

# **MLFB-Ordering data**

6SL3210-1KE23-8UF1



Figure similar

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

Item no.:
Consignment no. :
Project :

Rated data		General tech. specifications			
Input		Power factor λ		O 0.85	
Number of phases	3 AC	Offset factor cos φ	0.9		
Line voltage	380 480 V +10 % -20 %	Efficiency η	0.9	7	
Line frequency	47 63 Hz	Sound pressure level (1m)	66 (	dВ	
Rated current (LO)	48.20 A	Power loss	0.50	) kW	
Rated current (HO)	45.20 A	Ambient conditions		nc	
Output		Ambien	Condition	15	
Number of phases	3 AC	Cooling	Air cooling	using an integrated fan	
Rated voltage	400 V	Cooling air requirement	0.018 m <sup>3</sup> /	0.018 m³/s (0.636 ft³/s)	
Rated power IEC 400V (LO)	18.50 kW	Cooling air requirement			
Rated power NEC 480V (LO)	25.00 hp	Installation altitude	1000 m (3	280.84 ft)	
Rated power IEC 400V (HO)	15.00 kW	Ambient temperature			
Rated power NEC 480V (HO)	20.00 hp	Operation		C (14 104 °F)	
Rated current (IN)	38.00 A	Transport	-40 70 °	C (-40 158 °F)	
Rated current (LO)	37.00 A	Storage	-40 70 °	C (-40 158 °F)	
Rated current (HO)	31.00 A	Relative humidity			
Max. output current	62.00 A	95 % At 40 °C (104 °F), co Max. operation and icing not permissible		°C (104 °F), condensation not permissible	
Pulse frequency	4.000 kHz				
Output frequency for vector control	0 240 Hz	Closed-loop co	ontrol tech	niques	
Output frequency for V/f control	0 550 Hz	V/f linear / square-law / paramet	erizable	Yes	
		V/f with flux current control (FCC	C)	Yes	
		V/f ECO linear / square-law		Yes	
Overload capability		Sensorless vector control		Yes	
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		Vector control, with sensor		No	
		Encoderless torque control		No	
High Overload (HO)		Torque control, with encoder		No	

300 s cycle time

200 % base load current IH for 3 s, followed by 150 % base load current IH for 57 s in a

Communication

PROFINET / EtherNet/IP

Communication



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03	15210 TRE25 001 T		Figure similar	
Mechanical data		Connections		
Degree of protection	IP20 / UL open type	Signal cable		
Size	FSC	Conductor cross-section	0.15 1.50 mm² (AWG 24 AWG 16)	
Net weight	4.40 kg (9.70 lb)	Line side		
Width	140 mm (5.51 in)	Version	Plug-in screw terminals	
Height	295 mm (11.61 in)	Conductor cross-section	6.00 16.00 mm² (AWG 10 AWG 6)	
Depth	225 mm (8.86 in)	Motor end		
Inputs / out	tputs	Version	Plug-in screw terminals	
Standard digital inputs		Conductor cross-section	6.00 16.00 mm² (AWG 10 AWG 6)	
Number	6	DC link (for braking resistor)		
Switching level: 0→1	11 V	Version	Plug-in screw terminals	
Switching level: 1→0	5 V	Conductor cross-section	6.00 16.00 mm² (AWG 10 AWG 6)	
Max. inrush current	15 mA	Line length, max.	15 m (49.21 ft)	
Fail-safe digital inputs		PE connection	On housing with M4 screw	
Number	1	Max. motor cable length	·	
Digital outputs		Shielded	150 m (492.13 ft)	
Number as relay changeover contact	1	Unshielded	150 m (492.13 ft)	
Output (resistive load)	DC 30 V, 0.5 A	Standards		
Number as transistor	1	Compliance with standards	UL, cUL, CE, C-Tick (RCM)	
Output (resistive load)	DC 30 V, 0.5 A		FMC Discretive 2004/100/FC   2004/100/FC	
Analog / digital inputs		CE marking	EMC Directive 2004/108/EC, Low-Voltage Directive 2006/95/EC	
Number	1 (Differential input)			
Resolution	10 bit			
Switching threshold as digital in	out			
0→1	4 V			
1→0	1.6 V			

# PTC/ KTY interface

**Analog outputs** 

Number

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)



### **MLFB-Ordering data**

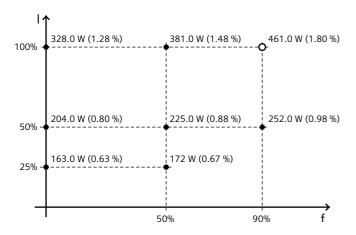
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Figure similar

### Converter losses to EN 50598-2\*

Efficiency class	IE2
Comparison with the reference converter (90% / 100%)	-64.36 %



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