

Data sheet for SINAMICS Power module PM230

Article No. : 6SL3210-1NE23-2AG1



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)	33.10 A
Rated current (HO)	27.00 A

Output

Number of phases	3 AC	
Rated voltage	400V IEC	480V NEC ¹⁾
Rated power (LO)	15.00 kW	20.00 hp
Rated power (HO)	11.00 kW	15.00 hp
Rated current (LO)	32.00 A	
Rated current (HO)	26.00 A	
Max. output current	52.00 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 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	0.90
Offset factor $\cos \varphi$	0.95
Efficiency η	0.97
Sound pressure level (1m)	65 dB
Power loss	0.35 kW
Filter class (integrated)	Class A

Ambient conditions

Cooling	Internal air cooling
Cooling air requirement	0.019 m ³ /s (0.671 ft ³ /s)
Installation altitude	1,000 m (3,280.84 ft)
Ambient temperature	
Operation LO	-10 ... 40 °C (14 ... 104 °F)
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
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Connections

Line side

Version	Plug-in screw terminals
Conductor cross-section	6.00 ... 16.00 mm ² (AWG 10 ... AWG 6)

Motor end

Version	Plug-in screw terminals
Conductor cross-section	6.00 ... 16.00 mm ² (AWG 10 ... AWG 6)

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	F5C
Net weight	5.10 kg (11.24 lb)
Dimensions	
Width	140 mm (5.51 in)
Height	355 mm (13.98 in)
Depth	165 mm (6.50 in)

Standards

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

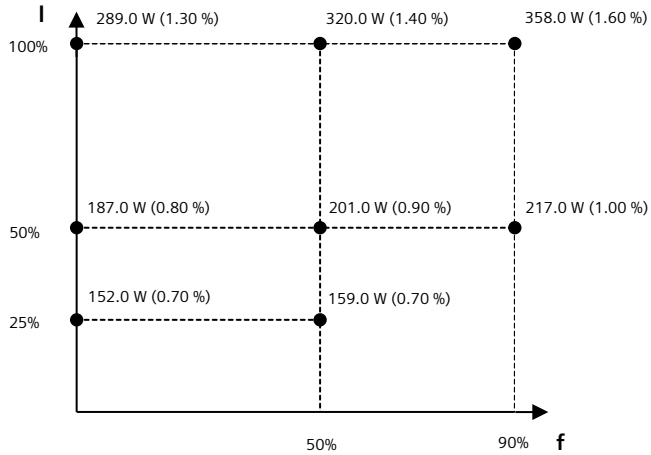
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Converter losses to IEC61800-9-2*

Efficiency class IE2

Comparison with the reference converter (90% / 100%) 31.90 %



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.

*converted values

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