## **SIEMENS**

## **Data sheet for SINAMICS Power module PM230**

6SL3210-1NE28-8AL0 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)	84.00 A	
Rated current (HO)	70.00 A	
Output		
Number of phases	3 AC	
Rated voltage	400V IEC	480V NEC 1)
Rated power (LO)	45.00 kW	60.00 hp
Rated power (HO)	37.00 kW	50.00 hp
Rated current (LO)	90.00 A	
Rated current (HO)	75.00 A	
Max. output current	112.00 A	
Pulse frequency	4 kHz	
Output frequency for vector control	0 200 Hz	
Output frequency for V/f control	0 550 Hz	
Overload capability		

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

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	1.20 kW	
Filter class (integrated)	Class A	

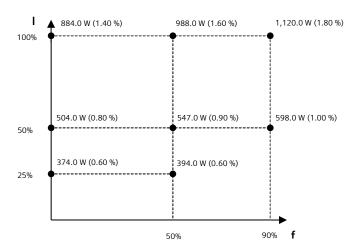
Ambient conditions		
Cooling	Internal air cooling	
Cooling air requirement	0.080 m <sup>3</sup> /s (2.825 ft <sup>3</sup> /s)	
Installation altitude	1,000 m (3,280.84 ft)	
Ambient temperature		
Operation LO	0 40 °C (32 104 °F)	
Operation HO	0 50 °C (32 122 °F)	
Transport	-25 55 °C (-13 131 °F)	
Storage	-25 55 °C (-13 131 °F)	
Relative humidity		
Max. operation	95 % RH, condensation not permitted	
Connections		
Line side		
Version	M6 bolt	
Conductor cross-section	25.00 50.00 mm <sup>2</sup> (AWG 4 AWG 1)	
Motor end		
Version	M6 bolt	
Conductor cross-section	25.00 50.00 mm <sup>2</sup> (AWG 4 AWG 1)	
Max. motor cable length		
Shielded	25 m (82.02 ft)	
Unshielded	100 m (328.08 ft)	
Me	echanical data	
Degree of protection	IP20 / UL open type	
Frame size	FSE	
Net weight	22.00 kg (48.50 lb)	
Dimensions		
Width	275 mm (10.83 in)	
Height	635 mm (25.00 in)	
Depth	204 mm (8.03 in)	
Standards		
Compliance with standards	CE, C-Tick (RCM)	
CE marking	Low-voltage directive 2006/95/EC	



## Data sheet for SINAMICS Power module PM230

Article No.: 6SL3210-1NE28-8AL0

Converter losses to IEC61800-9-2*	
Efficiency class	IE2
Comparison with the reference converter (90% / 100%)	37.90 %



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