

MLFB-Ordering data

6SL3220-1YE64-0CP0



Client order no. : Order no. :

Offer no. : Remarks : Item no. :
Consignment no. :
Project :

Rated data			
Input			
Number of phases	3 AC		
Line voltage	380 480 V +10 % -10 %		
Line frequency	47 63 Hz	47 63 Hz	
Rated voltage	400V IEC	480V NEC	
Rated current (LO)	945.00 A	751.00 A	
Rated current (HO)	756.00 A	614.00 A	
Output			
Number of phases	3 AC		
Rated voltage	400V IEC	480V NEC	
Rated power (LO)	500.00 kW	600.00 hp	
Rated power (HO)	400.00 kW	500.00 hp	
Rated current (LO)	890.00 A	724.00 A	
Rated current (HO)	820.00 A	591.00 A	
Rated current (IN)	910.00 A		
Max. output current	1202.00 A		
Pulse frequency	4 kHz		
Output frequency for vector control	0 100 Hz		
Output frequency for V/f control	0 100 Hz		

General tech. specifications		
Power factor λ	0.75 0.93	
Offset factor cos φ	0.96	
Efficiency η	0.98	
Sound pressure level (1m)	74 dB	
Power loss	10.885 kW	
Filter class (integrated)	RFI suppression filter for Category C3	
EMC category (with accessories)	Category C3	
Ambient conditions		

Ambient conditions			
Standard board coating type	Class 3C2, according to IEC 60721-3-3: 2002		
Cooling	Air cooling using an integrated fan		
Cooling air requirement	0.450 m³/s (15.892 ft³/s)		
Installation altitude	1000 m (3280.84 ft)		
Ambient temperature			
Operation	0 45 °C (32 113 °F)		
Transport	-40 70 °C (-40 158 °F)		
Storage	-25 55 °C (-13 131 °F)		

Overload capability

Low Overload (LO)

110% base load current IL for 60 s in a 300 s cycle time

High Overload (HO)

150% x base load current IH for 60 s within a 600 s cycle time

95~% At 40 °C (104 °F), condensation and icing not permissible

Relative humidity

Max. operation



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Mechanical	data	Closed-loop co	ntrol techniques
Degree of protection	IP20 / UL open type		
Size	FSJ	V/f linear / square-law / paramete	rizable Yes
Net weight	250 kg (551.16 lb)	V/f with flux current control (FCC)) Yes
Width	801 mm (31.54 in)	V/f ECO linear / square-law	Yes
Height	1621 mm (63.82 in)	Sensorless vector control	Yes
		Vector control, with sensor	No
Depth	393 mm (15.47 in)	Encoderless torque control	Yes
Inputs / out	puts		
Standard digital inputs		Torque control, with encoder	No
Number	6	Communication	
Switching level: 0→1	11 V	Communication	PROFIBUS DP
Switching level: 1→0	5 V	Connections	
Max. inrush current	15 mA		
Fail-safe digital inputs		Signal cable	
Number	1	Conductor cross-section	0.15 1.50 mm² (AWG 24 AWG 16)
Digital outputs		Line side	
Number as relay changeover contact	2	Version	M12 screw
Output (resistive load)	DC 30 V, 5.0 A	Conductor cross-section	240.00 mm ² (MCM 4 x 500 MCM 6 x 500)
Number as transistor	0	Motor end	
Analog / digital inputs		Version	M12 screw
Number	2 (Differential input)	Conductor cross-section	240.00 mm ² (MCM 4 x 500 MCM 8 x 500)
Resolution	10 bit	DC link (for braking resistor)	(WEW 1 X 300 WEW 0 X 300)
Switching threshold as digital in	out		M12 careur
0→1	4 V	PE connection	M12 screw
1→0	1.6 V	Max. motor cable length	
Analog outputs		Shielded	150 m (492.13 ft)

Number

PTC/ KTY interface

1 (Non-isolated output)

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

Technical data are subject to change! There may be discrepancies between calculated and rating plate values.



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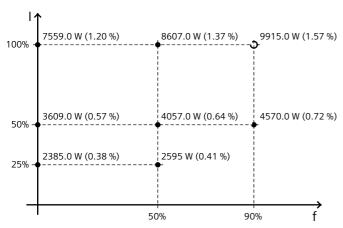
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Figure similar

Converter losses to EN 50598-2*

Efficiency class	IE2
Comparison with the reference converter (90% / 100%)	-38.50 %



 $The \ percentage \ values \ show \ the \ losses \ in \ relation \ to \ the \ rated \ apparent \ power \ of \ the \ converter.$

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.

Standards

Compliance with standards UL, cUL, CE, C-Tick (RCM), EAC, KCC, SEMI F47, REACH

CE marking

EMC Directive 2004/108/EC, Low-Voltage Directive 2006/95/EC

^{*}converted values