## **SIEMENS**

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

Article No.: 6SL3210-1NE17-7UG1

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





Figure simila

Rated data		
Input		
Number of phases	3 AC	
Line voltage	380 480 V ±10	%
Line frequency	47 63 Hz	
Rated current (LO)	8.00 A	
Rated current (HO)	6.10 A	
Output		
Number of phases	3 AC	
Rated voltage	400V IEC	480V NEC 1)
Rated power (LO)	3.00 kW	4.00 hp
Rated power (HO)	2.20 kW	3.00 hp
Rated current (LO)	7.70 A	
Rated current (HO)	5.90 A	
Max. output current	11.80 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 λ	0.90	
Offset factor $\cos\phi$	0.95	
Efficiency η	0.96	
Sound pressure level (1m)	50 dB	
Power loss	0.11 kW	
Filter class (integrated)	-	

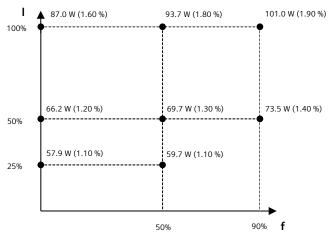
Cooling air requirement  Installation altitude  Installation altitude  Installation altitude  Installation altitude  Installation altitude  Installation altitude  Income (3,280.84 ft)  Installation altitude  Income (14 104 °F)  Income (14 104 °F)  Income (14 122 °F)  Income (15 °C (14 122 °F)  Income (15 °C (14 122 °F)  Income (15 °C (14 158 °F)  Income (15 °C (15	Ambient conditions	
Installation altitude  Ambient temperature  Operation LO  Operation HO  Transport  Au 70 °C (14 104 °F)  Transport  Au 70 °C (-40 158 °F)  Storage  Au 70 °C (-40 158 °F)  Relative humidity  Max. operation  Connections  Line side  Version  Plug-in screw terminals  Conductor cross-section  Aug 16 Aug 14)  Motor end  Version  Plug-in screw terminals  Conductor cross-section  Aug 16 Aug 14)  Max. motor cable length  Shielded  25 m (82.02 ft)  Unshielded  Degree of protection  Prod / UL open type  Frame size  FSA  Net weight  Aug (9.48 lb)  Dimensions  Width  T3 mm (2.87 in)  Height  Popth  165 mm (6.50 in)  Standards  Compliance with standards  UL, CE, C-Tick (RCM), KCC	Cooling	Internal air cooling
Operation LO Operation HO Operation Holder Holder Holder Holder Holder Holder Holder Holder HO Operation Holder	Cooling air requirement	0.005 m <sup>3</sup> /s (0.177 ft <sup>3</sup> /s)
Operation LO	Installation altitude	1,000 m (3,280.84 ft)
Operation HO  -10 50 °C (14 122 °F)  Transport  -40 70 °C (-40 158 °F)  Storage  -40 70 °C (-40 158 °F)  Relative humidity  Max. operation  95 % RH, condensation not permitted  Connections  Line side  Version  Plug-in screw terminals  1.50 2.50 mm² (AWG 16 AWG 14)  Motor end  Version  Plug-in screw terminals  Conductor cross-section  1.50 2.50 mm² (AWG 16 AWG 14)  Max. motor cable length  Shielded  25 m (82.02 ft)  Unshielded  100 m (328.08 ft)  Mechanical data  Degree of protection  IP20 / UL open type  Frame size  FSA  Net weight  4.30 kg (9.48 lb)  Dimensions  Width  73 mm (2.87 in)  Height  196 mm (7.72 in)  Depth  165 mm (6.50 in)  Standards  Compliance with standards  UL, CE, C-Tick (RCM), KCC	Ambient temperature	
