

MLFB-Ordering data

6SL3210-1KE23-8UF1



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 +10 % -20 %		
Line frequency	47 63 Hz		
Rated current (LO)	48.20 A		
Rated current (HO)	45.20 A		
Output			
Number of phases	3 AC		
Rated voltage	400 V		
Rated power IEC 400V (LO)	18.50 kW		
Rated power NEC 480V (LO)	25.00 hp		
Rated power IEC 400V (HO)	15.00 kW		
Rated power NEC 480V (HO)	20.00 hp		
Rated current (LO)	37.00 A		
Rated current (HO)	31.00 A		
Rated current (IN)	38.00 A		
Max. output current	62.00 A		
Pulse frequency	4 kHz		
Output frequency for vector control	0 240 Hz		
Output frequency for V/f control	0 550 Hz		

Overload capability

Low Overload (LO)

 $150\ \%$ base load current IL for 3 s, followed by $110\ \%$ base load current IL for 57 s in a $300\ s$ cycle time

High Overload (HO)

 $200\,\%$ base load current IH for 3 s, followed by 150 % base load current IH for 57 s in a 300 s cycle time

General tech. specifications			
Power factor λ	0.70 0.85		
Offset factor cos φ	0.95		
Efficiency η	0.97		
Sound pressure level (1m)	66 dB		
Power loss	0.50 kW		
Filter class (integrated)	Unfiltered		

Ambient conditions		
Cooling	Air cooling using an integrated fan	
Cooling air requirement	0.018 m³/s (0.636 ft³/s)	
Installation altitude	1000 m (3280.84 ft)	
Ambient temperature		
Operation	-10 40 °C (14 104 °F)	
Transport	-40 70 °C (-40 158 °F)	
Storage	-40 70 °C (-40 158 °F)	
Relative humidity		

Closed-loop control techniques			
V/f linear / square-law / parameterizable	Yes		
V/f with flux current control (FCC)	Yes		
V/f ECO linear / square-law	Yes		
Sensorless vector control	Yes		
Vector control, with sensor	No		
Encoderless torque control	No		
Torque control, with encoder	No		



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Net weight 4.40 kg (9.70 lb) Signal cable Width 140 mm (5.51 in) Conductor cross-section 0.15 1.50 mm² (AWG 24 Line side Depth 208 mm (8.19 in) Version Plug-in screw terminals Conductor cross-section 6.00 16.00 mm² (AWG 10 Motor end Version Plug-in screw terminals Conductor cross-section 6.00 16.00 mm² (AWG 10 Motor end Version Plug-in screw terminals Switching level: 0→1 11 V Conductor cross-section 6.00 16.00 mm² (AWG 10 DC link (for braking resistor) Wax. inrush current all-safe digital inputs Conductor cross-section 6.00 16.00 mm² (AWG 10 Version Plug-in screw terminals Conductor cross-section 6.00 16.00 mm² (AWG 10 The plug-in screw terminals Conductor cross-section 6.00 16.00 mm² (AWG 10 Version Plug-in screw terminals Conductor cross-section 6.00 16.00 mm² (AWG 10 The plug-in screw terminals Conductor cross-section 6.00 16.00 mm² (AWG 10 Version Plug-in screw terminals Conductor cross-section 6.00 16.00 mm² (AWG 10 The plug-in screw terminals Conductor cross-section 6.00 16.00 mm² (AWG 10 Version Plug-in screw terminals Conductor cross-section 6.00 16.00 mm² (AWG 10 The plug-in screw terminals Conductor cross-section 6.00 16.00 mm² (AWG 10 Version Plug-in screw terminals Conductor cross-section 6.00 16.00 mm² (AWG 10 The plug-in screw terminals Conductor cross-section 6.00 16.00 mm² (AWG 10 Version Plug-in screw terminals Conductor cross-section 6.00 16.00 mm² (AWG 10 The plug-in screw terminals Conductor cross-section 6.00 16.00 mm² (AWG 10 The plug-in screw terminals Conductor cross-section 6.00 16.00 mm² (AWG 10 The plug-in screw terminals Conductor cross-section 6.00 16.00 mm² (AWG 10 The plug-in screw terminals Conductor cross-section 6.00 16.00 mm² (AWG 10 The plug-in screw terminals Conductor cross-section 6.00 16.00 mm² (AWG 10 The plug-in screw t				Figur
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Resolution 10 bit CE marking Directive 2006/95/EC witching threshold as digital input 0→1 4 V	Number	1 (Differential input)		
0→1 4 V	Resolution	10 bit	CE marking	EMC Directive 2004/108/EC, Low-Vo Directive 2006/95/EC
	witching threshold as digital inp	out		
1→0 1.6 V	0→1	4 V		
	1→0	1.6 V		

PTC/ KTY interface

Number

1 motor temperature sensor input, sensors that can be connected: PTC, KTY and Thermo-Click, accuracy $\pm 5~^\circ\text{C}$

1 (Non-isolated output)



MLFB-Ordering data

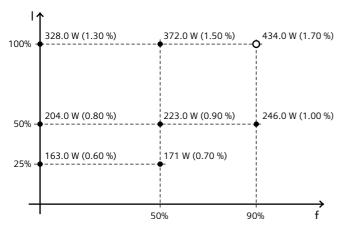
6SL3210-1KE23-8UF1



Figure similar

Converter losses to IEC61800-9-2*

Efficiency class	IE2
Comparison with the reference converter (90% /	34.10 %



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