

Data sheet for Motor Module

Client order no. :

During operation

Order no. : Offer no. : Remarks :

Article No.: 6SL3120-1TE31-3AA3

Connections

Consignment no. : Project :

Item no. :

Rated data		
DC link voltage	DC 510 720 V	
Electronics power supply	DC 24 V -15 % / +20 %	
Current demand, max.	1.50 A	
DC-link current I _d	158.0 A	
Output current		
Rated value I _N	132.0 A	
Base load current I _H	105.0 A	
For S6 duty (40%) I _{S6}	150.0 A	
I _{max}	210.0 A	
Type rating ²⁾		
Based on IN	71.0 kW	
Based on IH	57.0 kW	
Rated pulse frequency	4.00 kHz	
Current carrying capacity		
DC link busbars	200 A	
24 V busbars	20 A	
DC link capacitance	2,820 μF	
Output frequency for servo control 5)	0 650 Hz	
Output frequency for V/f control 6)	0 600 Hz	
Output frequency for vector control 7)	0 300 Hz	
Ambient conditions		
Installation altitude (without derating)	1,000 m (3,281 ft)	
Cooling 8)	Internal air cooling	
Cooling air requirement	0.144 m³/s	
Ambient temperature		

Motor end	
Version	M8 bolt (X1)
Conductor cross-section	2.5 120 mm² (143 AWG)
PE connection	M8 Screw
Max. motor cable length	
Shielded	100 m (328 ft)
Unshielded	150 m (492 ft)
Standards	
Compliance with standards	CE, cULus
Safety Integrated	SIL 2 acc. to IEC 61508, PL d acc. to EN ISO 13849-1, Category 3 acc. to EN ISO 13849-1
Mechanical data	
Line side	
Width	300.00 mm (11.81 in)
Height	629.00 mm (24.76 in)
Depth	270.00 mm (10.63 in)
Degree of protection	IP20 / UL open type
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)	1.26 kW / 1.29 kW
rower loss, typ./max.	1.20 KW / 1.29 KW

 $^{^{\}rm 2)} \rm Rated$ output of a typical standard asynchronous motor at 400 V 3 AC

0 ... 40 °C (32 ... 104 °F)

 $^{^{5)}}$ 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.

 $^{^{7)}\}mbox{Observe}$ the dependency between max. output frequency and current derating.

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

 $^{^{9)}\}mbox{Power loss of the Motor Module with rated power including losses of the 24 V DC electronics power supply$