



Figure similar

### MLFB-Ordering data

6SL3210-1RE31-5AL0

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Rated data		General tech. specifications	
<b>Input</b>		<b>Power factor <math>\lambda</math></b>	0.95
Number of phases	3 AC	<b>Offset factor <math>\cos \phi</math></b>	0.99
Line voltage	380 ... 480 V $\pm 10\%$	<b>Efficiency <math>\eta</math></b>	0.98
Line frequency	47 ... 63 Hz	<b>Sound pressure level (1m)</b>	68 dB
Rated current (LO)	140.00 A	<b>Power loss</b>	1.60 kW
Rated current (HO)	117.00 A	<b>Filter class (integrated)</b>	Class A
<b>Output</b>		<b>Ambient conditions</b>	
Number of phases	3 AC	<b>Cooling</b>	Internal air cooling
Rated voltage	400 V	<b>Cooling air requirement</b>	0.153 m <sup>3</sup> /s (5.403 ft <sup>3</sup> /s)
Rated current (LO)	145.00 A	<b>Installation altitude</b>	1000 m (3280.84 ft)
Rated current (HO)	110.00 A	<b>Ambient temperature</b>	
Max. output current	196.00 A	<b>Operation LO</b>	-20 ... 40 °C (-4 ... 104 °F)
Rated power IEC 400V (LO)	75.00 kW	<b>Operation HO</b>	-20 ... 50 °C (-4 ... 122 °F)
Rated power NEC 480V (LO)	75.00 hp	<b>Transport</b>	-40 ... 70 °C (-40 ... 158 °F)
Rated power IEC 400V (HO)	55.00 kW	<b>Storage</b>	-40 ... 70 °C (-40 ... 158 °F)
Rated power NEC 480V (HO)	60.00 hp	<b>Relative humidity</b>	
Pulse frequency	2 kHz	<b>Max. operation</b>	95 % RH, condensation not permitted
Output frequency for vector control	0 ... 200 Hz		
Output frequency for V/f control	0 ... 550 Hz		

### Overload capability

#### Low Overload (LO)

1.1 x rated output current (i.e. 110 % overload) for 57 s with a cycle time of 300 s 1.35 x rated output current (i.e. 135 % overload) for 3 s with a cycle time of 300 s

#### High Overload (HO)

1.5 x output current rating (i.e., 150 % overload) for 60 s with a cycle time of 300 s



Figure similar

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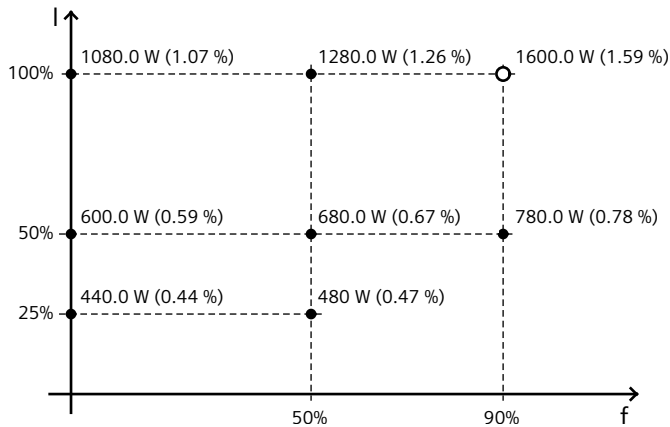
6SL3210-1RE31-5AL0

Mechanical data	
Degree of protection	IP20 / UL open type
Size	FSF
Net weight	63.00 kg (138.89 lb)
Width	305 mm (12.01 in)
Height	708 mm (27.87 in)
Depth	357 mm (14.06 in)

Connections	
<b>Line side</b>	
Version	M10 bolt
Conductor cross-section	35.00 ... 120.00 mm <sup>2</sup> (AWG 2 ... AWG -3)
<b>Motor end</b>	
Version	M10 bolt
Conductor cross-section	35.00 ... 120.00 mm <sup>2</sup> (AWG 2 ... AWG -3)

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

Efficiency class	IE2
Comparison with the reference converter (90% / 100%)	-0.34 %



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

### Max. motor cable length

Shielded	300 m (984.25 ft)
Unshielded	450 m (1476.38 ft)

### Standards

Compliance with standards	UL, cUL, CE, C-Tick (RCM), SEMI F47
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CE marking Low-voltage directive 2006/95/EC