

MLFB-Ordering data

6SL3210-1KE27-0AF1



Client order no.:

Item no.: Consignment no. :

Project:

Order no. :
Offer no. :
Remarks :

Rated data			
Input			
Number of phases	3 AC		
Line voltage	380 480 V +10 % -20 %		
Line frequency	47 63 Hz		
Rated current (LO)	64.00 A		
Rated current (HO)	61.00 A		
Output			
Number of phases	3 AC		
Rated voltage	400 V		
Rated power IEC 400V (LO)	37.00 kW		
Rated power NEC 480V (LO)	40.00 hp		
Rated power IEC 400V (HO)	30.00 kW		
Rated power NEC 480V (HO)	30.00 hp		
Rated current (IN)	68.00 A		
Rated current (LO)	68.00 A		
Rated current (HO)	58.00 A		
Max. output current	116.00 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	0.90 0.95	
Offset factor cos φ	0.99	
Efficiency η	0.98	
Sound pressure level (1m)	72 dB	
Power loss	1.02 kW	
Filter class (integrated)	Class A	

Ambient conditions			
Cooling	Air cooling using an integrated fan		
Cooling air requirement	0.055 m³/s (1.942 ft³/s)		
Installation altitude	1000 m (3280.84 ft)		
Ambient temperature			
Operation	-20 40 °C (-4 104 °F)		
Transport	-40 70 °C (-40 158 °F)		
Storage	-40 70 °C (-40 158 °F)		
Relative humidity			

Max. operation 95 % RH, condensation not permitted

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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			Figure sim	
Mechanica	data	Con	Communication	
Degree of protection	IP20 / UL open type	Communication	PROFINET, EtherNet/IP	
Size	FSD	Co	onnections	
Net weight	19.50 kg (42.99 lb)	Signal cable		
Width	200 mm (7.87 in)	Conductor cross-section	0.15 1.50 mm² (AWG 24 AWG 16	
Height	472 mm (18.58 in)	Line side		
Depth	237 mm (9.33 in)	Version	screw-type terminal	
Inputs / ou	tputs	Conductor cross-section	10.00 35.00 mm² (AWG 8 AWG 2)	
tandard digital inputs		Motor end		
Number	6	Version	Screw-type terminals	
Switching level: 0→1	11 V	Conductor cross-section	10.00 35.00 mm² (AWG 8 AWG 2	
Switching level: 1→0	5 V	DC link (for braking resistor	r)	
Max. inrush current	15 mA	Version	Screw-type terminals	
ail-safe digital inputs		Conductor cross-section	10.00 35.00 mm² (AWG 8 AWG 2	
Number	1	Line length, max.	10 m (32.81 ft)	
Digital outputs		PE connection	Screw-type terminals	
Number as relay changeover contact	1	Max. motor cable length		
Output (resistive load)	DC 30 V, 0.5 A	Shielded	200 m (656.17 ft)	
Number as transistor	1	Unshielded	300 m (984.25 ft)	
Output (resistive load)	DC 30 V, 0.5 A	9	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-Volta Directive 2006/95/EC	
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)



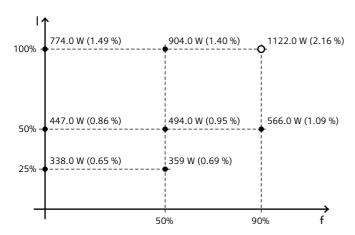
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Converter losses to EN 50598-2*

Efficiency class	IE2
Comparison with the reference converter (90% /	-54.91 %



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

