

## **MLFB-Ordering data**

## 6SL3120-1TE28-5AA3



Client order no. : Order no. :

Offer no. : Remarks : ltem 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 <sup>8)</sup>	Internal air cooling
Current demand, max.	1.50 A	Cooling air requirement	0.044 m³/s
DC-link current I <sub>d</sub> <sup>1)</sup>	102.0 A	Ambient temperature	
DC link capacitance	1880 µF	During operation	0 40 °C (32 104 °F)
Output current		Connections	
Rated value I <sub>N</sub>	85.0 A	PE connection	M6 screw
Base load current I <sub>H</sub>	68.0 A		
For S6 duty (40%) I <sub>s6</sub>	110.0 A	Motor end	
I <sub>max</sub>	141.0 A	Version	M8 bolt (X1)
Type rating <sup>2)</sup>		Conductor cross-section	3 95 mm² (142 AWG)
Based on <sub>IN</sub>	46.0 kW	Max. motor cable length	
Based on <sub>IH</sub>	37.0 kW	Shielded	100 m (328 ft)
Current carrying capacity		Unshielded	150 m (492 ft)
DC link busbars <sup>3)</sup>	200 A	Standards	
24 V busbars <sup>4)</sup>	20 A	Standards	
Output frequency for servo control <sup>5)</sup>	0 650 Hz	Compliance with standards	CE, cULus
Output frequency for V/f control <sup>6)</sup>	0 600 Hz	Safety Integrated	SIL 2 acc. to IEC 61508, PL d acc. to EN ISO 13849-1, Category 3 acc. to
Output frequency for vector control 7)	0 300 Hz		EN ISO 13849-1
Rated pulse frequency	4 kHz		



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Mechanical data		General te	General tech. specifications	
Line side		Sound pressure level (1m)	60.0 dB	
Width	200.00 mm (7.87 in)	Power loss, typ./max. <sup>9)</sup>	0.8 kW / 0.8 kW	
Height	380.00 mm (14.96 in)			
Depth	270.00 mm (10.63 in)			
Degree of protection	IP20			
Type of construction	Booksize			
Net weight	15.0 kg (33.07 lb)			

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