



Figure similar

MLFB-Ordering data

6SL3120-1TE24-5AC0

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 derating)	1000 m (3281 ft)
Electronics power supply	DC 24 V -15 % / +20 %	Cooling ⁸⁾	Internal air cooling
Current demand, max.	0.90 A	Cooling air requirement	0.023 m ³ /s
DC-link current I _d ¹⁾	54.0 A	Ambient temperature	
Output current		During operation	
Rated value I _N	45.0 A	0 ... 40 °C (32 ... 104 °F)	
Base load current I _H	38.0 A	Connections	
For S6 duty (40%) I _{S6}	60.0 A	Motor end	
I _{max}	90.0 A	Version	M6 bolt (X1)
Type rating ²⁾		Conductor cross-section	3 ... 50 mm ² (14 ... 1 AWG)
Based on I _N	24.0 kW	PE connection	M6 screw
Based on I _H	21.0 kW	Max. motor cable length	
Rated pulse frequency	4.00 kHz	Shielded	100 m (328 ft)
Current carrying capacity		Unshielded	150 m (492 ft)
DC link busbars	200 A	Standards	
24 V busbars ⁴⁾	20 A	Compliance with standards	CE, cULus
DC link capacitance	1230 μF	Safety Integrated	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 servo control ⁵⁾	650 Hz		
Output frequency for V/f control ⁶⁾	600 Hz		
Output frequency for vector control ⁷⁾	300 Hz		



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Mechanical data

Line side

Width	100.00 mm (3.94 in)
Height	380.00 mm (14.96 in)
Depth	270.00 mm (10.63 in)
Degree of protection	IP20 / UL open type
Type of construction	Booksize
Net weight	8.5 kg (18.74 lb)

General tech. specifications

Sound pressure level (1m)	71.0 dB
Power loss, typ./max. ⁹⁾	0.34 kW / 0.35 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 frequency 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