

MLFB-Ordering data

6SL3210-1KE13-2UB2



Figure similar

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

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)	4.10 A	
Rated current (HO)	3.20 A	
Output		
Number of phases	3 AC	
Rated voltage	400 V	
Rated power IEC 400V (LO)	1.10 kW	
Rated power NEC 480V (LO)	1.50 hp	
Rated power IEC 400V (HO)	0.75 kW	

Output	
Number of phases	3 AC
Rated voltage	400 V
Rated power IEC 400V (LO)	1.10 kW
Rated power NEC 480V (LO)	1.50 hp
Rated power IEC 400V (HO)	0.75 kW
Rated power NEC 480V (HO)	1.00 hp
Rated current (IN)	3.20 A
Rated current (LO)	3.10 A
Rated current (HO)	2.20 A
Max. output current	4.40 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)	49 dB	
Power loss	0.05 kW	
Filter class (integrated)	Unfiltered	

Ambient conditions		
Cooling	Air cooling using an integrated fan	
Cooling air requirement	0.005 m³/s (0.177 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		

95~% At 40 °C (104 °F), condensation and icing not permissible

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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			Fig
Mechanical	data	Cor	mmunication
Degree of protection	IP20 / UL open type	Communication	USS/MODBUS RTU
Size	FSAA	С	onnections
Net weight	1.40 kg (3.09 lb)	Signal cable	
Width	73 mm (2.87 in)	Conductor cross-section	0.15 1.50 mm² (AWG 24 AV
Height	173 mm (6.81 in)	Line side	
Depth	155 mm (6.10 in)	Version	Plug-in screw terminals
Inputs / out	puts	Conductor cross-section	1.00 2.50 mm² (AWG 18 AW
tandard digital inputs		Motor end	
Number	6	Version	Plug-in screw terminals
Switching level: 0→1	11 V	Conductor cross-section	1.00 2.50 mm² (AWG 18 AW
Switching level: 1→0	5 V	DC link (for braking resisto	r)
Max. inrush current	15 mA	Version	Plug-in screw terminals
ail-safe digital inputs		Conductor cross-section	1.00 2.50 mm² (AWG 18 AW
Number	1	Line length, max.	15 m (49.21 ft)
igital outputs		PE connection	On housing with M4 screw
Number as relay changeover contact	1	Max. motor cable length	0.1.10us.n.g
Output (resistive load)	DC 30 V, 0.5 A	Shielded	50 m (164.04 ft)
Number as transistor	1	Unshielded	100 m (328.08 ft)
Output (resistive load)	DC 30 V, 0.5 A		Standards
nalog / digital inputs		Compliance with standards	UL, cUL, CE, C-Tick (RCM)
Number	1 (Differential input)		
Resolution	10 bit	CE marking	EMC Directive 2004/108/EC, Low- Directive 2006/95/EC
witching threshold as digital inp	out		
0→1	4 V		
1→0	1.6 V		

PTC/ KTY interface

Analog outputs

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)





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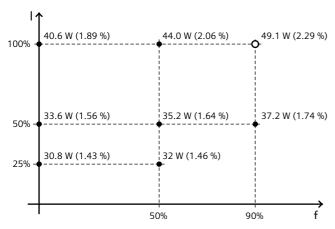
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WINS I

Figure similar

Converter losses to EN 50598-2*

Efficiency class	IE2
Comparison with the reference converter (90% / 100%)	-77.61 %



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.

*converted values

