

Data sheet for SIMOTICS S-1FK7



Figure similar

MLFB-Ordering data

1FK7064-4CF71-1SG1

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	6	Motor type	High Dynamic
Rated torque (100 K)	8.0 Nm	Shaft height	63
Rated current	7.6 A	Cooling	Natural cooling
Static torque (60 K)	10.00 Nm	Radial runout tolerance	0.040 mm
Static torque (100 K)	12.0 Nm	Concentricity tolerance	0.10 mm
Stall current (60 K)	8.70 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	10.80 A	Vibration severity grade	Grade A
Moment of inertia	7.500 kgcm ²	Connector size	1
Efficiency	93.0 %	Degree of protection	IP65
Physical constants		Design acc. to Code I	IM B5 (IM V1, IM V3)
Torque constant	1.11 Nm/A	Temperature monitoring	KTY84 temperature sensor in the stator winding
Voltage constant at 20° C	70.5 V/1000*min ⁻¹	Electrical connectors	Connectors for signals and power rotatable
Winding resistance at 20° C	0.35 Ω	Color of the housing	Standard (Anthracite RAL 7016)
Rotating field inductance	12.0 mH	Holding brake	without holding brake
Electrical time constant	34.50 ms	Shaft extension	Plain shaft
Mechanical time constant	0.64 ms	Encoder system	Multi-pole resolver (number of pole pairs corresponds to number of pole pairs of the motor)
Thermal time constant	55 min		
Shaft torsional stiffness	29500 Nm/rad		
Net weight of the motor	15.4 kg		



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Optimum operating point

Optimum speed 3000 rpm

Optimum power 2.5 kW

Limiting data

Max. permissible speed (mech.) 7500 rpm

Max. permissible speed (inverter) 7500 rpm

Maximum torque 32.0 Nm

Maximum current 33.0 A

Recommended Motor Module

Rated inverter current 18 A

Maximum inverter current 54 A

Maximum torque 32.00 Nm