

## **MLFB-Ordering data**

6SL3210-1KE31-7AF1



Figure similar

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

ltem no. :
Consignment no. :
Project :

Rated data		General tech. specifications		
nput		Power factor λ	0.9	90 0.95
Number of phases	3 AC	Offset factor cos φ	0.9	99
Line voltage	380 480 V +10 % -20 %	Efficiency η	0.9	99
Line frequency	47 63 Hz	Sound pressure level (1m)	68	dB
Rated current (LO)	156.00 A	Power loss	1.5	57 kW
Rated current (HO)	144.00 A	Filter class (integrated)	Cla	iss A
Output		Ambiou	at conditio	2
Number of phases	3 AC	Ambient conditions		
Rated voltage	400 V	Cooling	Air coolin	g using an integrated fan
Rated power IEC 400V (LO)	90.00 kW			
Rated power NEC 480V (LO)	100.00 hp	Cooling air requirement		/s (5.403 ft³/s)
Rated power IEC 400V (HO)	75.00 kW	Installation altitude	1000 m (	3280.84 ft)
Rated power NEC 480V (HO)	75.00 hp	Ambient temperature		
Rated current (IN)	164.00 A	Operation	-20 40	°C (-4 104 °F)
Rated current (LO)	164.00 A	Transport	-40 70	°C (-40 158 °F)
Rated current (HO)	136.00 A	Storage	-40 70	°C (-40 158 °F)
Max. output current	272.00 A	Relative humidity		
Pulse frequency	2 kHz	Max. operation 95 % RH, condensation not pe		condensation not permitt
Output frequency for vector control	0 240 Hz			
	0	Closed-loop control techniques		hniques
Output frequency for V/f control	0 550 Hz	V/f linear / square-law / parame	eterizable	Yes
		V/f with flux current control (F	CC)	Yes
Overload capability		V/f ECO linear / square-law		Yes
Low Overload (LO)		Sensorless vector control		Yes
150 % base load current IL for 3 s, followed by 110 % base load current IL for 57 s in a		Vector control, with sensor		No
300 s cycle time	Encoderless torque control		No	
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



Torque control, with encoder

No



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			Figu	
Mechanical data		Com	Communication	
Degree of protection	IP20 / UL open type	Communication	PROFINET, EtherNet/IP	
Size	FSF	Connections		
Net weight	63.50 kg (139.99 lb)	Signal cable		
Width	305 mm (12.01 in)	Conductor cross-section	0.15 1.50 mm² (AWG 24 AWG	
Height	708 mm (27.87 in)	Line side		
Depth	357 mm (14.06 in)	Version	screw-type terminal	
Inputs / outputs		Conductor cross-section	35.00 120.00 mm² (AWG 2 AW	
itandard digital inputs		Motor end		
Number	6	Version	Screw-type terminals	
Switching level: 0→1	11 V	Conductor cross-section	35.00 120.00 mm² (AWG 2 AW	
Switching level: 1→0	5 V	DC link (for braking resistor)	)	
Max. inrush current	15 mA	Version	Screw-type terminals	
ail-safe digital inputs		Conductor cross-section	35.00 120.00 mm <sup>2</sup> (AWG 2 AW	
Number	1	Line length, max.	10 m (32.81 ft)	
Digital outputs				
Number as relay changeover contact	1	PE connection Max. motor cable length	Screw-type terminals	
Output (resistive load)	DC 30 V, 0.5 A	Shielded	300 m (984.25 ft)	
Number as transistor	1	Unshielded	450 m (1476.38 ft)	
Output (resistive load)	DC 30 V, 0.5 A	Standards		
Analog / 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-Vol Directive 2006/95/EC	
witching threshold as digital in	put			
0→1	4 V			
1→0	1.6 V			
Analog outputs				
Number	1 (Non-isolated output)			
PTC/ KTY interface				

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



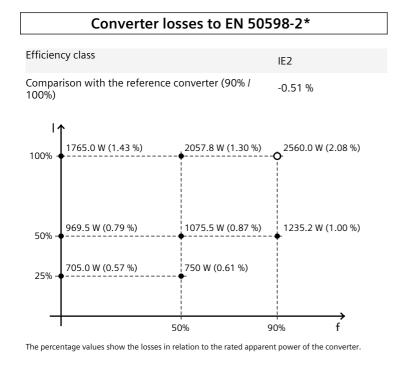


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The diagram shows the losses for the points (as per standard EN 50598) of the relative torque generating current (I) over the relative motor stator frequency(f). The values are valid for the basic version of the converter without options/components.

\*converted values

