SIEMENS

Data sheet for SIMOTICS S-1FK7

Figure similar

MLFB-Ordering data **1FK7080-2AH71-1BB2**

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

Item no. :
Consignment no. :
Project :

Engineering data

Rated speed (100 K)	4500 rpm
Number of poles	8
Rated torque (100 K)	4.5 Nm
Rated current	4.8 A
Static torque (60 K)	6.60 Nm
Static torque (100 K)	8.00 Nm
Stall current (60 K)	6.00 A
Stall current (100 K)	7.40 A
Moment of inertia	17.500 kgcm²
Efficiency	92.0 %

Physical constants

Torque constant	1.08 Nm/A
Voltage constant at 20° C	68.5 V/1000*min⁻¹
Winding resistance at 20° C	0.42 Ω
Rotating field inductance	7.3 mH
Electrical time constant	17.30 ms
Mechanical time constant	1.54 ms
Thermal time constant	40 min
Shaft torsional stiffness	81000 Nm/rad
Net weight of the motor	13.3 kg

Mechanical data

Motor type	Permanent-magnet synchronous motor
Motor type	Compact
Shaft height	80
Cooling	Natural cooling
Radial runout tolerance	0.050 mm
Concentricity tolerance	0.10 mm
Axial runout tolerance	0.10 mm
Vibration severity grade	Grade A
Connector size	1
Degree of protection	IP65 and DE flange IP67
Design acc. to Code I	IM B5 (IM V1, IM V3)
Temperature monitoring	Pt1000 temperature sensor
Electrical connectors	Connectors for signals and power rotatable
Color of the housing	Standard (Anthracite RAL 7016)
Holding brake	with holding brake
Shaft end	Feather key
Encoder system	Encoder AS24DQI: absolute encoder single-turn 24 bits

Siemens 1FK70802AH711BB2 AC Servo Motors | gesrepair.com

SIEMENS

MLFB-Ordering data **1FK7080-2AH71-1BB2**

Figure similar

Optimum operating point

Optimum speed	4000 rpm
Optimum power	2.4 kW

Limiting data

Max. permissible speed (mech.)	6000 rpm
Max. permissible speed (inverter)	6000 rpm
Maximum torque	25.0 Nm
Maximum current	27.5 A

Holding brake

Holding brake version	Permanent-magnet brake
Holding torque	22.0 Nm
Power supply voltage	DC 24 V ± 10 %
Coil current	0.9 A
Opening time	200 ms
Closing time	60 ms
Highest braking work	1400 J

Recommended Motor Module

Rated inverter current	9 A
Maximum inverter current	27 A
Maximum torque	24.70 Nm