

Data sheet for SIMOTICS S-1FT7



Figure similar

MLFB-Ordering data

1FT7064-5AK70-1FH4

Client order no. :
Order no. :
Offer no. :
Remarks :

Item no. :
Consignment no. :
Project :

Engineering data		Mechanical data	
Rated speed	6000 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	10	Design of the motor type	Compact
Rated torque (100 K)	2.9 Nm	Shaft height	63 mm
Rated current	3.4 A	Cooling	Natural cooling
Static torque (60 K)	7.70 Nm	Radial runout tolerance	N
Static torque (100 K)	9.0 Nm	Vibration severity grade	Grade R
Stall current (60 K)	7.7 A	Degree of protection	IP65
Stall current (100 K)	9.0 A	Design acc. to Code I	IM B5 (new flange design)
Rotor moment of inertia	0.0014700 kgm ²	Temperature monitoring	Pt1000 temperature sensor
Efficiency	91.0 %	Color of the housing	Standard (pearl dark gray similar to RAL 9023)
Physical constants		Holding brake version	Permanent-magnet brake
Torque constant	1.00 Nm/A	Shaft end type	Plain shaft
Voltage constant at 20° C	64.0 V/1000*min ⁻¹	Sensor design	Encoder AM22DQ: absolute encoder 22 bits (resolution 4194304, encoder-internal 2048 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)
Winding resistance at 20° C	0.39 Ω	Electrical connectors	Connector turnable
Rotating field inductance	4.1 mH	Connector size	1
Electrical time constant	11.00 ms		
Mechanical time constant	1.40 ms		
Thermal time constant	30 min		
Shaft torsional stiffness	26000 Nm/rad		
Net weight of the motor	11.4 kg		

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Optimum operating point		Recommended Motor Module	
Optimum speed	4500 rpm	Rated inverter current	9 A
Optimum power	2.6 kW	Maximum inverter current	27 A
Limiting data		Maximum torque	25.30 Nm
Max. permissible speed (mech.)	9000 rpm		
Max. permissible speed (inverter)	8000 rpm		
Maximum torque	36.0 Nm		
Maximum current	45.0 A		