

Data sheet for SIMOTICS S-1FK7

MLFB-Ordering data

1FK7064-4CC71-1KG1



Figure similar

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	6	Motor type	High Dynamic		
Rated torque (100 K)	10.0 Nm	Shaft height	63		
Rated current	7.1 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)	6.60 A	Axial runout tolerance	0.10 mm		
Stall current (100 K)	8.10 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)		
		Temperature monitoring	Pt1000 temperature sensor		
		Electrical connectors	Connectors for signals and power rotatable		
		Color of the housing	Standard (Anthracite RAL 7016)		
		Holding brake	without holding brake		
		Shaft extension	Plain shaft		
		Encoder system	Encoder AM16DQ: absolute encoder 16 bits (resolution 65536, encoder-internal 32 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)		
		Torque constant	1.48 Nm/A		
		Voltage constant at 20° C	94.0 V/1000*min ⁻¹		
		Winding resistance at 20° C	0.58 Ω		
Rotating field inductance	21.5 mH				
Electrical time constant	37.00 ms				
Mechanical time constant	0.60 ms				
Thermal time constant	55 min				
Shaft torsional stiffness	29500 Nm/rad				
Net weight of the motor	15.4 kg				



Figure similar

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Optimum operating point		Recommended Motor Module	
Optimum speed	2000 rpm	Rated inverter current	9 A
Optimum power	2.1 kW	Maximum inverter current	27 A
Limiting data		Maximum torque	32.00 Nm
Max. permissible speed (mech.)	7500 rpm		
Max. permissible speed (inverter)	6150 rpm		
Maximum torque	32.0 Nm		
Maximum current	25.0 A		