

SIEMENS

Data sheet for Motor Module



MLFB-Ordering data 6SL3420-1TE13-0AA1

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.	0.85 A	Cooling air requirement	0.008 m³/s
DC-link current I _d	3.6 A	Ambient temperature	
Output current		During operation	
Rated value I _N	3.0 A	0 ... 40 °C (32 ... 104 °F)	
Base load current I _H	2.6 A	Connections	
For S6 duty (40%) I _{S6}	3.5 A		
I _{max}	9.0 A	Motor end	
Type rating ²⁾		Version	connector (X1) with Screw-type
Based on I _N	1.6 kW	Conductor cross-section	0 ... 6 mm² (24 ... 10 AWG)
Based on I _H	1.4 kW	PE connection	M5 screw
Rated pulse frequency	8.00 kHz	Shield connecting kit	Integrated connection plug (X1)
Current carrying capacity		Max. motor cable length	
DC link busbars	100 A	Shielded	50 m (164 ft)
24 V busbars ⁴⁾	20 A	Unshielded	75 m (246 ft)
DC link capacitance	110 µF	Standards	
Output frequency for servo control ⁵⁾	0 ... 650 Hz	Compliance with standards	CE / UL
Output frequency for V/f control ⁶⁾	0 ... 600 Hz	Safety Integrated	
Output frequency for vector control ⁷⁾	0 ... 300 Hz	SIL 2 acc. to IEC 61508, PL d acc. to EN ISO 13849-1, Category 3 acc. to EN ISO 13849-1	



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Mechanical data		General tech. specifications	
Line side		Sound pressure level (1m)	60.0 dB
Width	50.00 mm (1.97 in)	Power loss, typ. ⁹⁾	0.07 kW
Height	270.00 mm (10.63 in)		
Depth	226.00 mm (8.90 in)		
Degree of protection	IP20 / UL open type		
Type of construction	Booksize Compact		
Net weight	2.7 kg (5.95 lb)		

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) 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.

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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