

Data sheet for SIMOTICS S-1FK7



Figure similar

MLFB-Ordering data

1FK7062-3BF71-1QG2

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data		Mechanical data			
Rated speed (100 K)	3000 rpm	Motor type	Permanent-magnet synchronous motor		
Number of poles	8	Motor type	High Inertia		
Rated torque (100 K)	6.0 Nm	Shaft height	63		
Rated current	4.0 A	Cooling	Natural cooling		
Static torque (60 K)	7.10 Nm	Radial runout tolerance	0.040 mm		
Static torque (100 K)	8.5 Nm	Concentricity tolerance	0.10 mm		
Stall current (60 K)	4.30 A	Axial runout tolerance	0.10 mm		
Stall current (100 K)	5.30 A	Vibration severity grade	Grade A		
Moment of inertia	23.500 kgcm ²	Connector size	1		
Efficiency	91.0 %	Degree of protection	IP65 and DE flange IP67		
<th colspan="2">Physical constants</th> <td>Design acc. to Code I</td> <td>IM B5 (IM V1, IM V3)</td>		Physical constants		Design acc. to Code I	IM B5 (IM V1, IM V3)
		Torque constant	1.60 Nm/A	Temperature monitoring	Pt1000 temperature sensor
		Voltage constant at 20° C	102.5 V/1000*min ⁻¹	Electrical connectors	Connectors for signals and power rotatable
		Winding resistance at 20° C	1.15 Ω	Color of the housing	Standard (Anthracite RAL 7016)
		Rotating field inductance	14.6 mH	Holding brake	without holding brake
		Electrical time constant	12.80 ms	Shaft extension	Plain shaft
		Mechanical time constant	3.15 ms	Encoder system	Encoder AS20DQI: absolute encoder single-turn 20 bits
		Thermal time constant	35 min		
		Shaft torsional stiffness	34500 Nm/rad		
		Net weight of the motor	10.7 kg		



Figure similar

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Optimum operating point	
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Optimum speed	3000 rpm
Optimum power	1.6 kW

Limiting data	
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Max. permissible speed (mech.)	7200 rpm
Max. permissible speed (inverter)	5600 rpm
Maximum torque	26.0 Nm
Maximum current	19.2 A

Recommended Motor Module	
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Rated inverter current	5 A
Maximum inverter current	15 A
Maximum torque	22.10 Nm