO)	84.00 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	135.00 A	
Pulse frequency	4 kHz	
Output frequency for vector control	0 200 Hz	
Output frequency for V/f control	0 550 Hz	
Overload canability		

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 λ	0.90	
Offset factor $\cos\phi$	0.95	
Efficiency η	0.97	
Sound pressure level (1m)	60 dB	
Power loss	1.40 kW	
Filter class (integrated)	Class A	

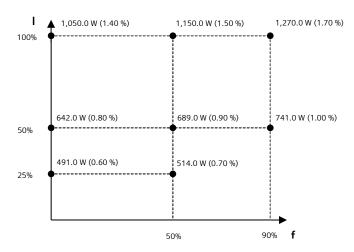
Amb	pient conditions
Cooling	Internal air cooling
Cooling air requirement	0.150 m ³ /s (5.297 ft ³ /s)
Installation altitude	1,000 m (3,280.84 ft)
Ambient temperature	
Operation LO	0 40 °C (32 104 °F)
Operation HO	0 50 °C (32 122 °F)
Transport	-25 55 °C (-13 131 °F)
Storage	-25 55 °C (-13 131 °F)
Relative humidity	
Max. operation 95 % RH, condensation not p	
(Connections
Line side	
Version	M8 bolt
Conductor cross-section	35.00 120.00 mm ² (AWG 2 AWG -3)
Motor end	
Version	M8 bolt
Conductor cross-section	35.00 120.00 mm ² (AWG 2 AWG -3)
Max. motor cable length	
Shielded	25 m (82.02 ft)
Unshielded	100 m (328.08 ft)
Me	echanical data
Degree of protection	IP20
Frame size	FSF
Net weight	46.00 kg (101.41 lb)
Dimensions	
Width	350 mm (13.78 in)
Height	934 mm (36.77 in)
Depth	316 mm (12.44 in)
	Standards
Compliance with standards	CE, C-Tick (RCM)
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%)	35.60 %	



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.

*calculated values

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