

MLFB-Ordering data

6SL3230-2YE44-0UF0



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 % -2						
Line frequency	47 63 Hz					
Rated voltage	400V IEC	480V NEC				
Rated current (LO)	177.00 A	151.00 A				
Rated current (HO)	154.00 A	132.00 A				
Output						
Number of phases	3 AC					
Rated voltage	400V IEC	480V NEC				
Rated power (LO)	90.00 kW	125.00 hp				
Rated power (HO)	75.00 kW	75.00 hp				
Rated current (LO)	178.00 A	156.00 A				
Rated current (HO)	145.00 A	124.00 A				
Rated current (IN)	183.00 A					
Max. output current	241.00 A					
Pulse frequency	4 kHz					
Output frequency for vector control	0 200 Hz					
Output frequency for V/f control	0 550 Hz					

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	1.570 kW				
Filter class (integrated)	Unfiltered				
EMC category (with accessories)	without				

Ambient conditions						
Standard board coating type	Class 3C3, according to IEC 60721-3-3: 2002					
Cooling	Air cooling using an integrated fan					
Cooling air requirement	0.153 m³/s (5.403 ft³/s)					
Installation altitude	1000 m (3280.84 ft)					
Ambient temperature						
Operation	-20 45 °C (-4 113 °F)					
Transport	-40 70 °C (-40 158 °F)					
Storage	-25 55 °C (-13 131 °F)					

Relative humidity

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

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



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			Figure similar		
Mechanical data		Closed-loop control techniques			
Degree of protection	IP20 / UL open type	V/f linear / square-law / parameter	ri zable Yes		
Size	FSF	v/i ilicar / square law / parameter	izabic i c3		
Net weight	61 kg (134.48 lb)	V/f with flux current control (FCC)	Yes		
Width	305 mm (12.01 in)	V/f ECO linear / square-law	Yes		
Height	709 mm (27.91 in)	Sensorless vector control	Yes		
Depth	369 mm (14.53 in)	Vector control, with sensor	No		
Inputs / out	tputs	Encoderless torque control	Yes		
Standard digital inputs		Torque control, with encoder	No		
Number	6				
Switching level: 0→1	11 V		unication		
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	M10 screw		
Output (resistive load)	DC 30 V, 5.0 A	Conductor cross-section	35.00 120.00 mm ² (AWG 1 AWG 4/0)		
Number as transistor	0	Motor end			
Analog / digital inputs		Version	M10 screw		
Number	2 (Differential input)	Conductor cross-section	35.00 120.00 mm² (AWG 1 AWG 4/0)		
Resolution	10 bit	DC link (for braking resistor)			
Switching threshold as digital in	out	PE connection	M10 screw		
0→1	4 V	Max. motor cable length			
1→0	1.6 V	Shielded	300 m (984.25 ft)		
Analog outputs		Unshielded	450 m (1476.38 ft)		
Number	1 (Non-isolated output)				
PTC/ KTY interface					

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



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	Converter losses to EN 50598-2*							
Efficier	ncy class		IE2					
Compa 100%)	rison with the reference	-50.60 %						
14	↑							
100% -	1761.3 W (1.43 %)	2057.6 W (1.67 %)	2566.6 W (2.08 %)					
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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

1761.3 W (1.43 %) 2057.6 W (1.67 %) 2566.6 W (2.08 %)

966.9 W (0.78 %) 1074.1 W (0.87 %) 1235.7 W (1.00 %)

703.1 W (0.57 %) 748 W (0.61 %)

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.

Operator panel: Basic Operator Panel (BOP-2)

Screen		Ambient conditions Ambient temperature during			
Display design LCD, monochrome					
		Operation	0 50 °C (32 122 °F)		
Mech	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 d	uring		
Width	70.0 mm (2.76 in)	Max. operation	95 %		
Height	106.85 mm (4.21 in)	·	Approvals		
Depth	19.60 mm (0.77 in)		• •		
		Certificate of suitability	CE, cULus, EAC, KCC, RCM		

^{*}converted values