

MLFB-Ordering data

6SL3210-1KE23-8AF1



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

Remarks :	·	roject.				
Rated data		General tech. specifications				
Input		Power factor λ	0.7	70 0.85		
Number of phases	3 AC	Offset factor cos φ	0.9	95		
Line voltage	380 480 V +10 % -20 %	Efficiency η	0.9	97		
Line frequency	47 63 Hz	Sound pressure level (1m)	66	dB		
Rated current (LO)	48.20 A	Power loss	0.!	50 kW		
Rated current (HO)	45.20 A	Ambient conditions				
Output		Ambier	Tr contains	113		
Number of phases	3 AC	Cooling	Air coolir	ng using an integrated fan		
Rated voltage	400 V	Cooling air requirement	0.018 m³/s (0.636 ft³/s)			
Rated power IEC 400V (LO)	18.50 kW			1000 m (3280.84 ft)		
Rated power NEC 480V (LO)	25.00 hp			n (3280.84 ft)		
Rated power IEC 400V (HO)	15.00 kW	Ambient temperature		10 10 00 (41 10 10 1)		
Rated power NEC 480V (HO)	20.00 hp	Operation		-10 40 °C (14 104 °F)		
Rated current (IN)	38.00 A	·) 70 °C (-40 158 °F)		
Rated current (LO)	37.00 A			70 °C (-40 158 °F)		
Rated current (HO)	31.00 A	Relative humidity				
Max. output current	62.00 A	95 % At 40 °C (104 Max. operation and icing not pern		40 °C (104 °F), condensation not permissible		
Pulse frequency	4.000 kHz					
Output frequency for vector control	0 240 Hz	Closed-loop control techniques		hniques		
Output frequency for V/f control	0 550 Hz	V/f linear / square-law / parameterizable Yes		Yes		
		V/f with flux current control (FC	CC)	Yes		
		V/f ECO linear / square-law		Yes		
Overload capability		Sensorless vector control		Yes		
Low Overload (LO)		Vector control, with sensor		No		
150% base load current IL for 3 s, followed by 110 % base load current IL for 57 s in a 300 s cycle time		Encoderless torque control		No		
High Overload (HO)		Torque control, with encoder		No		

300 s cycle time

200 % base load current IH for 3 s, followed by 150 % base load current IH for 57 s in a

Communication

PROFINET / EtherNet/IP

Communication



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F							

03	163210-1RE23-0AF1		Figure simi				
Mechanical data		Co	Connections				
Degree of protection	IP20 / UL open type	Signal cable					
Size	FSC	Conductor cross-section	0.15 1.50 mm² (AWG 24 AWG 16)				
Net weight	4.40 kg (9.70 lb)	Line side					
Width	140 mm (5.51 in)	Version	Plug-in screw terminals				
Height	295 mm (11.61 in)	Conductor cross-section	6.00 16.00 mm² (AWG 10 AWG 6)				
Depth	225 mm (8.86 in)	Motor end					
Inputs / ou	tputs	Version	Plug-in screw terminals				
Standard digital inputs		Conductor cross-section	6.00 16.00 mm² (AWG 10 AWG 6)				
Number	6	DC link (for braking resistor))				
Switching level: 0→1	11 V	Version	Plug-in screw terminals				
Switching level: 1→0	5 V	Conductor cross-section	6.00 16.00 mm² (AWG 10 AWG 6)				
Max. inrush current	15 mA	Line length, max.	15 m (49.21 ft)				
Fail-safe digital inputs		PE connection	On housing with M4 screw				
Number	1	Max. motor cable length	•				
Digital outputs		Shielded	150 m (492.13 ft)				
Number as relay changeover contact	1	Unshielded	150 m (492.13 ft)				
Output (resistive load)	DC 30 V, 0.5 A	S	tandards				
Number as transistor	1	Compliance with standards	UL, cUL, CE, C-Tick (RCM)				
Output (resistive load)	DC 30 V, 0.5 A		ENG Di vi 2004/400/EG L VIII				
Analog / digital inputs		CE marking	EMC Directive 2004/108/EC, Low-Voltage Directive 2006/95/EC				
Number	1 (Differential input)						
Resolution	10 bit						
Switching threshold as digital in	put						
0→1	4 V						

PTC/ KTY interface

Analog outputs

1→0

Number

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

1.6 V

1 (Non-isolated output)



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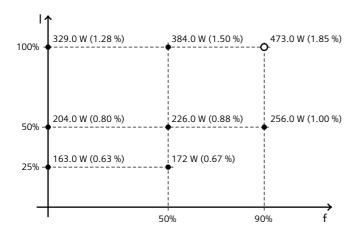
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Figure similar

Converter losses to EN 50598-2*

Efficiency class	IE2
Comparison with the reference converter (90% / 100%)	-63.37 %



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