

# **MLFB-Ordering data**

6SL3210-1KE23-8AF1



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

ltem no. :
Consignment no. :
Project :

Rated data		General tech. specifications	
Input		Power factor λ	0.70 0.85
Number of phases	3 AC	Offset factor cos φ	0.95
Line voltage	380 480 V +10 % -20 %	Efficiency η	0.97
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	Filter class (integrated)	Class A
Output		Ambior	nt conditions
Number of phases	3 AC	Allible	
Rated voltage	400 V	Cooling	Air cooling using an integrated fan
Rated power IEC 400V (LO)	18.50 kW	Cooling air requirement	$0.019 \text{ m}^{3/2} (0.020 \text{ ft}^{3/2})$
Rated power NEC 480V (LO)	25.00 hp	Cooling air requirement	0.018 m <sup>3</sup> /s (0.636 ft <sup>3</sup> /s)
Rated power IEC 400V (HO)	15.00 kW	Installation altitude	1000 m (3280.84 ft)
Rated power NEC 480V (HO)	20.00 hp	Ambient temperature	
Rated current (IN)	38.00 A	Operation	-10 40 °C (14 104 °F)
Rated current (LO)	37.00 A	Transport	-40 70 °C (-40 158 °F)
Rated current (HO)	31.00 A	Storage	-40 70 °C (-40 158 °F)
Max. output current	62.00 A	Relative humidity	
Pulse frequency	4 kHz	95 % At 40 °C (104 °F), conden Max. operation and icing not permissible	95 % At 40 °C (104 °F), condensation and icing not permissible
Output frequency for vector control	0 240 Hz		
output nequency for vector control	0 2 10 112	Closed-loop control techniques	
Output frequency for V/f control	0 550 Hz	V/f linear / square-law / parame	eterizable Yes
		V/f with flux current control (F0	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

#### 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

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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Figure similar

			Figure sin	
Mechanical data		Com	Communication	
Degree of protection	IP20 / UL open type	Communication	PROFINET, EtherNet/IP	
Size	FSC	Connections		
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 AWG 16)	
Height	295 mm (11.61 in)	Line side		
Depth	208 mm (8.19 in)	Version	Plug-in screw terminals	
Inputs / outputs		Conductor cross-section	6.00 16.00 mm² (AWG 10 AWG 6)	
itandard digital inputs		Motor end		
Number	6	Version	Plug-in screw terminals	
Switching level: 0→1	11 V	Conductor cross-section	6.00 16.00 mm² (AWG 10 AWG 6)	
Switching level: 1→0	5 V	DC link (for braking resistor)	)	
Max. inrush current	15 mA	Version	Plug-in screw terminals	
ail-safe digital inputs		Conductor cross-section	6.00 16.00 mm² (AWG 10 AWG 6)	
Number	1	Line length, max.	15 m (49.21 ft)	
Digital outputs		PE connection	On housing with M4 screw	
Number as relay changeover contact	1	Max. motor cable length	5	
Output (resistive load)	DC 30 V, 0.5 A	Shielded	50 m (164.04 ft)	
Number as transistor	1	Unshielded	150 m (492.13 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-Voltag 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  $\pm 5~^\circ\mathrm{C}$ 



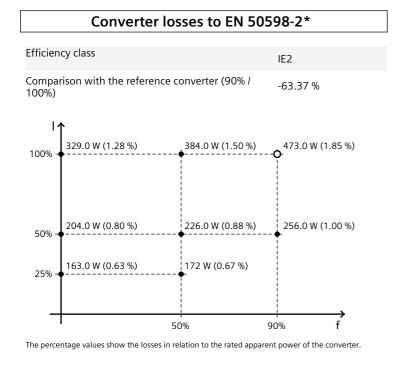


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Figure similar



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

