

Data sheet for SIMOTICS S-1FK7



Figure similar

MLFB-Ordering data

1FK7032-2AF21-1AA0

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	Compact
Rated torque (100 K)	1.0 Nm	Shaft height	36
Rated current	1.6 A	Cooling	Natural cooling
Static torque (60 K)	0.95 Nm	Radial runout tolerance	0.035 mm
Static torque (100 K)	1.1 Nm	Concentricity tolerance	0.08 mm
Stall current (60 K)	1.40 A	Axial runout tolerance	0.08 mm
Stall current (100 K)	1.70 A	Vibration severity grade	Grade A
Moment of inertia	0.650 kgcm ²	Connector size	1
Efficiency	85.0 %	Degree of protection	IP64
Physical constants		Design acc. to Code I	IM B5 (IM V1, IM V3)
Torque constant	0.67 Nm/A	Temperature monitoring	KTY84 temperature sensor in the stator winding
Voltage constant at 20° C	45.0 V/1000*min ⁻¹	Electrical connectors	Connectors for signals and power rotatable
Winding resistance at 20° C	5.05 Ω	Color of the housing	Standard (Anthracite RAL 7016)
Rotating field inductance	17.3 mH	Holding brake	without holding brake
Electrical time constant	3.45 ms	Shaft extension	Feather key
Mechanical time constant	2.20 ms	Encoder system	Encoder IC2048S/R: incremental encoder sin/cos 1 Vpp 2048 S/R with C and D track
Thermal time constant	25 min		
Shaft torsional stiffness	6000 Nm/rad		
Net weight of the motor	2.7 kg		

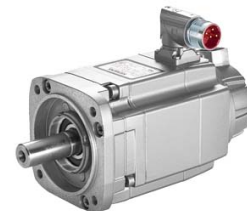


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Optimum operating point	
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Optimum speed	3000 rpm
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Optimum power	0.3 kW
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Limiting data	
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Max. permissible speed (mech.)	10000 rpm
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Max. permissible speed (inverter)	6400 rpm
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Maximum torque	4.5 Nm
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Maximum current	7.0 A
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Recommended Motor Module	
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Rated inverter current	2 A
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Maximum inverter current	5 A
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Maximum torque	3.00 Nm
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