SIEMENS

Data sheet for Motor Module

Article No. : 6SL3320-1TG31-5AA3



Figure similar

Client order no. :
Order no. :
Offer no. :
Remarks :

Item no. :
Consignment no. :
Project :

Rated data

DC link voltage	DC 675 ... 1,035 V
Electronics power supply	DC 24 V -15 % / +20 %
Current demand, max.	0.80 A
Current consumption 500V AC	0.70 A
Current consumption 690V AC	0.40 A
DC-link current	
Rated current I_N DC	
- Basic/Smart Line Module	180 A
- Active Line Module	162 A
Base-load current I_L DC	
- Basic/Smart Line Module	175 A
- Active Line Module	157 A
Base-load current I_H DC	
- Basic/Smart Line Module	160 A
- Active Line Module	144 A
Output current	
Rated value I_N	150 A
Base-load current I_L [1]	142 A
Base load current I_H [2]	134 A
I_{max}	213 A
Type rating [3]	
Based on $_{IN}$	150 kW
Based on $_{IH}$	110 kW
Pulse frequency	
Rated pulse frequency [4]	1.25 kHz
Pulse frequency, max.	7.50 kHz
DC link capacitance	2,800 µF
Output frequency for servo control	0 ... 550 Hz
Output frequency for V/f control	0 ... 550 Hz
Output frequency for vector control	0 ... 550 Hz

Ambient conditions

Installation altitude (without derating)	2,000 m (6,561.68 ft)
Cooling [5]	air cooled
Cooling air requirement	0.17 m³/s (6.010 ft³/s)
Ambient temperature	
During operation	0 ... 40 °C (32 ... 104 °F)

Connections

Motor end	
Version	2 x M10 screw
Conductor cross-section	2 x 185 mm² (2 x -5 AWG)
DC link	
Version	2 x M10 screw
Conductor cross-section	2 x 185 mm² (2 x -5 AWG)
Braking module	
Version	M6 bolt
PE1 connection	
Version	2 x M10 screw
Conductor cross-section	2 x 185 mm² (2 x -5 AWG)
PE2 connection	
Version	2 x M10 screw
Conductor cross-section	2 x 185 mm² (2 x -5 AWG)
Max. motor cable length [6]	
Shielded	300 m (984.25 ft)
Unshielded	450 m (1,476.38 ft)

Standards

Compliance with standards	CE / C-Tick (RCM)
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	
Dimensions	
Width	326 mm (12.83 in)
Height	1,400 mm (55.12 in)
Depth	356 mm (14.02 in)
Degree of protection	IP20
Type of construction	Chassis
Net weight	95 kg (209.44 lb)

General tech. specifications

Sound pressure level (1m) + 50 Hz / 60 Hz	64 dB / 67 dB
At 50 Hz 690 V	1.80 kW
At 60 Hz 575 V	1.62 kW

[1] The base-load current IL is the basis for a duty cycle of 110% for 60 s or 150% for 10 s with a duty cycle duration of 300 s.
[2] The base load current IH is based on a duty cycle of 150% for 60 s or 160% for 10 s with a duty cycle duration of 300 s.
[3] Rated power of a typical 6-pole standard induction motor based on IL or IH at 3 AC 50 Hz 500 V or 690 V, 3 AC 60 Hz 575 V.
[4] Information on the correlation between pulse frequency and maximum output current/output frequency is provided in the SINAMICS Low Voltage Configuration Manual.
[5] Power units with intensified air cooling thanks to integrated fan
[6] Sum of all motor cables and DC link. Longer cable lengths on request, depending on configuration. More information can be found in the SINAMICS Low Voltage Configuration Manual.