



Figure similar

MLFB-Ordering data

6SL3210-1KE18-8UP1

Client order no. :

Item no. :

Order no. :

Consignment no. :

Offer no. :

Project :

Remarks :

Rated data		General tech. specifications	
Input			
Number of phases	3 AC	Power factor λ	0.70 ... 0.85
Line voltage	380 ... 480 V +10 % -20 %	Offset factor $\cos \varphi$	0.95
Line frequency	47 ... 63 Hz	Efficiency η	0.97
Rated current (LO)	11.40 A	Sound pressure level (1m)	52 dB
Rated current (HO)	10.60 A	Power loss	0.15 kW
		Filter class (integrated)	Unfiltered
Output		Ambient conditions	
Number of phases	3 AC	Cooling	Air cooling using an integrated fan
Rated voltage	400 V	Cooling air requirement	0.005 m ³ /s (0.177 ft ³ /s)
Rated power IEC 400V (LO)	4.00 kW	Installation altitude	1000 m (3280.84 ft)
Rated power NEC 480V (LO)	5.00 hp	Ambient temperature	
Rated power IEC 400V (HO)	3.00 kW	Operation	-10 ... 40 °C (14 ... 104 °F)
Rated power NEC 480V (HO)	4.00 hp	Transport	-40 ... 70 °C (-40 ... 158 °F)
Rated current (IN)	9.00 A	Storage	-40 ... 70 °C (-40 ... 158 °F)
Rated current (LO)	8.80 A	Relative humidity	
Rated current (HO)	7.30 A	Max. operation	95 % At 40 °C (104 °F), condensation and icing not permissible
Max. output current	14.60 A	Closed-loop control techniques	
Pulse frequency	4 kHz	V/f linear / square-law / parameterizable	Yes
Output frequency for vector control	0 ... 240 Hz	V/f with flux current control (FCC)	Yes
Output frequency for V/f control	0 ... 550 Hz	V/f ECO linear / square-law	Yes
Overload capability		Sensorless vector control	Yes
Low Overload (LO)		Vector control, with sensor	No
150 % base load current IL for 3 s, followed by 110 % base load current IL for 57 s in a 300 s cycle time		Encoderless torque control	No
High Overload (HO)		Torque control, with encoder	No
200 % base load current IH for 3 s, followed by 150 % base load current IH for 57 s in a 300 s cycle time			



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Mechanical data		Communication	
Degree of protection	IP20 / UL open type	Communication	PROFIBUS DP
Size	FSA	Connections	
Net weight	1.70 kg (3.75 lb)	Signal cable	
Width	73 mm (2.87 in)	Conductor cross-section	0.15 ... 1.50 mm ² (AWG 24 ... AWG 16)
Height	196 mm (7.72 in)	Line side	
Depth	203 mm (7.99 in)	Version	Plug-in screw terminals
Inputs / outputs		Conductor cross-section	1.00 ... 2.50 mm ² (AWG 18 ... AWG 14)
Standard digital inputs		Motor end	
Number	6	Version	Plug-in screw terminals
Switching level: 0 → 1	11 V	Conductor cross-section	1.00 ... 2.50 mm ² (AWG 18 ... AWG 14)
Switching level: 1 → 0	5 V	DC link (for braking resistor)	
Max. inrush current	15 mA	Version	Plug-in screw terminals
Fail-safe digital inputs		Conductor cross-section	1.00 ... 2.50 mm ² (AWG 18 ... AWG 14)
Number	1	Line length, max.	15 m (49.21 ft)
Digital outputs		PE connection	On housing with M4 screw
Number as relay changeover contact	1	Max. motor cable length	
Output (resistive load)	DC 30 V, 0.5 A	Shielded	50 m (164.04 ft)
Number as transistor	1	Unshielded	150 m (492.13 ft)
Output (resistive load)	DC 30 V, 0.5 A	Standards	
Analog / digital inputs		Compliance with standards	UL, cUL, CE, C-Tick (RCM)
Number	1 (Differential input)	CE marking	EMC Directive 2004/108/EC, Low-Voltage Directive 2006/95/EC
Resolution	10 bit	Switching threshold as digital input	
0 → 1	4 V		
1 → 0	1.6 V		
Analog outputs			
Number	1 (Non-isolated output)		
PTC/ KTY interface			
1 motor temperature sensor input, sensors that can be connected: PTC, KTY and Thermo-Click, accuracy ±5 °C			

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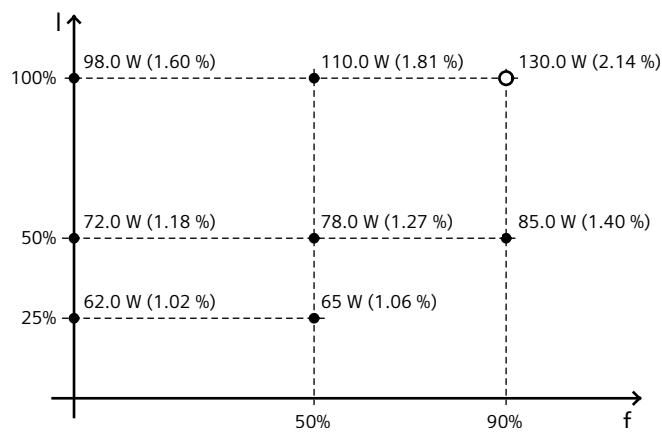
Figure similar

Converter losses to EN 50598-2*

Efficiency class

IE2

Comparison with the reference converter (90% / 100%) -66.51 %



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