

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

**MLFB-Ordering data** 

6SL3210-1NE23-8UL0



Client order no. : Item no. :
Order no. : Consignment no. :
Offer no. : Project :
Remarks :

Rated data		General tec	General tech. specifications	
Input		Power factor λ	0.90	
Number of phases	3 AC	Offset factor cos φ	0.95	
Line voltage	380 480 V ±10 %	Efficiency η	0.98	
Line frequency	47 63 Hz	Sound pressure level (1m)	65 dB	
Rated current (LO)	39.00 A	Power loss	0.45 kW	
Rated current (HO)	33.00 A	Ambier	nt conditions	
Output		Cooling	Internal air cooling	
Number of phases	3 AC	Cooling air requirement	0.019 m³/s	
Rated voltage	400 V	Installation altitude	1000 m	
Rated power (LO)	18.50 kW / 25.00 hp	Ambient temperature		
Rated power (HO)	15.00 kW / 20.00 hp	Operation LO	0 40 °C (32 104 °F)	
Rated current (LO)	38.00 A	Operation HO	0 50 °C (32 122 °F)	
Rated current (HO)	32.00 A	Transport	-40 70 °C (-40 158 °F)	
Max. output current	64.00 A	Storage	-25 55 °C (-13 131 °F)	
Pulse frequency	4 kHz	Relative humidity		
Output frequency for vector control	0 200 Hz			
Output frequency for V/f control	0 550 Hz	Max. operation	95 % RH, condensation not permitted	

### Overload capability

### Low Overload (LO)

 $1.1 \times \text{rated}$  output current (i.e. 110 % overload) for 57 s with a cycle time of  $300 \times 1.5 \times \text{rated}$  output current (i.e. 150 % overload) for 3 s with a cycle time of  $300 \times 1.5 \times \text{rated}$ 

### High Overload (HO)

1.5 × output current rating (i.e., 150 % overload) for 57 s with a cycle time of 300 s 2 × output current rating (i.e., 200 % overload) for 3 s with a cycle time of 300 s



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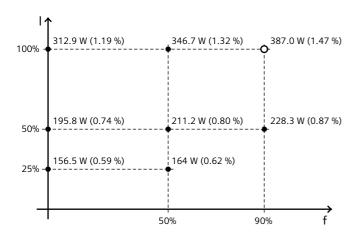
### 6SL3210-1NE23-8UL0



Mechanical data		Co	Connections	
Degree of protection	IP20	Line side		
Size	FSC	Version	Plug-in screw terminals	
Net weight	4.50 kg	Conductor cross-section	6.00 16.00 mm <sup>2</sup>	
Width	140.0 mm	Motor end		
Height	355.0 mm	Version	Plug-in screw terminals	
Depth	165.0 mm	Conductor cross-section	6.00 16.00 mm <sup>2</sup>	

### Converter losses to EN 50598-2\*

Efficiency class	IE2
Comparison with the reference converter (90% / 100%)	-71.01 %



 $The \ percentage \ values \ show \ the \ losses \ in \ relation \ to \ the \ rated \ apparent \ power \ of \ the \ converter.$ 

The diagram shows the losses for the points (as per standard EN 50598) 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.

#### Max. motor cable length

Max. Illotor cable length				
Shielded	25 m			
Unshielded	100 m			
Standards				
Compliance with standards	UL, CE			
CE marking	Low-voltage directive 2006/95/EC			

<sup>\*</sup>calculated values; increased by 10% according to the standard