

Article No. : 6SL3210-1KE23-8UC1

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

Item no. :  
Consignment no. :  
Project :



Figure similar

Rated data		Inputs / outputs		
<b>Input</b>		<b>Standard digital inputs</b>		
Number of phases	3 AC	Number	6	
Line voltage	380 ... 480 V +10 % -20 %	Switching level: 0→1	11 V	
Line frequency	47 ... 63 Hz	Switching level: 1→0	5 V	
Rated current (LO)	48.20 A	Max. inrush current	15 mA	
Rated current (HO)	45.20 A	<b>Fail-safe digital inputs</b>		
<b>Output</b>		Number	1	
Number of phases	3 AC	<b>Digital outputs</b>		
<b>Rated voltage</b>	<b>400V IEC</b>	<b>480V NEC<sup>1)</sup></b>	Number as relay changeover contact	1
Rated power (LO)	18.50 kW	25.00 hp	Output (resistive load)	DC 30 V, 0.5 A
Rated power (HO)	15.00 kW	20.00 hp	Number as transistor	1
Rated current (LO)	37.00 A	Output (resistive load)	DC 30 V, 0.5 A	
Rated current (HO)	31.00 A	<b>Analog / digital inputs</b>		
Rated current (IN)	38.00 A	Number	1 (Differential input)	
Max. output current	62.00 A	Resolution	10 bit	
Pulse frequency	4 kHz	<b>Switching threshold as digital input</b>		
Output frequency for vector control	0 ... 240 Hz	0→1	4 V	
Output frequency for V/f control	0 ... 550 Hz	1→0	1.6 V	
<b>Overload capability</b>		<b>Analog outputs</b>		
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	Number	1 (Non-isolated output)	
High Overload (HO)	200 % base load current IH for 3 s, followed by 150 % base load current IH for 57 s in a 300 s cycle time	<b>PTC/ KTY interface</b>		
1 motor temperature sensor input, sensors that can be connected PTC, KTY and Thermo-Click, accuracy ±5 °C		<b>Closed-loop control techniques</b>		
<b>General tech. specifications</b>		V/f linear / square-law / parameterizable	Yes	
Power factor λ	0.70 ... 0.85	V/f with flux current control (FCC)	Yes	
Offset factor cos φ	0.95	V/f ECO linear / square-law	Yes	
Efficiency η	0.97	Sensorless vector control	Yes	
Sound pressure level (1m)	66 dB	Vector control, with sensor	No	
Power loss	434.0 W	Encoderless torque control	No	
Filter class (integrated)	Unfiltered	Torque control, with encoder	No	
<b>Communication</b>				
Communication	CANopen			

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### Ambient conditions

Cooling	Air cooling using an integrated fan
Cooling air requirement	0.018 m <sup>3</sup> /s (0.636 ft <sup>3</sup> /s)
Installation altitude	1,000 m (3,280.84 ft)

### Ambient temperature

Operation	-10 ... 40 °C (14 ... 104 °F)
Transport	-40 ... 70 °C (-40 ... 158 °F)
Storage	-40 ... 70 °C (-40 ... 158 °F)

### Relative humidity

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

#### Signal cable

Conductor cross-section	0.15 ... 1.50 mm <sup>2</sup> (AWG 24 ... AWG 16)
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#### Line side

Version	Plug-in screw terminals
Conductor cross-section	6.00 ... 16.00 mm <sup>2</sup> (AWG 10 ... AWG 6)

#### Motor end

Version	Plug-in screw terminals
Conductor cross-section	6.00 ... 16.00 mm <sup>2</sup> (AWG 10 ... AWG 6)

#### DC link (for braking resistor)

Version	Plug-in screw terminals
Conductor cross-section	6.00 ... 16.00 mm <sup>2</sup> (AWG 10 ... AWG 6)
Line length, max.	15 m (49.21 ft)
PE connection	On housing with M4 screw

#### Max. motor cable length

Shielded	50 m (164.04 ft)
Unshielded	150 m (492.13 ft)

### Mechanical data

Degree of protection	IP20 / UL open type
Frame size	FSC
Net weight	4.40 kg (9.70 lb)

#### Dimensions

Width	140 mm (5.51 in)
Height	295 mm (11.61 in)
Depth	203 mm (7.99 in)

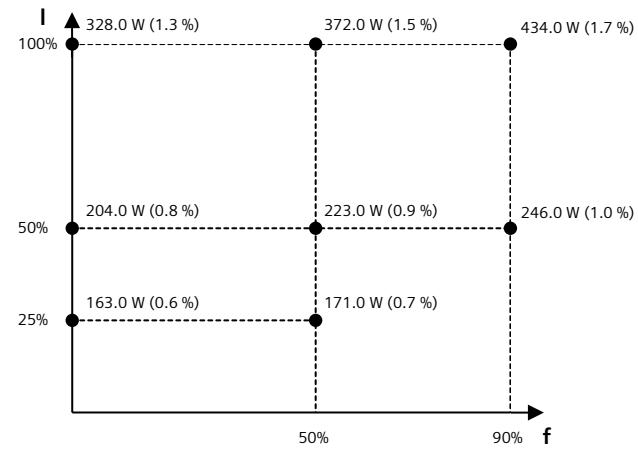
### Standards

Compliance with standards	UL, cUL, CE, C-Tick (RCM)
CE marking	EMC Directive 2004/108/EC, Low-Voltage Directive 2006/95/EC

### Converter losses to IEC61800-9-2\*

Efficiency class	IE2
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Comparison with the reference converter (90% / 100%)	34.1 %
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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 IEC61800-9-2) 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

<sup>1)</sup>The output current and HP ratings are valid for the voltage range 440V-480V