



Figure similar

### MLFB-Ordering data

6SL3210-1PH31-2AL0

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>	0.90
Number of phases	3 AC	<b>Offset factor <math>\cos \phi</math></b>	0.99
Line voltage	500 ... 690 V $\pm 10\%$	<b>Efficiency <math>\eta</math></b>	0.99
Line frequency	47 ... 63 Hz	<b>Sound pressure level (1m)</b>	68 dB
Rated current (LO)	111.00 A	<b>Power loss</b>	1.83 kW
Rated current (HO)	106.00 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	690 V	<b>Cooling air requirement</b>	0.153 m <sup>3</sup> /s (5.403 ft <sup>3</sup> /s)
Rated current (LO)	115.00 A	<b>Installation altitude</b>	1000 m (3280.84 ft)
Rated current (HO)	100.00 A	<b>Ambient temperature</b>	
Max. output current	200.00 A	<b>Operation LO</b>	-20 ... 40 °C (-4 ... 104 °F)
Rated power IEC 690V (LO)	110.00 kW	<b>Operation HO</b>	-20 ... 50 °C (-4 ... 122 °F)
Rated power NEC 600V (LO)	100.00 hp	<b>Transport</b>	-40 ... 70 °C (-40 ... 158 °F)
Rated power IEC 690V (HO)	90.00 kW	<b>Storage</b>	-40 ... 70 °C (-40 ... 158 °F)
Rated power NEC 600V (HO)	100.00 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 1.5 x rated output current (i.e. 150 % 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 57 s with a cycle time of 300 s 2 x output current rating (i.e., 200 % overload) for 3 s with a cycle time of 300 s



Figure similar

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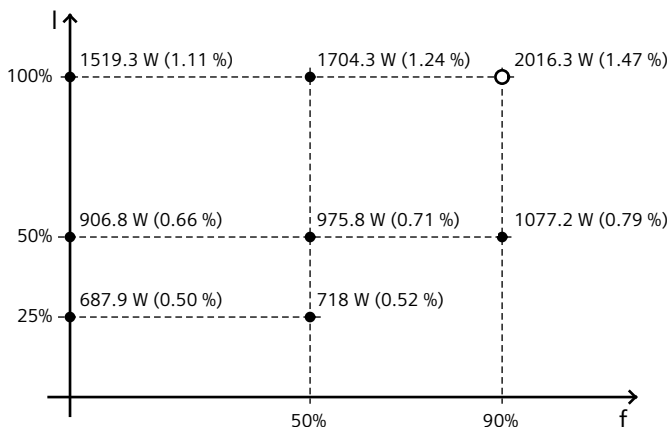
6SL3210-1PH31-2AL0

### Mechanical data

Degree of protection	IP20 / UL open type
Size	FSF
Net weight	64.00 kg (141.10 lb)
Width	305 mm (12.01 in)
Height	708 mm (27.87 in)
Depth	357 mm (14.06 in)

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

Efficiency class	IE2
Comparison with the reference converter (90% / 100%)	-0.36 %



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

### Connections

#### Line side

Version	M10 bolt
Conductor cross-section	35.00 ... 120.00 mm <sup>2</sup> (AWG 2 ... AWG -3)

#### Motor end

Version	M10 bolt
Conductor cross-section	35.00 ... 120.00 mm <sup>2</sup> (AWG 2 ... AWG -3)

#### DC link (for braking resistor)

Version	Screw-type terminals
Conductor cross-section	25.00 ... 70.00 mm <sup>2</sup> (AWG 4 ... AWG -1)
Cable length	10 m (32.81 ft)
PE connection	M10 screw studs

#### 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
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