

Data sheet for SIMOTICS S-1FK7

MLFB-Ordering data 1FK7103-2AC71-1EA0-Z
K24



Client order no. :
Order no. :
Offer no. :
Remarks :
Item no. :
Consignment no. :
Project :

Engineering data		Mechanical data	
Rated speed (100 K)	2000 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	8	Motor type	Compact
Rated torque (100 K)	25.0 Nm	Shaft height	100
Rated current	11.0 A	Cooling	Natural cooling
Static torque (60 K)	30.00 Nm	Radial runout tolerance	0.050 mm
Static torque (100 K)	36.0 Nm	Concentricity tolerance	0.10 mm
Stall current (60 K)	11.60 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	14.40 A	Vibration severity grade	Grade A
Moment of inertia	104.000 kgcm ²	Connector size	1.5
Efficiency	93.0 %	Degree of protection	IP64
Physical constants		Design acc. to Code I	IM B5 (IM V1, IM V3)
Torque constant	2.45 Nm/A	Temperature monitoring	KTY84 temperature sensor in the stator winding
Voltage constant at 20° C	162.0 V/1000*min ⁻¹	Electrical connectors	Connectors for signals and power rotatable
Winding resistance at 20° C	0.29 Ω	Color of the housing	without
Rotating field inductance	7.9 mH	Holding brake	without holding brake
Electrical time constant	27.50 ms	Shaft extension	Feather key
Mechanical time constant	1.43 ms	Encoder system	Encoder AM2048S/R: absolute encoder 2048 S/R, 4096 revolutions multi-turn, with EnDat interface
Thermal time constant	65 min		
Shaft torsional stiffness	148000 Nm/rad		
Net weight of the motor	28.5 kg		

No image available for this configuration.

Figure similar

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Optimum operating point		Recommended Motor Module	
Optimum speed	2000 rpm	Rated inverter current	18 A
Optimum power	5.2 kW	Maximum inverter current	54 A
Limiting data		Maximum torque	108.00 Nm
Max. permissible speed (mech.)	5000 rpm	Special design	
Max. permissible speed (inverter)	3550 rpm	K24	Primed (unpainted)
Maximum torque	108.0 Nm		
Maximum current	46.5 A		