

Data sheet for SIMOTICS S-1FK7



Figure similar

MLFB-Ordering data

1FK7064-4CF71-1AA1

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data

Rated speed (100 K)	3000 rpm
Number of poles	6
Rated torque (100 K)	8.0 Nm
Rated current	7.6 A
Static torque (60 K)	10.00 Nm
Static torque (100 K)	12.0 Nm
Stall current (60 K)	8.70 A
Stall current (100 K)	10.80 A
Moment of inertia	7.500 kgcm ²
Efficiency	93.0 %

Physical constants

Torque constant	1.11 Nm/A
Voltage constant at 20° C	70.5 V/1000*min ⁻¹
Winding resistance at 20° C	0.35 Ω
Rotating field inductance	12.0 mH
Electrical time constant	34.50 ms
Mechanical time constant	0.64 ms
Thermal time constant	55 min
Shaft torsional stiffness	29500 Nm/rad
Net weight of the motor	15.4 kg

Mechanical data

Motor type	Permanent-magnet synchronous motor
Motor type	High Dynamic
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
Design acc. to Code I	IM B5 (IM V1, IM V3)
Temperature monitoring	KTY84 temperature sensor in the stator winding
Electrical connectors	Connectors for signals and power rotatable
Color of the housing	Standard (Anthracite RAL 7016)
Holding brake	without holding brake
Shaft extension	Feather key
Encoder system	Encoder IC2048S/R: incremental encoder sin/cos 1 Vpp 2048 S/R with C and D track



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Optimum operating point		Recommended Motor Module	
Optimum speed	3000 rpm	Rated inverter current	18 A
Optimum power	2.5 kW	Maximum inverter current	54 A
Limiting data		Maximum torque	32.00 Nm
Max. permissible speed (mech.)	7500 rpm		
Max. permissible speed (inverter)	7500 rpm		
Maximum torque	32.0 Nm		
Maximum current	33.0 A		