

MLFB-Ordering data

6SL3220-2YE66-0CP0



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					
Rated voltage	400V IEC	480V NEC				
Rated current (LO)	1061.00 A	862.00 A				
Rated current (HO)	816.00 A	677.00 A				
Output						
Number of phases	3 AC					
Rated voltage	400V IEC	480V NEC				
Rated power (LO)	560.00 kW	700.00 hp				
Rated power (HO)	450.00 kW	500.00 hp				
Rated current (LO)	1000.00 A	830.00 A				
Rated current (HO)	890.00 A	652.00 A				
Rated current (IN)	1021.00 A					
Max. output current	1350.00 A					
Pulse frequency	4 kHz					
Output frequency for vector 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	12.496 kW				
Filter class (integrated)	RFI suppression filter for Category C3				
EMC category (with accessories)	Category C3				
Ambient conditions					
Standard board coating type	Class 3C2, according to IEC 60721-3-3: 2002				

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

Output frequency for V/f control

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

0 ... 100 Hz

Relative humidity

Max. operation

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



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Figure simila							

Mechanica	data	Closed-loop o	Closed-loop control techniques			
Degree of protection	IP20 / UL open type	V/f linear / square-law / paramet	terizable Yes			
Size	FSJ					
Net weight	250 kg (551.16 lb)	V/f with flux current control (FC	CC) Yes			
Width	801 mm (31.54 in)	V/f ECO linear / square-law	Yes			
Height	1621 mm (63.82 in)	Sensorless vector control	Yes			
Depth	393 mm (15.47 in)	Vector control, with sensor	No			
Inputs / ou	tputs	Encoderless torque control	Yes			
Standard digital inputs		Torque control, with encoder	No			
Number	6					
Switching level: 0→1	11 V	Comn	nunication			
Switching level: 1→0	5 V	Communication	PROFIBUS DP			
Max. inrush current	15 mA	Connections				
Fail-safe digital inputs	13111/1	Signal cable				
Number	1	Conductor cross-section	0.15 1.50 mm ² (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)	(c x 333 me e x 333,			
Switching threshold as digital in	put	PE connection	M12 screw			
0→1	4 V	Max. motor cable length	WILE SCIETS			
1→0	1.6 V	Shielded	150 m (492.13 ft)			
Analog outputs		Siliciaca	.30 111 (132.13 10)			

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

1 (Non-isolated output)

Number

PTC/ KTY interface



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Converter losses to EN 505	98-2*	Standards			
Efficiency class	IE2	Compliance with standards	UL, cUL, CE, C-Tick (RCM), EAC, KCC, SEM F47, REACH		
Comparison with the reference converter (90% / 100%)	-40.10 %		,		
100% \$8858.0 W (1.25 %) 10067.0 W (1.42 %)	11587.0 W (1.64 %)	CE marking	EMC Directive 2004/108/EC, Low-Voltage Directive 2006/95/EC		
4142.0 W (0.59 %) 4653.0 W (0.66 %)	5243.0 W (0.74 %)				
2702.0 W (0.38 %) 2941 W (0.42 %)					
50% 9	0% f				

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

Operator panel: Basic Operator Panel (BOP-2)						
Screen		Ambient conditions				
Display design	LCD, monochrome	Ambient temperature during				
		Operation	0 50 °C (32 122 °F)			
Mecha	anical data	Storage	-40 70 °C (-40 158 °F)			
Degree of protection	IP55 / UL type 12	Transport	-40 70 °C (-40 158 °F)			
Net weight	0.14 kg (0.31 lb)	Relative humidity at 25°C du	uring			
Width	70.0 mm (2.76 in)	Max. operation	95 %			
Height	106.85 mm (4.21 in)	Α	approvals			
Depth	19.60 mm (0.77 in)	Certificate of suitability	CE, cULus, EAC, KCC, RCM			