

MLFB-Ordering data

6SL3210-1KE18-8UF1



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

Remarks :				
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)	52	dB
Rated current (LO)	11.40 A	Power loss	0.1	15 kW
Rated current (HO)	10.60 A	Filter class (integrated)	Ur	filtered
Output		Ambian	t conditio	nc
Number of phases	3 AC	Ambien	Conditio	115
Rated voltage	400 V	Cooling	Air coolin	g using an integrated fan
Rated power IEC 400V (LO)	4.00 kW		0.005	(0.477.621.)
Rated power NEC 480V (LO)	5.00 hp	Cooling air requirement		//s (0.177 ft³/s)
Rated power IEC 400V (HO)	3.00 kW	Installation altitude	1000 m (3280.84 ft)
Rated power NEC 480V (HO)	4.00 hp	Ambient temperature		
•	·	Operation	-10 40	°C (14 104 °F)
Rated current (IN)	9.00 A	Transport	-40 70	°C (-40 158 °F)
Rated current (LO)	8.80 A	Storage	-40 70	°C (-40 158 °F)
Rated current (HO)	7.30 A	Relative humidity		
Max. output current	14.60 A	······································		
Pulse frequency	4 kHz	Max. operation		O °C (104 °F), condensation not permissible
Output frequency for vector control	0 240 Hz			
		Closed-loop control t		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	C)	Yes

Item no.:

Project:

Consignment no. :

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

vi ilileai , square iaiv , parameterizable	103	
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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			Figure similar	
Mechanical data		Communication		
Degree of protection	IP20 / UL open type	Communication	PROFINET, EtherNet/IP	
Size	FSA	Connections		
Net weight	1.70 kg (3.75 lb)	Signal cable		
Width	73 mm (2.87 in)	Conductor cross-section	0.15 1.50 mm² (AWG 24 AWG 16)	
Height	196 mm (7.72 in)	Line side		
Depth	208 mm (8.19 in)	Version	Plug-in screw terminals	
Inputs / out	tputs	Conductor cross-section	1.00 2.50 mm² (AWG 18 AWG 14)	
Standard 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 AWG 14)	
Switching level: 1→0	5 V	DC link (for braking resistor)		
Max. inrush current	15 mA	Version	Plug-in screw terminals	
Fail-safe digital inputs		Conductor cross-section	1.00 2.50 mm² (AWG 18 AWG 14)	
Number	1		,	
Digital outputs		Line length, max.	15 m (49.21 ft)	
		PE connection	On housing with M4 screw	
Number as relay changeover contact	1	Max. motor cable length		
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-Voltage Directive 2006/95/EC	

Switching threshold as digital input

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 $\pm 5~^\circ\text{C}$



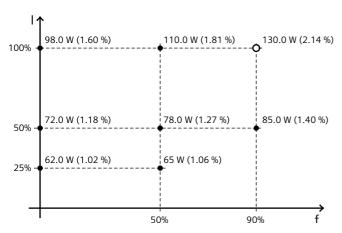
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Converter losses to EN 50598-2*

Efficiency class	IE2
Comparison with the reference converter (90% / 100%)	-66.51 %



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

