

Data sheet for SIMOTICS S-1FT7

MLFB-Ordering data

1FT7044-5AK70-1BG0



Figure similar

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	6	Design of the motor type	Compact
Rated torque (100 K)	2.0 Nm	Shaft height	48 mm
Rated current	2.5 A	Cooling	Natural cooling
Static torque (60 K)	4.40 Nm	Radial runout tolerance	N
Static torque (100 K)	5.0 Nm	Vibration severity grade	Grade A
Stall current (60 K)	4.9 A	Degree of protection	IP64
Stall current (100 K)	5.7 A	Design acc. to Code I	IM B5 (new flange design)
Rotor moment of inertia	0.0005430 kgm ²	Temperature monitoring	Pt1000 temperature sensor
Efficiency	91.0 %		
Physical constants		Color of the housing	
Torque constant	0.89 Nm/A	Holding brake version	no value
Voltage constant at 20° C	56.5 V/1000*min ⁻¹	Shaft end type	Plain shaft
Winding resistance at 20° C	0.61 Ω	Sensor design	Encoder AS24DQI: Absolut encoder Singleturn 24 bit - with signal connection RJ45
Rotating field inductance	4.2 mH		
Electrical time constant	7.00 ms		
Mechanical time constant	1.30 ms		
Thermal time constant	35 min	Electrical connectors	Connector turnable
Shaft torsional stiffness	9500 Nm/rad	Connector size	1
Net weight of the motor	7.2 kg		



Figure similar

Optimum operating point		Recommended Motor Module	
Optimum speed	4500 rpm	Rated inverter current	9 A
Optimum power	1.4 kW	Maximum inverter current	27 A
Limiting data		Maximum torque	21.90 Nm
Max. permissible speed (mech.)	9000 rpm		
Max. permissible speed (inverter)	9000 rpm		
Maximum torque	23.0 Nm		
Maximum current	30.0 A		