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Storage -40 70 °C (-40 158 °F)  Relative humidity  Max. operation 95 % RH, condensation not permitted  Connections  Line side  Version Plug-in screw terminals  Conductor cross-section 1.50 2.50 mm² (AWG 16 AWG 14)  Motor end  Version Plug-in screw terminals  Conductor cross-section 1.50 2.50 mm² (AWG 16 AWG 14)  Max. motor cable length  Shielded 25 m (82.02 ft)  Unshielded 100 m (328.08 ft)  Mechanical data  Degree of protection IP20 / UL open type  Frame size FSA  Net weight 4.30 kg (9.48 lb)  Dimensions  Width 73 mm (2.87 in)  Height 196 mm (7.72 in)  Depth 165 mm (6.50 in)  Standards  Compliance with standards UL, CE, C-Tick (RCM), KCC	Operation HO	-10 50 °C (14 122 °F)
Relative humidity  Max. operation  95 % RH, condensation not permitted  Connections  Line side  Version  Plug-in screw terminals  1.50 2.50 mm² (AWG 16 AWG 14)  Motor end  Version  Plug-in screw terminals  Conductor cross-section  1.50 2.50 mm² (AWG 16 AWG 14)  Max. motor cable length  Shielded  25 m (82.02 ft)  Unshielded  100 m (328.08 ft)  Mechanical data  Degree of protection  IP20 / UL open type  Frame size  FSA  Net weight  4.30 kg (9.48 lb)  Dimensions  Width  73 mm (2.87 in)  Height  196 mm (7.72 in)  Depth  165 mm (6.50 in)  Standards  Compliance with standards  UL, CE, C-Tick (RCM), KCC	Transport	-40 70 °C (-40 158 °F)
Connections  Connections  Line side  Version Plug-in screw terminals  Conductor cross-section (AWG 16 AWG 14)  Motor end  Version Plug-in screw terminals  Conductor cross-section (AWG 16 AWG 14)  Max. motor cable length  Shielded 25 m (82.02 ft)  Unshielded 100 m (328.08 ft)  Mechanical data  Degree of protection IP20 / UL open type  Frame size FSA  Net weight 4.30 kg (9.48 lb)  Dimensions  Width 73 mm (2.87 in)  Height 196 mm (7.72 in)  Depth 165 mm (6.50 in)  Standards  Compliance with standards  UL, CE, C-Tick (RCM), KCC	Storage	-40 70 °C (-40 158 °F)
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Conductor cross-section (AWG 16 AWG 14)  Max. motor cable length  Shielded 25 m (82.02 ft)  Unshielded 100 m (328.08 ft)  Mechanical data  Degree of protection IP20 / UL open type  Frame size FSA  Net weight 4.30 kg (9.48 lb)  Dimensions  Width 73 mm (2.87 in)  Height 196 mm (7.72 in)  Depth 165 mm (6.50 in)  Standards  Compliance with standards UL, CE, C-Tick (RCM), KCC	Version	Plug-in screw terminals
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Dimensions           Width         73 mm (2.87 in)           Height         196 mm (7.72 in)           Depth         165 mm (6.50 in)           Standards           Compliance with standards         UL, CE, C-Tick (RCM), KCC	Frame size	FSA
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Height 196 mm (7.72 in)  Depth 165 mm (6.50 in)  Standards  Compliance with standards UL, CE, C-Tick (RCM), KCC	Dimensions	
Depth 165 mm (6.50 in)  Standards  Compliance with standards UL, CE, C-Tick (RCM), KCC	Width	73 mm (2.87 in)
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Compliance with standards UL, CE, C-Tick (RCM), KCC	Depth	165 mm (6.50 in)
		Standards
CE marking Low-voltage directive 2006/95/EC	Compliance with standards	UL, CE, C-Tick (RCM), KCC
	CE marking	Low-voltage directive 2006/95/EC



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

Article No.: 6SL3210-1NE17-7UG1

Converter losses to IEC61800-9-2*		
Efficiency class	IE2	
Comparison with the reference converter (90% / 100%)	29.80 %	



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