

Data sheet for SIMOTICS S-1FK7

MLFB-Ordering data1FK7083-2AF71-1EH0



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 8	Motor type Compact
Rated torque (100 K) 10.5 Nm	Shaft height 80
Rated current 7.2 A	Cooling Natural cooling
Static torque (60 K) 13.30 Nm	Radial runout tolerance 0.050 mm
Static torque (100 K) 16.0 Nm	Concentricity tolerance 0.10 mm
Stall current (60 K) 8.20 A	Axial runout tolerance 0.10 mm
Stall current (100 K) 10.10 A	Vibration severity grade Grade A
Moment of inertia 29.500 kgcm²	Connector size 1
Efficiency 93.0 %	Degree of protection IP64
	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 with holding brake
	Shaft extension Plain shaft
	Encoder system Encoder AM2048S/R: absolute encoder 2048 S/R, 4096 revolutions multi-turn, with EnDat interface

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Optimum operating point		Recommended Motor Module	
Optimum speed	3000 rpm	Rated inverter current	9 A
Optimum power	3.3 kW	Maximum inverter current	27 A
Limiting data		Maximum torque	40.00 Nm
Max. permissible speed (mech.)	6000 rpm		
Max. permissible speed (inverter)	5600 rpm		
Maximum torque	50.0 Nm		
Maximum current	37.0 A		
Holding brake			
Holding brake version	Permanent-magnet brake		
Holding torque	22.0 Nm		
Power supply voltage	DC 24 V ± 10 %		
Coil current	0.9 A		
Opening time	200 ms		
Closing time	60 ms		
Highest braking work	1400 J		