

MLFB-Ordering data

6SL3220-3YH66-0CF0



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

Item no.: Consignment no. : Project:

Power factor λ

Efficiency η

Power loss

Offset factor cos φ

Sound pressure level (1m)

Rated da	ta	
Input		
Number of phases	3 AC	
Line voltage	500 690 V	+10 % -10 %
Line frequency	47 63 Hz	
Rated voltage	690V IEC	600V NEC
Rated current (LO)	679.00 A	665.00 A
Rated current (HO)	494.00 A	543.00 A
Output		
Number of phases	3 AC	
Rated voltage	690V IEC	600V NEC
Rated power (LO)	560.00 kW	600.00 hp
Rated power (HO)	500.00 kW	500.00 hp
Rated current (LO)	580.00 A	610.00 A
Rated current (HO)	520.00 A	523.00 A
Rated current (IN)	654.00 A	
Max. output current	864.00 A	
Pulse frequency	2 kHz	
Output frequency for vector control	0 100 Hz	
Output frequency for V/f control	0 100 Hz	

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
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)

General tech. specifications

0.75 ... 0.93

0.96

0.98

74 dB

8.828 kW

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

Relative humidity

Max. operation

95 % At 40 °C (104 °F), condensation

and icing not permissible



MLFB-Ordering data

6SL3220-3YH66-0CF0



Fi					

			Figure simi		
Mechanical	data	Closed-loop control techniques			
Degree of protection	IP20 / UL open type	V/f linear / square-law / paramet	erizable Yes		
Size	FSJ	V/f with flux current control (FCC	C) Yes		
Net weight	236 kg (520.29 lb)				
Width	801 mm (31.54 in)	V/f ECO linear / square-law Sensorless vector control	Yes		
Height	1621 mm (63.82 in)	Vector control, with sensor	No		
Depth	393 mm (15.47 in)		Yes		
Inputs / out	tputs	Encoderless torque control	res		
Standard digital inputs		Torque control, with encoder	No		
Number	6	Comm	unication		
Switching level: 0→1	11 V	Communication			
Switching level: 1→0	5 V	Communication PROFINET, EtherNet/IP			
Max. inrush current	15 mA	Connections			
Fail-safe digital inputs		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)	(WICH T A 300 WICH O A 300)		
Switching threshold as digital in	put	PE connection	M12 screw		
0→1	4 V	Max. motor cable length	IVI 1 2 3CI CVV		
1→0	1.6 V	Shielded	150 m (492.13 ft)		
Analog outputs		Silielueu	130 III (432.13 IU)		

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.



MLFB-Ordering data

6SL3220-3YH66-0CF0



Converter losses to EN 50	598-2*	Standards			
Efficiency class Comparison with the reference converter (90% /	IE2	Compliance with standards UL, cUL, CE, C-Tick (RCM), EAC, KG F47, REACH			
100%)	-34.60 %	CE marking	EMC Directive 2004/108/EC, Low-Voltage		
100% \$8085.0 W (1.14 %) 8864.0 W (1.25 %)	9935.0 W (1.40 %)	-	Directive 2006/95/EC		
4308.0 W (0.61 %) 4636.0 W (0.65 %)	5038.0 W (0.71 %)				
3021.0 W (0.42 %) 3173 W (0.45 %)	3038.0 W (0.71 ///)				
25% -					
50% 90% 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: Intelligent Operator Panel (IOP-2)					
S	creen	Ambie	ent conditions		
Display design	LCD colors	Ambient temperature durin	g		
Seroon recolution	320 x 240 Pixel	Operation	0 50 °C (32 122 °F)		
Screen resolution	320 X 240 FIXEI		55 °C only with door mounting kit		
Mechanical data		Storage	-40 70 °C (-40 158 °F)		
Degree of protection	IP55 / UL type 12	Transport	-40 70 °C (-40 158 °F)		
Net weight	0.13 kg (0.30 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)				
Danish	10 (5 (0 77 :)	A	Approvals		
Depth	19.65 mm (0.77 in)	Certificate of suitability	CE, cULus, EAC, KCC, RCM		