



Figure similar

### Ordering data

6SL3210-1NE31-1AL0

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 \varphi</math></b>	0.95
Line voltage	380 ... 480 V $\pm 10\%$	<b>Efficiency <math>\eta</math></b>	0.97
Line frequency	47 ... 63 Hz	<b>Sound pressure level (1m)</b>	60 dB
Rated current (LO)	102.00 A	<b>Power loss</b>	1.40 kW
Rated current (HO)	84.00 A	<b>Ambient conditions</b>	
<b>Output</b>		<b>Cooling</b>	Internal air cooling
Number of phases	3 AC	<b>Cooling air requirement</b>	0.150 m <sup>3</sup> /s
Rated voltage	400 V	<b>Installation altitude</b>	1000 m
Rated power (LO)	55.00 kW / 75.00 hp	<b>Ambient temperature</b>	
Rated power (HO)	45.00 kW / 60.00 hp	<b>Operation LO</b>	0 ... 40 °C (32 ... 104 °F)
Rated current (LO)	110.00 A	<b>Operation HO</b>	0 ... 50 °C (32 ... 122 °F)
Rated current (HO)	90.00 A	<b>Transport</b>	-40 ... 70 °C (-40 ... 158 °F)
Max. output current	135.00 A	<b>Storage</b>	-25 ... 55 °C (-13 ... 131 °F)
Pulse frequency	4 kHz	<b>Relative humidity</b>	
Output frequency for vector control	0 ... 200 Hz	<b>Max. operation</b>	95 % RH, condensation not permitted
Output frequency for V/f control	0 ... 550 Hz		

### Overload capability

#### Low Overload (LO)

1.1 × output current rating (i.e., 110 % overload) for 57 s with a cycle time of 300 s  
1.5 × output current rating (i.e., 150 % overload) for 3 s with a cycle time of 300 s

#### High Overload (HO)

1.5 × output current rating (i.e., 150 % overload) for 57 s with a cycle time of 300 s  
2 × output current rating (i.e., 200 % overload) for 3 s with a cycle time of 300 s



Figure similar

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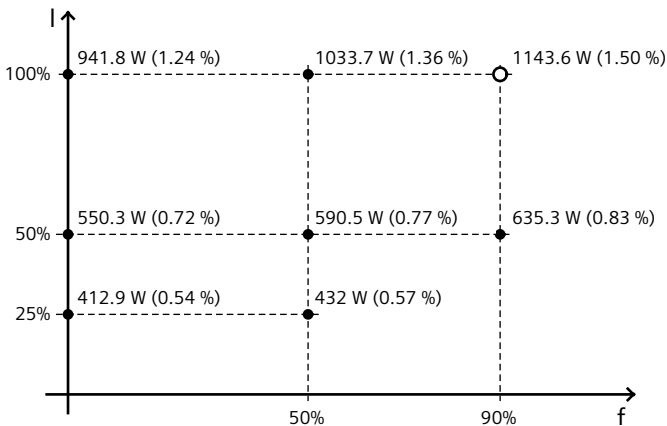
### Mechanical data

Degree of protection	IP20
Size	FSF
Net weight	46.00 kg
Width	350.0 mm
Height	934.0 mm
Depth	316.0 mm

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

Efficiency class	IE2
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Comparison with the reference converter (90% / 100%) -68.49 %



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.

\*calculated values; increased by 10% according to the standard

### Connections

#### Line side

Version	M8 bolt
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Conductor cross-section	35.00 ... 120.00 mm <sup>2</sup>
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#### Motor end

Version	M8 bolt
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Conductor cross-section	35.00 ... 120.00 mm <sup>2</sup>
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### Max. motor cable length

Shielded	25 m
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Unshielded	100 m
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### Standards

Compliance with standards	CE, C-Tick (RCM)
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CE marking	According to low-voltage directive 2006/95/EC
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