

Data sheet for SIMOTICS S-1FK7



Figure similar

MLFB-Ordering data

1FK7062-3BF71-1BG2

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data

Rated speed (100 K) 3000 rpm

Number of poles 8

Rated torque (100 K) 6.0 Nm

Rated current 4.0 A

Static torque (60 K) 7.10 Nm

Static torque (100 K) 8.50 Nm

Stall current (60 K) 4.30 A

Stall current (100 K) 5.30 A

Moment of inertia 23.500 kgcm²

Efficiency 91.0 %

Physical constants

Torque constant 1.60 Nm/A

Voltage constant at 20° C 102.5 V/1000*min⁻¹

Winding resistance at 20° C 1.15 Ω

Rotating field inductance 14.6 mH

Electrical time constant 12.80 ms

Mechanical time constant 3.15 ms

Thermal time constant 35 min

Shaft torsional stiffness 34500 Nm/rad

Net weight of the motor 10.7 kg

Mechanical data

Motor type Permanent-magnet synchronous motor

Motor type High Inertia

Shaft height 63

Cooling Natural cooling

Radial runout tolerance 0.040 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 without holding brake

Shaft end Plain shaft

Encoder system Encoder AS24DQI: absolute encoder single-turn 24 bits



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Optimum operating point		Recommended Motor Module	
Optimum speed	3000 rpm	Rated inverter current	5 A
Optimum power	1.9 kW	Maximum inverter current	15 A
Limiting data		Maximum torque	22.10 Nm
Max. permissible speed (mech.)	7200 rpm		
Max. permissible speed (inverter)	5600 rpm		
Maximum torque	26.0 Nm		
Maximum current	19.2 A		