



Figure similar

MLFB-Ordering data

6SL3120-1TE31-3AA3

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Rated data		Ambient conditions	
DC link voltage	DC 510 ... 720 V	Installation altitude (without	1000 m (3281 ft)
Electronics power supply	DC 24 V -15 % / +20 %	Cooling ⁸⁾	Internal air cooling
Current demand, max.	1.50 A	Cooling air requirement	0.144 m ³ /s
DC-link current I _d ¹⁾	158.0 A	Ambient temperature	
DC link capacitance	2820 μF	During operation	0 ... 40 °C (32 ... 104 °F)
Output current		Connections	
Rated value I _N	132.0 A	PE connection	M8 Screw
Base load current I _H	105.0 A	Motor end	
For S6 duty (40%) I _{S6}	150.0 A	Version	M8 bolt (X1)
I _{max}	210.0 A	Conductor cross-section	3 ... 120 mm ² (14 ... -3 AWG)
Type rating ²⁾		Max. motor cable length	
Based on I _N	71.0 kW	Shielded	100 m (328 ft)
Based on I _H	57.0 kW	Unshielded	150 m (492 ft)
Current carrying capacity		Standards	
DC link busbars ³⁾	200 A	Compliance with standards	CE, cULus
24 V busbars ⁴⁾	20 A	Safety Integrated	
Output frequency for servo control ⁵⁾	0 ... 650 Hz	SIL 2 acc. to IEC 61508, PL d acc. to EN ISO 13849-1, Category 3 acc. to EN ISO 13849-1	
Output frequency for V/f control ⁶⁾	0 ... 600 Hz		
Output frequency for vector control ⁷⁾	0 ... 300 Hz		
Rated pulse frequency	4 kHz		



Figure similar

Mechanical data

Line side

Width	300.00 mm (11.81 in)
Height	380.00 mm (14.96 in)
Depth	270.00 mm (10.63 in)
Degree of protection	IP20
Type of construction	Booksize
Net weight	21.0 kg (46.30 lb)

General tech. specifications

Sound pressure level (1m)	73.0 dB
Power loss, typ./max. ⁹⁾	1.3 kW / 1.3 kW

1) Rated dc link current for dimensioning an external DC connection

2) Rated output of a typical standard asynchronous motor at 400 V 3 AC

4) If, when connecting several Line Modules and Motor Modules in series, the current carrying capacity exceeds 20 A, another 24 V DC connection is required using a 24 V terminal adapter (max. connectable cross-section 6 mm², max. protection 20 A).

5) With rated output current (max. output frequency 1300 Hz at a current controller cycle of 62.5 μs, pulse frequency 8 kHz, 60 % permissible output current). Observe the dependency between max. output frequency and current derating. At present, the output f requency is limited to 550 Hz, the values stated apply with the high output frequency license.

6) Observe the dependency between max. output frequency and current derating. At present, the output frequency is limited to 550 Hz, the values stated apply with the high output frequency license.

7) Observe the dependency between max. output frequency and current derating.

8) Power units with intensified air cooling thanks to integrated fan

9) Power loss of the Motor Module with rated power including losses of the 24 V DC electronics power supply