

MLFB-Ordering data

6SL3210-1KE27-0AF1



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

Remarks:

Item no. : Consignment no. : Project :

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

Overload capability

Output frequency for V/f control

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

0 ... 550 Hz

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	

		ions

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

	1
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



MLFB-Ordering data

6SL3210-1KE27-0AF1



			Figur	
Mechanical data		Com	Communication	
egree of protection	IP20 / UL open type	Communication	PROFINET, EtherNet/IP	
Size	FSD	Connections		
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	
Height	472 mm (18.58 in)	Line side		
Depth	237 mm (9.33 in)	Version	screw-type terminal	
Inputs / out	tputs	Conductor cross-section	10.00 35.00 mm² (AWG 8 AWG	
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	
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	10.00 35.00 mm² (AWG 8 AWG	
Number	1	Line length, max.	10 m (32.81 ft)	
igital outputs		PE connection	Screw-type terminals	
Number as relay changeover contact	1	Max. motor cable length	seem type terminals	
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	S	tandards	
nalog / 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-Vo Directive 2006/95/EC	
witching threshold as digital in	put			
0→1	4 V			
1→0	1.6 V			
nalog outputs				
	400			
Number	1 (Non-isolated output)			

PTC/ KTY interface

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



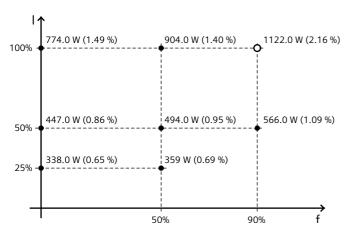
MLFB-Ordering data

6SL3210-1KE27-0AF1



Converter losses to EN 50598-2*

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